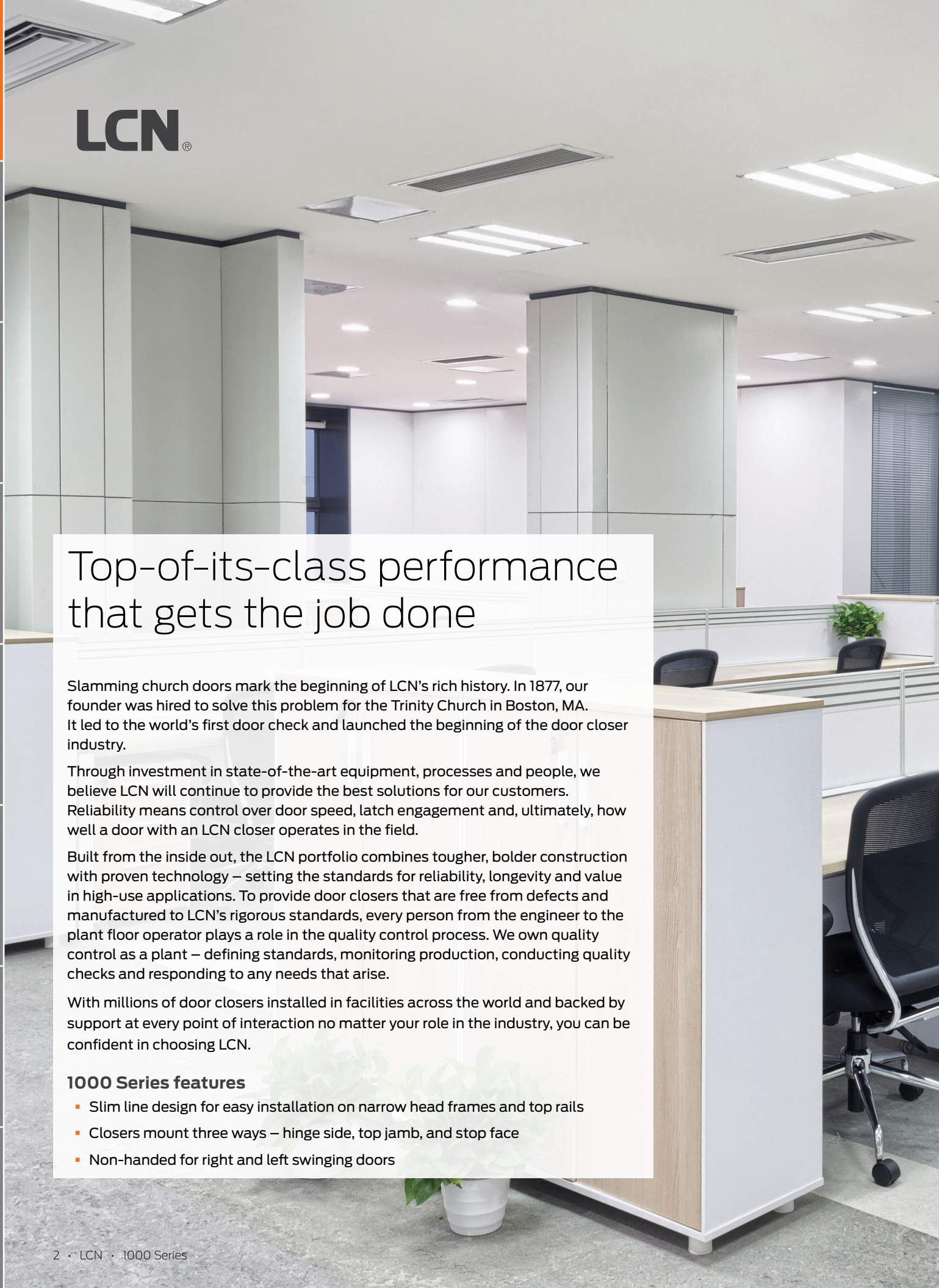
ALLEGION™

LCN®

1000 Series

Surface mounted closers



Top-of-its-class performance that gets the job done

Slamming church doors mark the beginning of LCN's rich history. In 1877, our founder was hired to solve this problem for the Trinity Church in Boston, MA. It led to the world's first door check and launched the beginning of the door closer industry.

Through investment in state-of-the-art equipment, processes and people, we believe LCN will continue to provide the best solutions for our customers. Reliability means control over door speed, latch engagement and, ultimately, how well a door with an LCN closer operates in the field.

Built from the inside out, the LCN portfolio combines tougher, bolder construction with proven technology – setting the standards for reliability, longevity and value in high-use applications. To provide door closers that are free from defects and manufactured to LCN's rigorous standards, every person from the engineer to the plant floor operator plays a role in the quality control process. We own quality control as a plant – defining standards, monitoring production, conducting quality checks and responding to any needs that arise.

With millions of door closers installed in facilities across the world and backed by support at every point of interaction no matter your role in the industry, you can be confident in choosing LCN.

1000 Series features

- Slim line design for easy installation on narrow head frames and top rails
- Closers mount three ways – hinge side, top jamb, and stop face
- Non-handed for right and left swinging doors

Information and customer care

us.allegion.com

US 877.671.7011
Canada 800.900.4734

support@allegion.com
Closers_TechProdSupport@allegion.com

www.youtube.com/LCNHardware

Ordering

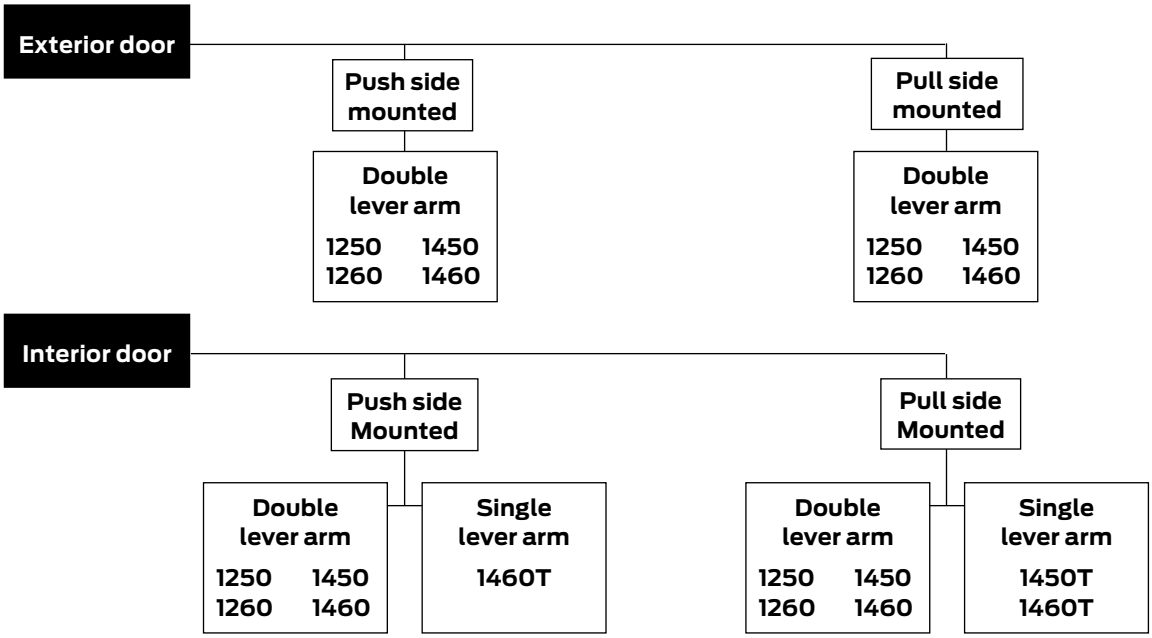
Allegion_Orders@allegion.com

eFax: 1.800.248.1460

1000 Series surface mounted closers

Product selection guide

Surface mounted 1000 Series LCN closers feature a modern slim line design for easy installation on narrow head frames and top rails. This guide is based on the desired mounting of the closer.



Note: For parallel mounts order "P" version to also receive PA Shoe.

Product comparison

This chart shows a basic comparison of LCN 1000 Series closers. Refer to the specific closer chapter for complete details.

	Mounting					Finish			Cover				Cylinder							Arm function*						
	Hinge (pull) side	Top jamb (pull)	Top jamb (push)	Parallel arm	Stop face	Paint	Powder coat	Plated	Plastic	Metal	Designer series	Non-handed	Non-sized	Accessibility	Delay action	Regular (double)	Standard (single)	Heavy duty	Hold Open	EDA/HEDA	CUSH/HCUSH	SCUSH/SHCUSH							
1250	■	■	■	■	■	■	■	■	■	■	■	■	■	♿	■	180°	■	■	180°	180°	110°	110°							
1260	■	■	■	■	■	■	■	■	■	■	■	■	■	♿	■	180°	■	■	180°	120°	110°	110°							
1450	■	■	■	■	■	■	■	■	■	■	■	■	■	♿	■	180°	■	■	180°	180°	110°	110°							
1450T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	180°	■	180°	■	■	■							
1460	■	■	■	■	■	■	■	■ D	■	■	■	■	■	♿	■	180°	■	180°	180°	110°	100°	100°							
1460T	■	■	■	■	■	■	■	■ D	■	■	■	■	■	♿	■	■	180°	■	115°	■	■	■							

■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template. See individual closer series for degrees of opening per installation.
D For designer series only

Applications
- For aluminum, hollow metal, or wood swinging doors and frames.
- Can be used with hinge or pivot mounted door.
- Mounts on 1 3/4" transom without adapter plates.
- Adapter plates and other installation accessories available for non-standard conditions.

Features common to 1000 Series
- 1000 series closers mount three ways. Closers with regular or holdopen arm mount hinge side or top jamb. Parallel arm, closers include - 62PA SHOE required for parallel arm mount. 1450T mounts hinge side and stop face. 1460T mounts hinge side, top jamb (pull side) and stop face.
- Non-handed for right and left swinging doors.
- Closers to meet ADA reduced opening force requirements.
- Adjustable hydraulic backcheck cushions opening swing prior to 90º.
- Separate regulation of general closing speed and latching speed.

Design assistance
LCN has been providing reliable solutions to unique door control problems since 1925. Design and specification assistance are only a phone call away. Contact LCN for assistance or technical information at 877-671-7011 or fax 800-248-1460 (Order Entry), Fax 815-879-1495 for Product Support.

Warranty
- 30 year limited warranty (1460 Series) and 20 year limited warranty (1260 Series) on cast iron closers.
- 15 year limited warranty (1250 series) and 25 year limited warranty (1450 series) on cast aluminum closers.

See General Information catalog for full warranty details.

Specifications
Refer to specifications section for suggested architectural specifications.

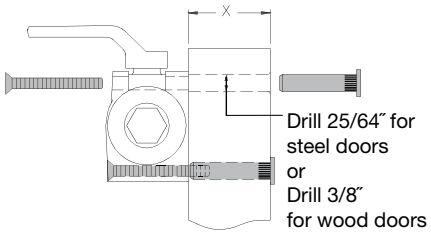
Materials
- High strength cast iron (1260, 1460, 1460T) or cast aluminum (1250, 1450, 1450T) cylinder.
- Forged steel main arm for all EDA, CUSH, 1460HD and 1460T arms.
- One piece forged steel piston.
- Heat treated pinion.
- LCN's standard all weather fluid performs to temperature ranges from 120ºF (49ºC) to -30ºF (-35ºC).
- High efficiency, full complement, low friction bearings.
- Tamper resistant regulating screws.
- Full rack and pinion hydraulic action.
- Low friction track and roller combination for all single lever arm closers.

Finishes
- Available in six standard or a wide selection of optional custom powder coat finishes to blend with door and frame.
- LCN's powder coat finish surpasses 100 hours of salt spray which is over four times the ANSI standard for corrosion resistance.
- Painted finishes on cast aluminum closers (1250,1450).
- For installations where a higher level of corrosion resistance is required, LCN offers an optional Special Rust Inhibitor (SRI) pretreatment (cast iron). Closers that combine the exclusive LCN powder coat finish and the SRI pretreatment exceed the ANSI standard for corrosion resistance even further.
- Plated finishes are available as an option to accent door and frame for the 1460 Series closers.

Listings and approvals
UL listed for self-closing doors without hold open under "swinging door closers" (GVEV) file R 1943. Tested and certified under ANSI Standard A156.4 grade one. Consult factory for details. Consult factory for other listings such as; cUL, California State Fire Marshal, Bureau of Standards and Appeals.

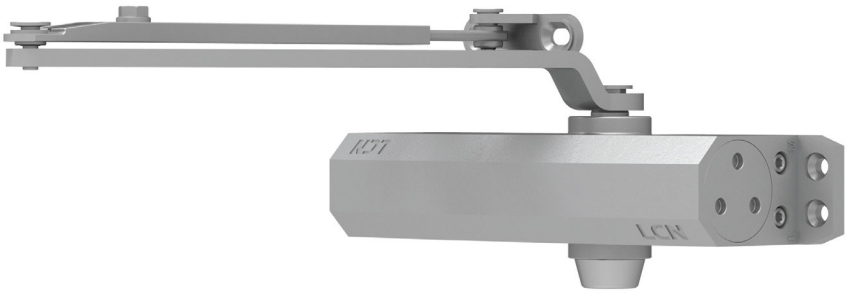
Positive pressure
LCN closers have been certified for three hours by UL to be in compliance with UL 10 C. Contact LCN for specific details on door closer fire ratings.

Fasteners
1260, 1460, 1460T series closers are shipped with: A standard Self Reaming and Tapping Screws (SRT) pack that contains Phillips head SRT screws to install the closer. 1250, 1450 and 1450T series closers are shipped with: A universal screw pack to include Self Reaming and Tapping Screws (SRT), machine and wood screws. Standard LCN Through Bolts (TB) can be installed on 1 3/4" (44 mm) thick doors with 1/4 - 20 machine screws. Optional Through Bolt (TB) sizes are available for 1 5/8" (41 mm) or 1 3/8" (35 mm) door thickness, but this must be specified when ordering.



Notes:
1. For Through Bolts, specify door thickness if other than 1 3/4" (44mm), represented in diagram as dimension "X".
2. Phillips head, metric machine screws are available, please specify.
3. LCN recommends the use of wood screws for wood door applications.

1250 Series



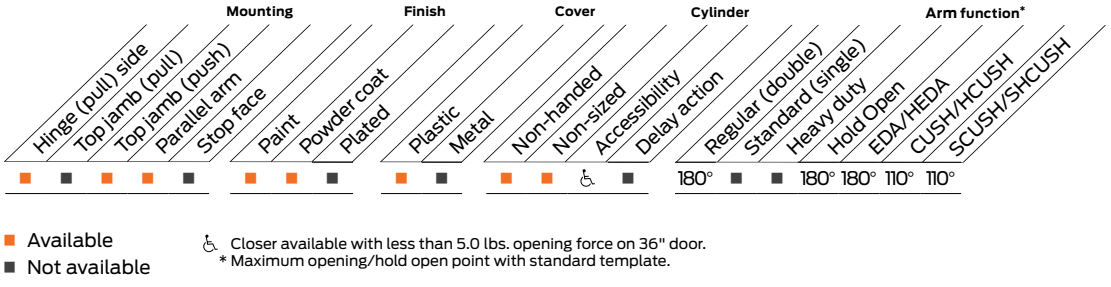
The 1250 Series cast aluminum closer is designed for low-frequency and low-abusive traffic areas. Combining dependable operation, low maintenance and a stylish look this closer is ideal for aluminum storefronts and interior offices.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	▪ Cast aluminum body ▪ Full complement bearing ▪ 1 3/8" diameter piston ▪ 5/8" diameter single heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Templating	Peel-n-Stick templates - 3/4" x 9 1/16" mounting hole pattern
Size	Adjustable spring size 1-5
Warranty	15 years

Cover	Slim line cover, optional
Fasteners	Universal screw pack (UNIV)
Mounting	Hinge (pull side), top jamb (push side), parallel arm (push side)
Arms	Tripack includes regular, top jamb, and parallel arm (RWPA)
Finishes/colors/ powder coat	▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only

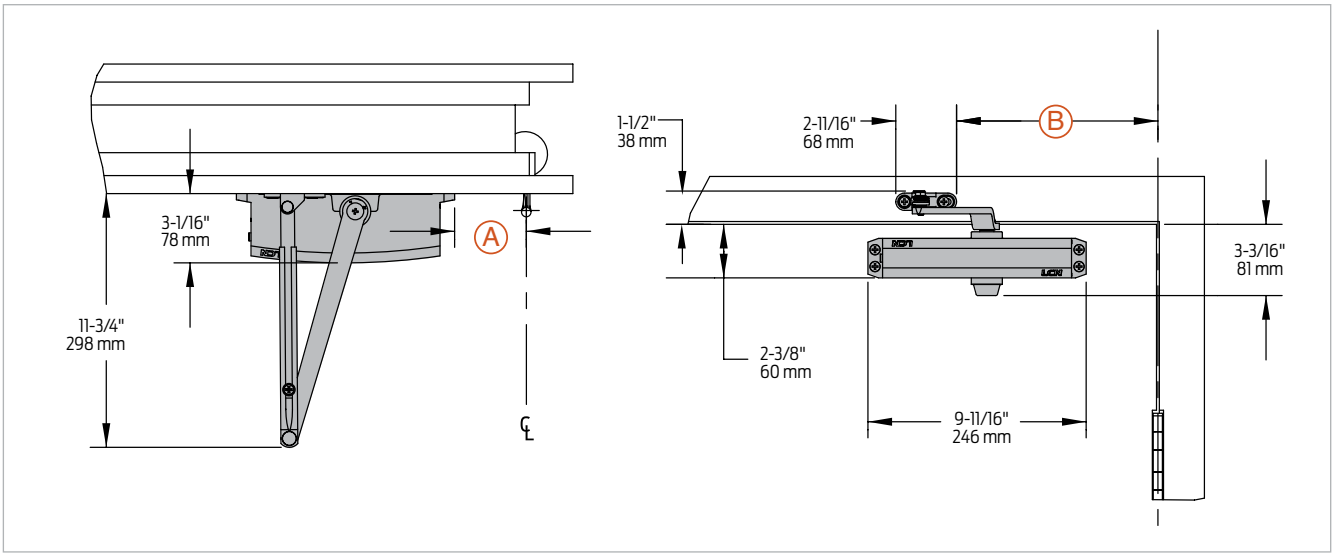
Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Hinge (pull) side mounting

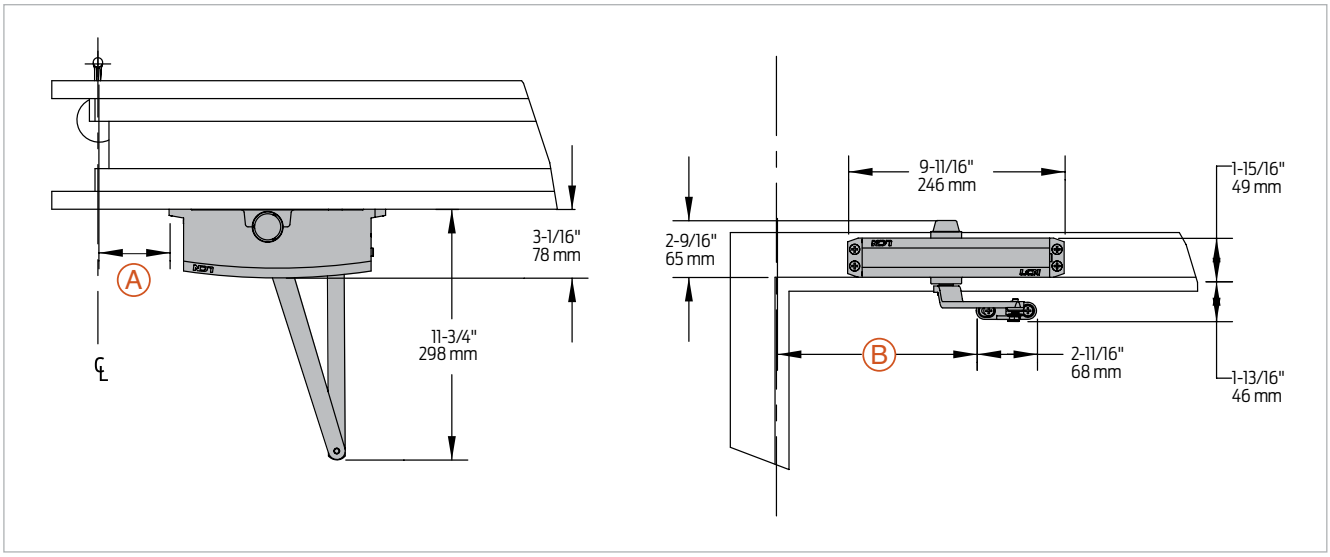


Butt hinges	Should not exceed 5" (127 mm) in width	
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°	
Reveal	Should not exceed 3/4" (19 mm) for regular arm or 1/2" (13 mm) for Hold Open Arm (H)	
Top rail	Less than 2 3/8" (60 mm) requires plate, 1250-18	
Clearance	3 1/16" (78mm) behind door required for installation	
Maximum opening	100°:	A = 6 11/16" (170mm) B = 12 7/16" (316 mm)
	101° to 120°:	A = 5 11/16" (144mm) B = 11 7/16" (291 mm)
	or 121°* to 180°:	A = 3 1/16" (78 mm) B = 8 15/16" (227 mm)

Note: Hold open points up to maximum opening with Hold Open Arm.
* Frame and trim permitting.

Mounting details

Top jamb (push side) mounting

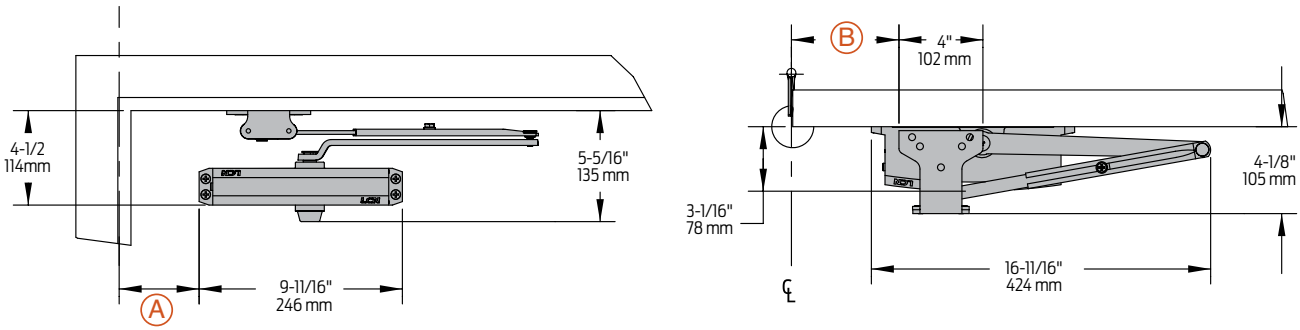


Butt hinges	Should not exceed 5" (127 mm) in width		
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°		
Reveal	Arm type	Maximum reveal	Opening
	Regular Arm	0" to 5"	180°
	Long Arm	4" to 8"	165°
	Hold Open Arm	0" to 2 3/4"	180°
	Hold Open Long Arm	2" to 6 1/2"	180°
Top rail	Requires 1 3/4" (44 mm) minimum. 2 1/2" (64 mm) minimum with closer on plate, 1250-18		
Head frame	Less than 1 3/4" (44 mm) requires plate, 1250-18. For flush ceiling condition with 2" (51 mm) head frame, use plate, 1250-18. (Plate requires 1 3/8" (35 mm) minimum.)		
Maximum opening	100°:	A = 7 3/16" (183 mm) B = 12 15/16" (329 mm)	
	101° to 120°:	A= 5 11/16" (144 mm) B = 11 7/16" (291 mm)	
	or *121° to 180°:	A= 3 1/16" (78 mm) B = 8 15/16" (227 mm)	

Note: Hold open points up to maximum opening with Hold Open Arm.
* Frame and trim permitting.

Mounting details

Parallel arm (push side) mounting



The 'A' dimension refers to the edge of the closer body to the center line of pivot or hinge.
The 'B' dimension refers to the edge of the closer shoe bracket to the center line of pivot or hinge.

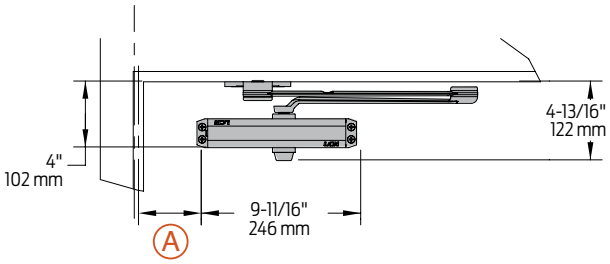
Butt hinges	Should not exceed 5" (127 mm) in width	
Auxiliary stop	Recommended at hold open point, where a door cannot swing 180°, or where Cush-n-Stop Arm is not used	
Top rail	Less than 4 1/2" (114 mm) measured from the stop requires plate, 1250-18PA	
Clearance	1250-62PA shoe projects 4 1/8" (105 mm) from door face	
Stop width	Minimum 1" (25 mm)	
Blade stop	Clearance, requires 1/2" (13 mm) blade stop spacer, 1250-61	
Auxiliary shoe	1250-62A allows installation of regular arm with overhead holder/stop	
Maximum opening	Regular or Hold Open Arm can be templated to 100°:	A = 7 5/16" (186 mm) B = 8 5/8" (219 mm)
	or 101° to 130°:	A= 5 13/16" (148 mm) B = 7 1/8" (181 mm)
	or *131° to 180°:	A= 3 13/16" (97 mm) B = 5 1/8" (130 mm)

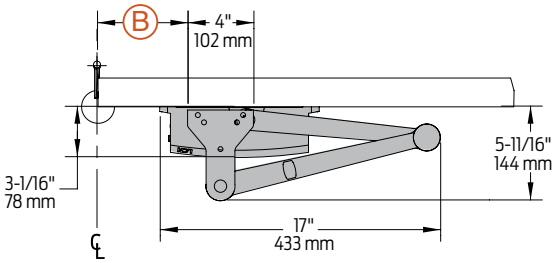
Note: Hold open points up to maximum opening with Hold Open Arm. 1250 Parallel arm closer includes 1250-201 fifth hole spacer to support PA shoe.
* Frame and trim permitting.

Mounting details

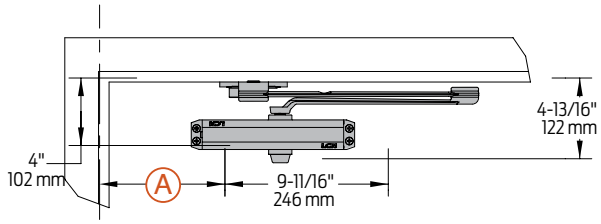
EDA and Cush-n-Stop mounting

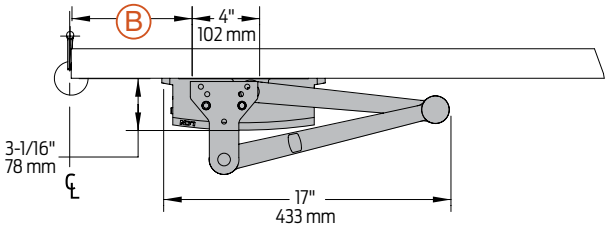
EDA mount





CUSH/SCUSH mount





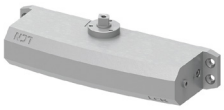
The 'A' dimension refers to the edge of the closer body to the center line of pivot or hinge.
The 'B' dimension refers to the edge of the closer shoe bracket to the center line of pivot or hinge.

Clearance	1250-62EDA or CUSH shoe projects 5 11/16" (144mm) from door face	
Head frame	Flush or rabbeted requires CUSH flush panel adapter, 1250-419	
EDA or CUSH Arm	Requires soffit shoe support, 1250-30 for fifth screw anchorage where reveal is less than 2 3/4" (70mm)	
SCUSH	Dead stop points are approximately 5° more than templated stop point.	
Maximum opening	EDA template allows 180°. Hold open point up to maximum opening	CUSH arms can be templated for maximum opening/ hold open point at 85°
	100°: A = 7 5/16" (186mm) B = 9" (229 mm)	85°: A = 8 13/16" (224 mm) B = 10 1/2" (267 mm)
	or 130°: A = 5 13/16" (148 mm) B = 7 1/2" (191 mm)	90°: A = 8 1/16" (205 mm) B = 9 3/4" (248 mm)
	or 180°: A = 3 13/16" (97 mm) B = 5 1/2" (140 mm)	100°: A = 6 11/16" (170 mm) B = 8 3/8" (213 mm)
		105°: A = 6 1/16" (154 mm) B = 7 3/4" (197 mm)
		110°: A = 5 7/16" (138 mm) B = 7 1/8" (181 mm)

Note: 1250 closers ordered with EDA, CUSH or SCUSH arms include 1250-201 fifth hole spacer to support the shoe

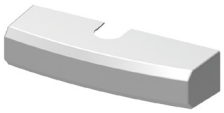
Accessories

Cylinders



1250-3071
Cast aluminum cylinder assembly (CYL)
- Non-handed
- Standard

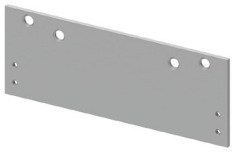
Covers



1250-72
Slim line plastic cover (SLIMPC)
- Non-handed
- Optional

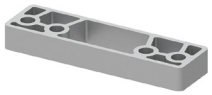
Installation accessories

1250-18
Plate
- Required for hinge side mount where top rail is less than 2 3/8" (60mm)
- Required for top jamb mounting where head frame is less than 1 3/4" (44 mm) or flush ceiling condition exists
- Requires minimum 1 1/2" (38 mm) minimum top rail or 1 1/4" (32 mm) head frame



1250-18PA
Plate
- Required for parallel arm mounting where top rail is less than 4 1/2" (114mm), measured from the stop
- Requires 1 3/4" (44 mm) minimum top rail

1250-30
CUSH shoe support
- Provide anchorage for fifth screw used with CUSH arms where reveal is less than 2 3/4" (70mm)



1250-61
Blade stop spacer
- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop

1250-62A
Auxiliary shoe
- Requires a top rail of 7 1/8" (181mm). Optional shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop

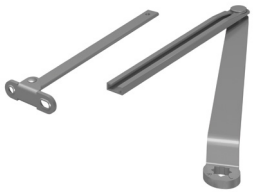
1250-419
PA flush panel adapter
- Provides horizontal mounting surface for PA, EDA or CUSH shoe on single rabbeted or flush frame

1250-62PA
PA shoe
- Required for parallel arm mounting

Accessories

Arms

1250-3077
Regular Arm with Parallel Arm Bracket (RWPA)
- Non-handed
- Mounts hinge side or top jamb
- Parallel Arm includes PA shoe, 1250-62PA required for parallel arm mounting



1250-3077L
Long Arm (LONG)
- Non-handed
- Includes long rod and shoe, 1250-79LR for top jamb mount with deep reveals
- Optional

1250-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Features solid forged steel main and forearm for potentially abusive installations
- Optional

1250-3049EDA
Hold Open Extra Duty Arm (HEDA)
- Handed
- Provides hold open function adjustable at shoe
- Optional

1250-3049
Hold Open Arm with Parallel Arm Bracket (HWPA)
- Non-handed
- Mounts hinge side, top jamb or parallel arm (62PA required)
- Hold open adjustable at shoe
- Optional

1250-3049L
Hold Open Long Arm (HLONG)
- Non-handed
- Includes long head and tube, 1250-3048L for top jamb mount with deep reveals
- Optional

1250-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe
- Optional

1250-3049CNS
Hold Open Cush-n-Stop Arm (HCUSH)
- Non-handed
- Provides hold-open function with templated stop/hold open points
- Handle controls hold open function
- Optional

1250-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional

1250-3049SCNS
Spring Hold Open Cush-n-Stop Arm (SHCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional

Ordering information

How-to-order 1250 Series closers

1. Select finish

☐ Standard powder coat _____
Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696).

Closer will be shipped with:
- Standard cylinder
- Tripack arm (RWPA)
- Universal screw pack
  (unless options listed below are selected)

Closer options

Cover
☐ Slim line plastic cover (SLIMPC)

Finish
☐ Custom Powder Coat (RAL) _____
☐ SRI primer (for use with powder coat finishes only)

Arm
☐ Regular Arm with 62A Auxiliary Shoe (RW62A)
☐ Long Arm (LONG)
☐ Regular with 62A Auxiliary Shoe (RW62A)
☐ Hold Open with Parallel Arm Bracket (HWPA)
☐ Hold Open Long Arm (HLONG)
☐ Extra Duty Arm (EDA)
☐ Hold Open Extra Duty Arm (HEDA)
☐ Cush-n-Stop Arm (CUSH)
☐ Hold Open Cush-n-Stop Arm (HCUSH)
☐ Spring Cush-n-Stop Arm (SCUSH)
☐ Spring Hold Open Cush-n-Stop Arm (SHCUSH)

Optional screw packs
☐ Torx Machine Screws (TORX)
☐ Through Bolt[1] and Torx Machine Screw (TBTRX)

Installation accessories
☐ Plate, 1250-18
☐ Plate, 1250-18PA
☐ CUSH Shoe Support, 1250-30
☐ Blade Stop Spacer, 1250-61
☐ Auxiliary Shoe, 1250-62A
☐ PA Flush Panel Adapter, 1250-419

Special template
☐ ST- _____

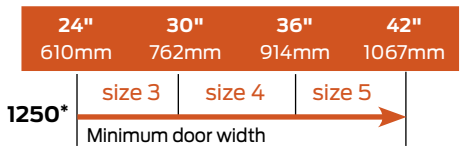
Meets Buy American Act
☐ BAA

1. Specify door thickness if other than 1 3/4".

Table of sizes

- Select closer based on width of door.
- The spring power of a 1250 cylinder is field adjustable from size 1 through size 5 and is shipped adjusted to size 3.

Exterior (and vestibule) door width



Interior door width

→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 1250 Series closers

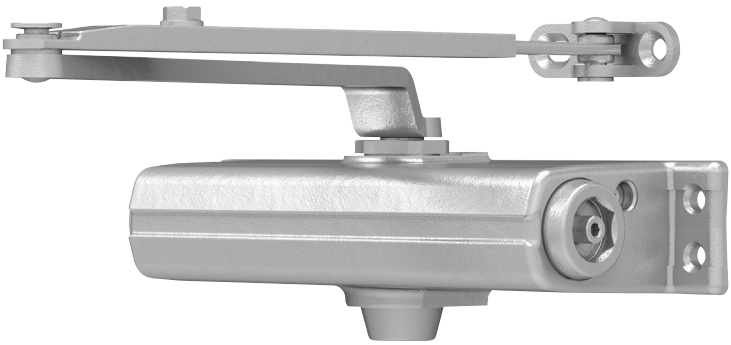
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	1250	1250	1250
5.0* lbs.	1250	1250	1250

* Maximum opening force.

1260 Series



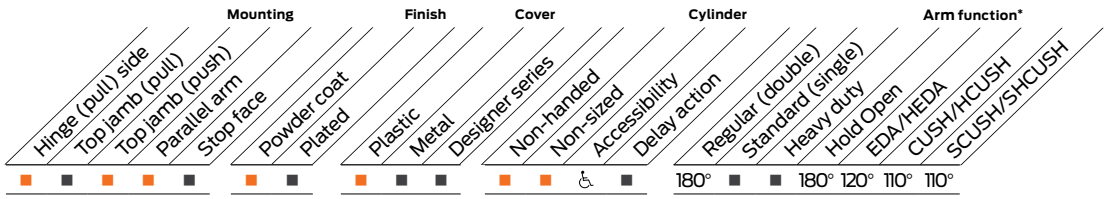
The 1260 is a light to medium duty cast iron closer designed to fit the most common commercial foot print. It's adjustable for spring sizes 1-5, features a complete line of regular and extra duty arms, and an optional Quick Fix™ bracket kit.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 3/8" Diameter piston ▪ 5/8" diameter single heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Templating	Peel-n-Stick templates - 3/4" x 9 1/16" mounting hole pattern
Size	Adjustable spring size 1-5
Warranty	20 years

Cover	Slim line plastic cover, optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Hinge (pull side), top jamb (push side), parallel arm (push side)
Arms	Regular arm
Finishes/colors/ powder coat	▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only

Product Configurations



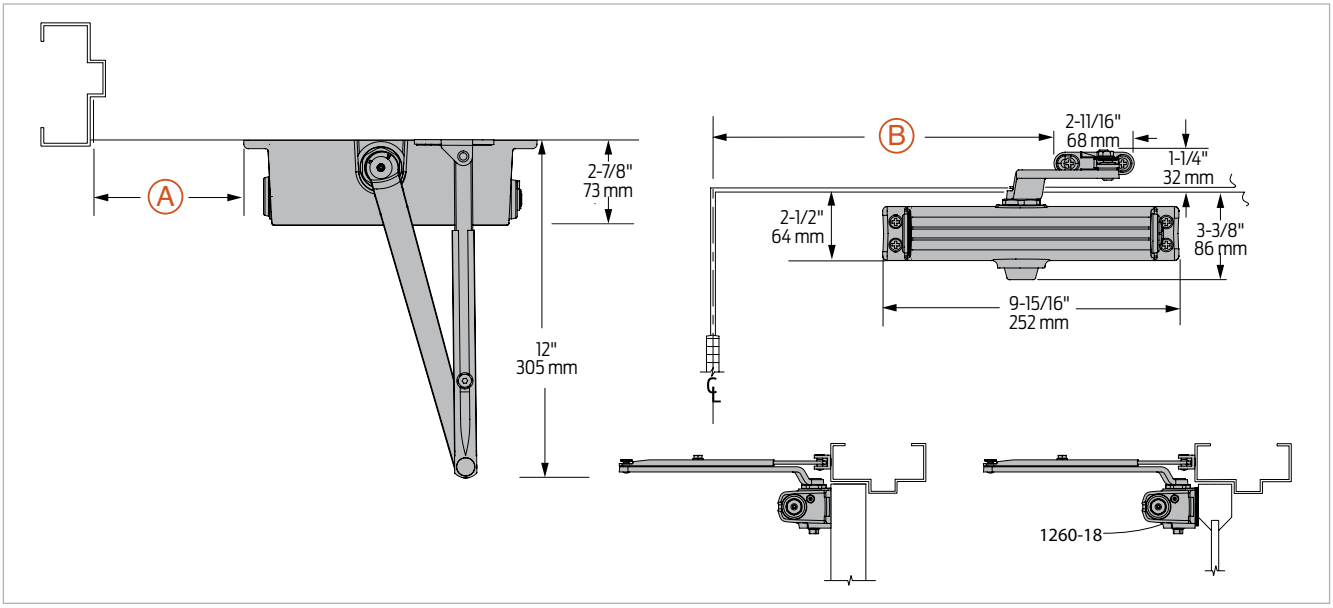
■ Available
■ Not available

Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Hinge (pull) side mounting

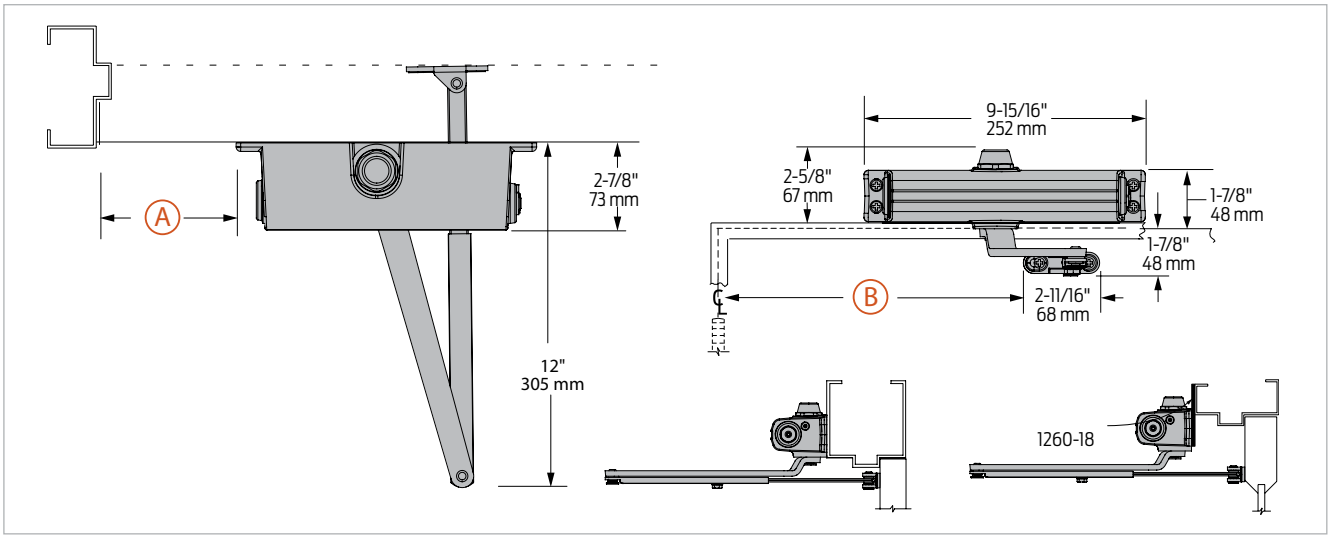


Butt hinges	Should not exceed 5" (127 mm) in width	
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°	
Reveal	Should not exceed 3/4" (19 mm) for regular arm or 1/2" (13 mm) for Hold Open Arm	
Top rail	Less than 2 1/2" (64 mm) requires plate, 1260-18	
Clearance	2 7/8" (73 mm) behind door required for installation	
Maximum opening	110°:	A = 6 9/16" (167 mm) B = 12 7/16" (316 mm)
	101° to 120°:	A= 5 9/16" (141 mm) B = 11 7/16" (291 mm)
	or *121° to 180°:	A= 3 1/16" (78 mm) B = 8 15/16" (227 mm)

Note: Hold open points up to maximum opening with Hold Open Arm.
* Frame and trim permitting.

Mounting details

Top jamb (push side) mounting

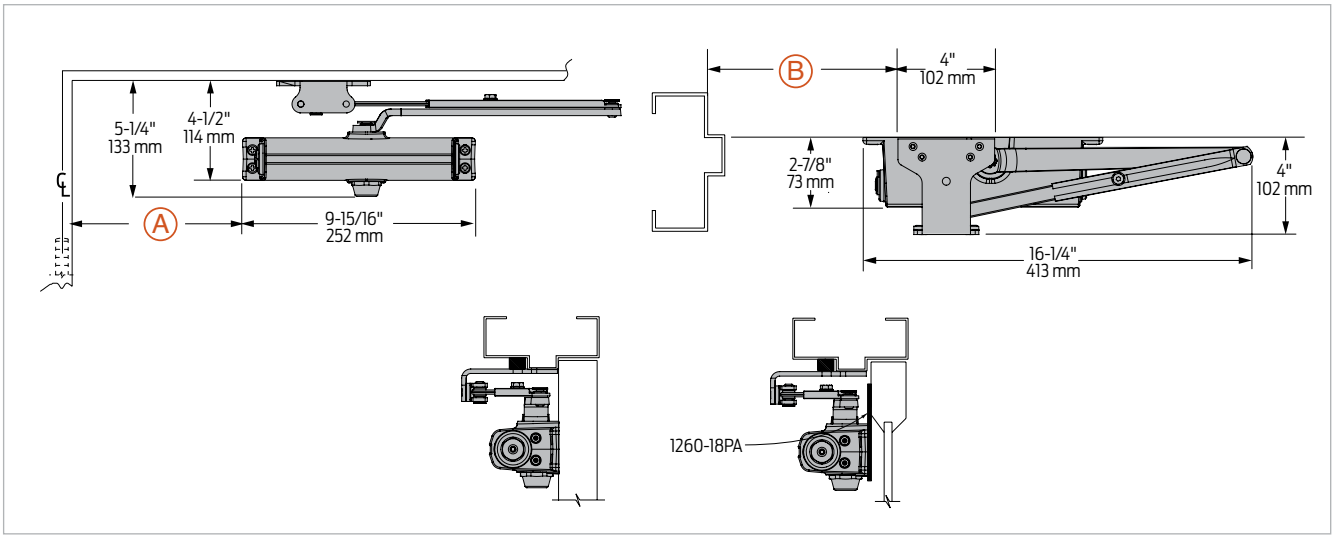


Butt hinges	Should not exceed 5" (127 mm) in width		
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°		
Reveal	Arm type	Maximum reveal	Opening
	Regular Arm	3 1/2"	Up to 120°
	Regular Arm	2 1/4"	121° to 180°
	Long Arm	7 1/2"	Up to 120°
	Long Arm	3 1/2"	121° to 180°
	Hold Open Arm	2"	Up to 120°
	Hold Open Arm	2 1/4"	121° to 180°
	Hold Open Long Arm	4 1/2"	Up to 120°
	Hold Open Long Arm	4 1/2"	121° to 160°
Top rail	1 3/4" (44 mm) minimum. 2 1/2" (64 mm) minimum with closer on plate, 1260-18		
Head frame	Less than 1 3/4" (44 mm) requires plate, 1260-18. For flush ceiling condition with 2" (51 mm) head frame, use plate, 1260-18. (Plate requires 1 3/8" (35 mm) minimum.)		
Maximum opening	110°:	A = 7 1/16" (179 mm) B = 12 15/16" (329 mm)	
	101° to 120°:	A= 5 9/16" (141 mm) B = 11 7/16" (291 mm)	
	or *121° to 180°:	A= 3 1/16" (78 mm) B = 8 15/16" (227 mm)	

Note: Hold open points up to maximum opening with Hold Open Arm.
* Frame and trim permitting.

Mounting details

Parallel arm (push side) mounting



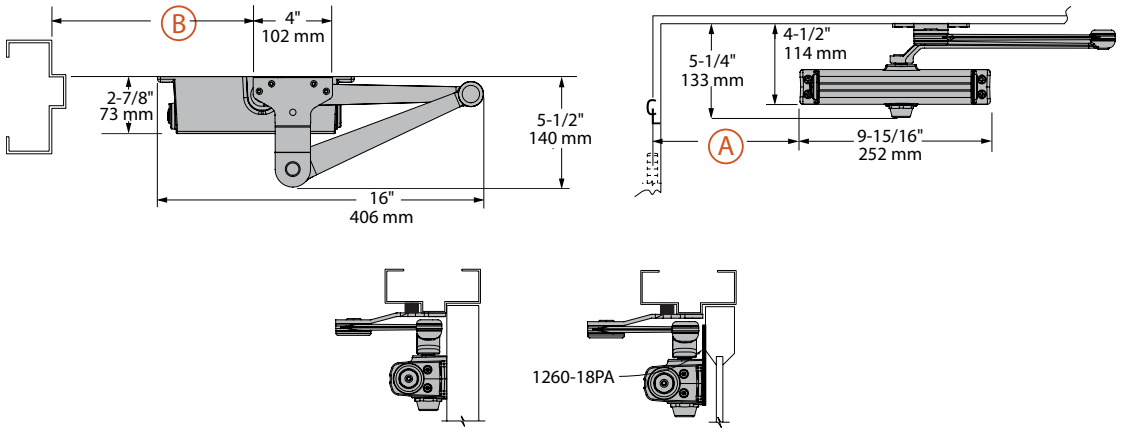
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point, where a door cannot swing 180°, or where Cush-n-Stop Arm is not used
Top rail	Less than 4 3/8" (111 mm) measured from the stop requires plate, 1260-18PA
Clearance	1260-62PA shoe projects 4" (102 mm) from door face
Stop width	Minimum 1" (25 mm)
Blade stop	Clearance, requires 1/2" (13 mm) blade stop spacer, 1260-61
Auxiliary shoe	1260-62A allows installation of regular arm with overhead holder/stop. Special templating required
Maximum opening	Regular or Hold Open Arm can be templated to 100°: A = 7 3/16" (183 mm) B = 8 5/8" (219 mm)
	or 101° to 130°: A= 5 11/16" (144 mm) B = 7 1/8" (181 mm)
	or *131° to 180°: A= 3 11/16" (94 mm) B = 5 1/8" (130 mm)

Note: Hold open points up to maximum opening with Hold Open Arm. Optional mounting requires PA shoe, 1260-62PA for Regular and Hold Open Arms. 1260 Parallel Arm closer includes 1260-201 fifth hole spacer to support PA shoe.
* Frame and trim permitting.

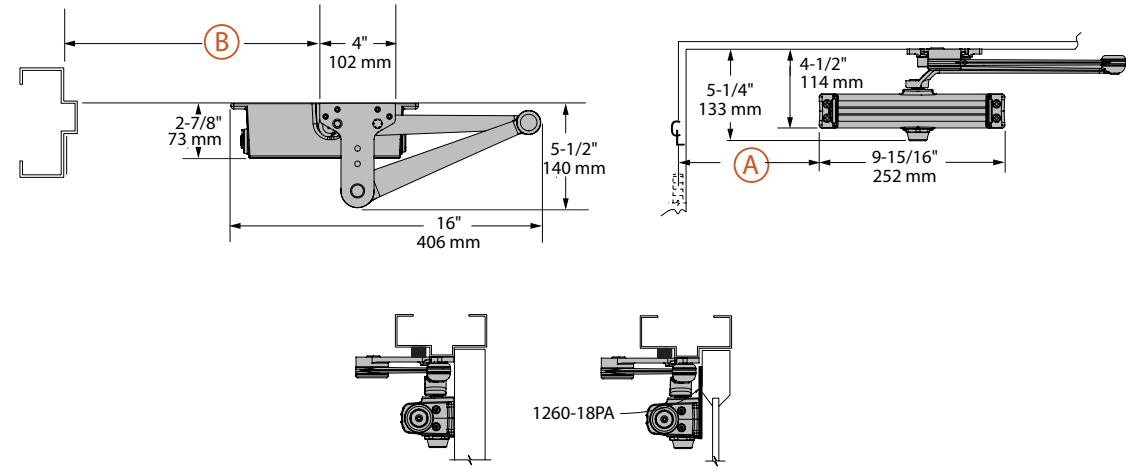
Mounting details

EDA and Cush-n-Stop mounting

EDA mount



CUSH mount



Clearance	1260-62EDA or CUSH shoe projects 5 1/2" (140 mm) from door face			
Head frame	Flush or rabbeted requires CUSH flush panel adapter, 1260-419			
EDA or CUSH ARM	Requires shoe support, 1260-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm)			
Maximum opening	EDA template allows 120°. Hold open point up to maximum opening		CUSH arms can be templated for maximum opening/hold open point at	
	90°:	A = 4 13/16" (122 mm) B = 9 1/2" (241 mm)	85°:	A = 5 5/16" (135 mm) B = 10" (254 mm)
	or 120°:	A = 3 5/16" (84 mm) B = 8" (203 mm)	90°:	A = 4 11/16" (119 mm) B = 9 3/8" (238 mm)
	Hold open points up to maximum opening with HEDA arm		100°:	A = 3 9/16" (90 mm) B = 8 1/4" (210 mm)
			110°:	A = 2 13/16" (71 mm) B = 7 1/2" (191 mm)

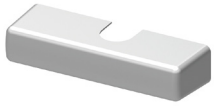
Note: 1260 closers ordered with EDA, CUSH or SCUSH arms include 1260-201 fifth hole spacer to support the shoe.

Accessories

Cylinders

1261(2)(3)(4)(5)-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- Standard

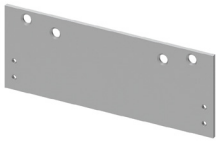
Covers



1260-72
Slim line plastic cover (SLIMPC)
- Non-handed
- Optional

Installation accessories

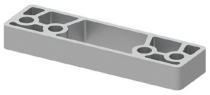
1260-18
Plate
- Required for hinge side mount where top rail is less than 2 1/2" (64 mm)
- Required for top jamb mounting where head frame is less than 1 3/4" (44 mm) or flush ceiling condition exists
- Requires minimum 1 1/2" (38 mm) minimum top rail or 1 1/4" (32 mm) head frame



1260-18PA
Plate
- Required for parallel arm mounting where top rail is less than 4 3/8" (111 mm), measured from the stop
- Requires 1 3/4" (44 mm) minimum top rail

1260-18QF
Quick Fix™ bracket kit
- Optional kit includes retro-fit mounting plates for 1371 closer cylinder and shoe
- Useful in applications when previously drilled holes are damaged

1260-30
CUSH shoe support
- Provide anchorage for fifth screw used with CUSH arms where reveal is less than 3 1/16" (78 mm)



1260-61
Blade stop spacer
- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop

1260-62A
Auxiliary shoe
- Requires a top rail of 7" (178 mm)
- Optional shoe replaces-62PA for parallel arm mounting of regular arm with overhead holder/stop

1260-419
PA flush panel adapter
- Provides horizontal mounting surface for PA, EDA or CUSH shoe on single rabbeted or flush frame

1260-62PA
PA shoe
- Required for parallel arm mounting

Accessories

Arms

1260-3077
Regular Arm with Parallel Arm Bracket (RWPA)
- Non-handed
- Mounts hinge side or top jamb
- Parallel arm includes PA shoe, 1260-62PA required for parallel arm mounting

1260-3077L
Long Arm (LONG)
- Non-handed
- Includes long rod and shoe, 1260-79LR for top jamb mount with deep reveals
- Optional

1260-3049
Hold Open Arm (H)
- Non-handed
- Mounts hinge side, top jamb or parallel arm (62PA required)
- Hold open adjustable at shoe
- Optional

1260-3049L
Hold Open Long Arm (HLONG)
- Non-handed
- Includes long head and tube, 1260-3048L for top jamb mount with deep reveals
- Optional

1260-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Features solid forged steel main and forearm for potentially abusive installations
- Optional 1260-3077EDA/G for blade stop clearance

1260-3077EDA/62G
Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
- Non-handed
- Features solid forged steel main and forearm for potentially abusive installations

1260-3049EDA
Hold Open Extra Duty Arm (HEDA)
- Handed
- Provides hold open function adjustable at shoe
- Optional

1260-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe
- Optional

1260-3049CNS
Hold Open Cush-n-Stop Arm (HCUSH)
- Non-handed
- Provides hold open function with templated stop/hold open points
- Handle controls hold open function
- Optional

1260-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional

1260-3049SCNS
Spring Hold Open Cush-n-Stop Arm (SHCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional

Ordering information

How-to-order 1260 Series closers

1. Select finish

☐ Standard powder coat _____
Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696).

Closer will be shipped with:
- Standard cylinder
- Regular arm
- Self reaming and tapping screws
  (unless options listed below are selected)

Closer options

Cover
☐ Slim line plastic cover (SLIMPC)

Finish
☐ Custom Powder Coat (RAL) _____
☐ SRI primer (for use with powder coat finishes only)

Arm
☐ Regular Arm with Parallel Arm Bracket (RWPA)
☐ Long Arm (LONG)
☐ Regular Arm with 62A Auxiliary Shoe (RW62A)
☐ Hold Open Arm (H)
☐ Hold Open with Parallel Arm Bracket (HWPA)
☐ Hold Open Long Arm (HLONG)
☐ Extra Duty Arm (EDA) (optional -62G)
☐ Hold Open Extra Duty Arm (HEDA) - specify handing (optional -62G)
☐ Cush-n-Stop Arm (CUSH)
☐ Hold Open Cush-n-Stop Arm (HCUSH)

Optional screw packs
☐ Through Bolt[1] Self Reaming and Tapping Screws (TBSRT)
☐ Wood and Machine Screws (WMS)
☐ Through Bolt[1] Wood and Machine Screws (TBWMS)
☐ Torx Machine Screws (TORX)
☐ Through Bolt[1] and Torx Machine Screw (TBTRX)

Installation accessories
☐ Plate, 1260-18
☐ Plate, 1260-18PA
☐ CUSH shoe support, 1260-30
☐ Blade stop spacer, 1260-61
☐ Auxiliary shoe, 1260-62A
☐ PA flush panel adapter, 1260-419
☐ Quick Fix™ bracket kit, 1260-18QF

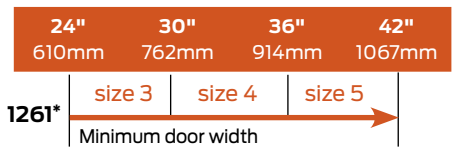
Special template
☐ ST- _____

1. Specify door thickness if other than 1 ¾".

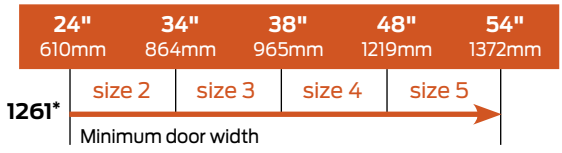
Table of sizes

- Select closer based on width of door.
- The spring power of a 1261 cylinder is field adjustable from size 1 through size 5 and is shipped adjusted to size 3.

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 1260 Series closers

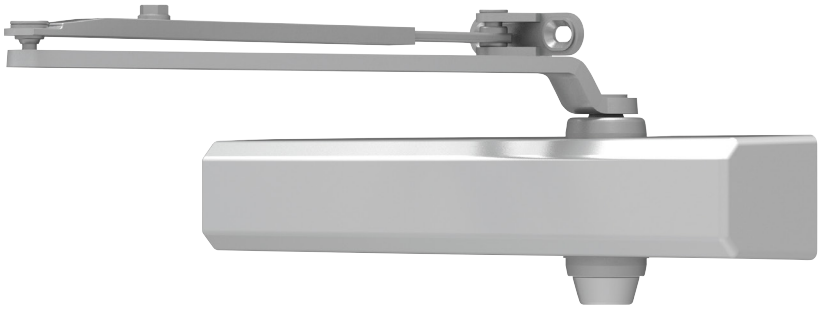
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	1261	1261	1261
5.0* lbs.	1261	1261	1261

* Maximum opening force.

1450 Series



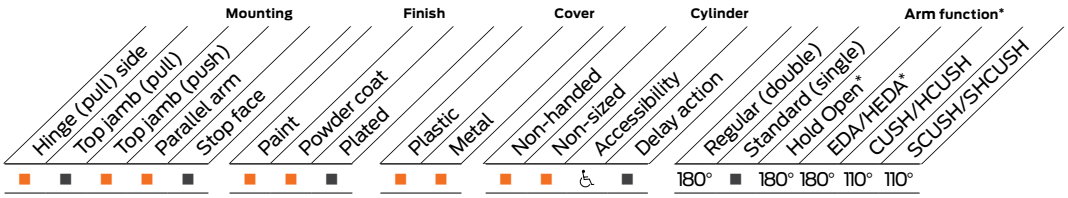
The 1450 Series cast aluminum closer was specially designed to deliver consistent, dependable, long-term performance in frequently-used, low-abusive traffic areas. With industry's most common hole pattern it can fit a range of applications like aftermarket replacement, aluminum storefronts and new construction projects.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast aluminum body ▪ Full complement bearing ▪ 1 1/4" diameter piston ▪ 5/8" diameter single heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Templating	Peel-n-Stick templates - 3/4" x 12" mounting hole pattern
Size	Adjustable spring size 1-6
Warranty	25 years

Cover	▪ Slim line plastic, standard ▪ Full plastic and metal, optional
Fasteners	Universal screw pack (UNIV)
Mounting	Hinge (pull side), top jamb (push side), parallel arm (push side)
Arms	Standard regular pull side and top jamb
Finishes/colors/ powder coat	▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional
	▪ Optional SRI primer - powder coat only

Product Configurations



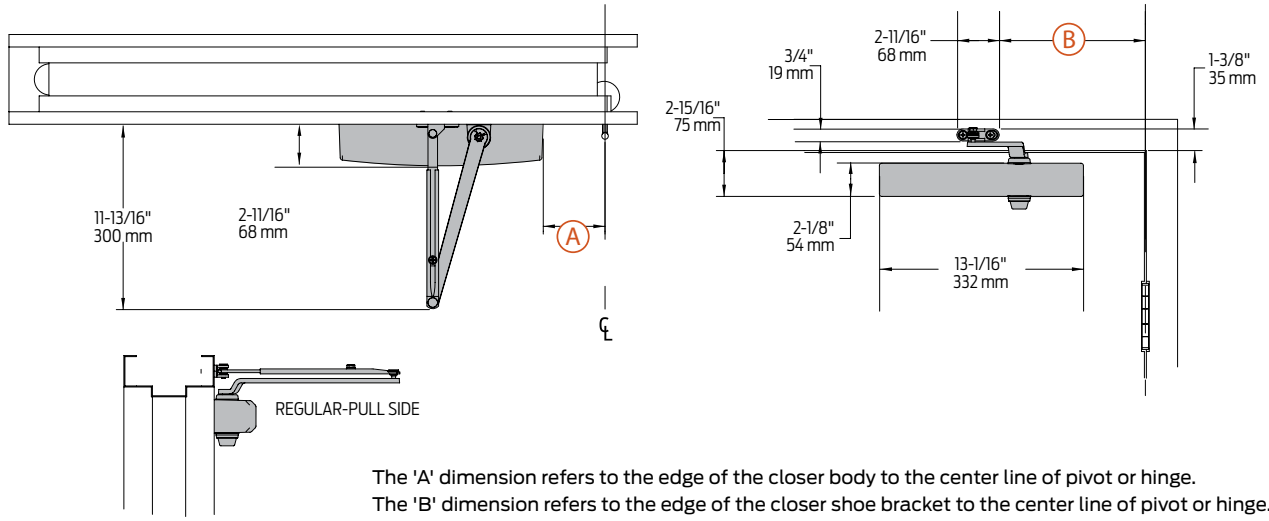
■ Available
■ Not available

Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
D For designer series only

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Hinge (pull side) mounting



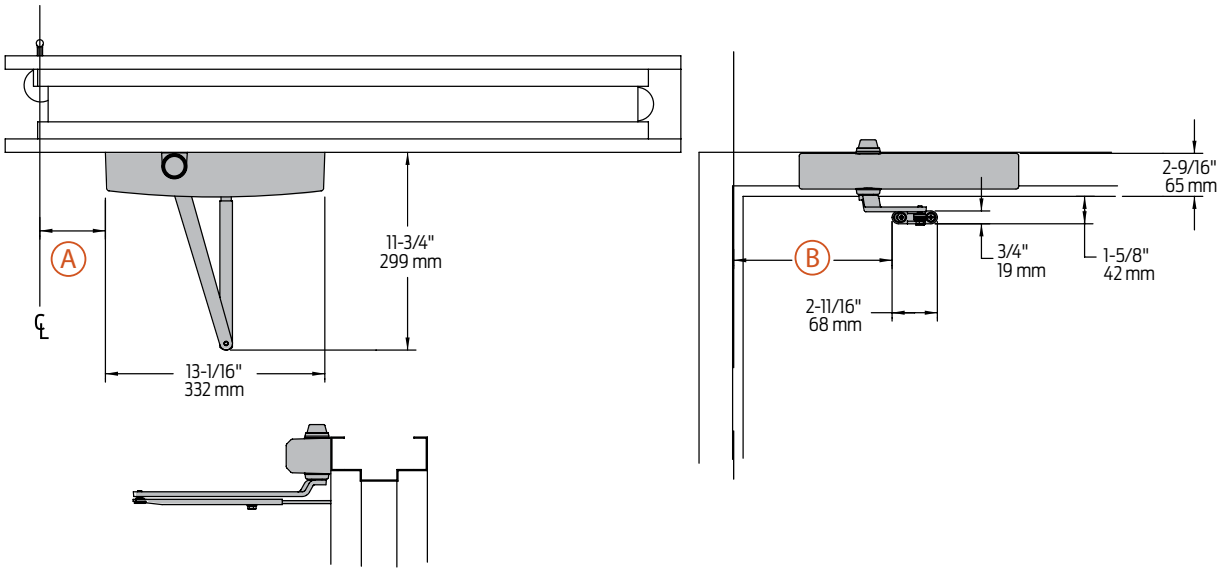
The 'A' dimension refers to the edge of the closer body to the center line of pivot or hinge.
The 'B' dimension refers to the edge of the closer shoe bracket to the center line of pivot or hinge.

Butt hinges	Should not exceed 5" (127 mm) in width	
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°	
Reveal	Should not exceed 3/4" (19 mm) for regular arm or 1/2" (13 mm) for Hold Open Arm	
Top rail	▪ Less than 2 1/2" (64 mm) requires plate, 1450-18 ▪ With full cover, use plate, 1450-18FC. Plate requires 1 1/2" (38 mm) minimum	
Clearance	2 3/8" (60 mm) behind door required for installation	
Maximum opening	100°:	A = 7" (102 mm) B = 12 3/8" (314 mm)
	101° to 130°:	A=5 1/2" (140 mm) B = 10 7/8" (276 mm)
	131° to 180°:	A=4" (140 mm) B = 9 3/8" (238 mm)

Note: Hold open points up to maximum opening with Hold Open Arm.
* Frame and trim permitting

Mounting details

Top jamb (push side) mounting



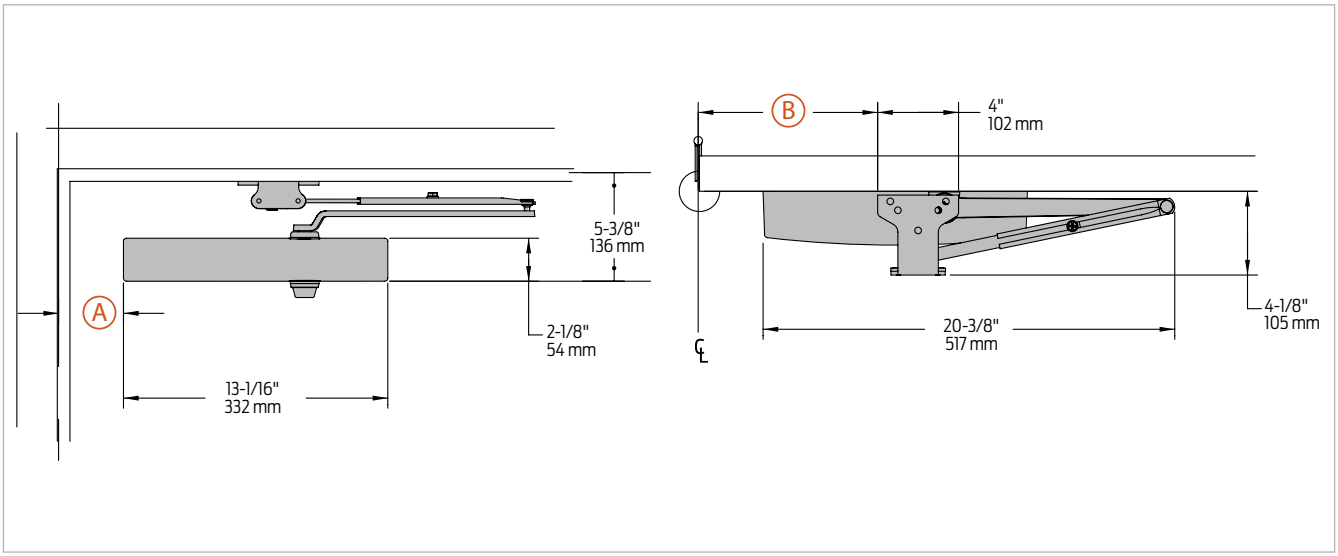
The 'A' dimension refers to the edge of the closer body to the center line of pivot or hinge.
The 'B' dimension refers to the edge of the closer shoe bracket to the center line of pivot or hinge.

Butt hinges	Should not exceed 5" (127 mm) in width		
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°		
Reveal	Arm type	Reveal	Max opening
	Regular Arm	5"	Up to 170°
	Regular Arm	3 3/4"	Up to 180°
	Long Arm	8"	Up to 155°
	Hold Open Arm	2 3/4"	Up to 180°
	Hold Open Long Arm	4 7/8"	Up to 140°
Top rail	Requires 2 1/8" (54 mm) minimum. 3 3/8" (86 mm) minimum with closer on plate, 1450-18.		
Head frame	Less than 1 3/4" (44 mm) requires plate, 1450-18. For flush ceiling condition with 1 3/4" (45 mm) head frame, use plate, 1450-18		
Maximum opening	100°:	A=7" (102 mm) B = 12 3/8" (314 mm)	
	101° to 130°:	A= 5 1/2" (140 mm) B = 10 7/8" (276 mm)	
	131° to 180°:	A= 4" (102 mm) B = 9 3/8" (238 mm)	

Note: Hold open points up to maximum opening with Hold Open Arm.
* Frame and trim permitting

Mounting details

Parallel arm (push side) mounting



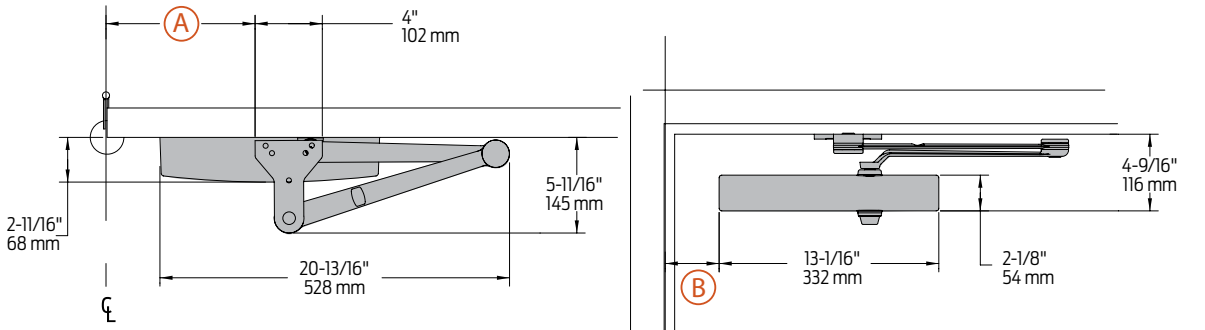
Butt hinges	Should not exceed 5" (127 mm) in width		
Auxiliary stop	Recommended at hold open point, where a door cannot swing 180°, or where Cush-n-Stop Arm is not used		
Top rail	▪ Less than 5 1/4" (133 mm) measured from the soffit requires ▪ Plate requires 1 1/4" (32 mm) minimum.		
	Cover	Minimum top rail (measured from soffit)	Plate required
	Plastic	3 1/2" (89 mm)	1450-18
		2 1/4" (57 mm)	1450-18PA
	Metal	3 1/2" (89 mm)	1450-18FC
		2 1/4" (57 mm)	1450-18PAFC
Clearance	1450-62PA shoe projects 4 1/8" (105 mm) from door face		
Head frame	Flush or single rabbeted requires PA shoe adapter, 1450-418		
Stop width	Minimum 1" (25 mm)		
Blade stop	Clearance, requires 1/2" (13 mm) blade stop spacer, 1450-61		
Auxiliary shoe	1450-62A allows installation of regular arm with overhead holder/stop		
Maximum opening	Regular or Hold Open Arm can be templated to 120°: A = 3 3/16" (81 mm) B = 8 7/8" (225 mm)		
	121° to 180°: A= 11/16" (17 mm) B = 6 3/8" (162 mm)		

Note: Note: Hold open points up to maximum opening with Hold Open Arm. PA shoe is included with RWPA Arm. 1450 closer includes 1450-201 fifth hole spacer to support PA shoe.

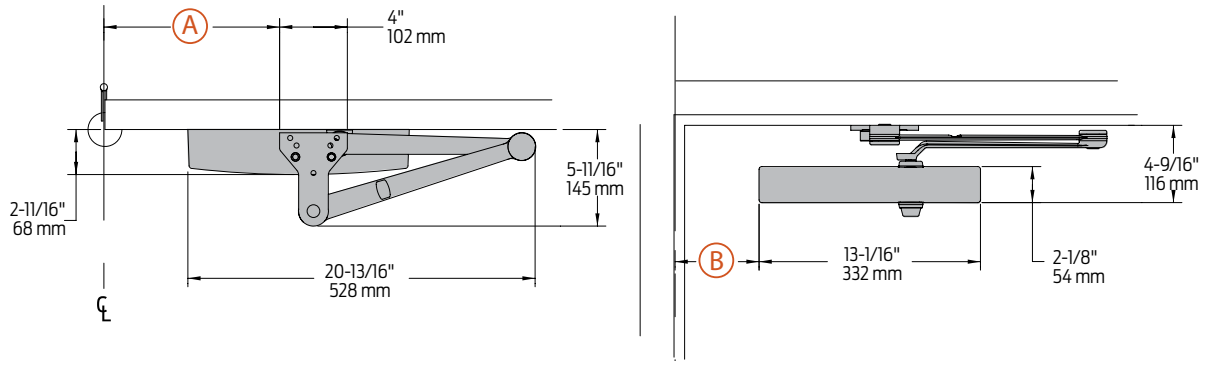
Mounting details

EDA and Cush-n-Stop mounting

EDA/HEDA mount



CUSH/HCUSH/SCUSH/SHCUSH mount



The 'A' dimension refers to the edge of the closer body to the center line of pivot or hinge.
The 'B' dimension refers to the edge of the closer shoe bracket to the center line of pivot or hinge.

Clearance	1450-62EDA or CUSH shoe projects 5 11/16" (144mm) from door face	
Head frame	Flush or rabbeted requires CUSH flush panel adapter, 1450-419	
EDA or CUSH ARM	Requires soffit shoe support, 1450-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm)	
SCUSH	Dead stop points are approximately 5° more than templated stop points	
Maximum opening	EDA template allows 110°. Hold open point up to maximum opening	CUSH arms can be templated for maximum opening/ hold open point at 85°
	120°: A = 8 7/8" (225 mm) B = 3 3/16" (81 mm)	85°: A = 10 3/8" (279 mm) B = 4 15/16" (140 mm)
	over 120°: A = 6 3/8" (162 mm) B = 11/16" (17 mm)	90°: A = 9 5/8" (244 mm) B = 4 3/16" (106 mm)
		95°: A = 8 7/8" (225 mm) B = 3 7/16" (87 mm)
		100°: A = 8 1/4" (210 mm) B = 2 13/16" (71 mm)
		105°: A = 7 5/8" (194 mm) B = 2 3/16" (56 mm)
		110°: A = 7" (178 mm) B = 1 9/16" (40 mm)

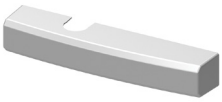
Note: 1450 closers ordered with EDA, CUSH or SCUSH Arms include 1450-201 fifth hole spacer to support the shoe.

Accessories

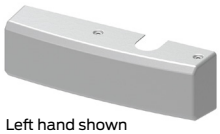
Cylinders

1450-3071
Cast aluminum cylinder assembly

Covers



1450T-72
Cast aluminum cylinder assembly
- Non-handed
- Standard

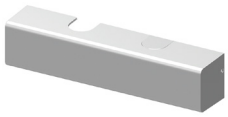


Left hand shown

1450-72MC
Metal cover (MC)
- Handed
- Optional

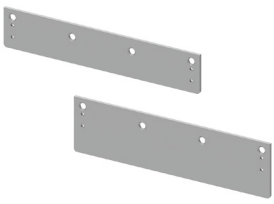
1450-72FC
Full plastic cover (FPC)
- Non-handed
- Optional

Alternate cover

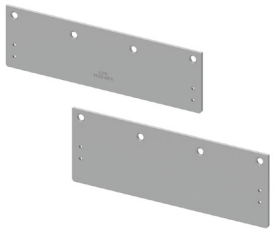


1450-72ALT
Alternate cover
- Non-handed
- Optional, sold separately (not packed with closer)

Installation accessories

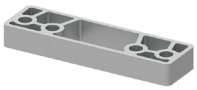


1450-18 / 1450-18FC
Plate
- Required for hinge side mount where top rail is less than 2 1/2" (64 mm)
- Required for top jamb mounting where head frame is less than 1 3/4" (44 mm) or flush ceiling condition exists
- Requires minimum 1 1/2" (38 mm) minimum top rail or 1 1/4" (32 mm) head frame
- With full cover, use plate 1450-18FC



1450-18PA / 1450-18PAFC
Plate
- Required for parallel arm mounting where top rail is less than 4 3/8" (111mm), measured from the stop
- Requires 1 3/4" (44 mm) minimum top rail
- With full cover, use plate 1450-18PAFC

1450-30
CUSH shoe support
- Provide anchorage for fifth screw used with CUSH arms where reveal is less than 3 1/16" (78mm)



1450-61
Blade stop spacer
- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop

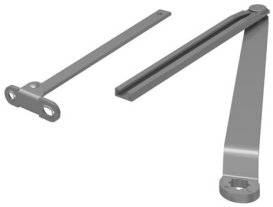
1450-62PA
PA shoe
- Required for parallel arm mounting

1450-62A
Auxiliary shoe
- Requires a top rail of 7" (178mm). Optional shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop

1450-419
PA flush panel adapter
- Provides horizontal mounting surface for PA, EDA or CUSH shoe on single rabbeted or flush frame

Accessories

1450-3077
Regular Arm with Parallel Arm Bracket (RWPA)
- Non-handed
- Mounts hinge side or top jamb
- Includes PA shoe, 1450-62PA required for parallel arm mounting



1450-3077L
Long Arm (LONG)
- Non-handed
- Includes long rod and shoe, 1450-79LR for top jamb mount with deep reveals
- Optional

1450-3049
Hold Open Arm with Parallel Arm Bracket (HWPA)
- Non-handed
- Mounts hinge side, top jamb or parallel arm (62PA required)
- Hold open adjustable at shoe
- Optional

1450-3049L
Hold Open Long Arm (HLONG)
- Non-handed
- Includes long head and tube, 1450-3048L for top jamb mount with deep reveals
- Optional

1450-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Features solid forged steel main and forearm for potentially abusive installations
- Optional 1450-3077EDA/G for blade stop clearance

1450-3077EDA/62G
Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
- Non-handed
- Features solid forged steel main and forearm for potentially abusive installations
- Optional 1450-3077EDA/G for blade stop clearance

1450-3049EDA
Hold Open Extra Duty Arm (HEDA)
- Handed
- Provides hold open function adjustable at shoe
- Optional

1450-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe
- Optional

1450-3049CNS
Hold Open Cush-n-Stop Arm (HCUSH)
- Non-handed
- Provides hold-open function with templated stop/hold open points
- Handle controls hold open function
- Optional

1450-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional

1450-3049SCNS
Spring Hold Open Cush-n-Stop Arm (SHCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional

Ordering information

How-to-order 1450 Series closers

1. Select finish

☐ Standard powder coat _____
Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696).

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Tripack arm (RWPA)
- Universal screw pack
  (unless options listed below are selected)

Closer options

Cover
- ☐ Full Plastic Cover (FPC)
- ☐ Metal Cover (MC)
- ☐ Alternate Cover (ALT) (sold separately from product)

Finish
- ☐ Custom powder coat (RAL) _____ (metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

Arm
- ☐ Regular Arm with Parallel Arm Bracket (RWPA)
- ☐ Long Arm (LONG)
- ☐ Regular Arm with 62A Auxiliary Shoe (RW62A)
- ☐ Hold Open with Parallel Arm Bracket (HWPA)
- ☐ Hold Open Long Arm (HLONG)
- ☐ Extra Duty Arm (EDA) (optional -62G)
- ☐ Hold Open Extra Duty Arm (HEDA) - specify handing
- ☐ Cush-n-Stop Arm (CUSH)
- ☐ Hold Open Cush-n-Stop Arm (HCUSH)
- ☐ Spring Cush-n-Stop Arm (SCUSH)
- ☐ Spring Hold Open Cush-n-Stop Arm (SHCUSH)

Optional screw packs
- ☐ Torx Machine Screw (TORX)
- ☐ Through Bolt[1] and Torx Machine Screw (TBTRX)

Installation accessories
- ☐ Plate, 1450-18
- ☐ Plate, 1450-18FC
- ☐ Plate, 1450-18PA
- ☐ Plate, 1450-18PAFC
- ☐ CUSH Shoe Support, 1450-30
- ☐ Blade Stop Spacer, 1450-61
- ☐ Auxiliary Shoe, 1450-62A
- ☐ PA Flush Panel Adapter, 1450-419

Special template
- ☐ ST- _____

Meets Buy American Act
- ☐ BAA

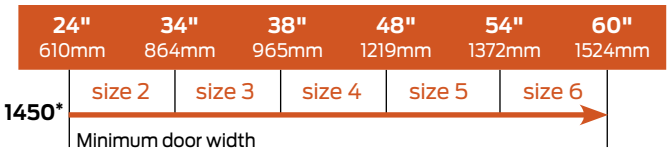
1. Specify door thickness if other than 1 3/4".

Table of sizes

- Select closer based on width of door
- The spring power of a 1450 cylinder is field adjustable from size 1 through size 6 and is shipped adjusted to size 3

Exterior (and vestibule) door width

Interior door width



→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 6.

Reduced opening force 1450 Series closers

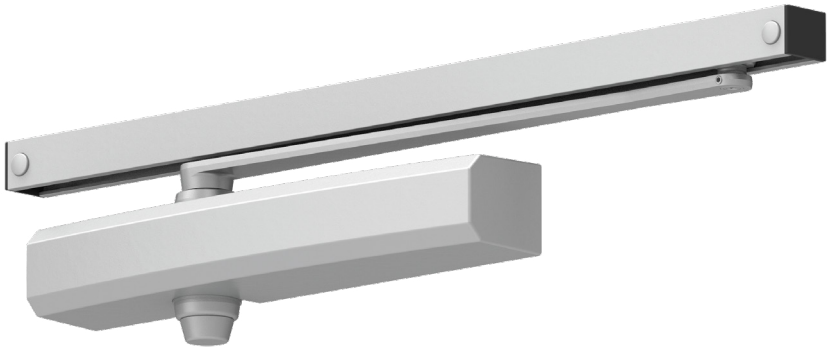
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	1450	1450	1450
5.0* lbs.	1450	1450	1450

* Maximum opening force.

1450T Series



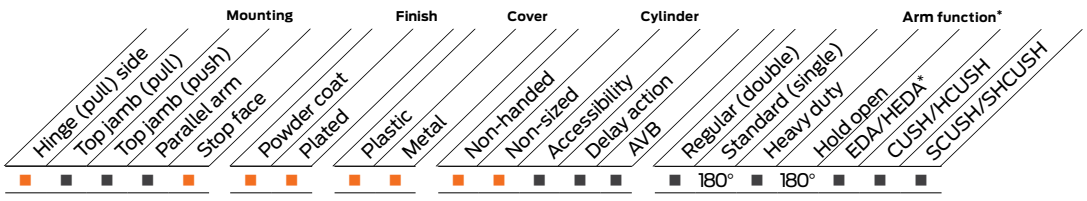
The 1450T is a fully universal slim line, single lever (track) arm closer designed for interior use on narrow head frames and top rails. Our patented appearance maintains the integrity of the building design making it a great choice for interior doors.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	▪ Cast aluminum body ▪ Full complement bearing ▪ 1 1/4" diameter piston ▪ 5/8" diameter single heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Templating	Peel-n-Stick templates - 3/4" x 12" mounting hole pattern
Size	Adjustable spring size 2-3
Warranty	25 years

Cover	▪ Alternate plastic cover ▪ Slim line, standard ▪ Full plastic or full metal, optional
Fasteners	Universal screw pack (UNIV)
Mounting	Pull side on door, push side on door
Arms	Single lever track arm with track roller
Finishes/colors/ powder coat	▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only

Product Configurations



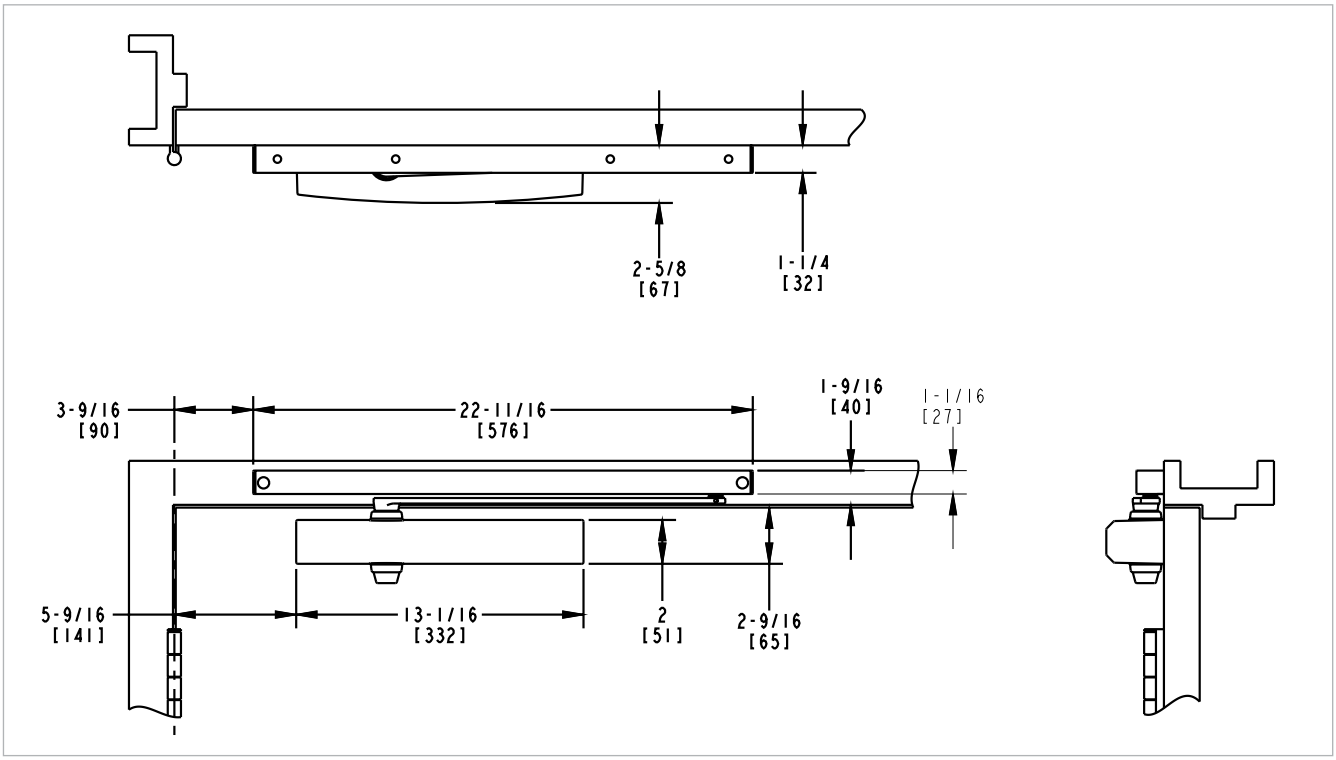
■ Available
■ Not available

* Maximum opening/hold-open point with standard template.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

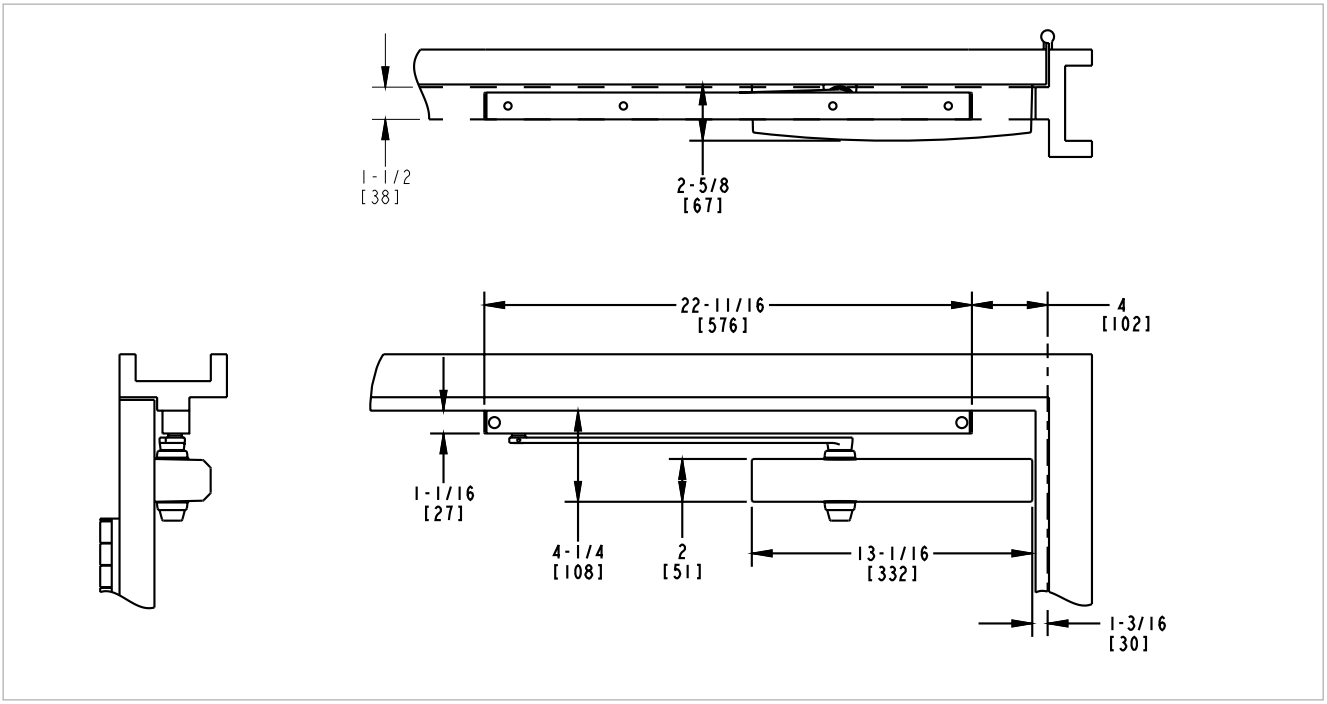
Hinge (pull side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended where a door cannot swing 180° ▪ Optional track bumper assembly assists backcheck in cushioning the opening swing of the door
Reveal	Should not exceed 1/8" (3 mm)
Top rail	▪ Less than 2 3/8" (60 mm) requires plate, 1450T-18 ▪ Plate requires 1-5/8″ (41 mm) minimum top rail ▪ With full cover, use plate, 1450T-18FC
Clearance	2 5/8" (67 mm) behind door required for installation
Maximum opening	▪ Templating allows up to 180°, trim and frame permitting, limited to 120° when optional bumper is installed ▪ Be aware that the majority of track style closers are at their weakest closing force in the 180°-130° range ▪ Consult factory for applications where an exterior or large/heavy door must swing 180°

Mounting details

Stop face (push side) mounting



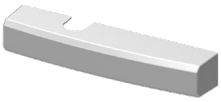
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended where a door cannot swing 120° ▪ Track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop
Top rail	▪ Less than 4 1/6" (103 mm) requires plate, 1450T-18 ▪ Plate requires 3-1/16″ (78 mm) minimum top rail ▪ With full cover, use plate, 1450T-18PAFC
Clearance	2 5/8" (67 mm) from face of door
Stop width	Minimum 1- 1/4" (32 mm)
Maximum opening	▪ Templating allows up to 120°, limited to 100° when optional bumper is installed ▪ Variable hold-open angles with infinite options

Accessories

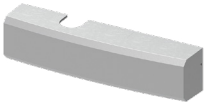
Cylinders

1450T-3071
Cast aluminum cylinder assembly
- Non-handed
- Standard

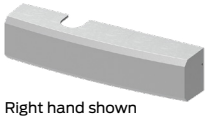
Covers



1450T-72
Slim line plastic cover
- Non-handed
- Standard



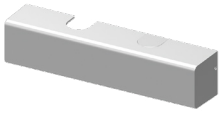
1450T-72FC
Full plastic cover
- Non-handed
- Optional



Right hand shown

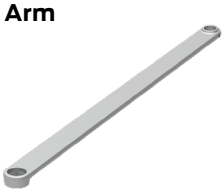
1450T-72MC
Metal cover
- Handed
- Optional

Alternate cover



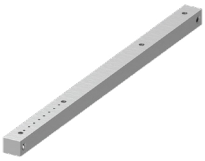
1450T-72ALT
Alternate cover
- Non-handed
- Optional, sold separately (not packed with closer)

Arm

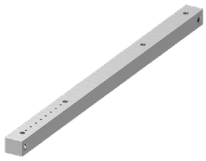


1450T-3077T
Standard arm
- Non-handed
- Arm does not include track or roller

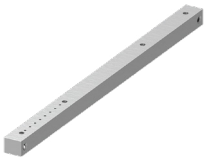
Tracks



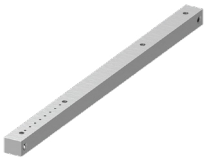
1450T-3038
Standard track
- Non-handed
- Non hold-open
- Will accept hold-open clip and/or bumper assembly
- Standard



1450T-3038B
Standard track with bumper
- Non-handed
- Non hold-open
- Will accept hold-open clip
- Optional

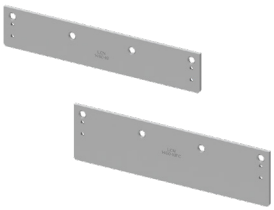


1450T-3038H
Hold-open track
- Non-handed
- With hold-open clip installed
- Will accept bumper assembly
- Optional



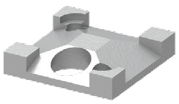
1450T-3038HB
Hold-open track with bumper
- Non-handed
- With hold-open clip and bumper assembly installed
- Optional

Installation accessories



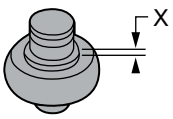
1450T-18 / 1450T-18FC
Plate
- Required for pull side (door mount) where top rail is less than 2-3⁄8″ (60 mm)
- Requires minimum 1-5⁄8″ (41 mm) top rail
- Required for push side (door mount) where top rail is less than 4-1⁄16″ (103 mm) measured from the stop
- Requires minimum 3-1⁄16″ (78 mm) top rail

1450T-169
Track bumper
- Mounts in track to assist backcheck, does not replace auxiliary stop
- Limits maximum opening
- Consists of bumper, bumper post, and mounting screw



1450T-3054
Hold-open clip
- Mounts in track to provide hold-open function
- Hold-open point controlled by clip location
- Consists of clip and mounting screws
- Requires 1450T-3034H hold-open track roller

1450T-3034H
Hold-open track roller
- Quiet, low friction roller assembly
- Shoulder dimension “X” = 1⁄8″ (3 mm)
- Can be used without hold-open clip



Ordering information

How-to-order 1450T Series closers

1. Select finish

☐ Standard powder coat _____
Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696).

Closer will be shipped with:
- Standard cover
- Standard cylinder
- Standard track arm
- Standard track
- Track roller
- Universal screw pack (UNIV)

Closer options

Cover
- ☐ Full plastic cover (FPC)
- ☐ Metal cover (specify right or left handed) (MC)
- ☐ Alternate cover (ALT) (sold separately from product)

Finish
- ☐ Custom powder coat (RAL) _____ (metal cover required)
- ☐ SRI primer (for use with powder coat finishes only)

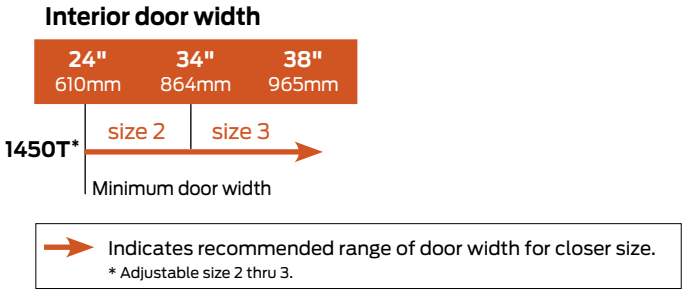
Track
- ☐ Regular with bumper (BUMPER)
- ☐ Hold-open (HO)
- ☐ Hold-open with bumper (HBUMPER)

Installation accessories
- ☐ Plate, 1450T-18
- ☐ Plate, 1450T-18FC

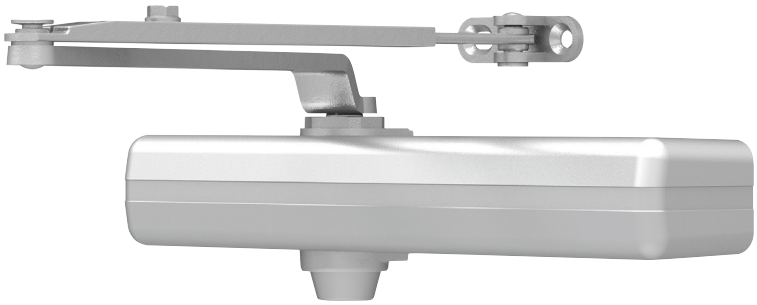
Special template
- ☐ ST- _____

Table of sizes

- Select closer based on width of door
- Non-sized 1450T cylinder is adjustable from sizes 2 thru 3 and is shipped set to size 2



1460 Series



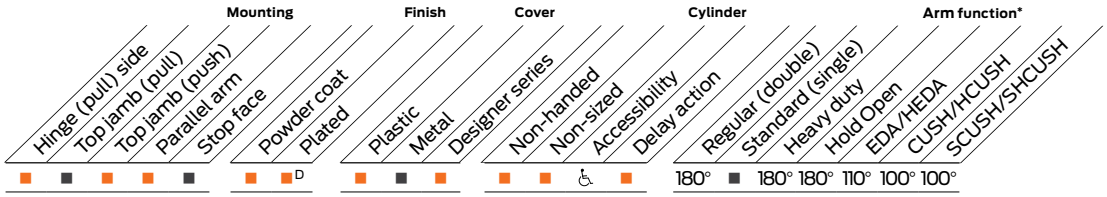
Designed for maximum versatility, the 1460, available with multiple cover options, can be used for both commercial and institutional applications. This fully universal closer offers a wide variety of options and fast and accurate installation.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/4" diameter piston ▪ 3/4" diameter single heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Templating	Peel-n-Stick templates - 1" x 7 1/2" mounting hole pattern
Size	Adjustable Spring Size 1-6 (Includes patented Green Dial)
Warranty	30 years

Cover	▪ Slim line plastic, standard ▪ Full plastic and metal designer series, optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Hinge (pull side), top jamb (push side), Parallel arm (push side)
Arms	Standard regular pull side, and top jamb
Finishes/colors/ powder coat	▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



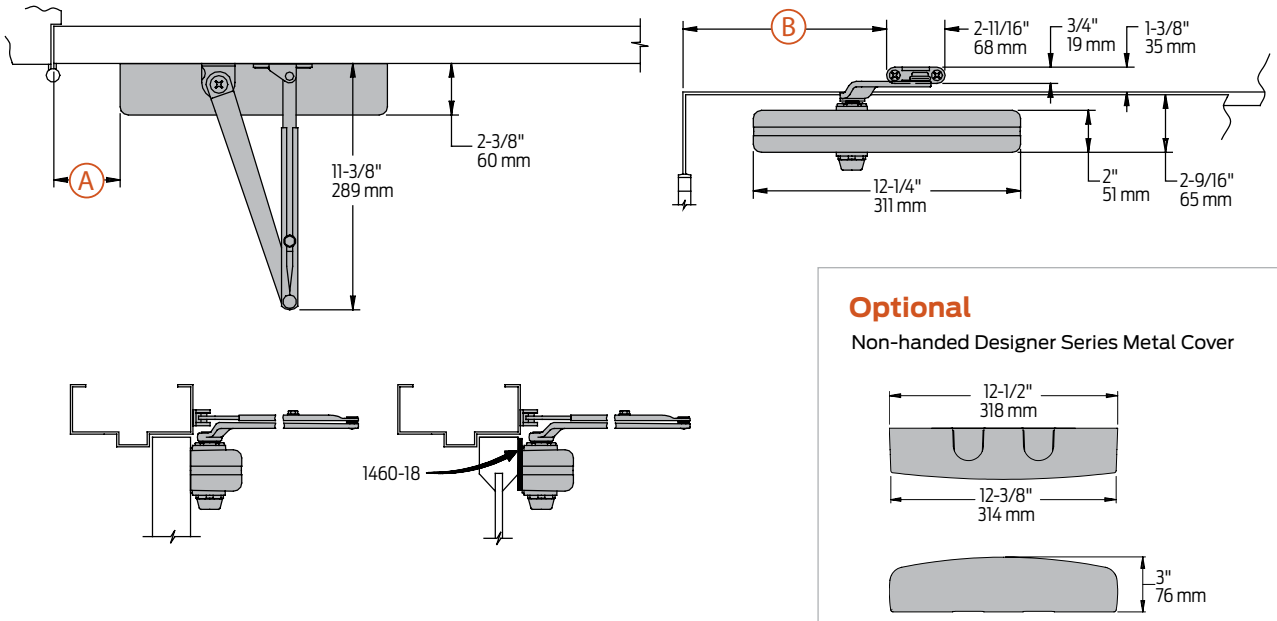
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
D For designer series only

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Hinge (pull side) mounting



Optional

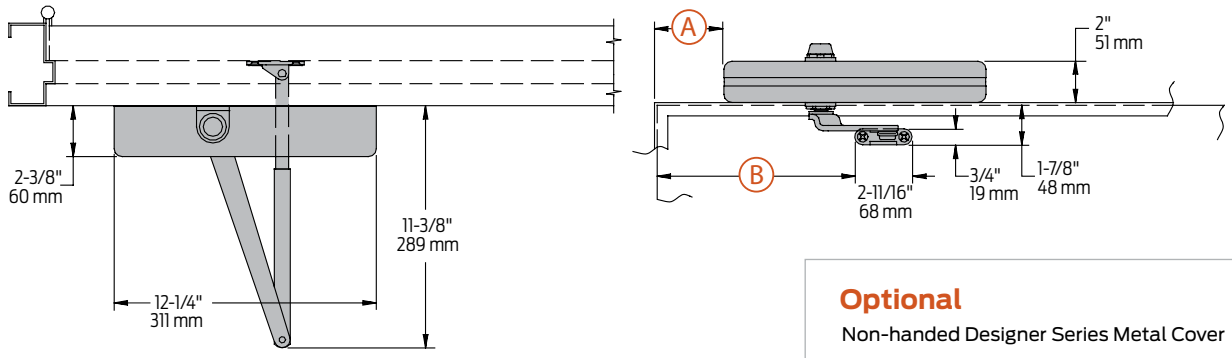
Non-handed Designer Series Metal Cover

Butt hinges	Should not exceed 5" (127 mm) in width	
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°	
Reveal	Should not exceed 3/4" (19 mm) for regular arm or 1/2" (13 mm) for Hold Open Arm	
Top rail	▪ Less than 2 1/2" (64 mm) requires plate, 1460-18 ▪ With Full Plastic Cover, use plate, 1460-18FC. Plate requires 1 1/2" (38 mm) minimum ▪ With Designer Series Metal Cover, use plate, 1460-18DS1	
Clearance	2 3/8" (60 mm) behind door required for installation	
Delay action	▪ Add suffix "CYLDEL" to selected cylinder ▪ Delays closing from: - 110° to 65° (using 110° template) - 160° to 75° (using 180° template) ▪ Delay time adjustable up to approximately 1 minute	
Maximum opening	110°:	A = 5 7/8" (149 mm) B = 10 7/8" (276 mm)
	or *180°	A= 2 7/8" (73 mm) B = 7 7/8" (200 mm)

Note: Hold open points up to maximum opening with Hold Open Arm.
* Frame and trim permitting

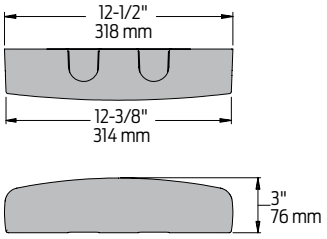
Mounting details

Top jamb (push side) mounting



Optional

Non-handed Designer Series Metal Cover

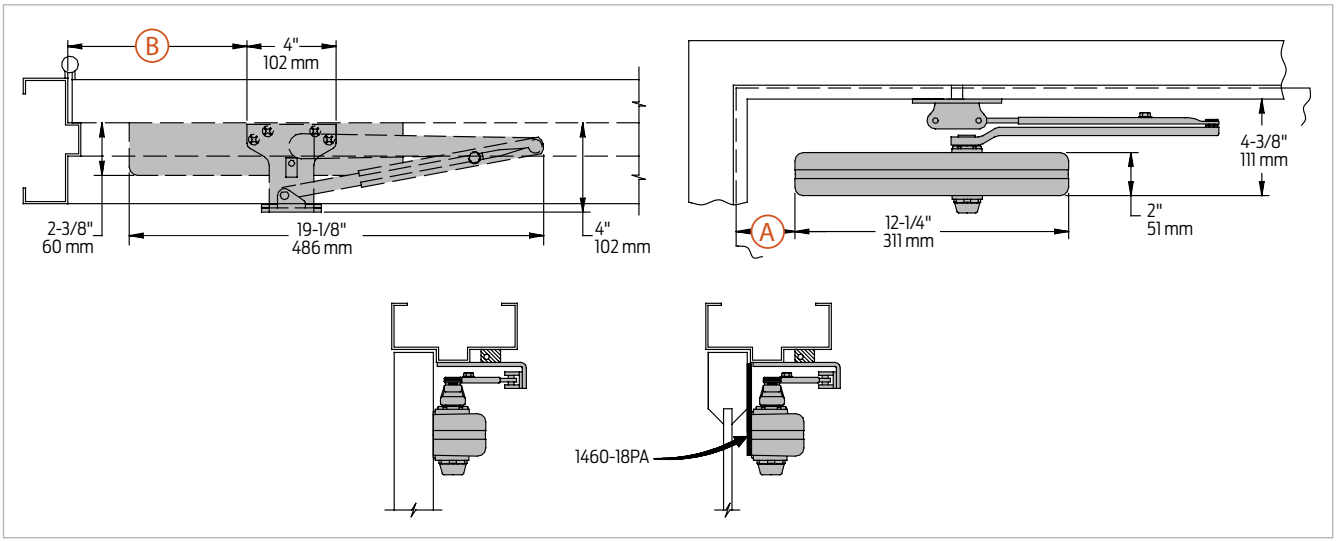


Butt hinges	Should not exceed 5" (127 mm) in width		
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°		
Reveal	Arm type	Reveal	Max opening
	Regular Arm	4 7/8"	Up to 140°
	Regular Arm	3 1/2"	Up to 180°
	Long Arm	7"	Up to 140°
	Hold Open Arm	2 1/2"	Up to 180°
	Hold Open Long Arm	4 7/8"	Up to 140°
Top rail	Requires 1 7/8" (48 mm) minimum. 2 3/4" (70 mm) minimum with closer on plate, 1460-18		
Head frame	Less than 1 3/4" (44 mm) requires plate, 1460-18. For flush ceiling condition with 2" (51 mm) head frame, use plate, 1460-18		
Delay action	▪ Add suffix "CYLDEL" to selected cylinder ▪ Delays closing: - 110° to 75° (using 110° template) - 180° to 95° (using 180° template) ▪ Delay time adjustable up to approximately 1 minute.		
Maximum opening	110°:	A= 6 3/4" (169 mm) B = 11 1/4" (286 mm)	
	101° to 120°:	A= 3" (76 mm) B = 7 1/2" (191 mm)	

Note: Hold open points up to maximum opening with Hold Open Arm.
* Frame and trim permitting

Mounting details

Parallel arm (push side) mounting



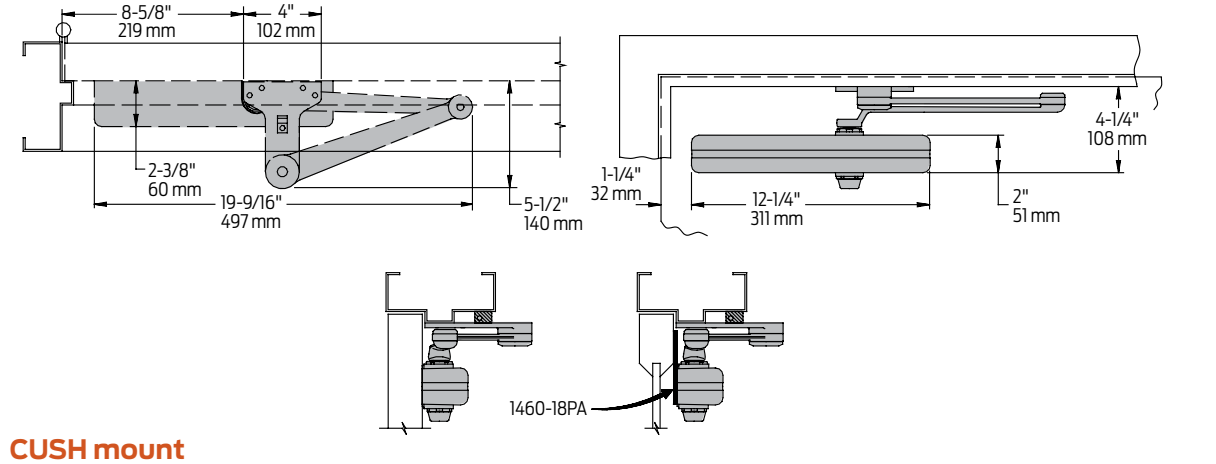
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point, where a door cannot swing 180°, or where Cush-n-Stop Arm is not used
Top rail	▪ Less than 4 3/8" (111 mm) measured from the stop requires plate, 1460-18PA. With Full Cover, use plate, 1460-18PAFC ▪ Plate requires 1 3/4" (44 mm) minimum. Plate requires 1 1/4" (32 mm) minimum ▪ With Designer Series Metal Cover, use plate, 1460-18PADS1
Clearance	1460-62PA shoe projects 4" (102 mm) from door face
Head frame	Flush or single rabbeted requires PA shoe adapter, 1460-419
Stop width	Minimum 1" (25 mm)
Blade stop	Clearance, requires 1/2" (13 mm) blade stop spacer, 1460-61
Auxiliary shoe	▪ 1460-62A allows installation of regular arm with overhead holder/stop ▪ Special templating required
Delay action	▪ Add suffix "CYLDEL" to selected cylinder ▪ Delays closing from maximum opening to approximately 75° ▪ Delay time adjustable up to approximately 1 minute
Maximum opening	Regular or Hold Open Arm can be templated to 100°: A = 4 1/4" (108 mm) B = 9 1/4" (235 mm) or 180°: A= 1 3/4" (44 mm) B = 6 3/4" (171 mm)

Notes: Hold open points up to maximum opening with Hold Open Arm. Optional mounting requires PA shoe, 1460-62PA for Regular or Hold Open Arms.
Add prefix "P" to closer description (e.g. P1460). P1460 closer includes 1460-201 fifth hole spacer to support PA shoe.

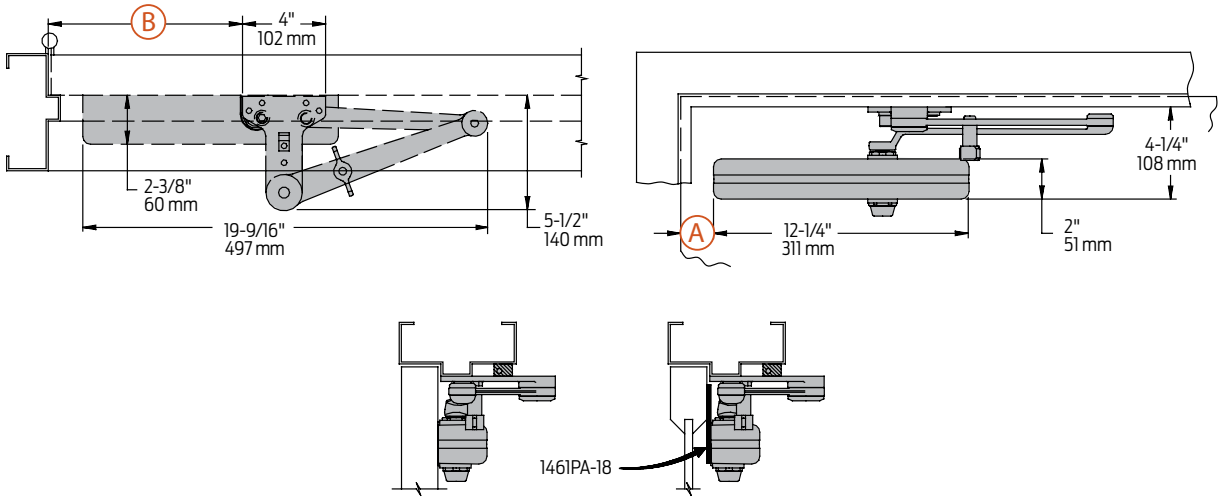
Mounting details

EDA and CUSH mounting

EDA mount



CUSH mount



SCUSH	Hold open points are approximately 5° less than dead stop point		
Clearance	1460-62EDA or CUSH shoe projects 5 1/2" (140 mm) from door face		
Head frame	Flush or rabbeted requires PA flush panel adapter, 1460-419		
EDA or CUSH Arm	Requires shoe support, 1460-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm)		
Maximum opening	EDA template allows 110° Hold open point up to maximum opening	CUSH arms can be templated for maximum opening/hold open point at	
		85°:	A = 2 3/8" (60 mm) B = 9 9/16" (243 mm)
		90°:	A = 1 5/8" (41 mm) B = 9 1/16" (230 mm)
		100°:	A = 5/8" (16 mm) B = 8 1/16" (205 mm)

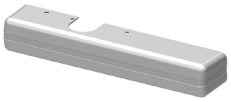
Note: 1460 closers ordered with EDA, CUSH or SCUSH Arms include 1460-201 fifth hole spacer to support the shoe.

Accessories

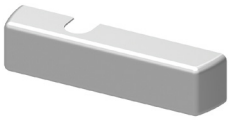
Cylinders

1461-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- Standard

Covers



1460-72
Slim line plastic cover (SLIMPC)
- Non-handed
- Standard



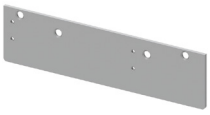
1460-72FC
Full Plastic Cover (FPC)
- Non-handed
- Optional

1460-72DS
Designer Series Metal Cover (DS)
- Non-handed
- Provides complete enclosure with a stylish look
- Required for plating and custom powder coat option
- Optional

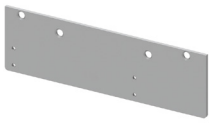
Installation accessories

1460-18
Plate
- Required for hinge side mount where top rail is less than 2 1/2" (64 mm)
- Required for top jamb mounting where head frame is less than 1 3/4" (44 mm) or flush ceiling condition exists
- Requires 1 1/2" (38 mm) minimum top rail or 1 1/4" (32 mm) head frame

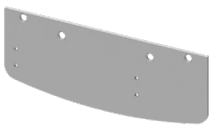
1460-18DS1
Plate
- Required for hinge side mount where top rail is less than 2 1/2" (64 mm)
- Requires 1 1/2" (38 mm) minimum top rail or 1 1/4" (32 mm) head frame
- For use with Designer Series Metal Cover
- Will not work in top jamb application



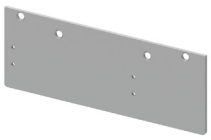
1460-18FC
Plate
- Required for hinge side mount where top rail is less than 2 1/2" (64 mm)
- Requires minimum 1 1/2" (38 mm) minimum top rail or 1 1/4" (32 mm) head frame
- For use with full cover
- Will not work in top jamb application



1460-18PA
Plate
- Required for parallel arm mounting where top rail is less than 4 3/8" (111 mm), measured from the stop
- Requires 1 3/4" (44 mm) minimum top rail



1460-18PADS1
Plate
- Required for parallel arm mounting where top rail is less than 4 3/8" (111 mm), measured from the stop
- Requires 1 3/4" (44 mm) minimum top rail
- For use with Designer Series Metal Cover



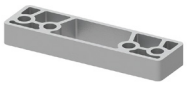
1460-18PAFC
Plate
- Required for parallel arm mounting where top rail is less than 4 3/8" (111 mm), measured from the stop
- Requires 1 3/4" (44 mm) minimum top rail
- For use with full cover

Accessories

Installation accessories

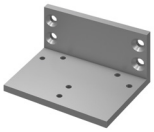
1460-30
Cush shoe support
- Provide anchorage for fifth screw used with CUSH arm where reveal is less than 3 1/16" (78 mm)

1460-30A
Mounting bracket
- Bracket to be used when installing cylinder body
- Included with cylinder when ordered



1460-61
Blade stop spacer
- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop

1460-62A
Auxiliary shoe
- Requires a top rail of 7" (178 mm)
- Optional shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop



1460-419
PA flush panel adapter
- Provides horizontal mounting surface for PA, EDA, or CUSH shoe on single rabbeted or flush frame

1460-62PA
PA shoe
- Required for parallel arm mounting

Arms

1460-3077
Regular Arm (REGARM)
- Non-handed
- Mounts hinge side or top jamb
- P1460 closer includes PA shoe, 1460-62PA required for parallel arm mounting

1460-3077L
Long Arm (LONG)
- Non-handed
- Includes long rod and shoe, 1460-79LR for top jamb mount with deep reveals
- Optional

1460-3077HD
Heavy Duty Arm (HD)
- Non-handed
- Mounts hinge side, top jamb or parallel arm
- Optional

1460-3077HDL
Heavy Duty Long Arm (HDLONG)
- Non-handed
- Includes long rod and shoe, 1460-79LR for top jamb mounts with deep reveals
- Optional

Accessories

Arms

1460-3049
Hold Open Arm (H)
- Non-handed
- Mounts hinge side, top jamb or parallel arm (62PA required)
- Hold-open adjustable at shoe
- Optional

1460-3049L
Hold Open Long Arm (HLONG)
- Non-handed
- Includes long head and tube, 1460-3048L for top jamb mount with deep reveals
- Optional

1460-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Features solid forged steel main and forearm for potentially abusive installations
- Optional 1460-3077EDA/62G for blade stop clearance

1460-3077EDA/62G
Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
- Non-handed
- Features solid forged steel main and forearm for potentially abusive installations

1460-3049EDA
Hold Open Extra Duty Arm (HEDA)
- Handed
- Provides hold open function adjustable at shoe
- Optional

1460-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe
- Optional

1460-3049CNS
Hold Cush-n-Stop Arm (HCUSH)
- Non-handed
- Provides hold open function with templated stop/hold open points
- Handle controls hold open function
- Optional

1460-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional

1460-3049SHCNS
Spring Hold Open Cush-n-Stop Arm (SHCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional

Ordering information

How-to-order 1460 Series closers

1. Select finish

☐ Standard powder coat _____
Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696).

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Regular arm
- Self reaming and tapping screws
(unless options listed below are selected)

Closer options

Cylinder
☐ Delay Action Cylinder (CYLDEL)

Cover
☐ Full Plastic Cover (FPC)
☐ Designer Series Metal Cover (DS)

Finish
☐ Custom powder coat (RAL) _____
(DS cover required)
☐ Plated finish, _____
(DS cover required)
☐ SRI primer
(use with powder coat finishes only)

Arm
☐ Regular Arm with Parallel Arm Bracket (RWPA)
☐ Long Arm (LONG)
☐ Regular Arm with 62A Auxiliary Shoe (RW62A)
☐ Hold Open Arm (H)
☐ Hold Open with Parallel Arm Bracket (HWPA)
☐ Hold Open Long Arm (HLONG)
☐ Heavy Duty Arm (HD)
☐ Heavy Duty with 62A Auxiliary Shoe (HD62A)
☐ Heavy Duty with Parallel Arm Bracket (HDPA)
☐ Heavy Duty Long Arm (HDLONG)
☐ Extra Duty Arm (EDA) (optional -62G)
☐ Hold Open Extra Duty (HEDA) (specify handing), (optional -62G)
☐ Cush-n-Stop Arm (CUSH)
☐ Hold Open Cush-n-Stop Arm (HCUSH)
☐ Spring Cush-n-Stop Arm (SCUSH)
☐ Spring Hold Open Cush-n-Stop Arm (SHCUSH)

Optional screw packs
☐ Through Bolt[1] Self Reaming and Tapping Screws (TBSRT)
☐ Wood and Machine Screws (WMS)
☐ Through Bolt[1] Wood and Machine Screws (TBWMS)
☐ Torx Machine Screws (TORX)
☐ Through Bolt[1] and Torx Machine Screws (TBTRX)

Installation accessories
☐ Plate, 1460-18
☐ Plate, 1460-18DS
☐ Plate, 1460-18FC
☐ Plate, 1460-18PA
☐ Plate, 1460-18PADS
☐ Plate, 1460-18PAFC
☐ CUSH Shoe Support, 1460-30
☐ Blade Stop Spacer, 1460-61
☐ Auxiliary Shoe, 1460-62A
☐ PA Flush Panel Adapter, 1460-419

Special template
☐ ST- _____

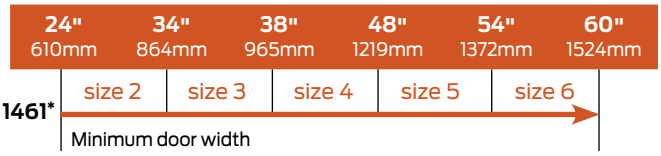
1. Specify door thickness if other than 1 3/4".

Table of sizes

- Select closer based on width of door
- The spring power of a 1461 cylinder is field adjustable from size 1 through size 6 and is shipped adjusted to size 3

Exterior (and vestibule) door width

Interior door width



→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 1460 Series closers

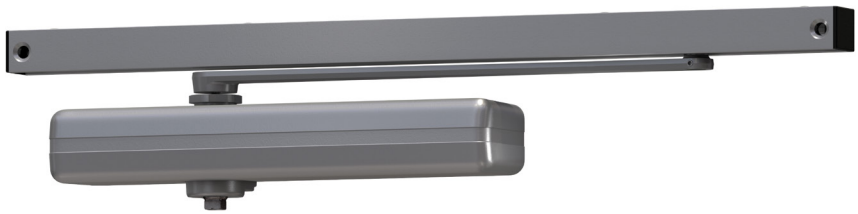
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	1461	1461	1461
5.0* lbs.	1461	1461	1461

* Maximum opening force.

1460T Series



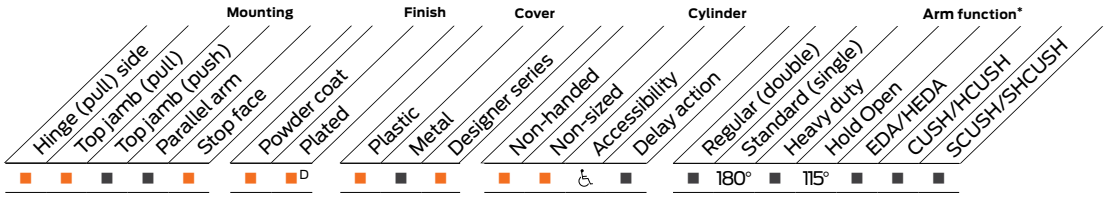
The 1460T is a fully universal slim line, single lever (track) arm closer designed for interior use on narrow head frames and top rails. The modern styling and small projection make it an excellent choice for interior doors.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/4" diameter piston ▪ 5/8" diameter single heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Templating	Peel-n-Stick templates - 1" x 7 1/2" mounting hole pattern
Size	▪ 1460T adjustable size 2-4 ▪ 1461T adjustable size 1-2
Warranty	30 years

Cover	▪ Slim line plastic cover, standard ▪ Full plastic or full metal designers series, optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Hinge (pull side), top jamb (pull side), stop face (push side)
Arms	Single level with track roller
Finishes/colors/ powder coat	▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



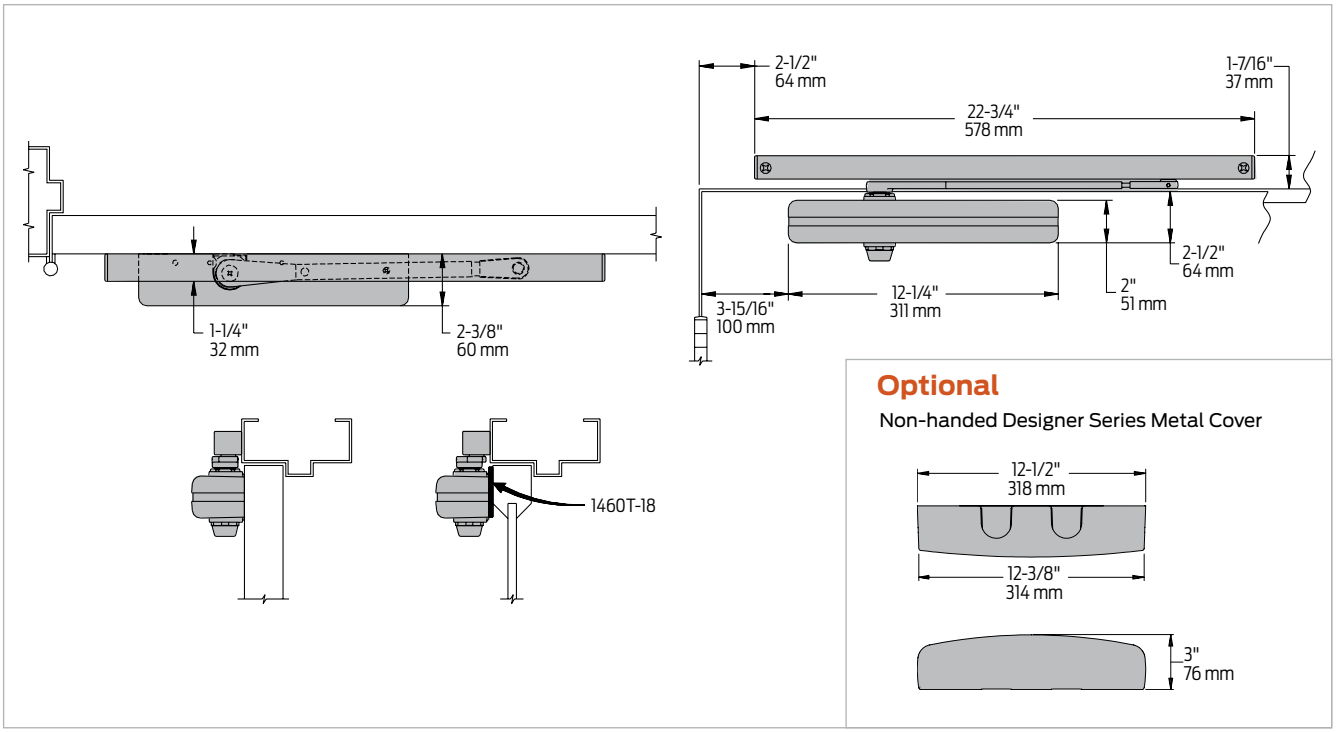
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
D For designer series only

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

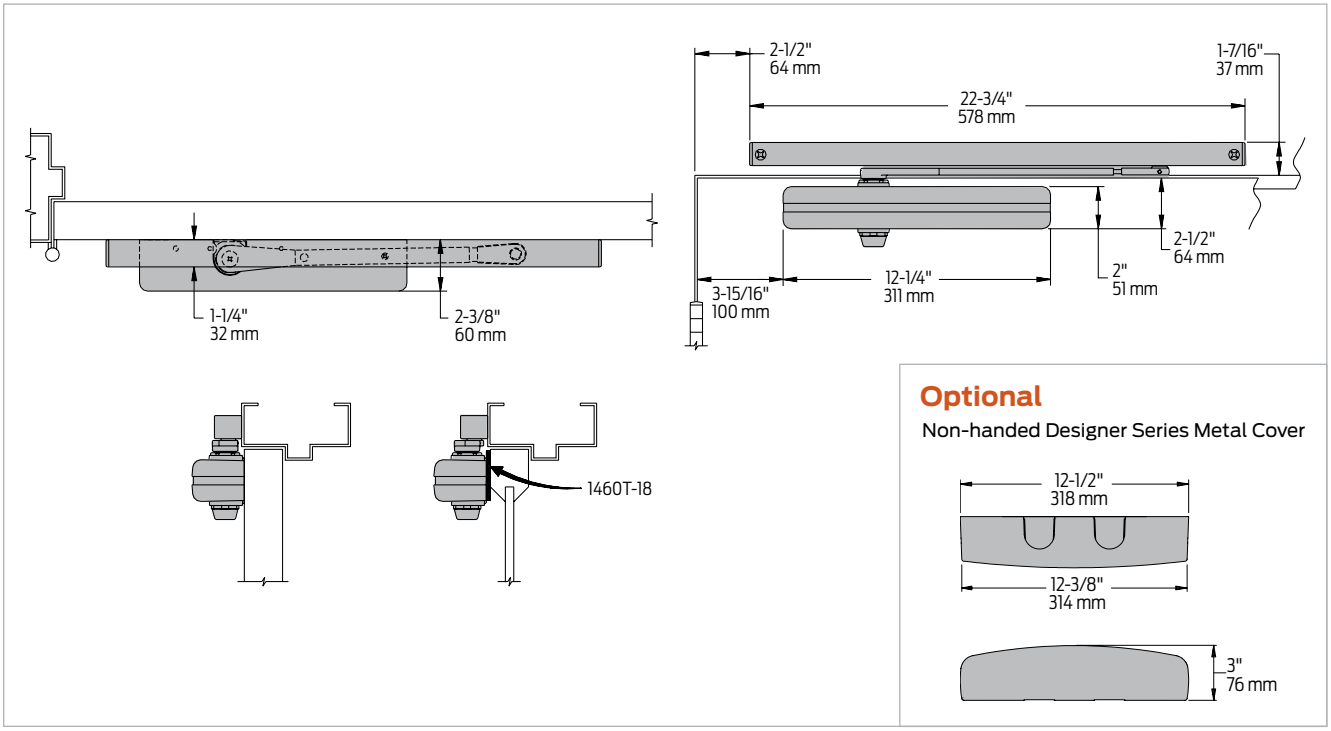
Hinge (pull side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended where a door cannot swing 180° ▪ Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop
Reveal	Should not exceed 1/8" (3 mm)
Top rail	▪ Less than 2 1/2" (64 mm) requires plate, 1460T-18 ▪ Plate requires 1 1/2" (38 mm) minimum ▪ With Full Plastic Cover, use plate, 1460T-18FC ▪ With Designer Series Metal Cover, use plate, 1460T-18DS
Clearance	2 3/8" (60 mm) behind door required for installation
Maximum opening	▪ Templating allows up to 180°, trim and frame permitting, limited to 115° when optional bumper is installed ▪ Hold open points at 85°, 90°, 95°, 100°, 110° or 115° with Hold Open Tracks ▪ Please note that many track style door closers are capable of allowing 180° of door swing ▪ Be aware that the majority of track style closers are at their weakest closing force in the 180°-130° range ▪ Consult factory for applications where door must swing 180°

Mounting details

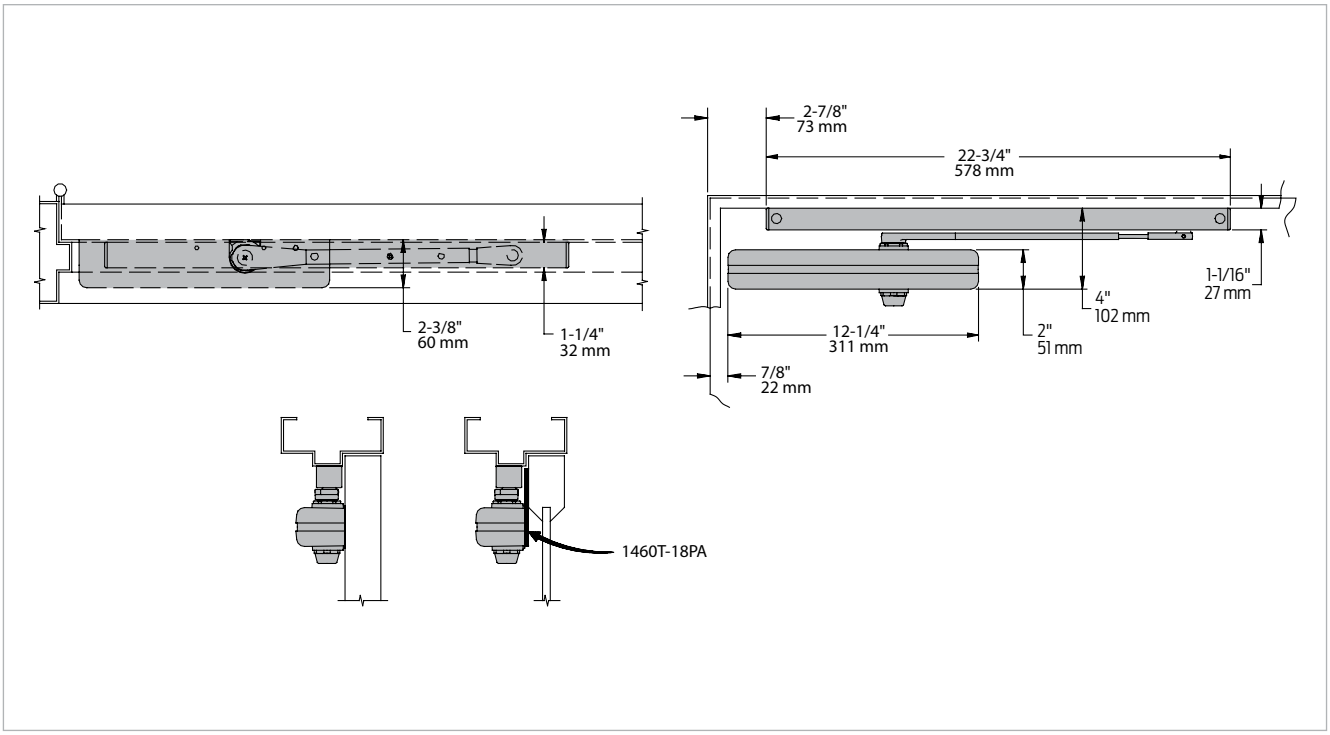
Top jamb (pull side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended where a door cannot swing 180° ▪ Track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop
Reveal	Should not exceed 1/8" (3 mm)
Top rail	Minimum 1 1/4" (32 mm)
Head frame	▪ Less than 2 3/4" (70 mm) requires plate, 1460T-18 ▪ Plate requires 1 3/4" (44 mm) minimum ▪ With Full Plastic Cover, use plate, 1460T-18FC ▪ With Designer Series Metal Cover, use plate, 1460T-18DS
Clearance	1 1/4" (32 mm) behind door for installations
Maximum opening	▪ Templating allows up to 180°, limited to 115° when optional bumper is installed ▪ Hold open ramp and roller design allows for variable angles ▪ Please note that many track style door closers are capable of allowing 180° of door swing ▪ Be aware that the majority of track style closers are at their weakest closing force in the 180° – 130° range ▪ Consult factory for applications where door must swing 180°

Mounting details

Stop face (push side) mounting



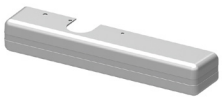
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended where a door cannot swing 110° ▪ Track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop
Top rail	▪ Less than 4" (102 mm) measured from the stop face requires plate, 1460T-18PA. Plate requires 1 ½" (38 mm) minimum ▪ With Full Plastic Cover, use plate, 1460T-18PAFC ▪ With Designer Series Metal Cover, use plate, 1460T-18PADS
Clearance	1460T projects 2 ⅜" (60 mm) from door face
Stop width	Minimum 1 ¼" (32 mm)
Maximum opening	▪ Templating allows 110°, limited to 100° when optional bumper is installed ▪ Variable hold open angles with infinite options

Accessories

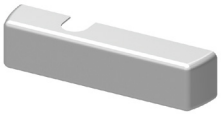
Cylinders

1460(1)T-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- 1461T adjustable 1-2
- 1460T adjustable 2-4
- Standard

Covers



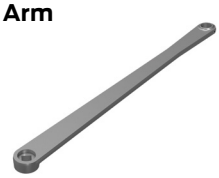
1460T-72
Slim Line Plastic Cover (SLIMPC)
- Non-handed
- Standard



1460T-72FC
Full Plastic Cover (FPC)
- Non-handed
- Optional

1460T-72DS
Designer Series Metal Cover (DS)
- Non-handed
- Required for plating option and custom powder coat finishes
- Optional

Arm



1460T-3077T
Single Arm (STDTRKARM)
- Non-handed
- Mounts hinge side, top jamb, or stop face
- Track roller not included with arm

Tracks

1460T-3038
Standard Track (STDTRK)
- Non-handed
- Non hold open
- Mounts on either side of the door
- Will accept hold open clip and/or bumper assembly
- Standard

1460T-3038B
Track with Bumper (BUMP)
- Non-handed
- Non hold open
- Mounts on either side of the door
- Will accept hold open clip
- Optional

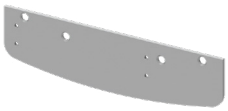
1460T-3038H
Hold Open Track (H)
- Non-handed
- Hold open
- Mounts on either side of the door
- Will accept bumper assembly
- Optional

1460T-3038HB
Hold Open Track with Bumper (HBMP)
- Non-handed
- Hold open
- Mounts on either side of the door
- Optional

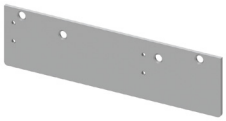
Accessories

Installation accessories

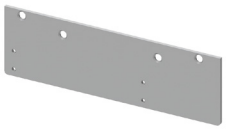
1460T-18
Plate
- Required for hinge side mount where top rail is less than 2 ½" (64 mm)
- Required for top jamb mount when head frame is less than 2 ¾" (70 mm)
- Requires minimum 1 ½" (38 mm) top rail or 1 ¾" (44 mm) head frame minimum



1460T-18DS
Plate
- Required for hinge side mount where top rail is less than 2 ½" (64 mm)
- Required for top jamb mount when head frame is less than 2 ¾" (70 mm)
- Requires minimum 1 ½" (38 mm) top rail or 1 ¾" (44 mm) head frame minimum
- For use with Designer Series Metal Cover

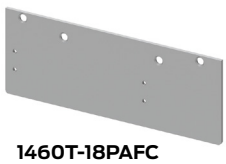


1460T-18FC
Plate
- Required for hinge side mount where top rail is less than 2 ½" (64 mm)
- Required for top jamb mount when head frame is less than 2 ¾" (70 mm)
- Requires minimum 1 ½" (38 mm) top rail or 1 ¾" (44 mm) head frame minimum
- For use with Full Cover



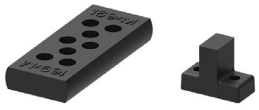
1460T-18PA
Plate
- Required for stop face mounting where top rail is less than 4" (102 mm), measured from the stop
- Requires 1 ½" (38 mm) minimum top rail

1460T-18PADS
Plate
- Required for stop face mounting where top rail is less than 4" (102 mm), measured from the stop
- Requires 1 ½" (38 mm) minimum top rail
- For use with Designer Series Metal Cover



1460T-18PAFC
Plate
- Required for stop face mounting where top rail is less than 4" (102 mm), measured from the stop
- Requires 1 ½" (38 mm) minimum top rail
- For use with Full Cover

1460T-30A
Mounting bracket
- Used when installing cylinder body
- Included with cylinder when ordered



1460T-169
Track bumper
- Mounts in track to assist backcheck, does not replace auxiliary stop
- Limits maximum opening
- Consists of bumper, bumper post, and mounting screw

1460T-3054
Hold open clip
- Mounts in track to provide hold open function
- Hold open point controlled by clip location

1460T-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = ⅛" (3 mm)

1460T-3034H
Hold open track roller
- Hold open roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = ⅛" (3 mm)
- Spring-loaded hold open mechanism

Ordering information

How-to-order 1460T Series closers

1. Select cylinder size

☐ 1461T (adjustable from size 1 to 2)
☐ 1460T (adjustable from size 2 to 4)

2. Select finish

☐ Standard powder coat _____
Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696)

Closer will be shipped with:
- Standard cover
- Standard arm
- Standard track
- Track roller
- Self reaming and tapping machine screws
(unless options listed below are selected)

Closer options

Cover
☐ Full Plastic Cover (FPC)
☐ Designer Series Metal Cover (DS)

Finish
☐ Custom powder coat (RAL) _____
(DS cover required)
☐ Plated finish, _____ (DS cover required)
☐ SRI primer (use with powder coat finishes only)

Track
☐ Track with Bumper (BUMP)
☐ Hold Open Track (H)
☐ Hold Open Track with Bumper (HBMP)

Optional screw packs
☐ Through Bolt[1] Self Reaming And Tapping Screws (TBSRT)
☐ Wood and Machine Screws (WMS)
☐ Through Bolt[1] Wood and Machine Screws (TBWMS)
☐ Torx Machine Screws (TORX)
☐ Through Bolt[1] and Torx Machine Screws (TBTRX)

Installation accessories
☐ Plate, 1460T-18
☐ Plate, 1460T-18DS1
☐ Plate, 1460T-18FC
☐ Plate, 1460T-18PA
☐ Plate, 1460T-18PADS1
☐ Plate, 1460T-18PAFC

Special template
☐ ST- _____

1. Specify door thickness if other than 1 3/4".

Table of sizes

- Select closer based on width of door. The spring power of a 1460T cylinder is adjustable from size 2 to size 4 and is shipped adjusted to size 3
- The closing power of 1460T series cylinders may be increased 50%
- The spring power of a 1461T cylinder is adjustable from size 1 to size 2 and is shipped adjusted to size 1

Interior door width

→ Indicates recommended range of door width for closer size.
*Adjustable Size 2 thru 4

Interior door width

→ Indicates recommended range of door width for closer size.
*Adjustable Size 1 thru 2

Reduced opening force 1460T Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	N/A	N/A	N/A
5.0* lbs.	1461T	1461T	1461T

* Maximum opening force.

Notes

Notes

About Allegion

Allegion (NYSE: ALLE) is a global pioneer in seamless access, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion secures people and assets with a range of solutions for homes, businesses, schools and institutions.

For more, visit **www.allegion.com**

KRYPTONITE ■ LCN ■ SCHLAGE ■ STEELCRAFT ■ VON DUPRIN

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ALLEGION™

ALLEGION

LCN®

Door controls

General information

History of door controls and LCN

Trinity church

In 1876, Mr. L. C. Norton was sent to Boston, Massachusetts to help build the Boston Trinity Church. The church took over four years to complete. Located on the Back Bay facing southwest, it was often subjected to the severe wind conditions of the area. When the church began operation in 1880, the pastor, Rev. Brooks and his congregation quickly found out that the strong winds would make the doors close with a thunderous bang. Needless to say, the pastor was not going to stand for all the noise; those doors needed to be controlled! This prompted Mr. Norton to action.

Mr. Norton's first attempt to remedy the situation was to hang the doors on double-spring hinges. With this solution, the slamming stopped, but now the strong winds made the doors stand open, and the cold, drafty air raised protest amongst church attendees. He tried rubber stops, special door linings, and some other ideas. Nothing worked. One day, continuing to ponder the problem with the doors at the Trinity Church, he put some things away in a closet and, being in a hurry, he threw the door shut. To his amazement, the door did not slam. Instead, the door bounced back. He tried this over and over with the same result. An idea came to him; he rushed to town and purchased a beer pump. With the beer pump, a makeshift arm, and some special brackets he had designed, Mr. Norton installed his invention on one of the exterior church doors. He opened the door and let it go...crash! The door slammed so hard it broke the pump into many pieces.

Mr. Norton spent many months trying to solve the problem; finally, he used the principles of the lever, improved the main components, and decided to reposition the device on the door. He took his updated version and again installed it on one of the troublesome church doors. Rev. Brooks saw Mr. Norton's new design and to his delight, the closer worked perfectly. Mr. Norton had used air pressure to make the doors close quietly. The problems with the doors at the Boston Trinity Church were now solved.

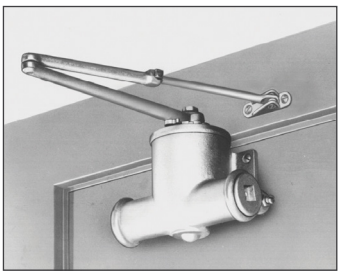
Growing pains

Soon after the doors at the Trinity Church were under control, Mr. Norton formed a company to manufacture his new found invention. The factory was located in Boston, Massachusetts and business started out strong. In fact, at times, there were more orders than production could match.

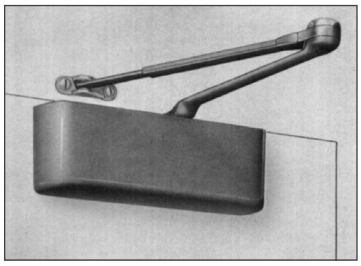
Time flew by. Mr. Norton's company began to experience difficulty. Competition was fierce. Some competitors began to infringe on patents, which drained Mr. Norton of both cash flow and other resources. Mr. Norton also made a few business decisions that would hamper company growth. The early years presented other challenges too. New closer designs were being introduced at an increasingly fast pace. This quick growth brought about some challenging quality issues. Business associates both good and bad, came and went. The factory moved to Brooklyn, New York and then back to Boston, Massachusetts. In these years, the door closer business was a volatile one. Most good companies were forced into change whether they liked it or not. The door closer industry was no exception.

New beginnings

Competition drove Mr. Norton in a new direction. His air check had worked well but was slowly giving way to new technology. In 1900, Mr. Norton developed a liquid door check. This new liquid door check controlled the door through the entire door swing by incorporating three independent hydraulic regulations. Backcheck, general speed, and latch speed were necessary for total door control. In 1908, the company was moved to Chicago, Illinois. By the early 1920's, the door closer business was doing well but Mr. Norton was wearing down, he needed help.

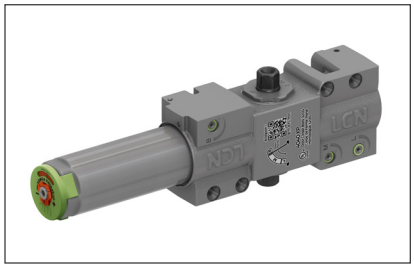


In 1925, Mr. L. C. Norton teamed with Mr. D. R. Lasier and formed the Norton-Lasier company, located at 466 West Superior Street in Chicago, Illinois. Norton and Lasier knew that if their company was to survive, they must build a far superior product at a very fair price. They called their improved door closer an LCN. After a few years, Mr. Norton left the business to Mr. Lasier and moved to California. During the years of 1926 through 1948, under the leadership of Mr. D. R. Lasier, LCN manufactured and shipped high-quality traditional style closers all over the world. Many of these closers are still in use today.



In 1949, the factory moved to Princeton, Illinois. In 1958, LCN introduced the heavy-duty 4010/4110 Series closer. Schlage Lock Company purchased LCN in 1959. In 1974, Ingersoll-Rand purchased Schlage Lock Company (and LCN). Today, LCN offers a complete line of door control products including heavy-duty hydraulic closers, automatic operators, fire/life safety closer/holders, high security closers and more.

The model numbers may have changed but the passion, quality, and excitement will always remain. LCN closers are made with premier materials and our products are tested far beyond the industry requirements.



1851	Lewis C. Norton born May 5th in New Hampshire.
1880	First door closer installed at Boston Trinity Church.
1881	Manufacturing begins at Boston plant.
1900	Mr. Norton introduces a liquid door check.
1908	Company moves to Chicago.
1917	David R. Lasier joins company as timekeeper.
1925	Norton-Lasier Company begins operation.
1929	L. C. Norton moves to California. D. R. Lasier heads up company.
1930	Norton-Lasier Company produces wooden riding toys to cope with the Great Depression.
1937	L. C. Norton passes away on November 4th.
1942	Norton-Lasier Company produces hydraulic aircraft fittings for the war effort.
1948	Norton-Lasier Company officially changes name to LCN.
1958	LCN introduces the 4010/4110 Series door closer.
1959	LCN sold to Schlage Lock Company.
1972	LCN introduces Sentronic line of fire/life safety holder/closers.
1973	LCN introduces the 4040 series door closer.
1974	Schlage Lock (and LCN) sold to Ingersoll-Rand.
1978	LCN introduces Equalizer units.
1980	Production on traditional series ends.
1981	LCN introduces the 1460 Series door closer.
1981	LCN introduces AutoEqualizer™ units.
1985	LCN introduces the 1070 Series door closer.
1993	LCN introduces the powder coat finish.
1995	LCN introduces Electric operator units.
1996	LCN introduces the 1520 Series door closer.
1998	LCN introduces the 1370 Series door closer.
2006	LCN introduces the new 4030 Series door closer to replace the 1520 closer series.
2006	LCN introduces the new Senior, Astro and Middle Swing Digital Control Box.
2007	LCN introduces the new Tri-volt magnets.
2007	LCN introduces the new 4040XP.
2007	LCN introduces the new 1260 Series.
2013	In December of 2013, the Security Technologies division of Ingersoll Rand became its own publicly traded company called Allegion.
2015	LCN introduces the 1250, 1450 and 4050A Series cast aluminum door closers.
2021	LCN introduces the 6400 Compact™ series low-energy automatic operator, supporting ADA compliance and touchless access.
2022	LCN enhances the 4040XP door closer to make it easier to install and maintain.

Information and customer care

us.allegion.com

US 877-671-7011
Canada 800-900-4734

Customer service
Support@allegion.com

Product support
Closers_TechProdSupport@allegion.com

www.youtube.com/LCNHardware

Ordering

Allegion_Orders@allegion.com

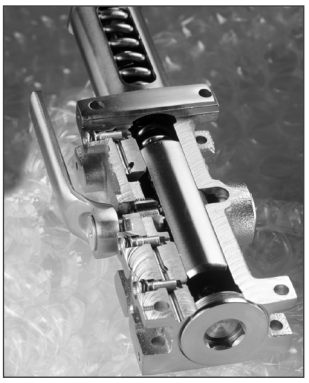
eFax: 1.800.248.1460

The LCN formula for success

Since its founding in 1926, LCN has specialized in solving door control problems through the use of high quality, innovative door control products. By adhering to high standards of performance, LCN has earned a leadership role within the industry and is committed to meeting door control challenges of the future. With representatives located throughout the world, LCN provides the products and services necessary to solve your door control problems.

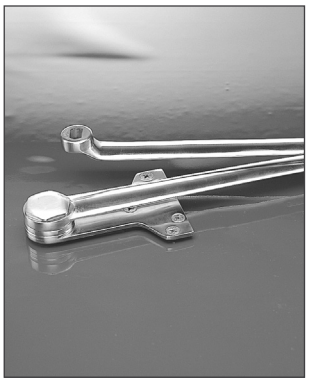
Materials

Material control is foundational to the consistent performance of LCN closers. Consequently, we hold our material suppliers to rigorous standards for the cut and type of raw materials they provide. Suppliers are required to show certification that the raw materials adhere to LCN standards.



Extensive abuse test

LCN door closers go through robust testing, beyond industry requirements, to ensure you get performance you can trust in real-world applications. In addition to meeting ANSI and BHMA industry compliance standards, our engineers seek to understand just how much our closers can handle.



Forged steel arms

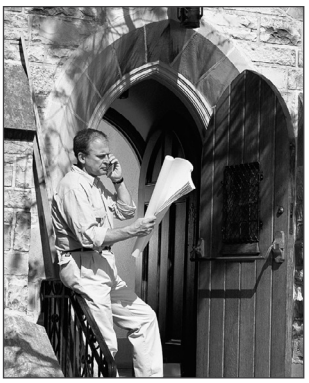
The closing power and control generated within LCN closers is transferred to the door through forged steel arms. Forged steel arms have greater strength, better appearance and less bulk.

Green dial

LCN's Green dial is a user-friendly tool that makes adjusting a door closer fast, easy and foolproof. Installers can easily tune in the performance of a closer.

Heat-treated

The process of double heat treating pinions gives proper hardness and strength to the parts where they need it and maximizes torque rating, reduces wear and, ultimately, readies it to withstand abusive applications.



Special templates

LCN offers a variety of custom door closers solutions. With over 3,000 special templates on file, LCN can provide a door control solution for one-of-a-kind doors such as vault, balanced, over-sized and arch doors.

Hydraulic fluid

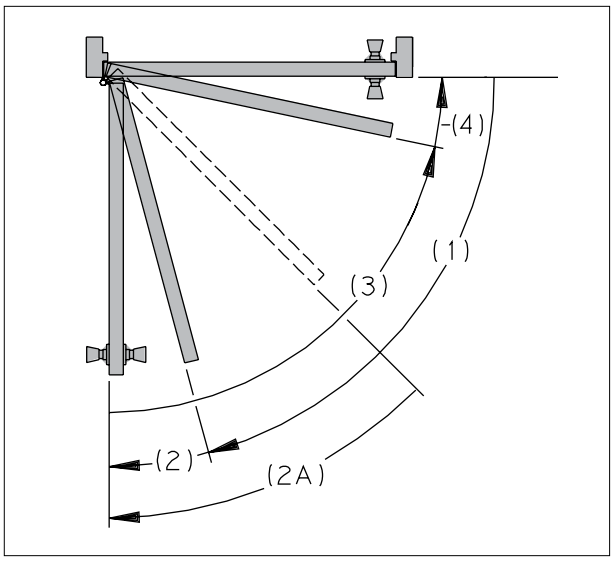
LCN's Liquid X is one of the primary reasons our closers can operate at extreme temperatures. This unique, all-weather hydraulic fluid helps maintain consistent closer performance throughout seasonal changes.

Customer service

We have a phone support team able to address countless product questions. Whether we're consulting on code, advising a door specification or answering installation questions, we are focused on making your interaction with LCN a positive one.

Door controls aim to execute the perfect opening and closing cycle

In most applications, a pedestrian manually opens a door and a door closer controls the speed and force with which the door shuts behind them. The power to close the door is generated by the springs inside the closer. Regulated hydraulic circuits control the speed of the door's closing swing. An ideal door closing cycle can be achieved using one of the many LCN door closers available.



This diagram shows the main stages in correct door operation

1. On the opening swing, the door closer's function is to let the door open easily, except at the end of the swing where backcheck is applied.
2. Backcheck is a feature that cushions the opening swing to prevent the door from slamming into the stop. Special closers designed for potentially abusive applications begin the backcheck function much earlier (2A) such as LCN's Advanced Variable Backcheck (CYLAVB).
3. Through the long closing arc, a uniform, reasonable (main) speed should be maintained.
4. The latching arc brings the door to a quiet, secure close.

Opening the door builds up the power that later closes the door
As a controlled door is opened, the spring of the closer is compressed, which builds up the power to close the door. Normally, more opening force would be required as spring compression increases. However, an LCN closer changes its arm geometry while the door opens, which increases the door leverage. This offsets the spring compression, resulting in greater ease in opening the door.

In opening, more leverage for the person
The changing arm geometry increases leverage over the door to overcome the growing power of the spring and allows one to pass through the door easily.

In closing, more leverage for the closer
When the person releases the door and the closer takes over, spring power is applied through the arm system to close the door. Because the spring has been compressed, its power is very high. As the door closes, the spring expands, providing the power to close the door.

Special closers for reduced opening force
The 1990 Americans with Disabilities Act (ADA) and ANSI Standard A117.1 describe maximum opening force limitations for certain non-fire rated doors. The last page of each closer section in the catalog includes a section titled Reduced Opening Force Closers. This section lists closers in that specific series that will comply with a maximum opening force based on the width of the door.

Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed, and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch the door.

Refer to LCN Automatic Operators catalog for information on electric, pneumatic and electromechanical systems that meet reduced opening force requirements without affecting closer power.

How to select a door closer

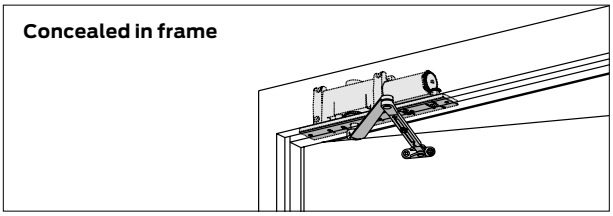
Concealed or surface mounted closers

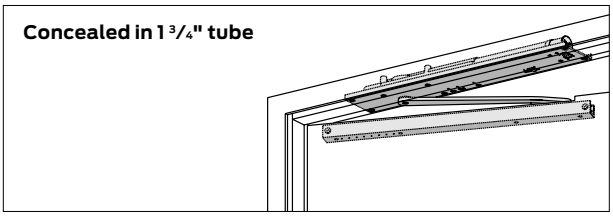
Door closers are available in two styles - concealed or surface mounted. When choosing a closer style for a particular application, consideration should be given to the type of door being controlled, frame conditions, aesthetic requirements, and control features needed. The following information can serve as a guide in selecting the style and model of closer to meet specific requirements.

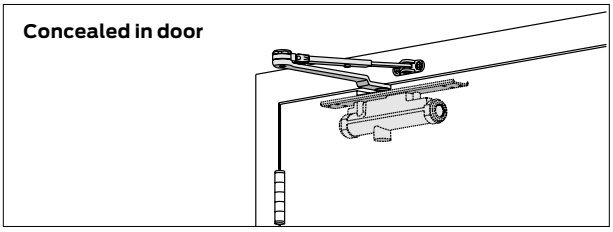
Concealed application

Closers concealed in the head frame over the door are out of sight and out of the pedestrian's way. They are more protected from external contaminants than those mounted outside of the door. They are easy to reach for regulation without removing any parts. Closers for frame sections as thin as 1 3/4" (44 mm) are available.

Closers located within the door itself are also hidden and protected but recommended for interior doors only.

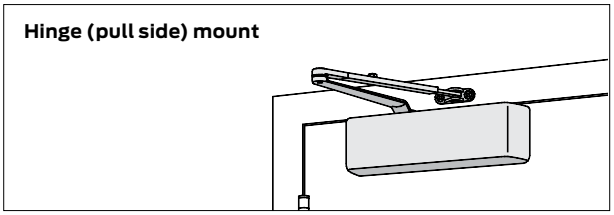


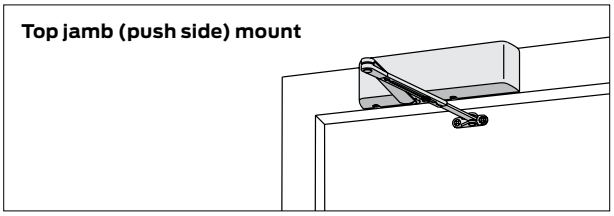


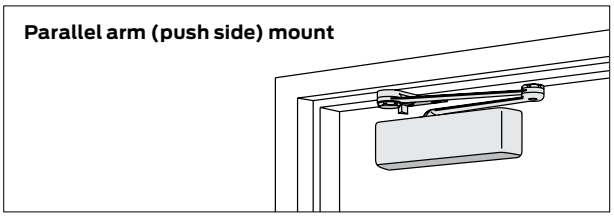


Surface mounted application

Closer location is subject to the considerations of practicality and appearance. Standard application usually decrees that closers on doors along a corridor be located on the room side of the door so they are out of the line of sight from the corridor. Closers should be placed on the inside of exterior doors for optimal aesthetics and to shelter them from environmental elements.







Where heavy duty closers are required

Heavy duty closers are the recommended solutions in the following locations:

1. Schools or public buildings where heavy or abusive usage is expected.
2. Exterior doors.
3. Doors subject to draft, winds, or air pressure differentials.
4. High frequency doors such as those on department stores, malls, or mixed use tenancies.

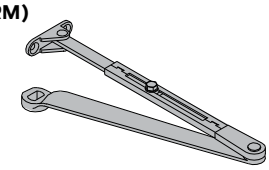
How to select a door closer

Arm system options

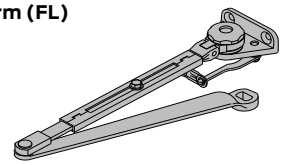
Double lever arm

Double lever arm closers can provide control under difficult conditions for either interior or exterior doors. A parallel arm system is a type of double lever arm where the main arm is parallel to the face of the closed door. Available double lever arms:

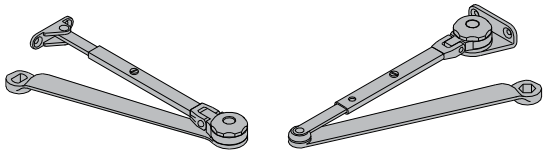
Regular arm (REGARM)



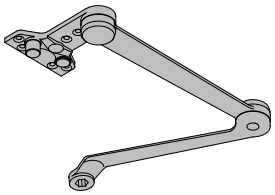
Fusible link arm (FL)



Hold open arm (H)

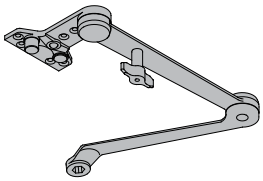


Cush-n-stop arm (CUSH)



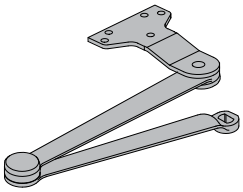
3077CNS

Hold open cush-n-stop arm (HCUSH)

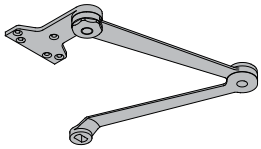


3049CNS

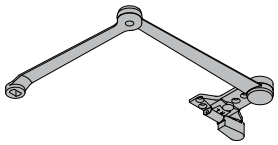
Extra duty arm (EDA)



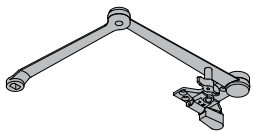
Hold open extra duty arm (HEDA)



Spring cush-n-stop arm (SCUSH)



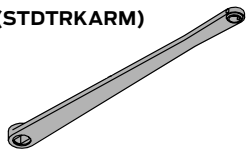
Spring hold open cush-n-stop arm (SHCUSH)



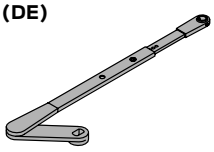
Single lever arm

Single lever arm (track) closers may be used on interior or sheltered exterior doors. The hold open function in a single lever arm system is provided by either the track or the cylinder assembly. Available single lever arms:

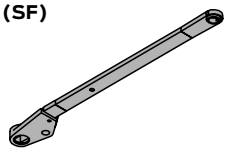
Standard arm (STDTRKARM)



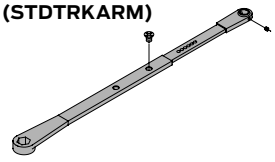
Double egress arm (DE)



Swing free arm (SF)



Standard arm (STDTRKARM)

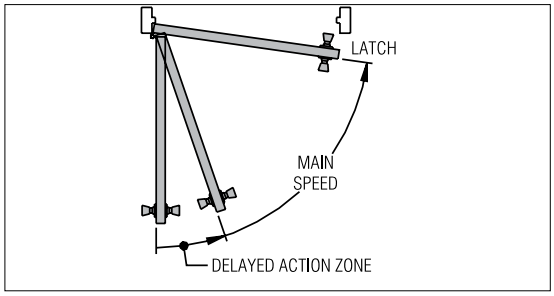


How to select a door closer

Special cylinder functions

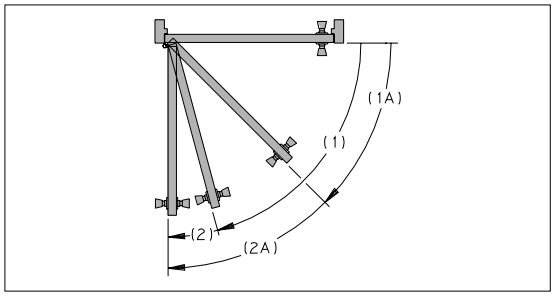
Delay action (CYLDEL)

Many LCN closers can be ordered with a delayed action function built into the cylinder. Delay action (CYLDEL) is a special hydraulic circuit that provides additional time to pass through the door. A special regulating screw controls the closing speed from maximum opening through approximately 75°. After that point the normal main speed resumes control to close the door. Delayed action is not available with single lever arm (track) closers.



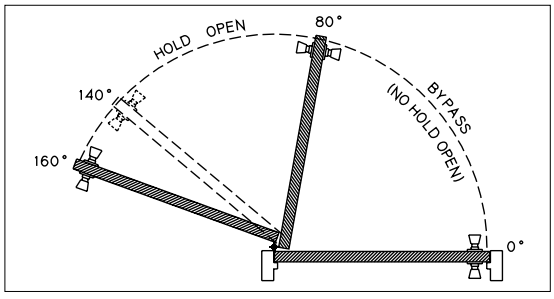
Advanced variable backcheck (CYLAVB)

CYLAVB is available with high security and 4110 Series closers to begin cushioning the opening swing at about 45°(2A) instead of the usual 75°(2). CYLAVB is recommended for potentially abusive applications.



Multi-point (ME Series)

ME Series closer/holders can be ordered with a hold open bypass at either 80° or 140° function. This feature does not allow hold open to take effect until opened beyond the selected degree of bypass.



Seasonal adjustment

Temperature changes can affect the operation of common door closers by changing the viscosity of the hydraulic fluid inside the closer. As temperature rises, the fluid thins out and closes the door more rapidly. As temperatures decrease, the fluid thickens causing the closer to close the door very slowly.

LCN's Liquid X all-weather hydraulic fluid reduces the amount of adjustments and maintenance needed through every season.

Hanging the doors

While butt hinges provide the most common method of hanging doors, some doors are hung on pivots centered in the door, others on offset pivots. Surface mounted closers will handle doors hung in any of these three ways. LCN 4020 Series closers can even control a "balanced" door installation. Concealed closers may conflict in location with pivot leaves and thus may require special templating.

Degree of opening

Three basic rules apply to maximum degree of opening.

1. It is best to let the door swing as far as it can swing freely. Closers are mounted in different locations for different degrees of opening.
2. Use a mechanical stop when a door cannot swing 180° or at the selected hold open point of a double lever arm system. The mechanical stop can be mounted on the floor, wall, overhead, or built into the closer arm.
3. The closer should be positioned so backcheck takes place well in advance of the stop position to cushion the opening swing and prevent door and frame damage from an abrupt stop.

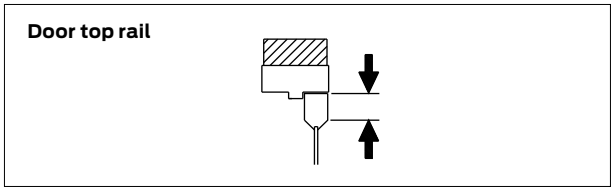
How to select a door closer

Door dimensions

The width of the door is the main consideration in determining the correct closer size. Size here refers to the minimum spring power, and hence the closing force, generated by the closer. In the catalog, the interior and exterior table of sizes for each closer are set up for ranges of door width and assume normal operating conditions. If a door is of exceptional height, weight, special construction, or if drafts and air pressure differentials exist, increased closer power should be considered.

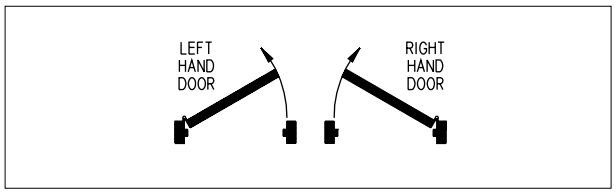
Door thickness may be a factor. A concealed-in-the-door closer should not be used in a hollow metal door less than 1 1/2" (38mm) thick or a wood door under 1 3/4" (44mm). Exceptionally thick doors can affect hinge and pivot centers to the extent that closer functions and geometry are also affected.

The depth of the door's top rail is important to nearly every closer installation. Narrow top rails may require plates to successfully mount the closer. An insufficient top rail in flush, hollow, or composite filled doors may make concealed-in-the-door installations impractical.



Handed closers

Some door closers are handed. When approaching a door from the push side, if hinged on the left, it is a left hand door; if hinged on the right, it is a right hand door.



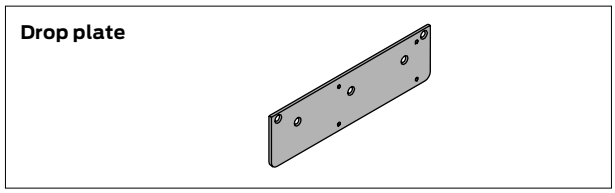
For purposes of handing door closers, right hand reverse bevel and left hand are identical. Also, left hand reverse bevel and right hand are identical.

A standard closer and template to meet your needs

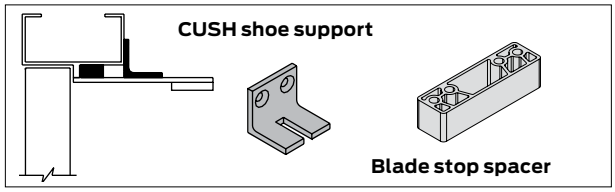
Occasionally, the physical limitations of the selected closer may not provide the desired functions or degree of opening. Standard templated locations may interfere with other applied hardware. In these situations, contact the LCN Applications Engineering Department for assistance. Customized installation templates or products may be available to solve a non-standard application.

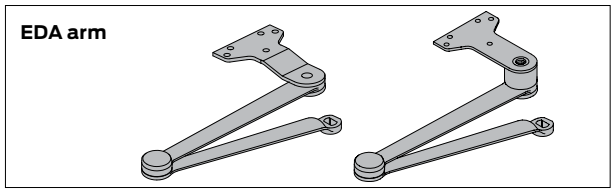
Plates, brackets, adapters and other special pieces

A drop plate is now commonly used to drop (lower) closers to meet special conditions or adapt a closer to door or frame surfaces that are not adequate for normal mounting patterns.



Specialized brackets, adapters, and parallel arm shoes are available to simplify the installation of closers with a variety of frame and door conditions. The most commonly used are listed with each closer. Consult LCN for assistance if you are not sure.





Fastener options

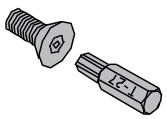
LCN closers are shipped with Wood and machine screws (WMS) or Self reaming and Tapping screws (SRT) unless other fasteners are ordered. These screw packs are suitable for wood or properly reinforced hollow metal frames and metal or solid core wood doors. For wood door applications, LCN recommends the use of wood screws. For selected closers, metric machine screws are available in lieu of UNC/UNF machine screws.

How to select a door closer

When attaching closers to hollow core doors, optional Through bolts (TB) are recommended to minimize crushing or squeezing the door. Through bolting can also provide a very strong mechanical connection for potentially abusive applications. Because the TB barrel extends completely through the door, the door thickness must be specified when ordering if it is other than 1 3/4" (44 mm). TBs are only available for 1/4-20 machine screws.

For high security applications, Torx machine screws are available with most closers. These are standard for all exposed fasteners with high security closers. Torx fasteners feature a hex lobular drive with a security pin in the center. They can only be installed or removed with a special set of bits.

Torx



Desired finishes

LCN powder coating provides superior protection against the effects of weather conditions and is an environmentally friendly process. The high quality, chip resistant finish is far superior to any previously offered. Corrosion resistance surpasses 100 hours salt spray testing (four times the industry standard). Non-metallic components also provide the same high resistance to the effects of the elements. All LCN products are shipped with a finish.

LCN offers custom finishing services to complement special installations. This provides a custom appearance and all the corrosion resistance inherent in the standard powder coated finishes. It is recommended that the customer submit a physical sample of the desired custom finish with the closer order. Custom powder coat finishes are available at additional cost. A metal cover must be ordered when custom powder coat finishes are desired.

With some exceptions, visible components such as covers, arms, fasteners, and finish plates are available in plated finishes. Tracks are painted to complement the plated finish. Hidden assemblies such as cylinders and mounting plates are supplied with a powder coated finish. Plated finishes are available at additional cost.

For installations where a higher level of protection against weathering is required, LCN offers a Special rust inhibitor (SRI) process at an additional cost. Metal components receive an SRI pretreatment and a standard or custom powder coat finish. The SRI process with a powder coat finish exceeds the protection level available with powder coated parts. SRI cannot be ordered with plated or anodized finishes. All closers must be shipped with a finish.

Installation process

Before installation of the door closer:

- Review the installation instructions provided with the door closer.
- Verify the desired installation and template with the hardware schedule. Review other applied door hardware for possible interference.
- Verify that the frame attachments and door hinges or pivots are securely installed.
- Verify that the door is hung properly and operates smoothly through it's entire range of opening. Misalignment, sagging or other conditions that prevent free movement of the door must be corrected prior to installation of the door closer. LCN recommends < 1/4 lbf to open the door before installing closers for ADA applications.
- Check latching mechanisms for proper operation and release.
- Verify that the door and frame have specified reinforcements.
- Verify that all required tools are available.

To complete the installation:

- Follow the installation instructions and use fasteners provided with the closer.
- Use the template provided with the closer to layout, drill, and tap (for metal screws) the required mounting holes. Be sure to use the proper size drill bit and tap to ensure maximum holding power by the screws.
- For closers with adjustable spring power, adjust the cylinder spring power based on the width of the door as described in the installation instructions.
- The hydraulic backcheck main speed and latch speed regulation adjustments of the door closer have been adjusted at the factory to meet normal installation conditions. If further adjustments are required to the hydraulic regulation, follow the directions included with the installation instructions.
- Lightly wipe the cover and arm surfaces with a soft, clean, dry cloth to remove any dirt or smudges that occurred during the installation.

Finishes

Standard powder coat finishes

LCN powder coating provides superior protection against the effects of weather conditions and is an environmentally friendly process. The high quality finish is chip resistant. Corrosion resistance surpasses 100 hours salt spray testing (four times the industry standard). Non-metallic components also provide the same high resistance to the effects of the elements. All LCN products must be shipped with a finish.

LCN standard finishes (ANSI/BHMA number):

622 Matte black

689 Aluminum

690 Statuary bronze

691 Light bronze

693 Gloss black

695 Dark bronze

696 Brass

Optional custom powder coat finishes

LCN offers custom powder coating to provide a custom appearance and all the corrosion resistance of standard powder coat finishes at a nominal additional cost. LCN uses the RAL numbering system for the 150+ custom colors available. Contact your local RSO representative for a brochure showing the available custom colors.

Note: Custom powder coat finishes require a metal cover.

Optional plated finishes

Visible components such as metal covers, arms, fasteners, and finish plates are plated to match the selected finish. Surface mounted tracks are powder coated to compliment the plated finish. Hidden assemblies such as cylinders, tracks, and mounting plates are supplied with a powder coated finish. Plated finishes require handing of closers.

Plated finishes:

616 Satin bronze, blackened
632 Bright brass
633 Satin brass
639 Satin bronze
646 Satin nickel
651 Bright chrome
652 Satin chrome

Special Rust Inhibitor (SRI) process

For installations where a higher level of protection against weather conditions, or the effects of a potentially corrosive atmosphere is required, LCN offers a Special rust inhibitor (SRI) process. Ferrous metal components receive an SRI pretreatment and a standard powder coat finish of your choice, or a custom powder coat finish for a nominal additional cost. Closers treated with the SRI process exceed the 100 hour protection level available with standard LCN powder coated finishes. For details, contact your local RSO representative or the LCN factory.

Standard anodized finishes

LCN Senior swing and benchmark electromechanical automatic operators are offered with an anodized finish. Anodizing is an electrochemical process that thickens and toughens the protective oxide on aluminum metal.

LCN anodized finishes:

628 Aluminum, clear anodized
710 Dark brown, anodized

Materials

The LCN offering consists of well-made, reliable, long-lasting products that work in real-life applications. In addition to the mechanical advantages derived from proven designs, much of the durability of the closer and arm system is directly related to the materials used in their manufacturing.

Precision machined cast iron cylinders and forged steel pistons work together because of the compatibility of their basic elements. Heat-treated pinions and pistons spread the load over a large gear tooth system to better handle the wear and stress of millions of operating cycles. Upper and lower full complement pinion bearings provide the support and load capacity required by the design of the closer. All-weather fluid, Liquid X, reduces the amount of adjustments and maintenance needed and ensures consistent performance through every season.

Forged steel main arms are a durable alternative to lower-cost stamped steel arms. Specially designed shoe and elbow joints help each closer fit securely onto a variety of opening applications. A state-of-the-art, powder coat process delivers a high quality, corrosion resistant finish on all metal parts in popular architectural finishes.

Through state-of-the-art equipment, processes and people, we believe LCN will continue to provide the best solutions for our customers.

Part 1 - General

1.1 Quality assurance

A. Reference standards

1. American National Standards Institute (ANSI/BHMA):
   - A117.1 Providing accessibility and usability for physically handicapped people
   - A156.10 For power operated pedestrian doors
   - A156.4 Door controls - closers
   - A156.15 Life safety closer holder release devices
   - A156.18 Materials and finishes
   - A156.19 Power assist and low energy power operated doors
2. Americans with Disabilities Act (ADA)
3. American society for testing and material (ASTM): Specification B117-9 Method of finish corrosion testing
4. Underwriters laboratory (UL):
   - 228 Door closers-holders
   - ul10c Standard positive pressure fire test of door assemblies
   - Ul10b Standard for fire test of door assemblies
5. National fire protection association (NFPA)
   - No. 80 Fire doors and windows
   - No. 101 Life safety code

B. Source quality control

1. Obtain each kind of hardware (latch and lock sets, hinges, closers, etc.) from only one manufacturer, although several may be indicated as offering products complying with requirements.
2. All products shall meet grade 1 or the highest level of cycle test requirements of the applicable ANSI/BHMA standard.

C. Supplier qualifications

1. Supplier must be a recognized builders hardware supplier who has been furnishing hardware in the projects vicinity for a period of not less than two years.
2. Supplier must be or employ an experienced hardware consultant who is available, at reasonable times during the course of the work, for consultation about the project's hardware requirements, to owner, architect, and contractor.

D. Fire-rated openings

1. Provide hardware for fire rated openings in compliance with NFPA Standard No. 80, NFPA Standard No. 101, and local building codes.
2. **[Manual Hold Open Arm function not allowed.]** Provide hardware which has been tested and listed by UL for types and sizes of doors required and complies with the requirements of door and frame labels.

Part 2 - Products

2.3 Materials and fabrication

A. General

1. Closers shall be installed to allow door swing as shown on plans. Doors swinging into exit corridors should provide for corridor clear width as required by codes.

2.8 Closers and door control devices

A. General

All closers shall have the following features:

1. All closers shall carry manufacturer's warranty, as stated on page 27.
2. All closers with electrical or pneumatic components shall carry a manufacturers two (2) year warranty. **[Items 3 through 11 apply to closer cylinder, items 12 through 15 apply to closer arms.]**
3. **[Excluding 1250, 1450, and 4050A]** Fully hydraulic, rack and pinion action with high strength cast iron cylinders and one piece forged steel pistons.
4. Fluid of a type requiring no seasonal adjustments.
5. **[Excluding 1460, 1260, 3030, 3130 4030, 4040XP, 1250, 1450, and 4050A Series.]** Pinion shaft minimum diameter of $^{11}/_{16}$".
6. Hydraulic regulation controlled by tamper-proof, non-critical screw valves, adjustable with a hex wrench.
7. Separate adjustments for backcheck, general speed, and latch speed.
8. **[Applies to 1450, 1460, 4010, 4020, 4040XP, 4050A, 4110, 4210, 4510, 5010 Series.]** Where detailed on double lever arm closers, provide a delay action feature to delay closing up to one minute from maximum opening to approximately 75˚.
9. Backcheck shall be properly located for protection of the door, frame, and applied hardware.
10. **[Applies to 2210, 4110, 4210, 4210T, 4510, and 4510T Series only.]** Where detailed, provide advanced variable backcheck to start backcheck function at approximately 45˚.
11. Include high efficiency, low friction full complement pinion bearings.
12. **[Excluding 1260, 1460, 6030 Series.]** Forged steel main arms.
13. **[Applies to 4110, 4210, 4510 Series and all EDA and CUSH arms.]** Forged steel main and forearms.
14. **[Applies to all single lever arm (track type) closers.]** Where detailed, provide a quiet, low friction track and roller assembly and provisions for an optional bumper assembly to assist backcheck and/or Hold Open Clip.
15. **[Applies to all double lever arm closers, except EDA or CUSH arms.]** Reversible shoe to increase latching power of the closer.

B. Size of closers

1. Sized in accordance with ANSI/BHMA Standard A156.4 as shown in the applicable table of sizes listed in the current LCN catalogs.
2. Closing power of non-sized cylinders shall be adjustable over a range of sizes**; [Applies to 1250, 1261, 1450, 1461, 1460T, 4011, 4021, 4040SE, 4040XP, 4040XPT, 4041DEL, 4050A, 4111, 4211, 4511, 4631, 4642, 4811, 4822, 4841, 4031, 4031T Cylinders.]**

C. Barrier free manual closers

1. All closers for openings that must meet the minimum requirements of the ADA act, in lieu of ANSI/BHMA Standard A156.4, shall be sized in accordance with the applicable REDUCED OPENING FORCE table in the current LCN catalogs.
2. All size 1 manual closers shall provide or be adjustable to provide less than 5 pounds opening force on a 36" door leaf and delay closing time in accordance with the ADA requirements.

D. Combination door closers and holders

1. Provide closer/holders designed to hold the door in the open position under normal usage and to release and automatically close the door under fire conditions. Closer will include an integral electromagnetic holder mechanism designed for use with UL listed fire detectors, provided with normally closed switching contacts.
2. **[Applies to all ME models.]** Where detailed, multi-point closer/holders shall incorporate a hold open bypass feature from 0º up to either 80º or 140º.
3. **[Applies to 4310 ME only.]** Where detailed, multi-point closer/holders shall provide a swing-free function with a no-drift feature.

E. High security closers

1. Provide closers designed to resist vandalism and tampering.
2. All exposed fasteners shall be Torx machine screws with a security pin.
3. All closer adjustments shall be shielded by the cover

Part 2 - Products (cont.)

or finish plate, after installation.

4. Arm and, where furnished, high security roller assembly shall be designed to prevent disassembly.
5. **[4210 and 4510 Series only.]** All surface mounted high security closers shall include a cast iron cylinder, heavy gauge metal covers with four mounting screws and double lever arms manufactured to prevent disassembly.
6. **[4210T and 4510T Series only.]** All surface mounted high security closers shall include a cast iron cylinder, heavy gauge metal covers with four mounting screws, heavy duty arm with special security roller, and a heavy gauge high security track designed to eject foreign objects.
7. **[2210 and 2210 DPS only.]** All concealed high security closers shall include a cast iron cylinder, 3/8" steel mounting plate, heavy duty arm with special security roller, and a heavy gauge high security track designed to eject foreign objects.
8. **[2210 DPS only.]** A built-in door position switch shall be optional with concealed closers.

F. Automatic operators

1. Where low kinetic energy, as defined by ANSI/BHMA Standard 156.19, automatic operators are indicated for doors required to be accessible to the disabled, provide pneumatic, electrohydraulic or electromechanical **[2810, 2850, 2860, 4630, 4640, 9130, 9140, 9150, 9530, 9540, 9550, 9560 Series]** operators complying with the ADA for opening force and time to close standards.
2. Full closing force shall be provided when the power or assist cycle ends **[2610, 2810, 2850, 2860, 4630, 4640, 4810, 4820, 4840, 9130, 9140, 9150, 9530, 9540, 9550, 9560 Series]**.
3. **[2610, 4810, 4820, 4840]** Locate power unit and pneumatic exhaust away from door to minimize noise and vibration in pedestrian areas.
4. All automatic operator systems shall include the following features and functions.
   a) Provisions for separate conduits to carry high and low voltage wiring in compliance with the National Electrical Code, section 725-31.
   b) The operator will be designed to prevent damage to the mechanism if the system is actuated while the door is latched or if the door is forced closed during the opening cycle.
   c) All covers, mounting plates and arm systems shall be powder coated and successfully pass a minimum of 100 hours testing as outlined in ANSI/BHMA Standard A156.18 **[2610, 4630, 4640, 4810, 4820, 4840 Series]**.

   -Or-

   d) Electromechanical automatic operators shall be standard anodized either in aluminum or dark bronze. Custom anodized finishes and custom paint are available and can be specified. **[2810, 2850, 2860, 9130, 9140, 9150, 9530, 9540, 9550, 9560 Series]**
   e) UL listed for use on labeled doors
   f) **[4630, 4640, 4810, 4820, 4840 Series]** shall be non-handed with spring power over a range of at least four sizes either 1 through 4 or 2 through 5.

   -Or-

   g) **[2810, 2850, 2860, 9130, 9140, 9150, 9530, 9540, 9550, 9560, Series]** are handed and feature a spring return.
   h) Provisions in the control box or module shall provide control {inputs and outputs} for; electric strike delay, auxiliary contact, sequential operations, fire alarm systems, actuators, swing side sensors, stop side sensors. **[2610, 4630, 4640, 4810, 4820, 4840, 9130, 9140, 9150 Series]**
5. **[4630, 4640 Series]** All electrohydraulic automatic operators shall include the following features or functions:
   a) Second chance feature: When an obstruction or resistance to the opening swing is encountered the operator will pause at that point, then attempt to continue opening the door. If the obstruction or resistance remains, the operator will again pause the door.
   b) Easily accessible main power and maintain hold open switches will be provided on the operator.
   c) An electrically controlled clutch to provide adjustable opening force.
   d) A microprocessor to control all motor and clutch functions.
   e) An on-board power supply capable of delivering both 12V and 24V outputs up to a maximum of 1.0 ampere combined load.
   f) All input and output power wiring shall be protected by a resettable circuit breaker.
6. All electromechanical automatic operators shall include the following features of functions:
   a) Maximum 8 1/2 lbs of manual opening force **[9130, 9140, 9150 Series]**.
   b) Maximum 15 lbs of manual opening force **[2810, 2850, 2860, 9530, 9540, 9550, 9560 Series]**.
   c) Bottom loaded header for easy access to controls **[2810, 2850, 2860, 9550, 9560 Series]**.
   d) Power Boost, which adds an additional 25 lbs of closing force at latch **[2810, 2850, 2860, 9130, 9140, 9150, 9530, 9540, 9550, 9560 Series]**.
   e) Self contained automatic operators in a cast aluminum housing and a forged steel arm **[2810, 2850, 2860, 9130, 9140, 9150, 9530, 9540, 9550, 9560 Series]**.

2.12 Hardware finishes

A. Finish

1. All closers with powder coat finishes shall exceed a minimum 100 hour salt spray test, as described in ANSI/BHMA Standard A156.4 and ASTM B117.
2. All closers detailed with plated finishes shall include plated covers (or finish plates), arms, and visible fasteners.
3. All electromechanical automatic operators supplied with anodized finishes.
4. All closers must be shipped with a finish.

Part 3 - Execution

3.1 Installation

A. General

1. Installation shall be in accordance with the templates and installation instructions packaged with the closers at the time of manufacture.
2. Installation shall be made with fasteners packaged with the closer by the manufacturer.
3. All electrical connections shall be made in accordance with the manufacturers recommendations.
4. Clean installed closer to remove dirt, debris, and marks incidental to installation work.
5. Installation instructions and templates are to be turned over to the owners representative upon completion of the installation work.
6. Factory trained representative will be available for job site inspection of major projects upon completion of the hardware installation work.

3.2 Adjustment

A. Adjustment

1. Install and regulate all closers in accordance with the installation instructions packaged with the closers at the time of manufacture.
2. If unfamiliar with LCN products furnished, consult factory representative prior to installation for assistance.

ANSI/LCN product cross reference

Surface mounted

ANSI number	Mounting	LCN closer	ANSI Standard A156.4-2013 PT-4A	PT-4B	PT-4C	PT-4D	PT-4F	PT-4G	PT-4H	PT-4J
C02011	Hinge side	4031	■	■	■	■			■	
		4040XP	■	■	■	■			■	
		1250	■	■	■	■			■	
		1260	■	■	■	■	■		■	
		1450	■	■	■	■			■	
		1460	■	■	■	■	■		■	
		4010	■	■	■	■	■		■	
		4050A	■	■	■	■			■	
		4510	■	■	■	■	■		■	■
C02021	Parallel	4031	■	■	■	■		■	■	
		4040XP	■	■	■	■		■	■	
		1250	■	■	■	■		■	■	
		1260	■	■	■	■	■	■	■	
		1450	■	■	■	■		■	■	
		1460	■	■	■	■	■	■	■	
		4050A	■	■	■	■		■	■	
		4110	■	■	■	■	■	■	■	■
		4210	■	■	■	■	■	■	■	■
C02031	Bracket	4040XP	■	■	■	■			■	
		4010	■	■	■	■	■		■	
		4050A	■	■	■	■			■	
C02041	Top jamb	4031	■	■	■	■			■	
		4040XP	■	■	■	■			■	
		1250	■	■	■	■			■	
		1260	■	■	■	■	■		■	
		1450	■	■	■	■			■	
		1460	■	■	■	■	■		■	
		4020	■	■	■	■	■		■	
		4050A	■	■	■	■			■	
C02051	Hinge side hold open	4031	■	■	■	■			■	
		4040XP	■	■	■	■			■	
		1250	■	■	■	■			■	
		1260	■	■	■	■	■		■	
		1450	■	■	■	■			■	
		1460	■	■	■	■	■		■	
		4010	■	■	■	■	■		■	
		4050A	■	■	■	■			■	
C02061	Parallel hold open	4031	■	■	■	■		■	■	
		4040XP	■	■	■	■		■	■	
		1250	■	■	■	■		■	■	
		1260	■	■	■	■	■	■	■	
		1450	■	■	■	■		■	■	
		1460	■	■	■	■	■	■	■	
		4050A	■	■	■	■		■	■	
		4110	■	■	■	■	■	■	■	■
		4210	■	■	■	■	■	■	■	■
C02071	Bracket hold open	4010	■	■	■	■	■		■	
		4040XP	■	■	■	■			■	
		4050A	■	■	■	■			■	
C02081	Top jamp hold open	4031	■	■	■	■			■	
		4040XP	■	■	■	■			■	
		1250	■	■	■	■			■	
		1260	■	■	■	■	■		■	
		1450	■	■	■	■			■	
		1460	■	■	■	■	■		■	
		4020	■	■	■	■	■		■	
		4050A	■	■	■	■			■	
C02091	Hinge side fusible link	4010	■	■	■	■	■		■	
C02101	Parallel fusible link	4110	■	■	■	■	■		■	■
C02111	Bracket fusible link	4010	■	■	■	■	■		■	
C02121	Top jamp fusible link	4020	■	■	■	■	■		■	
C02171	Hinge side telephone booth	4010TEL				■				
		4110TEL				■				
C02211	Hinge side track	1460T	■	■	■	■			■	
		4010T	■	■	■	■			■	
		4031T	■	■	■	■			■	
		4040XPT	■	■	■	■			■	
		4510T	■	■	■	■			■	■

Note: All closers listed in this section are certified grade 1 = 1,500,000 cycles, PT-4A = 15% adjustable closing force, PT-4B = 35% adjustable closing force, PT-4C = 50% adjustable closing force, PT-4D = adjustable hydraulic backcheck, PT-4F = delay action, PT-4G = built-in factory dead stop (Cush-n-Stop), PT-4H = spring power adjustable over a range of sizes, PT-4J = backcheck position advanced 15 degrees.

Surface mounted

ANSI number	Mounting	LCN closer	ANSI Standard A156.4-2013 PT-4A	PT-4B	PT-4C	PT-4D	PT-4F	PT-4G	PT-4H	PT-4J
C02221	Hinge side hold open track	1460T	■	■	■	■			■	
		4010T	■	■	■	■			■	
		4031T	■	■	■	■			■	
		4040XPT	■	■	■	■			■	
		4031T	■	■	■	■			■	
		4040XPT	■	■	■	■			■	
		4510T	■	■	■	■			■	■
C02231	Stop face track	1460T	■	■	■	■			■	
		4031T	■	■	■	■			■	
		4040XPT	■	■	■	■			■	
		4110T	■	■	■	■			■	
		4210T	■	■	■	■			■	■
C02241	Stop face hold open track	1460T	■	■	■	■			■	
		4031T	■	■	■	■			■	
		4040XPT	■	■	■	■			■	
		4110T	■	■	■	■			■	
C02251	Top jamb track	1460T	■	■	■	■			■	
		4000T	■	■	■	■			■	
		4020T	■	■	■	■			■	
		4031T	■	■	■	■			■	
		4040XPT	■	■	■	■			■	
C02261	Top jamb hold open track	1460T	■	■	■	■			■	
		4020T	■	■	■	■			■	
		4031T	■	■	■	■			■	
		4040XPT	■	■	■	■			■	
C02271	Top jamb push side flush frame track	4031T	■	■	■	■			■	
C02281	Top jamb push side flush frame hold open track	4031T	■	■	■	■			■	
C03011	Hinge side	1250	■	■	■	■			■	
		1260	■	■	■	■	■		■	
		1450	■	■	■	■			■	
C03021	Parallel	1250	■	■	■	■		■	■	
		1260	■	■	■	■	■	■	■	
		1450	■	■	■	■		■	■	
C03041	Top jamb	1260	■	■	■	■	■		■	
C03051	Hinge side hold open	1250	■	■	■	■			■	
		1260	■	■	■	■	■		■	
		1450	■	■	■	■			■	
C03061	Parallel hold open	1250	■	■	■	■		■	■	
		1260	■	■	■	■	■	■	■	
		1450	■	■	■	■		■	■	
C03081	Top jamb hold open	1250	■	■	■	■			■	
		1260	■	■	■	■	■		■	
		1450	■	■	■	■			■	

Note: All closers listed in this section are certified grade 1 = 1,500,000 cycles, PT-4A = 15% adjustable closing force, PT-4B = 35% adjustable closing force, PT-4C = 50% adjustable closing force, PT-4D = adjustable hydraulic backcheck, PT-4F = delay action, PT-4G = built-in factory dead stop (Cush-n-Stop), PT-4H = spring power adjustable over a range of sizes, PT-4J = backcheck position advanced 15 degrees.

Concealed in door

ANSI number	Mounting	Arm	LCN closer	ANSI Standard A156.4-2013 PT-4A	PT-4D
C04011	Concealed in door	Regular arm	3030	■	■
		Hold open arm	3030H	■	■
C04031	Concealed in door	Standard arm	3130		■
		Hold open arm	3130H		■

Note: All closers listed in this section are certified grade 1 = 1,500,000 cycles. PT-4A = 15% adjustable closing force, PT-4D = adjustable hydraulic backcheck.

ANSI/LCN product cross reference

Overhead concealed

ANSI Standard A156.4-2013

ANSI number	Mounting	Arm	LCN closer	PT-8A	PT-8B	PT-8D	PT-8E	PT-8F	PT-8J	PT-8L
C05011	Butt hinge	Regular arm	5010	■	■	■	■	■	■	■
			5030	■	■	■	■	■		■
C05021	Pivot	Regular arm	5010	■	■	■		■	■	■
			5030	■	■	■		■		■
C05031	Butt hinge	Standard arm	2010	■	■		■	■		■
			2030	■	■		■	■		■
			2210	■		■	■	■		■
			2210 DPS	■		■	■	■		■
C05041	Pivot	Standard arm	2010	■	■			■		■
			2030	■	■			■		■
			2210	■		■		■		■
			2210 DPS	■		■		■		■
C05071	Pivot	Standard arm	2010	■	■			■		■
			2030	■	■			■		■
C05081	Pivot	Standard arm	6030	■	■			■		■
C05091	Butt hinge	Hold open arm	5010	■	■	■	■	■	■	■
			5030	■	■	■	■	■		■

Note: All closers listed in this section are certified grade 1 = 1,500,000 cycles. PT-8A = door under control from 7 degrees of maximum door opening to close, PT-8B = hold open between 85 and 180 degrees, PT-8D = 50% adjustable PT-8E = single acting, 165 degrees of opening, double acting 165 degrees of opening either way, PT-8F = adjustable hydraulic backcheck, PT-8J = delay action, PT-8L = 35% adjustable closing force.

Life safety closer/holder release device

ANSI Standard A156.15-2001

ANSI number	Mounting	Arm	LCN closer	PT-4D	PT-4N	PT-4P
C00011	Wall	N/a	7830, 7840, 7850			
C00021	Floor	N/a	7820			
C00191	Hinge side	Standard arm	4040SE	■	■	■
			4040SEL	■	■	■
C00231	Stop face	Standard arm	4040SE	■	■	■
			4040SEL	■	■	■
C00311	Top jamb	Regular arm	4410HSA	■	■	
			4410ME	■	■	
C00351	Hinge side	Standard arm	4310HSA	■	■	
			4310ME	■	■	
C00371	Hinge side	Swing free arm	4310ME	■	■	
C00391	Top jamb	Double egress arm	4310HSA	■	■	
			4310ME	■	■	
C00471	Hinge side	Regular arm	4040SEH			■
C00511	Push side	Regular arm	4040SEH			■
C00611	Concealed	Standard arm	3130SE	■		■
			3130SEL	■		■
C00651	Concealed	Standard arm	2310ME	■	■	

Note: Options are; PT-4D = adjustable hydraulic backcheck, PT-4N = adjustable spring power, and PT-4P = adjustable hold open intensity.

Abbreviations

Arm options

CUSH	Cush-n-stop arm
DE	Double egress arm
DHWPA	H arm with 62PA for delay
DRWPA	Regular arm with 62PA for delay
EDA	Extra duty arm
EDAW62G	Extra duty arm with 62G thick hub shoe
FL	Fusible link arm
H	Hold open arm
HCUSH	Hold open cush-n-stop arm
HEDA	Hold open extra duty arm
HEDA62G	Hold open extra duty arm with 62G thick hub shoe
HLONG	Hold open long arm
HWPA	Hold open with parallel arm bracket
LONG	Long arm
REGARM	Regular arm (non-handed)
RWPA	Regular arm with parallel arm bracket
RW62A	Regular arm with 62A auxiliary shoe
SCUSH	Spring cush-n-stop arm
SF	Swing free arm
SHCUSH	Spring hold open cush-n-stop arm
STDTRKARM	Standard arm (handed)
STDTRKSECARM	Standard security arm (handed)
XLONG	Extra long arm

Control box options

CTRL	Standard controller

Cylinder options

CYL	Cast iron or aluminum cylinder assembly
CYL18G	Standard cylinder with 18G mounting plate
CYL80G	Bypass hold open up to 80 degrees with 18G mounting plate
CYL140G	Bypass hold open up to 140 degrees with 18G mounting plate
CYLAVB	Advanced variable backcheck
CYLB80	Bypass hold open up to 80 degrees
CYLB140	Bypass hold open up to 140 degrees
CYLDEL	Delay action cylinder
CYLTEL	Telephone booth cylinder

Cover options

CL	Cover length
DS	Designer series metal cover
FC36	Full 36" cover
FPC	Full plastic cover
LESSCOV	Less cover
MC	Metal cover
MC27	Standard 27" metal cover
MC72	Standard 72" metal cover
PC	Plastic cover
SLIMPC	Slim line plastic cover

Track options

BUMP	Track with bumper
H	Hold open track
HBMP	Hold open track with bumper
LESSTRK	Less track
LONG	Long track
STDSECTRK	Standard security track (non-handed)
STDTRK	Standard track (non-handed)

Fastener pack options

LESSSCPK	Less screws
MS	Machine screws
MTBMS	Metric metal through bolt machine screws
MWMS	Metric metal and wood machine screws
SRT	Self reaming and tapping screws
TBSRT	Through bolt self reaming and tapping screws
TBTRX	Through bolt and torx machine screws
TBWMS	Through bolt wood and machine screws
TORX	Torx machine screws
UNIV	Universal screws
WMS	Wood and machine screws

Motor gearbox options

MGB	Standard motor gearbox

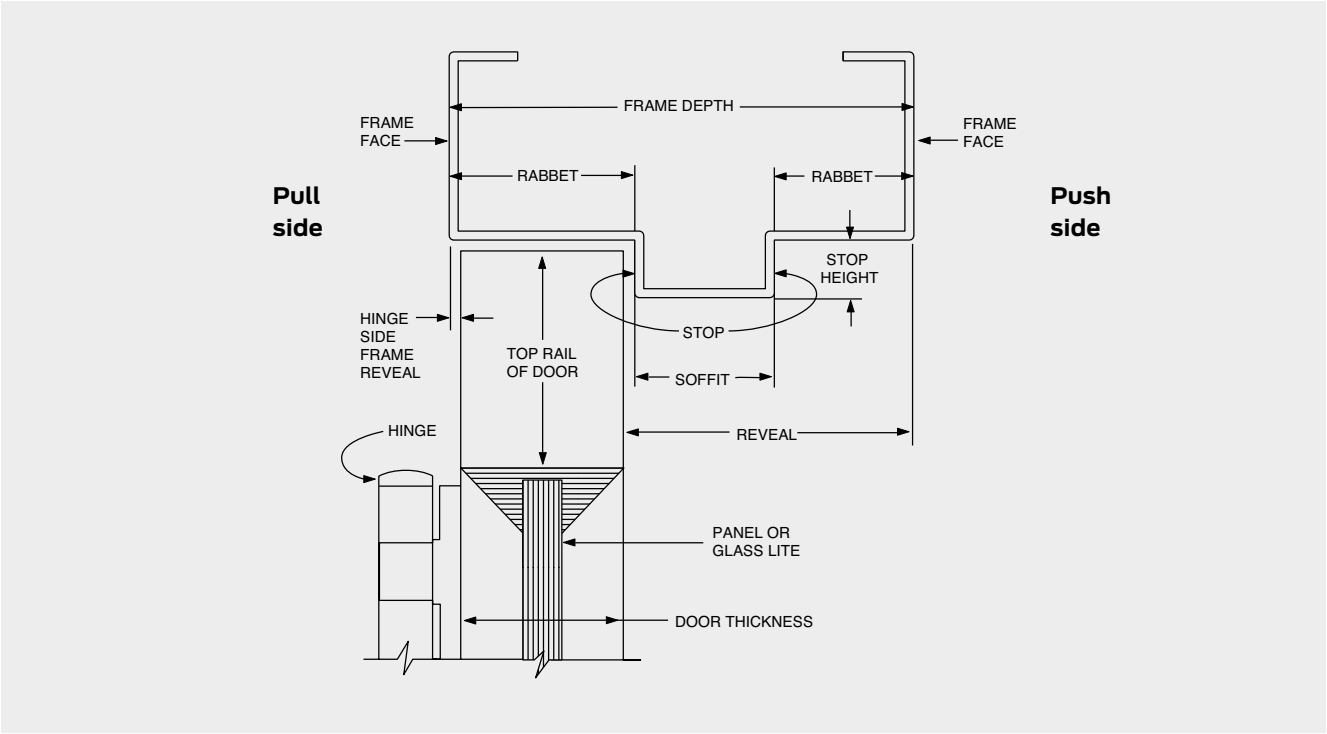
Powder coat finishes

622	Matte black paint
689	Aluminum paint
690	Statuary bronze paint
691	Light bronze paint
693	Gloss black paint
695	Dark bronze paint
696	Brass paint

Miscellaneous terms

BKY	Breakaway stop
DPS	Door position switch
ELR	Extra long rod
ES	Electric strike relay (control boxes)
FCA	Flush ceiling application
HDR2	Double door header
HL	Header length
HSA	Hold open/scanner activated
LH	Left hand
LR	Long rod
ME	Multi point hold open series
PA	Parallel arm
PAH	Parallel arm holder
POS	Positive stop
RF	Radio frequency
RH	Right hand
S	Sequential (control boxes)
SE	Single point hold open series
SRI	Special rust inhibitor
ST	Special template
T	Track
TJ	Top jamb
XP	Extra protection

Terms

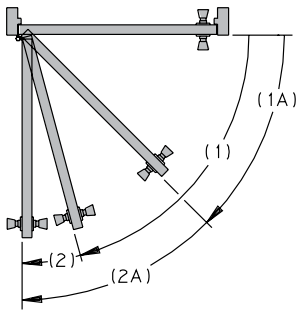


A

ADA – Americans with Disabilities Act.

Advanced variable backcheck (CYLAVB) – Optional cylinder that starts backcheck at about 45° (2A) instead of the normal 75°(2).

CYLAVB cylinder



Anodized – An electrochemical process that thickens and toughens the protective oxide on aluminum metal.

ANSI – American National Standards Institute publishes standards for commercial hardware. A156.4 is the basic door closer standard.

Applied stop – Surface mounted stop attached to a cased opening frame.

Arch top door – Any door with an arched top rail.

Armature extension – Standard metal extensions available for SEM magnets where the armature does not reach the magnet. Available in ½", ¾", 1", 2", 4" or a kit including all sizes.

Autoequalizer™ – An LCN specific term for an electric or a pneumatic automatic operator. System is low-energy and carries a two-year warranty.

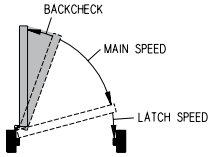
Automatic operator – A term used to describe a type of automated opening system.

Auxiliary door stop – Hardware designed and installed to limit the swing of a door.

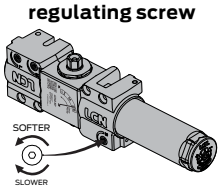
B

Backcheck – Hydraulic circuit designed to cushion the doors opening swing at about 75°. Standard on all LCN closers.

Backcheck

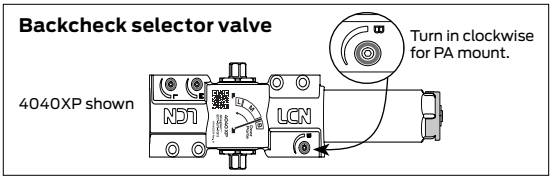


Backcheck regulating screw



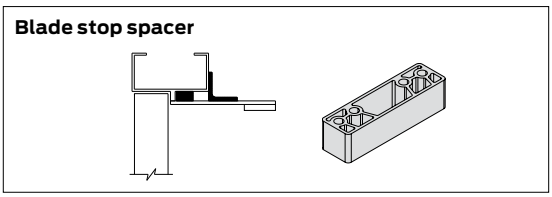
Terms

Backcheck selector valve – Valve used to provide proper backcheck location for 4040XP and 4050A parallel arm mounting.



Blade stop – Narrow frame stop that will not accept a parallel arm shoe.

Blade stop spacer – Spacer lowers a parallel arm ½" so the arm will clear a blade stop.

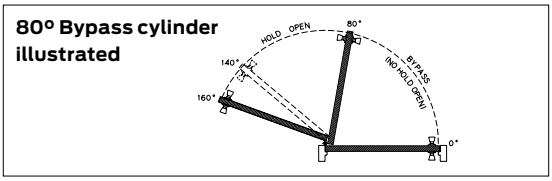


Blow-open – A type of control box that is used for a smoke evacuation system. Can be used with or without a normal automatic operator system.

Breakaway stop (BKY) – An optional safety device that permits egress on in-swinging exterior doors by allowing them to swing out in case of an emergency. Used with overhead concealed, center pivoted in-swinging doors.

Brite metallic (MTLPC) – Custom powder coat finish, which resembles that of 651 or 652 plated finish.

Bypass cylinder – ME cylinder that will not hold open within a specified range of door swing.



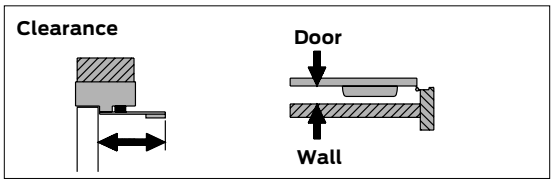
C

Cased opening – Frame section without stops.

Cast aluminum – Material used in producing LCN's competitively priced door closers.

Cast iron – Material used in producing high quality door closers.

Clearance – Distance from a PA shoe to the push side of door or distance from the pull side of door to the wall on 90° installations.



Closing force – Energy generated by a closer to close and latch the door.

Control box, standard, 9100 Series – Microprocessor door control without Power Boost or built in power supply.

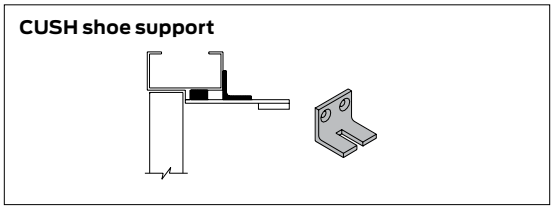
Control box, 2800, 9500 Series – Microprocessor door control, includes adjustment for opening, closing and backcheck speeds. Features Push 'N Go and Power Boost.

Control box, 7900 Series – Heavy duty, surface mounted control box that contains one or two electrically controlled pneumatic circuits.

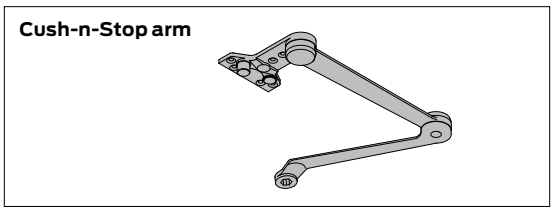
Controller assembly – Digital control suite used in the LCN automatic operator. Includes adjustments for opening force and opening speed.

Concealed in door – Closer with cylinder concealed in the top rail of the door with either an exposed or concealed arm.

CUSH shoe support – Support provides fifth screw anchorage of CUSH shoes on frames with narrow push side reveals.



Cush-n-stop arms (CUSH) – Extra duty, parallel arm that includes a stop in the CUSH shoe.



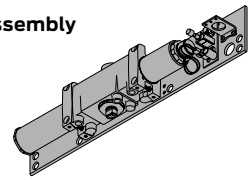
Custom powder coat (RAL) – An optional powder coat finish. Currently, LCN offers a wide selection for special powder coat finishes. LCN uses a European color standard, referred to as an RAL #, to differentiate between finishes.

Terms

Cutout – Preparation of the top rail of a door or frame for concealment of the closer, arm or track.

Cylinder assembly (CYL) – Main closer component complete with any mounting plates or electronics.

Cylinder assembly



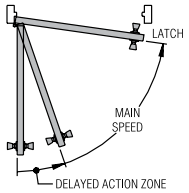
Cylinder only – Hydraulic cast iron cylinder.

D

Deep reveal – Reveal deeper than what an arm will accommodate.

Delay action cylinder (CYLDEL) – Delays closing from maximum opening to approximately 75°.

Delay action



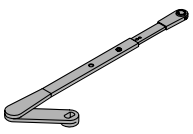
Designer series metal cover (DS) – An aesthetically pleasing cover design that appeals to many types of facilities and architects.

Door position switch (DPS) – A security option specific to the 2210 Series closer. A door position switch is used to monitor the closed position of a door in an opening.

Double door header (HDR2) – One electromechanical automatic operator and one manual door within the same header, for a pair of doors.

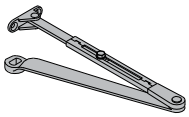
Double acting – Term used to describe door swing. A double acting frame does not have a stop thus allowing the door to swing 95° in both directions.

Double egress arm



Double lever arm – Two-part arm hinged at the elbow that provides superior leverage. Used on hinge side, top jamb and parallel arm mountings, the geometry of the arm provides greater mechanical advantage to the closer.

Double lever arm



Double rabbet frame – Frame with a recess or offset formed on both sides of a stop to receive a door.

Double rabbet frame

Drop plate – Designed to mount a closer on top rail or head frame to meet special conditions or mounting surface dimensions that are below minimums.

E

Electric strike – An optional, electronic latching device that replaces a regular lock strike in a doorframe that allows the door to open from a remote location or by special access equipment.

Electric strike relay (ES) – An optional feature found in an LCN 7900 Series control box that can be used to control an electric strike.

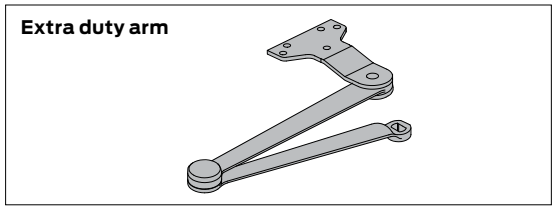
Electrohydraulic automatic operator – Automatic operator with an electrically controlled opening feature and hydraulic closing feature.

Electromechanical automatic operator – Automatic operator with an electrically controlled opening feature and closing feature.

Escutcheon – An optional, protective or decorative plate that can be installed with many surface mounted actuators.

Terms

Extra duty arm (EDA) – Double lever arm with both main and forearm made of solid forged steel for extra strength.



Extra long arm (XLONG) – 4040XP Series double lever arm for exceptionally deep reveals or other special applications.

F

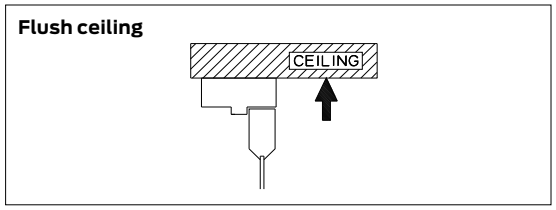
Fifth screw – Mounting screw farthest from the door on a parallel arm shoe.

Fifth screw spacer – Supports PA shoe mounted on frame stop.

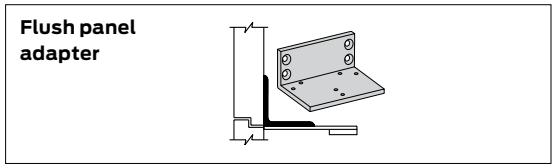
Finish plate – Decorative plate applied to overhead concealed closer to conceal closer mounting plate and screws.

Fire shield – 22-gauge steel liner mounts in the track mortise of the door's top rail for 20 minute labeled wood doors.

Flush ceiling application (FCA) – Condition when the ceiling is at the same height as the top of the frame.



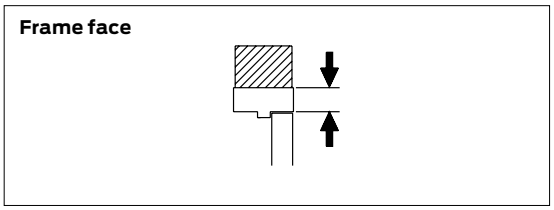
Flush panel adapter – Adapter provides PA shoe mounting surface when door and frame are flush.



Forearm – Arm part that connects main arm to the shoe attachments in a double lever arm system.

Frame depth – Face to face dimension of the frame.

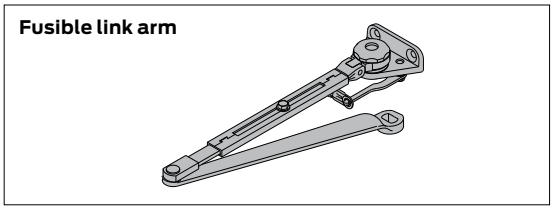
Frame face – Exposed part of frame parallel to face of the wall.



Full complement bearings – Low friction, high load needle bearings found in all LCN closers.

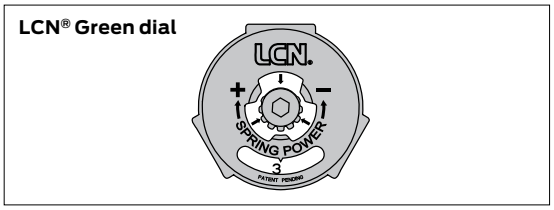
Full plastic cover (FPC) – Cover that encloses cylinder assembly except for shaft/arm attachment.

Fusible link arm (FL) – Releases hold open function when exposed to high temperatures. 135°F and 165°F available.



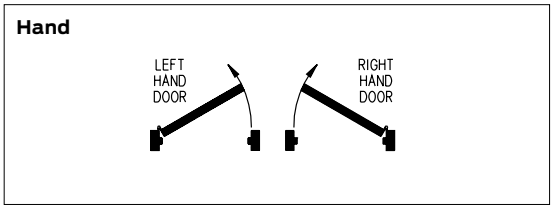
G

(LCN®) Green dial – The LCN Green Dial is located on the end of the spring tube on selected heavy duty closers. Designed to help installers accurately adjust the closer power to match the conditions of the entrance.



H

Hand – Direction of a door's swing, either right or left.



Handed – Closer or part designed for ONLY right or left swinging doors.

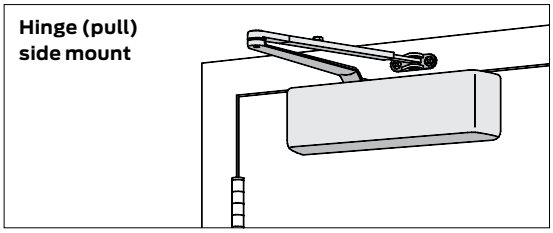
Head frame – Member of the frame above the door.

Terms

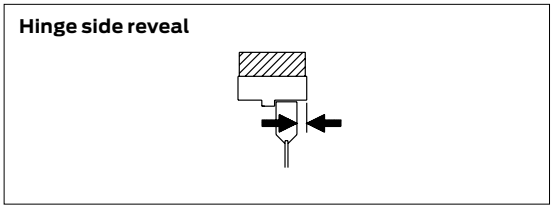
Header – Aluminum enclosure for motor gearbox and controller.

Hinge side – Face of door and frame on which the hinge pivot point is located.

Hinge side mount – Mounting with the closer cylinder on the hinge side of the door top rail.



Hinge side reveal – Depth measured from the frame face to the pull side of the door face.



Hinge stile – Vertical member of a door prepared for installation of hinges.

Hold open arm (H) – Double lever arm that provides hold open function that is either adjustable at elbow or shoe.

Hold open clip – Located in track to provide hold open function for single lever arms.

Hold open cush-n-stop arm (HCUSH) – Parallel arm that features solid forged steel main arm and forearm with stop in soffit shoe. Uses control handle to select hold open function.

Hold open long arm (HLONG) – Hold open arm extended by a long head and tube for deep reveals.

Hold open track with bumper (HBMP) – Track with hold open clip and bumper assembly installed.

Hold open/scanner activated (HSA) – Electrically controlled closer/holder with built-in scanner.

Hydraulic fluid – Fluid metered by valve system to control door.

I

Independent pair – Two automatic doors that function separately.

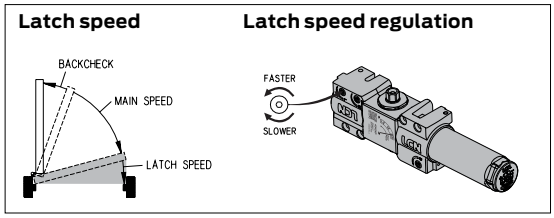
J

Jamb – The vertical member that forms the sides of a door frame. There is a hinge side jamb and a strike side jamb.

L

Labeled door – Conforms to all applicable codes, requirements, and procedures governing fire rated doors and bears the manufacturer's identification label.

Latch speed – Separate adjustment to control the last few degrees of the door's closing swing.



Lock stile – Vertical member of a door prepared for installation of a lock.

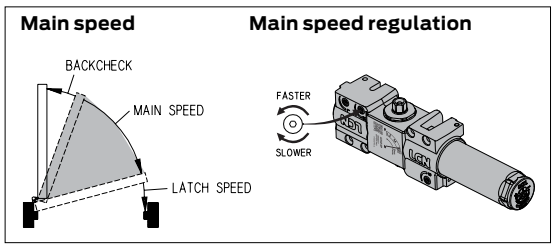
Long arm (LONG) – Extended arm for deep reveals or other special applications.

Low energy operator – A type of automated opener used on a door that should take approximately 5 seconds to open to 90º. Low Energy operators do not require safety devices or guide rails. Conforms to ANSI A156.19.

M

Main arm – Connects to the cylinder in a double lever arm system.

Main speed – Separate adjustment to control closing swing of the door to within a few degrees of latch.



Maximum opening – Furthest degree of door opening.

Metal cover (MC) – Stamped metal cover required for optional plated finishes and custom powder coat finishes. Standard cover with High Security Series closers.

Terms

Motor clutch – The geared assembly in an LCN electric automatic operator. Once activated, the motor clutch drives the door open.

Mortise – Material removed from frame and/or top rail of door.

Mounting/finish plate – Plate with exposed mounting screws and finish applied.

Multi point hold open series (ME) – Infinite hold open points from 0° up to maximum opening.

N

No destruct feature – A feature specific to the motor clutch assembly portion of an LCN electric automatic operator. This feature does not allow the user to back drive the motor, which could cause damage to the unit.

Non-handed – Closer or part designed for both right and left hand swinging doors.

Non-sized – Cylinder assembly with spring power adjustable over a range of sizes.

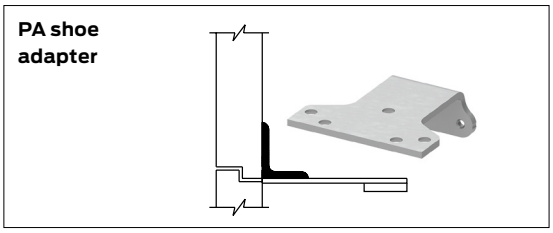
O

Opening force – Force required to open the door against the closers spring power.

Overhead concealed – Closer with cylinder concealed in head frame and either a concealed or exposed arm.

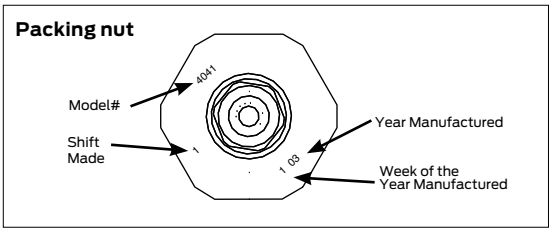
P

PA shoe adapter – Adapter provides horizontal mounting for PA shoe on a flush door and frame.

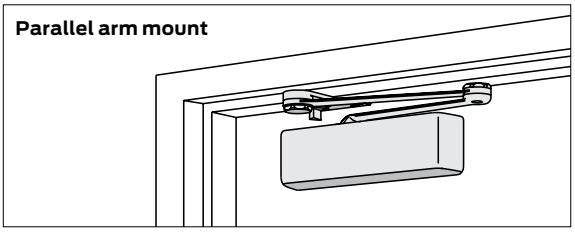


PA shoe – Attaches the forearm to the soffit for a parallel arm system.

Packing nut – A threaded part that holds the pinion in place. Usually, the LCN model number and date of manufacture are stamped into this part. The date of manufacture is important because the owner can determine if the cylinder is in or out of warranty.



Parallel arm – A push side mounted double lever arm system where main arm is parallel to the door when in the closed position.



Parallel arm holder (PAH) – An item usually used on the inactive leaf of a pair of doors for hold open where the active leaf has a closer installed.

Pinion – Transfers rotary motion of the arm system to the piston. Also provides attachment of arms to closer.

Piston – One of the internal pieces of a door closer. The piston is moved by the rotating pinion, which in turn compresses the spring.

Positive stop (POS) – Door stop for overhead concealed, center pivoted out swinging doors.

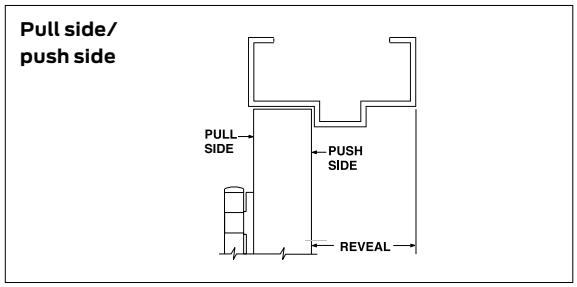
Pneumatic – This type of LCN Automatic Operator is driven by an air source. The air source can be built into the control box or provided separately within the building.

Power boost – Provides additional closing force to ensure latching.

Powder coat – A standard finishing process that provides a very durable, corrosion resistant covering to the majority of products that LCN offers. An LCN powder coat finish offers over four times the ANSI salt spray test of 25 hours.

Terms

Pull side – Hinge side of door.



Push side – Face of door on stop side of frame.

Push 'N go – Provides power opening after partial (5°) manual opening of door.

Q

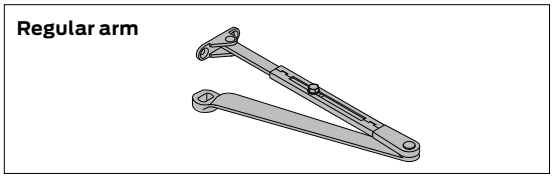
Quick fix plate™ – Retrofit mounting plate for the LCN 1260 closer used for closer replacement in push/pull applications.

R

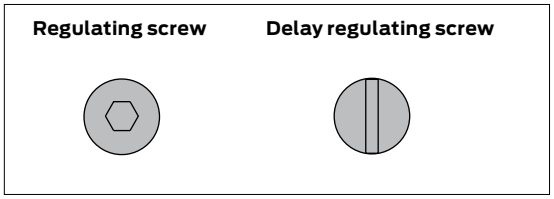
Rabbet – Recess or offset formed in the face to receive a door.

Radio frequency (RF) – A method of actuating LCN Automatic Operators. A RF transmitter signals a RF receiver to open a door.

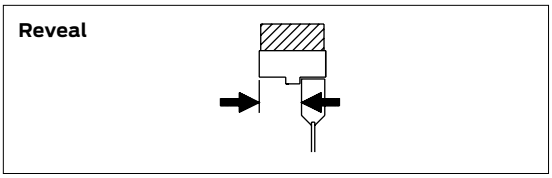
Regular arm (REGARM) – A double lever, non hold open arm.



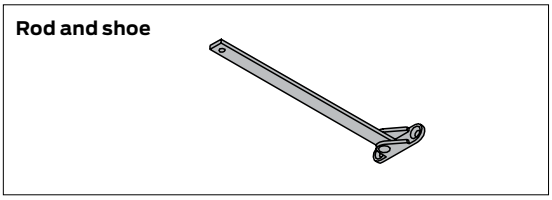
Regulating screw – Valve that adjusts flow of hydraulic fluid within cylinder to control door closing speed.



Reveal – Depth measured from the frame face to the door face.

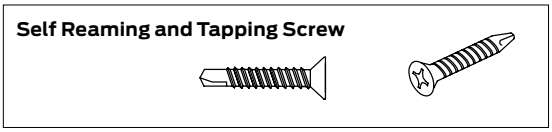


Rod and shoe – Part of forearm that provides adjustable length feature for double lever arms.



S

Self reaming and tapping screw (SRT) – Phillips head screw with self-reaming and self-tapping capability used in mounting installations.



Second chance feature – A feature that allows the Automatic Operator two attempts at opening the door. If resistance is encountered on the first attempt, the operator will pause and then try a second time. This feature is standard on the LCN electric automatic operators.

SEM – SEM is short for 'single-point electronic magnet'. An actual product number is required when ordering.

Sentronic – A general term for the fire/life safety products that are offered by LCN.

Sequence – An option to the LCN series of automatic operators. This option allows a pair of vestibule doors to open one after the other.

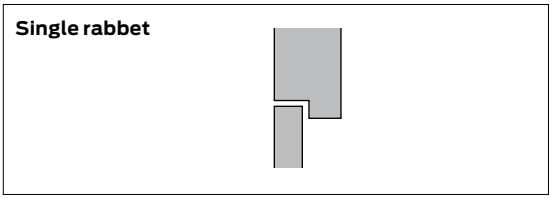
Shoe – Attaches forearm to frame or door face in a double lever arm system.

Simultaneous pair – Two automatic doors that open at the same time.

Single point hold open series (SE) – Electrically controlled hold open using a special track and single lever arm.

Terms

Single rabbet frame – Frame with a recess or offset formed on one side of a stop to receive a door.



Sized – A closer with a specific closer power for proper door applications.

Slider – This part is used in conjunction with a track roller in a Sentronic track assembly.

Slim line plastic cover (SLIMPC) – A over that conceals the cylinder but exposes both pinion shafts.

Soffit – Horizontal surface of a frame between vertical stops on a double rabbet frame.

Soffit shoe – Connects parallel arm shoe to soffit.

Special rust inhibitor (SRI) – A special corrosion resistant pre-treatment that is available for most LCN closers. Adding SRI to the standard LCN powder coat finish gives the closer a tremendous advantage over a potentially corrosive environment.

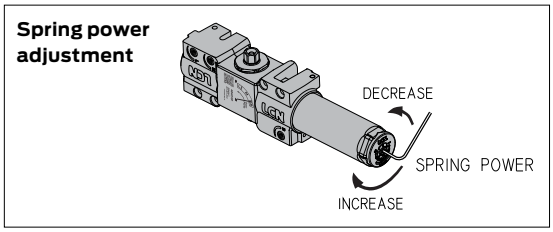
Special template (ST) – A special template is usually a modification to a standard product. Either the product itself changes location in the opening or a component is modified from the standard offering to accommodate other hardware or door and frame dimensions.

Spring cush-n-stop arm (SCUSH) – Non-handed parallel arm for abusive applications. Features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe.

Spring hold open cush-n-stop arm (SHCUSH) – Non-handed parallel arm for abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe. Uses control handle to select hold open function.

Spring power – Closing force exerted by the spring inside the cylinder to close the door.

Spring power adjustment – Mechanical pre-loading of spring to adjust closing force.

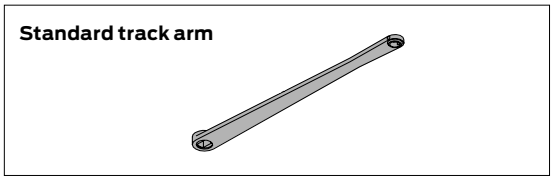


Spring tube – Part of the closer assembly that contains the spring.

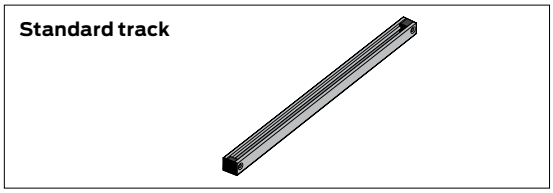
Standard cylinder – Cylinder with main speed, latch speed, and backcheck adjustments.

Standard motor gearbox (MGB) – Electromechanical drive unit.

Standard track arm (non-handed) (STDTRKARM) – Directly connects cylinder and track/roller assembly on the door or frame.

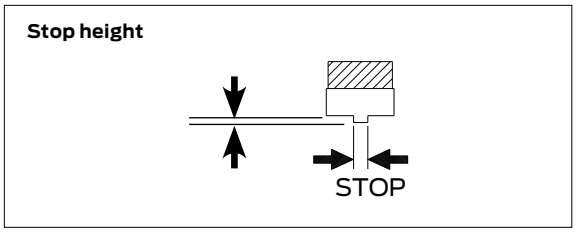


Standard Track – Non Hold Open Track.



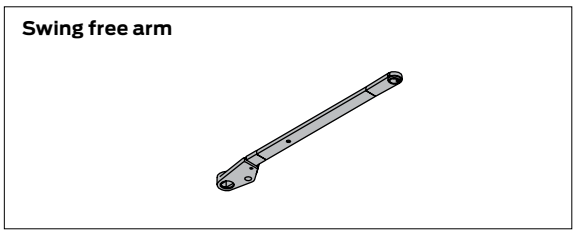
Stop – Part of frame against which the door closes.

Stop height – Distance the stop extends below the frame face.



Terms

Swing free arm (SF) – ME arm designed to allow free movement of the door without disengaging the holding mechanism.



T

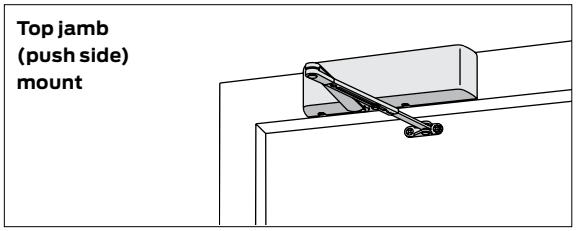
TBSRT – Through bolt self reaming and tapping screws.

TBTRX – Through bolt and torx machine screws.

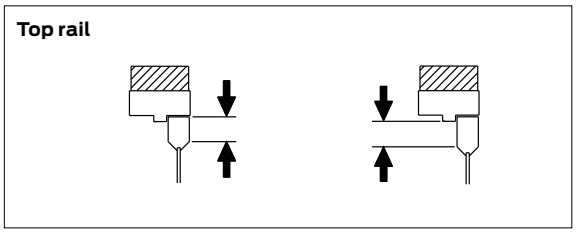
TBWMS – Through bolt wood and machine screws.

Thick hub shoe (62G) – Substituted for soffit shoe on EDA arm to clear blade stop.

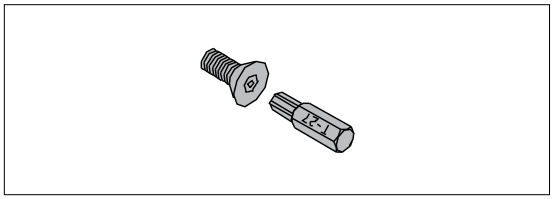
Top jamb (TJ) – Mounting with closer installed on frame face.



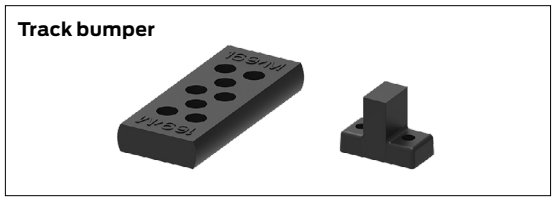
Top rail – Horizontal top member of a door that connects the latch and hinge stiles. Height is measured from stop on push side.



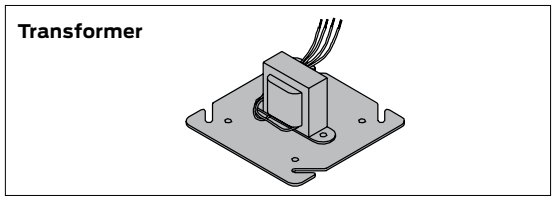
Torx – Security machine screw with Torx drive and security pin for tamper resistant applications.



Track bumper – Mounts in track to cushion opening swing, but reduces maximum opening. This is not a substitute for a mechanical door stop.



Transformer – Electrical device to reduce voltage from 120V AC to 24V AC.



Tri-voltage – SEM magnets available with current inputs of 12v, 24v and 120v.

U

Ultra liquid X – All weather fluid that does not change viscosity over a wide temperature range.

Universal – A term used to describe a door closer. Closers of this nature are non-sized and non-handed.

V

Vestibule – A small lobby or entrance that has at least two doors. One door is to the exterior and the other to the interior of the building. A variation could be multiple doors or banks of doors.

W

WMS – Wood and machine screws.

Wood mounting clip – Designed to ease installation of concealed closer in wood frame.

Limited warranty

Subject to the terms and conditions of this limited warranty, Schlage Lock Company, LLC (the "Company") extends a limited warranty against defects in material and workmanship for its LCN branded product(s) identified in the Product Table below ("Products") as installed in the original location.

This limited warranty applies to Products purchased on or after March 3, 2014.

Product table - cast iron

4000 Series	30 Years
1460 Series	30 Years
1260 Series	20 Years
Concealed, high security (except 2210DPS)	15 Years
Automatic Operators; SE, ME, HSA, SEH Series; SEM Magnets; 2210 DPS (includes both electronic and mechanical components)	2 Years

Product table - cast aluminum

1250 Series	15 Years
1450 Series	25 Years
4050A Series	25 Years

Term: The limited warranty period for products is as stated in the product table above. The "Commencement Date" for a limited warranty period shall be the date of Company's delivery to the original purchaser of the Products. Proof of Product purchase may be required by Company to confirm the commencement date.

What Company will do: Company may require proof of Product purchase in order to provide coverage under this limited warranty. As Company's only responsibility and user's only remedy under this limited warranty, Company will furnish a replacement Product upon receipt and confirmation by Company, in its sole opinion, that the Product has, in fact, failed due to a manufacturing defect under normal use and maintenance. In the event a replacement Product cannot be provided, Company will either provide a suitable replacement Product or a refund in the amount of the original purchase price.

What is not covered: The following costs, expenses, and damages are not covered by the provisions of this limited warranty: (i) labor costs including, but not limited to, such costs as removal and installation of Product; (ii) shipping and freight expenses required to return Product to Company; (iii) failures, defects, or damage caused by any third party product or service; (iv) any other incidental, consequential, indirect, special and/or punitive damages, whether based on contract, warranty, tort (including, but not limited to, strict liability or negligence), patent infringement, or otherwise, even if advised of the possibility of such damages.

The provisions of this limited warranty do not apply to product that is: (i) not the proper size for the application for which the Product is used; (ii) not installed in accordance with Company's published Product installation instructions; (iii) installed with improper parts and/or incorrect parts (NOTE: It is recommended that Product be installed with LCN fasteners provided with Product); (iv) improperly stored, maintained, or operated; (v) modified, repaired, or altered in Company's sole opinion, in any manner, without the express written consent of Company; (vi) used for purposes for which the Product is not designed or intended; (vii) subjected to misuse, abuse, negligence, or accident; or (vii) subjected to improper temperature, humidity, or other environmental conditions.

Note: 900/7900 Series compressors are not manufactured by Company and are excluded from coverage under this limited warranty. For more information, parts, or repairs concerning the compressors, contact the compressor manufacturer directly at (269) 926-6171.

Additional terms: This limited warranty is in lieu of all other warranties, express or implied. Company does not authorize any person to create for it any obligation or liability in connection with Product. Company's maximum liability hereunder is limited to the original purchase price of the Product. No action arising out any claimed breach of this limited warranty by Company may be brought by the user more than one (1) year after the cause of action has arisen.

How local law applies: This limited warranty gives you specific legal rights, and you may also have other rights as permitted by law. Some local laws do not allow limitations on how long an implied warranty lasts or the exclusions or limitation of incidental or consequential damages so the limitations or exclusions provided herein may not apply to you.

Program and warranty claims: If product is to be claimed to be defective under this limited warranty, contact Customer Care at (877) 671-7011.

Note: Please contact LCN Customer Care prior to returning any product back to the factory. You will need prior authorization and an RMA for your return.

About Allegion

At Allegion (NYSE: ALLE), we design and manufacture innovative security and access solutions that help keep people safe where they live, learn, work and connect. We're pioneering safety with our strong legacy of brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Our comprehensive portfolio of hardware, software and electronic solutions is sold around the world and spans residential and commercial locks, door closer and exit devices, steel doors and frames, access control and workforce productivity systems.

For more, visit **www.allegion.com**

KRYPTONITE ■ LCN ■ SCHLAGE ■ STEELCRAFT ■ VON DUPRIN

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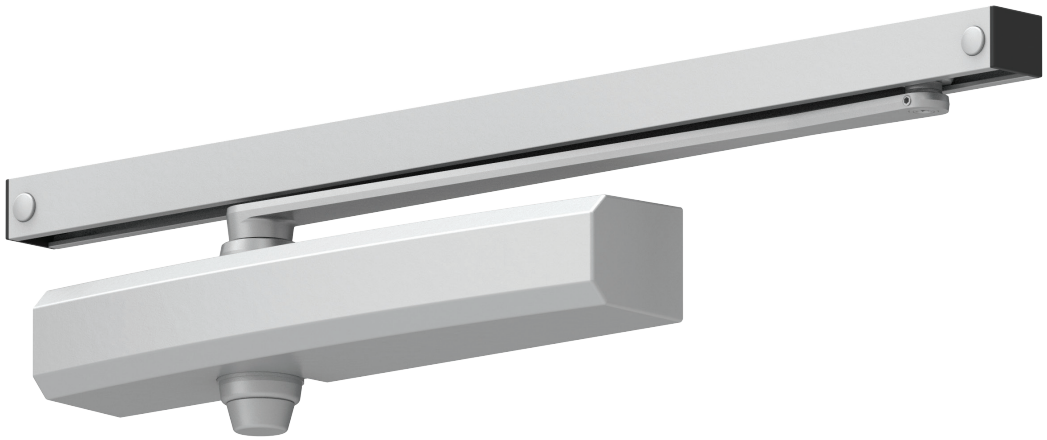
ALLEGION™

1450T Series

Features

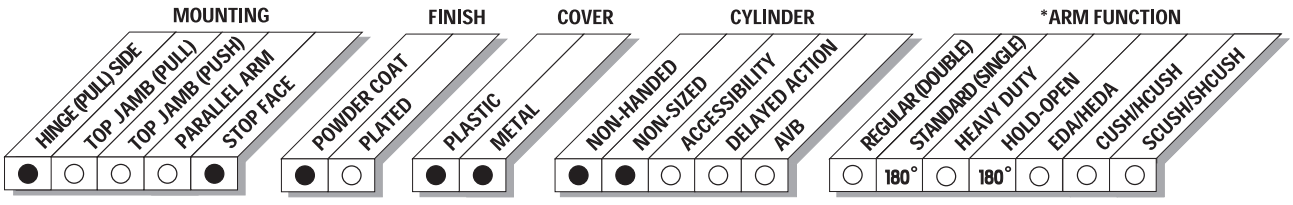


The 1450T is a fully universal slim line, single lever (track) arm closer designed for interior use on narrow head frames and top rails. Our patented appearance maintains the integrity of the building design making it a great choice for interior doors.

Certifications	Grade 1 - ANSI A156.4, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body Construction	■ Cast Aluminum Body ■ Full Complement Bearing ■ 1-1/4″ Diameter Piston ■ 5/8″ Diameter Single Heat Treated Pinion Journal
Fluid	All Weather Fluid
Handing	Non-Handed
Templating	3/4″ x 12″ Mounting Hole Pattern
Size	■ Adjustable Spring Size 2-3
Warranty	25 years

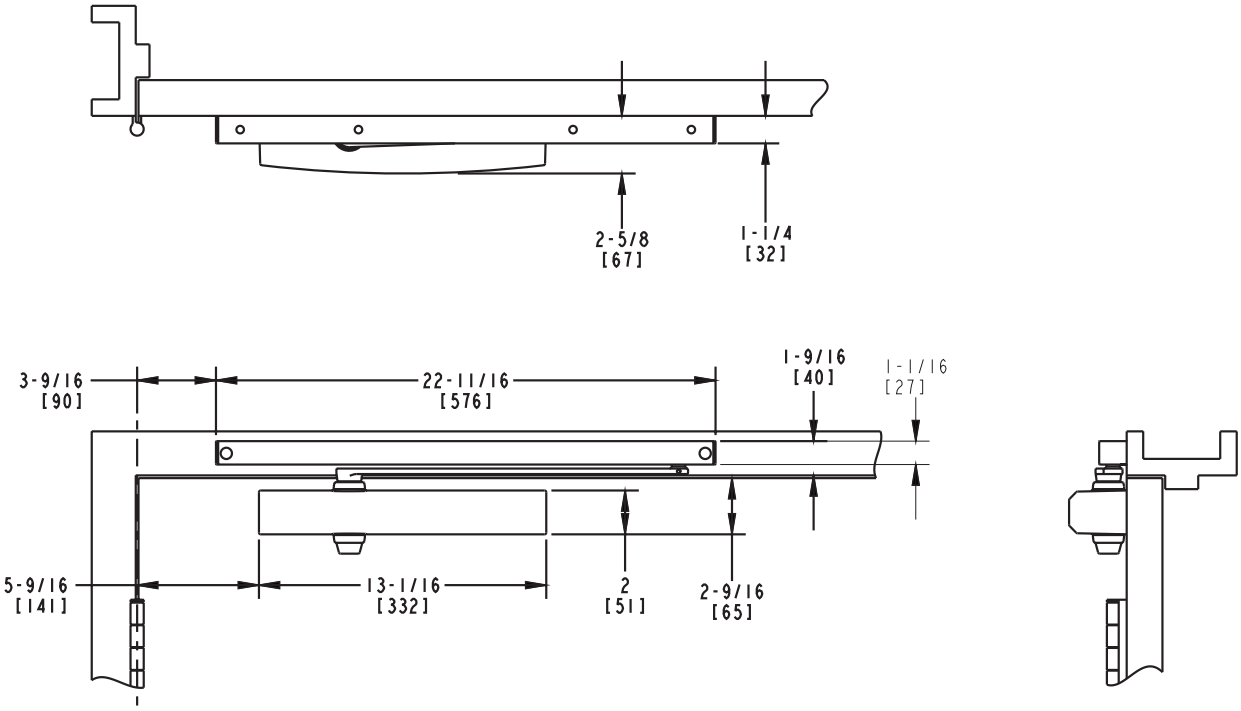
Cover	■ Alternate Plastic Cover ■ Slim Line, Standard ■ Full Plastic or Full Metal, Optional
Fasteners	Universal Screw Pack (UNIV)
Mounting	Pull side on door, push side on door
Arms	Single lever track arm with track roller
Finishes/Colors/ Powder Coat	■ Aluminum (689) ■ Statuary Bronze (690) ■ Light Bronze (691) ■ Black (693) ■ Dark Bronze (695) ■ Brass (696) ■ Custom colors optional
	■ Optional SRI primer - powder coat only

Special Templates | Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.

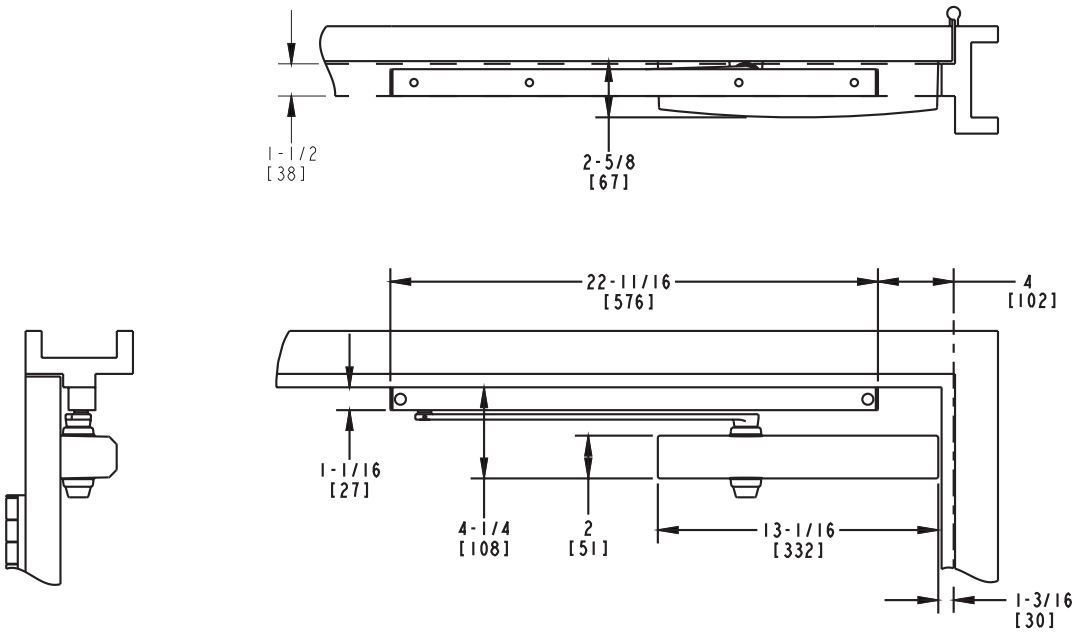


● AVAILABLE
○ NOT AVAILABLE

* Maximum opening/hold-open point with standard template.



Butt Hinges	Should not exceed 5″ (127 mm) in width
Auxiliary Stop	■ Recommended where a door cannot swing 180º ■ Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop
Reveal	Should not exceed 1/8″ (3 mm)
Top Rail	■ Less than 2-3/8″ (60 mm) requires PLATE 1450T-18 ■ Plate requires 1-5/8″ (41 mm) minimum top rail ■ With Full cover, use PLATE, 1450T-18FC
Clearance	2-5/8″ (67 mm) behind door required for installation
Maximum opening	■ Templating allows up to 180º, trim and frame permitting, limited to 120º when optional bumper is installed ■ Be aware that the majority of track style closers are at their weakest closing force in the 180º-130º range ■ Consult factory for applications where an exterior or large/heavy door must swing 180º



Butt Hinges	Should not exceed 5″ (127 mm) in width
Auxiliary Stop	■ Recommended where a door cannot swing 120º ■ Track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop
Top Rail	■ Less than 4-1/16″ (103 mm) requires PLATE, 1450T-18. Plate requires 3-1/16″ (78 mm) minimum top rail. ■ With Full cover, use PLATE, 1450T-18PAFC
Clearance	Projects 2-5/8″ (67 mm) from face of door
Stop Width	Minimum 1-1/4″ (32 mm)
Maximum opening	■ Templating allows 120º, limited to 100º when optional bumper is installed ■ Variable hold-open angles with infinite options

Cylinders

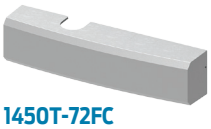
1450T-3071
Cast Aluminum Cylinder Assembly

- Non-handed
- Standard

Covers

1450T-72
Slim Line Plastic Cover

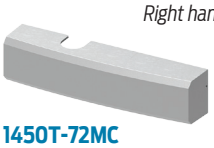
- Non-handed
- Standard



1450T-72FC
Full Plastic Cover

- Non-handed
- Optional

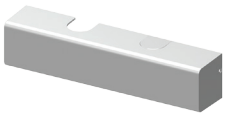
Right hand shown



1450T-72MC
Metal Cover

- Handed
- Optional

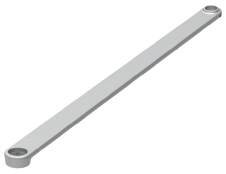
Alternate Cover



1450-72ALT
Alternate Cover

- Non-handed
- Optional, sold separately (not packed with closer)

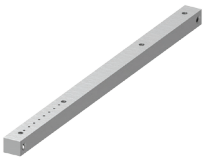
Arm



1450T-3077T
Standard Arm

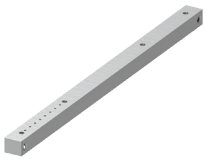
- Non-handed
- Arm does not include track roller

Tracks



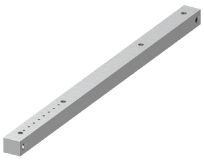
1450T-3038
Standard Track

- Non-handed
- Non hold-open
- Will accept hold-open clip and/or bumper assembly
- Standard



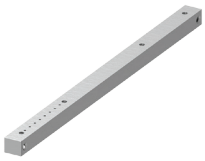
1450T-3038B
Standard Track with Bumper

- Non-handed
- Non hold-open
- Will accept hold-open clip
- Optional



1450T-3038H
Hold-Open Track

- Non-handed
- With hold-open clip installed
- Will accept bumper assembly
- Optional



1450T-3038HB
Hold-Open Track with Bumper

- Non-handed
- With hold-open clip and bumper assembly installed
- Optional

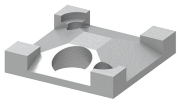
Installation Accessories

1450T-18 / 1450T-18FC
Plate

- Required for pull side (door mount) where top rail is less than 2-3/8″ (60 mm)
- Requires minimum 1-5/8″ (41 mm) top rail
- Required for push side (door mount) where top rail is less than 4-1/16″ (103 mm) measured from the stop
- Requires minimum 3-1/16″ (78 mm) top rail

1450T-169
Track Bumper

- Mounts in track to assist backcheck, does not replace auxiliary stop
- Limits maximum opening
- Consists of bumper, bumper post, and mounting screw

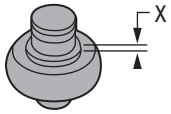


1450T-3054
Hold-Open Clip

- Mounts in track to provide hold-open function
- Hold-open point controlled by clip location
- Consists of clip and mounting screws
- Requires 1450T-3034H Hold-Open Track Roller

1450T-3034H
Hold-Open Track Roller

- Quiet, low friction roller assembly
- Shoulder dimension “X” = 1/8″ (3 mm)
- Can be used without hold open clip



How-to-order 1450T Series closers

1. Select finish

☐ Standard Powder Coat _____
Aluminum, Dark Bronze, Statuary, Light Bronze, Black, Brass

Closer will be shipped with:

- Standard cover
- Standard cylinder
- Standard track arm
- Standard track
- Track roller
- Universal Screw Pack (UNIV)

Closer options

Cover

☐ Full Plastic Cover (FC)
☐ Metal (Specify right or left handed) (MC)
☐ Alternate Cover (ALT) (sold separately from product)

Finish

☐ Custom Powder Coat (RAL) _____
(Metal cover required)
☐ SRI primer (for use with powder coat finishes only)

Track

☐ Regular with Bumper (BUMPER)
☐ Hold-Open (HO)
☐ Hold-Open with Bumper (HBUMPER)

Installation accessories

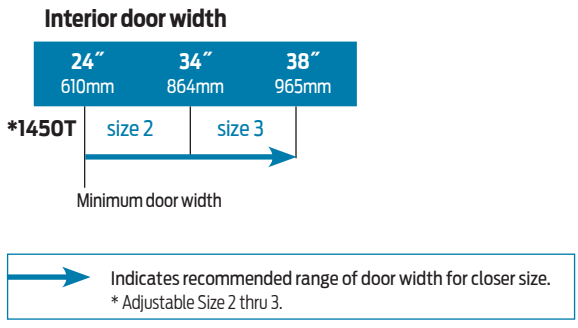
☐ Plate, 1450T-18
☐ Plate, 1450T-18FC

Special template

☐ ST-_____

Table of sizes

- Select closer based on width of door.
- Non-sized 1450T cylinder is adjustable from sizes 2 thru 3 and is shipped set to size 2.



Notes

Notes

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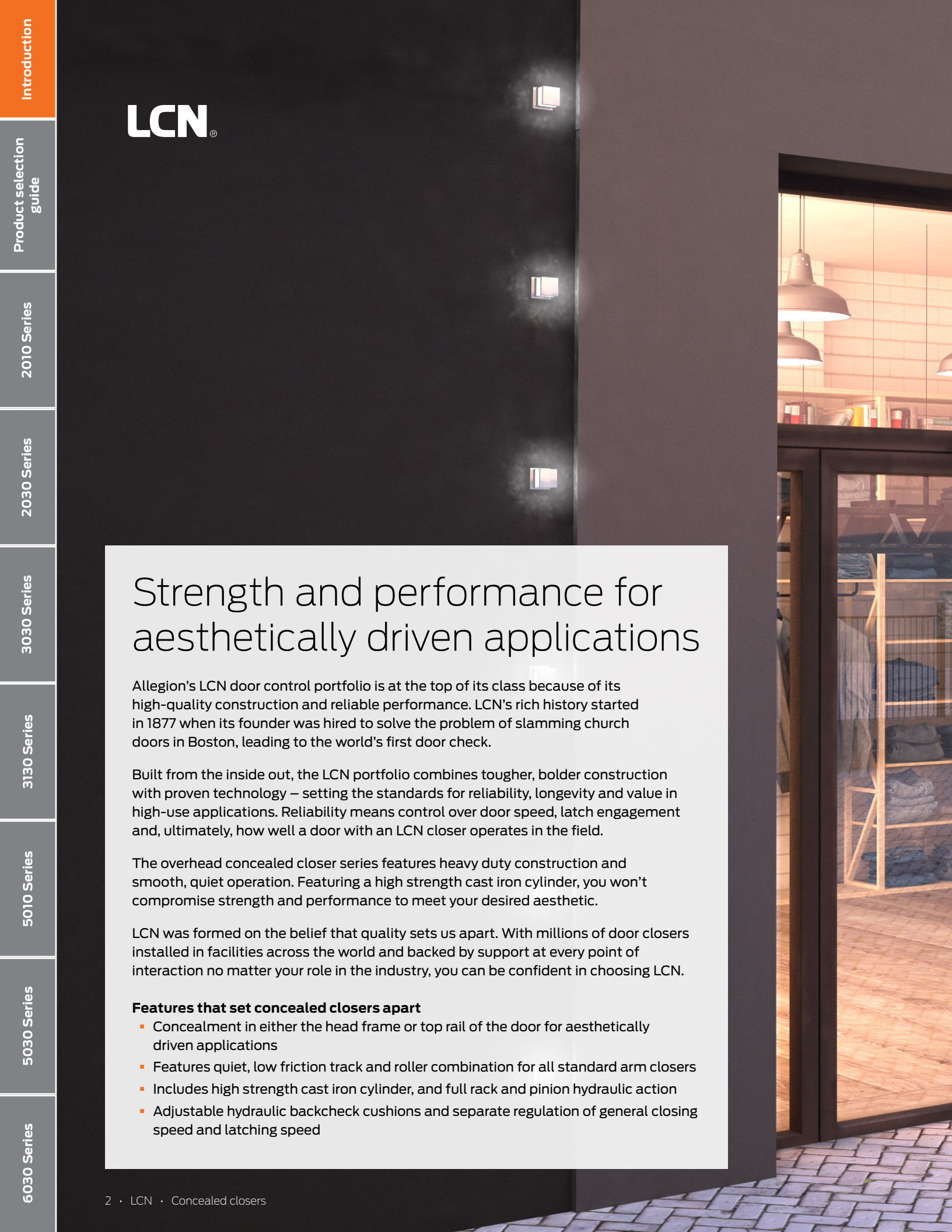
LCN®

Concealed closers

LCN®



Strength and performance for aesthetically driven applications

Allegion's LCN door control portfolio is at the top of its class because of its high-quality construction and reliable performance. LCN's rich history started in 1877 when its founder was hired to solve the problem of slamming church doors in Boston, leading to the world's first door check.

Built from the inside out, the LCN portfolio combines tougher, bolder construction with proven technology – setting the standards for reliability, longevity and value in high-use applications. Reliability means control over door speed, latch engagement and, ultimately, how well a door with an LCN closer operates in the field.

The overhead concealed closer series features heavy duty construction and smooth, quiet operation. Featuring a high strength cast iron cylinder, you won't compromise strength and performance to meet your desired aesthetic.

LCN was formed on the belief that quality sets us apart. With millions of door closers installed in facilities across the world and backed by support at every point of interaction no matter your role in the industry, you can be confident in choosing LCN.

Features that set concealed closers apart

- Concealment in either the head frame or top rail of the door for aesthetically driven applications
- Features quiet, low friction track and roller combination for all standard arm closers
- Includes high strength cast iron cylinder, and full rack and pinion hydraulic action
- Adjustable hydraulic backcheck cushions and separate regulation of general closing speed and latching speed

Information and customer care

us.allegion.com

US 877.671.7011
Canada 800.900.4734

support@allegion.com
Closers_TechProdSupport@allegion.com

www.youtube.com/LCNHardware

Ordering

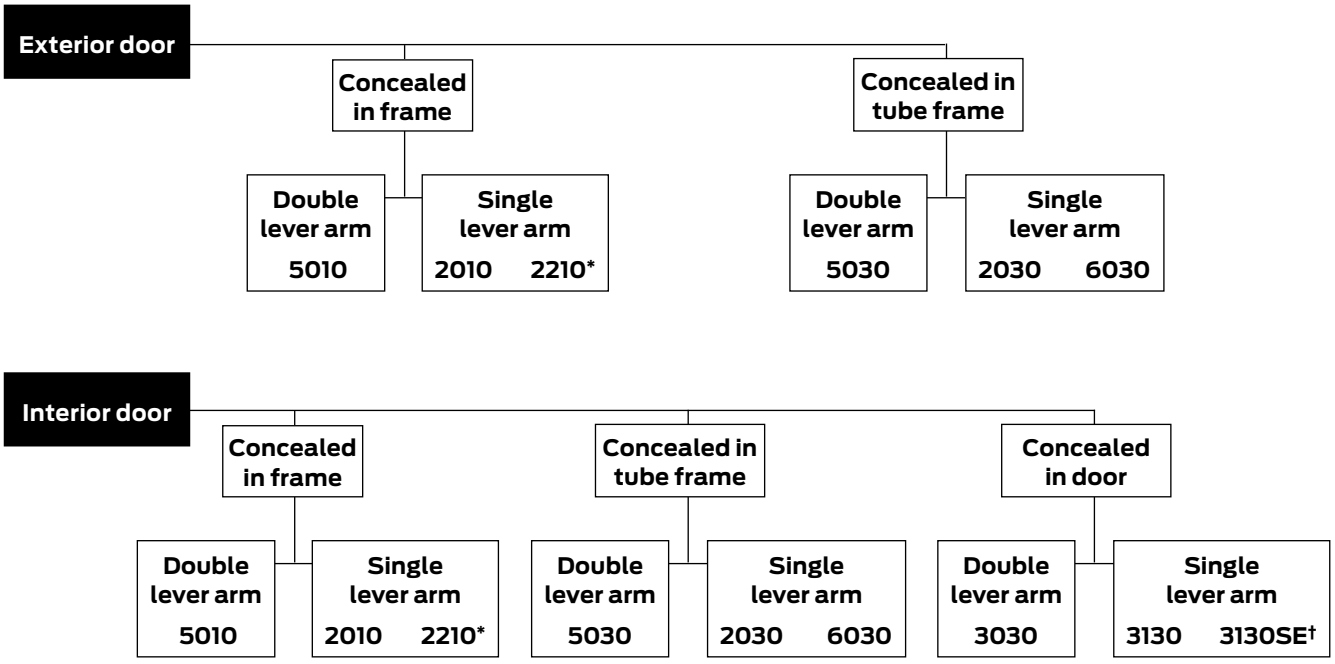
Allegion_Orders@allegion.com

eFax: 1.800.248.1460

Concealed mounted closers

Product selection guide

The concealed LCN closers feature a modern design for concealment in either the head frame or top rail of the door. This guide is based on the desired mounting of the closer.



* Indicates high security closer, door position switch optional. Refer to high security catalog.
† Indicates fire life safety closer. Refer to fire life safety catalog.

Product comparison

This chart shows a basic comparison of concealed closers.
Refer to the specific closer chapter for complete details.

	Mounting			Finish				Cylinder		Arm		Arm function*		
	In frame	In 1 3/4" tube	In door	Powder coat	Plated	Handed	Sized	Accessibility	Delay action	Concealed	Exposed	Standard (single)	Regular (double)	Hold open
2010	■	■	■	■	■	■	■	♿	■	■	■	180°	■	110°
2030	■	■	■	■	■	■	■	♿	■	■	■	180°	■	110°
3030	■	■	■	■	■	■	■	♿	■	■	■	■	180°	140°
3130	■	■	■	■	■	■	■	♿	■	■	■	140°	■	100°
5010	■	■	■	■	■	■	■	♿	■	■	■	■	180°	100°
5030	■	■	■	■	■	■	■	♿	■	■	■	■	180°	100°
6030	■	■	■	■	■	■	■	♿	■	■	■	95°	■	95°

■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/Hold open point with standard template.
See individual closer series for degrees of opening per installation.

Applications
- For aluminum, hollow metal, or wood doors and frames
- Can be used with hinge or pivot mounted door
- Closers for 4" or minimum 1 3/4" head frame or 4" top rail
- Mounting clips for wood frames and other installation accessories available for non-standard conditions
- For concealed in door closers consult factory for installations with pivots

Features common to concealed closers
- Mountings for head frame or door top rail
- Handed for right or left swinging doors (except 6030)
- Closers to meet ADA reduced opening force requirements
- Adjustable hydraulic back check cushions opening swing prior to 90°
- Separate regulation of general closing speed and latching speed
- Joints in arm and shoe adapt to uneven trim (for double lever arms)

Design assistance

LCN has been providing reliable solutions to unique door control problems since 1925. Design and specification assistance are only a phone call away. Contact LCN for assistance or technical information at 877-671-7011, fax 800-248-1460 for Order Entry, or fax 815-879-1495 for Product Support.

Warranty

15 year limited warranty. See General Information catalog for complete warranty details.

Specifications

Refer to "Specifications" section for suggested architectural specifications.

Materials

(Closers concealed in the door or frame)
- High strength cast iron cylinder
- Forged steel main arms (except 6030)
- One piece forged steel piston
- All weather fluid in overhead concealed models performs to temperature ranges from 120°F (49°C) to -30°F (-35°C) without any seasonal adjustment
- High efficiency, full complement, low friction bearings
- Full rack and pinion hydraulic action
- Quiet, low friction track and roller combination for all single lever (standard) arm closers

Finishes
- Available in seven standard or a wide selection of optional custom powder coat finishes to blend with door and frame
- LCN's powder coat finishes surpass 100 hours of salt spray which is over four times the ANSI standard for corrosion resistance
- For installations where a higher level of corrosive resistance is required, LCN offers an optional Special Rust Inhibitor (SRI) pretreatment
- Closers that combine the exclusive LCN powder coat finish and the SRI pre-treatment exceed the ANSI standard for corrosion resistance even further
- Plated finishes are available as an option to accent door and frame (SRI not available with plated finishes)

Listings and approvals

UL listed for self-closing doors without hold open to UL10C. Tested and certified under ANSI/BHMA Standard A156.4. Consult factory for other listings such as; cUL, California State Fire Marshal, Bureau of Standards and Appeals.

Positive pressure

LCN closers have been certified for three hours by UL to be in compliance with UL 10C. Contact LCN for specific details on door closer fire ratings.

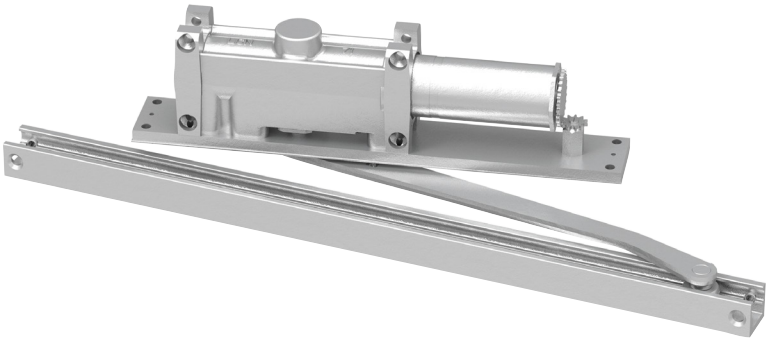
Fasteners
- Standard Wood and machine screws (WMS) contains Phillips head wood and machine screws to install the closer
- Torx machine screws are available for some closers

Note: Phillips head metric machine screws are available, please specify.

Maintenance

Closers mounted according to LCN installation instructions require no periodic maintenance or adjustments.

2010 Series



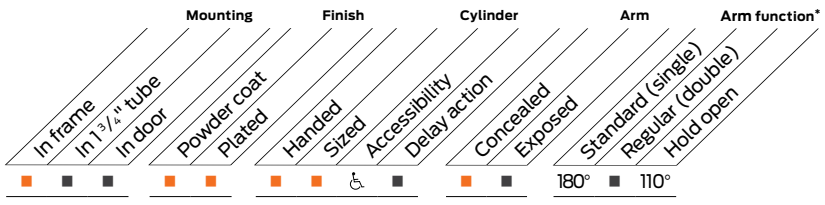
The concealed 2010 Series is a heavy duty closer designed to provide complete concealment. The single lever arm and roller assembly provide smooth, quiet door control and the choice of finishes and track functions meet virtually all architectural requirements.

Features

Certifications	Grade 1 - ANSI/BHMA A156.4, UL 10 C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 1-6
Warranty	15 years

Fasteners	Wood and machine screws (WMS)
Mounting	Concealed (in frame); aluminum frame requires minimum 4" x 4" (102 mm) tube
Arms	Standard arm and track
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Gloss black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product configurations



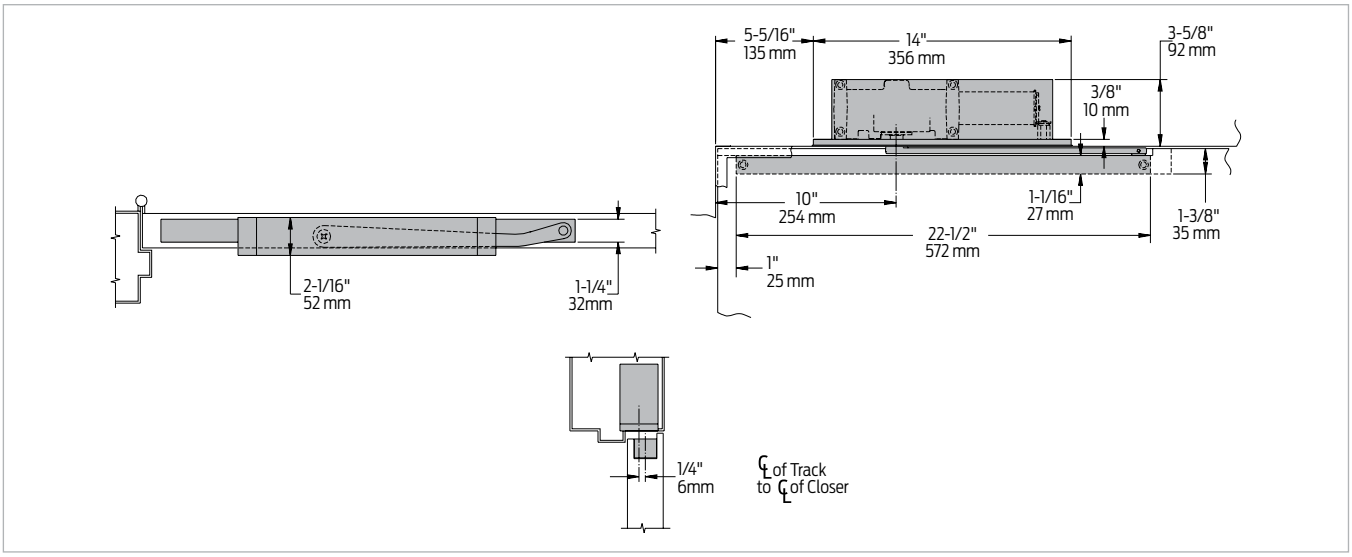
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/Hold open point with standard template. See individual closer series for degrees of opening per installation.

Customized installation templates or products may be available to solve non-standard applications.
Contact LCN Product Support for assistance.

Mounting details

Concealed mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended where a door cannot swing 180° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door (not intended to replace an auxiliary stop)
Top rail	▪ 1 3/8" (35 mm) mortise required ▪ With Fire shield, 1 13/32" (36 mm) mortise required ▪ 5/16" (8 mm) cutout required at top of the door, stop face only
Door thickness	1 3/4" (44 mm) minimum
Hollow metal frame	Consult factory for installation instructions
Maximum opening	▪ Butt hinge template allows 180°, trim permitting ▪ Limited to 110° when optional bumper is installed ▪ Adjustable Hold open points from 85° to 110°, with Hold open track (H)
	▪ Offset pivot template allows 110°, trim permitting ▪ Limited to 95° when optional bumper is installed ▪ Adjustable Hold open points from 75° to 95°, with Hold open track (H)
	▪ Center pivot template allows 120°, trim permitting ▪ Limited to 95° when optional bumper is installed ▪ Adjustable Hold open points from 75° to 95°, with Hold open track (H)

Notes:
- For interior or exterior doors
- Single acting cylinder in head frame
- Concealed arm and track in door top rail

Accessories

Cylinders

2011(3)(4)(5)(6)-3071
Cast iron cylinder assembly with mounting plate (CYL)
- Handed
- With mounting plate
- Standard

Arms

2010-3077T
Standard arm (STDTRKARM)
- Handed
- Track roller not included with arm

Tracks

2010-3038
Standard track (STDTRK)
- Non-handed
- Non hold open
- Will accept hold open clip and/or bumper assembly
- Standard

2010-3038B
Track with bumper (BUMP)
- Non-handed
- Non hold open
- Will accept hold open clip
- Optional

2010-3038H
Hold open track (H)
- Non-handed
- Will accept bumper assembly
- Optional

2010-3038HB
Hold open track with bumper (HBMP)
- Non-handed
- Optional

Installation accessories

2010-420
Fire shield
- 22 gauge steel liner mounts in the track mortise of the door's top rail for 20 minute labeled wood doors

2010-169
Track bumper
- Mounts in track to assist back check
- Limits maximum opening
- Consists of bumper, bumper post and mounting screw

Note: Track bumper does not replace auxiliary stop.

2010-3054
Hold open clip
- Mounts in track to provide hold open function
- Hold open point controlled by clip location
- Requires 2010-3034H

2010-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2 mm)

2010-3034H
Hold open track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2 mm)

Ordering information

How-to-order 2010 Series closers

1. Select cylinder size
- ☐ 2011
- ☐ 2013
- ☐ 2014
- ☐ 2015
- ☐ 2016

2. Specify hand
- ☐ Right hand (RH)
- ☐ Left hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte black (622), Aluminum (689), Dark bronze (695), Statuary bronze (690), Light bronze (691), Gloss black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder with finish plate
- Standard arm
- Standard track
- Wood and machine screws
  (unless options listed below are selected)

Closer options

Track
- ☐ Track with bumper (BUMP)
- ☐ Hold open track (H)
- ☐ Hold open Track with bumper (HBMP)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (use with powder coat finishes only)

Screw pack
- ☐ Torx machine screws (TORX)

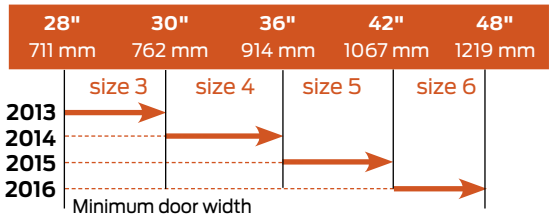
Installation accessories
- ☐ Fire shield, 2010-420

Special template
- ☐ ST- _____

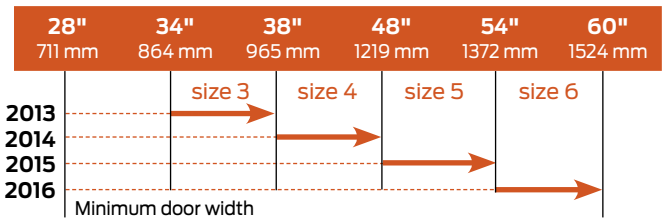
Table of sizes

- Select closer based on width of door
- 2010 Series cylinders available in size 1, 3, 4, 5 or 6
- Closing power of all 2010 Series closers may be increased 15%
- Specify next higher size closer where strong drafts exist

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.

Reduced opening force 2010 Series closers

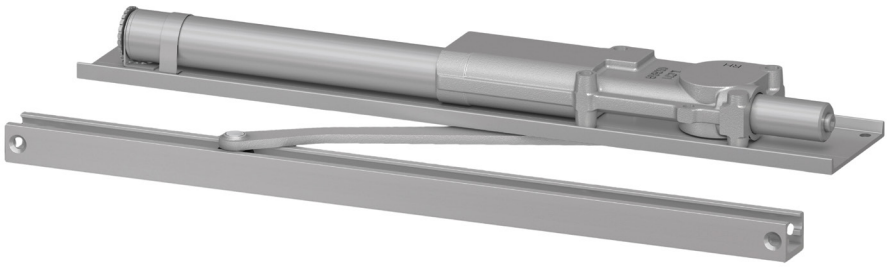
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	2014	2014	2015
5.0* lbs.	2011	2011	2013

* Maximum opening force.

2030 Series



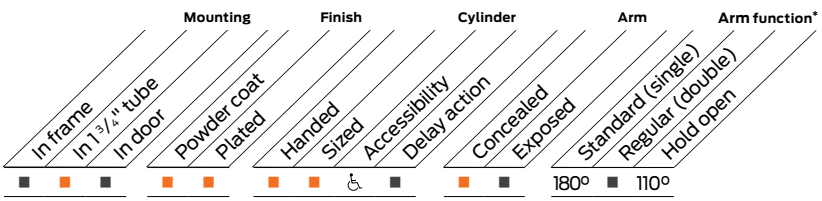
The concealed 2030 Series PACER® is a heavy duty closer designed to fit in a narrow, minimum 1 3/4" aluminum transom. The single lever arm and roller assembly provide smooth, quiet door control and the choice of finishes and track functions meet virtually all architectural requirements.

Features

Certifications	ANSI/BHMA A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/8" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 1-5
Warranty	15 years

Fasteners	Wood and Machine Screws (WMS)
Mounting	Concealed (in tube); aluminum frame requires minimum 1-3/4" (44 mm) x 4" (102) mm) tube
Arms	Standard arm and track
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Gloss black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product configurations



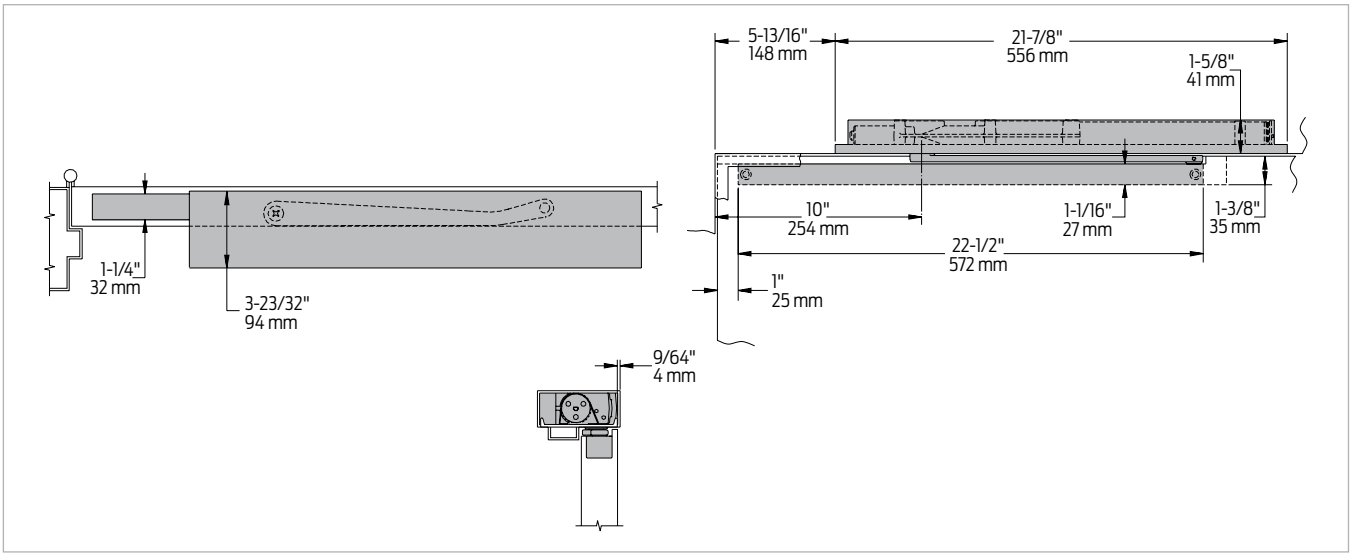
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/Hold open point with standard template. See individual closer series for degrees of opening per installation.

Customized installation templates or products may be available to solve non-standard applications.
Contact LCN Product Support for assistance.

Mounting details

Concealed mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended where a door cannot swing 180° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door (not intended to replace an auxiliary stop)
Top rail	▪ 1 3/8" (35 mm) mortise required ▪ With fire shield, 1 13/32" (36 mm) mortise required ▪ 5/16" (8 mm) cutout required at top of the door, stop face only
Door thickness	1 3/4" (44 mm) minimum
Hollow metal frame	Consult factory for installation instructions
Wood frame	Installation simplified by Wood mounting clip set 2030-416 for center pivoted or 2030-417 for offset pivoted and butt hung installations. Consult factory for preparation details.
Maximum opening	▪ Butt hinge template allows 180°, trim permitting ▪ Limited to 110° when optional bumper is installed ▪ Adjustable Hold open points from 85° to 110°, with Hold open track (H)
	▪ Consult factory if door will be held open at 180°
	▪ Offset pivot template allows 115°, trim permitting. Limited to 95° when optional bumper is installed ▪ Hold open point from 85°, with Hold open track (H)
	▪ Center pivot template allows 120°, trim permitting ▪ Limited to 100° when optional bumper is installed ▪ Adjustable Hold open points from 85° to 100°, with Hold open track (H)

Notes:
- For interior or exterior doors
- Single acting cylinder in head frame
- Concealed arm and track in door top rail

Accessories

Cylinders

2031(2)(3)(4)(5)-3071
Cast iron cylinder assembly with mounting plate (CYL)
- Handed
- With mounting plate
- Standard

Arms

2030-3077T
Standard arm (STDTRKARM)
- Handed
- Track roller not included with arm

Tracks

2030-3038
Standard track (STDTRK)
- Non-handed
- Non hold open
- Will accept hold open clip and/or bumper assembly
- Standard

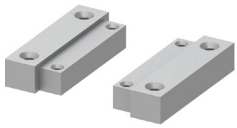
2030-3038B
Track with bumper (BUMP)
- Non-handed
- Non hold open
- Will accept hold open clip
- Optional

2030-3038H
Hold open track (H)
- Non-handed
- Will accept bumper assembly
- Optional

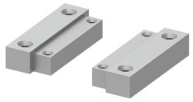
2030-3038HB
Hold open track with bumper (HBMP)
- Non-handed
- Optional

Installation accessories

2030-420
Fire shield
- 22 gauge steel liner mounts in the track mortise of the door's top rail for 20 minute labeled wood doors



2030-416
Wood mounting clip set
- Simplifies mounting center pivoted 2030 closer in wood frame
- Includes latch stile clip, hinge stile clip and cover
- For use with Ives center pivots
- Consult factory for special template



2030-417
Wood mounting clip set
- Simplifies mounting offset pivoted or butt hung 2030 closer in wood frame
- Includes two clips
- For use with offset pivots
- Consult factory for special template

2030-169
Track bumper
- Mounts in track to assist back check
- Limits maximum opening
- Consists of bumper, bumper post and mounting screw

Note: Track bumper does not replace auxiliary stop.

2030-3054
Hold open clip
- Mounts in track to provide hold open function
- Hold open point controlled by clip location
- Requires 2030-3034H hold open track roller

2030-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2 mm)

2030-3034H
Hold open track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2 mm)

Ordering information

How-to-order 2030 Series closers

1. Select cylinder size
- ☐ 2031
- ☐ 2032
- ☐ 2033
- ☐ 2034
- ☐ 2035

2. Specify hand
- ☐ Right hand (RH)
- ☐ Left hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte black (622), Aluminum (689), Dark bronze (695), Statuary bronze (690), Light bronze (691), Gloss black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder with mounting plate
- Standard arm
- Standard track
- Wood and machine screws
  (unless options listed below are selected)

Closer options

Track
- ☐ Track with bumper (BUMP)
- ☐ Hold open track (H)
- ☐ Hold open track with bumper (HBMP)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (use with powder coat finishes only)

Screw pack
- ☐ Torx machine screws (TORX)

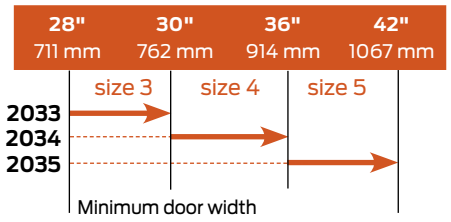
Installation accessories
- ☐ Fire shield, 2030-420
- ☐ Wood clip set, 2030-416
- ☐ Wood clip set, 2030-417

Special template
- ☐ ST- _____

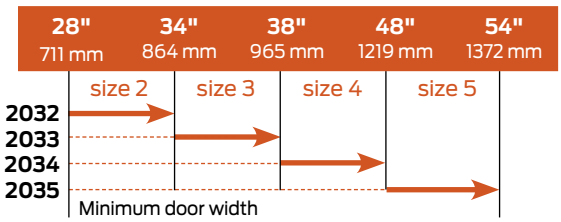
Table of sizes

- Select closer based on width of door.
- 2030 Series cylinders available in size 1, 2, 3, 4, or 5
- Closing power of all 2030 Series closers may be increased 35%
- Specify next higher size closer where strong drafts exist

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.

Reduced opening force 2030 Series closers

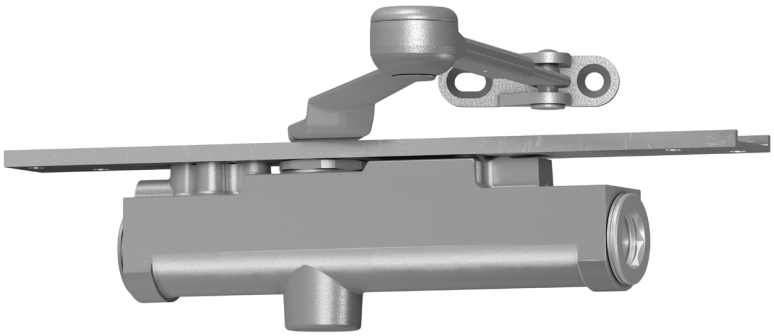
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	2033	2033	2034
5.0* lbs.	2031	2032	2032

* Maximum opening force.

3030 Series



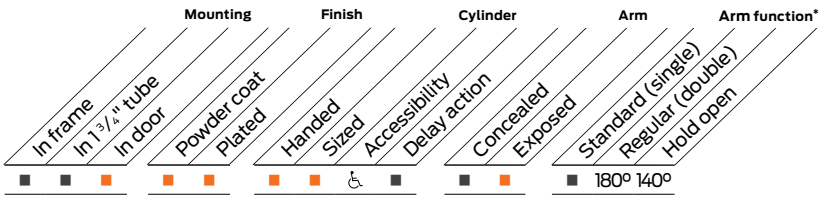
The concealed 3030 Series is designed to mount in a 1 3/4" interior door. The double lever arm provides superior door control and the choice of finishes and arm functions meet virtually all architectural requirements.

Features

Certifications	Grade 1 - ANSI/BHMA A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/8" diameter piston
Fluid	All weather fluid
Handing	Handed
Size	Sized 1-4
Warranty	15 years
Fasteners	Wood screws and torx security screws (optional)

Mounting	Concealed (in door); consult factory for installations with pivots
Arms	Regular arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Gloss black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product configurations



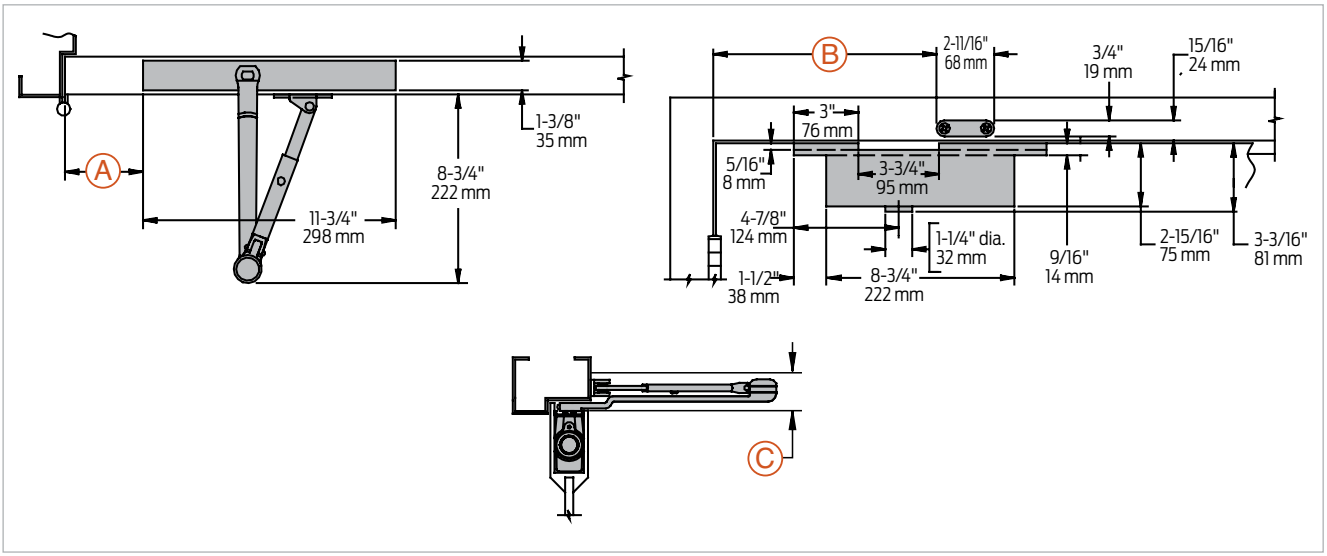
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/Hold open point with standard template. See individual closer series for degrees of opening per installation.

Customized installation templates or products may be available to solve non-standard applications.
Contact LCN Product Support for assistance.

Mounting details

Concealed mounting



Butt hinges	Should not exceed 5" (127 mm) in width	
Auxiliary stop	Recommended at Hold open point or where a door cannot swing 180°	
Reveal	Minimum 4" (102 mm) required	
Top rail	▪ 1 3/4" (44 mm) minimum ▪ Please consult the door manufacturer to assure that the door integrity and warranty is maintained after installing the 3030 Series door closer in a 1 3/4" thick wood door	
Clearance	2 13/16" (72 mm) behind door required for 90° installation	
Delay action	Delays closing from 180°-70°. Delay time adjustable up to approximately 1 minute	
Maximum opening	To 100°:	A = 3 5/8" (92 mm) B = 10 1/4" (260 mm)
	130°:	A = 2 5/8" (67 mm) B = 9 1/4" (235 mm)
	180°:	A = 1 5/8" (41 mm) B = 8 1/4" (210 mm)
	Hold open points up to maximum opening or 140°, whichever is less, with Hold open Arm (H)	
	Arm clearance above door: C = 1 1/4" (32 mm)	

Notes:
- For interior doors
- Single acting cylinder in top rail of door
- Exposed arm on hinge side of door

Accessories

Cylinders

3031(2)(3)(4)-3071
Cast iron cylinder assembly with mounting plate (CYL)
- Handed
- With mounting plate
- Standard

3030-3077
Regular arm (REGARM)
- Non-handed

3030-3049
Hold open arm (H)
- Handed
- Provides hold open function, adjustable at elbow
- Optional

Ordering information

How-to-order 3030 Series closers

1. Select cylinder size
- ☐ 3031
- ☐ 3032
- ☐ 3033
- ☐ 3034

2. Specify hand
- ☐ Right hand (RH)
- ☐ Left hand (LH)

3. Select finish
- ☐ Standard powder coat _____

Matte black (622) Aluminum (689), Dark bronze (695), Statuary bronze (690), Light bronze (691), Gloss black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Regular arm
- Wood and machine screws
  (unless options listed below are selected)

Closer options

Arm
- ☐ Hold open arm (H)

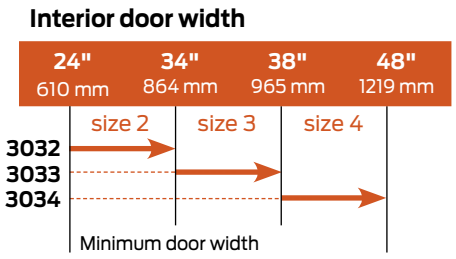
Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (use with powder coat finishes only)

Screw pack
- ☐ Torx machine screws (TORX)

Special template
- ☐ ST- _____

Table of sizes

- Select closer based on width of door
- 3030 Series cylinders available in size 1, 2, 3, or 4
- Closing power of all 3030 Series closers may be increased 15%



→ Indicates recommended range of door width for closer size.

Reduced opening force 3030 Series closers

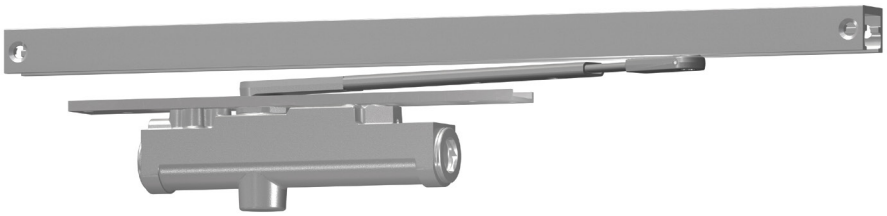
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	N/A	N/A	N/A
5.0* lbs.	3031	3031	3032

* Maximum opening force.

3130 Series



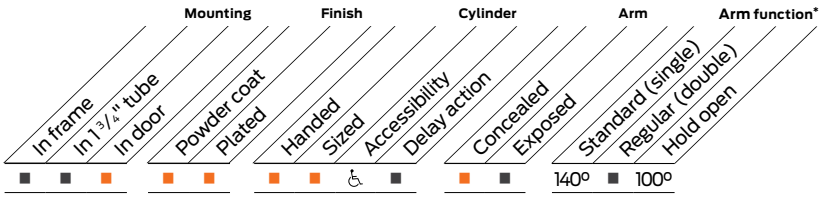
The concealed 3130 Series is designed to mount in a 1 3/4" interior door. The single lever arm and roller assembly provides complete concealment and the choice of finishes and track functions meet virtually all architectural requirements.

Features

Certifications	Grade 1 - ANSI/BHMA A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/8" diameter piston
Fluid	All weather fluid
Handing	Handed
Size	Sized 1-3
Warranty	15 years
Fasteners	Wood screws and torx security screws (optional)

Mounting	Concealed (in door); consult factory for installation with pivots
Arms	Standard arm and track
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Gloss black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product configurations



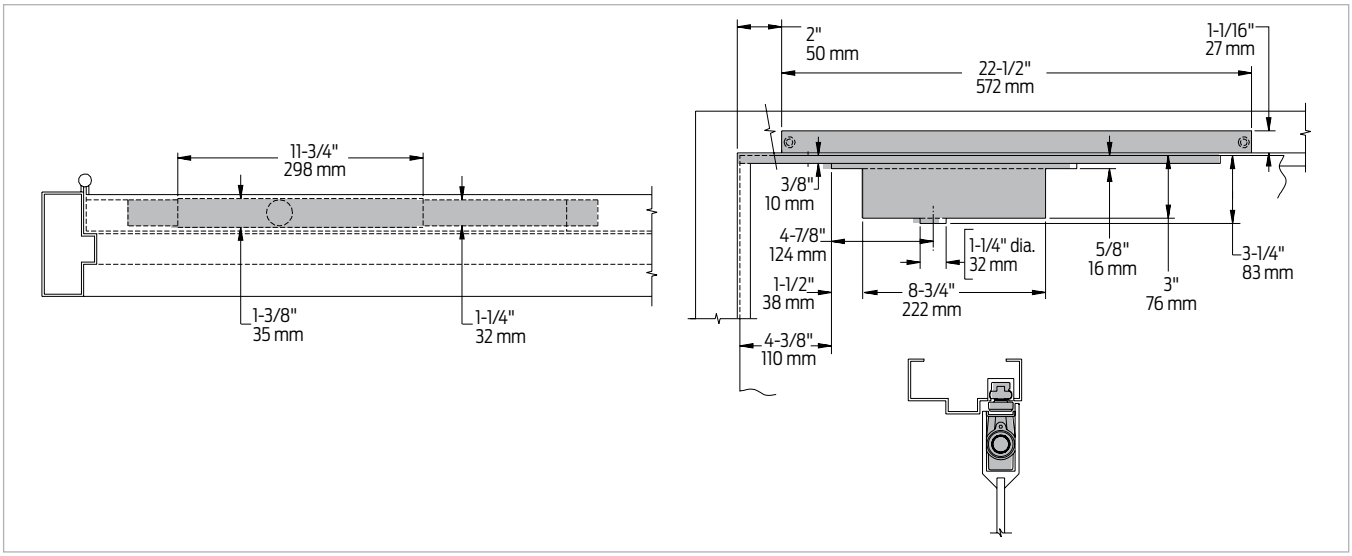
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/Hold open point with standard template. See individual closer series for degrees of opening per installation.

Customized installation templates or products may be available to solve non-standard applications.
Contact LCN Product Support for assistance.

Mounting details

Concealed mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended at Hold open point or where a door cannot swing 140° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door (it is not intended to replace an auxiliary stop)
Top rail	Minimum 4" (102 mm) required
Door thickness	▪ 1 ¾" (44 mm) minimum. ▪ Please consult the door manufacturer to assure that the door integrity and warranty is maintained after installing the 3130 Series door closer in a 1 ¾" thick wood door
Door width	2' 2" (660 mm) minimum
Maximum opening	▪ Templating allows 140°, trim permitting. 100° with optional bumper installed ▪ Adjustable Hold open points from 85° to 100°, with Hold open track (H)

Notes:
- For interior doors
- Single acting cylinder and standard arm in top rail of door
- Concealed track in head frame
- Consult factory for installations with pivots

Accessories

Cylinders

3131(2)(3)-3071
Cast iron cylinder assembly with mounting plate (CYL)
- Handed
- With mounting plate
- Standard

Arms

3130-3077T
Standard arm (STDTRKARM)
- Handed
- Track roller not included with arm
- Standard

Tracks

3130-3038H
Hold open track (H)
- Non-handed
- Will accept bumper assembly
- Optional

3130-3038B
Track with aumper (BUMP)
- Non-handed
- Non hold open
- Will accept hold open clip
- Optional

3130-3038H
Hold open track (H)
- Non-handed
- Will accept bumper assembly
- Optional

3130-3038HB
Hold open track with bumper (HBMP)
- Non-handed
- Optional

Installation accessories

3130-169
Track bumper
- Mounts in track to assist back check, does not replace auxiliary stop
- Limits maximum opening
- Consists of bumper, bumper post and mounting screw

3130-3054
Hold open clip
- Mounts in track to provide hold open function
- Hold open point controlled by clip location
- Requires 3130-3034H Hold open track roller

3130-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3 mm)

3130-3034H
Hold open track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3 mm)

Ordering information

How-to-order 3130 Series closers

1. Select cylinder size
- ☐ 3131
- ☐ 3132
- ☐ 3133

2. Specify hand
- ☐ Right hand (RH)
- ☐ Left hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte black (622), Aluminum (689), Dark bronze (695), Statuary bronze (690), Light bronze (691), Gloss black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Standard arm
- Track roller
- Standard track
- Self-reaming and tapping screws
  (unless options listed below are selected)

Closer options

Track
- ☐ Track with bumper (BUMP)
- ☐ Hold open track (H)
- ☐ Hold open Track with bumper (HBMP)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (use with powder coat finishes only)

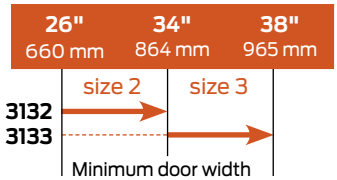
Screw pack
- ☐ Torx machine screws (TORX)

Special template
- ☐ ST-_____

Table of sizes

- Select closer based on width of door
- 3130 Series cylinders available in size 1, 2, or 3
- Closing power of 3130 Series closers is not adjustable

Interior door width



Indicates recommended range of door width for closer size.

Reduced opening force 3130 Series closers

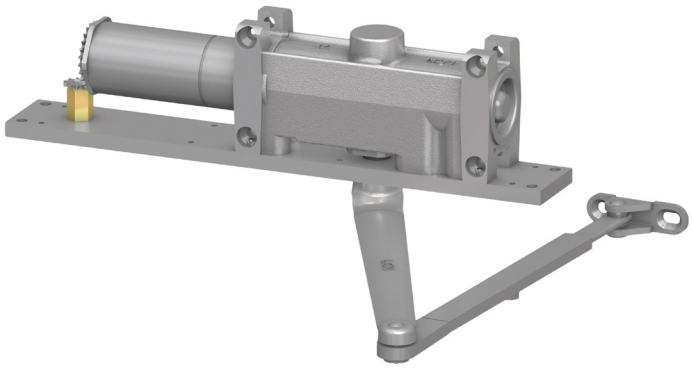
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	N/A	N/A	N/A
5.0* lbs.	3131	3131	3132

* Maximum opening force.

5010 Series



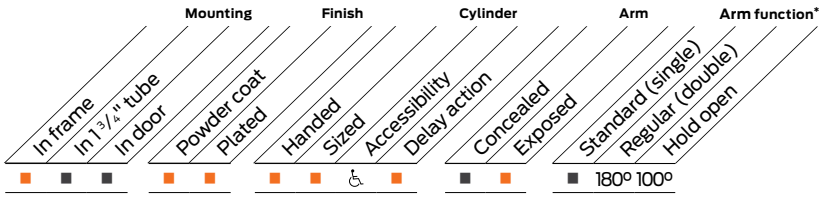
The concealed 5010 Series is a heavy duty closer designed for institutional, high traffic, or other applications exposed to weather or abuse. The double lever arm provides superior door control and a choice of finishes, cylinder functions, and arm functions that meet virtually all architectural requirements.

Features

Certifications	Grade 1 - ANSI/BHMA A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 1-6
Warranty	15 years
Fasteners	Wood screws and torx security screws (optional)

Mounting	Concealed (in frame); aluminum frame requires 4" (102 mm) x 4" tube
Arms	Regular Arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Gloss black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product configurations



■ Available
■ Not available

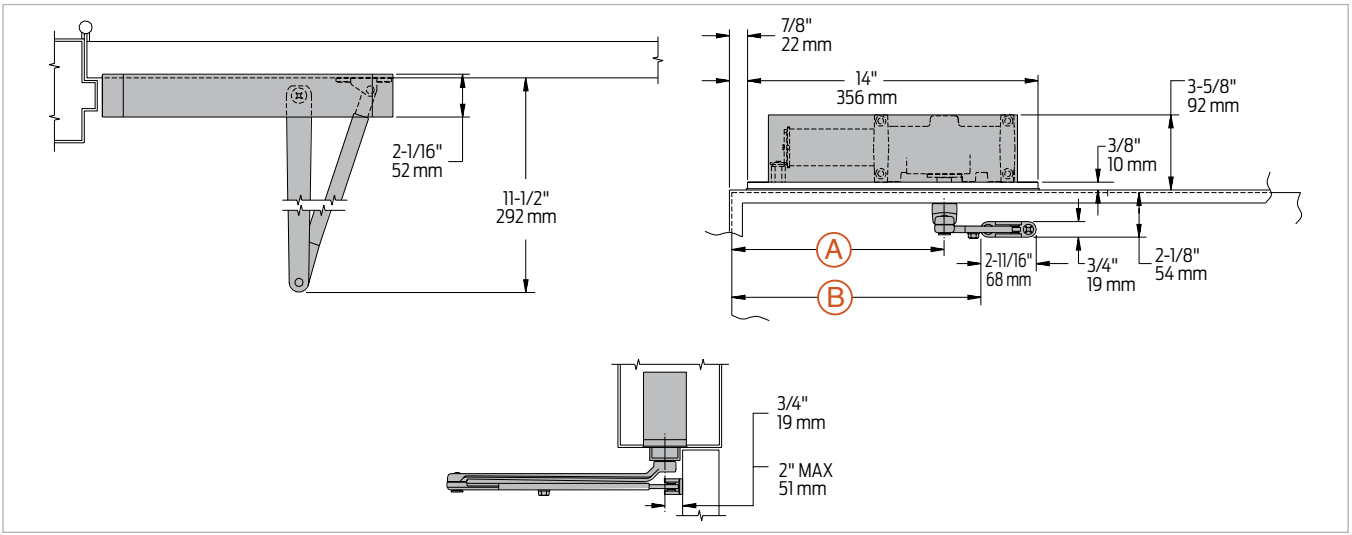
♿ Closer available with less than 5.0 lbs. opening force on 36" door.

* Maximum opening/Hold open point with standard template. See individual closer series for degrees of opening per installation.

Customized installation templates or products may be available to solve non-standard applications.
Contact LCN Product Support for assistance.

Mounting details

Concealed mounting

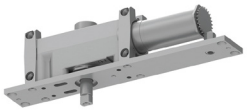


Butt hinges	Should not exceed 6" (152 mm) in width
Auxiliary stop	Recommended at Hold open point or where a door cannot swing 180°
Top rail	Minimum 2 1/8" (54 mm) required
Delay action	▪ Add suffix "CYLDEL" to selected cylinder (not available with 5016 cylinder) ▪ Delays closing from maximum opening to approximately 70° ▪ Delay time adjustable up to approximately 1 minute
Maximum opening	Butt hung doors can be templated for: 100°: A = 10 3/16" (259 mm), B = 12" (305 mm) 180°: A = 5 1/2" (140 mm), B = 7 5/16" (186 mm) trim permitting ▪ Hold open points up to 100° only with Hold open arm (H) ▪ Center pivot mounting restricts opening to 140° ▪ Offset pivot mounting allows up to 180°, trim permitting

Notes:
- For interior or exterior doors
- Single acting cylinder in head frame
- Exposed arm on hinge side of door

Accessories

Cylinders



5011(2)(3)(4)(5)(6)-3071
Cast iron cylinder assembly with mounting plate (CYL)
- Handed
- With mounting plate
- Standard

Arms

5010-3077
Regular arm (REGARM)
- Non-handed

5010-3049
Hold open arm (H)
- Handed
- Provides hold open function for 100° template, adjustment at elbow
- Optional

Ordering information

How-to-order 5010 Series closers

1. Select cylinder size
- ☐ 5011
- ☐ 5012
- ☐ 5013
- ☐ 5014
- ☐ 5015
- ☐ 5016 (CYLDEL not available)

2. Specify hand
- ☐ Right hand (RH)
- ☐ Left hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte black (622), Aluminum (689), Dark bronze (695), Statuary bronze (690), Light bronze (691), Gloss black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder with finish plate
- Standard arm
- Regular arm
- Wood and machine screws
  (unless options listed below are selected)

Closer options

Cylinder function
- ☐ Delay action cylinder (CYLDEL)

Arm
- ☐ Hold open arm (H)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (use with powder coat finishes only)

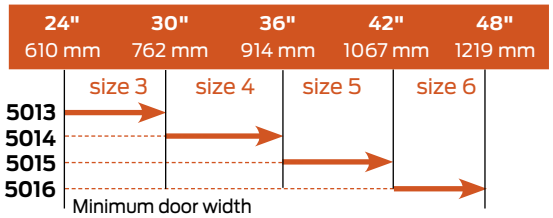
Screw pack
- ☐ Torx machine screws (TORX)

Special template
- ☐ ST- _____

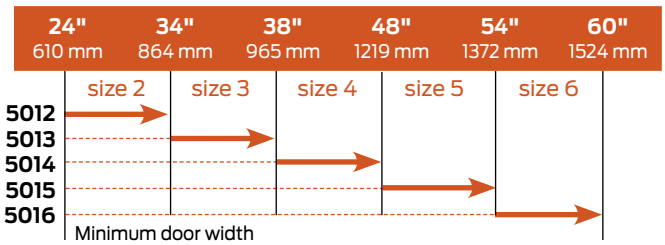
Table of sizes

- Select closer based on width of door
- Series cylinders available in size 1, 2, 3, 4, 5 or 6
- Closing power of all 5010 Series closers may be increased 50%
- Specify next higher size closer where strong drafts exist
- Delay action not available with 5016 cylinder

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.

Reduced opening force 5010 Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	5012	5013	5013
5.0* lbs.	5011	5011	5012

* Maximum opening force.

5030 Series

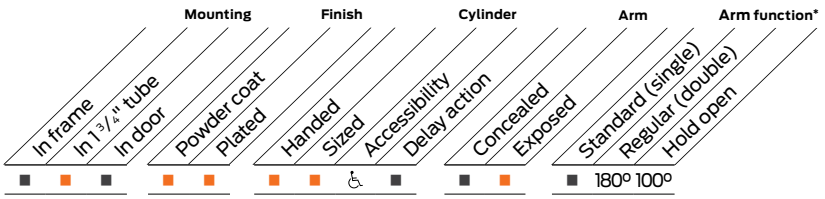
The concealed 5030 Series PACER® is a heavy duty closer designed to fit in a narrow, minimum 1 3/4" aluminum transom. The double lever arm provides superior door control and the choice of finishes and arm functions meet virtually all architectural requirements.

Features

Certifications	ANSI/BHMA A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/8" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 1, 3, 4, 5, 6
Warranty	15 years

Fasteners	Wood screws and torx security screws (optional)
Mounting	Concealed (in tube); aluminum frame requires minimum 1 3/4" (44 mm) x 4 1/2" (114 mm) tube
Arms	Regular arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Gloss black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product configurations



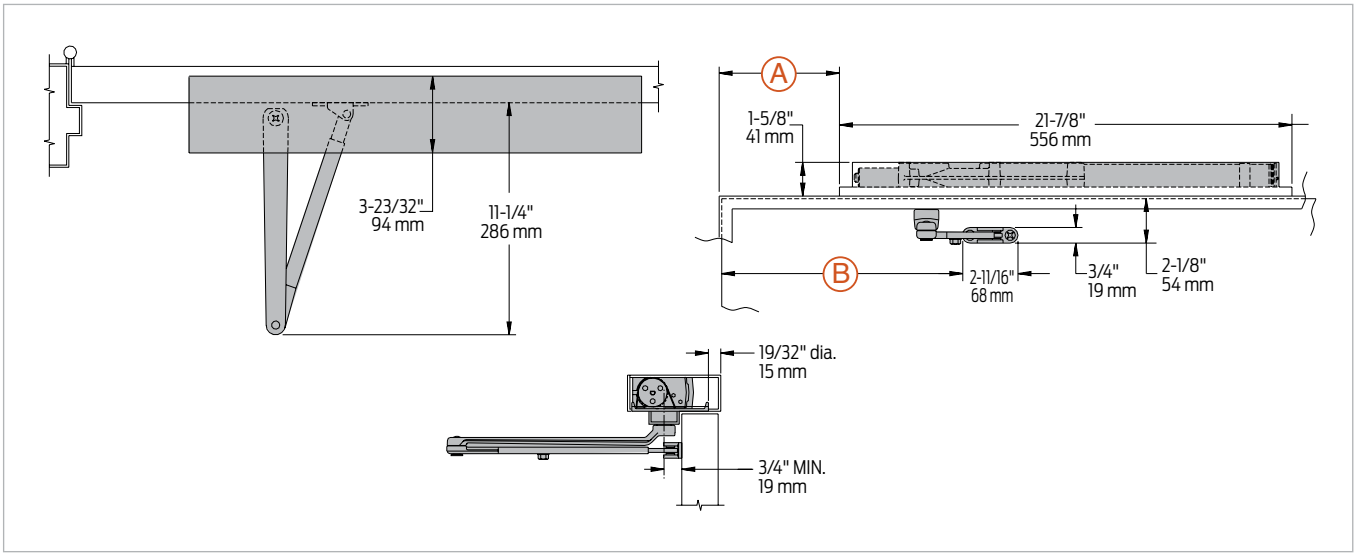
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/Hold open point with standard template. See individual closer series for degrees of opening per installation.

Customized installation templates or products may be available to solve non-standard applications.
Contact LCN Product Support for assistance.

Mounting details

Concealed mounting



Butt hinges	Should not exceed 6" (152 mm) in width
Auxiliary stop	Recommended at Hold open point or where the door cannot swing 180°
Top rail	Minimum 2 1/8" (54 mm) required
Door thickness	Maximum 1 3/4" (44 mm), for doors thicker than 1 3/4" consult factory
Wood frame	▪ Installation simplified by wood mounting clip set 5030-416 for center pivoted or 5030-417 for offset pivoted and butt hung installations ▪ Consult factory for preparation details
Maximum opening	Butt hung doors can be templated for: 100°: A = 5 13/16" (148 mm), B = 11 13/16" (300 mm) 180°: A = 2 1/16" (52 mm), B = 8 1/16" (205 mm) trim permitting ▪ Hold open points up to 100° only with Hold open arm (H) ▪ Center pivot mounting restricts opening to 120°. Hold open up to 120° with Hold open Arm (H) ▪ Offset pivot mounting allows up to 115°, trim permitting. Hold open up to 115° with Hold open Arm (H)

Notes:
- For interior or exterior doors
- Single acting cylinder in head frame
- Exposed arm on push side of door

Accessories

Cylinders

5011(2)(3)(4)(5)(6)-3071
Cast iron cylinder assembly with mounting plate (CYL)
- Handed
- With mounting plate
- Standard

Arms

5010-3077
Regular arm (REGARM)
- Non-handed

5030-3049
Hold open arm (H)
- Handed
- Provides hold open function for 100° template, adjustment at elbow
- Optional

Installation accessories

5030-416
Wood mounting clip set
- Simplifies mounting center pivoted 5030 closer in wood frame
- Includes latch stile clip, hinge stile clip and cover
- For use with Ives center pivots
- Consult factory for special template

5030-417
Wood mounting clip set
- Simplifies mounting offset pivoted or butt hung 5030 closer in wood frame
- Includes two clips
- For use with offset pivots
- Consult factory for special template

Ordering information

How-to-order 5030 Series closers

1. Select cylinder size
- ☐ 5031
- ☐ 5033
- ☐ 5034
- ☐ 5035
- ☐ 5036

2. Specify hand
- ☐ Right hand (RH)
- ☐ Left hand (LH)

3. Select finish
- ☐ Standard powder coat _____

  Matte black (622), Aluminum (689), Dark bronze (695), Statuary bronze (690), Light bronze (691), Gloss black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder with mounting plate
- Regular arm
- Wood and machine screws
  (unless options listed below are selected)

Closer options

Arm
- ☐ Hold open Arm (H)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (use with powder coat finishes only)

Screw pack
- ☐ Torx machine screws (TORX)

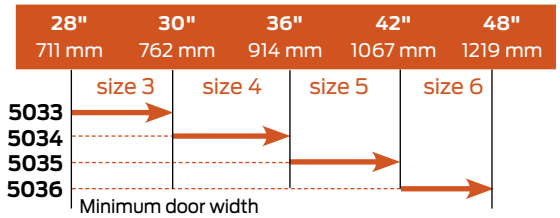
Installation accessories
- ☐ Wood clip set, 5030-416
- ☐ Wood clip set, 5030-417

Special template
- ☐ ST- _____

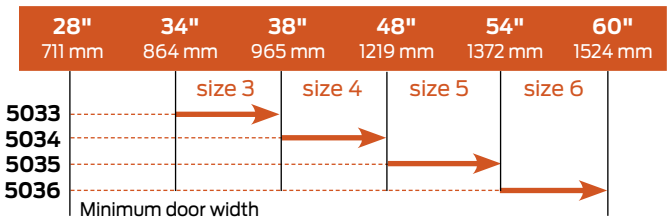
Table of sizes

- Select closer based on width of door
- 5030 Series cylinders available in size 1, 2, 3, 4, 5 or 6
- Closing power of all 5030 Series closers may be increased 50%
- Specify next higher size closer where strong drafts exist

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.

Reduced opening force 5030 Series closers

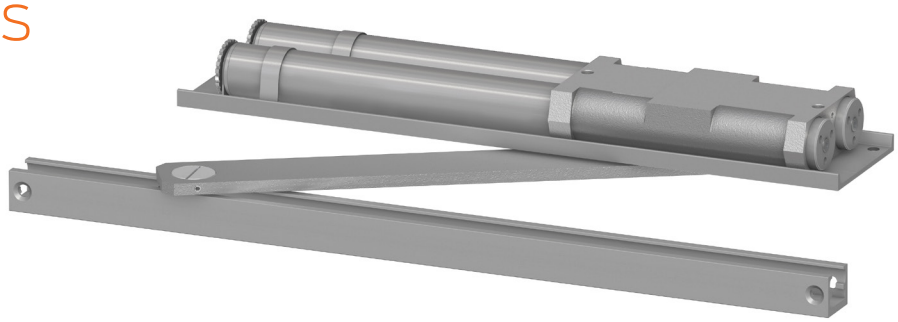
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	5033	5033	5033
5.0* lbs.	5031	5031	5033

* Maximum opening force.

6030 Series



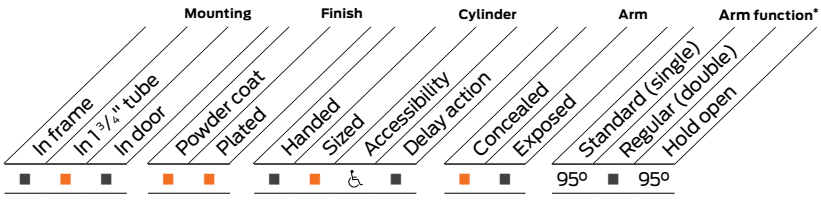
The concealed 6030 Series PACER® is a heavy duty double acting closer designed to fit in a narrow, minimum 1 3/4" header. The single lever arm and roller assembly provides smooth, quiet door control and the choice of finishes and track functions meet virtually all architectural requirements.

Features

Certifications	ANSI/BHMA A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/8" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Size	Sized 1-5
Warranty	15 years

Fasteners	Wood screws and torx security screws (optional)
Mounting	Concealed (in tube); double acting
Arms	Standard arm with track
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Gloss black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product configurations



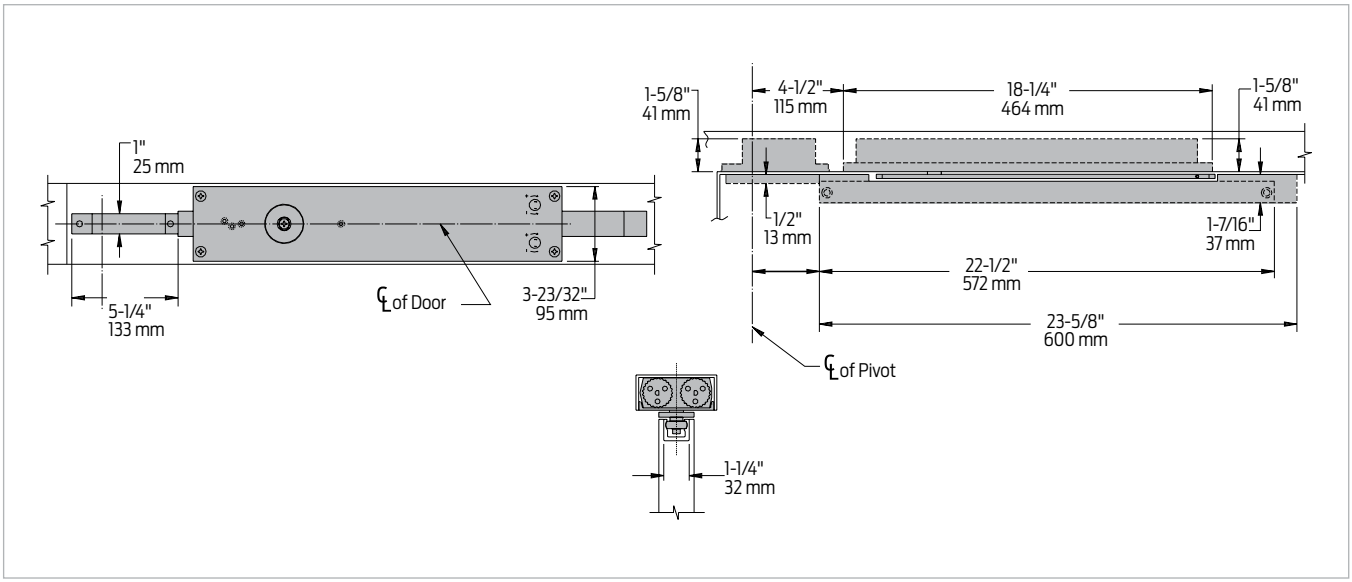
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/Hold open point with standard template. See individual closer series for degrees of opening per installation.

Customized installation templates or products may be available to solve non-standard applications.
Contact LCN Product Support for assistance.

Mounting details

Hinge (pull) side mounting



Auxiliary stop	Recommended where a door cannot swing 95º
Center pivot set	Must be used but ordered separately
Top rail	▪ 1 7/16" (36 mm) mortise required ▪ 3/8" (10 mm) cutout required at top of the door, both sides
Door thickness	1 3/4" (44 mm) minimum
Door width	30" (762 mm) minimum with 1 3/4" (44 mm) pivot centers
Centering adjustment	Centering is provided by rotating the track roller to center the door in the opening
Wood frame	▪ Installation simplified by wood mounting clip set, 6030-416 ▪ Consult product support for special template
Maximum opening	▪ Center pivot template allows 95º ▪ Adjustable Hold open points from 85º to 95º, with Hold open track (H)

Notes:
- For interior or exterior doors
- Double acting cylinder in cased frame
- Concealed arm and track in door top rail
- Center pivots only

Accessories

Cylinders

6031(2)(3)(4)(5)-3071
Cast iron cylinder assembly with mounting plate (CYL)
- Non-handed
- With mounting plate
- Standard

Arms

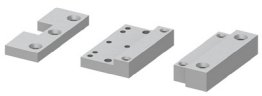
6030-3077T
Standard arm (STDTRKARM)
- Non-handed
- 5/16" (8 mm) thick arm
- Track roller not included with arm

Tracks

6030-3038B
Track with bumper (BUMP)
- Non-handed
- Non hold open
- Will accept hold open clip
- Standard

6030-3038HB
Hold open track with bumper (HBMP)
- Non-handed
- Optional

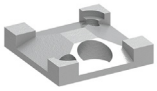
Installation accessories



6030-416
Wood mounting clip set
- Simplifies mounting closer in wood frame
- Includes latch stile clip, hinge stile clip and cover
- For use with Ives center pivots
- Consult factory for special template

6030-169
Track bumper
- Mounts to track to assist back check
- Limits maximum opening
- Consists of bumper, bumper post, and mounting screw

Note: Track bumper does not replace auxiliary stop.



6030-3034
Track roller
- Quiet, low friction roller assembly includes eccentric with 3/4" (19 mm) adjustment to center 36" (914 mm) door

6030-3034
Track roller
- Quiet, low friction roller assembly includes eccentric with 3/4" (19 mm) adjustment to center 36" (914 mm) door

6030-3034H
Hold open track roller
- Hold open roller
- Quiet, low friction roller assembly

Ordering information

How-to-order 6030 Series closers

1. Select cylinder size
- ☐ 6031
- ☐ 6032
- ☐ 6033
- ☐ 6034
- ☐ 6035

2. Select finish
- ☐ Standard powder coat _____ Matte black (622), Aluminum (689), Dark bronze (695), Statuary bronze (690), Light bronze (691), Gloss black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder with mounting plate
- Standard arm
- Standard Track with bumper
- Wood and machine screws
  (unless options listed below are selected)

Closer options

Track
- ☐ Hold open Track with bumper (HBMP)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (use with powder coat finishes only)

Screw pack
- ☐ Torx machine screws (TORX)

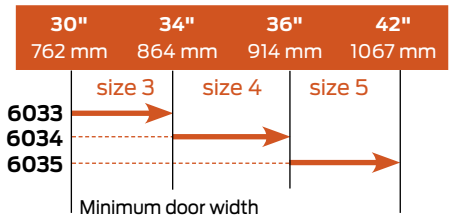
Installation accessories
- ☐ Wood clip set, 6030-416

Special template
- ☐ ST- _____

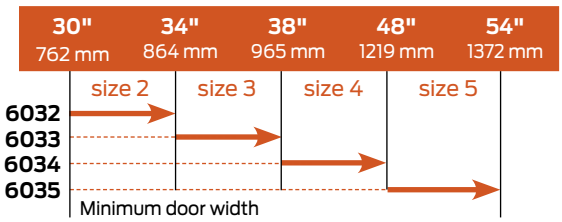
Table of sizes

- Select closer based on width of door
- 6030 Series cylinders available in size 1, 2, 3, 4, or 5
- Closing power of all 6030 Series closers may be increased 35%
- Specify next higher size closer where strong drafts exist

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.
Note: Minimum door width 28" (711 mm).

Reduced opening force 6030 Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	6033	6034	6035
5.0* lbs.	6031	6032	6032

* Maximum opening force.

Notes

Notes

About Allegion

At Allegion (NYSE: ALLE), we design and manufacture innovative security and access solutions that help keep people safe where they live, learn, work and connect. We're pioneering safety with our strong legacy of brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Our comprehensive portfolio of hardware, software and electronic solutions is sold around the world and spans residential and commercial locks, door closer and exit devices, steel doors and frames, access control and workforce productivity systems.

For more, visit **www.allegion.com**

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ALLEGION™

ALLEGION™

LCN®

High Security Series

Vandal resistant closers

Designed with durable materials and meticulous engineering

From the very beginning, our dedication has distinguished LCN from other brands. From those who design the product to those who make it to those who sell it, we have a passion for providing door closers that keep people safe and secure. We want a quality product that stands in its own class. And our heritage for high quality has led the company for multiple decades.

LCN's rich history started in 1877 when our founder was hired to solve the problem of slamming church doors at a Boston church. It led to the world's first door check and launched the beginning of the door closer industry. His innovation continued, leading to the formation of the LCN brand in 1926. LCN is always raising the bar another notch—just like when we began implementing environmental and high use/abuse testing to better gauge performance in real-world applications.

Manufactured with pride in Princeton, Ill., U.S.A., by our highly skilled and tenured craftsmen. Our solutions are specifically designed for enhanced durability, consistency and longevity. From meticulous engineering to strict quality control, LCN accepts no less than the best.

Through investment in state-of-the-art equipment, processes and people, we believe LCN will continue to provide the best solutions for our customers. Reliability means control over door speed, latch engagement and, ultimately, how well a door with an LCN closer operates in the field. Our processes include additional measures, such as honing and centerless grinding, that enable us to achieve tolerances within one ten-thousandth of an inch. The durable and reliable solutions our Princeton manufacturing plant delivers have been proven in the field to withstand abuse.

LCN has dedicated its time and resources to doing one thing—producing the finest line of door control devices possible. Our success is found in the millions of door closers installed in facilities across the world that bear the LCN trademark.

High Security closer features

- A vandal resistant design engineered for each application, easy installation and superior performance
- Hinge side, parallel arm, stop face or concealed mounting
- Handed for right or left swinging doors

Information and customer care

us.allegion.com

US 877.671.7011
Canada 800.900.4734

support@allegion.com
Closers_TechProdSupport@allegion.com

www.youtube.com/LCNHardware

Ordering

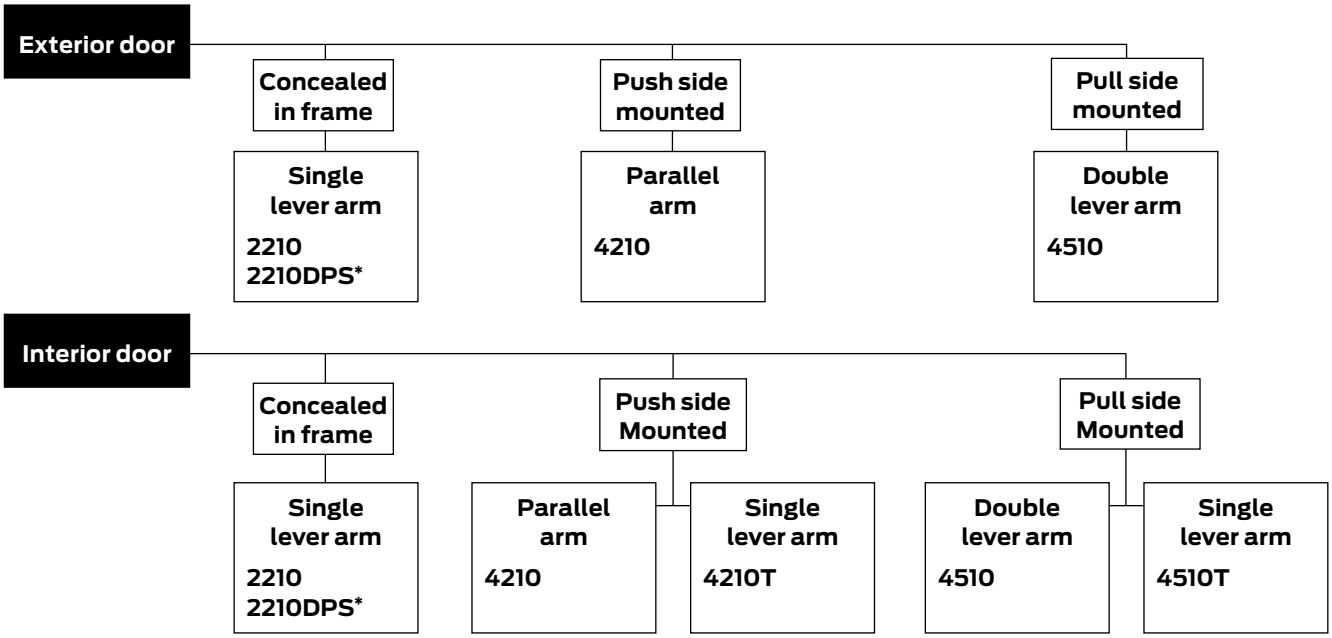
Allegion_Orders@allegion.com

eFax: 1.800.248.1460

High Security Series vandal resistant closers

Product selection guide

High Security LCN closers feature a vandal resistant design engineered for each application, easy installation, and superior performance. This guide is based on the desired mounting of the closer.



*Door position switch.

Product comparison

This chart shows a basic comparison of LCN High Security Series closers.
Refer to the specific closer chapter for complete details.

	Mounting				Finish		Cover				Cylinder				Arm function*		
	Hinge (pull) side	Parallel arm (push)	Stop face	Concealed (frame)	Powder coat	Plated	Plastic	Metal	Handed	Non-sized	Sized	Accessibility	Delay action	CYLAVB**	DPS	Standard (single)	EDA	CUSH/HCUSH
2210	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	180°	■	■
2210DPS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	180°	■	■
4210	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	■	■	180°	110°
4210T	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	■	110°	■	■
4510	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	■	■	140°	■
4510T	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	■	180°	■	■

■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening with standard template. See individual closer series for degrees of opening per installation.
** Advanced Variable Backcheck.

Applications

- For any concealed or surface mounted installation subject to potential abuse or vandalism
- For correctional, aluminum, hollow metal, or wood doors and frames
- Can be used with hinge or pivot mounted door
- Adapter plates and other installation accessories available for non-standard conditions

Features common to High Security closers

- Each closer is a vandal resistant design for a specific mounting; hinge side, parallel arm, stop face or concealed
- Handed for right or left swinging doors
- Closers to meet ADA reduced opening force requirements
- All closers furnished with Torx tamper resistant machine screws
- All surface mount closers include a heavy gauge steel cover with four attachment points
- All closer adjustments are protected when installation is complete
- All track closers use a jam resistant track and tamper resistant arm/roller assembly
- Adjustable hydraulic back check cushions opening swing prior to 90°
- Advanced Variable Back Check (CYLAVB) is available on all high security closers
- Separate regulation of general closing speed and latching speed

Design assistance

LCN has been providing reliable solutions to unique door control problems since 1925. Design and specification assistance are only a phone call away. Contact LCN for assistance or technical information at 877-671-7011 or fax 800-248-1460 (Order Entry), Fax 815-879-1495 for Product Support.

Warranty

High Security Series closers carry a 15 year limited warranty, except for the 2210DPS Series closer that carries a 2 year limited warranty. See LCN General Information catalog for complete warranty details.

Specifications

Refer to specifications section for suggested architectural specifications.

Materials

- High strength cast iron cylinder
- Forged steel main arms and forearms
- One piece forged steel piston
- LCN's all weather "Liquid X" fluid performs to temperature ranges from 120°F (49°C) to -30°F (-35°C) without any seasonal adjustment
- High efficiency, full complement, low friction bearings
- Double heat treated pinions
- Tamper resistant regulating screws
- Full rack and pinion hydraulic action
- Quiet, low friction track and roller combination for all single lever arm closers

Finishes

- Available in six standard or a wide selection of optional custom powder coat finishes to blend with door and frame
- LCN's powder coat finishes surpass 100 hours of salt spray, which is over four times the ANSI standard for corrosion resistance
- For installations where a higher level of corrosive resistance is required, LCN offers an optional special rust inhibiting (SRI) pre-treatment
- Closers that combine the exclusive LCN powder coat finish and the SRI pre-treatment exceed the ANSI standard for corrosion resistance even further
- Plated finishes are available as an option to accent door and frame

Listings and approvals

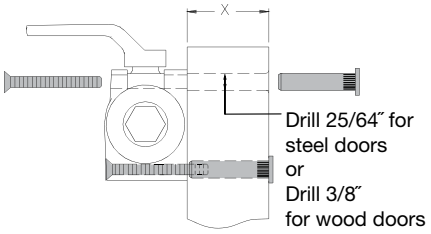
- UL listed for self-closing doors without hold open under "swinging door closers"(GVEV) file R 1943.
- Tested and certified under ANSI Standard A 156.4 (consult factory for details)
- Consult factory for other listings such as; ULC, California State Fire Marshal, Bureau of Standards and Appeals

Positive pressure

LCN closers have been certified for three hours by UL to be in compliance with UL 10 C. Contact LCN for specific details on door closer fire ratings.

Fasteners

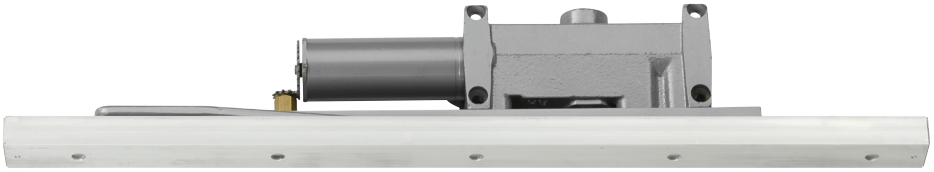
Torx Machine Screw (TORX) pack contains tamper resistant machine screws to install the closer. Through Bolts for Torx Machine Screws are available for all high security closers, except 2210 Series. LCN Through Bolts (TB) can be installed on 1 3/4" thick doors with the 1/4"-20 Torx screws supplied with the closer. Optional sizes are available for 1 5/8" or 1 3/8" door thicknesses, but this must be specified when ordering.



Note: For Through Bolts, specify door thickness if other than 1 3/4" (44mm), represented in diagram as dimension "X".

Special driver bits are required for installation or removal of Torx Machine Screws with a security pin as supplied with LCN High Security closers. All bits fit a 1/4" hex drive socket. For 1/4"-20 screws use T-27, for #12 machine screws use T-25, for #10 machine screws use T20, for #8 (and undercut #10) machine screws use T15, and for #6 machine screws use T10. The specific bits required for installation are listed on the "how to order" page for each closer. Sold separately.

2210 Series



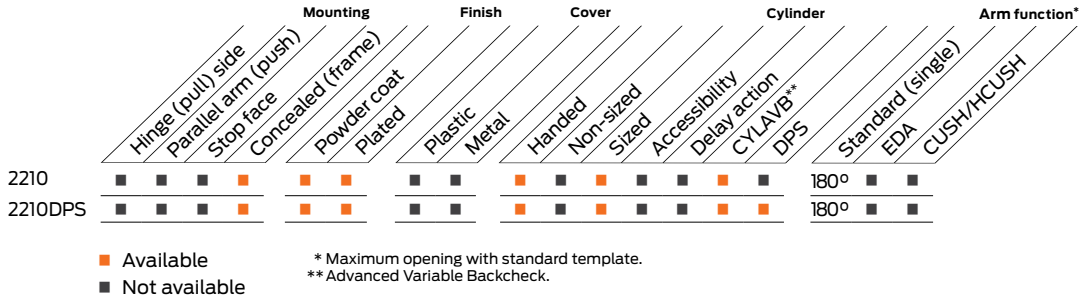
The concealed 2210 Series, heavy duty, high security track closer features complete concealment with special components to minimize tampering and vandalism. Forged steel, single lever arm and heavy steel mounting plate are designed for correctional, vandal prone, institutional, and other high traffic applications. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 3-5 (refer to chart); interior, exterior and vestibule
Warranty	15 years (2210); 2 years (2210DPS)
Cover	Two piece metal finish plates

Fasteners	Torx Machine Screws (TORX)
Mounting	▪ Concealed, single acting cylinder in head frame ▪ Concealed, arm and track in top rail of door
Arms	Standard security arm and security track
Finishes/colors/ powder coat	▪ 622 Matte Black ▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Gloss Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

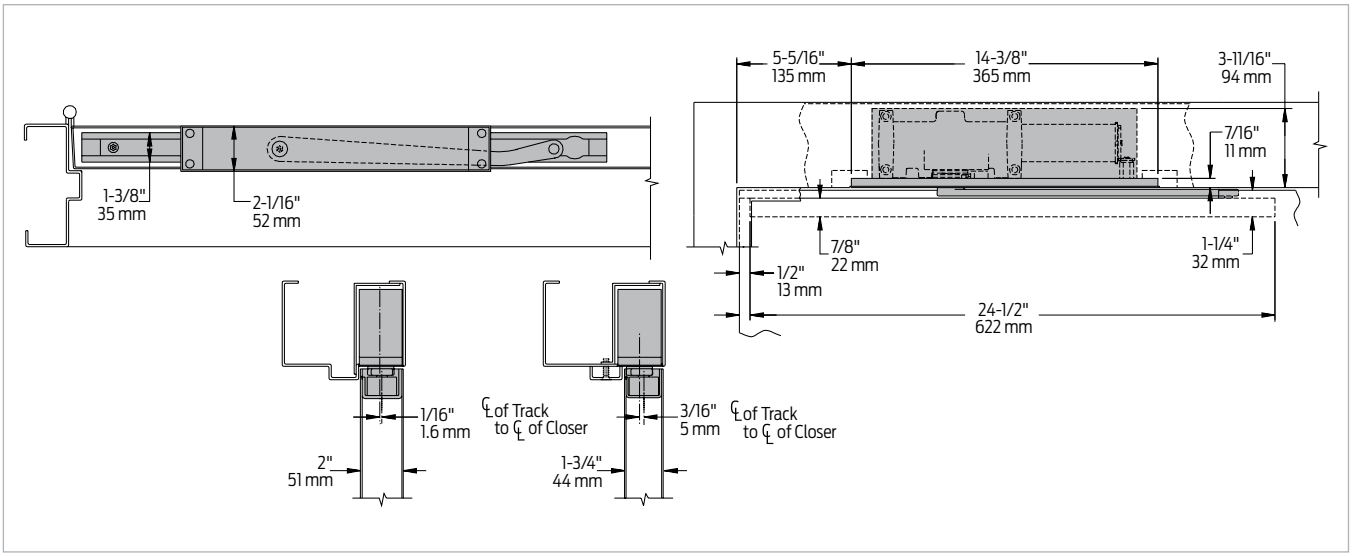
Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Concealed mounting

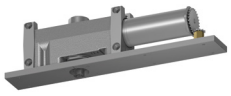


Butt hinges	Should not exceed 4 1/2" (114 mm) in width
Auxiliary stop	Recommended where a door cannot swing 180°
Top rail	1 1/4" (32 mm) mortise required; 3/8" (10 mm) cutout required at top of door, stop face only
Door thickness	1 3/4" (44 mm) minimum
Door width	28" (711 mm) minimum
Head frame	▪ 5 3/4" (146 mm) wide and 4" (102 mm) high with 2 3/16" (56 mm) rabbet required ▪ Consult factory if any dimension is less
Steel mounting plate	Thickness 3/8" (10 mm)
Door position switch	▪ Optional, field adjustable switch can interface with security and monitoring systems ▪ Add suffix "DPS" to selected cylinder ▪ Provides normally open (N.O.) and normally closed (N.C.) circuit ▪ A three wire connector harness with 84" (2134 mm), 16 AWG leads is furnished to simplify connection to field wiring ▪ Single pole double throw (SPDT) contacts rated at 125/250 VAC at 10.1 amps maximum resistive load are standard
Advanced Variable Back Check	▪ Cylinder starts back check at approximately 45° instead of the normal 75° ▪ Add suffix "CYLAVB" to selected cylinder
Maximum opening	▪ Templating allows 180° ▪ Consult factory if door will be held open at 180° ▪ Pivot mounting door limits opening to 110° and increases minimum door width to 32" (813 mm) ▪ Please note that many track style door closers are capable of allowing 180° of door swing
Options	▪ Advanced Variable Back Check Cylinder (CYLAVB) ▪ Door Position Switch (DPS)

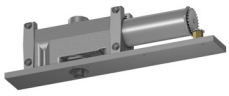
Note: Track style closers are at their weakest closing force at 180°.

Accessories

Cylinders



2213(4)(5)-3071
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- Standard



2213(4)(5)DPS-3071
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- Assembly includes DPS wire harness and gear

Arms

2210-3077T
2210DPS-3077T
Standard Security Arm (STDTRKSECARM)
- Handed
- Solid forged steel and large cross section for potentially abusive installations
- Special threaded attachment of track roller for extra security
- Double slab arm/pinion attachment for maximum strength
- Can only be used with high security track roller, 2210-3034 or 2210DPS-3034
- Roller is included with arm when either the 2210-3077T or 2210DPS-3077T are ordered separately

Tracks

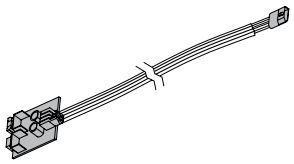
2210-3038
2210DPS-3038
Standard Security Track (STDSECTRK)
- Non-handed
- Hold open function not available
- Designed to eject foreign objects placed in track during either opening or closing motion
- Requires track roller, 2210-3034

Installation accessories

2210-11
Long Plate
- Heavy gauge metal plate
- Required for complete enclosure
- Six point Torx Mounting Screws for extra security
- Closer adjustments not accessible with finish plates installed

2210-12
Short Plate
- Heavy gauge metal plate
- Required for complete enclosure
- Four point Torx Mounting Screws for extra security
- Closer adjustments not accessible with finish plates installed

2210-3034
Security Track Roller
- Low friction track roller threads into 2210-3077T arm for extra strength and security
- Can not be removed without disconnecting arm from closer



2210-493
Test Kit
- Battery operated designed to verify switch signal response point
- Can be used directly at door location (used for 2210DPS only)

Ordering information

How-to-order 2210 Series closers

1. Select cylinder size
- ☐ 2213
- ☐ 2213DPS
- ☐ 2214
- ☐ 2214DPS
- ☐ 2215
- ☐ 2215DPS

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____ Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss Black (693), Brass (696).

Closer will be shipped with:
- Standard cylinder
- Finish plate
- Standard security arm
- Security track roller
- Security track
- Torx machine screws, (unless options listed below are selected)

Closer options

Cylinder
- ☐ Advanced Variable Back Check (CYLAVB)

Finish
- ☐ Custom Powder Coat (RAL) _____
- ☐ Plated finish _____ (cover plate and arm only)
- ☐ SRI primer (excludes DPS) (for use with powder coat finishes only)

Special template
- ☐ ST- _____

Note: Installation of this closer requires T-27, T-25 and T-15 driver bits for torx machine screws with a security pin. Sold separately.

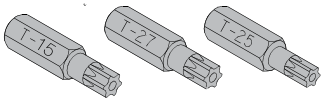
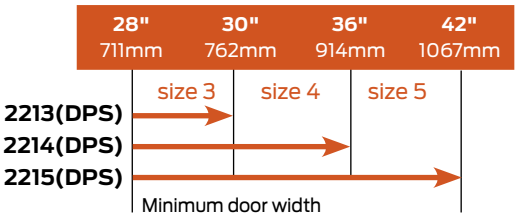


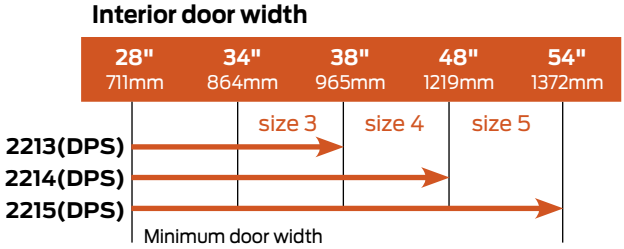
Table of sizes

- Select closer based on width of door
- 2210 Series cylinders available in size 3, 4, or 5
- Spring power is set at the factory for size 3, 4, or 5, but is field adjustable (may be increased 50%)

Exterior (and vestibule) door width

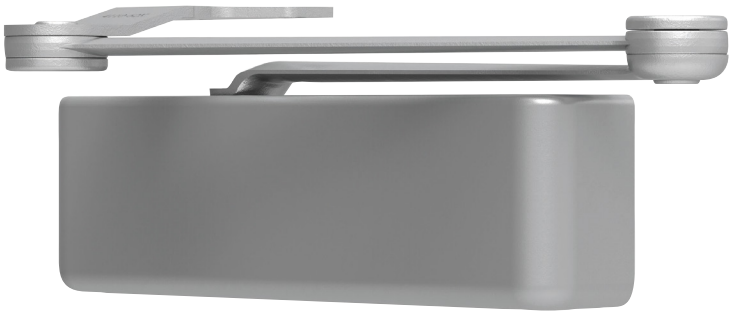


Interior door width



→ Indicates recommended range of door width for closer size.
Note: Minimum door width 28" (711mm).

4210 Series



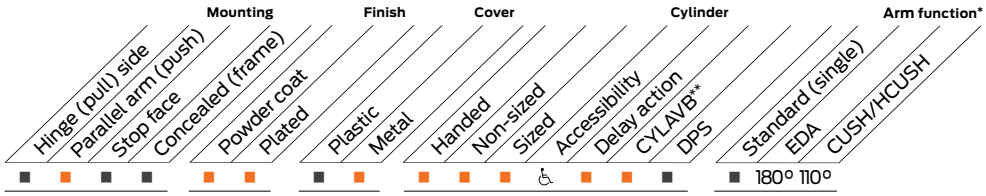
The 4210 Smoothee® Series is a heavy duty, high security closer with special components to minimize tampering and vandalism. Forged steel parallel arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic applications. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act Note: 4211 cylinder meets ADA.
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" Diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 1-5 or size 6; adjustable exterior, interior and vestibule
Warranty	15 years

Cover	Metal Cover (MC)
Fasteners	Torx Machine Screws (TORX)
Mounting	Parallel (push side)
Arms	Extra duty, non hold open
Finishes/colors/ powder coat	▪ 622 Matte Black ▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Gloss Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes (cover only)

Product Configurations



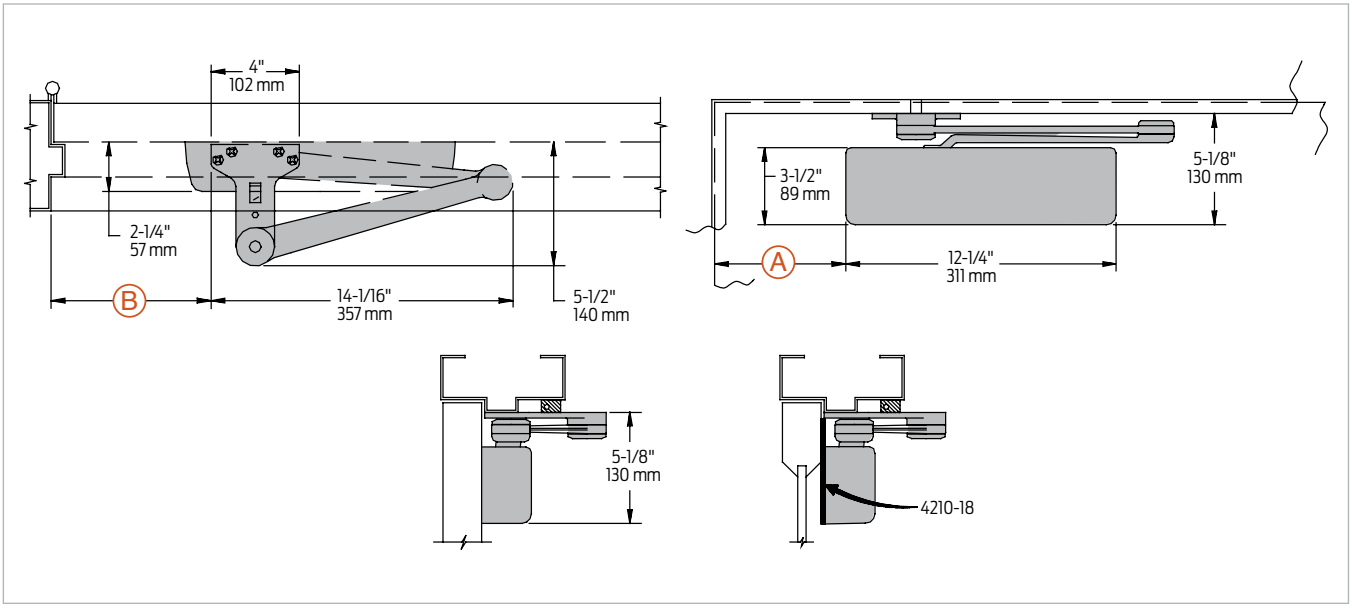
■ Available
■ Not available

Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening with standard template.
** Advanced Variable Backcheck.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

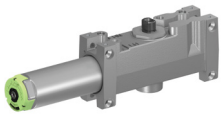
Parallel arm (push side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width	
Auxiliary stop	Recommended where a door cannot swing 180° or where CUSH arms not used	
Clearance	For EDA or CUSH is 5 1/2" (140 mm) from push side of door	
Top rail	Less than 5 1/8" (130 mm) measured from stop, requires plate 4210-18. Plate requires 2" (51 mm) minimum top rail	
Stop width	2 3/4" (70 mm) recommended. Less than 1" (25mm), consult factory	
Delay action	▪ Add suffix "CYLDEL" to selected cylinder ▪ Not available with 4215 or 4216 cylinder ▪ Delays closing from maximum opening to approximately 70° ▪ Delays time adjustable up to approximately 1 minute	
Advanced Variable Back Check	▪ Cylinder starts back check at approximately 45° instead of the normal 75° ▪ Add suffix "CYLAVB" to selected cylinder	
Maximum opening	EDA arm can be templated for	CUSH arm can be templated for maximum opening at
	100°: A = 5 15/16" (151 mm) B = 7 1/4" (184 mm)	85°: A = 8 5/16" (211 mm) B = 9 5/8" (244 mm)
	140°: A= 4 7/16" (113 mm) B = 5 3/4" (146 mm)	90°: A= 7 11/16" (195 mm) B = 9" (229 mm)
	180°: A= 2 15/16" (75 mm) B = 4 1/4" (108 mm)	100°: A= 6 7/16" (164 mm) B = 7 3/4" (197 mm)
		110°: A = 5 9/16" (141 mm) B = 6 7/8" (175 mm)
		Hold open point at maximum opening with HCUSH arm
Options	Delay Action cylinder (CYDEL) or Advanced Variable Back Check cylinder (CYLAVB)	

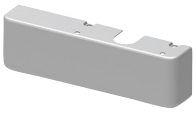
Accessories

Cylinders



4211(6)-3071
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- Standard

Covers



4210-72MC
Metal Cover (MC)
- Handed
- Four point mounting for extra security
- Closer adjustments not accessible with cover installed
- Standard

Arms

4210-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Parallel arm features solid forged steel main arm and forearm for potentially abusive installations
- Double slab arm/pinion attachment for maximum strength

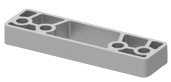
4210-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Parallel arm features solid forged steel main arm and forearm with built-in stop in soffit shoe
- Double slab arm/pinion attachment for maximum strength

4210-3049CNS
Hold Open Cush-n-Stop Arm (HCUSH)
- Non-handed
- Parallel arm provides hold open function with templated stop/hold open points
- Handle controls hold open function with thumb turn
- HCUSH arm not available with 4216 cylinder
- Double slab arm/pinion attachment for maximum strength

Installation accessories

4210-18, 4210-18CUSH
Plate
- Required for push side mount where top rail is less than 5 1/8" (130 mm), measured from the stop
- Requires 2" (51 mm) minimum top rail measured from the stop
- Also used with CUSH arm installations

4210-30
CUSH Shoe Support
- Provides anchorage for fifth screw used with CUSH arms where reveal is less than 3 1/16" (78mm)



4210-61
Blade Stop Spacer
- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop

4210-419
PA Flush Panel Adapter
- Provides horizontal mounting surface for EDA or CUSH shoe on single rabetted or flush frame

Ordering information

How-to-order 4210 Series closers

1. Select cylinder size
- ☐ 4211 (adjustable from size 1 to 5)
- ☐ 4216 (CYLDEL or HCUSH arm not available)

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss Black (693), Brass (696).

Closer will be shipped with:
- Standard cylinder
- Metal cover
- Standard security arm
- Torx machine screws
  (unless options listed below are selected)

Closer options

Cylinder
- ☐ Delay Action Cylinder (CYLDEL)
- ☐ Advanced Variable Back Check Cylinder (CYLAVB)

Finish
- ☐ Custom Powder Coat (RAL) _____
- ☐ Plated finish _____ (cover only)
- ☐ SRI primer (excludes DPS)
  (for use with powder coat finishes only)

Arm
- ☐ Cush-n-Stop Arm (CUSH)
- ☐ Hold Open Cush-n-Stop Arm (HCUSH)

Screw packs
- ☐ Through Bolt[1] and Torx Machine Screw (TBTRX)

Installation accessories
- ☐ Plate, 4210-18
- ☐ Plate, 4210-18CUSH

Special template
- ☐ ST- _____

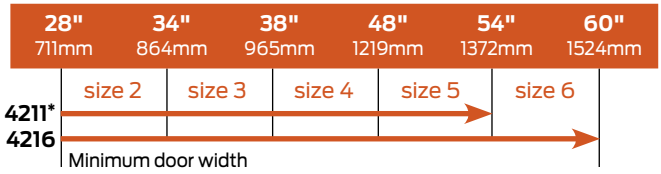
1. Specify door thickness if other than 1 ¾".

Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4211 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4210 Series cylinder available in size 6
- Delay action not available with 4216 cylinder

Exterior (and vestibule) door width

Interior door width



→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 4210 Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4211	4211	4211
5.0* lbs.	4211	4211	4211

* Maximum opening force.

4210T Series

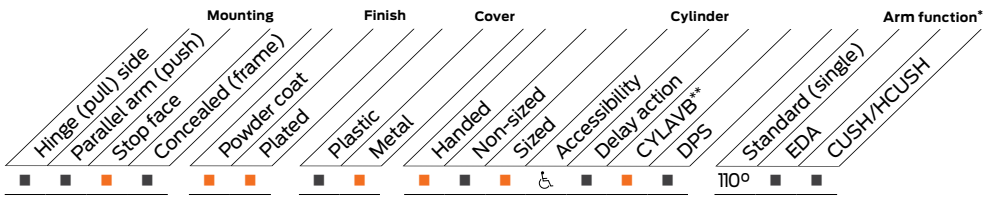
The 4210T Smoothee Series is a heavy duty, high security track closer with special components to minimize tampering and vandalism. Forged steel arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic interior applications. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act Note: 4211 cylinder meets ADA.
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" Diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 1, 3 or 4; Interior
Warranty	15 years

Cover	Metal Cover (MC)
Fasteners	Torx Machine Screws (TORX)
Mounting	Stop face (push side)
Arms	Security arm, security track with roller
Finishes/colors/ powder coat	▪ 622 Matte Black ▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Gloss Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



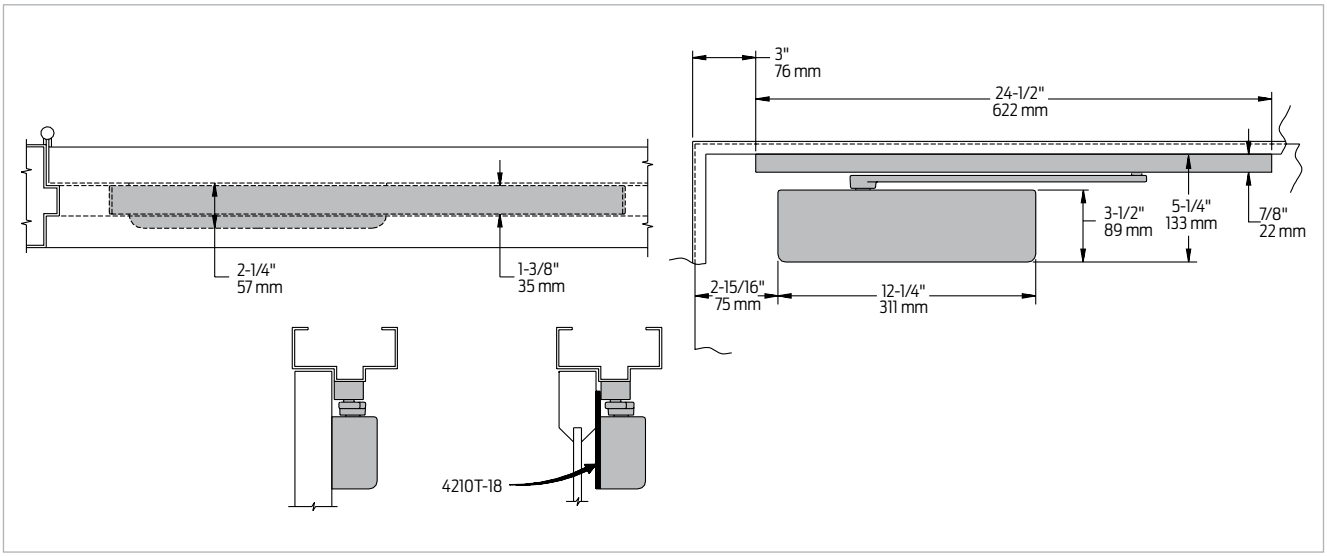
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening with standard template.
** Advanced Variable Backcheck.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

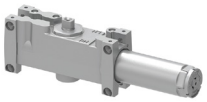
Stop face (push side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended where a door cannot swing 180°
Clearance	2 1/4" (57 mm) from door
Top rail	▪ Less than 5 1/4" (133 mm) measured from stop, requires plate 4210T-18 ▪ Plate requires 2 1/4" (57mm) minimum measured from the stop
Stop width	Minimum 1 3/8" (35 mm)
Advanced Variable Back Check	▪ Cylinder starts back check at approximately 45° instead of the normal 75° ▪ Add suffix “CYLAVB” to selected cylinder
Maximum opening	Templating allows 110°
Options	Advanced Variable Back Check Cylinder (CYLAVB)

Accessories

Cylinders



4211(3)(4)T-3071
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- Standard

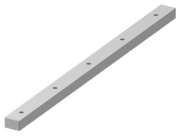
Covers

4210T-72MC
Metal Cover (MC)
- Handed
- Four point torx mounting for extra security
- Closer adjustments not accessible with cover installed

Arms

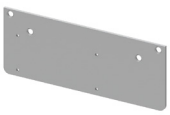
4210T-3077T
Standard Security Arm (STDTRKSECARM)
- Handed
- Solid forged steel, large cross section arm
- Special threaded attachment of track roller for extra security
- Double slab arm/ pinion attachment for maximum strength
- Can only be used with high security track roller, 4210T-3034

Tracks



4210T-3038
Standard Security Track (STDSECTRK)
- Non-handed
- Designed to eject foreign objects placed in track during either opening or closing motion
- Requires track roller, 4210T-3034

Installation accessories



4210T-18
Plate
- Required where top rail, when measured from the stop, is less than 5 ¼" (133 mm)
- Requires 2 ¼" (57 mm) minimum top rail measured from the stop

4210T-3034
Security Track Roller
- Low friction track roller threads into 4210T-3077 arm for extra strength and security
- Can not be removed without disconnecting arm from closer

Ordering information

How-to-order 4210T Series closers

1. Select cylinder size
- ☐ 4211T (ADA)
- ☐ 4213T
- ☐ 4214T

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____ Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss Black (693), Brass (696).

Closer will be shipped with:
- Standard cylinder
- Metal cover
- Standard security arm
- Security track roller
- Security track
- Torx machine screws, (unless options listed below are selected)

Closer options

Cylinder
- ☐ Advanced Variable Back Check Cylinder (CYLAVB)

Finish
- ☐ Custom Powder Coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (excludes DPS) (for use with powder coat finishes only)

Screw packs
- ☐ Through Bolt[1] and Torx Machine Screw (TBTRX)

Installation accessories
- ☐ Plate, 4210T-18

Special template
- ☐ ST- _____

1. Specify door thickness if other than 1 3/4".

Note: Installation of this closer requires T-27 and T-25 driver bits for Torx Machine Screws with a security pin. Sold separately.

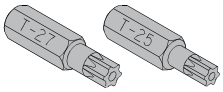
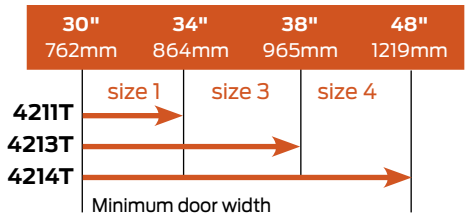


Table of sizes

- Select closer based on width of door
- 4210T series cylinders available in size 1, 3 or 4
- Closing power of all 4210T Series closers may be increased 15%

Interior door width



→ Indicates recommended range of door width for closer size.
Note: Minimum door width 30" (762mm).

Reduced opening force 4210T Series closers

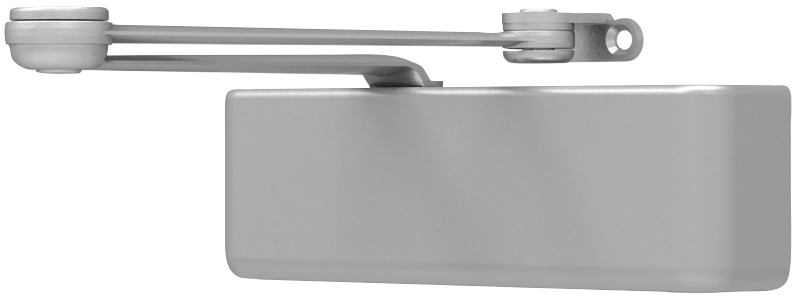
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4213T	4213T	4213T
5.0* lbs.	4211T	4211T	4211T

* Maximum opening force.

4510 Series



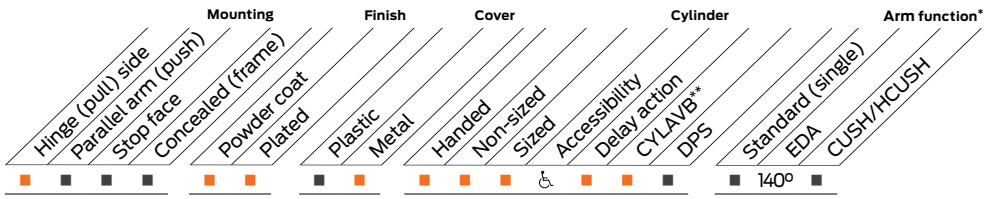
The 4510 Smoothee Series is a heavy duty, high security closer with special components to minimize tampering and vandalism. Forged steel double lever arms and heavy gauge metal security covers are designed for correctional, vandal prone, institutional and other high traffic applications. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act Note: 4511 cylinder meets ADA.
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" Diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 1-5; Adjustable, exterior, interior and vestibule
Warranty	15 years

Cover	Metal Cover (MC)
Fasteners	Torx Machine Screws (TORX)
Mounting	Hinge (pull side)
Arms	Extra heavy duty, non-hold open
Finishes/colors/ powder coat	▪ 622 Matte Black ▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Gloss Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



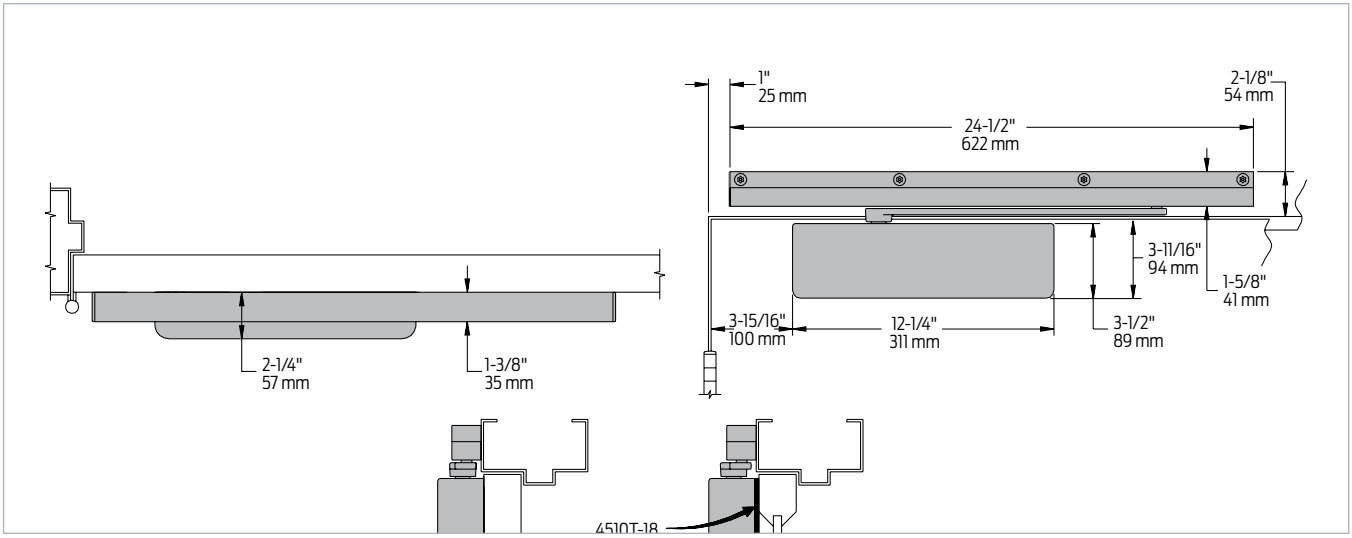
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening with standard template.
** Advanced Variable Backcheck.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

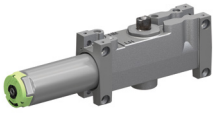
Hinge (pull side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended where a door cannot swing 140°
Reveal	Reveal should not exceed 1/8" (3 mm)
Clearance	2 1/4" (57 mm) behind door required for installation
Top rail	▪ Less than 3 1/2" (89 mm), requires plate 4510-18 ▪ Plate requires 2" (51mm) minimum top rail
Head frame	Less than 1" (25 mm), consult factory
Arm clearance	Above door 1 1/8" (29 mm) required
Delay action	▪ Add suffix “CYLDEL” to selected cylinder ▪ Not available with 4516 cylinder ▪ Delays closing from maximum opening to approximately 70° ▪ Delays time adjustable up to approximately 1 minute
Advanced Variable Back Check	▪ Cylinder starts back check at approximately 45° instead of the normal 75° ▪ Add suffix “CYLAVB” to selected cylinder
Maximum opening	Can be templated for
	140°: A= 4 3/16" (106 mm) B = 9 7/8" (251 mm)
Options	Delay Action cylinder (CYDEL) or Advanced Variable Back Check cylinder (CYLAVB)

Accessories

Cylinders



4511(6)-3071
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- Standard

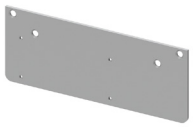
Covers

4510-72MC
Metal Cover (MC)
- Handed
- Four point mounting for extra security
- Closer adjustments not accessible with cover installed
- Standard

Arms

4510-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Solid forged steel main arm and forearm for potentially abusive installations
- Double slab arm/ pinion attachment for maximum strength
- Standard

Installation accessories



4510-18
Plate
- Required where top rail is less than 3 ½" (89 mm)
- Requires minimum 2"(51 mm) top rail

Ordering information

How-to-order 4510 Series closers

1. Select cylinder size
- ☐ 4511 (adjustable from size 1 to 5)
- ☐ 4516 (CYLDEL not available)

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss Black (693), Brass (696).

Closer will be shipped with:
- Standard cylinder
- Metal cover
- Extra duty arm
- Torx machine screws
  (unless options listed below are selected)

Closer options

Cylinder
- ☐ Delay Action Cylinder (CYLDEL)
- ☐ Advanced Variable Back Check Cylinder (CYLAVB)

Finish
- ☐ Custom Powder Coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (for use with powder coat finishes only)

Screw packs
- ☐ Through Bolt[1] and Torx Machine Screw (TBTRX)

Installation accessories
- ☐ Plate, 4510-18

Special template
- ☐ ST- _____

1. Specify door thickness if other than 1 ¾".

Note: Installation of this closer requires T-27 and T-25 driver bits for Torx Machine Screws with a security pin. Sold separately.

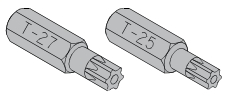
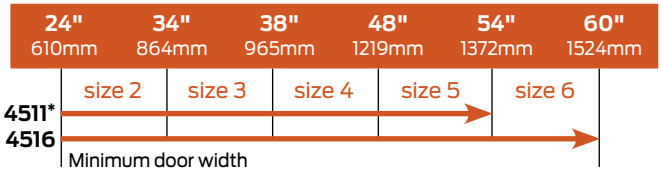


Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4511 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4510 Series cylinder available in size 6
- Delay action not available with 4516 cylinder

Exterior (and vestibule) door width

Interior door width



→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 4210 Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4511	4511	4511
5.0* lbs.	4511	4511	4511

* Maximum opening force.

4510T Series

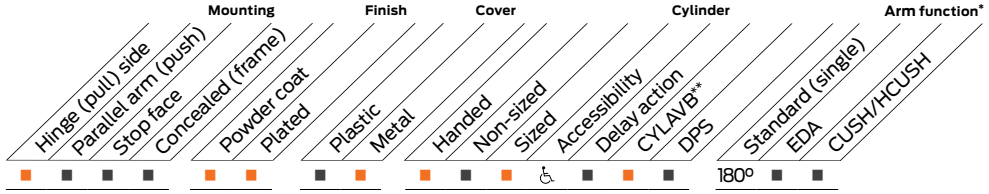
The 4510T Smoothee Series is a heavy duty, high security track closer with special components to minimize tampering and vandalism. Forged steel single lever arm and heavy gauge metal security cover are designed for correctional, vandal prone, institutional and other high traffic interior applications. A choice of finishes and cylinder functions meet correctional and vandal resistant requirements.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act Note: 4511T cylinder meets ADA.
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" Diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 1, 3 or 4
Warranty	15 years

Cover	Metal Cover (MC)
Fasteners	Torx Machine Screws (TORX)
Mounting	Hinge (pull side)
Arms	Standard security arm, security track (non hold open) and track roller
Finishes/colors/ powder coat	▪ 622 Matte Black ▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Gloss Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



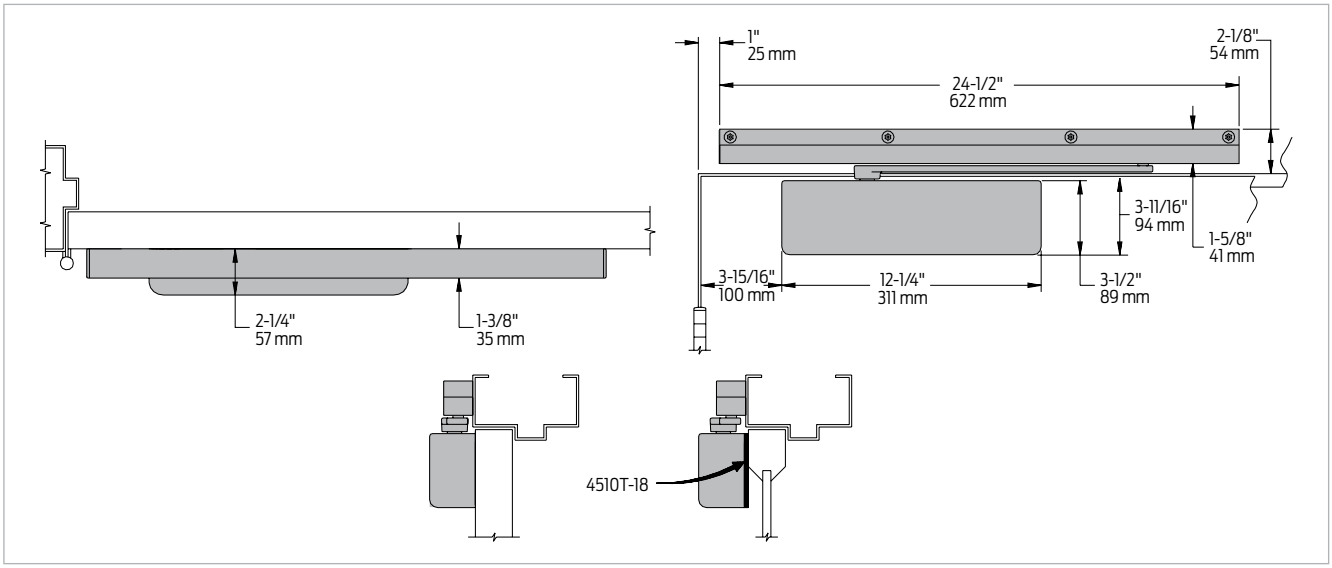
■ Available
■ Not available

Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening with standard template.
** Advanced Variable Backcheck.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

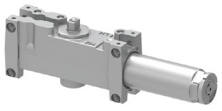
Hinge (pull side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended where a door cannot swing 180°
Reveal	Reveal should not exceed 1/8" (3 mm)
Clearance	2 1/4" (57 mm) behind door required for installation
Top rail	▪ Less than 3 3/4" (95 mm), requires plate 4510T-18 ▪ Plate requires 2" (51mm) minimum top rail
Head frame	Minimum 2 1/8" (54 mm)
Advanced Variable Back Check	▪ Cylinder starts back check at approximately 45° instead of the normal 75° ▪ Add suffix “CYLAVB” to selected cylinder
Maximum opening	▪ Templating allows 180° ▪ Consult factory if door will be held open at 180°
Options	Advanced Variable Back Check cylinder (CYLAVB)

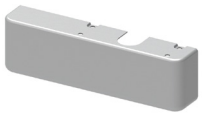
Accessories

Cylinders



4511T(3)(4)-3071
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- Standard

Covers



4510T-72MC
Metal Cover (MC)
- Handed
- Four point torx mounting for extra security
- Closer adjustments not accessible with cover installed

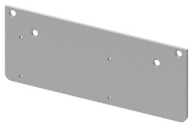
Arm

4510T-3077T
Standard Security Arm (STDTRKSECARM)
- Handed
- Solid forged steel, large cross section arm
- Special threaded attachment of track roller for potentially abusive installations
- Double slab arm/pinion attachment for maximum strength
- Can only be used with high security track roller, 4510T-3034

Tracks

4510T-3038
Standard Security Track (STDSECTRK)
- Non-handed
- Designed to eject foreign objects placed in track during either opening or closing motion
- Requires track roller, 4510T-3034

Installation accessories



4510T-18
Plate
- Required where top rail is less than 3 3/4" (95 mm)
- Requires minimum 2" (51 mm) top rail

4510T-3034
Security Track Roller
- Low friction track roller threads into 4510T-3077T arm for extra strength and security
- Can not be removed without disconnecting arm from closer

Ordering information

How-to-order 4510T Series closers

1. Select cylinder size
- ☐ 4511T (ADA)
- ☐ 4513T
- ☐ 4514T

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____ Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Gloss Black (693), Brass (696).

Closer will be shipped with:
- Standard cylinder
- Metal cover
- Standard security arm
- Security track roller
- Security track
- Torx machine screws, (unless options listed below are selected)

Closer options

Cylinder
- ☐ Advanced Variable Back Check Cylinder (CYLAVB)

Finish
- ☐ Custom Powder Coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (excludes DPS) (for use with powder coat finishes only)

Screw packs
- ☐ Through Bolt[1] and Torx Machine Screw (TBTRX)

Installation accessories
- ☐ Plate, 4510T-18

Special template
- ☐ ST- _____

1. Specify door thickness if other than 1 3/4".

Note: Installation of this closer requires T-27 and T-25 driver bits for Torx Machine Screws with a security pin. Sold separately.

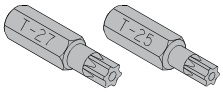
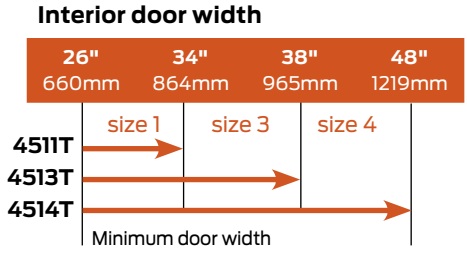


Table of sizes

- Select closer based on width of door
- Sized 4510T Series cylinders available in size 1, 3 or 4
- Closing power of all 4510T Series closers may be increased 15%



→ Indicates recommended range of door width for closer size.
Note: Minimum door width 30" (762mm).

Reduced opening force 4510T Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4513T	4513T	4513T
5.0* lbs.	4511T	4511T	4511T

* Maximum opening force.

Notes

Notes

About Allegion

At Allegion (NYSE: ALLE), we design and manufacture innovative security and access solutions that help keep people safe where they live, learn, work and connect. We're pioneering safety with our strong legacy of brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Our comprehensive portfolio of hardware, software and electronic solutions is sold around the world and spans residential and commercial locks, door closer and exit devices, steel doors and frames, access control and workforce productivity systems.

For more, visit **www.allegion.com**

KRYPTONITE ■ LCN ■ SCHLAGE ■ STEELCRAFT ■ VON DUPRIN

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ALLEGION™

ALLEGION™

LCN®

Fire and life safety series

Hold open solutions for fire rated doors

Combining proven technology with high-quality standards

LCN was formed on the belief that quality sets us apart. Built from the inside out, the portfolio combines tougher, bolder construction with proven technology – setting the standards of reliability, longevity and value in high-use applications.

LCN fire and life safety series are heavy duty closers/holders with electrically controlled hold open functions to control fire and smoke barrier doors. These closers feature a wide portfolio with single point, multi-point and tri-volt magnet offerings still incorporating trusted LCN design elements like cast iron cylinders.

Allegion's LCN door control portfolio is at the top of its class because of its high-quality construction and reliable performance. Our Sales and Technical Services teams provide support throughout every step of our process, whether consulting on code, advising a door specification or answering installation questions. We are focused on making your LCN experience positive.

Fire/life safety Series features

- Hold open solutions for fire rated doors
- Designed to integrate with existing fire and life safety systems
- Incorporates the same trusted LCN proven reliability as cast iron closers
- Features broad portfolio with single point, multi-point and tri-volt magnet offerings

Information and customer care

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US 877.671.7011
Canada 800.900.4734

support@allegion.com
Closers_TechProdSupport@allegion.com

www.youtube.com/LCNHardware

Ordering

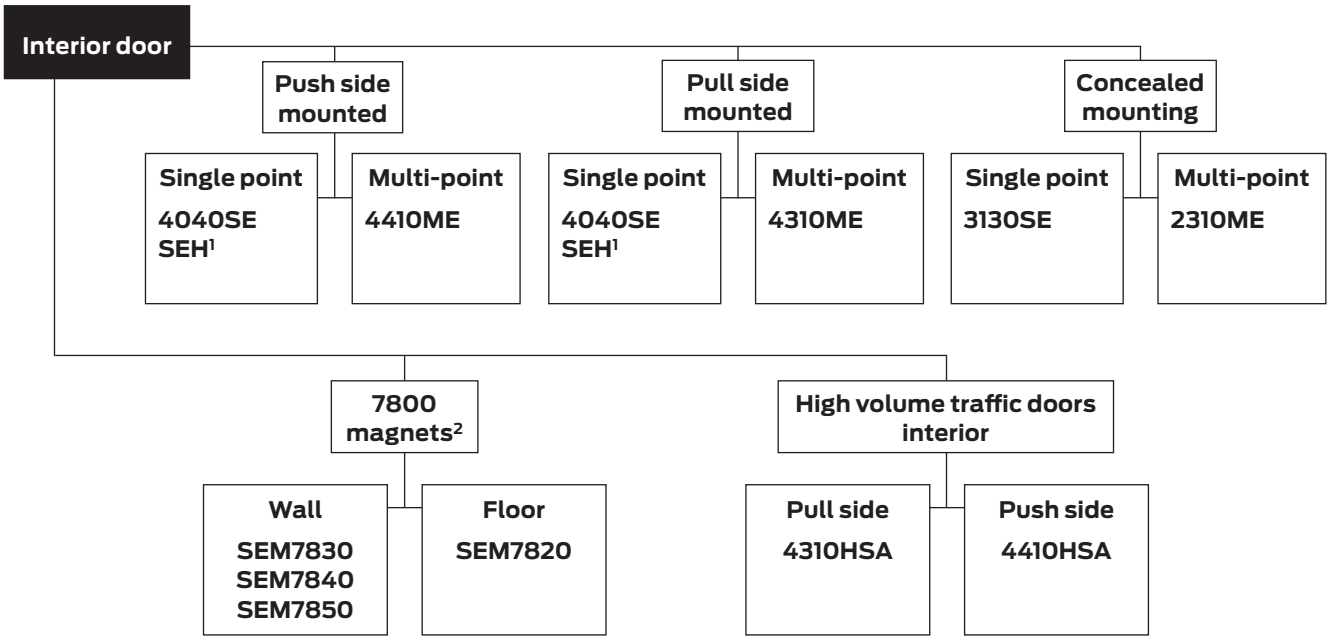
Allegion_Orders@allegion.com

eFax: 1.800.248.1460

Fire and Life Safety Series closers and holders

Product selection guide

SENTRONIC® Series LCN closer/holders combine heavy duty closers with electrically controlled hold open functions to control fire and smoke barrier doors. This guide is based on the desired mounting of the unit.



1. See SEH section (cylinder not included).
2. SEM 7800 Series are die cast.

Product comparison

This chart shows a basic comparison of Sentronic closer/holders. Refer to the specific product chapter for complete details.

	Mounting					Finish		Cover						Cylinder				Arm function*			
	Hinge (pull) side	Top jamb (push)	Stop face (push)	Concealed (frame)	Concealed (door)	Powder coat	Plated	Plastic	Metal	Handed	Non-sized	Sized	Single Point Hold Open	Multi-point Hold Open	Pass 80/140		Standard (single)	Regular (double)	Swing Free	Double Egress
3130SE	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	110°	■	■	■	■
4040SE	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	110°	■	■	95°	
2310ME	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	160°	■	■	■	■
4310ME	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	160°	95°	
4410ME	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	150°	■	■	■
4310HSA	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	160°	■	■	95°	
4410HSA	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	150°	■	■	■

■ Available
■ Not available

* Maximum opening/hold open point with standard template. See individual closer series for degrees of opening per installation.

Sentronic closer/holders
Automatic detection and containment of fire and smoke are the best ways to minimize danger to life and property. Patented Sentronic door closer/holders are designed to hold swinging doors open in normal use and release and automatically close the doors under fire conditions. Conforms to major building codes, life safety codes (eg. NFPA 101) and ANSI A156.15.

Single Point Hold Open (SE)
SE Series offers adjustable single point hold open function controlled by solenoid assembly located in the SE track.

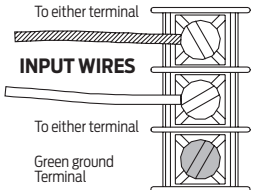
Multi-point Hold Open (ME)
ME Series offers adjustable, multi-point hold open function controlled by solenoid on the cylinder assembly.

Holder Scanner Activated (HSA)
Electronically controlled closer/holder designed to provide easy passage for groups of pedestrians through high traffic doors.

Magnets (SEM) - Electromagnetic door holders
SEM Series magnets work with manual door closers to provide single point hold open. Now available in new tri-voltage with 35 lbs. of holding force.

Applications
- For fire and smoke barrier doors
- Integrated into larger system
- Surface and concealed mountings
- Remote control hold open function of executive and conference area doors
- Adapter plates and other installation accessories available for non-standard conditions

General notes
1. For installations where 120V AC input voltage is supplied, 120V/24V transformer, 4040SE-3210, is required to reduce line voltage for 24V holding solenoid. Units are available in either 24V or 120V input, please specify.
2. Transformer 4040SE-3210 mounted on cover plate to fit 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others).
3. SE track quick-connector is required for 1/2" conduit.
4. SE test switch assembly includes fuse to protect solenoid. Works with ionization, photoelectric and heat sensing detectors (by others).



SE wiring diagram

Features common to Fire and Life Safety closers
- 24V AC/DC or 120V AC input, please specify for SE or ME
- When current is interrupted, hold open releases and door closes
- Adjustable hydraulic back check cushions opening swing prior to 90°
- Separate regulation of general closing speed and latching speed
- Available in a wide range of powder coated finishes to blend with door and frame (SEM magnets available in Aluminum and Dark Bronze only)
- Circuit automatically handles AC or DC input
- Can be pushed safely and easily out of hold open
- Functions as a full rack and pinion door closer when hold open is not engaged or current is interrupted
- Works with ionization, photoelectric and heat sensing detectors (by others)

Design assistance
LCN has been providing reliable solutions to unique door control problems since 1925. Contact LCN for assistance or technical information at 877-671-7011 or fax 800-248-1460 (Order Entry), Fax 815-879-1495 for Product Support.

Warranty
2 year limited warranty. See General Information catalog for complete warranty details.

Specifications
Refer to specifications section for suggested architectural specifications.

Materials
- High strength cast iron cylinder
- Forged steel main arm
- One piece forged steel piston
- All weather fluid reduces seasonal adjustments
- High efficiency, full complement, low friction bearings
- Tamper resistant regulating screws
- Quiet, low friction track and roller combination for all single lever arm closers

Finishes
- Available in six standard or a wide selection of optional custom powder coat finishes to blend with door and frame
- LCN's powder coat finishes surpass 100 hours of salt spray which is over four times the ANSI standard for corrosion resistance
- Plated finishes are available as an option to accent door and frame

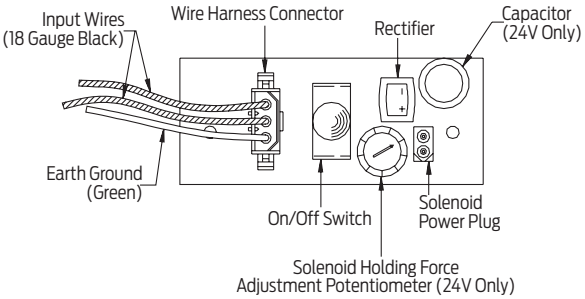
Listings and approvals
Sentronic closer/holders are listed by Underwriters Laboratories, Inc. in the following product categories under Fire Doors (GSNV), Combination Door Closers and Holders (GTIS) file R7050. SEM 7800 Series magnets are listed under Door Holders (GTPR) file R8327.

Consult the factory for other listings, such as; cUL, Department of Labor and Industry of the Commonwealth of Pennsylvania, The Board of Standards and Appeals of the City of New York, Fire and Panic Safety Standards of the California State Fire Marshal.

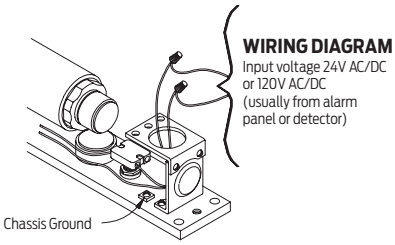
Holding solenoids current draw
- SE/ME
  - 24V AC/DC (+10% -15%) @ 90 mA max
  - 120V AC/DC (+10% -15%) @ 30 mA max
- SEM (tri-volt)
  - 12V DC (+10% -15%) @ 30 mA max
  - 24V AC/DC (+10% -15%) @ 20 mA max
  - 120V AC (+10% -15%) @ 20 mA max
- HSA
  - 24V AC/DC (+10% -15%) @ 120 mA max

Transformer data
120V AC 50-60 Hz (primary); 24V AC @ 400 mA max (secondary). An LCN supplied transformer will power (recommended) 2 SE, 3 SE/ME and 15 SEM.

ME wiring
ME "ON/OFF" switch assembly includes trim pot to adjust pull out force and fuse to protect solenoid.

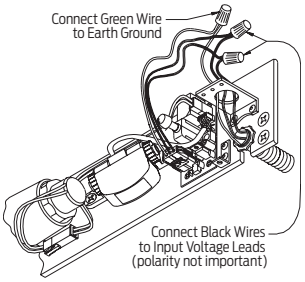


ME (4310, 4410) wiring diagram (24V only)



ME (2310) wiring diagram

HSA wiring
HSA "On/Off" switch assembly includes trim pot to adjust hold open time and fuse to protect solenoid.



HSA wiring diagram

Maintenance

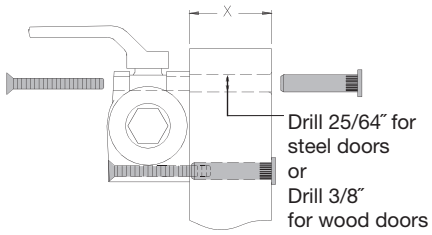
Closers mounted according to LCN installation instructions requires reduced periodic adjustments. Quarterly inspections are recommended. Refer to the installation instructions for complete, product specific details.

Positive pressure

LCN closers have been certified for three hours by UL to be in compliance with UL 10 C. Contact LCN for specific details on door closer fire ratings.

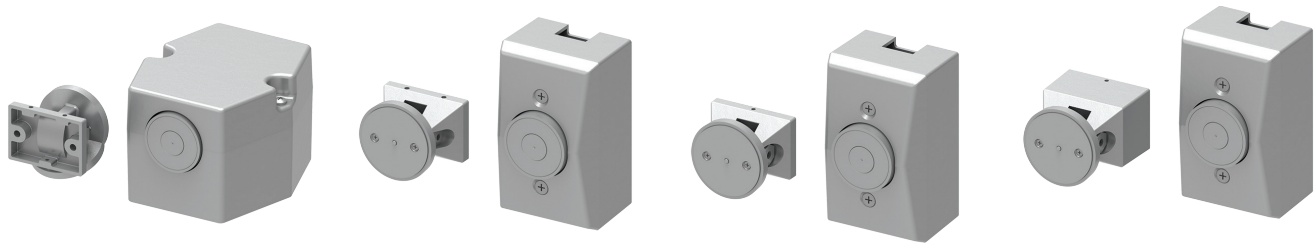
Fasteners

Standard Wood and Machine Screw (WMS) pack contains Phillips head wood and machine screws to install the closer. Through Bolts and/or Torx Machine Screws are available for most closers. LCN Through Bolts (TB) can be installed on 1 3/4" thick doors with either the 1/4"-20 machine screws or optional Torx screws supplied with the closer. Optional sizes are available for 1 5/8" or 1 3/8" door thicknesses, but this must be specified when ordering.



Notes:
1. For Through Bolts, specify door thickness if other than 1 3/4" (44mm), represented in diagram as dimension "X".
2. Phillips head, metric machine screws are available, please specify.
3. LCN recommends the use of wood screws for wood door applications.

SEM7800 Series



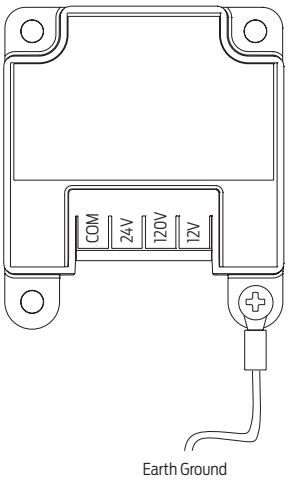
The Sentronic® SEM 7800 Series are heavy duty, electrically controlled door holding magnets. Magnets are fail safe and hold until the current is interrupted. A manual door closer is used to control and close the door. A choice of floor, recessed wall, or surface mounted wall magnets are available.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C for metal smoke barrier or labeled door, Life Safety Code, NFPA 101, 100 Hour Salt Spray, Meets BAA - Buy American Act
Voltage	Tri-voltage design with 35 lbs. of holding force
Housing	Die cast
Fasteners	Wood and Machine Screws (WMS)
Finishes/colors/powder coat	▪ 689 Aluminum paint ▪ 695 Dark Bronze paint
Options	Available with armature extensions (see page 10)

Electrical data

Voltage input



Electrical schematic

Operation:
Electromagnets are typically used with fire alarm systems. Doors are held open in the non-alarm condition. When the fire alarm panel enters the alarm condition, power to the electromagnets is removed, the doors close under door closer control, and function as a manual door. When the fire alarm panel returns to the non-alarm condition, power is reapplied to the electromagnets and the doors can be held open again.

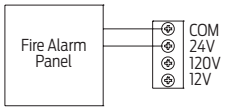


Fig. 1 24V AC/DC Wiring
Polarity is inimportant

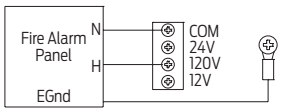


Fig. 2 120V AC Wiring

Electrical Specifications
Max. Current Draw
.030A @ 12VDC
.020A @ 24VAC/DC
.020A @ 120VAC

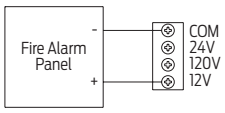
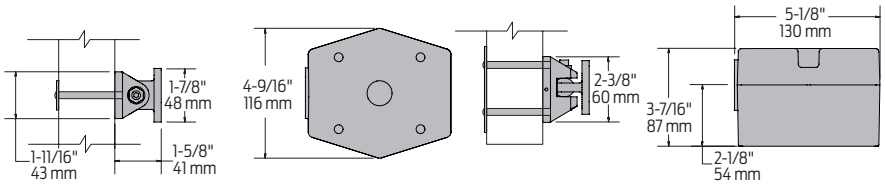


Fig. 3 12V DC Wiring
Polarity as shown

Holding force	35 lbs. @ nominal input voltage
Maximum current draw	▪ Standard profile recessed wall mount ▪ 2" (51 mm) x 4" (102 mm) x 1 ½" (38 mm)

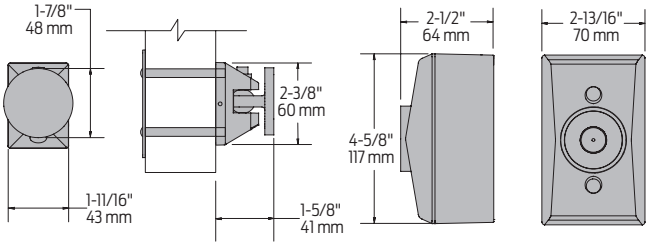
Mounting details

7820



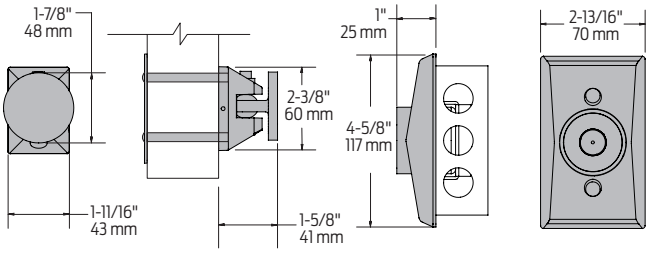
Mounting	Floor mounted
Total projection	6 ¾" (171 mm)

7830[1]



Mounting	Surface wall mounted
Total projection	4 ⅛" (105 mm)

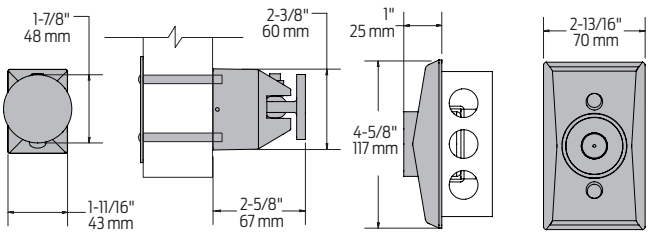
7840[1]



Mounting	▪ Low profile recessed wall mount ▪ 2" (51 mm) x 4" (102 mm) x 1 ½" (38 mm)
Total projection	2 ⅝" (67 mm)

Note: Outlet box not included.

7850[1]



Mounting	▪ Standard profile recessed wall mount ▪ 2" (51 mm) x 4" (102 mm) x 1 ½" (38 mm)
Total projection	3 ⅝" (92 mm)

Note: Outlet box not included.

1. Suitable for use in pocket door installations.

Accessories

Magnets

SEM7820-516
Magnet core assembly
- Magnet coil
- Standard

SEM7830(40)(50)-516
Magnet core assembly
- Magnet coil
- Standard

Armatures

SEM7820(30)(40)-825
Door armature
- Die cast low profile armature
- Standard

SEM7850-828
Door armature
- Die cast armature
- Standard

Note: Fastener kits for mounting must be ordered separately using part numbers ending in-515.

Fasteners

SEM7820-515
Fastener kit
- Hex key wrench
- Armature thru hole plate and surface mount clip
- Cement anchor
- Wood and machine screws

SEM7830-515
Fastener kit
- Hex key wrench
- Armature thru hole plate and surface mount clip
- Cement anchor
- Wood, machine and PHND screws

SEM7840-515
Fastener kit
- Hex key wrench
- Armature thru hole plate and surface mount clip
- Cement anchor
- Wood, machine and PHND screws

SEM7850-515
Fastener kit
- Hex key wrench
- Armature thru hole plate and surface mount clip
- Cement anchor
- Wood, machine and PHND screws

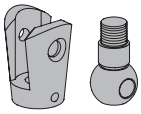
Cover

SEM7830(40)(50)-72
Standard cover
- Die cast cover
- Standard

Box

SEM7830-268
Surface mount box
- Die cast surface wall mount box
- Standard

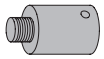
Extensions



SEM7810-514
Ball pivot/connection link
- Required for each door needing extension(s)
- Kit includes coupler link and ball pivot (alone serves as a 1 ½" extension)

SEM7810-E050
Magnet extension ½"
- Metal
- Standard

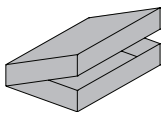
SEM7810-E075
Magnet extension ¾"
- Metal
- Standard



SEM7810-E100
Magnet extension 1"
- Metal
- Standard

SEM7810-E200
Magnet extension 2"
- Metal
- Standard

Extension, SEM7810-E400
Magnet extension 4"
- Metal
- Standard



SEM7810-517
Magnet SEM extension kit
- Extension kit includes:
- 10 .....7810SEM-E050
- 10 .....7810SEM-E075
- 10 .....7810SEM-E100
- 5 .....7810SEM-E200
- 20 .....7810SEM-514

Ordering information

How-to-order SEM7800 Series magnets

1. Select magnet series
- ☐ SEM7820
- ☐ SEM7830
- ☐ SEM7840
- ☐ SEM7850

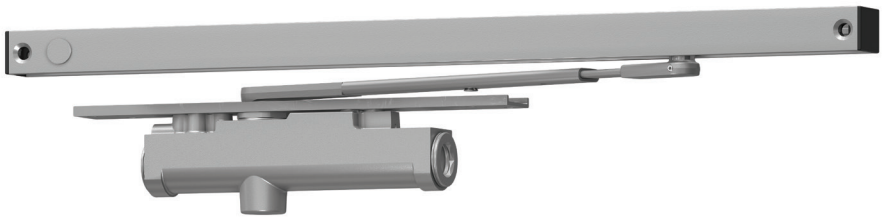
2. Select finish
- ☐ Standard powder coat _____ Aluminum (689), Dark Bronze (695) paint

Magnets will be shipped with:
- Die cast housing
- Cover
- Armatures
- Wood and machine screws

SEM 7810 extensions

Magnet series
- ☐ Ball Pivot/Connection Link (SEM7810-514) (qty.)
- ☐ Magnet Extension ½" (SEM7810-E050) (qty.)
- ☐ Magnet Extension ¾" (SEM7810-E075) (qty.)
- ☐ Magnet Extension 1" (SEM7810-E100) (qty.)
- ☐ Magnet Extension 2" (SEM7810-E200) (qty.)
- ☐ Magnet Extension 4" (SEM7810-E400) (qty.)
- ☐ Magnet SEM Extension Kit (SEM7810-517) (qty.)

3130SE Series



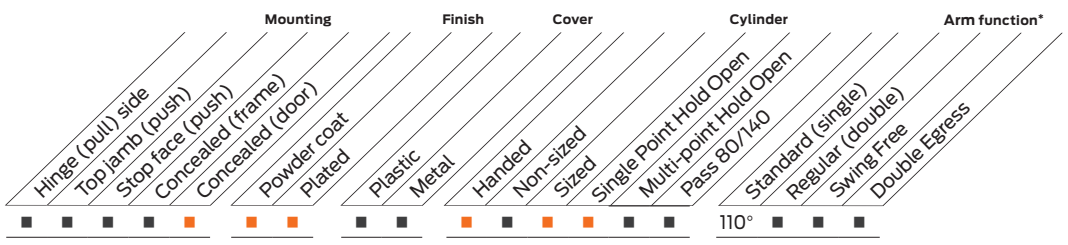
The 3130SE SENTRONIC® is a concealed in the door, closer/holder designed to provide single point hold open for fire and smoke barrier doors. Door is held open until current interruption releases the holding mechanism and the door closes.

Features

Certifications	Grade 1 - ANSI A156.15, UL/for metal smoke barrier or labeled door, Life Safety Code, NFPA 101, 100 Hour Salt Spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/8" Diameter piston ▪ 9/16" diameter double heat treated pinion journal
Handing	Handed
Size	Size 3 or 4, non-adjustable
Warranty	2 years

Fasteners	Wood and Machine Screws (WMS)
Mounting	Concealed (in door) for interior smoke barrier and labeled doors
Arms	Standard, handed arm and non-handed track
Finishes/colors/ powder coat	▪ 689 Aluminum paint ▪ 690 Statuary Bronze paint ▪ 691 Light Bronze paint ▪ 693 Black paint ▪ 695 Dark Bronze paint ▪ 696 Brass paint ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

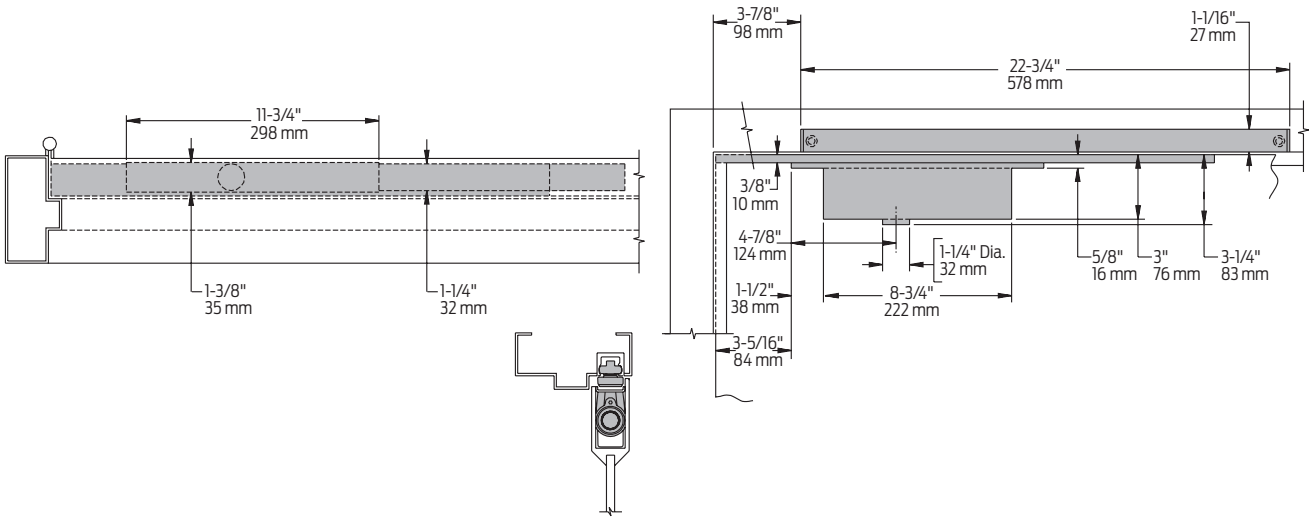


▪ Available
■ Not available

* Maximum opening/hold open point with standard template.

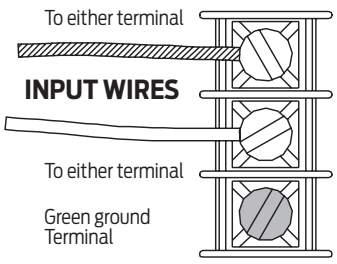
Mounting details

Concealed mounting



Butt hinges	▪ Should not exceed 5" (127 mm) in width ▪ Consult factory for pivot hung installations
Auxiliary stop	Recommended at hold open point
Top rail	Minimum 4" (102 mm)
Door thickness	▪ 1 ¾" (44 mm) minimum ▪ Please consult the door manufacturer to assure that the door integrity and warranty is maintained after installing the 3130SE Series door closer in 1 ¾" (44 mm) thickness wood doors
Door width	▪ 2'4" (711 mm) minimum for single door with SE ▪ 2'8" (813 mm) minimum for door with SEL
Maximum opening	▪ Templating allows 110° ▪ Hold open points between 85° and 110° in approximately 3° increments ▪ SEL arm and track locate hold open at 110°, 120° and 130°
SE, SEL electrical options	▪ These track assemblies require a single power circuit for the holding solenoid ▪ SE or SEL holding solenoid is either 24V or 120V input, please specify ▪ An optional 4040SE-3210 or 8310-824 transformer reduces 120V AC line voltage to 24V AC ▪ Circuitry accepts either AC or DC input
Options	▪ Long (SEL) Track and Arm ▪ 24V or 120V input, please specify

SE wiring diagram



- For interior smoke barrier and labeled fire doors
- Functions as full rack and pinion door closer when hold open is not engaged or current is interrupted
- Interfaces with fire alarm system

Accessories

Cylinder

3130SE-3071
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- Standard

Arms

3130SE-3077T
Standard Arm (STDTRKARM)
- Handed
- Adjustable to select hold open point
- Standard

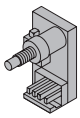
3130SEL-3077T
Long Arm (LONG)
- Handed
- Provides hold open point from 110° to 130°, determined by track templating
- Used with SEL TRACK 3130SEL-3038 only
- Option

Tracks

3130SE-3038
Standard Track (STDTRK)
- Non-handed
- Circuitry accepts either AC or DC input
- 24V holding solenoid (24) or 120V holding solenoid (120), please specify
- Standard

3130SEL-3038
Long Track (LONG)
- Non-handed
- Used with Long Arm, 3130SEL-3077T, only
- Provides hold open point from 110° to 130°, determined by templating. Circuitry accepts either AC or DC input
- 24V holding solenoid (24) or 120V holding solenoid (120), please specify
- Optional

Switch

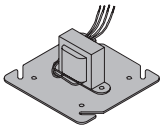


3130SE-3436
Test Switch

Installation accessories

3130SE-81
Conduit Quick-Connector
- Two piece connector for use with ½" conduit

3130SE-3034SE
Track Roller and Track Slider
- Quiet, low friction roller assembly
- Shoulder dimension "X" = ⅛" (3 mm)
- Alloy metal slider for use in SE Series tracks only



4040SE-3210
Transformer
- Reduces line voltage from 120V to 24V AC
- Mounted on plate for 4" (102 mm) x 4" x 2 ⅛" (54 mm) junction box (by others)

Ordering information

How-to-order 3130SE Series closers

1. Select cylinder size
- ☐ 3133SE
- ☐ 3134SE

2. Select hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select voltage
- ☐ 24V AC/DC
- ☐ 120V AC/DC

4. Select finish
- ☐ Standard powder coat _____ Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696) paint.

Closer will be shipped with:
- Standard arm
- Track roller and slider
- Standard track
- Wood and machine screws

(unless options listed below are selected)

Closer options

Arm
- ☐ Long Arm (LONG)*

* Use with SEL track only

Finish
- ☐ Custom Powder Coat (RAL) _____
- ☐ Plated finish _____

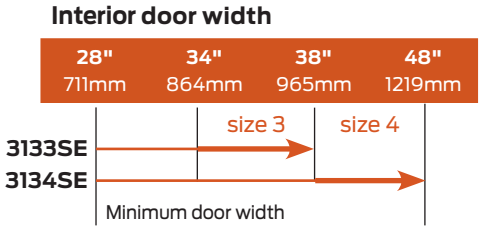
Installation accessories
- ☐ Transformer, 4040SE-3210

Screw pack
- ☐ Torx Machine Screws (TORX)

Special template
- ☐ ST- _____

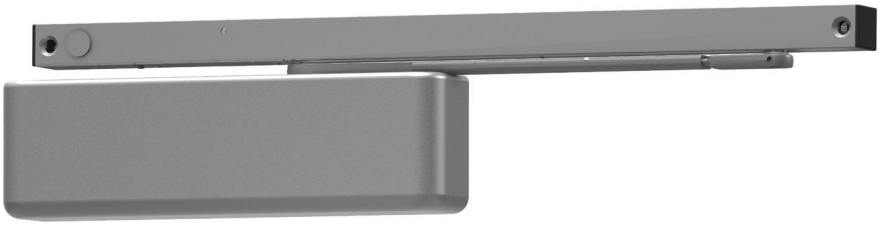
Table of sizes

- Select closer based on width of door
- Sized 3130SE Series cylinders available in size 3 or 4
- Closing power of all 3130SE Series closers is not adjustable



→ Indicates recommended range of door width for closer size.
Note: For SE, minimum door width 28" (711mm) For SEL, minimum door width 32" (813mm)

4040SE Series



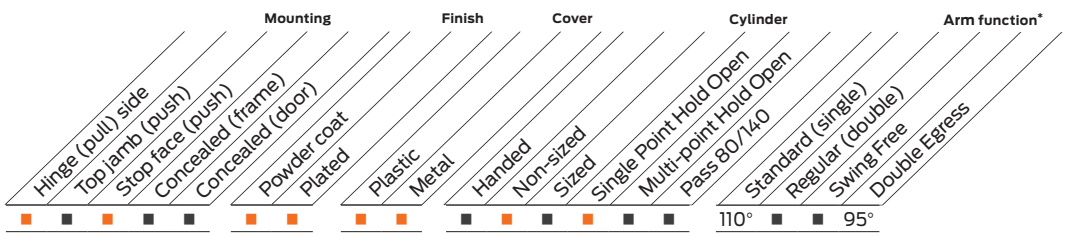
The 4040SE SENTRONIC® is a heavy duty, non-handed, nonsized closer/holder designed to provide single point hold open for fire and smoke barrier doors. Single lever (track) arm closer is specifically designed for interior doors.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 hour salt spray, meets BAA - Buy American Act, NFPA 101
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 3/4" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Size	Adjustable spring size, up to 4
Warranty	2 years
Cover	▪ Plastic, standard ▪ Metal, optional

Fasteners	Wood and Machine Screws (WMS)
Mounting	Hinge (pull side), stop face (push side)
Arms	Standard Arm and SE track, standard Double Egress Arm and SEL track, optional
Finishes/colors/ powder coat	▪ 689 Aluminum paint ▪ 690 Statuary Bronze paint ▪ 691 Light Bronze paint ▪ 693 Black paint ▪ 695 Dark Bronze paint ▪ 696 Brass paint ▪ Custom colors optional ▪ Optional SRI primer - powder coat only
Wiring	Concealed or surface, interfaces with fire alarm systems

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

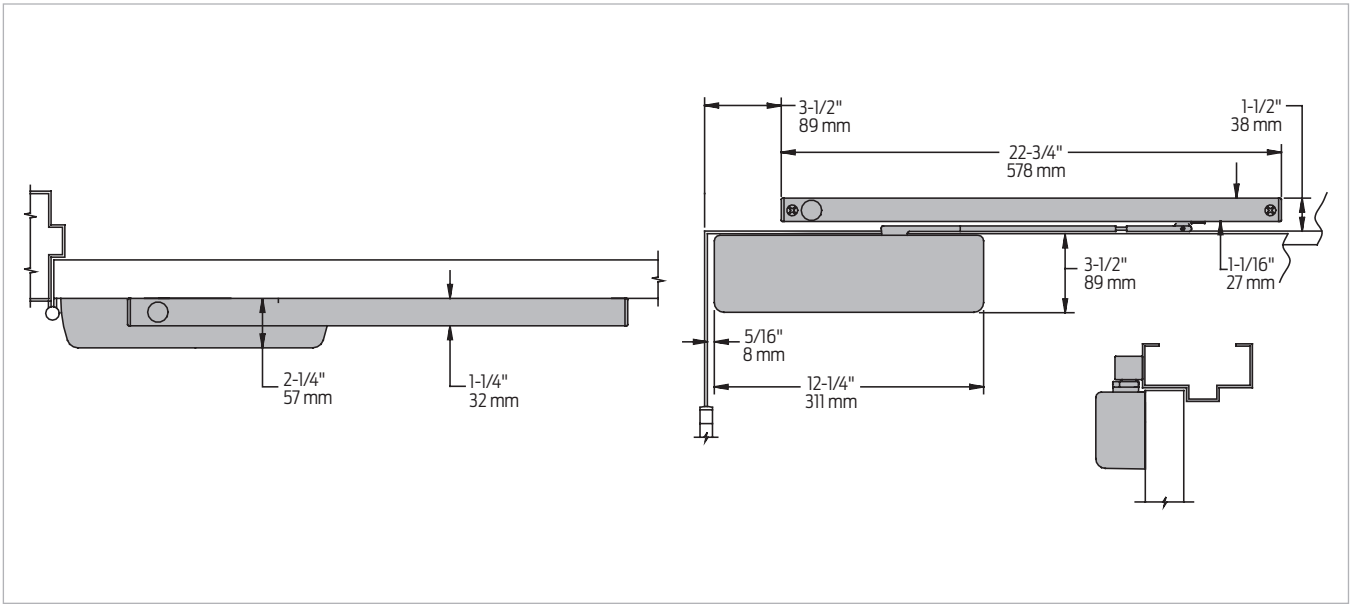


▪ Available
■ Not available

* Maximum opening/hold open point with standard template.

Mounting details

Hinge (pull side) mounting

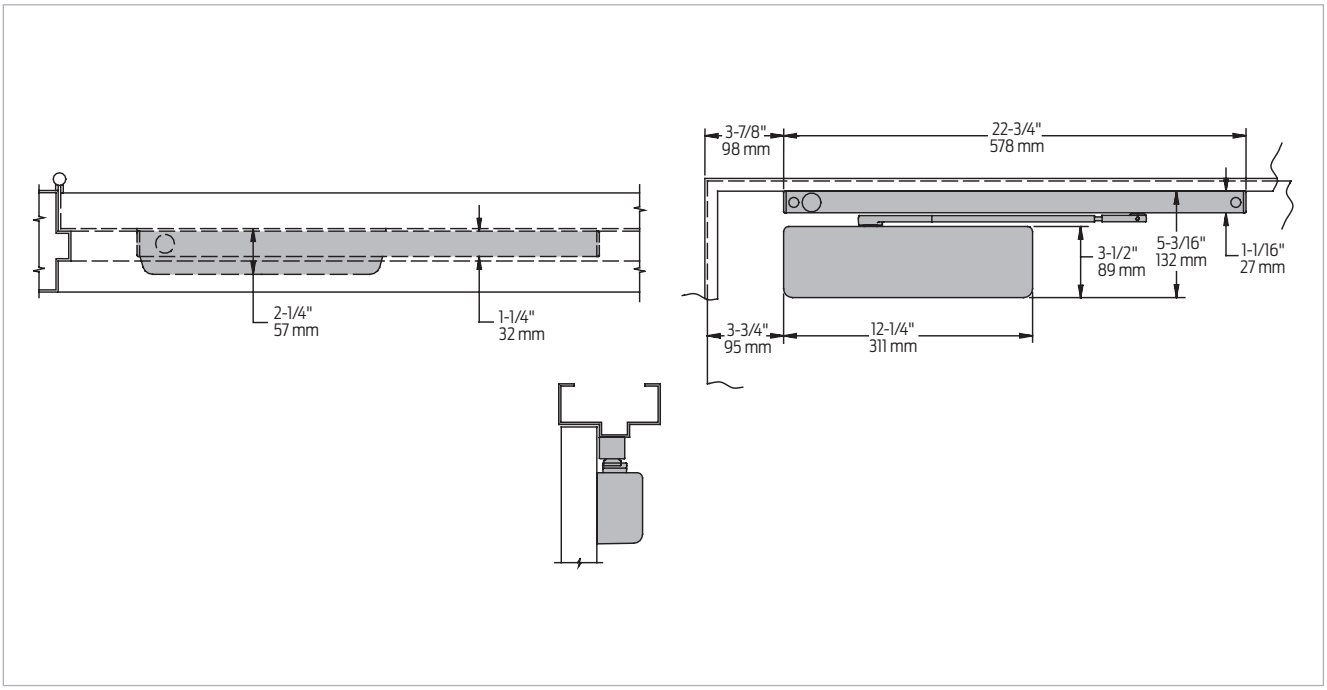


Butt hinges	Should not exceed 5" (127 mm) in width
Swing clear hinges	Consult factory
Auxiliary stop	Recommended at hold open point
Reveal	▪ Should not exceed 1/8" (3 mm) for Standard Arm ▪ Should not exceed 2 11/16" (68 mm) for Double Egress Arm
Top rail	▪ Minimum 3 1/2" (89 mm) ▪ Installation with plate, 4040SE-18 requires special template and 1 3/4" (44 mm) minimum top rail
Head frame	Requires 2" (51 mm) minimum
Flush ceiling	2" (51 mm) head frame does not require special templating
Door width	▪ 2' 4" (711 mm) minimum for single door with SE ▪ 4' 8" (1422 mm) minimum for paired doors with SE
Clearance	2 3/8" (60 mm) behind door required for 90° installation
Maximum opening	▪ Templating allows 110° ▪ Hold open points between 85° and 110° in approximately 3° increments ▪ Pull side mounting on a Double Egress frame requires a handed Double Egress Arm ▪ Maximum Hold Open to 95° ▪ 2 11/16" (67 mm) maximum reveal on pull side ▪ SEL track provides hold open points between 90° and 120°, in approximately 3° increments
SE, SEL electrical options	▪ These track assemblies require a single power circuit for the holding solenoid ▪ SE or SEL holding solenoid is either 24V or 120V input, please specify ▪ An optional 4040SE-3210 or 8310-824 transformer reduces 120V AC line voltage to 24V AC ▪ Circuitry accepts either AC or DC input
Options	▪ Long Track (SEL) ▪ Handed Double Egress Arm for reveal under 2 11/16" (67 mm)
SE wiring diagram	See page 13 for typical wiring and electrical diagram

Notes:
- Information applies to 4040 SE unless otherwise specified
- Hold open force is adjustable
- Momentary on/off switch board assembly for testing door release also provides over-voltage protection (field replaceable)
- Functions as a full rack and pinion closer when hold open is not engaged or current is interrupted

Mounting details

Stop face (push side) mounting

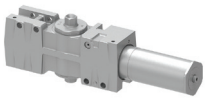


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point
Top rail	▪ Minimum 5 3/4" (146 mm) ▪ Installation with plate, 4040SE-18PA requires special template and 2" (51 mm) minimum top rail
Stop width	1 1/4" (32 mm) minimum
Door width	▪ 2'4" (711 mm) minimum for single door with SE ▪ 4'8" (1422 mm) minimum for paired doors with SE
Maximum opening	▪ Templating allows 110° ▪ Hold open points between 85° and 110° in approximately 3° increments ▪ SEL track provides hold open points between 90° and 120°, in approximately 3° increments
SE, SEL electrical options	▪ These track assemblies require a single power circuit for the holding solenoid ▪ SE or SEL holding solenoid is either 24V or 120V input, please specify ▪ An optional 4040SE-3210 or 8310-824 transformer reduces 120V AC line voltage to 24V AC ▪ Circuitry accepts either AC or DC input
Options	▪ Long Track (SEL)
SE wiring diagram	See page 13 for typical wiring and electrical diagram

Notes:
- Information applies to 4040 SE closers unless otherwise specified
- Momentary on/off switch board assembly for testing door release also provides over-voltage protection (field replaceable)
- Functions as a full rack and pinion closer when hold open is not engaged or current is interrupted

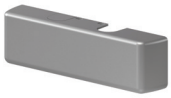
Accessories

Cylinders

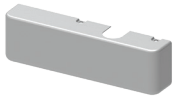


4040SE-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- Cast iron
- Standard

Covers



4040SE-72
Plastic Cover (PC)
- Non-handed
- Clip-on
- Standard



4040SE-72MC
Metal Cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4040SE-3077T
Standard Arm (STDTRKARM)
- Non-handed
- Adjustable to select hold open point

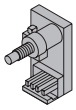
4040SE-3077DE
Double Egress Arm (DE)
- Handed
- For pull side installations on double egress doors and frames
- Not required for push side mounting on double egress frames
- Optional

Tracks

4040SE-3038
Standard Track (STDTRK)
- Non-handed
- For SE closers. Mounts on either head frame or stop
- 24V or 120V AC/DC input for holding solenoid, please specify
- Includes test switch assembly with fuse
- Standard

4040SEL-3038
Long Track (LONG)
- Non-handed
- Mounts on either head frame or stop
- 24V or 120V AC/DC input
- standard for holding solenoid, please specify
- Includes test switch assembly with fuse
- Optional

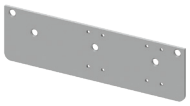
Switch



4040SE-3436
Test Switch
- Non-handed
- Standard

Accessories

Installation accessories

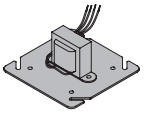


4040SE-18
Plate
- Required where top rail is less than 3 1/2" (89 mm)
- Requires minimum 2" (51 mm) top rail
- Installations require a special template

4040SE-18PA
Plate
- Required where top rail is less than 5 3/4" (146 mm)
- Requires minimum 2" (51 mm) top rail
- Installations require a special template

4040SE-81
Conduit Quick-Connector
- Two piece connector for use with 1/2" conduit

4040SE-3034SE
Track Roller and Track Slider
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3 mm)
- Alloy metal slider for use in SE series tracks only



4040SE-3210
Transformer
- Reduces line voltage from 120V to 24V AC
- Mounted on cover for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

Ordering information

How-to-order 4040SE Series closers

1. Select cylinder size
- ☐ SE
- ☐ SEL

2. Select voltage
- ☐ 24V AC/DC
- ☐ 120V AC/DC

3. Select finish
- ☐ Standard powder coat _____ Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696) paint

Closer will be shipped with:
- Standard cylinder
- Standard clip-on cover
- Standard arm
- Standard track
- Wood and machine screws

(unless options listed below are selected)

Closer options

Cover
- ☐ Metal Cover (MC) (please specify right or left hand)

Finish
- ☐ Custom Powder Coat (RAL) (handed metal cover required
- ☐ Plated Finish, US _____ (handed metal cover required)

Arm
- ☐ Double Egress Arm (DE) (please specify right or left hand)

Screw pack
- ☐ Through Bolt*, Wood and Machine Screws (TBWMS)
- ☐ Torx Machine Screws (TORX)
- ☐ Through Bolt* and Torx Machine Screws (TBTRX)

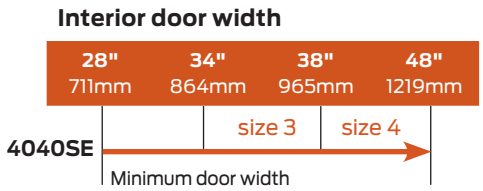
*Specify door thickness if other than 1 ¾".

Installation accessories
- ☐ Plate, 4040SE-18
- ☐ Plate, 4040SE-18PA
- ☐ Transformer, 4040SE-3210

Special template
- ☐ ST- _____

Table of sizes

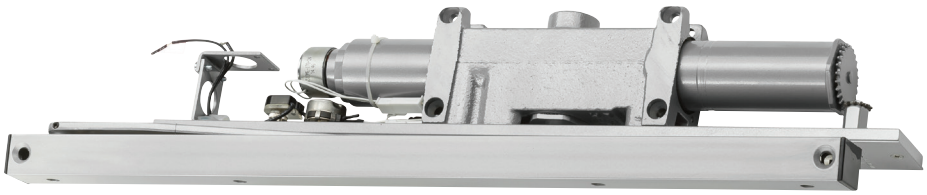
- 4040SE series cylinders accommodate interior doors up to 48" (1219 mm) widen
- Closing power of 4040SE Series closers is adjustable through a range of sizes up to size 4



→ Indicates recommended range of door width for closer size.

Notes: For SE on paired door, minimum width 60˝ (1524 mm)
For SE, minimum door width 28˝ (711 mm)
For SEL, minimum door width 30˝ (762 mm)
Details are listed on the MOUNTING DETAILS pages.

2310ME Series



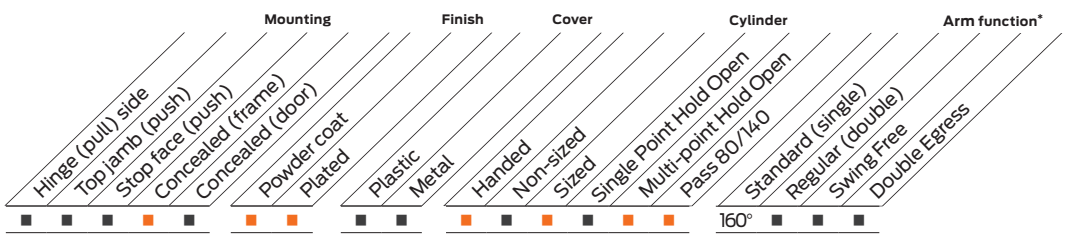
The 2310ME SENTRONIC® is a concealed heavy duty, electrically controlled closer/holder designed to provide infinitely adjustable hold open for fire and smoke barrier doors. Door is held open until current interruption releases mechanism and the door closes.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act, NFPA 101
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized, 4 only
Warranty	2 years

Fasteners	Wood and Machine Screws (WMS)
Mounting	Concealed (in frame)
Arms	Standard handed arm and non-handed track (two piece metal finish plate)
Finishes/ colors/ powder coat	▪ 689 Aluminum paint ▪ 690 Statuary Bronze paint ▪ 691 Light Bronze paint ▪ 693 Black paint ▪ 695 Dark Bronze paint ▪ 696 Brass paint ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes
Wiring	▪ Concealed or exposed ▪ Built in on/off switch controls hold open function ▪ Interfaces with fire alarm system

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

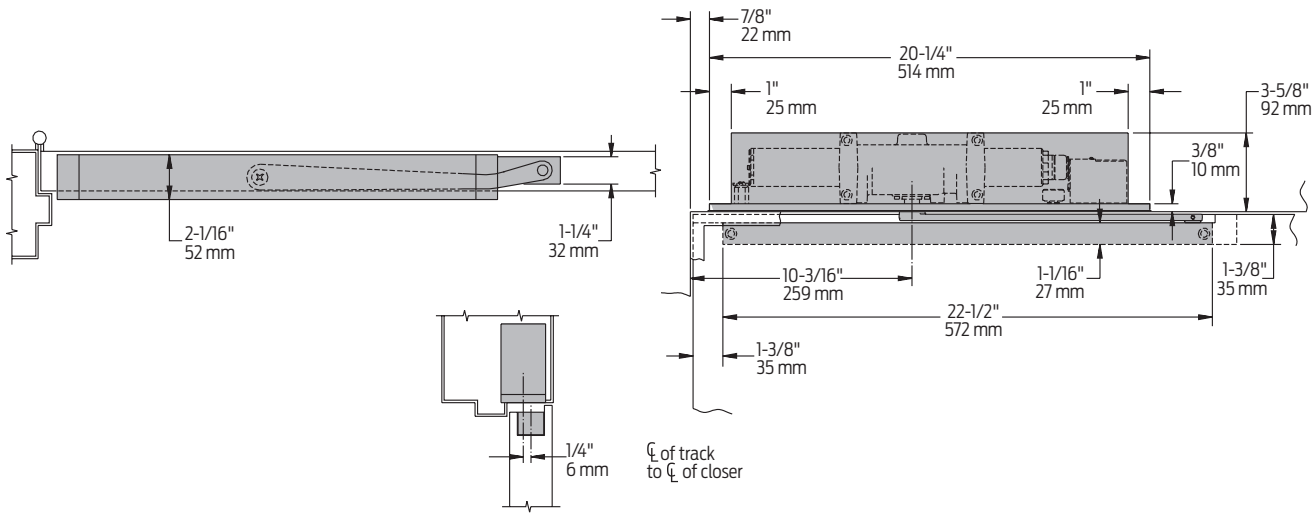


■ Available
■ Not available

* Maximum opening/hold open point with standard template.

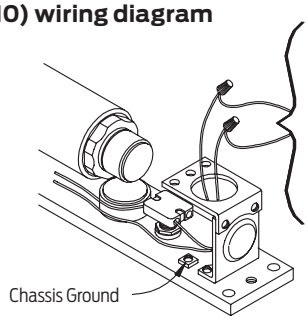
Mounting details

Concealed mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Top rail	▪ 1 3/4" (35 mm) mortise required ▪ 5/16" (8 mm) cutout required at top of door, stop face only
Door thickness	1 3/4" (44 mm) minimum
Door width	2' 4" (711 mm) minimum
Hollow metal frame	▪ Requires minimum 4" (102 mm) x 4" frame ▪ Consult factory or template for preparation details
Bypass	▪ CYLB80 or CYLB140 - eliminates hold open function up to a specified point of door swing ▪ CYLB80 cylinder from 0° to 80° ▪ CYLB140 cylinder from 0° to 140°
Maximum opening	Templating allows 180° with hold open points up to 160°
Options	▪ Hold open bypass ▪ 24V or 120V input, please specify

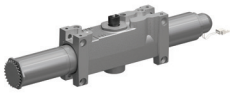
ME (2310) wiring diagram



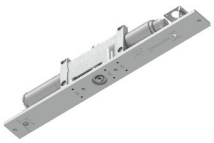
- For interior smoke barrier and labeled fire doors
- Functions as full rack and pinion door closer when hold open is not engaged or current is interrupted

Accessories

Cylinders



2310ME-3971
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron



2310ME-3071
Cast iron cylinder assembly (CYL)
- Handed
- "On/Off" switch assembly controls the hold open function.
- Circuitry accepts either AC or DC input. Specify 24V or 120V
- Standard

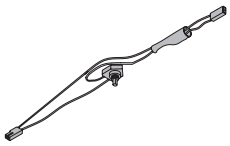
Arm

2310ME-3077T
Standard Arm (STDTRKARM)
- Handed

Track

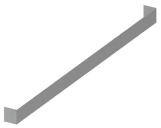
2310ME-3038
Standard Track (STDTRK)
- Non-handed
- Standard

Switch

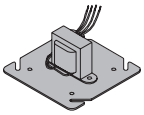


2310ME-3351
Switch
- "On/Off" switch assembly provides continuous hold open function
- 24V or 120V, please specify

Installation accessories



2310ME-420
Fire Shield
- 22 gauge steel liner mounts in the track mortise of the door's top rail for 20 minute labeled wood doors with hollow metal frames



2310ME-3210
Transformer
- Reduces line voltage from 120V to 24V AC
- Mounted on plate for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

2310ME-3034
Track Roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2 mm)

Ordering information

How-to-order 2310ME Series closers

1. Select hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

2. Select voltage
- ☐ 24V AC/DC
- ☐ 120V AC/DC

3. Select finish
- ☐ Standard powder coat _____ Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696) paint

Closer will be shipped with:
- Finish plates
- Standard arm
- Standard track
- Track roller
- Wood and machine screws

(unless options listed below are selected)

Closer options

Cylinder function
- ☐ Bypass hold open up to 80° (CYLB80)
- ☐ Bypass hold open up to 140° (CYLB140)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____

Screw pack
- ☐ Torx Machine Screws (TORX)

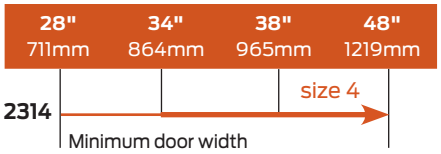
Installation accessories
- ☐ Fire shield, 2310ME-420
- ☐ Transformer, 2310ME-3210

Special template
- ☐ ST- _____

Table of sizes

- Closing power of 2314ME Series closers may be increased 15%

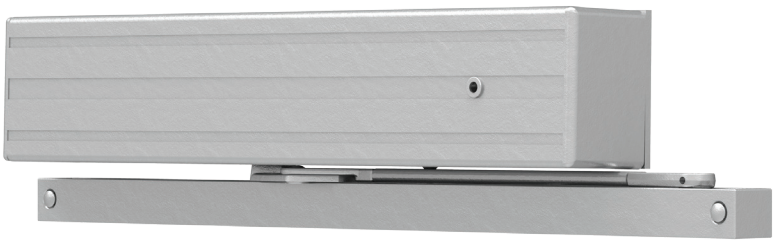
Interior door width



→ Indicates recommended range of door width for closer size.

Notes:
- For SE, minimum door width 28" (711mm)
- For SEL, minimum door width 32" (813mm)

4310ME Series



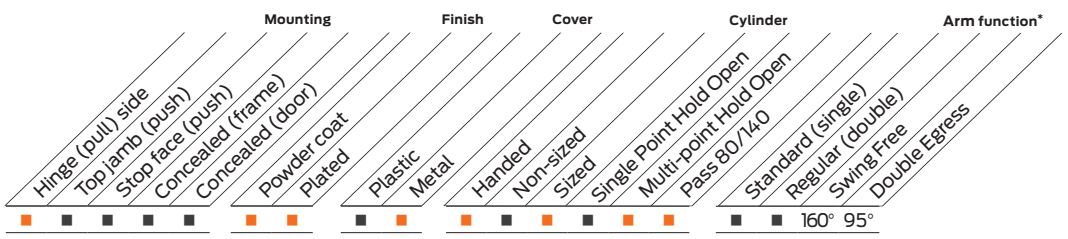
The 4310ME SENTRONIC® is a heavy duty, electrically controlled closer/holder designed to provide infinitely adjustable hold open for fire and smoke barrier doors. Door is held open until current interruption releases mechanism and the door closes. Single lever (track) arm closer is specifically designed for interior doors. Choice of finishes, cylinder functions, and installation accessories meet virtually all life safety requirements. An ME provides only the closer / holder function.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act, NFPA 101
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized, 4 only
Warranty	2 years
Wiring	▪ Concealed or exposed electrical connectors ▪ Built in "On/Off" switch controls hold open function ▪ Interfaces with fire alarm systems

Cover	Metal, Standard
Fasteners	Wood and Machine Screws (WMS)
Mounting	Hinge (Pull Side)
Arms	▪ Swing Free Arm, standard ▪ Double Egress, optional
Finishes/ colors/ powder coat	▪ 689 Aluminum paint ▪ 690 Statuary Bronze paint ▪ 691 Light Bronze paint ▪ 693 Black paint ▪ 695 Dark Bronze paint ▪ 696 Brass paint ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

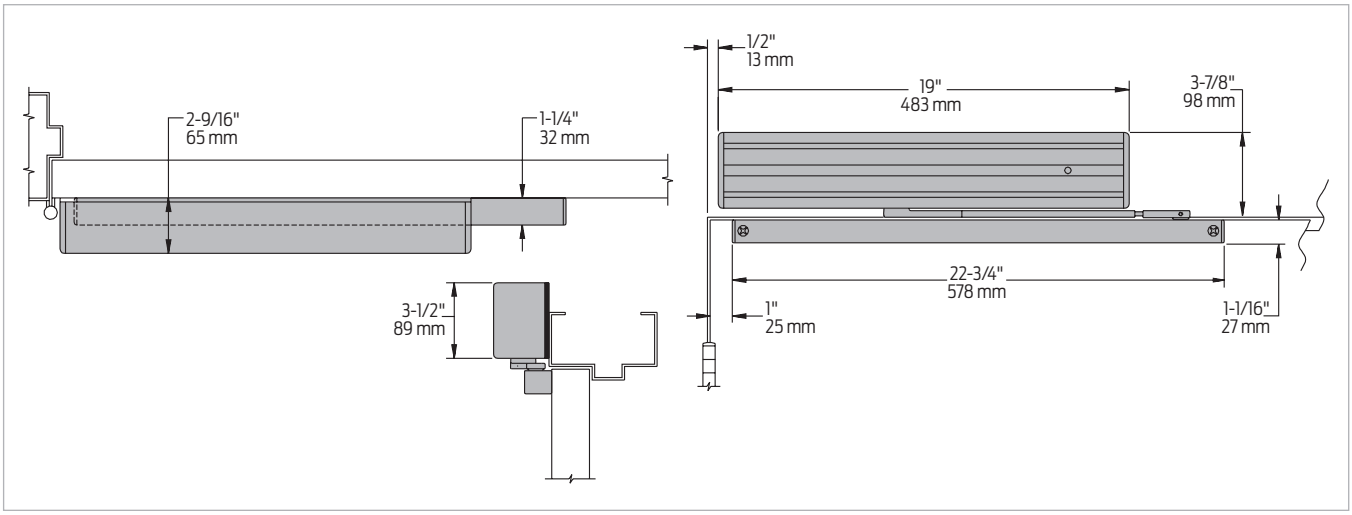


■ Available
■ Not available

* Maximum opening/hold open point with standard template.

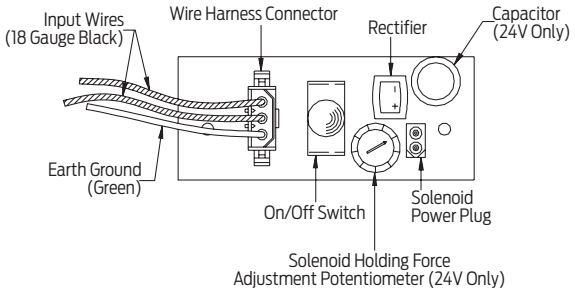
Mounting details

Hinge (pull side) mounting



Butt hinges	Should not exceed 4 1/2" (114 mm) in width
Top Rail	1 1/16" (27 mm) minimum
Reveal	▪ Should not exceed 1/8" (3 mm) for Swing Free Arm ▪ Should not exceed 2 11/16" (68 mm) for Double Egress Arm
Head frame	Requires 2" (51 mm) minimum
Clearance	1 1/4" (32 mm) behind door required for installation
Bypass	▪ CYLB80 or CYLB140 - eliminates hold open function up to a specified point of the doors swing ▪ CYLB80 cylinder from 0° to 80° ▪ CYLB140 cylinder from 0° to 140°
Maximum opening	▪ Templating allows 180° with hold open points up to 160° ▪ Optional Double Egress Arm limited to 95° ▪ Please note that many track style door closers are capable of allowing 180° of door swing ▪ Be aware that the majority of track style closers are at their weakest closing force in the 180° – 130° range ▪ Consult factory for applications where exterior or large/heavy door must swing 180°
ME electrical options	▪ These assemblies have a single electrical circuit with a choice of voltages ▪ A separate transformer, 4040SE-3210, can be used to reduce line voltage to 24V AC ▪ Circuitry accepts either AC or DC input ▪ Please specify 24V or 120V
Options	▪ Hold open bypass ▪ 24V or 120V volt input, please specify

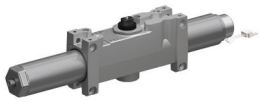
ME (4310, 4410) wiring diagram



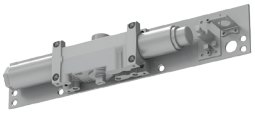
Notes:
- Information applies to ME closer
- Functions as full rack and pinion door closer when hold open is not engaged or when current is interrupted with Swing Free Arm engaged
- Swing Free Arm allows door to be moved without door closer resistance

Accessories

Cylinder

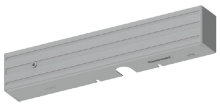


4310ME-3971
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- Specify 24V or 120V
- Standard



4310ME-3071
Cast iron cylinder assembly (CYL)
- Handed
- "On/Off" switch assembly controls hold open function
- Circuitry accepts either AC or DC input
- 24V or 120V, please specify
- Standard

Cover



4310ME-72MC
Metal Cover (MC)
- Handed
- Standard

Arms

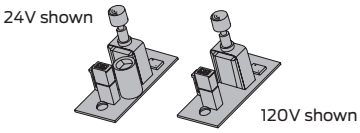
4310ME-3077SF
Swing Free Arm (SF)
- Handed
- After door is placed in hold open, secondary pivot point allows up to 160º swing without door closer resistance

4310ME-3077DE
Double Egress Arm (DE)
- Handed
- For double egress doors and frames
- 2 11/16" (68 mm) maximum reveal
- Optional

Track

4310ME-3038
Standard Track (STDTRK)
- Non-handed
- Standard

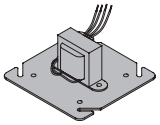
Switch



4310ME-3351
Switch Assembly
- Provides continuous hold open function
- 24V or 120V, please specify

Installation accessories

4310ME-3034
Track Roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3mm)



4310-3210
Transformer
- Reduces line voltage from 120V to 24V AC
- Mounted on cover for 4" (102 mm) x 4" x 2 1/8" (54mm) junction box (by others)

4310ME-3354
ME Wiring Harness
- Three wire harness with 6" (152 mm) leads for field wiring connections

Ordering information

How-to-order 4310ME Series closers

1. Select hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

2. Select voltage
- ☐ 24V AC/DC
- ☐ 120V AC/DC

3. Select finish
- ☐ Standard powder coat _____ Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696) paint.

Closer will be shipped with:
- Standard cover
- Swing Free Arm
- Standard track
- Track roller
- Wood and machine screws

(unless options listed below are selected)

Closer options

Cylinder function
- ☐ Bypass hold open up to 80° (CYLB80)
- ☐ Bypass hold open up to 140° (CYLB140)

Arm
- ☐ Double Egress Arm (DE)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____

Screw pack
- ☐ Through Bolt[1], Wood and Machine Screws (TBWMS)
- ☐ Torx Machine Screws (TORX)
- ☐ Through Bolt[1] and Torx Machine Screws (TBTRX)

*Specify door thickness if other than 1 3/4".

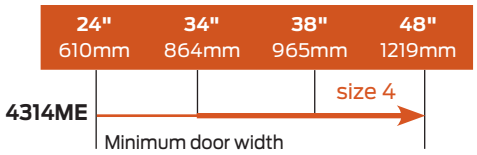
Installation accessories
- ☐ Transformer, 4310ME-3210

Special template
- ☐ ST- _____

Table of sizes

- Closing power of 4314ME Series closers may be increased 15%

Interior door width



→ Indicates recommended range of door width for closer size.

4410ME Series

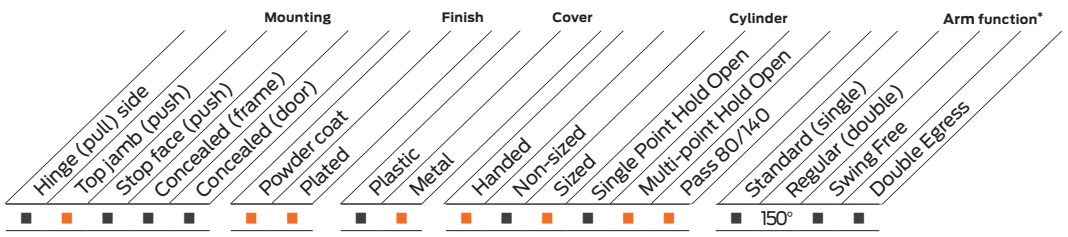
The 4410ME SENTRONIC® is a heavy duty, electrically controlled closer/holder designed to provide infinitely adjustable hold open for fire and smoke barrier doors. Double lever arm closer is specifically designed for interior doors.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act, NFPA 101
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized, 4 only
Warranty	2 years

Cover	Metal, standard
Fasteners	Wood and Machine Screws (WMS)
Mounting	Top jamb (push side)
Arms	Regular Arm
Finishes/colors/ powder coat	▪ 689 Aluminum paint ▪ 690 Statuary Bronze paint ▪ 691 Light Bronze paint ▪ 693 Black paint ▪ 695 Dark Bronze paint ▪ 696 Brass paint ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes
Wiring	▪ Concealed or surface wiring ▪ Interfaces with fire alarm system

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

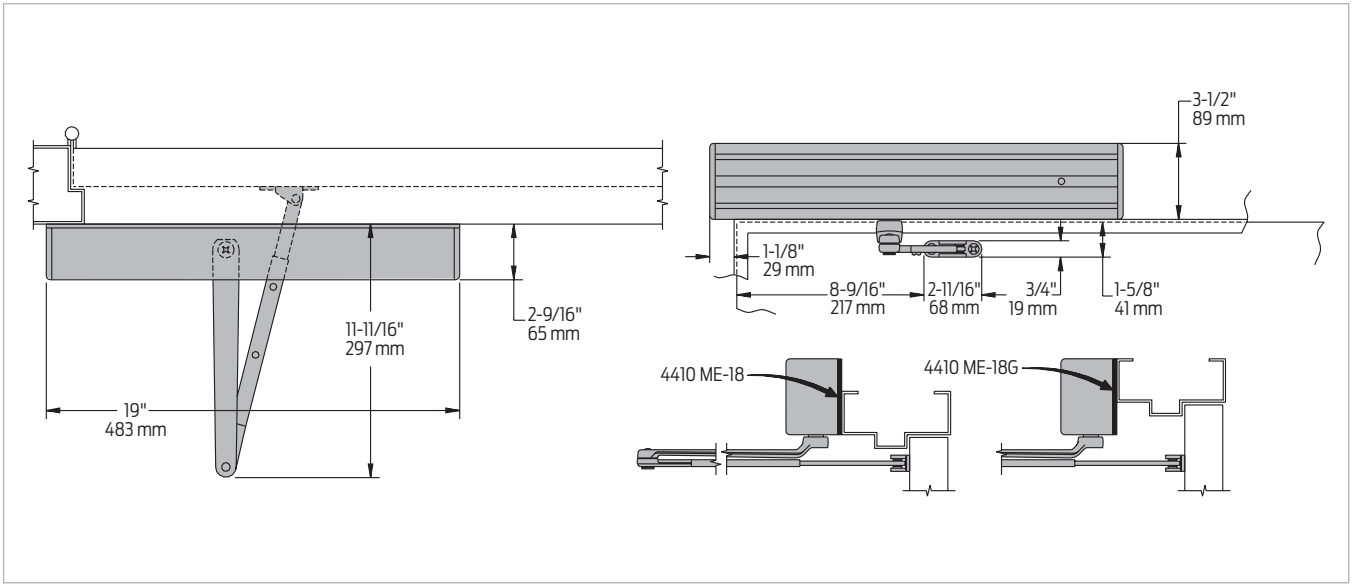


■ Available
■ Not available

* Maximum opening/hold open point with standard template.

Mounting details

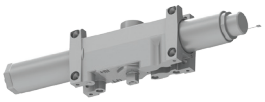
Top jamb (push side) mounting



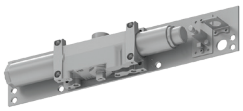
Butt hinges	Should not exceed 4 1/2" (114 mm) in width
Top rail	▪ 1 3/4" (44 mm) minimum ▪ 3 3/4" (95mm) minimum with flush ceiling
Reveal	▪ 3 7/8" (98 mm) maximum Regular or Long Arm ▪ For reveals greater than 3 7/8" consult factory
Head frame	▪ Requires 1 1/2" (38 mm) minimum ▪ 2" (51 mm) minimum with flush ceiling
Flush ceiling	Requires plate, 4410ME-18G substituted for standard mounting plate
Bypass	▪ (Suffix "CYLB80" or "CYLB140") eliminates hold open function up to a specified point of door swing ▪ CYLB80 cylinder from 0° to 80° ▪ CYLB140 cylinder from 0° to 140°
Maximum opening	▪ Templating allows 160°, with hold open points up to 150° ▪ Optional Long Arm allows 180°, hold open points up to 170°
ME electrical options	▪ These assemblies have a single electrical circuit with a choice of voltages ▪ A separate transformer, 4040SE-3210, can be used to reduce line voltage to 24V AC ▪ Circuitry accepts either AC or DC input ▪ Please specify 24V or 120V
Options	▪ Hold open bypass ▪ Optional Long Arm allows 180° with hold open points up to 170° ▪ Optional –18G plate accommodates flush ceiling conditions ▪ 24V or 120V volt input, please specify
ME wiring diagram	See page 27 for typical wiring and electrical diagram

Accessories

Cylinders

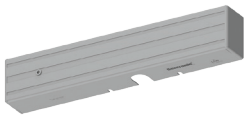


4414ME-3971
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- Specify 24V or 120V
- Standard



4414ME-3071
Cast iron cylinder assembly (CYL)
- Handed
- "On/Off" switch assembly controls hold open function
- Circuitry accepts either AC or DC input
- Please specify 24V or 120V
- Standard

Cover



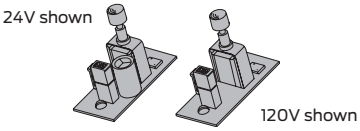
4410ME-72MC
Metal Cover (MC)
- Handed

Arms

4410ME-3077
Regular Arm (REGARM)
- Non-handed
- 3 7/8" (98 mm) maximum reveal

4410ME-3077L
Long Arm (LONG)
- For increasing opening to 180°
- 3 7/8" (98 mm) maximum reveal
- Optional

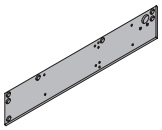
Switch



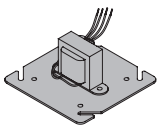
4410ME-3351
ME Switch Assembly
- Provides continuous hold open function
- Available as 24V or 120V, please specify

Installation accessories

4410ME-18
Mounting Plate
- Standard



4410ME-18G
Mounting Plate
- Substituted for standard plate on flush ceiling installations
- Optional



4410ME - 3210
Transformer
- Reduces line voltage from 120V to 24V AC
- Mounted on cover for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

4410ME-3354
ME Wiring Harness
- Three wire harness with 6"
- (152 mm) leads for field wiring connections

Ordering information

How-to-order 4410ME Series closers

1. Select hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

2. Select voltage
- ☐ 24V AC/DC
- ☐ 120V AC/DC

3. Select finish
- ☐ Standard powder coat _____
  Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696) paint.

Closer will be shipped with:
- Standard cover
- Regular arm
- Wood and machine screws

(unless options listed below are selected)

Closer options

Cylinder function
- ☐ Bypass hold open up to 80° (CYLB80)
- ☐ Bypass hold open up to 140°v (CYLB140)

Arm
- ☐ Long Arm (LONG)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____

Screw pack
- ☐ Through Bolt[1], Wood and Machine Screws (TBWMS)
- ☐ Torx Machine Screws (TORX)
- ☐ Through Bolt[1] and Torx Machine Screws (TBTRX)

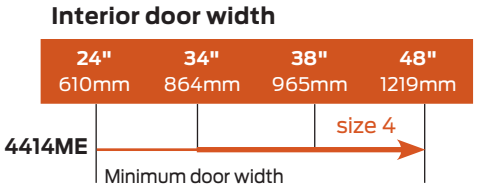
*Specify door thickness if other than 1-3/4"

Installation accessories
- ☐ Plate, 4410ME-18G
  (substituted for standard mounting plate)
- ☐ Transformer, 4410ME-3210

Special template
- ☐ ST- _____

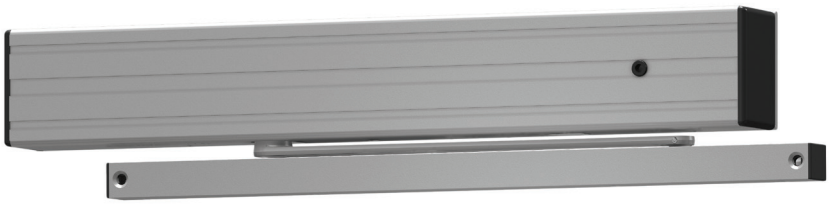
Table of sizes

- Closing power of 4414ME Series closers may be increased 15%



→ Indicates recommended range of door width for closer size.

4310HSA Series



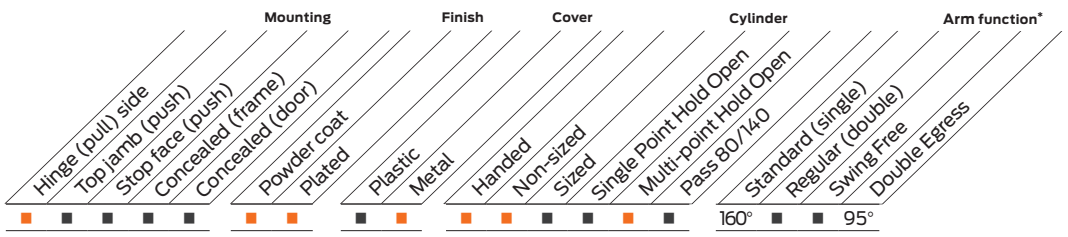
The 4310HSA SENTRONIC® is an electrically controlled closer/holder designed to provide easy passage for groups of pedestrians through high traffic doors. Pedestrians, moving through the doorway, trigger the built-in scanner. When the door is opened to 80º or more, the door is electrically held open to minimize wear and tear on applied door hardware. After the last pedestrian in a group passes through the doorway, the system timer releases the hold open, closing the door.

Features

Certifications	Grade 1 - ANSI A156.15, NFPA 101, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Field adjustable, shipped at size 3
Warranty	2 years
Fasteners	Wood and Machine Screws (WMS)
Mounting	Hinge (pull side), interior doors

Cover	Metal, Standard
Arms	▪ Standard Arm (with track) ▪ Double Egress Arm, optional
Finishes/colors/ powder coat	▪ 689 Aluminum paint ▪ 690 Statuary Bronze paint ▪ 691 Light Bronze paint ▪ 693 Black paint ▪ 695 Dark Bronze paint ▪ 696 Brass paint ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes
Wiring	▪ Concealed or surface wiring ▪ 24V AC/DC input only ▪ 120V requires 4310HSA-3210 transformer ▪ HSA features a scanner activated hold open function, fixed 15 seconds or 30 seconds

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

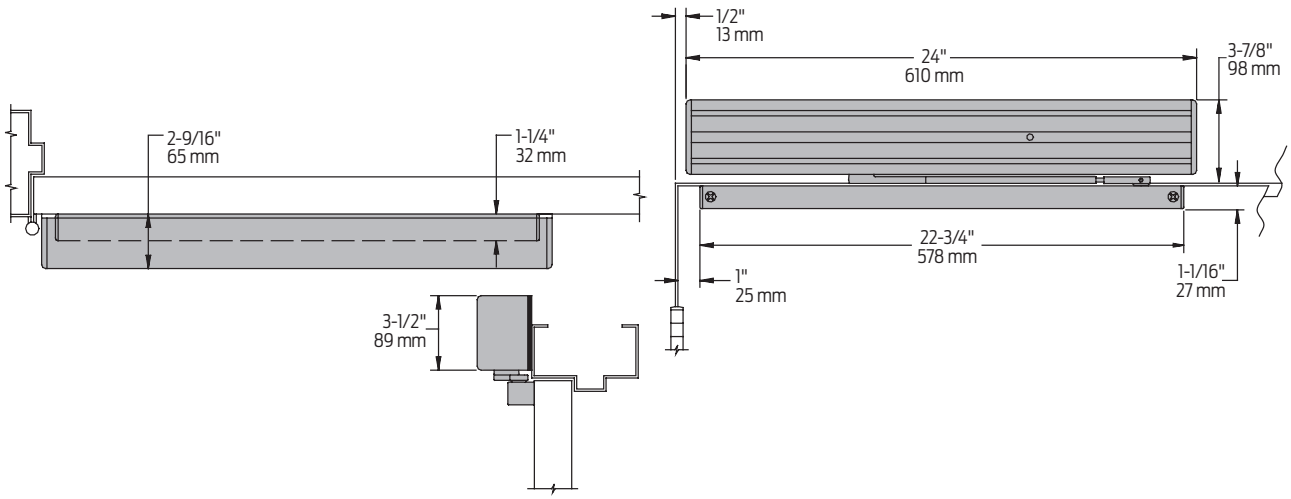


■ Available
■ Not available

* Maximum opening/hold open point with standard template.

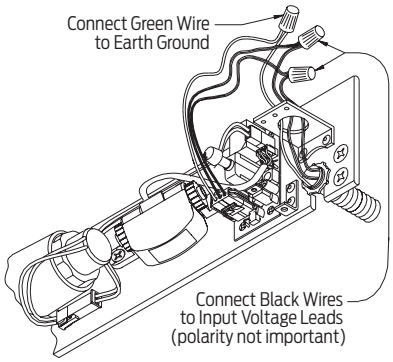
Mounting details

Hinge (pull side) mounting



Butt hinges	Should not exceed 4 1/2" (114 mm) in width
Reveal	▪ Should not exceed 1/8" (3 mm) for Standard Arm ▪ Should not exceed 2 11/16" (68 mm) for Double Egress Arm
Top rail	1 1/16" (27 mm) minimum
Head frame	Requires 2" (51 mm) minimum
Clearance	1 1/4" (32 mm) minimum
Maximum opening	▪ Templating allows 180° ▪ Optional Double Egress Arm limited to 95° ▪ Infinite hold open points from 80° up to 160°
Options	120 volt input requires 4310HSA-3210 transformer to change 120V AC to 24V AC

HSA wiring diagram



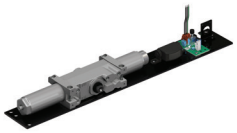
Note: If used on fire door, must be wired into fire alarm system.

Notes:
- Functions as full rack and pinion door closer when current is interrupted or continuous hold open is not engaged
- Built-in "On/Off" switch provides continuous hold open function

Accessories

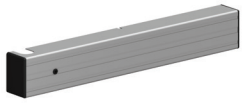
Cylinders

4311HSA-3971
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- 24V AC/DC input only for holding solenoid
- Standard



4311HSA-3071
Cast iron cylinder assembly (CYL)
- Handed
- Includes scanner module and system timer module
- "On/Off" switch assembly provides continuous hold open function
- 24V AC/DC input only for holding solenoid and electronics modules
- Standard

Cover



4310HSA-72MC
Metal Cover (MC)
- Handed
- Standard

Arms

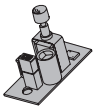
4310HSA-3077T
Standard Arm (STDTRKARM)
- Handed

4310HSA-3077DE
Double Egress Arm (DE)
- Handed
- For double egress doors and frames
- 2 11/16" (67 mm) maximum reveal
- Optional

Track

4310HSA-3038
Track
- Non-handed
- Standard

Switch



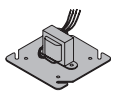
4310HSA-3448
Switch Assembly
- Provides continuous hold open function
- Available in 24V only

Scanner

4310HSA-3428
Scanner Module
- Includes wire harness to connect scanner module to the switch assembly

Installation accessories

4310HSA-3034
Track Roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3 mm)



4310HSA-3210
Transformer
- Reduces line voltage from 120V to 24V AC
- Mounted on plate for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

Ordering information

How-to-order 4310HSA Series closers

1. Select hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

2. Select voltage
- ☐ 24V AC/DC

3. Select finish
- ☐ Standard powder coat _____
  Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696) paint

Closer will be shipped with:
- 24 AC/DC HSA cylinders
- Metal cover
- Standard arm
- Standard track
- Track roller
- Wood and machine screws

(unless options listed below are selected)

Closer options

Arm
- ☐ Double Egress Arm (DE)

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____

Screw packs
- ☐ Through Bolt[1], Wood and Machine Screws (TBWMS)
- ☐ Torx Machine Screws (TORX)
- ☐ Through Bolt* and Torx Machine Screws (TBTRX)

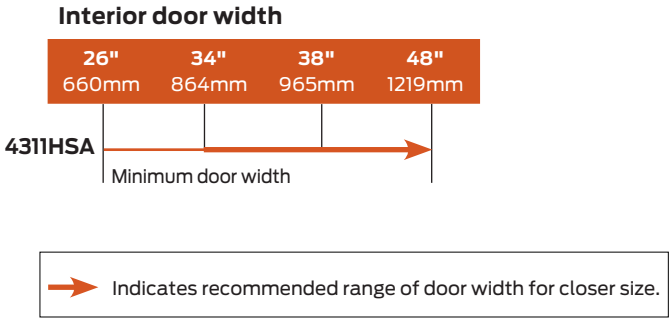
*Specify door thickness if other than 1 3/4".

Installation accessories
- ☐ Transformer, 4310HSA-3210

Special template
- ☐ ST-_____

Table of sizes

- Closing power of 4310HSA Series closers is field adjustable, shipped at size 3



4410HSA Series

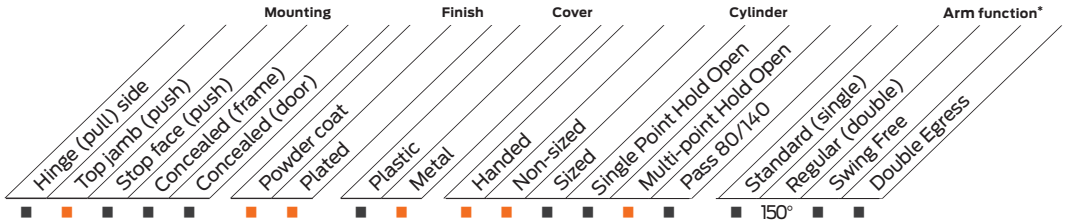
The 4410HSA SENTRONIC® is an electrically controlled closer/holder designed to provide easy passage for groups of pedestrians through high traffic doors. Pedestrians, moving through the doorway, trigger the built-in scanner. Double lever arm closer is specifically designed for push side mounting. Choice of finishes and accessories meet virtually all high traffic installation requirements.

Features

Certifications	Grade 1 - ANSI 156.15, NFPA 101, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Field adjustable, shipped at size 3
Warranty	2 years
Fasteners	Wood and Machine Screws (WMS)
Mounting	Top jamb (push side)
Cover	Metal, Standard

Arms	▪ Regular Arm ▪ Long Arm, optional
Finishes/ colors/ powder coat	▪ 689 Aluminum paint ▪ 690 Statuary Bronze paint ▪ 691 Light Bronze paint ▪ 693 Black paint ▪ 695 Dark Bronze paint ▪ 696 Brass paint ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes
Wiring	▪ Concealed or surface wiring ▪ 24V AC/DC input only ▪ 120V AC input requires 4410HSA-3210 transformer ▪ HSA features a scanner activated hold open function, adjustable 15 or 30 seconds ▪ Built-in "On/Off" switch provides continuous hold open feature

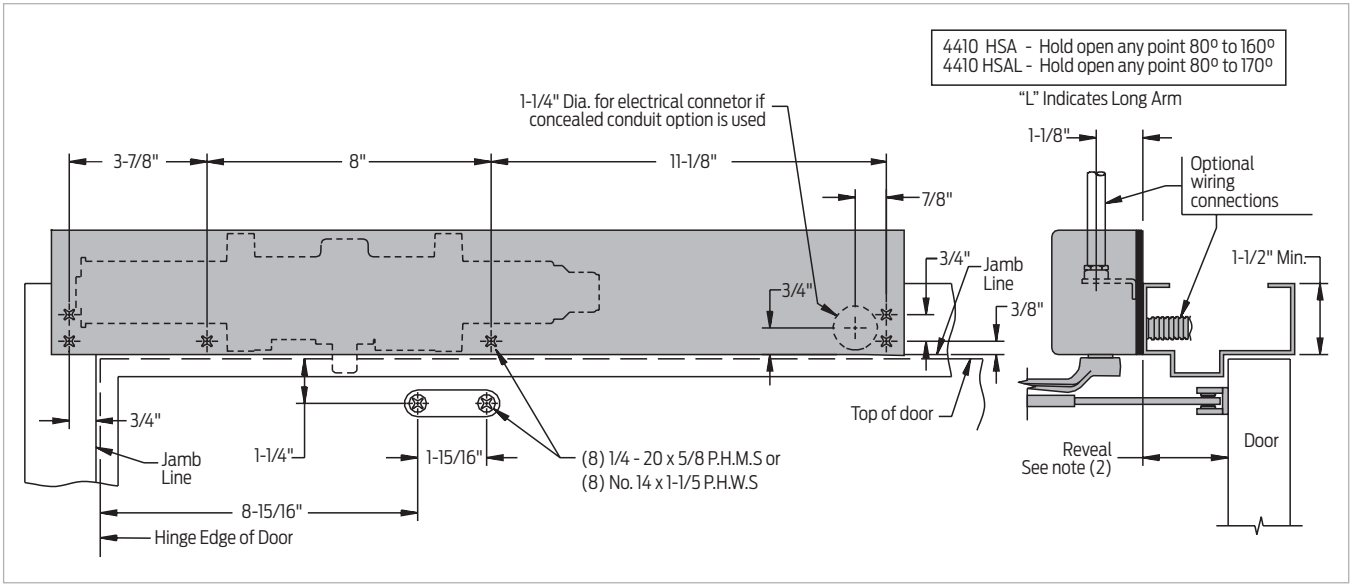
Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.



* Maximum opening/hold open point with standard template.

Mounting details

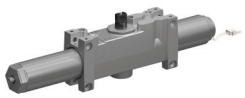
Top jamb (push side) mounting



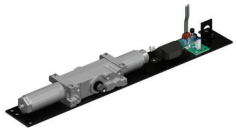
Butt hinges	Should not exceed 4 1/2" (114 mm) in width
Top rail	▪ 1 3/4" (44 mm) minimum ▪ 3 3/4" (95 mm) minimum with flush ceiling
Head frame	▪ Requires 1 1/2" (38mm) minimum ▪ 2" (51 mm) minimum with flush ceiling
Reveal	▪ 3 7/8" (98 mm) maximum for Regular or Long Arm ▪ For reveals greater than 3 7/8" consult factory
Maximum opening	▪ Templating allows 160° ▪ Infinite hold open points from 80° up to 150° ▪ Optional Long Arm allows 180°, hold open points up to 170°
Options	▪ Optional Long Arm allows 180° with hold open points up to 170° ▪ Optional–18G plate accommodates flush ceiling conditions ▪ 120 volt input requires 4410HSA–3210 transformer to change 120V AC to 24V AC
HSA wiring diagram	

Accessories

Cylinders

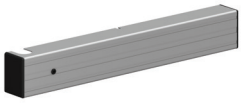


4412HSA-3971
Cast iron cylinder assembly (CYL)
- Handed
- Cast iron
- 24V AC/DC input only for holding solenoid
- Standard



4412HSA-3071
Cast iron cylinder assembly (CYL)
- Handed
- Includes scanner module and system timer module
- "On/Off" switch assembly provides continuous hold open function
- 24V AC/DC input only for holding solenoid and electronics modules
- Standard

Cover



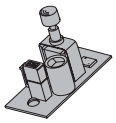
4410HSA-72MC
Metal Cover (MC)
- Handed
- Standard

Arms

4410HSA-3077
Regular Arm (REGARM)
- Non-handed
- 3 7/8" (98 mm) maximum reveal

4410HSA-3077L
Long Arm (LONG)
- For increased opening
- 3 7/8" (98 mm) maximum reveal
- Optional

Switch



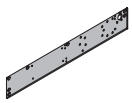
4410HSA-3448
Switch Assembly
- Provides continuous hold open function
- Available in 24V only

Scanner

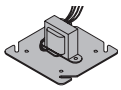
4410HSA-3428
Scanner Module
- Includes wire harness to connect scanner module to the switch assembly

Installation accessories

4410HSA-18
Mounting Plate
- Standard



4410HSA-18G Transformer Mounting Plate
- Substituted on flush ceiling installations
- Optional



4410HSA-3210
Transformer
- Reduces line voltage from 120V to 24V AC
- Mounted on plate for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

Ordering information

How-to-order 4410HSA Series closers

1. Select hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

2. Select voltage
- ☐ 24V AC/DC

3. Select finish
- ☐ Standard powder coat _____ Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696) paint

Closer will be shipped with:
- 24 AC/DC HSA cylinders
- Metal cover
- Regular arm
- Wood and machine screws

(unless options listed below are selected)

Closer options

Arm
- ☐ Long Arm (LONG)

Finishes
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____

Screw pack
- ☐ Through Bolt[1], Wood and Machine Screws (TBWMS)
- ☐ Torx Machine Screws (TORX)
- ☐ Through Bolt* and Torx Machine Screws (TBTRX)

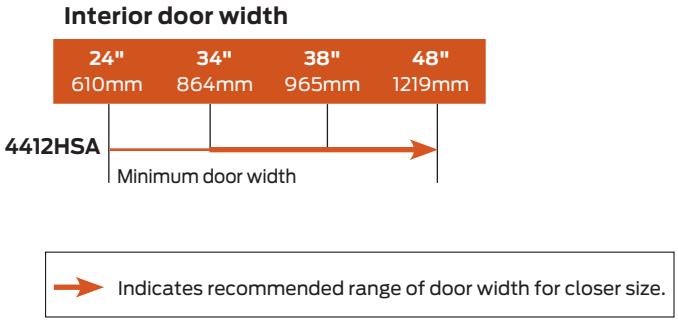
*Specify door thickness if other than 1 3/4".

Installation accessories
- ☐ Plate, 4410HSA-18
- ☐ Plate, 4410HSA-18G (substituted for standard mounting plate)
- ☐ Transformer,4410HSA-3210

Special template
- ☐ ST-_____ (if required)

Table of sizes

- Closing power of 4410HSA Series closers is field adjustable, shipped at size 3



SEH Series

The SEH SENTRONIC® is a holder designed to provide single point hold open for fire and smoke barrier doors that must be used with an opposite side mounted UL listed door closer. The door is held open until current interruption releases the holding mechanism and the door closes. Single lever (track) arm is specifically designed for interior doors.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act, NFPA 101
Handing	Non-handed
Templating	22 3/4" x 1 1/4"
Warranty	2 years
Fasteners	Wood and Machine Screws (WMS)
Mounting	Hinge (pull side)
Arms	▪ Standard, non-handed arm for any 4040SE Series ▪ Standard, non-handed track for SEH ▪ Specify 24V or 120V AC/DC input for holding solenoid ▪ Includes test switch assembly with fuse

Finishes/ colors/ powder coat	▪ 689 Aluminum paint ▪ 690 Statuary Bronze paint ▪ 691 Light Bronze paint ▪ 693 Black paint ▪ 695 Dark Bronze paint ▪ 696 Brass paint ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes
Wiring	▪ Concealed or surface wiring ▪ 24V or 120V, please specify n Interfaces with alarm system, please consult with factory for full details

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting					Finish		Cover		Cylinder**			Arm function*		
Hinge (pull) side	Top jamb (push)	Stop face (push)	Concealed (frame)	Concealed (door)	Powder coat	Plated	Plastic	Metal	Handed	Non-sized	Sized	Single Point Hold Open	Multi-point Hold Open	Pass 80/140	Standard (single)	Regular (double)	Swing Free	Double Egress
■	■	■	■	■	■	■	■	■	■	■	■	■	■	100°	■	■	■	

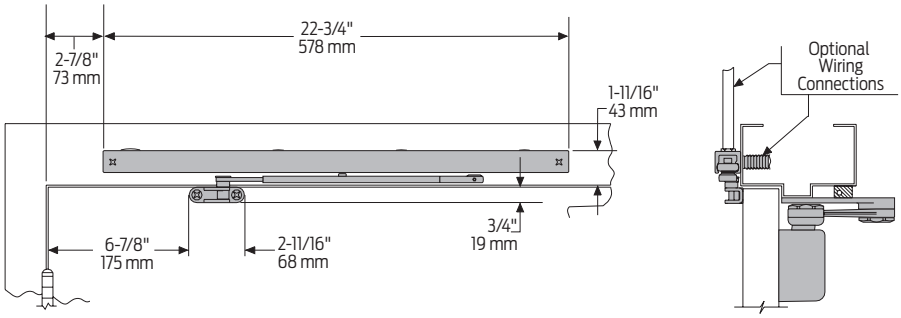
■ Available
■ Not available

* Maximum opening/hold open point with standard template.
** Cylinder sold separately.

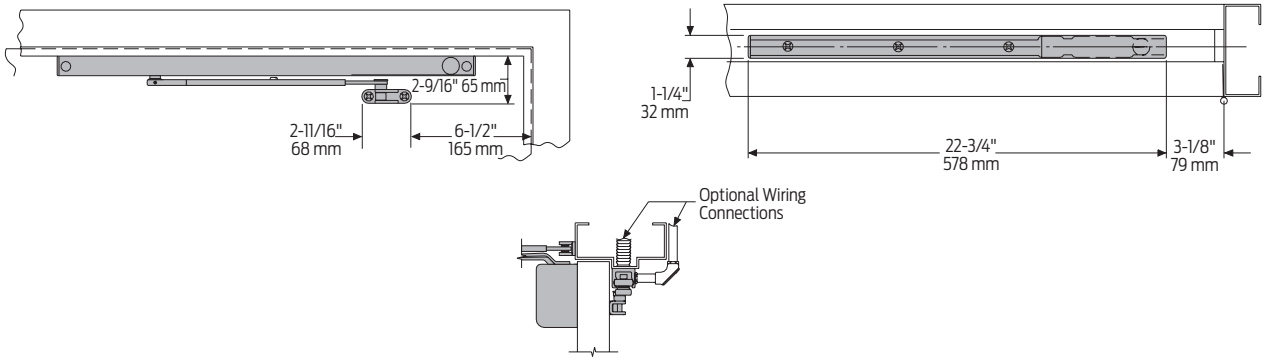
Mounting details

Hinge (pull side) and stop face (push side) mounting

Hinge (pull side) mount



Stop face (push side) mount



Butt hinges	Should not exceed 5" (127 mm) in width
Swing clear hinges	Consult factory
Auxiliary stop	Recommended at hold open point
Reveal	Should not exceed 1/8" (3 mm) for Standard Arm
Head frame	Should not exceed 5" (127 mm) in width
Stop width	1 1/4" (32 mm) minimum
Flush ceiling	2" (51 mm) head frame does not require special templating
Door width	▪ 2'4" (711 mm) minimum for single door with SEH ▪ 4'8" (1422 mm) minimum for paired doors with SEH
Maximum opening	▪ Templating allows 100° ▪ Hold open points between 80° and 100° in approximately 3° increments
SEH electrical options	▪ These track assemblies require a single power circuit for the holding solenoid ▪ SEH holding solenoid is either 24V or 120V input, please specify ▪ An optional 4040SE-3210 transformer or 8310-824 reduces 120V AC line voltage to 24V AC ▪ Circuitry accepts either AC or DC input
Options	24V or 120V volt input for SEH, please specify
Wiring diagram	See page 13 for typical wiring and electrical diagram

Notes:
- Information applies to SEH unless otherwise specified
- Standard SEH Series is a door holder that must be installed in conjunction with an opposite side mounted, UL listed door closer
- Hold open force is adjustable
- Momentary on/off switch board assembly for testing door release also provides over-voltage protection (field replaceable)
- All SEH type holders require a separate closer for fire or smoke barrier door applications

Accessories

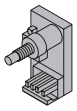
Arm

SEH-3077T
Standard Arm (STDTRKARM)
- Non-handed
- Can be combined with any 4040SE Series track to provide an electrically controlled hold open function on either side of the door
- All SEH type holders require a separate closer for fire or smoke barrier door applications

Track

SEH-3038
Standard Track (STDTRK)
- Non-handed
- Mounts on either head frame or stop
- 24V or 120V AC/DC input for holding solenoid, please specify
- Includes test switch assembly with fuse
- Standard

Switch

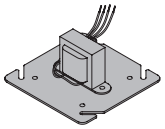


SEH-3436
Test Switch

Installation accessories

SEH-81
Conduit Quick-Connector
- Two piece connector for use with ½" conduit

SEH-3034SE
Track Roller and Track Slider
- Quiet, low friction roller assembly
- Shoulder dimension
- "X" = ¼" (6 mm)
- Alloy metal slider for use in SE series tracks only



4040SEH-3210
Transformer
- Reduces line voltage from 120V to 24V AC
- Mounted on cover for 4" (102 mm) x 4" x 2 ⅛" (54 mm) junction box (by others)

Ordering information

How-to-order SEH Series closers

1. Select voltage
- ☐ 24V AC/DC
- ☐ 120V AC/DC

2. Select finish
- ☐ Standard powder coat _____ Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), Brass (696) paint.

Closer will be shipped with:
- Standard arm- Standard track
- Regular arm
- Wood and machine screws

(unless options listed below are selected)

Closer options

Finish
- ☐ Custom powder coat (RAL) _____

Screw pack
- ☐ Through Bolt[1], Wood and Machine Screws (TBWMS)
- ☐ Torx Machine Screws (TORX)
- ☐ Through Bolt* and Torx Machine Screws (TBTRX)

*Specify door thickness if other than 1 ¾".

Installation accessories
- ☐ Transformer, 4040SE-3210

Special template
- ☐ ST-_____ (if required)

Notes

Notes

About Allegion

Allegion (NYSE: ALLE) is a global pioneer in seamless access, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion secures people and assets with a range of solutions for homes, businesses, schools and institutions. Allegion had $2.7 billion in revenue in 2020, and its security products are sold around the world.

For more, visit **www.allegion.com**

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ALLEGION™

ALLEGION™

LCN®

4000 Series

Surface mounted closers

Delivering reliable solutions for over a century

Slamming church doors are the beginning of LCN's rich history

In 1877, our founder was hired to solve this problem of a Boston church's swinging doors that slammed noisily shut. It led to the invention of the world's first door check. His innovation continued, leading to the formation of the LCN brand in 1926. A passion for quality has guided LCN ever since and continues to set it apart from other brands.

Manufactured with pride in Princeton, Ill., U.S.A., by our highly skilled and tenured craftsmen. Our solutions are specifically designed for enhanced durability, consistency and longevity. From meticulous engineering to strict quality control, LCN accepts no less than the best.

Every person in the LCN plant plays a role in the rigorous quality control process

This level of shared commitment is why, in part, our Princeton plant was honored with the 2017 Manufacturing Leadership Award from the Manufacturing Leadership Council. The award recognizes manufacturing companies that are shaping the future of global manufacturing by delivering clear and compelling value, return on investment and other tangible outcomes. With millions of door closers installed in facilities across the world, you can be confident in choosing LCN.

Features that set the 4000 Series apart

- Double heat-treated pinions gives proper hardness and strength to the parts where they need it
- All-weather Liquid X hydraulic fluid performs in temperatures from -30°F to 120°F, reducing the need for seasonal adjustment
- Full complement bearings help withstand abuse in real-world applications because of increased surface contact
- The LCN Green Dial provides easy visual adjustments and indicator to dial in the strength needed for any environmental condition

Information and customer care

us.allegion.com

US 877.671.7011
Canada 800.900.4734

support@allegion.com
Closers_TechProdSupport@allegion.com

www.youtube.com/LCNHardware

Ordering

Allegion_Orders@allegion.com

eFax: 1.800.248.1460

4000 Series surface mounted closers

Product selection guide

Surface mounted 4000 Series LCN closers feature a modern design engineered for each application, easy installation, and trusted performance. This guide is based on the desired mounting of the closer.

Exterior door

- **Push side mounted**
  - **Double lever arm**: 4020, 4040XP, 4110, 4210*, 4050A
- **Pull side mounted**
  - **Double lever arm**: 4010, 4040XP, 4510*, 4050A

Interior door

- **Push side Mounted**
  - **Double lever arm**: 4020, 4040XP, 4110, 4210*, 4030, 4050A
  - **Single lever arm**: 4110T, 4040XPT, 4210T*, 4050AT
- **Pull side Mounted**
  - **Double lever arm**: 4040XP, 4030, 4050A, 4510*, 4010
  - **Single lever arm**: 4000T, 4010T, 4020T, 4510T*, 4040XPT, 4030T, 4050AT

* Indicates high security closer. Refer to that section of the catalog.

Product comparison

This chart shows a basic comparison of 4000 Series closers.
Refer to the specific closer chapter for complete details.

	Mounting					Finish		Cover			Cylinder			Arm function*							
	Hinge (pull) side	Top jamb (pull)	Top jamb (push)	Parallel arm	Stop face	Powder coat	Plated	Plastic	Metal	Non-handed	Non-sized	Accessibility	Delay action***	CYLAVB***	Regular (double)	Standard (single)	Hold Open	Fusible Link	EDA/HEDA	CUSH/HCUSH	SCUSH/SHCUSH	Double Egress
4010	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	140°	■	140°	140°	■	■	■	■
4010T	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	180°	120°	■	■	■	■	100°
4020	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	180°	■	140°	140°	■	■	■	■
4020T	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	180°	100°	■	■	■	■	■
4030	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	180°	■	180°	■	110°	100°	100°	■
4030T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	180°	180°	■	■	■	■	■
4040XP	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	120°	■	120°	■	180°	110	110°	■
4040XPT	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	120°	110°	■	■	■	■	95°
4050A	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	180°	■	180°	■	180°	110°	110°	■
4050AT	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	180°	180°	■	■	■	■	95°
4110	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	■	180°	180°	180°	110°	110°	■
4110T	■	■	■	■	■	■	■	■	■	■	■	♿	■	■	■	110°	100°	■	■	■	■	■
4000T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	90°	■	■	■	■	■	■

■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template. See individual closer series for degrees of opening per installation.
** Advanced Variable Back Check.
*** Delay action for 4040XP incorporates standard 4041 cylinder.

Applications
- For aluminum, hollow metal, or wood swinging doors and frames.
- Can be used with hinge or pivot mounted door.
- Adapter plates and other installation accessories available for non-standard conditions.

Features common to 4000 Series
- Each closer (except 4050A, 4050AT, 4040XP, 4040XPT, 4030, 4030T) is designed for a specific mounting; hinge side, top jamb, or parallel arm. 4040XP closer with regular or Hold Open Arm mounts hinge side or top jamb. 4030, 4040XP and 4050A regular parallel arm closers include 62PA shoe required to parallel arm mount either Regular or Hold Open Arm.
- Handed for right or left swinging doors, except for 4000T, 4030, 4030T, 4040XP, 4050A, 4050AT and 4040XPT.
- Adjustable hydraulic back check cushions opening swing prior to 90º.
- Separate regulation of general closing speed and latching speed.
- Joints in regular arm and shoe adapt to uneven trim.
- Reversible shoe to boost latching power on double lever arms.
- Not designed for exterior mounting or exposure to elements.

Design assistance
LCN has been providing reliable solutions to unique door control problems since 1926. Design and specification assistance are only a phone call away. Contact LCN for assistance or technical information at 877-671-7011 or fax 800-248-1460 (Order Entry), Fax 815-879-1495 for Product Support.

Warranty
30 year limited warranty; 25 year limited warranty (4050A). See General Information catalog for complete warranty details.

Specifications
Refer to “Specifications” section for suggested architectural specifications.

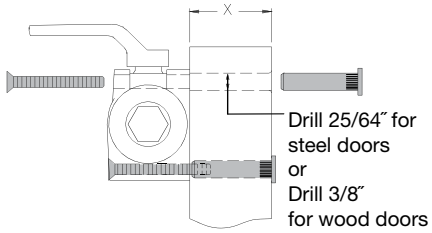
Materials
- High strength cast iron or cast aluminum (4050A) cylinder.
- Forged steel main arms.
- One piece forged steel piston.
- Double heat treated pinion.
- LCN's all-weather Liquid X hydraulic fluid performs to temperature ranges from 120ºF (49ºC) to -30ºF (-35ºC) without any seasonal adjustment.
- High efficiency, full complement, low friction bearings.
- Tamper resistant regulating screws.
- Full rack and pinion hydraulic action.
- Low friction track and roller combination for all single lever arm (track style) closers.

Finishes
- Available in seven standard or optional custom powder coat finishes to blend with door and frame.
- LCN’s powder coat finishes surpass 100 hours of salt spray which is over four times the ANSI standard for corrosion resistance.
- For installations where a higher level of corrosive resistance is required, LCN offers an optional Special Rust Inhibitor (SRI) pre-treatment. Closers that combine the exclusive LCN powder coat finish and the SRI pre-treatment exceed the ANSI standard for corrosion resistance even further.
- Plated finishes are available as an option to accent door and frame. (SRI not available with plated finishes).

Listings and approvals
UL listed for self-closing doors without hold open under “swinging door closers”(GVEV) file R1943. Tested and certified under ANSI Standard A156.4 Grade One. Consult factory for details. Consult factory for other listings such as; cUL, California State Fire Marshal, Bureau of Standards and Appeals.

Positive pressure
LCN closers have been certified for three hours by UL to be in compliance with UL 10C. Contact LCN for specific details on door closer fire ratings.

Fasteners
- 4010, 4010T, 4020, 4020T, 4040XP, 4040XPT, 4050A, 4050AT, 4110, 4110T series closers are shipped with a standard Self Reaming and Tapping Screw (SRT) with Phillips head SRT screws.
- 4000T series closers are shipped with Wood and Machine Screws (WMS) with Phillips head wood and machine screws.
- 4030, 4030T series closers are shipped with a standard Wood and Self-Tapping Machine Screws (WMS) pack with Phillips head wood and self-tapping machine screws.
- Standard LCN Through Bolts (TB) can be installed on 1 3/4" (44 mm) thick doors with 1/4"-20 machine screws. Optional Through Bolt (TB) sizes are available for 1 5/8" (41 mm) or 1 3/8" (35 mm) door thickness, but this must be specified when ordering.



Notes:
1. For through bolts, specify door thickness if other than 1 3/4" (44mm), represented in diagram as dimension "X".
2. Phillips head, metric machine screws are available, please specify.
3. LCN recommends the use of wood screws, available in optional WMS screw packs, for wood door applications.

4010 Series

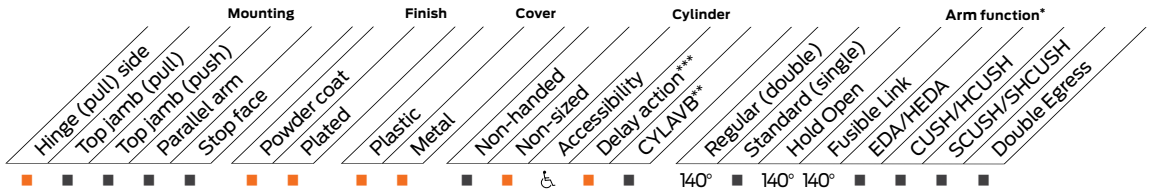
The 4010 is LCN's best performing heavy duty closer designed specifically for institutional and other rugged high traffic applications.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Handed
Templating	Peel-n-Stick templates - 2 1/2" x 6" mounting hole pattern
Size	Adjustable 1-5 or sized 6
Warranty	30 years

Cover	▪ Plastic cover (PC), standard ▪ Metal cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Hinge (Pull side)
Arms	Regular arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



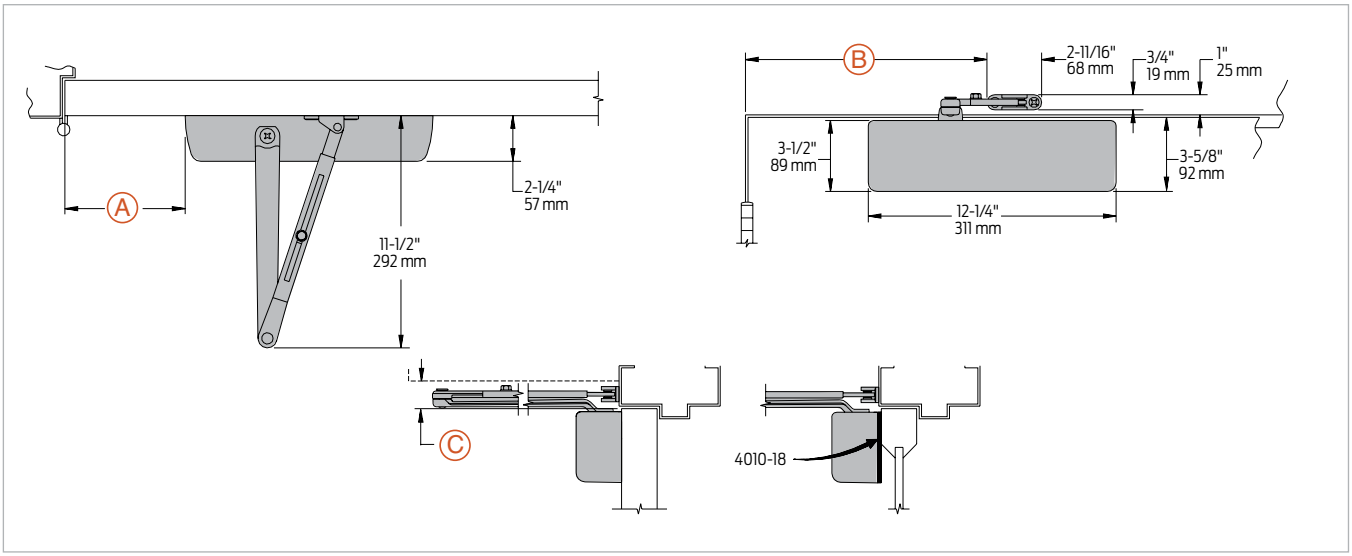
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay action for 4040XP incorporates standard 4041 cylinder.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Hinge (pull) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing 140°
Reveal	Should not exceed 3/4" (19 mm); should not exceed 1/8" (3 mm) for fusible link arm
Top rail	▪ Less than 3 3/4" (95 mm) requires plate, 4010-18 ▪ Plate requires 2" (51 mm) minimum ▪ Clearance of 2 1/4" (57 mm) behind door required for 90° installation
Delay action	▪ Add suffix "CYLDEL" to selected cylinder ▪ Not available with 4016 cylinder ▪ Delays closing from maximum opening to approximately 70° ▪ Delay time adjustable up to approximately 1 minute
Maximum opening	Can be templated for:
	100°: A = 5 15/16" (151 mm) B = 11 15/16" (303 mm) 140°: A = 4 3/16" (106 mm) B = 10 3/16" (259 mm)
	Hold open points up to maximum opening with Hold Open Arm
Arm clearance	Regular Arm: C = 1 1/16" (27 mm) Hold Open Arm: C = 1 3/8" (35 mm) Fusible Link Arm requires: C = 1 5/8" (41 mm)

Note: Hold open points up to maximum opening with Hold Open Arm.

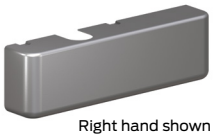
Accessories

Cylinders

4011(6)-3071
Cast iron cylinder assembly (CYL)
- Handed
- Standard

Covers

4010-72
Plastic Cover (PC)
- Non-handed



Right hand shown

4010-72MC
Metal Cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4010-3077
Regular Arm (REGARM)
- Non-handed

4010-3049
Hold Open Arm (H)
- Handed
- Provides hold open function, adjustable at elbow
- Optional

4010-3049FL
Fusible Link Arm (FL)
- Handed
- Releases hold-open function when exposed to temperatures above 165° F; 1/8" (3 mm) maximum reveal
- Optional

Note: Check local codes before specifying FL arms. NOT A life safety product!

Installation accessories

4010-18
Plate
- Required where top rail is less than 3 3/4" (95 mm)
- Requires minimum 2" (51 mm) top rail

Ordering information

How-to-order 4010 Series closers

1. Select cylinder size
- ☐ 4011 (adjustable from size 1 to 5)
- ☐ 4016 (CYLDEL not available)

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Regular arm
- Self reaming and tapping screws
  (unless options listed below are selected)

Closer options

Cylinder
- ☐ Delay action cylinder (CYLDEL)

Cover
- ☐ Metal cover (MC)

Arm
- ☐ Hold Open Arm (H)
- ☐ Fusible Link Arm, 165ºF (FL)

Finish
- ☐ Custom powder coat (RAL) _____
  (handed metal cover required)
- ☐ Plated finish _____
  (handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

Screw pack
- ☐ Through bolt[1] and self reaming and tapping screws (TBSRT)
- ☐ Wood and machine screws (WMS)
- ☐ Through bolt[1] wood and wachine screw (TBWMS)
- ☐ Torx machine screws (TORX)
- ☐ Wood and machine screws (WMS)
- ☐ Through bolt[1] and torx machine screws (TBTRX)

Installation accessories
- ☐ Plate, 4010-18

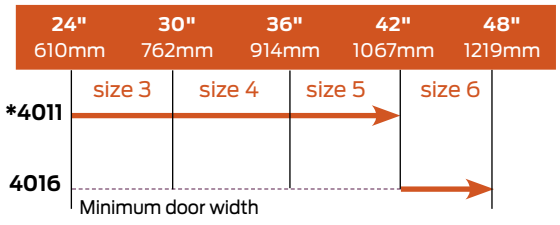
Special template
- ☐ ST- _____

1. Specify door thickness if other than 1 3/4".

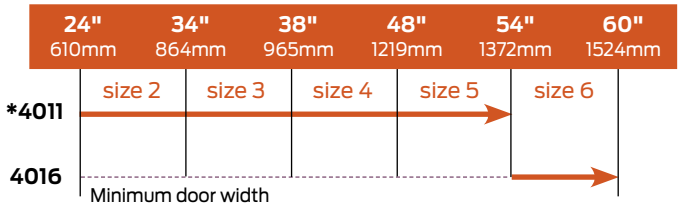
Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4011 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4010 Series cylinders available in size 6
- Delay action not available with 4016 cylinder

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 4010 Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4011	4011	4011
5.0* lbs.	4011	4011	4011

* Maximum opening force.

4010T Series

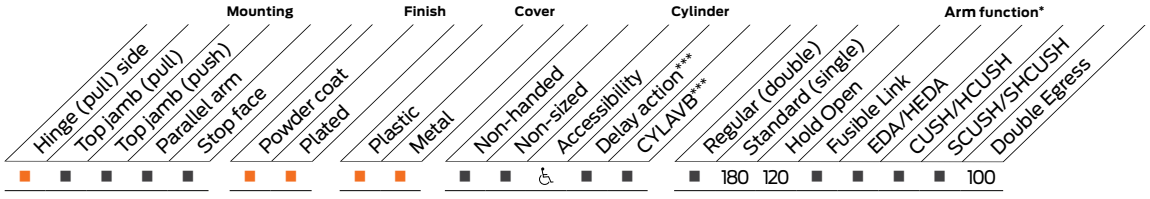
The 4010T is LCN's best performing heavy duty track closer designed specifically for interior doors in institutional and other rugged high traffic applications.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Handed
Templating	Peel-n-Stick templates - 2 1/2" x 6" mounting hole pattern
Size	Sized 1, 3 or 4
Warranty	30 years

Cover	▪ Plastic cover (PC), standard ▪ Metal cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Hinge (Pull side)
Arms	Standard arm and track with roller
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



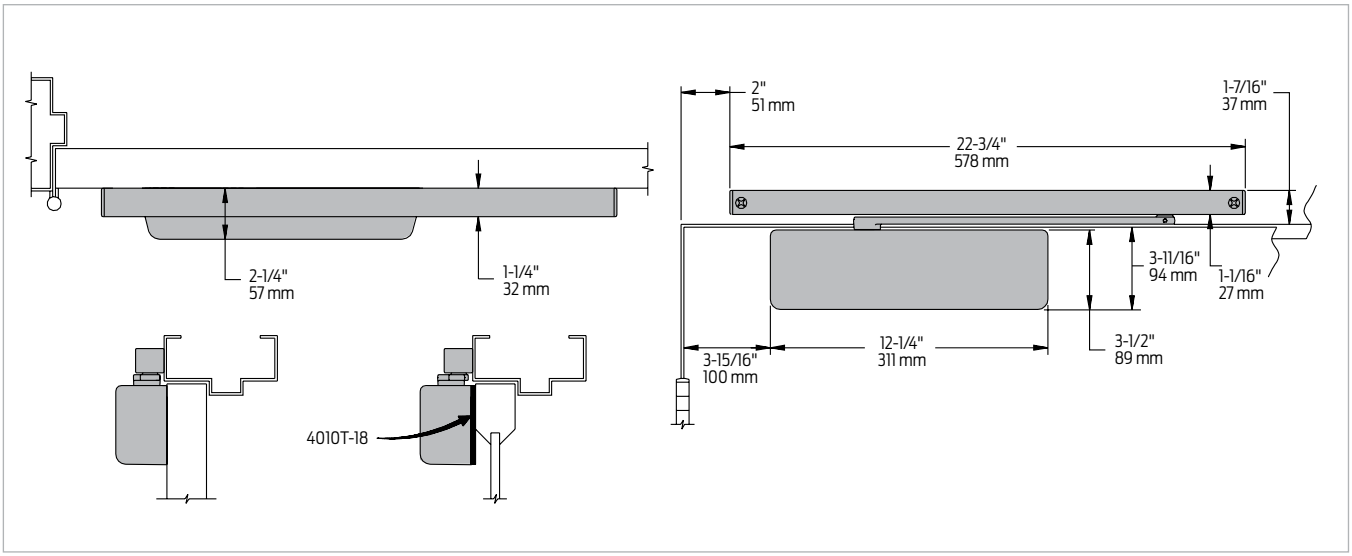
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay action for 4040XP incorporates standard 4041 cylinder.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Hinge (pull) side mounting

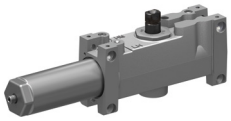


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°
Reveal	▪ Should not exceed 1/8" (3 mm) for Standard Arm ▪ Should not exceed 3 5/16" (84 mm) for Double Egress Arm
Top rail	Less than 3 3/4" (95 mm) requires plate, 4010T-18
Head frame	Requires 1 1/2" (38 mm) minimum
Clearance	2 1/4" (57 mm) behind door required for 90° or 180° installation
Maximum opening	▪ Templating allows 180° with Standard Arm, limited to 120° when optional bumper is installed ▪ Consult factory if door will be held open at 180° ▪ Variable hold open angles with infinite options

Notes:
1. Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop.
2. Plate requires 2" (51 mm) minimum.

Accessories

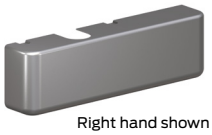
Cylinders



4011T(3)(4)-3071
Cast iron cylinder assembly (CYL)
- Handed
- Standard

Covers

4010T-72
Plastic Cover (PC)
- Non-handed
- Standard



Right hand shown

4010T-72MC
Metal Cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4010T-3077T
Standard Arm (STDTRKARM)
- Handed
- Does not include track roller

4010T-3077DE
Double Egress Arm (DE)
- Handed
- For double egress doors and frames
- Does not include track roller
- Maximum reveal is 3 5/16" (84mm)
- Optional

Tracks

4010T-3038
Standard Track (STDTRK)
- Non-handed
- Non hold open
- Will accept hold open clip and/or bumper assembly
- Standard

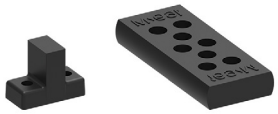
4010T-3038B
Track with Bumper (BUMP)
- Non-handed
- Non hold open
- With bumper assembly installed
- Will accept hold open clip
- Optional

4010T-3038H
Hold Open Track (H)
- Non handed
- With hold open clip installed
- Will accept bumper assembly
- Optional

4010T-3038HB
Hold Open Track with Bumper (HBMP)
- Non-handed
- With hold open clip and bumper assembly installed
- Optional

Installation accessories

4010T-18
Plate
- Required where top rail is less than 3 3/4″ (95 mm)
- Requires minimum 2″ (51 mm) top rail



4010T-169
Track bumper
- Mounts in track to assist back check, does not replace auxiliary stop
- Limits maximum opening
- Consists of bumper, bumper post, and mounting screw

4010T-3054
Hold open clip
- Mounts in track to provide hold open function
- Hold open point controlled by clip location
- Consists of clip and mounting screws
- Requires 4010T-3034H Track Roller

4010T-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16″ (2mm)

4010T-3034H
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16″ (2mm)
- Spring-loaded hold open mechanism

Ordering information

How-to-order 4010T Series closers

1. Select cylinder size
- ☐ 4011T
- ☐ 4013T
- ☐ 4014T

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Standard arm
- Track roller
- Standard track
- Self reaming and tapping screws
  (unless options listed below are selected)

Closer options

Cover
- ☐ Metal cover (MC)

Arm
- ☐ Double Egress Arm (DE)[2]

Track
- ☐ Track with Bumper (BUMP)
- ☐ Hold Open Track (H)
- ☐ Hold Open Track with Bumper (HBMP)

Finish
- ☐ Custom powder coat (RAL) _____
  (handed metal cover required)
- ☐ Plated finish _____
  (handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

Screw pack
- ☐ Through bolt[1] and self reaming and tapping screws (TBSRT)
- ☐ Wood and machine screws (WMS)
- ☐ Through bolt[1] wood and machine screws (TBWMS)
- ☐ Torx machine screws (TORX)
- ☐ Through bolt[1] and torx machine screws (TBTRX)

Installation accessories
- ☐ Plate, 4010T-18

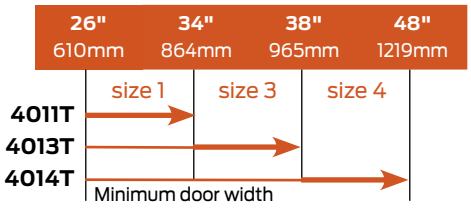
Special template
- ☐ ST- _____

1. Specify door thickness if other than 1 3/4".
2. Using this closer on double-egress doors and frames requires the closer to be ordered with a "DE" suffix (i.e., 4014T DE). Standard "DE" option will accommodate pull side reveals up to 3 5/16". For deeper reveals, consult factory.

Table of sizes

- Select closer based on width of door
- Sized 4010T Series cylinders available in size 1, 3 or 4

Interior door width



→ Indicates recommended range of door width for closer size.

Reduced opening force 4010T Series closers

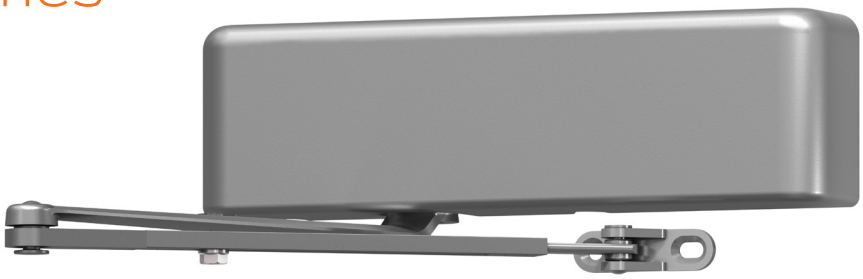
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	N/A	N/A	N/A
5.0* lbs.	4011T	4011T	4011T

* Maximum opening force.

4020 Series



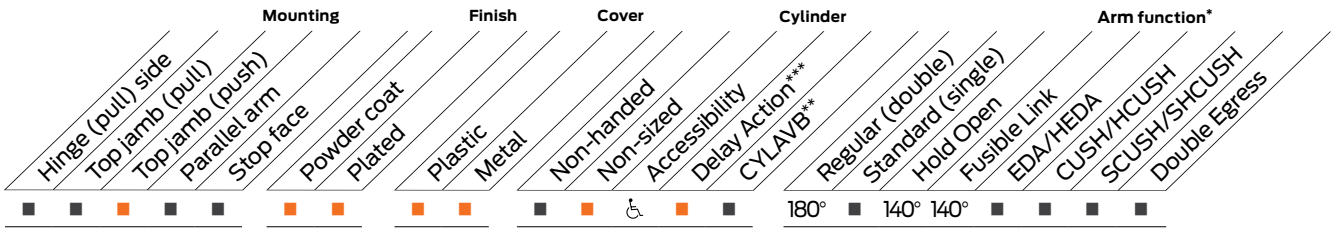
The 4020 is a heavy duty closer with adjustable spring power using the LCN Green Dial. This creates a custom fit to meet the specific demands of high traffic use and brings reliable performance.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Handed
Templating	Peel-n-Stick templates - 2 ½" x 6" mounting hole pattern
Size	Adjustable 1-5 or sized 6
Warranty	30 years

Cover	▪ Plastic cover (PC), standard ▪ Metal cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Top jamb (Push side)
Arms	Regular arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



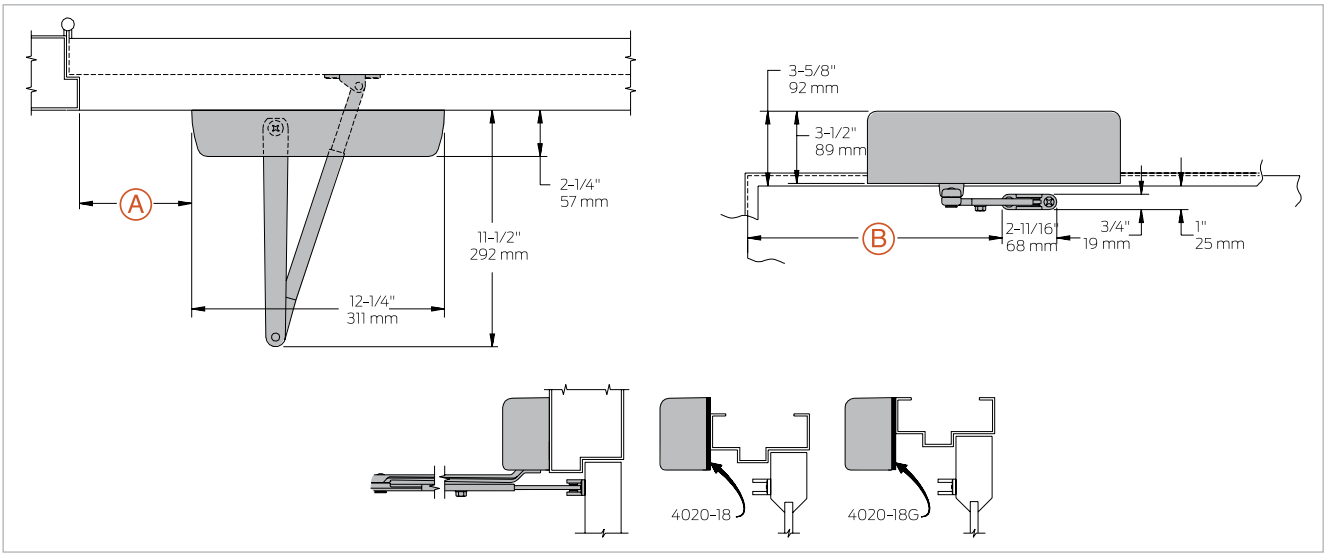
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay action for 4040XP incorporates standard 4041 cylinder.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Top jamb (push) side mounting

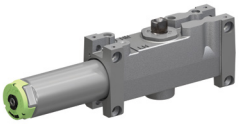


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where the door cannot swing 180°
Reveal	▪ 2 9/16" (65 mm) allows 180° opening with regular arm ▪ 4" (102 mm) allows up to 140° opening with regular arm ▪ 8" (203 mm) allows up to 140° opening with Long Arm (LONG) where standard rod and shoe is replaced with optional long rod and shoe (4020-79LR)
Head frame	Less than 3 7/16" (87 mm) requires plate, 4020-18; use plate, 4020-18G for flush ceiling condition; either plate requires 1 3/4" (44 mm) frame minimum
Top rail	▪ Requires minimum 1 1/2" (38 mm) ▪ Closer on 4020-18 plate requires 2" (51 mm) minimum ▪ Closer on 4020-18G plate requires 2 3/4" (70 mm) minimum
Delay action	▪ Add suffix "CYLDEL" to selected cylinder ▪ Not available with 4026 cylinder ▪ Delays closing from maximum opening to approximately 75° ▪ Delay time adjustable up to approximately 1 minute
Maximum opening	Can be templated for: 100°: A = 6" (152 mm), B = 12 3/8" (314 mm) 140°: A = 4" (102 mm), B = 10 3/8" (264 mm) 180°: A = 2" (51 mm), B = 8 3/8" (213 mm)

Notes:
- Hold open points up to maximum opening or 140°, whichever is less, for Hold Open or Fusible Link Arm
- For hold open beyond 140°, use 4110 Series closer

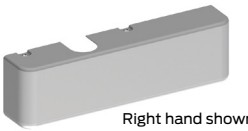
Accessories

Cylinders



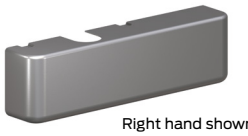
4021(6)-3071
Cast iron cylinder assembly (CYL)
- Handed
- Standard

Covers



Right hand shown

4020-72
Plastic Cover (PC)
- Handed
- Standard



Right hand shown

4020-72MC
Metal Cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4020-3077
Regular Arm (REGARM)
- Non-handed

4020-3077L
Long Arm (LONG)
- Non-handed
- Includes 4020-79LR for deep reveals
- Optional

4020-3049
Hold Open Arm (H)
- Handed
- Provides hold open function, adjustable at elbow
- 5 3/4" (146 mm) maximum reveal, 140° hold open
- Optional

4020-3049FL
Fusible Link Arm (FL)
- Handed
- Releases hold open function, adjustable at shoe, when exposed to temperatures above 165° F
- 3 7/8" (98 mm) maximum reveal
- Optional

Note: Check local codes before specifying FL arms. NOT A life safety product!

Installation accessories

4020-18
Plate
- Required where head frame is less than 3 7/16" (87 mm)
- Requires minimum 1 3/4" (44 mm) minimum head frame and 2" (51 mm) top rail 3 7/8" (98 mm) maximum reveal

4020-18G
Plate
- For flush ceiling condition
- Requires minimum 1 3/4" (44 mm) minimum head frame and 2 3/4" (70 mm) top rail

Ordering information

How-to-order 4020 Series closers

1. Select cylinder size
- ☐ 4021 (adjustable from size 1 to 5)
- ☐ 4026 (CYLDEL not available)

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____

Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Regular arm
- Self reaming and tapping screws (unless options listed below are selected)

Closer options

Cylinder
- ☐ Delay action cylinder (CYLDEL)

Cover
- ☐ Metal cover (MC)

Arm
- ☐ Hold Open Arm (H)
- ☐ Fusible Link Arm, 165ºF (FL)

Finish
- ☐ Custom powder coat (RAL) _____ (handed metal cover required)
- ☐ Plated finish _____ (handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

Screw pack
- ☐ Through bolt[1] self reaming and tapping screws (TBSRT)
- ☐ Wood and machine screws (WMS)
- ☐ Through bolt[1] wood and machine screws (TBWMS)
- ☐ Torx machine screws (TORX)
- ☐ Through bolt[1] and torx machine screws (TBTRX)

Installation accessories
- ☐ Plate, 4020-18
- ☐ Plate, 4020-18G

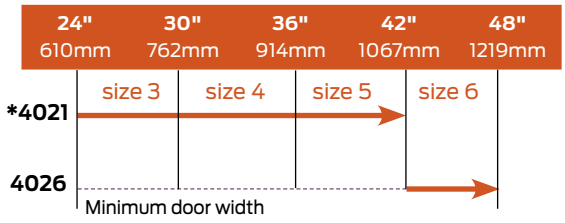
Special template
- ☐ ST- _____

1. Specify door thickness if other than 1 3/4".

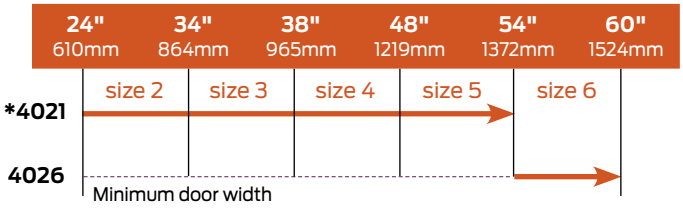
Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4021 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4020 Series cylinders available in size 6
- Delay action not available with 4026 cylinder

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 4020 Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4021	4021	4021
5.0* lbs.	4021	4021	4021

* Maximum opening force.

4020T Series

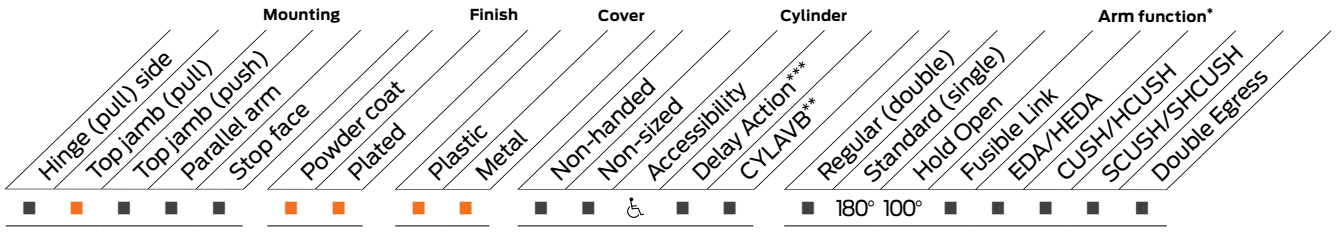
The 4020T is a cast iron, heavy duty closer designed for interior, high traffic conditions. This Grade 1 device comes in various finishes and colors to match your interior look.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Handed
Templating	Peel-n-Stick templates - 2 1/2" x 6" mounting hole pattern
Size	Sized 1, 3 or 4
Warranty	30 years

Cover	▪ Plastic cover (PC), standard ▪ Metal cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Top jamb (Pull side)
Arms	Standard arm, track with roller
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



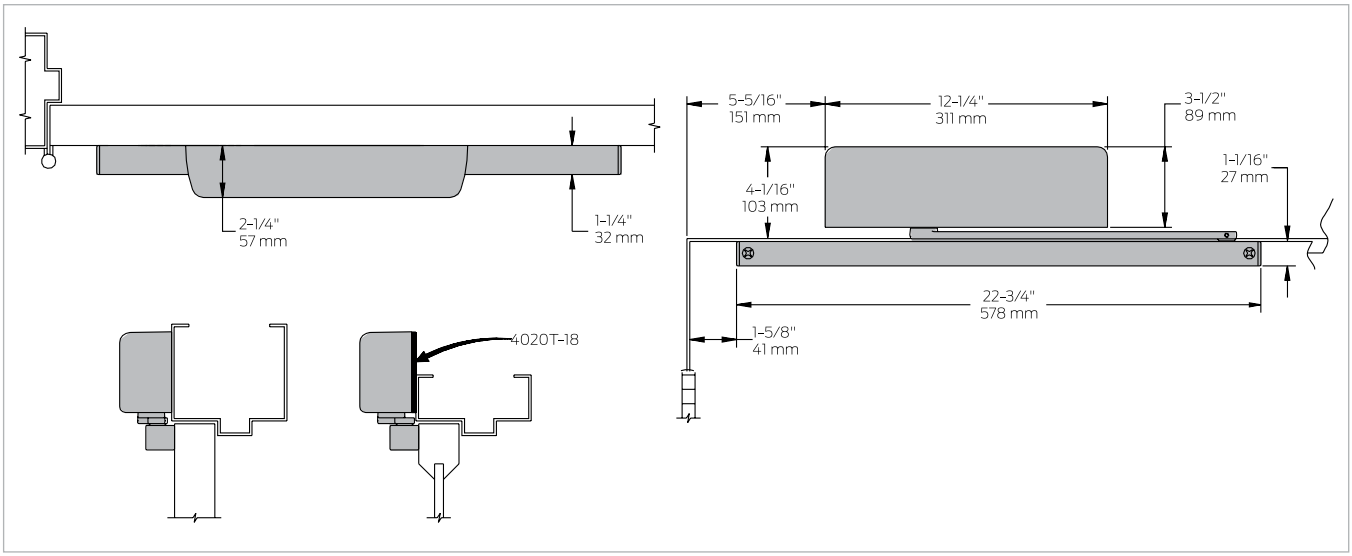
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay action for 4040XP incorporates standard 4041 cylinder.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Top jamb (pull) side mounting

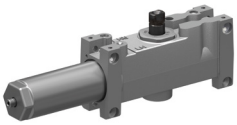


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°
Reveal	Should not exceed 1/8" (3 mm)
Head frame	Less than 3 7/8" (98 mm), requires plate, 4020T-18; plate requires 1 3/4" (44 mm) minimum
Clearance	1 1/2" (38 mm) behind door required for 90° or 180° installation
Maximum opening	▪ Templating allows 180° with standard track arm, limited to 100° with optional bumper installed ▪ Consult factory if door will be held open at 180° ▪ Variable hold open angles with infinite options

Note: Optional track bumper assembly assists back check in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop.

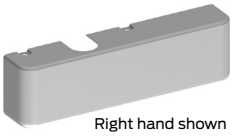
Accessories

Cylinders



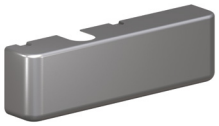
4021T(3)(4)-3071
Cast iron cylinder assembly (CYL)
- Handed
- Standard

Covers



Right hand shown

4020T-72
Plastic Cover (PC)
- Handed
- Standard



Right hand shown

4020T-72MC
Metal Cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4020T-3077T
Standard Arm (STDTRKARM)
- Handed
- Roller not included with arm

Tracks

4020T-3038
Standard Track (STDTRK)
- Non-handed
- Non hold open
- Will accept hold open clip and/or bumper assembly
- Standard

4020T-3038B
Track with Bumper (BUMP)
- Non-handed
- Non hold open
- With bumper assembly installed
- Will accept hold open clip
- Optional

4020T-3038H
Hold Open Track (H)
- Non-handed
- With hold open clip installed
- Will accept bumper assembly
- Optional

4020T-3038HB
Hold Open Track with Bumper (HBMP)
- Non-handed
- With hold open clip and bumper assembly installed
- Optional

Installation accessories

4020T-18
Plate
- Required where head frame is less than 3 7/8" (98 mm)
- Requires minimum 1 3/4" (44 mm) frame face

4020T-169
Track bumper
- Mounts in track to assist back check, does not replace auxiliary stop
- Limits maximum opening
- Consists of bumper, bumper post, and mounting screw

4020T-3054
Hold open clip
- Mounts in track to provide hold open function
- Hold open point controlled by clip location
- Consists of clip and mounting screws
- Requires 4020T-3034H Track Roller

4020T-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2mm)

4020T-3034H
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2mm)
- Spring-loaded hold-open mechanism

Ordering information

How-to-order 4020T Series closers

1. Select cylinder size
- ☐ 4021T (ADA)
- ☐ 4023T
- ☐ 4024T

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Standard arm
- Track roller
- Standard track
- Self-reaming and tapping screws
  (unless options listed below are selected)

Closer options

Cover
- ☐ Metal cover (MC)

Track
- ☐ Track with Bumper (BUMP)
- ☐ Hold Open Track (H)
- ☐ Hold Open Track with Bumper (HBMP)

Finish
- ☐ Custom powder coat (RAL) _____
  (handed metal cover required)
- ☐ Plated finish _____
  (handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

Screw pack
- ☐ Through bolt[1] and self reaming and tapping screws (TBSRT)
- ☐ Wood and machine screws (WMS)
- ☐ Through bolt[1] wood and machine screws (TBWMS)
- ☐ Torx machine screws (TORX)
- ☐ Through bolt[1] and torx machine screws (TBTRX)

Installation accessories
- ☐ Plate, 4010T-18

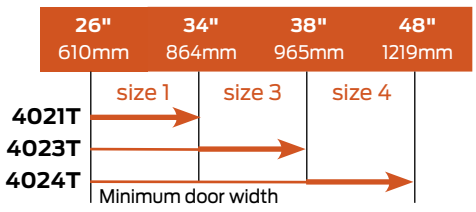
Special template
- ☐ ST- _____

1. Specify door thickness if other than 1 3/4".

Table of sizes

- Select closer based on width of door
- Sized 4020T Series cylinders available in size 1, 3 or 4
- Specify next higher size closer where strong drafts exist

Interior door width



→ Indicates recommended range of door width for closer size.

4030 Series

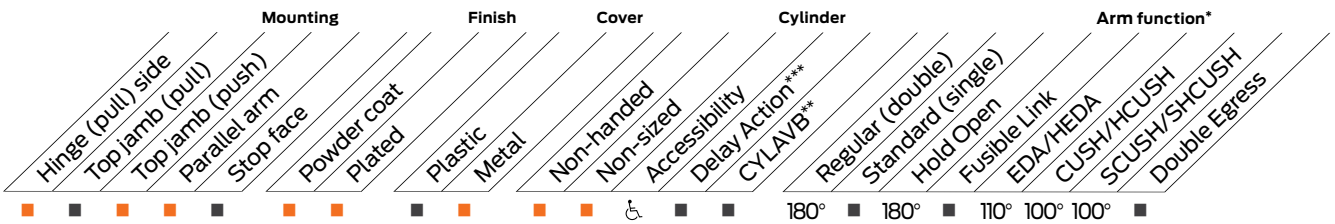
The 4030 is a cast iron, universal closer designed specifically for doors in moderate traffic conditions. This versatile closer compliments the rest of the heavy duty 4000 Series and offers the choice of three mountings and multiple arm options.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/8" diameter piston ▪ 1/2" diameter single heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Non-handed
Templating	Peel-n-Stick templates - 1 23/32" x 6 17/64" mounting hole pattern
Size	Adjustable spring size 1-4
Warranty	30 years

Cover	Metal Cover (MC), standard
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Hinge (pull side), top jamb (push side), parallel arm (push side)
Arms	Regular arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



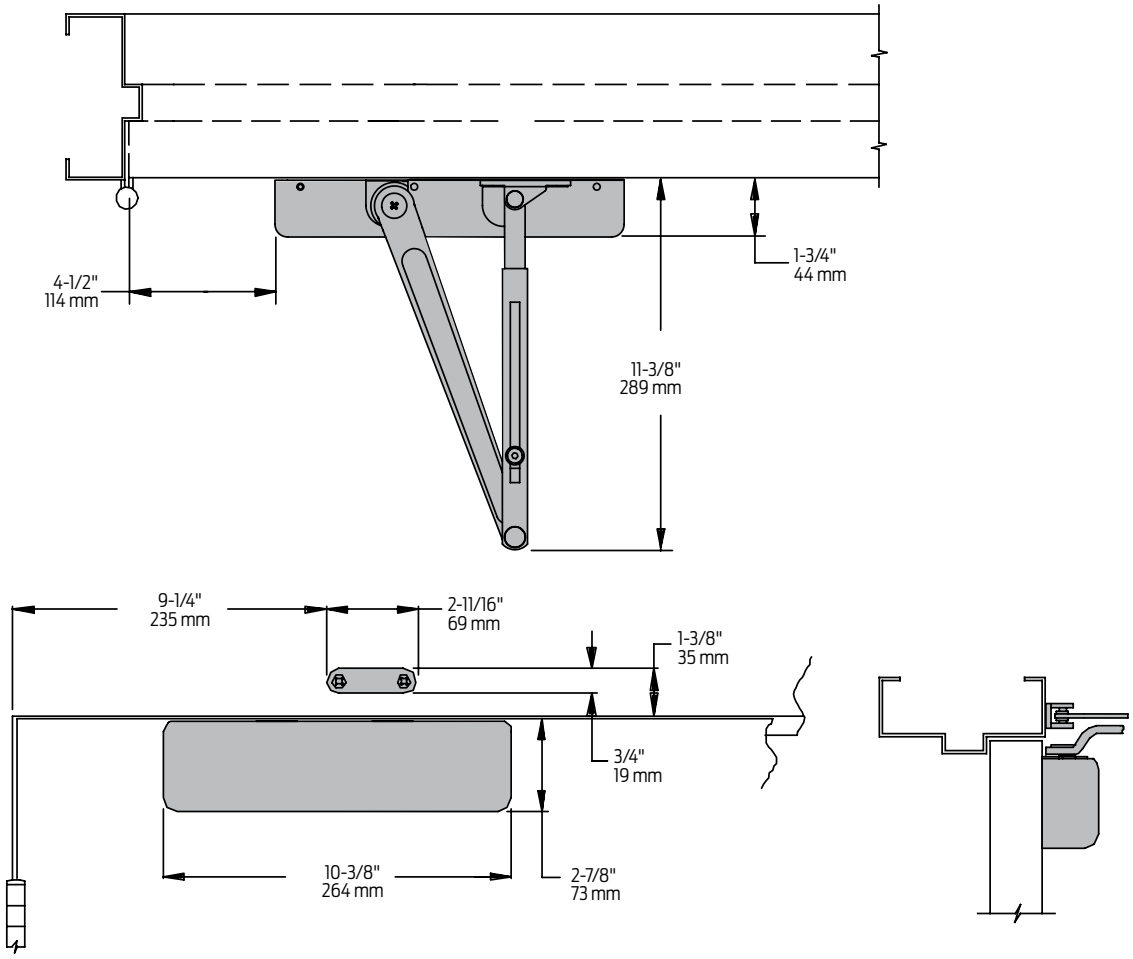
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay action for 4040XP incorporates standard 4041 cylinder.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

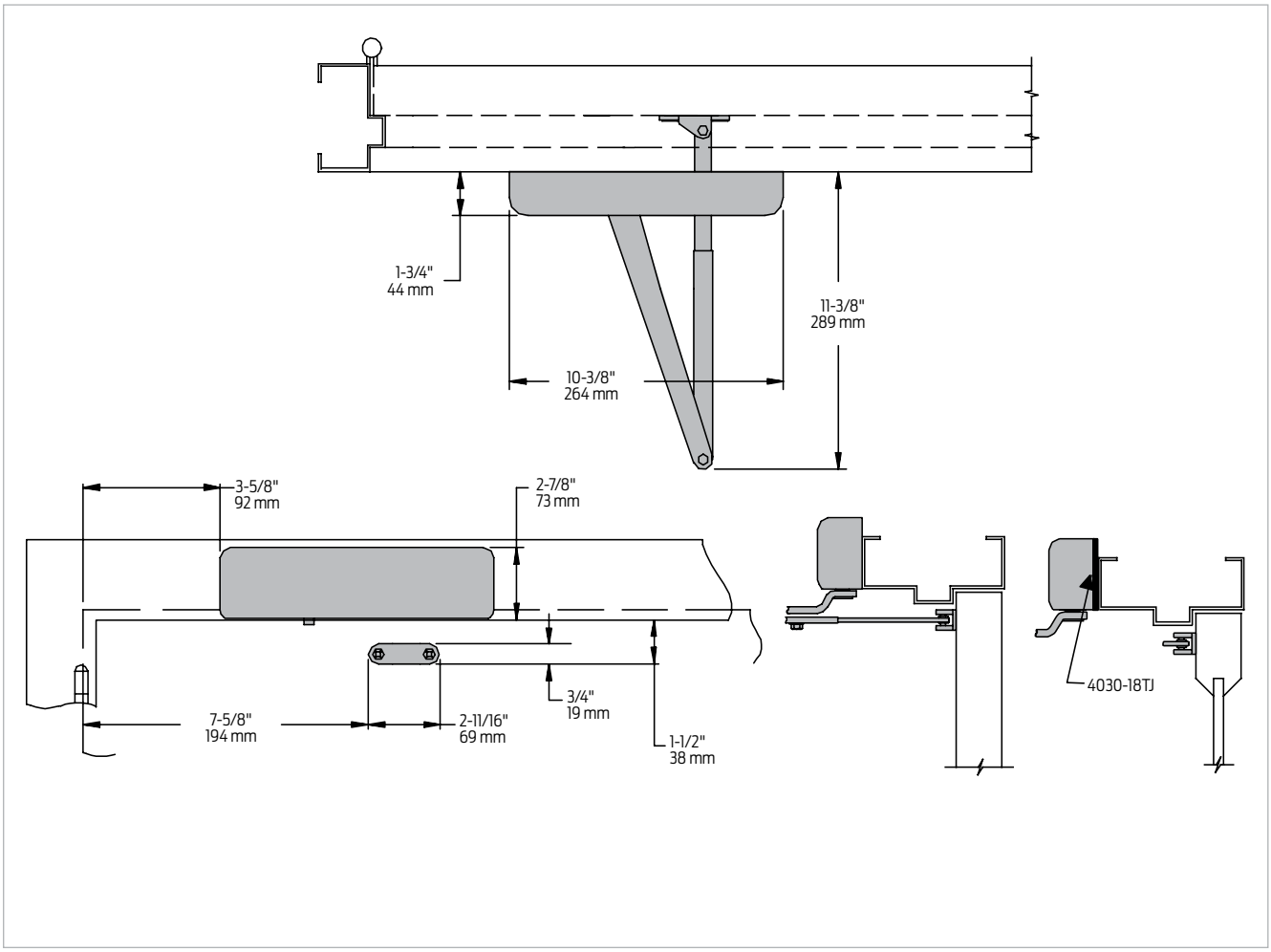
Hinge (pull) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°
Reveal	Should not exceed 3/16" (5 mm) for regular arm or 3/16" (5 mm) for Hold Open Arm
Top rail	Requires 2 7/8" (73 mm) minimum
Clearance	1 3/4" (44 mm), behind door required for installation
Maximum opening	▪ Can be templated for 180° ▪ Hold open points up to maximum opening with Hold Open Arm

Mounting details

Top jamb (push) side mounting

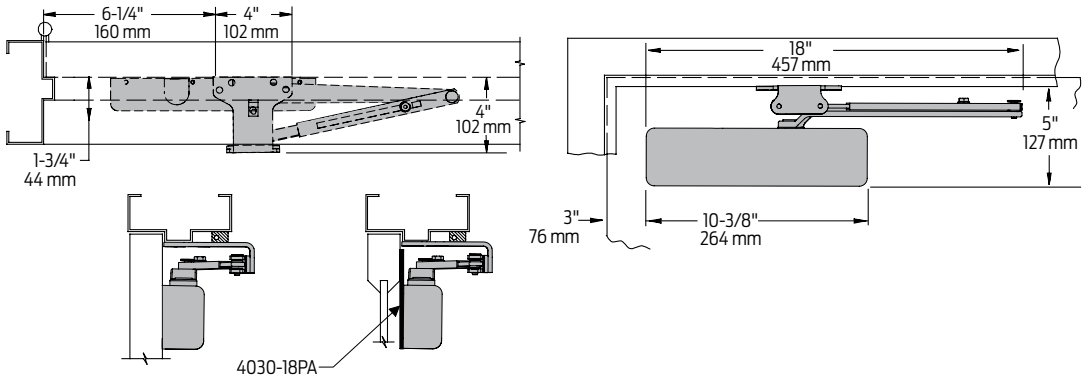


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where the door cannot swing 180°
Reveal	▪ Up to 3 1/2" (89 mm) allows 180° opening ▪ Up to 7 1/2" (191 mm) with long arm allows for 140° opening
Top rail	Requires 1 1/2" (38 mm) minimum from stop
Head frame	▪ Less than 2 1/4" (57 mm) requires plate, 4030-18TJ ▪ Plate requires 1 1/2" (38 mm) minimum
Maximum opening	▪ Can be templated for 180° ▪ Hold open points up to maximum opening with Hold Open Arm (H)

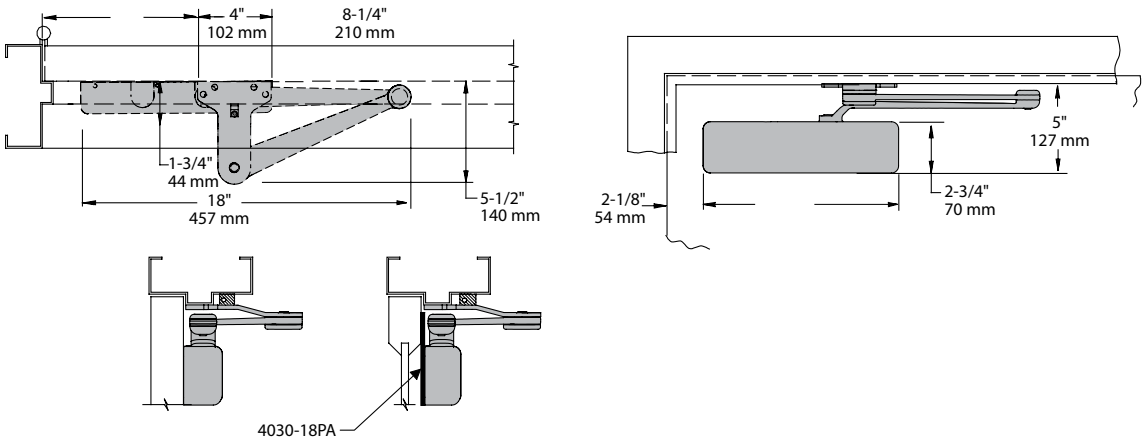
Mounting details

Parallel arm (push side) and EDA mounting

Parallel arm mount



EDA mount



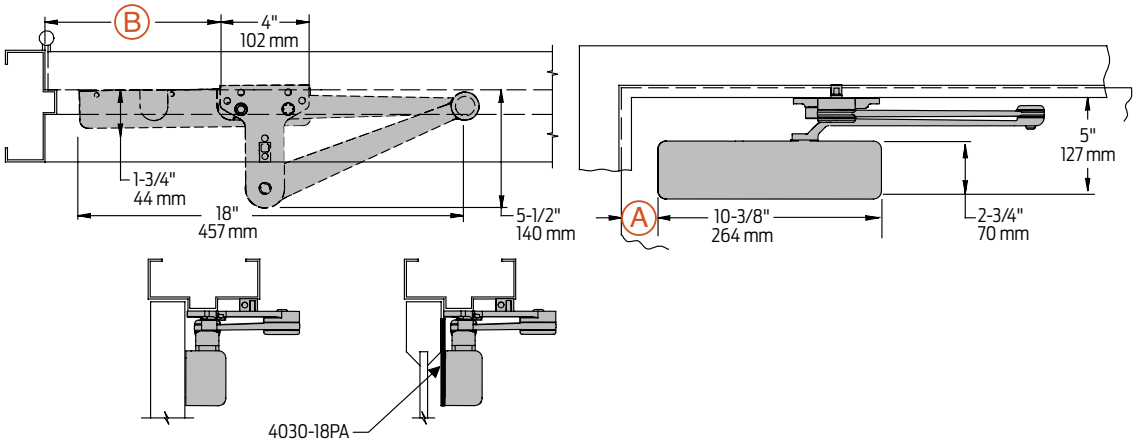
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing maximum opening
Clearance	▪ For 4030-62PA shoe is 4" (102 mm) from door face ▪ EDA arm is 5 1/2" (140 mm) from door face
Top rail	▪ Less than 5" (127 mm) measured from the stop requires plate 4030-18PA ▪ Plate requires 1 3/4" (44 mm) minimum
Stop width	Minimum 1" (25 mm)
Head frame	Flush or single rabetted requires PA shoe adapter, 4030-419
Blade stop	Clearance, requires 1/2" (13 mm) blade stop spacer, 4030-61
Auxiliary shoe	▪ 4030-62A allows installation of regular arm with overhead holder/stop ▪ Special templating required
EDA arm	Requires shoe support, 4030-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm)
Maximum opening	▪ Regular or Hold Open Arms can be templated for 180° ▪ EDA template allows 110° maximum opening ▪ Hold open points up to maximum opening with Hold Open Arm (H)

Notes:
- 4030 closers ordered with EDA arms include 4030-201 fifth hole spacer to support the shoe
- Regular or Hold Open Arm mounting requires PA shoe, 4030-62PA for Regular or Hold Open Arms; Add prefix "P" to closer description (eg. P4031.)
- P4031 closer includes 4030-201 fifth hole spacer to support PA shoe

Mounting details

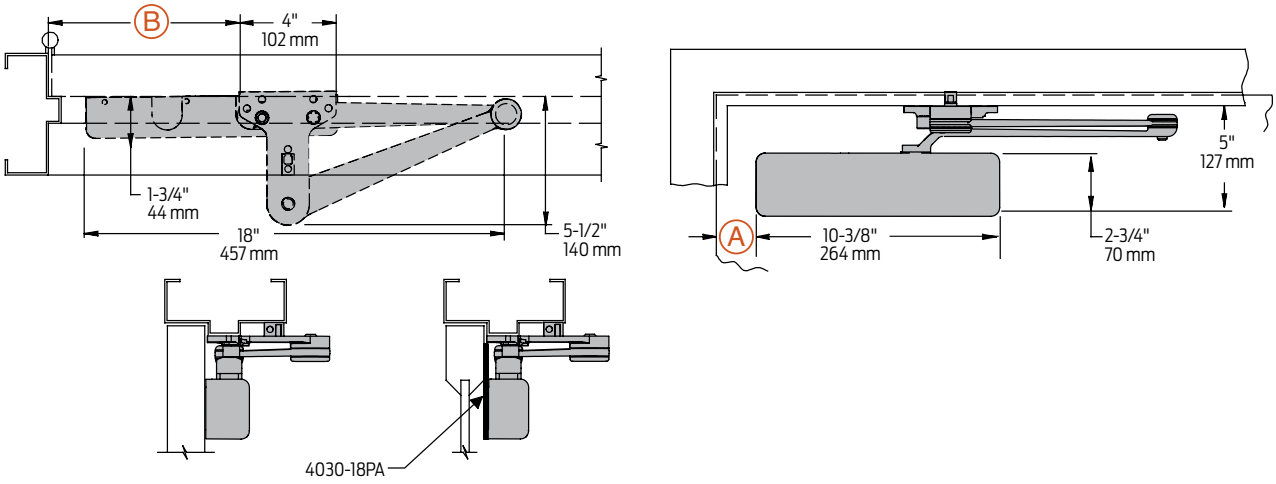
CUSH and Spring CUSH mounting

CUSH mount



Spring CUSH mount

Spring CUSH dead stop points are approximately 5° greater than templated stop point.



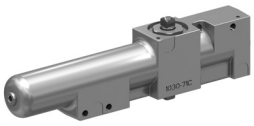
Clearance	For CUSH or SCUSH shoe is 5 1/2" (140 mm) from door face					
Head frame	Flush or rabetted requires CUSH flush panel adapter, 4030-419					
CUSH or SCUSH Arm	Requires shoe support, 4030-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm)					
Maximum opening	CUSH and SCUSH arms can be templated for maximum opening/hold open point at:					
	85°:	A = 3 5/8 (92 mm) B = 9 3/4" (248 mm)	90°:	A = 3" (76 mm) B = 9 1/8" (232 mm)	100°[1]:	A = 1 7/8" (48 mm) B = 8" (203 mm)

1. 100° mounting will not work with swing clear hinges.

Note: 4031 closers ordered with CUSH or SCUSH arms include 4030-201 fifth hole spacer to support the shoe.

Accessories

Cylinders



4031-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- Standard

Covers

4030-72MC
Metal Cover (MC)
- Non-handed

Arms

4030-3077
Regular Arm (REGARM)
- Non-handed
- Mounts hinge side or top jamb
- P4031 closer includes PA shoe, 4030-62PA is required for parallel arm mounting

4030-3077LD
Light Duty Arm (LD)
- Non-handed
- Mounts hinge side, top jamb or parallel arm (62PA required)
- Optional

4030-3077L
Long Arm (LONG)
- Non-handed
- Includes long rod and shoe, 4030-79LR for top jamb mount with deep reveals
- Optional

4030-3049
Hold Open Arm (H)
- Non-handed
- Mounts hinge side, top jamb or parallel arm (62PA required)
- Hold open adjustable at shoe
- Optional

4030-3049L
Hold Open Long Arm (HLONG)
- Non-handed
- Includes long head and tube, 4030-3048L for top jamb mount with deep reveals
- Optional

4030-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Extra duty arm features solid forged steel main and forearm for potentially abusive installations
- Optional

4030-3049EDA
Hold Open Extra Duty Arm (HEDA)
- Handed
- Arm, provides hold open function adjustable at shoe
- Optional

4030-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Solid forged steel main arm and forearm with stop in soffit shoe
- Optional

4030-3049CNS
Hold Open Cush-n-Stop Arm (HCUSH)
- Non-handed
- Provides hold open function with templated stop/hold open points
- Handle controls hold open function
- Optional

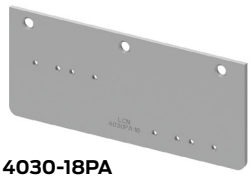
4030-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For abusive applications
- Features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional

4030-3049SCNS
Spring Hold Open Cush-n-Stop Arm (SHCUSH)
- Non-handed
- For abusive applications
- Features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional

Accessories

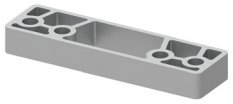
Installation accessories

4030-18TJ
Plate
- Required for top jamb mounting where head frame is less than 2 1/4" (57 mm) or flush ceiling condition exists
- Requires 1 1/2" (38 mm) minimum



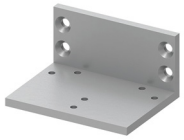
4030-18PA
Plate
- Required for parallel arm mounting where top rail is less than 5" (127 mm), measured from the stop
- Rrequires 1 3/4" (44 mm) minimum

4030-30
CUSH shoe support
- Provides anchorage for fifth screw used with CUSH arms where reveal is less than 3 1/16" (78 mm)



4030-61
Blade stop spacer
- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop

4030-62A
Auxiliary shoe
- Requires a top rail of 7" (178 mm)
- Replaces -62PA for parallel arm mounting of regular arm with some overhead holder/stop
- Optional



4030-419
PA flush panel adapter
- Provides horizontal mounting surface for PA or CUSH shoe on single rabetted or flush frame

4030-62PA
PA shoe
- Required for parallel arm mounting

Ordering information

How-to-order 4030 Series closers

1. Select finish

☐ Standard powder coat _____
Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard metal cover
- Regular arm
- Wood and self tapping machine screw pack
(unless options listed below are selected)

Closer options

Finish
- ☐ Custom powder coat (RAL) _____
- ☐ Plated finish _____
- ☐ SRI primer (use with powder coat finishes only)

Arm
- ☐ Regular Arm with Parallel Arm Bracket (RWPA)
- ☐ Regular Arm with 62A Auxiliary Shoe (RW62A)
- ☐ Long Arm (LONG)
- ☐ Hold Open Arm (H)
- ☐ Hold Open with Parallel Arm Bracket (HWPA)
- ☐ Hold Open Long Arm (HLONG)
- ☐ Light Duty Arm (LD)
- ☐ Light Duty Arm with Auxiliary Shoe (LD62A)
- ☐ Light Duty Arm with Parallel Arm Shoe (LDPA)
- ☐ Light Duty Long Arm (LDL)
- ☐ Extra Duty Arm (EDA)
- ☐ Hold Open Extra Duty Arm (HEDA)
(specify right or left hand)
- ☐ Cush-n-Stop Arm (CUSH)
- ☐ Hold Open Cush-n-Stop Arm (HCUSH)
- ☐ Spring Cush-n-Stop Arm (SCUSH)
- ☐ Spring Hold Open Cush-n-Stop Arm (SHCUSH)

Optional screw packs
- ☐ Through bolt[1] wood and machine screws (TBWMS)

Installation accessories
- ☐ Plate, 4030-18TJ
- ☐ Plate, 4030-18PA
- ☐ CUSH shoe support, 4030-30
- ☐ Blade stop spacer, 4030-61
- ☐ Auxiliary shoe, 4030-62A
- ☐ PA flush panel adapter, 4030-419

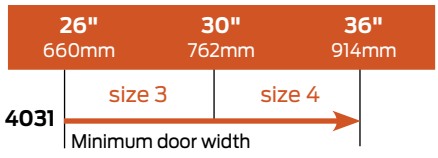
Special template
- ☐ ST- _____

1. Specify door thickness if other than 1 3/4".

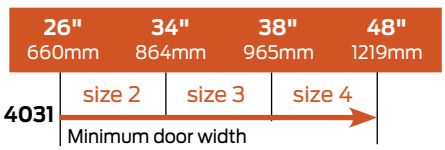
Table of sizes

- Non-sized 4031 cylinder is adjustable from sizes 1 to4 and is shipped set to size 3

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.

Reduced opening force 4030 Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4031	4031	4031
5.0* lbs.	4031	4031	4031

* Maximum opening force.

4030T Series

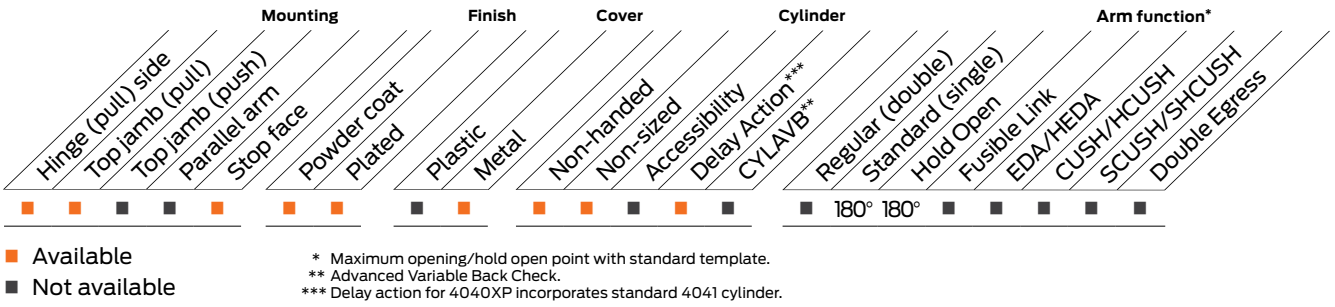
The 4030T is a single lever (track) arm, surface mounted closer designed for interior use on narrow head frames and top rails. The choice of three mountings and ease of installation offer a versatile solution to door control in moderate traffic applications. The 4030T compliments the heavy duty 4000 Series.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/8" diameter piston ▪ 1/2" diameter single heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Non-handed
Size	Adjustable spring size 1-3
Warranty	30 years

Cover	Metal cover (MC), standard
Fasteners	Wood and machine screws (WMS)
Mounting	Pull side on door, pull side on frame and push side on door
Arms	Standard arm and track
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



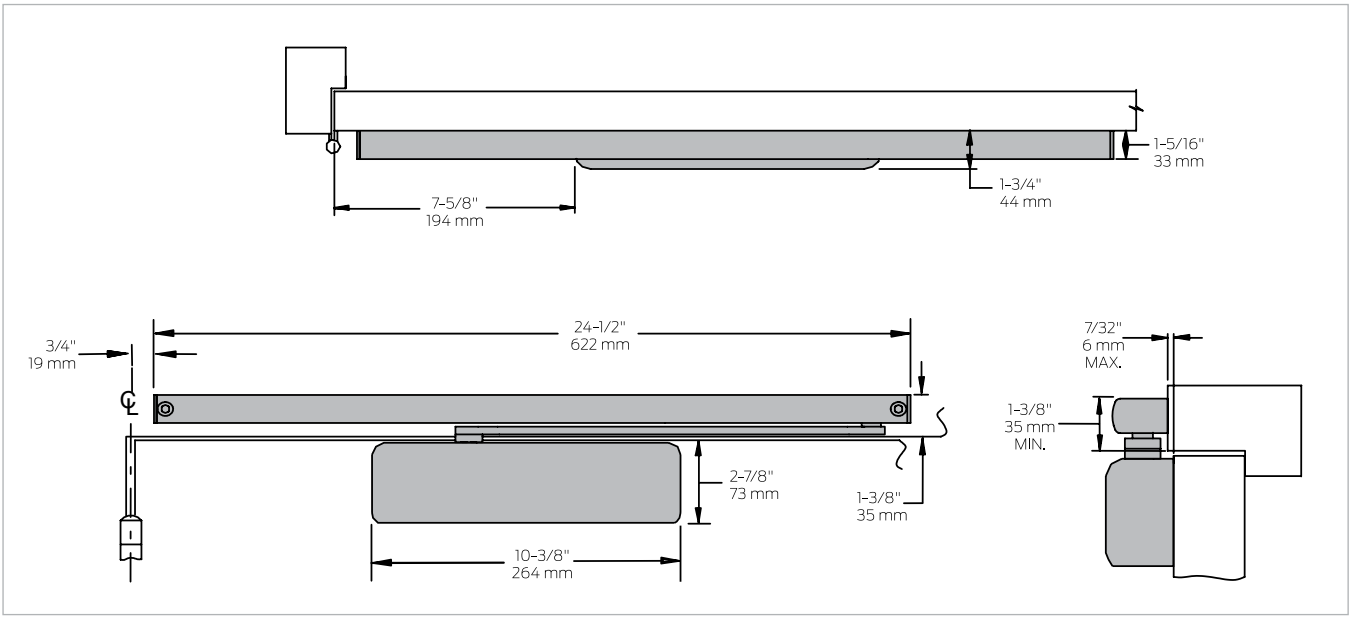
■ Available
■ Not available

* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay action for 4040XP incorporates standard 4041 cylinder.

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

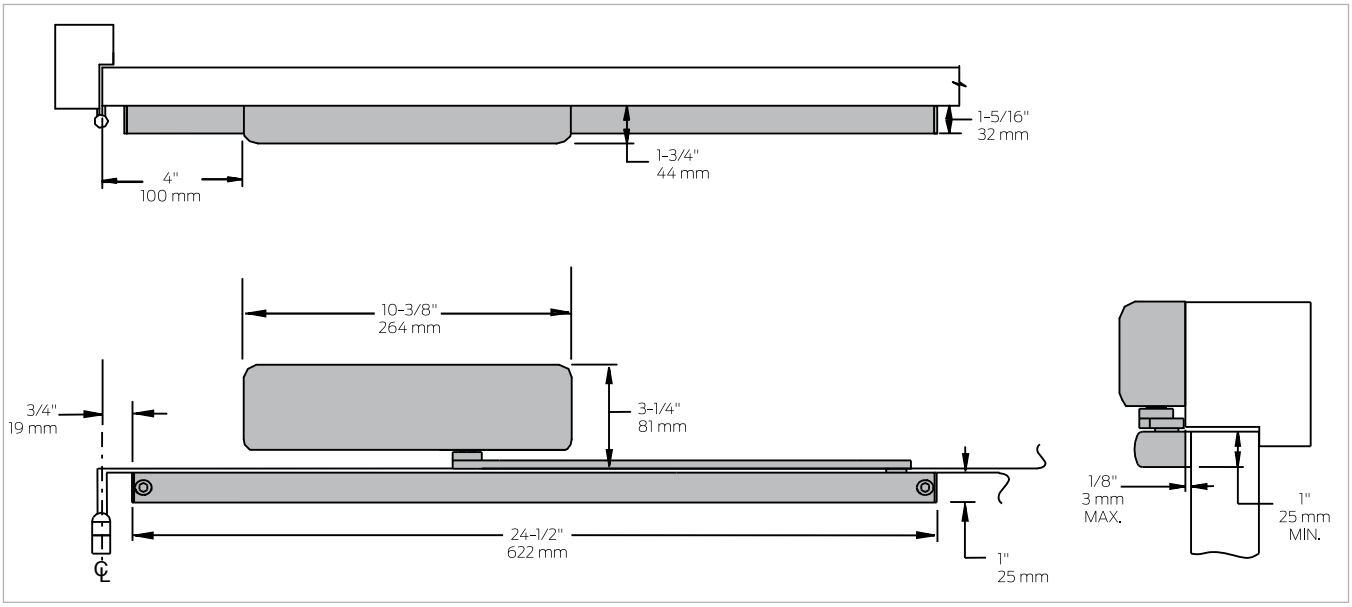
Hinge (pull) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing 180°
Reveal	Should not exceed 7/32" (6 mm)
Top rail	Requires 2 7/8" (73 mm) minimum
Clearance	1 3/4" (44 mm), behind door required for installation
Maximum opening	▪ Can be templated for 180° ▪ Consult factory if door will be held open at 180° ▪ Hold open points up to maximum opening point with hold open option

Mounting details

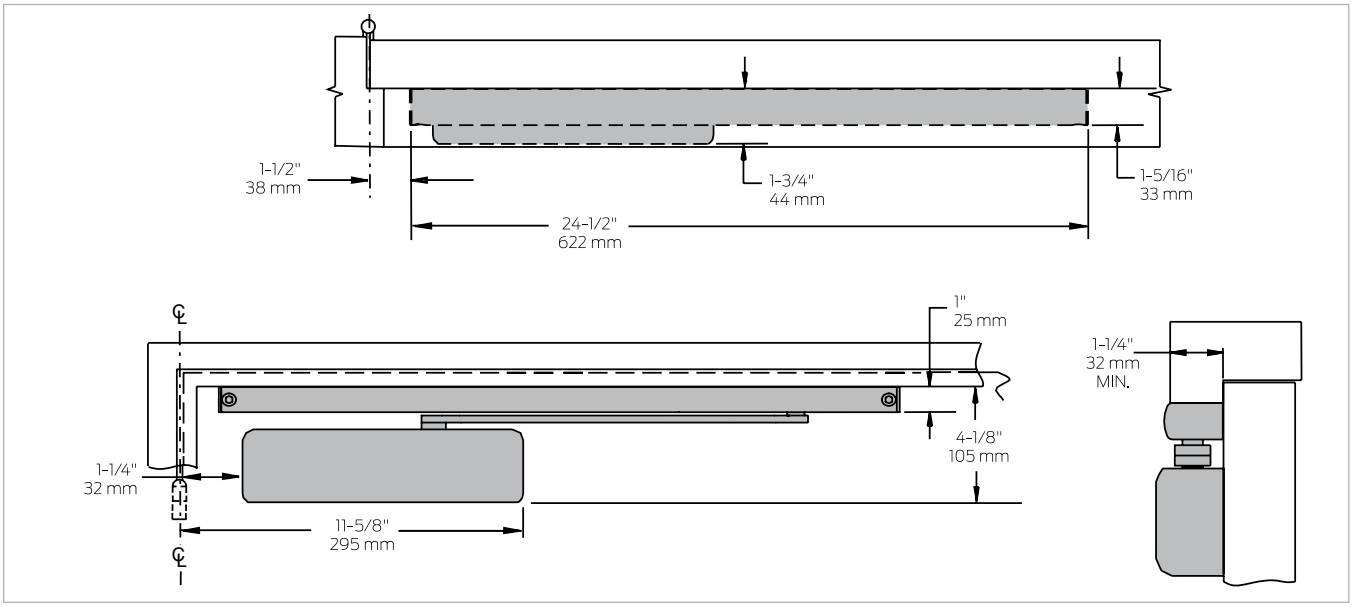
Top jamb (pull) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where the door cannot swing 180°
Reveal	Should not exceed 1/8" (3 mm)
Top rail	Requires 1" (25 mm) minimum
Head frame	Requires 2 7/8" (73 mm) minimum
Maximum opening	▪ Can be templated for 180° ▪ Consult factory if door will be held open at 180° ▪ Hold open points up to maximum opening point with hold open option

Mounting details

Stop face (push) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing 110°
Reveal	Should not exceed 1 3/4" (44 mm)
Top rail	Requires 4 1/8" (105 mm) minimum measured from the stop
Head frame	Minimum 1 1/4" (32 mm)
Maximum opening	▪ Can be templated for 110° ▪ Hold open points up to maximum opening with hold open option

Note: Consult factory for applications where door must swing 180°.

Accessories

Cylinders

4031T-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- Standard

Covers

4030T-72MC
Metal Cover (MC)
- Non-handed

Arms

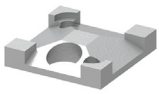
4030T-3077T
Standard Arm (STDTRKARM)
- Non-handed
- Single lever mounts hinge side, top jamb or stop face
- Track roller included

Tracks

4030T-3038
Standard Track (STDTRK)
- Non-handed
- Non hold open track mounts on either side of the door
- Will accept hold open clip
- Standard

4030T-3038H
Hold Open Track (H)
- Non-handed
- Hold open track mounts on either side of the door
- Comes with 4030T-3054 hold open clip
- Optional

Installation accessories



4030T-3054
Hold-open clip
- Mounts in track to provide hold open function
- Hold open point controlled by clip location
- Requires 4030T-3034H

Ordering information

How-to-order 4030T Series closers

1. Select finish

☐ Standard powder coat _____
Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:

- Standard cylinder
- Standard metal cover
- Standard track
- Standard arm
- Track roller
- Wood and self tapping machine screw pack
  (unless options listed below are selected)

Closer options

Finish

☐ Custom powder coat (RAL) _____
☐ Plated finish _____
☐ SRI primer (use with powder coat finishes only)

Track

☐ Hold Open Arm (H)

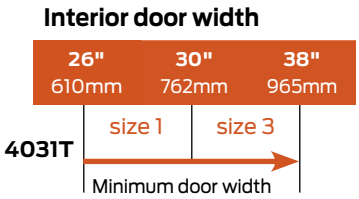
Optional screw packs

☐ Through bolt[1] wood and machine screws (TBWMS)
☐ Hold open wood and machine screws (HWMS)
☐ Hold open through bolt wood and machine screws (HTBWMS)

1. Specify door thickness if other than 1 3/4".

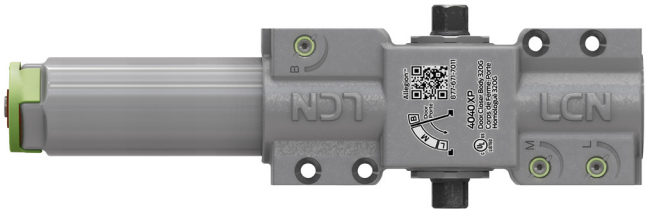
Table of sizes

- Non-sized 4031T Series cylinder is adjustable from sizes 1 to 3 and is shipped set to size 3



→ Indicates recommended range of door width for closer size.

4040XP Series



The 4040XP Series is LCN's most popular door closer—and for good reason. This durable, non-handed, surface-mounted, heavy-duty closer is designed for the most demanding high-use-and-abuse applications as well as for easy installation and maintenance.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Patented positive stop ▪ Patented regulation valve indicators ▪ Independent speed adjustments ▪ QR code for instructions and support ▪ Cast iron body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ Double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Non-handed
Templating	Peel-n-Stick templates - 2 ¼" x 5" mounting hole pattern
Size	Adjustable spring size 1-6, includes LCN Green Dial
Warranty	30 years

Cover	▪ Snap-fit plastic cover (PC) with retention fit, standard ▪ Metal cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Hinge (pull side), top jamb (push side), parallel arm (push side)
Arms	Regular arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations

Mounting						Finish		Cover			Cylinder			Arm function*						
Hinge (pull) side	Top jamb (pull)	Top jamb (push)	Parallel arm	Stop face	Powder coat	Plated	Plastic	Metal	Non-handed	Non-sized	Accessibility	Delay Action***	CYLAVB**	Regular (double)	Standard (single)	Hold Open	Fusible Link	EDA/HEDA	CUSH/HCUSH	SCUSH/SHCUSH	Double Egress
■	■	■	■	■	■	■	■	■	■	■	♿	■	■	120°	■	120°	■	180°	110°	110°	■

■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay feature incorporates standard 4040 cylinder (not XP).

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

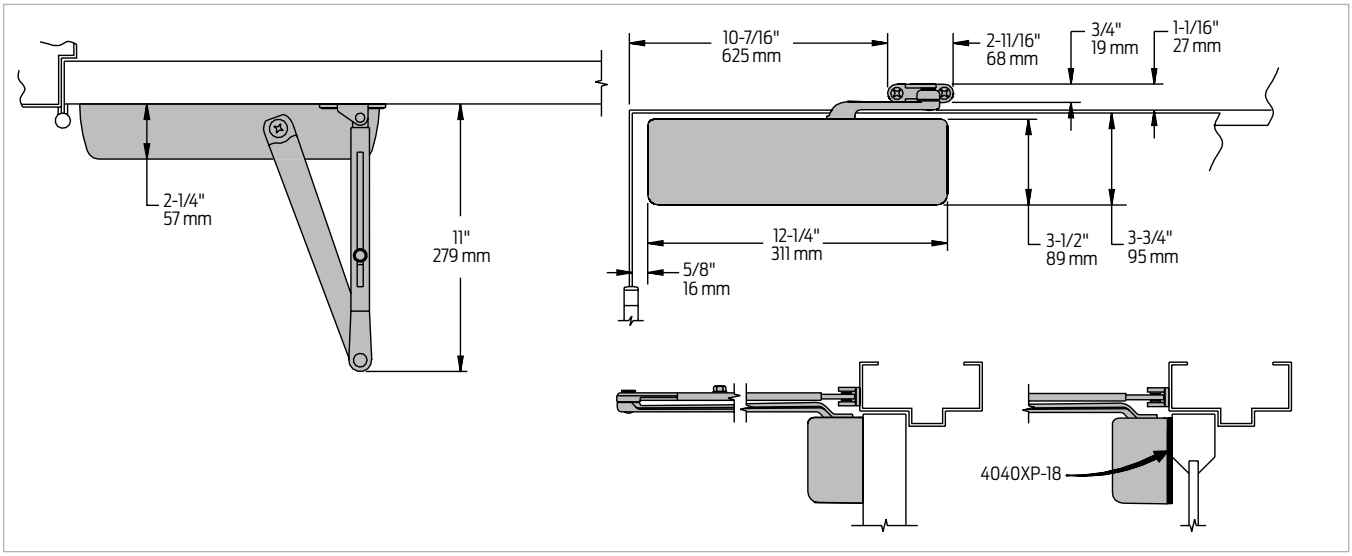
Adjustments

There are several design features that make installation or adjustment of the 4040XP easier and more intuitive.

- **LCN Green Dial** provides a visual reference of the spring power setting, taking the guesswork out of spring power adjustments.
- **Additional adjustments** can be made to the back check, main, and latch regulation valves which are labeled for easy identification.
  - Labels correspond to a diagram with door swing zones located on the closer body.
- **Patented positive stop feature** on all regulation valves. The improved staking feature prevents the screw from being backed out and causing accidental damage to the product.
  - The patented regulation valve indicators provide visual color indicators of how far a screw is backed out—the more visible the component, the faster the speed.
  - This makes adjustments simpler and more intuitive.
- **QR code** that provides on-the-spot access to interactive installation and maintenance instructions and tech support.

Mounting details

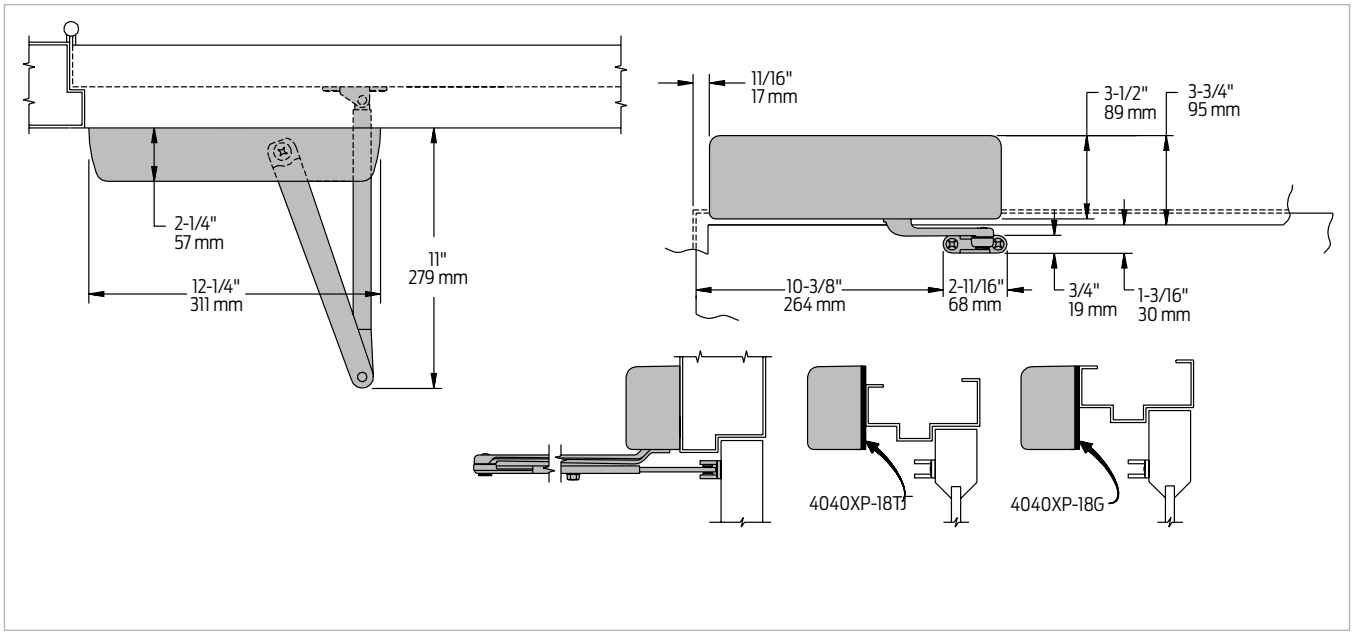
Hinge (pull) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing beyond 120°
Reveal	Should not exceed 3/4" (19 mm) for Regular or Hold Open Arm
Top rail	Less than 3 3/4" (95 mm) requires plate, 4040XP-18; plate requires 2" (51 mm) minimum
Clearance	2 3/8" (60 mm) behind door required for 90° installation
Delay action	▪ Incorporates standard 4041 cylinder ▪ Delays closing from 120° to 70° ▪ Delay time adjustable up to approximately 1 minute
Maximum opening	▪ Templating allows up to 120° ▪ Hold open points 90° up to 120° with Hold Open Arm

Mounting details

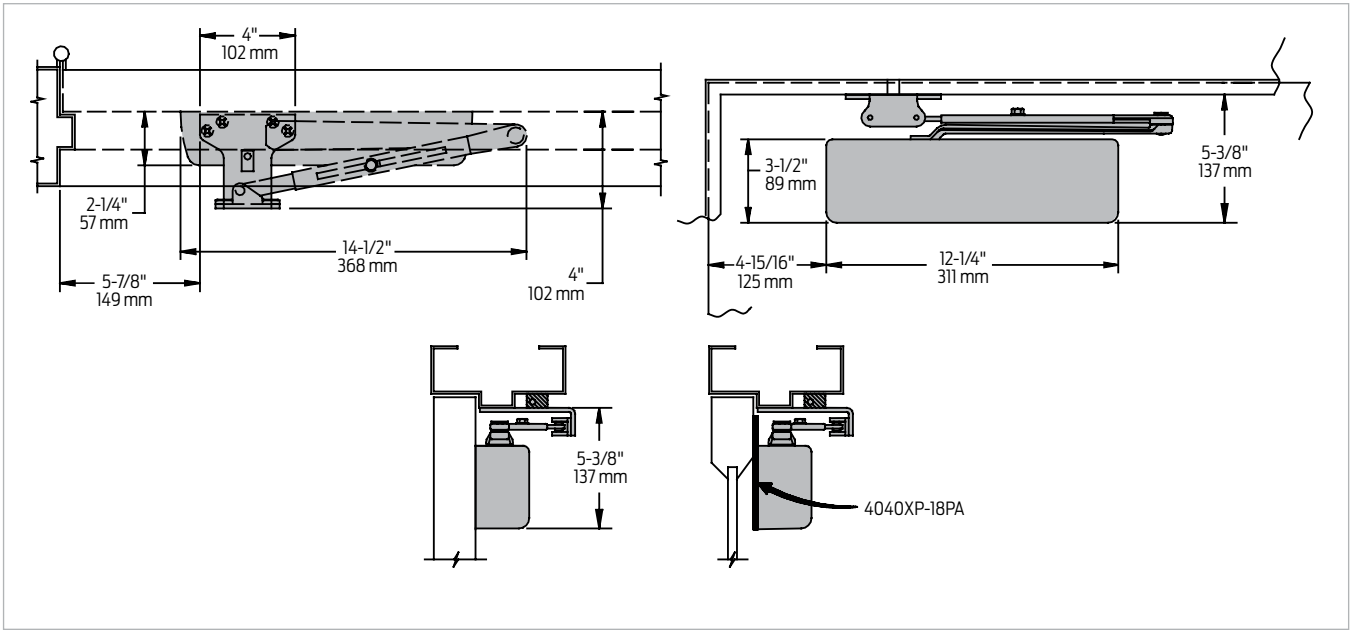
Top jamb (push) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width		
Auxiliary stop	Recommended at hold open point or where a door cannot swing beyond 120°		
Reveal	Arm type	Reveal	Max opening
	Regular Arm	2 9/16"	Up to 120°
	Long Arm	4 13/16"	Up to 120°
	X Long Arm	4 13/16" up to 8"	Up to 120°
	Hold Open Arm	2 9/16"	Up to 120°
	Hold Open Long Arm	4 13/16"	Up to 120°
Top rail	▪ Requires 1 1/4" (32 mm) minimum ▪ 2 1/4" (57 mm) minimum with closer on plate, 4040XP-18TJ ▪ 3" (76 mm) minimum with closer on plate, 4040XP-18G		
Head frame	▪ Less than 3 1/2" (89 mm) requires plate, 4040XP-18TJ ▪ With flush ceiling, use plate, 4040XP-18G. Either plate requires 1 3/4" (44 mm) minimum		
Maximum opening	▪ Templating allows up to 120° ▪ Hold open points 85° up to 120° with Hold Open Arm		
Delay action	▪ Incorporates standard 4041 cylinder ▪ Delays closing from 120° to 70° ▪ Delay time adjustable up to approximately 1 minute		

Mounting details

Parallel arm (push) side mounting



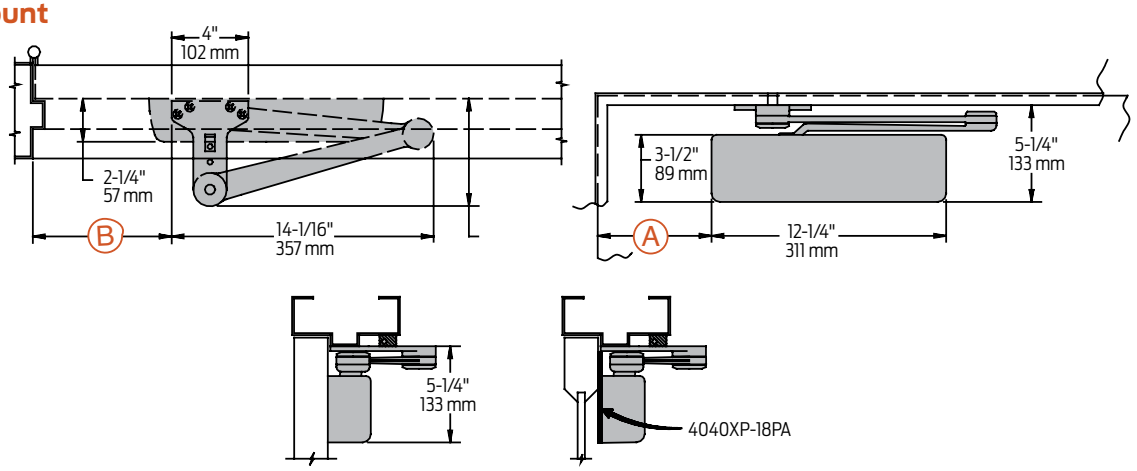
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point, where the door cannot swing 180°, or where Cush-n-Stop Arm is not used
Reveal	Should not exceed 7/32" (6 mm)
Top rail	Less than 5 3/8" (137 mm) measured from the stop requires plate, 4040XP-18PA; plate requires 2" (51 mm) minimum from the stop
Head frame	Flush or rabetted requires PA shoe adapter, 4040XP-419
Stop width	Minimum 1" (25 mm); CUSH arm requires minimum 1 1/2" (38 mm)
Blade stop	Clearance requires 1/2" (13mm) blade stop spacer, 4040XP-61
Clearance	▪ 4040XP-62PA shoe is 4" (102 mm) from door face ▪ EDA shoe projects 5 1/2" (140 mm) from door face ▪ CUSH shoe projects 6" (152 mm) from door face
Delay action	▪ Incorporates standard 4041 cylinder, without XP cylinder ▪ Delays closing from 120° to 70° ▪ Delay time adjustable up to approximately 1 minute
Maximum opening	▪ 180° opening/hold open points with all except CUSH arms ▪ 110° opening/hold open with CUSH arms

Notes:
- Optional mounting requires PA shoe, 4040XP-62PA for regular or Hold Open Arms
- Add prefix "P" to closer description (eg. P4040XP)
- P4040XP closer includes 4040XP-201 fifth hole spacer to support PA shoe

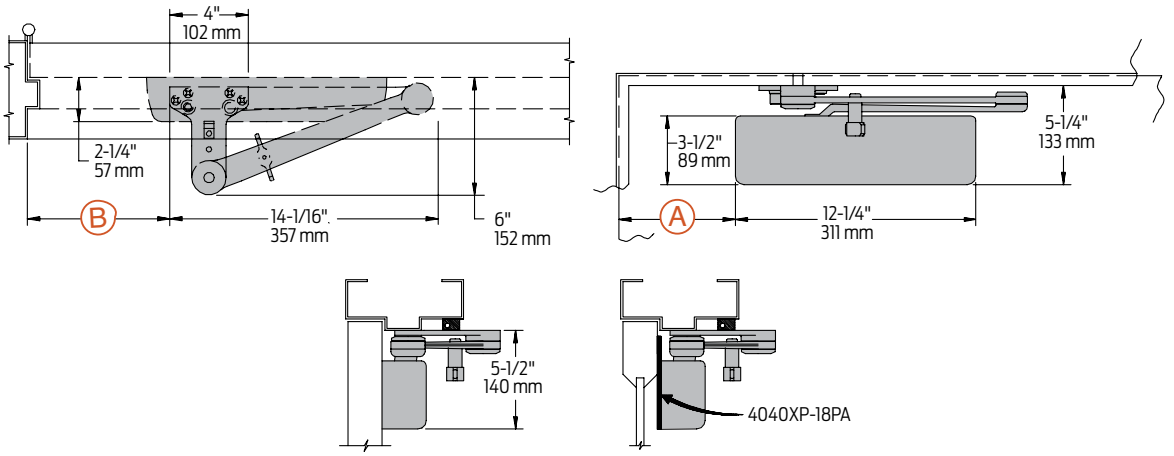
Mounting details

EDA and CUSH mounting

EDA mount



CUSH mount



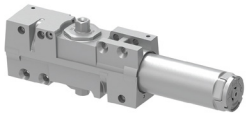
Clearance	4040XP-62EDA is 5 1/2" (140 mm) from door face; 6" (152 mm) for CUSH	
Head frame	Flush or rabetted requires CUSH flush panel adapter, 4040XP-419	
CUSH Arm	Requires shoe support, 4040XP-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm)	
Delay action	▪ Incorporates standard 4041 cylinder, without XP cylinder ▪ Delays closing from maximum opening to; 115° with 180° template, 95° with 110° template, 85° with 100° template, 75° with 90° template (delay time adjustable up to approximately 1 minute)	
Maximum opening	EDA arm can be templated for points at:	CUSH arms can be templated for opening/hold open point at:
	110°: A = 6 3/8" (162 mm) B = 7 3/4" (197 mm)	85°: A = 7 15/16" (202 mm) B = 9 1/8" (232 mm)
	or 180°: A = 2 7/8" (73 mm) B = 4 1/4" (108 mm)	90°: A = 7 3/16" (183 mm) B = 8 1/2" (216 mm)
	Hold open points up to maximum opening with HEDA arm	100°: A = 6 1/16" (154 mm) B = 7 1/4" (184 mm)
		or 110°: A = 5 1/16" (129 mm) B = 6 3/8" (162 mm)

Notes:
- 4040XP Series closers ordered with EDA or CUSH arms include 4040XP-201 fifth hole spacer to support the shoe
- SCUSH stop points are approximately 5° more than templated stop point
- Hold open at templated stop points

Accessories

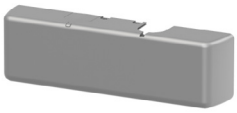
Cylinders

4040XP-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- Heavy duty

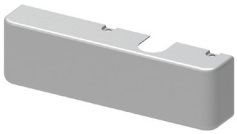


4041-3071 DEL
Delay Action Cylinder (CYLDEL)
- Used for delayed action closing
- Non-handed
- Heavy duty

Covers



4040XP-72
plastic cover (PC)
- Non-handed
- Includes 4040XP-54 snap-on cover clip
- Patented snap-fit cover with improved retention fit



4040XP-72MC
metal cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4040XP-3077
Regular Arm (REGARM)
- Non-handed
- Mounts pull side or top jamb with shallow reveal P4041 closer includes PA shoe, 4040XP-62PA required for parallel arm mounting

4040XP-3077L
Long Arm (LONG)
- Non-handed
- Includes long rod and shoe, 4040XP-79LR for top jamb mount
- Optional

4040XP-3077ELR
Extra Long Arm (XLONG)
- Non-handed
- Includes extra long rod and shoe, 4040XP-79ELR for top jamb mount with deep reveal
- Optional

4040XP-3049
Hold Open Arm (H)
- Non-handed
- Mounts pull side or top jamb with shallow reveal, hold open adjustable shoe
- 4040XP-62PA shoe required for parallel arm mounting
- Optional

4040XP-3049L
Hold Open Long Arm (HLONG)
- Non-handed
- Includes long head and tube, 4040XP-3048L for top jamb mount
- Optional

4040XP-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- Optional

4040XP-3049EDA
Hold Open Extra Duty Arm (HEDA)
- Handed
- Parallel arm features forged, solid steel main and forearm for potentially abusive installations
- Hold open function is adjusted at the shoe
- Optional

4040XP-3077EDA/62G
Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance
- Optional

4040XP-3049EDA/62G
Hold Open Extra Duty arm with 62G Thick Hub Shoe (HEDA62G)
- Handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance; hold open function is adjusted at the shoe
- Optional

4040XP-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe.
- Optional

4040XP-3049CNS
Hold Open Cush-n-Stop Arm (HCUSH)
- Non-handed
- Hold open function with templated stop/hold open points
- Handle controls hold open function
- Optional

Accessories

Arms (cont.)

4040XP-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For potentially abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional

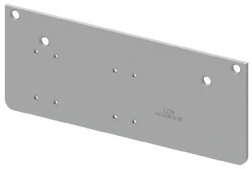
4040XP-3049SCNS
Spring Hold Open Cush-n-Stop Arm (SHCUSH)
- Non-handed
- For potentially abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional

Installation accessories

4040XP-18
Plate
- Required for hinge side mount where top rail is less than 3 3/4" (95 mm)
- Requires minimum 2" (51 mm) minimum top rail

4040XP-18G
Plate
- Locates top jamb mounted closer flush with top of head frame face in flush ceiling condition
- Requires 1 3/4" (44 mm) minimum head frame

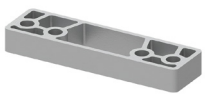
4040XP-18TJ
Plate
- Centers top jamb mounted closer vertically on head frame where face is less than 3 1/2" (89 mm). Plate requires 1 3/4" (44 mm) minimum head frame



4040XP-18PA
Plate
- Required for parallel arm mounting where top rail is less than 5 1/2" (140 mm), measured from the stop
- Requires 2" (51 mm) minimum top rail

4040XP-62PA
PA shoe
- Required for parallel arm mounting

4040XP-30
CUSH shoe support
- Provides anchorage for fifth screw used with CUSH arms, where reveal is less than 3 1/16" (78 mm)
- Optional



4040XP-61
Blade stop spacer
- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop
- Optional

4040XP-419
PA flush panel adapter
- Provides horizontal mounting surface for parallel arm shoe on single rabbeted or flush frame
- Optional

4040XP-62A
Auxiliary shoe
- Requires a top rail of 7" (178 mm)
- Shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop
- Optional

Ordering information

How-to-order 4040XP Series closers

1. Select finish

☐ Standard powder coat _____
Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Regular arm
- Self reaming and tapping screws
(unless options listed below are selected)

Closer options

Cylinder
☐ Delay action cylinder (CYLDEL)

Cover
☐ Metal (specify right or left hand)(MC)

Finish
☐ Custom powder coat (RAL) _____
(handed metal cover required)
☐ Plated finish, US _____
(handed metal cover required)
☐ SRI primer
(use with powder coat finishes only)

Arm
☐ Regular Arm (REGARM)
☐ Regular Arm with Parallel Arm Bracket (RWPA)
☐ Regular Arm with 62A Auxiliary Shoe (RW62A)
☐ Long Arm (LONG)
☐ Extra Long Arm (XLONG)
☐ Hold Open Arm (H)
☐ Hold Open with Parallel Arm Bracket (HWPA)
☐ Hold Open Long Arm (HLONG)
☐ Extra Duty Arm (EDA)
☐ Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
☐ Hold Open Extra Duty Arm (HEDA)
☐ Cush-n-Stop Arm (CUSH)
☐ Hold Open Cush-n-Stop Arm (HCUSH)
☐ Spring Cush-n-Stop Arm (SCUSH)
☐ Spring Hold Open Cush-n-Stop Arm (SHCUSH)

Optional screw packs
☐ Through bolt[1] self reaming and tapping screws (TBSRT)
☐ Wood and machine screws (WMS)
☐ Through bolt[1] wood and machine screws (TBWMS)
☐ Torx machine screws (TORX)
☐ Through bolt[1] and torx machine screws (TBTRX)

Installation accessories
☐ Plate, 4040XP-18
☐ Plate, 4040XP-18TJ
☐ Plate, 4040XP-18G
☐ Plate, 4030-18PA
☐ CUSH shoe support, 4040XP-30
☐ Blade stop spacer, 4040XP-61
☐ Auxiliary shoe, 4040XP-62A
☐ PA flush panel adapter, 4040XP-419

Special template
☐ ST- _____

1. Specify door thickness if other than 1 3/4".

Table of sizes

- 4040XP cylinders are adjustable from size 1 through size 6 and is shipped set to size 3
- Closing power of 4040XP Series closers may be adjusted 50%

Exterior (and vestibule) door width

24" 610mm	30" 762mm	36" 914mm	42" 1067mm	48" 1219mm
*4040XP	size 3	size 4	size 5	size 6

Minimum door width

Interior door width

24" 610mm	30" 762mm	38" 965mm	48" 1219mm	54" 1372mm	60" 1524mm
*4040XP	size 2	size 3	size 4	size 5	size 6

Minimum door width

→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 4040XP Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4040XP	4040XP	4040XP
5.0* lbs.	4040XP	4040XP	4040XP

* Maximum opening force.

4040XPT Series

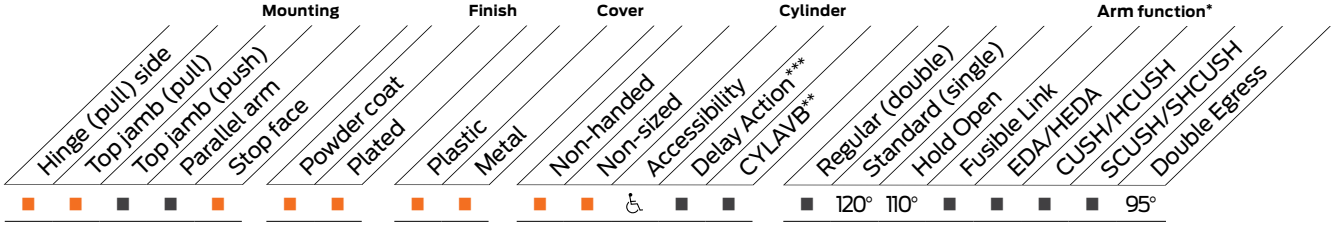
The 4040XPT is a Grade 1 device featuring a cast iron body and Liquid X Fluid ideal for pull or push side placement in high traffic applications. Its high-quality construction provides for reliable performance.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ Double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Non-handed
Size	Adjustable spring size 1-4
Warranty	30 years

Cover	▪ Snap-fit plastic cover (PC) with retention fit, standard ▪ Metal cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Pull side on door, pull side top jamb, push side on door
Arms	Standard arm and track with roller
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

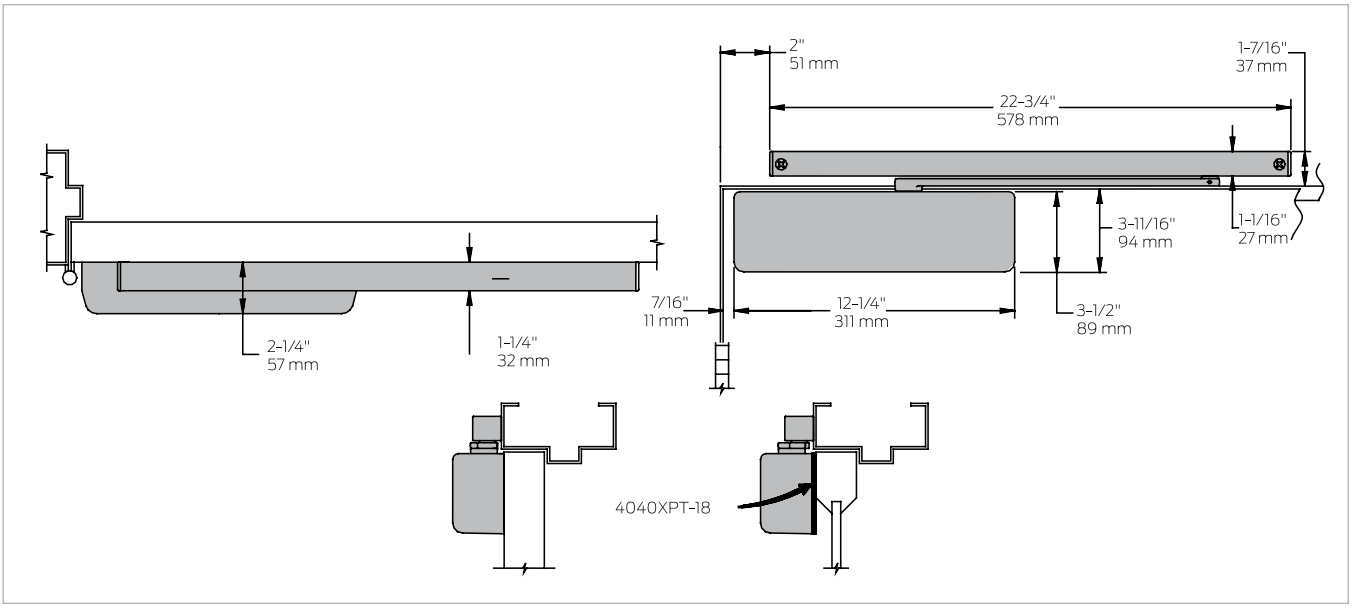


■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay feature incorporates standard 4040 cylinder (not XP).

Mounting details

Hinge (pull) side mounting

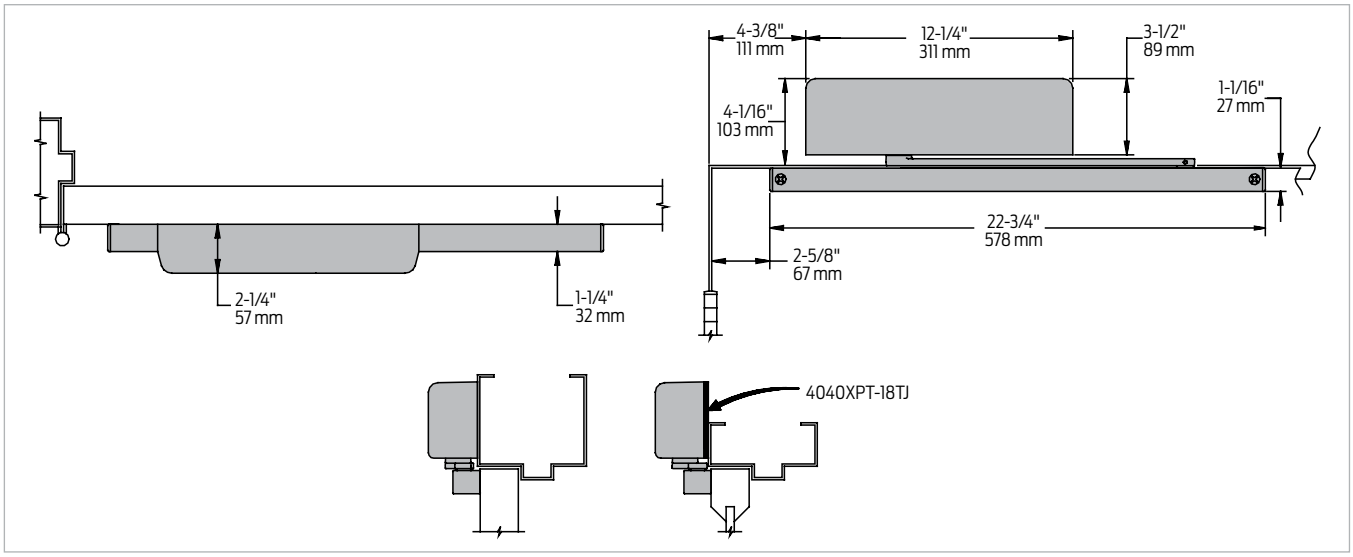


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended at hold open point or where a door cannot swing 120° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door ▪ Track bumper is not intended to replace an auxiliary stop
Reveal	Should not exceed 1/8" (3 mm) for standard arm
Top rail	Less than 3 3/4" (95 mm) requires plate, 4040XPT-18. Plate requires 1 13/16" (44 mm) minimum.
Head frame	Requires 1 1/4" (32 mm) minimum
Clearance	2 1/4" (57 mm) behind door required for 90° installation
Maximum opening	▪ Templating allows 120° with standard arm, limited to 110° when optional bumper is installed ▪ Variable hold open angles with infinite options

Note: Consult factory for applications where door must swing 180°.

Mounting details

Top jamb (pull) side mounting

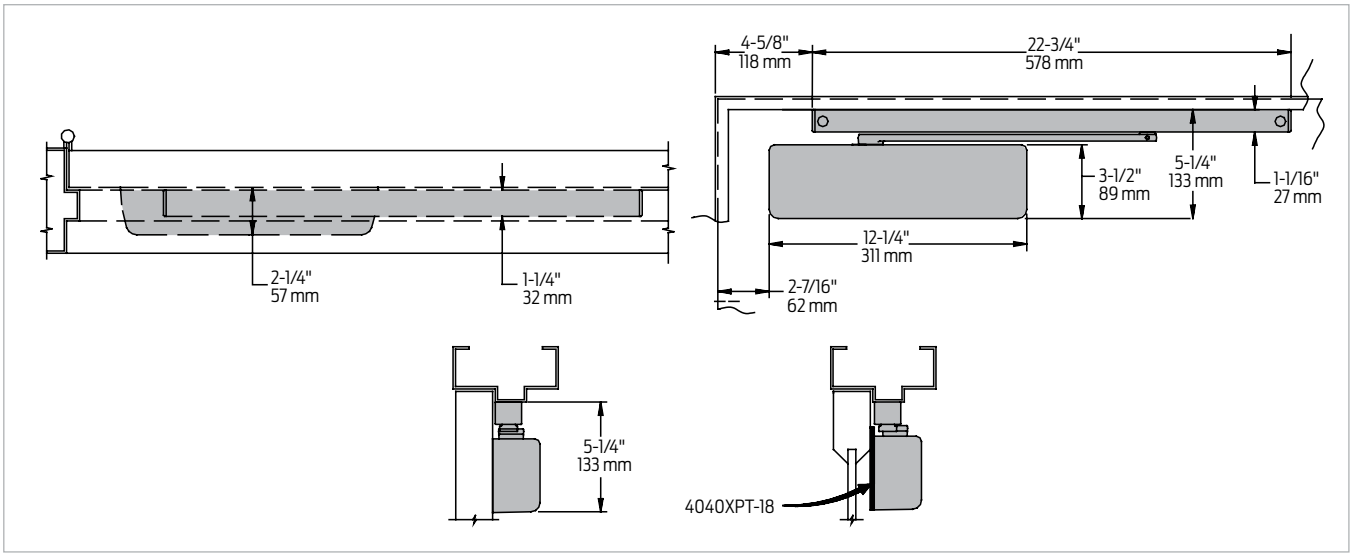


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended at hold open point or where a door cannot swing 180° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door ▪ It is not intended to replace an auxiliary stop
Reveal	Should not exceed 1/8" (3 mm)
Head frame	Less than 3 7/8" (98 mm), requires plate, 4040XPT-18TJ. Plate requires 1 3/4" (44 mm) minimum.
Clearance	1 1/4" (32 mm) behind door required for 180° installation
Maximum opening	▪ Templating allows 180° with standard track arm, limited to 110° with optional bumper installed ▪ Consult factory if door will be held open at 180° ▪ Variable hold open angles with infinite options

Note: Consult factory for applications where an exterior or large/heavy door must swing 180°

Mounting details

Stop face (push) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended at hold open point or where a door cannot swing 120° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door ▪ It is not intended to replace an auxiliary stop
Clearance	Projects 2 1/4" (57 mm) from face of door
Top rail	▪ Less than 5 1/4" (133 mm) measured from the stop, requires plate, 4040XPT-18 ▪ Plate requires 3 1/2" (89 mm) minimum
Stop width	Minimum 1 1/4" (32 mm)
Maximum opening	▪ Templating allows 120° with standard track arm, limited to 110° with optional bumper tracks ▪ Variable hold open angles with infinite options

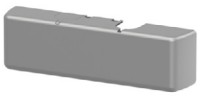
Note: Consult factory for applications where door must swing 180°.

Accessories

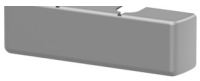
Cylinders

4040XPT-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- Standard

Covers



4040XPT-72
Plastic Cover (PC)
- Non-handed
- Snap-on
- Standard



4040XPT-72MC
Metal Cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4040XPT-3077T
Standard Arm (STDTRKARM)
- Non-handed
- Arm does not include track roller

4040XPT-3077DE
Double Egress Arm (DE)
- Handed
- For double egress doors and frames
- Does not include track roller
- Maximum reveal is 2 11/16" (68mm)
- Optional

Tracks

4040XPT-3038
Standard Track (STDTRK)
- Non-handed
- Non hold open
- Will accept hold open clip and/or bumper assembly
- Standard

4040XPT-3038B
Track with Bumper (BUMP)
- Non-handed
- Non hold open
- Will accept hold open clip
- Optional

4040XPT-3038H
Hold Open Track (H)
- Non-handed
- With hold open clip installed
- Will accept bumper assembly
- Optional

4040XPT-3038HB
Hold Open Track with Bumper (HBMP)
- Non-handed
- With hold open clip and bumper assembly installed
- Optional

Installation accessories

4040XPT-18
Plate
- Required for pull side (door mount) installations where top rail is less than 3 3/4" (95 mm)
  - Requires minimum 1 3/4" (44 mm) top rail
- Required for push side (door mount) installations where top rail is less than 5 1/4" (133 mm) measured from the stop
  - Requires minimum 3 1/2" (89 mm) top rail

4040XPT-18TJ
Plate
- Required for pull side top jamb installations where head frame is less than 3 7/8" (98 mm)
- Requires minimum 1 3/4" (44 mm) head frame

4040XPT-169
Track bumper
- Mounts in track to assist back check, does not replace auxiliary stop
- Limits maximum opening. Consists of bumper, bumper post, and mounting screw

4040XPT-3054
Hold open clip
- Mounts in track to provide hold-open function
- Hold open point controlled by clip location
- Consists of clip and mounting screws
- Requires 4040XPT-3034H hold open track roller

4040XPT-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3mm)

4040XPT-3034H
Hold open track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3mm)

Ordering information

How-to-order 4040XPT Series closers

1. Select finish

☐ Standard powder coat _____
Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Standard arm
- Track roller
- Standard track
- Self reaming and tapping screws
  (unless options listed below are selected)

Closer options

Cover
☐ Metal cover (MC)

Finish
☐ Custom powder coat (RAL) _____
(handed metal cover required)
☐ Plated finish, US _____
(handed metal cover required)
☐ SRI primer (use with powder coat finishes only)

Track
☐ Track with Bumper (BUMP)
☐ Hold Open Track (H)
☐ Hold Open Track with Bumper (HBMP)

Screw pack
☐ Through bolt[1] self reaming and tapping screws (TBSRT)
☐ Wood and machine screws (WMS)
☐ Through bolt[1] wood and machine screws (TBWMS)
☐ Torx machine screws (TORX)
☐ Through bolt[1] and torx machine screws (TBTRX)

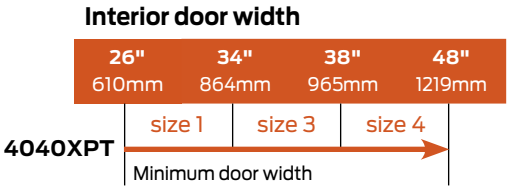
Installation accessories
☐ Plate, 4040XPT-18
☐ Plate, 4040XPT-18TJ

Special template
☐ ST- _____

1. Specify door thickness if other than 1 3/4".

Table of sizes

- Non-sized 4040XPT Series cylinder is adjustable from sizes 1 through 4 and is shipped set to size 3



→ Indicates recommended range of door width for closer size.

Reduced opening force 4040XPT Series closers

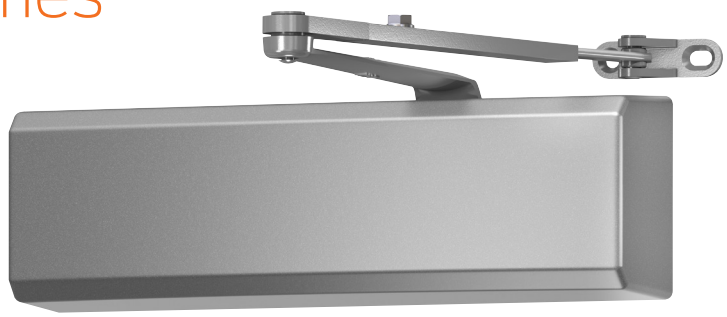
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	N/A	N/A	N/A
5.0* lbs.	4040XPT	4040XPT	4040XPT

* Maximum opening force.

4050A Series



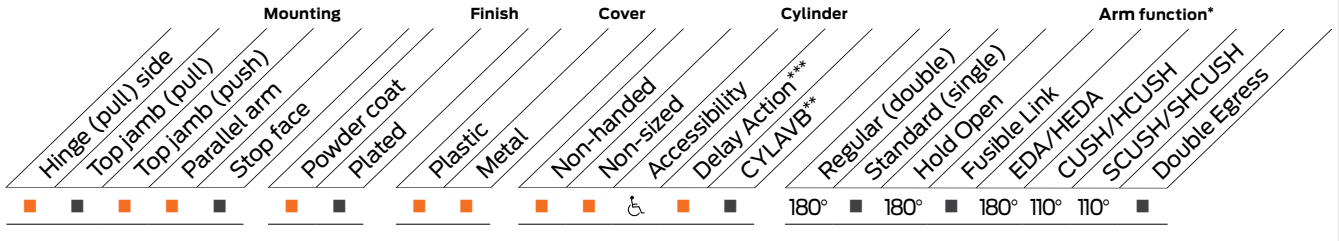
The 4050A Series cast aluminum closer is engineered for durability and built tough to excel in high frequency, day-to-day openings. Featuring the most common commercial footprint, it is ideal for commercial building applications that demand a combination of quality, reliability and value.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast aluminum body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Non-handed
Templating	2 3/8" x 6 3/4" mounting hole pattern
Size	Adjustable spring size 1-6
Warranty	25 years

Cover	▪ Plastic cover (PC), standard ▪ Metal cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Hinge (pull side), top jamb (push side), parallel arm (push side)
Arms	Standard regular arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only

Product Configurations



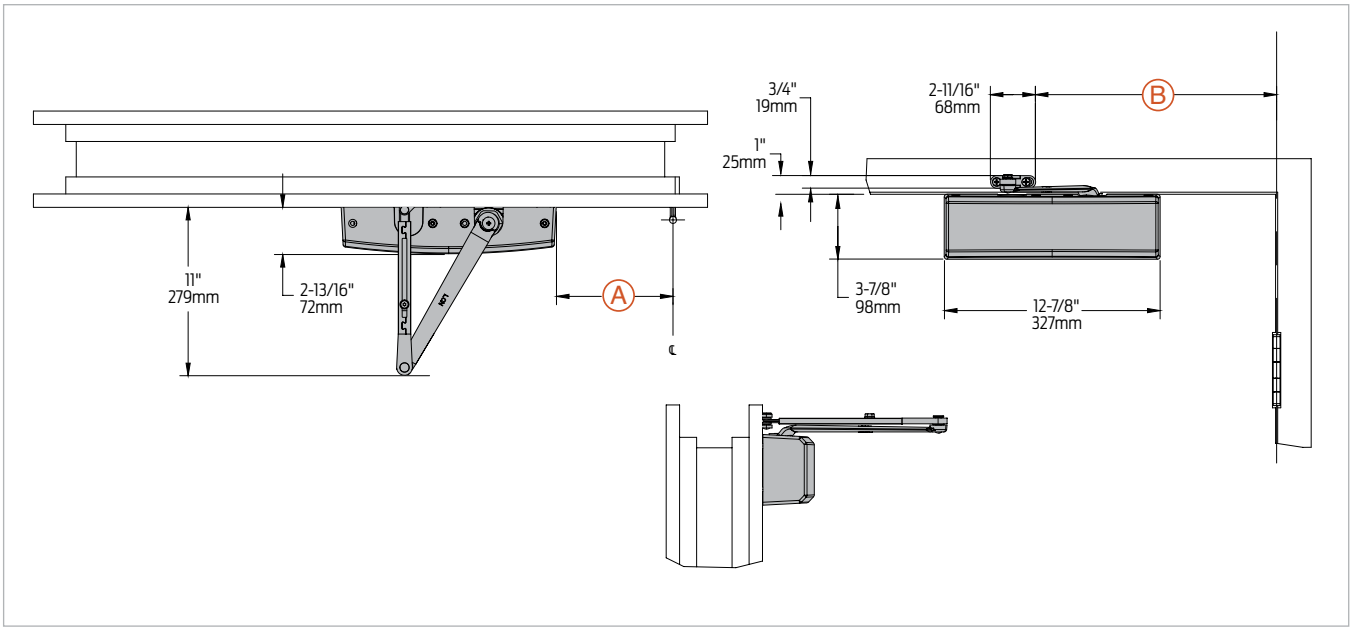
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay feature incorporates standard 4040 cylinder (not XP).

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

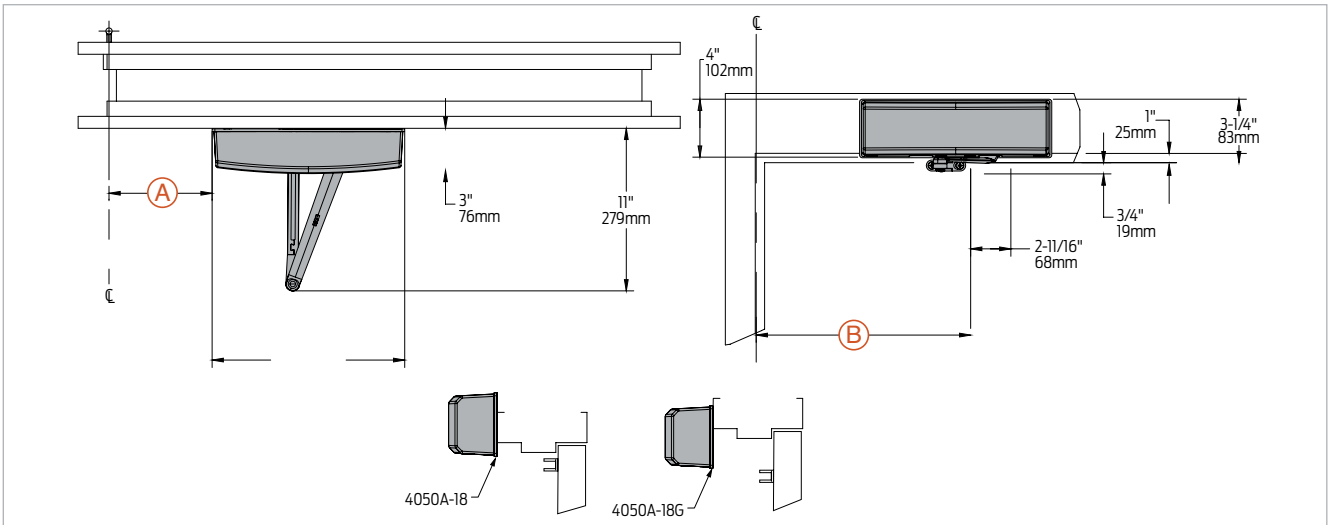
Hinge (pull) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point or where a door cannot swing beyond templated maximum opening
Reveal	Should not exceed 3/4" (19 mm) for Regular Arm or Hold Open Arm
Top rail	▪ Less than 3 7/8" (98 mm) requires plate, 4050A-18. ▪ Plate requires 1 13/16" (44 mm) minimum
Clearance	2 13/16" (72 mm) behind door required for 90° installation
Delay action	Delays closing from 180°-70°. Delay time adjustable up to approximately 1 minute
Maximum opening	▪ Templating allows up to 180° ▪ Hold open points up to maximum opening with Hold Open Arm
	To 100°: A = 5 5/8" (143mm) B = 11 1/4" (286mm)
	100° to 120°: A = 4 3/8" (111mm) B = 10" (254mm)
	120° to 150°: A = 3 5/8" (92mm) B = 9 1/4" (235mm)
	150° to 180°: A = 2 5/8" (67mm) B = 8 1/4" (210mm)

Mounting details

Top jamb (push) side mounting

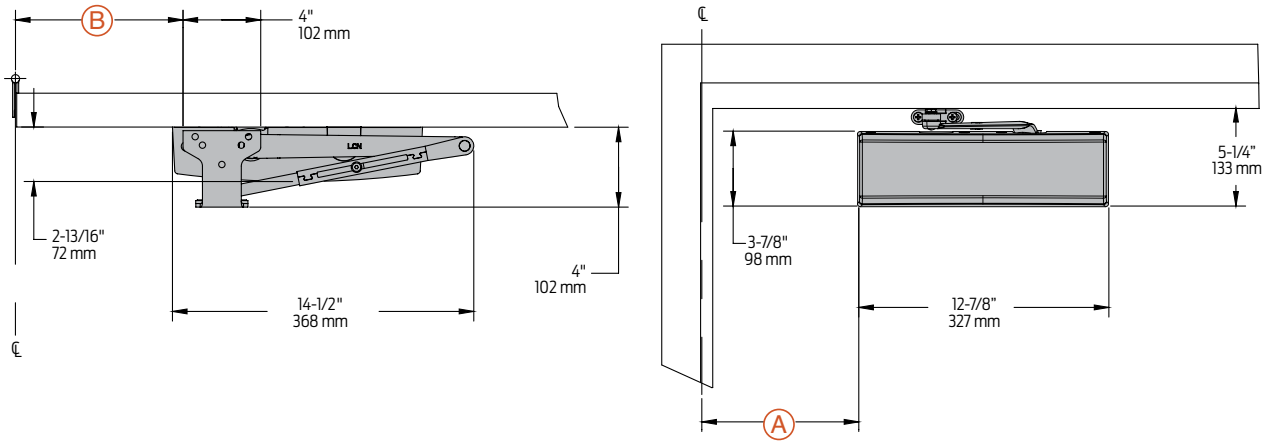


The 'A' dimension refers to the edge of the closer body to the center line of pivot or hinge.
The 'B' dimension refers to the edge of the closer shoe bracket to the center line of pivot or hinge.

Butt hinges	Should not exceed 5" (127 mm) in width		
Auxiliary stop	Recommended at hold open point or where a door cannot swing beyond templated maximum opening		
Reveal	Arm type	Reveal	Max opening
	Regular Arm	2 9/16"	Up to 180°
	Long Arm	4 13/16"	Up to 165°
	Hold Open Arm	2 9/16"	Up to 180°
	Hold Open Long Arm	4 13/16"	Up to 155°
Top rail	▪ Closer on 4050-18 plate requires minimum 1 3/4" (45mm) ▪ Closer on 4050-18G plate requires minimum 3 3/8" (86mm)		
Head frame	All top jamb installations require a plate ▪ 4050-18 plate requires minimum 3 1/4" (83mm) head frame and maximum stop height 5/8" (16mm) ▪ 4050-18G plate requires minimum 1 5/8" (41mm) head frame		
Delay action	Delay closing from 180° to 70°. Delay time adjustable up to approximately 1 minute.		
Maximum opening	▪ Templating allows up to 180° ▪ Hold open points up to maximum opening with Hold Open Arm		
	To 100°:	A = 5 1/2" (140mm) B = 11 1/4" (286mm)	
	100° to 120°:	A = 4 1/4" (108mm) B = 10" (254mm)	
	120° to 150°:	A = 3 1/2" (89mm) B = 9 1/4" (235mm)	
	150° to 180°:	A = 2 1/2" (64mm) B = 8 1/4" (210mm)	

Mounting details

Parallel arm (push) side mounting



The 'A' dimension refers to the edge of the closer body to the center line of pivot or hinge.
The 'B' dimension refers to the edge of the closer shoe bracket to the center line of pivot or hinge.

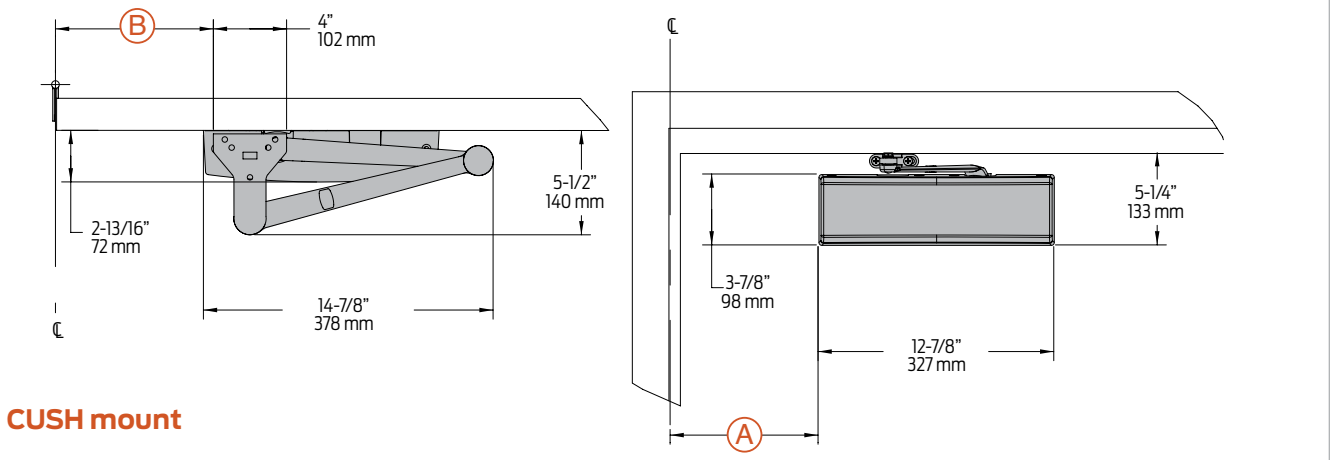
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point, where the door cannot swing beyond templated maximum opening, or where Cush-n-Stop Arm is not used
Top rail	Less than 5 1/4" (133mm) measured from the stop requires plate, 4050A-18PA. Plate requires 2" (51mm) minimum from the stop
Clearance	For 4050A-62PA shoe is 4" (102mm) from door face
Head frame	Flush or rabetted requires PA shoe adapter, 4050A-419
Stop width	Minimum 1" (25mm)
Blade stop	Clearance requires 1/2" (13mm) blade stop spacer, 4050A-61
Delay action	Delays closing from 180°-70°; delay time adjustable up to approximately 1 minute.
Auxiliary shoe	4050A-62A allows installation of Regular Arm with overhead holder/stop
Maximum opening	To 100°: A = 7 3/8" (187mm) B = 8 3/8" (213mm)
	100° to 130°: A = 6 3/8" (162mm) B = 7 3/8" (187mm)
	130° to 150°: A = 5 7/8" (149mm) B = 6 7/8" (175mm)
	150° to 180°: A = 4 7/8" (124mm) B = 5 7/8" (149mm)
	Hold open points up to maximum opening with Hold Open Arm

Note: Optional mounting requires PA shoe, 4050A-62PA for Regular or Hold Open Arms.

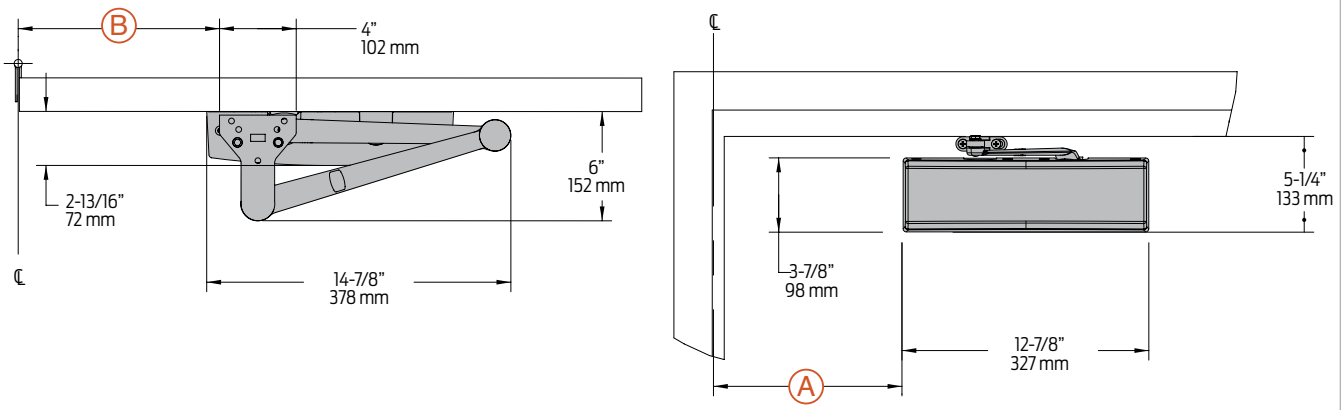
Mounting details

EDA and CUSH mounting

EDA mount



CUSH mount



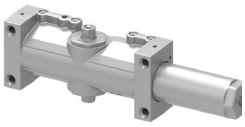
The 'A' dimension refers to the edge of the closer body to the center line of pivot or hinge.
The 'B' dimension refers to the edge of the closer shoe bracket to the center line of pivot or hinge.

Clearance	4050A-62EDA is 5 1/2" (140mm) from door face. 6" (152mm) for CUSH			
Head frame	Flush or rabetted requires flush panel adapter, 4050A-419			
CUSH Arm	Requires CUSH shoe support, 4050A-30 for fifth screw anchorage where reveal is less than 3 1/16" (78mm)			
Delay action	Delays closing from 180° to approximately 70°; delay time adjustable up to approximately 1 minute			
Maximum opening	EDA arm can be templated for points at: 100°		CUSH arms can be templated for opening/hold open point at:	
	100°:	A = 6 3/8" (162mm) B = 7 3/4" (197mm)	85°:	A = 7 7/8" (200mm) B = 9 1/8" (232mm)
	100° to 130°:	A = 4 7/8" (124mm) B = 6 1/4" (159mm)	90°:	A = 7 1/8" (181mm) B = 8 1/2" (216mm)
	130° to 150°:	A = 3 7/8" (98mm) B = 5 1/4" (133mm)	95°:	A = 6 1/2" (165mm) B = 7 7/8" (200mm)
	150° to 180°:	A = 2 7/8" (73mm) B = 4 1/4" (108mm)	100°:	A = 6" (152mm) B = 7 1/4" (184mm)
	Hold open points up to maximum opening with HEDA arm		105°:	A = 5 1/2" (140mm) B = 6 7/8" (175mm)
			110°:	A = 5" (127mm) B = 6 3/8" (162mm)

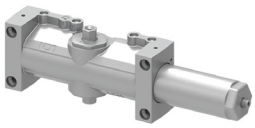
Notes:
- SCUSH dead stop points are approximately 5° more than templated stop point
- Hold open at templated stop points
- 4050A Series closers ordered with EDA or CUSH arms include 4050A-201 fifth hole spacer to support the shoe

Accessories

Cylinders

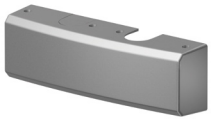


4050A-3071
Cast aluminum cylinder assembly (CYL)
- Non-handed
- Heavy duty



4050A-3071 DEL
Delay action cylinder (CYLDEL)
- Cylinder used for delayed action closing
- Non-handed
- Heavy duty

Covers



4050A-72
Plastic Cover (PC)
- Non-handed
- Standard

4050A-72MC
Metal Cover (MC)
- Non-handed
- Required for plated finishes and custom powder coat finishes
- Optional

Alternate cover

4050A-72ALT
Alternate cover
- Non-handed
- Optional, sold separately (not packed with closer)

Arms

4050A-3077
Regular Arm (REGARM)
- Non-handed
- Mounts pull side or top jamb with shallow reveal
- Includes PA shoe, 4050A-62PA required for parallel arm mounting

4050A-3077L
Long Arm (LONG)
- Non-handed
- Includes long rod and shoe, 4050A-79LR for top jamb mount
- Optional

4050A-3049
Hold Open Arm (H)
- Non-handed
- Mounts pull side or top jamb with shallow reveal
- Hold open adjustable shoe
- 4050A-62PA shoe required for parallel arm mounting
- Optional

4050A-3049L
Hold Open Long Arm (HLONG)
- Non-handed
- Hold open adjustable shoe
- Includes long head and tube, 4050A-3048L for top jamb mount
- Optional

4050A-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations

4050A-3049EDA
Hold Open Extra Duty Arm (HEDA)
- Handed
- Features forged, solid steel main and forearm for potentially abusive installations
- Hold open function is adjusted at the shoe

4050A-3077EDA/62G
Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance for use with additional door hardware such as an overhead holder

4050A-3049EDA/62G
Hold Open Extra Duty Arm with 62G Thick Hub Shoe (HEDA62G)
- Handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance for use with additional door hardware such as an overhead holder
- Hold open function is adjusted at the shoe

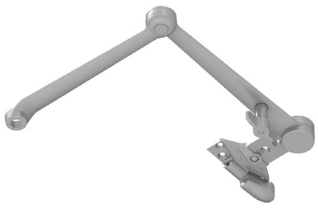
Accessories

Arms (cont.)

4050A-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe
- Optional

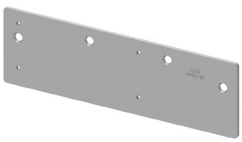
4050A-3049CNS
Hold Open Cush-n-Stop Arm (HCUSH)
- Provides hold open function with templated stop/hold open points
- Handle controls hold open function

4050A-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For potentially abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional

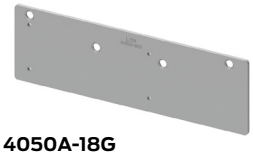


4050A-3049SCNS
Spring Hold Open Cush-n-Stop Arm (SHCUSH)
- Non-handed
- For potentially abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional

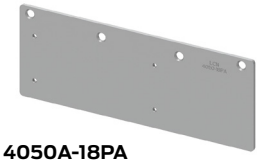
Installation accessories



4050A-18
Plate
- Required for hinge side mount where top rail is less than 3 7/8" (98 mm)
  - Requires minimum 1 3/4" (44 mm) top rail

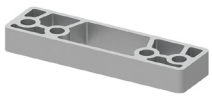


4050A-18G
Plate
- Locates top jamb mounted closer flush with top of head frame face in flush ceiling condition
- Contact LCN Product Support for minimum head frame requirement



4050A-18PA
Plate
- Required for parallel arm mounting where top rail is less than 5 1/4" (133 mm), measured from the stop
  - Requires 2" (51 mm) minimum top rail

4050A-30
CUSH shoe support
- Provides anchorage for fifth screw used with CUSH arms, where reveal is less than 3 1/16" (78 mm)



4050A-61
Blade stop spacer
- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop

4050A-419
Flush panel adapter
- Provides horizontal mounting surface for parallel arm shoe on single rabetted or flush frame

4050A-62A
Auxiliary shoe
- Requires a top rail of 7 13/16" (198 mm)
- Replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop
- Optional

4050A-62PA
PA shoe
- Required for parallel arm mounting

Ordering information

How-to-order 4050A Series closers

1. Select finish

☐ Standard powder coat _____
Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696).

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Tri pack arm (Rw/PA)
- Self-reaming and tapping screws
  (unless options listed below are selected)

Closer options

Cylinder
☐ Delay action cylinder (CYLDEL)

Cover
☐ Metal cover (MC)
☐ Alternate cover (ALT)

Finish
☐ Custom powder coat (RAL) _____
(handed metal cover required)
☐ SRI primer
(use with powder coat finishes only)

Arm
☐ Regular Arm (REGARM)
☐ Long Arm (LONG)
☐ Hold Open Arm (H)
☐ Hold Open with Parallel Arm Bracket (HWPA)
☐ Hold Open Long Arm (HLONG)
☐ Extra Duty Arm (EDA)
☐ Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
☐ Hold Open Extra Duty Arm (HEDA)
☐ Hold Open Extra Duty Arm with 62G Thick Hub Shoe (HEDA62G)
☐ Cush-n-Stop Arm (CUSH)
☐ Hold Open Cush-n-Stop Arm (HCUSH)
☐ Spring Cush-n-Stop Arm (SCUSH)
☐ Spring Hold Open Cush-n-Stop Arm (SHCUSH)

Optional screw packs
☐ Through bolt[1] self reaming and tapping screws (TBSRT)
☐ Wood and machine screws (WMS)
☐ Through bolt[1] wood and machine screws (TBWMS)
☐ Torx machine screws (TORX)
☐ Through bolt[1] and torx machine screws (TBTRX)

Installation accessories
☐ Plate, 4050A-18
☐ Plate, 4050A-18G
☐ Plate, 4050A-18PA
☐ CUSH shoe support, 4050A-30
☐ Blade stop spacer, 4050A-61
☐ Auxiliary shoe, 4050A-62A
☐ Flush panel adapter, 4050A-419

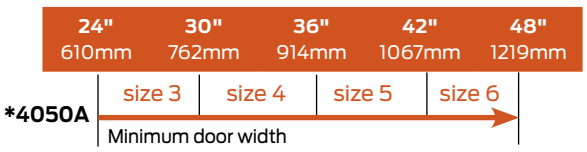
Special template
☐ ST- _____

1. Specify door thickness if other than 1 ¾".

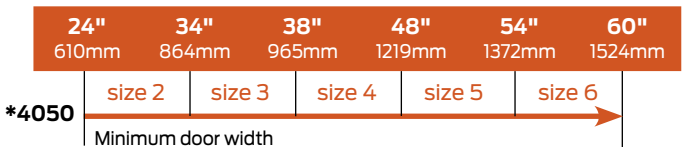
Table of sizes

- 4050A cylinders are adjustable from size 1 through size 6 and is shipped set to size 3
- Closing power of 4050A Series closers may be adjusted 50%

Exterior (and vestibule) door width



Interior door width



→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 4050A Series closers

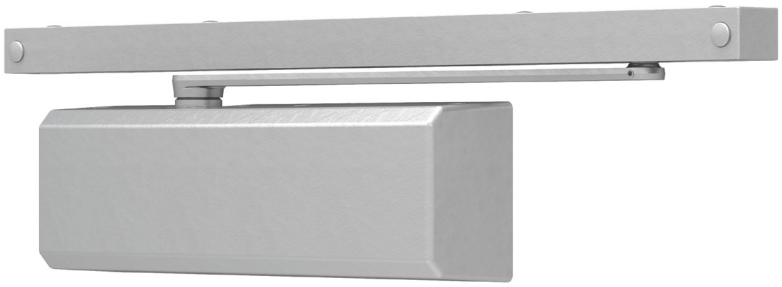
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4050A	4050A	4050A
5.0* lbs.	4050A	4050A	4050A

* Maximum opening force.

4050AT Series



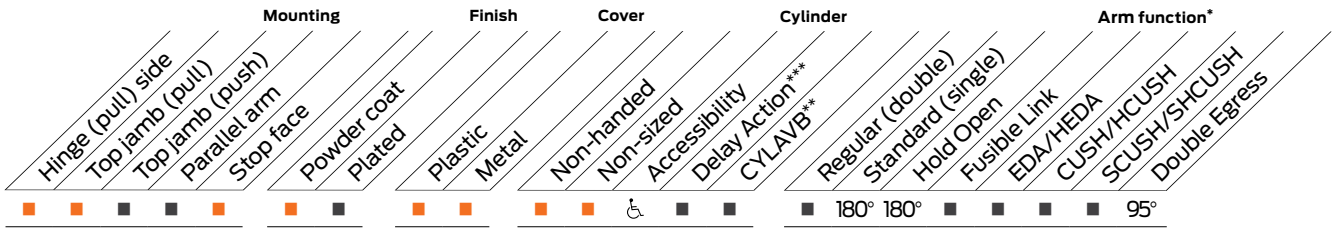
The 4050AT cast aluminum heavy duty track closer is designed for rugged high frequency traffic areas. Ideal for commercial building applications and competitive specification situations that demand a combination of quality, reliability and value.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast aluminum body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ 11/16"diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Non-handed
Size	Adjustable spring size 1-4
Warranty	25 years

Cover	▪ Plastic cover (PC), standard ▪ Metal cover (MC), optional
Fasteners	Self Reaming and Tapping Screws (SRT)
Mounting	Pull side on door, pull side top jamb, push side on door
Arms	Standard arm and track with roller
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only

Product Configurations



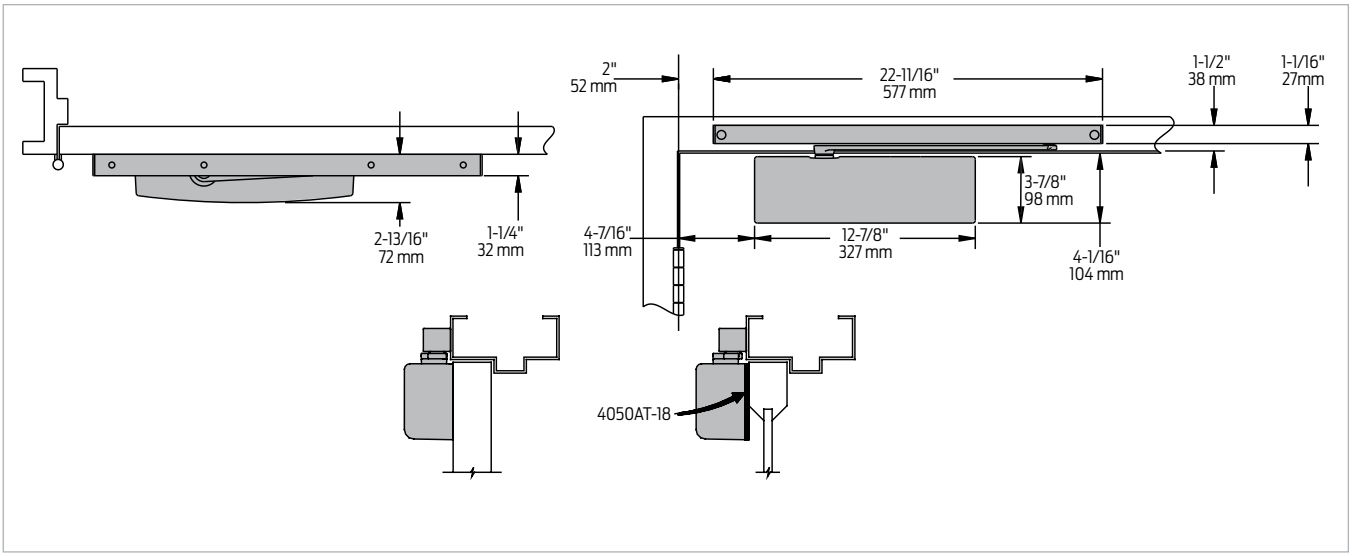
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay feature incorporates standard 4040 cylinder (not XP).

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Hinge (pull) side mounting

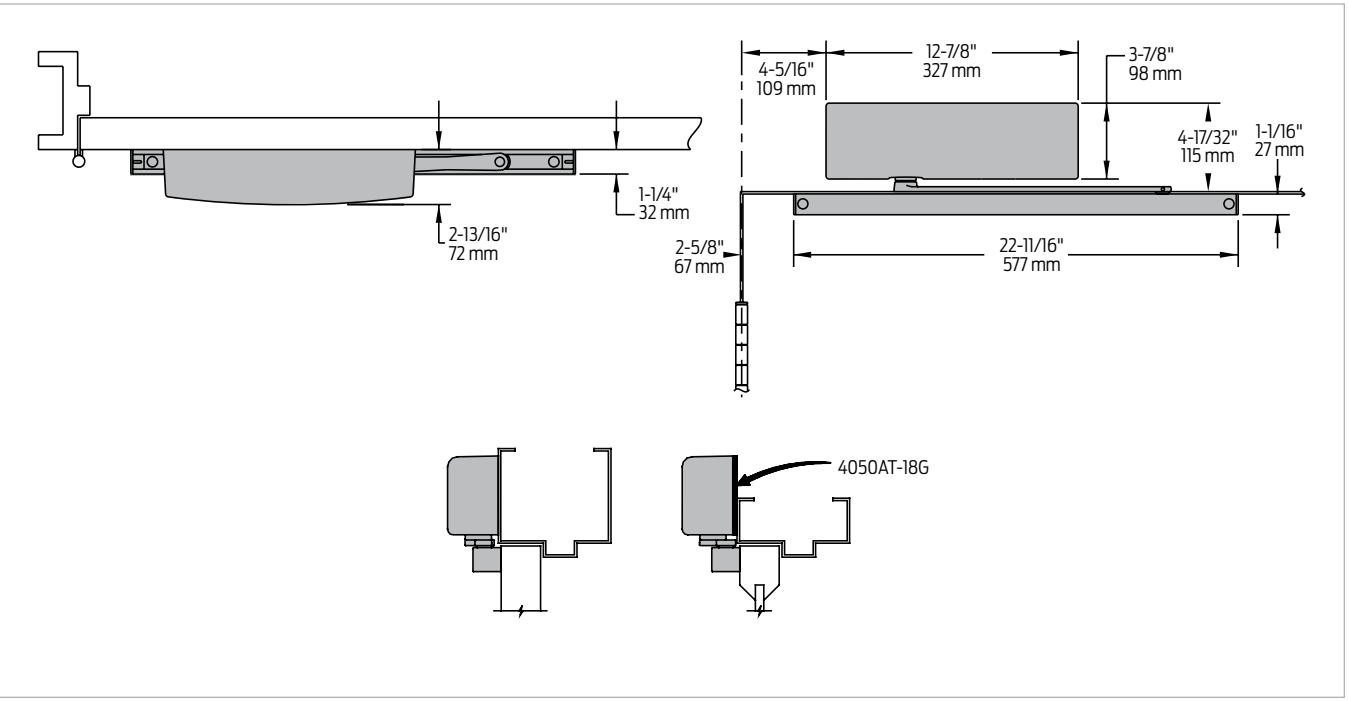


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended at hold open point or where a door cannot swing 180° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door ▪ It is not intended to replace an auxiliary stop
Reveal	Should not exceed 1/8" (3 mm) for standard arm
Top rail	Less than 4 1/8" (104 mm) requires plate, 4050AT-18; plate requires 2 1/16" (52mm) minimum
Head frame	Requires 1 1/4" (32 mm) minimum
Clearance	2 13/16" (52 mm) behind door required for 90° installation
Maximum opening	Templating allows 180°

Note: Consult factory for applications where door must swing 180°.

Mounting details

Top jamb (pull) side mounting

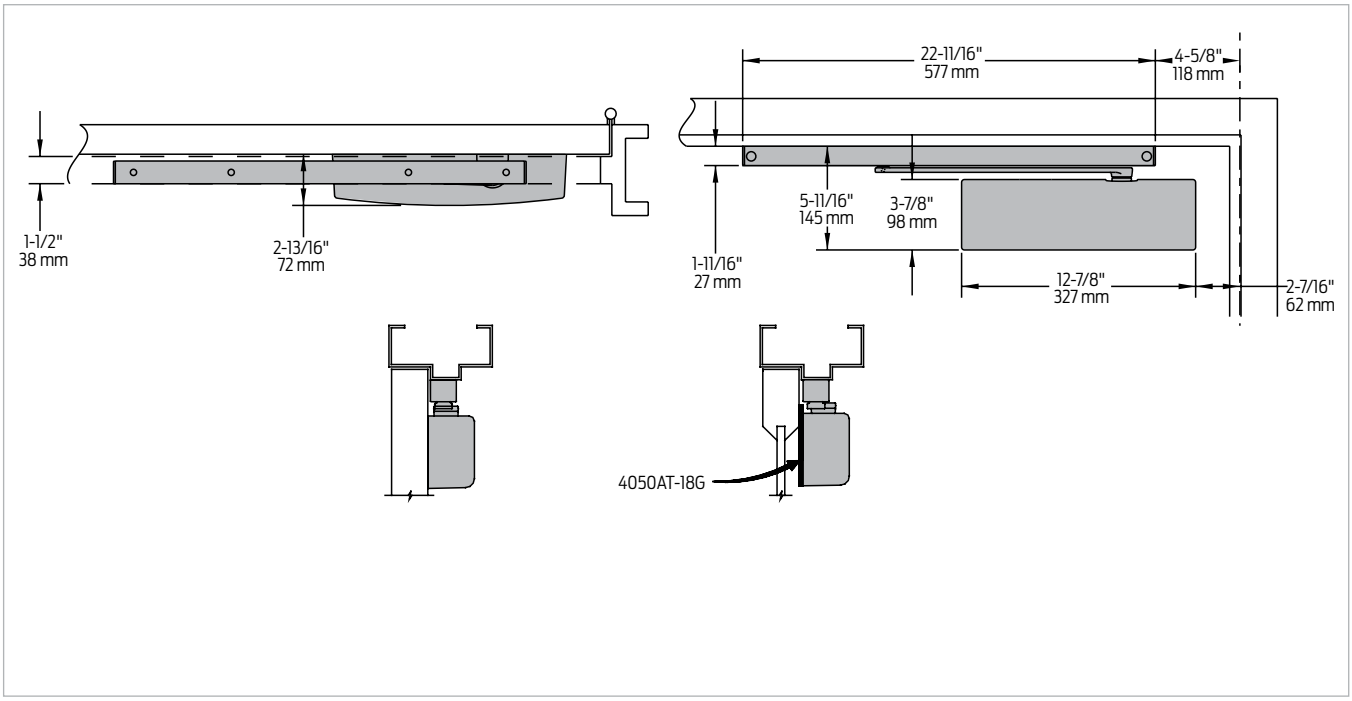


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended at hold open point or where a door cannot swing 180° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door ▪ It is not intended to replace an auxiliary stop
Reveal	Should not exceed 1/8" (3 mm)
Head frame	Less than 4 1/2" (114 mm), requires plate, 4050AT-18G; plate requires 2 1/16" (52 mm) minimum
Clearance	1 1/4" (32 mm) behind door required for 180° installation
Maximum opening	Templating allows 180°

Note: Consult factory for applications where an exterior or large/heavy door must swing 180°.

Mounting details

Stop face (push) side mounting

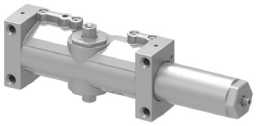


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended at hold open point or where a door cannot swing 120° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door ▪ It is not intended to replace an auxiliary stop
Clearance	Projects 2 9/16" (65 mm) from face of door
Top rail	▪ Less than 5 11/16" (144 mm) measured from the stop, requires plate, 4050AT-18G ▪ Plate requires 3 5/16" (84 mm) minimum
Stop width	Minimum 1 1/4" (32 mm)
Maximum opening	Templating allows 120°

Note: Consult factory for applications where door must swing 180°.

Accessories

Cylinders



4050AT-3071
Cast aluminum cylinder assembly (CYL)
- Non-handed
- Standard

Covers

4050AT-72
Plastic Cover (PC)
- Non-handed
- Standard

4050AT-72MC
Metal Cover (MC)
- Non-handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4050AT-3077T
Standard Arm (STDTRKARM)
- Non-handed
- Arm does not include track roller

4050AT-3077DE
Double Egress Arm (DE)
- Handed
- For double egress doors and frames
- Does not include track roller
- Maximum reveal is 3" (76 mm)
- Optional

Tracks

4050AT-3038
Standard Track (STDTRK)
- Non-handed
- Non hold open
- Will accept hold open clip and/or bumper assembly
- Standard

4050AT-3038B
Track with Bumper (BUMP)
- Non-handed
- Non hold open
- Will accept hold open clip
- Optional

4050AT-3038H
Hold Open Track (H)
- Non-handed
- With hold open clip installed
- Will accept bumper assembly
- Optional

4050AT-3038HB
Hold Open Track with Bumper (HBMP)
- Non-handed
- With hold open clip and bumper assembly installed
- Optional

Installation accessories

4050AT-18
Plate
- Required for pull side (door mount) installations where top rail is less than 4 1/8"
  - Requires minimum 2 1/16" top rail

4050AT-18G
Plate
- Required for pull side top jamb installations where head frame is less than 4 1/2"
  - Requires minimum 2 1/16" head frame
- Required for push side (door mount) installations where top rail is less than 5 11/16" measured from the stop
  - Requires minimum 3 5/16" top rail

4050AT-169
Track bumper
- Mounts in track to assist back check, does not replace auxiliary stop
- Limits maximum opening; consists of bumper, bumper post and mounting screw

4050AT-3054
Hold open clip
- Mounts in track to provide hold open function
- Hold open point controlled by clip location
- Consists of clip and mounting screws
- Requires 4050AT-3034H hold open track roller

4050AT-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3mm)

4050AT-3034H
Hold open track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3mm)

4050AT-480
Pinion extender
- Connects pinion to arm

Ordering information

How-to-order 4050AT Series closers

1. Select finish

☐ Standard powder coat _____
Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Standard arm
- Track roller
- Standard track
- Self reaming and tapping screws
  (unless options listed below are selected)

Closer options

Cover

☐ Metal cover (MC)

Finish

☐ Custom powder coat (RAL) _____
(handed metal cover required)
☐ SRI primer (use with powder coat finishes only)

Track

☐ Track with bumper (BUMP)
☐ Hold open track (H)
☐ Hold open track with bumper (HBMP)

Screw pack

☐ Through bolt[1] and torx machine screws (TBSRT)
☐ Wood and machine screws (WMS)
☐ Through bolt[1] wood and machine screws (TBWMS)
☐ TORX machine screws (TORX)
☐ Through bolt[1] and torx machine screws (TBTRX)

Installation accessories

☐ Plate, 4050AT-18
☐ Plate, 4050AT-18G

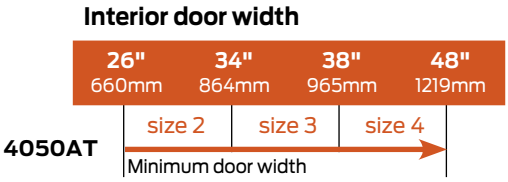
Special template

☐ ST- _____

1. Specify door thickness if other than 1 3/4".

Table of sizes

- Non-sized 4050AT Series cylinder is adjustable from sizes 1 through 4 and is shipped set to size 3



→ Indicates recommended range of door width for closer size.

Reduced opening force 4050AT Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	N/A	N/A	N/A
5.0* lbs.	4050AT	4050AT	4050AT

* Maximum opening force.

4110 Series

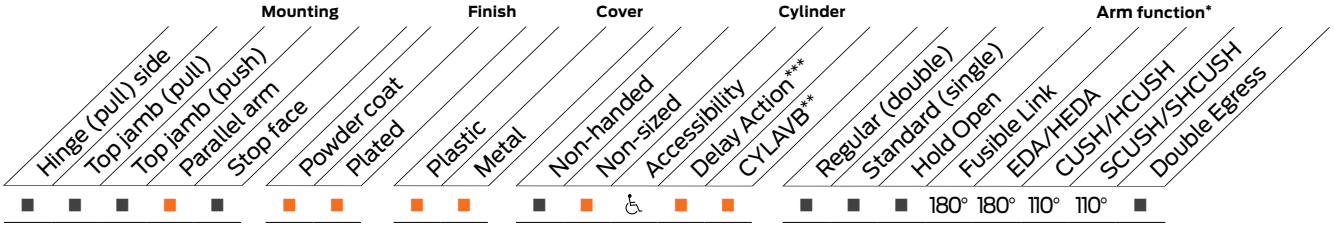
The 4110 is LCN's best performing heavy duty closer with an adjustable spring and possible hold open point beyond 140 degrees, meeting ADA requirements. Backed by a 30 year warranty, the cast iron body and all weather fluid offer versatility in high traffic applications.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Handed
Templating	Peel-n-Stick templates - 2 1/2" x 6" mounting hole pattern
Size	Adjustable spring size 1-5, or sized 6, includes LCN Green Dial
Warranty	30 years

Cover	▪ Plastic cover (PC), standard ▪ Metal cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Parallel arm (push side)
Arms	Extra-duty arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional
	▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



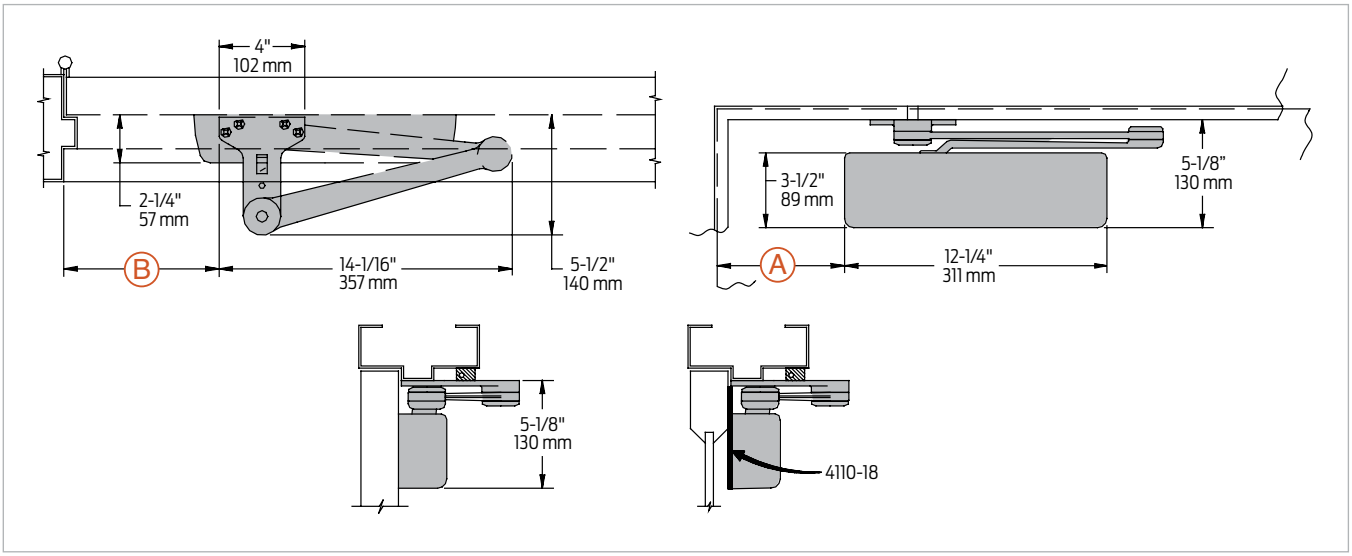
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay feature incorporates standard 4040 cylinder (not XP).

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Parallel arm (push) side mounting

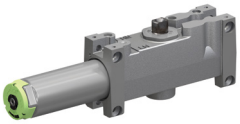


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point, where a door cannot swing 180°, or where Cush-n-Stop Arm is not used
Clearance	EDA, or CUSH shoe is 5 1/2" (140 mm) from door face
Top rail	▪ Less than 5 1/8" (130 mm) measured from stop requires plate, 4110-18 ▪ Plate requires 2" (51 mm) minimum measured from the stop
Stop width	Minimum 1" (25 mm)
Head frame	Flush or rabetted requires CUSH flush panel adapter, 4110-419
Reveal	Less than 2 3/4" (70 mm), use CUSH shoe support, 4110-30 with CUSH arms
Blade stop spacer	4110-61 required to clear 1/2" (13 mm) blade stop
Cush arm	Requires CUSH shoe support, 4110-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm)
Delay action	▪ Add suffix “CYLDEL” to selected cylinder ▪ Not available with 4116 cylinder; delays closing from maximum opening to approximately 70° ▪ Delay time adjustable up to approximately 1 minute
Advanced Variable Back Check	▪ Cylinder starts back check at approximately 45° instead of the normal 75° ▪ Add suffix “CYLAVB” to selected cylinder

Maximum opening	EDA or Fusible Link Arm can be templated for:	CUSH Arm can be templated for maximum opening at:
	100° A = 5 15/16" (151 mm) B = 7 1/4" (184 mm)	85° A = 8 5/16" (211 mm) B = 9 5/8" (244 mm)
	140° A= 4 7/16" (113 mm) B = 5 3/4" (146 mm)	90° A= 7 11/16" (195 mm) B = 9" (229 mm)
	or 180° A= 2 15/16" (75 mm) B = 2 15/16" (75 mm)	or 110° A= 5 9/16" (141 mm) B = 6 7/8" (175 mm)
	▪ Hold open points up to maximum opening with HEDA or Fusible Link Arm	▪ Hold open point at maximum opening with HCUSH Arm ▪ SCUSH hold open points are approximately 5° less than templated stop point

Accessories

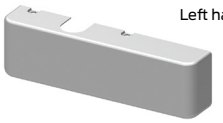
Cylinders



4111(6)-3071
Cast iron cylinder assembly (CYL)
- Handed
- Standard

Covers

4110-72
Plastic Cover (PC)
- Non-handed
- Standard



Left hand shown

4110-72MC
Metal Cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4110-3049EDA
Hold Open Arm (H)
- Handed
- Optional
- Provides hold open function, adjustable at shoe

4110-3049FL
Fusible Link Arm (FL)
- Handed
- Releases hold-open function adjustable at shoe when exposed to temperatures above 165° F
- Optional

Note: Check local codes before specifying FL arms. NOT A life safety product!

4110-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Features solid forged steel main arm and forearm with built-in stop in soffit shoe

4110-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations

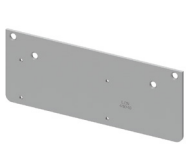
4110-3077EDA/62G
Extra Duty Arm (EDA)
- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- Optional 4110-62G thick hub shoe for blade stop clearance

4110-3049CNS
Hold Open Cush-n-Stop Arm (HCUSH)
- Non-handed
- Provides hold open function with templated stop/hold open points
- Handle controls hold open function

4110-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional

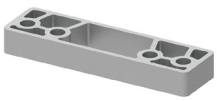
4110-3049SCNS
Spring Hold open Cush-n-Stop Arm (SHCUSH)
- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional

Installation accessories



4110-18
Plate
- Required for push side mount where top rail is less than 5 1/8" (130 mm), measured from the stop
- Requires minimum 2" (51 mm) minimum top rail

4110-30
CUSH shoe support
- Provides anchorage for fifth screw used with CUSH arm, where reveal is less than 3 1/16" (78 mm)



4110-61
Blade stop spacer
- Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop

4110-419
PA flush panel adapter
- Provides horizontal mounting surface for CUSH shoe on single rabetted or flush frame

Ordering information

How-to-order 4110 Series closers

1. Select cylinder size
- ☐ 4111 (adjustable from size 1 to 5)
- ☐ 4116 (CYLDEL, SHCUSH or HCUSH arm not available)

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat _____
  Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Extra duty arm
- Self reaming and tapping screws
  (unless options listed below are selected)

Closer options

Cylinder
- ☐ Delay action cylinder (CYLDEL) (not available with 4116)
- ☐ Advanced variable back check (CYLAVB)

Cover
- ☐ Metal cover (MC)

Finish
- ☐ Custom powder coat (RAL) _____ (handed metal cover required)
- ☐ Plated finish, US _____ (handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

Arm
- ☐ Extra Duty Arm (EDA)
- ☐ Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
- ☐ Hold Open Extra Duty Arm (HEDA)
- ☐ Fusible Link Arm (FL)
- ☐ Cush-n-Stop Arm (CUSH)
- ☐ Hold Open Cush-n-Stop Arm (HCUSH)(N/A with 4116 cylinder)
- ☐ Spring Cush-n-Stop Arm (SCUSH)
- ☐ Spring Hold Open Cush-n-Stop Arm (SHCUSH) (N/A with 4116 cylinder)

Optional screw packs
- ☐ Through bolt[1] self reaming and tapping screws (TBSRT)
- ☐ Wood and machine screws (WMS)
- ☐ Through Bolt[1] Wood and Machine Screws (TBWMS)
- ☐ Torx Machine Screws (TORX)
- ☐ Through Bolt[1] and Torx Machine Screws (TBTRX)

Installation accessories
- ☐ Plate, 4110-18
- ☐ CUSH shoe support, 4110-30
- ☐ Blade stop spacer, 4110-61
- ☐ PA flush panel adapter, 4110-419

Special template
- ☐ ST- _____

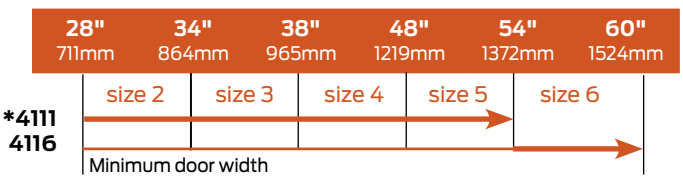
1. Specify door thickness if other than 1 ¾".

Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4111 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4116 series cylinders 6
- Delay action not available with 4116 cylinder
- HCUSH and SHCUSH arm not available with 4116 cylinder

Exterior (and vestibule) door width

Interior door width



→ Indicates recommended range of door width for closer size.
* Adjustable Size 1 thru 5.

Reduced opening force 4110 Series closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	4111	4111	4111
5.0* lbs.	4111	4111	4111

* Maximum opening force.

4110T Series

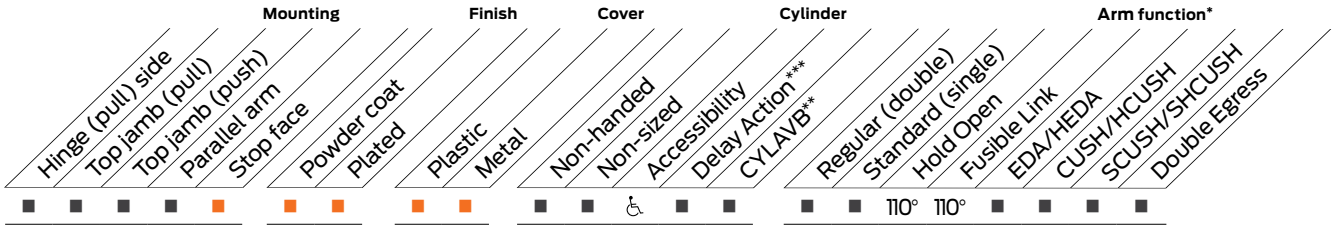
The 4110T is a Grade 1 push side, mounting track closer designed for interior high traffic applications. It features an optional track bumper assembly for additional cushioning in the opening swing of the door.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 1/2" diameter piston ▪ 11/16" diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Handed
Size	Sized 1, 3, or 4
Warranty	30 years

Cover	▪ Plastic cover (PC), standard ▪ Metal cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Stop face (push side)
Arms	Standard arm and track with roller
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



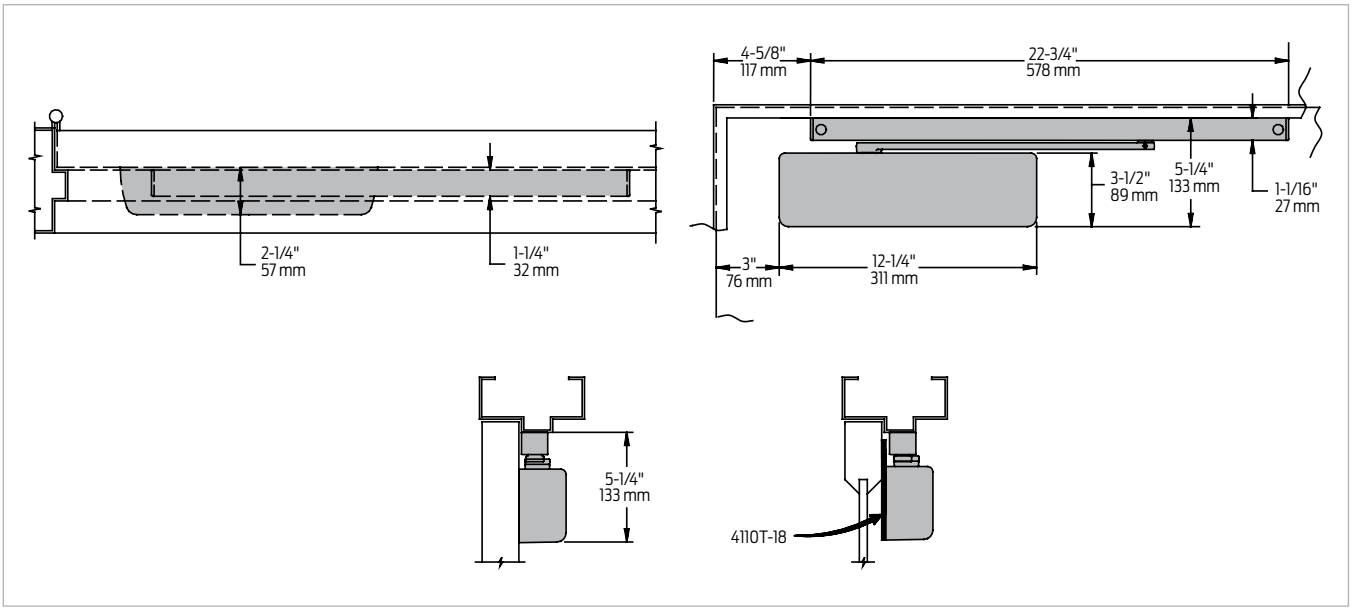
■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay feature incorporates standard 4040 cylinder (not XP).

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Stop face (push) side mounting

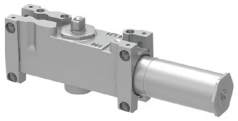


Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	▪ Recommended at hold open point or where a door cannot swing 110° ▪ Optional track bumper assembly assists back check in cushioning the opening swing of the door ▪ It is not intended to replace an auxiliary stop
Clearance	Projects 2 1/4" (57 mm) from face of door
Top rail	▪ Less than 5 1/4" (133 mm) measured from the stop, requires plate, 4110T-18 ▪ Plate requires 2 1/4" (57 mm) minimum
Stop width	Minimum 1 1/4" (32 mm)
Maximum opening	▪ Templating allows 110° with standard track arm, limited to 100° with optional bumper tracks ▪ Variable hold open angles with many options

Note: Consult factory for applications where door must swing 180°.

Accessories

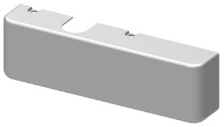
Cylinders



4111(3,4)T-3071
Cast iron cylinder assembly (CYL)
- Handed
- Standard

Covers

4110T-72
Plastic Cover (PC)
- Non-handed
- Standard



4110T-72MC
Metal Cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4110T-3077T
Standard Arm (STDTRKARM)
- Handed
- Roller not included with arm

Tracks

4110T-3038
Standard Track (STDTRK)
- Non-handed
- Non hold open
- Will accept hold open clip and/or bumper assembly
- Standard

4110T-3038B
Track with Bumper (BUMP)
- Non-handed
- Non hold-open
- With bumper assembly installed
- Will accept hold-open clip
- Optional

4110T-3038H
Hold Open Track (H)
- Non-handed
- With hold open clip installed
- Will accept bumper assembly
- Optional

4110T-3038HB
Hold Open Track with Bumper (HBMP)
- Non-handed
- With hold open clip and bumper assembly installed
- Optional

Installation accessories

4110T-18
Plate
- Required where top rail, when measured from the stop, is less than 5 1/4" (133 mm)
- Requires minimum 2 1/4" (57 mm) minimum top rail

4110T-169
Track bumper
- Mounts in track to assist back check, not replace auxiliary stop
- Limits maximum opening; consists of bumper, bumper post, and mounting screw

4110T-3054
Hold-open clip
- Mounts in track to provide hold open function
- Hold open point controlled by clip location
- Consists of clip and mounting screws
- Requires 4110T-3034H track roller

4110T-3034H
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2mm)
- Spring-loaded hold-open mechanism

4110T-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2 mm)

Ordering information

How-to-order 4110T Series closers

1. Select cylinder size
- ☐ 4111T (ADA)
- ☐ 4113T
- ☐ 4114T

2. Specify hand
- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

3. Select finish
- ☐ Standard powder coat

_____

Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cover
- Standard arm
- Track roller
- Standard track
- Self reaming and tapping screws (unless options listed below are selected)

Closer options

Cover
- ☐ Metal cover (MC)

Finish
- ☐ Custom powder coat (RAL) _____ (handed metal cover required)
- ☐ Plated finish, US _____ (handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

Track
- ☐ Track with Bumper (BUMP)
- ☐ Hold Open Track (H)
- ☐ Hold Open Track with Bumper (HBMP)

Screw pack
- ☐ Through bolt[1] self reaming and tapping screws (TBSRT)
- ☐ Wood and machine screws (WMS)
- ☐ Through bolt[1] wood and machine screws (TBWMS)
- ☐ Torx machine screws (TORX)
- ☐ Through bolt[1] and torx machine screws (TBTRX)

Installation accessories
- ☐ Plate, 4110T-18

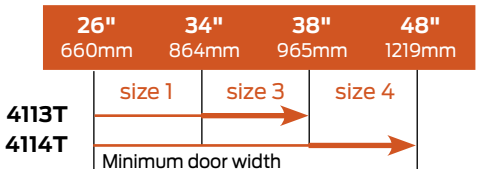
Special template
- ☐ ST-_____

1. Specify door thickness if other than 1 3/4".

Table of sizes

- Select closer based on width of door
- Sized 4110T Series cylinders available in size 1, 3 or 4
- Specify next higher size closer where strong drafts exists

Interior door width



→ Indicates recommended range of door width for closer size.

Reduced opening force 4110T Series closers

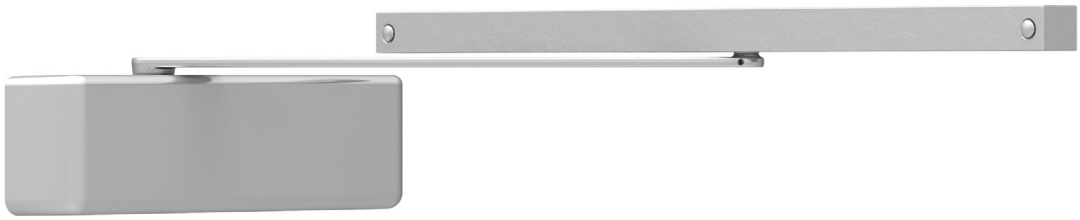
CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

Door width	36"	42"	48"
8.5* lbs.	N/A	N/A	N/A
5.0* lbs.	4110T	4110T	4110T

* Maximum opening force.

4000T Series



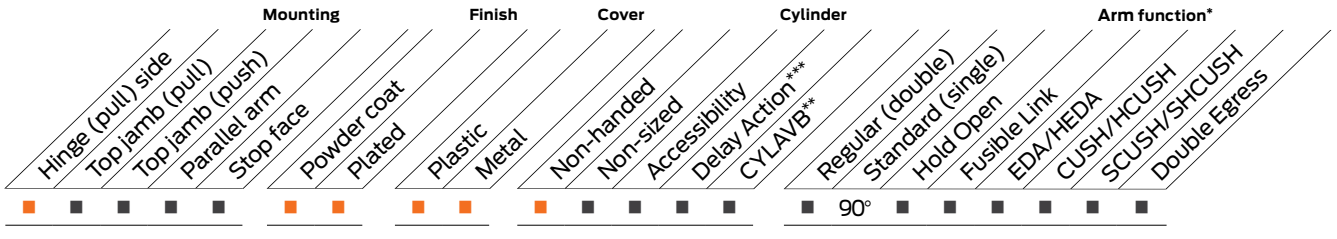
The 4000T is a heavy duty closer to reliably control fire and smoke barrier doors with maximum swing of 90º. Designed for use with an SEM 7850 wall magnet.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Cast iron body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ ¾" diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Non-handed
Size	Size 3 or 4
Warranty	30 years

Cover	▪ Plastic cover (PC), standard ▪ Metal cover (MC), optional
Fasteners	Wood and machine screws (WMS)
Mounting	In a wall pocket, hinge side
Arms	Standard arm and track with roller
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary Bronze ▪ 691 Light Bronze ▪ 693 Black ▪ 695 Dark Bronze ▪ 696 Brass ▪ Custom colors optional ▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Product Configurations



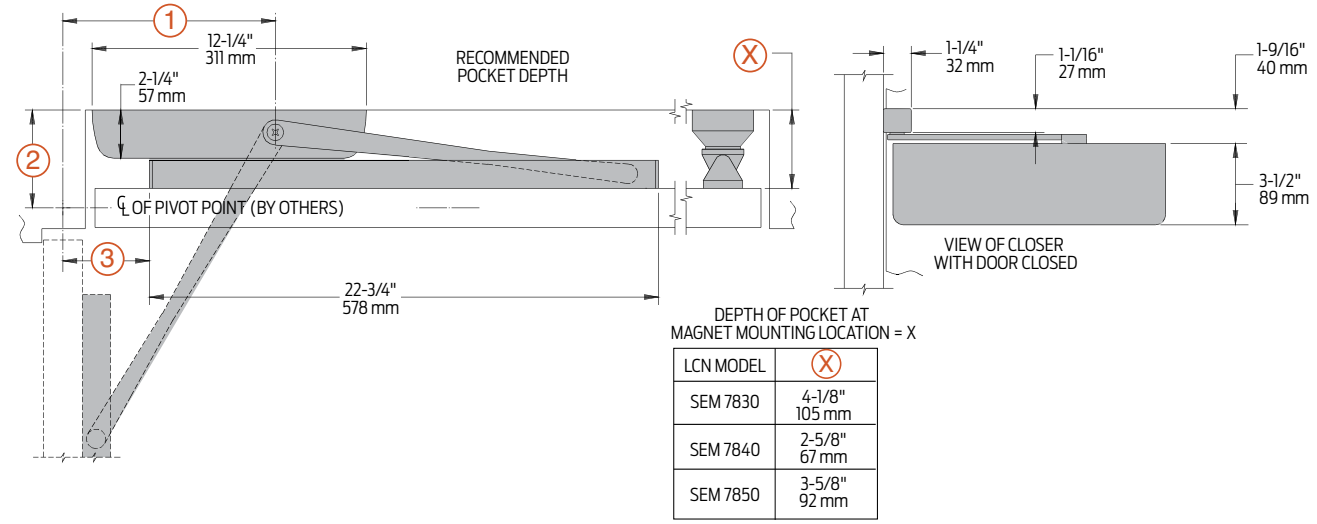
■ Available
■ Not available

* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay feature incorporates standard 4040 cylinder (not XP).

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Mounting details

Wall pocket mounting



DEPTH OF POCKET AT MAGNET MOUNTING LOCATION = X

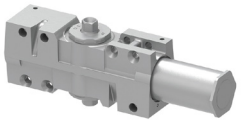
LCN MODEL	X
SEM 7830	4-1/8" 105 mm
SEM 7840	2-5/8" 67 mm
SEM 7850	3-5/8" 92 mm

Butt hinges	▪ Pocket pivot, total door hinge or center pivot are door mounting options ▪ Should not exceed 5" (127 mm)
Pocket depth	▪ See above table for distance required between door and closer mounting location ▪ This dimension is measured from the cylinder mounting surface to the pull side face of the door at 90°
Wall magnet	▪ SEM 7850 is recommended; use of other magnets may require special construction to alter the depth of the pocket at the magnet location ▪ See Fire Life Safety catalog
Dimension 1	▪ The distance from the centerline of the closer shaft to the centerline of the hinge or pivot ▪ For pocket pivot or total door hinge, 9 1/2" (241 mm) ▪ For butt hinge 8" (203 mm) ▪ For center pivot 10" (254 mm)
Dimension 2	▪ The distance from the centerline of the pivot or hinge to the cylinder mounting surface ▪ For pocket pivot 4 1/2" (114 mm) ▪ For total door hinge 3 7/8" (98mm) ▪ For butt hinge 2 7/8" (73 mm) ▪ For center pivot 4 1/2" (114 mm)
Dimension 3	▪ The distance from the centerline of the pivot or hinge to end of the track ▪ For pocket pivot or total door hinge, 3 7/8" (98mm) ▪ For butt hinge 2 3/8" (60mm) ▪ For center pivot 4 5/8" (117mm)
Maximum opening	▪ Templating allows 90° only ▪ Hold open point 90° with magnet

Notes:
- Cylinder mounts on wall
- Track mounts on hinge side of door

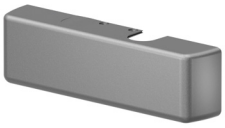
Accessories

Cylinders

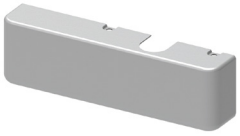


4003(4)T-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- Standard

Covers

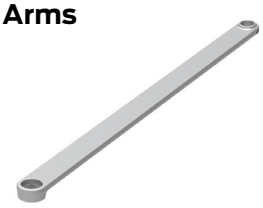


4000T-72
Plastic Cover (PC)
- Non-handed



4000T-72MC
Metal Cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms



4000T-3077T
Standard Arm (STDTRKARM)
- Non-handed
- Roller not included with arm

Tracks

4000T-3038
Standard Track (STDTRK)
- Non-handed
- Non hold open
- Will not accept hold open clip or bumper assembly
- Standard

4000T-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension “X”= 1/8" (3 mm)

Ordering information

How-to-order 4000T Series closers

1. Select cylinder size
- ☐ 4003T
- ☐ 4004T

2. Select finish
- ☐ Standard powder coat _____
  Matte Black (622), Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

Closer will be shipped with:
- Standard cylinder
- Standard cover
- Standard arm
- Track roller
- Standard track
- Wood and machine screws
  (unless options listed below are selected)

Closer options

Cover
- ☐ Metal cover (MC)

Finish
- ☐ Custom powder coat (RAL) _____
  (handed metal cover required)
- ☐ Plated finish _____
  (handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

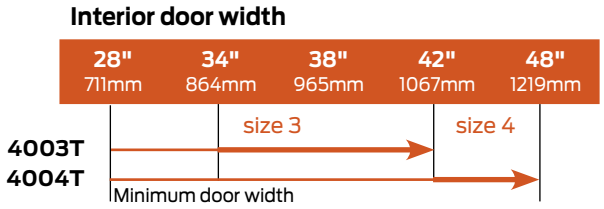
Screw pack
- ☐ Through bolt[1] wood and machine screws (TBWMS)
- ☐ Torx machine screws (TORX)
- ☐ Through bolt[1] and torx machine screws (TBTRX)

Special template
- ☐ ST-_____

1. Specify door thickness if other than 1 3/4".

Table of sizes

- Select closer based on width of door
- 4000T Series cylinders available in size 3 or 4
- Closing power of 4000T Series closers is not adjustable



→ Indicates recommended range of door width for closer size.

About Allegion

At Allegion (NYSE: ALLE), we design and manufacture innovative security and access solutions that help keep people safe where they live, learn, work and connect. We're pioneering safety with our strong legacy of brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Our comprehensive portfolio of hardware, software and electronic solutions is sold around the world and spans residential and commercial locks, door closer and exit devices, steel doors and frames, access control and workforce productivity systems.

For more, visit **www.allegion.com**

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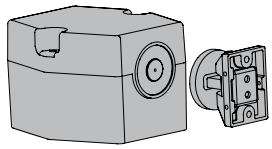
ALLEGION™

SEM SERIES

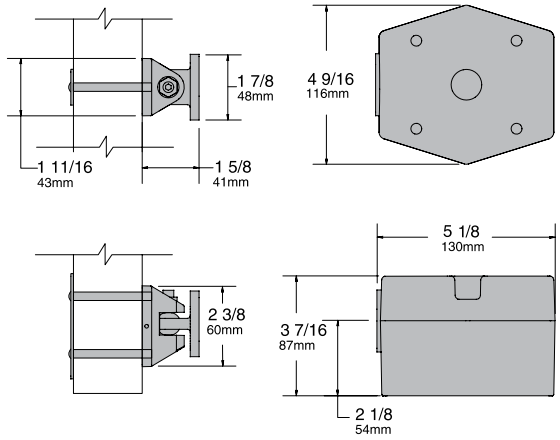
SEM 7820 MAGNET

Die Cast, Floor mounted.

SEM 7820



Total Projection = 6-3/4″ (171 mm)



The Sentronic® SEM 7800 Series are heavy duty, electrically controlled door holding magnets. Magnets are fail safe and hold until the current is interrupted. A manual door closer is used to control and close the door. A choice of floor, recessed wall, or surface mounted wall magnets are available.

All SEM Series magnets are UL listed for smoke barrier or labeled fire doors. Tested and certified under ANSI Standard A156.15.

SEM FEATURES

- **Tri-voltage design with 35 lbs. of holding force.**
- Now available armature extensions from LCN (see page 11).
- SEM 7820 magnets are shipped with die cast housing, cover, armature(s) and WMS screw pack.
- Available in Aluminum and Dark Bronze finishes only.
- UL listed for smoke barrier or labeled fire doors.

FEATURES

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2/14

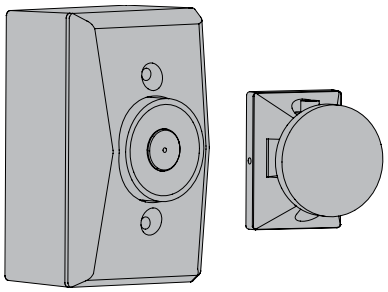
SEM SERIES

FEATURES

SEM 7830 MAGNET

Die cast housing,
Surface wall mounted.

SEM 7830

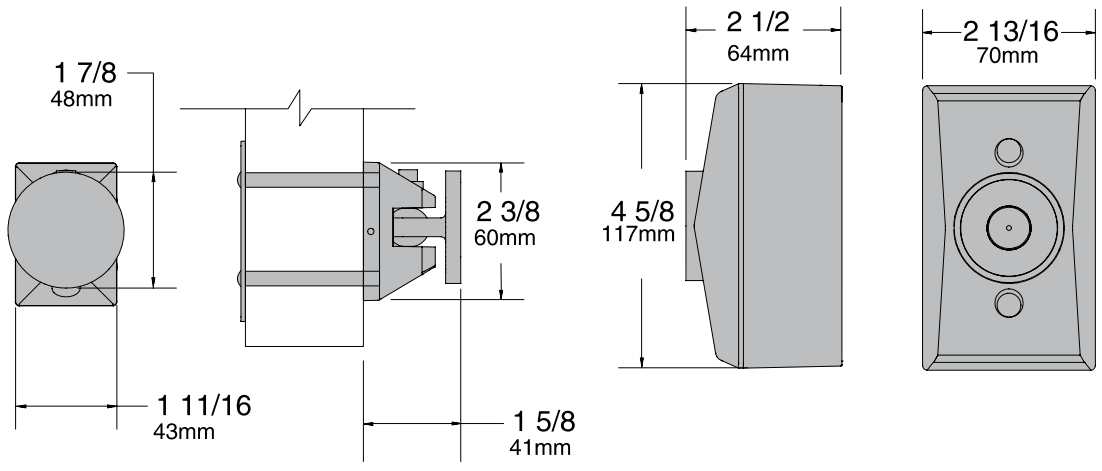


SEM FEATURES

- Tri-voltage design with 35 lbs. of holding force.
- Now available armature extensions from LCN (see page 11).
- SEM 7830 magnets are shipped with die cast housing, cover, armature and WMS screw pack.
- SEM 7830 available in Aluminum and Dark Bronze finishes only.
- Suitable for use in pocket door installations.
- UL listed for smoke barrier or labeled fire doors.

Total Projection = 4-1/8″ (105 mm)

Dimensions apply for both SEM 7830



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2/14

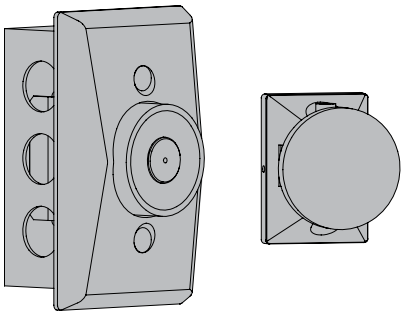
SEM 7840 MAGNET

Die cast housing, low profile recessed wall mount.

2″ (51 mm) x 4″ (102 mm) x 1-1/2″ (38 mm).

NOTE: Outlet box not included.

SEM 7840

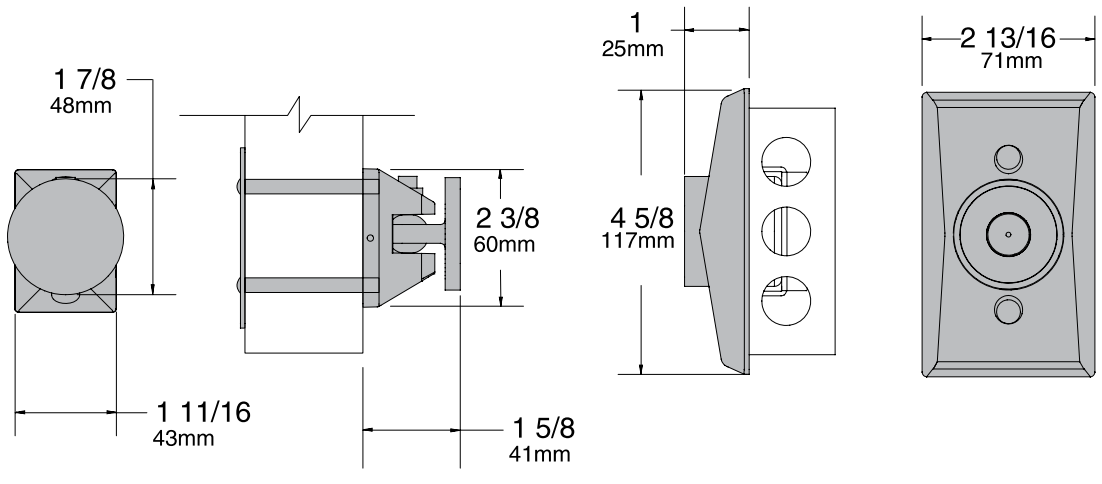


SEM FEATURES

- Tri-voltage design with 35 lbs. of holding force.
- Now available armature extensions from LCN (see page 11).
- SEM 7840 magnets are shipped with die cast housing, cover, armature and WMS screw pack.
- SEM 7840 available in Aluminum and Dark Bronze finishes only.
- Suitable for use in pocket door installations.
- UL listed for smoke barrier or labeled fire doors.

Total Projection = 2-5/8″ (67 mm)

Dimensions apply for both SEM 7840



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2/14

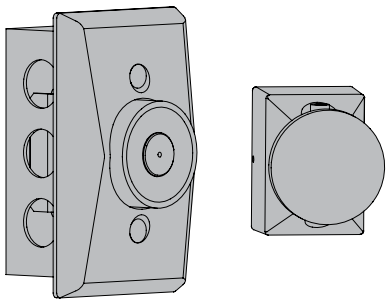
SEM SERIES

FEATURES

SEM 7850 MAGNET

Die cast housing, standard profile recessed wall mount.
2″ (51 mm) x 4″ (102 mm) x 1-1/2″ (38 mm)
NOTE: Outlet box not included.

SEM 7850

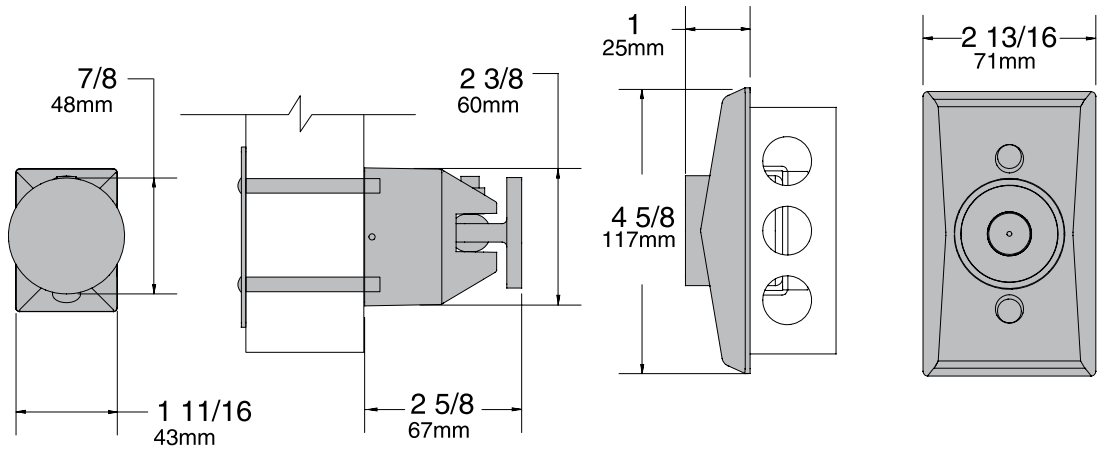


SEM FEATURES

- Tri-voltage design with 35 lbs. of holding force.
- Now available armature extensions from LCN (see page 11).
- SEM 7850 available in standard powder coat finishes.
- SEM 7850 available in Aluminum and Dark Bronze finishes only.
- Suitable for use in pocket door installations.
- UL listed for smoke barrier or labeled fire doors.

Total Projection = 3-5/8″ (92 mm)

Dimensions apply for both SEM 7850



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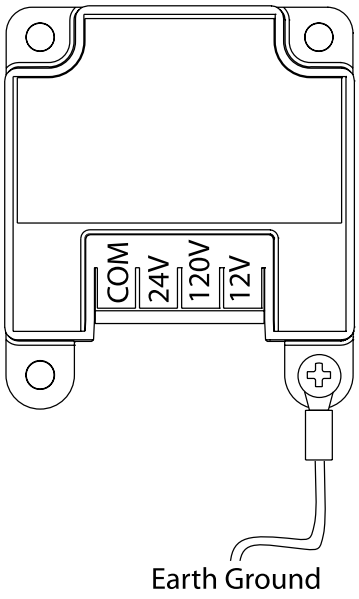
VOLTAGE INPUT



ELECTRICAL DATA

Holding Force: 35 lbs. @ Nominal Input Voltage.
Maximum Current Draw: .020A @ 24VAC/DC, 120VAC
.030A @ 12VDC

ELECTRICAL SCHEMATIC

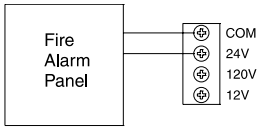


Fig. 1 24VAC/DC Wiring
Polarity is unimportant

Operation:
Electromagnets are typically used with fire alarm systems. Doors are held open in the non-alarm condition. When the fire alarm panel enters the alarm condition, power to the electromagnets is removed, the doors close under door closer control, and function as a manual door. When the fire alarm panel returns to the non-alarm condition, power is reapplied to the electromagnets and the doors can be held open again.

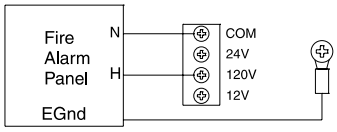


Fig. 2 120VAC Wiring

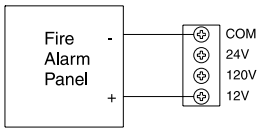


Fig. 3 12VDC Wiring
Polarity as shown

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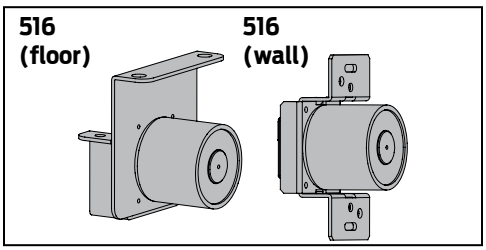
SEM SERIES

ACCESSORIES

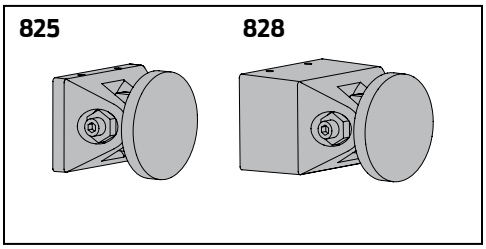
MAGNETS

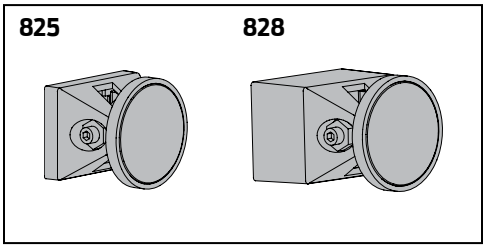
FLOOR MAGNET, SEM7820-516
Standard magnet coil.
WALL MAGNET, SEM7830-516, SEM7840-516, SEM7850-516, SEM1960-516, SEM1970-516, SEM1980-516
Standard magnet coil.



ARMATURES

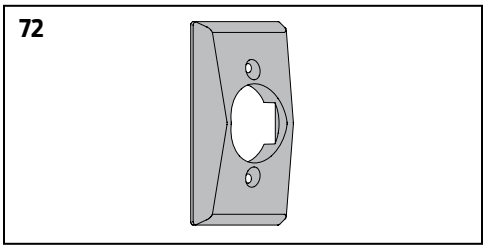
DOOR ARMATURE, SEM7820-825, SEM7830-825, SEM7840-825
Standard, die cast low profile armature.
DOOR ARMATURE, SEM7850-828
Standard, die cast armature.
DOOR ARMATURE, SEM1960-825, SEM1970-825
Standard, plastic low profile armature.
DOOR ARMATURE, SEM1980-828
Standard, plastic armature.





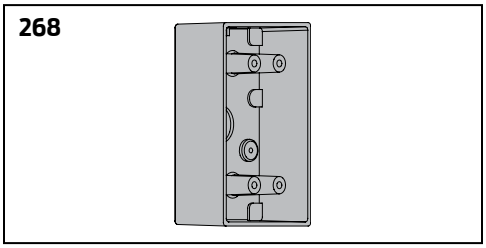
COVER

STANDARD COVER, SEM7830-72, SEM7840-72, SEM7850-72
Standard, die cast cover.
STANDARD COVER, SEM1960-72, SEM1970-72, SEM1980-72
Standard, plastic cover.



BOX

WALL BOX, SEM7830-268
Standard, die cast surface wall mount box.
WALL BOX, SEM1960-268
Standard, plastic surface wall mount box.



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EXTENSIONS

COUPLER ASSEMBLY KIT, SEM7810-514
Coupler assembly is required for each door needing extension(s). Kit includes coupler link and ball pivot (alone serves as a 1-1/2″ extension).

Extension, SEM7810-E050
Standard metal 1/2″ extension.

Extension, SEM7810-E075
Standard metal 3/4″ extension.

Extension, SEM7810-E100
Standard metal 1″ extension.

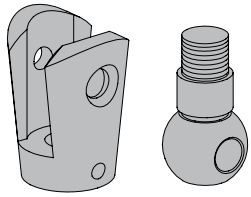
Extension, SEM7810-E200
Standard metal 2″ extension.

Extension, SEM7810-E400
Standard metal 4″ extension.

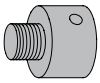
EXTENSION KIT, SEM7810-517
Extension kit includes:
10.....7810SEM-E050
10.....7810SEM-E075
10.....7810SEM-E100
5.....7810SEM-E200
20.....7810SEM-514

NOTE: Using just the Coupler Assembly Kit (SEM7810-514) will create a 1-1/2″ link. Extension Links are available in different lengths and can be combined together to achieve the desired length. Max. recommended length = 12″

514



E050



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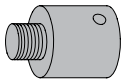

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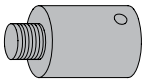
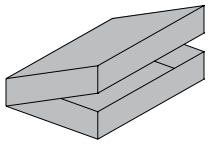


E200

E400

517



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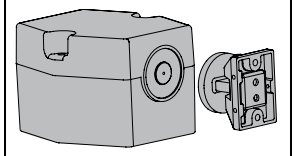
2/14

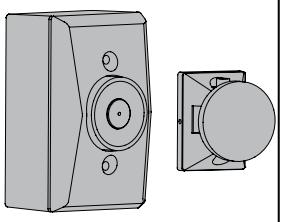
SEM SERIES

ORDERING INFORMATION

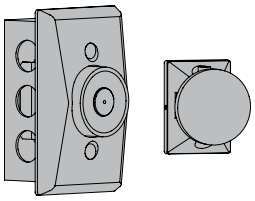
SEM 7820



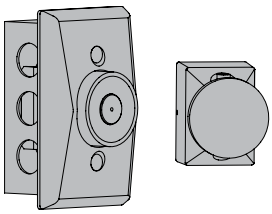
SEM 7830



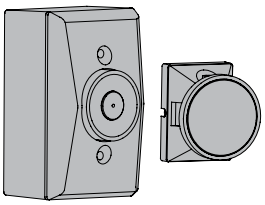
SEM 7840



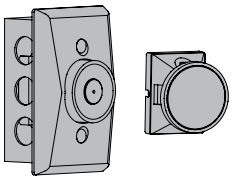
SEM 7850



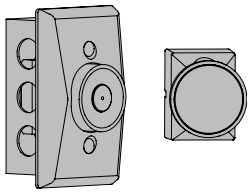
SEM 1960



SEM 1970



SEM 1980



HOW-TO-ORDER SEM 7800 SERIES MAGNETS

1. SELECT MAGNET SERIES

- ☐ SEM7820
- ☐ SEM7830
- ☐ SEM7840
- ☐ SEM7850

2. SPECIFY FINISH

- ☐ Standard Powder Coat _____
  Aluminum, Dark Bronze.

HOW-TO-ORDER SEM 1900 SERIES MAGNETS

1. SELECT MAGNET SERIES

- ☐ SEM1960
- ☐ SEM1970
- ☐ SEM1980

2. SPECIFY FINISH

- ☐ Standard Finish _____
  Aluminum or Dark Bronze.

HOW-TO-ORDER SEM 7810 EXTENSIONS

1. SELECT EXTENSIONS

- ☐ SEM7810-514 (qty.)_____
- ☐ SEM7810-E050 (qty.)_____
- ☐ SEM7810-E075 (qty.)_____
- ☐ SEM7810-E100 (qty.)_____
- ☐ SEM7810-E200 (qty.)_____
- ☐ SEM7810-E400 (qty.)_____
- ☐ SEM7810-517 (qty.)_____

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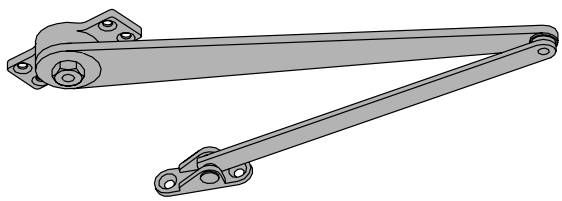
2/14

PAH 60

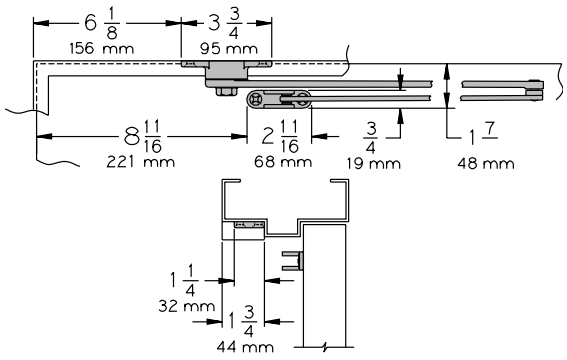


The PAH 60 is recommended for use on the inactive leaf of a pair of doors where the active leaf has a door closer installed.

MAXIMUM OPENING

Hold-open points up to 180º.

- Standard holder shipped with wood and machine screw pack.
- Handed for right or left swinging doors.
- Standard or optional custom powder coat finish.
- Hold-open point adjustable at the soffit shoe.
- Optional plated finish on holder and fasteners.
- Optional SRI primer for installations in corrosive conditions.



- Butt Hinges should not exceed 5″ (127 mm) in width.
- Auxiliary Stop recommended at hold-open point.
- Top Rail minimum 2″ (51 mm).
- Rabbet Depth minimum 1-1/4″ (32 mm).

HOW-TO-ORDER PAH 60 HOLDER

1. SPECIFY HAND

☐ RH
☐ LH

2. SPECIFY FINISH

☐ Standard Powder Coat _____
Aluminum, Dark Bronze, Tan, Statuary, Light Bronze, Black, Brass.

OPTIONAL ARM FINISH

☐ Custom Powder Coat (RAL)_____
☐ Plated Finish, US_____
☐ SRI Primer

FEATURES & ORDERING INFORMATION

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2/14

Notes

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2/14

LCN®

Automatic Operators

Table of Contents

Introduction **4**

Product Selection Guide **5**

Pneumatic Powered Systems **7**
- Wiring Diagrams 9
- 4810 Series 15
- 4820 Series 19
- 4840 Series 23
- 7900 Series Control Boxes 27

Electric Auto Equalizers **32**
- Wiring Diagrams 34
- 4630 Series 37
- 4640 Series 41
- 6400 COMPACT™ Series 45

Electromechanical Automatic Operators **51**
- Wiring Diagrams 53
- LCN Senior Swing - 9500IQ and 2800IQ Series 54
- 2810IQ Series 57
- 2850IQ Series 63
- 2860IQ Series 69
- 9530IQ Series 75
- 9540IQ Series 80
- 9550IQ Series 85
- 9560IQ Series 91
- 9130 Series 97
- 9140 Series 101
- 9150 Series 105

Actuators and Accessories **111**
- Sensors 125

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Support@allegion.com

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Ordering

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TAKING CONTROL.

Since 1877, LCN has been a pioneer in the door control industry, delivering innovative solutions known for their meticulous engineering, durability and reliable quality.

Durability

LCN strives to exceed customer expectations with high-quality construction, unique product functionality and robust testing protocols.

Precision

LCN's dedication to and investment in accuracy results in consistent performance—from installation through daily operation.

Trust

Since creating the first door control more than a century ago, LCN continues to use its expertise and pioneering spirit to ensure quality, life safety and customer satisfaction.

Improving Accessibility Through Superior Door Control

Since 1877, LCN has been the trusted leader in door control. Offering safety and security through superior products, we equip door hardware professionals with the tools and the expertise they need to get the job done right.

Meticulous engineering and rigorous quality control set us apart, ensuring reliable performance and consistent operation, saving you time and money. Our deep understanding of field challenges drives us to exceed expectations with premium materials, robust testing, and exceptional customer service. From installation to daily operation, you can count on LCN.

Manufactured with pride in Princeton, Illinois, our LCN automatic operators have been improving accessibility for over 30 years in schools, hospitals, offices, and many other commercial and residential settings across North American and across the globe.

From heavy, historic wooden doors to lightweight aluminum storefronts and from new construction specifications to renovations and retrofits, our auto operators provide the performance required to meet ANSI/BHMA building codes, accommodate ADA requirements, and equip our customers with the solutions they need.

Automatic Operators

Selecting an Automatic Operator

When choosing which automatic operator is best for each opening, there are a handful of key questions to consider, such as:

- Will this door be primarily used manually with an automatic option, or will it be opened automatically most of the time?
- What level of traffic will this door receive?
- Could this door be impacted by environmental factors such as wind or HVAC stack pressure?

The following pages serve as a guide to help understand and determine the key factors in choosing which auto operator is correct for each opening. To begin, there are a few key definitions to know.

- Low Energy Operator: Low Energy, or LE, operators are a type of automatic operator. These are differentiated from full-energy, or high-energy, operators through a variety of code and safety implications. The primary differences are that LE operators require a knowing act for operation, but do not require safety sensors or guide rails. In addition, LE operators do not require a specific certification to install or maintain, making them a more accessible option for in-house facility teams and locksmiths or integrators. All LCN automatic operators are LE operators.
- Electrohydraulic: These operators are best for primarily manual applications and feature a heavy duty closer to handle the closing function and electronics to perform the automatic opening. Electronic open + Mechanical close.
- Electromechanical: These operators are best for primarily automatic applications and manage both the opening and closing cycle using electronics. Electronic open + Electronic close.
- Pneumatic: These operators are best for primarily manual operation. Because they leverage the power of pressurized air, not electronics, they're an ideal solution for areas that contain either hazardous materials or a need to minimize or restrict high-voltage wiring. Pneumatic open + Mechanical close.

Mounting the Operator

With those definitions in mind, the first step is to determine how the auto operator will be installed, or mounted, onto your opening. As you'll see in the chart below, there are four options to choose from, which will help narrow the product choices.

Low energy powered systems

Concealed Mount	Surface Mounted Pull Side	Surface Mounted Push Side	Surface Mounted Double Egress
2610[3]	4630[1]	4640[1]	9550IQ[2]
2810IQ[2]	4810[3]	4820[3]	9560IQ[2]
2850IQ[2]	6440XP[1]	4840[3]	
2860IQ[2]	9130[2]	6440XP[1]	
	9530IQ[2]	9140[2]	
	9540IQ[2]	9150[2]	
	9550IQ[2]	9540IQ[2]	
	9560IQ[2]	9550IQ[2]	
		9560IQ[2]	

1. Electrohydraulic
2. Electromechanical
3. Pneumatic

Door Usage

With the mounting style determined, the next step is to identify how the door will primarily be used – manually or automatically - and account for any special building requirements, which could lead to our pneumatic products.

- Primarily Manual Operation = Electrohydraulic
- Primarily Manual Operation and/or special building requirements = Pneumatic
- Primarily Automatic Operation = Electromechanical

Building Codes and the ADA

Now that the mounting style and expected primary use have been established, the list of product choices should be narrowing. Before moving to the individual product sections of this catalog, it's important to also consider how operators and openings are evaluated in terms of both ADA and code requirements.

ANSI/BHMA A156.19

Low Energy Operators must adhere to the A156.19 standard set by the American National Standards Institute (ANSI) and the Building Hardware Manufacturers Association (BHMA). The requirements in ANSI/BHMA A156.19 include:

- Cycle test standard of 300,000 full load operating cycles
- Power opening plus full door control
- Open to back check no faster than 3 seconds
- Opening time to fully open is no faster than 4 seconds
- Remain fully open for at least 5 seconds
- Closing time from 90° for 10° is no faster than 3 seconds
- Less than 15 lb to stop door's motion
- Kinetic energy must not exceed 1.25 lb-ft
- In event of power failure, less than 15 lb to release latch, less than 30 lb to put door in motion, less than 15 lb to fully open door system

Americans with Disabilities Act

The American with Disabilities Act (ADA) is a civil rights law, not a building code. The section of this law that most impacts door hardware is Public Accommodations Title III. Essentially, businesses of all types must comply with accessible design standards to provide people with disabilities with access equal to, or similar to, that available to the general public.

The ADA requires an (accessible) opening, which means providing a door with a minimum 32" (813mm) clear width opening, easily manipulated handles, a maximum opening force, a minimum closing time, and the capability to open at least 90°.

There are openings—more commonly in historic buildings but also in new construction—where the ADA requirements are not attainable with a mechanical closer. Automatic operators can be used in these situations to achieve ADA compliance without needing to alter the opening itself. All LCN operators are ADA compliant with actuated opening.

Choosing a Finish

The final step in selecting an auto operator is choosing the finish. LCN auto operators are available in a variety of finish colors and styles, with additional custom coatings available upon request.

- LCN's powder coat finishes surpass 100 hours of salt spray, which is over four times the ANSI standard for corrosion resistance.
- For installations where a higher level of corrosive resistance is required, LCN offers an optional Special Rust Inhibitor (SRI) pretreatment. This can also be combined with the power coat for addition corrosion resistance.
- Plated finishes are also available as an option to accent the door and frame.

Contact Allegion for Help

We hope this guide has made selecting an automatic operator a smooth and clear process. However, should you have any additional questions regarding which operator is right for your doors, please don't hesitate to reach out to us via our website, LCNClosers.com, or by calling our customer service line at 1-877-671-7011 for US customers, and 1-800-900-4734 for Canadian customers.

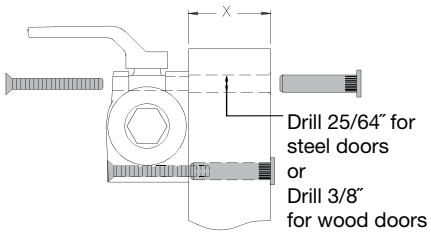
PNEUMATIC OPERATORS

Pneumatic Powered Systems

LCN Pneumatic Auto Equalizer systems use the power of pressurized air to do the work of automatically opening the door. A basic pneumatic system consists of an automatic operator to provide the door control, a control box that contains the valves and electrical timing circuits, actuators to start the system, and a compressed air source.

Pneumatic Fasteners

Standard Wood and Machine Screws (WMS)pack contains Phillips head wood and machine screws to install the closer. Through Bolts (TB) and/or Torx machine screws are available for all closers, except the 2610 series. LCN through bolts can be installed on 1-3/4" thick doors with either the 1/4-20 machine screws or optional Torx security screws supplied with the closer. Optional sizes are available for 1-5/8" or 1-3/8" door thicknesses, but must be specified when ordering.



Multi-Door and Single-Door Solutions

A single control box may power up to two pairs of doors simultaneously making pneumatic automatic operators a cost-effective solution for single or multi-door applications. This flexibility results in significant savings in material and installation costs.

Quiet Operation

Since the pneumatic automatic operators are powered by pressurized air, they are quiet, efficient, and very reliable. Flexible LCN pneumatic tubing is the only connection between the control box and the door frame. There is no need for high-voltage wiring at the door frame since all of the power for operation is generated by pressurized air located away from the door frame. (Note: special fittings are available so 3/16" metal tubing (by others) can be used in fire rated plenums).

Standards, Listings and Approvals

- Meets ADA opening force requirements
- Consult the factory for other listings

Pneumatically (Air) Powered

All pneumatic automatic operators require a compressed air source. LCN's pneumatic systems have the flexibility to run as an independent unit (7980 Series has a compressor built into the control box) or to run off an existing air supply (7900 Series has connections for utilizing existing air supply). Using a self-contained 7980 Series control box for single or double door leaf applications eliminates the need for an independent compressor. Existing building air compressors with a storage tank can be used to reduce the cost of multi-door systems and must utilize the 7900 Series control boxes.

Easy Adjustment/Installation

The air pressure and timing cycle are easily adjustable to meet the need of a specific installation. Because the control box can be located anywhere within 100 linear tubing feet from the controlled door for the 7900 Series or within 50 linear tubing feet for the 7980 Series, they can be placed in easily accessible locations. Convenient features such as sequential operation of vestibule doors are available.

Multiple Mounting Configurations

Available in three different mounting configurations:

- Concealed in the frame (2610 Series)
- Top jamb surface mounted on the pull side of the door (4810 Series)
- Top jamb surface mounted on the push side of the door (4820 Series)
- Door mounted, parallel arm on the push side of the door (4840 Series)

Hazardous Location Use

Since there is no high-voltage wiring at the door frame, pneumatically powered systems are ideal for use in hazardous areas. The control box, which contain the valves and electrical timing circuits, is remotely located.

Blow-Open (Smoke Evacuations Systems)

An auxiliary "blow-open" box is available and is controlled by the building smoke evacuation system. When activated, the normal pneumatic automatic operator functions are not available. The 7949 Series "blow-open" box works with or without the 7900 Series control boxes. (Limited to 50 linear foot of tubing).

Warranty

2 year limited warranty. See General Information catalog for complete details.

Maintenance

- For best performance, mount operators according to the LCN installation instructions
- Periodic visual inspections are recommended
- Inspect and service filter assembly in 7900 Series control boxes as required
- No service contracts required

Pneumatic Product Comparison

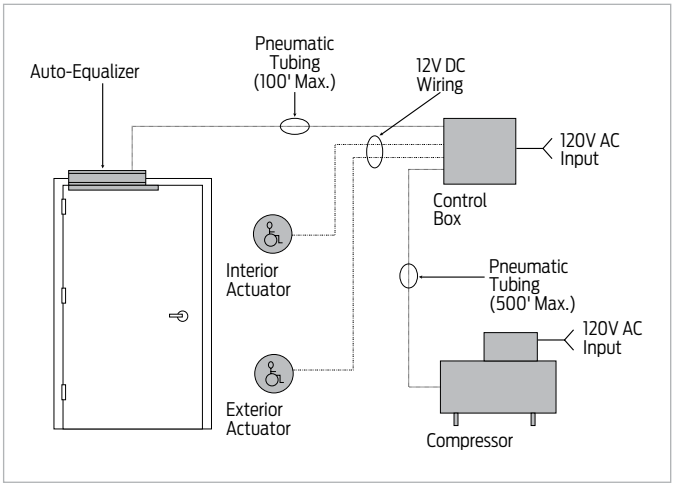
This chart shows a basic features comparison of the LCN electrohydraulic and pneumatic automatic operator systems designed to provide easy access without sacrificing closing power. Refer to the specific closer chapter for complete details.

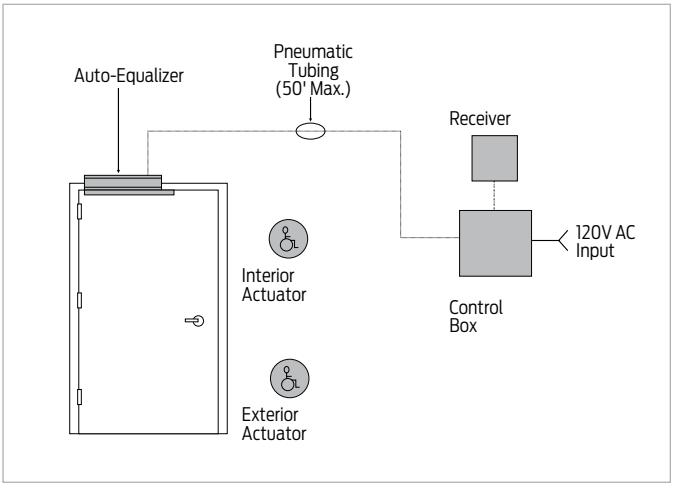
	Mounting					Finish		Cover						Cylinder					Arm Function*				
	Top jamb (pull) side	Top jamb (push) side	Parallel arm	Concealed	Door (pull) side	Powder coat	Plated	Plastic	Metal	Non-handed	Non-sized	Accessibility	Automatic operator	Hold open	DPS	Standard (single)	Regular (double)	EDA	CUSH	SCUSH
2610	●	●	●	●	●	●	●	●	●	●	●	♿	●	●	●	90°	●	●	●	●
4810	●	●	●	●	●	●	●	●	●	●	●	♿	●	●	●	90°	●	●	●	●
4820	●	●	●	●	●	●	●	●	●	●	●	♿	●	●	●	●	90°	●	●	●
4840	●	●	●	●	●	●	●	●	●	●	●	♿	●	●	●	●	●	90°	90°	90°

● Available
● Not available
♿ Meets ADA requirements (power mode)
* See individual series for maximum manual opening
** Switch provided for continuous Hold Open (4630 and 4640 only)

Wiring Diagrams

These pages illustrate examples of typical Pneumatic LCN systems. Please consult your local RSO representative or LCN for assistance with specific installations and material requirements.





Single Interior Door System (Wired)

- Slow opening interior door leaf
- System may be expanded to include an additional simultaneous door
- No guide rails or safety devices

How it Works

- A person requiring assistance triggers the system using either actuator
- The control box supplies pressurized air to the auto equalizer which opens the door slowly to 90˚, holds it for up to 30 seconds, then applies full spring power to reliably close and latch the door
- If not actuated, the auto equalizer functions as a full featured door closer

Bill of Materials

Qty	Part Number	Description
1	4811	Auto equalizer
1	8310-856	Hard wired wall mount, logo
1	8310-856	Hard wired wall mount, logo
1	7901	Control box
1		Compressor*
As needed	925	Tubing

* Contact Technical Support to verify compressor requirements.

Single Interior Door System (Wireless)

- Slow opening automatic door on door leaf
- Wireless actuators
- Stand alone system, no planned expansion
- No guide rails or safety devices

How it Works

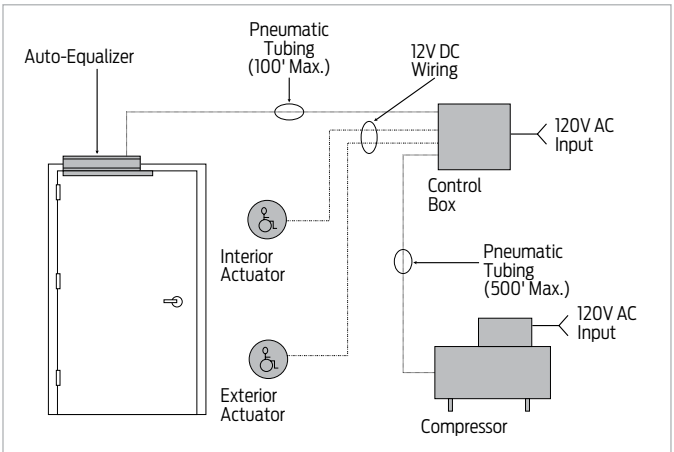
- A person requiring assistance triggers the system using either actuator
- The wireless transmitter in the actuator sends a signal to the wireless receiver which triggers the control box
- The control box supplies pressurized air to the auto equalizer which slowly swings door to 90º, holds it for up to 30 seconds, then applies full spring power to reliably close and latch the door.
- If not actuated, the auto equalizer functions as a full featured door closer

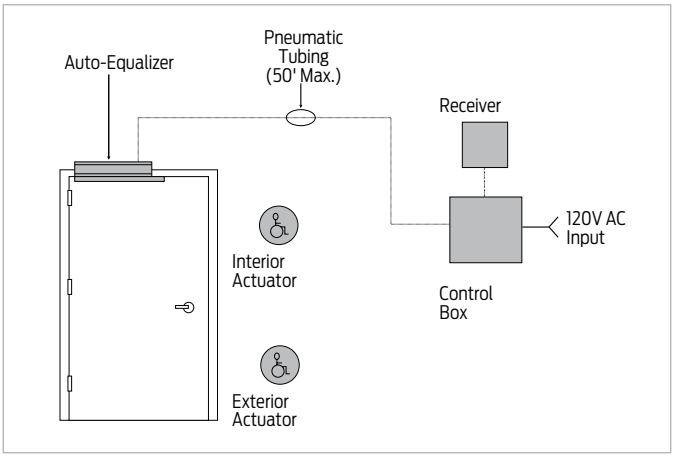
Bill of Materials

Qty	Part number	Description
1	4811	Auto equalizer
2	8310-3856WS	Wireless actuator, wall mount and surface, logo, 4-1/2" round
1	8310-865	Wireless receiver
1	7981	Control box
As needed	925	Tubing

Wiring Diagrams

These pages illustrate examples of typical Pneumatic LCN systems. Please consult your local RSO representative or LCN for assistance with specific installations and material requirements.





Alternate Vestibule Door System (Wired)

- Slow opening automatic doors with sequential operation for exterior and vestibule pairs of doors
- No guide rails or safety devices

How it Works

- People requiring assistance press exterior actuator for entry
- The exterior pair opens and after a short sequential delay the interior pair opens
- As the system times out, first the exterior, then the interior doors close
- Pressing the interior actuator reverses the process to exit the building
- This allows passage through the vestibule without all doors open for the entire cycle
- If a person stops in the vestibule and the system times out before they exit, pressing either vestibule actuator opens the appropriate doors
- Compressor is sized for multiple systems.; sequential operation is not recommended with scanners or motion sensors
- If not actuated, the auto equalizer functions as a full feature door closer

Bill of Materials

Qty	Part number	Description
2	4822	Auto equalizer (exterior)
2	4811	Auto equalizer (interior)
1	7902S	Control box with sequencer card
1		Compressor*
4	8310-856	Hard wired wall mount, logo
As needed	925	Tubing

* Contact Technical Support to verify compressor requirements.

Vestibule Door System (Wireless)

- Slow opening automatic doors with sequential operation for single exterior and vestibule doors
- No guide rails or safety devices

How it Works

- People requiring assistance press exterior actuator for entry
- The exterior door opens and after a short delay the interior door opens
- When the system times out, first the exterior, then the interior door closes
- Pressing the interior actuator reverses the process to exit the building
- This allows passage through the vestibule without both doors open for the entire cycle
- If a person stops in the vestibule and the system times out before they exit, pressing either vestibule actuator opens the appropriate door
- Sequential operation is not recommended with scanners or motion sensors
- If not actuated, the auto equalizer functions as a full featured door closer

Bill of Materials

Qty	Part number	Description
1	4822	Auto equalizer (exterior)
1	4811	Auto equalizer (interior)
1	7902S	Control box with sequencer card
4	8310-3856WS	Wireless actuator, wall mount and surface, logo, 4-1/2" round
2	8310-865	Wireless receiver
As needed	925	Tubing

2610 Series

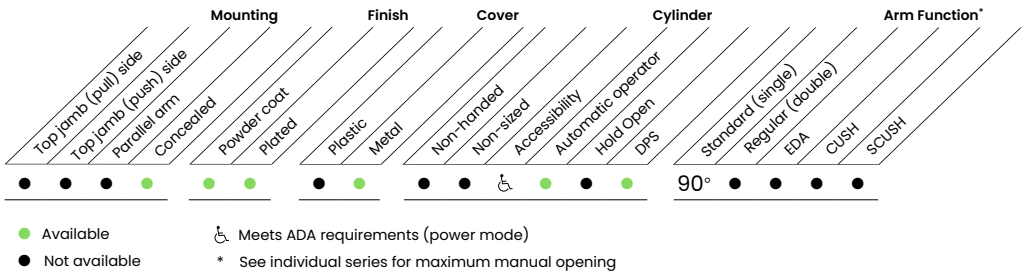
The 2610 Auto Equalizer™ is LCN's pneumatically powered multi-door solution. This low-energy automatic operator provides easy access for people with disabilities, or the elderly. Designed primarily for manual opening applications that occasionally require automatic opening.

Features

Certifications	ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	• Cast iron body • Full complement bearing • 1-1/2" diameter piston • 11/16" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Handed
Size	Sized 3 and 4
Warranty	2 years
Fasteners	Wood and machine screws (WMS)

Mounting	Concealed in frame
Arms	Single lever arm, mounting/finish plate, standard track
Finishes/colors/ powder coat	• 689 - Aluminum • 690 - Statuary bronze • 691 - Light bronze • 693 - Black • 695 - Dark bronze • 696 - Brass • Custom colors optional
	• Optional SRI primer - powder coat only • Optional plated finishes

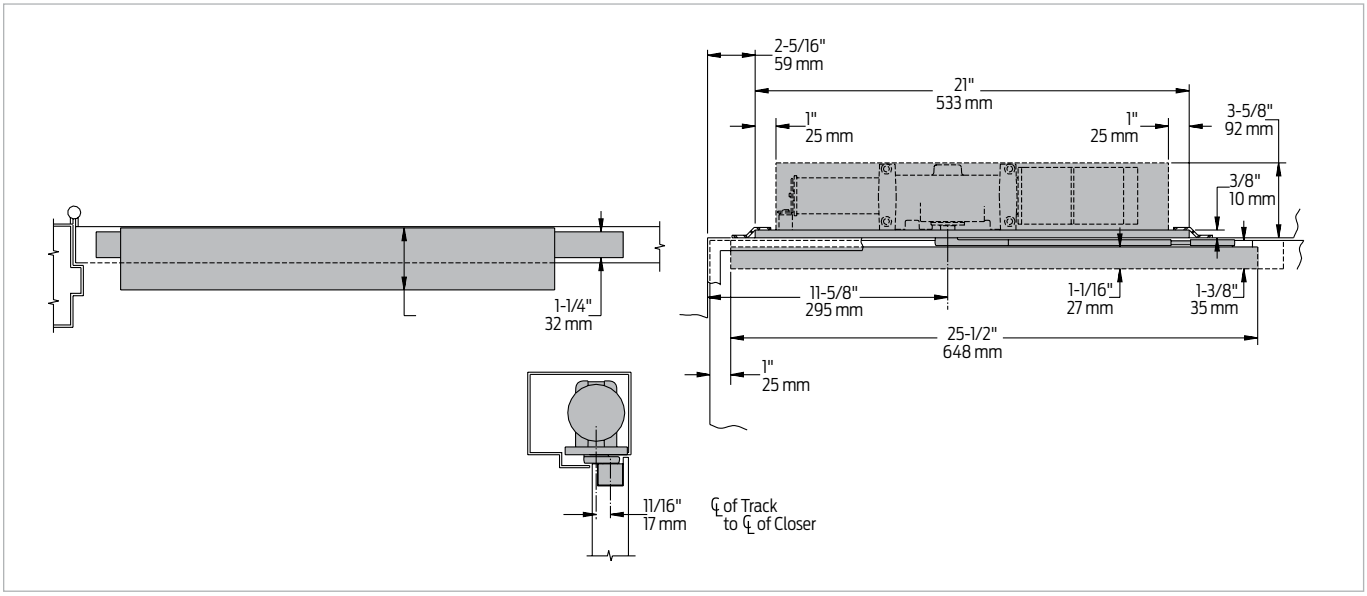
Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Pneumatic Systems

Concealed Mounting Details



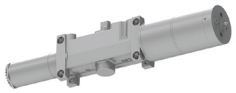
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended
Top rail	• 1-3/8" (35 mm) mortise required • 5/16" (8 mm) cutout required at top of the door, push side only
Head frame	Minimum 4" (102 mm) x 4" for hollow metal or aluminum tube construction
System diagram	See pages 9-10 for typical system wiring, and pages 27-28 for pneumatic control boxes
Maximum opening	• Butt hinge template allows 90° power opening and 160° manual opening • Please note that many track style door closers are capable of allowing 180° of door swing • Track style closers are at their weakest closing force at 180° • Consult factory for applications where exterior or large/heavy door must swing 180° • Consult factory for all pivot mounted installations

Notes:

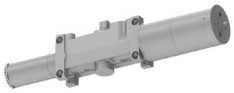
- For interior or exterior doors
- Single acting cylinder in head frame
- Concealed arm and track in door top rail
- Requires control box with integral compressor or control box using auxiliary air supply (see control box pages 27-28 and actuators and accessories, pages 110-129)
- Guard rails/safety mats not required

Accessories

Cylinders



2610-3971
Cast Iron Cylinder Assembly (CYL)
- Handed
- Standard



2610-3971 DPS
Cast Iron Cylinder Assembly (CYL)
- Handed
- With door position switch (DPS) which sends signal when door is closed
- Standard

2610-3071
Cast Iron Cylinder Assembly (CYL)
- Handed
- Mounting plate
- Standard

2610-3071 DPS
Cast Iron Cylinder Assembly (CYL)
- Handed
- Mounting plate with door position switch (DPS) which sends signal when door is closed
- Standard

Arms

2610-3077T
Standard Arm (STDTRKARM)
- Handed
- Track roller not included with arm

Tracks

2610-3038
Standard Track (STDTRK)
- Non-handed
- Standard

Installation Accessories

2610-3034
Track roller
- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/16" (2 mm)

Pneumatic Systems

Ordering Information

How to Order 2610 Series Operators		
1	Select cylinder size	2613 2613 DPS 2614 2614 DPS
2	Specify hand	Right Hand (RH) Left Hand (LH)
3	Select finish (standard powder coat)	689 - Aluminum 690 - Statuary bronze 691 - Light bronze 693 - Black 695 - Dark bronze 696 - Brass
4	Custom finish	Custom powder coat (RAL) Plated finish
5	Screw pack	Wood and machine screws (WMS)
6	Special template (ST)	ST - Designate while ordering

Optional

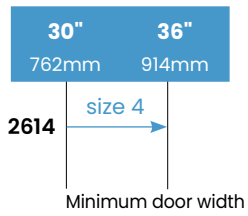
Operator will be shipped with:

- Standard arm
- Track roller
- Standard track
- Wood and machine screw pack

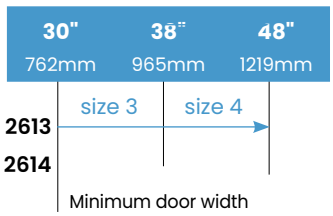
Table of Sizes

- Select closer based on width of door
- Sized 2610 Series cylinders available in size 3 or 4
- Closing power of all 2610 Series closers may be increased 15%

Exterior (and Vestibule) Door Width



Interior Door Width



→ Indicates recommended range of door width for operator.
Note: Minimum door width 30" (762mm).

4810 Series

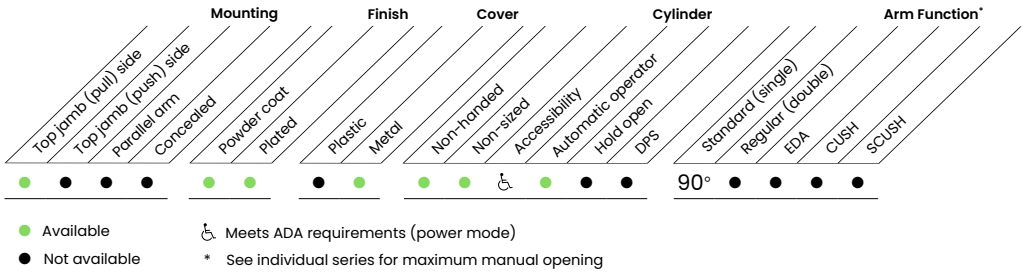
The 4810 Auto Equalizer™ is LCN's pneumatically powered multi-door solution. This low-energy automatic operator provides easy access for people with disabilities, or the elderly. Designed primarily for manual opening applications that occasionally require automatic opening.

Features

Certifications	ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	• Cast iron body • Full complement bearing • 1-1/2" diameter piston • 3/4" diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Size	Adjustable spring size 1-4
Warranty	2 years

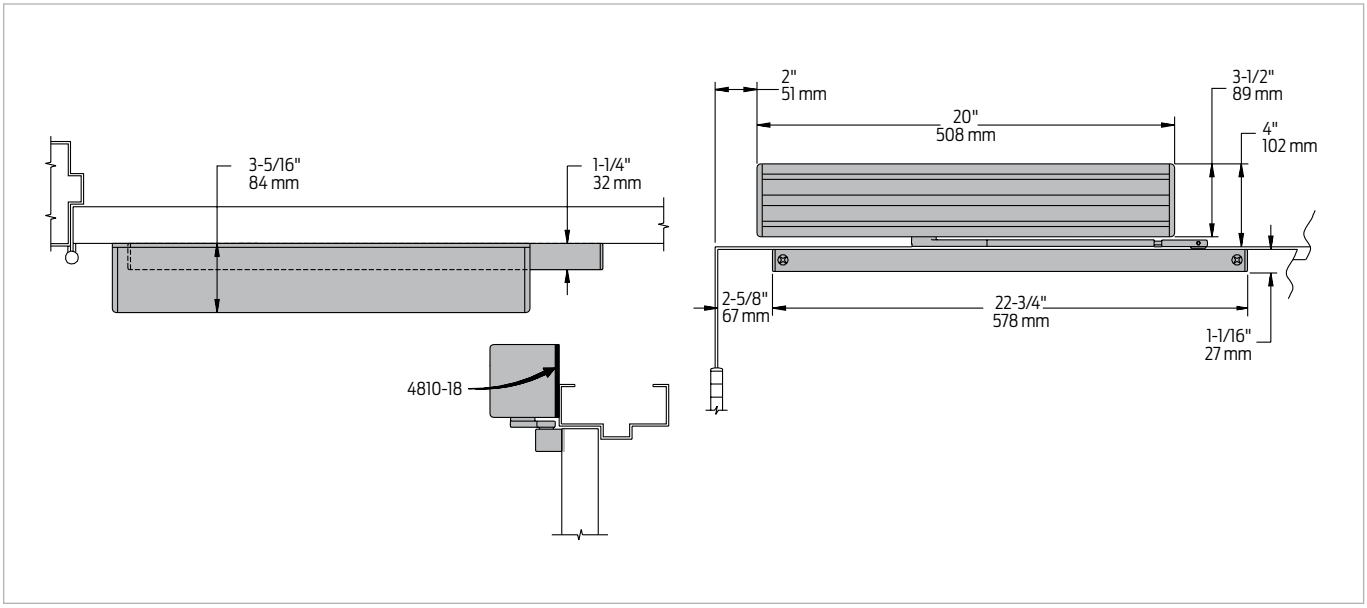
Cover	Metal cover (MC)
Fasteners	Wood and machine screws (WMS)
Mounting	Top jamb (pull side)
Arms	Single lever arm with standard track
Finishes/colors/ powder coat	• 689 - Aluminum • 690 - Statuary bronze • 691 - Light bronze • 693 - Black • 695 - Dark bronze • 696 - Brass • Custom colors optional
	• Optional SRI primer - powder coat only • Optional plated finishes

Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Top Jamb (Pull Side) Mounting Details



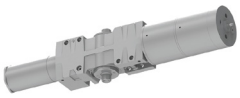
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended
Reveal	Should not exceed 1/8" (3 mm)
Top rail	Minimum 1-1/8" (29 mm)
Head frame	Minimum 2" (51 mm)
System diagram	See pages 9-10 for typical system wiring, and pages 27-28 for pneumatic control boxes
Maximum opening	• Templating allows 90° power opening and 170° manual opening • Please note that many track style door closers are capable of allowing 180° of door swing • Track style closers are at their weakest closing force at 180° • Consult factory for applications where exterior or large/heavy door must swing 180°

Notes:

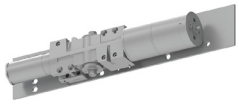
- Requires control box with integral compressor or control box using auxiliary air supply
- See control box pages 27-28 and actuators and accessories, pages 110-129
- Guard rails/safety mats not required

Accessories

Cylinders

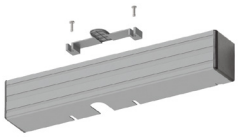


4811-3971
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Standard



4811-3071
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Mounting plate
- Standard

Covers



4810-72MC
Metal Cover (MC)
- Non-handed
- With black end caps
- Standard

Arms

4810-3077T
Standard Arm (STDTRKARM)
- Non-handed
- Track roller not included with arm

Tracks

4810-3038
Standard Track (STDTRK)
- Non-handed
- Standard

Installation Accessories

4810-3034
Track Roller
- Quiet low friction roller assembly
- Shoulder dimension "X" = 1/8" (3mm)

Pneumatic Systems

Ordering Information

How to Order 4810 Series Operators			
1	Select finish (standard powder coat)	689 - Aluminum 690 - Statuary bronze 691 - Light bronze 693 - Black 695 - Dark bronze 696 - Brass	
2	Custom finish	Custom powder coat (RAL) Plated finish	Optional
3	Screw pack	Through Bolt[1] Wood and Machine Screws (TBWMS)	Optional
4	Special template (ST)	ST - Designate while ordering	Optional

1. Specify door thickness if other than 1-3/4".

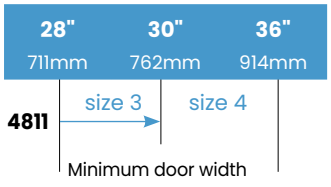
Operator will be shipped with:

- Standard cylinder
- Metal cover
- Standard arm
- Track roller
- Standard track
- Wood and machine screws

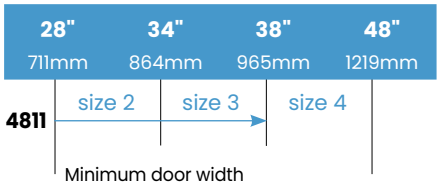
Table of Sizes

- Non-sized 4810 Series cylinder is adjustable from size 1 through size 4 and is shipped set to size 3
- Closing power of 4810 Series closers may be increased 50%

Exterior (and Vestibule) Door Width



Interior Door Width



→ Indicates recommended range of door width for operator.
Note: Minimum door width 28" (711 mm).

4820 Series

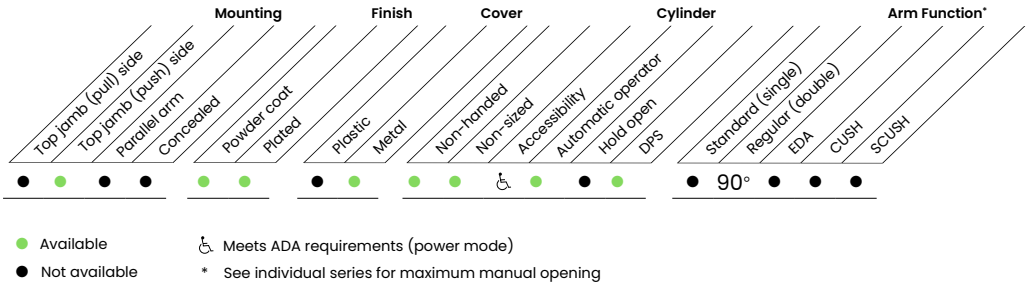
The 4820 Auto Equalizer™ is LCN's pneumatically powered multi-door solution. This low-energy automatic operator provides easy access for people with disabilities, or the elderly. Designed primarily for manual opening applications that occasionally require automatic opening.

Features

Certifications	ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	• Cast iron body • Full complement bearing • 1-1/2" diameter piston • 3/4 " diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Size	Adjustable spring size 2-5
Warranty	2 years

Cover	Metal cover (MC)
Fasteners	Wood and machine screws (WMS)
Mounting	Top jamb (push side)
Arms	• Regular Arm (REGARM), standard • Long Arm (LONG), optional
Finishes/colors/ powder coat	• 689 - Aluminum • 690 - Statuary bronze • 691 - Light bronze • 693 - Black • 695 - Dark bronze • 696 - Brass • Custom colors optional
	• Optional SRI primer - powder coat only • Optional plated finishes

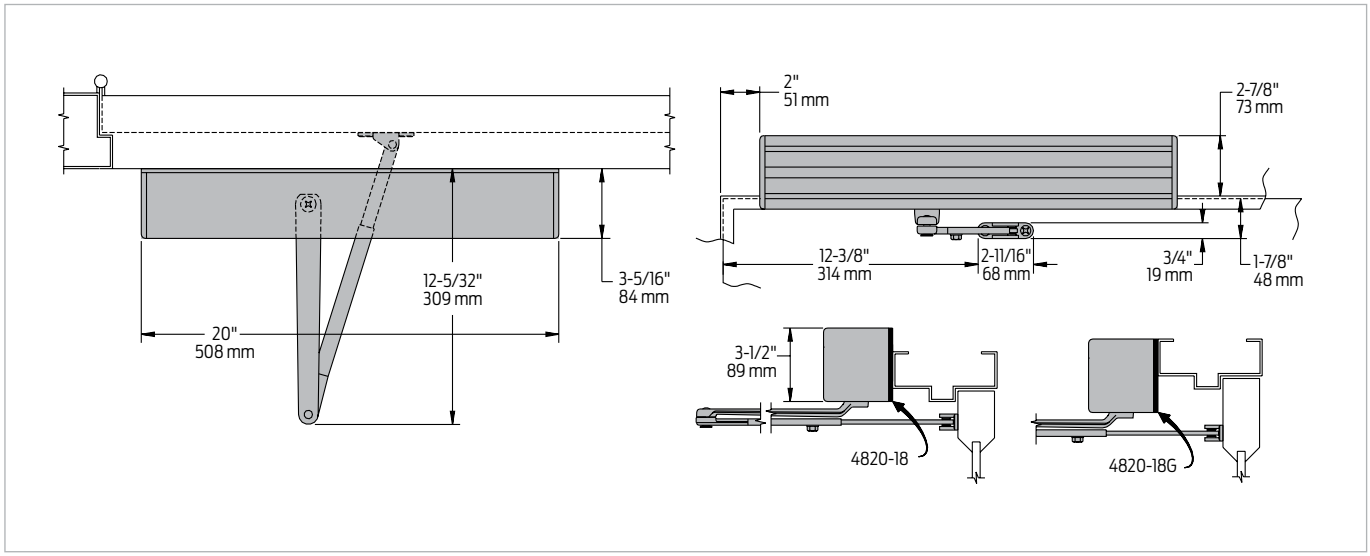
Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Pneumatic Systems

Top Jamb (Push Side) Mounting Details



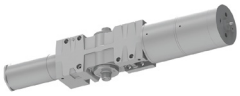
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended
Reveal	• 4-1/2" (114 mm) allows up to 90° power opening and 100° manual opening • 8" (203 mm) allows up to 90° power opening and 100° manual opening with long arm where standard rod and shoe is replaced with optional long rod and shoe, 4820-79LR
Top rail	• Minimum 1-3/4" (44 mm) • Closer on 4820-18G plate requires 3" (76 mm) minimum
Head frame	• Minimum 1-3/4" (44 mm) • With flush ceiling use plate, 4820-18G substituted for standard plate
System diagram	See pages 9-10 for typical system wiring, and pages 27-28 for pneumatic control boxes
Maximum opening	Templating allows 90° power opening and 100° manual opening
Options	Door position switch (DPS) kit that signals when the door has reached the open position

Notes:

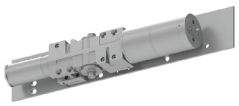
- Requires control box with integral compressor or control box using auxiliary air supply
- See control box pages 27-28 and actuators and accessories, pages 110-129
- Guard rails/safety mats not required

Accessories

Cylinders

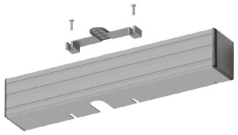


4822-3971
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Standard



4822-3071
Standard Cylinder with 18G Mounting Plate (CYL18G)
- Non-handed
- Includes; 4820-18 Mounting Plate or 4820-18G Mounting Plate (must specify)
- Standard

Covers



4820-72MC
Metal Cover (MC)
- Non-handed
- With black end caps
- Standard

Arms

4820-3077
Regular Arm (REGARM)
- Non-handed
- Standard

4820-3077L
Long Arm (Long)
- Includes long rod and shoe, 4820-79LR for deep reveals
- Optional

Installation Accessories

4820-18
Plate
- Requires minimum 1-3/4" (44 mm) minimum head frame and 2" (51 mm) top rail
- Standard

4820-18G
Plate
- Requires minimum 1-3/4" (44 mm) minimum head frame and 2" (51 mm) top rail
- Standard

4820-3377
Door Position Switch Kit
- Provides feedback when the door reaches the fully opened position
- Specify RH or LH when ordering

Pneumatic Systems

Ordering Information

How to Order 4820 Series Operators		
1	Select finish (standard powder coat)	689 - Aluminum 690 - Statuary bronze 691 - Light bronze 693 - Black 695 - Dark bronze 696 - Brass
2	Custom finish	Custom powder coat (RAL) Plated finish
3	Arm	Long arm (LONG)
4	Screw pack	Through Bolt[1] Wood and Machine Screws (TBWMS)
5	Installation accessories	Plate, 4820-18 Plate, 4820-18G Door position switch kit, 4820-3377 LH Door position switch kit, 4820-3377 RH
6	Special template (ST)	ST - Designate while ordering

Optional

1. Specify door thickness if other than 1-3/4".

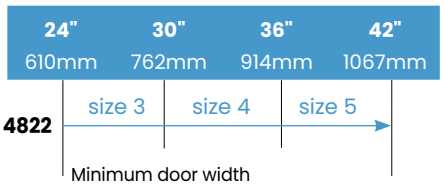
Operator will be shipped with:

- Standard cylinder
- Metal cover
- Regular arm
- Wood and machine screws

Table of Sizes

- Non-sized 4820 Series cylinder is adjustable from size 2 through size 5 and is shipped set to size 3
- Closing power of 4820 Series closers may be increased 50%

Exterior (and Vestibule) Door Width



Interior Door Width

→ Indicates recommended range of door width for operator.

4840 Series

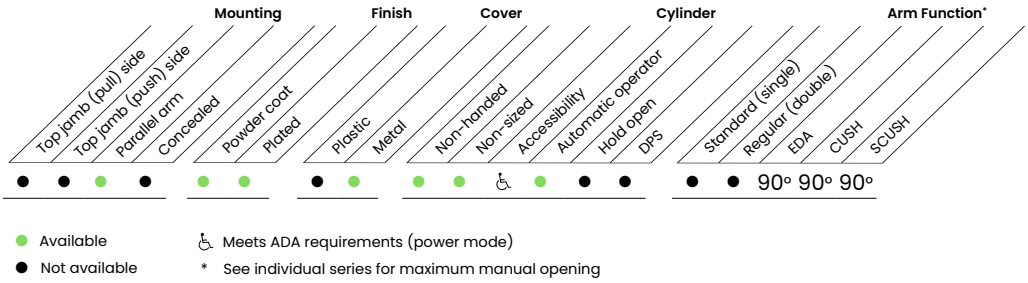
The 4840 Auto Equalizer™ is LCN's pneumatically powered multi-door solution. This low-energy automatic operator provides easy access for people with disabilities, or the elderly. Designed primarily for manual opening applications that occasionally require automatic opening.

Features

Certifications	ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	• Cast iron body • Full complement bearing • 1-1/2" diameter piston • 3/4 " diameter double heat treated pinion journal
Fluid	All weather fluid
Handing	Non-handed
Size	Adjustable spring size 1-5
Warranty	2 years
Cover	Metal cover (MC)

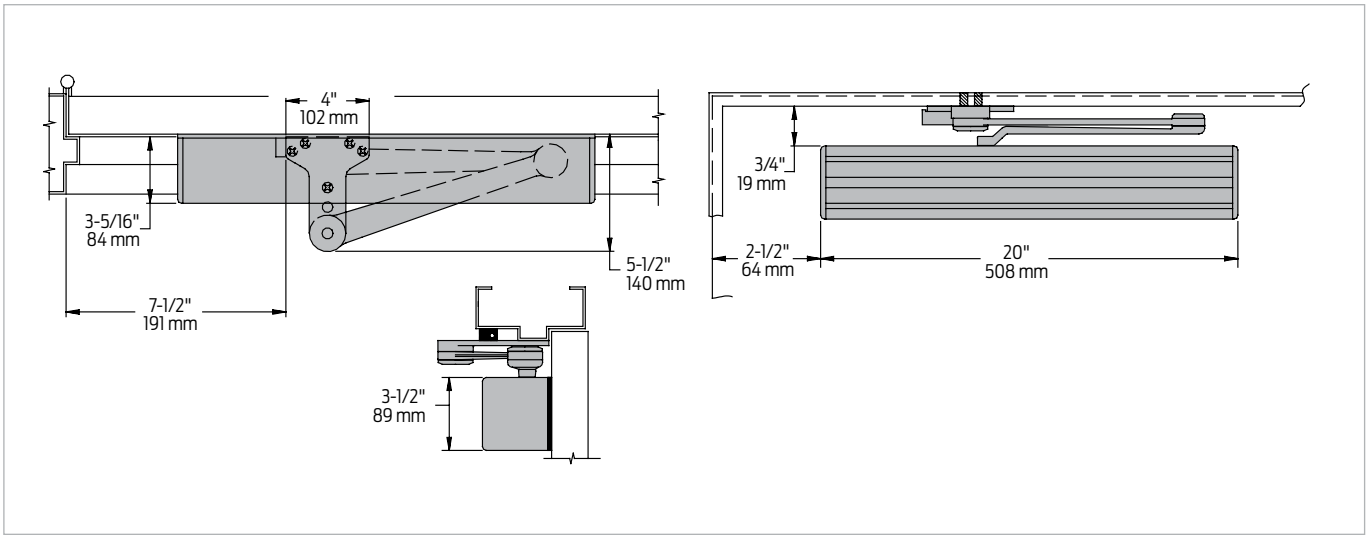
Fasteners	Adjustable spring size 1-5
Mounting	Parallel arm (push side)
Arms	Extra duty, standard; cush-n-stop and spring cush-n-stop, optional
Finishes/colors/ powder coat	• 689 - Aluminum • 690 - Statuary bronze • 691 - Light bronze • 693 - Black • 695 - Dark bronze • 696 - Brass • Custom colors optional
	• Optional SRI primer - powder coat only • Optional plated finishes* *End caps are black

Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Parallel Arm (Push Side) Mounting Details



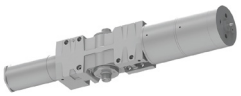
Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended when cush-n-stop (CUSH) or spring cush-n-stop (SCUSH) arms are not used
Clearance	EDA or CUSH shoes is 5-1/2" (140 mm) from door face
Top rail	Minimum 4-1/8" (105 mm). 6" minimum top rail for screw not to show in glass
Head frame	(Flush) requires PA shoe adapter, 4840-419
Stop width	Minimum 1" (25 mm)
Blade stop	Clearance requires 1/2" (13 mm) blade stop spacer, 4840-61
System diagram	See pages 9-10 for typical system wiring, and pages 27-28 for pneumatic control boxes
Maximum opening	• Maximum power opening is 90° with all arms • Maximum manual opening is 105° with EDA or SCUSH arms • Maximum manual opening is 100° with CUSH arm

Notes:

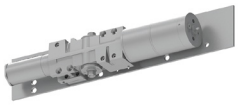
- For CUSH or SCUSH arm installations with maximum opening less than listed above, consult factory for special template
- Requires control box with integral compressor or control box using auxiliary air supply
- See control box pages 27-28 and actuators and accessories, pages 110-129
- Guard rails/safety mats not required

Accessories

Cylinders

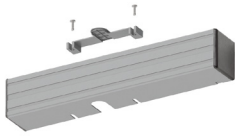


4841-3971
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Standard



4841-3071
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Mounting plate
- Standard

Covers



4840-72MC
Metal Cover (MC)
- Non-handed
- With black end caps
- Standard

Arms

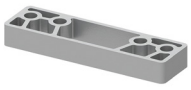
4840-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Features forged solid steel main arm and forearm for potentially abusive installations
- Standard

4840-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Features forged solid steel main arm and forearm with stop in soffit shoe
- Optional

4840-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For abusive applications features forged solid steel main arm and forearm with spring loaded stop in soffit shoe
- Optional

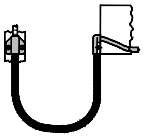
Installation Accessories

4840-30
CUSH Shoe Support
- Provides anchorage for fifth screw used with EDA and CUSH arms, where reveal is less than 3-1/16" (78 mm)

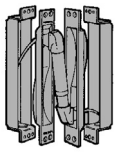


4840-61
Blade Stop Spacer
- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop

4840-419
PA Flush Panel Adapter
- Provides horizontal mounting surface for parallel arm shoe on single rabbeted or flush frame



4840-459
Door Loop Kit
- Surface mounted, flexible metal loop transfers pressurized air via pneumatic tubing from frame to closer end cap
- Extra caps allow tubing to run on frame surface or concealed in the frame



4840-460
Pneumatic Transfer Hinge
- Transfers pressurized air via pneumatic tubing from frame to door leaf for fully concealed installations
- Preparation of a raceway is required from the hinge stile of the door to the top rail for concealment of the pneumatic tubing within the door leaf

Pneumatic Systems

Ordering Information

How to Order 4840 Series Operators		
1	Select finish (standard powder coat)	689 - Aluminum 690 - Statuary bronze 691 - Light bronze 693 - Black 695 - Dark bronze 696 - Brass
2	Custom finish	Custom powder coat (RAL) Plated finish
3	Arm	Cush-n-stop arm (CUSH) Spring cush-n-stop arm (SCUSH)
4	Screw pack	Through Bolt[1] Wood and Machine Screws (TBWMS)
5	Installation accessories	CUSH shoe support, 4840-30 Blade stop spacer, 4840-61 PA flush panel adapter, 4840-419 Door loop kit, 4840-459 Pneumatic transfer hinge, 4840-460
6	Special template (ST)	ST - Designate while ordering

Optional

1. Specify door thickness if other than 1-3/4".

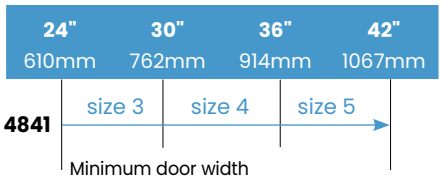
Operator will be shipped with:

- Standard cylinder
- Metal cover
- Extra duty arm
- Wood and machine screws

Table of Sizes

- Non-sized 4841 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Closing power of 4841 closers may be increased 50%

Exterior (and Vestibule) Door Width



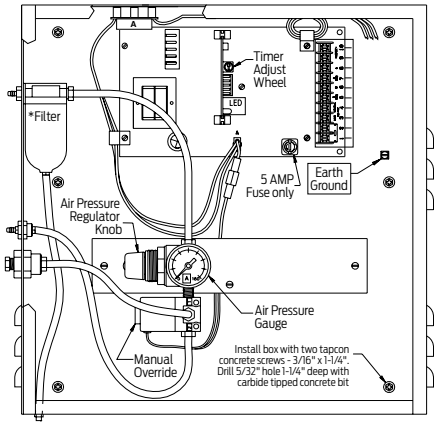
Interior Door Width

→ Indicates recommended range of door width for operator.

7900 Series Control Boxes

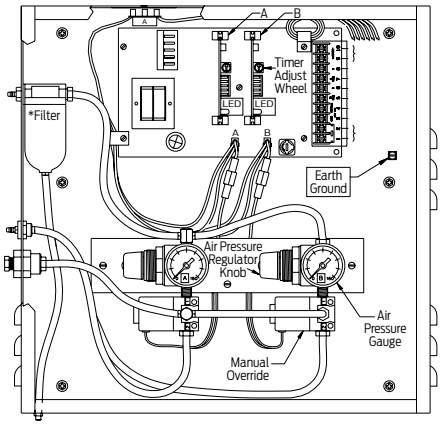
A heavy duty, surface mounted control box contains one or two electrically controlled pneumatic circuits. Air filtration, pneumatic regulation, and system timing is performed by the control box. 7980 Series control boxes also contain a built-in air pump to power the system. Each pneumatic circuit can be adjusted for a hold open time up to 30 seconds. Output air pressure can be adjusted to precisely tailor system to individual door requirements.

Pneumatic connections use standard barbed fittings and 925 tubing from the compressor to the control box to the operator. A package of barbed tee and butt connectors are supplied with each control box to simplify installations. Consult LCN for details. Other than a semi-annual inspection of the air filter assembly and muffler, no periodic system maintenance is required.



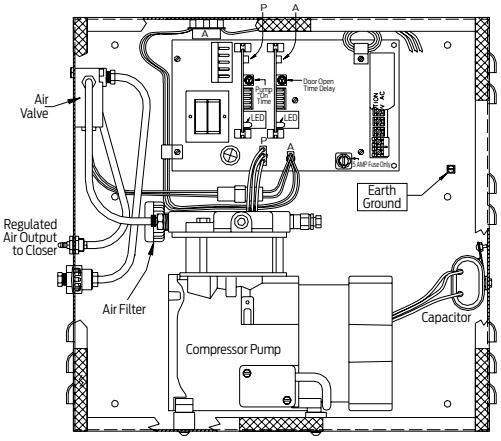
7901 and ES7901 Control Box

- For single door applications or independent control of single door in multiple door systems
- Two door leaves can be operated, if they are activated simultaneously
- The single pneumatic circuit accepts Normally Open (N.O.) inputs from hardwired or RF (wireless) actuator/receiver combinations
- The 7901 control box requires a separate compressor



7902 and ES7902 Control Box

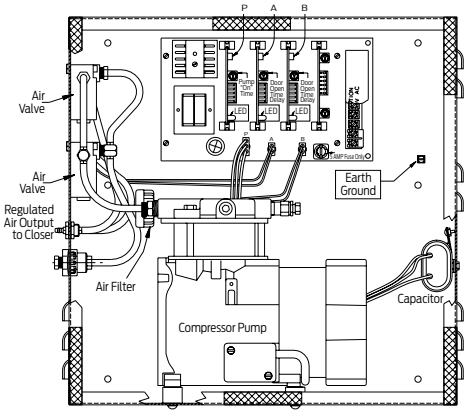
- For independent operation of two door or four door leaves, if pairs are actuated simultaneously
- Two independent pneumatic circuits accept Normally Open (N.O.) inputs from hardwired or RF (wireless) actuator/receiver combinations
- Sequential operation (add suffix "S") is available for 7902
- The 7902 control box requires a separate compressor



7981 and ES7981 Control Box

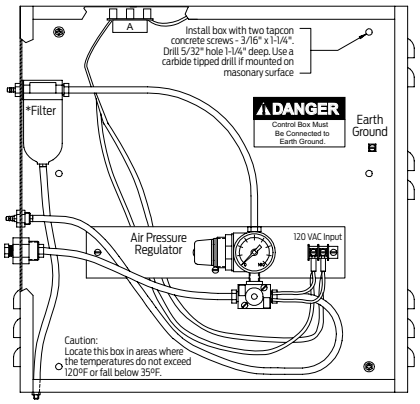
- Self-contained control box/compressor combination for single door leaf applications
- The single pneumatic circuit accepts Normally Open (N.O.) inputs from hardwired or RF (wireless) actuator/receiver combinations
- The 7981 control box does not require a separate compressor

7900 Series Control Boxes



7982 and ES7982 Control Box

- Self-contained control box/compressor combination for independent or simultaneous operation of two door leaves
- Two independent pneumatic circuit accepts Normally Open (N.O.) inputs from hardwired or RF (wireless) actuator/ receiver combinations
- The 7982 control box does not require a separate compressor
- Sequential operation (add suffix "S") is available for 7982 control boxes



7949 and ES7949 Control Box

- Auxiliary "blow-open" box works with or without 7901 or 7902 and one or two Auto Equalizers
- Controlled by smoke evacuation system, the 7949 open the door(s) to allow fresh air into the building
- Normal Auto Equalizer functions are not available when "blowopen" box is activated

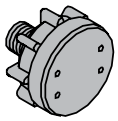
Optional "ES" Boxes

- Identical in function(s) to the basic box but includes an isolated (SPDT) relay with 1 set of Normally Open (N.O.) and Normally Closed (N.C.) contracts to control an electric strike
- The LCN control box cannot power the strike. ES7949 has two sets of isolated (DPDT) contacts. Compressor size recommendations are based on normal usage for the number of operations listed
- All LCN supplied auxiliary compressors include an automatic drain feature

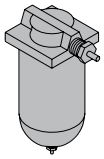
Control Box Installation Notes

- Locate a 7900 Series control box so no more than 100 linear feet of LCN 925 pneumatic tubing is required between the control box and door. Maximum 50 linear feet for a 7980 and 7949 Series
- Locate a 7900/7980/7949 Series control box where the temperatures do not exceed 120ºF or fall below 35ºF
- 7901, 7902 and 7949 control box input 120V AC @ 1 amp. 7981 and 7982 control boxes input 120V AC @ 5 amp
- Output voltage is 12V DC @ 0.25 amp. max
- Air pressure input, 80 PSI minimum/100 PSI maximum, required for 7901, 7902 and 7949
- Regulated air output up to 80 PSI for Auto Equalizer
- Auto Equalizers require approximately 0.5 cfm airflow in heavy traffic
- All control boxes are 15" x 15" x 6"

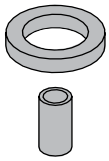
Accessories



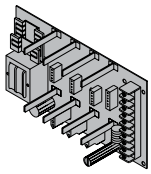
-329
Air Filter
- Replacement inlet air filter for 7981 or 7982 Series control boxes



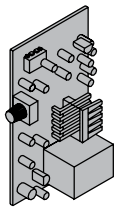
-329G
Air Filter
- Replacement inlet air filter assembly for 7901 or 7902 Series control boxes



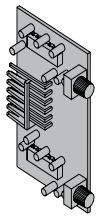
-929
Filter and Seal
- Internal filter and seal component to the Air Filter -329G assembly



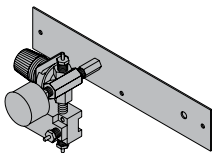
-900
Power Supply Board
- Main power supply/ input board for the 7901, 7902, 7981, or 7982 Series control boxes



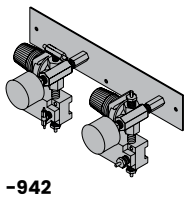
-903
Timer Card
- 0 to 30 second timer module
- Plugs into the power supply board, -900; 7901 (A slot) Series control box requires 1 each
- 7902 (A/B slots) and 7981 (P/A slots) Series control boxes require 2 each
- 7982 (P/A/B slots) Series control box requires 3 each



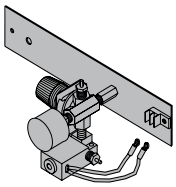
-3426
Sequencer Card
- Dual, 0 to 30-second sequence timer module for 7902 and 7982 Series control boxes
- Can be added to a standard 7902 or 7982 Series control box to convert to a sequential operation
- Sequencer card, -3426 is included when ordering a 7902S or 7982S Series control box



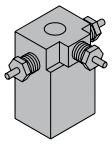
-941
Valve Assembly
- Regulator valve assembly for 7901 Series control box



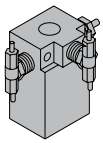
-942
Valve Assembly
- Regulator valve assembly for 7902 Series control box



-941C
Valve Assembly
- Regulator valve assembly for 7949 Series blow open control box



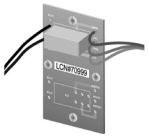
-3299A
Solenoid Valve Assembly
- Air valve assembly for 7981 Series control box or the 'A' circuit valve assembly for the 7982 Series control box



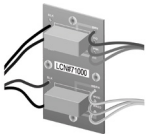
-3299B
Solenoid Valve Assembly
- Air valve assembly for the 'B' circuit in the 7982 Series control box

Pneumatic Systems

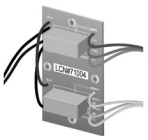
Accessories



-3390A
Relay Package "A"
- ES relay assembly for 7901 and 7981 Series control boxes or the 'A' circuit ES relay assembly in a 7902 or 7982 Series control boxes
- Includes 390 relay, base and wires
- Can be added to standard 7901, 7902, 7981 or 7982 Series control boxes to convert to ES operation
- Relay package, -3390A is included when ordering a 7901ES, 7902ES, 7981ES or 7982ES Series control box



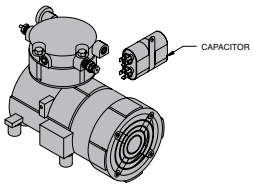
-3390B
Relay Package "B"
- ES relay assembly for 'B' circuit in 7902 or 7982 Series control boxes
- Includes –390 relay, base and wires
- Can be added to standard 7902 or 7982 Series control boxes to convert to ES operation
- Relay package, -3390B is included when ordering a 7902ES or 7982ES Series control box



-3390C
Relay Package "C"
- ES relay assembly in 7949 Series blow open control box
- Includes –390C relay, base and wires
- Can be added to standard 7949 Series blow open control box to convert to ES operation
- Relay package, -3390C is included when ordering a 7949ES Series control box

-962
Isolator
- Rubber isolators for 7981/7982 Compressor Assembly, -3960

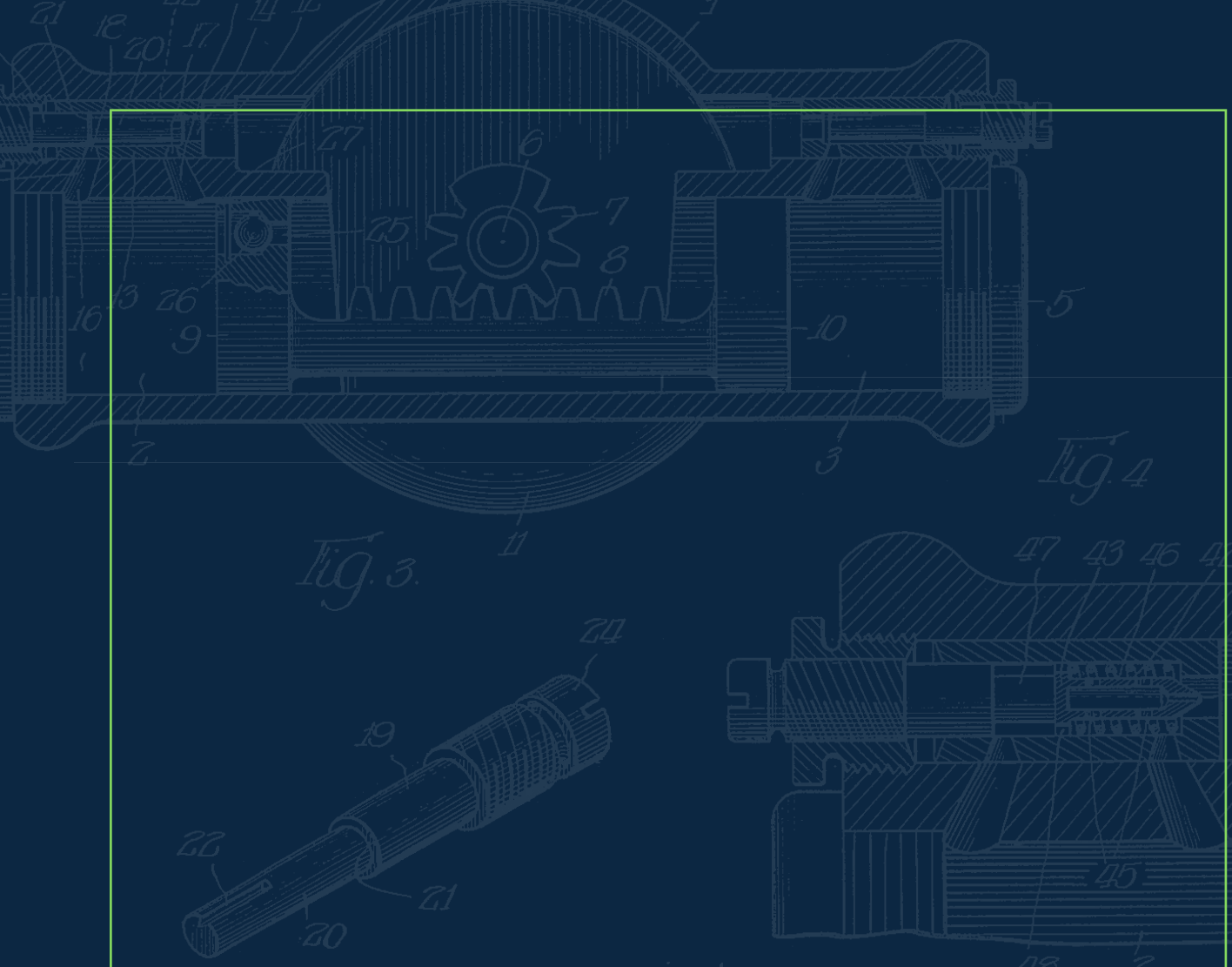
-293G
Muffler
- Exhaust muffler for 7901, 7902, 7949, 7981 and 7982 Series control boxes



-3960
Compressor Assembly
- Internal air pump assembly for 7981 or 7982 Series control box
- Includes starter capacitor, -962 Isolators, and -329 Air Filter

-3592
Compressor Service Kit
- Internal component for pressure release valve on
  - 3960 Compressor Assembly

925
Pneumatic Tubing
- 1/8" (3mm) I.D. flexible pneumatic tubing for use with standard barbed fittings provided on pneumatic control boxes and operators
- Order by linear footage required
- 925 tubing is not plenum rated
- Contact LCN for applications where tubing must run through rated plenums



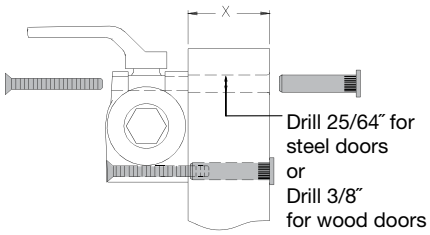
ELECTROHYDRAULIC OPERATORS

Electric Auto Equalizers

In addition to the original pneumatic drive system, LCN offers Automatic Electronic Equalizers. People moving through a door can use it as a normal rack and pinion door closer or, at the touch of a button, open the door automatically. An integrated digital control suite provides all electrical control functions. These self-contained units are suitable for use on single leaf doors or pair of doors where each leaf is equipped with an operator. The operator provides all the control and power elements into a single operator package, only some actuators are required to complete the system. Two surface mount models available—the 4630 mounts on the pull side of the door and the 4640 Series mounts on the push side of the door. Integrates a modified heavy-duty 4040XP Series cast iron cylinder.

Electrohydraulic Fasteners

Standard Wood and Machine Screws (WMS)pack contains Phillips head wood and machine screws to install the closer. Through Bolts (TB) and/or Torx machine screws are available for all closers, except the 2610 series. LCN through bolts can be installed on 1-3/4" thick doors with either the 1/4-20 machine screws or optional Torx security screws supplied with the closer. Optional sizes are available for 1-5/8" or 1-3/8" door thicknesses, but must be specified when ordering.



Electric Auto Equalizer Systems

- Exceeds proposed ANSI cycle test standard of 300,000 full load automatic operating cycles
- Power operation plus full door control
- For all applications, single or multi-door projects
- Opening time to back check no faster than 3 seconds
- Opening time 4 seconds or more to fully open
- Must remain fully open for at least 5 seconds
- Closing time from 90° to 10° no faster than 3 seconds
- Less than 15 pounds-force to stop door's motion
- Kinetic energy must not exceed 1.25 lbf-ft
- In event of failure; less than 15 lbf. to release latch, less than 30 lbf. to put door in motion, less than 15 lbf. to fully open door systems

Digital Control Box

Provides exceptionally precise control of a large range of built-in functions combined with superior durability and performance. Visual indications and digital readouts of all control function settings and activity make adjustments easy, fast and accurate.

Dual Independent Program Memories

Each unit is pre-programmed to factory default settings. The installer can adjust the unit to meet the job site requirements. These field settings are locked into the computer's memory. Any subsequent field adjustments replace the original field adjustments. The factory settings are always retained in memory and can be recalled to replace the field settings in just seconds, restoring the unit to its original programming.

On-Board Diagnostics

A sophisticated built-in diagnostics program monitors the system microprocessor, power supplies, drive system and actuators circuitry. This reduces the time required to make
sure the installation is complete and correct.

On-Board Power Supply

Provides both 12V DC and 24V DC outputs to power card readers, manual actuators and other peripherals.

"No Destruct" Drive System

Specially designed motor and clutch assembly reduces the chance the operator will be damaged in an abusive application. If a vandal tries to force the door closed while it is trying to open, the clutch mechanism prevents damage. The door has improved control because the heavy duty 4040XP closer is always operable.

Electronic Circuit Protection

The high voltage input circuit is protected by a one amp slow blow fuse. The low voltage output circuits by self-resetting fuses.

Visual Function Indicators

LED's allow direct observation of these inputs:

- Input power
- Fire alarm input
- Normal trigger (actuator) input
- Sequential trigger (actuator) input
- Hold open/alternate action (actuator) input
- Lockout timer
- Safety sensor (clear) input
- Safety sensor (active) input

Programming Mode

Allows tailoring of the following functions to meet specific site conditions:

- Hold open time
- 90° slow down time
- One shot input [on or off]
- Exterior mode [on or off] function to accommodate momentary resistance, like wind gusts, during the opening swing
- Electric strike delay timer
- Electric strike 3 second power function [on or off]
- Sequential trigger delay timer
- Alternate action timer
- Lockout timer

Standards, Listings and Approvals

- UL listed for Fire Door Operator (GUJY) and Door Operator System (FDDR) file R18222
- Tested and certified under ANSI Standard A156.19 (Refer to Section 2.1 and consult factory for details)
- ANSI Standard A117.1, Section 4.13.13
- ADA law, Section 4.13.12
- Listed for positive pressure plus UL 10B and UL 10C
- Wiring is compliant with both UL 325 and the NEC (Separation of high and low voltage)
- Consult the factory for other listings such as; State and Local Government regulations
- UL 10 C Listed for Fire Rated Door Operators with Automatic Closers, File No. (GUJY)

Warranty

2 year limited warranty. See General Information catalog for complete details.

Maintenance

- For best performance, mount operators according to the LCN installation instructions
- Periodic visual inspections are recommended
- No service contracts

Electrohydraulic Product Comparison

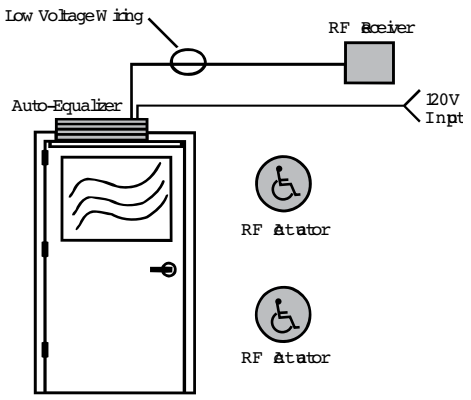
This chart shows a basic features comparison of the LCN electrohydraulic and pneumatic automatic operator systems designed to provide easy access without sacrificing closing power. Refer to the specific closer chapter for complete details.

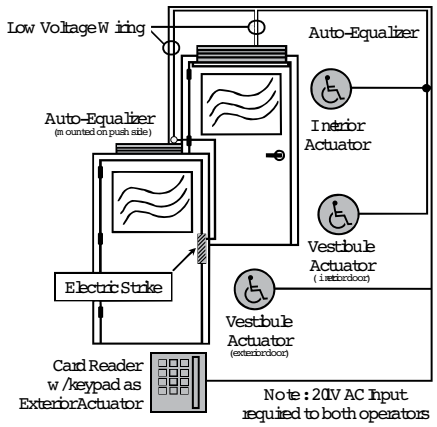
	Mounting					Finish		Cover						Cylinder					Arm Function*				
	Top jamb (pull) side	Top jamb (push) side	Parallel arm	Concealed	Door (pull) side	Powder coat	Plated	Plastic	Metal	Non-handed	Non-sized	Accessibility	Automatic operator	Hold open	DPS	Standard (single)	Regular (double)	EDA	CUSH	SCUSH
4630	●	○	○	○	○	●	●	○	●	●	●	♿	●	●	○**	○	90°	○	○	○	○
4630CS	●	○	○	○	○	●	●	○	●	●	●	♿	●	●	○**	○	90°	○	○	○	○
4640	○	●	○	○	○	●	●	○	●	●	●	♿	●	●	○**	○	○	90°	○	○	○
4640CS	○	●	○	○	○	●	●	○	●	●	●	♿	●	●	○**	○	○	90°	○	○	○
6440XP	○	●	●	○	●	●	○	●	○	●	○	♿	●	●	●	○	○	110°	●	●	●

● Available
○ Not available
♿ Meets ADA requirements (power mode)
* See individual series for maximum manual opening
** Switch provided for continuous Hold Open (4630 and 4640 only)

Wiring Diagrams

This page illustrates examples of typical electric LCN systems. Please consult your local RSO representative or LCN for assistance with specific installations and material requirements.





Single Door System (Wireless)

- An Interior Door
- No guide rails or safety devices
- Free swinging (or dogged) door

How it Works

- Wireless RF actuators and receiver, powered by the auto equalizer simplify installation and minimize installation costs
- For automatic door operation, touching either actuator signals the receiver and controller module to open the door to 90°
- The door is held there until the system times out, then full spring power is applied to reliably close and latch the door.
- Door opening speed and hold open time are adjustable on the controller
- Closing power and speed are adjustable on the cylinder assembly
- If not actuated, the Auto Equalizer functions as a full featured door closer

Bill of Materials

Qty	Part number	Description
1	4631	Auto equalizer
2	8310-3856WS	Wireless actuator, wall mount and surface, logo, 4-1/2" round
1	8310-865	Wireless receiver

Vestibule Door System (Wired)

- Exterior and vestibule doors
- Sequential operation
- No guide rails or safety devices
- Controlled access, free egress

How it Works

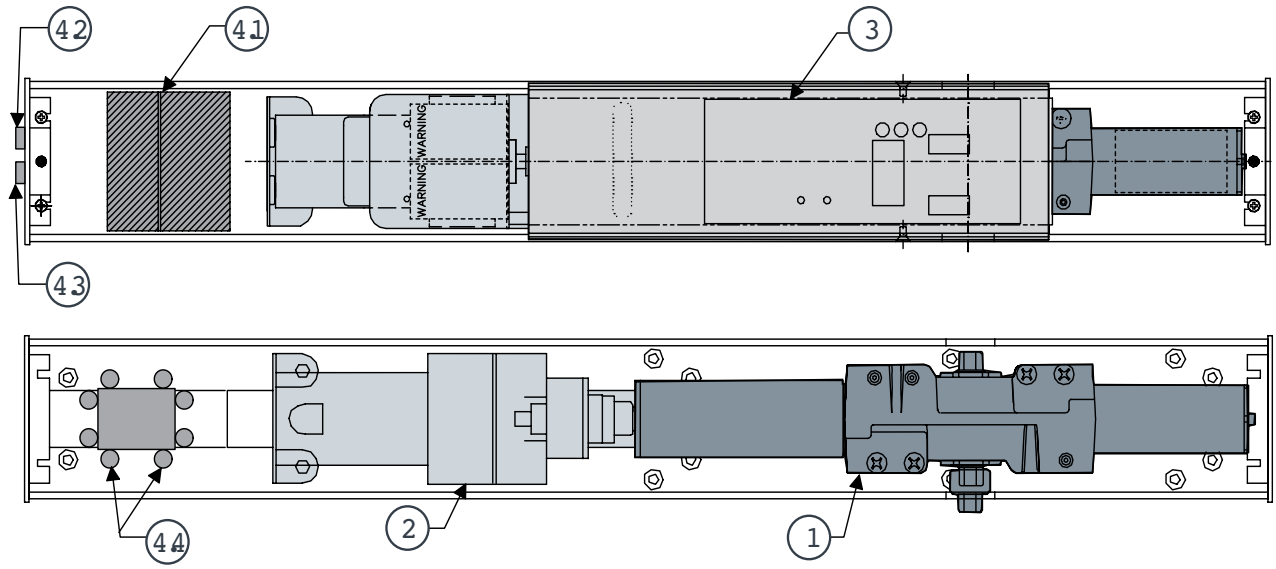
- This installation provides both accessibility and security for building occupants
- The Auto Equalizer controller module provides both the power and coordination for card reader and electric strike applications
- A built-in delay allows the strike to release before the door begins to open
- Two interconnected Auto Equalizers provide sequential operation in both directions
- Vestibule actuators allow single door ingress/egress from the vestibule as needed

Bill of Materials

Qty	Part number	Description
1	4642	Auto equalizer (exterior)
1	4631	Auto equalizer (interior)
3	8310-856	Hard wired wall mount, logo, 4-3/4" x 4-3/4"
	Other products from Von Duprin and Locknetics	

Note: An EL device requires a separate power supply. If not actuated, the auto equalizer functions as a full featured door closer.

Electrohydraulic Powered Systems



1. Door Closer Assembly

- Based on a heavy duty 4040XP, cast iron cylinder with allweather fluid for consistency and reliability
- Rugged drive mechanism provides the connection to the electric motor assembly
- Fully adjustable, independent hydraulic regulation controls the door to minimize the chance of damage to the door and frame assemblies

2. Electric Motor/Clutch Assembly

- Highly efficient motor combined with a custom designed gear system provides exceptionally quiet and smooth operation
- Special clutch transmits the power and provides a unique function that prevents damage to the operator, door and frame if a vandal forces the door closed during the powered opening swing

3. Digital Controller Module

- Digital control suite
- Dual independent program memories
- On board diagnostics
- Visual function indicators
- Adjustable programming modes

4.X Field Wiring

4.1

- Input power; 120V AC @ 1.5 amperes
- On-board, low voltage power supply provides both 12V and 24V DC @ 1.0 ampere (maximum combined load) for LCN actuators, RF receivers, and electric strikes or magnetic locks
- Slow blow and self-resetting fuses protect input and output power from voltage spikes
- Terminal strips simplify field wiring

4.2

- On/Off switch

4.3

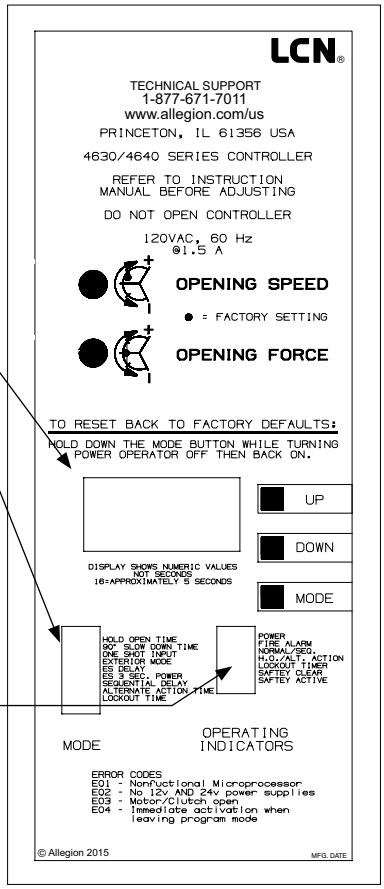
- Hold open switch

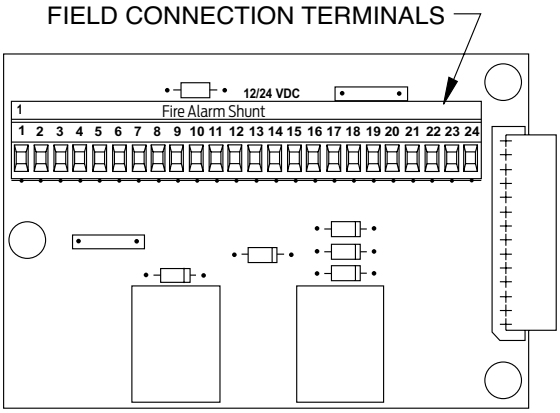
4.4

- Separate conduits for high voltage power and low voltage power and signal wiring meet UL and National Electrical Code requirements

Control Box and Electrical Connections

Digital Control Box	
Opening speed adjustment	Limited to a minimum of 3 seconds to back check (approx. 70°)
Opening force adjustment	Maximum of 15 lb-f to stop door swing
Time display	Displays numeric value relating to timing adjustments (16 = approx. 5 seconds)
Mode indicator	Indicates programming mode currently being displayed
Up button	Increases time or changes from OFF to ON when programming
Down button	Decreases time or changes from OFF to ON when programming
Mode button	Advances through programming setups on mode Indicator
Operating indicators	Displays operating information about internal functions and external hardware





Low Voltage (Class 2 NEC) Electrical Connections	
Function	Terminal
Actuator - normal input (N.O.)	16 and 17 or 18 and 1
Actuator - sequential input (N.O.)	8 and 19
Actuator - alternate action (N.O.)	15 and 17
Actuator - continuous (N.O.)	6 and 17
Sequential output	9
Stop side safety (N.O.)	19 and 2
Swing side safety (N.O.)	19 and 21
Fire alarm contact (N.C.)	13 and 14 (fire shunt)
Auxiliary relay contacts (5 amp max)	10 - Common 11 - N.O. 12 - N.C.
E.S. Relay contacts (5 amp max)	22 - Common 23 - N.O. 24 - N.C.
12V DC and 24V DC negative*	2, 4, 13, 17, and 19
12V DC positive*	5 and 7
24V DC positive*	1 and 3

* 1 Amp max load between 12V and 24V DC outputs.

4630 Series

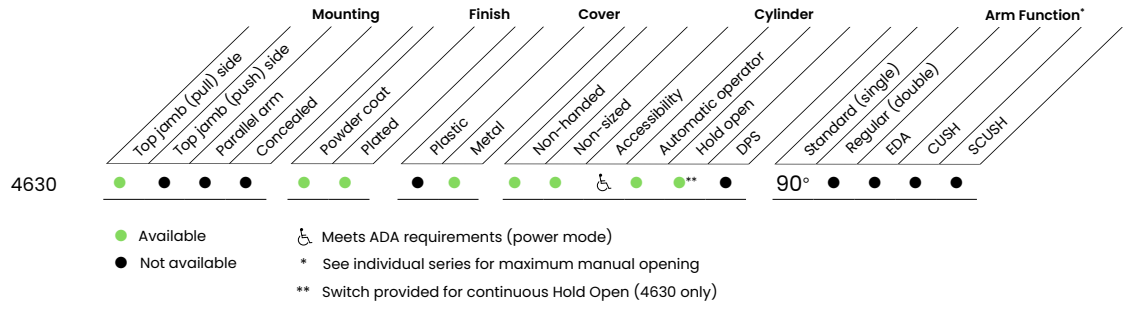
The 4630 auto equalizer is LCN's smart and reliable electrically powered low-energy automatic operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for manual opening applications that occasionally required automatic opening.

Features

Certifications	Grade 1 - ANSI A117.1, A156.19, UL 10C, UL 325/228, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	• Cast iron body • Full complement bearing • 1-1/2" diameter piston • 3/4 " diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Non-handed
Size	Adjustable spring size 1-4
Warranty	2 years

Cover	Metal cover (MC)
Fasteners	Wood and machine screws (WMS)
Mounting	Top jamb (pull side)
Arms	Standard single lever arm and track
Finishes/colors/ powder coat	• 689 - Aluminum • 690 - Statuary bronze • 691 - Light bronze • 693 - Black • 695 - Dark bronze • 696 - Brass • Custom colors optional
	• Optional SRI primer - powder coat only • Optional plated finishes* *End caps are black

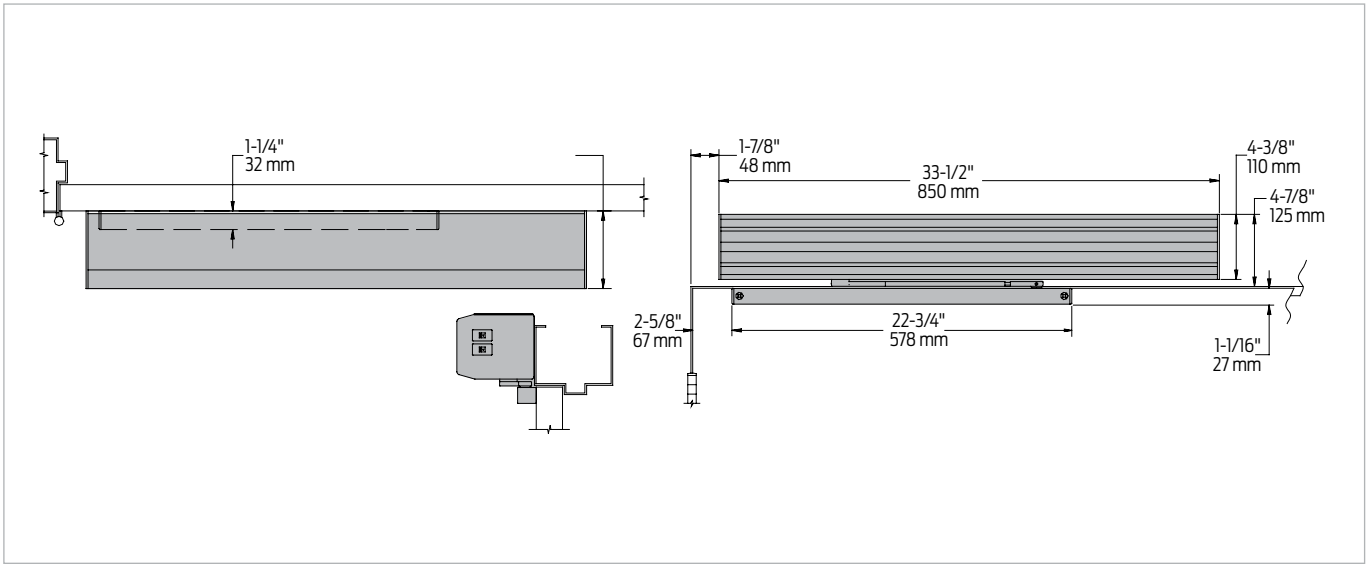
Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Electrohydraulic Systems

Top Jamb (Pull Side) Mounting Details



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended
Reveal	Should not exceed 1/8" (3 mm)
Top rail	Minimum 1-1/8" (29 mm)
Head frame	Minimum 2" (51 mm)
Opening time and force	• Variable by adjustments to the electronic control module located on the operator assembly • Maximum hold open time adjustable up to approximately five minutes
System diagram	See pages 34-36 for typical system wiring and electrical data
Maximum opening	• Templating allows 90° power opening and 170° manual opening • Please note that many track style door closers are capable of allowing 180° of door swing • Track style closers are at their weakest closing force at 180° • Consult factory for applications where exterior or large/heavy door must swing 180°

Notes:

- Actuators are sold separately, see pages 110-129
- Comes with a digital control box utilizing a 4040XP heavy duty door closer with on-board diagnostics and power supply
- Has a factory default memory that include "No Destruct" drive system
- Guard rails or safety mats not required
- 4630 has easily accessible switches to provide on/off and continuous hold open functions
- CS options provides concealed on/off power switch
- Control module provides timing and sequential door functions, electric strike controls and adjustments for opening speed and force

Accessories

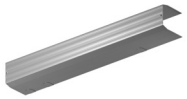
Cylinders

4631-3971
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Standard

4631-3071
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Mounting plate
- Includes 4630-3454 motor clutch, 4630-3180 I/O board assembly and 4630-3462 controller
- Standard

4631-3071CS
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Mounting plate
- Includes 4630-3454 motor clutch, 4630-3180 I/O board assembly and 4630-3462 controller
- Same as a 4630-3071 assembly except on/off switch is concealed in endcap and no hold open switch is included (separate key switches suggested)
- Optional

Covers



4630-72MC
Metal Cover (MC)
- Non-handed
- Standard

Arm

4630-3077T
Standard Arm (STDTRKARM)
- Non-handed
- Track roller not included with arm

Tracks

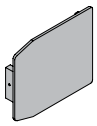
4630-3038
Standard Track (STDTRK)
- Non-handed
- Standard

Installation Accessories

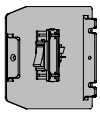
4630-3034
Track roller
- Quiet low friction roller assembly
- Shoulder dimension "X" = 1/8" (3mm)

4630-334
Switch End Cap
- End cap (black powder coat finish only) with cut outs for installing on/off and hold open switches

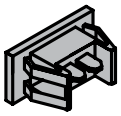
Installation Accessories



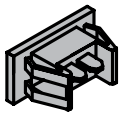
4630-334-2
Blank End Cap
- Black powder coat only



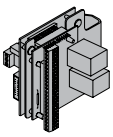
4630-334CS
Switch End Cap
- End cap and switch (black powder coat only) for concealed switch option



4630-3179-1
On/Off Switch Assembly
- Black rocker switch (plugs into high voltage PC board)



4630-3179-2
Hold Open Switch Assembly
- Black rocker switch
- Field wired to low voltage PC board

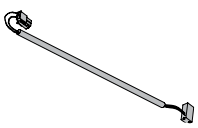


4630-3180
PC Board Assembly
- High and low voltage PC boards connected to mounting bracket

4630-3454
Motor/Clutch Assembly
- A geared assembly in an LCN automatic operator that incorporates a "no destruct" feature

4630-3462
Control Box Assembly
- Digital controller with built-in 12/24 VDC power supply
- Programming and timing functions are adjusted on controller

4630-3498-1
Ribbon Cable Connector
- 16 wire ribbon cable connecting PC board assembly to controller



4630-3498-2
AC Power Cable
- 2 wire cable to connect 120 VAC from PC board assembly to controller

Electrohydraulic Systems

Ordering Information

How to Order 4630 Series Operators		
1	Select finish (standard powder coat)	689 - Aluminum 690 - Statuary bronze 691 - Light bronze 693 - Black 695 - Dark bronze 696 - Brass
2	Cylinder assembly	Cast Iron cylinder assembly (CYL) (concealed on/off switch) (separate key switches suggested)
3	Custom finish	Custom powder coat (RAL) Plated finish
4	Screw pack	Through Bolt[1] Wood and Machine screws (TBWMS) Torx machine screws (TORX) Through bolt[1] and Torx machine screw (TBTRX)
7	Special template (ST)	ST - Designate while ordering

Optional

1. Specify door thickness if other than 1-3/4".

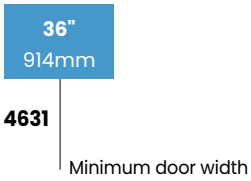
Operator will be shipped with:

- Standard cylinder
- Metal cover
- Standard arm
- Track roller
- Standard track
- Wood and machine screws

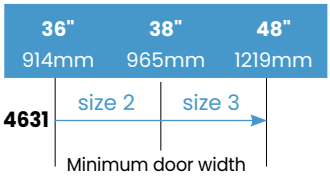
Table of Sizes

- Non-sized 4630 series cylinder is adjustable from size 1 through size 4 and is shipped set to size 3
- Closing power of 4630 Series closers may be increased 50%

Exterior (and Vestibule) Door Width



Interior Door Width



→ Indicates recommended range of door width for operator.
Note: Minimum door width 36" (914mm).

4640 Series

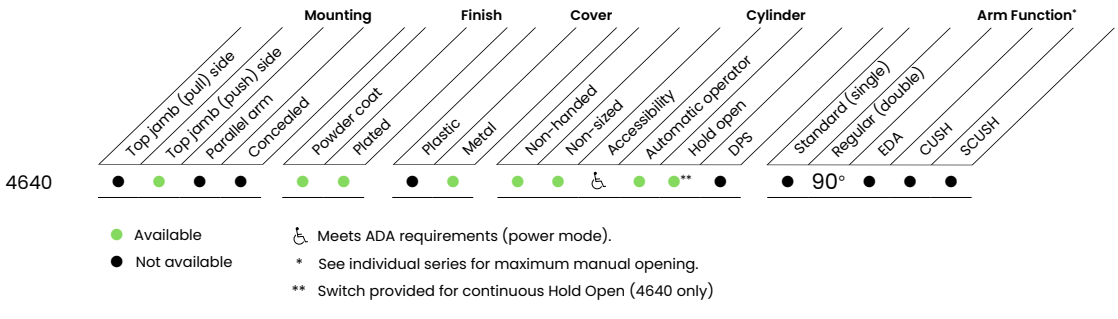
The 4640 auto equalizer is LCN's smart and reliable electrically powered low-energy automatic operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for manual opening applications that occasionally required automatic opening.

Features

Certifications	Grade 1 - ANSI A117.1, A156.19, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Body construction	• Cast iron body • Full complement bearing • 1-1/2" diameter piston • 3/4 " diameter double heat treated pinion journal
Fluid	All-weather Liquid X hydraulic fluid
Handing	Non-handed
Size	Adjustable spring size 2-5
Warranty	2 years

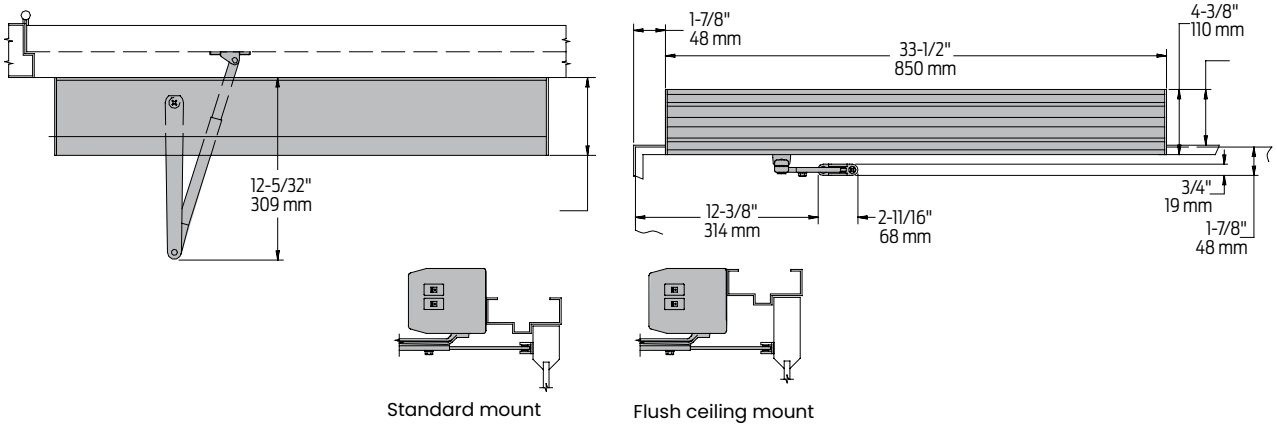
Cover	Metal cover (MC)
Fasteners	Wood and machine screws (WMS)
Mounting	Top jamb (push side)
Arms	• Regular arm (REGARM), standard • Long arm (LONG), optional
Finishes/colors/ powder coat	• 689 - Aluminum • 690 - Statuary bronze • 691 - Light bronze • 693 - Black • 695 - Dark bronze • 696 - Brass • Custom colors optional
	• Optional SRI primer - powder coat only • Optional plated finishes* *End caps are black

Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Top Jamb (Push Side) Mounting Details



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended
Reveal	• 4-1/2" (114 mm) allows up to 90° power opening and 100° manual opening • 8" (203 mm) allows up to 90° power opening and 100° manual opening with long arm where standard rod and shoe is replaced with optional long rod and shoe, 4640-79LR
Top rail	• Minimum 1-3/4" (44 mm) • Flush ceiling installation requires 3-3/4" (95 mm) minimum
Head frame	Minimum 1-3/4" (44 mm) (the standard mounting plate is also used to meet flush ceiling conditions)
System diagram	See pages 34-36 for typical system wiring and electrical data
Maximum opening	• Templating allows 90° power opening and 100° manual opening • Consult factory for all pivot mounted installations

Notes:

- Actuators are sold separately, see pages 110-129
- Comes with a digital control box utilizing a 4040XP heavy duty door closer with on-board diagnostics and power supply
- Has a factory default memory that include "No Destruct" drive system
- Guard rails or safety mats not required
- 4640 has easily accessible switches to provide on/off and continuous hold open functions
- CS options provides concealed on/off power switch
- Control module provides timing and sequential door functions, electric strike controls and adjustments for opening speed and force

Accessories

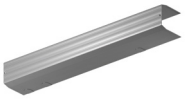
Cylinders

4642-3971
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Standard

4642-3071
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Mounting plate
- Includes; 4640-3454 motor clutch, 4640-3180 I/O board assembly and 4640-3462 controller
- Standard

4642-3071CS
Cast Iron Cylinder Assembly (CYL)
- Non-handed
- Mounting plate
- Includes; 4640-3454 motor clutch, 4640-3180 I/O board assembly and 4640-3462 controller
- Same as a 4640-3071 assembly except on/ off switch is concealed in endcap and no hold open switch is included (Separate key switches suggested)
- Optional

Covers



4640-72MC
Metal Cover (MC)
- Non-handed
- Standard

Arm

4640-3077
Regular Arm (REGARM)
- Non-handed

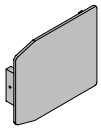
4640-3077L
Long Arm (LONG)
- Includes long rod and shoe, 4640-79LR for deep reveals

4640-79
Rod and Shoe
- For use with regular arm

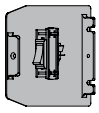
4640-79LR
Long Rod and Shoe
- Used for long arm with deep reveals

Installation Accessories

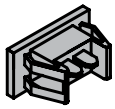
4640-334
Switch End Cap
- End cap (black powder finish coat only) with cut outs for installing on/off and hold open switches



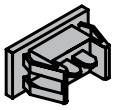
4640-334-2
Blank End Cap
- Black powder coat only



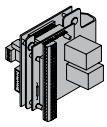
4640-334CS
Switch End Cap
- End cap and switch (black powder coat only) for concealed switch option



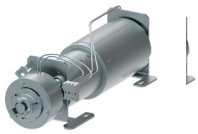
4640-3179-1
On/Off Switch Assembly
- Black rocker switch
- Plugs into high voltage PC board



4640-3179-2
Hold Open Switch Assembly
- Black rocker switch
- Field wired to low voltage PC board

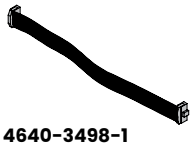


4640-3180
PC Board Assembly
- High and low voltage PC boards connected to mounting bracket

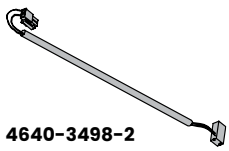


4640-3454
Motor/Clutch Assembly
- A geared assembly in an LCN automatic operator that incorporates a "no destruct" feature

4640-3462
Control Box Assembly
- Digital controller with built-in 12/24 VDC power supply
- Programming and timing functions are adjusted on controller



4640-3498-1
Ribbon Cable Connector
- 16 wire ribbon cable connecting PC board assembly to controller



4640-3498-2
AC Power Cable
- 2 wire cable to connect 120 VAC from PC board assembly to controller

Electrohydraulic Systems

Ordering Information

How to Order 4640 Series Operators		
1	Select finish (standard powder coat)	689 - Aluminum 690 - Statuary bronze 691 - Light bronze 693 - Black 695 - Dark bronze 696 - Brass
2	Cylinder assembly	Cast Iron cylinder assembly (CYL) (concealed on/off switch) (separate key switches suggested)
3	Custom finish	Custom powder coat (RAL) Plated finish
4	Screw pack	Through bolt[1] wood and machine screws (TBWMS) Torx machine screws (TORX) Through bolt[1] and torx machine screw (TBTRX)
7	Special template (ST)	ST - Designate while ordering

Optional

1. Specify door thickness if other than 1-3/4".

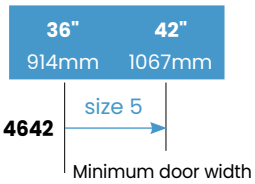
Operator will be shipped with:

- Standard cylinder
- Metal cover
- Regular arm
- Wood and machine screws

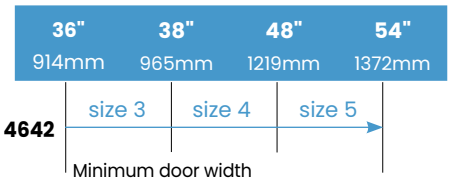
Table of Sizes

- Non-sized 4640 series cylinder is adjustable from size 2 through size 5 and is shipped set to size 3
- Closing power of 4640 Series closers may be increased 50%

Exterior (and Vestibule) Door Width

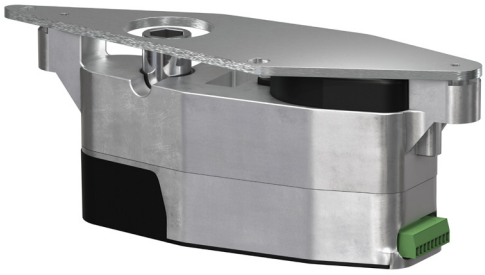


Interior Door Width



→ Indicates recommended range of door width for operator.
Note: Minimum door width 36" (914mm).

6400 COMPACT™ Series



Discover the LCN 6400 COMPACT™—a game-changing, cost-effective solution for automating more openings with touchless access and instant accessibility. This innovative, modular design allows the reuse of an existing LCN 4040XP saving the time and money of replacement. The electrified module connects with a mounting plate and just four screws and drives open the existing mechanical closer – a simple solution reducing the cost, labor and complexity required to automate any opening.

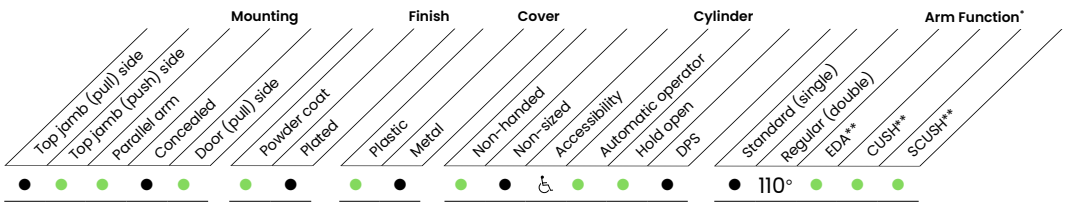
Features

Certifications	ADA, ANSI/BHMA A156.19, A117.1, UL 10C, UL 325, UL228, FCC, ADA Compliant
Body construction	Cast iron cylinder body[2]
Fluid	All weather Liquid X hydraulic fluid[2]
Handing	Non-handed
Size	Compatible with spring sizes 2-4
Cover	Painted system cover
Fasteners	Wood and machine screws (WMS), through bolts
Mounting	Door mount or top jamb
Arms	Compatible with: • Regular arm (REGARM) • Regular arm with parallel shoe (RwPA) • Extra duty arm (EDA)[3] • Cush-n-stop arm (CUSH)[3] • Spring cush-n-stop arm (SCUSH)[3]

Finishes/colors/ powder coat	• 689 Aluminum • 695 Dark bronze
Power input	2.0A @ 24VDC (supplied adapter)[1]
Power output	24VDC (75mA to power RF receiver)
Door width	33” to 48”
Door weight	Up to 185lbs
Cylinder compatibility	• 4040XP standard cylinder (CYL) • 4041 delayed action cylinder (CYLDEL)[3]
Warranty[2]	• Motor gearbox assembly: 2 year • 4040XP mechanical closer: 30 year *Attaching motor gearbox to an existing 4040XP does not impact the existing warranty.

1. If using other power supply, ensure voltage is regulated to +/- 10% power output
2. Please reference price book for complete terms and conditions
3. Must order separately from standard module kit

Product Configurations



● Available
● Not available

♿ Meets ADA requirements (power mode)
* See individual series for maximum manual opening
** Note: EDA, CUSH, SCUSH must be ordered separately from 6440 module kit

Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Electrohydraulic Systems

Simple and Intuitive

- The unique and modular design makes the COMPACT operator easy to install
- Motor gearbox assembly connects to a standard 4040XP with a mounting plate and just 4 screws
- Electrified module drives open mechanical closer
- First of its kind, modular solution, enables reuse of existing hardware

Cost-Effective Solution for Interior Openings

- Modular, intuitive design, minimizes complexity of installation and maintenance
- Low voltage design reduces need for skilled labor coordination
- Fraction of the cost of traditional solutions with features that meet basic requirements of interior, non-latching door

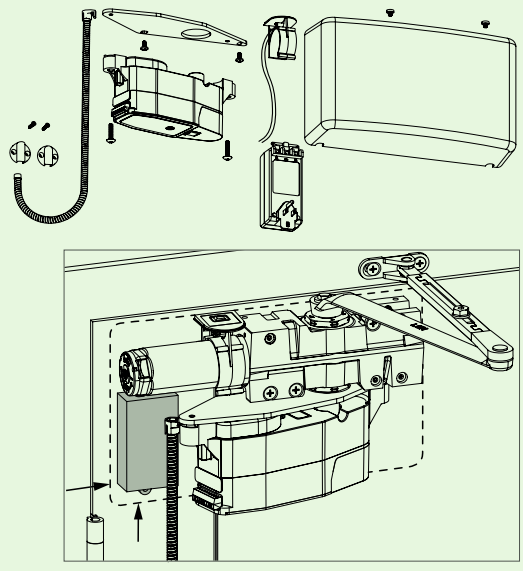
Performance You Can Trust

- The COMPACT operator leverages the trusted 4040XP mechanical closer
- Adjustments can be made to the 4040XP mechanical closer
- It can be adjusted normally using the regulation valves for main and latch speed
- This enables standardization of maintenance operations

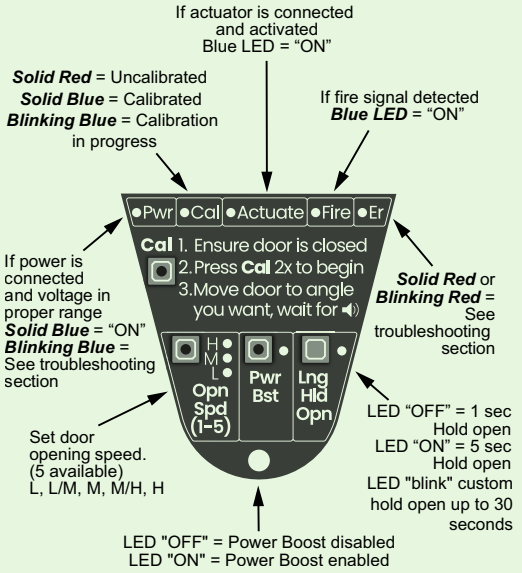
Features and Benefits

- 24V input for safe door-mount applications
- Configurable power input to allow for simple wall plug-in or external power supply
- Compact user interface for electronic feature adjustments
- Simple calibration set-up with visible and audible feedback
- Adjustments via mechanical closer to meet closing force preferences
- Power boost to overcome interior stack pressure and allow for lower spring settings
- Compatible with 3 different 4040XP mounting configurations
- Fire input to deactivate actuation upon signal
- Dedicated input for actuation signal (hardwired or wireless receiver)
- Optional drop plates available for aesthetic preferences, see page 126
- Custom extended hold open time of up to 30 seconds.

Modular System

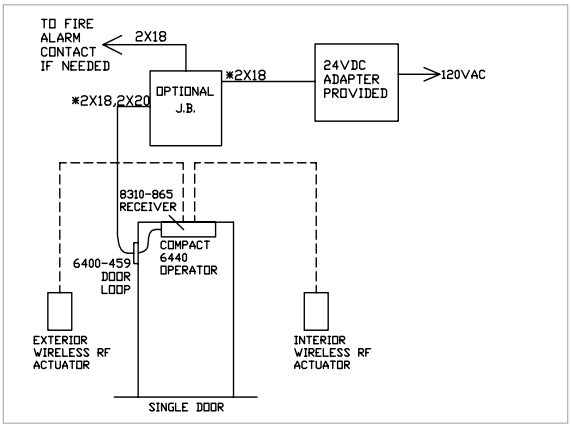


User Interface



Wiring Diagrams

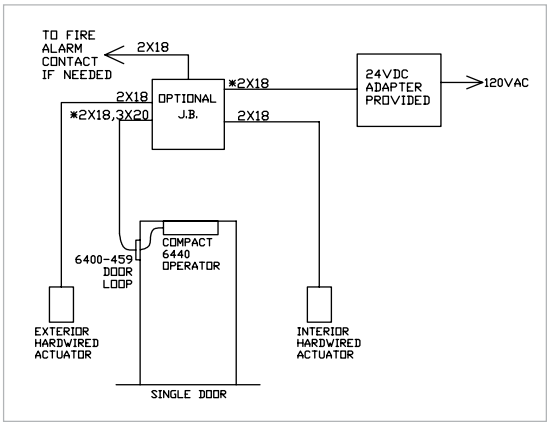
Wireless Interior and Exterior Actuators, Non-Latching Single Door



Operation

- Interior and exterior wireless RF wall actuators to operate door
- Fire alarm activation to disable operator from opening door (if fire alarm is not needed, apply jumper wire to terminals)

Hardwired Interior and Exterior Actuators, Non-Latching



Operation

- Interior and exterior wall actuators to operate door
- Fire alarm activation to disable operator from opening door (if fire alarm is not needed, apply jumper wire to terminals)

Module Kit Information

Features	
Certifications	ADA, BHMA A156.19, UL 325, UL 10C, FCC
Body construction	Cast iron cylinder body[2]
Fluid	All weather fluid in the 4040XP[2]
Handing	Non-handed
Size	• Compatible with spring size 2-4 • Adjustable spring size 2-4[2]
Cover	Painted system cover
Fasteners	Wood and machine screws, through bolts
Mounting	Door mount or top jamb
Arms	Compatible with: • Regular Arm (REGARM) • Regular Arm with Parallel Shoe (RwPA) • Extra Duty Arm (EDA)[3] • Cush-n-Stop Arm (CUSH)[3] • Spring Cush-n-Stop Arm (SCUSH)[3]
Finishes	689 Aluminum or 695 Dark bronze

Technical Specifications	
Power input	2.0A @ 24VDC (supplied adapter)[1]
Maximum powered opening	70° to 110°
Spring size	Compatible with sizes 2 through 4 (Size 3 default)
Door weight	Up to 185 lb door width 36"
Features	Power boost, fire input, motor enable switch
Warranty[2]	Motor gear-box assembly: 2 year warranty 4040XP mechanical closer: 30 year warranty The mechanical and electronic components of the COMPACT operator have different warranty periods
Clearance	3-3/4" (95mm) behind door required for 90° installation

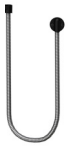
1. If using other power supply, ensure voltage is regulated to +/- 10% power output 75mA @ 24VDC (for wireless receiver).
2. Please reference the price book for complete terms and conditions.
3. Must order module kit separately.

Electrohydraulic Systems

Replacement Parts

6440-MD
Module
- Motor gearbox assembly to power 4040XP closer

6440-10
Mounting Plate
- Plate to attach module to 4040XP
- Fasteners included

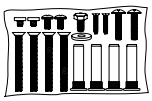


6440-549
Door Loop

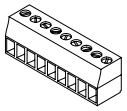
6440-470
50W Wall Adapter
- Basic wall power adapter included with each module kit

6440-471
65W Wall Adapter
- Wall power adapter add-on to power motorized latch retraction or e-strikes

6440-72
Cover



6440-20
Screw Bag



6440-441
I/O Block

Cylinders

6440-54B
Cover Insert with Switch and Harness Assembly

4040XP-3071
Standard Cylinder Assembly

4040-3071DEL
Delayed Action Cylinder Assembly

Arms

4040XP-3077
Regular Arm (REGARM)

Arms

4040XP-3077/PA
Regular Arm with Parallel Shoe (RwPA)

4040XP-3077EDA
Extra Duty Arm (EDA)

4040XP-3077CUSH
Cush-n-Stop Arm

4040XP-3077SCUSH
Spring Cush-n-Stop Arm

Ordering Information

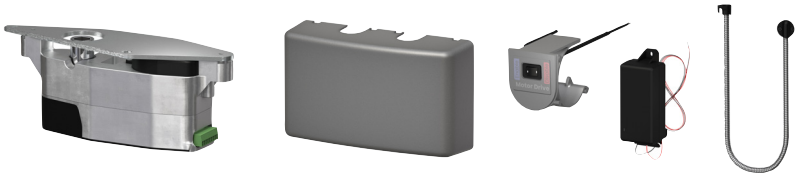
How to Order 6400 Series Operators		
1	Select model number	See kits below
2	Select finish	689 - Aluminum 695 - Dark bronze

6440 Module Kit

The 6440 is a module kit for simple upgrades to a 4040XP. The flexibility of the 6440 allows for custom actuator selection when upgrading an existing, installed 4040XP.

What's Included

- Gearmotor assembly, mounting plate and screws
- Cover and switch insert
- Wall adapter
- Door loop
- 30 ft of copper wire (not pictured)



6440XP Module and Closer Kit

The 6440XP is a module and closer Kit for new installations. The flexibility of the 6440XP allows for custom actuator selection in an installation.

What's Included

- 6440 Module kit components
- 4040XP Standard cylinder
- RwPA arm

6440-2210 Module and Actuator Kit

The 6440-2210 is a module and actuator kit for simple, all-in-one box upgrades to a 4040XP. The simplicity of the 6440-2210 provides everything that is needed to upgrade a 4040XP to an automated, touchless opening. The battery-powered actuators minimize the amount of wire that is needed in an installation.

What's Included

- 6440 Module kit components
- 8310-2210 Touchless, battery-powered, RF actuator kit, which includes:
  - (2) Single gang face plates and built-in transmitters; 2-3/4" x 4-1/2" stainless steel; battery-powered
  - (2) Surface mount boxes
  - (1) 915 MHz receiver (ONLY compatible with the included actuators. Will not be compatible with other LCN 900MHz products)

6440-3813W Module and Actuator Kit

The 6440-3813W is a module and actuator kit for simple, all-in-one box upgrades to a 4040XP. The simplicity of the 6440-3813W provides everything that is needed to upgrade a 4040XP to an automated, touchless opening. The line-powered actuators minimize the amount of maintenance required once installed.

What's Included

- 6440 Module kit components
- 8310-3813W Touchless, line-powered, RF actuator kit, which includes:
  - (2) Standard duty, double gang, black 8310-813 Series touchless actuators
  - (2) 885 Transmitters
  - (1) 880 Receiver

ELECTROMECHANICAL OPERATORS

Electromechanical Automatic Operators

LCN's electromechanical products are designed primarily for automatic opening applications that occasionally require manual opening. A control box provides all electrical functions. These self-contained units are suitable for use on single leaf doors or pair of doors. These products combine all the control and power elements into a single operator package, only some actuators are required to complete the system. Surface mounted and overhead concealed mountings available with two standard anodized finishes – aluminum and dark bronze.

Electromechanical Product Comparison

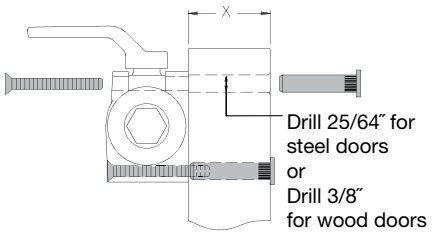
This chart shows a basic features comparison of the LCN electromechanical automatic operator systems designed to provide easy access without sacrificing closing power. Refer to the specific operator chapter for complete details.

	Mounting						Handing		Finish		Cover			Arm Function		
	Surface mount single door	Surface mount simultaneous pair	Surface mount independent pair	Concealed single door	Concealed simultaneous pair	Concealed independent pair	Handed*	Non-handed	Standard anodized	Metal	Standard (single lever)	Regular (double lever)	Double egress (push/pull)	Offset pivot arm	Center pivot arm
2810IQ	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2850IQ	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2860IQ	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
9130	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
9140	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
9150	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
9530IQ	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
9540IQ	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
9550IQ	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
9560IQ	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● Available
● Not available
* Handed for 2850 and 2860, double egress only.

Electromechanical Fasteners

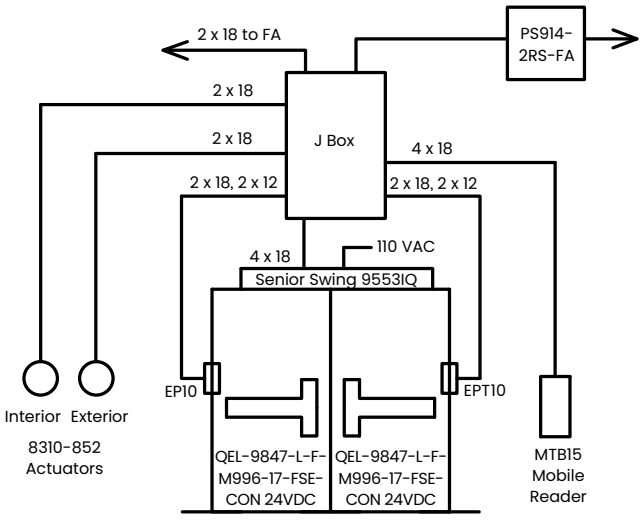
Typically installed 1/4-20 machine screw for aluminum/steel frames. Wood screws included for wood door mounting. Consult factory for additional information



Electromechanical Systems

Sample Application

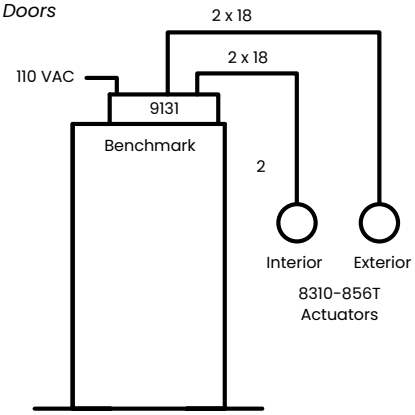
Secure Hospital Hallway



Operation: MTB15 Mobile Reader to signal EL latch retraction and enable exterior actuator through LX switches in panic device. Interior actuator always active.

Fire alarm to extend EL latch and disable automatic operator.

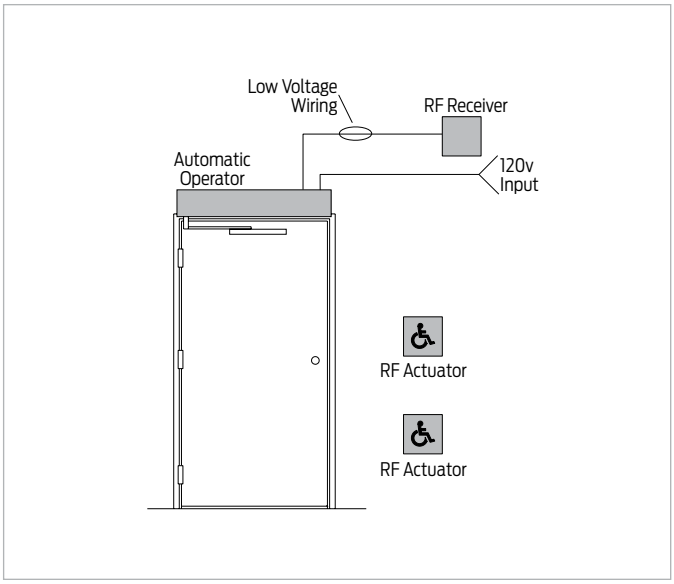
Restroom Doors

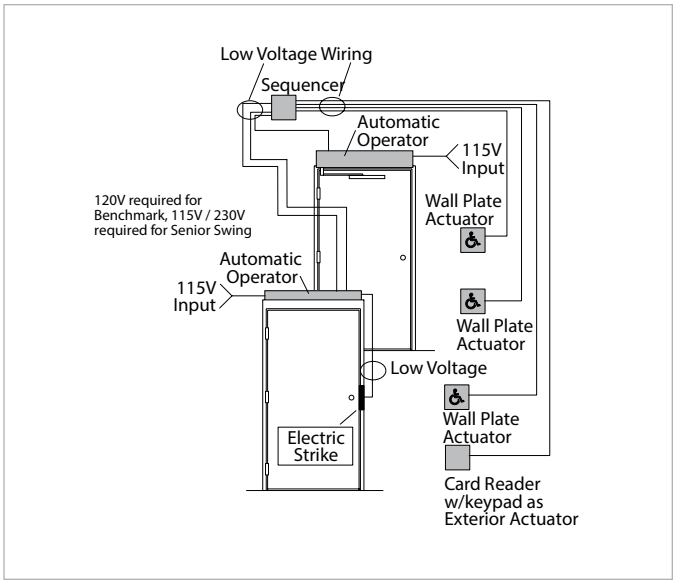


Operation: No latching at this door. For a single occupancy restroom. Either actuator will open door at any time.

Wiring Diagrams

This page illustrates examples of typical electric LCN systems. Please consult your local RSO representative or LCN for assistance with specific installations and material requirements.





Single Door System (Wireless)

- An interior door
- Guide rails or safety devices not required
- Free swinging (or dogged) door

How it Works

- Wireless actuators with receiver, powered by the transformer allows for easy installation
- For automatic door operation, touching either actuator signals the receiver and automatic operator to open the door to 90 degrees
- The door is held there until the system times out
- Door closes via spring return
- Door opening speed, closing speed and hold open time is adjustable on the control box
- If not actuated, the automatic operator functions as a manual door

Bill of Materials

Qty	Part Number	Description
1	9531IQ	Auto operator (RH)
2	8310-3853WS	Wireless actuator, wall mount and surface, logo, 4-3/4" x 4-3/4"
1	8310-865	Wireless receiver

Vestibule Door Wystem (Wired)

- Exterior and vestibule doors
- Sequential operation
- Guide rails or safety devices not required
- Controlled access, free egress

How it Works

- This installation provides both accessibility and security for building occupants
- It allows for the integration of multiple automatic operators, a card reader and electric strike
- A sequencer allows sequential operation of the two automatic operators
- Vestibule actuators allow single door ingress/egress from the vestibule as needed
- If not actuated the automatic operator functions as a manual door

Bill of Materials

Qty	Part Number	Description
1	9542IQ	Auto operator (RH)
1	9531IQ	Auto operator (RH)
3	8310-853	Hard wired wall mount, logo, 4-3/4" x 4-3/4"
1	8310-849	Sequencer
	Other products from Von Duprin and Schlage Electronics	

LCN Senior Swing - 9500IQ and 2800IQ Series

AdaptivIQ TECHNOLOGY

Overview

The LCN Senior Swing 9500IQ and 2800IQ series are LCN's premier electromechanical automatic operators. Designed specifically for heavy duty use in primarily automatic applications, the Senior Swing series delivers the reliability and durability expected from any LCN product.

Key Features

Single-person mechanical installation

- Our motor gearbox and controller are each mounted to a specially designed hook-and-cleat, allowing them to simply hook onto the backplate to provide a hand-free holding option while each component is secured.

Fully-loaded controller

- With 23 total programmable settings all accessible through a user-friendly LCD screen, a self-calibration cycle that establishes default settings based on the physical aspects of the door and the opening area, and real-time error code and diagnostic information, this loaded control box provides users with complete control of our automatic operator.

AdaptivIQ

- This built-in technology allows our operator to automatically adjust to external pressures and resistance during both opening and closing cycles. Through a combination of dynamic braking, responsive motor control, and Smart Power Boost technology, our operator compensates for wind, carpet drag, and HVAC stack pressure, allowing the door to latch securely and minimize the risk of slamming.

Sleek industrial design

- Designed to blend in as part of any environment, the rounded corners, sleek edges, and multiple finish options allow architects and end users alike to better curate their aesthetic vision without being interrupted by the necessary hardware.

Additional Benefits

- Capability to operate and control doors of up to 600 pounds
- Power Assist and Push and Go to allow for easy manual operation
- Auto Reverse on Closing to minimize potential damage from obstructions
- Opening Speed and Force programmed separately for further customization
- Off / Auto / Hold-Open switch hidden outside the cover to easy yet discreet access
- On-board power supply (24VDC Output) to power actuators, card readers, and safety circuits.
- Built-in support for up to four (single door) or six (double door) optional safety sensors

Certifications

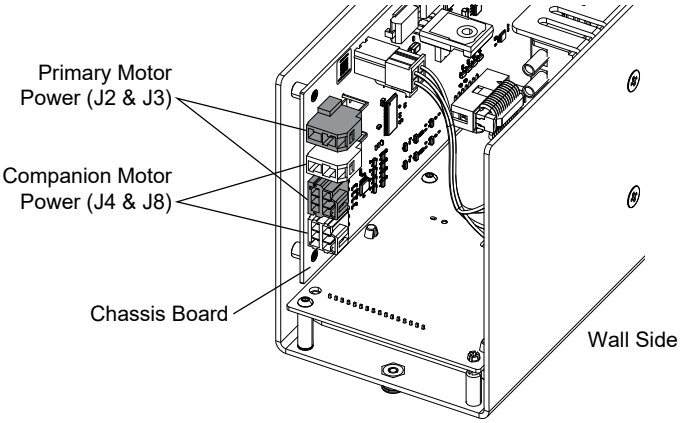
- ADA Certified
- ANSI/BHMA 156.19
- UL 325, 228, 10C, CA
- Buy America Act

Finishes

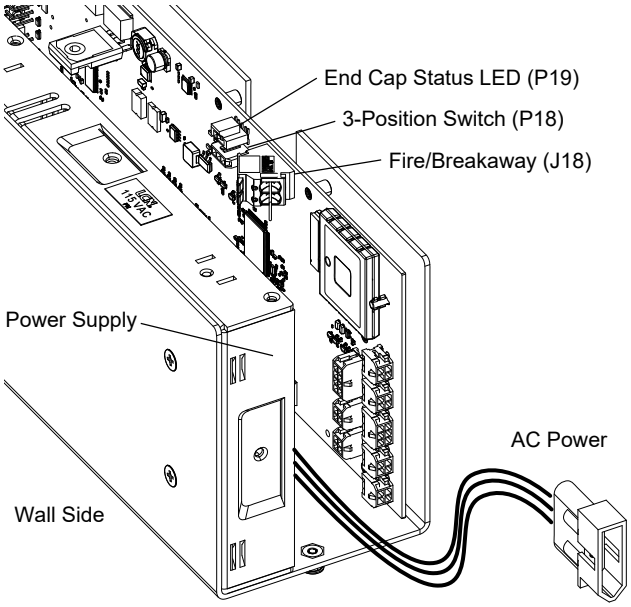
- 628 Aluminum, anodized
- 710 Dark bronze, anodized
- 711 Matte black, anodized

Senior Swing Control Box Diagrams

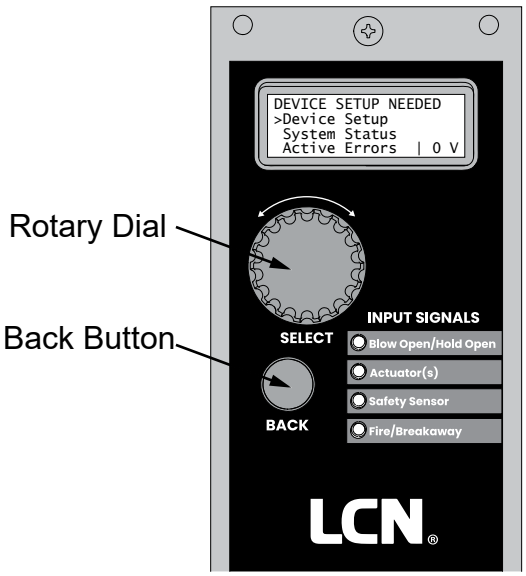
Control Box Gearmotor Headers



Control Box Peripheral Headers



Closeup of Senior Swing IQ User Interface



Programmable Settings

- Opening Speed: The speed of the door opening from closed to the backcheck angle. If Opening Force setting is too low, it can limit the Opening Speed.
- Opening Force: This adjusts the max opening force allowed by the operator. High settings may be needed for external doors which may need to drive open against strong winds.
- Hold Open Delay: The time the door is held at a full open position following an actuation signal. Time starts when the door reaches the hold open or an actuation signal disables. Time is restarted if an actuation is received while in hold open. The hold open time is unlimited if the 3-way switch is set to Hold Open.
- Backcheck Speed: Opening speed from the backcheck angle to a full open position. Set to lower speeds for heavier doors.
- Backcheck Angle: Angle at which the door begins to decelerate to backcheck speed. Set to lower angles for heavier doors.
- Closing Speed of Door 1: Closing speed for Door 1. Set to lower speeds for heavier doors.
- Closing Speed of Door 2: Closing speed for Door 2. Set to lower speeds for heavier doors.
- Latch Angle: Angle at which the door begins to decelerate near the full closed position. Set to higher angles for heavier or faster doors.
- Smart Power Boost: When on, this will increase closing force when needed as the door is closing. It can be used if latching or drag issues prevent the door from fully closing. Set to "Cont" Continuous mode to drive door into frame continually in the case of door with no latch. "Cont" mode should utilize a Power Boost Disable sensor to briefly turn off power boost as a user approaches door.
- Smart Power Boost Angle: Angle at which Power Boost is eligible to engage if door has trouble closing.
- Smart Power Boost Force: Adjusts the max power boosting closing force allowed by the operator. Higher settings may be needed for doors which have high winds, stack pressure, or substantial latch, threshold, hinge or door warp problems.
- Power Assist: When activated, this will assist door opening while the user manually opens door. The door will feel lighter by reducing the opening resistance.
- Power Assist Force: The force applied to assist the user when opening the door manually. Lower the force setting if the door is drifting away or taking too much time to stop during a manual opening.
- Push & Go: When activated, manually pushing the door open a short distance will trigger an actuation, causing door to open to the full open position and then hold. Hold open time will follow Hold Open setting. When set to FT, the behavior will be the same as ON, but the hold open time will be 1 second.
- Alternate Action: When activated, an actuation will work like a garage door opening. First actuate signal will open the door and hold until next actuate signal is received or times out. Timeout ranges from 10 minutes to 30 minutes.
- Auto Reverse on Closing: When activated, the door will re-open upon hitting an obstruction while closing. This applies for both manual and actuated openings. This feature only works for door angles greater than the Smart Power Boost Angle setting.
- Electric Lock Delay: When activated, the system will trigger the Electric Lock Relay and delay for a specified time before then opening the door. Delay time is 0.5 to 2.0 seconds. If you are experiencing pause or interference with your latch, consider turning on or increasing the latch delay time.
- Preload Release: When activated, the door will first drive closed prior to engaging the Electric Lock to relieve pressure on the latch. This feature only available when Electric Lock Delay is enabled.
- DMSS Safety Action: This action will occur while opening when DMSS (Door Mounted Safety Sensor) on the swing side of the door triggers. If set to Slow, the opening speed will slow. If set to Pause, the door will pause for 5 seconds and then open slowly. If set to close, the door will close immediately.
- DMSS Safety Side Ignore Angle: When activated, the system will ignore the DMSS (Door Mounted Safety Sensor) on the swing side when the door is greater than the angle selected. Eliminates nuisance detection when sensor detects a wall or guard rail.
- Actuator 2 Enable: This allows the Actuator 2 input to be disabled, and applies to Door 2 only.
- Audible Beep: Used to enable or disable the audible beeper on the device. Beeps are used to provide audible feedback during setup or service.
- Bluetooth: When available, this enables a certified mobile app to connect to the device. Toggle from Off to On to initiate claiming device. If device is not connected after 30 minutes, the system will automatically disable.

2810IQ Series

The LCN® 2810IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a concealed mount on single door applications, the 2810IQ can be configured with either a center or offset pivot arm, allowing flexibility for a variety of opening needs.

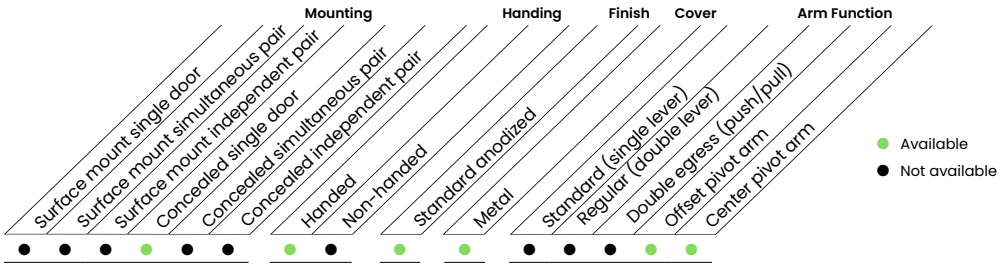
When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 2810IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

Features

Certifications	Grade 1 - ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA - Buy American Act
Handing	Handed
Door width	Minimum door width 33"- 48"; 49" with finger guard Note: Single door width per leaf 33" minimum, 48" maximum.
Door weight	Up to 600 lbs
Warranty	2 years

Fasteners	Wood and machine screws (WMS)
Mounting	Single door, overhead concealed, center pivot, offset pivot, butt hinge
Arms	Center pivot arm Offset pivot arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



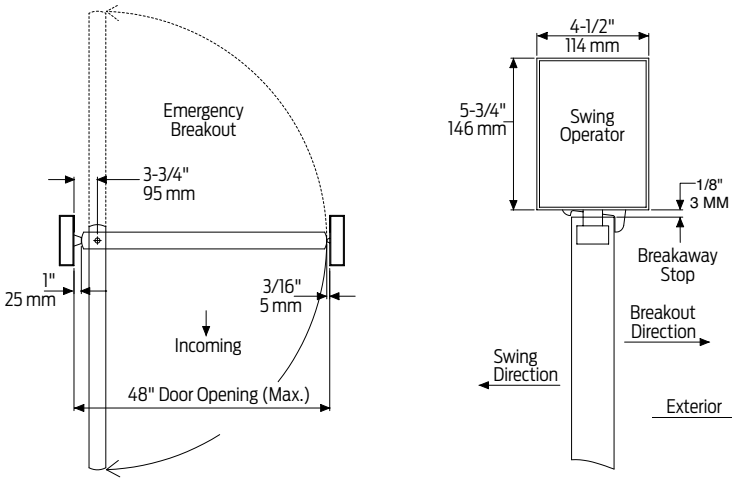
Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Electromechanical Systems

Concealed Single Door Mounting Details

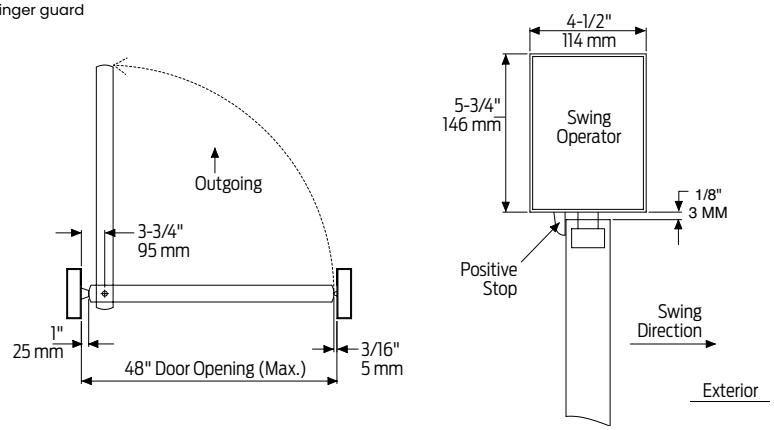
Center Pivot, Breakaway Stop, Pull

Shown with 3-3/4" pivot and finger guard



Center Pivot, Positive Stop, Push

Shown with 3-3/4" pivot and finger guard



Top rail	Minimum 2" (51 mm)
Head frame	Minimum 36" (L) x 5-3/4" (H) x 4-1/2" (W) (914 mm x 146 mm x 114 mm)
Opening and closing time	• Variable by adjustments to the electronic control box • Maximum hold open time adjustable up to approximately 60 seconds
System diagram	See page 52-53 for typical system wiring and electrical data
Maximum opening	Template allows 90 degree power opening and 90 degree manual opening
Minimum door width	33" with applied stop by others and 36" with LCN positive or breakaway stop

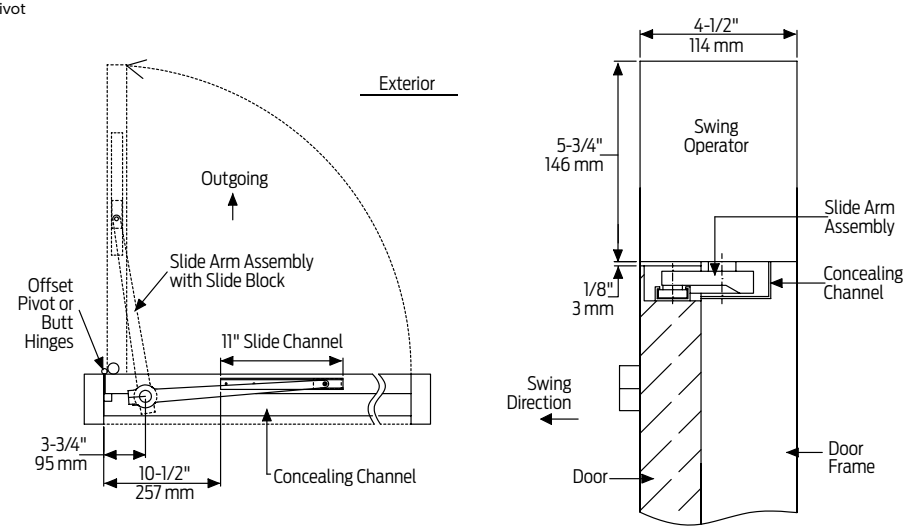
Notes:

- Power Assist and Push & Go permits non-switch activation
- Double Door Header available up to 98", specify length 49" to 98" maximum (consult factory regarding this option)
- Positive or breakaway stop available with center pivot arm

Concealed Single Door Mounting Details

Offset Pivot or Butt Hinge, Slide Arm, Push

Shown with 3-3/4" pivot



Top rail	Minimum 2" (51 mm)
Head frame	Minimum 33" (L) x 5-3/4" (H) x 4-1/2" (W) (838 mm x 146 mm x 114 mm)
Opening and closing time	• Variable by adjustments to the electronic control box • Maximum hold open time adjustable up to approximately 60 seconds
System diagram	See page 52-53 for typical system wiring and electrical data
Maximum opening	Template allows 90 degree power opening and 90 degree manual opening

- Minimum door width 33"
- Installations require bottom pivot and two intermediate pivots

Notes:

- Push 'N Go permits non-switch activation
- Double door header available up to 98", specify length 49" to 98" maximum (consult factory regarding this option)
- Positive or breakaway stop available with center pivot arm

Electromechanical Systems

Accessories

Motor Gearbox

2810IQ-3454
Standard Motor Gearbox (MGB)
- Senior Swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

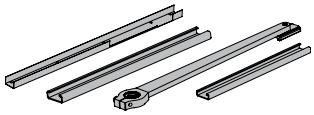
Control Box

2810IQ-3462
Standard Controller (CTRL)
- Senior Swing
- Electronic controlling device for Senior Swing

Arm

2810IQ-3077CP
2 3/4" Center Pivot Arm (ARMCP)
- Center pivot installations only
- Used with overhead concealed operators and center pivoted doors

2810IQ-3077OP
3 3/4" Offset Pivot Arm (ARMOP)
- Offset pivot or butt hung installations only
- Used with overhead concealed operators



2810IQ-3077OPCM
Offset Pivot Arm Assembly
- Offset arm with track and concealing channel (includes 3072 concealing channel, 168 slide channel and 3077OP offset pivot arm)

Brackets

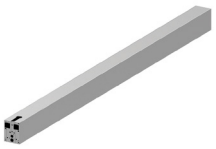
2810IQ-375
Mounting Bracket
- Motor gearbox mounting bracket for 3-3/4" offset pivot, butt hinge or center pivot with finger guard installations
- Front bracket

2810IQ-275
Mounting Bracket
- Motor gearbox mounting bracket for 2-3/4" center pivot installations
- Front bracket

2810IQ-3018
Rear Mounting Bracket
- Motor gearbox mounting bracket
- Rear bracket

Header

2810IQ-3572HL
Standard Mounting Header (HDR)
- Standard
- Single door, single operator
- Specify length 33" to 49" maximum



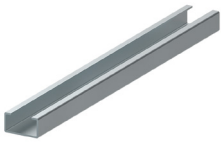
2810IQ-3572DD
Double Door Header (HDR2)
- Standard
- Double door, single operator
- Specify length 49" to 98" maximum

End Cap

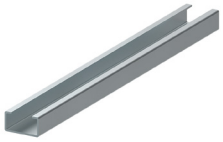
2810IQ-334
Header End Caps
- With openings for wiring

Accessories

Channels

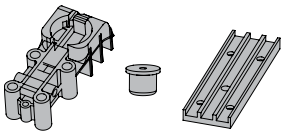


2810IQ-3072
Concealing Channel
- Offset arm with track and concealing channel (includes 3072 concealing channel, 168 slide channel and 3077OP offset pivot arm) used to conceal arm in overhead concealed applications
- For offset pivot installations only
- If ordering separately specify length and hand

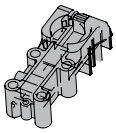


2810IQ-168
Slide Channel
- Offset pivot or butt hinge installations only
- Mounts in top rail of door
- Allows arm to slide

Pivots

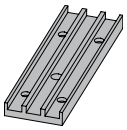


2810IQ-3107
Bottom Pivot Assembly
- Includes pivot body, pivot post and bottom pivot plate
- For overhead concealed, center pivoted installations
- Includes; 2810-107, 2810-110 and 2810-117



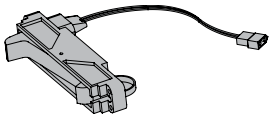
2810IQ-107
Bottom Pivot Body
- For center pivoted installations

2810IQ-110
Pivot Post
- Connects pivot body to bottom pivot plate for center pivoted installations



2810IQ-117
Bottom Pivot Plate
- Applied to floor for center pivoted installations

Installation Accessories



2810IQ-384B
Breakaway Stop (BKY)
- Allows in-swinging door to swing out in case of emergency
- Disables operator in breakaway mode
- For center pivoted installations only

2810IQ-384F
Positive Stop (POS)
- Prevents out-swinging door from swinging in
- For center pivoted installations only

2810IQ-12
Filler Plate Blank
- Completes length of header box

2810IQ-11A
Spindle Plate
- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 2-3/4" center pivot installations

2810IQ-11B
Spindle Plate
- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 3-3/4" offset pivot, butt hinge or center pivot with finger guard installations

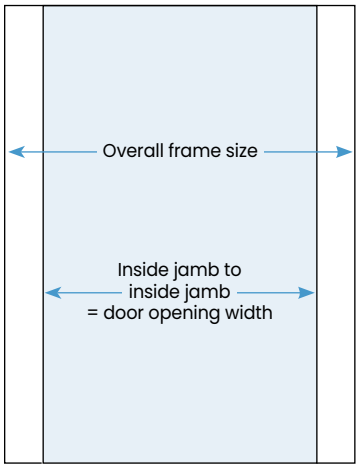
Ordering Information

How to Order a 2810IQ Series Operator		
1	Choose operator	2811IQ
2	Motor gearbox	Standard
3	Controller	Standard
4	Concealed header	HDR - Single door header - 33" - 48" HDR2 - Double door header - 48.125 "- 98" HDR2MP - Door door header w/ manual prep - 48.125" - 98"
5	Specify door opening width (jamb to jamb)	33" - 48"
6	Select arm	ST/CP - Center pivot arm ST/OP - Offset pivot arm
7	Track (stops)	LESS - No stop (standard selection) BKY - Breakaway stop POS - Positive stop
8	Specify handing	RH - Right Hand LH - Left Hand
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) 3.75 SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized

Operator will be shipped with:

- Motor gearbox mounting hardware
- Controller box mounting hardware
- Wood and machine screws

Measuring Door Opening Width



2850IQ Series

The LCN® 2850IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a concealed mount on double door applications, this configuration is ideal for simultaneous double door operation and features two motor gearboxes with one controller. The 2850IQ can be mounted with either center or offset pivot arms, allowing flexibility for a variety of opening needs.

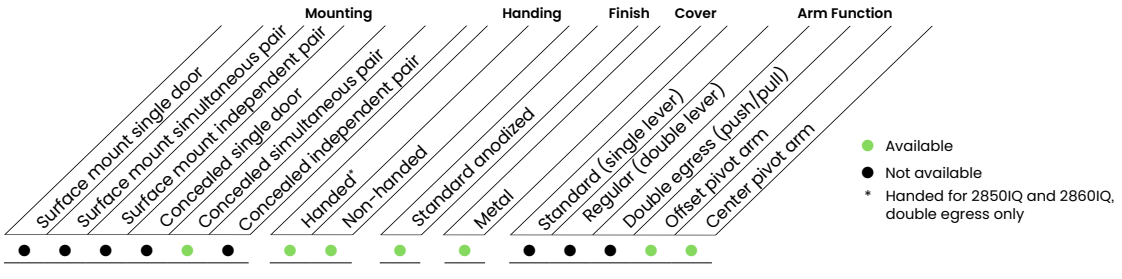
When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 2850IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Combined width min 52" - 96" • Simultaneous pair - width per leaf 26" minimum to 48" maximum
Door weight	Up to 600lbs
Warranty	2 years

Fasteners	Wood and machine screws (WMS)
Mounting	Double door, overhead concealed, center pivot, offset pivot, butt hinge
Arms	Center pivot arm Offset pivot arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



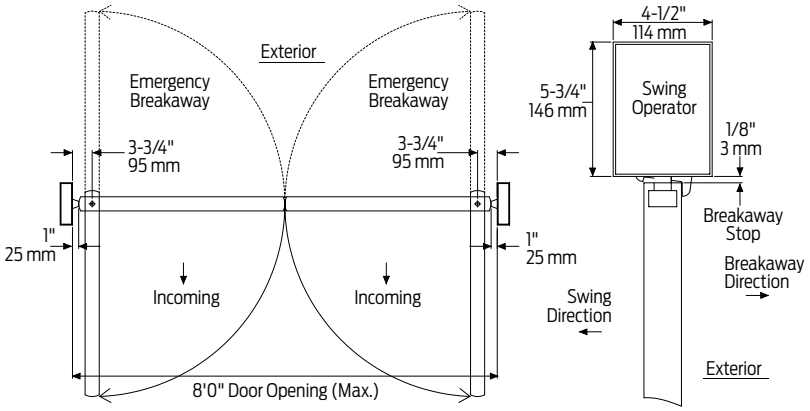
Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Electromechanical Systems

Concealed Simultaneous Pair Mounting Details

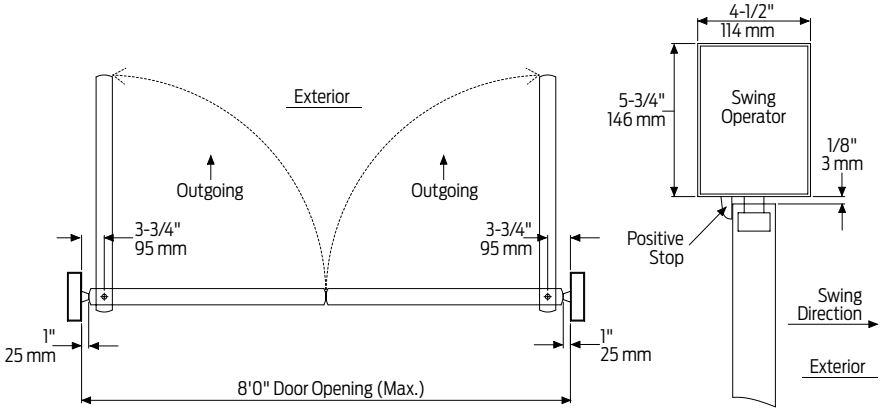
Center Pivot, Breakaway Stop, Pull

Shown with 3-3/4" pivot



Center Pivot, Positive Stop, Push

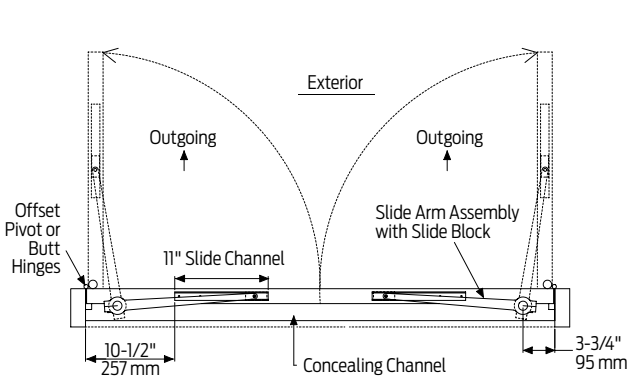
Shown with 3-3/4" pivot

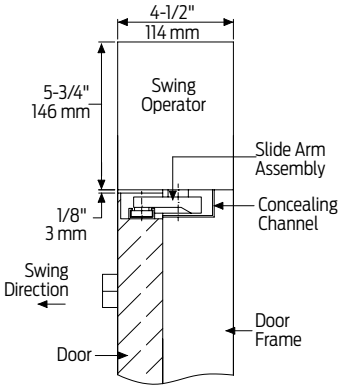


Concealed Simultaneous Pair Mounting Details

Offset Pivot Or Butt Hinge, Slide Arm, Push

Shown with 3-3/4" pivot





Electromechanical Systems

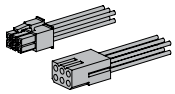
Accessories

Motor Gearbox

2850IQ-3454
Standard Motor Gearbox (MGB)
- Senior Swing
- Driving mechanism for operator
- Provides maximum 15 lbs opening force
- Handed

Control Box

2850IQ-3462
Standard Controller (CTRL)
- Senior Swing
- Electronic controlling device for Senior Swing

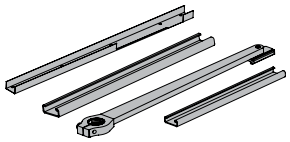


2850IQ-982
Companion Cable
- Cable that allows one control box to run two motor gearboxes
- For use with Senior Swing

Arm

2850IQ-3077CP
2-3/4" Center Pivot Arm (ARMCP)
- Center pivot installations only
- Used with overhead concealed operators and center pivoted doors

2850IQ-3077OP
3-3/4" Offset Pivot Arm (ARMOP)
- Offset pivot or butt hung installations only
- Handed
- Used with overhead concealed operators



2850IQ-3077OPCM
Offset Pivot Arm Assembly
- Offset Pivot Arm with track and concealing channel
- Includes 3072 Concealing Channel, 168 Slide Channel and 30770P offset pivot arm

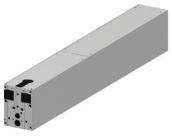
Brackets

2850IQ-375
Mounting Bracket
- Motor gearbox mounting bracket for 3-3/4" offset pivot, butt hinge or center pivot with finger guard installations
- Front bracket

2850IQ-275
Mounting Bracket
- Motor gearbox mounting bracket for 2-3/4" center pivot installations
- Front bracket

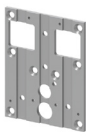
2850IQ-3018
Rear Mounting Bracket
- Motor gearbox mounting bracket
- Rear bracket

Header



2850IQ-3572HL
Standard Mounting Header (HDR)
- Mounting header
- Pair door, two operators
- Specify length 52" to 98" maximum
- Standard

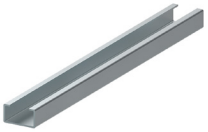
End Cap



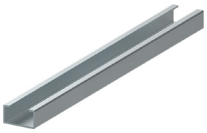
2850IQ-334
Header End Caps
- End cap with openings for wiring

Accessories

Channels

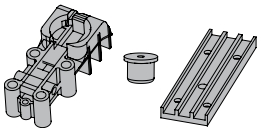


2850IQ-3072
Concealing Channel
- Used to conceal arm in overhead concealed applications
- For offset pivot installations only
- If ordering separately specify length and hand

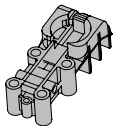


2850IQ-168
Slide Channel
- Offset pivot or butt hinge installations only
- Mounts in top rail of door
- Allows arm to slide

Pivots

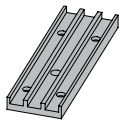


2850IQ-3107
Bottom Pivot Assembly
- Includes pivot body, pivot post and bottom pivot plate
- For overhead concealed, center pivoted installations
- Includes: 2850-107, 2850-110 and 2850-117



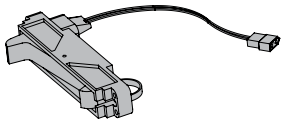
2850IQ-107
Bottom Pivot Body
- Pivot body for center pivoted installations

2850IQ-110
Pivot Post
- Connects pivot body to bottom pivot plate for center pivoted installations



2850IQ-117
Bottom Pivot Plate
- Applied to floor for center pivoted installations

Installation Accessories



2850IQ-384B
Breakaway Stop (BKY)
- Allows in-swinging door to swing out in case of emergency
- For center pivoted installations only

2850IQ-384F
Positive Stop (POS)
- Prevents out-swinging door from swinging in
- For center pivoted installations only

2850IQ-12
Filler Plate Blank
- Completes length of header box

2850IQ-11A
Spindle Plate
- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 2-3/4" center pivot installations

2850IQ-11B
Spindle Plate
- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 3-3/4" offset pivot, butt hinge or center pivot with finger guard installations

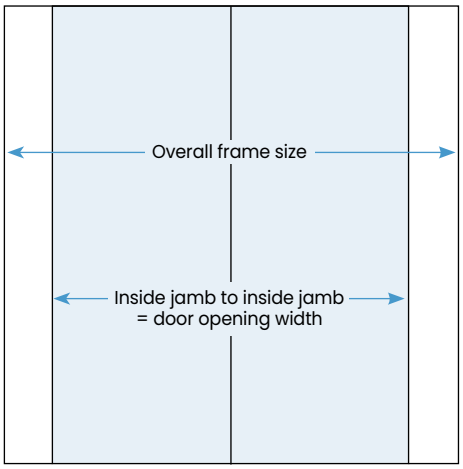
Ordering Information

How to Order a 2850IQ Series Operator		
1	Choose operator	2853IQ
2	Motor gearboxes	Two standard
3	Controller	Standard
4	Concealed header	HDR2 - Double door header
4	Specify door opening width (jamb to jamb)	52" - 96"
6	Select arm	STCP2 - Two center pivot arms STOP2 - Two offset pivot arms
7	Track (stops)	LESS - No stop (standard selection) BKY2 - Breakaway stop POS2 - Positive stop
8	Voltage	115V (standard selection) 230V
9	Spindle center	2.75 (standard selection) 3.75 SPEC
10	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized

Operator will be shipped with:

- Motor gearbox mounting hardware
- Controller box mounting hardware
- Wood and machine screws

Measuring Door Opening Width



2860IQ Series

The LCN® 2860IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a concealed mount on double door applications, this configuration is ideal for independent double door operation and features two motor gearboxes with two separate controllers. The 2860IQ can be mounted with either center or offset pivot arms, allowing flexibility for a variety of opening needs.

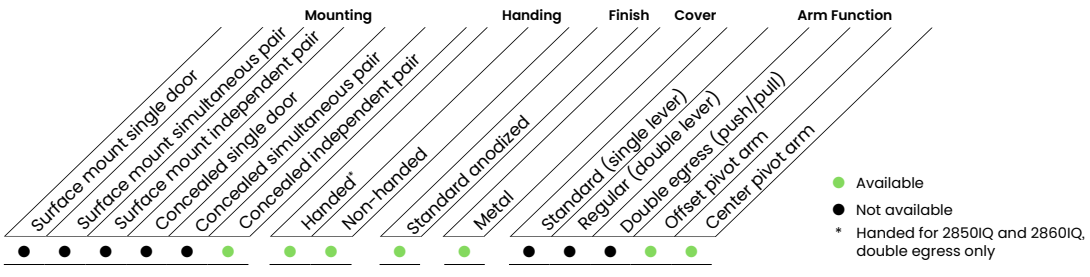
When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. Each of the double doors controlled by the 2860IQ can also be operated manually and independently for regular pedestrian traffic and include both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Combined width min 52" - 96" • Simultaneous pair - width per leaf 26" minimum to 48" maximum
Door weight	Up to 600 lbs
Warranty	2 years

Fasteners	Wood and machine screws (WMS)
Mounting	Independent pair, overhead concealed, center pivot, offset pivot, butt hinge
Arms	Center pivot arm Offset pivot arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



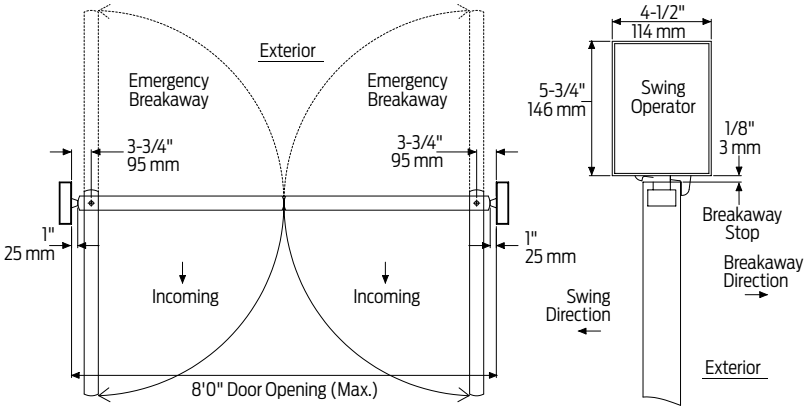
Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Electromechanical Systems

Concealed Independent Pair Mounting Details

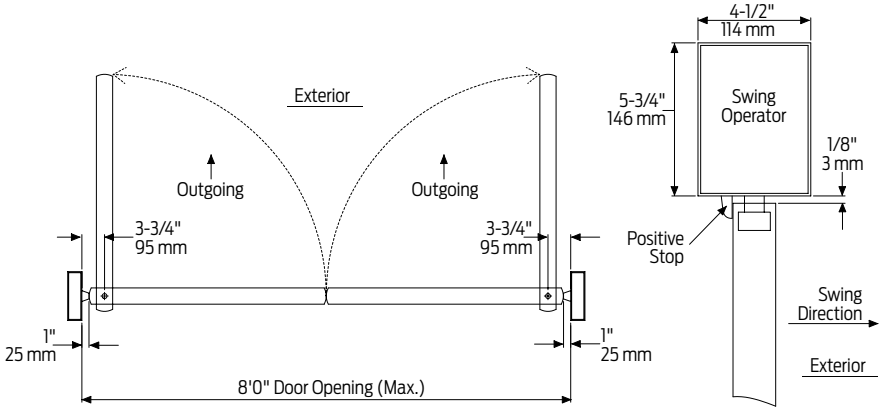
Center Pivot, Breakaway Stop, Pull

Shown with 3-3/4" pivot



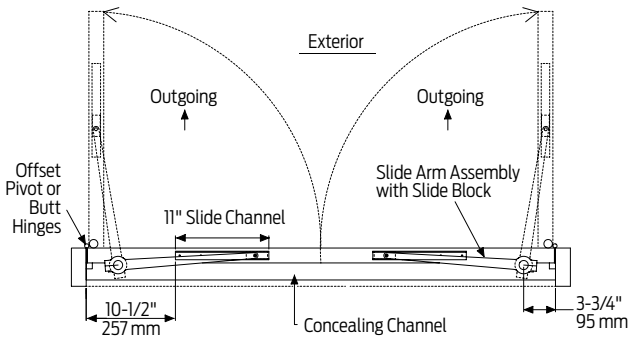
Center Pivot, Positive Stop, Push

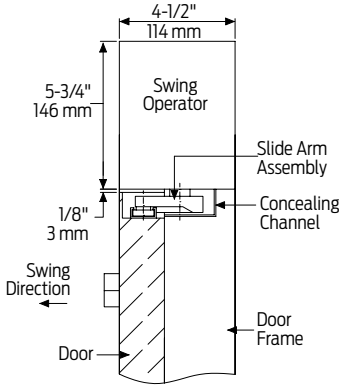
Shown with 3-3/4" pivot



Concealed Independent Pair Mounting Details

Offset pivot or butt hinge, push





Electromechanical Systems

Accessories

Motor Gearbox

2860IQ-3454
Standard Motor Gearbox (MGB)
- Senior Swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

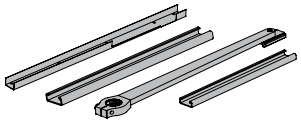
Control Box

2860IQ-3462
Standard Controller (CTRL)
- Electronic controlling device for Senior Swing

Arm

2860IQ-3077CP
2-3/4" Center Pivot Arm (ARMCP)
- Center pivot installations only
- Used with overhead concealed operators and center pivoted doors

2860IQ-3077OP
3-3/4" Offset Pivot Arm (ARMOP)
- Offset pivot or butt hung installations only
- Used with overhead concealed operators



2860IQ-3077OPCM
Offset Pivot Arm Assembly
- Offset arm with track and concealing channel
- Includes 3072 concealing channel, 168 slide channel and 30770P offset pivot arm

Brackets

2860IQ-375
Mounting Bracket
- Motor gearbox mounting bracket for 3-3/4" offset pivot, butt hinge or center pivot with finger guard installations
- Front bracket

2860IQ-275
Mounting Bracket
- Motor gearbox mounting bracket for 3-3/4" center pivot installations
- Front bracket

2860IQ-3018
Rear Mounting Bracket
- Motor gearbox mounting bracket
- Rear bracket

Header

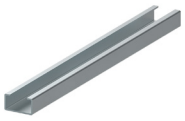
2860IQ-3572HL
Standard Mounting Header (HDR)
- Pair door, two operators
- Specify length 65" to 98" maximum
- Standard

End Cap

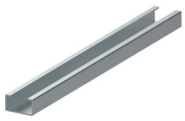
2860IQ-334
Header End Caps
- With openings for wiring

Accessories

Channels

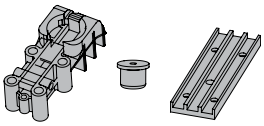


2860IQ-3072
Concealing Channel
- Used to conceal arm in overhead concealed applications
- For offset pivot installations only
- If ordering separately specify length and hand

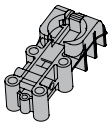


2860IQ-168
Slide Channel
- Offset pivot or butt hinge installations only
- Mounts in top rail of door
- Allows arm to slide

Pivots

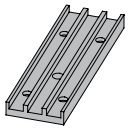


2860IQ-3107
Bottom Pivot Assembly
- Includes pivot body, pivot post and bottom pivot plate
- For overhead concealed, center pivoted installations
- Includes: 2860-107, 2860-110 and 2860-117



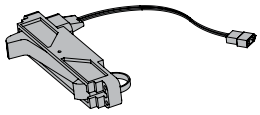
2860IQ-107
Bottom Pivot Body
- Pivot body for center pivoted installations

2860IQ-110
Pivot Post
- Connects pivot body to bottom pivot plate for center pivoted installations



2860IQ-117
Bottom Pivot Plate
- Applied to floor for center pivoted installations

Installation Accessories



2860IQ-384B
Breakaway Stop (BKY)
- Allows in-swinging door to swing out in case of emergency
- For center pivoted installations only

2860IQ-384F
Positive Stop (POS)
- Prevents out-swinging door from swinging in
- For center pivoted installations only

2860IQ-12
Filler Plate Blank
- Completes length of header box

2860IQ-11A
Spindle Plate
- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 2-3/4" center pivot installations

2860IQ-11B
Spindle Plate
- Hides bottom of motor gearbox
- Completes header box
- Cutout allows for motor gearbox shaft
- For 3-3/4" offset pivot, butt hinge or center pivot with finger guard installations

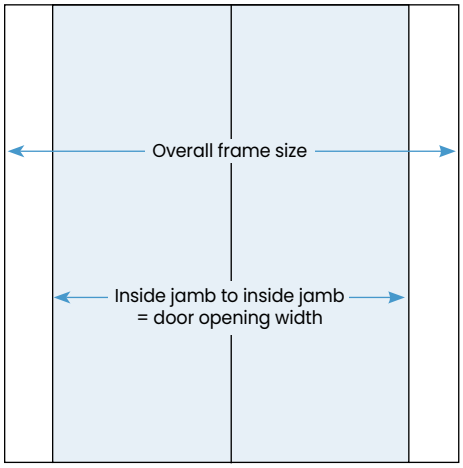
Ordering Information

How to Order a 2860IQ Series Operator		
1	Choose operator	2863IQ
2	Motor gearboxes	Two standard
3	Controllers	Two standard
4	Concealed header	HDR2 - Double door header
5	Specify door opening width (jamb to jamb)	52" - 96"
6	Select arm	STCP2 - Two center pivot arms STOP2 - Two offset pivot arms
7	Track (stops)	LESS - No stop (standard selection) BKY2 - Breakaway stop POS2 - Positive stop
8	Voltage	115V (standard selection) 230V
9	Spindle center	2.75 (standard selection) 3.75 SPEC
10	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized

Operator will be shipped with:

- Motor gearbox mounting hardware
- Controller box mounting hardware
- Wood and machine screws

Measuring Door Opening Width



9530IQ Series

The LCN® 9530IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a surface mount on single door applications, the 9530IQ is paired with a standard arm for a pull-side configuration.

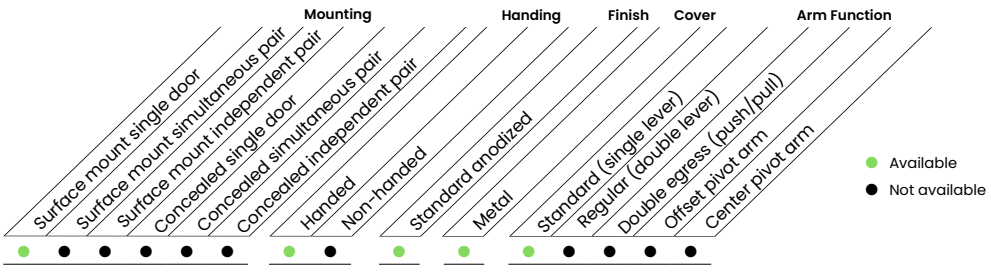
When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 9530IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Minimum 33"- 48" • Single door - width per leaf 33" minimum to 48" maximum
Door weight	Up to 600 lbs
Warranty	2 years

Fasteners	Machine screws (MS)
Mounting	Single door, surface mount, offset pivot, butt hinge, pull side
Arms	Standard arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Cover	Metal cover (MC)
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



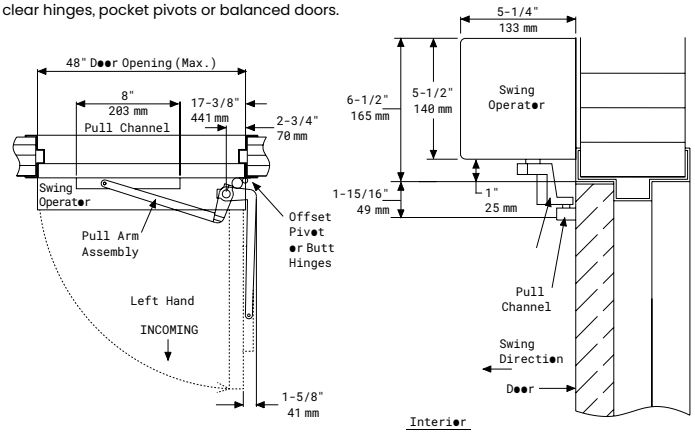
Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Electromechanical Systems

Top Jamb Single Door Mounting Details

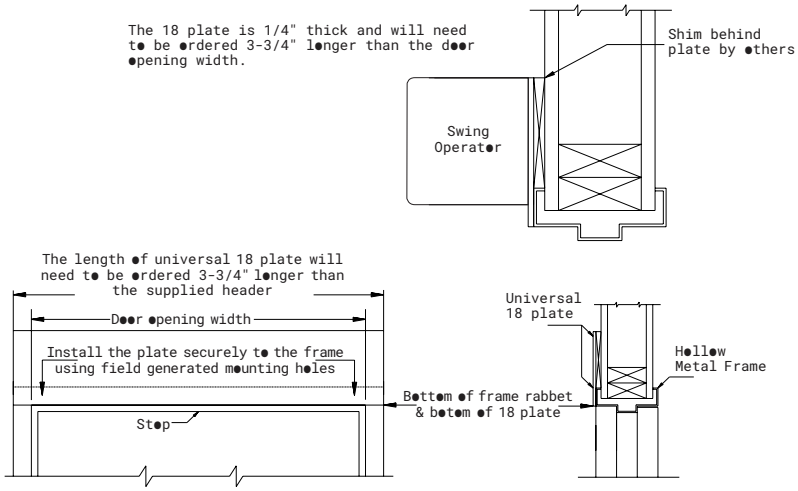
Offset Pivot/Butt Hinge, Center Pivot, Pull

Note: Cannot be used with swing clear hinges, pocket pivots or balanced doors.



Hollow Metal Frame

The -18 plate is 1/4" thick and will need to be ordered 3-3/4" longer than the door opening width. See illustration below.



Note: Suggested installation.

Butt Hinges	Should not exceed 5" (127 mm) in width
Reveal	Should not exceed 4" (102 mm)
Top Rail	Minimum 2-3/4" (70 mm)
Head Frame	Minimum 1-3/4" (44 mm); Face Frame 6-1/2" (165mm) Total Operator Clearance
Opening and Closing Time	• Variable by adjustments to the Electronic Control Box • Maximum Hold Open Time adjustable up to approximately 60 Seconds
System Diagram	See page 52-53 for typical system wiring and electrical data
Maximum Opening	Template allows 90 degree power opening and 90 degree manual opening

Notes:

- Power Assist and Push & Go permit non-switch activation with Smart Power Boost providing additional latching force
- 36" door width is standard. Specify 33" - 48" max
- Double door header available up to 98", specify other length 49"- 98" max
- Actuators available separately, see pages 110-129

Accessories

Motor Gearbox

9530IQ-3454
Standard Motor Gearbox (MGB)
- Senior Swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

Control Box

9530IQ-3462
Standard Controller (CTRL)
- Electronic controlling device for Senior Swing

Arm

9530IQ-3077PLCM
Standard Arm Assembly with Track Roller (STDTRKARM2)
- Handed
- Track roller included (includes 3038, 3077T, 3034 and 73)

9530IQ-3077T
Standard Arm (STDTRKARM)
- Handed
- Track roller not included

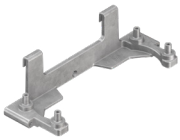
Track

9530IQ-3038
Track
- Non-handed
- Includes 3034 and 73

9530IQ-73
Track End Cap
- Black plastic end caps

9530IQ-3034
Roller
- Quiet low friction roller assembly

Brackets



9530IQ-475
MGB Mounting Bracket
- Mounting bracket for the motor gearbox
- Connects to baseplate
- Includes fasteners

9530IQ-575
Controller Mounting Brackets
- Two mounting brackets for the controller box
- Connects to backplate
- Includes fasteners

Operator Housing

9530IQ-72MC
Standard Cover
- Single door operator cover
- Specify for door widths 33" - 48"

9530IQ-72MC-DD
Double Door Cover
- Double door cover for single or multiple operators
- Specify for door widths 49" - 98"

9530IQ-10
Standard Baseplate
- Single door operator baseplate
- Specify for door widths 33" - 48"

9530IQ-10-DD
Double Door Baseplate
- Double door baseplate for single or multiple operators
- Specify for door widths 49" - 98"

9530IQ-163
RF Window
- Cover for rectangular opening on top of the cover

Installation Accessories

9530IQ-18
Mounting Plate
- Optional mounting plate for standard hollow metal door frames
- Specify desired length between 33" - 101-1/2"

Note: The length of a universal 18 plate will need to be ordered 3-3/4" longer than the door width.

Accessories

End Cap

9530IQ-334L
Left Side End Cap
- One end cap for the left side of a metal cover

9530IQ-334R
Right Side End Cap
- One end cap for the right side of a metal cover

9530IQ-3179
Rocker Switch Assembly
- This is an exterior Off/HO/Auto three-way rocker switch on the end cap of the metal cover. The switch is concealed from view, and is accessed by pulling the switch open from the end cap

9530IQ-163-1
End Cap Cover Insert
- This cover insert is used to fill the end cap(s) that do not contain the Rocker Switch Assembly Insert.

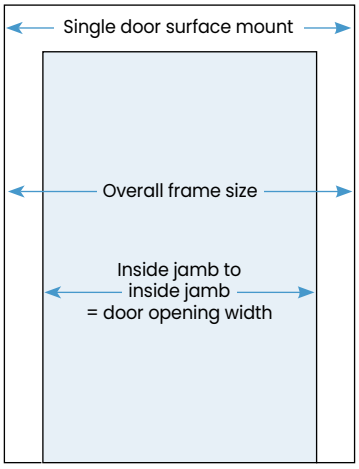
Ordering Information

How to Order a 9530IQ Series Operator		
1	Choose operator	9531IQ
2	Motor gearbox	Standard
3	Controller	Standard
4	Metal cover	COV - Single door header - 33" - 48" COV2 - Double door header - 48.125" - 98"
5	Specify door opening width (jamb to jamb)	33" - 98"
6	Select arm	STD - Standard arm
7	Track	STD - Standard track
8	Specify handing	RH - Right hand LH - Left hand
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized
12	Rocker switch assembly	SW - Yes NS - No

Operator will be shipped with:

- Motor gearbox mounting bracket
- Controller box mounting hooks (2)
- Machine screws
- Baseplate (manufactured at specified door width)
- Cover end cap kit (one left, one right, cover insert(s), fasteners)

Measuring Door Opening Width



Electromechanical Systems

9540IQ Series

The LCN® 9540IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a surface mount on single door applications, the 9540IQ is paired with a regular arm for a push-side configuration.

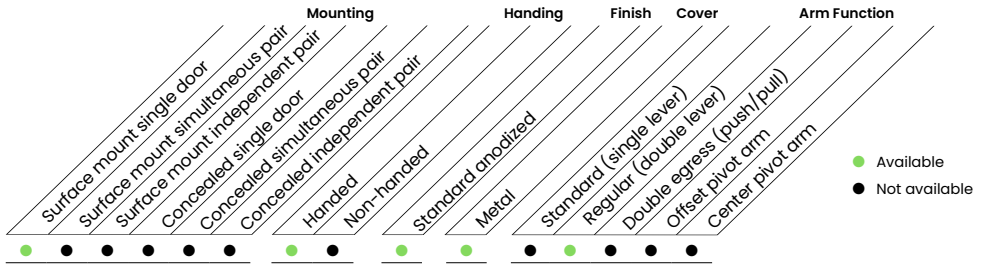
When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 9540IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, UL1998, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Combined width min 33"- 48" • Single door - width per leaf 33" minimum to 48" maximum
Door weight	Up to 600 lbs
Warranty	2 years

Fasteners	Machine screws (MS)
Mounting	Single door, surface mount, offset pivot, butt hinge, push side
Arms	Regular arm Long arm Telescoping arm Telescoping long arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Cover	Metal cover (MC)
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations

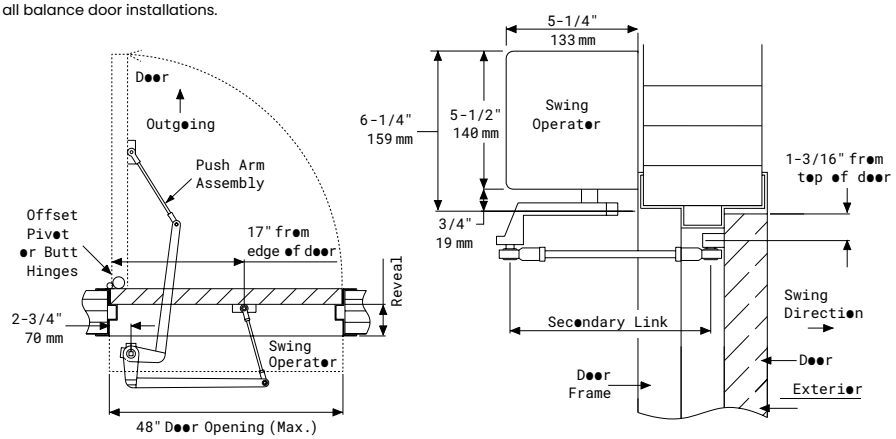


Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Top Jamb Single Door Mounting Details

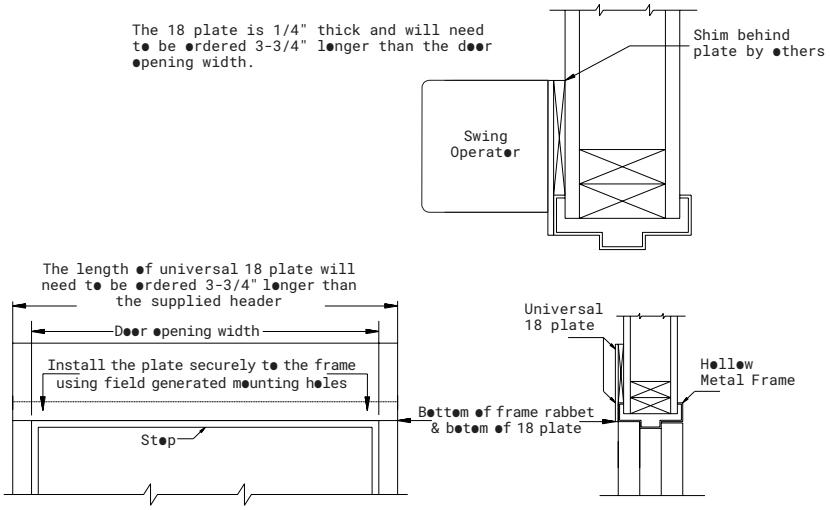
Offset Pivot/Butt Hinge, Center Pivot, Push

Note: Consult factory for all balance door installations.



Hollow Metal Frame

The -18 plate is 1/4" thick and will need to be ordered 3-3/4" longer than the door opening width. See illustration below.



Note: Suggested installation.

Butt hinges	Should not exceed 5" (127 mm) in width
Reveal	Push installations should not exceed 10" (254 mm) for regular arm and 20" (508 mm) for long arm
Top rail	Minimum 2-3/4" (70 mm)
Head frame	Minimum 1-3/4" (44 mm); face frame 6-1/2" (165mm) total operator clearance
Opening and closing time	• Variable by adjustments to the electronic control box • Maximum hold open time adjustable up to approximately 60 seconds
System diagram	See page 52-53 for typical system wiring and electrical data
Maximum opening	Template allows 90 degree power opening and 90 degree manual opening

Notes:

- Power Assist and Push & Go permit non-switch activation with Smart Power Boost providing additional latching force
- Electromechanical unit with microprocessor control
- 36" door width is standard. Specify 33" - 48" max
- Double door header available up to 98", specify other length 49"- 98" max
- Consult factory regarding this option
- Actuators available separately, see pages 110-129

Electromechanical Systems

Accessories

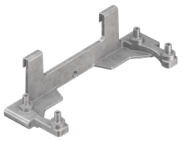
Motor Gearbox

9540IQ-3454
Standard Motor Gearbox (MGB)
- Senior Swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

Control Box

9540IQ-3462
Standard Controller (CTRL)
- Electronic controlling device for Senior Swing

Brackets



9540IQ-475
MGB Mounting Bracket
- Mounting bracket for the motor gearbox
- Connects to baseplate
- Includes fasteners
- Front bracket

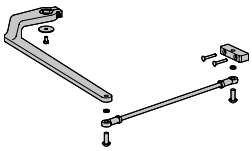
9540IQ-575
Controller Mounting Brackets
- Two mounting brackets for the controller box
- Connects to backplate
- Includes fasteners

Installation Accessories

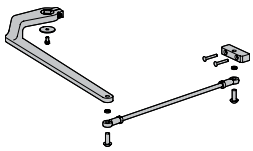
9540IQ-18
Mounting Plate
- Optional mounting plate for standard hollow metal door frames
- Specify desired length between 33" - 101 1/2"

Note: The length of a universal 18 plate will need to be ordered 3-3/4" longer than the door width.

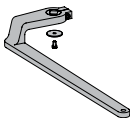
Arm



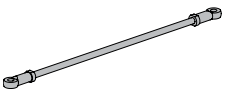
9540IQ-3077
Regular Arm (REGARM)
- Handed
- Includes 77 main arm assembly and 79 linkage assembly
- For reveals up to 10"



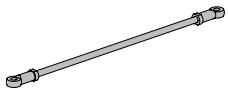
9540IQ-3077L
Long Arm (LONG)
- Handed
- Includes 77 main arm assembly and 79LR linkage assembly
- For reveals up to 20"



9540IQ-77
Main Arm
- Handed
- Attaches to motor gearbox



9540IQ-79
Linkage Assembly - 15"
- Threaded rod attaches to door
- Extends from main arm



9540IQ-79LR
Linkage Assembly - 32"
- Threaded long rod attaches to door
- Extends from main arm
- Used for reveal 10" to 20"

Arm

9540IQ-3077TLS
Telescoping Arm (TLS)
- A regular length, double lever, non-hold open arm for push-side applications with a fully adjustable linkage assembly (no hacksaw required)
- For reveals up to 5"

9540IQ-3077LNGTLS
Telescoping Long Arm (LNGTLS)
- An extended arm for deep reveals or other special configurations on push-side applications with a fully adjustable linkage assembly (no hacksaw required)
- For reveals up to 13"
- For extra long reveals of up to 18", use the telescoping extension part

Operator Housing

9540IQ-72MC
Standard Cover
- Single door operator cover
- Specify for door widths 33" - 48"

9540IQ-72MC-DD
Double Door Cover
- Double door cover for single or multiple operators
- Specify for door widths 49" - 98"

Operator Housing

9540IQ-10
Standard Baseplate
- Single door operator baseplate
- Specify for door widths 33" - 48"

9540IQ-10-DD
Double Door Baseplate
- Double door baseplate for single or multiple operators
- Specify for door widths 49" - 98"

9540IQ-163
RF Window
- Cover for rectangular opening on top of the cover

End Cap

9540IQ-334L
Left Side End Cap
- One end cap for the left side of a metal cover

9540IQ-334R
Right Side End Cap
- One end cap for the right side of a metal cover

9540IQ-3179
Rocker Switch Assembly
- This is an exterior Off/HO/Auto three-way rocker switch on the end cap of the metal cover. The switch is concealed from view, and is accessed by pulling the switch open from the end cap

9540IQ-163-1
End Cap Cover Insert
- This cover insert is used to fill the end cap(s) that do not contain the Rocker Switch Assembly Insert

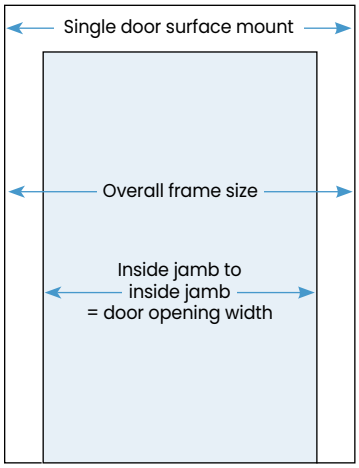
Ordering Information

How to Order a 9540IQ Series Operator		
1	Choose operator	9542IQ
2	Motor gearbox	Standard
3	Controller	Standard
4	Metal cover	COV - Single door - 33" - 48" COV2 - Double door - 48.125" - 98"
5	Specify door opening width (jamb to jamb)	33" - 98"
6	Select arm	REG - Regular arm (standard selection) LONG - Long arm TLS - Telescoping arm LNGTLS - Telescoping long arm
7	Track	LESS - No track
8	Specify handing	RH - Right hand LH - Left hand
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) 12.25 SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized
12	Rocker switch assembly	SW - Yes NS - No

Operator will be shipped with:

- Motor gearbox mounting bracket
- Controller box mounting hooks (2)
- Machine screws
- Baseplate (manufactured at specified door width)
- Cover end cap kit (one left, one right, cover insert(s), fasteners)

Measuring Door Opening Width



9550IQ Series

The LCN® 9550IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a surface mount on double door applications, this configuration is ideal for simultaneous double door operation and features two motor gearboxes with one controller. The 9550IQ can be mounted with either two regular arms (push), two standard arms (pull), or one of each (double egress), allowing flexibility for a variety of opening needs.

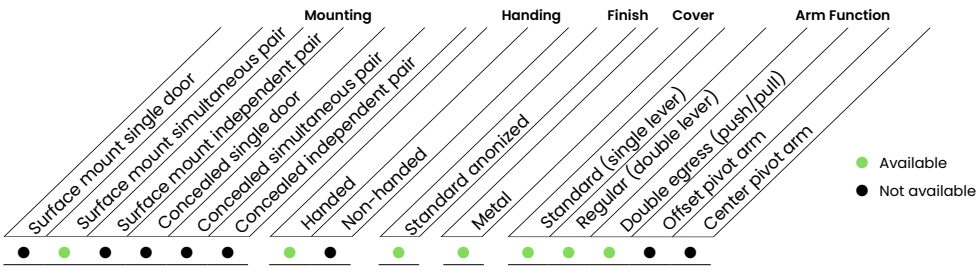
When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 9550IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Minimum combined door width 52"- 98" (push) • Minimum combined door width 60"- 98" (pull; double egress) • Simultaneous pair - width per leaf 30" minimum - 48" maximum
Warranty	2 years
Door weight	Up to 600lbs

Fasteners	Machine screws (MS)
Mounting	Simultaneous pair, surface mount, pull side, push side, double egress
Arms	Standard arms (pull) Regular arms (push) Long arms (push) Telescoping arms (push) Telescoping long arms (push) Regular + standard arm (double egress) Telescoping + standard arm (double egress)
Cover	Metal cover
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark brown, anodized • 711 - Matte black, adonized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



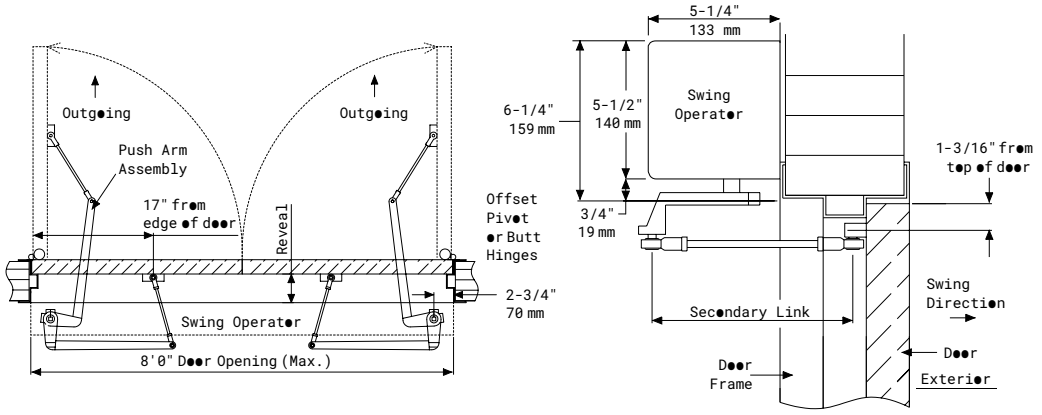
Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Electromechanical Systems

Top Jamb Simultaneous Pair Mounting Details

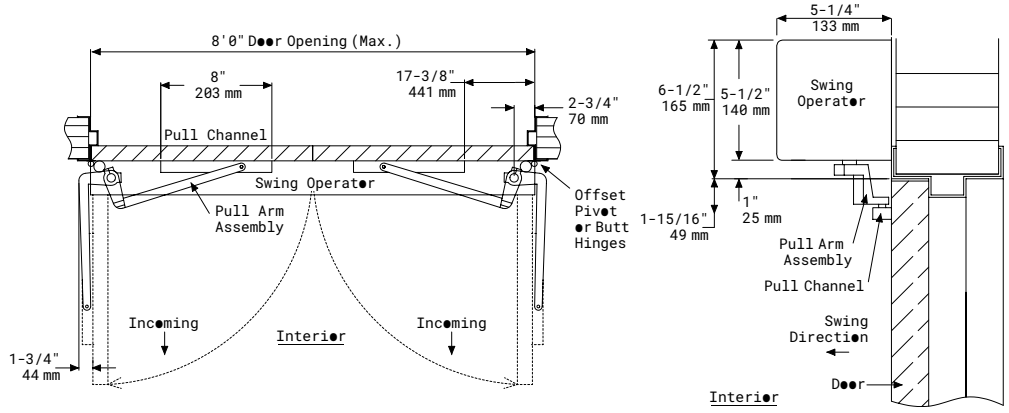
Offset Pivot/Butt Hinge, Center Pivot, Push

Note: Consult factory for all balanced door installations.



Offset Pivot/Butt Hinge, Center Pivot, Pull

Note: Cannot be used with swing clear hinges, pocket pivots or balanced doors.



Butt hinges	Should not exceed 5" (127 mm) in width
Reveal for push	Should not exceed 10" (254 mm) for Regular Arm and 20" (508 mm) for Long Arm
Reveal for pull	Should not exceed 4" (102 mm)
Reveal	Double egress installations should not exceed 4" (102 mm)
Top rail	Minimum 2-3/4" (70 mm)
Head frame	• Minimum 1-3/4" (44 mm) • Face frame 6-1/2" (165mm) total operator clearance
Opening and closing time	• Variable by adjustments to the electronic control box • Maximum hold open time adjustable up to approximately 60 seconds
System diagram	See page 52-53 for typical system wiring and electrical data
Maximum opening	Template allows 90 degree power opening and 90 degree manual opening

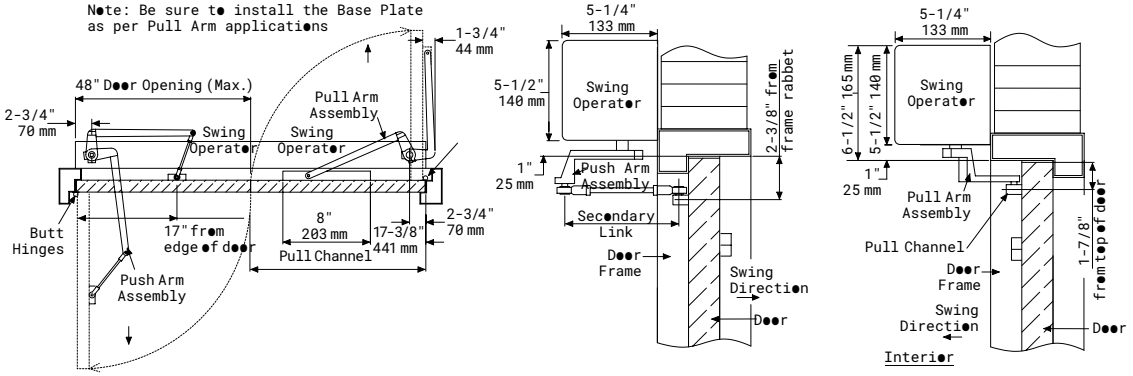
Notes:

- Power Assist and Push & Go permit non-switch activation with Smart Power Boost providing additional latching force
- Electromechanical unit with microprocessor control
- 72" door width is standard. Specify other length 52" - 98" (push), specify other length 60" - 98" (pull; double egress) (consult factory regarding this option)
- Actuators available separately, see pages 110-129

Top Jamb Simultaneous Pair Mounting Details

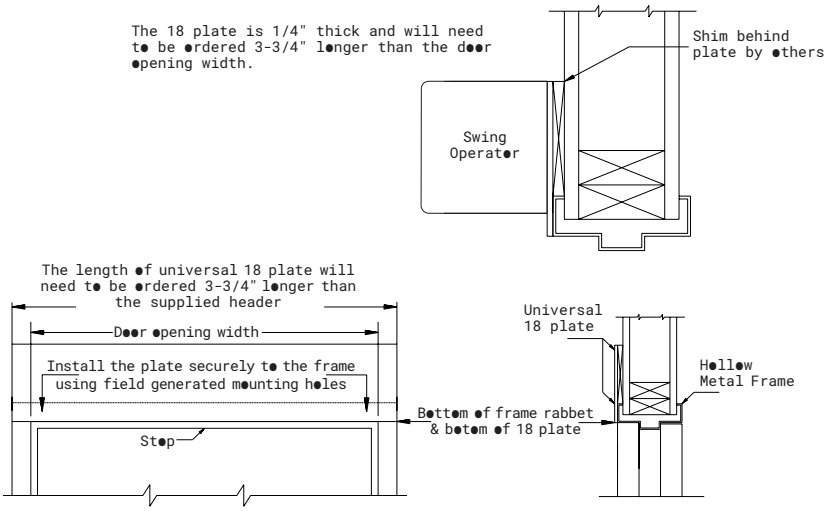
RH Double Egress

Double egress applications with safety sensors require LCN 9560IQ Series.
Note: Cannot be used with swing clear hinges, pocket pivots or balanced door.



Hollow Metal Frame

The -18 plate is 1/4" thick and will need to be ordered 3-3/4" longer than the door opening width. See illustration below.



Note: Suggested installation.

Butt hinges	Should not exceed 5" (127 mm) in width
Reveal for push	Should not exceed 10" (254 mm) for regular arm and 20" (508 mm) for long arm
Reveal for pull	Should not exceed 4" (102 mm)
Reveal	Double egress installations should not exceed 4" (102 mm)
Top rail	Minimum 2-3/4" (70 mm)
Head frame	Minimum 1-3/4" (44 mm) Face frame 6-1/2" (165mm) total operator clearance
Opening and closing time	• Variable by adjustments to the electronic control box • Maximum hold open time adjustable up to approximately 60 seconds
System diagram	See page 52-53 for typical system wiring and electrical data
Maximum opening	Template allows 90 degree power opening and 90 degree manual opening

Notes:

- Power Assist and Push & Go permit non-switch activation with Smart Power Boost providing additional latching force
- Electromechanical unit with microprocessor control
- 72" door width is standard. Specify other length 52" - 98" (push), specify other length 60" - 98" (pull; double egress) (consult factory regarding this option)
- Actuators available separately, see pages 110-129

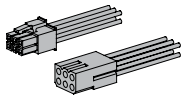
Accessories

Motor Gearbox

9550IQ-3454
Standard Motor Gearbox (MGB)
- Senior Swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

Control Box

9550IQ-3462
Standard Controller (CTRL)
- Electronic controlling device for Senior Swing

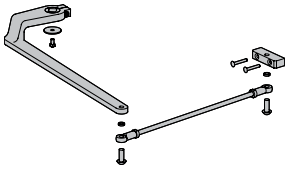


9550IQ-982
Companion Cable
- Cable that allows one control box to run two motor gear boxes
- For use with Senior Swing

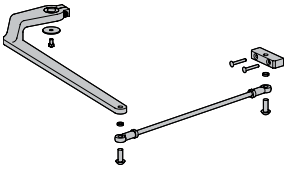
Arm

9550IQ-3077PLCM
Standard Arm Assembly with Track Roller (STDTRKARM2)
- Handed
- Includes 3077 regular arm assembly, 3038 track, and 3034 track roller

Arm

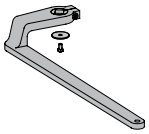


9550IQ-3077L
Long Arm (LONG)
- Handed
- Includes 77 main arm assembly and 79LR linkage assembly

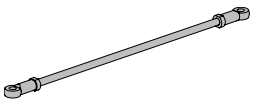


9550IQ-3077
Regular Arm (REGARM)
- Handed
- Includes 77 main arm assembly and 79 linkage assembly

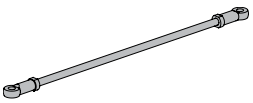
9550IQ-3077T
Standard Arm (STDTRKARM)
- Handed
- Track roller not included



9550IQ-77
Main Arm
- Handed
- Attaches to motor gearbox



9550IQ-79
Linkage Assembly
- 15"
- Threaded rod attaches to door
- Extends from main arm



9550IQ-79LR
Linkage Assembly
- 32"
- Threaded long rod attaches to door
- Extends from main arm
- Used for reveal 10" to 20"

9550IQ-3077TLS
Telescoping Arm (TLS)
- A regular length, double lever, non-hold open arm for push-side applications with a fully adjustable linkage assembly (no hacksaw required)
- For reveals up to 5"

9550IQ-3077LNGTLS
Telescoping Long Arm (LNGTLS)
- An extended arm for deep reveals or other special configurations on push-side applications with a fully adjustable linkage assembly (no hacksaw required)
- For reveals up to 13"
- For extra long reveals of up to 18", use the telescoping extension part

Track

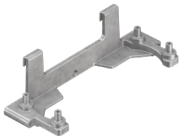
9550IQ-3038
Track
- Non-handed
- Standard

9550IQ-73
Track End Cap
- Black plastic end caps

9550IQ-3034
Roller
- Quiet low friction roller assembly

Accessories

Brackets



9550IQ-475
MGB Mounting Bracket
- Mounting bracket for the motor gearbox
- Connects to baseplate
- Includes fasteners

9550IQ-575
Controller Mounting Brackets
- Two mounting brackets for the controller box
- Connects to backplate
- Includes fasteners

Installation Accessories

9550IQ-18
Mounting Plate
- Optional mounting plate for standard hollow metal door frames
- Specify desired length between 33" - 101-1/2"

Note: The length of a universal 18 plate will need to be ordered 3-3/4" longer than the door width.

Operator Housing

9550IQ-72MC-DD
Double Door Cover
- Double door cover for single or multiple operators
- Specify for door widths 52" - 98" (push)
- Specify for door widths 60" - 98" (pull, double egress)

9550IQ-10-DD
Double Door Baseplate
- Double door baseplate for single or multiple operators
- Specify for door widths 52" - 98" (push)
- Specify for door widths 60" - 98" (pull, double egress)

9550IQ-163
RF Window
- Cover for rectangular opening on top of the cover

End Cap

9550IQ-334L
Left Side End Cap
- One end cap for the left side of a metal cover

9550IQ-334R
Right Side End Cap
- One end cap for the right side of a metal cover

9550IQ-3179
Rocker Switch Assembly
- This is an exterior Off/HO/Auto three-way rocker switch on the end cap of the metal cover. The switch is concealed from view, and is accessed by pulling the switch open from the end cap

9550IQ-163-1
End Cap Cover Insert
- This cover insert is used to fill the end cap(s) that do not contain the Rocker Switch Assembly Insert

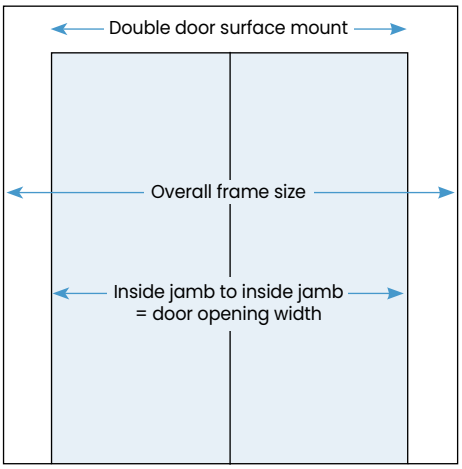
Ordering Information

How to Order a 9550IQ Series Operator		
1	Choose operator	9553IQ
2	Motor gearboxes	Two standard
3	Controller	Standard
4	Metal cover	COV2 - Double door
5	Specify door opening width (jamb to jamb)	52" - 98" (push) 60" - 98" (pull, double egress)
6	Select arms	STDTRACKARM2 - Two standard arms - double pull REGARM2 - Two regular arms - double push LONG2 - Two long arms - double push TLS2 - Two telescoping arms - double push LNGTLS2 - Two telescoping long arms - double push REG/STD - Regular + standard arm - double egress TLS/STD - Telescoping + standard arm - double egress
7	Track	LESS - No track STD - Single standard track STD2 - Two standard tracks
8	Specify handing	RH - Right Hand LH - Left Hand Non-handed - Double push/double pull
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized
12	Rocker switch assembly	SW - Yes NS - No

Operator will be shipped with:

- Motor gearbox mounting bracket (2)
- Controller box mounting hooks (2)
- Machine screws
- Baseplate (manufactured at specified door width)
- Cover end cap kit (one left, one right, cover insert(s), fasteners)

Measuring Door Opening Width



9560IQ Series

The LCN® 9560IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a surface mount on double door applications, this configuration is ideal for independent double door operation and features two motor gearboxes and two separate controllers. The 9560IQ can be mounted with either two regular arms (push), two standard arms (pull), or one of each (double egress), allowing flexibility for a variety of opening needs.

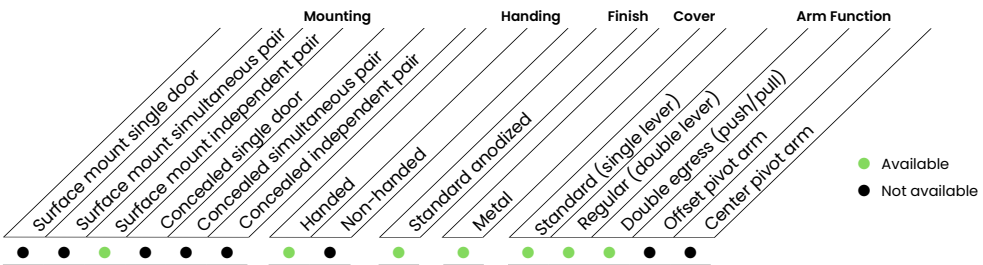
When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. Each of the double doors controlled by the 9560IQ can also be operated manually and independently for regular pedestrian traffic and include both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Warranty	2 years
Cover	Metal cover (MC)
Door width	Minimum combined door width: 65" - 98" Simultaneous pair - width per leaf 30" - 48"
Door weight	Up to 600lbs

Fasteners	Machine screws (MS)
Mounting	Independent pair, surface, pull, push, double egress
Arms	Standard arms (pull) Regular arms (push) Long arms (push) Telescoping arms (push) Telescoping long arms (push) Regular + standard arm (double egress) Telescoping + standard arm (double egress)
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, adonized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations

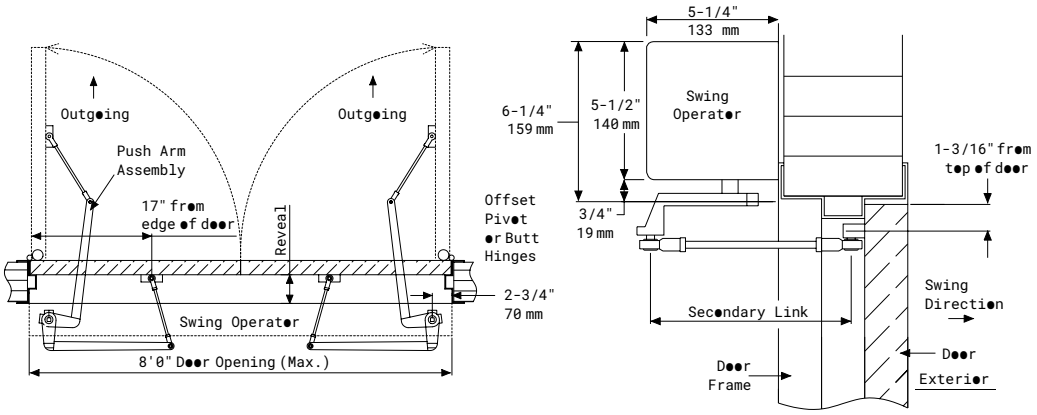


Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Top Jamb Independent Pair Mounting Details

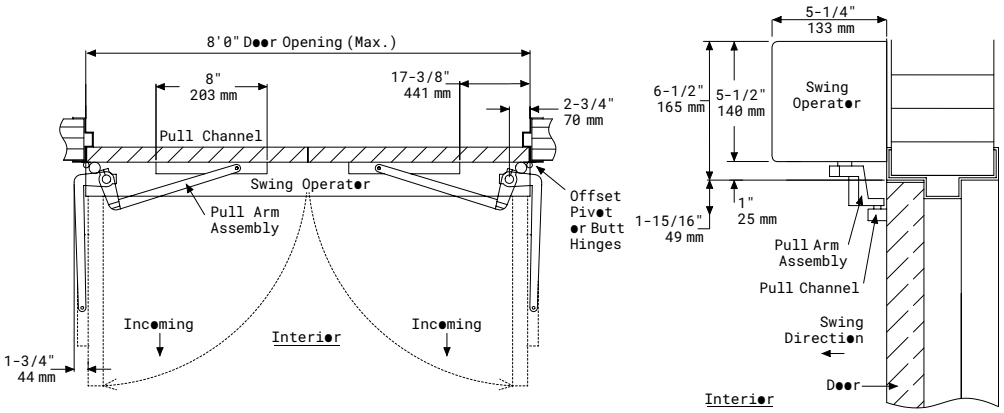
Offset Pivot/Butt Hinge, Center Pivot, Push

Note: Consult factory for all balanced door installations.



Offset Pivot/Butt Hinge, Center Pivot, Pull

Note: Cannot be used with swing clear hinges, pocket pivots or balanced doors.



Butt hinges	Should not exceed 5" (127 mm) in width
Reveal for push	Should not exceed 10" (254 mm) for regular arm and 20" (508 mm) for long arm
Reveal for pull	Should not exceed 4" (102 mm)
Reveal	Double egress installations should not exceed 4" (102 mm)
Top rail	Minimum 2-3/4" (70 mm)
Head frame	• Minimum 1-3/4" (44 mm) • Face frame 6-1/2" (165 mm) total operator clearance
Opening and closing time	• Variable by adjustments to the electronic control box • Maximum hold open time adjustable up to approximately 60 seconds
System diagram	See page 52-53 for typical system wiring and electrical data
Maximum opening	Template allows 90 degree power opening and 90 degree manual opening

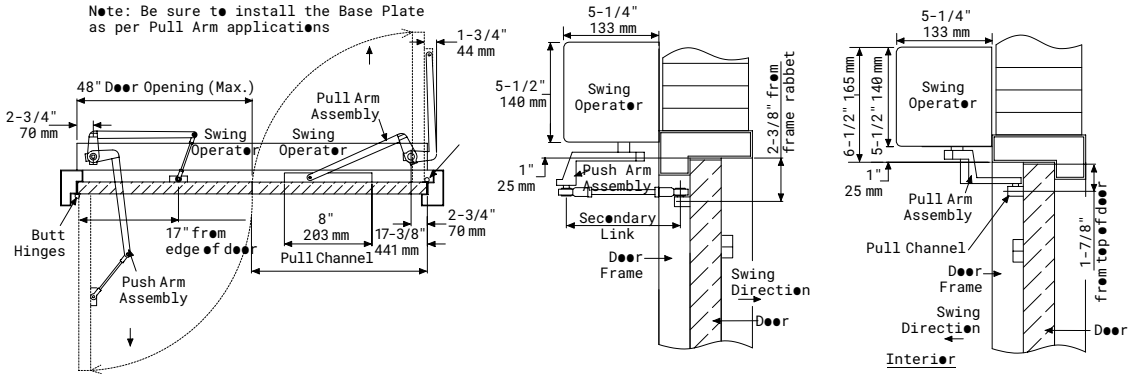
Notes:

- Push 'N Go permits non-switch activation with Smart Power Boost providing additional latching force
- Electromechanical unit with microprocessor control
- 72" door width is standard. Specify 65" - 98" max
- Pull, push, or double egress applications available
- Actuators available separately, see pages 110-129

Top Jamb Independent Pair Mounting Details

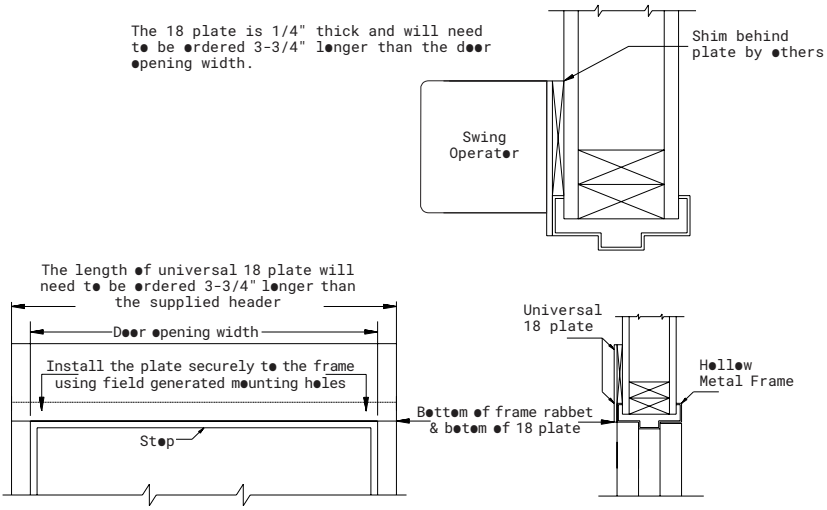
RH Double Egress

Note: Cannot be used with swing clear hinges, pocket pivots or balanced door.



Hollow Metal Frame

The -18 plate is 1/4" thick and will need to be ordered 3-3/4" longer than the door opening width. See illustration below.



Note: Suggested installation.

Electromechanical Systems

Accessories

Motor Gearbox

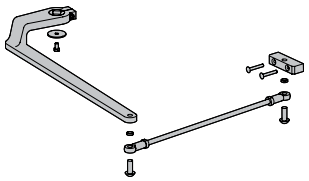
9560IQ-3454
Standard Motor Gearbox (MGB)
- Senior Swing
- Handed
- Driving mechanism for operator
- Provides maximum 15 lbs opening force

Control Box

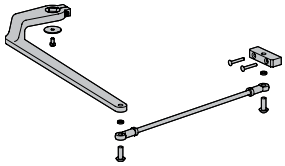
9560IQ-3462
Standard Controller (CTRL)
- Electronic controlling device for Senior Swing

Arm

9560IQ-3077T
Standard Arm (STDTRKARM)
- Handed
- Track roller not included

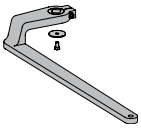


9560IQ-3077
Regular Arm (REGARM)
- Handed
- Includes 77 main arm assembly and 79 linkage assembly

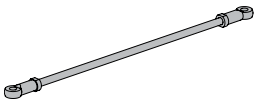


9560IQ-3077TL
Long Arm (LONG)
- Handed
- Includes 77 main arm assembly and 79LR linkage assembly

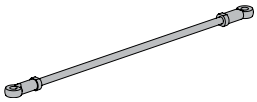
9560IQ-3077/PLCM
Standard Arm Assembly with Track Roller (STDTRKARM2)
- Handed
- Includes 3077 regular arm assembly, 3038 track, and 3034 track roller



9560IQ-77
Main Arm
- Handed
- Attaches to motor gearbox



9560IQ-79
Linkage Assembly
- 15"
- Threaded rod attaches to door
- Extends from main arm
- Used for reveal 1" to 10"



9560IQ-79LR
Linkage Assembly
- 32"
- Threaded long rod attaches to door
- Extends from main arm
- Used for reveal 10" to 20"

9560IQ-3077TLS
Telescoping Arm (TLS)
- A regular length, double lever, non-hold open arm for push-side applications with a fully adjustable linkage assembly (no hacksaw required)
- For reveals up to 5"

9560IQ-3077LNGTLS
Telescoping Long Arm (LNGTLS)
- An extended arm for deep reveals or other special configurations on push-side applications with a fully adjustable linkage assembly (no hacksaw required)
- For reveals up to 13"
- For extra long reveals of up to 18", use the telescoping extension part

Track

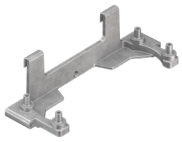
9560IQ-3038
Track
- Non-handed
- Standard

9560IQ-73
Track End Cap
- Black plastic end caps

9560IQ-3034
Roller
- Quiet low friction roller assembly

Accessories

Brackets



9560IQ-475
MGB Mounting Bracket
- Mounting bracket for the motor gearbox
- Connects to baseplate
- Includes fasteners

9560IQ-575
Controller Mounting Brackets
- Two mounting brackets for the controller box
- Connects to backplate
- Includes fasteners

Installation Accessories

9560IQ-18
Mounting Plate
- Optional mounting plate for standard hollow metal door frames
- Specify desired length between 33" - 101-1/2

The length of a universal 18 plate will need to be ordered 3-3/4" longer than the door width.

Operator Housing

9560IQ-72MC-DD
Double Door Cover
- Double door cover for single or multiple operators
- Specify for door widths 52" - 98" (push)
- Specify for door widths 60" - 98" (pull, double egress)

9560IQ-10-DD
Double Door Baseplate
- Double door baseplate for single or multiple operators
- Specify for door widths 52" - 98" (push)
- Specify for door widths 60" - 98" (pull, double egress)

9560IQ-163
RF Window
- Cover for rectangular opening on top of the cover

End Cap

9560IQ-334L
Left Side End Cap
- One end cap for the left side of a metal cover

9560IQ-334R
Right Side End Cap
- One end cap for the right side of a metal cover

End Cap

9560IQ-3179
Rocker Switch Assembly
- This is an exterior Off/HO/Auto three-way rocker switch on the end cap of the metal cover. The switch is concealed from view, and is accessed by pulling the switch open from the end cap

9560IQ-163-1
End Cap Cover Insert
- This cover insert is used to fill the end cap(s) that do not contain the Rocker Switch Assembly Insert

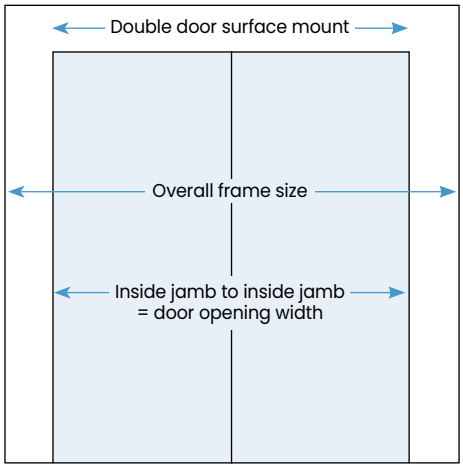
Ordering Information

How to Order a 9560IQ Series Operator		
1	Choose operator	9563IQ
2	Motor gearboxes	Two standard
3	Controllers	Two standard
4	Metal cover	COV2 - Double door
5	Specify door opening width (jamb to jamb)	65" - 98"
6	Select arm	STDTRACKARM2 - Two standard arms - double pull REG2 - Two regular arms - double push LONG2 - Two long arms - double push TLS2 - Two telescoping arms - double push LNGTLS2 - Two telescoping long arms - double push REG/STD - Regular + standard arm - double egress TLS/STD - Telescoping + standard arm - double egress
7	Track	LESS - No track STD - Single standard track STD2 - Two standard tracks
8	Specify handing	RH - Right hand LH - Left hand Non-handed (double push/double pull)
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized
12	Rocker switch assembly	SW - Yes NS - No

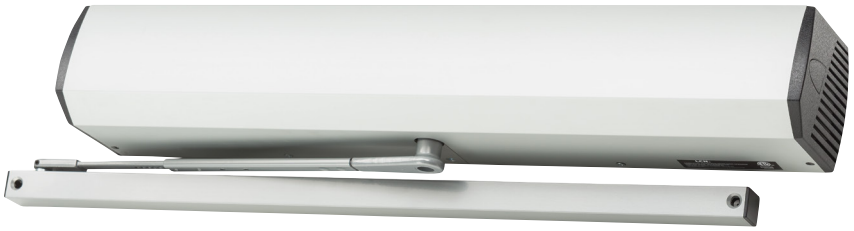
Operator will be shipped with:

- Motor gearbox mounting brackets (2)
- Controller box mounting hooks (4)
- Machine screws
- Baseplate (manufactured at specified door width)
- Cover end cap kit (one left, one right, cover insert(s), fasteners)

Measuring Door Opening Width



9130 Series



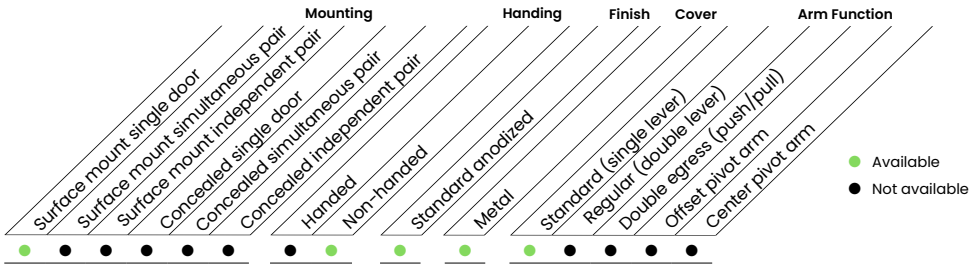
The 9130 Benchmark by LCN is an electrically powered low-energy operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for automatic opening applications that occasionally require manual opening. The Benchmark is a cost-effective solution for retrofitting an activated or manual door.

Features

Certifications	Grade 1 - A156.19, UL325/228, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Handing	Non-handed
Door width	• 30" - 48" • 30" minimum door width for 27" • 36" door width only for full length pull operator
Warranty	2 years

Cover	• Metal 27", standard • Metal 36", optional
Fasteners	Wood and Machine Screws (WMS)
Mounting	Single interior door, surface mount, offset pivot/butt hinge (pull side)
Arms	Standard arm and track
Finishes/colors/ powder coat	• 628 - Aluminum, Anodized • 710 - Dark brown, Anodized

Product Configurations

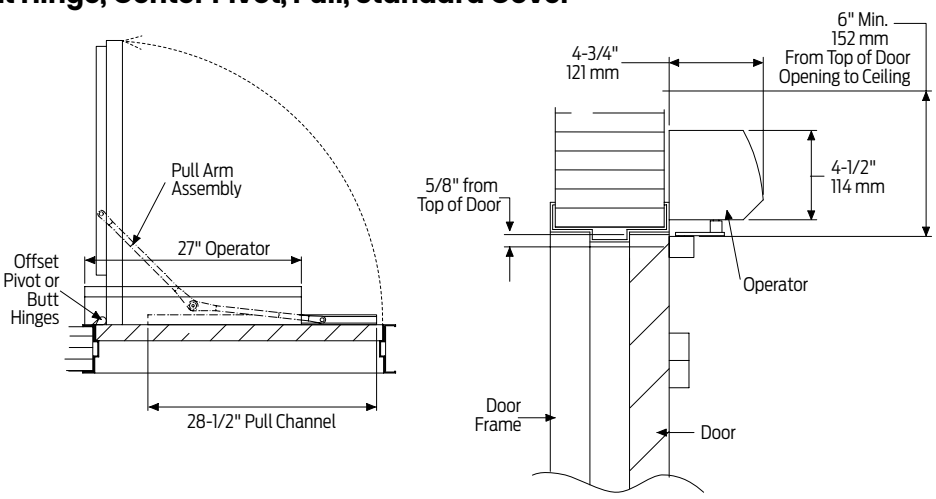


Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

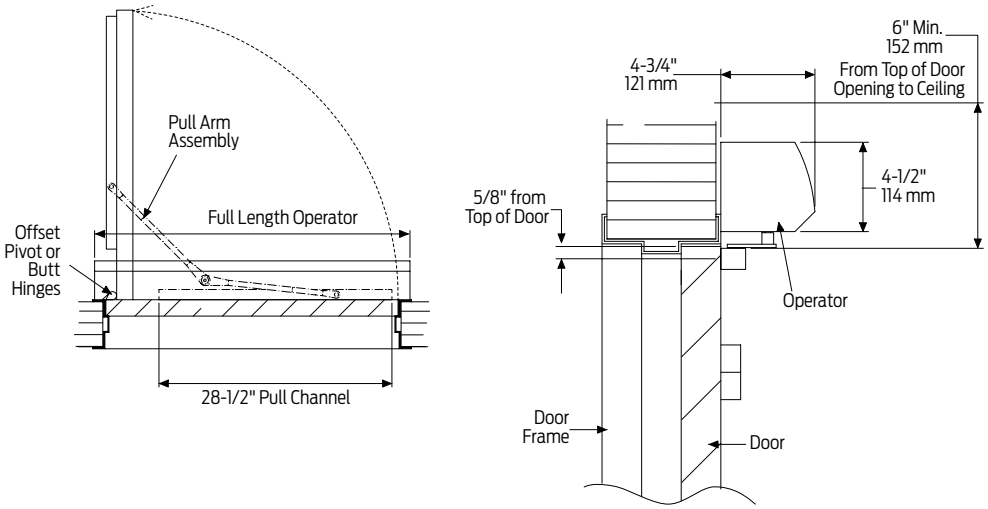
Electromechanical Systems

Top Jamb (Single Door) Mounting Details

Offset/Butt Hinge, Center Pivot, Pull, Standard Cover



Offset/Butt Hinge, Center Pivot, Pull, Full Cover



Butt hinges	Should not exceed 5" (127 mm) in width
Reveal	Should not exceed 1/8" (3 mm)
Top rail	Minimum 2" (51 mm)
Head frame	Minimum 2" (51 mm)
Opening and closing time	• Variable by adjustments to the electronic control module located on the operator assembly • Maximum hold open time adjustable up to approximately 30 seconds
System diagram	See page 52-53 for typical system wiring and electrical data
Maximum opening	Template allows 90 degree power opening and 90 degree manual opening

Notes:

- Push 'N Go permits non-switch activation with a microprocessor control box that ensures reliability and maintains customer settings
- Power boost allows for increased closing force near latch
- On/off switch is included as standard
- All potentiometers are clearly labeled with their functions
- LED lights indicate power to control box and motor gearbox

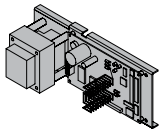
Accessories

Motor Gearbox

9130-3454S
Standard Motor Gearbox (MGB)
- Driving mechanism for operator (switch included)
- For 27" unit

9130-3454
Standard Motor Gearbox (MGB) (W/O Switch)
- Driving mechanism for operator (switch not included)
- For full length 36" unit

Control Box



9130-3462
Standard Controller (120 volts) (CTRL)
- Electronic controlling device with power supply output and power boost feature

Arm

9130-3077T
Standard Arm (STDTRKARM)
- Non-handed
- Track roller not included

9130-3077PLCM
Standard Arm (STDTRKARM)
- Non-handed
- Standard non-handed track

Track

9130-3038
Standard Track (STDTRK)
- Non-handed
- Standard

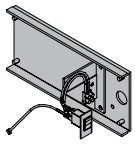
9130-73
Track End Cap
- Black plastic

Installation Accessories

9130-3034
Roller Assembly
- Quiet low friction

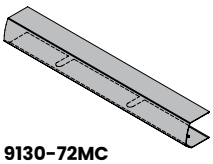
Brackets

9130-3018
Mounting Bracket
- Standard

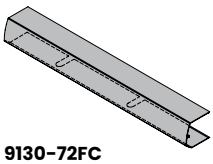


9130-3351-2
Switch Bracket
- 41" cable
- Bracket used to locate switch at end of cover on full length unit

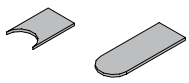
Covers



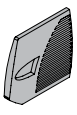
9130-72MC
Standard 27" Metal Cover (MC27)
- Non-handed
- 27"
- Extruded aluminum
- Standard



9130-72FC
Full Metal Cover 36" (FMC)
- Non-handed
- 36"
- Extruded aluminum



9130-163
Cover Insert
- Used to cover operator shaft opening (includes 2 pieces)



9130-163-1
Cover End Cap Insert
- Used to cover switch hole opening

9130-334
Cover End Cap
- Black plastic
- Includes 9130-163-1 cover and cap insert

Electromechanical Systems

Ordering Information

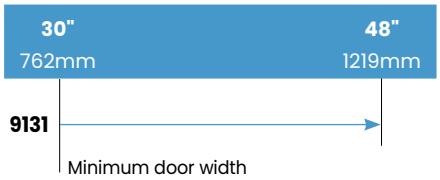
How to Order 9130 Series Operators			
1	Select finish (standard anodized finish)	628 - Aluminum, clear anodized 710 - Dark brown, anodized	
2	Cover	Full metal cover 36" (FMC)	Optional

Operator will be shipped with:

- Standard motor gearbox
- Standard control box
- Mounting bracket
- 27" metal cover
- Standard arm (3077t)
- Standard track w/track roller
- Wood and machine screws

Table of Sizes

Door Width



→ Indicates recommended range of door width for operator.

Note: For all Benchmark series 30" minimum door width for 27" pull operator. 36" door width only for full length pull operator.

9140 Series

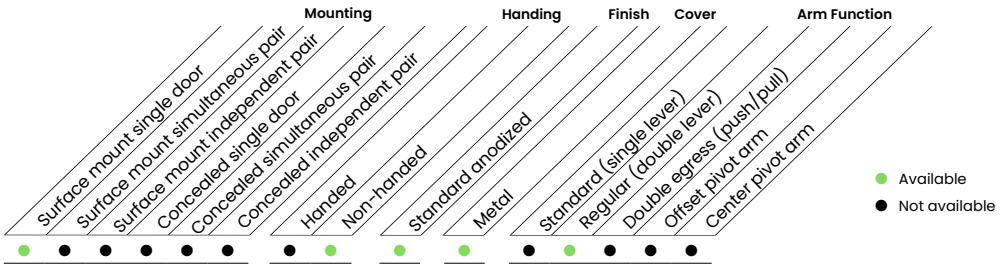
The 9140 Benchmark by LCN is an electrically powered low-energy operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for automatic opening applications that occasionally require manual opening. The Benchmark is a cost-effective solution for retrofitting an activated or manual door.

Features

Certifications	Grade 1 - A156.19, UL325/228, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Handing	Non-handed
Door width	• 26" - 48" • 26" minimum door width for 27" • 36" door width only for full length pull operator
Warranty	2 years

Fasteners	Wood and machine screws (WMS)
Mounting	Single interior door, surface mount, offset pivot/butt hinge (push side)
Arms	Regular arm (REGARM)
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark brown, anodized

Product Configurations

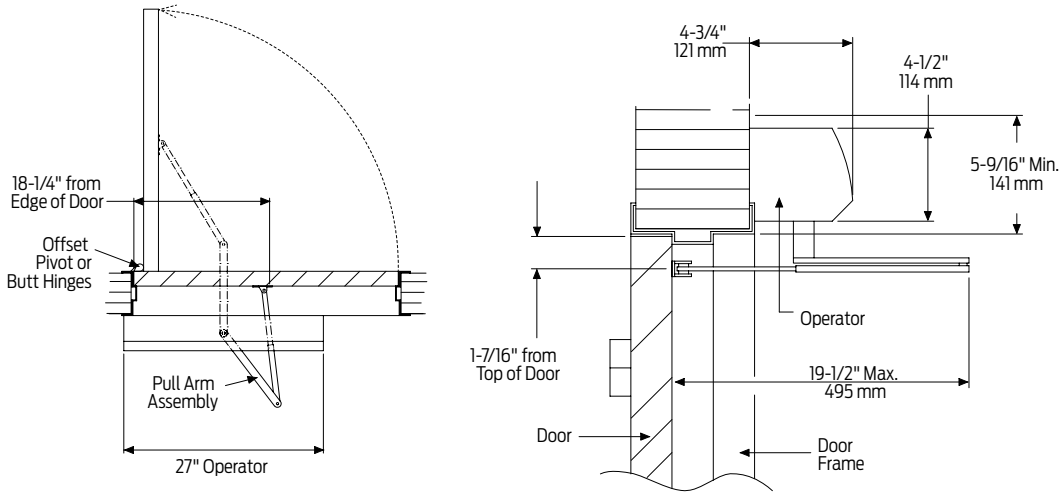


Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

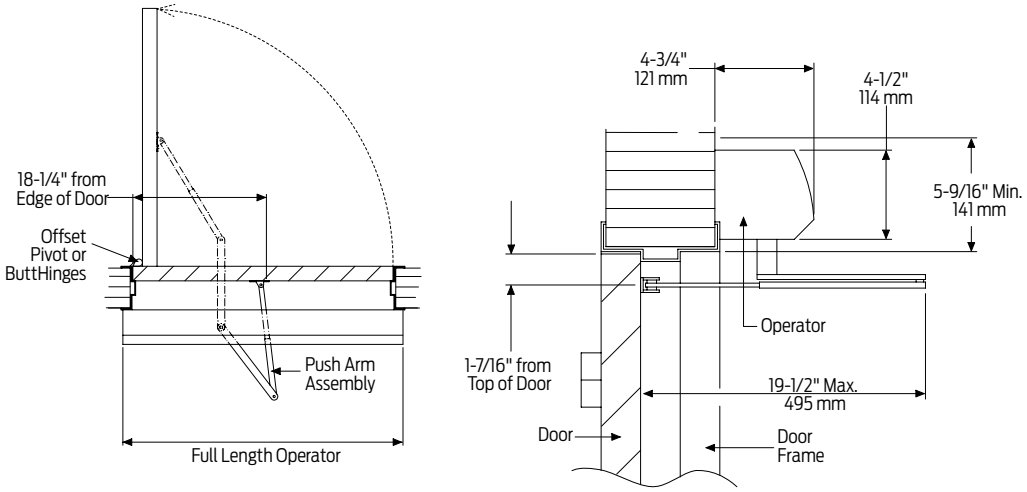
Electromechanical Systems

Top Jamb (Single Door) Mounting Details

Offset/Butt Hinge, Center Pivot, Push, Standard Cover



Offset/Butt Hinge, Center Pivot, Push, Full Cover



Butt hinges	Should not exceed 5" (127 mm) in width
Reveal	Push installations should not exceed 6" (152 mm) for regular arm and 9-3/4" (248 mm) for long arm
Top rail	• Minimum 2" (51 mm) • Flush ceiling installation requires 5-1/4" (133 mm) minimum
Head frame	Minimum 2" (51 mm)
Opening and closing time	• Variable by adjustments to the electronic control module located on the operator assembly • Maximum hold open time adjustable up to approximately 30 seconds
System diagram	See page 52-53 for typical system wiring and electrical data
Maximum opening	Template allows 90 degree power opening and 90 degree manual opening

Notes:

- Push 'N Go permits non-switch activation with a microprocessor control box that ensures reliability and maintains customer settings
- Power boost allows for increased closing force near latch
- On/off switch is included as standard
- All potentiometers are clearly labeled with their functions
- LED lights indicate power to control box and motor gearbox

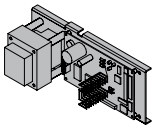
Accessories

Motor Gearbox

9140-3454S
Standard Motor Gearbox (MGB)
- Driving mechanism for operator (switch included)
- For 27" unit

9140-3454
Standard Motor Gearbox (MGB) (W/O Switch)
- Driving mechanism for operator (switch not included)
- For full length unit (36")

Control Box



9140-3462
Standard Controller (120 volts) (CTRL)
- Electronic controlling device with power supply output and power boost feature

Arm

9140-3077
Regular Arm (REGARM)
- Non-handed

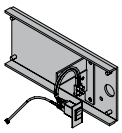
9140-3077L
Long Arm (LONG)
- Non-handed

9140-79
Rod and Shoe
- For use with regular arm

9140-79LR
Long Rod and Shoe
- Used with long arm, for deep reveals

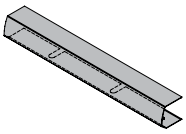
Brackets

9140-3018
Mounting Bracket
- Standard

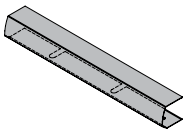


9140-3351-1
Switch Bracket
- 29" cable
- Used with a 36" door
- Used to locate switch at end of cover on full length unit

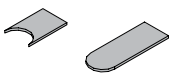
Covers



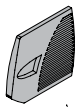
9140-72MC
Standard 27" Metal Cover (MC27)
- Non-handed
- 27"
- Extruded aluminum cover
- Standard



9140-72FC
Full 36" Cover (FC36)
- Non-handed
- 36"
- Extruded aluminum cover



9140-163
Cover Insert
- Used to cover operator shaft opening (includes 2 pieces)



9140-163-1
Cover End Cap Insert
- Used to cover switch hole opening

9140-334
Cover End Cap
- Black plastic
- Includes 9130-163-1 cover and cap insert

Ordering Information

How to Order 9140 Series Operators			
1	Select finish (standard anodized finish)	628 - Aluminum, clear anodized 710 - Dark brown, anodized	
2	Cover	Full metal cover 36" (FMC)	Optional
3	Arm	Long arm (LONG) (reveals 6" to 9 3/4")	Optional

Operator will be shipped with:

- Standard motor gearbox
- Standard control box
- Mounting bracket
- 27" metal cover
- Standard arm (3077t)
- Standard track w/track roller
- Wood and machine screws

Table of Sizes

Door Width

→ Indicates recommended range of door width for operator.

Note: For all Benchmark series. 30" minimum door width for 27" pull operator. 36" door width only for full length pull operator.

9150 Series

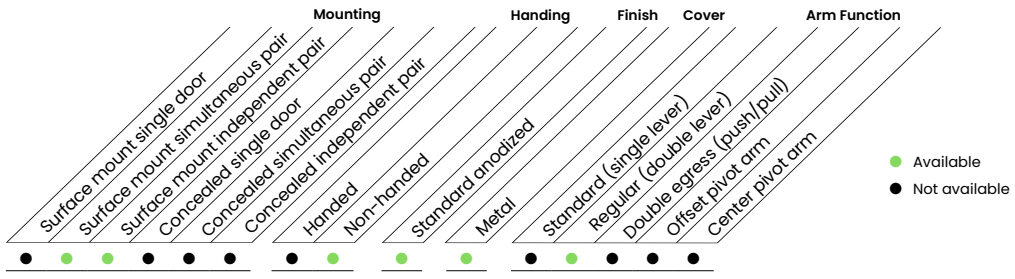
The 9150 Benchmark by LCN is an electrically powered low-energy operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for automatic opening applications that occasionally require manual opening. The Benchmark is a cost-effective solution for retrofitting an activated or manual door.

Features

Certifications	Grade 1 - ANSI A156.19, UL325/228, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act
Handing	Non-handed
Templating	Peel-n-stick templates - 2-3/8" x 6-3/4" mounting hole pattern
Door width	• Minimum door width 52" - 96" • 72" door width only for full length double operator
Warranty	2 years

Cover	Metal cover (MC)
Fasteners	Wood and machine screws (WMS)
Mounting	Pair of doors, surface mount, offset pivot/butt hinges (push side)
Arms	Regular arm (REGARM)
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark brown, anodized

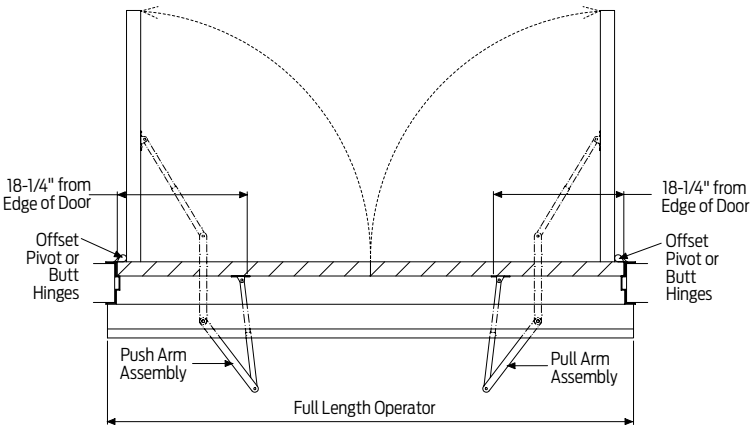
Product Configurations

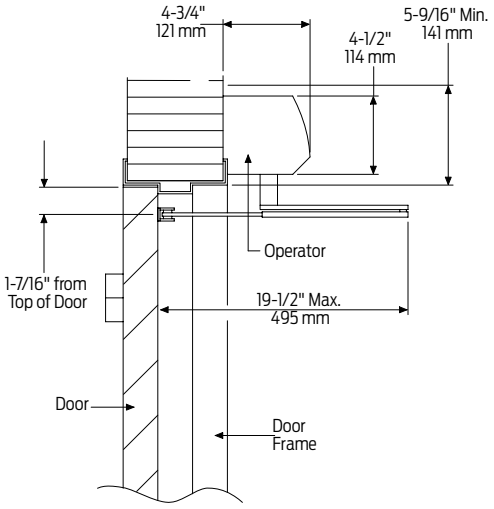


Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Top Jamb, Independent/Simultaneous Pair Mounting Details

Offset Pivot/Butt Hinge, Center Pivot, Push





Butt hinges	Should not exceed 5" (127 mm) in width
Reveal	Push installations should not exceed 6" (152 mm) for regular arm and 9-3/4" (248 mm) for long arm
Top rail	• Minimum 2" (51 mm) • Flush ceiling installation requires 5-1/4" (133 mm) minimum
Head frame	Minimum 2" (51 mm)
Opening and closing time	• Variable by adjustments to the electronic control module located on the operator assembly • Maximum hold open time adjustable up to approximately 32 seconds
System diagram	See page 52-53 for typical system wiring and electrical data
Maximum opening	Template allows 90 degree power opening and 90 degree manual opening

Notes:

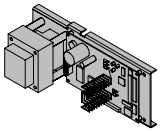
- Determined by wiring
- Push 'N Go permits non-switch activation with a microprocessor control box that ensures reliability and maintains customer settings
- Power boost allows for increased closing force near latch
- All potentiometers clearly labeled with their functions
- LED lights indicate power to control box and motor gearbox

Accessories

Motor Gearbox

9150-3454S
Standard Motor Gearbox (MGB)
- Driving mechanism for operator (switch included)

Control Box



9150-3462
Standard Controller (120 volts) (CTRL)
- Electronic controlling device with power supply output and power boost feature

Arm

9150-3077
Regular Arm (REGARM)
- Non-handed

9150-3077L
Long Arm (LONG)
- Non-handed

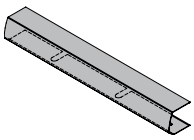
9150-79
Rod and Shoe
- For use with regular arm

9150-79LR
Long Rod and Shoe
- Used with long arm, for deep reveals

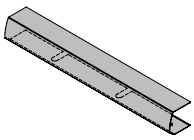
Brackets

9150-3018
Mounting Bracket
- Standard

Covers



9150-72MC
Standard 72" Metal Cover (MC72)
- Non-handed
- 72"
- Extruded aluminum cover
- Standard



9150-163
Cover Insert
- Used to cover operator shaft opening (includes 2 pieces)

9150-163-1
Cover End Cap Insert
- Used to cover switch hole opening

9150-334
Cover End Cap
- Black plastic
- Includes 9130-163-1 cover and cap insert

Electromechanical Systems

Ordering Information

How to Order 9150 Series Operators			
1	Select finish (standard anodized finish)	628 - Aluminum, clear anodized 710 - Dark brown, anodized	
2	Arm	Long arm (LONG) (reveals 6" to 9-3/4")	Optional

Operator will be shipped with:

- Standard motor gearbox (2 ea)
- Standard control box (2 ea)
- Mounting bracket (2 ea)
- 27" metal cover
- Standard arm (2 ea)
- Wood and machine screws

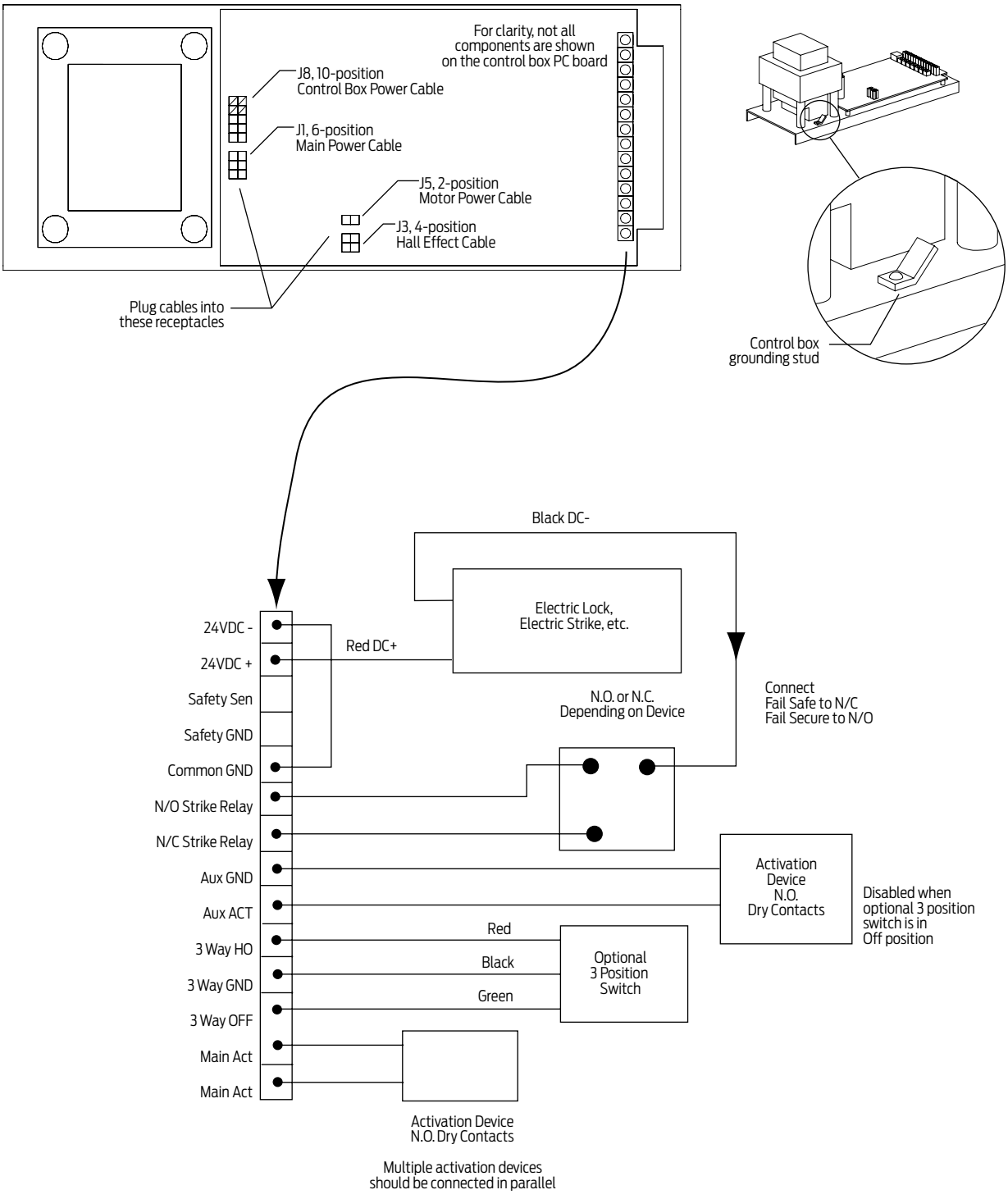
Table of Sizes

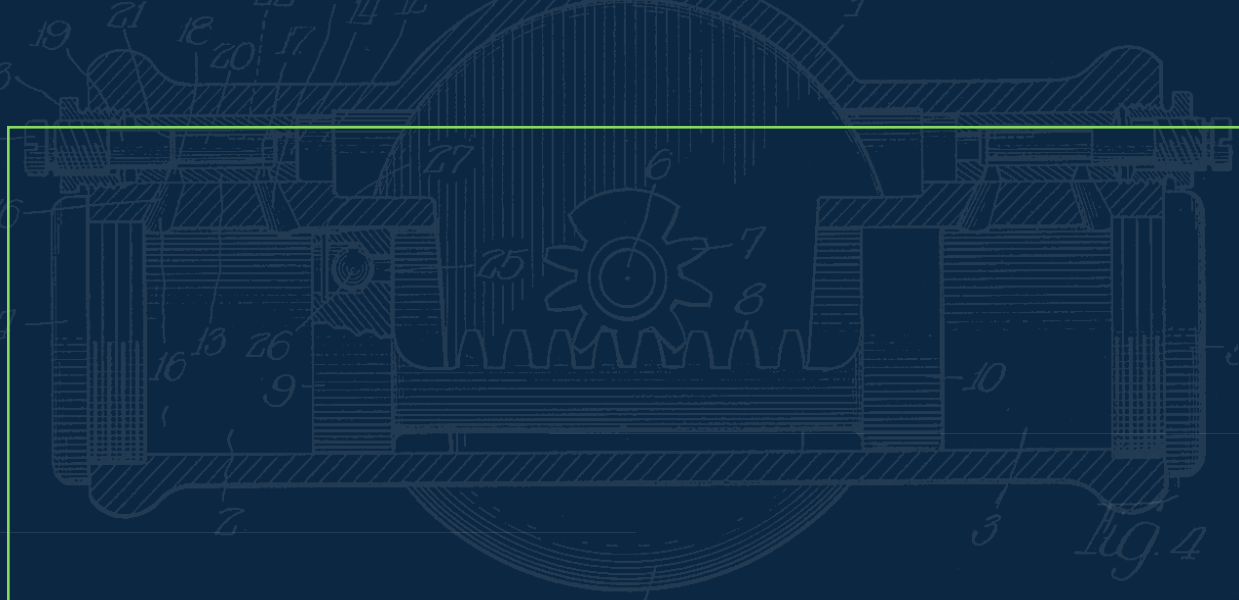
Door Width

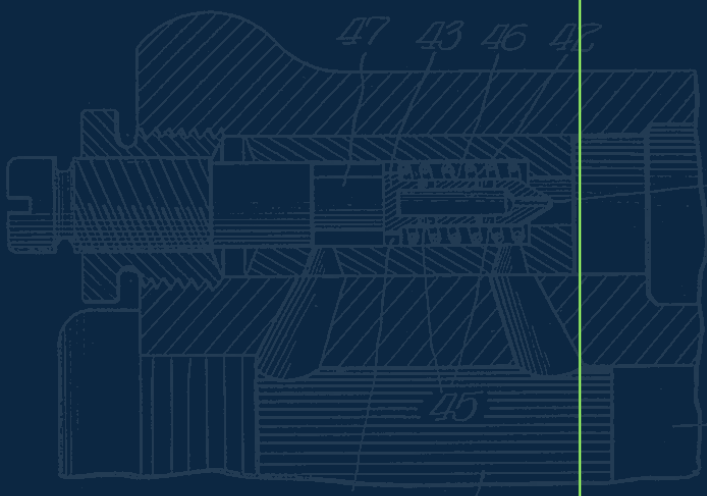
→ Indicates recommended range of door width for operator.

Note: For 9150 Benchmark series, 72" door width only for full length push double door operator.

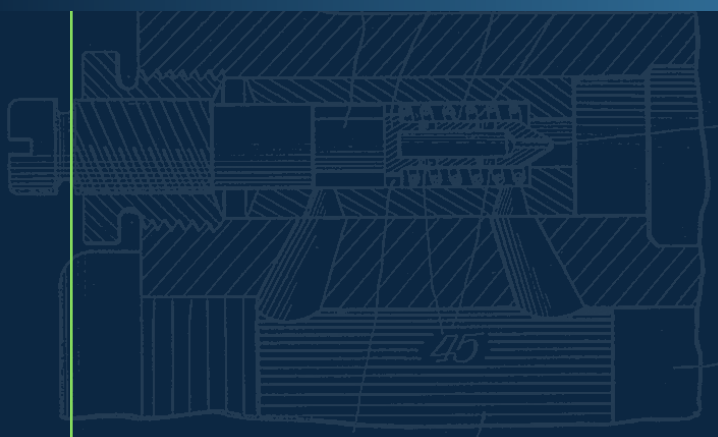
Benchmark Control Box Diagram







ACTUATORS AND ACCESSORIES



Actuators and Accessories

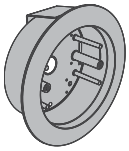
The actuators and accessories on the following pages are to be used with LCN automatic operators. When using actuators supplied by others, such as card readers, consult the factory. The desired function, traffic patterns and physical design of the opening will determine the type of actuators used. Generally, for two-way traffic, an actuator is required on both the interior and exterior side of the door. Each actuator is packaged with a decal to be applied to the controlled door. Scanners operate on 12V or 24V AC/DC and may be powered by the LCN electrohydraulic/ electromechanical operators. The 7900 series control box requires separate power supply for scanners. Actuators provide normally open (N.O.) dry contacts.

4-1/2" Surface and Flush Mounts

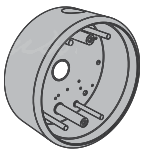
8310-856
Hard Wired Wall Mount, Logo
- Hardwired low voltage actuator with round, stainless steel touch plate in 4-1/2" (114mm) diameter
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in single gang electrical box (by others)
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard

8310-856P
Hard Wired Wall Mount, Blank
- Hard wired low voltage actuator with round, stainless steel touch plate in 4-1/2" (114mm) diameter
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in single gang electrical box (by others)
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard

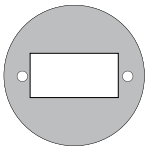
8310-856T
Hard Wired Wall Mount, Logo and Text
- Same as the 8310-856, with the added engraving of "Push to Open"



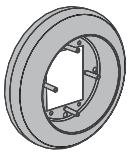
8310-868F
Flush Mount Box
- Rugged Plastic Box, 4-1/2" Round
- Optional accessory - can be used w/ any 4-1/2" round actuator



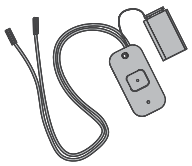
8310-868S
Surface Mount Box
- Rugged plastic box, 4-1/2" round
- Optional accessory - can be used w/any 4-1/2" round actuator



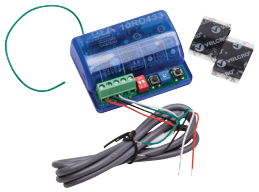
8310-800
Weather/Trim Ring
- Weather/trim ring, 4-1/2" round
- Optional accessory - must be used w/any 4-1/2" round plastic mounting box



8310-874
Escutcheon
- Tapered stainless steel escutcheon covers the gap between the wall and the back of the wall plate actuators when mounted in electrical boxes (by others) to minimize cart damage or vandalism
- Optional accessory - can be used w/any 4-1/2" round actuator
- Not to be used with wireless function

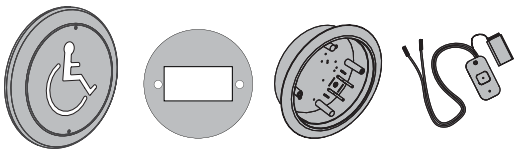


8310-844
Transmitter, Wireless, 1 Channel, Wall Mount, 9V
- Transmitter, wireless, 1 channel, 9V battery included
- Use to convert standard wall mount actuator to wireless
- Requires 8310-865 Receiver

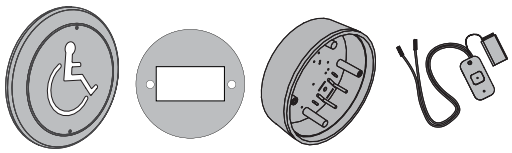


8310-865
Wireless Receiver
- Receiver, wireless, 1 channel, w/ sequencing feature
- Used in conjunction w/ wireless actuators and transmitter(s) for push plate applications

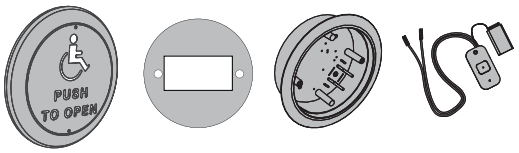
4-1/2" Surface and Flush Mounts



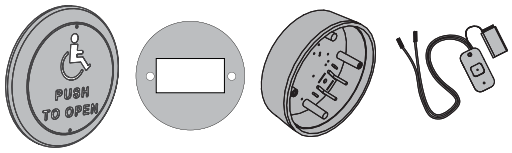
8310-3856WF
Wireless Actuator, Wall Mount and Flush, Logo, 4-1/2 Inch Round
- Actuator, 4-1/2" round, logo, wireless
- Includes 8310-856 actuator, 8310-844 transmitter, 8310-868F flush box, 8310-800 weather/trim ring
- Requires 8310-865 receiver (not part of kit)



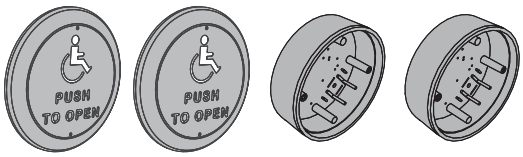
8310-3856WS
Wireless Actuator, Wall Mount and Surface, Logo, 4-1/2 Inch Round
- Actuator, 4-1/2" round, logo, wireless
- Includes 8310-856 actuator, 8310-844 transmitter, 8310-868S surface box, 8310-800 weather/trim ring
- Requires 8310-865 receiver (not part of kit)



8310-3856TWF
Wireless Actuator, Wall Mount and Flush, Logo and Text, 4-1/2 Inch Round
- Actuator, 4-1/2" round, logo, text, wireless,
- Includes 8310-856T actuator, 8310-844 transmitter, 8310-868F flush box, 8310-800 weather/trim ring
- Requires 8310-865 receiver (not part of kit)

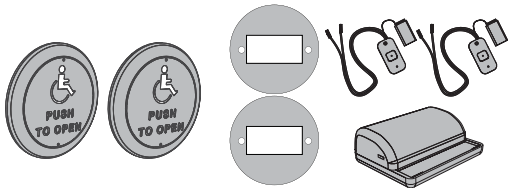


8310-3856TWS
Wireless Actuator, Wall Mount and Surface, Logo and Text, 4-1/2 Inch Round
- Actuator, 4-1/2" round, logo, text, wireless
- Includes 8310-856T actuator, 8310-844 transmitter, 8310-868S surface box, 8310-800 weather/trim ring
- Requires 8310-865 receiver (not part of kit)



8310-3860T
Hard Wired Actuator Package, Logo and Text, 4-1/2 Inch Round
- Actuator package, 4-1/2" round
- Includes 8310-856T (2) wall mount actuator, 8310-868S surface mount box

Note: Weather/Trim Rings are sold separately.



8310-3860TW
Wireless Actuator Package, Logo and Text, 4-1/2 Inch Round
- Includes 8310-856T (2) wall mount actuator, 8310-868S (2) surface mount box, 8310-800 (2) weather/trim ring, 8310-844 (2) transmitter, 8310-865 receiver

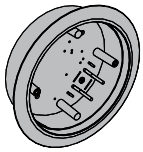
6" Surface and Flush Mounts

8310-852
Hard Wired Wall Mount Actuator, Logo, 6 Inch Round
- Hardwired low voltage actuator with round, stainless steel touch plate in 6" (152mm) diameter
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in single gang electrical box (by others) or double gang box (4" x 4" by others)
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard.

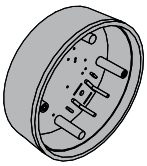
8310-852WP
Wireless Wall Mount Actuator Package, Logo, 6 Inch Round
- Wireless, low profile, low voltage actuator with round, stainless steel touch plate in 6" (152mm) diameter
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Surface mount box includes integral transmitter w/battery and actuator switch
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard
- Requires 8310-865 Receiver

8310-852T
Hard Wired Wall Mount Actuator, Logo and Text, 6 Inch Round
- Same as the 8310-852, with the added engraving of "Push to Open"

8310-852TWP
Wireless Wall Mount Actuator Package, Logo and Text, 6 Inch Round
- Same as the 8310-852WP, with the added engraving of "Push to Open"

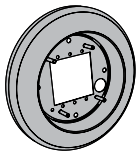


8310-869F
Flush Mount Box
- Rugged plastic box, 6" round
- Optional accessory - can be used w/any 6" round actuator

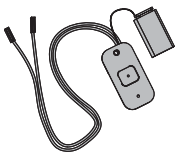


8310-869S
Surface Mount Box
- Rugged plastic box, 6" round
- Optional accessory - can be used w/any 6" round actuator

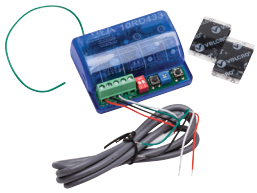
8310-802
Weather/Trim Ring
- Plastic weather/trim ring, 6" round
- Optional accessory - can be used w/ any 6" round plastic mounting box



8310-876
Escutcheon
- Tapered stainless steel escutcheon covers the gap between the wall and the back of the wall plate actuators when mounted in electrical boxes (by others) to minimize cart damage or vandalism
- Optional accessory - Can be used w/ any 6" round actuator
- Not to be used with wireless function



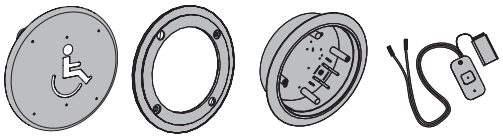
8310-844
Transmitter, wireless, 1 channel, Wall Mount, 9V
- Transmitter, Wireless, 1 Channel, 9V battery included
- Use to convert standard wall mount actuator to wireless
- Requires 8310-865 receiver



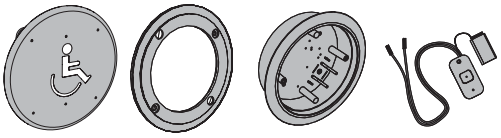
8310-865
Wireless Receiver
- Receiver, wireless, 1 channel, w/ sequencing feature
- Used in conjunction w/ wireless actuators and transmitter(s) for push plate applications

Actuators and Accessories

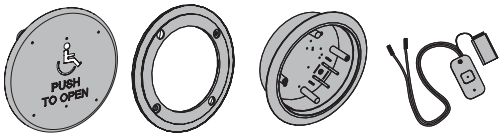
6" Surface and Flush Mounts



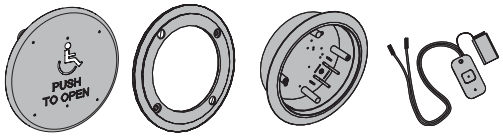
8310-3852WF
Wireless Actuator, Wall Mount and Flush, Logo, 6 Inch Round
- 6" round, logo, wireless
- Includes 8310-852 actuator, 8310-844 transmitter, 8310-869F flush box, 8310-802 weather/trim ring
- Requires 8310-865 receiver (not part of kit)



8310-3852WS
Wireless Actuator, Wall Mount and Surface, Logo, 6 Inch Round
- 6" round, logo, wireless,
- Includes 8310-852 actuator, 8310-844 transmitter, 8310-869S surface box, 8310-802 weather/trim ring
- Requires 8310-865 receiver (not part of kit)



8310-3852TWF
Wireless Actuator, Wall Mount and Flush, Logo and Text, 6 Inch Round
- 6" round, logo, text, wireless,
- Includes 8310-852T actuator, 8310-844 transmitter, 8310-869F flush box, 8310-802 weather/trim ring
- Requires 8310-865 receiver (not part of kit)



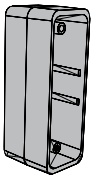
8310-3852TWS
Wireless Actuator, Wall Mount and Surface, Logo and Text, 6 Inch Round
- 6" round, logo, text, wireless
- Includes 8310-852T actuator, 8310-844 transmitter, 8310-869S surface box, 8310-802 weather/trim ring
- Requires 8310-865 receiver (not part of kit)

1-1/22" x 4-3/4" Surface and Flush Mounts

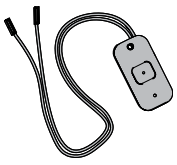
8310-818
Hard Wired Jamb Mount Actuator, Logo, 1-1/2" x 4-3/4"
- Hardwired low voltage actuator with rectangular stainless steel touch plate
- 1-1/2" (38mm) wide by 4-3/4" (121mm)
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Designed to mount in a frame cutout (template provided) projecting approximately 1/2" (12mm) from the frame
- Optional mounting in surface or flush mount box (sold separately)
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard

8310-818T
Hard Wired Jamb Mount Actuator, Logo and Text, 1-1/2" x 4-3/4"
- Same as the 8310-818, with the added engraving of "Push to Open"

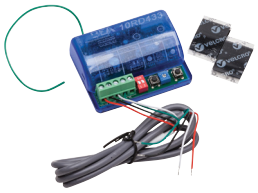
8310-819F
Box Only, Jamb Mount and Flush Mount, 1-1/2" x 4-3/4"
- Rugged plastic jamb box
- 1-1/2" x 4-3/4" rectangle, optional accessory - can be used w/any 1-1/2" x 4-3/4" jamb mount actuator



8310-819S
Box Only, Jamb Mount and Surface Mount, 1-1/2" x -3/4"
- Rugged plastic jamb box
- 1-1/2" x 4-3/4", rectangle
- Optional accessory - can be used w/any 1-1/2" x 4-3/4" jamb mount plastic mounting box



8310-844J
Transmitter, Wireless, 1 Channel, Jamb Mount, 3V
- Wireless, 1 channel, jamb mount, 3v battery included
- Used to convert standard jamb mount actuator to wireless when used w/819F or 819S boxes; requires 8310-865 Receiver (interior use only)

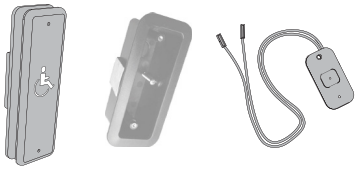


8310-865
Wireless Receiver
- Receiver, wireless, 1 channel, w/sequencing feature
- Used in conjunction w/ Wireless Actuators and Transmitter(s) for push plate applications

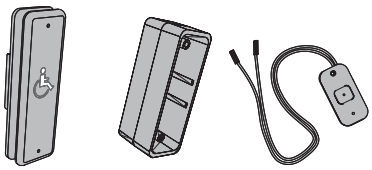
Note: LCN recommends for all jamb mount actuators be used on an interior installation only.

Actuators and Accessories

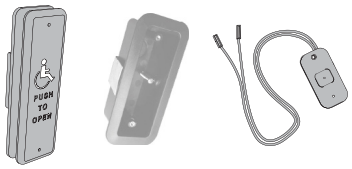
1-1/2" x 4-3/4" Surface and Flush Mounts



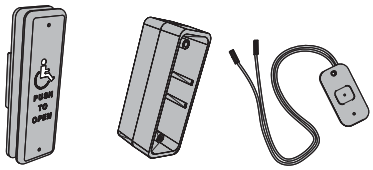
8310-3818WF
Wireless Actuator, Jamb Mount and Flush, Logo, 1-1/2" x 4-3/4"
- Actuator, 1-1/2" x 4-3/4" rectangle, logo, wireless
- Includes 8310-818 actuator, 8310-844J transmitter, 8310-819F flush box
- Requires 8310-865 receiver (not part of kit)



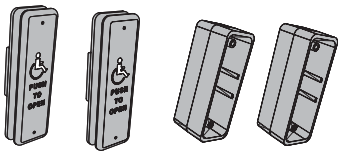
8310-3818WS
Wireless Actuator, Jamb Mount and Surface, Logo, 1-1/2" x 4-3/4"
- Actuator, 1-1/2" x 4-3/4" rectangle, logo, wireless
- Includes 8310-818 actuator, 8310-844J transmitter, 8310-819S surface box
- Requires 8310-865 receiver (not part of kit)



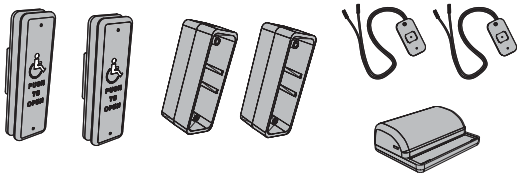
8310-3818TWF
Wireless Actuator, Jamb Mount and Flush, Logo and Text, 1-1/2" x 4-3/4"
- Actuator, 1-1/2" x 4-3/4" rectangle, logo, wireless
- Includes 8310- 818T actuator, 8310-844J transmitter, 8310-819F flush box
- Requires 8310-865 receiver (not part of kit)



8310-3818WS
Wireless Actuator, Jamb Mount and Surface, Logo, 1-1/2" x 4-3/4"
- Actuator, 1-1/2" x 4-3/4" rectangle, logo, wireless
- Includes 8310-818 actuator, 8310-844J transmitter, 8310-819S surface box
- Requires 8310-865 receiver (not part of kit)



8310-3822T
Hard Wired Actuator Package, Logo and Text, 1-1/2" x 4-3/4"
- Actuator package, 1-1/2" x 4-3/4", jamb mount
- Includes 8310-818T (2) jamb mount actuator, 8310-819S (2)
- Surface mount box



8310-3822TW
Wireless Actuator Package, Logo and Text, 1-1/2" x 4-3/4"
- Actuator package, 1-1/2" x 4-3/4", wireless, jamb mount
- Includes 8310-818T (2) jamb mount actuator, 8310-819S (2)
- Surface mount box, 8310-844J (2) jamb mount transmitter, 8310-865 receiver

Note: LCN recommends for all jamb mount actuators be used on an interior installation only.

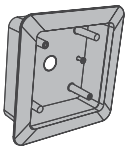
4-3/4" Square Surface and Flush Mounts

8310-853
Hard Wired Wall Mount, Logo, 4-3/4" x 4-3/4"
- Hardwired low voltage actuator with stainless steel touch plate in 4-3/4" (121mm) square
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in single gang electrical box (by others) or double gang box (4" x 4" by others) or on an 8310-866 bollard post
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard

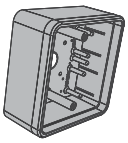
8310-853WP
Wireless Wall Mount Actuator Package, Logo, 4-3/4" x 4-3/4"
- Wireless, low profile, low voltage actuator with square, stainless steel touch plate in 4-3/4" (121mm) square
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Surface mount box includes integral transmitter w/battery and actuator switch
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard
- Requires 8310-865 Receiver

8310-853T
Hard Wired Wall Mount, Logo and Text, 4-3/4" x 4-3/4"
- Same as the 8310-853, with the added engraving of "Push to Open"

8310-853TWP
Wireless Wall Mount Actuator Package, Logo and Text, 4-3/4" x 4-3/4"
- Same as the 8310-853WP, with the added engraving of "Push to Open"

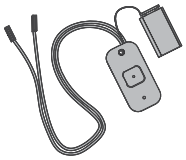


8310-867F
Flush Mounted Actuator
- Rugged plastic box, 4-3/4" square
- Optional accessory - can be used w/any 4-3/4" square actuator

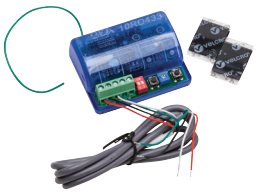


8310-867S
Surface Mount Box
- Rugged plastic box, 4-3/4" square
- Optional accessory - can be used w/ any 4-3/4" square actuator

8310-801
Weather/Trim Ring
- Plastic weather ring, 4-3/4" square
- Optional accessory - can be used w/ any 4-3/4" square plastic mounting box

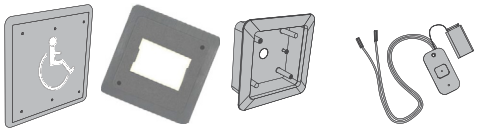


8310-844
Transmitter, Wireless, 1 Channel, Wall Mount, 9V
- Transmitter, wireless, 1 channel, 9V battery included
- Use to convert standard wall mount actuator to wireless
- Requires 8310-865 receiver

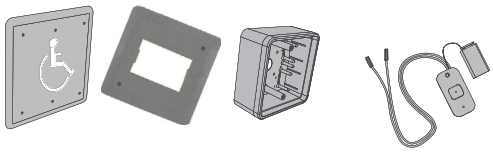


8310-865
Wireless Receiver
- Receiver, wireless, 1 channel, w/ sequencing feature
- Used in conjunction w/ wireless actuators and transmitter(s) for push plate applications

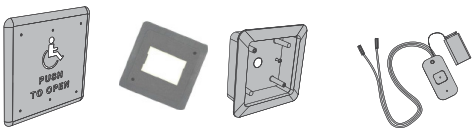
4-3/4" Square Surface and Flush Mounts



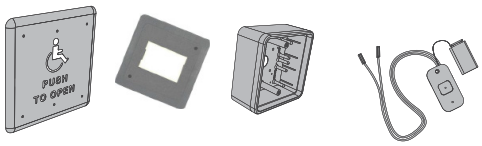
8310-3853WF
Wireless Actuator, Wall Mount and Flush, Logo, 4-3/4" x 4-3/4"
- Actuator, 4-3/4" square, logo, wireless
- Includes 8310-853, 8310-844 transmitter, 8310-867F Flush Box, 8310-801 weather/trim ring
- Requires 8310-865 receiver (not part of kit)



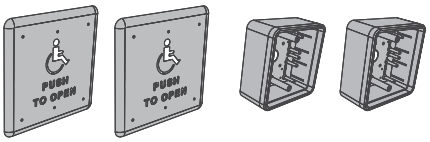
8310-3853WS
Wireless Actuator, Wall Mount and Surface, Logo, 4-3/4" x 4-3/4"
- Actuator, 4-3/4" square, logo, wireless
- Includes 8310-853, 8310-844 transmitter, 8310-867S surface box, 8310-801 weather/trim ring
- Requires 8310-865 receiver (not part of kit)



8310-3853TWF
Hard Wired Actuator, Wall Mount and Flush, Logo and Text, 4-3/4" x 4-3/4"
- Actuator, 4-3/4" square, logo, text, wireless
- Includes 8310-853T, 8310-844 transmitter, 8310-867F flush box, 8310-801 weather/trim ring
- Requires 8310-865 receiver (not part of kit)

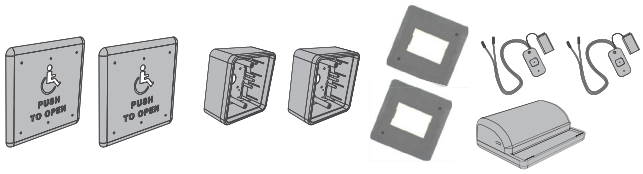


8310-3853TWS
Hard Wired Actuator, Wall Mount and Surface, Logo and Text, 4-3/4" x 4-3/4"
- Actuator, 4-3/4" square, logo, text, wireless
- Includes 8310-853T, 8310-844 transmitter, 8310-867S surface box, 8310-801 weather/trim ring
- Requires 8310-865 receiver (not part of kit)



8310-3857T
Hard Wired Actuator Package, Logo and Text, 4-3/4" x 4-3/4"
- Actuator package, 4-3/4" square
- Includes 8310-853T (2) wall mount actuator, 8310-867S (2)
- Surface mount box

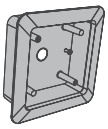
Note: Weather/trim rings are sold separately



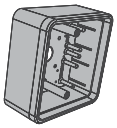
8310-3857TW
Wireless Actuator Package, Logo and Text, 4-3/4" x 4-3/4"
- Actuator package, 4-3/4" square
- Includes 8310-853T (2) wall mount actuator, 8310-867S (2) surface mount box, 8310-801 (2) weather/trim ring, 8310-844 (2) transmitter, 8310-865 receiver

4-3/4" Dual Square Surface and Flush Mounts

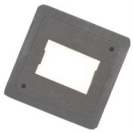
8310-855
Hard Wired Wall Mount Actuator, Logo, Double Vestibule
- Hardwired low voltage actuator with dual rectangle, stainless steel touch plate in 4-3/4" (121mm) square
- Engraved blue filled handicap symbol w/text, conforms to most accessibility codes
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in double gang box (4" x 4" by others) or on an 8310-866 bollard post
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard



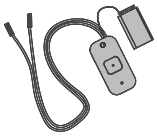
8310-867F
Flush Mounted Actuator
- Rugged plastic box, 4-3/4" square
- Optional accessory - can be used w/ any 4-3/4" square actuator



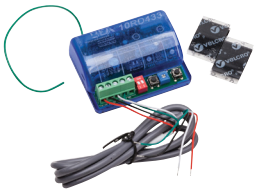
8310-867S
Surface Mount Box
- Rugged plastic box, 4-3/4" square
- Optional accessory - can be used w/ any 4-3/4" square actuator



8310-801
Weather/Trim Ring
- Plastic weather ring, 4-3/4" square
- Optional accessory - can be used w/ any 4-3/4" square plastic mounting box

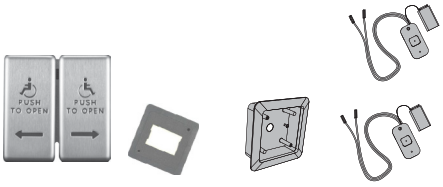


8310-844
Transmitter, Wireless, 1 Channel, Wall Mount, 9V
- Transmitter, wireless, 1 channel, 9V battery included
- Use to convert standard wall mount actuator to wireless
- Requires 8310-865 Receiver

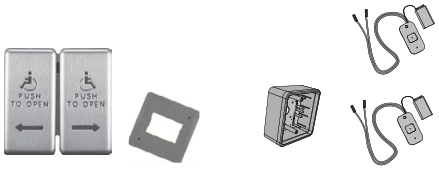


8310-865
Wireless Receiver
- Receiver, wireless, 1 channel, w/ sequencing feature
- Used in conjunction w/ wireless actuators and transmitter(s) for push plate applications

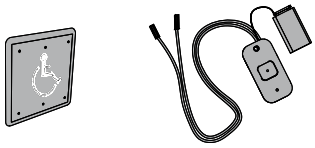
4-3/4" Dual Square Surface and Flush Mounts



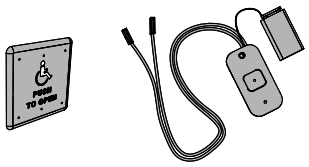
8310-3855WF
Wireless Actuator, Wall Mount and Flush, Dual Vestibule, Logo, 4-3/4" x 4-3/4"
- Actuator, 4-3/4" square, logo, text, dual vestibule, wireless
- Includes 8310-855 actuator, 8310-844 transmitter (2), 8310-867F flush box, 8310-801 weather/trim ring
- Requires 8310-865 receiver (2) (not part of kit)



8310-3855WS
Wireless Actuator, Wall Mount and Surface, Dual Vestibule, Logo, 4-3/4" x 4-3/4"
- Actuator, 4-3/4" square, logo, text, dual vestibule, wireless
- Includes 8310-855 actuator, 8310-844 transmitter (2), 8310-867S surface box, 8310-801 weather/trim ring
- Requires 8310-865 receiver (2) (not part of kit)



8310-3853WB
Wireless Bollard Actuator, Logo, 4-3/4" Square
- 4-3/4" square w/ logo, wireless actuator
- Use w/ 8310-866 Bollard (not included) - includes 8310- 853 actuator, 8310-844 transmitter
- Requires 8310-865 receiver (not part of kit)



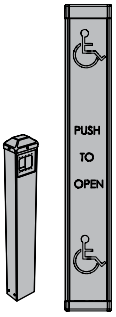
8310-3853TWB
Wireless Bollard Actuator, Logo and Text, 4-3/4" Square
- 4-3/4" square w/ logo, wireless actuator
- Use w/8310-866 bollard (not included) - includes 8310-853T actuator, 8310-844 transmitter
- Requires 8310-865 receiver (not part of kit)

36" x 6" Full Length Actuators

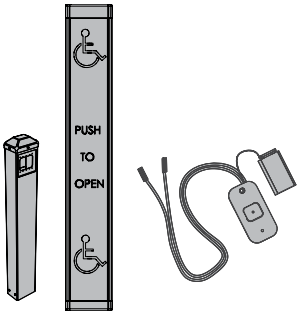
8310-836T
Hard Wired Full Length Actuator, Logo and Text, 36" x 6"
- Hardwired low voltage actuator with stainless steel touch plate with 36" x 6" activation surface
- Blue handicap symbol conforms with most accessibility codes
- Added "PUSH TO OPEN" lettering for enhanced identification
- Designed to meet California building codes and increase accessibility for wheelchair bound entrants
- Can easily be mounted to any flat surface or a bollard post

8310-836TW
Wireless Full Length Actuator, Logo and Text, 36" x 6"
- Same as the 8310-836T with a built in wireless transmitter and 3v battery
- Use in conjunction with 8310-865 receiver (not included)

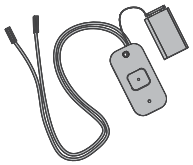
8310-866FLA
FLA Bollard Post
- A powder coated steel 42" x 4" x 6": bollard post, mounting base pre prepped for the 8310-836T
- Includes 8310-866CAP, 2 mounting screws and spacer for installation



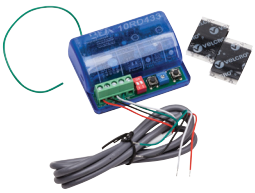
8310-3836T
Full Length Actuator/Bollard Package
- 36" x 6" actuator with 8310- 866FLA bollard for wired applications



8310-3836TW
Wireless Full Length Actuator/Bollard Package
- 36" x 6" actuator with 8310-866FLA bollard and 8310-844 wireless transmitter
- Transmitter requires 8310-865 receiver (not included)



8310-844
Transmitter, Wireless, 1 Channel, Wall Mount, 9V
- Transmitter, wireless, 1 channel, 9V battery included
- Use to convert standard wall mount actuator to wireless
- Requires 8310-865 receiver



8310-865
Wireless Receiver
- Receiver, wireless, 1 channel, w/sequencing feature
- Used in conjunction w/ wireless actuators and transmitter(s) for push plate applications

Actuators and Accessories

Touchless Actuators

8310-810D
Touchless Actuator, Double Gang
- Stainless steel
- 2 - 24" range
- Heavy duty applications

8310-810DA
Touchless Actuator, Double Gang
- Stainless steel
- 2 - 24" range
- Heavy duty applications

8310-810R
Touchless Actuator, Round
- Stainless steel
- 2 - 24" range
- Heavy duty applications

8310-810RA
Touchless Actuator, Round
- Stainless steel
- 2 - 24" range
- Heavy duty applications

8310-810S
Touchless Actuator, Single Gang
- Stainless steel
- 2 - 24" range
- Heavy duty applications

8310-810SA
Touchless Actuator, Single Gang
- Stainless steel
- 2 - 24" range
- Heavy duty applications

8310-813
Touchless Actuator, Single Gang and Double Gang
- Black: ASA, nylon, PC
- 4-24" Range
- Medium duty applications

8310-813J
Touchless Actuator, Jamb
- Black: ASA, nylon, PC
- 4-24" range
- Medium duty applications
- Requires 8310-819SJ mounting box to surface mount

8310-813JWH
Touchless Actuator, Jamb
- White: ASA, nylon, PC
- 4-24" range
- Medium duty applications
- Surface mounts with the 8310-819SJ mounting box only

8310-813R
Touchless Actuator, Round
- Black: ASA, nylon, PC
- 4-24" range
- Medium duty applications

8310-813RWH
Touchless Actuator, Round
- White: ASA, nylon, PC
- 4 - 24" range
- Medium duty applications

8310-813WH
Touchless Actuator, Single Gang and Double Gang
- White: ASA, nylon, PC
- 4-24" range
- Medium duty applications

8310-815
Touchless Actuator, Square
- External mounting box not required
- 4 - 24" range
- Harsh condition applications

Touchless Actuators

8310-2210
Touchless Actuator, Battery Kit
- 1 - 12" range
- Battery powered
- Kit includes transmitters and receiver
- Kit includes transmitters and receiver and is not compatible with other wireless hardware

8310-2310
Touchless Actuator, Single Gang Battery
- 1 - 12" range
- Battery powered
- Mounts with a standard single gang box by others that must be at least 2-3/4" deep

8310-2320
Touchless Actuator Double Gang Battery
- 1 - 12" range
- Battery powered
- Mounts with a standard single or double gang box by others that must be at least 2-3/4" deep

8310-2330
Touchless Actuator, Jamb Battery
- 1 - 12" range
- Battery powered
- Mounts without a mounting box

8310-2340
Touchless Actuator, Round Battery
- 1 - 12" range
- Battery powered
- Mounts with a standard single gang box by others that must be at least 2-3/4" deep

Touchless Wireless Transmitters and Receivers

8310-880
Wireless Receiver, 900 mHz
- Receiver, wireless
- Program instant or delayed actuation
- Used in conjunction with touchless actuators for wireless signal transmission

8310-881
900 mHz Transmitter, 1 Button
- Handheld transmitter
- 3V battery powered
- Line of sight ~500 ft

8310-882
900 mHz Transmitter, 2 Buttons
- Handheld transmitter
- 3V battery powered
- Line of sight ~500 ft

8310-883
900 mHz Transmitter, 3 Buttons
- Handheld transmitter
- 3V battery powered
- Line of sight ~500 ft

8310-884
900 mHz Transmitter, 4 Buttons
- Handheld transmitter
- 3V battery powered
- Line of sight ~500 ft

8310-885
Retrofit 900 mHz Transmitter
- Push plate conversion to touchless application
- Line of sight ~500 ft

8310-886
900 mHz Hardwired Transmitter
- 900 mHz transmitter for hardwired applications

Restroom Actuator Kits

The restroom actuator kits are intended for single occupancy and family restrooms. Dual color illuminated LEDs provide notification of whether the restroom is occupied or vacant. Opening/closing and locking of the door is accomplished with a push button or touchless actuator system. A logic module controls the electric strike, door operator, switches, and illumination.

8310-2410
Touchless Restroom Kit

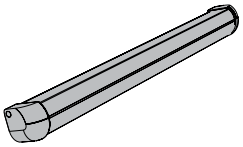
- Advanced logic relay, 2 amp power supply, control box and transformer
- Wired touchless switch, "Wave to Lock", light ring, stainless faceplate
- Wired touchless switch, "Wave to Open", light ring, double gang stainless faceplate
- Wired touchless switch, "Wave to Open", double gang stainless faceplate
- Electric strike, Grade 2 ANSI, 3 faceplates
- Door position switch, surface

8310-2420
Push Plate Restroom Kit

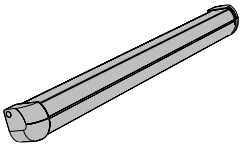
- Advanced logic relay, 2 amp power supply, control box and transformer
- Combo push actuator, 2x4", "Push to Open", and "Push to Lock", illuminated, flush mount
- Push plate actuator, 4-1/2", "Push to Open", illuminated
- Electric strike, Grade 2 ANSI, 3 faceplates
- Door position switch, surface

Sensors

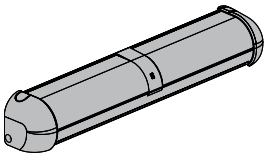
The sensors and accessories on the following pages are to be used only with LCN automatic operators. When using sensors supplied by others, consult the factory. The desired function, traffic patterns and physical design of the opening will determine the type of sensors used.



8310-804-1
(1) Door Mount Safety Sensor for Leading Edge
- Contains one active sensor module to detect obstruction(s) on leading edge of door
- Use with Senior Swing will require 8310-847 Door Mount Harness

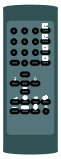


8310-804-2
(1) Door Mount Safety Sensor for Full Face
- Contains two active sensor modules to detect obstruction(s) on full face of door
- Use with Senior Swing will require 8310-847 Door Mount Harness



8310-877
(1) Header Mount Safety Sensor
- Safety sensor, 'diffused infrared' technology
- Used to detect obstructions during door open and door closed position
- Nine selectable patterns
- 8310-859 handheld remote control required to program 8310-877 sensor from a distance
- Includes 8310-846 Harness

8310-877S
Header Mount Safety Sensor Spacer
- Required when 8310-804-1 or 8310-804-2 door mount safety sensor is mounted on the pull side with a Senior Swing
- Spacers are used w/8310-877 header mount safety sensor



8310-859
Handheld Remote Control
- Used to program 8310-877 header mount safety sensor or 8310-854 header mount motion sensor

8310-846
Header Mount Harness
- Comes with 8310-877 header mount safety sensor

8310-847
Door Mount Harness
- Used with 8310-804-1 or 8310-804-2 Door Mount Safety Sensor, must order separately.
- Used with Senior Swing only, must order separately

8310-878
Single Door Safety Package - (2) Door Mounted Safety Sensors with ANSI .10 Monitoring
- Contains two door-mounted sensors and a control hub that perform the swing door safety functions and provides the sensor monitoring required by A156.10
- All wire harnesses and mounting hardware included

8310-879
Double Door Safety Package - (4) Door Mounted Safety Sensors with ANSI .10 Monitoring
- Contains four door-mounted sensors and a control hub that perform the swing door safety functions and provides the sensor monitoring required by A156.10
- All wire harnesses and mounting hardware included

Actuators and Accessories

Packages

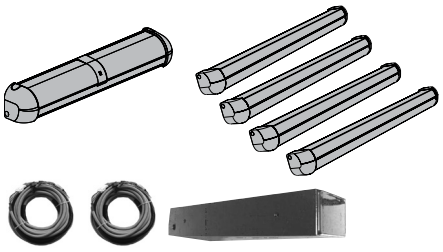
8310-3881
Single Door Package - (1) Activation and (2) Safety Sensors with ANSI .10 Monitoring
- Activation/safety sensor package, single door
- Includes 8310-854 (2) header mount activation sensor, 8310-878 monitored safety sensor kit (Used with Senior Swing only)

Alert: After November 2017, this package must be purchased for unknowing-act activation requirements in A156.10 for single door.

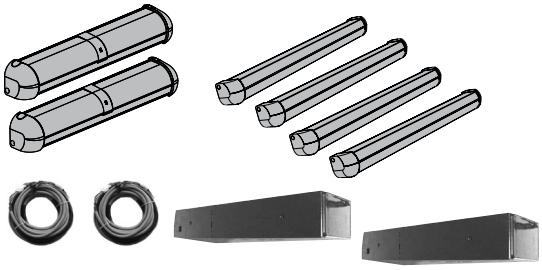
8310-3883
Senior Swing Single Door Package - (1) Safety Sensor and (1) Concealed Door Position Switch and (1) Relay Module
- Activation/safety sensor package, low energy convenience
- Single door, includes 8310-804-1 door mount safety
- Sensor (approach side), 8310-805C door position switch (concealed), 8310-845 programmable relay module (used with Senior Swing only)

8310-3882
Double Door Package - (2) Activation and (4) Safety Sensors with ANSI .10 Monitoring
- Activation/safety sensor package, double door
- Includes 8310-854 (2) header mount sensor, 8310-879 monitored safety sensor kit (Used with Senior Swing only)

Alert: After November 2017, this package must be purchased for unknowing-act activation requirements in A156.10 for single door.



8310-3891
Senior Swing Simultaneous Pair Package - (1) Header Safety Sensor and (1) Spacer and (4) Door Mount Safety Sensors and (2) Harnesses
- Activation/safety sensor package, health care I, simultaneous pair
- Includes 8310-877 header mount sensor, 8310-877S header mount spacer, 8310-804-2 (4) door mount sensor (approach/safety side), 8310-847 (2) harness (Used with Senior Swing only)



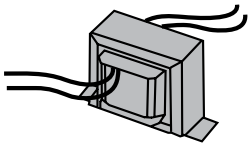
8310-3892
Senior Swing Independent Pair Package - (2) Header Sensors and (2) Spacers and (4) Door Safety Sensors and (2) Harnesses
- Activation/safety sensor package, health care II, independent pair, includes 8310-877 (2) header mount sensor, 8310-877S (2) header mount spacer, 8310-804-2 (4) door mount sensor (approach/safety side), 8310-847 (2) harness (Used with Senior Swing only)

NOTE: Not for use with Double Egress These two sensor packages must be used on installations with knowing-act activation only

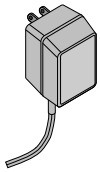
Sensor Accessories

8310-805
Door Position Switch (DPS)
- Surface mount
- Used when 8310-804-1 or 8310-804-2 Door Mounted Safety Sensor and 8310-845 Relay Module is installed in conjunction w/either a electrohydraulic, pneumatic or Benchmark Automatic Operator
- Disables approach side sensor when door is closed

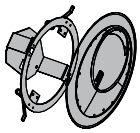
8310-805C
Door Position Switch (DPS)
- Concealed
- Used when 8310-804-1 or 8310-804-2 Door Mounted Safety Sensor and 8310-845 Relay Module is installed in conjunction w/ either a electrohydraulic, pneumatic or Benchmark Automatic Operator
- Disables approach side sensor when door is closed



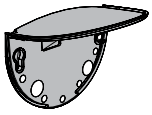
8310-824
24V Hardwired Transformer
- Hardwired
- Optional accessory - Used to remotely power any 24v sensor/receiver



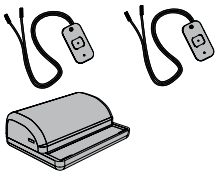
8310-824P
24V Plug In Transformer
- 24v, plug in
- Optional accessory - Used to remotely power any 24v sensor/receiver



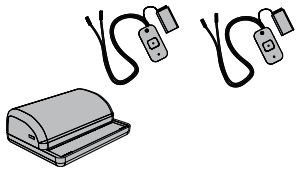
8310-854ECA
Drop Ceiling Bracket
- Bracket used w/ 8310-854 header mount activation sensor
- Optional



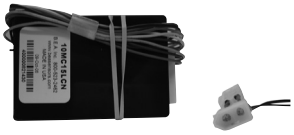
8310-854ERA
Protective Cover
- Cover used w/8310-854 header mount activation sensor
- Optional



8310-3803
3v Wireless Conversion Kit Jamb Mount
- Jamb mount, 3v
- Converts standard jamb actuator to wireless version
- Includes 8310-865 receiver, 8310-844J (2) jamb mounted
- Transmitter - requires 8310-819S or 8310-819F jamb box



8310-3809
9v Wireless Conversion Kit Wall Mount
- Jamb mount, 9v
- Converts standard wall mount actuator to wireless version
- Includes 8310-865 receiver, 8310-844 (2) wall mount transmitter
- Requires surface or flush box and weather ring



8310-3889
Safety Module Kit for Pneumatic Control Box
- Used w/7901, 7902, 7981, 7982 control boxes
- Includes 8310-3888 safety module harness; required when 8310-877 header mount safety sensor is used w/ pneumatic
- Automatic operators (2610, 4810, 4820 or 4840 Series)

8310-3888
Safety Module Harness for Pneumatic Control Box
- Safety module, service part
- Safety module harness for pneumatic control box

Actuators and Accessories

Sensor Accessories

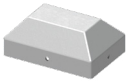
8310-861
Transmitter, Wireless, 1 Channel, Handheld, 9v
- Wireless
- 1 Channel, handheld, 9v; requires 8310-865 receiver

8310-862
Transmitter, Wireless, 2 Channel, Handheld, 9v
- Wireless
- 2 Channel, handheld, 9v; requires 8310-865 receiver

8310-863
Transmitter, Wireless, 3 Channel, Handheld, 9v
- Wireless
- 3 Channel, handheld, 9v; requires 8310-865 receiver

8310-864
Transmitter, Wireless, 4 Channel, Handheld, 9v
- Wireless
- 4 Channel, handheld, 9v; requires 8310-865 receiver

8310-866
Bollard Post with Mounting Base and Actuator Cut-Out, 42" x 4" x6"
- A powder coated steel 42" x 4" x 6" bollard post, mounting base and 8310-866CAP
- Actuator cut out accepts 8310-3853WB or 8310-3853TWB wireless actuators 4-3/4" square hard wired actuator



8310-866CAP
Bollard Post Protective Cap
- Plastic cap, protective cover, service part for 8310-866 bollard post

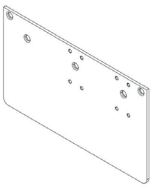
Accessories

8310-806K
Key Switch
- Type, 3 position (On/Off/Hold Open)
- Optional switch used with Benchmark or 4630/4640 operators with (cs) option

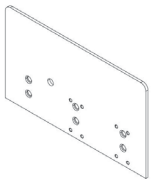
8310-806R
Rocker Switch
- Type, 3 position (On/Off/Hold Open)
- Optional switch used with Benchmark or 4630/4640 operators with (cs) option

8310-807
Line Filter
- AC, 120v, optional filter used w/ Senior Operators to reduce 'line noise'

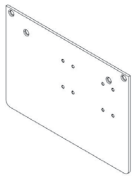
8310-845
Programmable Relay Module
- Used to sequence door operation in Senior Swing and Benchmark for hard wired applications



6440-18
COMPACT Drop Plate – Door Mount Pull Side
- Optional drop plate to meet aesthetic preference
- Available in ALUM 689 or DKBZ 695 finish
- 12-9/32" x 7-1/16" x 3/16"



6440-18TJ
COMPACT Drop Plate – Top Jamb
- Optional drop plate to meet aesthetic preference
- Available in ALUM 689 or DKBZ 695 finish
- 12-9/32" x 7-1/16" x 3/16"



6440-18PA
COMPACT Drop Plate – Door Mount Parallel Arm
- Optional drop plate to meet aesthetic preference
- Available in ALUM 689 or DKBZ 695 finish
- 12-9/32" x 7-1/16" x 3/16"

Notes

Notes

About Allegion

At Allegion (NYSE: ALLE), we design and manufacture innovative security and access solutions that help keep people safe where they live, learn, work and connect. We're pioneering safety with our strong legacy of brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Our comprehensive portfolio of hardware, software and electronic solutions is sold around the world and spans residential and commercial locks, door closer and exit devices, steel doors and frames, access control and workforce productivity systems.

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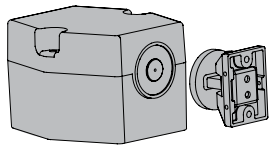
ALLEGION™

SEM SERIES

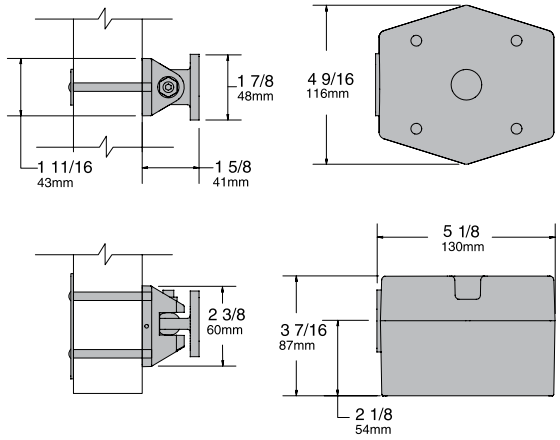
SEM 7820 MAGNET

Die Cast, Floor mounted.

SEM 7820



Total Projection = 6-3/4″ (171 mm)



The Sentronic® SEM 7800 Series are heavy duty, electrically controlled door holding magnets. Magnets are fail safe and hold until the current is interrupted. A manual door closer is used to control and close the door. A choice of floor, recessed wall, or surface mounted wall magnets are available.

All SEM Series magnets are UL listed for smoke barrier or labeled fire doors. Tested and certified under ANSI Standard A156.15.

SEM FEATURES

- **Tri-voltage design with 35 lbs. of holding force.**
- Now available armature extensions from LCN (see page 11).
- SEM 7820 magnets are shipped with die cast housing, cover, armature(s) and WMS screw pack.
- Available in Aluminum and Dark Bronze finishes only.
- UL listed for smoke barrier or labeled fire doors.

FEATURES

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2/14

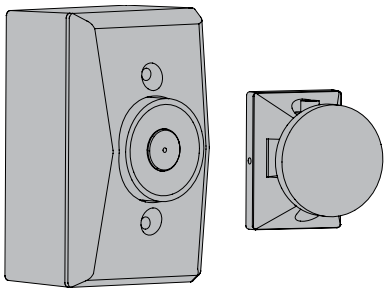
SEM SERIES

FEATURES

SEM 7830 MAGNET

Die cast housing,
Surface wall mounted.

SEM 7830

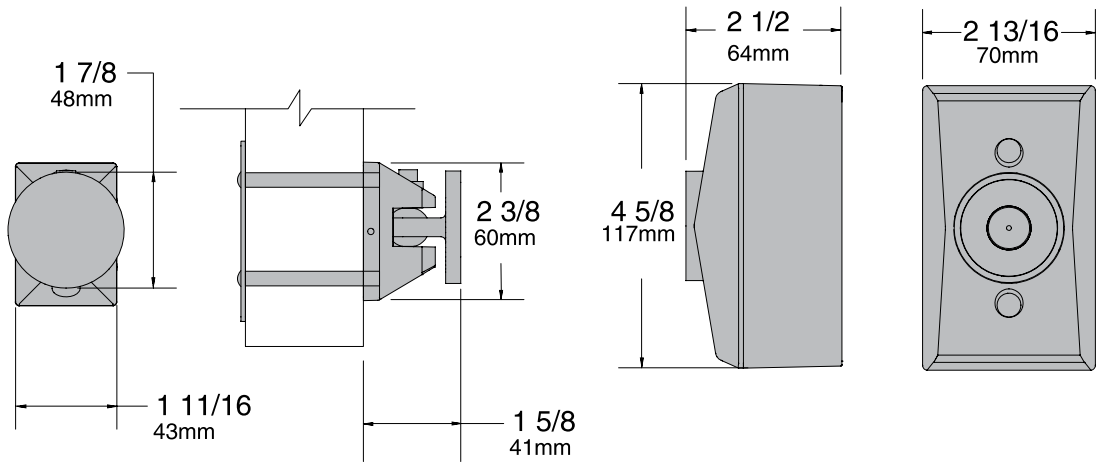


SEM FEATURES

- Tri-voltage design with 35 lbs. of holding force.
- Now available armature extensions from LCN (see page 11).
- SEM 7830 magnets are shipped with die cast housing, cover, armature and WMS screw pack.
- SEM 7830 available in Aluminum and Dark Bronze finishes only.
- Suitable for use in pocket door installations.
- UL listed for smoke barrier or labeled fire doors.

Total Projection = 4-1/8″ (105 mm)

Dimensions apply for both SEM 7830



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2/14

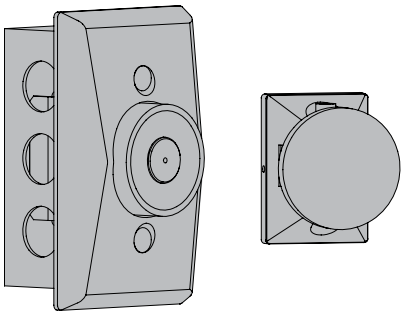
SEM 7840 MAGNET

Die cast housing, low profile recessed wall mount.

2″ (51 mm) x 4″ (102 mm) x 1-1/2″ (38 mm).

NOTE: Outlet box not included.

SEM 7840

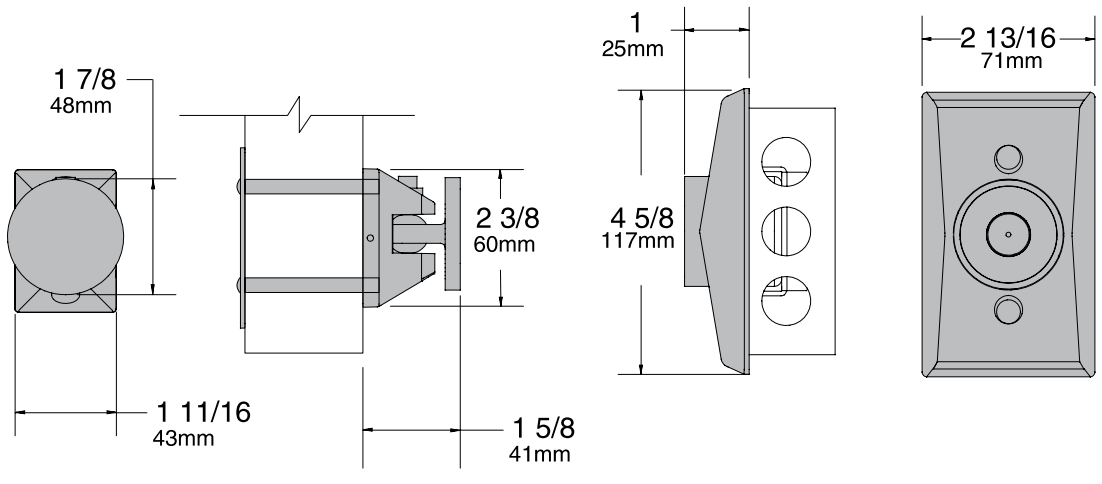


SEM FEATURES

- Tri-voltage design with 35 lbs. of holding force.
- Now available armature extensions from LCN (see page 11).
- SEM 7840 magnets are shipped with die cast housing, cover, armature and WMS screw pack.
- SEM 7840 available in Aluminum and Dark Bronze finishes only.
- Suitable for use in pocket door installations.
- UL listed for smoke barrier or labeled fire doors.

Total Projection = 2-5/8″ (67 mm)

Dimensions apply for both SEM 7840



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2/14

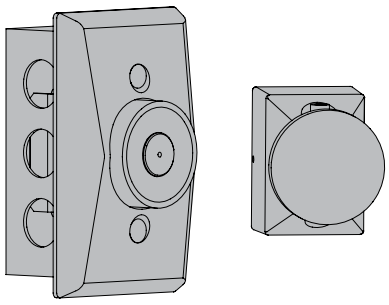
SEM SERIES

FEATURES

SEM 7850 MAGNET

Die cast housing, standard profile recessed wall mount.
2″ (51 mm) x 4″ (102 mm) x 1-1/2″ (38 mm)
NOTE: Outlet box not included.

SEM 7850

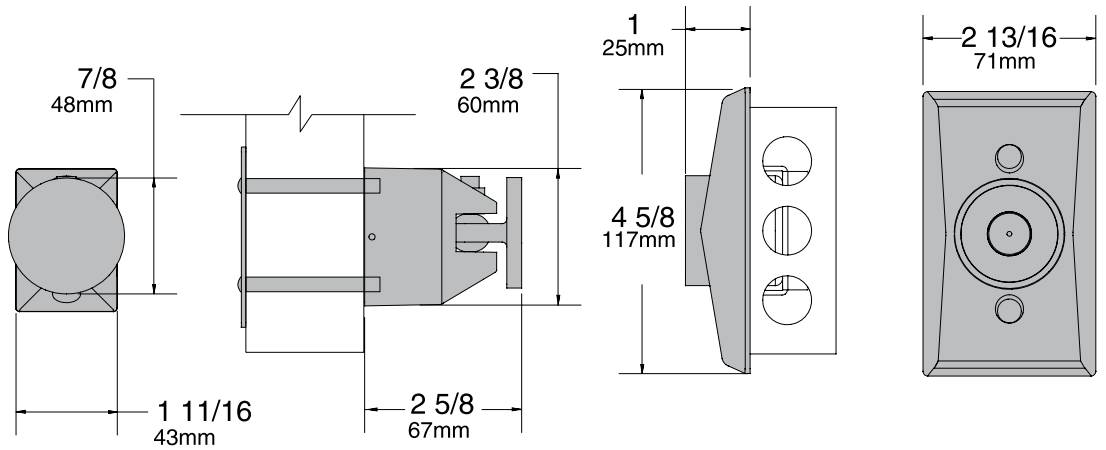


SEM FEATURES

- Tri-voltage design with 35 lbs. of holding force.
- Now available armature extensions from LCN (see page 11).
- SEM 7850 available in standard powder coat finishes.
- SEM 7850 available in Aluminum and Dark Bronze finishes only.
- Suitable for use in pocket door installations.
- UL listed for smoke barrier or labeled fire doors.

Total Projection = 3-5/8″ (92 mm)

Dimensions apply for both SEM 7850



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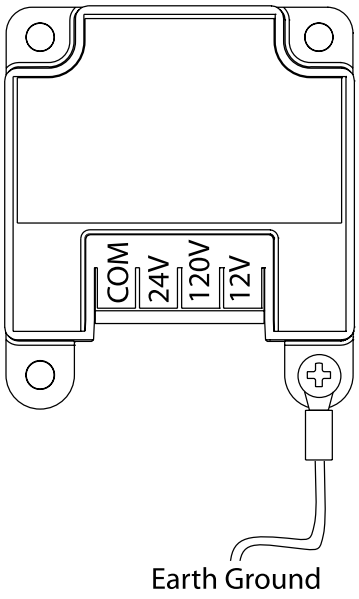
VOLTAGE INPUT



ELECTRICAL DATA

Holding Force: 35 lbs. @ Nominal Input Voltage.
Maximum Current Draw: .020A @ 24VAC/DC, 120VAC
.030A @ 12VDC

ELECTRICAL SCHEMATIC

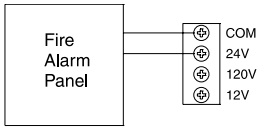


Fig. 1 24VAC/DC Wiring
Polarity is unimportant

Operation:
Electromagnets are typically used with fire alarm systems. Doors are held open in the non-alarm condition. When the fire alarm panel enters the alarm condition, power to the electromagnets is removed, the doors close under door closer control, and function as a manual door. When the fire alarm panel returns to the non-alarm condition, power is reapplied to the electromagnets and the doors can be held open again.

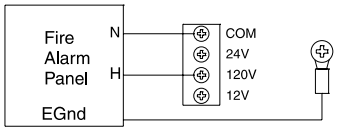


Fig. 2 120VAC Wiring

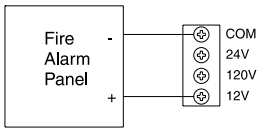


Fig. 3 12VDC Wiring
Polarity as shown

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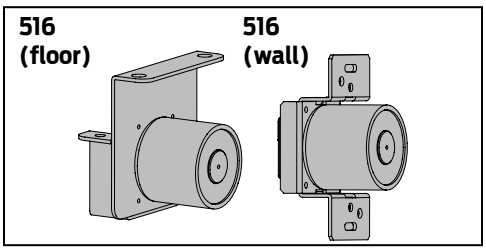
SEM SERIES

ACCESSORIES

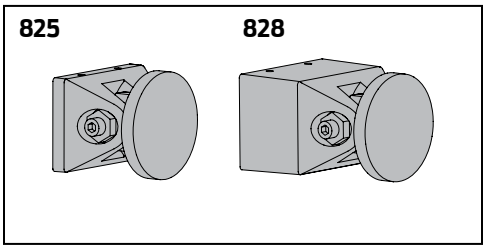
MAGNETS

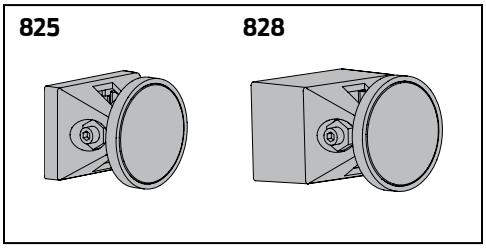
FLOOR MAGNET, SEM7820-516
Standard magnet coil.
WALL MAGNET, SEM7830-516, SEM7840-516, SEM7850-516, SEM1960-516, SEM1970-516, SEM1980-516
Standard magnet coil.



ARMATURES

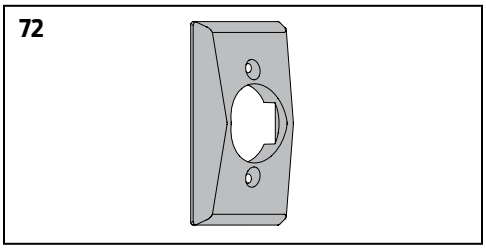
DOOR ARMATURE, SEM7820-825, SEM7830-825, SEM7840-825
Standard, die cast low profile armature.
DOOR ARMATURE, SEM7850-828
Standard, die cast armature.
DOOR ARMATURE, SEM1960-825, SEM1970-825
Standard, plastic low profile armature.
DOOR ARMATURE, SEM1980-828
Standard, plastic armature.





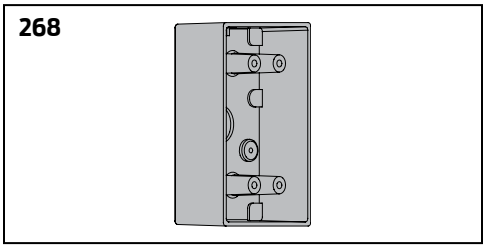
COVER

STANDARD COVER, SEM7830-72, SEM7840-72, SEM7850-72
Standard, die cast cover.
STANDARD COVER, SEM1960-72, SEM1970-72, SEM1980-72
Standard, plastic cover.



BOX

WALL BOX, SEM7830-268
Standard, die cast surface wall mount box.
WALL BOX, SEM1960-268
Standard, plastic surface wall mount box.



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EXTENSIONS

COUPLER ASSEMBLY KIT, SEM7810-514
Coupler assembly is required for each door needing extension(s). Kit includes coupler link and ball pivot (alone serves as a 1-1/2″ extension).

Extension, SEM7810-E050
Standard metal 1/2″ extension.

Extension, SEM7810-E075
Standard metal 3/4″ extension.

Extension, SEM7810-E100
Standard metal 1″ extension.

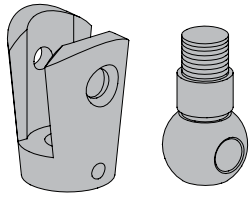
Extension, SEM7810-E200
Standard metal 2″ extension.

Extension, SEM7810-E400
Standard metal 4″ extension.

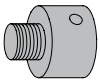
EXTENSION KIT, SEM7810-517
Extension kit includes:
10.....7810SEM-E050
10.....7810SEM-E075
10.....7810SEM-E100
5.....7810SEM-E200
20.....7810SEM-514

NOTE: Using just the Coupler Assembly Kit (SEM7810-514) will create a 1-1/2″ link. Extension Links are available in different lengths and can be combined together to achieve the desired length. Max. recommended length = 12″

514



E050



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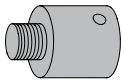

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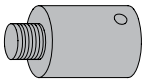
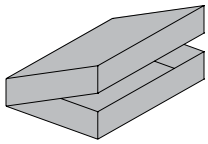


E200

E400

517



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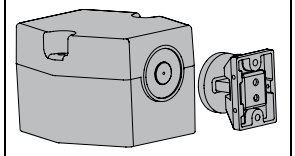
2/14

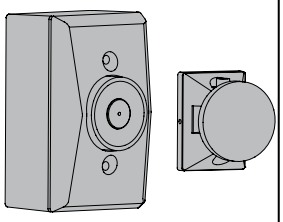
SEM SERIES

ORDERING INFORMATION

SEM 7820



SEM 7830



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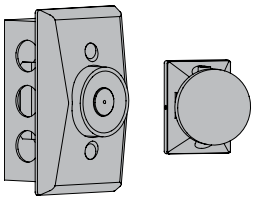
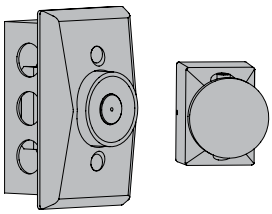
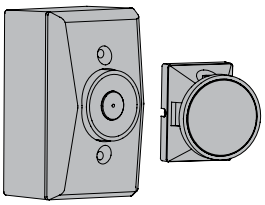


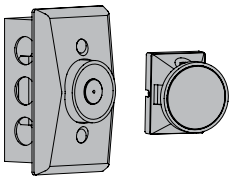
SEM 7850



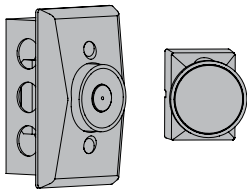
SEM 1960



SEM 1970



SEM 1980



HOW-TO-ORDER SEM 7800 SERIES MAGNETS

1. SELECT MAGNET SERIES

- ☐ SEM7820
- ☐ SEM7830
- ☐ SEM7840
- ☐ SEM7850

2. SPECIFY FINISH

- ☐ Standard Powder Coat _____
  Aluminum, Dark Bronze.

HOW-TO-ORDER SEM 1900 SERIES MAGNETS

1. SELECT MAGNET SERIES

- ☐ SEM1960
- ☐ SEM1970
- ☐ SEM1980

2. SPECIFY FINISH

- ☐ Standard Finish _____
  Aluminum or Dark Bronze.

HOW-TO-ORDER SEM 7810 EXTENSIONS

1. SELECT EXTENSIONS

- ☐ SEM7810-514 (qty.)_____
- ☐ SEM7810-E050 (qty.)_____
- ☐ SEM7810-E075 (qty.)_____
- ☐ SEM7810-E100 (qty.)_____
- ☐ SEM7810-E200 (qty.)_____
- ☐ SEM7810-E400 (qty.)_____
- ☐ SEM7810-517 (qty.)_____

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2/14

ALLEGION™

Electronic Access Control

Q4 2025 Edition

IVES | LCN | SCHLAGE | VON DUPRIN

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Thank you for choosing Allegion™ electronic access control products. This catalog contains overviews and technical specifications. In the back of the catalog you will find wiring and riser diagrams for a number of products.

The electronic security industry is ever-changing. In order to make sure that you have the most current and up to date product information, we recommend that you register your catalog. Go to us.allegion.com/eac to register. By registering and providing your email address, you will be notified each time Allegion releases an updated version of the catalog as well as other product and solution information from Allegion.

Additional Resources

Product Information & Learning

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Von Duprin Website
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LCN Website
lcnclosers.com

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Von Duprin Electronics (Power Supplies, Electric Strikes, Delayed Exit System, Electrical Power Transfer)
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Isonas.Tech.Prod.Support@allegion.com

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Technical Library
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Allegion How-To Web App
https://instructions.allegion.com/instr/418/25835

ALLEGION

Electronic Access Control Catalog

Open Architecture Products & Solutions

Table of Contents

Credentials

005388 Credentials Introduction
013465 Schlage Mobile Bluetooth® Credentials
013287 Mobile Student ID
015583 MIFARE® DESFire® Credentials
015584 MIFARE Classic® Credentials
005426 Proximity Credentials
011900 Credentials Compatibility Guide

Electronic Locking Solutions

015893 Electronic Locking Solutions Introduction

AD Series Locks & Accessories

004446 AD-400 Networked Wireless Electronic Lock
013214 AD-402 FIPS 201-2 Integration Ready Networked Wireless Electronic Lock
004448 AD-300 Networked Hardwired Electronic Lock
004869 AD-302 FIPS 201-2 APL Listed Networked Hardwired Electronic Lock
004442 AD-200 Standalone Electronic Lock
009820 AD-201 PIV/PIV-I Compatible Standalone Electronic Lock
004436 AD-250 Standalone Electronic Lock
004382 AD Series Exit Trim Compatibility
010432 AD Series & CO Series Lever and Cylinder Compatibility
004447 PIM400-485 Panel Interface Module for RS-485 Communication
004441 PIM400-TD2 Panel Interface Module Wiegand or Clock & Data Communication
005131 PIM400-1501-LC Sixteen Door Intelligent Controller
004094 TK400 AD Series Wireless Test Kit
004096 WPR400 AD Series Wireless Portable Reader
004014 WRI400 Wireless Reader Interface
004013 GCK400 & ECK400 Wireless Gate Control Kits and Elevator Control Kits
004095 ANT400-REM Remote Antennas for Wireless System
004097 RLBD AD Series Dry Contact Relay Board
004015 REPTR400 Wireless Repeater Kit
013622 Schlage Utility Software (SUS)
003940 Schlage Express™ Offline Access Control Software
009396 Schlage Express™ Compatibility Matrix

CO Series Locks & Accessories

004186 CO-100 Standalone Electronic Lock
004185 CO-200 Standalone Electronic Lock
004183 CO Series Exit Trim Compatibility
010432 AD Series & CO Series Lever and Cylinder Compatibility
013622 Schlage Utility Software (SUS)
003940 Schlage Express™ Offline Access Control Software
009396 Schlage Express™ Compatibility Matrix

ENGAGE™ Family Locks & Accessories

010409 NDE Mobile Enabled Wireless Cylindrical Lock
011389 LE Mobile Enabled Wireless Mortise Lock
013616 Schlage LE & NDE Mobile Enabled Retrofit Kits
013252 Schlage Control® Mobile Enabled Deadbolt & Interconnected Lock
016171 Schlage Control® Mobile Enabled Retrofit Kits
011168 MT20W Credential Enrollment Reader
010842 GWE ENGAGE™ Gateway with IP (PoE) & RS-485 Communication
013210 TKE ENGAGE™ Test Kit
015657 ENGAGE™ Mobile App for Device Commissioning
011427 ENGAGE™ Cloud-Based Web & Mobile Applications

XE360™ Series Locks & Exit Trim

015588 XE360™ Series Tubular Locks
015589 XE360™ Series Mortise Locks
015590 XE360™ Series Exit Trim

Electromechanical Solutions

005024 Electromechanical Solutions Introduction

Electrified Locks

004998 L Series Electrified Mortise Lock
016154 L Series Motorized Latch Retraction Mortise Locks
004999 ND Series Electrified Cylindrical Lock
016494 PM Series Electrified Mortise Lock

Exit Devices - Electrical Options

006586 QEL Electric Latch Retraction
015518 QEL Electric Latch Retraction Conversion Kits
013791 Emergency Secure Lockdown (ESL)
013467 M996L/L-BE Motorized Breakaway Lever Trim
011898 Remote Undogging (RU) & Remote Monitoring (RM)
010101 Alarm Kit

Delayed Egress/Alarmed Exits

010942 CHEXIT, RCM & DE5300

Monitor Strikes

010118 Monitor Strikes

Door Control - Electrical Options

Automatic Operators

010112 Electrohydraulic Automatic Operators
016284 2810IQ Series Electromechanical Automatic Operators
016197 2850IQ Series Electromechanical Automatic Operators
016198 2860IQ Series Electromechanical Automatic Operators
016199 9530IQ Series Electromechanical Automatic Operators
016200 9540IQ Series Electromechanical Automatic Operators
016201 9550IQ Series Electromechanical Automatic Operators
016202 9560IQ Series Electromechanical Automatic Operators

Sentronics (Fire & Life Safety)

010115 Fire & Life Safety Sentronic Closer/Holders

Actuators & Sensors

010114 Actuators & Sensors

Readers

005025 Readers Introduction
013251 Mobile Enabled Multi-Technology Readers
005354 Multi-Technology Readers
013788 Single Technology Readers
004256 FIPS 201 Compliant Readers
009621 Reader Accessories
010523 MT20 Multi-Technology Enrollment Reader
004250 SERIII-W Scramble Keypad
004252 SEKPDWG & SEKPDMGW Essex Electronic Keypads
010175 OEM 200 Module

Reader Controllers

013787 Schlage Reader Controller Introduction
013614 RC Multi-Technology Reader Controller
013623 Pure IP™ Reader Controller Accessories
011910 CTE ENGAGE™ Single Door Controller with Multi-Technology Reader
004016 CT5000 Offline Controller

System Components

005028 System Components Introduction

Electric Strikes

010151 4200 Series Electric Strikes
005009 5100 Series Electric Strikes
005282 6100 Series Electric Strikes
005368 6200 Series Electric Strikes
003242 6300 Series Surface Mount Electric Strikes
009011 6400 Series Modular Strike

Electromagnetic Locks

M400 Series

004204 M490/492 Electromagnetic Locks
004205 M450/452 Electromagnetic Locks
004206 M420/422 Electromagnetic Locks
004158 M490G Electromagnetic Gate Lock
004762 M490DE Delayed Egress Electromagnetic Lock

Specialty

004160 GF3000 Mortise Mounted Shear Lock
004159 GF3000 Surface Mounted Shear Lock
004157 320M Mortise Mount Miniline™ Electromagnetic Lock
009007 M390RFK Electromagnetic Locks

Power Supplies

PS900 Series Power Supplies

004193 PS906 6 Amp Power Supply
004194 PS904 4 Amp Power Supply
004195 PS902 2 Amp Power Supply
004101 PS914 4 Amp Power Supply (Von Duprin®)

System Component Accessories

Pushbuttons

003910 620/631 Series Heavy Duty Pushbuttons
003911 700 Series Pushbuttons
003906 740 Series Emergency Break Glass Release
003912 660 Series Concealed Remote Button

Keyswitches

003907 650 Series Keyswitches

Request-To-Exit Bars

003909 672 Series TouchBar
003904 692 Series SmartBar™

Power Transfers

010106 Electric Power Transfer
010116 Electrified Hinge
005006 Armored Door Cords With Caps

Monitoring Stations & Consoles

005007 800/801 Series Remote & Local Monitoring Stations
005004 8200 Series Remote Monitor & Control Console

Other

003908 SCAN II™ Passive Infrared Motion Sensors
003905 1910 Electronic Horns
005005 Door Position Switches
013632 FSS1 High Security Door Monitoring Sensor
005011 PB405 & PB405S Electrified Deadbolts
010152 442S Cabinet Lock

Appendix

005138 Appendix Introduction

Wiring Diagrams

Access Control

105234 Pair of RX EL with MT15 Reader
112131 Pair QEL & MT156 Reader
105349 Single AD-300 Integrated Partner
105348 Single AD-300 PIB300 Wiegand
105351 Single PIM 485 Integrated Partner
105350 Single PIMTD2 Wiegand
112121 CO-100 with Remote Pushbutton
109439 Single with 99 Exit & FSE 6111 E-Strike
109440 4 Singles with EL Panic Bars & Remote Push Button
109444 Pair with ELs & Push Button
109445 Pair with Fail Safe E996L & Push Button - Fire Rated
109499 Single with CT5000 & EL Panic
112133 Single with QEL, 621AA Push Button – Fire Rated
109550 Single with EL & Push Button
109551 Pair of EL & Push Button
109552 Single EL with Push Button – Fire Rated
109553 Pair EL with Push Button – Fire Rated
113738 Single Door, RC Controller, Falcon E-lock
113739 Single Door, RC Controller, RX EU ND lock
113740 Pair of Doors, RC Controller, MEL Exit
113749 Single Door, RC Controller, FSE CS450/750 E-Strike
113750 Single Door, RC Controller, FSE MDS100 E-Strike
113751 Single Door, RC Controller, FSE RS200/300 E-strike
113752 Pair of Doors, RC Controller, RS200/300 E-strike
113753 Single Door, RC Controller, FSE MDS100 E-strike, CSW-100 PB
113754 Single Door, RC Controller, FSE NC450 E-strike
113755 Single Door, RC Controller, RX QEL Exit
113762 Single Door, RC Controller, RX EU L9000 E-lock
113763 Single Door, RC Controller, RX MEL Exit
113764 Single Door, RC Controller, RX 25
113765 Pair of Doors, RC Controller, RS200/300 E-Strike, Exits with Mullion
113766 Pair of Doors, RC Controller, MEL One Leaf Only
113767 Pair of Doors, RC Controller, RX MEL Both Leaves
113768 Pair of Doors, RC Controller, RX MEL 9500 AO
113769 Single Door, RC Controller, MG Maglock, 620 DA PB - with Fire Alarm Connection
113770 Single Door, RC Controller, TB Touchbar, MG Maglock, 620DA PB - with Fire Alarm Connection
113771 Single Door, IP Bridge, FSE MDS100 E-strike
113772 Single Door, IP Bridge, EU ND Lockset
113773 Single Door, IP Bridge, MEL/QEL Exit
113774 Single Door, IP Bridge, RX MEL/QEL Exit
113775 Single Door, IP Bridge, MG Maglock - with Fire Alarm Connection

Touchless Openings – with LCN® & Falcon Automatic Operators

113517 Single Door, FSE 6211 E-strike, LCN 9500 AO
113518 Single Door, RX QEL Panic, LCN 9500 AO, CTE
113520 Single Door, FSE E-strike, LCN 9500 AO, CTE
113521 Single Door, Falcon 8200 AO Non-Latching Door
113522 Pair of Doors, QEL Pair, LCN 9500 AO with Sensors

113714 Pair of Doors, RX LC QEL Pair, LCN 4600, Access Control by Others
113715 Pair of Doors, RX LC QEL Pair, LCN 9500, Access Control by Others
113716 Single Door, LCN 9131 AO, Touchless Actuators - Non-Latching Door
113717 Single Door, LCN 4600 AO, MTB Reader, Access Control by Others

Doors with Automatic Operators – LCN® & Falcon

104970 Double Doors with EL & LCN 4600 AO
104972 Single Electric Strike with LCN 4600 AO
104968 2 Single Doors with LCN ES7982 AO
109463 Pair EL with 4600
109464 Single with 99 & Fail Secure 6111 E-strike
113740 Pair of Doors, RC Controller, MEL Exit, 4600 AO
113752 Single Door, RC Controller, FSE RS200/300 E-strike, 4600 AO
113768 Pair of Doors, RC Controller, RX MEL, RX Exit, 9500 AO One Leaf Only

Doors with Automatic Operators – Generic

109441 Single with EL & Generic Auto Operator
112132 Single QEL with Auto Operator & Access Control

Security Interlocks

104967 2 Single Doors with M400 Mag Locks Security Interlock - with Fire Alarm Connection
109438 2 Single Doors with M400 Mag Locks, Security Interlock - with Fire Alarm Connection
109442 2 Single Doors with M400P Mag Locks & Access Control, Security Interlock - with Fire Alarm Connection

Safety Interlocks

109443 2 Pairs Safety Interlock with M4X2P Mag Locks - with Fire Alarm Connection
109437 2 Door Safety Interlock with M400 P Magnetic Locks - with Fire Alarm Connection

Delayed Egress – CX Panic Bars

112289 CX Single Door with PS902 for CX Devices That Shipped After 08-24-15
112290 CX Pair with PS904 & Access Control For CX Devices That Shipped After 08-24-15

Delayed Egress – Delayed Egress Magnetic Locks

109498 Single Door with M490DEP Mag Lock & Access Control - with Fire Alarm Connection
109500 Pair Doors with M490DEP-2 Mag Lock & Access Control - with Fire Alarm Connection

Shared Spaces – 2 Door

109529 2 Single Doors with ND80 HDEL RX Locksets on Shared Restroom

Shared Spaces – 3 Door

109537 3 Single Doors with ND80 HD EL RX Locksets on Shared Restroom
112089 PoE+ CTE Basic Configuration with 5100 E-strike
112090 CTE with EL, PS914/2RS Fire Rated
112091 CTE, QEL with Sr Swing Auto Operator

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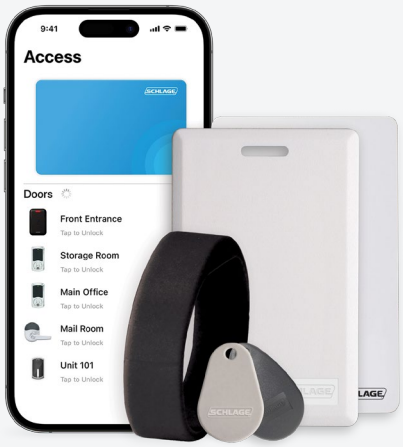
ALLEGION

Credentials



This section of the Electronic Access Control catalog covers mobile, smart, multi-technology and proximity credentials.

Overview

Schlage® offers credentials that fit every step along the continuum of your security strategy. Starting with the most basic key, to the most sophisticated smart or mobile credential. Every opening has its own needs and Schlage delivers a solution to fit them all.

The comprehensive credential offering from Schlage features mobile, smart, multi-technology and proximity technologies as well as a variety of form factors to meet the security needs of virtually any customer.

There are many types of smart cards on the market today, but unlike proximity, smart credentials are not all equal. Schlage continually strives to identify the best technologies in the world to ensure we're offering the best solutions for our customers to meet their continued goals for safety and security.

Benefits

- Simple
  - Credentials from Schlage provide unique advantages that help your business thrive and make doing business easier
- Secure
  - Schlage credentials using MIFARE® DESFire® offer our highest level of security through the use of mutual authentication, key diversification, and encryption
- Interoperable
  - Schlage credentials leverage NXP's open-architecture technology to enable the individual protection and management of various applications to meet the various needs of your ecosystem

Schlage Credential Services

At Schlage, we understand that credentials are the key to a successful access control plan. And we know that some solutions available in the market today can lock you into a proprietary path that limits your options in the future. That is why we offer Schlage Credential Services with programs that are designed to provide you with a whole new level of security, adaptability and flexibility.

Services include:

- Custom encryption keys
- Schlage standard encryption keys
- CardTrax™ Credential Sequencing Program
- Custom format consulting
- Custom artwork

Check out our Schlage Credential Services

Mobile Credentials

Allegion is an industry leader in mobile credential technologies and offers a broad portfolio of solutions that have been developed to meet specific customer requirements.

NFC mobile credentials in Apple Wallet® & Google Wallet™

NFC wallet-based credentials offer a premium experience by allowing users to add their credential to Apple Wallet® and Google Wallet™ and use their phone or watch just as they would their physical credential. Schlage enables our technology alliances to integrate and offer:

Student ID: By adding their campus ID to Apple Wallet or Google Wallet, mobile student ID provides a more secure and seamless experience around campus for university students, faculty and staff. Not only does it allow access control, but the ability to use their phone or watch to make payments and track balances on and off campus through the university's one-card system.

Resident Key: Offered through physical access control and Proptech systems, including Zentra from Allegion, mobile resident keys make resident life more convenient and secure. Property managers will also see added efficiencies and overall NOI growth.

Employee Badge: Mobile phones and smart watches are used for multiple purposes throughout a person's day and now using them to conveniently gain access to work spaces and other buildings is possible.

Schlage Mobile Bluetooth® Credential

Schlage Mobile Bluetooth credentials are simple to implement, easy to manage, convenient to use and ideal for multifamily and business applications. Available for both Apple and Android phones, this solution is available through Allegion technology alliances or for those using the ENGAGE access control system from Allegion.

Mobile Bluetooth credential

Mobile student ID

Smart Credentials

Schlage offers a variety of smart credential technology options to fit the needs and budget of almost every application. All smart credentials from Schlage are encrypted and secure, but also based on open, global standards, ensuring a future of headache-free flexibility and scalability.

Schlage smart credentials offer a single credential solution for secure physical and logical access and are available in a variety of form factors to fit any facility or business need, including ISO style cards, clamshell cards, wristbands, key fobs and adhesive patches. All Schlage smart cards are compliant with international standard ISO 14443.

Schlage 13.56 MHz contactless smart credentials are offered with the following industry standard MIFARE® technologies:

MIFARE® DESFire®

MIFARE DESFire delivers the perfect balance of security, speed and performance. Its open protocol design allows future seamless integration of other applications.

- Flexible file system/flexible memory organization
- Fast and secure data transmission
- 128 AES encryption used for authenticity, confidentiality and integrity
- Multiple memory options and form factors

MIFARE Classic®

Schlage credentials using MIFARE Classic technology are ideal for facilities with moderate security needs, and for businesses that want to use credentials to support multiple business functions.

- Simple, fixed memory structure
- Freely programmable memory
- Multiple memory options and form factors

Schlage Multi-Technology Credentials

Schlage multi-technology credentials combine 125 kHz proximity and 13.56 MHz smart technologies in one contactless card, simplifying access control solutions and offering flexibility for users. The credentials are compatible with proximity, smart and multi-technology card readers, allowing facilities ultimate flexibility. The open architecture design also ensures fast data transfer rates.

- Includes 125 kHz proximity and 13.56 MHz smart technologies in one credential
- Compatible with Schlage and other industry manufacturers' readers and electronic locks
- CardTrax Credential Sequencing Program helps keep track of card numbers at no additional cost
- Lifetime warranty against manufacturer's defects
- Custom artwork and laser engraving available
- Available in ISO style cards and can include a magnetic stripe
- Available in multiple memory capacities

Form Factors

From highly durable clamshell-style cards to the standard ISO style cards, keyfobs or PVC adhesive discs, Schlage offers a variety of credential formats to support a broad range of access control applications.

Clamshell card

ISO glossy card

Keyfob/thin keyfob

Wristbands

PVC adhesive patch

PVC adhesive disc

Schlage Proximity Credentials

Schlage proximity credentials offer a convenient access control solution for facilities with less demanding security needs. Schlage proximity credentials are compatible with most industry-leading proximity readers, allowing them to easily integrate with new and existing proximity access control systems.

- 125 kHz proximity technology available in multiple form factors
- Easily integrates into existing proximity systems
- CardTrax Credential Sequencing Program helps keep track of card numbers at no additional cost
- Lifetime warranty against manufacturer's defects
- Custom artwork and laser engraving available
- Available in ISO style cards and can include a magnetic stripe

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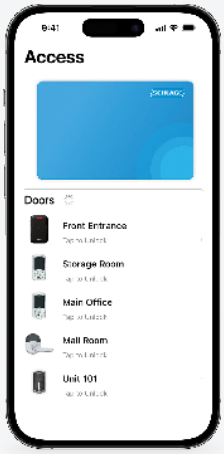
Mobile Bluetooth® Credentials



Overview

Schlage® Mobile Bluetooth® Credentials enable residents or staff members to utilize a mobile device instead of a physical badge to securely unlock an opening. Available for Apple and Android™ phones, the Schlage Mobile Access app is convenient and easy to use. Simply select a specific door listed on the app and the encrypted credential will be sent to the mobile enabled lock or reader.

Schlage Mobile Bluetooth Credentials feature best-in-class asymmetric encryption for added security and peace of mind. For added reliability and convenience, Schlage Mobile Bluetooth Credentials will work without an internet or cellular connection once they are downloaded from the cloud and access rights are synced to the devices.

At Schlage, we believe in building flexible and interoperable solutions that are rooted in open design standards. We recognize that Schlage locks and readers are managed by a wide variety of physical access control systems (PACS), that is why we have made software development tools available to industry leading providers. Please consult with your PACS provider to determine if Schlage Mobile Bluetooth Credentials have been integrated to work with your system.

Features & Benefits

Mobile Credential Users:

- Supports iOS and Android; available in the Apple App Store and Google Play Store
- Quick response from smart device to mobile enabled lock or reader
- Unlock an opening from a distance, a feature unique to Bluetooth mobile credentials[1]
- Best-in-class asymmetric credential encryption
- The built-in fingerprint or facial recognition features on the phone are used to confirm identity
- Works without internet connection or cellular service at the opening

Site Administrators:

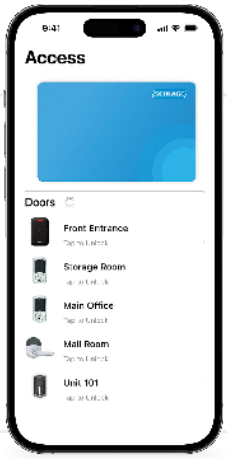
- Compatible with mobile enabled hardware including Schlage Control®, MTB Readers, NDEB, LEB and XE360™ Series wireless locks and RC reader controllers
- No-Tour support for Schlage Mobile Bluetooth Credentials is available with select PACS providers
- Please consult with your PACS provider for specific support of features and capabilities

CYBERSECURITY
Learn about Allegion's commitment

1. Dependent on device. Schlage MTB Readers and RC reader controllers can be configured to read up to 30', Schlage Control, NDEB and LEB wireless locks are configurable and can read up to 15'.

Specifications	
Credential technology	Bluetooth Low Energy (LE) 2.4 GHz
Mobile device support	Click here or visit the Schlage Mobile Bluetooth Credentials page on commercial.schlage.com for a list of supported mobile phones
Opening modes	Using mobile app, select door to unlock, up to 30' range[1]
Security	• Mobile access credentials are protected by device lock screen • Over-the-air communication generates keypair for each session • Using the ECDH algorithm the exchanged public key and private key are used to create a session key that will be used to encrypt information for the session
Compatible devices	• Schlage XE360 Series wireless locks • Schlage Control mobile enabled deadbolt and interconnected lock • Schlage MTB mobile enabled multi-technology reader • Schlage MTB mobile enabled multi-technology reader with CTE single door controller in ENGAGE • Schlage NDE mobile enabled (B) cylindrical wireless lock with interior push button • Schlage LE mobile enabled (B) wireless locks • Schlage RC mobile enabled multi-technology reader controller

1. Dependent on device. Schlage MTB Readers and RC reader controllers can be configured to read up to 30', Schlage Control, NDEB and LEB wireless locks are configurable and can read up to 15'.



It's Easy to Use Schlage Mobile Bluetooth Credentials

- Click on link in the text message that you receive from Schlage, sent by your system administrator
- Download and install the Schlage Mobile Access app
- Add doors to your favorites list and tap to unlock
- Additional features and capabilities will vary; please visit us.allegion.com/alliances or consult your access control provider or your Schlage sales consultant for details

Schlage Bluetooth Mobile Credential License Options

One-Year Flexible License

SMA-ENGAGE-FLEX-1YR

The One-Year Flexible License enables facility administrators to grant visitors, temporary workers, and maintenance staff access when required. When a flexible credential is disabled, the remaining time on the license is retained and can be reused for your next visitor. Please note that One-Year Flexible Licenses also support the No-Tour feature.

Five-Year Fixed License

SMA-ENGAGE-FIX-5YR

The Five-Year Fixed License is the ideal credential solution for long-term residents or employees. The Five-Year License is our longest-term credential. Please note that Five-Year Licenses do not support the No-Tour feature and cannot be reassigned.

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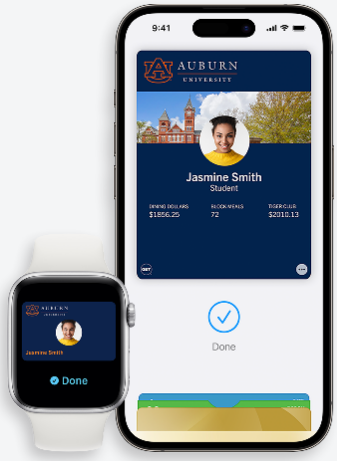
Mobile Student ID



Overview

Mobile Student ID is the most secure way for students to get around campus with the ID they're used to carrying. This feature will allow students, faculty and staff at select universities to add their student ID cards to their Apple Wallet® or Google Wallet™.

Leveraging NFC technology and contactless readers, students are able to easily gain access and make payments around campus using Mobile Student ID.

Mobile Student ID is available to anyone on campus who uses a school ID card:

- Students
- Faculty
- Staff

To enable this capability on campus, all readers must support an NFC credential. Some examples of this include:

- Interior and exterior door access
- Dining hall and retail dining
- Bookstore and off-campus retailers
- Library, printing, laundry and vending
- Event ticketing
- Attendance tracking

Features & Benefits

- **Easy**
  Students expect to get around their campus with ease and school administrators want to provide a great experience for their students
- **Secure**
  Using NFC technology, Mobile Student ID is a more secure way to transact on campus; the mobile credential is stored directly on a user's device in the secure element
- **Private**
  Apple does not know where you go, what you bought, or how much you spend; everything is managed directly through existing one card and access control providers, just as with the plastic card
- Schlage offers a comprehensive portfolio of electronic hardware to accommodate every opening
  - AD Series electronic lock
  - MTB Mobile enabled multi-technology readers
  - NDE wireless cylindrical lock
  - LE wireless mortise lock

AD Series Electronic Lock

The AD Series was built from the ground up to provide more options, more functionality and more compatibility than any other electronic locking solution on the market today.

- Mortise, cylindrical and exit trim versions
- Adaptable reader heads
- Non-invasive installations for historic buildings and s ensitive areas
- Secure encrypted data transmission
- 200 feet range from transceiver/access panel
- Near real-time communication
- Reads multiple credential technologies including magnetic stripe, proximity, smart and NFC Mobile Student ID
- AD300 wired and AD400 wireless options
- Seamlessly integrates into On Guard

Mobile Enabled Multi-Technology Readers

The Schlage® MTB mobile-enabled, multi-technology readers are designed to simplify your access control solutions and eases the transition from an existing proximity system to a secure encrypted card technology or mobile solution at your own pace—without having to change readers.

- Compatible with Bluetooth® Low Energy and NFC-open smart devices
- Plug and play mode for straight out of the box functionality
- Limited lifetime warranty
- Ability to upgrade firmware on Schlage MTB readers through the ENGAGE™ mobile app or by OSDP

NDE & LE Wireless Locks

NDE and LE wireless locks support the transition to mobile on campus. They read proximity and smart credentials as well as mobile student IDs.

- Simplified installation by combining the lock, credential reader, door position sensor and request-to-exit switch all in one unit
- NDE fits mechanical ND door prep with minor modifications
- LE suites with Schlage mechanical and electrified L Series locks with many common parts

Accessories

For non-access control applications such as dining, POS - USB output, vending, or laundry, Schlage has hardware solutions to fit your needs.

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013287, Rev. 01/24

MIFARE® DESFire® Credentials

Overview

MIFARE® DESFire® smart credentials offer the highest in physical security from Schlage and deliver the perfect balance level of security, speed and performance. Its open protocol design allows seamless integration of other applications in addition to access control, such as cashless vending, cafeteria services, transportation, secure printing and more. All MIFARE credentials from Schlage are encrypted and secure, but also based on open, global standards, ensuring a future of headache-free flexibility and scalability.

Encryption Key

- Configured with our default encryption key or with a custom key developed by Schlage Custom Encryption Key Service (SCEKS)
- Can be configured with encryption keys developed by NXP manufacturing partners

Schlage Credential Services

- Programmed with industry standard formats as well as Schlage CardTrax™ Credential Sequencing Program
- Custom bit format development
- Custom artwork

Hardware Interoperability

- MT and MTB multi-technology readers
- Schlage RC reader controllers
- All Schlage AD, NDE, LE, XE360 Series and Schlage Control® electronic locks
- See Compatibility Guide for additional details

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Features & Benefits

- Flexible file system/flexible memory organization
- Fast and secure data transmission
- 128 AES encryption used for authenticity, confidentiality and integrity
- Available with single technology 13.56 MHz (new applications) or multi-technology 125 kHz + 13.56 MHz (migrating)
- Multiple memory options and form factors to fit any business need
- Open, standards-based platform easily accommodates applications of your choice
- Lifetime warranty against manufacturer's defects
- Compatible with all Schlage reader and electronic locks and most industry manufacturers' readers and electronic locks when a Schlage custom encryption key is used

Clamshell card

Wristbands

ISO glossy card

Keyfob/thin keyfob

PVC adhesive patch

PVC adhesive disc

Check out our Schlage Credential Services

Single Technology (13.56 MHz) Smart Credentials

Ideal for new installations, Schlage MIFARE® DESFire® contactless credentials utilizing high frequency (13.56 MHz) technology, offers the highest level of physical security and encryption, as well as the greatest level of flexibility and scalability for future-readiness.

13.56 MHz MIFARE Credentials						
Model number	8440	8540	8740	8443	8543	8643T
Credential type	Clamshell	ISO glossy white[1]	PVC adhesive patch	Clamshell	ISO glossy white[1]	Thin keyfob
Credential technology	MIFARE DESFire EV1[4]	MIFARE DESFire EV1[4]	MIFARE DESFire EV1[4]	MIFARE DESFire EV3[4]	MIFARE DESFire EV3[4]	MIFARE DESFire EV3[4]
Magnetic stripe	No	Yes[2]	No	No	Yes[2]	No
Dimensions (H x W x T)	3.37" x 2.125" x 0.075"	3.37" x 2.125" x 0.033"	3.37" x 2.125" x 0.033"	3.37" x 2.125" x 0.075"	3.37" x 2.125" x 0.033"	1.77" x 1.18" x .11"
Slot punch[3] (printed guide included on ISO cards)	Vertical (standard)	Vertical or horizontal (optional)	Vertical or horizontal (optional)	Vertical (standard)	Vertical or horizontal (optional)	Keyring
Memory capacity	4K byte/32k bit	4K byte/32k bit	4K byte/32k bit	4K byte/32k bit	4K byte/32k bit	4K byte/ 32k bit

Multi-Technology (125 kHz + 13.56 MHz) Smart Credentials

Highly secure, flexible and future-ready, Schlage multi-technology credentials combine 125 kHz proximity and 13.56 MHz MIFARE® DESFire® technologies into one contactless card. The credentials can be read by both proximity readers and smart readers, allowing customers to improve their existing legacy applications while migrating at their own pace.

125 kHz/13.56 MHz Multi-Technology Credentials			
Model number	8940	8943	8843T
Credential type	ISO glossy white[1]	ISO glossy white[1]	Thin keyfob
Credential technology	Proximity/MIFARE DESFire EV1[4]	Proximity/MIFARE DESFire EV3[4]	Proximity/MIFARE DESFire EV3[4]
Magnetic stripe	Yes[2]	Yes[2]	No
Dimensions (H x W x T)	3.37" x 2.125" x 0.033"	3.37" x 2.125" x 0.033"	1.77" x 1.18" x .11"
Slot punch[3] (printed guide included on ISO cards)	Vertical or horizontal (optional)	Vertical or horizontal (optional)	Keyring
Memory capacity	4K byte/32k bit	4K byte/32k bit	4K byte/32k bit

Limited lifetime warranty *- Credentials have a lifetime warranty against manufacturers defects. See sales policy for complete warranty details.*

1. ISO glossy white style credentials are made from composite material, are printable, and can include a magnetic stripe as an option.
2. Add M1 to the model number for a magnetic stripe when ordering. Vertical slot punch not available on magnetic stripe cards.
3. Add SPV (vertical) or SPH (horizontal) your credential order for a slot punch. Vertical slot punch comes standard on all clamshell order. Vertical and horizontal slot punch are optional on ISO cards. Vertical slot punch not available on magnetic stripe cards.
4. All Schlage MIFARE credentials comply with the 14443 ISO standard.

As we consolidate our DESFire® offering to standardize on EV3, please reference the latest price book for a cross reference guide when transitioning from EV1 or EV2.

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MIFARE Classic® Credentials

Overview

Often viewed as the entry point into smart cards, Schlage MIFARE Classic® credentials are ideal for facilities with moderate secure needs, and for businesses that want to use credentials to support multiple business functions such as multifamily. These credentials protect your most sensitive data by utilizing extra layers of security protection, and can be used for many applications including transit, cashless vending, and cafeteria point of sale. All MIFARE® credentials from Schlage are encrypted and secure, but also based on open, global standards, ensuring a future of headache-free flexibility and scalability.

Schlage Credential Services

- Programmed with industry standard formats as well as Schlage CardTrax™ Credential Sequencing Program
- Custom bit format development
- Custom artwork and laser engraving

Hardware Interoperability

- MT and MTB multi-technology readers
- Schlage RC reader controllers
- All Schlage AD, NDE, LE, XE360™ Series and Schlage Control® electronic locks
- See Compatibility Guide for additional details

Features & Benefits

- Simple, fixed memory structure
- Freely programmable memory
- 3 DES encryption projects data being relayed between card and reader
- Available with single technology 13.56 MHz (new applications) or multi-technology 125 kHz + 13.56 MHz (migrating)
- Multiple memory options and form factors to fit any business need
- Open, standards-based platform easily accommodates applications of your choice
- Lifetime warranty against manufacturer's defects
- Compatible with Schlage (encrypted) and other industry manufacturers' readers and electronic locks (CSN only)

Clamshell card

Wristbands

ISO glossy card

Keyfob/thin keyfob

PVC adhesive patch

PVC adhesive disc

Check out our Schlage Credential Services

Single Technology (13.56 MHz) Smart Credentials

Ideal for new installations for facilities with moderate security needs, Schlage MIFARE Classic® contactless credentials utilize high frequency (13.56 MHz) technology. These credentials offer more security compared to proximity, multiple memory options and form factors plus a simple, fixed memory structure.

13.56 MHz MIFARE Credentials						
Model number	9420, 9451	9520, 9551, 9558	9651	9651T	9351	9751, 9758
Credential type	Clamshell	ISO glossy white[1]	Keyfob	Thin keyfob	Silicone wristband	PVC adhesive patch
Credential technology	MIFARE Classic[4]	MIFARE Classic[4]	MIFARE Classic[4]	MIFARE Classic[4]	MIFARE Classic[4]	MIFARE Classic[4]
Magnetic stripe	No	Yes[2]	No	No	No	No
Dimensions (H x W x T)	3.37" x 2.125" x 0.075"	3.37" x 2.125" x 0.033"	2" x 1.24" x 0.38"	1.77" x 1.18" x .11"	0.63" x 7.68" x 0.295"	3.37" x 2.125" x 0.033"
Slot punch[3] (printed guide included on ISO cards)	Vertical (standard)	Vertical or horizontal (optional)	Keyring	Keyring	N/A	Vertical (optional)
Memory capacity; application sectors	2.5k bit; 5 sectors 1K byte/8k bit; 16 sectors	2.5k bit; 5 sectors 1K byte/8k bit; 16 sectors 4K byte/ 32k bit; 40 sectors	1K byte/8k bit; 16 sectors	1K byte/8k bit; 16 sectors	1K byte/8k bit; 16 sectors	1K byte/8k bit; 16 sectors 4K byte/32k bit; 40 sectors

Multi-Technology (125 kHz + 13.56 MHz) Smart Credentials

Particularly useful for facilities with moderate security needs during migration, Schlage multi-technology credentials combine 125 kHz proximity and 13.56 MHz MIFARE Classic® technologies in one contactless card. This flexibility allows customers to economically improve security of existing legacy applications to more secure MIFARE technology over time.

125 kHz/13.56 MHz Multi-Technology Credentials			
Model number	9951	9958	9691T
Credential type	ISO glossy white[1]	ISO glossy white[1]	Thin keyfob
Credential technology	Proximity/MIFARE Classic[4]	Proximity/MIFARE Classic[4]	Proximity/MIFARE Classic[4]
Magnetic stripe	Yes[2]	Yes[2]	No
Dimensions (H x W x T)	3.37" x 2.125" x 0.033"	3.37" x 2.125" x 0.033"	1.77" x 1.18" x 0.11"
Slot punch[3] (printed guide included on ISO cards)	Vertical or horizontal (optional)	Vertical or horizontal (optional)	Keyring
Memory capacity	1K byte/8k bit; 16 sectors	4K byte/32k bit; 40 sectors	1K byte/8k bit; 16 sectors

Limited lifetime warranty *- Credentials have a lifetime warranty against manufacturers defects. See sales policy for complete warranty details.*

1. ISO glossy white style credentials are made from composite material, are printable, and can include a magnetic stripe as an option.
2. Add M1 to the model number for a magnetic stripe when ordering. Vertical slot punch not available on magnetic stripe cards.
3. Add SPV (vertical) or SPH (horizontal) your credential order for a slot punch. Vertical slot punch comes standard on all clamshell order. Vertical and horizontal slot punch are optional on ISO cards. Vertical slot punch not available on magnetic stripe cards.
4. All Schlage MIFARE credentials comply with the 14443 ISO standard.

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Proximity Credentials

Overview

Schlage® proximity credentials provide a convenient access control solution for facilities with less demanding security needs. Schlage proximity credentials are compatible with most industry-leading proximity readers, allowing them to easily integrate with new and existing proximity access control systems. From highly durable clamshell-style cards to the standard ISO style cards, keyfobs or PVC adhesive discs, Schlage offers a variety of credential formats to support a broad range of access control applications.

Features & Benefits

- 125 kHz proximity technology available in multiple form factors
- Easily integrates into existing proximity systems
- CardTrax™ account tracking program helps keep track of card numbers at no additional cost
- Lifetime warranty against manufacturer's defects
- Custom artwork and laser engraving available
- Available in ISO style cards and can include a magnetic stripe.
- Available in multiple memory capacities

Check out our Schlage Credential Services

125 kHz Proximity Credentials					
Model number	7410	7510	7610	7610T	7010
Credential type	Clamshell	ISO glossy white[1]	Keyfob	Thin keyfob	PVC adhesive disc
Credential technology	Proximity	Proximity	Proximity	Proximity	Proximity
Magnetic stripe available	No	Yes[2]	No	No	No
Dimensions (H x W x T)	3.37" x 2.125" x 0.075"	3.37" x 2.125" x 0.033"	2" x 1.24" x 0.38"	1.77" x 1.18" x .11"	1.38 or 35 mm diameter
Slot punch[3] (printed guide included on ISO cards)	Vertical (standard)	Vertical or horizontal (optional)	Keyring	Keyring	N/A
Warranty	Limited lifetime - Credentials have a lifetime warranty against manufacturers defects. See sales policy for complete warranty details.				

1. ISO glossy white style credentials are made from composite material, are printable, and can include a magnetic stripe as an option.
2. Add M1 to the model number for a magnetic stripe when ordering. Vertical slot punch not available on magnetic stripe cards.
3. Add SPV (vertical) or SPH (horizontal) your credential order for a slot punch. Vertical slot punch comes standard on all clamshell order. Vertical and horizontal slot punch are optional on ISO cards. Vertical slot punch not available on magnetic stripe cards.

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Credentials Compatibility Guide

For Readers & Electronic Locks

PR10
Proximity - Mini-Mullion

SM10
Smart - Mini-Mullion

MT11 | MT15 | MTK15 | MTMS15 | MTMSK15
Multi-Technology
Mullion | Single Gang

MTB11 | MTB15 | MTKB15
Mobile-Enabled
Multi-Technology
Mullion | Single Gang

	PR10 Proximity - Mini-Mullion	SM10 Smart - Mini-Mullion	MT11 | MT15 | MTK15 | MTMS15 | MTMSK15 Multi-Technology Mullion | Single Gang	MTB11 | MTB15 | MTKB15 Mobile-Enabled Multi-Technology Mullion | Single Gang
Schlage Credentials - Secure and Encrypted				
Schlage Mobile - Wallet-Based NFC[1]		●	●	●
Schlage Mobile - Bluetooth®[2]				●
Schlage MIFARE® DESFire® EV1/EV3		●	●	●
Schlage MIFARE Classic®		●	●	●
Multi-technology: Schlage MIFARE® DESFire® EV1/EV3 (secure) and Proximity[3] (unsecure)	●[3]	●	●	●
Multi-technology: Schlage MIFARE Classic® (secure) and Proximity (unsecure)	●[3]	●	●	●
Schlage Credentials - Not Encrypted				
Schlage Proximity[3] (125 kHz)	●		●	●
Personal Identification Number (PIN)			●[4]	●[4]
Magnetic stripe			●[5]	
Other Supported Credential Types				
Multi-Factor Authentication (Card + PIN)			●[4]	●
PIV and PIV-I		●	●	

1. Unless noted, wallet-based NFC credentials are in Apple Wallet® and Google Wallet™
2. Schlage Mobile Bluetooth Credential or integrated Allegion Alliance solution.
3. Proximity only. Bit lengths greater than 37 not supported.
4. MTK15, MTMSK15 and MTBK15 models only.
5. MTMS15 and MTMSK15 models only.

Learn more about Schlage Credentials and Services

Learn more about Schlage Readers

Learn more about Schlage Electronic Locks

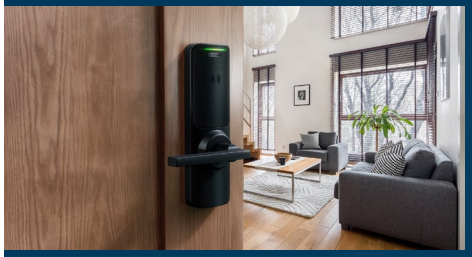
Credentials Compatibility Guide
For Readers & Electronic Locks

	RC11 | RC15 | RCK15 Multi-Technology Reader-Controller Mullion | Single Gang	MT20 (USB) or MT20W (USB only) Smart Enrollment	CO-200 Electronic Lock	AD Series Electronic Locks[4]	LE & NDE Mobile Enabled Wireless Locks[5]	Schlage Control™ Mobile Enabled Smart Locks[5]	Schlage XE360™ Series Wireless Locks[5]
Schlage Credentials - Secure and Encrypted							
Mobile - Wallet-Based NFC[1]	●	●		●	●	●	●
Mobile - Bluetooth®[2]	●				●	●	●
Schlage MIFARE® DESFire® EV1/EV3	●	●		●	●	●[6]	●
Schlage MIFARE Classic®	●	●		●	●	●	●
Multi-technology: Schlage MIFARE® DESFire® EV1/EV3 (secure) and Proximity[3] (unsecure)	●	●[9]	●[3]	●	●	●[6]	●[6]
Multi-technology: Schlage MIFARE Classic® (secure) and Proximity (unsecure)	●	●	●[3]	●	●	●	●
Schlage Credentials - Not Encrypted							
Schlage Proximity[3]	●		●	●	●		
Personal Identification Number (PIN)	●		●	●			
Magnetic stripe			●	●			
Other Supported Credential Types							
Multi-Factor Authentication (Card/Fob + PIN)	●		●	●			
PIV and PIV-I		●[8]		●[7]			

1. Unless noted, wallet-based NFC credentials are in Apple Wallet® and Google Wallet™
2. Schlage Mobile Bluetooth Credential or integrated Allegion Alliance solution.
3. Proximity only. Bit lengths greater than 37 not supported.
4. Excludes AD-250.
5. No Tour functionality requires minimum 1K byte/8k bit Schlage smart credential and MT20W enrollment reader.
6. Not compatible with Schlage MIFARE® DESFire® EV2 credentials or proximity credentials.
7. Requires AD Series FMK reader.
8. MT20 only for PIV and PIV-I
9. MT20 only for proximity credentials

Leverage Your Credential Investment

Already invested in a credential platform from another brand or manufacturer? No problem. Schlage offers electronic locks and readers that fully support smart and mobile credentials from other leading brands.



Please see pages 3 and 4 for our Interoperable Solutions

Credentials Compatibility Guide
For Readers & Electronic Locks

PR10
Proximity - Mini-Mullion

SM10
Smart - Mini-Mullion

MT11 | MT15 | MTK15 | MTMS15 | MTMSK15
Multi-Technology
Mullion | Single Gang

MTB11 | MTB15 | MTKB15
Mobile-Enabled
Multi-Technology
Mullion | Single Gang

Other Credential Brands - Secure and Encrypted; requires custom credential configurations and/or special models. Please contact your Allegion rep for details.				
HID iCLASS®, iCLASS SE®, and Seos® secure application area				
HID Seos® NFC mobile, secure application area				
LenelS2 BlueDiamond™ Mobile (Apple Wallet® Only)			●	●
LenelS2 MIFARE® DESFire® Custom Key		●	●	●
Transact MIFARE® DESFire®		●	●	●
Transact NFC Wallet		●	●	●
Brivo Unified Credential (BUC)			●	●
Kastle Systems NFC Apple Wallet®		●	●	●
Other PACS using Wavelynx NFC Mobile		●	●	●
PACS using LEAF Custom MIFARE® DESFire® Configuration (Cc) credentials		●	●	●
Avigilon Alta; No-Tour (Schlage EV3) or Standard (Alta EV3-B)		●	●	●
Avigilon Alta Bluetooth® Mobile				●
Other Credential Brands - Card Serial Number Only (CSN)				
MIFARE® DESFire® EV1/EV2/EV3, MIFARE Classic®, and MIFARE Plus® CSN[1]		●	●	●
HID iClass®, iCLASS SE® CSN[1]		●	●	●
Other Credential Brands - Not Encrypted				
Proximity[2] (including ISONAS™, HID®[2], LenelProx®, GE/CASI ProxLite®, AWID®)	●		●	●

1. CSN = Card serial number only.
2. Proximity bit lengths greater than 37 not supported.

Notes:
If your credential is not listed, please contact your local Allegion sales consultant or our credential engineering services at ElectronicInsideSales@allegion.com.

Full support of the secure sector requires custom credential configurations and/or special models, please contact your local Allegion sales consultant for details.

Unless noted, wallet-based NFC credentials are in Apple Wallet® and Google Wallet™

Unlock Possibilities With Interoperability

We offer electronic locks and readers that fully support smart and mobile credentials from other leading brands. This helps you leverage your ***existing*** credential investment and makes adding new openings to the access control enterprise **seamless**.

Security
Trusted in over 40 million homes, schools and businesses around the world. We continuously strive to keep buildings, and the people within them, safe and secure.

Possibility
Fully supports the secure application areas of smart & mobile credentials from Schlage and other leading brands including HID®, LenelS2 BlueDiamond™ and more.

Non-proprietary
Schlage's non-proprietary solutions and interoperability model unlocks the freedom to choose from a wide range of locking hardware that serves your needs.

Dependability
Get the proven reliability of electronic locks from Schlage–delivering dependable craftsmanship ad creative solutions for over 100 years.

To learn more, visit ***commercial.schlage.com/freedom***

Credentials Compatibility Guide
For Readers & Electronic Locks

RC11 | RC15 | RCK15 Multi-Technology Reader-Controller Mullion | Single Gang

MT20 (USB) Smart Enrollment

CO-200 Electronic Locks[4]

AD Series Electronic Locks[5]

LE & NDE Mobile Enabled Wireless Locks[6]

Schlage Control™ Mobile Enabled Smart Locks[6]

Schlage XE360™ Series Wireless Locks[6]

Other Credential Brands - Secure and Encrypted Interoperability; requires custom credential configurations and/or special models. Please contact your Allegion rep for details.							
HID iCLASS®, iCLASS SE®, and Seos® secure application area[1]				●	●		
HID Seos® NFC mobile, secure application area[1]				●	●		
LenelS2 BlueDiamond™ Mobile (Apple Wallet® Only)		●		●	●	●	
Lenel MIFARE® DESFire® Custom Key	●			●	●		●
Transact MIFARE® DESFire®		●		●	●		●
Transact NFC Wallet		●		●	●		●
Brivo Unified Credential (BUC)	●	●		●	●		●
Kastle Systems NFC Apple Wallet®	●	●		●	●	●	●
PACS using Wavelynx NFC Mobile	●	●		●	●	●[7]	●
PACS using LEAF Custom MIFARE® DESFire® Configuration (Cc) credentials	●	●		●	●	●	
Avigilon Alta; No-Tour (Schlage EV3) or Standard (Alta EV3-B)		●			●	●	
Avigilon Alta Bluetooth® Mobile		●			●	●	
Other Credential Brands - Card Serial Number Only							
MIFARE® DESFire® EV1/EV2/EV3, MIFARE Classic®, and MIFARE Plus® CSN[2]	●	●		●	●		●
HID iClass®, iCLASS SE® CSN[2]	●	●		●	●	●	●
Other Credential Brands - Not Encrypted							
Proximity[3] (including ISONAS™, HID®[3], LenelProx®, GE/CASI ProxLite®, AWID®)	●		●	●	●		

1. Requires Si or SiK option. Si/SiK option does not support proximity credentials.
2. CSN = Card serial number only.
3. Proximity bit lengths greater than 37 not supported.
4. Requires CO-200 with PR or PRK Reader
5. Excludes AD-250 as well as KP, MS, MSK readers
6. Consult PACS/PropTech Provider for No-Tour credential requirements
7. Apple Wallet® Only

Notes:
If your credential is not listed, please contact your local Allegion sales consultant or our credential engineering services at ElectronicInsideSales@allegion.com.

Full support of the secure sector requires custom credential configurations and/or special models, please contact your local Allegion sales consultant for details.

Unless noted, wallet-based NFC credentials are in Apple Wallet® and Google Wallet™

Learn more about Schlage Credentials and Services

Learn more about Schlage Readers

Learn more about Schlage Electronic Locks

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ALLEGION

Electronic Locking Solutions

The AD Series

The AD Series was built from the ground up to provide more options, more functionality and more compatibility than any other electronic locking solution on the market today. The AD Series meets today's security needs while also easily adapting to future needs as they emerge. The AD Series is designed on an open architecture platform to provide users with enhanced flexibility and scalability, resulting in an investment that's every bit as secure as your facility.

The modular design of the AD Series creates an easy and affordable way to expand a security system and integrate emerging technologies over time and when budgets permit. Customers can easily upgrade readers or networking options – all without having to remove the lock from the door. And the wireless technology gives you the option to install access control on doors that have traditionally been difficult to wire while providing real-time monitoring and centralized lockdown capabilities. The AD Series was designed to be the right choice for today, and ready for whatever the future holds. With the AD Series you can be assured that your investment is every bit as protected as your facility.

The AD Series simplifies installation by combining the electrified lock, reader, door position switch, request-to-exit, and other status monitors together. A variety of electronic locking models are available which can be configured to meet the needs of most common applications across a building or a campus. Wireless accessories complement the locks and enable the same technology to be used beyond doors including elevators and parking gates.

- Broadest range of options, features, and capabilities in the Schlage portfolio
- Networked real-time wireless and wired, as well as standalone models
- Electronic Locking models to address cylindrical, mortise and exit trim applications
- Wireless accessories to address remote and hard to wire applications including elevators and parking gates
- Supports NFC mobile, smart (MIFARE®, MIFARE DESFire®), prox, mag stripe and keypad credentials
- Specific models available to support HID credentials[1] and FIPS and other government standards[2]
- Robust design; ideal for institutional and high abuse environments
- Adaptable credential and connectivity modules; upgrade to new technologies as needs change

1. Requires the Si or SiK reader module; see data sheet for specific support
2. Please see the AD-402, AD-302 or AD-201 data sheets for specific support

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CO Series

The CO Series is a reliable and proven solution backed by extensive testing and certification and the strong mechanical heritage of Schlage. It is ideal for applications that desire a cost-effective solution for basic security needs. Three different classifications are offered in the CO Series for standalone applications.

The CO Series provides the added security and convenience of electronic access control without the cost or complexity of a networked system. By providing electronic credentials you can minimize the number of mechanical keys issued which protects the integrity of key systems. Choose from basic PIN code access for a small number of users or a card-based system to serve a larger population of users.

- Offline, standalone models only
- CO-100 carries full outdoor rating
- Supports prox and keypad credentials

NDE Wireless Cylindrical Locks

The Schlage® NDE mobile enabled wireless cylindrical lock is designed to affordably extend electronic access control deeper into the building beyond traditional perimeter and high security openings. It can function in offline or No-Tour mode. It can also be connected over Wi-Fi for periodic check-ins or via the GWE gateway for real-time management.

The open architecture design allows the NDE to be managed by Allegion software or to be integrated into popular physical access control systems through our PACS Alliance program. This enables customers to choose the system that best fits their requirements and gives them the ability to move to a fully networked solution at any time.

The NDE is compatible with a wide range of mobile, smart and proximity credential technologies and can operate in storeroom, office, privacy, or apartment functions using its interior push button with indication.

NDE works within existing network architecture and can exist in the same EAC system as other wireless locks including Schlage Control®, AD-400 and LE.

- Networked real-time wireless, connected Wi-Fi and No-Tour offline modes of operation
- Designed for cylindrical applications; minimal modifications needed for installation on most doors
- Supports Bluetooth® and NFC mobile, smart (including MIFARE Classic®, MIFARE® DESFire®) and proximity credentials
- Specific model available to support HID® smart and NFC credentials[1]
- Ideal for commercial, multifamily and institutional environments

1. Requires the Si option; see data sheet for specific support

LE Wireless Mortise Locks

The Schlage® LE mobile enabled wireless mortise lock is designed to affordably extend electronic access control deeper into the building beyond traditional perimeter and high security openings. It can function in offline or No-Tour mode or as a networked lock with either periodic check-ins or real-time management.

The open architecture design allows the LE to be managed by Allegion software or to be integrated into popular physical access control systems through our PACS Alliance program. This enables customers to choose the system that best fits their requirements and gives them the ability to move to a fully networked solution at any time.

The LE is compatible with a wide range of mobile, smart and proximity credential technologies.

Featuring two sleek trim options with a broad range of decorative lever and finish choices. The LE can be ordered with LED indicator, interior push button, or deadbolt to enable storeroom, office, privacy, or apartment functions.

LE electronic wireless locks fit into existing network architecture and can work in the same EAC system as other wireless locks including Schlage Control®, AD-400 and NDE.

- Networked real-time wireless, connected Wi-Fi and No-Tour modes of operation
- Designed for mortise applications; minimal modifications needed for installation on most doors
- Supports Bluetooth® and NFC mobile, smart (including MIFARE Classic®, MIFARE® DESFire®) and proximity credentials
- Specific model available to support HID® smart and NFC credentials[1]
- Ideal for commercial, multifamily and institutional environments

XE360™ Series

The XE360™ Series is the latest wireless lock from Schlage and designed with the options, features, and style most looked for by multifamily properties - at an attractive price point. It operates in an offline or No-Tour environment and is integrated with Allegion and 3rd party PACS and Proptech systems. The XE360 Series supports the latest credential technologies and is available as Tubular, Mortise and Exit Trim. The innovative FleX Module™ allows the XE360 Series to be easily upgraded in the field to allow migration from an offline to networked solution and adapt to emerging trends in security and connectivity.

- No-Tour and offline options
- Models to address Tubular, Mortise and Exit Trim applications
- Supports Bluetooth® and NFC mobile and smart (including MIFARE Classic®, MIFARE® DESFire®) credentials
- Ideal for multifamily properties

1. Requires the Si option; see data sheet for specific support

Schlage Control® Smart Locks

The Schlage Control® mobile enabled smart lock was designed specifically for multifamily residence doors. It allows properties to offer convenient security to residents and intelligent efficiency to property managers. And, through support for Bluetooth® mobile credentials, Schlage is opening the door to any number of future possibilities.

Schlage Control mobile enabled smart locks allow residents to gain access using a smart credential or their smartphone. And without traditional keys to deal with, properties will save time and money in managing resident access.

The open architecture capabilities of Schlage Control offer properties the freedom to use the physical access control (PACS) or Proptech provider of their choice to manage security and extend the possibilities of their locks beyond access control.

- No-Tour, offline and networked real-time applications
- Available as a deadbolt or interconnected lock
- Two attractive styles and a broad selection of finishes and suited lever designs
- Ideal for multifamily properties
- Supports Bluetooth® and NFC mobile and smart (including MIFARE Classic®, MIFARE® DESFire®) credentials

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AD-400

Networked Wireless Electronic Lock

Overview

AD Series electronic locks from Schlage® are designed to be modular and provide more options to choose from, more functionality in the lock, and more compatibility with existing access control systems. Its patented modular design allows the lock to be customized to fit the needs of an application now and changed to meet future needs without removing it from the door.

To simplify installation, the AD Series combines all the hardware components required at the door for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit, and request-to-enter sensors, door position switch, tamper switch, and more.

The AD-400 wireless networked lock gives you many of the key benefits of a hardwired access control system—without the wires. This allows you to secure doors that were traditionally difficult to run wires to in the past and increase the security throughout your facility.

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP, HID® and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Other manufacturer credentials including:
  - HID iCLASS®, iCLASS SE® and SEOS® plastic and NFC mobile credentials
  - LenelS2™ BlueDiamond™ MIFARE® DESFire® EV3 and NFC mobile credentials
  - TRANSACT, Brivo, Kastle and more
- See the Credential Compatibility Guide for full details

Schlage Credential Services

- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

Features & Benefits

- Open architecture platform - integrated into most popular physical access control systems through our PACS Alliance program
- Multi-technology credential compatibility includes Schlage MIFARE®, NFC mobile[1], and proximity
  - Optional support for HID® smart and NFC mobile credentials
- Panel interface options ensure seamless communication with the access control system
- Secure encrypted data transmission
- Unique communication protocols won't interfere with other wireless networks
- 'Wake up on Radio' feature enables centralized lockdown in less than 10 seconds while still optimizing battery life up to 2 years
- Non-invasive wireless installation for historic buildings and sensitive areas
- Wireless accessories available for remote, gate, elevator, and portable or temporary (mustering) applications

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1. Check with PACS provider for specific support of mobile credentials in Apple Wallet® and Google Wallet™.

Reliable Communications

Secure and reliable wireless communication with the Panel Interface Module (PIM) is accomplished using 900 MHz frequency. 900 MHz band enables longer transmission ranges because signal propagation with longer wavelengths travel a greater distance and better penetrate typical building construction – allowing for simplified system design.

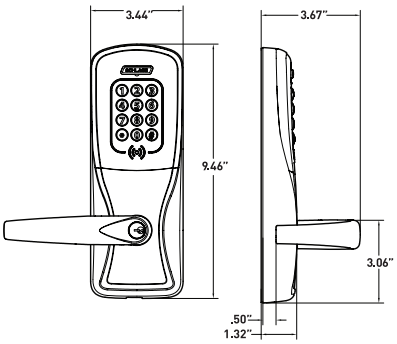
Wake-Up on Radio

This feature enables implementation of wireless locks in applications where centralized lockdown or unlock is required. 'Wake Up on Radio' utilizes patent-pending technology to enable real-time activation at a remote battery-powered wireless lock. The technology is configurable from 10 to 1 second increments. When Wake-Up on Radio is used in critical applications, Dynamic Channel Switching should also be enabled.

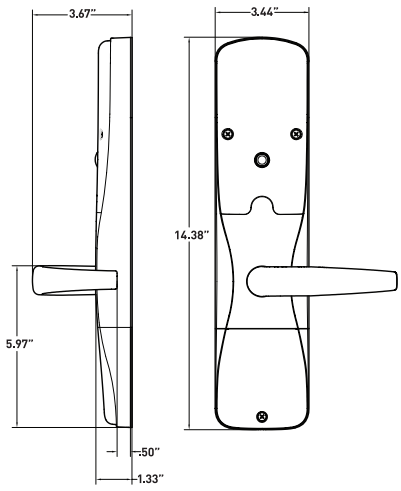
Panel Interface Module (PIM400)

The PIM400 (sold separately) is required for communication between the AD-400 wireless lock and the access control panel, and can support up to 16 locks depending on your access control system.

Exterior



Interior



AD-400 Electronic Lock Specifications	
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Frequency range	902-928 MHz
Transmission/encryption	AES-128 bit key
Credential verification time	< 1 second[1]
Wake-up on radio	Responds to lock/unlock command from host in less than 10 seconds in battery powered applications (per field configuration)
Communication range	Up to 200 ft with obstructions (normal building construction), up to 1,000 ft clear line of sight
RF interference avoidance	Configurable dynamic channel switching
Data rate	RF: 40 kbps
Visual/audible communications	Tri-colored LED's and audible indicators (field configurable)
System interface	RS-485, Wiegand, or Clock & Data via PIM400 to host
Power supply	4AA, 8AA, 12 VDC or 24 VDC
Voltage range	4 VDC to 26 VDC
Max current requirement	Up to 250 mA
Battery life	Up to 2 yrs with 4AA
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 32° to 120°F (0° to 49°C) (battery)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25; ANSI/BHMA Grade 1; UL 294; ULC S319; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant; Cylindrical and mortise chassis only: TDI DR-464; DR-465; FL12400, FL4613, FL1592, FL13013, FL14482; Mortise chassis only: FL3905
Accessories	Panel Interface Module (PIM400), SUS-A Cable used with SUS Android mobile app, remote antennas for PIM400 to extend range, Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

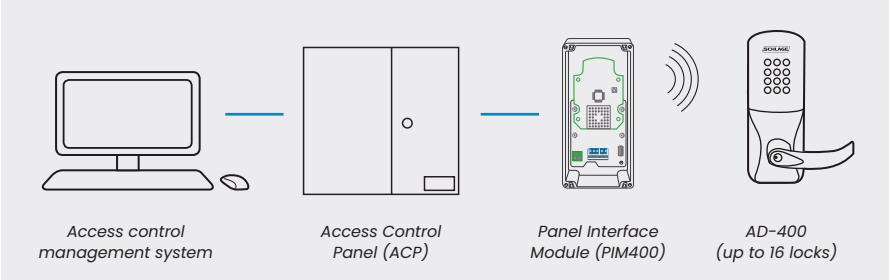
Functions

- Storeroom[2]
- Office/classroom[2, 3]
- Privacy[3]
- Apartment[3]

Available Status Signals

- Lock/unlock status[4]
- Request-to-exit
- Door position
- Mechanical key override[3]
- Deadbolt position[3]
- Interior push button[3]
- Interior cover tamper guard[3]
- Battery status
- Communication status[3]
- Request-to-enter[3]

*The AD-400 has a number of field-configurable features and provides opening intelligence through status signals that can be monitored by access control software. Please consult one of our Physical Access Control Software (PACS) providers for **details** on specific features.*



1. Lock requires less than 100 msec, response time does not include latency time of ACP.
2. Storeroom and office/classroom functions not available with mortise deadbolt option.
3. Consult your Physical Access Control Software (PACS) provider for specific scope of support. Interior pushbutton, mechanical key override, and deadbolt position are only available when linked via PIM400-485.
4. Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch position unless monitored on RS-485 connection.

Mechanical Specifications			
	Cylindrical	**Mortise**	**Exit Trim**
Handing	Handed to order, field reversible		
ANSI standard (meets or exceeds)	A156.25 locked outdoor A156.2 Series 4000 Grade 1	A156.25 locked outdoor A156.13 Series 1000 Grade 1	A156.25 locked outdoor A156.3 Grade 1
Door thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	Standard: 2-3/4" Optional: 2-3/8", 3-3/4", 5"	2-3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw	Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated		
Strike	Standard: 1-3/16" lip, ANSI, 1-1/4" x 4-7/8" Optional: Additional configurations available, please see price book		Provided by exit device
Cylinder and keys	Schlage® 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys standard. Additional options available including SFIC, FSIC and competitor brands. See lever and cylinder compatibility data sheet.		

Standard Multi-Technology Reader Specification	
Credential technologies	Proximity (125 kHz), Smart (13.56 MHz) and Near Field Communication (NFC)
Standards	ISO 15693, ISO 14443
Read range	Proximity: up to 1.25"; Smart: up to .75"; NFC mobile: mobile device dependent
Proximity credential support	Schlage, ISONAS™, HID4, GE/CASI ProxLite®, AWID® and LenelProx®
Smart credential support	Secure sector: Schlage MIFARE Classic®, Schlage MIFARE Plus®, Schlage MIFARE® DESFire®, PIV and PIV-I[1,2] CSN only: HID iCLASS®, HID iCLASS SE®, Inside Contactless Pico Tag®, MIFARE Classic/Plus/DESFire, ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code®
Mobile credential support	NFC mobile credentials in Apple Wallet® and Google Wallet™ [3]
Certifications	FCC, Industry Canada (IC), UL 294
Options	12 button, 3 x 4 matrix backlit keypad

Note: See the Credential Compatibility Guide for full details including interoperable credentials from other manufacturers.

Available AD Series Reader Modules

Multi-Technology

- Proximity
- Smart
- NFC mobile

+ KEYPAD option

Si with HID Support

- Smart
- NFC mobile

+ KEYPAD option

Magnetic Stripe (swipe)

+ KEYPAD option

Keypad

1. FIPS 201-2 integration ready option available: The AD Series can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-2 compliance when installed as part of a tested and approved integrated solution. Please see the AD-402 data sheet or AD-302 data sheet for complete details.
2. 75 bit output format default. Configurable to other output formats.
3. Check with PACS provider for specific support of mobile credentials in Apple Wallet® and Google Wallet.™
4. Proximity bit lengths greater than 37 not supported.

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AD Series exit trim is compatible with Von Duprin 98/99 and 98/99XP (rim, mortise, SVR; and CVC, CVR on metal doors only), Von Duprin 78 (rim, SVR, CVR), Von Duprin 22/22F (rim and SVR) and Falcon 25 (rim) exit devices from Allegion. The AD Series is also compatible with select rim exit devices from Sargent, Corbin Russwin, Yale, Dorma and Precision.

For Von Duprin and Falcon solutions, a low current request-to-exit switch (RX-LC or AE) is required. The part numbers are:

Von Duprin: 050281
Falcon: 650359

Refer to the AD Series Exit Trim Compatibility Guide for additional details.

Benefits of AD Series Multi-Technology Readers:

- Reads multiple brands of both proximity (125 kHz) and smart (13.56 MHz) technologies with single reader
- Compatible with NFC mobile credentials in Apple Wallet® and Google Wallet™ [3]
- Allows facility to migrate to more secure credential technologies over time and as budgets permit

Additional Readers

Si option with HID® support

Supports:

- Secure application area of HID iCLASS®, iCLASS SE®, Seos® smart credentials
- iCLASS Standard Key and Elite Keys
- HID NFC mobile credentials
- All Schlage MIFARE® and NFC mobile credentials

Does not support:

- Proximity
- Bluetooth® (BLE) mobile credentials

Magnetic stripe

- Triple track reader (1, 2 or 3), field configurable
- ABA, ISO76XX standard

Keypad

- Backlit keypad
- 12 button, 3 x 4 matrix

Ordering Information

Available through one of our GSA schedule 84 approved distributions. BAA options available.

AD	-	400	-	CY	-	70	-	MS	-	SPA	-	626	-	P6	-	S123	-	RH	-	4B	-	13-247	-	10-025	-	134
Series		Class		Chassis		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Handing		Battery		Backset & Latch or Armored Front		Strike		Door Thickness
1		2		3		4		5		6		7		8		9		10		11		12		13		14

Standard options are indicated with a dot. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise deadbolt
993R	Exit trim – rim/CVC/CVR
993S	Exit trim – SVR
993M	Exit trim – mortise
993DT	Non-functioning dummy trim for exit

4 Function

40	Privacy
50	Office/classroom
60	Apartment
70	Storeroom

Lock function capabilities are determined by users access control system.

5 Reader

• KP	Keypad
MS	Magnetic stripe (swipe)
MSK	Magnetic stripe + keypad (swipe)
MT	Multi-technology (125 kHz, 13.56 MHz, NFC)
MTK	Multi-technology + keypad (125 kHz, 13.56 MHz, NFC)
FMK	FIPS 201-1 compliant multi-technology + keypad (125 kHz and 13.56 MHz)
Si	HID support
SiK	HID support + keypad
DT	Dummy trim

6 Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with tactile warning options.

7 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
• 626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

8 Key Cylinder

• P6	Schlage 6-pin conventional key-in-lever cylinder

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9 Keyway

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

10 Handing

• RH	Right handed
LH	Left handed

Field reversible.

11 Battery

• 4B	4AA
8B	8AA

12 Backset & Latch or Armored Front

• 13-247	Cylindrical: 2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"
• 09-663	Mortise: Armor front, 1-1/4" wide, square corner

See price book for mortise deadbolt and other backset and latch options or armor front options.

13 Strike

• 10-025	Cylindrical: 1-3/16" lip, ANSI, no box, 1-1/4" x 4-7/8"
• 10-072	Mortise: 1-3/16" lip, 1-1/4" x 4-7/8" square corner, box

See price book for other available strikes.

14 Door Thickness

• 134	1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

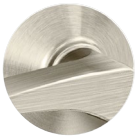
Tubular

Finishes

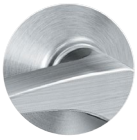
605
Bright Brass

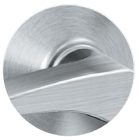
606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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004446, Rev. 04/25

AD-402

FIPS 201-2 Integration Ready Networked Wireless Electronic Lock

Overview

AD Series electronic locks from Schlage® are designed to be modular and provide more options to choose from, more functionality in the lock and greater compatibility with existing systems. Its patented modular design allows the lock to be customized to fit the needs of an application now, and changed to meet future needs without removing it from the door.

AD-402 locks feature a multi-technology card and keypad reader (FMK) that is fully PIV and PIV-I capable for dual authentication to an external server. The open architecture software design of AD Series facilitates integration making AD-402 a desirable part of a Physical Access Control Software (PACS) provider's offering. Any completed PACS integrations that are tested and approved under HSPD-12 guidelines can then be applied in U.S. Federal Agency Buildings.

Factory orderable options include choices of chassis type, network configurations, locking functions, power options, lever styles and finishes. It also offers a selection of features that can be configured in the field to customize your openings.

To simplify installation, the AD Series combines all the hardware components required at the door into one design that includes the electrified lock, credential reader, request-to-exit sensor, request-to-enter sensor, and both door position and tamper switches. The AD-402 has a number of features built in that are configurable in the field and a long list of items that can be monitored by access control software.

The AD-402 wireless networked lock gives you many of the key benefits of a hardwired access control system — without the wires. This allows you to secure doors that were traditionally difficult to run wires to in the past — and increase the security throughout your facility.

Features & Benefits

- PIV and PIV-I compatible
- Open architecture platform
- The PIM400-485 Panel Interface Module ensures seamless communication with your RS-485 system and can support up to 16 AD-402 devices
- Non-invasive installations for historic buildings and sensitive areas
- Secure encrypted data transmission
- Unique communication protocols that won't interfere with other wireless networks
- Patent-pending wireless feature that enables efficient centralized lockdown in less than 10 seconds while still optimizing battery life up to 2 years
- Available in cylindrical, mortise, mortise deadbolt and exit trim
- Compatible with major brands of master key systems

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Reliable Communications

Secure and reliable wireless communication with the Panel Interface Module (PIM) is accomplished using 900 MHz frequency. 900 MHz band enables longer transmission ranges because signal propagation with longer wavelengths travel a greater distance and better penetrate typical building construction – allowing for simplified system design.

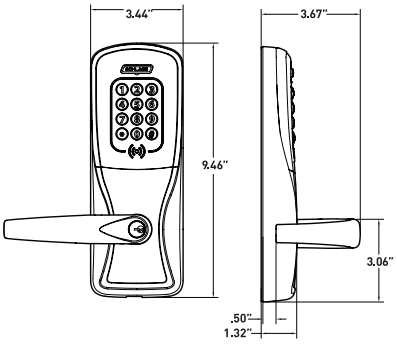
Wake-Up on Radio

This feature enables implementation of wireless locks in applications where centralized lockdown or unlock is required. 'Wake Up on Radio' utilizes patent-pending technology to enable real-time activation at a remote battery-powered wireless lock. The technology is configurable from 10 to 1 second increments. When Wake-Up on Radio is used in critical applications, Dynamic Channel Switching should also be enabled.

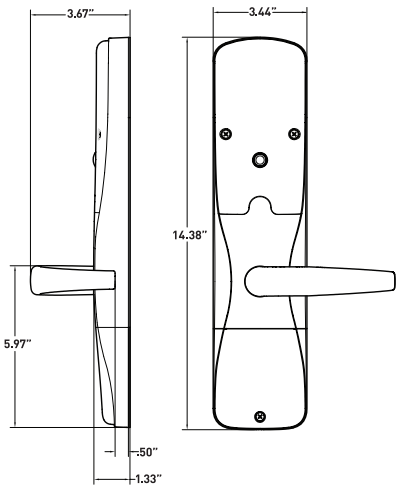
Panel Interface Module (PIM400)

The PIM400 (sold separately) is required for communication between the AD-402 wireless lock and the access control panel, and can support up to 16 locks depending on your access control system.

Exterior



Interior



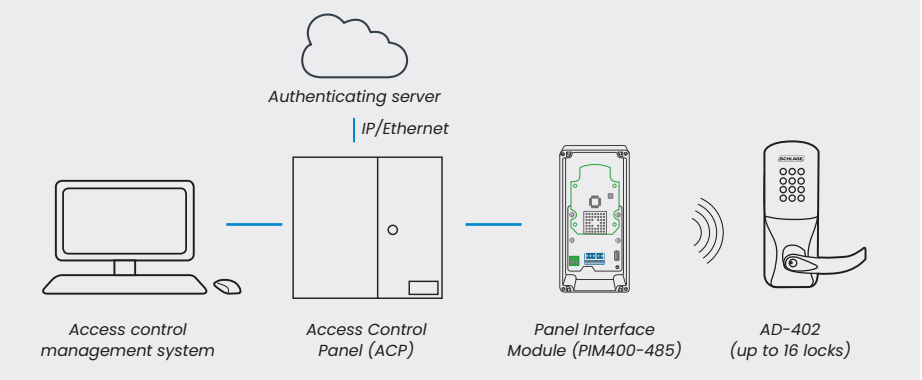
AD-402 Electronic Lock Specifications	
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Frequency range	902-928 MHz
Transmission/encryption	AES-128 bit key
Credential verification time	< 2 seconds in FASC-N mode: card certificate validated by the ACP only 2-6 seconds in full authentication mode: card certificate validated by 3rd party server
Wake-Up on Radio	Responds to lock/unlock command from host in less than 10 seconds in battery powered applications (per field configuration)
Communication range	Up to 200 ft with obstructions (normal building construction), up to 1,000 ft clear line of sight
RF interference avoidance	Configurable dynamic channel switching
Data rate	RF: 40 kbps
Visual/audible communications	Tri-colored LED's and audible indicators (field configurable)
System interface	RS-485
Power supply	4AA, 8AA, 12 VDC or 24 VDC
Voltage range	4 VDC to 26 VDC
Max current requirement	Up to 250 mA
Battery life[1]	FASC-N mode: 18-24 months (4AA) Full authentication mode: 10-12 months (4AA)
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 32° to 120°F (0° to 49°C) (battery)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25; ANSI/BHMA Grade 1; UL 294; ULC S319; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant Cylindrical and mortise chassis only: TDI DR-464; DR-465; FL12400, FL4613, FL1592, FL13013, FL14482 Mortise chassis only: FL3905
Accessories	Panel Interface Module (PIM400), SUS-A Cable with SUS Android mobile app. Also supported by existing Handheld Devices (HHD)

Functions

- Storeroom[2]
- Office/classroom[2]
- Privacy
- Apartment

Standard Status Signals

- Lock/unlock status
- Request-to-exit
- Door position
- Mechanical key override
- Deadbolt position
- Interior push button
- Interior cover tamper guard
- Battery status
- Communication status
- Request-to-enter



1. Battery life testing results based on an average 20 activations per day.
2. Storeroom and office/classroom functions not available with mortise deadbolt option.

Mechanical Specifications			
	Cylindrical	**Mortise**	**Exit Trim**
Handing	Handed to order, field reversible		
ANSI standard (meets or exceeds)	A156.25 locked outdoor A156.2 Series 4000 Grade 1	A156.25 locked outdoor A156.13 Series 1000 Grade 1	A156.25 locked outdoor A156.3 Grade 1
Door thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	Standard: 2-3/4" Optional: 2-3/8", 3-3/4", 5"	2-3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw	Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated		
Strike	Standard: 1-3/16" lip, ANSI, 1-1/4" x 4-7/8" Optional: Additional configurations available, please see price book		Provided by exit device
Cylinder and keys	Schlage® 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys standard. Additional options available including SFIC, FSIC and competitor brands. See lever and cylinder compatibility data sheet.		

FMK Multi-Technology Reader Specification	
Credential technologies	Proximity (125 kHz), Smart (13.56 MHz)
Standards	ISO 15693, ISO 14443
Read range	Proximity: up to 1.25"; Smart: up to .75"
Proximity credential support	**Compatibility:** Schlage, HID[2], GE/CASI ProxLite®, AWID® and LenelProx®
Smart credential support	**Secure sector compatibility:** Schlage MIFARE Classic®, Schlage MIFARE Plus®, Schlage MIFARE® DESFire®; PIV and PIV-I[1] **CSN only compatibility:** HID iCLASS®, HID iCLASS SE®, Inside Contactless Pico Tag®, MIFARE Classic/Plus/DESFire, ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code®
Certifications	FCC, Industry Canada (IC), UL 294
Options	12 button, 3 x 4 matrix backlit keypad

1. 75 bit output format default. Configurable to other output formats.
2. Proximity bit lengths greater than 37 not supported.

AD Series exit trim is compatible with Von Duprin 98/99 and 98/99XP (rim, mortise, SVR; and CVC, CVR on metal doors only), Von Duprin 78 (rim, SVR, CVR), Von Duprin 22/22F (rim and SVR) and Falcon 25 (rim) exit devices from Allegion. The AD Series is also compatible with select rim exit devices from Sargent, Corbin Russwin, Yale, Dorma and Precision.

For Von Duprin and Falcon solutions, a low current request-to-exit switch (RX-LC or AE) is required. The part numbers are:

Von Duprin: 050281
Falcon: 650359

Refer to the AD Series Exit Trim Compatibility Guide for additional details.

AD Series FMK Reader Modules

The AD Series is an ideal solution for applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-2 compliance. It is possible to upgrade existing, non-compliant AD Series locks to the new standard as follows:

- Field upgrade AD Series locks not currently set up for FIPS 201-2 by replacing the reader module with a FIPS 201-2 PIV-I capable FMK reader (sold separately)
- Field upgrade AD Series FIPS 201-1 compliant locks with an FMK reader manufactured after August 2016 by uploading FIPS 201-2 compatible firmware (AD.A.121 or higher)

Both types of upgrades should only be performed by a PACS provider who has tested and been approved under HSPD-12 for AD Series integration.

PIV capable

- The FMK reader is required on AD Series locks to achieve FIPS 201-2 compliance; It supports proximity cards and is PIV-I capable using 13.56 MHz smart card technologies

KEYPAD

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Ordering Information

Available through one of our GSA schedule 84 approved distributions. BAA options available.

AD - 402 - CY - 70 - FMK - SPA - 626 - P6 - S123 - RH - 4B - 13-247 - 10-025 - 134

Series	Class	Chassis	Function	Reader	Lever Style	Finish	Key Cylinder	Keyway	Handing	Battery	Backset & Latch or Armored Front	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Standard options are indicated with a dot. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise deadbolt
993R	Exit trim – Rim/CVC/CVR
993S	Exit trim – SVR
993M	Exit trim – mortise
993DT	Non-functioning dummy trim for exit

4 Function

40	Privacy
50	Office/classroom
60	Apartment
70	Storeroom

Lock function capabilities are determined by users access control system.

5 Reader

• FMK	FIPS 201-1 compliant multi-technology + keypad (125 kHz and 13.56 MHz)

6 Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with tactile warning options.

7 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
• 626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

8 Key Cylinder

• P6	Schlage 6-pin conventional key-in-lever cylinder

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9 Keyway

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

10 Handing

• RH	Right handed
LH	Left handed

Field reversible.

11 Battery

• 4B	4AA
• 8B	8AA

12 Backset & Latch or Armored Front

• 13-247	Cylindrical: 2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"
• 09-663	Mortise: Armor front, 1-1/4" wide, square corner

See price book for mortise deadbolt and other backset and latch options or armor front options.

13 Strike

• 10-025	Cylindrical: 1-3/16" lip, ANSI, no box, 1-1/4" x 4-7/8"
• 10-072	Mortise: 1-3/16" lip, 1-1/4" x 4-7/8" square corner, box

See price book for other available strikes.

14 Door Thickness

• 134	1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

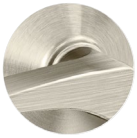
Tubular

Finishes

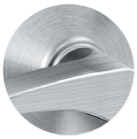
605
Bright Brass

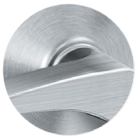
606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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013214, Rev. 04/25

AD-300

Networked Hardwired Electronic Lock

Overview

AD Series electronic locks from Schlage® are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing access control systems. Its patented modular design allows the lock to be customized to fit the needs of an application now, and changed to meet future needs without removing it from the door.

To simplify installation, the AD Series combines all the hardware components required at the door for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit and request-to-enter sensors, door position switch, tamper switch and more.

The AD-300 has a number of features built in that are configurable in the field and a long list of items that can be monitored by access control software. Please consult one of our Physical Access Control Software (PACS) providers for details on the integration of specific features.

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP, HID® and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Other manufacturer credentials including:
  - HID iCLASS®, iCLASS SE® and SEOS® plastic and NFC mobile credentials
  - LenelS2™ BlueDiamond™ MIFARE® DESFire® EV3 and NFC mobile credentials
  - TRANSACT, Brivo, Kastle and more
- See the Credential Compatibility Guide for full details

Schlage Credential Services

- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

Features & Benefits

- Open architecture platform - integrated into most popular physical access control systems through our PACS Alliance program
- Multi-technology credential compatibility includes Schlage MIFARE®, NFC mobile[1], and proximity
  - Optional support for HID® smart and NFC mobile credentials
- Panel interface options ensure seamless communication with the access control system
- Real-time communication between access control system and lock
- Field configurable fail safe/fail secure and other capabilities per code
- Available in cylindrical, mortise, mortise deadbolt and exit trim
- Compatible with major brands of master key systems
- A wide selection of credential readers and networking options to choose from
- Compatible with NFC mobile credentials on iOS and Android™ platforms[1]

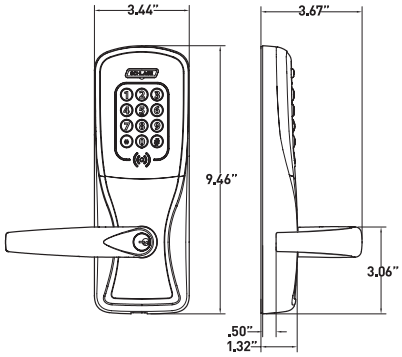
CYBERSECURITY
Learn about Allegion's commitment

1. Check with PACS provider for specific support of mobile credentials in Apple Wallet® and Google Wallet™

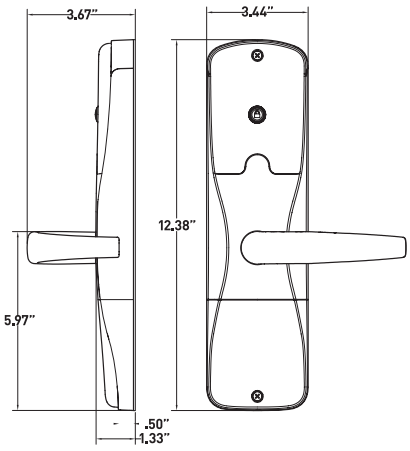
Panel Interface Board (PIB300-2D)

If the system requires Wiegand or Clock & Data protocol (rather than a direct RS-485 connection), the AD Series open architecture platform connects up to two AD-300 locks to the Panel Interface Board (PIB300 - sold separately, if required) that seamlessly connects to an access control panel or reader interface board. All monitoring is captured at the remote monitoring station.

Exterior



Interior



AD-300 Electronic Lock Specifications	
Credential verification time	< 1 second[1]
Data rate	RS-485 : 9.6 kbps
Visual/audible communications	Tri-colored LED's and audible indicators (field configurable)
System interface	Wiegand or Clock & Data via PIB300 or RS-485 directly
Power supply	12 VDC or 24 VDC
Voltage range	4 VDC to 26 VDC
Max current requirement	Up to 250 mA
Cable specifications for power	18AWG, 2 conductor (Belden 8760 or equivalent)
Cable distance for power	AD-300 to power supply: up to 1,000 ft (303 m)
Cable specifications for data	24AWG, 2 or 4 conductor shielded (Belden 9841, 9842 or equivalent)
Cabling distance for data	AD-300 to PIB300 or ACP, RS-485: up to 4000 ft (1219 m)
Operating temperature	-31° to 151°F (-35° to 66°C)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25; ANSI/BHMA Grade 1; UL 294; ULC S319; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant Cylindrical and mortise chassis only: TDI DR-464; DR-465; FL12400, FL4613, FL1592, FL13013, FL14482 Mortise chassis only: FL3905
Accessories	Panel Interface Board (PIB300), SUS-A Cable used with SUS Android mobile app, Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

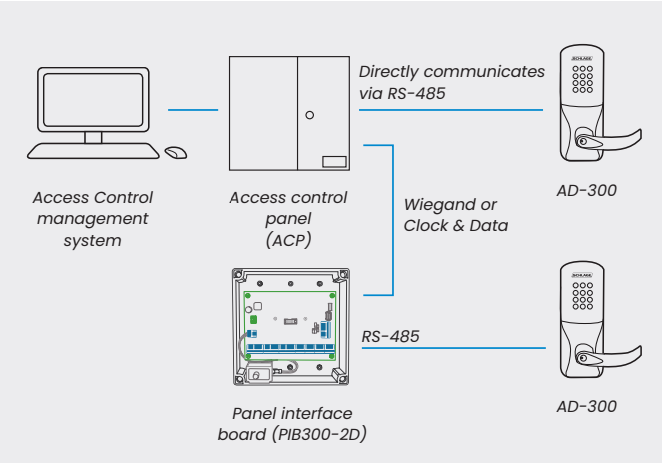
PIB300-2D Specifications	
Communication range	PIB300 to lock, RS-485: up to 4000 ft (1219 m) PIB300 to ACP, Wiegand or Clock & Data: up to 500 ft (152 m)
Visual/audible	13 LEDs for status indicators
System interface	Wiegand or Clock & Data
Power supply	12 VDC or 24 VDC
Voltage range	9.5 VDC to 26 VDC
Max current requirement	Up to 250 mA
Operating temperature	-31° to 151°F (-35° to 66°C)
Dimensions (H x W x D)	7.1" x 7.1" x 3.0" (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.57 kg)
Cable specifications (PIB300 to ACP)	22AWG, 8 conductor shielded (Alpha 1298C or equivalent)
Certifications	NEMA 1, 4, 4X, 6; UL 294; FCC Part 15; RoHS

Functions

- Storeroom[2]
- Office/classroom[2, 3, 4]
- Privacy[3, 4]
- Apartment[3, 4]

Standard Status Signals

- Lock/unlock status[5]
- Request-to-exit
- Door position
- Mechanical key override[3]
- Deadbolt position[3]
- Interior cover tamper guard[3]
- Communication status[3]
- Interior push button[3]
- Request-to-enter[3]



1. Lock requires less than 100 msec, response time does not include latency time of ACP.
2. Storeroom and office/classroom functions not available with mortise deadbolt option.
3. Consult your PACS provider for specific scope of support, including interior pushbutton, mechanical key override and deadbolt position availability.
4. Not available on exit trim.
5. Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch position unless monitored on RS-485 connection.

Mechanical Specifications			
	Cylindrical	**Mortise**	**Exit Trim**
Handing	Handed to order, field reversible		
ANSI standard (meets or exceeds)	A156.25 locked outdoor A156.2 Series 4000 Grade 1	A156.25 locked outdoor A156.13 Series 1000 Grade 1	A156.25 locked outdoor A156.3 Grade 1
Door thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	Standard: 2-3/4" Optional: 2-3/8", 3-3/4", 5"	2-3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw	Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated		
Strike	Standard: 1-3/16" lip, ANSI, 1-1/4" x 4-7/8" Optional: Additional configurations available, please see price book		Provided by exit device
Cylinder and keys	Schlage® 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys standard. Additional options available including SFIC, FSIC and competitor brands. See lever and cylinder compatibility data sheet.		

Standard Multi-Technology Reader Specification	
Credential technologies	Proximity (125 kHz), Smart (13.56 MHz) and Near Field Communication (NFC)
Standards	ISO 15693, ISO 14443
Read range	Proximity: up to 1.25"; Smart: up to .75"; NFC mobile: mobile device dependent
Proximity credential support	Compatibility: Schlage, ISONAS™, HID[4], GE/CASI ProxLite®, AWID® and LenelProx®
Smart credential support	Secure sector: Schlage MIFARE Classic®, Schlage MIFARE Plus®, Schlage MIFARE® DESFire®, PIV and PIV-I[1,2] CSN only: HID iCLASS®, HID iCLASS SE®, Inside Contactless Pico Tag®, MIFARE Classic/Plus/DESFire, ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code®
Mobile credential support	NFC mobile credentials in Apple Wallet® and Google Wallet™ [3]
Certifications	FCC, Industry Canada (IC), UL 294
Options	12 button, 3 x 4 matrix backlit keypad

Note: See the Credential Compatibility Guide for full details including interoperable credentials from other manufacturers.

Available AD Series Reader Modules

Multi-Technology

- Proximity
- Smart
- NFC mobile

+ KEYPAD option

Si with HID Support

- Smart
- NFC mobile

+ KEYPAD option

Magnetic Stripe (swipe)

+ KEYPAD option

Keypad

AD Series exit trim is compatible with Von Duprin 98/99 and 98/99XP (rim, mortise, SVR; and CVC, CVR on metal doors only), Von Duprin 78 (rim, SVR, CVR), Von Duprin 22/22F (rim and SVR) and Falcon 25 (rim) exit devices from Allegion. The AD Series is also compatible with select rim exit devices from Sargent, Corbin Russwin, Yale, Dorma and Precision.

For Von Duprin and Falcon solutions, a low current request-to-exit switch (RX-LC or AE) is required. The part numbers are:

Von Duprin: 050281
Falcon: 650359

Refer to the AD Series Exit Trim Compatibility Guide for additional details.

Benefits of AD Series Multi-Technology Readers:

- Reads multiple brands of both proximity (125 kHz) and smart (13.56 MHz) technologies with single reader
- Compatible with NFC mobile credentials in Apple Wallet® and Google Wallet™ [3]
- Allows facility to migrate to more secure credential technologies over time and as budgets permit

Additional Readers

Si option with HID® support

Supports:

- Secure application area of HID iCLASS®, iCLASS SE®, Seos® smart credentials
- iCLASS Standard Key and Elite Keys
- HID NFC mobile credentials
- All Schlage MIFARE® and NFC mobile credentials

Does not support:

- Proximity
- Bluetooth® (BLE) mobile credentials

Magnetic stripe

- Triple track reader (1, 2 or 3), field configurable
- ABA, ISO76XX standard

Keypad

- Backlit keypad
- 12 button, 3 x 4 matrix

1. FIPS 201-2 integration ready option available: The AD Series can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-2 compliance when installed as part of a tested and approved integrated solution. Please see the AD-402 data sheet or AD-302 data sheet for complete details.
2. 75 bit output format default. Configurable to other output formats.
3. Check with PACS provider for specific support of mobile credentials in Apple Wallet® and Google Wallet.™
4. Proximity bit lengths greater than 37 not supported.

Allegion, the Allegion logo, Falcon, Schlage, the Schlage logo, and Von Duprin are trademarks of Allegion plc, its subsidiaries and/or affiliates in the United States and other countries. All other trademarks are the property of their respective owners.

Ordering Information

Available through one of our GSA schedule 84 approved distributions. BAA options available

AD	-	300	-	CY	-	70	-	MS	-	SPA	-	626	-	P6	-	S123	-	RH	-	13-247	-	10-025	-	134
Series		Class		Chassis		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Handing		Backset & Latch or Armored Front		Strike		Door Thickness
1		2		3		4		5		6		7		8		9		10		11		12		13

Standard options are indicated with a dot. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise deadbolt
993R	Exit trim – Rim/CVC/CVR
993S	Exit trim – SVR
993M	Exit trim – mortise
993DT	Non-functioning dummy trim for exit

4 Function

40	Privacy
50	Office/classroom
60	Apartment
70	Storeroom

Lock function capabilities are determined by users access control system.

5 Reader

• KP	Keypad
MS	Magnetic stripe (swipe)
MSK	Magnetic stripe + keypad (swipe)
MT	Multi-technology (125 kHz, 13.56 MHz, NFC)
MTK	Multi-technology + keypad (125 kHz, 13.56 MHz, NFC)
FMK	FIPS 201-1 compliant multi-technology + keypad (125 kHz and 13.56 MHz)
Si	HID support
SiK	HID support + keypad
DT	Dummy trim

6 Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with tactile warning options.

7 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
• 626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

8 Key Cylinder

• P6	Schlage 6-pin conventional key-in-lever cylinder

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9 Keyway

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

10 Handing

• RH	Right handed
LH	Left handed

Field reversible.

11 Backset & Latch or Armored Front

• 13-247	Cylindrical: 2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"
• 09-663	Mortise: Armor front, 1-1/4" wide, square corner

See price book for mortise deadbolt and other backset and latch options or armor front options.

12 Strike

• 10-025	Cylindrical: 1-3/16" lip, ANSI, no box, 1-1/4" x 4-7/8"
• 10-072	Mortise: 1-3/16" lip, 1-1/4" x 4-7/8" square corner, box

See price book for other available strikes.

13 Door Thickness

• 134	1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

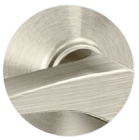
Tubular

Finishes

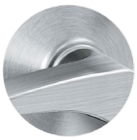
605
Bright Brass

606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome


626
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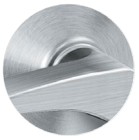
626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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004448, Rev. 04/25

AD-302

FIPS 201-2 APL Listed Networked Hardwired Electronic Lock

Overview

AD Series electronic locks from Schlage® are designed to be modular and provide more options to choose from, more functionality in the lock and greater compatibility with existing systems. Its patented modular design allows the lock to be customized to fit the needs of an application now, and changed to meet future needs without removing it from the door.

AD-302 locks feature a multi-technology card and keypad reader (FMK) that is fully PIV and PIV-I capable for dual authentication to an external server. The open architecture software design of AD Series facilitates integration making AD-302 a desirable part of a Physical Access Control Software (PACS) provider's offering. Any completed PACS integrations that are tested and approved under HSPD-12 guidelines can then be applied in U.S. Federal Agency Buildings.

Factory orderable options include choices of chassis type, network configurations, locking functions, lever styles and finishes. It also offers a wide selection of features that can be configured in the field to customize your openings.

To simplify installation, the AD Series combines all the hardware components required at the door into one design that includes the electrified lock, credential reader, request-to-exit sensor, request-to-enter sensor, and both door position and tamper switches. The AD-302 has a number of features built in that are configurable in the field and a long list of items that can be monitored by access control software.

Features & Benefits

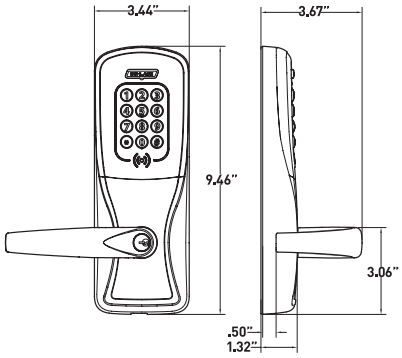
- PIV and PIV-I compatible
- Open architecture platform
- AD-302 locks can wire directly into the panel of integrated RS-485 access control software partners
- Real-time communication between access control system and lock
- Field configurable fail safe/fail secure and other capabilities per code
- Available in cylindrical, mortise, mortise deadbolt and exit trim
- Compatible with major brands of master key systems

CYBERSECURITY
Learn about Allegion's commitment

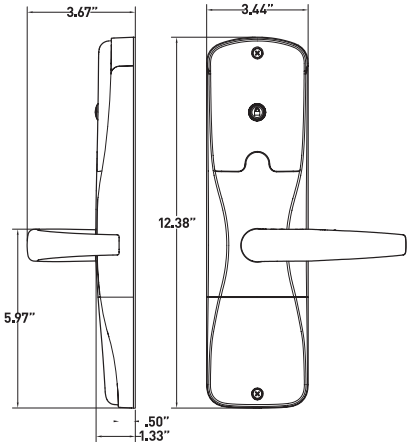
AD-302

FIPS 201-2 APL Listed Networked Hardwired Electronic Lock

Exterior



Interior



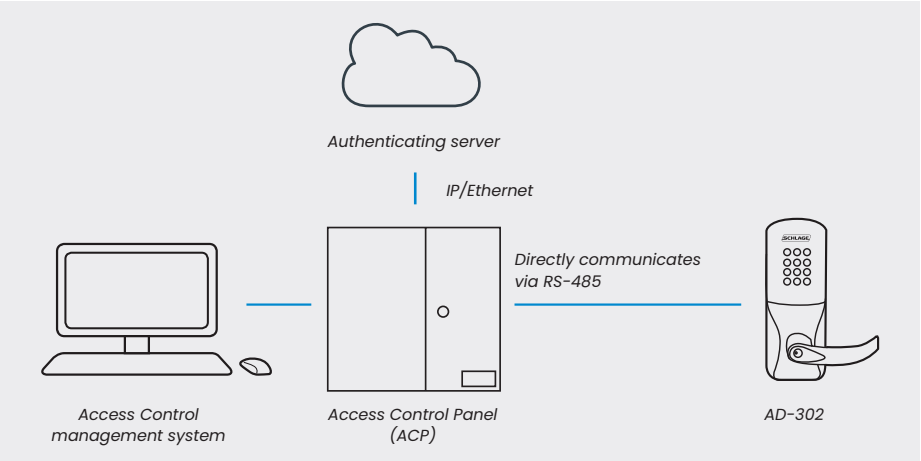
AD-302 Electronic Lock Specifications	
Credential verification time	<2 seconds in FASC-N mode: card certificate validated by the ACP only 2-4 seconds in full authentication mode: card certificate validated by 3rd party server
Data rate	RS-485 : 9.6 kbps
Visual/audible communications	Tri-colored LED's and audible indicators (field configurable)
System interface	RS-485 directly
Power supply	12 VDC or 24 VDC
Voltage range	4 VDC to 26 VDC
Max current requirement	Up to 250 mA
Cable specifications for power	18AWG, 2 conductor (Belden 8760 or equivalent)
Cable distance for power	AD-302 to power supply: up to 1,000 ft (303 m)
Cable specifications for data	24AWG, 2 or 4 conductor shielded (Belden 9841, 9842 or equivalent)
Cabling distance for data	AD-302 to ACP, RS-485: up to 4000 ft (1219 m)
Operating temperature	-31° to 151°F (-35° to 66°C)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25; ANSI/BHMA Grade 1; UL 294; ULC S319; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant Cylindrical and mortise chassis only: TDI DR-464; DR-465; FL12400, FL4613, FL1592, FL13013, FL14482 Mortise chassis only: FL3905
Accessories	SUS-A Cable with SUS Android™ mobile app. Also supported by existing Handheld Devices (HHD)

Functions

- Storeroom[2]
- Office/classroom[2]
- Privacy[3]
- Apartment

Standard Status Signals

- Lock/unlock status
- Mechanical key override
- Battery status



1. Storeroom and office/classroom functions not available with mortise deadbolt option.

Mechanical Specifications			
	Cylindrical	**Mortise**	**Exit Trim**
Handing	Handed to order, field reversible		
ANSI standard (meets or exceeds)	A156.25 locked outdoor A156.2 Series 4000 Grade 1	A156.25 locked outdoor A156.13 Series 1000 Grade 1	A156.25 locked outdoor A156.3 Grade 1
Door thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	Standard: 2-3/4" Optional: 2-3/8", 3-3/4", 5"	2-3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw	Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated		
Strike	Standard: 1-3/16" lip, ANSI, 1-1/4" x 4-7/8" Optional: Additional configurations available, please see price book		Provided by exit device
Cylinder and keys	Schlage® 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys standard. Additional options available including SFIC, FSIC and competitor brands. See lever and cylinder compatibility data sheet.		

AD Series exit trim is compatible with Von Duprin 98/99 and 98/99XP (rim, mortise, SVR; and CVC, CVR on metal doors only), Von Duprin 78 (rim, SVR, CVR), Von Duprin 22/22F (rim and SVR) and Falcon 25 (rim) exit devices from Allegion. The AD Series is also compatible with select rim exit devices from Sargent, Corbin Russwin, Yale, Dorma and Precision.

For Von Duprin and Falcon solutions, a low current request-to-exit switch (RX-LC or AE) is required. The part numbers are:

Von Duprin: 050281
Falcon: 650359

Refer to the AD Series Exit Trim Compatibility Guide for additional details.

FMK Multi-Technology Reader Specification	
Credential technologies	Proximity (125 kHz), Smart (13.56 MHz)
Standards	ISO 15693, ISO 14443
Read range	Proximity: up to 1.25"; Smart: up to .75"
Proximity credential support	**C**ompatibility: Schlage, HID[2], GE/CASI ProxLite®, AWID® and LenelProx®
Smart credential support	Secure sector compatibility: Schlage MIFARE Classic®, Schlage MIFARE Plus®, Schlage MIFARE® DESFire®; PIV and PIV-I[1] CSN only compatibility: HID iCLASS®, HID iCLASS SE®, Inside Contactless Pico Tag®, MIFARE Classic/Plus/DESFire, ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code®
Certifications	FCC, Industry Canada (IC), UL 294
Options	12 button, 3 x 4 matrix backlit keypad

1. 75 bit output format default. Configurable to other output formats.
2. Proximity bit lengths greater than 37 not supported.

AD Series FMK Reader Modules

The AD Series is an ideal solution for applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-2 compliance. It is possible to upgrade existing, non-compliant AD Series locks to the new standard as follows:

- Field upgrade AD Series locks not currently set up for FIPS 201-2 by replacing the reader module with a FIPS 201-2 PIV-I capable FMK reader (sold separately)
- Field upgrade AD Series FIPS 201-1 compliant locks with an FMK reader manufactured after August 2016 by uploading FIPS 201-2 compatible firmware (AD.A.121 or higher)

Both types of upgrades should only be performed by a PACS provider who has tested and been approved under HSPD-12 for AD Series integration.

PIV capable

- The FMK reader is required on AD Series locks to achieve FIPS 201-2 compliance; It supports proximity cards and is PIV-I capable using 13.56 MHz smart card technologies

+ KEYPAD

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Ordering Information

Available through one of our GSA schedule 84 approved distributions. BAA options available

AD	-	302	-	CY	-	70	-	FMK	-	SPA	-	626	-	P6	-	S123	-	RH	-	13-247	-	10-025	-	134
Series		Class		Chassis		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Handing		Backset & Latch or Armored Front		Strike		Door Thickness
1		2		3		4		5		6		7		8		9		10		11		12		13

Standard options are indicated with a dot. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise deadbolt
993R	Exit trim – Rim/CVC/CVR
993S	Exit trim – SVR
993M	Exit trim – mortise
993DT	Non-functioning dummy trim for exit

4 Function

40	Privacy
50	Office/classroom
60	Apartment
70	Storeroom

Lock function capabilities are determined by users access control system.

5 Reader

• FMK	FIPS 201-1 compliant multi-technology + keypad (125 kHz and 13.56 MHz)

6 Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with tactile warning options.

7 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
• 626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

8 Key Cylinder

• P6	Schlage 6-pin conventional key-in-lever cylinder

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9 Keyway

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

10 Handing

• RH	Right handed
LH	Left handed

Field reversible.

11 Backset & Latch or Armored Front

• 13-247	Cylindrical: 2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"
• 09-663	Mortise: Armor front, 1-1/4" wide, square corner

See price book for mortise deadbolt and other backset and latch options or armor front options.

12 Strike

• 10-025	Cylindrical: 1-3/16" lip, ANSI, no box, 1-1/4" x 4-7/8"
• 10-072	Mortise: 1-3/16" lip, 1-1/4" x 4-7/8" square corner, box

See price book for other available strikes.

13 Door Thickness

• 134	1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

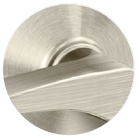
Tubular

Finishes

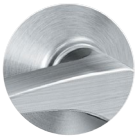
605
Bright Brass

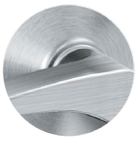
606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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004869, Rev. 04/25

AD-200

Standalone Electronic Lock

Overview

AD Series electronic locks from Schlage are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing systems. Its patented modular design allows the lock to be customized to fit the needs of an application now, and can change to meet future needs without removing it from the door.

Factory orderable options include choices of credential readers, chassis type, locking functions, power options, lever styles and finishes. It also offers a wide selection of features that can be configured in the field to customize your openings.

The AD-200 is a simple, economical solution if no access control system currently exists in the facility, or for openings that don't require the control of a networked solution. The AD-200 is easily upgradable to a networked lock if requirements change in the future.

On all AD Series standalone locks, Schlage has built in many of the incremental features needed in a networked system such as request-to-exit and -enter sensors, interior cover tamper guard, as well as the door position switch. This way, if the customer chooses to network this opening in the future, all the components will be there to make the transition an easy one.

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP, HID® and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Other manufacturer credentials including:
  - HID iCLASS®, iCLASS SE® and SEOS® plastic and NFC mobile credentials
  - LenelS2™ BlueDiamond™ MIFARE® DESFire® EV3 and NFC mobile credentials
  - TRANSACT, Brivo, Kastle and more
- See the Credential Compatibility Guide for full details

Schlage Credential Services

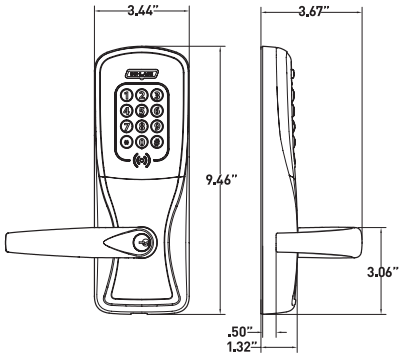
- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

Features & Benefits

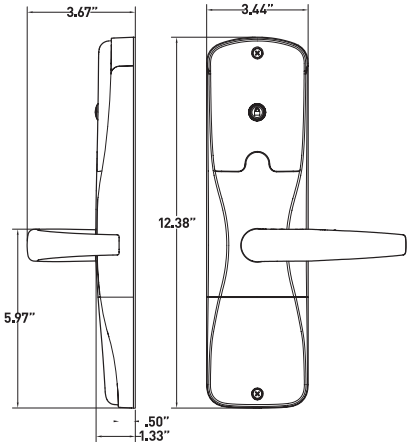
- Security that's more intelligent and convenient than traditional mechanical locking devices
- Audit trail reports that allow you to track usage and events
- Update users and access rights at the lock using the keypad or handheld device
- The ability to upgrade to a networked solution without removing the lock from the door
- Available in cylindrical, mortise, mortise deadbolt and exit trim
- Compatible with major brands of master key systems and exit devices
- Hardwired remote push button release capability
- Programmable option for lighted occupancy indication[1]
- Offline lockdown mode configurable with Inside Push Button (IPB)

1. Available on privacy function locks manufactured after May 2019 with firmware version AD.A.126 or higher.

Exterior



Interior



AD-200 Electronic Lock Specifications	
Users	Up to 5,000
Audits	Up to 5,000
Credential verification time	≤ 1 second[1]
Visual/audible communications	Tri-colored LEDs and audible indicators (field configurable)
System interface	SUS mobile app on compatible Android™ device[3]
Power supply	4AA, 8AA, 12 VDC or 24 VDC
Voltage range	4 VDC to 26 VDC
Max current requirement	Up to 250 mA
Battery life	Up to 2 yrs with 4AA
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 32° to 120°F (0° to 49°C) (battery)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25; ANSI/BHMA Grade 1; UL 294; ULC S319; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant; Cylindrical and mortise chassis only: TDI DR-464, DR-465; FL12400, FL4613, FL1592, FL13013, FL14482; Mortise chassis only: FL3905
Accessories	SUS-A Cable used with SUS Android mobile app[3]

Functions

- Storeroom[2]
- Office/classroom[2]
- Privacy
- Apartment

Standard Status Signals

- Mechanical key override
- Battery status - indicated by flashing LED lights
- Lock/unlock status
- Occupied - indicated by red LED light (privacy function only)

Schlage Utility Software

The Schlage Utility Software (SUS) mobile app on compatible Android mobile devices and SUS-A cable provides an easy way to manage people, audits and locks for simple access control management.

Schlage Utility Software

- Initialize lock and accessories
- Field configure devices
  - Credential reader formats
  - Lock function
  - Lockdown
  - Unlock period
  - Failure mode
  - Audible alarm on/off
- Service and diagnostics
  - Battery status
  - Validate hardware and software revision
  - Troubleshooting status signals
  - Firmware upgrades
- New device template simplifies configuration

1. Verification time is dependent on size of user base
2. Storeroom and Office/Classroom function not available with mortise deadbolt option
3. Also compatible with legacy Handheld Device (HHD)

Mechanical Specifications			
	Cylindrical	**Mortise**	**Exit Trim**
Handing	Handed to order, field reversible		
ANSI standard (meets or exceeds)	A156.25 locked outdoor A156.2 Series 4000 Grade 1	A156.25 locked outdoor A156.13 Series 1000 Grade 1	A156.25 locked outdoor A156.3 Grade 1
Door thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	Standard: 2-3/4" Optional: 2-3/8", 3-3/4", 5"	2-3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw	Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated		
Strike	Standard: 1-3/16" lip, ANSI, 1-1/4" x 4-7/8" Optional: Additional configurations available, please see price book		Provided by exit device
Cylinder and keys	Schlage® 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys standard. Additional options available including SFIC, FSIC and competitor brands. See Lever & Cylinder Compatibility Data Sheet.		

Standard Multi-Technology Reader Specification	
Credential technologies	Proximity (125 kHz) and Smart (13.56 MHz)
Standards	ISO 15693, ISO 14443
Read range	Proximity: up to 1.25"; Smart: up to .75"
Proximity credential support	Compatibility: Schlage®, ISONAS,™ HID[1], GE/CASI ProxLite®, AWID® and LenelProx®
Smart credential support[2]	Secure sector compatibility: Schlage MIFARE Classic®, Schlage MIFARE Plus®, Schlage MIFARE® DESFire®, PIV and PIV-I[3] CSN only compatibility: HID iCLASS®, HID iCLASS SE®, Inside Contactless Pico Tag®, MIFARE Classic/Plus/DESFire, ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code®
Certifications	FCC, UL 294
Options	Option for 12 button, 3 x 4 matrix backlit keypad

Note: See the Credential Compatibility Guide for full details including interoperable credentials from other manufacturers.

AD Series exit trim is compatible with Von Duprin 98/99 and 98/99XP (rim, mortise, SVR; and CVC, CVR on metal doors only), Von Duprin 78 (rim, SVR, CVR), Von Duprin 22/22F (rim and SVR) and Falcon 25 (rim) exit devices from Allegion. The AD Series is also compatible with select rim exit devices from Sargent, Corbin Russwin, Yale, Dorma and Precision.

For Von Duprin and Falcon solutions, a low current request-to-exit switch (RX-LC or AE) is recommended for future network migration.

Refer to the AD Series Exit Trim Compatibility Guide for additional details.

Benefits of AD Series Multi-Technology Readers:

- Reads multiple brands of both proximity (125 kHz) and smart (13.56 MHz) technologies with single reader
- Allows facility to migrate to more secure credential technologies over time and as budgets permit

Additional Readers

Si option with HID® support

Supports:

- Secure application area of HID iCLASS®, iCLASS SE®, Seos® smart credentials
- iCLASS Standard Key and Elite Keys
- All Schlage MIFARE® and NFC mobile credentials

Does not support:

- Proximity
- Bluetooth® (BLE) mobile credentials

Magnetic stripe

- Available with choice of insertion or swipe style readers
- Triple track reader (1, 2 or 3), field configurable
- ABA, ISO76XX standard

Keypad

- Backlit keypad
- 12 button, 3 x 4 matrix

Available AD Series Reader Modules

Multi-Technology

- Proximity
- Smart

KEYPAD option

Si with HID Support

- Smart

KEYPAD option

Magnetic Stripe (swipe)

KEYPAD option

Keypad

1. Proximity bit lengths greater than 37 not supported
2. Smart card functionality dependant on access control software
3. 75 bit output format default. Configurable to other output formats. Check with access control provider for specific support

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Ordering Information

Available through one of our GSA schedule 84 approved distributions. BAA options available

AD	-	200	-	CY	-	70	-	MG	-	SPA	-	626	-	P6	-	S123	-	RH	-	4B	-	13-247	-	10-025	-	134
Series		Class		Chassis		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Handing		Battery		Backset & Latch or Armored Front		Strike		Door Thickness
1		2		3		4		5		6		7		8		9		10		11		12		13		14

Standard options are indicated with a dot. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise deadbolt
993R	Exit trim – Rim/CVC/CVR
993S	Exit trim – SVR
993M	Exit trim – mortise
993DT	Non-functioning dummy trim for exit

4 Function

40	Privacy
50	Office/classroom
60	Apartment
70	Storeroom

Lock function capabilities are determined by users access control system.

5 Reader

• KP	Keypad
MS	Magnetic stripe (swipe)
MSK	Magnetic stripe + keypad (swipe)
MT	Multi-technology (125 kHz, 13.56 MHz, NFC)
MTK	Multi-technology + keypad (125 kHz, 13.56 MHz, NFC)
Si	HID support
SiK	HID support + keypad
DT	Dummy trim

6 Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with knurled surface.

7 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
• 626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

8 Key Cylinder

• P6	Schlage 6-pin conventional key-in-lever cylinder

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9 Keyway

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

10 Handing

• RH	Right handed
LH	Left handed

Field reversible.

11 Battery

• 4B	4AA
8B	8AA

12 Backset & Latch or Armored Front

• 13-247	Cylindrical: 2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"
• 09-663	Mortise: Armor front, 1-1/4" wide, square corner

See price book for mortise deadbolt and other backset and latch options or armor front options.

13 Strike

• 10-025	Cylindrical: 1-3/16" lip, ANSI, no box, 1-1/4" x 4-7/8"
• 10-072	Mortise: 1-3/16" lip, 1-1/4" x 4-7/8" square corner, box

See price book for other available strikes.

14 Door Thickness

• 134	1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

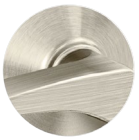
Tubular

Finishes

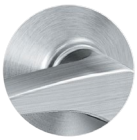
605
Bright Brass

606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome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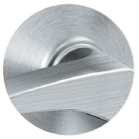
626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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004442, Rev. 10/25

AD-201

PIV & PIV-I Compliant Standalone Electronic Lock

Overview

The AD-201 is a simple and economical standalone solution for applications which require compatibility with PIV or PIV-I credentials. The solution consists of the AD-201 integrated electronic lock with multi-technology + keypad (FMK) reader module, a programming device and cable, and the MT20 enrollment reader.

The innovative modular design of the AD-201 allows reader modules and communication modules to easily be upgraded. As a result, the AD-201 standalone lock can become an AD-402 networked wireless locks in minutes, without even taking it off the door.

The FMK reader module comes standard with the AD-201 lock and also can be ordered separately for field upgrades. It is for use with PIV and PIV-I credentials. The FMK is a multi-technology reader that supports 125 kHz proximity and 13.56 MHz smart cards.

Schlage Express offline access control software is used in conjunction with the AD-201 to manage access points, users and schedules. Reporting capability is available to show audit trails retrieved, access privileges granted, and time functions established by either user or door.

The MT-20 is an enrollment reader is designed to simplify the credential enrollment process. You can easily enroll 75-bit and 200-bit PIV, PIV-I or other smart card into Schlage Express using the MT-20 connected to your computer's USB port.

The Schlage Utility Software (SUS) on either an Android mobile device or legacy Schlage Handheld Device (HHD) serves as the link between Schlage Express software and the AD-201 lock. It consolidates and simplifies programming and managing your access control system. It is used to initialize, configure and test product operation as well as to transfer information between the lock and the software.

Features & Benefits

AD-201 Standalone Lock

- Multi-technology reader for use with PIV and PIV-I credentials
- Upgradable to an AD-402 FIPS 201-2 integration ready wireless lock
- Available in cylindrical, mortise, mortise deadbolt and exit trim
- UL 294 listed, ANSI/BHMA A156.25 and ANSI/BHMA Grade 1 certified

Schlage Express™ Offline Software

- Offline software used to manage AD-201 locks
- Supports up to 2,000 users/audits with 50 locks or 1,000 users/audits with 100 locks
- Supports up to 8 time zone and up to 16 holidays and auto unlocks per system

MT-20 Enrollment Reader

- USB reader makes it easy to enroll credentials in Schlage Express™
- Recognizes Schlage MIFARE® smart credentials

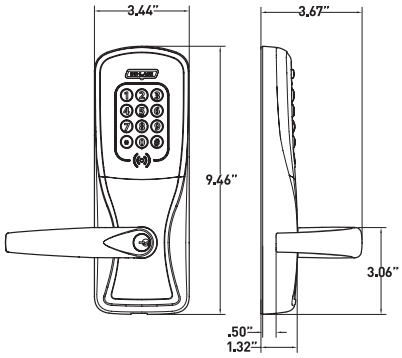
Schlage Utility Software (SUS)

- Allows you to initialize, configure and test AD-201 locks
- Used to transfer user rights from Schlage Express to AD-201
- Transfers audits trails from AD-201 to Schlage Express

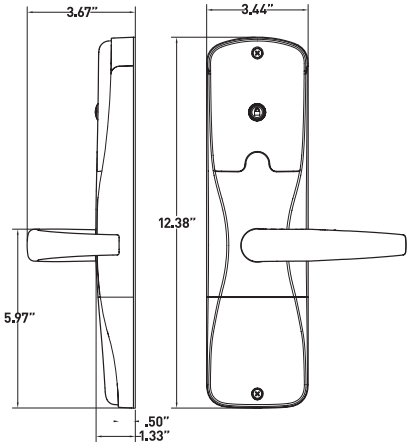
AD-201

PIV & PIV-I Compliant Standalone Electronic Lock

Exterior



Interior



AD Series FMK Reader Modules

FIPS 201-1 compliant multi-technology

- FMK reader required for FIPS 201-1 compliant multi-technology and keypad reader supporting both proximity and smart credentials

KEYPAD

AD-201 Electronic Lock Specifications	
Credential verification time	≤ 1 second[1]
Visual/audible communications	Tri-colored LEDs and audible indicators (field configurable)
System interface	SUS mobile app on compatible Android devices with SUS-A Cable; also supported by legacy Schlage Handheld Devices (HHD)
Power supply	4AA, 8AA, 12 VDC or 24 VDC
Voltage range	4 VDC to 26 VDC
Max current requirement	Up to 250 mA
Battery life	Up to 2 yrs with 4AA
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 32° to 120°F (0° to 49°C) (battery)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25; ANSI/BHMA Grade 1; UL 294; ULC S319; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant; Cylindrical and mortise chassis only: TDI DR-464, DR-465; FL12400, FL4613, FL1592, FL13013, FL14482; Mortise chassis only: FL3905
Accessories	SUS-A Cable with SUS Android mobile app; also supported by legacy Handheld Devices (HHD)

Mechanical Specifications			
Chassis	**Cylindrical**	**Mortise**	**Exit trim**
Handing	Handed to order, field reversible		
ANSI standard (Meets or exceeds)	A156.25 locked outdoor A156.2 Series 4000 Grade 1	A156.25 locked outdoor A156.13 Series 1000 Grade 1	A156.25 locked outdoor A156.3 Grade 1
Door thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	Standard: 2-3/4" Optional: 2-3/8", 3-3/4", 5"	2-3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw	Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated	Steel, plated	Steel, plated
Strike	Standard: 1-3/16" lip, ANSI, 1-1/4" x 4-7/8" Optional: Additional configurations available please see price book		Provided by exit device
Cylinder and keys	Standard: Schlage 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys. Additional keying options available, including interchangeable cores, competitor brands, master keying and grand master keying		

Multi-Technology Reader Specification	
Credential technologies	Proximity (125 kHz) and Smart (13.56 MHz)
Standards	ISO standard 15693 and ISO 14443
Maximum read range	Proximity: up to 1.25" Smart: up to 0.75"
Proximity credential support	Compatibility: Schlage®, ISONAS™, HID[2], GE/CASI ProxLite®, AWID® and LenelProx®
Smart credential support	Secure sector compatibility: Schlage MIFARE Classic®, Schlage MIFARE Plus®, Schlage MIFARE® DESFire®, PIV and PIV-I CSN only compatibility: HID iCLASS®, HID iCLASS SE®, Inside Contactless Pico Tag®, MIFARE Classic/Plus/DESFire, ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code®
Certifications/standards	FCC, UL 294 Listed
Style/layout	Option for 12 button, 3x4 matrix backlit keypad

1. Verification time is dependent on size of user base.
2. Proximity bit lengths greater than 37 not supported.

Schlage Express Specifications	
Hardware	Intel Pentium II processor (Pentium III or IV recommended), CD-ROM, mouse or compatible pointing device, VGA or Super VGA monitor, keyboard
Hard disk space	250 MB for software; will require additional space for stored data
Memory	256 MB RAM minimum or the memory required for the operating system, whichever is greater
Operating system	Microsoft Windows XP, Windows 7 and Windows 8

Reports with the built-in viewer Internet Explorer 6 or higher must be installed.

Schlage Express AD-201 Specifications	
Users/audits	• 2,000 Users/audits with 50 AD-201 locks/devices • 1,000 Users/audits with 100 AD-201 locks/devices
User time zones	Limits the hours and days a user can access up to 8 assigned points
Holidays	Suspends normal operations for user defined periods per door during up to 16 non-normal days
PIN codes	• Supports up to 6 digit PIN codes • Duplicate PIN notification feature
Auto unlock schedules	Allows weekly repeating for automatic locking and unlocking of up to 16 defined

AD-201 Standalone System

PIV or PIV-I credential — *MT-20 enrollment reader* — *Access control management system* — *SUS on Android mobile or legacy HHD with cable* — *AD-201 standalone electronic lock*

Schlage Utility Software

The Schlage Utility Software (SUS) mobile app on compatible Android mobile devices and SUS-A cable provides an easy way to manage people, audits and locks for simple access control management. Also supported by legacy Schlage Handheld Devices (HHD).

Schlage Utility Software

- Initialize lock and accessories
- Field configure devices
  - Credential reader formats
  - Lock function
  - Unlock period
  - Failure mode
  - Audible alarm on/off
- Service and diagnostics
  - Battery status
  - Validate hardware and software revision
  - Troubleshooting status signals
  - Firmware upgrades
- New device template simplifies configuration

Ordering Information

Available through one of our GSA schedule 84 approved distributions. BAA options available

AD	-	201	-	CY	-	70	-	FMK	-	SPA	-	626	-	P6	-	S123	-	RH	-	4B	-	13-247	-	10-025	-	134
Series		Class		Chassis		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Handing		Battery		Backset & Latch or Armored Front		Strike		Door Thickness
1		2		3		4		5		6		7		8		9		10		11		12		13		14

Standard options are indicated with a dot. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise deadbolt
993R	Exit trim – Rim/CVC/CVR
993S	Exit trim – SVR
993M	Exit trim – mortise
993DT	Non-functioning dummy trim for exit

4 Function

40	Privacy
50	Office/classroom
60	Apartment
70	Storeroom

5 Reader

FMK	PIV and PIV-I compatible multi-technology + keypad (125 kHz and 13.56 MHz)

6 Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with knurled surface.

7 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

8 Key Cylinder

P6	Schlage 6-pin conventional key-in-lever cylinder

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9 Keyway

• S123	Everest 29

See price book for other available keyway options including master keying.

10 Handing

• RH	Right handed
LH	Left handed

Field reversible.

11 Battery

• 4B	4AA
8B	8AA

12 Backset & Latch or Armored Front

• 13-247	Cylindrical: 2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"
• 09-663	Mortise: Armor front, 1-1/4" wide, square corner

See price book for mortise deadbolt and other backset and latch options or armor front options.

13 Strike

• 10-025	Cylindrical: 1-3/16" lip, ANSI, no box, 1-1/4" x 4-7/8"
• 10-072	Mortise: 1-3/16" lip, 1-1/4" x 4-7/8" square corner, box

See price book for other available strikes.

14 Door Thickness

• 134	1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

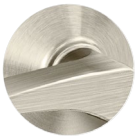
Tubular

Finishes

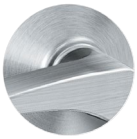
605
Bright Brass

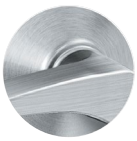
606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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009820, Rev. 01/24

AD-250

Standalone Electronic Lock

Overview

AD Series electronic locks from Schlage are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing systems. Its patent-pending modular design allows the lock to be customized to fit the needs of an application now, and can change to meet future needs without removing it from the door.

Factory orderable options include choices of magnetic stripe credential readers, chassis type, locking functions, power options, lever styles and finishes. It also offers a wide selection of features that can be configured in the field to customize your openings.

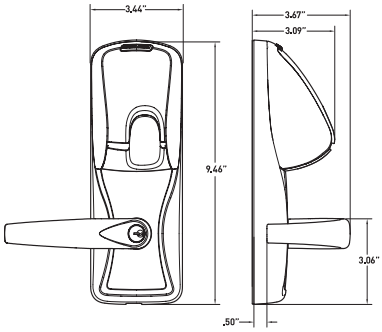
The AD-250 is a unique solution in which the credential, not the lock, carries access rights on a magnetic stripe card. This allows dynamic rights management on the card without reprogramming each lock in the facility. And the lock still maintains an audit trail of events at the door. This makes it a smart and economical solution for campus-like environments with a large number of users and offline openings.

On all AD Series standalone locks, Schlage has built in many of the incremental features needed in a networked system such as request-to-exit and request-toenter sensors, interior cover tamper guard, as well as the door position switch. This way, if the customer chooses to network this opening in the future, all the components will be there to make the transition an easy one.

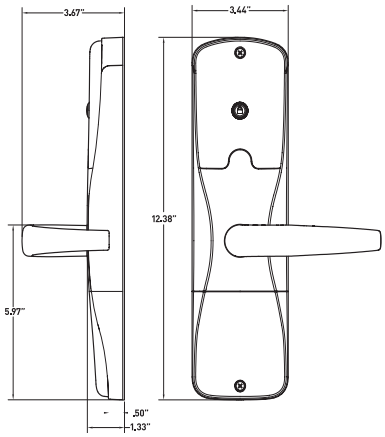
Features & Benefits

- Security that's more intelligent and convenient than traditional mechanical locking devices
- Audit trail reports that allow you to track usage
- Add users and access rights using credentials instead of having to visit each lock
- The ability to upgrade to a networked solution without removing the lock from the door
- Available in cylindrical, mortise, mortise deadbolt and exit trim
- Compatible with major brands of master key systems and exit devices

Exterior



Interior



AD-250 Electronic Lock Specifications	
Users	Unlimited, dependent on software
Audits	Up to 10,000
Credential verification time	≤ 1 second
Visual/audible communications	Tri-colored LED's and audible indicators (field configurable)
System interface	SUS mobile app on compatible Android devices with SUS-A Cable; also supported by legacy Schlage Handheld Devices (HHD)
Power supply	4AA, 8AA, 12 VDC or 24 VDC
Voltage range	4 VDC to 26 VDC
Max current requirement	Up to 250 mA
Battery life	Up to 2 yrs with 4 AA batteries
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 32° to 120°F (0° to 49°C) (batteries)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1; UL 294; ULC S319; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant; Cylindrical and mortise chassis only: TDI DR-464, DR-465; FL12400, FL4613, FL1592, FL13013, FL14482; Mortise chassis only: FL3905
Accessories	SUS-A Cable with SUS Android mobile app, magnetic stripe credential encoder (CL-Encoder 2)

Functions

- Storeroom[1]
- Office/classroom[1]
- Privacy
- Apartment

Standard Status Signals

- Lock/unlock status
- Mechanical key override
- Battery status

Schlage Utility Software

The Schlage Utility Software (SUS) mobile app on compatible Android mobile devices and SUS-A cable provides an easy way to manage people, audits and locks for simple access control management.

Schlage Utility Software

- Initialize lock and accessories
- Field configure devices
  - Credential reader formats
  - Lock function
  - Unlock period
  - Failure mode
  - Audible alarm on/off
- Service and diagnostics
  - Battery status
  - Validate hardware and software revision
  - Troubleshooting status signals
  - Firmware upgrades
- New device template simplifies configuration

1. Storeroom and office/classroom function not available with mortise deadbolt option. To ensure safety, all functions always allow for free egress.

Mechanical Specifications			
Chassis	**Cylindrical**	**Mortise**	**Exit trim**
Handing	Handed to order, field reversible		
ANSI standard (Meets or exceeds)	A156.25 A156.2 Series 4000 Grade 1	A156.25 A156.13 Series 1000 Grade 1	A156.25 A156.3
Door thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	Standard: 2-3/4" Optional: 2-3/8", 3-3/4", 5"	2-3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw	Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated		
Strike	Standard: 1-3/16" lip, ANSI, 1-1/4" x 4-7/8" Optional: Additional configurations available please see price book		Provided by exit device
Cylinder and keys	Schlage 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys standard. Additional options available including SFIC, FSIC and competitor brands. See Lever & Cylinder Compatibility Data Sheet.		

AD Series exit trim is compatible with Von Duprin 98/99 and 98/99XP (rim, mortise, SVR; and CVC, CVR on metal doors only), Von Duprin 78 (rim, SVR, CVR), Von Duprin 22/22F (rim and SVR) and Falcon 25 (rim) exit devices from Allegion. The AD Series is also compatible with select rim exit devices from Sargent, Corbin Russwin, Yale, Dorma and Precision.

For Von Duprin and Falcon solutions, a low current request-to-exit switch (RX-LC or AE) is recommended for future network migration.

Refer to the AD Series Exit Trim Compatibility Guide for additional details.

Available AD-250 Reader Options

Magnetic stripe (swipe)

- Triple track reader (1, 2 or 3), field configurable
- ABA, ISO76XX standard
- Reader can be cleaned without removing lock from door
- 12 button, 3x4 matrix backlit keypad

KEYPAD

Magnetic stripe (swipe)

- Triple track reader (1, 2 or 3), field configurable
- ABA, ISO76XX standard
- Reader can be cleaned without removing lock from door

Ordering Information

Available through one of our GSA schedule 84 approved distributions.

AD	-	250	-	CY	-	70	-	MG	-	SPA	-	626	-	P6	-	S123	-	RH	-	4B	-	13-247	-	10-025	-	134
Series		Class		Chassis		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Handing		Battery		Backset & Latch or Armored Front		Strike		Door Thickness
1		2		3		4		5		6		7		8		9		10		11		12		13		14

Standard options are indicated with a dot. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise deadbolt
993R	Exit trim – Rim/CVC/CVR
993S	Exit trim – SVR
993M	Exit trim – mortise
993DT	Non-functioning dummy trim for exit

4 Function

40	Privacy
50	Office/classroom
60	Apartment
70	Storeroom

5 Reader

• MS	Magnetic stripe (swipe)
MSK	Magnetic stripe + keypad (swipe)
DT	Dummy trim

6 Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with tactile warning options.

7 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
• 626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

8 Key Cylinder

• P6	Schlage 6-pin conventional key-in-lever cylinder

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9 Keyway

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

10 Handing

• RH	Right handed
LH	Left handed

Field reversible.

11 Battery

• 4B	4AA
8B	8AA

12 Backset & Latch or Armored Front

• 13-247	Cylindrical: 2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"
• 09-663	Mortise: Armor front, 1-1/4" wide, square corner

See price book for mortise deadbolt and other backset and latch options or armor front options.

13 Strike

• 10-025	Cylindrical: 1-3/16" lip, ANSI, no box, 1-1/4" x 4-7/8"
• 10-072	Mortise: 1-3/16" lip, 1-1/4" x 4-7/8" square corner, box

See price book for other available strikes.

14 Door Thickness

• 134	1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

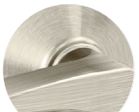
Tubular

Finishes

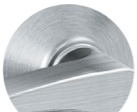
605
Bright Brass

606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome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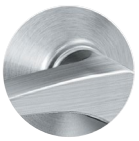
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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004436, Rev. 04/25

AD Series

Exit Trim Compatibility

Overview

The AD Series electronic lock is available in 993 Exit Trim for use on openings that require exit devices for either retrofit or new construction applications. Offline and networked solutions are available. The 993 Exit Trim was designed to suite with AD Series cylindrical and mortise locksets to ensure that the facility remains aesthetically consistent. The AD Series 993 Exit Trim utilizes universal hardware to simplify installation of offline trim to a variety of exit devices, including rim style from Von Duprin, Falcon, Sargent,® Precision™, Corbin Russwin, Dorma,® and Yale®.

Available Exit Trim Styles:

- 993R – Rim, concealed vertical rod or concealed vertical cable (CVR/CVC for metal doors only)
- 993S – Surface vertical rod
- 993M – Mortise

Exit Device Compatibility for AD-200/250, AD-300/302, AD-400/402[3]

Brand	Compatible Exit Devices	Rim	SVR	CVR	CVC	Mortise
Von Duprin®	98/99 and 98/99XP	●	●	●[1]	●[1]	●
Von Duprin®	78 Series	●	●	●[1]		
Von Duprin®	22/22F	●	●			
Falcon®	25 Series	●				
Sargent®	80 Series[4]	●				
Corbin Russwin®	5000[4]	●				
Yale®	7000[4]	●				
Dorma®	9300[4]	●				
Precision™	21[4] (2100 converts to 21 with Precision's BP21 kit)	●				

1. For metal doors only
2. Narrow design and reversible rim exits not compatible.
3. The proper low current request to exit switch (RX-LC) is required for AD-300/302 and AD-400/402. Part numbers for request to exit switch:
   - Von Duprin: 050281
   - Falcon: 650359
4. Performance using exit devices other than Von Duprin or Falcon may vary and is dependent on competitive switches.

Features & Benefits

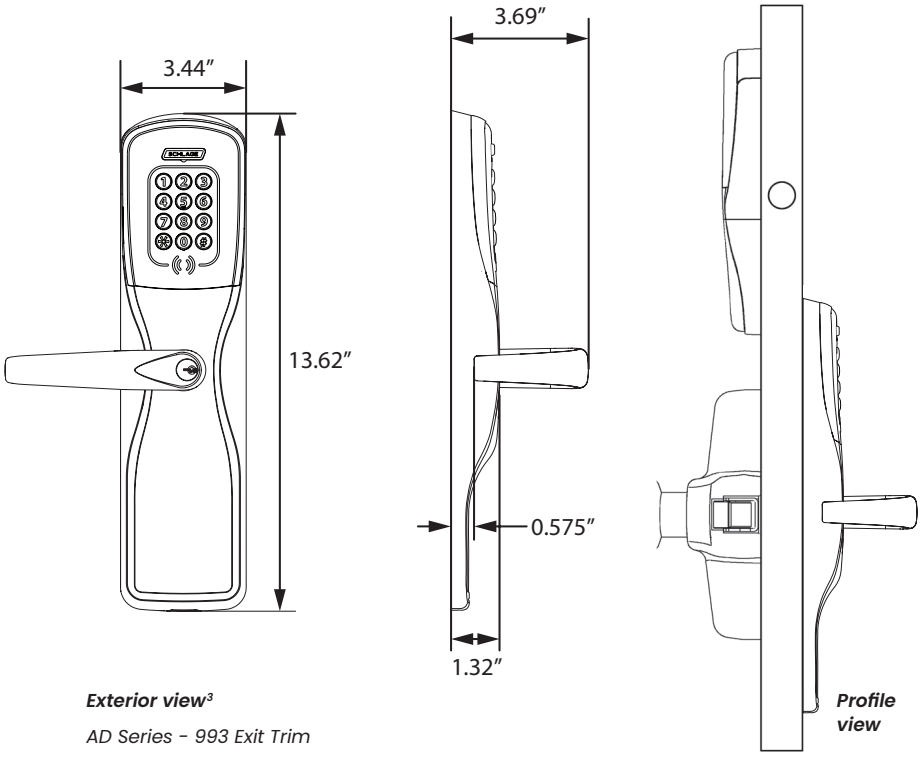
- Multiple credential reader options
- Offline and networked communication options
- A wide variety of finishes and lever styles
- Power options that include hardwired (12 VDC or 24 VDC) or batteries (4AA or 8AA)
- Compatible with all Schlage Conventional, FSIC and SFIC formatted cylinders including many competitive OEM cylinders such as Sargent,® Corbin Russwin, Medeco® and Yale®

Available AD Series Reader Modules[2]

- Multi-technology (125 kHz proximity, 13.56 MHz smart card and NFC mobile)
- FIPS 201-2 compliant multi-technology (125 kHz proximity and 13.56 MHz smart card)
- Smart –HID support
- Magnetic stripe
- Keypad only
- All credential readers available + keypad

Available Communication Options

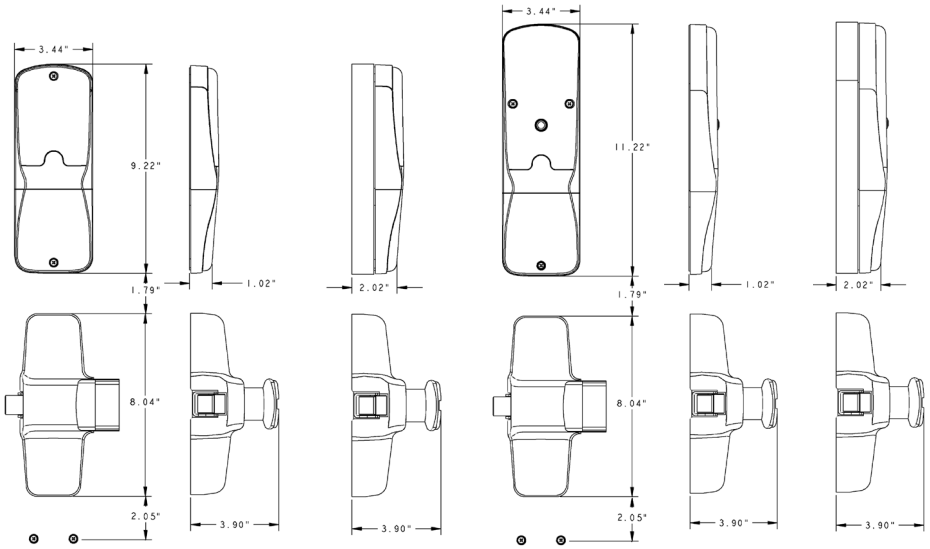
- AD-400: Networked wireless locks
- AD-402: Networked wireless locks - FIPS 201-2 compliant
- AD-300: Networked hardwired locks
- AD-302: Networked hardwired locks - FIPS 201-2 compliant
- AD-250: Offline, access rights stored on the magnetic stripe credential
- AD-200: Offline, access rights stored on the lock



Exterior view[3]

AD Series - 993 Exit Trim

Profile view



Interior view[1]

AD-200/250/300/302 - all styles

Side view

AD-200/250/300/302 – rim/CVR/CVC or mortise

Side view

AD-200/250/300/302 SVR

Interior view

AD-400/402 all styles

Side view

AD-400/402 rim/CVR/CVC or mortise

Side view

AD-400/402 SVR

1. AD-300/302 includes LED indicator
2. Unlike other AD Series chassis styles, upgrading reader modules on the 993 Exit Trim requires the exterior escutcheon to be removed from the door
3. (2) #7 fasteners with decorative washers located 11.88" below bottom edge of lock

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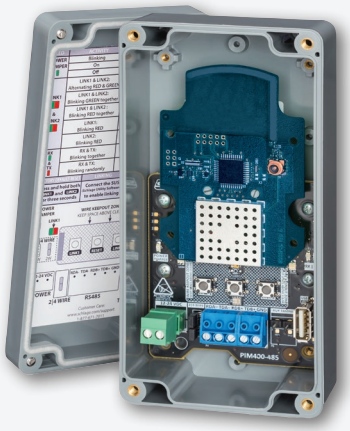
004382, Rev. 10/24

PIM400-485

Panel Interface Module for RS-485 Communication



Overview

The PIM400-485 seamlessly integrates to select access control panels via RS-485, eliminating the need for reader interface modules. Each PIM400-485 supports up to 16 wireless access devices such as AD-400/401 locks.

Reliability

Reliable communications result from incorporated technologies and features. 900 MHz spread spectrum technology enables high transmission power in a license-free band. Error detection algorithm maintains data integrity on each transmission, and redundant transmissions ensure communication success. Periodic "heartbeat" signals provide supervision and assure reliable RF communications are maintained. Lastly, dynamic channel switching (DCS) can be enabled to overcome harsh RF environments by automatically changing channels to avoid potential interference.

Security

Used extensively by government and military organizations, spread spectrum technology provides significant security advantages over conventional transmission methods. Wireless access devices utilize spread spectrum transmissions, which are encrypted with AES 128-bit keys, to yield a system that is virtually uncompromisable. In addition, scalability is virtually unlimited as each AD-Series wireless access module has nearly a million addresses to choose from during the linking process.

Centralized Lock/Unlock Command in 10 Seconds or Less

The Wake-Up on Radio (WOR) feature drives communication from the PIM400 to any or all linked wireless devices in 10 seconds or less. This innovative feature works efficiently in parallel with periodic "heartbeat", to maintain up to 2 year battery life on wireless devices such as the AD-400/401 locks. Response rate can be field configured down to 1 second with consideration of battery life. When Wake-Up on Radio is used in critical applications, dynamic channel switching should also be enabled.

Features & Benefits

- 900 MHz spread spectrum RF technology for long range, reliable communications
- Automatic linking to remote wireless access points with 10 channel frequencies to select from enables easy commissioning
- AES-128 bit encrypted spread spectrum transmissions
- 5 visual indicators to quickly pinpoint and display status
- Flash memory for easy firmware upgrades
- Redesigned with smaller footprint

CYBERSECURITY
Learn about Allegion's commitment

PIM400-485 Specifications	
Frequency range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
RF interference avoidance	Optional dynamic channel switching
Transmission/encryption	AES-128 bit key (optional)
Credential verification time	< 1 second[1]
Communication range	Up to 200 ft (61 m) with obstructions Up to 1,000 ft (305 m) clear line of sight Up to 2,000 ft (609 m) line of sight with high gain antenna on PIM400 Up to 4,000 ft (1219 m) line of sight with high gain antennas on PIM400 and WRI400
Visual/audible communications	5 LEDs for status indicators
System interface	RS-485
Power supply	12 VDC or 24 VDC
Voltage range	9.5 VDC to 26 VDC
Max current requirement	Up to 250 mA
Operating temperature	-31° to 151°F (-35° to 66°C)
Operating humidity	0% to 100% non-condensing
Dimensions (H x W x D)	6.3" x 3.2" x 2.2" (16.0 cm x 8.13 cm x 5.59 cm)
Weight	1.25 lb (.56 kg)
Cable specifications	DC power Input: 18AWG, 2 conductor (Belden 8760 or equivalent) up to 1,000 ft (305 m) PIM400-485 to ACP: 24AWG, 2 or 4 conductor shielded (Belden 9842, 9841 or equivalent) up to 4,000 ft (1219 m)
Data rate	RF: 40 kbps; RS-485: 9.6 kbps
Certifications	NEMA 1, 4, 4X, 6; UL 294; ULCS319; FCC Part 15; Industry Canada (IC); RoHS

1. Dependant on latency time of access control panel.

Additional Features

Reliable Communications

900 MHz band enables longer transmission ranges. In general, signal propagation with longer wavelengths travel a greater distance and penetrate through, and around objects better than signals with shorter wavelengths.

Online Communications (Heartbeat)

Regular communications between the AD-Series wireless access module and PIM400 monitor transmission presence and integrity. Online communications enable the PIM400 to download information or instructions such as unlock and relock.

Auto Addressing (Linking)

One of the final steps in the installation process is called "linking". Linking ties a specific wireless access module to a selected PIM400 and assigns a unique address. There are over 65,000 unique addresses available per channel, providing nearly a million combinations for virtually unlimited scalability.

Assured Communications

A Packet-Error-Rate-Test (PERT) is performed during linking at reduced power levels to ensure reliable communication during operation.

Encoded Transmissions

Each RF transmission is encrypted with AES-128 bit keys to provide virtually uncompromisable security.

Tamper

The PIM400 cover is monitored by an optical tamper switch.

Visual indications

- Power on
- Microprocessor running
- Linking status
- PIM receiving RF data
- PIM transmitting RF data
- PIM receiving RS-485 data
- PIM transmitting RS-485 data
- PIM firmware version
- PIM tamper status

Access point status available through RS-485 connection

- Card and keypad data
- Door position
- Loss of RF communication
- Request-to-exit
- Request-to-enter
- Low battery
- PIM tamper
- Mechanical key override
- Deadbolt position
- Interior cover tamper guard
- Lock/unlock status
- Interior push button

Configurable items from PIM400-485

- Wake-Up on Radio (WOR)
- Heartbeat frequency
- Relock parameters
- Card data format conversion
- Extended unlock
- Fail safe/fail secure/fail as-is
- Door held pre-alarm
- Cache memory parameters
- Dynamic channel switching (DCS)
- Reader configuration
- Keypad configuration
- Inside pushbutton configuration
- User interface configuration

Ordering Information

PIM400-485 – Panel Interface Module with outdoor enclosure standard. Supports up to 16 access points via RS-485 with select brands of access control panels

Optional accessories

- **ANT400-REM-I/O** – Omni-directional remote indoor/outdoor antenna module. Requires available grounding kit (MGB+MCA5) for outdoor installations
- **ANT400-REM-I/O+6dB** – Directional, flat panel, remote indoor/outdoor antenna with 6dB of gain. Requires available grounding kit (MGB+MCA5) for outdoor installations
- **MGB+MCA5** – Grounding kit for outdoor installations
- **ANT400-REM-CEILING** – Omni-directional ceiling mount indoor remote antenna
- **ANT400-REM-HALL** – Bi-directional indoor hall application remote antenna
- **SUS-A Cable** – for use with SUS mobile app on compatible Android™ devices
- **593PI-12DC** – 12 VDC power supply

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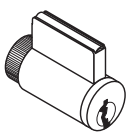
AD Series & CO Series

Lever & Cylinder Compatibility

Overview

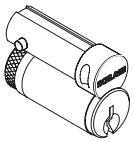
AD Series and CO Series electronic locks come standard with the Schlage® 6-pin Everest 29™ S123 keyway and two patented keys. The Everest 29 keyway's patentprotected undercut design with protection through 2029 is available in open and restricted keyway families. Patented restricted keyways, such as the Everest 29 R and T families, deliver a higher level of security by requiring authorization to access key blanks for duplication. Improve both administrative and physical security with the application of Primus XP cylinders and gain the option to also employ high-security UL 437 cylinders. The Everest 29 design enables a key blank that is backwards compatible to legacy Everest keyways allowing Everest 29 keys to work with existing Everest systems aiding the key system migration process.

The AD Series and CO Series can also be ordered with other popular Schlage keyways or prepared to receive Falcon® Conventional key-in-lever cylinders or Small Format Interchangeable Core (SFIC) cylinders. Less cylinder options are available to provide compatibility with Conventional, LFIC or SFIC cylinders of other manufacturers including, Sargent,® Corbin Russwin,® Medeco® and Yale.®



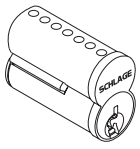
Conventional key-in-lever

P, P6, Z, L, L-SAR, L-FA7



Full Size Interchangeable Core

R, M, J-SAR, J-CO6, J-CO7, J-MED, J-YA6, J-YA7



Small Format Interchangeable Core

G7, B

Features & Benefits

- The key-in-lever design of AD and CO Series fits a full range of Schlage cylinders featuring administrative security options from open to patented and patented restricted keyways
- Primus cylinder and key options provide enhanced physical security in the cylinder including a UL 437 listed high-security option and a patent protected key design with geographic exclusivity
- Levers are offered in a wide variety of finishes and styles
- Compatible with all Schlage Conventional, FSIC, SL (as Conventional and FSIC), and SFIC formatted cylinders including many competitive OEM cylinders
- SL cylinder option allows an Everest 29 R or legacy Everest B keyway facility to gain a Primus program level security
- AD and CO 993 exit trim is compatible with a variety of exit devices including rim style from Von Duprin, Falcon, Sargent,® Precision,™ Corbin Russwin,® Dorma® and Yale.®

Lever & Cylinder Compatibility

				Cylinder type			Lever style							
Ordering suffix	**Application (made to accept)**	**With cylinder**	**Pins**	**KIL**	**FSIC**	**SFIC**	**ATH**	**BRK**	**BRW**	**LAT**	**LON**	**RHO**	**SPA**	**TLR**
P	Schlage® - (6-pin, keyed 5)	●	6	●			●	●	●	●	●	●	●	●
P6	Schlage - Everest 29 S (default)	●	6	●			●	●	●	●	●	●	●	●
Z	Schlage SL - Everest 29 R keyways	●	7	●			●	●	●	●	●	●	●	●
L	Schlage, Falcon®		6	●			●	●	●	●	●	●	●	●
R	Schlage - Everest 29 S (default)	●	6		●		●	●	●	●	●	●	●	●
M	Schlage SL - Everest 29 R keyways	●	7		●		●	●	●	●	●	●	●	●
J	Schlage		6		●		●	●	●	●	●	●	●	●
G7	Schlage Everest 29 R keyways	●	7			●	●	●	●	●	●	●	●	●
B	Schlage, Falcon, Competitive OEM's		7			●	●	●	●	●	●	●	●	●
L-FA7	Falcon		7	●				●	●	●	●	●	●	
L-SAR	Sargent® (10L+11L)		6	●			●	●	●	●	●	●	●	●
J-SAR	Sargent 6300		6		●		●	●	●	●	●	●	●	●
J-CO6	Corbin® 8000		6		●		●	●	●	●	●	●	●	●
J-CO7	Corbin 8000-7		7		●			●	●	●	●	●	●	●
J-MED	Medeco® 32*0201		6		●			●	●	●	●	●	●	
J-YA6	Yale® 1210 or Medeco 31*0100		6		●		●	●	●	●	●	●	●	●
J-YA7	Yale 1220		7		●			●	●	●	●	●	●	

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

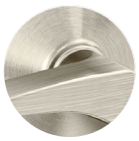
Tubular

Finishes

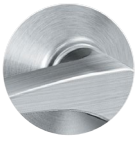
605
Bright Brass

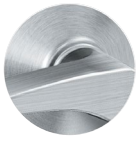
606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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010432, Rev. 01/24

PIM400-TD2

Panel Interface Module Wiegand or Clock & Data Communication

Overview

The PIM400-TD2 seamlessly integrates to virtually any access control panel and their reader interface modules via Wiegand or Clock & Data protocols. Each PIM400-TD2 supports up to two wireless access devices such as AD-400/401 Series locks.

Reliability

Reliable communications result from incorporated technologies and features. 900 MHz spread spectrum technology enables high transmission power in a license-free band. Error detection algorithm maintains data integrity on each transmission and redundant transmissions ensure communication success. Periodic "heartbeat" signals provide supervision and assure reliable RF communications are maintained. Lastly, dynamic channel switching (DCS) can be enabled to overcome harsh RF environments by automatically changing channels to avoid potential interference.

Security

Used extensively by government and military organizations, spread spectrum technology provides significant security advantages over conventional transmission methods. Wireless access devices utilize spread spectrum transmissions, which are encrypted with AES-128 bit keys, to yield a system that is virtually uncompromisable. In addition, scalability is virtually unlimited as each AD Series wireless access module has nearly a million addresses to choose from during the linking process.

Centralized lock/unlock command in 10 seconds or less

The Wake-Up on Radio (WOR) feature drives communication from the PIM400 to any or all linked wireless devices in 10 seconds or less. This innovative feature works efficiently in parallel with periodic "heartbeat" to maintain up to 2 year battery life on wireless devices such as the AD-400/401 locks. Response rate can be field configured down to 1 second with consideration of battery life. When Wake-Up on Radio is used in critical applications, dynamic channel switching should also be enabled.

Features & Benefits

- 900 MHz spread spectrum RF technology for long range, reliable communications
- Supports up to two AD Series wireless devices
- Automatic linking to remote wireless access points with 10 channel frequencies to select from enables easy commissioning
- AES-128 bit encrypted spread spectrum transmissions
- 13 visual indicators to quickly verify operation and troubleshoot
- Flash memory for easy software upgrades

CYBERSECURITY
Learn about Allegion's commitment

PIM400-TD2 Specifications	
Frequency range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
RF interference avoidance	Optional dynamic channel switching
Transmission/encryption	AES-128 bit key (optional)
Credential verification time	< 1 second[1]
Communication range	Up to 200 ft (61 m) with obstructions Up to 1000 ft (305 m) clear line of sight Up to 2000 ft (609 m) line of sight with high gain antenna on PIM400 Up to 4000 ft (1219 m) line of sight with high gain antennas on PIM400 and WRI400
Visual/audible communications	13 LEDs for status indicators
System interface	Wiegand (data1/data0) or magnetic stripe (Clock & Data)
Power supply	12 VDC or 24 VDC
Voltage range	9.5 VDC to 26 VDC
Max current requirement	Up to 250 mA
Operating temperature	-31˚ to 151˚F (-35˚ to 66˚C)
Operating humidity	0 - 100% non-condensing
Dimensions (H x W x D)	7.1" x 7.1" x 3.0" (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.56 kg)
Cable specifications	DC power Input: 18AWG, 2 conductor (Belden 8760 or equivalent) up to 1000 ft (303 m) PIM400-TD2 to ACP: 22AWG, 8 conductor shielded (Alpha 1298C or equivalent) up to 500 ft (152 m)
Data rate	RF: 40 kbps
Certifications	NEMA 1, 4, 4X, 6; UL 294; ULC S319; FCC Part 15; RoHS; Industry Canada (IC)

1. Dependant on latency time of access control panel.

Additional Features

Reliable Communications

900 MHz band enables longer transmission ranges. In general, signal propagation with longer wavelengths travel a greater distance and penetrate through, and around objects better than signals with shorter wavelengths.

Online Communications (Heartbeat)

Regular communications between the AD Series wireless access module and PIM400 monitor transmission presence and integrity. Online communications enable the PIM400 to download information or instructions such as unlock and relock.

Auto Addressing (Linking)

One of the final steps in the installation process is called "linking". Linking ties a specific wireless access module to a selected PIM400 and assigns a unique address. There are over 65,000 unique addresses available per channel, providing nearly a million combinations for virtually unlimited scalability.

Assured Communications

A packet-error-rate-test (PERT) is performed during linking at reduced power levels to ensure reliable communication during operation.

Encoded Transmissions

Each RF transmission is encrypted with AES-128 bit keys to provide virtually uncompromisable security.

Tamper

The PIM400 cover is monitored by a tamper switch.

Visual LED indications

- Power on
- Microprocessor running
- Linking status to WAPM
- PIM transmitting RF data
- PIM receiving RF data
- PIM receiving data
- PIM transmitting data
- Door position
- PIM tamper status
- PIM firmware version
- Wiegand and Clock & Data status 1 & 2
- Door status 1 & 2
- Trouble 1 & 2

Standard open collector contacts

- Configurable for normally open or normally closed
- Door position
- Request-to-exit
- Request-to-enter
- Trouble

Optional relay board (RLBD) to achieve dry contact

- Configurable for normally open or normally closed
- Door position
- Request-to-exit
- Request-to-enter
- Trouble

Access point status available through PIM400-TD2

- Wiegand or magnetic stripe card data
- Door position
- Request-to-exit
- Request-to-enter (optional)
- Trouble
- Loss of RF communication
- Low battery
- PIM tamper
- Reader tamper

Configurable items from PIM400-TD2

- Wake-Up on Radio (WOR)
- Heartbeat frequency
- Relock parameters
- Card data format conversion
- Extended unlock
- Fail safe/fail secure/fail as-is
- Door held pre-alarm
- Cache memory parameters
- Dynamic channel switching (DCS)
- Reader configuration
- Keypad configuration
- User interface configuration

Ordering information

PIM400-TD2 – Panel Interface Module with outdoor enclosure standard. Supports up to two access points via Wiegand or Clock & Data with virtually any access control panel.

Optional accessories

- **ANT400-REM-I/O** – Omni-directional remote indoor/outdoor antenna module. Requires available grounding kit (MGB+MCA5) for outdoor installations
- **ANT400-REM-I/O+6dB** – Directional, flat panel, remote indoor/outdoor antenna with 6dB of gain. Requires available grounding kit (MGB+MCA5) for outdoor installations
- **MGB+MCA5** – Grounding kit for outdoor installations
- **ANT400-REM-CEILING** – Omni-directional ceiling mount indoor remote antenna
- **ANT400-REM-HALL** – Bi-directional indoor hall application remote antenna
- **SUS-A Cable** – for use with SUS mobile app on compatible Android™ devices
- **593PI-12DC** – 12 VDC power supply

Note: Available through one of our GSA schedule 84 approved distributors.

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PIM400-1501-LC

16 Door Intelligent Controller for AD Series Wireless Devices; Powered by Mercury

Overview

The Schlage intelligent controller powered by Mercury is designed to provide a complete and cost effective IP addressable access control solution for up to 16 wireless AD Series devices. By combining the strength of the AD Series wireless PIM400 with customized functionality of the MP1501 intelligent controller from Mercury, this single device provides a compact solution that simplifies installation and cost of implementation. MP1501 controller is not included and must be purchased separately.

The PIM400-1501-LC can extend a facility's access control to remote locations and can be centrally managed by an IP network connection. By having an IP connection you can easily hook on to the existing network without the need for additional wiring requirements such as RS232 or RS485 cables. By leveraging the full portfolio of Schlage Wireless devices including the AD-400 locksets, WPR400 portable readers, and WRI400 reader interfaces there is the ability to support a broad range of applications including traditional openings that may require electric strikes or wall mounted readers.

The PIM400-1501-LC is pre-wired with external RJ-45 and USB connections. To further simplify installation, the device can be Powered over Ethernet (PoE) or receive 12VDC supply.

Once configured, the PIM400-1501-LC functions independently of the host in the event network connectivity is lost. Thus, the PIM400-1501-LC can continue to manage access control to up to 16 wireless devices even when the network is disconnected. The intelligence of the PIM400-1501-LC extends beyond just its capacity for 240,000 cardholders and 50,000 audit events to include the ability to manage elaborate interdependencies among the devices.

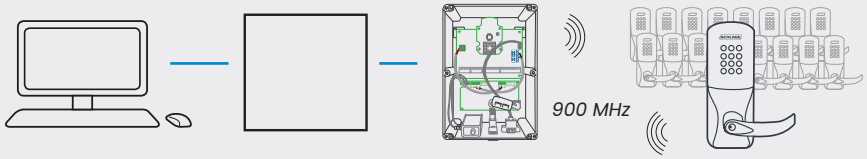
Features & Benefits

- Standard IP addressable intelligent controller for up to 16 AD Series wireless devices
- Decentralized system intelligence capable of managing up to 240,000 cardholders and 50,000 transactions in memory if temporarily disconnected from network
- PoE compliant to IEEE 802.3af
- Optional 12VDC external power supply to achieve UL294 Listing
- 900 MHz communication between PIM4001501-LC and AD Series wireless devices for secure, AES-128 bit encrypted transmission
- Wireless lockdown/unlock feature (10 seconds or less) preserves up to 2 year battery life in wireless device
- External RJ-45 and USB connectors for simplified installation and use
- Capable of managing a combination of AD-400, WPR400, and WRI400 devices for applications ranging from traditional doors to elevators and parking gates

CYBERSECURITY
Learn about Allegion's commitment

PIM400-1501-LC 16 Door Intelligent Controller	
Modulation / encryption	900 MHz spread spectrum, direct sequence, 10 channels, AES-128 bit key
Frequency range	902-928 MHz
Credential verification time	< 1 second[1]
Communication range	Up to 200 ft (61 m) indoor range, with normal building obstructions Up to 1000 ft (305 m) clear line of sight Up to 2000 ft (609 m) line of sight with high gain antenna on PIM400 Up to 4000 ft (1219 m) line of sight with high gain antennas on PIM400-1501-LC and WRI400.
RF interference avoidance	Configurable Dynamic Channel Switching
Operating temperature	32° to 151°F (0° to 66°C)
Humidity	10% to 95% relative humidity non-condensing
Power input	PoE, 12.95W compliant to IEEE 802.3af or 12VDC +- 10% 400mA max power supply
Communication to host	10 Base-T / 100Base-TX
Intelligent controller memory	240,000 cardholders, 50,000 transaction buffer 32 Access levels per cardholder Activation/deactivation dates
Dimensions (H x W x D)	10.43" x 7.28" x 3.79" (26.49 cm x 18.49 cm x 9.63 cm)
Weight	2.8 lbs.
Certifications	FCC Part 15; Industry Canada(IC); RoHS; ULC S319; UL294 Listed[2] when connected to UL294 power supply

1. Lock requires less than 100 msec, response time does not include latency time of ACP.
2. Confirm with your Physical Access Control Software (PACS) provider.



Access control management system — *PoE Network Switch* — *Panel interface module (PIM400-1501-LC)* — *AD-400 wireless devices (Up to 16 devices)*

Rev 1.14.6 or higher

Optional Accessories

- **ANT400-REM-I/O** – Omni-directional remote indoor/ outdoor antenna module. Requires available grounding kit (MGB+MCA5) for outdoor installations
- **ANT400-REM-I/O+6dB** – Directional, flat panel, remote indoor/outdoor antenna with 6dB of gain. Requires available grounding kit (MGB+MCA5) for outdoor installations
- **MGB+MCA5** – Grounding kit for outdoor installations
- **ANT400-REM-CEILING** – Omni-directional ceiling mount indoor remote antenna
- **ANT400-REM-HALL** – Bi-directional indoor hall application remote antenna
- **SUS-A Cable** – for use with SUS mobile app on compatible Android™ devices
- **WPR400** – Wireless Portable Reader
- **WRI400** – Wireless Reader Interface
- **REPTR400** – Wireless Repeater

PIM400-1501-LC has RJ-45 and USB external connectors to make installation easy.

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TK400

AD Series
Wireless Test Kit

Overview

The Schlage AD Series TK400 Wireless Test Kit can help you evaluate system design on new AD-400 wireless networked systems prior to installation. The TK400 can also be used to diagnose communication strength on existing AD-400 wireless applications. AD-400 locks and devices including the Wireless Reader Interface (WRI400), and Wireless Portable Reader (WPR400) communicate via 900 MHz frequency to the Panel Interface Module (PIM400); the PIM400 is required for communication between the AD-400 devices and the access control panel.

The TK400 Wireless Test Kit contains a Wireless Portable Signal Tester (WPR400-DT), a Panel Interface Module (PIM400-TD2), a PIM400 power supply, 8 AA alkaline batteries, and a convenient carrying case. The WPR400-DT operates on batteries, making it convenient and easy to maintain on job sites.

The Wireless Portable Signal Tester (WPR400-DT) is used to communicate to the PIM400 as an access control module. LED lights provide intuitive feedback about the quality of the signal.

The communication range of the AD-400 to the PIM400 is up to 200 feet with normal building construction and up to 1000 feet with clear line of sight. The TK400 can be used to determine the proper location of each Panel Interface Module (PIM) to optimize system design. When installed properly, an AD-400 wireless solution is an extremely reliable and cost effective alternative to a hardwired networked system.

Features & Benefits

- Allows you to test the range of 900 MHz signals between AD-400 devices and PIM400 to ensure proper location prior to installation of complete system.
- Can be used to test existing installations for signal strength
- LED light feedback for signal strength communication; green for strong connection, red for weak connection
- Kit comes complete with:
  - Wireless portable signal tester (WPR400-DT)
  - Panel Interface Module (PIM400-TD2)
  - Power supply for PIM400-TD2
  - 8 AA off-the-shelf batteries
  - Carrying case
- WPR400-DT certifications: FCC Part 15, Industry Canada (IC), RoHS
- PIM400-TD2 certifications: NEMA 1, 4, 4X, 6; UL 294, FCC Part 15, Industry Canada (IC), RoHS

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Wireless Portable Signal Tester	
Frequency range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Communication	Up to 200 ft with obstructions (normal building); up to 1000 ft clear line of sight
Operating temperature	0°C (32°F) to 49°C (120°F)
Humidity	0% to 100% non-condensing
Battery type	8AA alkaline batteries
Dimensions (H x W x D)	2.375" x 5.0" x 6.25" (6.03 cm x 12.7 cm x 15.88 cm)
Certifications	• FCC Part 15 • Industry Canada (IC) • RoHS

PIM400-TD2	
Frequency range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Communication	Up to 200 ft with obstructions (normal building); up to 1000 ft clear line of sight
Operating temperature	-31° to 151°F (-35° to 66°C)
Humidity	0% to 100% condensing
Power supply	12 VDC or 24VDC (12 VDC power supply included)
Dimensions (H x W x D)	7.1" x 7.1" x 3.0" (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.56 kg)
Certifications	• NEMA 1, 4, 4X, 6 • UL 294 • FCC Part 15 • Industry Canada (IC) • RoHS

Available through one of our GSA schedule 84 approved distributors

Visual LED Indications

- Wireless signal quality
- Low battery

Visual LED Indications

- Power on
- Linking status to AD-400 devices
- PIM transmitting/receiving RF data

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WPR400

AD Series Wireless Portable Reader

Overview

The Schlage® AD Series Wireless Portable Reader (WPR400) was designed to extend a facility's access control to remote locations, at a moment's notice.

The WPR400 is a portable device that utilizes the same credential reader module as an AD Series electronic lock. The WPR400 can be held by hand or placed in a convenient temporary location to allow for credential verification. Whether it is at a temporary check point or bus load registration, the WPR400 will provide simple, intuitive feedback to the user if the credential being presented is valid or invalid via real time connectivity to the access control system.

The WPR400, as well as other AD-400 locks and devices, communicate via 900MHz frequency to the Panel Interface Module (PIM400); the PIM400 is required for communication between the AD-400 devices and the access control panel.

The WPR400 was designed to be intuitive to use and easy to set up, which is critical in situations where there is a need for remote credential verification. At power-on and within range, the WPR400 is ready to accept its first credential within moments of powering up and reconnecting to the previously paired PIM400. After the credential has been authenticated by the access control system, the WPR400 provides intuitive LED light feedback.

The WPR400 also has the ability to be configured to cache mode. When enabled, the WPR400 keeps a local database of valid access grants. Upon moving the WPR400 to an offline location away from the PIM400, credentials can be verified for the last 1000 valid users.

Finally, the WPR400 can be manually configured to operate as a wireless portable tester. In Wireless Test Mode, the device can be used to evaluate the location of PIM400s and AD-400 devices within a specific environment, or the existing reader module can remain installed on the WPR400.

Features & Benefits

- Fully compatible with Schlage AD Series credential reader modules and Panel Interface Modules
- Credential support includes Schlage MIFARE®, NFC mobile[1], proximity, magnetic stripe, and keypad. Refer to AD-400 data sheet for more detail.
  - Optional support for HID® smart and NFC mobile credentials
- Card reader options available with keypad for multi-factor authentication
- Cache mode option for offline applications
- Field configurable to work as a wireless portable signal tester
- Configured with the SUS Android mobile app and SUS-A Cable
- LED indicators communicate valid (green) and invalid (red) credential status
- Communicates to access control system via PIM400
- Comes with 8 AA off-the-shelf batteries

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1. Refer to the Schlage mobile credential compatibility chart for a list of certified devices.

Wireless Portable Reader Specifications	
Modulation/encryption	900 MHz spread spectrum, direct sequence, 10 channels AES-128 bit key
Frequency range	902-928 MHz
Credential verification time	< 1 second[1]
Communication range	Up to 200 ft with obstructions (normal building); up to 1000 ft clear line of sight
RF interference avoidance	Configurable dynamic channel switching
Data rate	40 kbps
Operating temperature	32˚F (0˚C) to 120˚F (49˚C)
Humidity	0% to 100% non-condensing
Battery type	8AA alkaline batteries
Battery life	Up to 2 years at 40,000 card reads or PIN codes per year
Dimensions (H x W x D, less reader)	3.375" x 5.0" x 6.25" (8.57 cm x 12.7 cm 15.88 cm)
Weight (less reader)	1.5 lb (0.68 kg)
Certifications	NEMA 1, 4, 4X, 6; FCC Part 15; Industry Canada (IC); RoHS
Additional accessories	Panel Interface Module (PIM400), SUS-A Cable used with SUS mobile app on compatible Android™ devices

Available through one of our GSA schedule 84 approved distributors

Included with WPR400

- AD Series credential reader module specified at ordering

Modes of operation

- Reader mode (default)
- Wireless test mode (field configurable)

Reliability

Secure and reliable wireless communication with the Panel Interface Module (PIM400) is accomplished using 900 MHz frequency. 900 MHz band enables longer transmission ranges because signal propagation with longer wavelengths travels a greater distance and better penetrates typical building construction – allowing for simplified system design.

Panel Interface Module (PIM400)

The PIM400 (sold separately) is required for communication between the WPR400/402 and the access control panel, and can support up to 16 AD-400 devices depending on your access control system.

Available AD Series Reader Modules[2]

Multi-Technology

- Proximity
- Smart

KEYPAD option

Si with HID Support

- Smart

KEYPAD option

Magnetic Stripe (swipe)

KEYPAD option

Keypad

1. WPR requires less than 100 msec, response time does not include latency time of ACP.
2. Dummy trim reader module also available. Please see AD Series data sheets for more details on credential reader modules.

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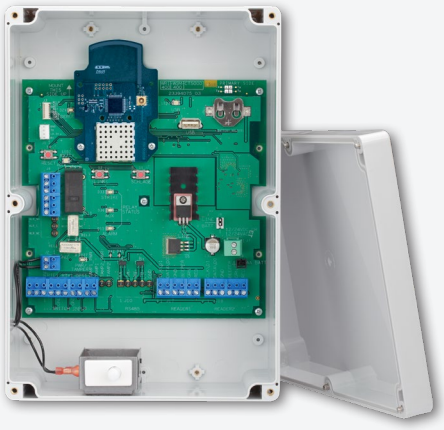
WRI400

Wireless Reader Interface



Overview

The WRI400 is a networked access point controller designed to provide wireless connectivity to traditional electronic access control components including credential readers, door position and request-to-exit switches.

The WRI400 Wireless Reader Interface provides local termination points for your wall or mullion mounted reader, door position switch, request-to-exit (RX) and reader tamper. The WRI400 communicates data via 900 MHz back to either a PIM400-485 or PIM400-TD2 which are hardwired to the Access Control Panel (ACP) where all access and specific reporting decisions are made and recorded.

The WRI400 is designed to be compatible with most of the popular Wiegand or Clock & Data format readers that exist in the market today. Utilizing the two form C relays on board expands the capability at the door to control electronic locking hardware as well as other devices such as automatic operators.

The WRI400 allows you to extend the reach of your access control system to openings that are hard to reach with network wiring. Ideal applications include remote doors, historic buildings, gates and elevators. Since the WRI400 is built on an open architecture platform it is designed for seamless integration with most access control systems.

Features & Benefits

- Visual LED indications – WRI400 cover is monitored by a tamper switch
- Encryption – Each RF transmission is encrypted with AES-128 bit keys
- Reader interfaces support:
  - Wiegand (data1/data0) up to 255 bits
  - Magnetic stripe (Clock & Data) up to 255 bits
- Form C relay outputs:
  - Strike relay
  - Auxiliary output relay
- Signal inputs:
  - Request-to-enter
  - Request-to-exit
  - Door position switch
  - Reader tamper 1
  - Reader tamper 2
- Certification: NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; Industry Canada (IC), RoHS

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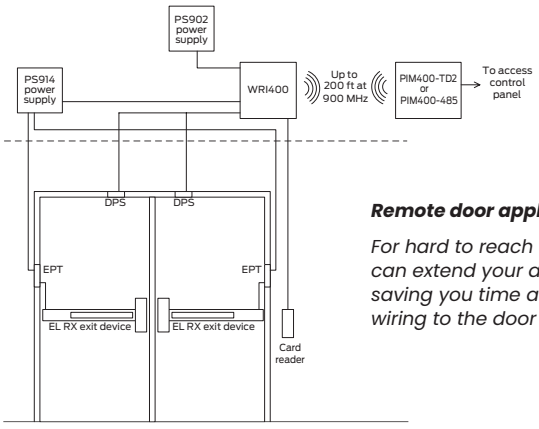
WRI400 Specifications		
Frequency range		902-928 MHz
Modulation		900 MHz spread spectrum, direct sequence, 10 channels
RF interference avoidance		Optional dynamic channel switching
Transmission/encryption		AES-128 bit key (optional)
Data rate		RF: 40 kbps
Credential verification time		< 1 second[1]
Communication range		Up to 200 ft (61 m) normal building construction Up to 1000 ft (305 m) clear line of sight (See ANT400-REM data sheet for increasing distance)
Power supply requirements		12 VDC or 24 VDC; 500 mA maximum current
Connector cable specifications	DC power input	18AWG, 2 conductor (Belden 8760 or equivalent) up to 1000 ft (305 m)
	Credential readers (x2)	Data signals: 22AWG, 6 conductor (Alpha 1296C or equivalent) up to 500 feet (152 meters) Reader tamper signals: 18AWG, twisted pair shielded (Beldon 8760 or equivalent) up to up to 500 feet (152 meters)
	Strike/aux relay outputs	18AWG, 2 conductor (Belden 8760 or equivalent) up to 2000 feet (610 meters)
	Request-to-enter and -exit inputs	18AWG, 2 conductor (Belden 8760 or equivalent) up to 2000 feet (610 meters)
Relay output tolerances	Strike output relay	Form C relay; 6 amps at 24 VDC or 6 amps at 120 VAC or 3 amps at 240 VAC
	Auxiliary output relay	Form C relay; 2 amps at 24 VDC or 0.5 amps at 120 VAC
Operating temperature		-31°F (-35°C) to 151°F (66°C)
Operating humidity		0 - 100% condensing
Dimensions (H x W x D)		10.43" x 7.28" x 3.79" (26.49 cm x 18.49 cm x 9.63 cm)
Certifications		NEMA 1, 4, 4X, 6; UL 294; FCC Part 15; Industry Canada (IC); RoHS

1. WRI requires less than 100 msec, response time does not include latency time of ACP.



Remote door application

For hard to reach openings, the WRI400 can extend your access control system saving you time and money by reducing wiring to the door from the panel.

Additional Features

Reliable Communications

900 MHz band enables longer transmission ranges. In general, signal propagation with longer wavelengths travel a greater distance and penetrate through, and around objects better than signals with shorter wavelengths.

Online Communications (Heartbeat)

Regular communications between the WRI400 and PIM400 monitor transmission presence and integrity. Online communications enable the WRI400 to download information or instructions such as unlock and relock.

Optional Accessories

- **ANT400-REM-I/O** – Omni-directional remote indoor/outdoor antenna module. Requires available grounding kit (MGB+MCA5) for outdoor installations
- **ANT400-REM-I/O+6DB** – Directional, flat panel, remote indoor/outdoor antenna with 6DB of gain. Requires available grounding kit (MGB+MCA5) for outdoor installations
- **MGB+MCA5** – Grounding kit for outdoor installations
- **ANT400-REM-CEILING** – Omni-directional ceiling mount indoor remote antenna
- **ANT400-REM-HALL** – Bi-directional indoor hall application remote antenna
- **SUS-A Cable** – for use with SUS mobile app on compatible Android devices
- **593PI-12DC** – 12 VDC power supply

Note: Available through one of our GSA schedule 84 approved distributors.

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GCK400 & ECK400

Wireless Gate Control Kits & Elevator Control Kits

Overview

The Gate Control Kit (GCK400) and the Elevator Control Kit (ECK400) complement and expand the AD Series platform by bringing wireless access control to applications that are difficult to reach with a traditional wired approach.

The GCK400 and the ECK400 are kits comprised of the Wireless Reader Interface (WRI400), the Panel Interface Module (PIM400-TD2), a Remote Antenna (ANT-REM I/O) and a power supply (593PI-12DC). The GCK400 kit also includes an antenna grounding kit (MGB+MCA5).

The Wireless Reader Interface (WRI400) is compatible with most popular Wiegand or Clock & Data format credential readers on the market today. The WRI400 communicates via 900MHz to the PIM400-TD2 within a range of up to 1000 feet with a clear line of sight. The PIM400-TD2 is hardwired to the access control panel where decisions are validated and recorded.

The GCK400 kit can eliminate the need for trenching in gate applications, driving a significant reduction of installation time and cost. The gate kit is ideal for parking lots, airports, military bases and garages. Roadways, parking lots and landscape are left intact since the need to run wires underground is eliminated.

The ECK400 eliminate the need for traveling cables to elevator applications simplifying installation. Access control can be applied to elevators at a much faster rate, reducing downtime and disruption within the facility.

Features & Benefits

- Real time access control
- Reduced installation time
- Eliminates trenching of communication lines
- Eliminates traveling cables in elevators
- Two paralleled reader inputs
- Supports all Wiegand (data1/data0) and magnetic stripe (clock/data) reader technologies

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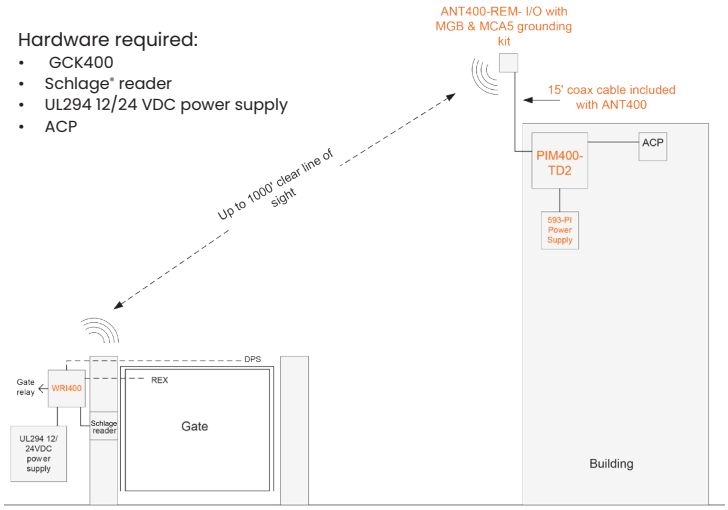
GCK400/ECK400 Kit Contents		
Qty	**Part number**	
1	ANT400-REM-I/O	Omni-directional, flat panel, remote indoor/outdoor antenna with adjustable mount
1	WRI400	Wireless reader interface connects to a reader and transmits signal to PIM
1	PIM400-TD2	Panel interface module receives information through antenna and sends to access control provider panel for confirmation
1	593PI-12	Wall plug-in power supply converts 120v input to 12 VDC output supports WRI-400
1	MGB+MCA5 (GCK400 only)	Antenna grounding kit

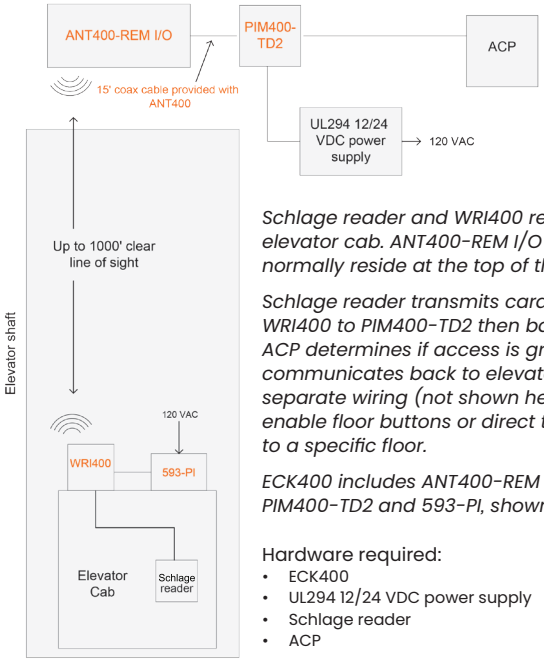
PIM400-TD2 Specifications	
Transmission / encryption	AES - 128 bit (optional)
Communication range	Up to 200 ft (61 m) with obstructions
	Up to 1000 ft (305 m) clear line of sight
	Up to 2000 ft (609 m) line of sight with high gain antenna on PIM400
	Up to 4000 ft (1219 m) line of sight with high gain antennas on PIM400 and WRI400
Dimensions (H x W x D)	10.43" x 7.28" x 3.79' (26.49 cm x 18.49 cm x 9.63 cm)

WRI400 Specification	
Frequency range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
RF interference avoidance	Optional dynamic channel switching
Data rate	RF: 40 kbps
Power supply requirements	12 VDC or 24 VDC
Dimensions (H x W x D)	10.43" x 7.28" x 3.79" (26.49 cm x 18.49 cm x 9.63 cm)
Operating temperature	- 31°F (-35°C) to 151°F (66°C)
Strike output relay	Form C relay: 6 amps at 24 VDC or 6 amps at 120 VAC or 3 amps at 240 VAC
Auxillary output relay	Form C relay: 2 amps at 24 VDC or 0.5 amps at 120 VAC
Dimensions (overall)	8.7 in x 6.94 in x 4.5 in (220 mm x 176 mm x 140 mm)
Weight	4.2 oz (120 grams)

Hardware required:
- GCK400
- Schlage® reader
- UL294 12/24 VDC power supply
- ACP



GCK includes WRI400, PIM400-TD2, ANT-REM I/O, MGB + MCA5 and 593-PI and are shown in blue. Items not included are in black. DPS and REX are optional.



Schlage reader and WRI400 reside in or on the elevator cab. ANT400-REM I/O and PIM400-TD2 normally reside at the top of the elevator shaft.

Schlage reader transmits card data through WRI400 to PIM400-TD2 then back to ACP. ACP determines if access is granted and communicates back to elevator cab via separate wiring (not shown here) to either enable floor buttons or direct the elevator cab to a specific floor.

ECK400 includes ANT400-REM I/O, WRI400, PIM400-TD2 and 593-PI, shown in blue.

Hardware required:
- ECK400
- UL294 12/24 VDC power supply
- Schlage reader
- ACP

Ordering Information

- **GCK400** - Wireless Gate Control Kit
- **ECK400** - Wireless Elevator Control Kit

Optional Accessories

- **ANT400 Hall** - Bi-directional indoor antenna ceiling mount
- **ANT400–REM–I/O + 6 DB** - High gain, directional, flat panel remote indoor/outdoor antenna with 6 DB gain.
- **MGB + MCA5** - Antenna grounding kit for outdoor applications

Available through one of our GSA schedule 84 approved distributors

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ANT400-REM

AD Series Remote Antennas for Wireless System

Note: Images not to scale

Overview

The Schlage ANT400-REM optional remote antennas are designed for use with the AD-400 Series devices. They increase installation flexibility of wireless products, extend the range of wireless communication in certain directions and expand the range of applications of AD Series solution.

A remote antenna is used to improve signal communication strength for wireless communications through an obstruction. A typical application would be when a remote device down a hallway requires a few extra feet of signal strength to reach the PIM400, which is sometimes located around a corner or behind a wire mesh or thick brick construction material.

When increased wireless communication range is required, the ANT400-REM-I/O+6dB model can up to double the range in the line of sight that it is aimed. This "gain antenna" increases the signal strength by focusing the energy in a single direction instead of broadcasting in all directions.

AD Series remote antennas are important components to environments with limited installation flexibility. The connected PIM400 can be up to 15 feet away from the remote antenna via the included coaxial cable. The outdoor rated antennas create new applications that allow a PIM400 to communicate to external remote access points such as gates or remote buildings without the need to trench cables.

Features & Benefits

- Use with PIM400 and WRI400
- Increase installation flexibility
- Optimize installation location
- Extend communication range with high-gain antenna
- Directional, bi-directional or omni-directional
- Indoor and outdoor options

Included in:

- ECK400 Wireless Elevator Kit
- GCK400 Wireless Gate Control Kit

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Remote Antenna Models

Model			Description
ANT400-REM-I/O	Type	Quasi omni-directional, unity gain	**Intended use:** an omni-directional flat-panel antenna for use with indoor or outdoor applications. To be mounted vertically on a wall or post. **Included:** antenna, 15 ft coax cable, coax whip, articulated wall/post mounting bracket. Requires grounding kit (MGB+MCA5) for outdoor installations.
	Communication range extension	15 ft due to cable length	
	Location	Indoor/outdoor	
	Dimensions (HxWxD)	9.1" x 8.4" x 1.2"	
	Weight:	0.5 kg	
	Temperature range:	-40˚C to +65˚C (-40˚F to +150°F)	
ANT400-REM-I/O+ 6dB	Type	Directional, high gain	**Intended use:** a high gain, directional flat-panel antenna for use with indoor or outdoor applications. To be mounted vertically on a wall or post. **Included:** antenna, 15 ft coax cable, coax whip and articulated wall/post mounting bracket. Requires grounding kit (MGB+MCA5) for outdoor installations.
	Communication range extension	Up to 2x the original range without antenna (single direction), plus 15 ft due to cable length. Up to 200' in typical building construction or up to 2000' clear line of sight.	
	Location	Indoor/outdoor	
	Dimensions (HxWxD)	9.1" x 8.4" x 1.2"	
	Weight:	0.5 kg	
	Temperature range:	-40˚C to +65˚C (-40˚F to +150°F)	
ANT400-REM-CEILING	Type	Omni-directional, unity gain	**Intended use:** an omni-directional antenna for use with indoor applications. To be mounted horizontally on ceiling. **Included:** antenna, 15 ft coax cable, and coax whip.
	Communication range extension	15 ft due to cable length. Up to 200' in typical building construction or up to 1000' clear line of sight.	
	Location	Indoor/outdoor	
	Dimensions (HxWxD)	9.1" x 8.4" x 1.2"	
	Weight:	0.5 kg	
	Temperature range:	-40˚C to +65˚C (-40˚F to +150°F)	
ANT400-REM-HALL	Type	Bi-directional, unity gain	**Intended use:** an bi-directional antenna for use with indoor applications. To be mounted on wall or ceiling. **Included:** antenna, 15 ft coax cable, and coax whip.
	Communication range extension	15 ft due to cable length. Up to 200' in typical building construction or up to 1000' clear line of sight.	
	Location	Indoor	
	Dimensions (HxWxD)	7.2" x 3.9" x 4.9"	
	Weight:	0.24 kg	
	Temperature range:	-10˚C to + 65˚C (14˚ F to + 150˚ F)	

Available through one of our GSA schedule 84 approved distributors

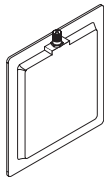
Accessories

MGB+MCA5 grounding kit

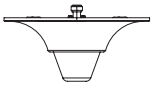
- The National Electrical Code (NEC) requires that any outdoor antenna be properly grounded
- The Schlage remote antenna grounding kit is compatible with all models of remote antenna

Certification

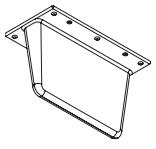
FCC Part 15



ANT400-REM-IO[1]
ANT400-REM-IO+6dB[1]



ANT400-REM-CEILING[1]



ANT400-REM-HALL[1]

1. These are the only remote antennas that have been approved by FCC for use with Allegion AD Series 900MHz communication modules. Any other antenna with an Allegion AD Series 900MHz communication modules would be in violation of FCC regulation.

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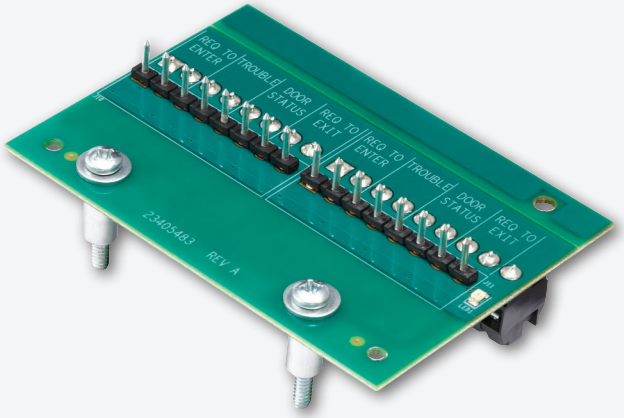
RLBD

AD Series Dry Contact Relay Board



Overview

The Schlage AD Series Relay Board (RLBD) is an add on board used on the PIM400-TD2 and PIB300-2D for access control systems that require dry contact closures for supervised inputs.

The optional RLBD relay board removes the need for additional wired relays which can be cumbersome to source, complicated to install, and difficult to troubleshoot. The use of this board over custom wired solutions increases system reliability and reduces installation labor.

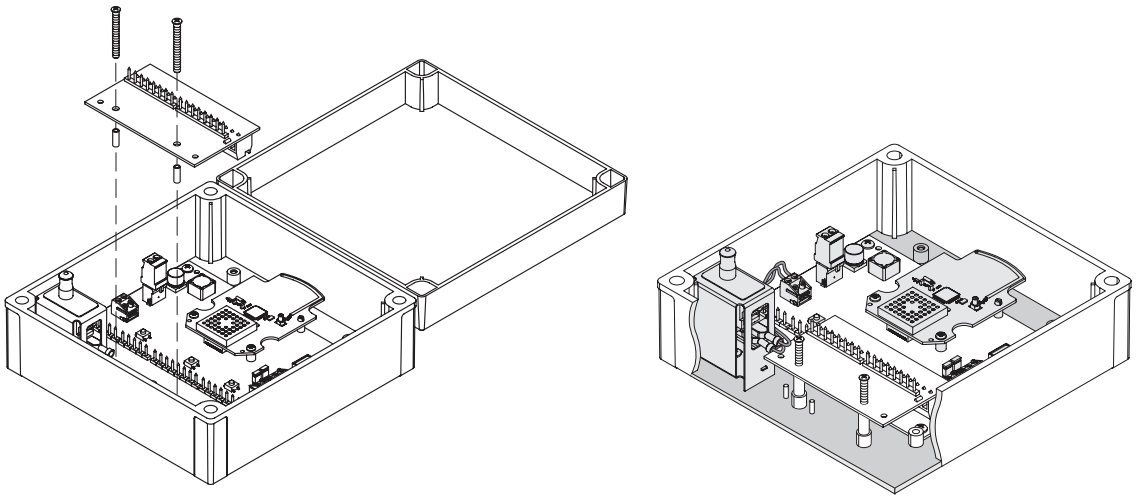
The RLBD is not required for integration of the PIM400-TD2 or the PIB3000-2D where the access control system can accept unsupervised inputs.

Features & Benefits

- Use with PIM400-TD2 or PIB300-2D
- Red LED light indicates power status
- Longer cycle lifetime than traditional mechanical-based relay solutions
- Access point status signals
  - Request-to-enter
  - Request-to-exit
  - Door position/status
  - Tamper switch

RLBD Specifications	
Voltage maximum (contact-to-contact)	28V
Maximum contact current	110 mA
“Open” state resistance	5 mega-ohms
“Closed” state resistance	2 ohms
Dimensions (H x W x D)	2.1" x 3.5" x 1.0" (5.33 cm x 8.89 cm x 2.54 cm)
Weight	0.125 lb (56.7 g)
Operating temperature	-31°F to 151°F (-35°C to 66°C)
Operating humidity	0-100% non-condensing

Available through one of our GSA schedule 84 approved distributors



Installation of RLBD in a PIM400-TD2

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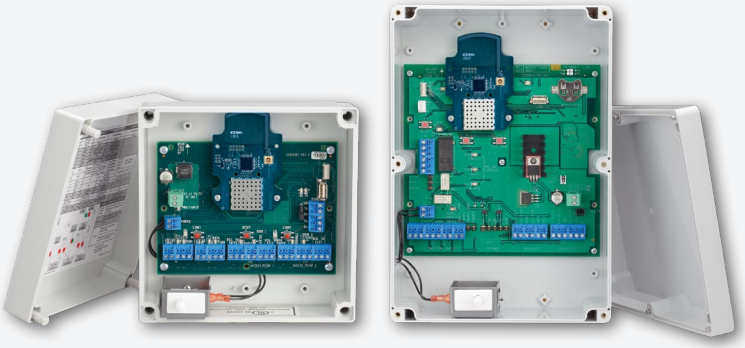
REPTR400

Wireless Repeater Kit



Overview

The Schlage REPTR400 Wireless Repeater Kit is a simple, all-in-one package solution for access control applications that require an extended wireless range. It can be used for indoor or outdoor applications enabling the integration and management of an opening too distant or difficult to reach via hard wires. Ideal applications include remote doors, historic buildings, gates and elevators.

The Schlage REPTR400 includes an AD Series Panel Interface Module (PIM400-TD2) and an AD Series Wireless Reader Interface (WRI400). The PIM400-TD2 interfaces with most access control systems. Its function is to wirelessly communicate with either an AD-400 Series wireless lock on the door or a separate WRI400 wired to other electronic components around the door. The PIM400-TD2 receives data via one radio channel and communicates it to the kit's WRI400 unit to be transmitted via another channel. The additional distances covered can be up to 900 ft. within a normally constructed building or up to 2500 ft. where there is direct line of site.

To extend range further for areas such as a remote gate or for use with a portable reader, a remote antenna (sold separately) can also be employed. If your distance needs suggest the use of an antenna, contact Allegion technical service for assistance.

Features & Benefits

- Convenient kit includes the WRI400 and PIM400-TD2
- Extends the reach of your access control system to remote locations without running wires
- Up to two REPTR400s can be added in a series (use only one for applications involving magnetic stripe credentials)

WRI400:

- 2 form C relay outputs – strike and auxiliary
- Each RF transmission is encrypted with AES-128 bit keys
- Reader interfaces support – Wiegand (data1/data 0) up to 255 bits and magnetic stripe (Clock & Data) up to 255 bits

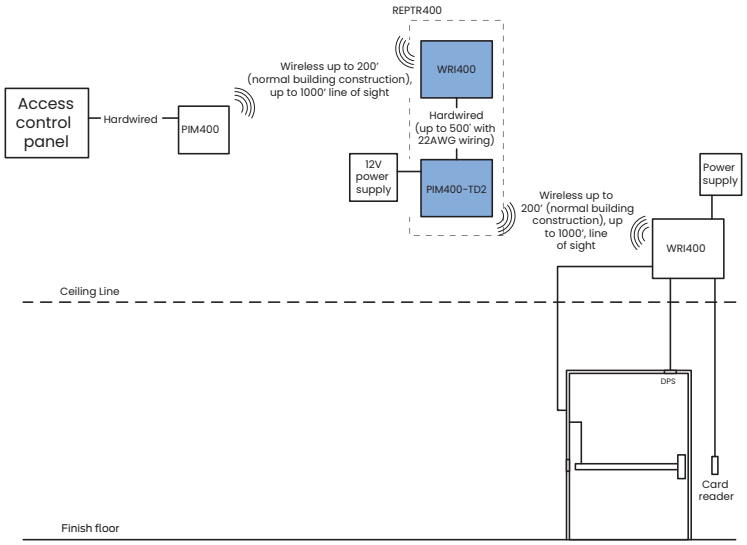
PIM400-TD2:

- 900 MHz spread spectrum RF technology for long range, reliable communications
- Automatic linking to remote wireless access points with 10 channel frequencies to select from enables easy commissioning
- AES-128 bit encrypted spread spectrum transmissions

CYBERSECURITY
Learn about Allegion's commitment

REPTR400
Wireless Repeater Kit

PIM400-TD2 Specifications	
Frequency range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Communication	Up to 200 ft (normal building construction); up to 1000 ft, clear line of sight
Operating temperature	-31°F (-35°C) to 151°F (66°C)
Humidity	0% to 100% condensing
Power supply	12 VDC or 24VDC
Dimensions (H x W x D)	7.1" x 7.1" x 3.0" (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.56 kg)
Certifications	NEMA 1, 4, 4X, 6; UL 294; FCC Part 15; RoHS; Industry Canada (IC)



Note: There are many other applications that use different wireless access points; this is one example of how a REPTR400 can be used.

WRI400 Specifications		
Frequency range		902-928 MHz
Modulation		900 MHz spread spectrum, direct sequence, 10 channels
RF interference avoidance		Optional dynamic channel switching
Transmission/encryption		AES-128 bit key (optional)
Data rate		RF: 40 kbps
Credential verification time		< 1 second (WRI requires less than 100ms. Response time does not include latency time of ACP. Each REPTR400 Kit adds 250ms delay)
Communication range		Up to 200 ft (61 m), normal building construction Up to 1000 ft (305 m), clear line of sight (See ANT400-REM data sheet for increasing distance)
Power supply requirements		12 VDC or 24 VDC; 500 mA maximum current
Connector cable specifications	DC power input	18AWG, 2 conductor (Belden 8760 or equivalent), up to 1000 ft (305 m)
	Credential readers (x2)	Data signals: 22AWG, 6 conductor (Alpha 1296C or equivalent) up to 500 feet (152 meters) Reader tamper signals: 18AWG, twisted pair shielded (Belden 8760 or equivalent) up to 500 feet (152 meters)
	Strike/aux relay outputs	18AWG, 2 conductor (Belden 8760 or equivalent), up to 2000 feet (610 meters)
	Request-to-enter and -exit inputs	18AWG, 2 conductor (Belden 8760 or equivalent), up to 2000 feet (610 meters)
Relay output tolerances	Strike output relay	Form C relay; 6 amps at 24 VDC or 6 amps at 120 VAC or 3 amps at 240 VAC
	Auxiliary output relay	Form C relay; 2 amps at 24 VDC or 0.5 amps at 120 VAC
Operating temperature		-31°F (-35°C) to 151°F (66°C)
Operating humidity		0 - 100% condensing
Dimensions (H x W x D)		10.43" x 7.28" x 3.79" (26.49 cm x 18.49 cm x 9.63 cm)
Certifications		NEMA 1, 4, 4X, 6; UL 294; FCC Part 15; Industry Canada (IC); RoHS
Optional accessories		593P1-12 DC - power supply for Panel Interface Module (PIM)

Available through one of our GSA schedule 84 approved distributors.

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Schlage Utility Software (SUS)

Utilizing the SUS-A Cable

Overview

The Schlage Utility Software (SUS) mobile app for Android™ devices[1] is designed specifically for use with the SUS-A cable to set up and act as the link between access control software and select Schlage® electronic locks and accessories. This new SUS mobile app and cable replaces the legacy SUS and HHD solution.

The SUS and SUS-A cable are used with networked and offline locks to initialize and configure devices, test operational status, perform ongoing system maintenance and update device firmware.

In addition, for offline devices, the SUS solution is utilized to transfer access control data from the Schlage Express access control software (such as authorized user lists) via the mobile device and cable to the locks or accessories. SUS is also utilized to download audit trail information from locks to the mobile device and then transfer that data to Schlage Express for analysis and storage.

The intuitive screen layout of the free SUS mobile app provides easy navigation during use. The SUS-A cable is an all-in-one solution with separate connectors – USB-A for our USB enabled devices and a 2-pin serial connection for our serial enabled devices – to connect the mobile device to the locks.

Features & Benefits

- Intuitive, free SUS mobile app for Android™ devices
- Single cable for Schlage AD and CO Series locks and select legacy devices
- Facilitates initialization of locks and accessories
- Configures and tests devices
- Simplifies firmware updates
- Import/Export Device Configuration feature simplifies configuration process
- Ability to reclass Schlage AD Series locks
- Manager and Operator user modes

1. Refer to the SUS User Guide for Compatible Android Phones.

Features & Specifications	
Initialize lock and accessories	Yes
Field configure devices	• Credential reader formats • Lock function • Unlock period • Failure mode • Audible alarm on/off
Offline devices	• Manage up to 100 unique door files • Retrieve audit trails from up to 100 devices
Networked devices	• Communication settings • Validate status monitor
Service and diagnostics	• Battery status • Validate hardware and software revision • Troubleshooting status signals • Firmware upgrades

Device Compatibility

SUS mobile app and SUS-A cable are compatible with the following Schlage devices:

- AD-400/401/402, AD-300/301/302, AD-200/201/250 locks, AD Series readers
- CO-200/220/250 locks
- PIM400 (RSI and TD2), WPR400/401, PIB300, WRI400, CT5000 controller
- BE367/FE210 (SPED) locks

Firmware Requirements

- Device firmware needs to be at a minimum version to function correctly with the SUS mobile app and SUS-A cable
- Please reference the Support Products area here for more information

Android™ Mobile Device

Recommendations

- For optimum performance the SUS mobile app has been tested[1] with flagship Android devices from major manufacturers. Compatible phone models and recommended OS versions are available on the SUS web page.
- Mobile phones are not available for purchase from Allegion
- Cellular plan is not required
- Apple® devices are not compatible with the SUS and SUS-A cable solution

1 Compatibility with other phone models and operating systems may work, but are not officially supported at this time.

Ordering Information

- 47282796 SUS A-KIT– USB and 2-pin Android cable
- SUS mobile app for compatible Android devices is available at no charge in the Google Play™ store
  - Search for "Schlage Utility Software - SUS"

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Schlage Express™

Offline Access Control Software

Overview

Schlage Express™ Offline Access Control Software provides a simple and effective means to manage access control within your facility. It supports Schlage offline locks including the CO-200, CO-220 and AD-200, as well as the CT5000 controller. Schlage Express is recommended for smaller facilities with basic access control needs.

It allows you to quickly enter or delete users and access points. It is compatible with a variety of credential options including PIN codes, iButtons, magnetic stripe, proximity and smart cards. For added security, dual authentication (card + PIN) is also supported.

Reporting capability is available to show audit trails retrieved, access privileges granted, and time functions established by either user or door.

Features & Benefits

- A variety of credential functions are supported including normal, toggle, one time and pass through
- Auto unlock schedules - allows weekly repeating for automatic locking and unlocking of doors (up to 16 defined per system; up to 8 assigned per lock)
- Supports magnetic stripe, proximity and smart cards
- Supported devices include CO-200, CO-220, AD-200, CM, KC-2, CT-1000, CT5000, FE210 and BE367
- Supports Windows 11, Windows 10, Windows XP, Windows 7 and Windows 8
- User times zones- limits the hours and days a user can access assigned points (Up to 8)
- Holidays - suspends normal operations for user defined periods per door during non-normal days (Up to 16)
- Users/audits and lock support
- 2,000 Users/audits and 50 locks/ devices
- 1,000 Users/audits and 100 locks/ devices
- Supports 12 button keypad with up to 6 digit PIN codes
- Duplicate PIN notification feature

Please note: Schlage Express Software is NOT supported on the Home and Starter Versions of the Windows Operating Systems.

Specifications	
Hardware	Intel Pentium II processor (Pentium III or IV recommended), CD-ROM, mouse or compatible pointing device, VGA or Super VGA monitor, keyboard
Hard disk space	250 MB for software; will require additional space for stored data
Memory	256 MB RAM minimum or the memory required for the operating system, whichever is greater
Operating system	Microsoft Windows 11, Windows 10, Windows XP, Windows 7 and Windows 8 Please note that Schlage Express Software is NOT supported on the Home and Starter Versions of the Windows Operating Systems.
Reports with the built-in viewer Internet Explorer 6 or higher must be installed	
Required for programming	For offline locking system programming, the following is required: • Available USB port on the PC • Schlage Utility Software (SUS) mobile app on compatible Android devices and SUS-A cable • Legacy Schlage Handheld Device (HHD) is also supported
	For offline legacy locking system programming done directly from the PC, the following is required: • Available USB port on the PC • Programming interface cables

Ordering Information

- **SXPR-SFT-1** - Schlage Express software only

Accessories

- **SUS-A Cable** – For use with SUS mobile app on compatible Android devices
- **P512112** - Computer interface module used in conjunction with HH-Serial cable for managing legacy Schlage offline locks
- **P101203** - Computer Interface module with ibutton reader used in conjunction with HH-Serial Cable for managing legacy Schlage offline locks
- **P394548** - Female/female serial cable. Used to connect computer interface module to laptop/PC
- **SDB9USBCBL** - Six inch cable adapter allows a serial port device to be used with a USB port device (for use with PS12112)
- **CRP2** - Proximity credential enrollment reader. Used to read proximity data for enrollment into Schlage Express 4.0 and higher
- **CRM2** - Magnetic stripe credential enrollment reader. Used to read magnetic stripe data for enrollment into Schlage Express 4.0 and higher

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Schlage Express™

Offline Access Control
Software Capability Matrix

	CO-200 & CO-220	AD-200
System capacity at lock		
Number of users or audits/locks	2,000 users/audits, 50 lock max.	2,000 users/audits, 50 lock max.
	1,000 users/audits, 100 lock max.	1,000 users/audits, 100 lock max.
Holidays	16	16
1st person in	Yes	Yes
Time zones	8	8
Auto unlocks	8	8
Reader		
Keypad only	Yes	Yes
Magnetic stripe	Yes	Yes
Proximity	Yes	Yes
Multi-technology - 125 kHz prox and 13.56 MHz smart card	No	Yes
Card + PIN	Yes (3 to 6)	Yes (3 to 6)
Status monitors		
Mechanical key override (ATK)	Yes	Yes
Battery status	Yes	Yes

Note: Shaded boxes indicate features that are only available in Express v4.0 or higher. Previous versions (Express 3.5.7 and older) support 1000 users/audits and 100 locks, and do not include AD Series and CO Series software labels.

	CO-200 & CO-220	AD-200
Lock functions		
Storeroom	CO-200 only	Yes
Office/toggle/classroom	CO-200 only	Yes
Privacy	CO-200 only	Yes
Apartment	CO-200 only	Yes
Classroom security	CO-200 only	No
Credential attributes		
Normal credential	Yes	Yes
Toggle credential	Yes	Yes
Pass thru credential	Yes	Yes
Visitor/one time use credential	Yes	Yes
Freeze credential	Yes	Yes
Lock down credential	No	No

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CO-100

Standalone Electronic Lock

Overview

The CO Series provides ideal solutions for customers seeking the added security and convenience of electronic access control without the cost or complexity of a fully networked system. Within this group is CO-100, a standalone lock that is manually programmable. User rights are stored on the lock with unique PIN codes assigned to each user. This minimizes the number of mechanical keys issued which protects the integrity of your key system. PIN codes can be easily added or deleted at anytime, right at the door.

The CO-100 from Schlage is versatile enough to use anywhere. In the classroom/storeroom function, it is rated full outdoor and can be used for gate or breezeway access. CO-100 privacy function locks can be programmed to show occupancy indication for applications such as dressing areas or bathrooms. And office/classroom function locks can be set up for remote release making them perfect for vestibules or waiting rooms.

Cylindrical, mortise, mortise deadbolt, and exit trim chassis options are available. The series is compatible with many popular brands of exit devices and offered in a wide variety of finishes and levers to suite with your existing hardware. Mechanical key override is standard and compatible with multiple cylinder types.

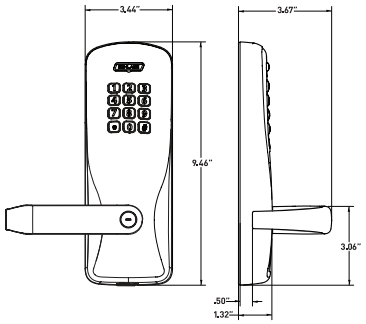
CO Series has been tested to the highest standards in the industry to ensure the quality and reliability you have come to expect from Schlage. The CO Series is ANSI/BHMA A156.25 (full outdoor[1]), ANSI/BHMA Grade 1 certified and UL 294 Listed.

Features & Benefits

- Manually programmable
- Up to 500 unique 3-6 digit PIN codes stored on the lock
- ANSI/BHMA A156.25 (full outdoor[1]), ANSI/BHMA Grade 1 certified, UL 294 and UL 10C listed, hurricane wind and impact rated[2]
- Storeroom, office/classroom and privacy functions available
- Chassis options include cylindrical, mortise, mortise deadbolt and exit trim
- Compatible with most major brands of key systems and exit devices
- Hard wired, remote release push button capability[3]
- Programmable option for lighted occupancy indication[4]
- Three levels of user authority
- Normal, toggle, pass through, and freeze credential attributes available
- LED indicator visually communicates lock status
- Fully outdoor rated in 70 function for use on pool gates and breezeways

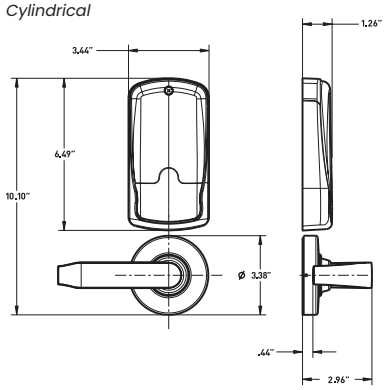
1. Applies to 70 function only.
2. Applies to cylindrical and mortise chassis only.
3. Available on office function locks manufactured after 1/1/2018 with firmware version 2.6.2 or higher.
4. Available on privacy function locks manufactured after 9/30/2018 with firmware version 2.7.0 or higher.

Exterior

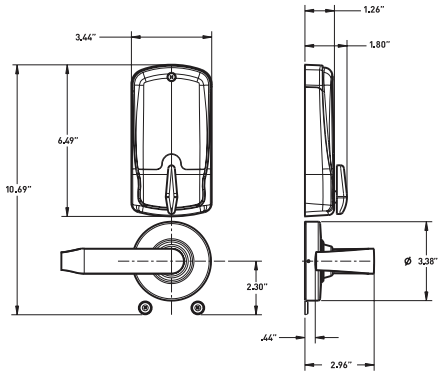


Interior

Cylindrical



Mortise deadbolt



CO-100 Electronic Lock Specifications	
Users	500
Credential verification time (keypad only)	≤ 1 second
Visual/audible communications	Tri-colored LED's and audible indicators
Power supply	4 AA batteries (standard off the shelf: included)
Battery life	Up to 2 yrs with 4 AA batteries
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: -31° to 151°F (-35° to 66°C)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25 (full outdoor[1]); ANSI/BHMA Grade 1; UL 294; ULC S319; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant Cylindrical and mortise chassis only: TDI DR-464, DR-465; FL12400, FL4613, FL1592, FL13013, FL14482 Mortise chassis only: FL3905

Functions

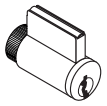
- Storeroom
- Office/classroom
- Privacy

Standard Status Signals

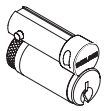
- Battery status - indicated by flashing LED lights
- Access granted/access denied
- Programming commands
- Occupied - indicated by red LED light (privacy function only)

1. Applies to 70 function only.

Mechanical Specifications			
Chassis	**Cylindrical**	**Mortise**	**Exit trim**
Handing	Handed to order, field reversible		
ANSI standard (Meets or exceeds)	A156.25 A156.2 Series 4000 Grade 1	A156.25 A156.13 Series 1000 Grade 1	A156.25 A156.3
Door thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	Standard: 2-3/4" Optional: 2-3/8", 3-3/4", 5"	2-3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw	Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated		
Strike	Standard: 1-3/16" lip, ANSI, 1-1/4" x 4-7/8" Optional: Additional configurations available please see price book		Provided by exit device
Cylinder and keys	Schlage 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys standard. Additional options available including SFIC, FSIC and competitor brands. See Lever & Cylinder Compatibility Data Sheet		
Exit device compatibility	See CO Series Exit Trim Compatibility Data Sheet		



Conventional cylinder



Full Size Interchangeable Core

Small Format Interchangeable Core

Programming and Use Options		
Function code	**User level**	**Description**
PIN[1]	Basic	Unlocks the lock momentarily when in a normally secured state.
Programming	Manager/administrator	Initiates all programming actions (can be changed by administrator)
User changes	Manager/administrator	Assigns or deletes user PINs for the lock
Toggle	Manager/administrator	Changes the lock to an unlocked state and back when desired
Freeze	Administrator	Maintains the lock in current state until code is re-entered (cannot be toggled)
Pass through	Administrator	Unlocks the lock momentarily regardless of current state
Other	Administrator	Includes change relock delay period; change PIN length; disable/enable beeper; disable/enable remote release[2]; disable/enable LED occupancy indication[3]

1. Credentials can be 3-6 digits in length.
2. Remote release feature available on office function only.
3. Occupancy indication feature available on privacy function only.

Ordering Information

Available through one of our GSA schedule 84 approved distributions.

Required fields — Factory defaults and options

CO	-	100	-	CY	-	70	-	KP	-	SPA	-	626	-	P6	-	S123	-	RH	-	13-247	-	10-025	-	134
Series		Class		Chassis		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Handing		Backset & Latch or Armored Front		Strike		Door Thickness
1		2		3		4		5		6		7		8		9		10		11		12		13

Standard options are indicated with a dot. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise deadbolt
993R	Exit trim – Rim/CVC/CVR
993S	Exit trim – SVR
993M	Exit trim – mortise
993DT	Dummy exit trim

4 Function

40	Privacy
50	Office/classroom
70	Storeroom

5 Reader

• KP	Keypad

6 Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with tactile warning options.

7 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
• 626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

8 Key Cylinder

• P6	Schlage 6-pin conventional key-in-lever cylinder

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9 Keyway

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

10 Handing

• RH	Right handed
RHR	Right handed reverse
LH	Left handed
LHR	Left handed reverse

Field reversible.

11 Backset & Latch or Armored Front

• 13-247	Cylindrical: 2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"
• 09-663	Mortise: Armor front, 1-1/4" wide, square corner

See price book for mortise deadbolt and other backset and latch options or armored front options.

12 Strike

• 10-025	Cylindrical: 1-3/16" lip, ANSI, no box, 1-1/4" x 4-7/8"
• 10-072	Mortise: 1-3/16" lip, 1-1/4" x 4-7/8" square corner, box

See price book for other available strikes.

13 Door Thickness

• 134	1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

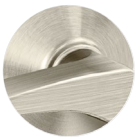
Tubular

Finishes

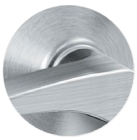
605
Bright Brass

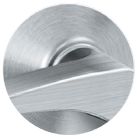
606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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004186, Rev. 10/25

CO-200

Standalone Electronic Lock

Overview

The CO Series is the ideal solution for customers seeking the added security and convenience of electronic access control without the cost or complexity of a fully networked system.

The CO-200 is computer or manually programmable with users rights stored on the lock. The Schlage Utility Software (SUS) mobile app on compatible Android devices is used in conjunction with your access control software and allows you to easily add or delete users and retrieve audits.

By issuing electronic credentials you can minimize the number of mechanical keys issued which protects the integrity of your key system. A variety of credential readers are also available, including keypad only, proximity, or proximity with keypad for dual authentication.

Cylindrical, mortise, mortise deadbolt, and exit trim chassis options are available as well as a wide variety of finishes and levers to suite with your existing hardware.

Mechanical key override is standard and compatible with multiple cylinder types. The CO Series is also compatible with many popular brands and types of exit devices.

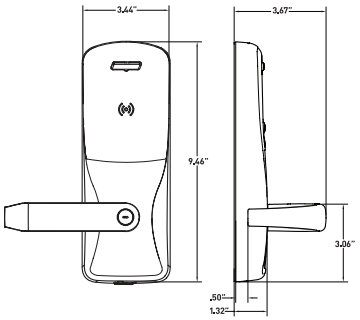
The CO Series has been tested the highest standards in the industry to ensure quality and reliability you have come to expect from Schlage. The CO Series is ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 Listed.

Features & Benefits

- Computer programmable with audit trail
- Up to 2,000 users and up to 2,000 audits[1]
- Up to 32 holidays and 16 time zones[1]
- User rights stored on the lock
- The ability to add and delete users at the lock
- Available in cylindrical, mortise, mortise deadbolt, and exit trim
- Compatible with major brands of key systems and exit devices
- Classroom/storeroom, office, and privacy functions available
- Programmable option for lighted occupancy indication[2]
- LED indicator visually communicates lock status
- Offline lockdown mode configurable with Inside Push Button (IPB)

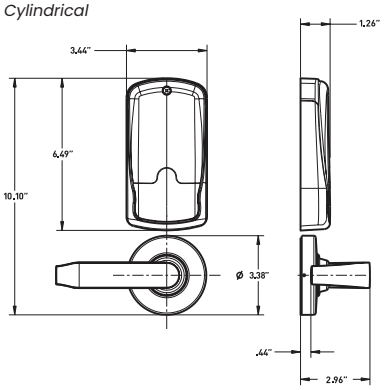
1. Depending on access control software.
2. Available on privacy function locks manufactured after February 2019 with firmware version CO.A.30 or higher.

Exterior

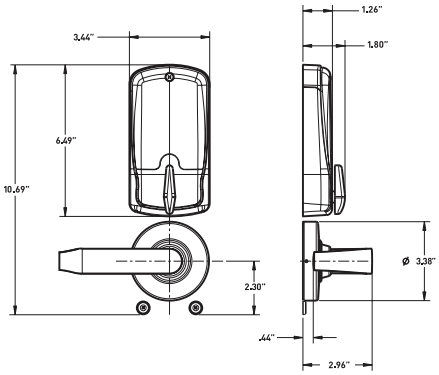


Interior

Cylindrical



Mortise deadbolt



CO-200 Electronic Lock Specifications	
Users	Up to 2,000[1]
Audits	Up to 2,000[1]
Credential verification time	≤ 1 second
Visual/audible communications	Tri-colored LED's and audible indicators
Power supply	4 AA batteries (standard off the shelf: included)
Voltage range	4 VDC to 7 VDC
Battery life	Up to 2 yrs with 4 AA batteries
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 32° to 120°F (0° to 49°C) due to batteries
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25; ANSI/BHMA Grade 1; UL 294; ULC S319; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant **Cylindrical and mortise chassis only:** TDI DR-464, DR-465; FL12400, FL4613, FL1592, FL13013, FL14482 **Mortise chassis only:** FL3905

Functions

- Storeroom[2]
- Office/classroom[2]
- Privacy[3]

Standard Status Signals

- Mechanical key override
- Battery status - indicated by flashing LED lights
- Access granted/access denied
- Programming commands
- Occupied - indicated by red LED light (privacy function only)

Schlage Utility Software

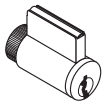
The Schlage Utility Software (SUS) mobile app on compatible Android mobile devices and SUS-A cable provides an easy way to manage people, audits and locks for simple access control management.

Schlage Utility Software

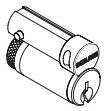
- Initialize lock and accessories
- Field configure devices
  - Credential reader formats
  - Lock function
  - Lockdown
  - Unlock period
  - Failure mode
  - Audible alarm on/off
- Service and diagnostics
  - Battery status
  - Validate hardware and software revision
  - Troubleshooting status signals
  - Firmware upgrades
- New device template simplifies configuration

1. Depending on access control software.
2. Storeroom and office/classrom function not available with mortise deadbolt option. To ensure safety, all functions always allow for free egress.
3. Door position switch is required for cylindrical and mortise chassis with privacy function.

Mechanical Specifications			
Chassis	**Cylindrical**	**Mortise**	**Exit trim**
Handing	Handed to order, field reversible		
ANSI standard (Meets or exceeds)	A156.25 A156.2 Series 4000 Grade 1	A156.25 A156.13 Series 1000 Grade 1	A156.25 A156.3
Door thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	Standard: 2-3/4" Optional: 2-3/8", 3-3/4", 5"	2-3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw	Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated		
Strike	Standard: 1-3/16" lip, ANSI, 1-1/4" x 4-7/8" Optional: Additional configurations available please see price book		Provided by exit device
Cylinder and keys	Schlage 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys standard. Additional options available including SFIC, FSIC and competitor brands. See Lever & Cylinder Compatibility Data Sheet		
Exit device compatibility	See CO Series Exit Trim Compatibility Data Sheet		



Conventional cylinder



Full Size Interchangeable Core

Small Format Interchangeable Core

Reader Specifications		
	Keypad	**Proximity**
Frequency standards	N/A	125 kHz
Maximum read range	N/A	up to 1.25"
Compatibility	3-6 digit pin code	Schlage, ISONAS®, HID[1], GE/CASI ProxLite™ and AWID®
Compatible Schlage credentials	N/A	125 kHz clamshell, ISO card, ISO card with magnetic stripe, keyfob, and PVC disc (7000 Series)
Style/layout	12-button, 3x4 matrix	Option for 12-button, 3x4 matrix

1. Proximity bit lengths greater than 37 not supported.

Available CO-200 Reader Options

Keypad

Proximity

KEYPAD

Proximity

Ordering Information

Available through one of our GSA schedule 84 approved distributions.

Required fields — Factory defaults and options

CO	-	200	-	CY	-	70	-	PR	-	SPA	-	626	-	P6	-	S123	-	RH	-	13-247	-	10-025	-	134
Series		Class		Chassis		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Handing		Backset & Latch or Armored Front		Strike		Door Thickness
1		2		3		4		5		6		7		8		9		10		11		12		13

Standard options are indicated with a dot. See price book for specific configuration options.

3 Chassis

CY	Cylindrical
MS	Mortise
MD	Mortise deadbolt
993R	Exit trim – Rim/CVC/CVR
993S	Exit trim – SVR
993M	Exit trim – mortise
993DT	Dummy exit trim

4 Function

40	Privacy
50	Office/classroom
70	Storeroom

5 Reader

• KP	Keypad
PR	Proximity
PRK	Proximity + keypad

6 Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with tactile warning options.

7 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
• 626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

8 Key Cylinder

• P6	Schlage 6-pin conventional key-in-lever cylinder

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9 Keyway

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

10 Handing

• RH	Right handed
RHR	Right handed reverse
LH	Left handed
LHR	Left handed reverse

Field reversible.

11 Backset & Latch or Armored Front

• 13-247	Cylindrical: 2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"
• 09-663	Mortise: Armor front, 1-1/4" wide, square corner

See price book for mortise deadbolt and other backset and latch options or armor front options.

12 Strike

• 10-025	Cylindrical: 1-3/16" lip, ANSI, no box, 1-1/4" x 4-7/8"
• 10-072	Mortise: 1-3/16" lip, 1-1/4" x 4-7/8" square corner, box

See price book for other available strikes.

13 Door Thickness

• 134	1-3/4"

Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

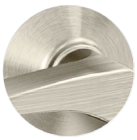
Tubular

Finishes

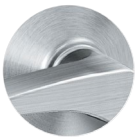
605
Bright Brass

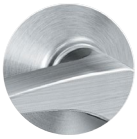
606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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004185, Rev. 10/25

CO Series

Exit Trim Compatibility

Overview

The CO Series offers 993 exit trim for use with compatible exit devices in retrofit or new construction applications. The 993 exit trim was designed to suite with CO Series cylindrical and mortise locksets to ensure that the facility remains aesthetically consistent. The CO Series 993 Exit Trim utilizes universal hardware to simplify installation of offline trim to a variety of exit devices, including rim style from Von Duprin, Falcon, Sargent®, Precision™, Corbin Russwin®, Dorma® and Yale® .

Available Exit Trim Styles:

- 993R – Rim, concealed vertical rod or concealed vertical cable (CVR/CVC for metal doors only)
- 993S – Surface vertical rod
- 993M – Mortise
- 993DT – Non-functioning dummy trim for exit

Exit Device Compatibility

Devices	CO-100/CO-200
Von Duprin 78 Rim/SVR/CVR[3]	●
Von Duprin 98/99 and 98/99XP Rim/SVR/CVR[3]/CVC[3]/mortise	●
Von Duprin 22/22F Rim/SVR	●
Falcon 25 Rim	●
Sargent® 80[4] Rim	●
Precision™ 21 Rim (2100 converts to 21 with Precision's BP21 kit)	●
Yale® 7000 Rim	●
Corbin Russwin® 5000 Rim	●
Dorma® 9300 Rim	●

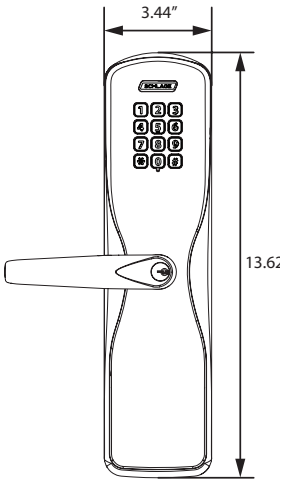
1. Excluding dummy trim devices (993DT).
2. UL 294 does not apply to dummy trim devices (993DT).
3. Metal door only.
4. Narrow design and reversible Rim exits not compatible.

Features & Benefits

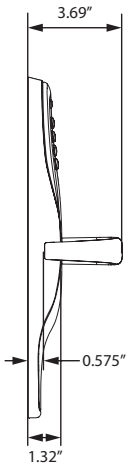
- Multiple credential reader options
- A wide variety of finishes and lever styles
- Powered by 4 AA batteries[1]
- Compatible with all Schlage Conventional, FSIC and SFIC formatted cylinders including many competitive OEM cylinders such as Sargent®, Corbin Russwin®, Medeco® and Yale®
- UL 294 Listed, ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified[2]

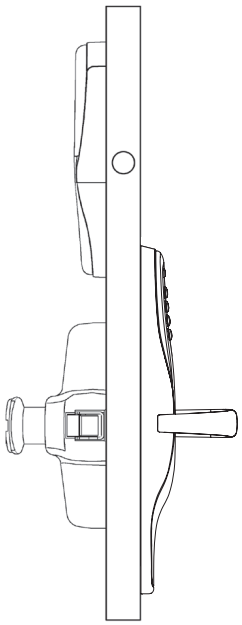
Compatibility		
Reader options	**CO-100**	**CO-200**
KP keypad	●	●
PR proximity		●
PRK proximity + keypad		●

Programming Options		
Reader options	**CO-100**	**CO-200**
Computer		●
Manual	●	●

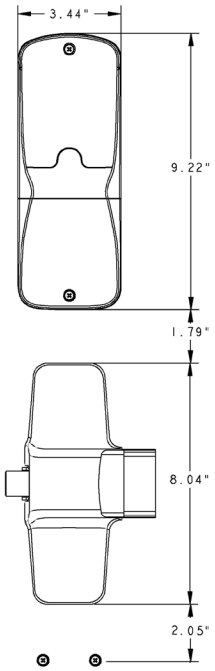


Exterior view
CO Series - 993 Exit Trim

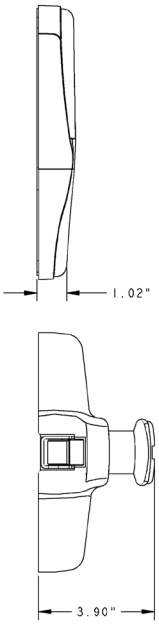




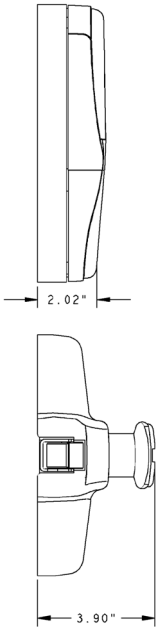
Profile view



Interior view
CO-100/200 - all styles



Side view
CO-100/200 - Rim/ CVR/CVC or mortise



Side view
CO-100/200 SVR

Note: (2) #7 fasteners with decorative washers located 11.88" below bottom edge of lock.

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004183, Rev. 10/24

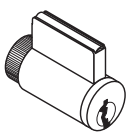
AD Series & CO Series

Lever & Cylinder Compatibility

Overview

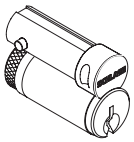
AD Series and CO Series electronic locks come standard with the Schlage® 6-pin Everest 29™ S123 keyway and two patented keys. The Everest 29 keyway's patentprotected undercut design with protection through 2029 is available in open and restricted keyway families. Patented restricted keyways, such as the Everest 29 R and T families, deliver a higher level of security by requiring authorization to access key blanks for duplication. Improve both administrative and physical security with the application of Primus XP cylinders and gain the option to also employ high-security UL 437 cylinders. The Everest 29 design enables a key blank that is backwards compatible to legacy Everest keyways allowing Everest 29 keys to work with existing Everest systems aiding the key system migration process.

The AD Series and CO Series can also be ordered with other popular Schlage keyways or prepared to receive Falcon® Conventional key-in-lever cylinders or Small Format Interchangeable Core (SFIC) cylinders. Less cylinder options are available to provide compatibility with Conventional, LFIC or SFIC cylinders of other manufacturers including, Sargent,® Corbin Russwin,® Medeco® and Yale.®



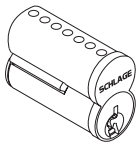
Conventional key-in-lever

P, P6, Z, L, L-SAR, L-FA7



Full Size Interchangeable Core

R, M, J-SAR, J-CO6, J-CO7, J-MED, J-YA6, J-YA7



Small Format Interchangeable Core

G7, B

Features & Benefits

- The key-in-lever design of AD and CO Series fits a full range of Schlage cylinders featuring administrative security options from open to patented and patented restricted keyways
- Primus cylinder and key options provide enhanced physical security in the cylinder including a UL 437 listed high-security option and a patent protected key design with geographic exclusivity
- Levers are offered in a wide variety of finishes and styles
- Compatible with all Schlage Conventional, FSIC, SL (as Conventional and FSIC), and SFIC formatted cylinders including many competitive OEM cylinders
- SL cylinder option allows an Everest 29 R or legacy Everest B keyway facility to gain a Primus program level security
- AD and CO 993 exit trim is compatible with a variety of exit devices including rim style from Von Duprin, Falcon, Sargent,® Precision,™ Corbin Russwin,® Dorma® and Yale.®

Lever & Cylinder Compatibility

				Cylinder type			Lever style							
Ordering suffix	**Application (made to accept)**	**With cylinder**	**Pins**	**KIL**	**FSIC**	**SFIC**	**ATH**	**BRK**	**BRW**	**LAT**	**LON**	**RHO**	**SPA**	**TLR**
P	Schlage® - (6-pin, keyed 5)	●	6	●			●	●	●	●	●	●	●	●
P6	Schlage - Everest 29 S (default)	●	6	●			●	●	●	●	●	●	●	●
Z	Schlage SL - Everest 29 R keyways	●	7	●			●	●	●	●	●	●	●	●
L	Schlage, Falcon®		6	●			●	●	●	●	●	●	●	●
R	Schlage - Everest 29 S (default)	●	6		●		●	●	●	●	●	●	●	●
M	Schlage SL - Everest 29 R keyways	●	7		●		●	●	●	●	●	●	●	●
J	Schlage		6		●		●	●	●	●	●	●	●	●
G7	Schlage Everest 29 R keyways	●	7			●	●	●	●	●	●	●	●	●
B	Schlage, Falcon, Competitive OEM's		7			●	●	●	●	●	●	●	●	●
L-FA7	Falcon		7	●				●	●	●	●	●	●	
L-SAR	Sargent® (10L+11L)		6	●			●	●	●	●	●	●	●	●
J-SAR	Sargent 6300		6		●		●	●	●	●	●	●	●	●
J-CO6	Corbin® 8000		6		●		●	●	●	●	●	●	●	●
J-CO7	Corbin 8000-7		7		●			●	●	●	●	●	●	●
J-MED	Medeco® 32*0201		6		●			●	●	●	●	●	●	
J-YA6	Yale® 1210 or Medeco 31*0100		6		●		●	●	●	●	●	●	●	●
J-YA7	Yale 1220		7		●			●	●	●	●	●	●	

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

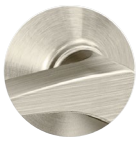
Tubular

Finishes

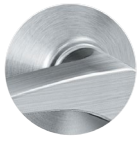
605
Bright Brass

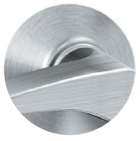
606
Satin Brass

612
Satin Bronze


619
Satin Nickel

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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010432, Rev. 01/24

Schlage Utility Software (SUS)

Utilizing the SUS-A Cable

Overview

The Schlage Utility Software (SUS) mobile app for Android™ devices[1] is designed specifically for use with the SUS-A cable to set up and act as the link between access control software and select Schlage® electronic locks and accessories. This new SUS mobile app and cable replaces the legacy SUS and HHD solution.

The SUS and SUS-A cable are used with networked and offline locks to initialize and configure devices, test operational status, perform ongoing system maintenance and update device firmware.

In addition, for offline devices, the SUS solution is utilized to transfer access control data from the Schlage Express access control software (such as authorized user lists) via the mobile device and cable to the locks or accessories. SUS is also utilized to download audit trail information from locks to the mobile device and then transfer that data to Schlage Express for analysis and storage.

The intuitive screen layout of the free SUS mobile app provides easy navigation during use. The SUS-A cable is an all-in-one solution with separate connectors – USB-A for our USB enabled devices and a 2-pin serial connection for our serial enabled devices – to connect the mobile device to the locks.

Features & Benefits

- Intuitive, free SUS mobile app for Android™ devices
- Single cable for Schlage AD and CO Series locks and select legacy devices
- Facilitates initialization of locks and accessories
- Configures and tests devices
- Simplifies firmware updates
- Import/Export Device Configuration feature simplifies configuration process
- Ability to reclass Schlage AD Series locks
- Manager and Operator user modes

1. Refer to the SUS User Guide for Compatible Android Phones.

Features & Specifications	
Initialize lock and accessories	Yes
Field configure devices	• Credential reader formats • Lock function • Unlock period • Failure mode • Audible alarm on/off
Offline devices	• Manage up to 100 unique door files • Retrieve audit trails from up to 100 devices
Networked devices	• Communication settings • Validate status monitor
Service and diagnostics	• Battery status • Validate hardware and software revision • Troubleshooting status signals • Firmware upgrades

Device Compatibility

SUS mobile app and SUS-A cable are compatible with the following Schlage devices:

- AD-400/401/402, AD-300/301/302, AD-200/201/250 locks, AD Series readers
- CO-200/220/250 locks
- PIM400 (RSI and TD2), WPR400/401, PIB300, WRI400, CT5000 controller
- BE367/FE210 (SPED) locks

Firmware Requirements

- Device firmware needs to be at a minimum version to function correctly with the SUS mobile app and SUS-A cable
- Please reference the Support Products area here for more information

Android™ Mobile Device

Recommendations

- For optimum performance the SUS mobile app has been tested[1] with flagship Android devices from major manufacturers. Compatible phone models and recommended OS versions are available on the SUS web page.
- Mobile phones are not available for purchase from Allegion
- Cellular plan is not required
- Apple® devices are not compatible with the SUS and SUS-A cable solution

1 Compatibility with other phone models and operating systems may work, but are not officially supported at this time.

Ordering Information

- 47282796 SUS A-KIT– USB and 2-pin Android cable
- SUS mobile app for compatible Android devices is available at no charge in the Google Play™ store
  - Search for "Schlage Utility Software - SUS"

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013622, Rev. 02/25

Schlage Express™

Offline Access Control Software

Overview

Schlage Express™ Offline Access Control Software provides a simple and effective means to manage access control within your facility. It supports Schlage offline locks including the CO-200, CO-220 and AD-200, as well as the CT5000 controller. Schlage Express is recommended for smaller facilities with basic access control needs.

It allows you to quickly enter or delete users and access points. It is compatible with a variety of credential options including PIN codes, iButtons, magnetic stripe, proximity and smart cards. For added security, dual authentication (card + PIN) is also supported.

Reporting capability is available to show audit trails retrieved, access privileges granted, and time functions established by either user or door.

Features & Benefits

- A variety of credential functions are supported including normal, toggle, one time and pass through
- Auto unlock schedules - allows weekly repeating for automatic locking and unlocking of doors (up to 16 defined per system; up to 8 assigned per lock)
- Supports magnetic stripe, proximity and smart cards
- Supported devices include CO-200, CO-220, AD-200, CM, KC-2, CT-1000, CT5000, FE210 and BE367
- Supports Windows 11, Windows 10, Windows XP, Windows 7 and Windows 8
- User times zones- limits the hours and days a user can access assigned points (Up to 8)
- Holidays - suspends normal operations for user defined periods per door during non-normal days (Up to 16)
- Users/audits and lock support
- 2,000 Users/audits and 50 locks/ devices
- 1,000 Users/audits and 100 locks/ devices
- Supports 12 button keypad with up to 6 digit PIN codes
- Duplicate PIN notification feature

Please note: Schlage Express Software is NOT supported on the Home and Starter Versions of the Windows Operating Systems.

Specifications	
Hardware	Intel Pentium II processor (Pentium III or IV recommended), CD-ROM, mouse or compatible pointing device, VGA or Super VGA monitor, keyboard
Hard disk space	250 MB for software; will require additional space for stored data
Memory	256 MB RAM minimum or the memory required for the operating system, whichever is greater
Operating system	Microsoft Windows 11, Windows 10, Windows XP, Windows 7 and Windows 8 Please note that Schlage Express Software is NOT supported on the Home and Starter Versions of the Windows Operating Systems.
Reports with the built-in viewer Internet Explorer 6 or higher must be installed	
Required for programming	For offline locking system programming, the following is required: • Available USB port on the PC • Schlage Utility Software (SUS) mobile app on compatible Android devices and SUS-A cable • Legacy Schlage Handheld Device (HHD) is also supported
	For offline legacy locking system programming done directly from the PC, the following is required: • Available USB port on the PC • Programming interface cables

Ordering Information

- **SXPR-SFT-1** - Schlage Express software only

Accessories

- **SUS-A Cable** – For use with SUS mobile app on compatible Android devices
- **P512112** - Computer interface module used in conjunction with HH-Serial cable for managing legacy Schlage offline locks
- **P101203** - Computer Interface module with ibutton reader used in conjunction with HH-Serial Cable for managing legacy Schlage offline locks
- **P394548** - Female/female serial cable. Used to connect computer interface module to laptop/PC
- **SDB9USBCBL** - Six inch cable adapter allows a serial port device to be used with a USB port device (for use with PS12112)
- **CRP2** - Proximity credential enrollment reader. Used to read proximity data for enrollment into Schlage Express 4.0 and higher
- **CRM2** - Magnetic stripe credential enrollment reader. Used to read magnetic stripe data for enrollment into Schlage Express 4.0 and higher

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Schlage Express™

Offline Access Control
Software Capability Matrix

	CO-200 & CO-220	AD-200
System capacity at lock		
Number of users or audits/locks	2,000 users/audits, 50 lock max.	2,000 users/audits, 50 lock max.
	1,000 users/audits, 100 lock max.	1,000 users/audits, 100 lock max.
Holidays	16	16
1st person in	Yes	Yes
Time zones	8	8
Auto unlocks	8	8
Reader		
Keypad only	Yes	Yes
Magnetic stripe	Yes	Yes
Proximity	Yes	Yes
Multi-technology - 125 kHz prox and 13.56 MHz smart card	No	Yes
Card + PIN	Yes (3 to 6)	Yes (3 to 6)
Status monitors		
Mechanical key override (ATK)	Yes	Yes
Battery status	Yes	Yes

Note: Shaded boxes indicate features that are only available in Express v4.0 or higher. Previous versions (Express 3.5.7 and older) support 1000 users/audits and 100 locks, and do not include AD Series and CO Series software labels.

	CO-200 & CO-220	AD-200
Lock functions		
Storeroom	CO-200 only	Yes
Office/toggle/classroom	CO-200 only	Yes
Privacy	CO-200 only	Yes
Apartment	CO-200 only	Yes
Classroom security	CO-200 only	No
Credential attributes		
Normal credential	Yes	Yes
Toggle credential	Yes	Yes
Pass thru credential	Yes	Yes
Visitor/one time use credential	Yes	Yes
Freeze credential	Yes	Yes
Lock down credential	No	No

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NDE

Mobile Enabled Wireless Cylindrical Lock

Overview

The Schlage® NDE mobile enabled wireless cylindrical lock is designed to affordably extend electronic access control deeper into the building beyond traditional perimeter and high security openings and offers users the security and convenience of using a smart device to gain access.[1]

NDE wireless locks simplify installation by combining the lock, credential reader, door position sensor and request-to-exit switch all in one unit, eliminating the need to install additional components or run wires to each opening.

The open architecture design of NDE allows it to be managed by Allegion software or to be integrated into popular physical access control systems through our PACS Alliance program[2]. This enables customers to choose the system that best fits their requirements now and transition to another solution at any time.

NDE suites with all Schlage ND levers and keyways to provide attractive options to meet the requirements of nearly any environment.

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP, HID® and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Other manufacturer credentials including:
  - HID iCLASS®, iCLASS SE® and SEOS® plastic and NFC mobile credentials
  - LenelS2™ BlueDiamond™ MIFARE® DESFire® EV3 and NFC mobile credentials
  - TRANSACT, Brivo, Kastle and more
- See the Credential Compatibility Guide for full details

Schlage Credential Services

- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

1. Dependent on access control software provider support of specific mobile credentials.
2. Integration with NDE mobile enabled wireless locks required for operation. For information on PACS providers and their capabilities visit us.allegion.com/alliances.

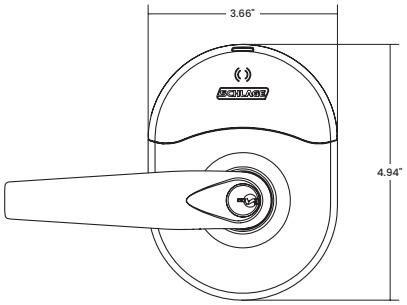
Features & Benefits

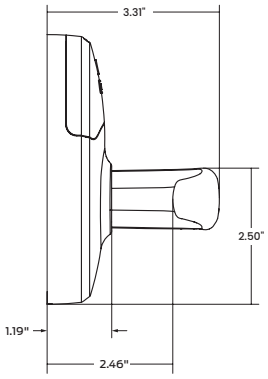
- NDE includes interior push button with indication for storeroom, office, privacy, and apartment applications
- Standard multi-technology credential compatibility includes Schlage MIFARE®, Bluetooth® and NFC mobile[1], and proximity
  - Optional support for HID® smart and NFC mobile credentials
- Wireless configuration from connected smartphones and tablets
- Built-in Wi-Fi® enables automated daily updates sent directly from host software
- Networked real-time communication available with the ENGAGE Gateway and PACS provider solutions[2]
- Ideal for office and suite entries, conference rooms, common area doors, resident units, and sensitive storage areas
- Fits mechanical ND door prep with minor modifications
- Weather resistant design
- Lever handing is field reversible in seconds; no tools required
- Up to 2 years of battery life

CYBERSECURITY
Learn about Allegion's commitment

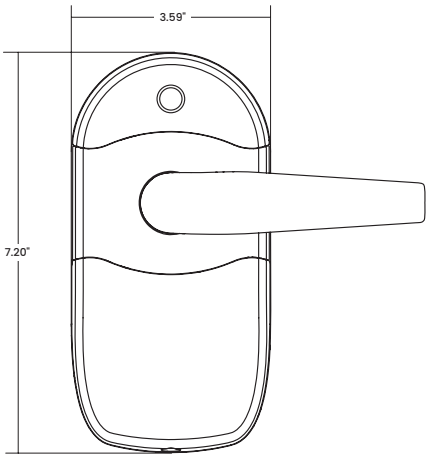
NDE
Mobile Enabled Wireless Cylindrical Lock

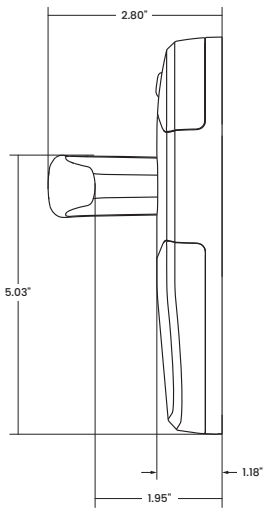
Exterior of the Lock





Interior of the Lock





NDE Wireless Lock Specifications	
Credentials	Up to 5,000[1]
Audits	Up to 2,000[2]
Credential verification time[3]	Smart and proximity: ≤ 1 second Mobile: mobile device dependent
Visual communications	LED (red, amber, green)
Audible communications	Audible indicator (field configurable)
Communication standards	• 2.4 GHz Wi-Fi® (IEEE 802.11b/g/n) • WPA2, WPA, WEP, 802.1x • Bluetooth® low energy (version 4.2) • Transport Layer Security (TLS) version 1.2 • Advanced Encryption Standard (AES), 256-bit
Gateway communication range	Up to 30' in typical building environments. A detailed site survey is recommended using the ENGAGE Test Kit (TKE). Reference ENGAGE™ Gateway data sheet for additional detail.
Wake-Up on Radio	Responds to command from host in less than 5 seconds when linked to ENGAGE Gateway (requires PACS provider system)
Data rate	54 Mbps
Connectivity options	• Bluetooth via mobile device (send updates at the lock) • Wi-Fi access point (automatic daily updates[7]) • No-Tour[8] • ENGAGE Gateway (real-time communication) ◦ RS-485 to ACP or IP to host
Battery life[4]	Uses 4 AA batteries Up to 2 years
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Exterior: -13° to 151°F (-25° to 66°C) (NDEBSi) Interior: 32° to 120°F (0° to 49°C) (battery)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25 locked outdoor; ANSI/BHMA A156.2, Series 4000, Grade 1; UL 294; ULC 60839; UL 10C 3 hour; CSA C22.2 No. 205-M1983; FCC Part 15; Industry Canada (IC); ADA compliant; ICC ANSI A117.1; FL1592, FL10356, FL12400, FL14482

Functionality
- Storeroom
- Office
- Privacy
- Apartment

NDE comes with Vandlgard® standard

Available Status Signals
- Request-to-exit
- Door position
- Interior cover tamper[5]
- Magnetic tamper
- Battery status
- Lock/unlock status[6]
- Communication status[5]

Flexible Solutions
NDE wireless locks offer connectivity options to fit any size budget or business.

1. Mobile
2. Wi-Fi
3. Real-time with ENGAGE Gateway
4. No-Tour[8]

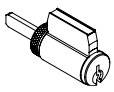
Use the ENGAGE mobile app to commission and connect devices to your access control system of choice

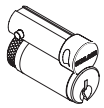
Download on the App Store

ANDROID APP ON Google play

1. Maximum storage capacity of lock; allocation of credentials per user can vary by access control software.
2. Maximum audit storage capacity of lock. Can vary by access control software audit storage capacity.
3. Response time does not include latency time of host when linked with an ENGAGE Gateway or when using No-Tour.
4. Assuming indoor application, default settings, 80 actuations, interior LED disabled and one Wi-Fi update per day.
5. Consult your access control software provider for specific scope of support.
6. Software indicates lock/unlock status based on sequence of events.
7. Daily update will occur within 24 hours as scheduled by the host
8. With MT20W and smart credential or mobile credential (consult your access control software provider for specific support).

Mechanical Specifications	
Chassis	Cylindrical
Handing	Right-handed from factory. Field reversible in seconds (no tools required).
ANSI standard (Meets or exceeds)	ANSI/BHMA A156.25-2013 (Indoor/Outdoor) ANSI/BHMA A156.2-2011, Series 4000, Grade 1
Door thickness	Standard: 1-5/8" - 2" (41mm - 51mm) only
Backset	Standard: 2-3/4" (70mm) Optional: 2-3/8" (60mm)
Latch bolt	Standard: 1/2" (12mm) throw deadlatch (steel) Optional: 3/4" (19mm) throw anti-friction deadlatch available for pairs of fire doors
Levers	Pressure cast zinc, plated
Strike	Standard: 1-3/16" lip, ANSI, DPS, 1-1/4" x 4-7/8" Optional: Additional strikes, lip lengths and ANSI strike box available
Cylinder and keys	Standard: Schlage 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys. Additional keying options available, including interchangeable cores, competitor brands, master keying and grand master keying.





Compatible Cylinders			
Schlage key systems	**Conventional key-in-lever cylinder**	**Full size interchangeable core**	**Small format interchangeable core**
With cylinder	P, P6, Z	M, R	G7
Construction core	----	T	H
Disposable core	----	----	BDC
Less cylinder	L	J	B

Compatible cylinders listed above are supported on all levers.

SARGENT® - Less cylinder	L-SAR	J-SAR	----
Corbin Russwin® - Less cylinder	L-CO6	J-CO6, J-CO7	----
Yale® - Less cylinder	----	J-YA6, J-YA7	----
Medeco - Less cylinder	----	J-MED	----

Six-pin competitive cylinders listed above are supported on ATH, SPA, RHO, and TLR levers. Seven-pin competitive cylinders listed above are supported on RHO levers.

Standard Multi-Technology Reader Specifications	
Credential technologies	Proximity (125 kHz), Smart (13.56 MHz), Bluetooth Low Energy (BLE) (2.4 GHz), and Near Field Communication (NFC)
Standards	ISO standard 15693 and ISO 14443
Maximum read range	Proximity: up to 1.25" Smart: up to .75" Bluetooth Low Energy: up to 15' NFC: mobile device dependent
Proximity credential support	Compatibility: Schlage®, ISONAS™, HID4, GE/CASI ProxLite®, AWID® and LenelProx®
Smart credential support[1]	Secure sector compatibility: Schlage MIFARE Classic®, Schlage MIFARE Plus®, Schlage MIFARE® DESFire®; HID support with the Si option CSN only compatibility: HID iCLASS®, HID iCLASS SE®, Inside Contactless Pico Tag®, MIFARE Classic/Plus/DESFire2, ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code®
Mobile credential support[3]	Schlage Mobile Bluetooth® credential, integrated PACS/Proptech mobile credential with Bluetooth, NFC mobile credentials in Apple Wallet® and Google Wallet™; HID NFC mobile support with the Si option

Note: See the Credential Compatibility Guide for full details including interoperable credentials from other manufacturers.

Mobile Enabled Retrofit Kits

Retrofit kits are available allowing the upgrade of legacy NDE locks to the mobile enabled model, adding the ability to read Bluetooth® mobile credentials and new functions supported by an interior push button with indication.

- Kit includes: Interior escutcheon with PCBA and DPS with lead (requires modified door prep)*

* Kit requires reuse of exterior of lock, lock chassis, existing levers/spring cages, battery cover, mounting screws and interior mounting plate.

Si Option with HID® Support

Supports:

- Secure application area of HID iCLASS®, iCLASS SE®, Seos® and MIFARE® DESFire® EV1 smart credentials
- iCLASS Standard Key and Elite Keys
- HID NFC mobile credentials
- All Schlage MIFARE and mobile credentials

Does not support:

- Proximity
- HID Seos Bluetooth mobile

1. No-Tour applications require a 1K Byte Schlage MIFARE smart credential
2. Specify CE-5901-0402 for ISONAS credential parity
3. Dependent on PACS /Proptech provider capabilities. Visit us.allegion.com/alliances for more information
4. Proximity bit lengths greater than 37 not supported

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Ordering Information

NDEB - P6 - SPA - 626 - LAT - XXX - XX-XXX - XXXXXXXX - XXX - S123

1	2	3	4	5	6	7	8	9	10
Series	Lever Cylinder	Outside		Inside (optional)		Backset & Latch	Strike	Dim	Additional Details
		Lever Style	Finish	Lever Style	Finish				

Standard options are indicated with a dot. See price book for specific configuration options.

1 Series

NDEB	Mobile enabled cylindrical with configurable functions
NDEBSi	Mobile enabled cylindrical with configurable functions that supports HID® credential types

2 Lever Cylinder Type

P6	Schlage 6-pin Conventional key-in-lever

See price book for other SFIC, FSIC and Less Cylinder options available. Supports Schlage, SARGENT®, Corbin, Russwin®, and Yale®.

3/5 Lever

ATH	Athens[1]
BRK	Boardwalk[1]
BRW	Broadway[1]
LAT	Latitude
LON	Longitude
OME	Omega
RHO	Rhodes[1]
SPA	Sparta[1]
TLR	Tubular[1]

1. Available with tactile warning options.

4/6 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
622	Matte Black
625	Bright Chrome
626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

7 Backset & Latch

• 13-247	2-3/4" backset deadlatch, square corner, 1-1/8" x 2-1/4"

See price book for additional backset and latch options.

8 Strike

• 47267101	1-1/4" x 4-7/8" with 1-3/16" lip (NDEB)

See price book for other available strikes.

9 Dim (strike lip length)

• 138	1-3/8" non-standard lip length

Enter only for non-standard strike lip lengths. See price book for other available non-standard lengths.

10 Additional Details

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

Lever Styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens

Boardwalk

Broadway

Latitude

Longitude

Rhodes

Sparta

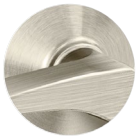
Tubular

Finishes

605
Bright Brass

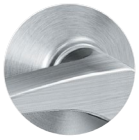
606
Satin Brass

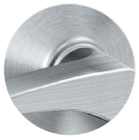
612
Satin Bronze


619
Satin Nickel

622
Matte Black

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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LE

Mobile Enabled Wireless Mortise Lock

Overview

The Schlage® LE mobile enabled wireless mortise lock is designed to affordably extend electronic access control deeper into the building beyond traditional perimeter and high security openings and offers users the security and convenience of using a smart device to gain access[1].

LE wireless locks simplify installation by combining the lock, credential reader, door position sensor and request-to-exit switch all in one unit. LE requires only minor modifications to existing mechanical mortise prep with no wires to run to the lock or additional components necessary.

The open architecture design of LE allows it to be managed by Allegion software or to be integrated into popular physical access control systems through our PACS Alliance program[2]. This enables customers to choose the system that best fits their requirements now and transition to another solution at any time

LE suites with Schlage L Series levers, finishes and keyways to provide a wide selections of attractive options to meet the requirements of nearly any environment.

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP, HID® and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Other manufacturer credentials including:
  - HID iCLASS®, iCLASS SE® and SEOS® plastic and NFC mobile credentials
  - LenelS2™ BlueDiamond™ MIFARE® DESFire® EV3 and NFC mobile credentials
  - TRANSACT, Brivo, Kastle and more
- See the Credential Compatibility Guide for full details

Schlage Credential Services

- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

1. Dependent on access control software provider support of specific mobile credentials.
2. Integration with LE mobile enabled wireless locks required for operation. For information on PACS providers and their capabilities visit us.allegion.com/alliances.
3. Door position switch requires additional prep for mortise deadbolt (MD) applications.

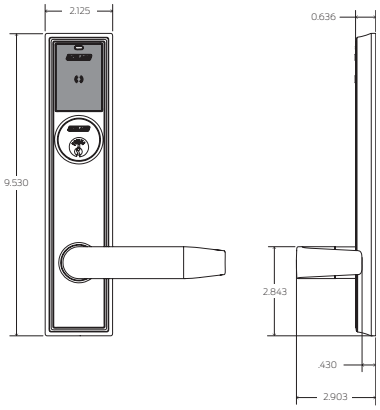
Features & Benefits

- Available with indicator, interior push button, or deadbolt for storeroom, privacy, apartment, and office applications
- Standard multi-technology credential compatibility includes Schlage MIFARE®, Bluetooth® and NFC mobile[1], and proximity
  - Optional support for HID® smart and NFC mobile credentials
- Wireless configuration from connected smartphones and tablets – no proprietary device needed
- Built-in Wi-Fi® enables automated daily updates sent directly from host software
- Networked real-time communication available with the ENGAGE Gateway and PACS provider solutions[2]
- Innovative integrated door position switch requires no additional door prep[3]
- Ideal for office and suite entries, conference rooms, common area doors, resident units, and sensitive storage areas
- Weather-resistant design
- Up to 2 years of battery life

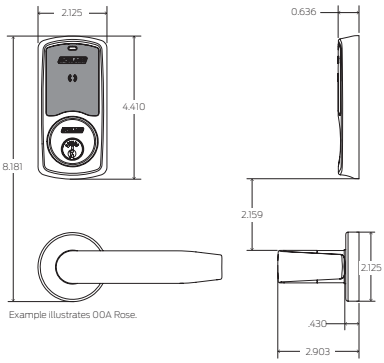
CYBERSECURITY
Learn about Allegion's commitment

Exterior of the Lock

Addison

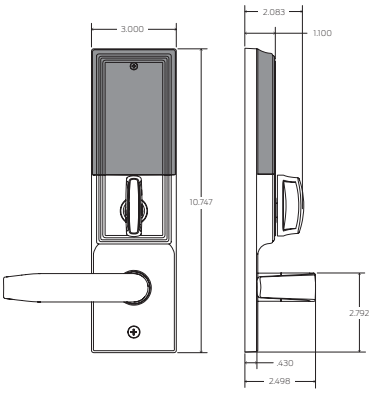


Greenwich

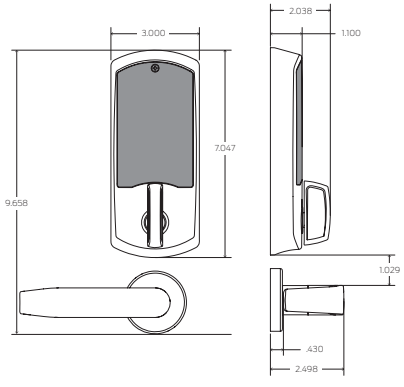


Interior of the Lock

Addison



Greenwich



LE Wireless Lock Specifications	
Credentials	Up to 5,000[1]
Audits	Up to 2,000[2]
Credential verification time[3]	Smart and proximity: ≤ 1 second Mobile: mobile device dependent
Visual communications	Exterior LED (red, amber, green); Interior LED (red, green)
Audible communications	Audible indicator (field configurable)
Communication standards	• 2.4 GHz Wi-Fi® (IEEE 802.11b/g/n) • WPA2, WPA, WEP, 802.1x • Bluetooth® low energy (version 4.2) • Transport Layer Security (TLS) version 1.2 • Advanced Encryption Standard (AES), 256-bit
Gateway communication range	Up to 30' in typical building environments. A detailed site survey is recommended using the ENGAGE Test Kit (TKE). Reference ENGAGE™ Gateway data sheet for additional detail.
Wake-Up on Radio	Responds to command from host in less than 5 seconds when linked to ENGAGE Gateway (requires PACS provider system)
Data rate:	54 Mbps via Wi-Fi
Connectivity options	• Bluetooth via mobile device (send updates at the lock) • Wi-Fi access point (automatic daily updates[7]) • No-Tour[8] • ENGAGE Gateway (real-time communication) ◦ RS-485 to ACP or IP to host
Battery life[4]	Uses 4 AA batteries Up to 2 years
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Exterior: -13° to 151°F (-25° to 66°C) (LEBSi) Interior: 32° to 120°F (0° to 49°C) (battery)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25 locked outdoor; ANSI/BHMA A156.13, Series 1000, Grade 1; UL 294; ULC 60839; UL 10C 3 hour; FCC Part 15; Industry Canada (IC); ADA compliant; FL1592, FL3905, FL4613, FL10356, FL12400, FL14482

Chassis/Functions

- MS mortise with indicator:
  - Storeroom
- MB mortise with push button:
  - Privacy
  - Office
  - Apartment
- MD mortise deadbolt:
  - Privacy
  - Apartment

Available Status Signals

- Request-to-exit
- Door position
- Interior cover tamper[5]
- Battery status
- Lock/unlock status[6]
- Communication status[5]
- Deadbolt position status (MD only)[5]
- Interior pushbutton status (MB only)[5]

Flexible Solutions

LE wireless locks offer connectivity options to fit any size budget or business.

1. Mobile
2. Wi-Fi
3. Real-time with ENGAGE Gateway
4. No-Tour[8]

Use the ENGAGE mobile app to commission and connect devices to your access control system of choice

Download on the App Store

ANDROID APP ON Google play

1. Maximum storage capacity of lock; allocation of credentials per user can vary by access control software.
2. Maximum audit storage capacity of lock. Can vary by access control software audit storage capacity.
3. Response time does not include latency time of host when linked with an ENGAGE Gateway or when using No-Tour.
4. Assuming indoor application, default settings, 80 actuations, interior LED disabled and one Wi-Fi update per day.
5. Consult your access control software provider for specific scope of support.
6. Software indicates lock/unlock status based on sequence of events.
7. Daily update will occur within 24 hours as scheduled by the host.
8. With MT20W and smart credential or mobile credential (consult your access control software provider for specific support).

Mechanical Specifications	
Chassis	MS mortise with LED indicator; MB mortise with push button and LED; MD mortise with deadbolt and LED
Handing	Handed to order, field reversible
ANSI standard (Meets or exceeds)	ANSI/BHMA A156.25-2013 (Indoor/Outdoor) ANSI/BHMA A156.13-2012, Series 1000, Grade 1 With interchangeable core cylinders: Grade 2 Security
Door thickness	Standard: 1-3/4" (44 mm) Optional: 1-3/4" (44 mm) to 2-1/4" (57 mm) optional (SFIC limited to 2" max)
Backset	Standard: 2-3/4" (70mm)
Latch bolt	Standard: 3/4" (19 mm) throw stainless steel latch bolt with anti-friction tongue
Deadbolt	Standard: 1" (25 mm) throw stainless steel deadbolt
Levers	Forged brass or bronze
Strike	Standard: ANSI 1-1/4" x 4-7/8" (32 mm x 124 mm) x 1-3/16" (30 mm) curved lip strike with dust box Optional: Additional strike lip lengths and ANSI strike box available
Cylinder and keys	Standard: Schlage 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys. Additional keying options available: Conventional and interchangeable cores, master keying, and grand master keying. Compatible with competitor cylinders and cams that support the L9000 Series.
Armored front	1-1/4" x 8" x 7/32" (32mm x 203 mm x 6 mm) only

Compatible Cylinders

	Mortise cylinder	Full size interchangeable core - FSIC	Small format interchangeable core - SFIC
With cylinder	P, P6, Z	M, R	G7
Less cylinder	L	J*	B*
Construction core	—	T	H
Disposable core	—	—	BDC

* Sold with cylinder housing - less core.

Note: Available in formats to support residential customers - 5-pin cylinder with C keyways.
Need to specify keyway and pinning needs. Standard if not specified - P, 6-pin Everest 29 with S123 keyway.

Standard Multi-Technology Reader Specifications	
Credential technologies	Proximity (125 kHz), Smart (13.56 MHz), Bluetooth Low Energy (BLE)(2.4 GHz), and Near Field Communication (NFC)
Standards	ISO standard 15693 and ISO 14443
Maximum read range	Proximity: up to 1.25" Smart: up to .75" Bluetooth Low Energy: up to 15' NFC: mobile device dependent
Proximity credential support	Compatibility: Schlage®, ISONAS™, HID4, GE/CASI ProxLite®, AWID® and LenelProx®
Smart credential support[1]	Secure sector compatibility: Schlage MIFARE Classic®, Schlage MIFARE Plus®, Schlage MIFARE® DESFire®; HID support with the Si option CSN only compatibility: HID iCLASS®, HID iCLASS SE®, Inside Contactless Pico Tag®, MIFARE Classic/Plus/DESFire[2], ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code®
Mobile credential support[3]	Schlage Mobile Bluetooth® Credential, integrated PACS/Proptech mobile credential with Bluetooth, NFC mobile credentials in Apple Wallet® and Google Wallet™; HID NFC mobile support with the Si option

Note: See the Credential Compatibility Guide for full details including interoperable credentials from other manufacturers.

1. No-Tour applications require a 1K Byte Schlage MIFARE smart credential.
2. Specify CE-5901-0402 for ISONAS credential parity.
3. Dependent on PACS provider capabilities. Visit us.allegion.com/alliances for more information.
4. Proximity bit lengths greater than 37 not supported.

Mobile Enabled Retrofit Kits

Retrofit kits are available allowing the upgrade of legacy LE locks to the mobile enabled model, enabling them to read Bluetooth® mobile credentials.

- Kit includes: Complete interior escutcheon with PCBA*

* Kit requires reuse of exterior of lock, lock chassis, existing levers/spring cages, battery cover, mounting screws and interior mounting plate.

Si Option with HID® Support

Supports:

- Secure application area of HID iCLASS®, iCLASS SE®, Seos® and MIFARE® DESFire® smart credentials
- iCLASS Standard Key and Elite Keys
- HID NFC mobile credentials
- All Schlage MIFARE and mobile credentials

Does not support:

- Proximity
- HID Seos Bluetooth mobile

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Ordering Information

LEB - MS - GRW - P6 - 07 - 626 - 00A - 17 - 622 - 00A - LH - 10-136 - 134 - S123

Series	Chassis/ function	Style	Cylinder Type	Outside			Inside (optional)			Handing	Strike Lip	Door Thickness	Key System	Additional Options
				Lever Style	Finish	Rose (GRW only)	Lever Style	Finish	Rose (GRW only)					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Standard options are indicated with a dot. See price book for specific configuration options.

1 Series / 2 Chassis / Function

LEBMS	Mobile enabled mortise with indicator only
LEBMB	Mobile enabled mortise with interior push button
LEBMD	Mobile enabled mortise with deadbolt
LEBSiMS	Mobile enabled mortise with indicator only that supports HID® credential types
LEBSiMB	Mobile enabled mortise with interior push button that supports HID® credential types
LEBSiMD	Mobile enabled mortise with deadbolt that supports HID® credential types

Prior to ordering, confirm support with preferred PACS provider, visit us.allegion.com/alliances.

3 Style

GRW	Greenwich (sectional)
ADD	Addison (escutcheon)

4 Cylinder type

P6	Schlage 6-pin Conventional cylinder

See price book for other mortise cylinder, SFIC, FSIC and Less Cylinder options.

5/8 Lever

03	Suites with Tubular
06	Suites with Rhodes
07	Suites with Athens
17	Suites with Sparta
LAT	Latitude

Available in 31 levers and two knob styles including most M Series decorative lever options.

6/9 Finish

605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
622	Matte Black
625	Bright Chrome
626	Satin Chrome
626AM	Satin Chrome Antimicrobial
643e	Aged Bronze

7/10 Rose (GRW style only)

00A	2-1/8" (54 mm) diameter
00B	2-9/16" (65 mm) diameter
00C	2-5/8" (66 mm) diameter with bevel (not available in 612 finish)

MER and AVA decorative rose options are also available, but only with MER and ACC lever styles. Inside rose will default to outside unless specified.

11 Handing

• RH	Right handed
LH	Left handed
RHR	Right handed reverse
LHR	Left handed reverse

Defaulted to Right Hand, if not specified. The chassis can be changed in the field, with some exceptions. See pricebook for additional details.

12 Strike Plate/Lip Length

• 10-136	1-3/16" lip length (MS and MB)
• 10-072	1-3/16" lip length (MD)

Additional lip length options 7/8" to 1-3/4". See price book for details.

13 Door Thickness

• 134	1-3/4" (44 mm)

Optional: 1-3/4" (44 mm) to 2-1/4" (57 mm).
2" maximum door thickness on SFIC cylinders.
See price book for additional details.

14 Keying type

• S123	Everest 29

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying.

15 Additional options

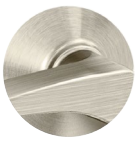
Other thicknesses available between 1-3/8" and 2-3/4" See price book for details.

Finishes

605
Bright Brass

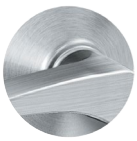
606
Satin Brass

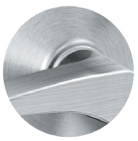
612
Satin Bronze


619
Satin Nickel

622
Matte Black

625
Bright Chrome


626
Satin Chrome


626AM
Satin Chrome Antimicrobial

643e
Aged Bronze

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011389, Rev. 04/25

Mobile Enabled Retrofit Kits

For Legacy Schlage NDE & LE Wireless Locks

Overview

Retrofit Kits are available to upgrade legacy Schlage NDE and LE wireless locks to the mobile enabled model, enabling them to read Bluetooth® mobile credentials[1] in addition to existing NFC mobile, smart and proximity support. This economic solution allows customers to upgrade current locks on their site, giving employees and residents the convenience of using their mobile phones to gain access.

NDE to NDEB Retrofit Kits

Also supports additional functionality with a new interior push button with indication.

- Kit includes interior escutcheon with PCBA, DPS with lead (new DPS requires modified door prep)
- Kit does not include and requires reuse of exterior of lock, lock chassis, existing levers/spring cages, battery cover, mounting screws, interior mounting plate

Part Number, Specify Finish:

47278749

LE to LEB Retrofit Kits

- Kit includes interior escutcheon with PCBA
- Kit does not include and requires reuse of exterior of lock, lock chassis, existing levers/spring cages, battery cover, mounting screws, interior mounting plate

Part Numbers, Specify Finish:

Greenwich	Addison
MS - 47270614	MS - 47270618
MB - 47270613	MB - 47270617
MD - 47270612	MD - 47270616

1. Use with the Schlage Mobile Bluetooth® Credential or compatible PACS mobile credential solution. Consult your Allegion sales representative for more information.

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013616, Rev. 10/24

Schlage Control® Smart Lock

Mobile Enabled Wireless Deadbolt & Interconnected Lock

Overview

The Schlage Control® mobile enabled smart lock was designed specifically for multifamily resident doors. It allows properties to offer smart security to residents and intelligent efficiency to property managers.

Residents will appreciate the security and convenience of using smart devices and/or smart credentials to open their doors today. And, through compatibility with Bluetooth® and NFC mobile credentials, Schlage makes it possible for software providers to enable residents to arrange in-unit package delivery and other services in the future.*

The open architecture capabilities of Schlage Control mobile enabled smart locks offer properties the freedom to use the physical access control (PACS) or Proptech provider of their choice to manage security and a wide spectrum of needs. Through these providers, properties are able to extend the possibilities of their locks beyond security.

For a simpler solution, managing access rights couldn't be easier than by using Allegion software. Staff can configure and manage access from virtually anywhere. And with the capability to view history of access, get usage data, receive alerts and more, it improves the intelligence and productivity of the staff and property.

Schlage Control mobile enabled smart locks are part of an extensive portfolio from Allegion™, which offers solutions for every opening within a multifamily property.

Features & Benefits

- Mobile enabled Schlage Control is ready for the future with the ability to read Schlage MIFARE® smart, Bluetooth® and NFC mobile[1] credentials
- Deadbolt (BE467F) and interconnected lock (FE410F) options
- Two styles with a broad selection of finishes and decorative lever designs
- Eliminates cost and hassle of managing keys
- AES-256 encryption keeps data and communications safe
- Interconnected lock provides single motion egress to comply with regional requirements
- Lock programming via smartphone or tablet (Bluetooth® connection)
- Supports networked (Gateway required), No-Tour and standalone applications

1. Use of mobile credential is dependent on availability of compatible mobile credential.
2. Dependent on PACS provider integrations and capabilities. Go to us.allegion.com/alliances for more information.

CYBERSECURITY
Learn about Allegion's commitment

Design & Style

Schlage Control® mobile enabled smart locks have style options to fit the design of any property and offer full suiting with Schlage decorative mechanical locks and other Allegion solutions.

Finish Options

619 Satin Nickel | 622 Matte Black | 625 Bright Chrome | 626 Satin Chrome | 716 (643e) Aged Bronze

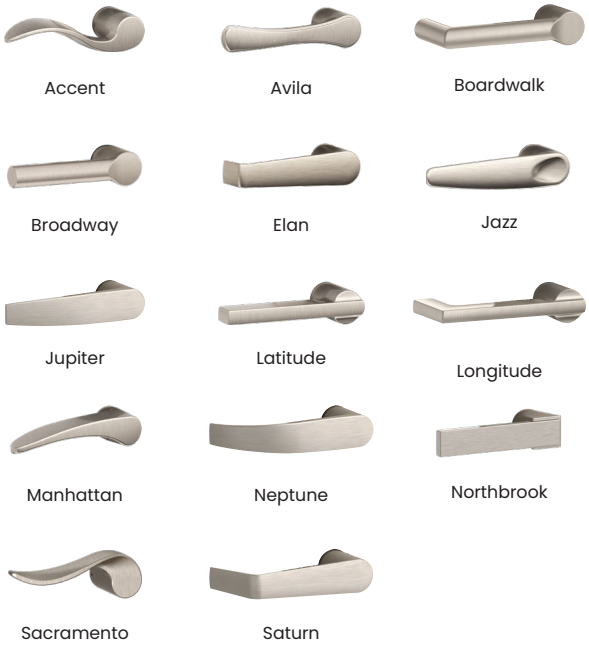
BE467F - Addison

BE467F - Greenwich

FE410F - Addison

FE410F - Greenwich

FE410F Lever Options



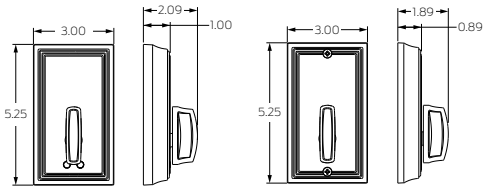
Accent | Avila | Boardwalk | Broadway | Elan | Jazz | Jupiter | Latitude | Longitude | Manhattan | Neptune | Northbrook | Sacramento | Saturn

Note: Reference current pricebook to confirm finishes available by lever style.

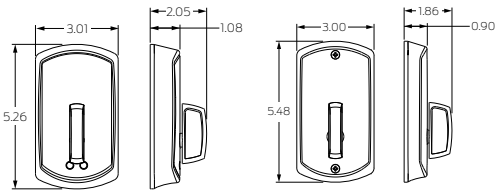
Dimensional Drawings

BE467F

Addison - exterior / interior

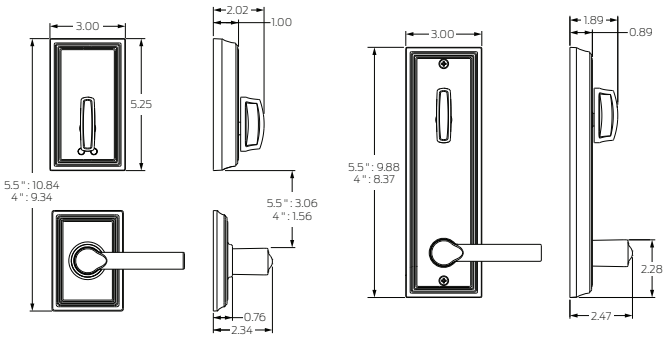


Greenwich - exterior / interior

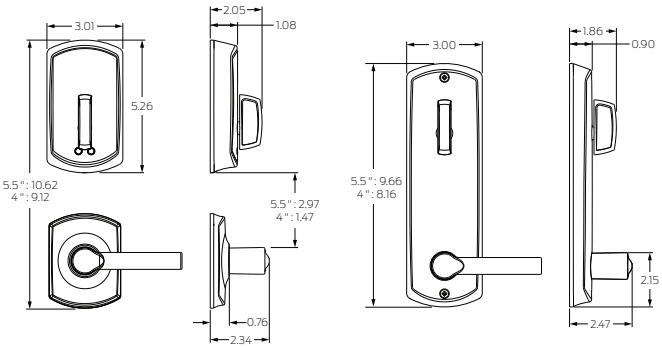


FE410F

Addison - 5.5" and 4" exterior / interior

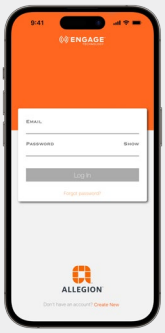


Greenwich - 5.5" and 4" exterior / interior



Choice Means Control

By working with the industry's best-in-class access control providers, we give properties the freedom to choose.



Use the ENGAGE mobile app to commission and connect devices to your access control system of choice

Download on the App Store

ANDROID APP ON Google play

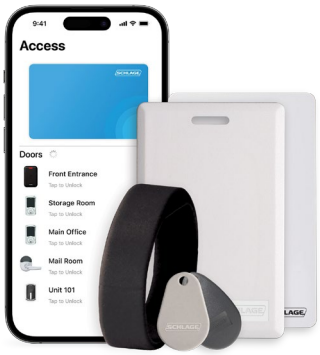
PACS/Proptech Provider Solutions

Schlage Control® mobile enabled smart locks are designed with open architecture capabilities. Because of this, multifamily properties have the flexibility to select the integrated physical access management (PACS) or Proptech system that best suits their needs and budget.

Visit us.allegion.com/alliances for more information on our PACS/Proptech providers and their capabilities.

Credentials

Residents are able to use a smart credential (fob, card or wristband) and/or a smart device to unlock their Schlage Control® mobile enabled smart lock – eliminating the need for traditional keys and saving properties time and money.



Specifications

Electronic Specifications	
Credentials	Up to 500[1]
Audits	1,000 minimum[2]
Visual and audible communications	Exterior LED (red, amber, green) Audible indicator (field configurable)
Communication standards	Bluetooth® low energy (version 4.2) Advanced Encryption Standard (AES), 256-bit
Gateway communication range (networked solution)	Up to 30' in typical building environments. A detailed site survey is recommended.
Wake-Up on Radio	Responds to command from host in less than 5 seconds when linked to ENGAGE Gateway (requires PACS provider solution)
Connectivity options	Bluetooth via mobile device (send updates at the lock) No-Tour[3] ENGAGE Gateway (real-time communication)
Available status signals	Battery status
Battery life	Up to 1-1/2 years (offline mode), up to 1 year (Bluetooth credential enabled); 4 AA batteries included
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 14° to 122°F (-10° to 50°C)
Operating humidity	0 - 100% non-condensing

Reader Specifications	
Credential technologies	Smart (13.56 MHz), Bluetooth Low Energy (LE) (2.4 GHz) Near Field Communication (NFC)
Standards	ISO 14443
Maximum read range	Smart: up to 1.25" Bluetooth Low Energy: up to 15' NFC: mobile device dependent
Smart credential support	Schlage MIFARE Classic®, Schlage MIFARE® DESFire® EV1 and EV3
Mobile credential support[4]	Schlage Mobile Bluetooth Credential, Integrated PACS mobile credential with Bluetooth, NFC resident key in Apple Wallet® and Google Wallet™

Note: See the Credential Compatibility Guide for full details including interoperable credentials from other manufacturers.

1. Maximum storage capacity of lock; allocation of credentials per user can vary by access control software.
2. Maximum audit storage capacity of lock. Can vary by access control software audit storage capacity.
3. With MT20W and smart credential (1K byte Schlage MIFARE smart credential) or mobile credential (consult your access control software provider for specific support).
4. Check with PACS provider for specific support of mobile credentials.

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Specifications

Mechanical Specifications	
Handing	Field reversible (FE410F)
Materials	All-metal chassis and escutcheon
Door thickness	1-3/8" - 1-3/4" (thick door kit available - up 2-1/4" for BE467F, up to 2" for FE410F)
Backset	Adjustable backset, fits 2-3/8" to 2-3/4" backsets
Latch	1" x 2-1/4" square and round corner faceplate (round corner standard, square corner included in package) 1" edge bore required
Deadbolt	Standard 1" (25 mm) throw
Strike	1-1/8" x 2-3/4", round corner, no box, latch strike Optional: Additional strike lip lengths and ANSI strike box available
Bore	2-1/8"
Stile width	Minimum 4-1/2" stile for 2-3/8" backset, minimum 5" stile for 2-3/4" backset

Certifications	
Certifications	BE467F: ANSI/BHMA A156.36 Grade 2 FE410F: ANSI/BHMA A156.12 Grade 2 ANSI/BHMA A156.5 Grade 2; UL 10C 90 minute; CAN ULC S104 90 minutes (20 minute wood core doors); FCC Part 15; Industry Canada (IC); ADA compliant; FL3625

Ordering Information

FE410F - GRW - LAT - 626 - 55

1	2	3	4	5	6	7	8	9
Series	Style	Outside: Lever Style	Outside: Finish	Inside: Lever Style	Inside: Finish	nterconnect Type	Latch	Strike

See price book for specific configuration options.

1 Series	
BE467F	Schlage Control mobile enabled smart deadbolt
FE410F	Schlage Control mobile enabled smart interconnected lock

2 Escutcheon Style	
ADD	Addison
GRW	Greenwich

3/5 Lever[1,2] (for FE410F only)	
ACC	Accent
VLA	Avila
BRK	Boardwalk
BRW	Broadway
ELA	Elan
JAZ	Jazz
JUP	Jupiter
LAT	Latitude
LON	Longitude
MNH	Manhattan
NEP	Neptune
NBK	Northbrook
SAC	Sacramento
SAT	Saturn

4/6 Finish[1]	
619	Satin Nickel
622	Matte Black
625	Bright Chrome
626	Satin Chrome
716	Aged Bronze

7 Interconnect Type (for FE410F only)	
4"	For doors with 4" bore hole spacing (40)
5-1/2"	For doors with 5-1/2" bore hole spacing (55)

8 Latch	
12-398	Standard for BE467F - 90 min UL Deadbolt latch dual option (sq+rd)
12-356	Standard for FE410F - Combo latch, dual option (sq+rd), non-UL bolt, UL latch

9 Strike for BE467F	
10-116	Round corner strike, 1-1/8" x 2-3/4" - Standard
10-147	Square corner strike, 1 -1/8" x 2-3/4"
10-095	Square corner full lip strike, 1-5/8" x 2-1/4" (Lip length: 1-1/8")
10-092	Round corner full lip strike, 1-5/8" x 2-1/4" (Lip length: 1-1/8")

10 Strike Combinations for FE410F	
10-152	Combo strike, square corner (10-147 and 10-026) - Standard
10-151	10-147 and 10-001
10-119	10-081 and 10-001
47344383	10-116 and 10-027
10-123	10-092 and 10-027
10-124	10-095 and 10-027

1. Only specify one finish if outside and inside are the same.
2. Some levers not available in all finishes - see price book for details.

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013252, Rev. 04/25

Mobile Enabled Retrofit Kits

For Legacy Schlage Control® Wireless Locks

FE410F kit *BE467F kit*

Overview

Retrofit kits are available to upgrade legacy Schlage Control® wireless locks to the mobile enabled models, enabling them to read Bluetooth mobile and NFC mobile credentials[1] in addition to existing smart support. This economic solution allows customers to upgrade current locks on their site, giving employees and residents the convenience of using their mobile phones to gain access.

Control Retrofit Kits

- Kit includes exterior escutcheon with PCBAs, through door cable, battery tray and installation instructions
- Kit does not include and requires reuse of batteries, deadbolt, interior escutcheon, mounting screws, strikes, latch (FE410F), interconnect slider mechanism (FE410F), spring cage (FE410F), and levers (FE410F)

Part Numbers, Specify Finish:

Addison	Greenwich
BE467F - 48057106	BE467F - 48057105
FE410F - 48056198	FE410F - 47977577

BE467F - Addison

BE467F - Greenwich

FE410F - Addison

FE410F - Greenwich

Finish Options

619 Satin Nickel | 622 Matte Black | 625 Bright Chrome | 626 Satin Chrome | 716 (643e) Aged Bronze

1. Use with the Schlage Mobile Bluetooth® Credential or compatible PACS mobile credential solution. Consult your Allegion sales representative for more information.

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016171, Rev. 05/25

MT20W

Credential Enrollment Reader with ENGAGE™ Technology

Overview

The Schlage® MT20W multi-technology enrollment reader is designed to simplify the enrollment of smart and multi-technology credentials in "No-Tour" multifamily applications. Site administrators use the MT20W to program encrypted credentials, such as a keyfob, over USB connection to PC. When presented at a lock by the resident or user, the pre-programmed credentials automatically update the lock database. This eliminates the need for the property staff to have to visit each lock to deliver updates.

The MT20W is compatible with Schlage smart credentials (MIFARE Classic®, and MIFARE® DESFire®) and supports no-tour access control when used with supported locks.

Features & Benefits

- Use your computer and the ENGAGE web app to easily enroll credentials
- Recognizes Schlage smart and multitechnology credentials (MIFARE Classic and MIFARE DESFire)
- Simplifies credential enrollment
- Communicates to server through your computers USB port
- Limited Lifetime Warranty

CYBERSECURITY
Learn about Allegion's commitment

Model	MT20W
Reader type	USB Enrollment Reader
Connection requirements	USB data share via a desktop app; click here to access the ENGAGE™ web portal.
Bit formats recognized	26A, 32X, 34N, 34S, 35C, 37X, 37H, 40X
Technologies supported	Schlage MIFARE Classic® Secure Sector Schlage MIFARE® DESFire® with PACSA Secure Application
Physical dimensions (l x w x h)	5.56" x 2.00" x .695"
Operating temperatures	0° to 40°C 32° to 104°F
Weight	4.1 oz
Power supply	Connect to powered USB port or via USB power supply
Interface	USB
Current requirement	Normal 160 mA; Peak 300mA

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GWE Gateway

ENGAGE™ Gateway with IP (PoE) & RS-485 Communication

Overview

The ENGAGE™ Gateway is designed to be used with devices that are on the ENGAGE™ Platform, including Schlage Control®, LE, NDE, CTE as well as Von Duprin® Remote Undogging (RU) and Remote Monitoring (RM). The ENGAGE Gateway enables these devices to be connected in real-time with Physical Access Control Software (PACS) providers. Each ENGAGE Gateway can support up to 6 wireless devices for a wide range of applications, including resident units, office and suite entries, conference rooms, sensitive storage areas and perimeter entries.

Security

The ENGAGE Platform was designed from the ground up with security in mind. It leverages industry-leading security practices, including AES 256 bit and TLS encryption to provide customers with a secure, dependable experience.

Reliability

Regular, frequent communication between the Gateway and linked ENGAGE™ Platform devices allows the Gateway to send commands such as lock, unlock and lock down from an ACP or IP host in real-time (commands are executed in < 5 seconds). All while enabling up to a 2-year battery life in linked wireless devices.

Efficiency

The ENGAGE Gateway provides the ability to leverage existing IP based or RS-485 infrastructure for maximum efficiency. Ethernet connectivity provides ability to connect to the network for real-time access control directly from an in- or out-of-network host; to further simplify installation the Gateway can be powered over ethernet (PoE). Additionally, it is designed to work seamlessly in an existing RS-485 environment to extend access control to more doors. It can be powered from the access control panel (ACP) or from the 12VDC supply (included).

Features & Benefits

- Small form factor, versatile design fits almost anywhere
- Plug and play connectivity without opening or drilling into the housing. External recessed power, antenna, RS-485 and Ethernet (PoE) ports for easy set-up
- Designed to work seamlessly in an existing RS-485 environment
- Designed with PoE built in to leverage a building's existing network infrastructure for communication and power
- Easily and securely commissions in seconds with the ENGAGE™ mobile app—no proprietary handheld device required
- Secure AES-256 bit encrypted 2.4 GHz Bluetooth 4.0 communication between Gateway and ENGAGE™ Platform devices does not interfere with Wi-Fi networks
- Capable of managing up to 6 ENGAGE Platform devices
- Optional 12 VDC external power supply included to achieve UL294 Listing

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Gateway Specifications	
Communication protocol (Gateway to Lock)	2.4 GHz Bluetooth version 4.0 (spread spectrum, dynamic channel switching, 40 channels)
Transmission/encryption (Gateway to Lock)	AES-256 bit key
Credential verification time	< 1 second[1]
BLE communication range	A detailed site survey is recommended to determine range in each unique environment. Up to 30' can be achieved in typical building environments. Under ideal conditions, up to 50' line of sight may be possible. A detailed site survey is recommended to determine if the extended range can be achieved. Performance is dependent on local physical (geometry, construction materials, and furnishings) and RF environment. For planning purposes users should consider estimating at least 10% contingency for Gateway quantity. The TKE ENGAGE Test Kit is available for site surveys. Reference the ENGAGE Gateway Placement Guide for details.
Visual communications	LED status indicators
System interface	Ethernet to IP host[2] RS-485 to ACP[3]
Transmission/encryption (Gateway to ACP or IP host)	TLS version 1.2 or greater (to IP host) Optional AES-128 bit key (to ACP)
Gateway Discovery Methods (by partner IP host)	Zero-configuration (zeroconf), Static IP, or DHCP with hostname option
Power supply	PoE (12.95W compliant to IEEE 802.3af/at) 12 VDC or 24 VDC (terminals)
Operating current	PoE: 60 mA 12 VDC: 330 mA, 24 VDC: 100 mA
Operating temperature	32° to 120°F (0° to 49°C)
Operating humidity	0% to 100% non-condensing
Dimensions (H x W x D)	5.1" x 6.0" x 1.2" (13.0 cm x 15.3 cm x 3.04 cm)
Weight	8.6 oz (.24 kg)
Cable specifications	DC terminal input: 18AWG, 2 conductor (Belden 8760 or equivalent) up to 1000 ft (305 m) Gateway to ACP: 24AWG, 2 or 4 conductor shielded (Belden 9842, 9841 or equivalent) up to 4000 ft (1219 m) Gateway to router: CAT3, CAT5/5E or CAT6 up to 328 ft (100 m)
Data rate	Gateway to Lock: up to 1 Mbps (Bluetooth) Gateway to ACP: 9.6 kbps (RS-485) Gateway to IP Host: up to 100 Mbps (Ethernet)
Certifications	UL294, FCC Part 15, Industry Canada(IC), RoHS

1. Dependant on latency time of access control system.
2. Supports NDE, LE, CTE, Schlage Control Smart locks and Von Duprin RU and RM.
3. Supports NDE, LE and Von Duprin RU and RM.

Ordering Information

GWE – ENGAGE Gateway with RS-485 and IP (PoE) connectivity. Supports up to 6 ENGAGE™ Platform devices with select brands of access control panels.

Additional Features

Real-Time Communications

Regular, frequent communication between the Gateway and linked ENGAGE Platform devices allows the Gateway to send commands such as lock, unlock and lock down from an ACP or IP host in real-time (commands are executed in < 5 seconds). All while enabling up to a 2-year battery life in linked wireless devices.

Secure Encrypted Transmissions

All communications between the Gateway, the ENGAGE mobile app and ENGAGE Platform devices are encrypted with an AES-256 bit key to provide virtually uncompromisable security. Additionally, all communications between the Gateway and an IP host over an existing network are secured with TLS 1.2 (or newer) encryption.

Visual Indications

- Power up
- Factory default state
- Connected to mobile device
- Normal operation
- Linking status
- Diagnostics

Edge Device Status*

(available through host connection)

- Card data
- Door position
- Loss of communication
- Request-to-exit
- Request-to-enter
- Low battery
- Interior cover tamper guard
- Lock/unlock status
- Deadbolt position
- Interior push button

Configurable Items from Gateway*

- Relock parameters
- Card data format conversion
- Extended unlock
- Fail safe/fail secure/fail as-is
- Door held pre-alarm
- Cache memory parameters
- Reader configuration
- Inside pushbutton configuration
- User interface configuration

* Capability varies by edge device. Refer to device solution sheet.

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010842, Rev. 10/25

TKE

ENGAGE™ Test Kit

Overview

The ENGAGE™ Test Kit (TKE) helps evaluate system design prior to installation of new ENGAGE wireless networked systems which utilize the ENGAGE GWE Gateway. The TKE can also be used to diagnose signal quality and signal strength in existing ENGAGE wireless applications.

ENGAGE Platform locks and devices communicate via 2.4 GHz Bluetooth® Low Energy (BLE) to the ENGAGE Gateway which is required for communication between ENGAGE devices and the access control panel for networked, real-time solutions using one of our integrated PACS providers.

The ENGAGE Test Kit transponder is used to communicate to the ENGAGE Gateway as an access control module. By using the ENGAGE mobile app to conduct the survey it is possible to obtain clear and comprehensive results during the survey. LED lights and numerical data provide intuitive feedback about the quality and strength of the 2.4 GHz Bluetooth Low Energy (BLE) signal[1]. By obtaining feedback on two different data points in the same test it makes it easier to identify issues and optimize placement of the Gateway.

The communication range of ENGAGE Platform devices to the gateway is up to 30 feet with normal building construction. The TKE can be used to determine the proper location of each Gateway to optimize system design. When installed properly, an ENGAGE wireless solution is an extremely reliable and cost-effective alternative to a hardwired networked system.

Features & Benefits

- Allows testing of 2.4 GHz Bluetooth Low Energy (BLE) signals between ENGAGE Platform devices and ENGAGE Gateway[1]
- Assists in accurate system design and quoting process
- Ensures proper location of gateways for efficient system installation
- Can be used to test existing installations for signal quality and strength
- Numerical and color indication of signal strength and quality; green for strong connection, red for weak connection
- For use with Schlage Control®, NDE, and LE wireless locks, Schlage CTE single door controller, and Von Duprin® exit devices with the RU/RM option
- Power supply, rechargeable battery and tripod included in kit for on-site convenience

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ENGAGE Test Kit Transponder Specifications	
Frequency	2.4 GHz Bluetooth® Low Energy (BLE) version 4.0
Communication range	Up to 30 ft with obstructions (normal building)
Operating temperature	32° to 120°F (0° to 49°C)
Battery type	4AA alkaline batteries
Dimensions (H x W x D) (excluding wire fastener)	7.20" x 3.59" x 2.80" (18.29 cm x 9.12 cm x 7.11 cm)
Certifications	• FCC Part 15 • Industry Canada (IC) • RoHS

ENGAGE GWE Gateway Specifications	
Frequency	2.4 GHz Bluetooth Low Energy (BLE) version 4.0
Communication range	Up to 30 ft with obstructions (normal building)
LED user interface	Power on, linking status, connection to mobile device
Operating tempurature	32° to 120°F (0° to 49°C)
Power	12 VDC or 24 VDC (12 VDC power supply and rechargeable lithium battery included)
Dimensions (H x W x D)	5.1" x 6.0" x 1.2" (13.0 cm x 15.3 cm x 3.04 cm)
Weight	8.6 oz (.24 kg)
Certifications	• UL 294 • FCC Part 15 • Industry Canada (IC) • RoHS

ENGAGE Test Kit Contains:

- ENGAGE GWE Gateway and mounting bracket
- Two ENGAGE transponders
- 12 VDC power supply
- Rechargeable battery
- Quick start guides
- 9 foot tripod
- Backpack

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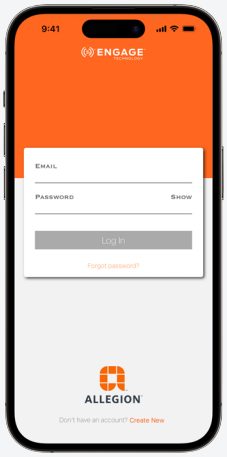
ENGAGE™

Mobile App for Device Commissioning



Overview

The ENGAGE™ mobile app is used to commission and connect devices to industry leading physical access control software (PACS) or multifamily proptech systems. This also includes support for the following products:

- Schlage Control®, NDE, LE and XE360™ electronic locks
- MTB readers
- CTE and RC controllers
- ENGAGE Gateway (GWE)
- ENGAGE Test Kit (TKE)
- Von Duprin® Remote Undogging (RU) and Remote Monitoring (RM)

Please visit us.allegion.com/alliances for specific support and capabilities by provider.

The free mobile app is required to initialize Schlage and Von Duprin devices that are on ENGAGE Platform and is available for Apple and Android smart devices.

Download on the App Store

GET IT ON Google Play

Features & Benefits

- Wirelessly add, configure or update locks at the door via mobile app using Bluetooth® enabled smart phone
- Can be used for other tasks including device firmware updates, hardware diagnostics and device audits
- Works with latest models of Apple and Android phones (see specific device requirements)
- Intuitive user interface simplifies the commissioning process

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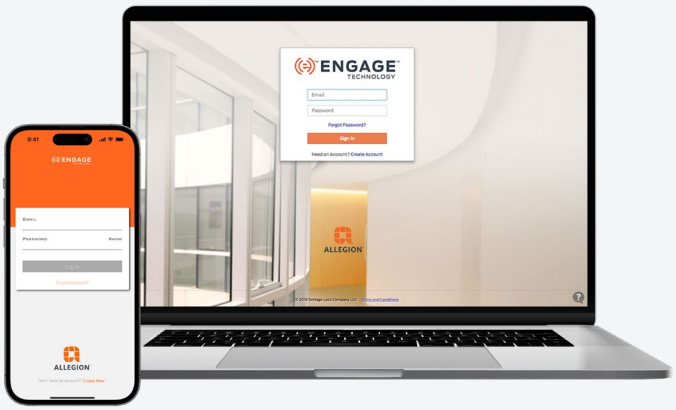
ENGAGE™

Cloud-Based Web & Mobile Applications



Overview

ENGAGE™ cloud-based web and mobile applications simplify the ability to connect people, openings and access management to deliver cost effective intelligence and efficiency to any facility.

With the ENGAGE cloud-based web and mobile apps, it's easy to configure settings, manage users, assign access privileges and view audits and alerts from anywhere. Updates to configuration and access privileges can be sent at the device with the ENGAGE mobile app. Or, to send updates without visiting the lock, leverage the existing Wi-Fi® network[1] or built-in No-Tour capability[2].

Daily schedule management of an opening is available with Von Duprin® remote undogging (RU) using ENGAGE software via Wi-Fi. This solution is available for scheduled lock-up events only, see the RU/RM data sheet for complete details.

The ENGAGE web app has the capability to issue and manage the Schlage Mobile Bluetooth® credential - giving users the security and convenience of using their mobile device to gain access to ENGAGE managed openings. Other capabilities of ENGAGE include audit filtering, lock schedules, user schedules, and holidays. Please see page 4 for a complete listing of capabilities.

The ENGAGE mobile app is also used to commission[4] and connect the following products to physical access control software (PACS) systems:

- Schlage Control®, NDE, LE and XE360™ electronic locks
- MTB readers
- CTE and RC controllers
- ENGAGE Test Kit (TKE)
- Von Duprin® Remote Undogging (RU) and Remote Monitoring (RM)

Please visit us.allegion.com/alliances for specific support and capabilities by provider.

Features & Benefits[3]

- Convenient—manage from anywhere
- Configure lock and device settings
- Add new users and enroll credentials
- Assign credential type including master, normal, toggle, freeze, pass through, blocked and lockdown
- Manage users and assign access privileges
- Unique web and mobile app capabilities:
  - **ENGAGE™ web app**
    - Create and assign lock/device schedules, user schedules and holidays
    - View and export audits
    - Schedule lock/device firmware updates[1]
    - Issue Schlage Mobile Bluetooth® Credentials
    - Update MT20W firmware via USB.
  - **ENGAGE™ mobile app**
    - Add new locks or devices
    - Assign lock/device schedules, user schedules and holidays
    - View audits
    - Send updates wirelessly at the lock or device

1. Applies to NDE, LE and CTE with built-in Wi-Fi.
2. Applies to Schlage Control®, NDE, LE, XE360 and CTE.
3. Features and benefits specific to ENGAGE web and mobile apps for basic access control. Please refer to the Von Duprin RU/RM data sheet for specific details about remote undogging solution.
4. Please see the ENGAGE™ Mobile App for Device Commissioning data sheet for more information.

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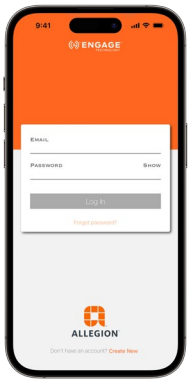
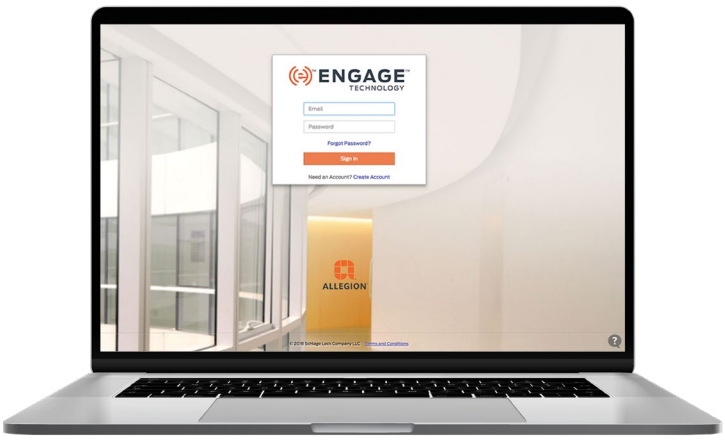
ENGAGE Mobile Application for Device Commissioning

The ENGAGE mobile app is also used to commission[4] and connect the following products to ENGAGE or third party physical access control software (PACS) systems. Additionally, the app is used to update device firmware and perform device diagnostics.

- Schlage Control®, NDE, LE and XE360™ electronic locks
- MTB readers
- CTE and RC controllers
- ENGAGE Test Kit (TKE)
- Von Duprin® Remote Undogging (RU) and Remote Monitoring (RM)

Please visit us.allegion.com/alliances for specific support and capabilities by provider. Also note that the details on pages 3 and 4 of this data sheet are not applicable to PACS managed solutions.





ENGAGE Cloud-Based Access Control

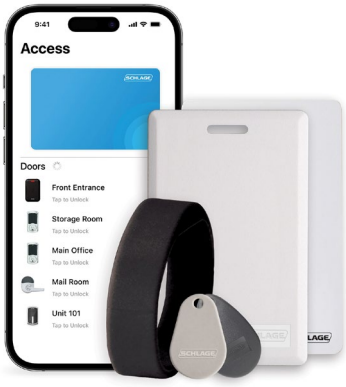
The ENGAGE cloud-based web and mobile applications deliver simple and convenient site set-up as well as the ability to manage users, assign access privileges and view audits and alerts from anywhere.

Technology Recommendations

iOS, Android™, and web browser specifications are available on the ENGAGE web and mobile apps page on commercial.schlage.com.

Download on the App Store

GET IT ON Google Play



Electronic Credentials

Eliminate the time and costs associated with managing keys or re-keying locks by upgrading to electronic credentials. Provide a unique credential to authorized users that can be:

- Tracked for usage
- Added and revoked remotely
- Assigned to be valid during specific days and times
- Deleted and replaced if lost or stolen – without having to re-key the lock

Supported Credentials

Mobile credentials (BLE 2.4 GHz):

- Schlage® Mobile Bluetooth® credential

Schlage MIFARE credentials (13.56 MHz):

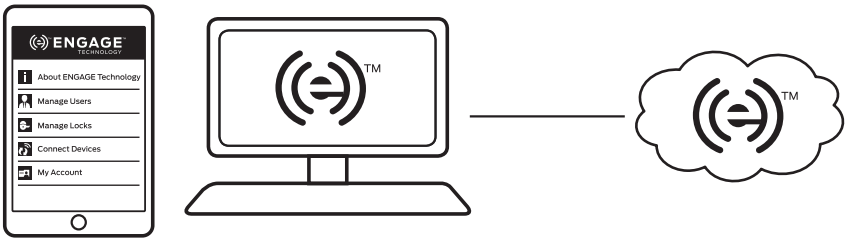
- Schlage MIFARE Classic®
- Schlage MIFARE® DESFire®

Smart credentials (13.56 MHz) – card serial number only:

- HID iClass® and iClass SE®
- MIFARE Classic®
- MIFARE® DESFire®

Proximity credentials (125 kHz):

- Schlage®
- AWID®
- GE/CASI®
- HID®



Manage Access

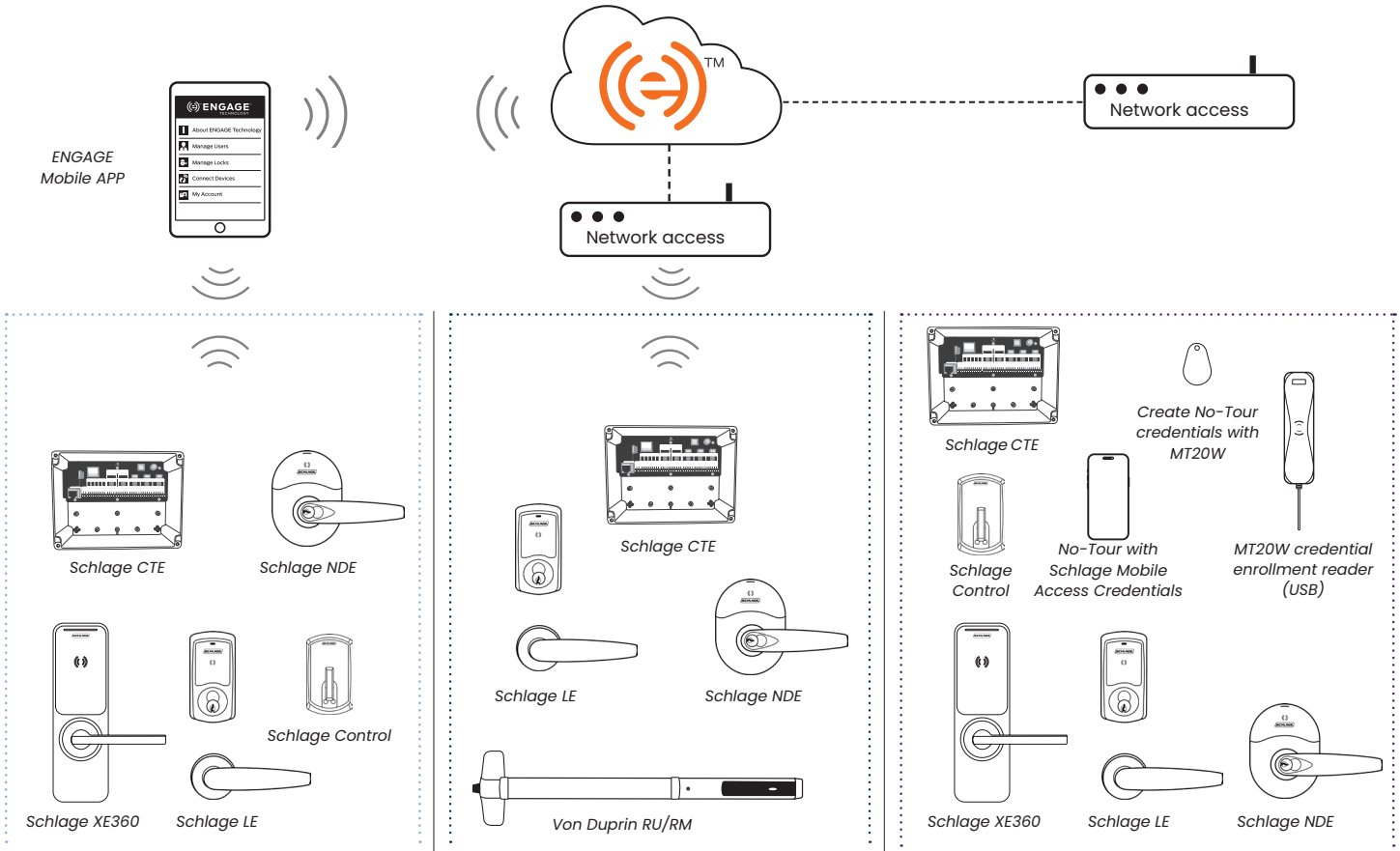
Manage your site from anywhere with ENGAGE cloud-based web and mobile applications.

- Configure lock/device settings
- Add new users and enroll credentials
- Manage users and assign access privileges
- Set lock/device schedules, holidays, user schedules
- View and export audits and alerts
- Invite others to assist with administration

Update Locks & Devices

Send updates wirelessly at the lock with the ENGAGE mobile application on a Bluetooth® enabled smart phone, tablet, or leverage the existing Wi-Fi® network or built-in No-Tour capability to send updates without visiting the lock or device.

- Update access rights
- Update lock/device settings
- Update firmware
- Perform diagnostics



Immediate updates

Send updates at the lock/device, anytime, with the ENGAGE mobile app. Available on Schlage Control smart locks, NDE, LE and XE360 wireless locks, and CTE.

Automatic daily updates[1]

Connect devices to the Wi-Fi network for automatic daily updates. Available on Schlage NDE and LE wireless locks, and CTE as well as Von Duprin RU/RM.

No-Tour via smart credentials

Eliminate the need to visit locks/devices by using 13.56 MHz smart or Schlage Mobile Credentials to deliver updates to access rights. Available on Schlage Control, NDE, LE and XE360 wireless locks, and CTE.

1. Refer to the Von Duprin RU/RM data sheet for specific details and support about remote undogging solution.

System Capabilities

	Wireless offline security solution with ENGAGE technology				
	Schlage NDE cylindrical	**Schlage LE mortise**	**Schlage XE360**	**Schlage Control smart deadbolt / interconnected**	**CTE single door controller with MTB reader**
System Features					
Maximum number of locks/devices	NDE, LE and CTE = up to 100; XE360 = up to 250; Control = up to 500				
Maximum number of credentials[1]	NDE, LE and CTE = up to 5,000; XE360 = up to 2,000; Control = up to 500				
Maximum number of audits	Up to 100,000[2]				
Maximum number of lock/device schedules	Up to 16[3]				
Maximum number of holidays	Up to 32[3]				
Maximum number of user schedules	Up to 16				
Update Capability					
Bluetooth®[4]	Yes	Yes	Yes	Yes	Yes
Wi-Fi[5]	Yes	Yes	No	No	Yes
Lock Functions					
Storeroom	Yes	Yes	Yes	N/A	N/A
Office	Yes[8]	Yes	Yes	N/A	N/A
Privacy	Yes[8]	Yes	Yes	N/A	N/A
Apartment	Yes[8]	Yes	Yes	Yes	N/A
Status Monitors					
Interior cover tamper	Yes	Yes	No	Yes	Yes[6]
Request to exit	Yes	Yes	Yes	N/A	Yes
Deadbolt position status	N/A	Yes	No	No	N/A
Interior pushbutton status	N/A	Yes	Yes	N/A	N/A
Forced door	Yes	Yes	N/A	N/A	Yes
Propped door	Yes	Yes	N/A	N/A	Yes
Magnetic tamper	Yes	Yes	No	N/A	N/A
Battery status (normal, low, critical)	Yes	Yes	Yes	Yes	N/A
Battery voltage level	Yes	Yes	Yes	Yes	N/A
Credentials					
2.4 GHz Bluetooth Mobile (Schlage)	Yes[7]	Yes[7]	Yes[7]	Yes[7]	Yes[7]
13.56 MHz Smart	Yes	Yes	Yes	Yes	Yes
125 kHz Prox	Yes	Yes	No	No	Yes
Near Field Communication (NFC)	Yes	Yes	Yes	Yes	Yes
Credential Attributes					
Normal credential	Yes	Yes	Yes	Yes	Yes
Toggle credential	Yes	Yes	Yes	N/A	Yes
Pass through credential	Yes	Yes	Yes	Yes	Yes
Visitor/one-time use credential	Yes	Yes	Yes	N/A	Yes
Freeze credential	Yes	Yes	Yes	Yes	Yes
Block credential	Yes	Yes	Yes	Yes	Yes

1. Maximum storage capacity of lock; allocation of credentials per user can vary by access control software.
2. Audit capacity per lock for a site. NDE, LE and XE360 wireless locks and CTE are capable of storing up to 2,000 audits. Control is capable of storing a minimum of 1,000 audits.
3. Applies to NDE and LE wireless locks and CTE only.
4. Requires ENGAGE mobile application.
5. Requires available Wi-Fi network with internet connection. Update will occur within 24 hours as scheduled by ENGAGE host software.
6. Ability to monitor tamper on reader cover.
7. Requires use of mobile enabled models of locks and devices.
8. Applies to mobile enabled NDE wireless lock (NDEB).

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XE360™ Series

Wireless Tubular Lock

Overview

Building upon the innovation and reliability of Schlage electronic locks, the XE360 Series is the next generation of wireless locks from this trusted brand. The sleek design offers customers a solution that looks as good as it performs – at an affordable price point.

XE360 currently works within No-Tour or offline access control systems. Credential support includes smart, Bluetooth and NFC mobile[1].

The open architecture design of the XE360 allows it to be managed by Allegion software or be integrated into popular physical access control and Proptech systems through our PACS Alliance program. This enables customers to choose what best fits their requirements now and transition to another solution at any time.

The XE360 Series is also available as mortise, mortise deadbolt or exit trim and suites with other Schlage families to provide a wide selection of attractive options to meet the requirements of nearly any opening.

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Schlage Mobile Bluetooth® Credential
- Other competitive credentials

Schlage Credential Services

- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

Features & Benefits

- Next level design inside and out
- Credential support includes Schlage MIFARE®, Bluetooth® and NFC mobile[1]
- Available with LED indicator or interior push button LED with indicator
- Advanced encryption keeps data and communications safe
- Wireless configuration using connected smartphones or tablets
- No-Tour or offline system capability
- Ready for the future with the innovative FleX Module™ that allows for communication type, memory and encryption upgrades
- Exceeds Grade 2 testing for exceptional quality and reliability
- Open architecture – interoperable and simple for software alliances to integrate
- Works seamlessly with other Schlage wireless locks, including Schlage Control[2]
- Uniquely concealed key override standard on all locks

1. Dependent on access control software provider support of specific mobile credentials.
2. Check with your Proptech or PACS provider for specific support.

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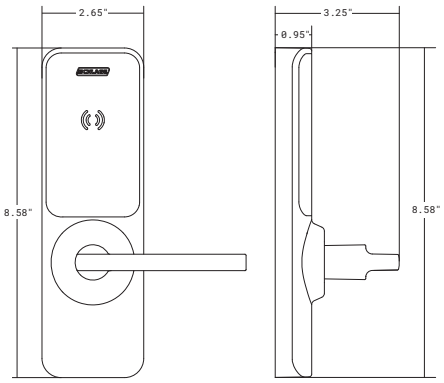
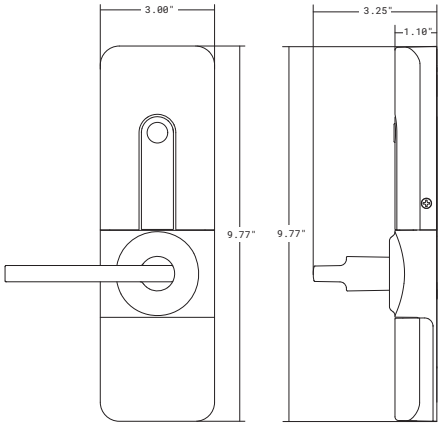
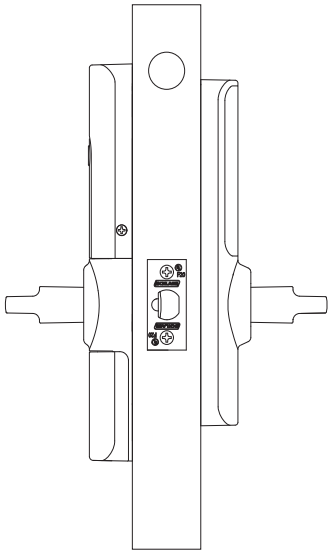
Exterior



Interior



Profile



XE360 Wireless Electronic Lock Specifications	
Credentials	2,000[1]
Audits	2,000[1]
Visual communications	LED (red, amber, green, blue)
Audible communications	Yes, field configurable
Communication and encryption standards – lock	Bluetooth® Low Energy (version 5) Advanced Encryption Standard (AES), 128- and 256-bit
Communication and encryption standards – mobile credentials	Bluetooth® Low Energy: AES 256-bit using CBC & ECDSA 256
Credential verification time	Smart: ≤ 1 second Mobile: mobile device dependent
System interface	Via Bluetooth using the ENGAGE mobile app compatible with iOS and Android
Battery life[2]	Up to two 2 years 4 AA batteries, included
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 32° to 120°F (0° to 49°C)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.2-2022 Grade 2; ANSI/BHMA A156.25-2023 Locked Outdoor Type; ANSI/BHMA A156.5-2020; UL 294; ULC 60839; UL 10C 3-hour; CAN/ULC S104 3-hour; FCC Part 15; Industry Canada (IC); Industry Canada (IC)-RSS210; ADA Compliant[3]; RoHS; REACH; TAA; FL10356

Functionality[4]

- With Indicator (I)
  - Storeroom
- With Button (B)
  - Office
  - Privacy
  - Apartment

Note: Door Position Sensor is required for privacy and apartment functions.

Available Status Signals[4]

- Battery level
- Door position
- Lock/unlock
- Request-to-exit

Connectivity Options

- Mobile (Bluetooth at the lock)
- No-Tour[5]

1. Maximum storage capacity of lock; allocation of credentials per user can vary by access control software.
2. Assuming default settings, 40 actuations per day.
3. See 'Lever Styles' section for available options.
4. Consult your access control software provider for specific scope of support.
5. With MT20W and smart credential or mobile credential (consult your access control software provider for specific support).

XE360 Tubular Mechanical Specifications	
Chassis	Tubular
Handing	On-site handing with included hex key
ANSI standard (Meets or exceeds)	ANSI/BHMA A156.02-2022 Grade 2 ANSI/BHMA A156.25-2023 Locked outdoor type ANSI/BHMA A156.5-2020
Door thickness	1-3/4" (44mm)
Backset	Standard: 2-3/4" (70mm), field adjustable to 2-3/8" (60mm)
Latchbolt	1" x 2-1/4" (25mm x 57mm); square and round corner faceplate; 1" (25mm) edge bore required
Levers	Zinc
Strike	Standard: 1-1/8" (29mm) lip, ANSI, 1-1/8" x 2-3/4" (29mm x 70mm), no box Optional: Additional strike lip lengths and ANSI strike box available
Stile width	Minimum 4-1/4" (108mm)
Materials	All-metal chassis and escutcheon; exterior polycarbonate elements
Cylinder and keys	Schlage Classic C keyway, Conventional 6-pin cylinder with two keys

Reader Specifications	
Credential technologies	Smart (13.56 MHz), Bluetooth Low Energy (LE) (2.4 GHz), and Near Field Communication (NFC)
Standards	ISO standard 15693 and ISO 14443
Read range	Smart: up to .5" Bluetooth® Low Energy: up to 15' NFC: mobile device dependent
Smart credential support	**Secure application area:** Schlage MIFARE DESFire® EV1/EV2/EV3, Schlage MIFARE® Classic® **CSN only:** HID iCLASS®, HID iCLASS SE®, MIFARE DESFire/Classic
Mobile credential support[1]	Schlage Mobile Bluetooth Credential, Integrated PACS mobile credential with Bluetooth, NFC mobile credentials in Apple Wallet® and Google Wallet™

Note: See the Credential Compatibility Guide for full details including interoperable credentials from other manufacturers.

1. Dependent on PACS provider capabilities. Visit us.allegion.com/alliances for more information.

Chassis Options

The XE360 Series portfolio offers tubular, mortise, mortise deadbolt and exit trim solutions to fit the needs of most applications.

Key Override

Key override is standard on all XE360 locks. The unique design conceals the cylinder in the bottom edge of the lock to preserve the sleek look on the door while still allowing emergency access using a key.

Ordering Information

XE360	-	T	-	OF	-	I	-	SM	-	LAT	-	626	-	P6	-	C	-	47535555	-	A500-074	-	134	-	47467230
Series		Chassis		Class		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Backset & Latch		Strike		Door Thickness		Accessories
1		2		3		4		5		6		7		8		9		10		11		12		13

Selections correspond with the numbers above. See price book for specific configuration options.

4 Function

I	Indicator
B	Button

5 Reader

SM	Smart; Bluetooth and NFC mobile

6 Lever Style

BRW	Broadway
LAT	Latitude
NEP	Neptune
LON-E	Longitude-extended length

7 Finish

619	Satin Nickel
622	Matte Black
626	Satin Chrome

8 Key Cylinder

P6	Schlage Conventional, 6-pin

See price book for additional options.

9 Keyway

C	Schlage Classic Obverse

See price book for additional options.

10 Backset & Latch

47535555	Adjustable backset: 2-3/8" or 2-3/4"; 1" x 2-1/4" (round and square corner included); 1" edge bore required

11 Strike

A500-074	Standard: 1-1/8" lip, ANSI, 1-1/8" x 2-3/4", no box

See price book for additional strike lip lengths and ANSI strike box options.

12 Door Thickness

134	1-3/4" only

13 Accessories

47467230	Door Position Switch (DPS)
LLLDPS	Less Door Position Switch (DPS)

Lever Styles

Broadway

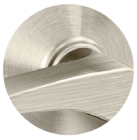
Latitude

Neptune (Sparta)

Longitude - Extended Length

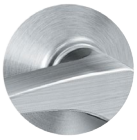
Extended length lever is designed to lower required operational force and improve rotational grip for higher accessibility.

Finishes



619
Satin Nickel

622
Matte Black



626
Satin Chrome

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015588, Rev. 10/25

XE360™ Series

Wireless Mortise Lock

Overview

Building upon the innovation and reliability of Schlage electronic locks, the XE360 Series is the next generation of wireless locks from this trusted brand. The sleek design offers customers a solution that looks as good as it performs – at an affordable price point.

XE360 currently works within No-Tour or offline access control systems. Credential support includes smart, Bluetooth and NFC mobile[1].

The open architecture design of the XE360 allows it to be managed by Allegion software or be integrated into popular physical access control and Proptech systems through our PACS Alliance program. This enables customers to choose what best fits their requirements now and transition to another solution at any time.

The XE360 Series is also available as tubular or exit trim and suites with other Schlage families to provide a wide selection of attractive options to meet the requirements of nearly any opening.

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Schlage Mobile Bluetooth® Credential
- Other competitive credentials

Schlage Credential Services

- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

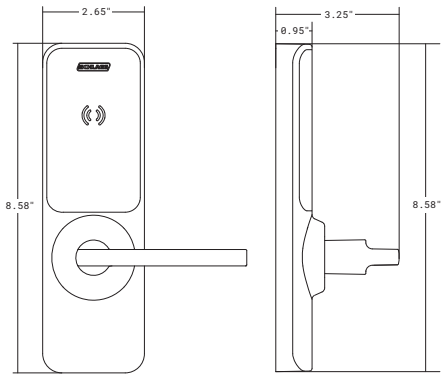
Features & Benefits

- Next level design inside and out
- Credential support includes Schlage MIFARE®, Bluetooth® and NFC mobile[1]
- Available with LED indicator, interior push button, or deadbolt with thumbturn
- Advanced encryption keeps data and communications safe
- Wireless configuration using connected smartphones or tablets
- No-Tour or offline system capability
- Ready for the future with the innovative FleX Module™ that allows for communication type, memory and encryption upgrades
- Utilizes a heavy-duty Grade 1 mortise chassis for exceptional quality and reliability
- Open architecture – interoperable and simple for software alliances to integrate
- Works seamlessly with other Schlage wireless locks, including Schlage Control[2]
- Uniquely concealed key override standard on all locks

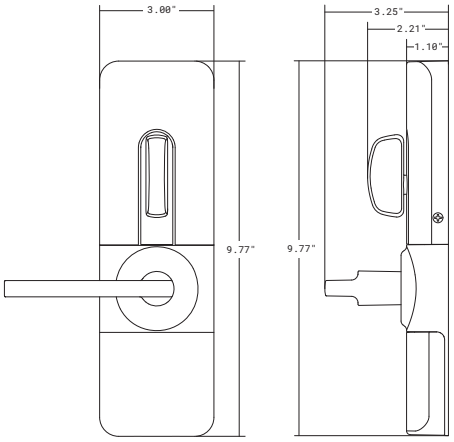
1. Dependent on access control software provider support of specific mobile credentials.
2. Check with your Proptech or PACS provider for specific support.

CYBERSECURITY
Learn about Allegion's commitment

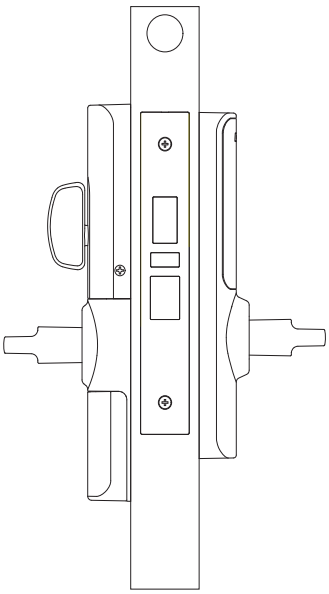
Exterior



Interior



Profile



XE360 Wireless Electronic Lock Specifications	
Credentials	2,000[1]
Audits	2,000[1]
Visual communications	LED (red, amber, green, blue)
Audible communications	Yes, field configurable
Communication and encryption standards – lock	Bluetooth® Low Energy (version 5) Advanced Encryption Standard (AES), 128- and 256-bit
Communication and encryption standards – mobile credentials	Bluetooth® Low Energy: AES 256-bit using CBC & ECDSA 256
Credential verification time	Smart: ≤ 1 second Mobile: mobile device dependent
System interface	Via Bluetooth using the ENGAGE mobile app compatible with iOS and Android
Battery life[2]	Up to two 2 years 4 AA batteries, included
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 32° to 120°F (0° to 49°C)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.13-2022; ANSI/BHMA A156.25-2023 Locked Outdoor Type; ANSI/BHMA A156.5-2020; UL 294; ULC 60839; UL 10C 3-hour; CAN/ULC S104 3-hour; FCC Part 15; Industry Canada (IC); Industry Canada (IC)-RSS210; ADA Compliant[3]; RoHS; REACH; TAA; FL12400; FL4613; FL1592; FL14482; FL10356; FL3905[4]

Functionality[5]

- With Indicator (I)
  - Storeroom
- With Button (B)
  - Office
  - Privacy
  - Apartment
- With Deadbolt (D)
  - Privacy
  - Apartment

Note: Door Position Sensor is required for privacy and apartment functions.

Available Status Signals[5]

- Battery level
- Door position
- Lock/unlock
- Request-to-exit
- Mortise deadbolt[4]

Connectivity Options

- Mobile (Bluetooth at the lock)
- No-Tour[6]

1. Maximum storage capacity of lock; allocation of credentials per user can vary by access control software.
2. Assuming default settings, 40 actuations per day.
3. See 'Lever Styles' section for available options.
4. Mortise deadbolt (D) chassis only.
5. Consult your access control software provider for specific scope of support.
6. With MT20W and smart credential or mobile credential (consult your access control software provider for specific support).

XE360 Mortise Mechanical Specifications	
Chassis	Mortise
Handing	On-site handing with included hex key
ANSI standard (Meets or exceeds)	ANSI/BHMA A156.13-2022 ANSI/BHMA A156.25-2023 Locked outdoor type ANSI/BHMA A156.5-2020
Door thickness	1-3/4" (44mm)
Backset	2-3/4" (70mm)
Latchbolt	Standard: 3/4" (19mm) throw stainless steel latch bolt with anti-friction tongue
Deadbolt	1" (25mm) throw, stainless steel
Armored front	1-1/4" x 8" x 7/32" (32mm x 203mm x 6mm) only
Strike	Standard: 1-3/16" (30mm) curved lip, ANSI, 1-1/4" x 4-7/8" (32mm x 124mm); no box Optional: Additional strike lip lengths and ANSI strike box available
Levers	Zinc
Stile width	Minimum 4-1/2" (114mm)
Materials	All-metal chassis and escutcheon; exterior polycarbonate elements
Cylinder and keys	Schlage Classic C keyway, Conventional 6-pin cylinder with two keys

Reader Specifications	
Credential technologies	Smart (13.56 MHz), Bluetooth Low Energy (LE) (2.4 GHz), and Near Field Communication (NFC)
Standards	ISO standard 15693 and ISO 14443
Read range	Smart: up to .5" Bluetooth® Low Energy: up to 15' NFC: mobile device dependent
Smart credential support	**Secure application area:** Schlage MIFARE DESFire® EV1/EV2/EV3, Schlage MIFARE® Classic® **CSN only:** HID iCLASS®, HID iCLASS SE®, MIFARE DESFire/Classic
Mobile credential support[1]	Schlage Mobile Bluetooth Credential, Integrated PACS mobile credential with Bluetooth, NFC mobile credentials in Apple Wallet® and Google Wallet™

Note: See the Credential Compatibility Guide for full details including interoperable credentials from other manufacturers.

1. Dependent on PACS provider capabilities. Visit us.allegion.com/alliances for more information.

Chassis Options

The XE360 Series portfolio offers tubular, mortise, mortise deadbolt and exit trim solutions to fit the needs of most applications.

Key Override

Key override is standard on all XE360 locks. The unique design conceals the cylinder in the bottom edge of the lock to preserve the sleek look on the door while still allowing emergency access using a key.

Ordering Information

XE360 - M - OF - I - SM - LAT - 626 - P6 - C - 09-663 - 10-072 - 134 - 47467230

1 Series	2 Chassis	3 Class	4 Function	5 Reader	6 Lever Style	7 Finish	8 Key Cylinder	9 Keyway	10 Armored Front	11 Strike	12 Door Thickness	13 Accessories
XE360	M	OF	I	SM	LAT	626	P6	C	09-663	10-072	134	47467230

Selections correspond with the numbers above. See price book for specific configuration options.

4 Function

I	Indicator
B	Button
D	Deadbolt

5 Reader

SM	Smart; Bluetooth and NFC mobile

6 Lever Style

BRW	Broadway
LAT	Latitude
NEP	Neptune
LON-E	Longitude-extended length

7 Finish

619	Satin Nickel
622	Matte Black
626	Satin Chrome

8 Key Cylinder

P6	Schlage Conventional, 6-pin

See price book for additional options.

9 Keyway

C	Schlage Classic Obverse

See price book for additional options.

10 Armored Front

	1-1/4" x 8" x 7/32"
09-663	For indicator and button
09-666	For deadbolt

11 Strike

10-072	1-3/16" curved lip, ANSI, 1-1/4" x 4-7/8"; no box

See price book for additional strike lip lengths and ANSI strike box options.

12 Door Thickness

134	1-3/4" only

13 Accessories

47467230	Door Position Switch (DPS)
LLLDPS	Less Door Position Switch (DPS)

Lever Styles

Broadway

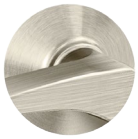
Latitude

Neptune (Sparta)

Longitude - Extended Length

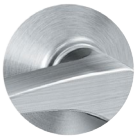
Extended length lever is designed to lower required operational force and improve rotational grip for higher accessibility.

Finishes



619
Satin Nickel

622
Matte Black



626
Satin Chrome

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015589, Rev. 10/25

XE360™ Series

Wireless Exit Trim

Note: Exit device sold separately.

Overview

Building upon the innovation and reliability of Schlage electronic locks, the XE360 Series is the next generation of wireless locks from this trusted brand. The wireless exit trim is compatible with rim and surface vertical rod exit devices from Falcon and Von Duprin, and suites flawlessly with the XE360 tubular and mortise chassis to ensure an aesthetically consistent property.

XE360 currently works within No-Tour or offline access control systems. Credential support includes smart, Bluetooth and NFC mobile[1].

The open architecture design of the XE360 allows it to be managed by Allegion software or be integrated into popular physical access control and Proptech systems through our PACS Alliance program. This enables customers to choose what best fits their requirements now and transition to another solution at any time.

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Schlage Mobile Bluetooth® Credential
- Other competitive credentials

Schlage Credential Services

- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

Features & Benefits

- Next level design inside and out
- Available for rim and surface vertical rod exit devices from Falcon and Von Duprin
- Utilizes a modular adapter for simple transitions to a wide variety of exit devices
- Credential support includes Schlage MIFARE®, Bluetooth® and NFC mobile[1]
- Advanced encryption keeps data and communications safe
- Wireless configuration from connected smartphones and tablets
- No-Tour or offline system capability
- Ready for the future with the innovative FleX Module™ that allows for communication type, memory and encryption upgrades
- Exceeds Grade 1 testing for exceptional quality and reliability
- Open architecture – interoperable and simple for software alliances to integrate
- Works seamlessly with other Schlage wireless locks, including Schlage Control[2]
- Uniquely concealed key override standard on all locks

1. Dependent on access control software provider support of specific mobile credentials.
2. Check with your Proptech or PACS provider for specific support.

CYBERSECURITY
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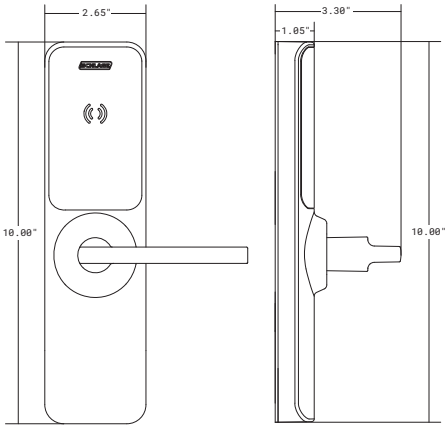
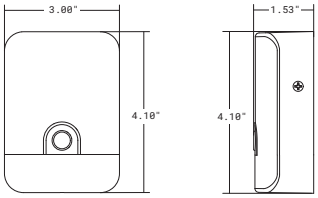
Exterior

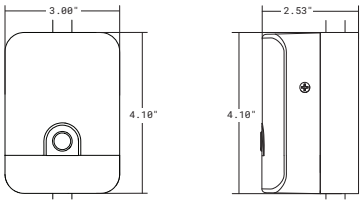


Interior

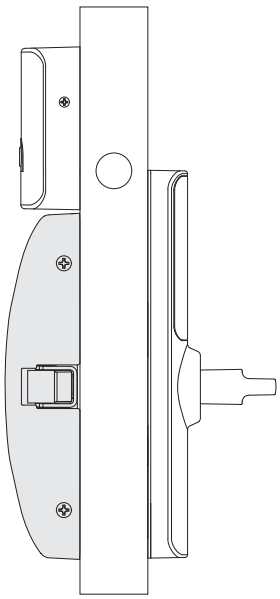
Rim



Surface vertical rod (SVR)



Profile - with Falcon 25 Rim



XE360 Wireless Electronic Lock Specifications	
Credentials	2,000[1]
Audits	2,000[1]
Visual communications	LED (red, amber, green, blue)
Audible communications	Yes, field configurable
Communication and encryption standards – lock	Bluetooth® Low Energy (version 5) Advanced Encryption Standard (AES), 128- and 256-bit
Communication and encryption standards – mobile credentials	Bluetooth® Low Energy: AES 256-bit using CBC & ECDSA 256
Credential verification time	Smart: ≤ 1 second Mobile: mobile device dependent
System interface	Via Bluetooth using the ENGAGE mobile app compatible with iOS and Android
Battery life[2]	Up to two 2 years 4 AA batteries, included
Operating temperature	Exterior: -31° to 151°F (-35° to 66°C) Interior: 32° to 120°F (0° to 49°C)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.3-2020 Grade 1; ANSI/BHMA A156.25-2023 Locked Outdoor Type; ANSI/BHMA A156.5-2020; UL 294; ULC 60839; UL 10C 3-hour; CAN/ULC S104 3-hour; FCC Part 15; Industry Canada (IC); Industry Canada (IC)-RSS210; ADA Compliant[3]; RoHS; REACH; TAA

Functionality[4]

- With Indicator (I)
  - Storeroom
- With Button (B)
  - Office
  - Privacy
  - Apartment

Note: Door Position Sensor is required for privacy and apartment functions.

Available Status Signals[4]

- Battery level
- Door position
- Lock/unlock
- Request-to-exit[5]

Connectivity Options

- Mobile (Bluetooth at the lock)
- No-Tour[6]

1. Maximum storage capacity of lock; allocation of credentials per user can vary by access control software.
2. Assuming default settings, 40 actuations per day.
3. See 'Lever Styles' section for available options.
4. Consult your access control software provider for specific scope of support.
5. Exit compatibility - supports both Low Current (RX-LC) and Normal versions (RX) of REX switch.
6. With MT20W and smart credential or mobile credential (consult your access control software provider for specific support).

XE360 Exit Trim Mechanical Specifications	
Chassis	Exit trim, wide stile
Handing	On-site handing with included hex key
ANSI standard (Meets or exceeds)	ANSI/BHMA A156.13-2020 Grade 1 ANSI/BHMA A156.25-2023 Locked outdoor type ANSI/BHMA A156.5-2020
Door thickness	1-3/4" (44mm)
Backset	Defined by exit device
Latchbolt	Defined by exit device
Strike	Defined by exit device
Levers	Zinc
Stile width	Minimum 4-1/4" (108mm)
Materials	All-metal chassis and escutcheon; exterior polycarbonate elements
Cylinder & keys	Schlage Classic C keyway, Conventional 6-pin cylinder with two keys

Reader Specifications	
Credential technologies	Smart (13.56 MHz), Bluetooth Low Energy (LE) (2.4 GHz), and Near Field Communication (NFC)
Standards	ISO standard 15693 and ISO 14443
Read range	Smart: up to .5" Bluetooth® Low Energy: up to 15' NFC: mobile device dependent
Smart credential support	**Secure application area:** Schlage MIFARE DESFire® EV1/EV2/EV3, Schlage MIFARE® Classic® **CSN only:** HID iCLASS®, HID iCLASS SE®, MIFARE DESFire/Classic
Mobile credential support[1]	Schlage Mobile Bluetooth Credential, Integrated PACS mobile credential with Bluetooth, Apple Wallet® NFC student ID and employee badge; Google Wallet™ NFC student ID and employee badge

Note: See the Credential Compatibility Guide for full details including interoperable credentials from other manufacturers.

1. Dependent on PACS provider capabilities. Visit us.allegion.com/alliances for more information.

Exit Device Compatibility

The XE360 exit trim is currently compatible with rim and surface vertical rod styles of the following exit devices:

- Falcon 25
- Von Duprin 98/99; XP98/99 rim
- Von Duprin 78 rim
- Von Duprin 22

Chassis Options

The XE360 Series portfolio offers tubular, mortise, mortise deadbolt and exit trim solutions to fit the needs of most applications.

Key Override

Key override is standard on all XE360 locks. The unique design conceals the cylinder in the bottom edge of the lock to preserve the sleek look on the door while still allowing emergency access using a key.

Ordering Information

XE360	-	EW	-	25R	-	OF	-	I	-	SM	-	LAT	-	626	-	P6	-	C	-	134	-	47467230
Series		Chassis		Exit Trim Adapter		Class		Function		Reader		Lever Style		Finish		Key Cylinder		Keyway		Door Thickness		Accessories
1		2		3		4		5		6		7		8		9		10		11		12

Selections correspond with the numbers above. See price book for specific configuration options.

3 Exit Trim Adapter

25R	Falcon 25 rim
25S	Falcon 25 surface vertical rod
99R	Von Duprin 98/99 or XP98/99 Rim
99S	Von Duprin 98/99 surface vertical rod
78R	Von Duprin 78 rim
22R	Von Duprin 22 rim
22S	Von Duprin 22 surface vertical rod

5 Function

I	Indicator
B	Button

6 Reader

SM	Smart; Bluetooth and NFC mobile

7 Lever Style

BRW	Broadway
LAT	Latitude
NEP	Neptune
LON-E	Longitude-extended length

8 Finish

619	Satin Nickel
622	Matte Black
626	Satin Chrome

Note: Interior finish of Exit Trim device will always be 622 Matte Black.

9 Key Cylinder

P6	Schlage Conventional, 6-pin

See price book for additional options.

10 Keyway

C	Schlage Classic Obverse

See price book for additional options.

11 Door Thickness

134	1-3/4" only

12 Accessories

47467230	Door Position Switch (DPS)
LLLDPS	Less Door Position Switch (DPS)

Lever Styles

Broadway

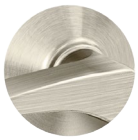
Latitude

Neptune (Sparta)

Longitude - Extended Length

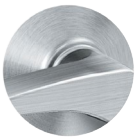
Extended length lever is designed to lower required operational force and improve rotational grip for higher accessibility.

Finishes



619
Satin Nickel

622
Matte Black



626
Satin Chrome

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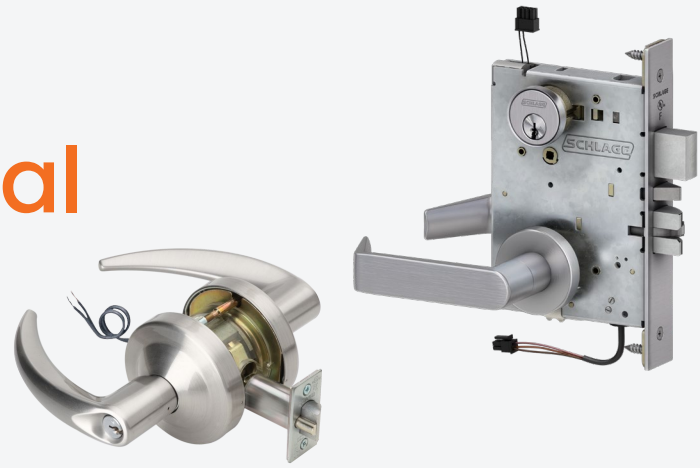
015590, Rev. 11/25

ALLEGION

Electromechanical Solutions



This section of the Electronic Access Control catalog covers LCN, Schlage, Von Duprin and Ives products which can be equipped with electronic features for added security and functionality.

Electrified Locks

Overview

An electromechanical lock is one of the most basic aspects of electronic access systems; however, they are as important as any other component of such a system. Mechanical security components must be able to stand up to constant wear and tear, and be durable enough to handle direct attack or abuse. Without such durability and integrity, a building's assets and people are at risk.

Features

The two primary Schlage commercial lock families are the L Series Grade 1 mortise lock and the ND Series Grade 1 cylindrical lock. Both the L and ND series are available in mechanical, wired electrified and wireless electronic configurations so that an entire project can be suited with a single lock family for a consistent look and feel. The features outlined below will focus on the wired electrified offerings of these two series.

Electrified Schlage L and ND locks have numerous advantages due to their use of motors instead of solenoids in their locking mechanisms. Both are highly-efficient, having a very low maximum current draw—which saves money by allowing more locks on a single power supply. They also have an extremely low holding current—only 10mA; which eliminates instances of "hot levers" often found in solenoid-based electrified locks. Motor driven locks are also inherently more quiet than the solenoid counterparts.

Flexibility is also enhanced with the wired electrified Schlage L and ND. A single lock designed to offer lever control can support 12 or 24V applications, and the operating mode—electrically locking (fail safe) or electrically unlocking (fail secure)—can easily be selected with a switch on the chassis. Request-to-exit, a popular option used on many locks, can even be "plugged in" at a later time. Combined, this flexibility allows a single electrified L or electrified ND lock to replace 8 traditional electrified locks - thus ensuring the right lock is always available at the job site or on the work truck. Additional options, including six L Series lock functions that feature motorized latch retraction, are available on the following product-specific pages.

Benefits

Schlage L and ND Series grade 1 locks are best-in-class commercial locks offered in multiple electrified functions to fit the security needs and use applications of any building. They are supported by a wide range of Schlage reader and controller solutions to improve security and simplify integration into the building's access control system. Like other mechanical and electronic solutions, they are compatible with a broad offering of key systems and credentials to ensure appropriate access and security.

Exit Devices - Electrical Options

Overview

Exit devices are a critical part of a fire and life safety egress system and provide safe and reliable service when properly applied and maintained. Von Duprin's portfolio of exit device hardware features a variety of options that allow the device to be controlled electronically. When an electrical option is used, the exit device integrates into any access control system.

Features

There are a variety of electrical options that can be applied to a Von Duprin exit device. Electric latch retraction allows for the remote unlatching of exit devices. Monitoring switches, such as RX and LX, are used to signal the state of an opening. Delayed egress and alarmed exits, such as the Chexit and ALK exit, help to deter unauthorized use of certain openings. Von Duprin also offers a variety of electrified exit trims that work seamlessly with the exit device. For a complete view of the range of available Von Duprin electrical options, please see the Von Duprin exit device catalogs.

Benefits

Applying electrical features to your Von Duprin exit devices allows you to remotely control, monitor and delay or alarm latch retraction, while allowing safe and efficient egress.

Door Controls - Electrical Options

Overview

LCN has automatic operator solutions to meet the full array of ADA accessibility and door control needs, including low-energy pneumatic and electric designs. What's more, they utilize several patented components and are all assembled by hand in the United States. LCN's comprehensive portfolio of solutions help building owners bridge the gap between business objectives and ADA accessibility, without sacrificing other needs related to high use and abuse, design, fire and life safety and security.

Features

LCN's low-energy operators can be broken into two categories: electrohydraulic and electromechanical. The electrohydraulic auto equalizer products can operate as normal rack and pinion door closers or, at the touch of a button, open automatically via electric or pneumatic–pressurized air–power. An integrated digital control suite contains all adjustable settings and diagnostic information. Available in both surface and concealed mounts, these operators are perfect for any door with a variety of both manual and automatic usage.

The electromechanical products, on the other hand, are designed primarily for automatic use with only occasional manual opening. A digital control box provides a variety of user-adjustable features and settings along with housing the intelligence for LCN's self-adjusting operators. Surface-mounted and overhead concealed mountings are available, giving customers the flexibility to choose the best configuration for each unique opening.

Benefits

LCN's automatic operators have been the proven standard in schools, healthcare facilities, and commercial buildings for over 25 years and are designed to meet ADA regulations for accessible openings and NFPA guidelines for fire and life safety. They are easily retrofitted into existing doors and frames, work seamlessly into new construction projects, and are an excellent solution to add convenience, accessibility and total door control to any opening.

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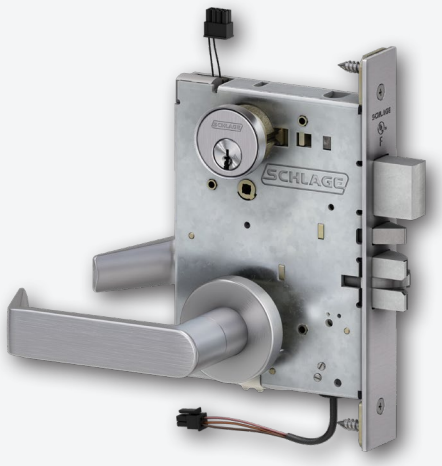
L Series

Electrified Mortise Locks with Lever Control



Overview

Many of the most advanced electronic access systems still rely on the strength and functionality of the mechanical lock hardware on the door. L Series electrified mortise locks include Schlage's most diverse aesthetic options in a design built for performance, security and durability. It can be used as part of an integrated system or as a standalone solution with a buzzer or other device as the controller.

The L Series offers exceptional flexibility and power savings. The lock automatically adapts to 12V or 24V DC input, and a case-mounted switch allows selection between EL and EU operation. Request-to-exit is modular and can be added without opening the lock case. 0.4 amp maximum current draw (24V operating voltage) allows multiple units on a single power supply, while 0.1 amp holding current eliminates "hot levers" in EL applications.

Utilizing the same levers, trims and options as the mechanical Schlage L Series mortise, it suites seamlessly with the other L Series hardware which includes both purely mechanical and fully electronic solutions. And because it is based on the Schlage L mortise, it carries the same proven record of performance, strength and durability from the most trusted name in the industry.

Recommended Applications

The wired electrified L Series is ideal for new construction and high traffic areas where hardwired power ensures continuous operation and where electrified door prep, hinges and wiring can easily be incorporated into the building. The electrified L Series is regularly used as part of an access control system for high security areas, or independently in areas that require a remote access switch.

Vandlgard® Feature

The Vandlgard optional feature available on many functions allows the outside lever to rotate freely down when in a locked state. This limits the ability of vandals to apply excessive force to the lever helping to prevent damage to internal components.

Features & Benefits

- Universal input voltage – accepts 12V or 24V DC for installation flexibility
- User selectable fail safe/fail secure through use of switch on lock case
- Low maximum current draw allows multiple locks on a single power supply
- Low holding current produces minimal heat, eliminating "hot levers" in electrically locking applications
- Modular design allows RX feature to be added at a later time without opening the lock case
- UL listed for 3-hour fire door
- Available with Vandlgard® lever engagement - ideal for areas subject to abuse or vandalism
- Extensive options for lever styles, finishes and functions
- Optional feature on two functions allows key override of the inside thumbturn when it is being held in the locked position to stop unwanted barricade situations

Available options:

- Request-to-Exit (RX)
- Latchbolt Monitor (LX)
- Door Position Sensor (DPS) - non-deadbolt functions only
- Deadbolt Monitor (DM) - standard, deadbolt functions only

Mechanical Specifications	
Case material	Cold Rolled Steel (CRS) with zinc dichromate plating
Case size	L9000 Series: 4-7/16" x 6-1/16" x 1" (113 mm x 154 mm x 25 mm)
Spacing	Knob or lever to cylinder: 3-7/8" (98 mm); Knob or lever to thumbturn hub: 2-11/16" (68 mm)
Door thickness	Standard: 1-3/4" (44 mm) Optional: 1-3/8" (35 mm) to 2-1/2" (64 mm); over 2-1/2" door ranges vary by function. Specify door thickness greater than 1-3/4" and position in door EE, EI, EO, ED.
Backset	2-3/4" (70 mm) only

Trim	
Handing	Field-reversible without disassembly
Lever/knob	33 lever designs: Forged brass and cast stainless steel Two knob designs: Heavy-duty wrought brass or stainless steel Ligature-resistant and hospital push/pull trim also available Tactile warning applied to outside lever; available on 01, 02, 03, 05, 06, 07, 12, 17, 18, M51, M52, M81, ME1, ME2, ME3 lever designs
Rose/ escutcheon	L escutcheons: 7-15/16" x 1-3/4" x 7/16" (202 mm x 44 mm x 11 mm); cold-forged brass and stainless steel N escutcheons: 7-7/8" x 2-1/2" x 7/16" (200 mm x 64 mm x 11 mm); heavy-wrought, reinforced brass and stainless steel Roses: A, B, C: wrought brass and stainless steel; AVA and MER: forged brass
Combinations	Available with knob both sides, lever both sides, or knob/lever combinations. Roses cannot be combined with escutcheons.
Finishes	12 available; 626 and 630 finishes are also available with optional antimicrobial coating. High Security Ligature-Resistant trim (HSLR) is available in 630 satin stainless steel only

Latches, Armors, & Strikes	
Armor	Standard: 1-1/4" x 8" x 7/32" (32 mm x 203 mm x 6 mm) Optional: 1-1/16" x 8" x 7/32" (27 mm x 203 mm x 6 mm)
Latch	3/4" (19 mm) throw stainless steel latch with anti-friction tongue
Deadbolt	1" (25 mm) throw stainless steel deadbolt
Strike	Standard: ANSI curved lip strike 1-1/4" x 4-7/8" (32 mm x 124 mm) x 1-3/16" (30 mm) lip with dust box; Optional: Extended lip strike options available

Keying	
Cylinder format	6-pin Conventional mortise cylinder (standard); also available in concealed mortise cylinder, FSIC, SFIC and 7-pin SL cylinder formats plus less cylinder options. Two nickel silver cut keys per lock.
Keyway	Patented Everest 29 S123 (standard); also available in open, restricted, and Primus security levels with available master keying and construction keying.

Warranty	
	3-year limited electromechanical

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Electronic Specifications	
Voltage	Auto-detects 12/24V DC operation
Peak current	12V operating voltage: 1 amp 24V operating voltage: 0.4 amp
Holding current	0.1 amp
Operating temperature	Maximum +120°F (+49°C) Minimum -32°F (0°C)
Interfacing devices	Biometric devices, wall switches, security consoles, access card readers, thermo-sensitive devices, smoke and fire alarms, telephone access controls, automatic time devices and computerized controls
Micro switch electrical rating for request-to-exit (RX) function and latchbolt monitor (LX)	Rating: 2A @ 30V DC

Certifications	
ANSI/BHMA	ANSI/BHMA A156.13-2017 Series 1000, Grade 1 Operational and Security **With FSIC Interchangeable Core Cylinders:** Grade 1 Operational, Grade 2 Security **With SFIC Interchangeable Core Cylinders:** Grade 1 Operational, Grade 3 Security
ICC	Complies with ICC A117.1 Accessible and Usable Buildings and Facilities
UL/cUL	UL 10C and CAN/ULC-S104 3-hour fire door UL 437 Listed when using UL 437 Primus cylinder
UL 294	UL 294 Access Control Performance Levels: Destructive Attack, Level 1; Line Security, Level 1; Standby Power, Level 1; Endurance, Level IV (with LX, Endurance, Level I).
CA Fire Code	All levers with a return to door of 1/2" (13 mm) or less comply (Formerly Title 19, California State Fire Marshal Standard)
Building codes	Miami-Dade NOA and Florida Building Commission listings; Texas Department of Insurance (TDI) for impact and non-impact applications
Federal	BAA compliant, all functions

Electrified Lever Control Functions	
No cylinder	L9090EL/EU electrically locking/unlocking outside lever L9091EL/EU electrically locking/unlocking both levers
Outside cylinder	L9092EL/EU electrically locking/unlocking outside lever L9093EL/EU Electrically locking/unlocking both levers
Inside & outside cylinder	L9095EL/EU electrically locking/unlocking both levers

Electrified Lever Control Functions with Deadbolt	
Outside cylinder (Optional key override feature available)	L9492EL/EU electrically locking/unlocking outside lever; deadbolt with inside thumbturn L9493EL/EU electrically locking/unlocking both levers; deadbolt with inside thumbturn
Inside and outside cylinder	L9494EL/EU electrically locking/unlocking outside lever; deadbolt L9495EL/EU electrically locking/unlocking both levers; deadbolt

Note: See catalog for additional details.

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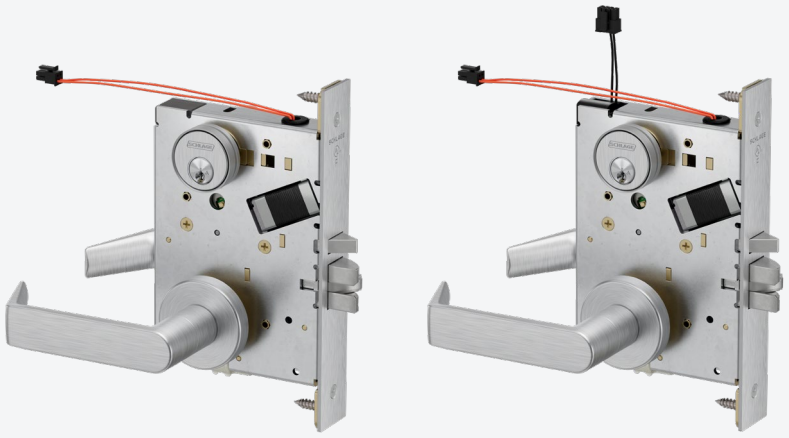
L Series

Motorized Latch Retraction Mortise Locks



Overview

Latch retraction capable L Series Grade 1 locks create application opportunity across many markets whether the need is security, controlled access or hands-free operation. They can replace the need for electric strike use in a form that is more secure and aesthetically pleasing. Quiet operation makes them ideal for Health Care environments or anywhere repeat user exit and entry can become an annoyance.

Use in conjunction with an auto operator

- Accessible public restrooms
- High security data storage areas
- Hands-free entries for infection control and clean room applications
- Spaces requiring cart access such as storage areas
- Loading dock single delivery doors

Low traffic openings where limited or timed access is needed

- Conference or training areas
- Daytime employee access
- Service/utility closets

K-12

- Visitor entrance vestibules
- Administration office access
- Classroom doors with centralized lockdown

As part of the L Series mortise family, motorized latch retraction functions fit seamlessly in your facility. They use the same door pocket as a mechanical or electrified L Series lock. Unlike electrified strikes, they do not require the cutting of the door frame which can risk the fire rating of the entry. Wiring moves through the door to connect on the same side as an auto operator.

L Series mortise locks include Schlage's most diverse aesthetic options in a design built for performance, security and durability. Latch retraction functions can be used as part of an integrated system or as a standalone solution with a buzzer or other device as the controller. The L Series offers exceptional flexibility and power savings. Utilizing the same levers, trims and options as the mechanical Schlage L Series mortise, they suite seamlessly with the other L Series hardware which includes both purely mechanical and fully electronic solutions.

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Features & Benefits

All functions:

- Quick, motor-controlled activation enables momentary or continuous (push/pull) operation
- Patent-pending feature detects binding conditions on the motor and adjusts as needed to overcome side load, static pressure and warped door conditions
- Quiet, stepper motor uses 24V DC to produce high torque at low speeds
- Fits same door prep as Schlage L9000 mortise locks
- Most functions accommodate optional use of Request-to-exit (RX) and/or Latchbolt monitor (LX)
- Modular design allows RX feature to be added at a later time without opening the lock case
- UL listed for 3-hour fire door
- Available in all L Series finishes, lever designs, roses and escutcheons

Electrically locked/unlocked functions:

- 3 of 6 functions feature user selectable fail safe/fail secure lever control
- Separate motors control lever and latch
- Peak power consumption combined is 1.8 amps
- Low holding current on lever motor produces minimal heat, eliminating "hot levers" in electrically locking applications

Mechanical Specifications	
Case material	Cold Rolled Steel (CRS) with zinc dichromate plating
Case size	L9000 Series: 4-7/16" x 6-1/16" x 1" (113 mm x 154 mm x 25 mm)
Spacing	Lever to cylinder: 3-7/8" (98 mm); Lever to thumbturn hub: 2-11/16" (68 mm)
Door thickness	Standard: 1-3/4" (44 mm) Optional: 1-3/8" (35 mm) Over 1-3/4" (44 mm) specify door thickness and position in door EE, EI, EO, ED
Backset	2-3/4" (70 mm) only

Trim	
Handing	Field-reversible without disassembly
Lever/knob	33 lever designs: Forged brass and cast stainless steel Tactile warning applied to outside lever; available on 01, 02, 03, 05, 06, 07, 12, 17, 18, M51, M52, M81, ME1, ME2, ME3 lever designs
Rose/ escutcheon	L escutcheons: 7-15/16" x 1-3/4" x 7/16" (202 mm x 44 mm x 11 mm); cold-forged brass and stainless steel N escutcheons: 7-7/8" x 2-1/2" x 7/16" (200 mm x 64 mm x 11 mm); heavy-wrought, reinforced brass and stainless steel Roses: A, B, C: wrought brass and stainless steel; AVA and MER: forged brass
Options	1/8" thick lock case lead lining available for use in x-ray or other rooms with radiation concern

Latches, Armors & Strikes	
Armor	Standard: 1-1/4" x 8" x 7/32" (32 mm x 203 mm x 6 mm) Optional: 1-1/16" x 8" x 7/32" (27 mm x 203 mm x 6 mm)
Latch	3/4" (19 mm) throw stainless steel latch with anti-friction tongue
Strike	Standard: ANSI curved lip strike 1-1/4" x 4-7/8" (32 mm x 124 mm) x 1-3/16" (30 mm) lip with dust box; Optional: Extended lip strike options (7/8", 1", 1-1/2", 1-3/4", 2")

Keying	
Cylinder format	6-pin Conventional mortise cylinder (standard); also available in concealed mortise cylinder, FSIC, SFIC and 7-pin SL cylinder formats plus less cylinder options. Two nickel silver cut keys per lock.
Keyway	Patented Everest 29 S123 (standard); also available in open, restricted, and Primus security levels with available master keying and construction keying.

Warranty	
	3-year limited electromechanical

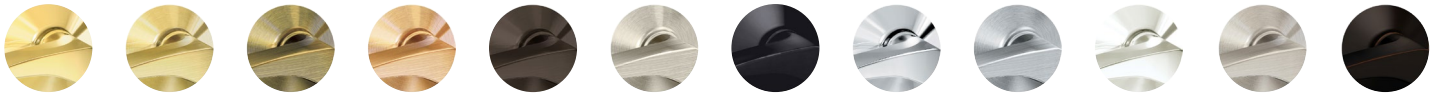
Electronic Specifications	
Input voltage	24V DC operation only
Operating mode	Fail Safe or Fail Secure via switch on chassis (except L9510, L9580, and L9582)
Peak current	Latch retraction: 1.4 amp Lever control: 0.4 amp
Holding current	Latch retraction: 0.1 amp Lever control: 0.1 amp
Request to Exit	Modular option (when ordering or added in field) Rating: 2A @ 30V DC
Latch bolt monitor	Rating: 2A @ 30V DC
Interfacing devices	Biometric devices, wall switches, security consoles, access card readers, thermosensitive devices, smoke and fire alarms, telephone access controls, automatic time devices and computerized controls

Certifications	
ANSI/BHMA	ANSI/BHMA A156.13-2017 Series 1000, Grade 1 Operational and Security **With FSIC Interchangeable Core Cylinders:** Grade 1 Operational, Grade 2 Security **With SFIC Interchangeable Core Cylinders:** Grade 1 Operational, Grade 3 Security
ICC	Complies with ICC A117.1 Accessible and Usable Buildings and Facilities
UL/cUL	UL 10C and CAN/ULC-S104 3-hour fire door UL 437 Listed when using UL 437 Primus cylinder
UL 294	UL 294 Access Control Performance Levels: Destructive Attack, Level 1; Line Security, Level 1; Standby Power, Level 1; Endurance, Level IV (with LX, Endurance, Level I).
CA Fire Code	All levers with a return to door of 1/2" (13 mm) or less comply (Formerly Title 19, California State Fire Marshal Standard)
Building codes	Miami-Dade NOA and Florida Building Commission listings; Texas Department of Insurance (TDI) for impact and non-impact applications
Federal	BAA compliant, all functions

Functions

Latch retraction only		Options	
L9510	Passage latch	RX	LX
L9580	Storeroom lock	RX	LX
L9582	Institution lock	–	LX
Latch retraction with lever control		**Options**	
L9692EL/EU	Electrically locking/unlocking outside lever, outside cylinder	RX	LX
L9695EL/EU	Electrically locking/unlocking both levers, double cylinder	RX	LX
L9696EL/EU	Electrically locking/unlocking inside lever, double cylinder	–	LX

Finishes



605 Bright Brass | 606 Satin Brass | 609 Antique Bronze | 612 Satin Bronze | 613 Oil Rubbed Bronze | 619 Satin Nickel | 622 Matte Black | 625 Bright Chrome | 626 Satin Chrome | 629 Bright Stainless | 630 Satin Stainless | 643e Aged Bronze

Note: Antimicrobial coating is available over 626 finish.

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ND Series

Electrified Cylindrical Lock

Overview

Many of the most advanced electronic access control systems still rely on the strength and functionality of the mechanical lock hardware on the door. ND Series electrified locks feature Schlage's most robust cylindrical design built for performance, security and durability. It is a "beyond grade 1" lock in terms of strength and can be used as part of an integrated system or as a standalone solution with a buzzer or other device as the controller.

The Schlage ND cylindrical lock uses a motor instead of a solenoid to provide quiet operation and energy efficiency. The maximum current draw of 0.24 amp allows more locks to run off a single power supply. A low, 0.010 amp holding current eliminates any potential for hot levers in electrically locking applications or in electrically unlocking applications where the door is left open for long periods of time. ND Series can be quickly and easily installed and is compatible with various key systems for field adaptability. It suites seamlessly with the other ND Series hardware which includes both purely mechanical and fully electronic solutions.

When it comes to access control, mechanical components are just as important as their electronic counterparts. The Schlage ND Series provides versatility and easy installation to complete your access control system.

Recommended Applications

The wired electrified ND Series is ideal for new construction and high traffic areas where hardwired power ensures continuous operation and where electrified door prep, hinges and wiring can easily be incorporated into the building. The electrified ND Series is regularly used as part of an access control system for high security areas, or independently in areas that require a remote access switch.

Features & Benefits

- Exceeds ANSI A156.2 series 4000 Grade 1 torque requirements
- Universal input voltage – accepts 12V or 24V DC for installation flexibility
- Change operation mode between Electrically Unlocking (EU or Fail Secure) and Electrically Locking (EL or Fail Safe) by simply flipping a switch on the chassis
- Low maximum current draw allows multiple locks on a single power supply
- Low holding current produces minimal heat, eliminating "hot levers" in electrically locking applications
- Request-to-exit functionality can be easily upgraded in the field with the following kit part #: N123-062
- Extensive options for lever styles, finishes and functions
- UL listed for 3-hour fire door
- Available with Vandlgard® lever engagement on storeroom function - ideal for areas subject to abuse or vandalism

ND Series Mechanical Specifications	
Handing	Non-handed
Door thickness	1-5/8" to 2-1/8" (41-54 mm) standard including Vandlgard
Backset	2-3/4" (70 mm) standard, 2-3/8", 3-3/4" and 5" (60, 92, and 127 mm) optional
Faceplate	Brass or stainless steel; 1-1/8" x 2-1/4" (29 mm x 57 mm) square corner, beveled
Lock chassis	Zinc and steel components plated for corrosion resistance
Latch	Stainless steel, 1/2" (12 mm) throw, spring latch or deadlatch; 3/4" (19 mm) throw anti-friction deadlatch available for pairs of fire doors
Exposed trim levers	Pressure cast zinc, plated to match finish designation in nine designs
Roses	Wrought brass or zinc, plated to match product finish specification
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" (32 mm x 124 mm) with 1-3/16" lip length standard
Cylinders and keys	Standard: 6-pin, solid brass Conventional (KIL) cylinder in the patented Schlage Everest 29 S123 keyway; two nickel silver cut keys per lock
Keying options	Available in 6-pin full size interchangeable core (FSIC), 7-pin SL in Conventional and FSIC formats, and 7-pin small format interchangeable core (SFIC). Less cylinder options are available made to fit Primus Conventional and FSIC formats plus non-Schlage cylinders from Best, Corbin Russwin, Medeco, Sargent and Yale.
Lever design and finish	Nine lever designs are available in nine finishes. 626 finish is also available with optional antimicrobial coating. High Security Ligature-Resistant trim (HSLR) is available in 630 satin stainless steel for all functions.

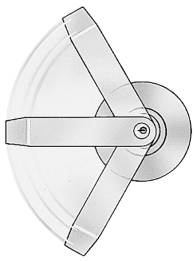
ND Series Electronic Specifications	
Voltage	Auto-detects 12/24V DC operation
Peak current	0.24 amp (240mA) at 70° F
Holding current	0.01 amp (10mA)
Operating temperature	Maximum +120°F (+49°C) Minimum 32°F (0°C)
Micro switch electrical rating for request-to-exit (N523-194) function	2 amps 30V DC

ND Series Electrified Functions	
No cylinder	ND12EL: Exit lock, electrically locked outside lever (fail safe) ND12EU: Exit lock, electrically unlocked outside lever (fail secure)
Outside cylinder	ND80EL: Storeroom lock, electrically locked outside lever (fail safe) ND80EU: Storeroom lock, electrically unlocked outside lever (fail secure)
Vandlgard	ND96EL: Vandlgard® storeroom lock, electrically locked outside lever (fail safe) ND96EU: Vandlgard® storeroom lock, electrically unlocked outside lever (fail secure)

Note: See catalog for additional details.

Vandlgard® Functions

Some functions feature Vandlgard locked lever protection. It allows the outside lever to rotate freely up and down when locked to limit the ability of vandals to apply excessive force to the chassis helping to prevent damage to internal components.



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PM Series™

Electrified Mortise Locks

Overview

Purpose-built to serve the commercial real estate, multifamily and hospitality industries, Schlage PM Series™ electrified mortise locks bring trusted quality to openings requiring secure access or free egress at a competitive price. Available in three electrified functions, these locks feature quiet, lever control (motor-driven actuation) for reliable operation and reduced power consumption. They integrate seamlessly into wired access control systems or can function as a standalone solution controlled by a switch, relay or other device.

The PM Series locks automatically adapt to 12V or 24V DC input and allow simple field selection between fail safe (EL) and fail secure (EU) operation via the case-mounted switch. With a low 0.4 amp maximum current draw and 0.1 amp holding current, it supports multiple locks per power supply while preventing "hot lever" conditions. Optional features like Request-to-Exit (RX) and Latchbolt Monitoring (LX) enhance visibility and control within the access control system.

Featuring the same levers, trims, and design continuity as the mechanical PM Series, it ensures a cohesive aesthetic across the Performance Series lock family—delivering Schlage quality, style and flexibility in an electrified Grade 1 mortise solution built for everyday performance.

Recommended Applications

The electrified PM Series is ideal for new construction and medium-high traffic areas where hardwired power ensures continuous operation and where electrified door prep, hinges and wiring can easily be incorporated into the building. The electrified PM Series can be used as part of an access control system for high security areas, or independently in areas that require a remote access switch.

For additional information and resources on Schlage PM Series electrified mortise locks, visit the ***commercial.schlage.com***

Features & Benefits

- Certified to ANSI/BHMA Grade 1 operational and security standards
- Universal input voltage – accepts 12V or 24V DC for installation flexibility
- User selectable fail safe/fail secure through use of switch on lock case
- Low maximum current draw allows multiple locks on a single power supply
- Low holding current produces minimal heat, eliminating "hot levers" in electrically locking applications
- Modular design allows RX feature to be added at a later time without opening the lock case
- UL listed for 3-hour fire door
- Available in 10 lever styles, one escutcheon, three rose styles, and six finishes
- Request to exit (RX) switch monitors the inside lever with enhanced detection level that balances security with lever sensitivity
- Comes standard with Allegion Connect Molex connector and wiring harness for simplified install and maintenance[1]
- 2 year limited electro-mechanical warranty

Available options:

- Request-to-Exit (RX)
- Latchbolt Monitor (LX)

1. As an alternative installation method, the Molex connector may be cut off and the lock installed with traditional wire splicing methods OR by using a 6" wiring harness (included) if additional wire length is needed.

Mechanical Specifications	
Case material	Cold Rolled Steel (CRS) with zinc dichromate plating
Case size	4-7/16" x 6-1/16" x 1" (113 mm x 154 mm x 25 mm)
Spacing	**Lever to cylinder:** 3-7/8" (98 mm); **Lever to thumbturn hub:** 2-11/16" (68 mm)
Door thickness	**Standard:** 1-3/4" (44 mm) **Optional:** 1-3/8" (35 mm) Over 1-3/4" (44 mm) and less than 2-1/2" (63.5 mm) specify door thickness (Available EE only)
Backset	2-3/4" (70 mm) only

Trim	
Handing	Field-reversible without disassembly
Lever	**10 lever designs (see cut sheet):** Zinc
Rose/ escutcheon	**N escutcheons:** 7-7/8" x 2-1/2" x 7/16" (200 mm x 64 mm x 11 mm); Brass **Roses:** A, C, D: Brass
Finishes	**6 available:** 613, 619, 622, 625, 626, 643e

Latches, Armors & Strikes	
Armor	**Standard:** 1-1/4" x 8" x 7/32" (32 mm x 203 mm x 6 mm) **Optional:** 1-1/16" x 8" x 7/32" (27 mm x 203 mm x 6 mm)
Latch	3/4" (19 mm) throw stainless steel latch with anti-friction tongue
Deadbolt	1" (25 mm) throw stainless steel deadbolt
Strike	**Standard:** ANSI curved lip strike 1-1/4" x 4-7/8" (32 mm x 124 mm) x 1-3/16" (30 mm) lip with dust box; **Optional:** Extended lip strike options (7/8", 1", 1-1/2", 1-3/4", 2")

Keying	
Cylinder format	6-pin Conventional mortise cylinder (standard); also available in FSIC, SFIC and 7-pin SL cylinder formats plus less cylinder options. Two nickel silver cut keys per lock.
Keyway	Patented Everest 29 S123 (standard); also available in open, restricted, and Primus XP security levels with available master keying and construction keying.

Warranty	
	2-year limited electromechanical For the most comprehensive and updated warranty information, visit us.allegion.com/warranty

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Electronic Specifications	
Input voltage	Auto-detects 12V or 24V DC operation
Operating mode	Fail Safe or Fail Secure via switch on chassis
Peak current	12V operating voltage: 1 amp 24V operating voltage: 0.4 amp
Holding current	0.1 amp
Operating Temperature	Maximum: +120°F (+49°C) Minimum: -32°F (0°C)
Interfacing devices	Biometric devices, wall switches, security consoles, access card readers, thermosensitive devices, smoke and fire alarms, telephone access controls, automatic time devices and computerized controls
Request to Exit	Modular option on PM09X electrified functions (when ordering or added in field) Rating: 2 A, 30 V DC, Resistive or 1 pf Available on all PM09X electrified functions. Also available option for the following mechanical functions: PM010/26/50/56/71/80 and PM453/56/80/85.
Latch bolt monitor	Rating: 2 A, 30 V DC, Resistive or 1 pf Available on all PM09X electrified and PM010/26/50/56/71/80 and PM453/80/85 mechanical functions.

Certifications	
ANSI/BHMA	ANSI/BHMA A156.13-2017 Series 1000, Grade 1 Operational and Security **With FSIC Interchangeable Core Cylinders:** Grade 1 Operational, Grade 2 Security **With SFIC Interchangeable Core Cylinders:** Grade 1 Operational, Grade 3 Security
ICC	Complies with ICC A117.1 Accessible and Usable Buildings and Facilities
UL/cUL	UL 10C and CAN/ULC-S104 3-hour fire door UL 437 Listed when using UL 437 Primus cylinder
UL 294	**UL 294 Access Control Performance Levels:** Destructive Attack, Level 1; Line Security, Level 1; Standby Power, Level 1; Endurance, Level IV (with LX, Endurance, Level I). **ULC-S319 Class III**
CA Fire Code	All levers with a return to door of 1/2" (13 mm) or less comply (Formerly Title 19, California State Fire Marshal Standard)

Electrified Lever Control Functions	
No cylinder	PM090EL/EU electrically locking/unlocking outside lever PM091EL/EU electrically locking/unlocking both levers
Outside cylinder	PM092EL/EU electrically locking/unlocking outside lever

The Schlage L Series electrified mortise lock offers motor lever control, electric latch retraction with a broad range of functions, options and aesthetics.

View Schlage's Full Electrified Offering

Schlage 101

Want to learn more? Get answers to all of your questions on electrified locks in the Training & Education section of our site.

Visit Our Schlage 101 Education Page

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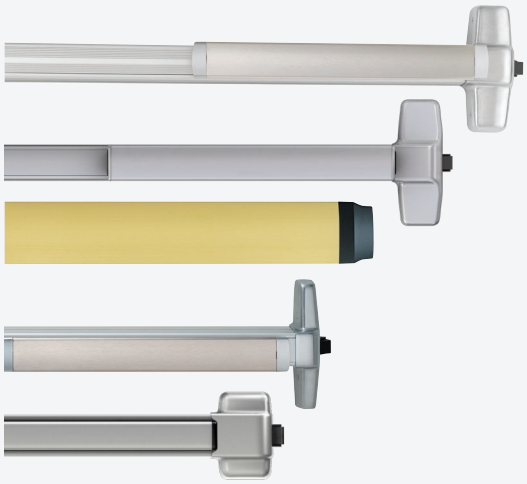
016494, Rev. 11/25

VON DUPRIN®

Quiet Electric Latch Retraction-QEL

Featuring 98/99, 94/95, 78/75, 33A/35A & 22 Series Exit Devices



Overview

Quiet electric latch retraction (QEL) provides electronic control of an exit device for environments where limited operational noise is desired. The QEL option is Von Duprin's solution of choice for hospitals, libraries, museums and theaters where ambient noise can be disruptive. It is available on all Von Duprin 98/99, 94/95, 78/75, 33A/35A, and 22 Series exit devices.

These devices always provide mechanical egress. The electrified latch retraction can also be activated by an access system or building automation system to unlatch the exit device momentarily. Often the QEL is used with a credential reader and access control system to unlock the door momentarily for authorized users.

The QEL can also be configured to electronically retract the latch for an extended period of time to allow free entry. This is a convenient alternative to mechanical dogging. If manual dogging is required, the hex dogging option is available, to order specify HD-QEL on non fire-rated devices. Special center case dogging is also available for 98/99 rim and vertical systems, specify SD-QEL.

If an active pushpad is required utilize the QEL-L option. This option will retract the latch bolt and maintain an active pushpad. In some applications an audible indication of pushpad retraction is desired. The QEL-B (B-buzzer) option is a feature that can be added or retrofitted to QEL devices that will send an audible notification of initial latchbolt retraction.

The QEL option is available on panic and fire rated devices. Fire rated openings have several additional requirements. The opening must be self latching and self closing and under the control of an automatic fire alarm system when used on fire rated openings.

Features & Benefits

- QEL option available on all 98/99, 94/95, 78/75, 33A/35A, and 22 Series exit devices
- Energy efficient motorized latch retraction utilizes standard 2 amp power supply, enabling longer wire runs from power source
- Quiet operation in both mechanical and electronic states
- Modular design allows for a simplified installation
- On-board installation and troubleshooting diagnostics built into device
- Auto adjust latch retraction – automatically adjusts latch throw and pull
- Pushbar is pulled in electronically for quieter operation when dogged
- Vandal resistant – detects and responds to events of attack and tampering

Specifications Compliance

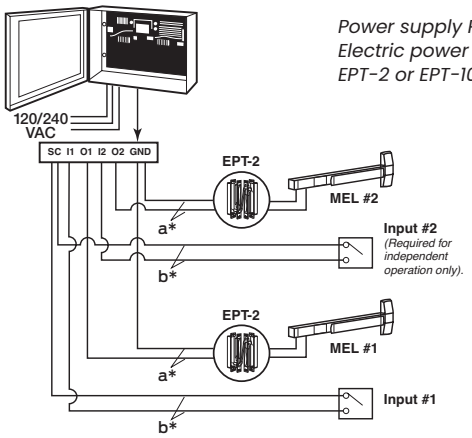
- Devices are BHMA Certified to ANSI/BHMA A156.3 (2001) Grade 1 for Exit Devices
- Devices are UL and cUL Listed as "Panic Hardware" (UL 305) and as "Fire Exit Hardware" (UL 10C)
- The QEL Conversion Kit is UL Classified under "Accessories for Single-Point Locks and Latches and Fire Exit Hardware" (UL 10C)

Electronic Specifications

QEL Electrical Load	
Voltage	24 VDC
Current	1.0 A Inrush (0.5 sec) 0.14 A Holding

QEL Wire Run Lengths	
Distance (one way)	Wire Gauge
Current	1.0 A Inrush (0.5 sec) 0.14 A Holding
200'	18 AWG
320'	16 AWG
500'	14 AWG
800'	12 AWG

QEL Wire Run Lengths



Power supply PS902-2RS
Electric power transfer
EPT-2 or EPT-10

Accessories

The QEL has a low in rush current = 1.0 amps, so it can be used with standard Schlage power supplies. When powering multiple components, verify that the amperage requirements of all components combined does not exceed the power supply output rating, see table below for output ratings.

Schlage PS902	Schlage PS904	Schlage PS906
Up to 2 amps	Up to 4 amps	Up to 6 amps

How to Order

- **Standard** – Use prefix QEL, example QEL99L
- **Special Center Case Dogging** – Use prefix SD-QEL, example SD-QEL99L*
- **Hex Dogging** – Use prefix HD-QEL, example HD-QEL99L
- **Latchbolt Retraction Only** – Use suffix -L, example QEL-L
- **Audible Notification Conversion Kit (47856044)** – Use suffix -B (buzzer), example QEL-B. Note: Available only for retrofit on existing QEL devices.

* SD QEL is available for the 98/99 Series only.

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VON DUPRIN®

Quiet Electric Latch Retraction Conversion Kits

Featuring 98/99, 33A/35A, 22, 75 & 78 Series Exit Devices

Overview

The Quiet Electric Latch (QEL) retraction latch option for Von Duprin® exit devices provides electronic control of an exit device for environments where limited operational noise is desired.

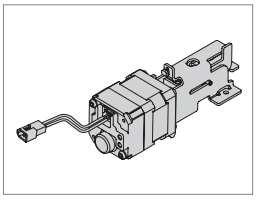
This optional feature is offered in fully configured exit devices, or as a conversion kit to mechanical or legacy latch retraction devices currently installed, to enhance the opening's operability.

Von Duprin offers both a modular and baseplate QEL conversion kits. In most applications, the modular QEL kit provides the necessary functionality at the lowest cost and is the recommended solution. The modular QEL conversion kit should be selected unless the product is currently a solenoid-driven latch retraction device (EL).

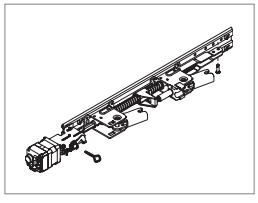
The baseplate QEL conversion kit was the initial conversion kit offered when Von Duprin originally launched the QEL. With the improved design of the motor assembly and availability of the modular conversion kit, the baseplate QEL conversion kit should primarily be used when converting an EL to a motor driven QEL solution.

The modular conversion kit was developed to improve the flexibility, cost, and installation process without the requirement of replacing the entire baseplate assembly. The modular motor assembly provides the same functionality and fits in both 3' device and 4' device. This design allows for flexibility of inventory and solutions for a broader set of openings.

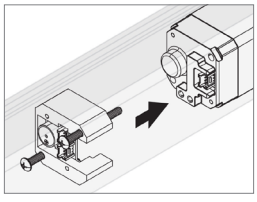
For certain applications where an active pushpad is required, utilize latchbolt retraction only option (QEL-L). If an audible indication during the initial latchbolt retraction is desired, utilize the buzzer conversion kit option (QEL-B).



Modular QEL Kit



Baseplate QEL Kit



QEL-B Kit

Features & Benefits

Modular QEL Conversion Kit

- Recommended conversion kit solution for most applications
- Greater inventory flexibility: Can upgrade both 3' and 4' devices
- Ease of installation: Can easily and quickly be installed in existing product
- Lower list price: Same functionality offered at a lower list price

QEL Conversion Kit Options:

- **Latchbolt Retraction Only (QEL-L):** If an active pushpad is required, utilize this option to retract the latchbolt and maintain an active pushpad (RX Switch Included)
- **Audible Notification Buzzer (QEL-B):** Provides audible notification during initial latchbolt retraction (47856044)
- **AX (QEL-X):** Designed to meet the 2010 ADA standards for Accessible Design that state the force required to activate operable parts shall not exceed 5 pounds
- **Allegion Connect (CON):** Specify CON for the Connector Adapter Harness for quick and easy connection to power sources
- **Hex Dogging (HD-QEL):** Hex Dogging allows the electric latch retraction exit device to be manually dogged, holding in the latch bolt

Baseplate QEL Conversion Kit*

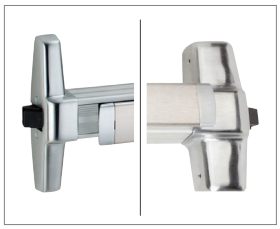
- EL conversion recommended when upgrading Von Duprin solenoid-driven latch retraction
- Device size 3' or 4' baseplate solution required to be specified

*Baseplate conversion kit available for the 98/99 and the 33A/35A Series devices only.

How to Order

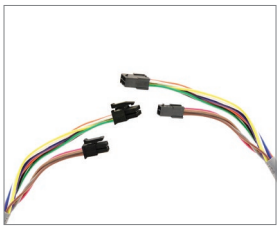
Use the following guided process to select the correct QEL conversion kit. Assess your product and choose 'Yes' or 'No' for each of the feature sections shown. Then, align selections with table columns on the next page. For each column, choose the corresponding row of products.

#1
33A/35A, 98/99, or 22

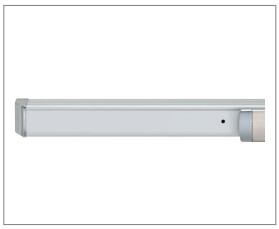


#2
AX
Y or N

#3
Connector
Y or N



#4
Hex Dogging
Y or N



#1	#2	#3	#4		Recommended	Baseplate Conversion Kit Part #s	
33A/35A, 98/99, or 22*	**AX**	**CON**	**HD**		**Modular Conversion Kit Part #s**	**3'**	**4'**
33A/35A, 98/99	N	N	N	QELA Conversion Kit	114317-00	958003-00	040065-00
33A/35A, 98/99	N	N	Y	HD-QELA Conversion	958002-00	958004-00	040067-00
33A/35A, 98/99	N	Y	N	QELA Conversion Kit w/ Connector	040061-00	040063-00	040066-00
33A/35A, 98/99	N	Y	Y	HD-QELA Conversion Kit w/ Connector	040062-00	040064-00	040068-00
33A/35A, 98/99	Y	N	N	QELX Conversion Kit	041162-00	041166-00	041167-00
33A/35A, 98/99	Y	N	Y	HD-QELX AX Conversion Kit w/ Dogging	041164-00	041170-00	041171-00
33A/35A, 98/99	Y	Y	N	QELX AX Conversion Kit w/ Connector	041163-00	041168-00	041169-00
33A/35A, 98/99	Y	Y	Y	HD-QELX AX Conversion Kit w/ Connector	041165-00	041172-00	041173-00
22	N	N	N	22 QEL Conversion Kit	47447540	N/A	N/A
22	N	N	Y	22 HD-QEL Conversion Kit w/ Dogging	47447541	N/A	N/A
22	Y	N	N	22 QELX Conversion Kit	47447544	N/A	N/A
22	Y	N	Y	22 QELX Conversion Kit w/ Dogging	47447547	N/A	N/A
33A/35A, 98/99	N	N	N	3' QEL-L Conversion Kit	47895915	N/A	N/A
33A/35A, 98/99	N	N	N	4' QEL-L Conversion Kit	47895918	N/A	N/A

Example: #1 = 98/99 | #2 = AX (N) | #3 = CON (N) | #4 = HD (N) » 114317-00 is the correct modular kit part number.
For confirmation purposes, 958003-00 is the corresponding baseplate kit part number. If you previously ordered 958003-00 for mechanical upgrades to latch retraction, we recommend choosing the 114317-00 modular kit.

*Von Duprin 22 series devices modular conversion kits compatible with devices manufactured after January 1, 2022 (no seam on the mechanism case).
Note: Baseplate conversion numbers are not applicable for 75/78.

Installation resources

- Video: Converting mechanical 98/99, 33A/35A to QEL
- Video: Converting EL to QEL
- Installation instructions QEL 33A/35A, 98/99 Series
- Installation instructions QEL 22 Series

Service and support

- To modify an existing order, contact Customer Service at (877) 671-7011, option 1.
- For additional product questions, contact Technical Support at (877) 671-7011, option 2, then option 3.

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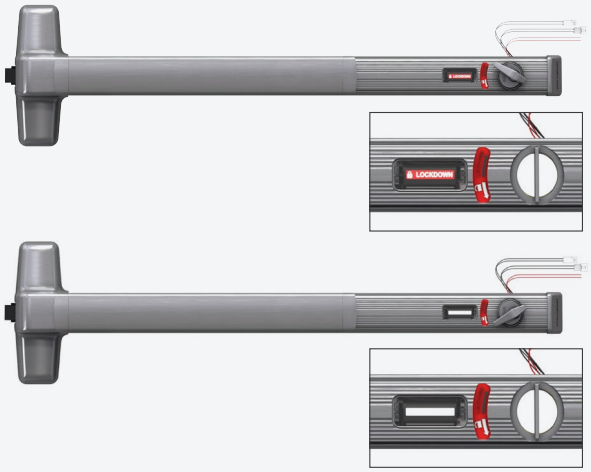
VON DUPRIN®

ESL

Emergency Secure Lockdown



Overview

The Von Duprin® Emergency Secure Lockdown (ESL) option is ideal for high-occupancy spaces, such as auditorium-style classrooms with access control. These large spaces often don't have a way to locally lockdown the room without tapping into the building's access control system. ESL allows occupants to quickly secure the opening in the case of an emergency.

In the event lockdown is necessary, students or teachers can turn the thumb turn (or cylinder key) of the ESL option installed in the exit device. This action interrupts power to the QEL motor, electronically undogging (extending the latchbolt) to secure pull side of the door as well as sends a signal to the access control system. The status indication assures the occupant the exit device has been put into secure lockdown mode. Free egress out of the room is maintained from the exit side of the door, while access into the room can only be performed with a key.

The ESL can be installed on openings containing both a Von Duprin QEL exit device, and an electronic access control system with credential reader.[1] In addition, where a key cylinder or thumb turn is in use, Von Duprin directional indicators aid the user in determining which way the key or thumb turn must be rotated to secure the opening.

[1] Recommended with trim functions: NL, K-NL, L-NL, NL-OP, T-KC, L-KC. Install in alignment with 2018 IBC 1010.2.8 NFPA 101 14.2.2.2.4 or per local AHJ.

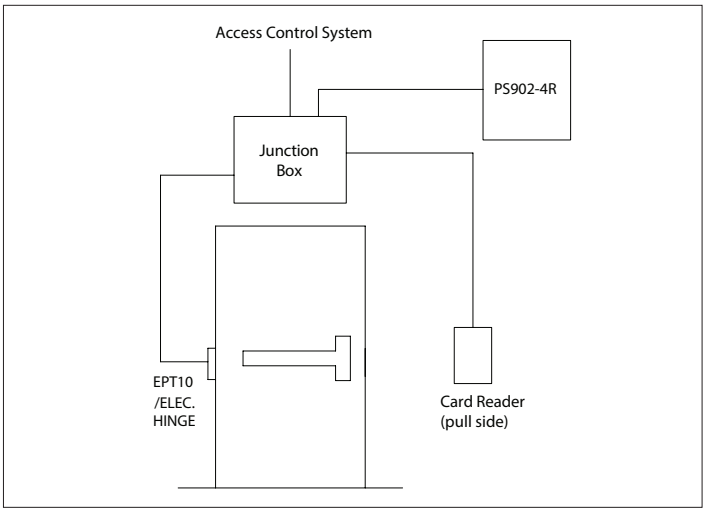
Status indicator

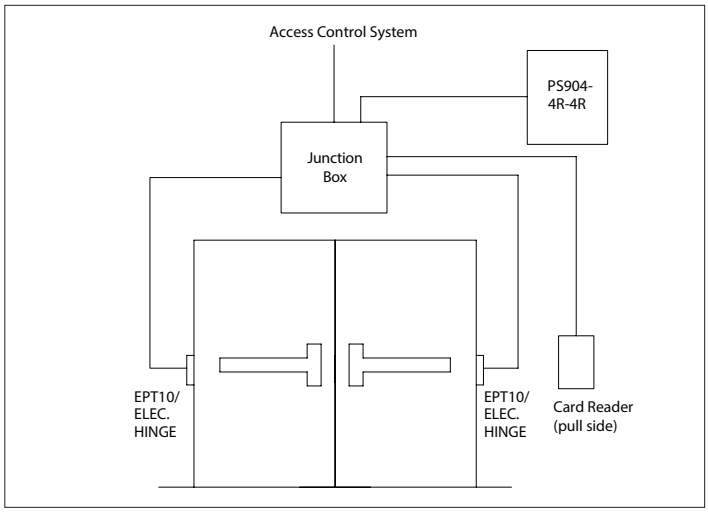
Directional indicator

Features & Benefits

- ANSI BHMA Grade 1 & UL 10C Fire Rated
- Designed with reliability and durability in mind for high use and abuse environments
- Maintains free egress as required by code while still securing the door for lockdown
- Pad printed icons provide a clear direction of rotation to secure opening
- Security indicator with clear LOCKDOWN/ BLANK icons and words behind tamper-resistant window
- Lockdown action interrupts power and extends latchbolt to secure pull side of door as well as sends signal to access control system
- When emergency lockdown is activated card access system no longer operates QEL
- Physical access is obtained by key override from pull side in lockdown mode
- Available for 98/99 and 33A/35A series exit devices that have QEL latch retraction
- Modular conversion kits allow quick and easy upgrade of existing devices
- Allows for scheduled electronic dog/undog or credential access during normal day-to-day use
- Works with any physical access control provider, no additional integration required

Specifications





Compatibility, Requirements & Considerations

ESL compatibility	For use with 33A/33A-F, 35A/35A-F, 98/98-F, or 99/99-F series exit devices that have QEL							
Device type	R, CVC, CVR, SV, M							
Rating	Fire exit hardware and panic hardware							
Indicator features	✓ Status indicator ✓ Directional indicator ✓ Change state of door from interior[1]							
Minimum door widths	**QEL Minimum Door Widths**				**QEL and ESL Minimum Door Widths**			
	SVR	CVR/CVC	MOR	RIM	SVR	CVR/CVC	MOR	RIM
98/99 3'	28-1/4"	28-1/4"	28-3/4"	29-1/4"	36"	36"	36"	36"
98/99 4'	34-1/4"	34-1/4"	34-3/4"	35-1/4"	42"	42"	42-1/2"	43"
33A/35A 3'	28-1/4"	25-1/4"	–	29-1/4"	36"	36"	–	36"
33A/35A 4'	34-1/4"	34-1/4"	–	35-1/4"	42"	42"	–	43"
Recommended trim functions[2]	NL, K-NL, L-NL, NL-OP, T-KC, L-KC[2]							
Cylinder	A standard 1-1/4" (32mm) mortise cylinder with an inverted straight cam and compression ring and spring is required. ESL doesn't come with cylinder or thumb turn and must be ordered separately.[3]							
Power supply (minimum requirement)	Single doors - PS902-4R							
	Double doors - PS904-4R-4R. For fire applications, add 900-FA							
Device restrictions	Windstorm (WS), SD-QEL/HD-QEL, and EL solenoid devices not compatible							
Retrofits existing devices for field upgrade:	Yes - Kit available							

[1] Interrupts power to QEL.

[2] Install in alignment with 2018 IBC 1010.2.8 NFPA 101 14.2.2.2.4 or per local AHJ.

How to Order

- For configured device, specify series, device length and ESL option. (Note: QEL and cylinder options are required, but not included.)
- For kits, use table below to specify part number and designate mechanism case cover plate.

Example (kit only): 967240 x US28

Kits for Device Size	Part #	619 (US15)	606 (US4)	711 (315)	628 (US28)	643e	630 (US32D)	710 (313)	605 (US3)	625 (US26)	622 (US19)	695 (SP313)	612 (US10)
33A ESL kit for 3' device	967240	–	•	•	•	•	–	•	•	•	•	•	•
33A ESL kit for 4' device	962741	–	•	•	•	•	–	•	•	•	•	•	•
35A ESL kit for 3' device	967242	•	•	•	•	•	•	•	•	•	•	•	•
35A ESL kit for 4' device	967243	•	•	•	•	•	•	•	•	•	•	•	•
98 ESL kit for 3' device	967244	•	•	•	•	•	•	•	•	•	–	–	•
98 ESL kit for 4' device	967245	•	•	•	•	•	•	•	•	•	–	–	•
99 ESL kit for 3' device	967246	•	•	•	•	•	–	•	•	•	–	–	•
99 ESL kit for 4' device	967247	•	•	•	•	•	–	•	•	•	–	–	•

[3] Compatible cylinders available from Schlage.

- Conventional cylinder: 20-001 1-1/4" XQ11-949
- Thumb turn cylinder: 09-904 1-1/4" B502-191 XQ11-949
- ADA thumb turn cylinder: 09-904 1-1/4" XB11-720 B502-191 XQ11-949

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013791, Rev. 10/24

VON DUPRIN®

M996L/L-BE

Motor Driven Electrified Trim

Overview

M996L/L-BE motor driven electrified breakaway lever trim provides remote locking and unlocking capabilities while incorporating the patented vandal-resistant trim design.

The motor can be energized from a distant controller, thus allowing access control of the opening. The control of stairwells in high-rise buildings is a common application for this trim. When electrically unlocked, the lever is operable. When electrically locked, the lever is rigid.

The vandal-resistant breakaway feature engages when more than 35 lbs. of torque pressure is applied to the locked lever. In breakaway mode, the lever dangles, internal components are protected from breakage, and the trim remains locked. Lever position is restored simply by pulling up on the lever.

The trim works with either 12VDC or 24VDC power supplies. The trim also comes with a field selectable dip switch for either Fail Safe (FS) or Fail Secure (FSE) functionality—no special configuration required.

The M996 key bypass options are:

- M996L (key functions as night latch mechanical override)
- M996L-BE (no key override, blank escutcheon)

The M996 trim can be ordered with a device, added to an existing 98/99 series device application, or a conversion kit can be added to an existing 996L/996L-BE, or E996L/E996L-BE trim.

Features & Benefits

- Vandal-resistant breakaway lever
- Dual voltage - works with either 12VDC or 24VDC power supplies
- Furnished Fail Safe (FS); convertible to Fail Secure (FSE) via dip switch
- Key bypass override (M996L), or no key bypass with blank escutcheon (M996L-BE)
- Field retrofit kits work for either mechanical 996 or updating solenoid driven E996
- Available with Allegion Connect (-CON)
- Field-reversible handing

Specifications

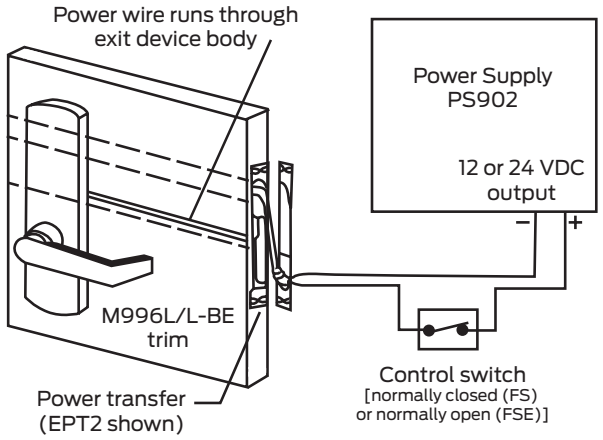
24VDC FSA	0.08 amp in-rush*, 0.01 amp holding
24VDC FSE	0.59 amp in-rush*, 0.01 amp holding
12VDC FSA	0.13 amp in-rush*, 0.01 amp holding
12VDC FSE	1.12 amp in-rush*, 0.01 amp holding

To Order Specify

- Use “M” prefix, example M996L
- Device type: R/V (rim/surface or concealed vertical rod/cable) or M (mortise)
- Fail mode: Furnished Fail Safe (FS) only; field convertible to Fail Secure (FSE) via dip switch
- Lever style: 06 lever is furnished standard if not specified
- Handing: RHR or LHR (RHR is furnished standard if not specified; field reversible)
- Finish: 605, 606, 612, 613, 619, 622, 625, 626, 643e,693, 695
- Allegion Connect: Specify -CON if desired
- When ordering with device specify trim series with “M” prefix, example 9927L-BE 3' US26D M996L-BE
- When ordering M996 conversion kit, specify:

Description	Part #
996 R/V/C conversion to motorized kit	47273111
996 Mortise conversion to motorized kit	47273112

Note: For more ordering details, please reference Von Duprin catalog and price book.



M996L Electrical Wiring

- Power input for M996L/L-BE is either 12 VDC or 24 VDC
- Two wires on the trim are non-polarized (18 AWG minimum)

Power Supply Requirements

Fail Secure Applications

Maximum M996 per power supply (in-rush consideration) – no logic board case shown in chart

Power Supply	12VDC	24VDC
PS902*	2	4
PS904/PS914*	4	8
PS906	6	12

*Adding 4RL board sequencing allows additional M996 per power supplies.

Fail Safe Applications

Total in-rush of all M996 not to exceed power supply maximum current.

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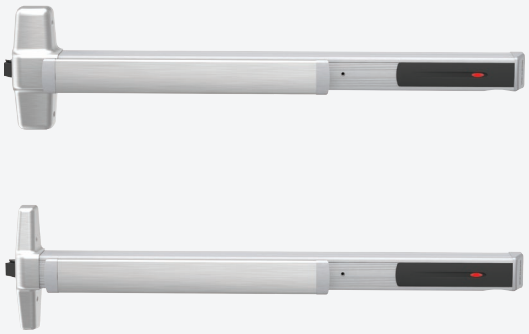
VON DUPRIN®

Remote Undogging & Remote Monitoring



Overview

In many institutional facilities, traffic is funneled through main perimeter openings equipped with access control. The remaining secondary perimeter openings utilize mechanical hardware, some of which is mechanically dogged (unlocked) and undogged (locked) to enable push/pull operation. The manual management and monitoring of these openings is inefficient and prone to human error.

The Von Duprin® RU retrofit kit for exit devices is a cost effective solution for these secondary openings that enables remote undogging for centralized lock down and door status monitoring. It connects wirelessly to our access control Physical Access Control Software (PACS) providers via an IP or RSI/RS-485 connection to the ENGAGE™ Gateway. It is a modular battery powered kit that can be added on to existing 98/99 and 33A/35A series devices. The RM option is a sensor only configuration for exit only or fire rate doors that require monitoring. It provides visibility to request to exit (RX), latchbolt monitor (LX) and door position switch (DPS).[2] This complementary solution enhances security by expanding the reach of the access control system to secondary openings that traditionally would go unaddressed because of the cost and complexity of running wires. Bringing these secondary openings online provides a more comprehensive perimeter security package.

Features & Benefits

- Access control managed via an IP or RSI/RS-485 connection to the ENGAGE Gateway through PACS providers
- Modular kit compatible with 98/99 and 33A/35A series devices
- Enables undogging for centralized lockdown (via real time IP or RS-485) or scheduled lockup (via Wi-Fi or real time IP or RS-485)
- Cylinder and hex mechanical dogging is maintained but can be overridden electronically
- Enables comprehensive view of door status via request to exit (RX), latchbolt monitor (LX) and door position switch (DPS)
- Sensor only configuration version (RM) available for exit only doors or fire rated doors
- Battery life up to 2 years with 4 standard AA batteries[1]
- Electronics Certifications: UL294 indoor, FCC Part 15 - Commercial

[1] Assuming dog and undog sequence use rate is two (2) cycles per day, exception notification rate is one occurrence every two (2) days, and door use of at least 200 cycles per day (sensor and wireless activity indication).

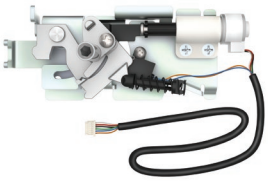
[2] RU using ENGAGE software or PAC solution via Wi-Fi is available for scheduled lock-up events only. This solution is not available for real time lockdown.

CYBERSECURITY
Learn about Allegion's commitment

Main Components of RU Kit

Cover

Battery housing/batteries/main PCB



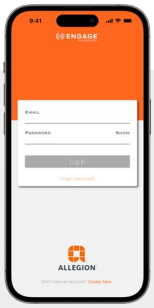
Undog assembly

LX/DPS and RX switch assembly

Wireless Specifications	
Audits	Up to 2,000[1]
Visual communications	LED (red, amber, green)
Audible communications	Audible indicator (field configurable)
Communication standards	• Bluetooth® low energy (BLE) (version 4.2) • Advanced Encryption Standard (AES), 256-bit • 2.4 GHz Wi-Fi® (IEEE 802.11b/g/n)[2] • WPA2, WPA, WEP, 802.1x • Transport Layer Security (TLS) version 1.2
Communication range	Up to 30 ft.
Wake-Up on Radio	Responds to command from host in less than 5 seconds when linked to ENGAGE Gateway (requires PACS provider system)
Connectivity options	• IP or RSI/RS-485 connection to the ENGAGE™ Gateway • BLE to mobile devices • BLE to ENGAGE Gateway • Wi-Fi (ENGAGE software enabled or PAC enabled where integrated)[2]
Battery life	Up to 2 years with 4 AA batteries[3]
Operating temperature	-4° to 140°F (-20° to 60°C)
Operating humidity	0 - 100% non-condensing
Certifications	**Exit devices will maintain the following:** BHMA A156.3 (Grade 1), UL305, Windstorm WX98/9927, Tornado FEMA 361 ANSI/ICC500, ADA ANSI A117.1, UL 10C 3 hour, ANSI/BHMA 156.18-2012 QUV **Electronics Certification:** UL294 indoor, FCC Part 15 - Commercial

Available Status Signals

- Request-to-exit
- Door position
- Interior cover tamper[4]
- Magnetic tamper
- Battery status
- Dog/undog status[5]
- Communication status[4]



Use the ENGAGE mobile app to commission and connect devices to your access control system of choice.

Download on the App Store

ANDROID APP ON Google play

[1] Maximum audit storage capacity of lock. Can vary upon access control software audit storage capacity when linked with an ENGAGE Gateway RS-485 to ACP.

[2] For offline management only.

[3] Assuming dog and undog sequence use rate is two (2) cycles per day, exception notification rate is one occurrence every two (2) days, and door use of at least 200 cycles per day (sensor and wireless activity indication).

[4] Consult your access control software provider for specific scope of support.

[5] Software indicates dog/undog status based on sequence of events.

Mechanical Specifications

Dogging Options	Cylinder Dogging, Hex Dogging
ANSI standard (meets or exceeds)	ANSI/BHMA A156.25-2013 (indoor/outdoor) ANSI/BHMA A156.2-2011, Series 4000, Grade 1

Compatible Exit Devices

	33A/35A*	98/99*
RIM	•	•
SVR	•	•
CVR	•	•
CVC	•	•
Mortise	–	–
3 pt. latch	•	•

RU not compatible with exit devices with the following options:

QEL, DI/CDSI/HDSI, RX2, AD, SD, SS, PN, ES/PL, CX, XP

RM not compatible with exit devices with the following options:

DI/CDSI/HDSI, RX2, AD, SD, SS, PN, ES/PL, CX, XP

* For devices manufactured after 9/1997.

Compatible Device Lengths

For Remote Undogging (RU) Module installation: All 33A/35A and 98/99 device types – 3' (914 mm) length to 2' 9" (838 mm), 4' (1219 mm) length to 3' 3" (991 mm)

For Remote Monitoring (RM) Module only: All 33A/35A and 98/99 device types – 3' (914 mm) length to 2' 83/4" (832 mm), 4' (1219 mm) length to 3'23/4" (984 mm)

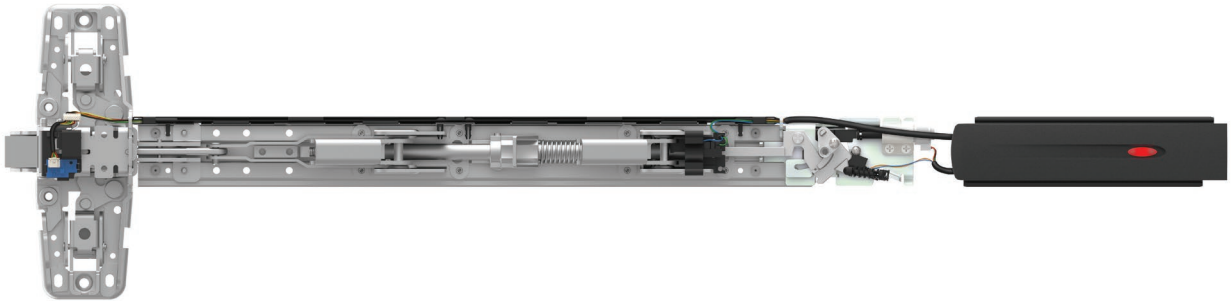
For Remote Monitoring (RM) Module with EL/QEL: All 33A/35A and 98/99 device types – 3' (914 mm) length only, 4' (1219 mm) length to 3' 51/8" (1045 mm)

How to Order

Remote undogging	
RU 3' kit	47258681
RU 4' kit	47258682
Remote monitoring	
RM 3' kit	47258683
RM 4' kit	47258684

If the door and exit device are fire rated, and the exit device type is a 98/99-F Rim manufactured prior to April 1, 2018, a new center case will be required before proceeding with the installation of the RM kit. 98/99-F Rim Center Case Kit Less Cover, part number 050026.

Note: Specify CON for Allegion Connect.



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011898, Rev. 01/24

VON DUPRIN®

ALK

Alarm Kit

Overview

The ALK battery alarm kit is a simple yet effective way to deter unauthorized use of an opening. While the exit device is still a means of egress, the ALK kit contains an internal horn. When the touch bar is depressed, the horn sounds to provide an audible means of signaling that the opening has been violated. The alarm kit can be armed or disarmed by key. The horn is rated at 85 decibel.

The key switch uses a standard 1 1/4" (32mm) mortise cylinder with a straight cam (Schlage 20-001, B502-191 cam). The unit can be powered by one standard 9 volt alkaline battery or be hardwired.

Auto reset (AR) option comes standard with this kit. This feature allows the device to resume the alarm option after a preset time. Preset times can be field selected at 1.5, 3, or 4.5 minutes.

Alarm kits are available with a choice of two switch kits, RX or LX. RX monitors the touchpad and is furnished standard. LX optional latch bolt monitoring is recommended for use with surface vertical rod exit devices or when alarm needs to sound from both the exit device and trim side of the door. Specify ALK-LX.

The ALK option is available for Von Duprin exit device models 98/99, 33A/35A, 78, 75 and 22.

The ALK includes a 6" x 20" decal for application on door "EMERGENCY EXIT ONLY. ALARM WILL SOUND." Red silk screen, RSS, push bar trim can be used instead of the door decal, specify RSS push bar trim when ordering the device.

When the ALK is used, standard dogging is removed. If cylinder dogging is required, the ALK can be moved to the hinge side of the device, and standard cylinder dogging (CD) can be added. Note size restrictions below.

Features & Benefits

- 24VDC Input and External Inhibit standard
- External Inhibit provides remote arming and disarming
- Automatic re-arm settings for 1-1/2, 3, or 4-1/2 minutes time delay or manual rearm
- Horn emits intermittent low battery alert signal
- Includes 6" x 20" decal for application on door "EMERGENCY EXIT ONLY. ALARM WILL SOUND."

EMERGENCY EXIT ONLY
ALARM WILL SOUND

Minimum Door Openings

98/99 Series ALK		
Device	3' (914mm) Length	4' (1219mm) Length
98/98-F/99/99-F	2' 10" (864mm)	3' 4" (1016mm)
9875/9875-F/9975/9975-F	2' 10" (864mm)	3' 4" (1016mm)
9827/9827-F/9927/9927-F	2' 10" (864mm)	3' 4" (1016mm)
9857/9857-F/9957/9957-F	2' 10" (864mm)	3' 4" (1016mm)
9847/9847-F/9947/9947-F	2' 9" (864mm)	3' 3" (991mm)
9847WDC/9847WDC-F/9947WDC/9947WDC-F	2' 9" (864mm)	3' 3" (991mm)
9848/9848-F/9948/9948-F	2' 9" (864mm)	3' 3" (991mm)
9849/9849-F/9949/9949-F	2' 9" (864mm)	3' 3" (991mm)
9850/9850-F/9950/9950-F	2' 9" (864mm)	3' 3" (991mm)

To Order, Specify:

- Standard - 98 ALK or 99 ALK
- Cylinder dogging - CD98 ALK or CD99 ALK
- Special center case dogging - SD98 ALK or SD99 ALK
- Auto reset - AR 1-1/2, 3 or 4-1/2

33A/35A Series ALK		
Device	3' (914mm) Length	4' (1219mm) Length
33A/35A	2' 9" (838mm)	3' 3" (991mm)
3327A/3527A	2' 8" (813mm)	3' 2" (966mm)
3347A/3347A-F 3547A/3547A-F	2' 8" (813mm)	3' 2" (966mm)
3348A/3348A-F 3548A/3548A-F	2' 8" (813mm)	3' 2" (966mm)
3349A/3349A-F/3549A/3549A-F	2' 8" (813mm)	3' 2" (966mm)
3350AWDC/3350AWDC-F/ 3550AWDC/3550AWDC-F	2' 8" (813mm)	3' 2" (966mm)

To Order, Specify:

- Standard - 33A ALK or 35A ALK
- Cylinder dogging - CD33A ALK or CD35A ALK 1
- Auto reset - ALK-AR3

1. When the ALK is used, standard dogging is removed. If cylinder dogging is required for 3' or 4' doors the ALK can be moved to the hinge side of the device and standard cylinder dogging can be added.

ALK CD		
Device	3' (914mm) Length	4' (1219mm) Length
98/99 rim	36"	40"
9875	N/A	N/A
9827	36"	40"
9857	36"	40"
9847	36"	40"
9848	36"	40"
9849	36"	40"
33A	36"	40"
3327A	36"	40"
3347A	36"	40"
3348A	36"	40"
3349A	36"	40"

70 Series ALK		
Device	3' (914mm) Length	4' (1219mm) Length
78/78-F/75/75-F	2' 11-1/2" (902mm)	3' 5-1/2" (1054mm)
7827/7827-F/7527/7527-F	2' 11-1/2" (902mm)	3' 5-1/2" (1054mm)
7847/7847-F/7547/7547-F	2' 10-1/2" (876mm)	3' 4-1/2" (1029mm)

To Order, Specify:

- Standard - when ordering full device with ALK, use ALK suffix with RX or LX prefix - Example: RX78EO ALK
- Available as a kit for field installation specify series, size, finish, and switch desired - Example: 78 ALK 3' x finish x RX

22 Series ALK		
Device	3' (914mm) Length	4' (1219mm) Length
22R/F	33-7/8" (860 mm)	39-7/8" (1013 mm)
2227/F	32-3/4" (832 mm)	38-3/4" (984 mm)

To Order, Specify:

- Standard, 22 ALK

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VON DUPRIN®

Delayed Egress Systems

CHEXIT, RCM & DE5300

98/99 Series CHEXIT

33A/35A Series CHEXIT

RCM/DE5300

Overview

The Von Duprin® CHEXIT is a delayed egress option available on all 98/99, XP98/99 and 33A/35A series exit devices. It is commonly used in behavioral health, memory care, and maternity applications to prevent patient abduction or elopement and in retail stores for asset protection. All control inputs, auxiliary locking, local alarm and remote signaling outputs are self-contained. The CHEXIT can easily be integrated with access control, fire prevention and infant protection systems.

The standard CHEXIT device sounds an alarm and keeps the door secured for 15 seconds following an exit attempt with immediate release upon fire alarm. Numerous configurable settings allow the CHEXIT to be customized based on specific application or code requirements.

Recently updated, the improved design of the CHEXIT makes installation and maintenance easier. The new motor driven blocking actuator is quiet and energy efficient, with an input current of only 1.25 amps and wire run up to 500 feet from the power transfer to power supply (14 AWG). Additional options were added including indefinite release delay to address 2015 IBC requirements for controlled egress.

The Remote CHEXIT Module (RCM) provides the same functionality for smaller door sizes by placing electronic components in a control box. Likewise, the DE5300 utilizes a control box, RX-LX low current request to exit panic device and a Schlage® direct hold electromagnetic lock.

Features & Benefits

- Available on all 98/99, XP98/99 and 33A/35A series exit devices
- Redesigned for easy and cost effective installation and maintenance
- Motor driven blocking actuator provides quiet and energy efficient operation
- Flexible field configurable functions, including: nuisance delay 0, 1, 2 or 3 seconds, audio sound level high/low, power up setting armed/disarmed
- Trim actuator/input for outside trim connection with selectable fail safe/ secure setting
- Secure status relay output
- RCM and DE5300 available to accommodate a variety of door configurations and applications
- UL 294 Listed and meets 2015 IBC 1010.1.9.7 Delayed Egress and 1010.1.9.6 Controlled Egress and NFPA 7.2.1.6 Special Locking Arrangements

CHEXIT Device

(with Motor Driven Blocking Actuator)

Available for 33A/35A, 98/99 and XP98/99 Series Devices

The Von Duprin CHEXIT device is designed for controlled egress applications. It is UL 294 listed and meets 2015 International Building Code (IBC) sections 1010.1.9.7 Delayed Egress and 1010.1.9.6 Controlled Egress and National Fire Protection Associations (NFPA) sections 7.2.1.6 Special Locking Arrangements. All control inputs, auxiliary locking, local alarm and remote signaling outputs are self-contained in the CHEXIT assembly. Numerous configurable options allow the device to be customized for the specific code or application requirements. The standard CHEXIT device sounds an alarm and keeps the door secured for 15 seconds following an exit attempt with immediate release upon fire. Included with each device is a 6" x 20" decal for application on the door reading "PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 SECONDS".

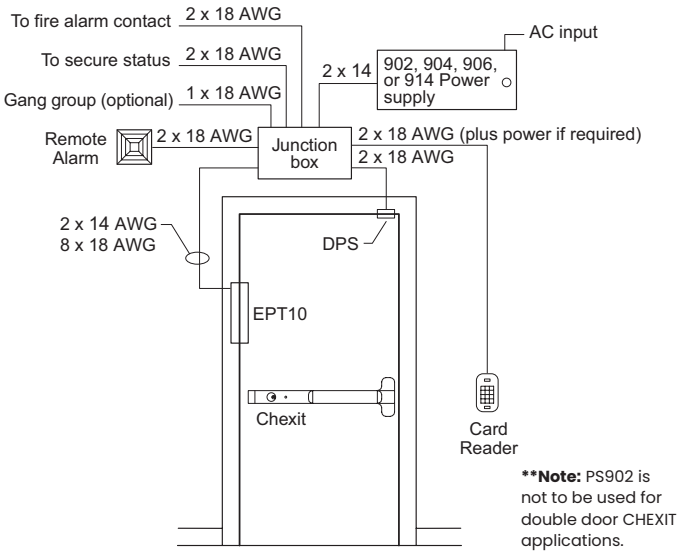


Figure 1. Riser Diagram, Single Door

Minimum Door Opening Sizes for CX Devices
Consult factory for other size requirements.

Device	3' (914mm) Length	4' (1219mm) Length
CX33A/35A	2'10-3/4" (883mm)	3'4-3/4" (1035mm)
CX3327A/3327A-F 3527A/3527A-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX3347A/3347A-F 3547A/3547A-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX3348A/3348A-F 3548A/3548A-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX3349A/3349A-F 3549A/3549A-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX3350/3350WDC-F 3550/3550WDC-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX98/98-F/99/99-F	2'10-3/4" (883mm)	3'4-3/4" (1035mm)
CX-XP98/XP98-F/XP99/XP99-F	2'10-3/4" (883mm)	3'4-3/4" (1035mm)
CX9827/9827-F/9927/9927-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX9847/9847-F/9947/9947-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX9848/9848-F/9948/9948-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX9849/9849-F/9949/9949-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX9850/9850WDC-F 9950/9950WDC-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX9857/9857-F/9957/9957-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)
CX9875/9875-F/9975/9975-F	2'10-1/4" (870mm)	3'4-1/4" (1022mm)

Electrical Specifications

Specifications / Power Requirements*
Input voltage – 24VDC
Input current inrush – 1.25A
Input current holding – 390mA
Alarm relay and Secure relay contact ratings – 24VDC, 1A
Fire alarm, Inhibit and Door position switch inputs require normally closed dry contacts.

Power Supply Information for CX Devices with Motor Driven Blocking Actuator*

Power Supply	Maximum Number of Devices*
PS902 (up to 2 amps)	1 CHEXIT device
PS904 (up to 4 amps)	3 CHEXIT devices
PS906 (up to 6 amps)	4 CHEXIT devices
PS914 (up to 4 amps)	4 CHEXIT devices

When powering multiple components, verify that the amperage requirements of all components combined does not exceed the power supply output rating. Consult Installation Instructions for proper wire gauge and wire run requirements. Exceeding the recommended devices and/or not following Installation Instructions may void your warranty. For more information call Customer Care at 877-671-7011.

How to Order*

1. Prefix product description number "CX", EX: CX99L
2. Specify option, EX: CX-RCM or CD-CX
3. Door size other than 3' (914mm)
4. Door thickness other than 1-3/4" (45mm)
5. Finish
6. Handing, LHR or RHR; required with "CD" option

*Note: The information listed in these pages reference the power supply and operating requirements for the redesigned CHEXIT with motor driven blocking actuator that launched August 24, 2015. For information on devices built previous to August 24, 2015, please contact Customer Care at 877-671-7011.

RCM Remote Chexit Module

Designed to provide the concept of the Chexit delayed exit system for door sizes smaller than the standard device can accommodate. The Chexit module is installed in a control box and mounted in a remote location. Features and functions of the standard Chexit exit device are available on the RCM.

Minimum Door Opening Sizes for RCM Devices
Consult factory for other size requirements.

Device	3' (914mm) Length	4' (1219mm) Length
CX-RCM33A/35A	2'5" (737mm)	2'11" (889mm)
CX-RCM3327A/3327A-F /3527A/3527A-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM3347A/3347A-F/ 3547A/3547A-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM3348A/3348A-F/ 3548A/3548A-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM3349A/3349A-F/ 3549A/3549A-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX3350/3350WDC-F/ 3550/3550WDC-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM 98/98-F/99/99-F	2'5" (737mm)	2'11" (889mm)
CX-RCM XP98/XP98-F/ XP99/XP99-F	2'5" (737mm)	2'11" (889mm)
CX-RCM 9827/9827-F/ 9927/9927-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM 9847/9847-F/ 9947/9947-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM 9848/9848-F/ 9948/9948-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM 9849/9849-F/ 9949/9949-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM 9850/9850WDC-F/ 9950/9950WDC-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM 9857/9857-F/ 9957/9957-F	2'4-1/2" (724mm)	2'10-1/2" (876mm)
CX-RCM 9875/9875-F/ 9975/9975-F	2'5-1/2" (743mm)	2'11-1/2" (902mm)

Specifications / Power Requirements*
Size – 3.75" x 5.57" x 2.50"
Input voltage – 24VDC
Input current inrush – 1.25A
Input current holding – 390mA
Alarm relay and Secure relay contact ratings – 24VDC, 1A
Fire alarm, Inhibit and Door position switch inputs require normally closed dry contacts.

How to Order

See Chexit "How to Order" on previous page.

*Note: The information listed in these pages reference the power supply and operating requirements for the redesigned RCM modules with motor driven blocking actuator that launched August 24, 2015. For information on devices built previous to August 24, 2015, please contact Customer Care at 877-671-7011.

DE5300 Delayed Egress System

DE5300 Delayed Egress System — Designed for controlled egress applications when used in conjunction with a magnetic lock. It meets both life safety and security needs, as well as the requirements of NFPA for "Special Locking Arrangement" and IBC "Special Egress-Control Devices". All control units, auxiliary locking, local alarm and remote signaling outputs are self-contained in the DE5300 assembly.

The DE5300 is commonly used on narrow stile doors where a standard or narrow stile Chexit is not practical. DE5300 Delayed Exit System uses a Chexit logic board and a Von Duprin RX-LC (low current request to exit) panic device to control a Schlage Electronics Direct Hold Magnetic Lock.

The Chexit module for the DE5300 is installed in a control box and mounted in the wall adjacent to the door. Features and functions of the standard Chexit exit device are available on the DE5300.

Specifications / Power Requirements*
Size - 3.75" x 5.57" x 2.50"
Input voltage – 24VDC
Input current – 1A
Alarm relay and Secure relay contact ratings – 24VDC, 1A
Fire alarm, Inhibit and Door position switch inputs require normally closed dry contacts.

How to Order

1. DE5300
2. M420/P, M450/P, or M490/P magnetic lock (order direct from Schlage Electronics)
3. RX-LC 22/33A/35A/98/99 device
4. PS900 Series
5. EPT-2/10

CHEXIT, Remote Chexit Module (RCM) & DE5300 Features

The Chexit, RCM and DE5300 devices have several features and options available to fit your needs.

Inputs & Outputs

Fire Alarm Input
Releases the door immediately upon a fire alarm allowing immediate egress. The Internal Alarm can be silenced during a fire input via an onboard switch setting.

Inhibit Input (Access Control)
Optional input provides authorized egress or entry when the device is Armed using an external card reader, Key Switch, etc. Also allows remote reset of the Chexit, RCM or DE5300 in an alarmed condition. The ability to reset alarms with the inhibit input can be disabled via an onboard switch setting.

Door Position Switch Input
An optional DPS can provide door position status additional security, ensuring that the door is closed, and can cause alarm when the door is left or forced open.

Gang Bus
The Gang bus allows a device to signal other Chexit, RCM or DE5300 devices when it enters the Release Delay, allowing multiple doors to release at the same time in an emergency. Up to 8 devices may be connected to the Gang Bus.

Alarm Relay Contacts
Control a Remote Alarm, such as a horn or lamp, or signal an external monitor. The contacts can be configured with a jumper as Normally Open or Normally Closed, and become active upon entering an alarmed condition.

Secure Relay Contacts
Signal an external monitor. The contacts can be configured as Normally Open or Normally Closed with a jumper, and become active when the DPS indicates the door is closed and the Push Pad is locked.

Delays

Release Delay
When the Push Pad is actuated and the Nuisance Delay expires, the device enters the Release Delay with alarm. During the Release Delay, the Internal Alarm sounds, the Alarm Relay activates, and the device remains locked for 15 seconds (less any time already elapsed during the Nuisance Delay). Once started, the Release Delay sequence will not stop and the devices will unlock.

Nuisance Delay
The Nuisance Delay is the brief time a Push Pad can be accidently actuated before the Release Delay sequence starts. If the Nuisance Time is set to 0 seconds the device will enter Release Delay as soon as the Push Pad is actuated (when armed). Setting the Nuisance Time to 1, 2, or 3 seconds allows the Push Pad to be pressed for 1 to 3 seconds before the device goes into Release Delay. If the Nuisance Audio and Nuisance Delay are both on, the Internal Alarm will pulse during the Nuisance Delay. The Alarm Relay does not activate during the Nuisance Delay. If the Push Pad is released before the Nuisance Delay expires, the device will remain armed.

Rearm Delay
The amount of time after the Key Switch or Inhibit Input is deactivated to when the device rearms. It is designed to give someone time to pass through the door before rearming occurs. The Rearm Time can be changed via the onboard switch settings from 0 and 28 seconds in 2 second increments. If the Rearm Time is set to 30 seconds and a DPS is used, if the door is opened and the Rearm Time expires, there will be no alarm. The device will rearm after the door is closed. If the door never opens, the device will rearm after 30 seconds. If not using a DPS, the device will always rearm in 30 seconds.

DPS Delay
If the DPS detects that the door closed during the Rearm Delay, the device ends the Rearm Delay and allows 2 seconds for the latch to clear the strike before rearming.

Interface

Key Switch
Provides the means to Arm or Disarm/Reset the device. Turning the Key Switch clockwise initiates the Rearm Delay, and turning the Key Switch counter-clockwise Disarms/Resets the device. The Key Switch allows the key to be removed in either the Arm or the Disarm/Reset position.

Status Indicator
The red Status Indicator flashes slow if the device is armed, flashes fast in an alarmed mode, is off when inhibited and on solid during Rearm Delay.

Internal Alarm
The Internal Alarm sounds continuously during and after a fire alarm or a Release Delay, pulses fast during the Nuisance Delay or a tamper and pulses slow during Disarmed Powerup mode.

Settings

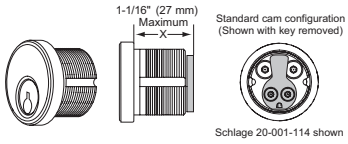
Armed Powerup
When set to OFF, a power disruption and power return will put the device in a disarmed, unlocked alarm mode.

Trim Fail Safe / Fail Secure (FS/FSE)
The trim input power can be set to FS (Fail Safe; locked when energized, unlocked when deenergized or during power failure) or FSE (Fail Secure; unlocked when energized, locked when deenergized or during power failure). The trim must be bought or modified to physically function as FS or FSE. This on board setting only selects the trim input power.

Options

Cylinder Dogging — Special center case cylinder dogging option is available to allow push/pull operation of the Chexit, when disarmed and used in a heavy traffic area. Prefix device with "CD" and specify handing.

Cylinders — Cylinders are not furnished with the Chexit, RCM or DE5300 devices and must be specified when ordering. Use 1-1/4" mortise cylinder with compression ring K510-406 with straight cam and orient cam as shown. Schlage cylinder 20-001-114 recommended for the device and the CD cylinder dogging option.



See Schlage Pricebook for additional information.

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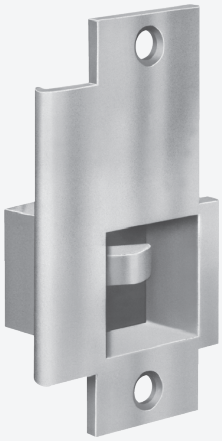
VON DUPRIN®

Monitor Strikes



Overview

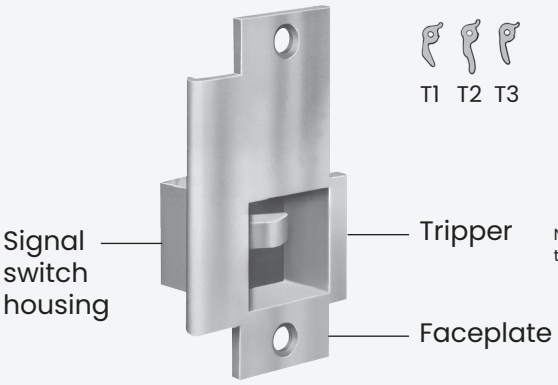
Monitor strikes are designed to offer remote door monitoring through the use of a signal switch mounted in the strike to monitor the latch bolt. This series of monitor strikes is designed for use with Von Duprin and most other manufacturers' rim, mortise, surface and concealed vertical rod exit devices and cylindrical, mortise and unit type locks.

The monitor strike replaces the standard door strike. The tripper in the monitor strike is depressed when the latch bolt is fully inserted in the strike. The stainless steel tripper activates an electric switch.

Features & Benefits

- UL listed as "miscellaneous door accessory"

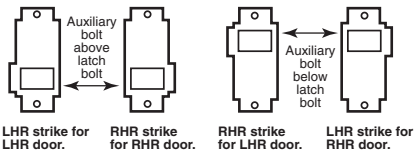
Monitor Strike Overview



Note: Tripper selection is based on the throw and shape of the latch bolt.

Monitor Strike Electrical Rating	
SPDT switch (single pole double throw)	24VDC @ 2 Amps (resistive)

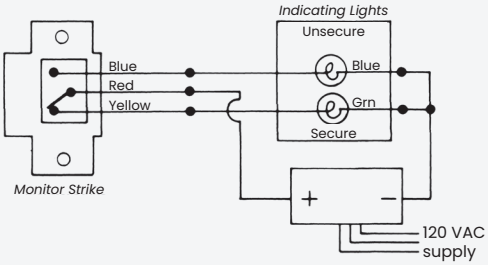
Model Specifications

Model #	4263	4268-T1	4582
Lockset	Rim or surface vertical rod exit devices	Rim fire exit devices	Mortise or cylindrical locks
# Doors	Single or pair	Single	Single or pair
Compatibility (with tripper type)	Von Duprin 22, T3 2227, T1 33A/35A, T3 3327A/3527A, T3 44, T1 55, T1 88, T1 8827, T1 98/99, T3 9827/9927, T1 Falcon 24-R, 25-R, T3 (3/49" [19mm] throw) Yale® 1500, T1 (5/89" [16mm] throw)	Von Duprin 22/22-F 33A/35A 88/88-F 98/99 98-F/99-F	Schlage 3/4" (19mm) Cyl., T2 L90, T2 Falcon 5/8" (16mm) ML (LR), T2 Arrow™ 5/8" (16mm) ML (LR), T1 Corbin Ruswin® 5/8" (16mm) ML (LR) 5999 ML (LR), T2 Yale® 5/8" (16mm) ML (LR), T2 **Caution: proper selection of handing required.**  **LHR strike for LHR door.** **RHR strike for RHR door.** **RHR strike for LHR door.** **LHR strike for RHR door.**
Certifications		UL list (GXHX R4504) fire exit hardware	UL List (GXHX R4504) fire exit hardware
Application Notes	1	2	3

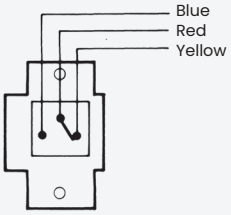
Application Notes

1. The 4263 is non-handed and features horizontal adjustment to compensate for misalignment of door and frame. 4263 may be used with a mullion. Tripper selection (-T1 or -T3) is based upon the lock to be used with.
2. The 4268 features horizontal adjustment to compensate for misalignment of door and frame. 4268-T1 is not for use with mullions.
3. For use on single or pair of doors with ANSI 115.3 frame cutout (frame modification required.) Tripper selection (-T1 or -T2) is based upon the lock to be used.

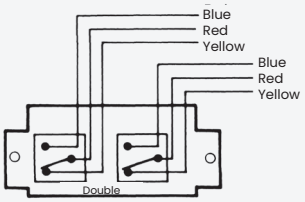
Basic Monitor Strike Circuit



Power supply same voltage as lamps with sufficient current capabilities



Switch shown in secure position



Switch shown in secure position

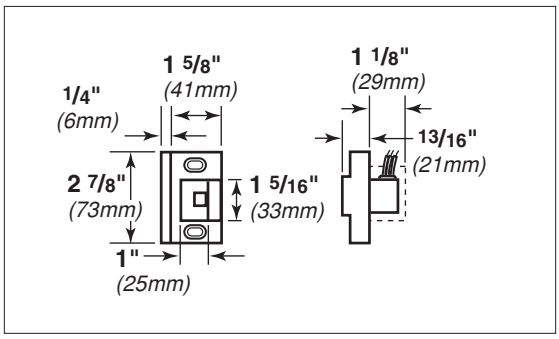
Model Specifications

Model #	4570-T1	4670-T1	4690-T2	4690-1-T2
Lockset	Cylindrical locks	Cylindrical locks	Concealed vertical rod exit devices	Concealed vertical rod exit devices
# Doors	Single or pair	Single or pair	Wide stile pair of doors	Narrow stile pair of doors
Compatibility (with tripper type)	Schlage 1/29" (13mm) Cyl. 5/89" (14mm) Cyl Falcon 1/29" (13mm) Cyl. 9/169" (14mm) Cyl. Adams Rite® 4510 8400 Arrow™ 1/29" (13mm) Cyl. Best® 9/169" (14mm) Cyl. Corbin Russwin® 5/89" (16mm) Cyl. Dexter® 7/169" (11mm) Cyl. Kwikset® 1/29" (13mm) Cyl. Precision™ 1040 Automatic Flush Bolt[1] Sargent® 1/29" (13mm) Cyl. Yale® 1/29" (13mm) Cyl.	Schlage 1/29" (13mm) Cyl. 5/89" (14mm) Cyl. Falcon 1/29" (13mm) Cyl. 9/169" (14mm) Cyl. Adams Rite® 4510 8400 Arrow™ 1/29" (13mm) Cyl. Best® 9/169" (14mm) Cyl. Corbin Russwin® 5/89" (16mm) Cyl. Dexter® 7/169" (11mm) Cyl. Kwikset® 1/29" (13mm) Cyl. Precision™ 1040 Automatic Flush Bolt[1] Sargent® 1/29" (13mm) Cyl. Yale® 1/29" (13mm) Cyl.	Von Duprin 3347A-F 3347A 9947 9947F	Von Duprin 3347A
Certifications			UL list (GXHX R4504) fire exit hardware	
Application Notes	1	2	3	4

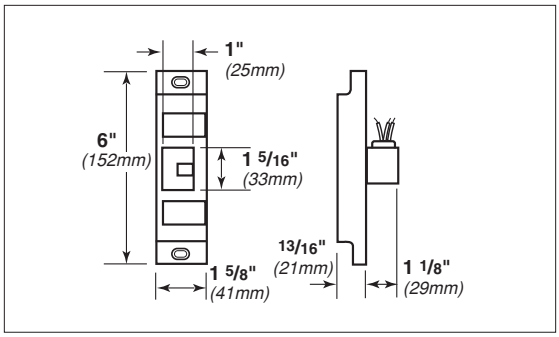
[1] Special template required

Dimensions

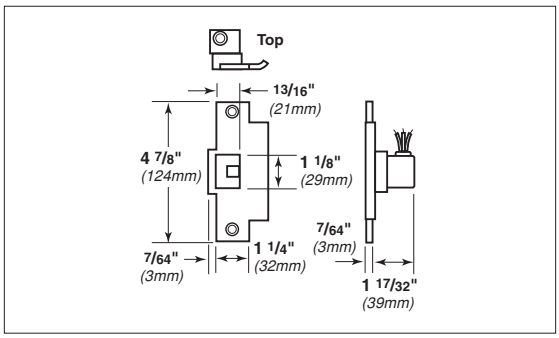
4263



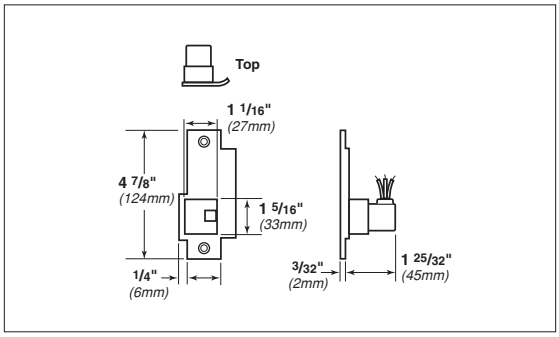
4268-T1



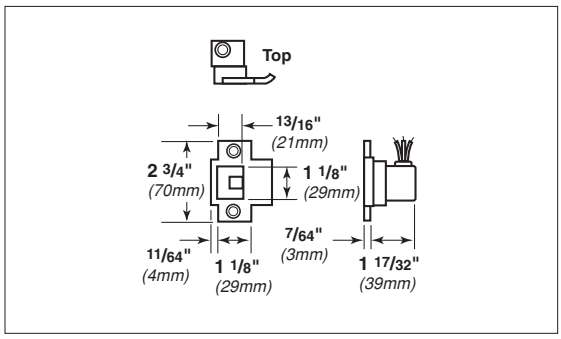
4570-T1



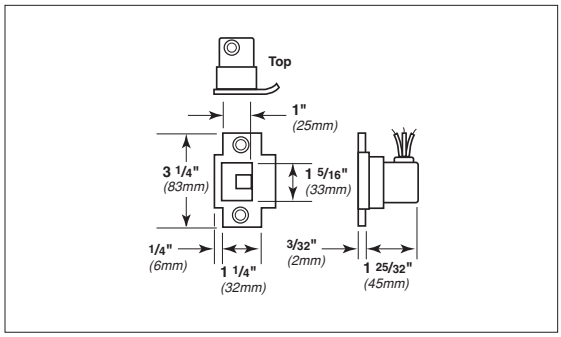
4582



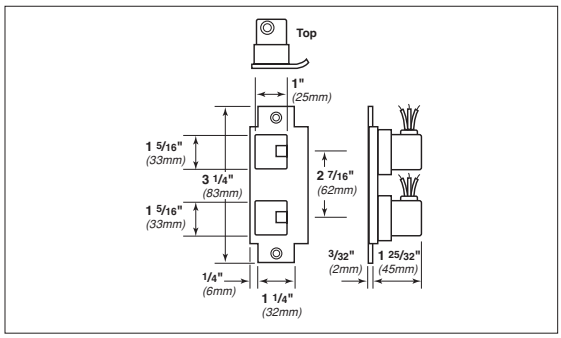
4670-T1



4690-T2



4690-1-T2



To Order Specify

- Model
- Tripper T1, T2, or T3
- Handing required on model 4582
- Specify LHR or RHR
- Finish: US3, US4, US10, US10B, US26, US26D

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010118, Rev. 01/24

Electrohydraulic Automatic Operators

Overview

LCN's electrohydraulic automatic operators integrate the 4000 Series mechanical closer to provide a smooth and easy manual opening experience for preliminary manual use applications. When activated, the door works as a fully functional low energy automatic operator to increase accessibility.

The low energy electric Auto Equalizer 4600 Series utilizes LCN's 4040XP mechanical closer to increase product life when the door is primarily used manually. When activated, a motor/clutch system drives the manual closer to automatically open the door.

The low energy pneumatic Auto Equalizer 4800/2600 Series provides quiet, smooth and reliable door operation and allows for use in hazardous locations where electronically operated devices are not permitted.

Features & Benefits

- UL Listed for self-closing doors without hold open under "Swinging door closers"
- Tested and certified under ANSI Standard A156.19
- ANSI Standard A117.1
- Electric Auto Equalizer has a no-destruct feature that allows clutch to slip when abused to reduce damage to the operator
- Digital control suite in electric Auto Equalizer has on-board diagnostics to ensure easy, trouble-free installation
- Pneumatic Auto Equalizer has easily adjustable air pressure and timing cycle to meet the needs of a specific installation
- Pneumatic Auto Equalizer is available in four different mounting configurations

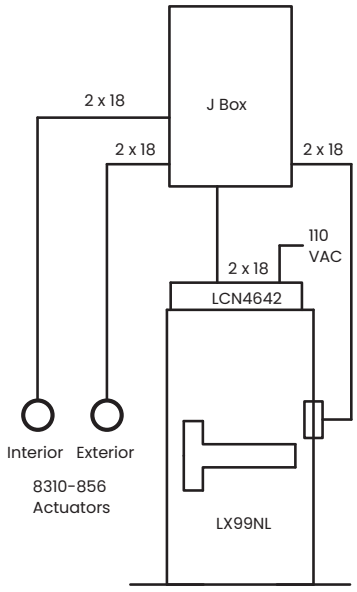
Additional Features

	4600 Series	4800/2600 Series
Handed	No	No; Yes (2610)
Mounting options	Push (4640) Pull (4630)	Push (4820) Pull (4810) Parallel arm (4840) Concealed (2610)
On board power supply	Yes	No
Digital control box	Yes	No
Header length	33-1/2"	20"
Maintains memory after power loss	Yes	Yes
Adjustable manual open face	Yes	Yes
Blow open capability	No	Yes
Meets UL requirements	UL/cUL 325 and 228	–

All electrohydraulic operators are available in seven standard or 150+ custom powder coated finishes.

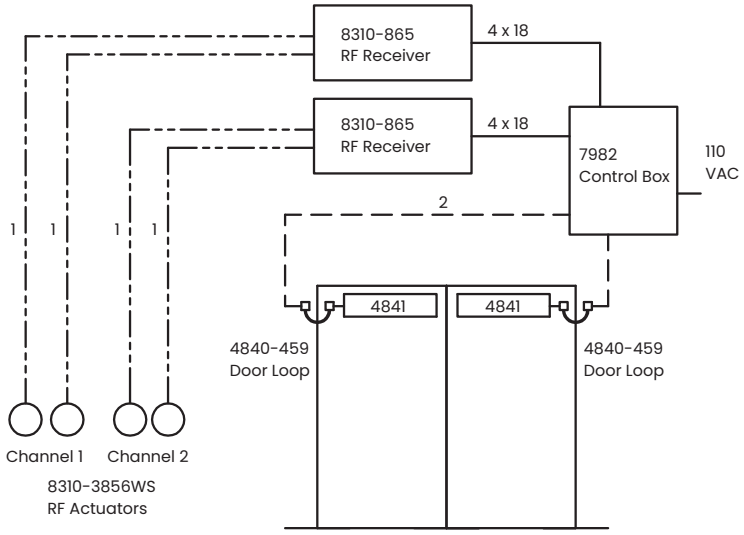
Sample Applications

Exterior Retail Entrance



Operation: When panic device is mechanically dogged both interior and exterior actuators will be enabled through LX switch. When device is undogged actuators will not function.

Church/Library Entrance



Operation: Doors normally closed, not latched. Two 8310-3856WS actuators to independently signal each door to swing.

[1] Dashed/dotted lines indicate RF signal, not a wiring connection.

[2] Dashed lines indicate pneumatic 925 tubing.

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2810IQ Series

Electromechanical Automatic Operators

Overview

The LCN® 2810IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a concealed mount on single door applications, the 2810IQ can be configured with either a center or offset pivot arm, allowing flexibility for a variety of opening needs.

When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 2810IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

AdaptivIQ™

This built-in technology allows our operator to automatically adjust to external pressures and resistance during both opening and closing cycles. Through a combination of dynamic braking, responsive motor control, and Smart Power Boost technology, our operator compensates for wind, carpet drag, and HVAC stack pressure, allowing the door to latch securely and minimize the risk of slamming.

Fully-Loaded Controller

With 23 total programmable settings all accessible through a user-friendly LCD screen, a self-calibration cycle that establishes default settings based on the physical aspects of the door and the opening area, and real-time error code and diagnostic information, this loaded control box provides users with complete control of our automatic operator.

Features & Benefits

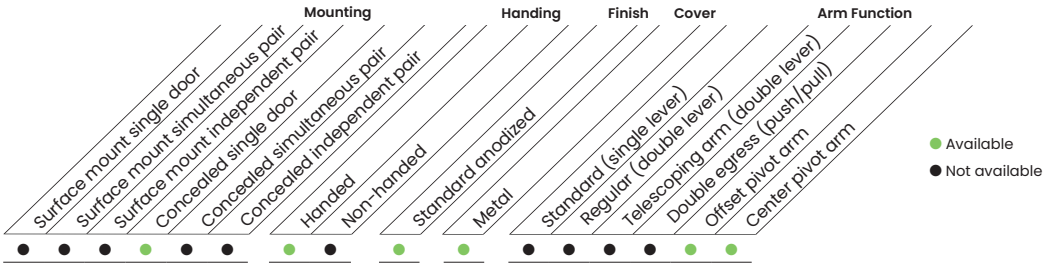
- Capability to operate and control doors of up to 600 pounds
- Power Assist and Push and Go to allow for easy manual operation
- Auto Reverse on Closing to minimize potential damage from obstructions
- Opening Speed and Force programmed separately for further customization
- On-board power supply (24VDC Output) to power actuators, card readers, and safety circuits
- Built-in support for up to four optional safety sensors

Features

Certifications	Grade 1 - ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA - Buy American Act
Handing	Handed
Door width	Minimum door width 33"- 48"; 49" with finger guard Note: Single door width per leaf 33" minimum, 48" maximum.
Door weight	Up to 600 lbs
Warranty	2 years

Fasteners	Wood and machine screws (WMS)
Mounting	Single door, overhead concealed, center pivot, offset pivot, butt hinge
Arms	Center pivot arm Offset pivot arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

User-Adjustable Features

- Opening Speed
- Opening Force
- Hold Open Delay
- Backcheck Speed
- Backcheck Angle
- Closing Speed of Door 1
- Latch Angle
- Smart Power Boost
- Smart Power Boost Angle
- Smart Power Boost Force
- Power Assist
- Power Assist Force
- Push & Go
- Alternate Action
- Auto Reverse on Closing
- Electric Lock Delay
- Preload Release
- DMSS Safety Action
- DMSS Safety Side Ignore Angle
- Actuator 2 Enable
- Audible Beep

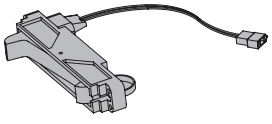
Accessories

Arm

2810IQ-3077CP
2-3/4" Center Pivot Arm (ARMCP)
- Center pivot installations only
- Used with overhead concealed operators and center pivoted doors

2810IQ-3077OP
3-3/4" Offset Pivot Arm (ARMOP)
- Offset pivot or butt hung installations only
- Used with overhead concealed operators

Installation Accessories



2810IQ-384B
Breakaway Stop (BKY)
- Allows in-swinging door to swing out in case of emergency
- Disables operator in breakaway mode
- For center pivoted installations only

2810IQ-384F
Positive Stop (POS)
- Prevents out-swinging door from swinging in
- For center pivoted installations only

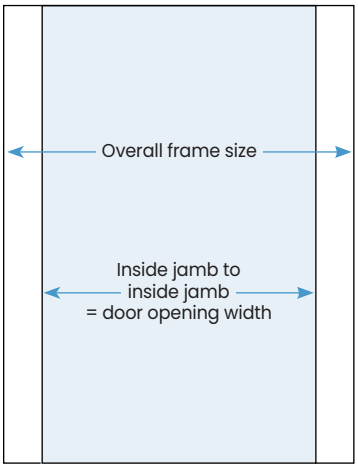
Ordering Information

How to Order a 2810IQ Series Operator		
1	Choose operator	2811IQ
2	Motor gearbox	Standard
3	Controller	Standard
4	Concealed header	HDR - Single door header - 33" - 48" HDR2 - Double door header - 48.125 "- 98" HDR2MP - Door door header w/ manual prep - 48.125" - 98"
5	Specify door opening width (jamb to jamb)	33" - 48"
6	Select arm	ST/CP - Center pivot arm ST/OP - Offset pivot arm
7	Track (stops)	LESS - No stop (standard selection) BKY - Breakaway stop POS - Positive stop
8	Specify handing	RH - Right Hand LH - Left Hand
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) 3.75 SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized

Operator will be shipped with:

- Motor gearbox mounting hardware
- Controller box mounting hardware
- Wood and machine screws

Measuring Door Opening Width



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016284, Rev. 10/25

2850IQ Series

Electromechanical Automatic Operators

Overview

The LCN® 2850IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a concealed mount on double door applications, this configuration is ideal for simultaneous double door operation and features two motor gearboxes with one controller. The 2850IQ can be mounted with either center or offset pivot arms, allowing flexibility for a variety of opening needs.

When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 2850IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

AdaptivIQ™

This built-in technology allows our operator to automatically adjust to external pressures and resistance during both opening and closing cycles. Through a combination of dynamic braking, responsive motor control, and Smart Power Boost technology, our operator compensates for wind, carpet drag, and HVAC stack pressure, allowing the door to latch securely and minimize the risk of slamming.

Fully-Loaded Controller

With 23 total programmable settings all accessible through a user-friendly LCD screen, a self-calibration cycle that establishes default settings based on the physical aspects of the door and the opening area, and real-time error code and diagnostic information, this loaded control box provides users with complete control of our automatic operator.

Features & Benefits

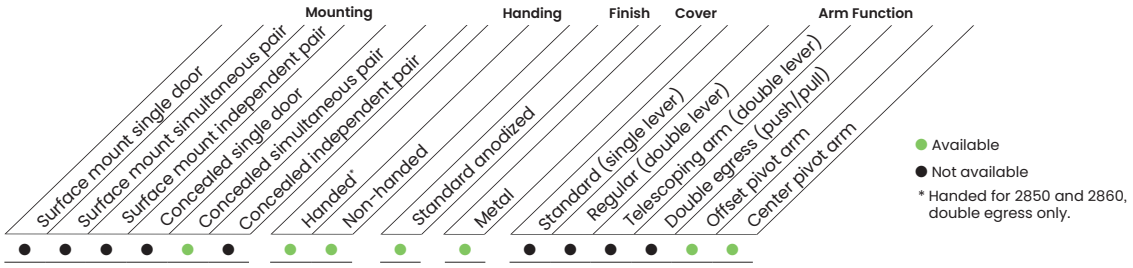
- Capability to operate and control doors of up to 600 pounds
- Power Assist and Push and Go to allow for easy manual operation
- Auto Reverse on Closing to minimize potential damage from obstructions
- Opening Speed and Force programmed separately for further customization
- On-board power supply (24VDC Output) to power actuators, card readers, and safety circuits
- Built-in support for up to six optional safety sensors

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Combined width min 52" - 96" • Simultaneous pair - width per leaf 26" minimum to 48" maximum
Door weight	Up to 600lbs
Warranty	2 years

Fasteners	Wood and machine screws (WMS)
Mounting	Double door, overhead concealed, center pivot, offset pivot, butt hinge
Arms	Center pivot arm Offset pivot arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

User-Adjustable Features

- Opening Speed
- Opening Force
- Hold Open Delay
- Backcheck Speed
- Backcheck Angle
- Closing Speed of Door 1
- Closing Speed of Door 2
- Latch Angle
- Smart Power Boost
- Smart Power Boost Angle
- Smart Power Boost Force
- Power Assist
- Power Assist Force
- Push & Go
- Alternate Action
- Auto Reverse on Closing
- Electric Lock Delay
- Preload Release
- DMSS Safety Action
- DMSS Safety Side Ignore Angle
- Actuator 2 Enable
- Audible Beep

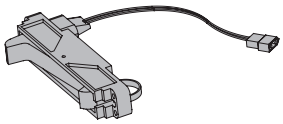
Accessories

Arm

2850IQ-3077CP
2-3/4" Center Pivot Arm (ARMCP)
- Center pivot installations only
- Used with overhead concealed operators and center pivoted doors

2850IQ-3077OP
3-3/4" Offset Pivot Arm (ARMOP)
- Offset pivot or butt hung installations only
- Handed
- Used with overhead concealed operators

Installation Accessories



2850IQ-384B
Breakaway Stop (BKY)
- Allows in-swinging door to swing out in case of emergency
- For center pivoted installations only

2850IQ-384F
Positive Stop (POS)
- Prevents out-swinging door from swinging in
- For center pivoted installations only

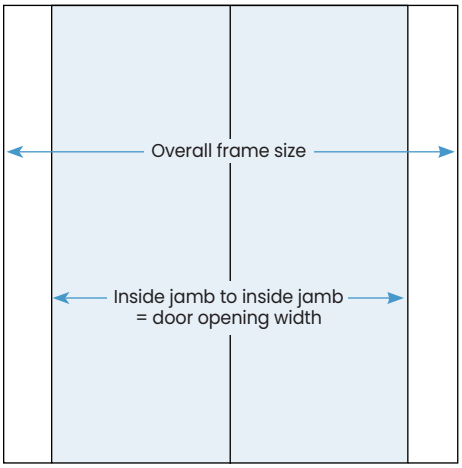
Ordering Information

How to Order a 2850IQ Series Operator		
1	Choose operator	2853IQ
2	Motor gearboxes	Two standard
3	Controller	Standard
4	Concealed header	HDR2 - Double door header
4	Specify door opening width (jamb to jamb)	52" - 96"
6	Select arm	STCP2 - Two center pivot arms STOP2 - Two offset pivot arms
7	Track (stops)	LESS - No stop (standard selection) BKY2 - Breakaway stop POS2 - Positive stop
8	Voltage	115V (standard selection) 230V
9	Spindle center	2.75 (standard selection) 3.75 SPEC
10	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized

Operator will be shipped with:

- Motor gearbox mounting hardware
- Controller box mounting hardware
- Wood and machine screws

Measuring Door Opening Width



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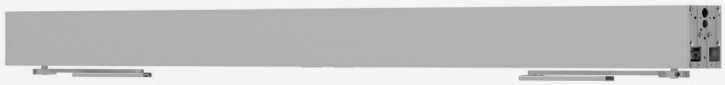
2860IQ Series

Electromechanical Automatic Operators



Overview

The LCN® 2860IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a concealed mount on double door applications, this configuration is ideal for independent double door operation and features two motor gearboxes with two separate controllers. The 2860IQ can be mounted with either center or offset pivot arms, allowing flexibility for a variety of opening needs.

When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. Each of the double doors controlled by the 2860IQ can also be operated manually and independently for regular pedestrian traffic and include both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

AdaptivIQ™

This built-in technology allows our operator to automatically adjust to external pressures and resistance during both opening and closing cycles. Through a combination of dynamic braking, responsive motor control, and Smart Power Boost technology, our operator compensates for wind, carpet drag, and HVAC stack pressure, allowing the door to latch securely and minimize the risk of slamming.

Fully-Loaded Controller

With 23 total programmable settings all accessible through a user-friendly LCD screen, a self-calibration cycle that establishes default settings based on the physical aspects of the door and the opening area, and real-time error code and diagnostic information, this loaded control box provides users with complete control of our automatic operator.

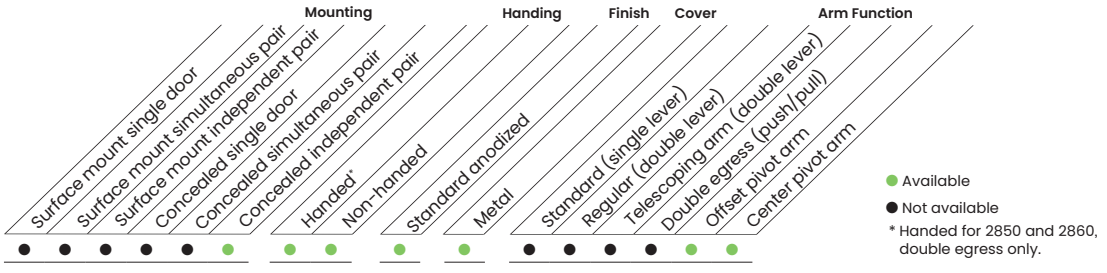
Features & Benefits

- Capability to operate and control doors of up to 600 pounds
- Power Assist and Push and Go to allow for easy manual operation
- Auto Reverse on Closing to minimize potential damage from obstructions
- Opening Speed and Force programmed separately for further customization
- On-board power supply (24VDC Output) to power actuators, card readers, and safety circuits
- Built-in support for up to six optional safety sensors

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Combined width min 52" - 96" • Simultaneous pair - width per leaf 26" minimum to 48" maximum
Door weight	Up to 600 lbs
Warranty	2 years

Fasteners	Wood and machine screws (WMS)
Mounting	Independent pair, overhead concealed, center pivot, offset pivot, butt hinge
Arms	Center pivot arm Offset pivot arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

User-Adjustable Features

- Opening Speed
- Opening Force
- Hold Open Delay
- Backcheck Speed
- Backcheck Angle
- Closing Speed of Door 1
- Closing Speed of Door 2
- Latch Angle
- Smart Power Boost
- Smart Power Boost Angle
- Smart Power Boost Force
- Power Assist
- Power Assist Force
- Push & Go
- Alternate Action
- Auto Reverse on Closing
- Electric Lock Delay
- Preload Release
- DMSS Safety Action
- DMSS Safety Side Ignore Angle
- Actuator 2 Enable
- Audible Beep

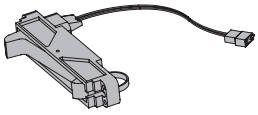
Accessories

Arms

2860IQ-3077CP
2-3/4" Center Pivot Arm (ARMCP)
- Center pivot installations only
- Used with overhead concealed operators and center pivoted doors

2860IQ-3077OP
3-3/4" Offset Pivot Arm (ARMOP)
- Offset pivot or butt hung installations only
- Used with overhead concealed operators

Installation Accessories



2860IQ-384B
Breakaway Stop (BKY)
- Allows in-swinging door to swing out in case of emergency
- For center pivoted installations only

2860IQ-384F
Positive Stop (POS)
- Prevents out-swinging door from swinging in
- For center pivoted installations only

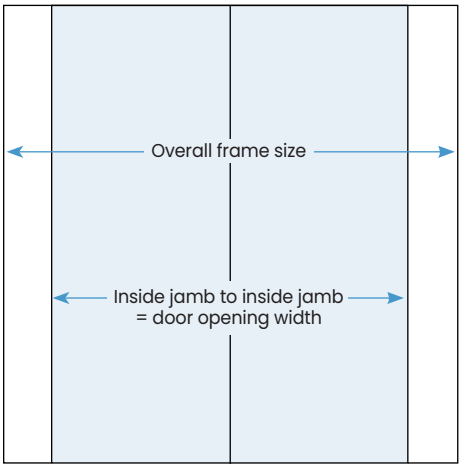
Ordering Information

How to Order a 2860IQ Series Operator		
1	Choose operator	2863IQ
2	Motor gearboxes	Two standard
3	Controllers	Two standard
4	Concealed header	HDR2 - Double door header
5	Specify door opening width (jamb to jamb)	52" - 96"
6	Select arm	STCP2 - Two center pivot arms STOP2 - Two offset pivot arms
7	Track (stops)	LESS - No stop (standard selection) BKY2 - Breakaway stop POS2 - Positive stop
8	Voltage	115V (standard selection) 230V
9	Spindle center	2.75 (standard selection) 3.75 SPEC
10	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized

Operator will be shipped with:

- Motor gearbox mounting hardware
- Controller box mounting hardware
- Wood and machine screws

Measuring Door Opening Width



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9530IQ Series

Electromechanical Automatic Operators

Overview

The LCN® 9530IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a surface mount on single door applications, the 9530IQ is paired with a standard arm for a pull-side configuration.

When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 9530IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

AdaptivIQ™

This built-in technology allows our operator to automatically adjust to external pressures and resistance during both opening and closing cycles. Through a combination of dynamic braking, responsive motor control, and Smart Power Boost technology, our operator compensates for wind, carpet drag, and HVAC stack pressure, allowing the door to latch securely and minimize the risk of slamming.

Fully-Loaded Controller

With 23 total programmable settings all accessible through a user-friendly LCD screen, a self-calibration cycle that establishes default settings based on the physical aspects of the door and the opening area, and real-time error code and diagnostic information, this loaded control box provides users with complete control of our automatic operator.

Single-Person Mechanical Installation

Our motor gearbox and controller are each mounted to a specially designed hook-and-cleat, allowing them to simply hook onto the backplate to provide a hands-free holding option while each component is secured. Not only is this a simplified install, but it is also a much safer install and can reduce mistakes for less familiar installers.

Sleek Industrial Design

Designed to blend in as part of any environment, the rounded corners, sleek edges, and multiple finish options allow architects and end users alike to better curate their aesthetic vision without being interrupted by the necessary hardware.

Features & Benefits

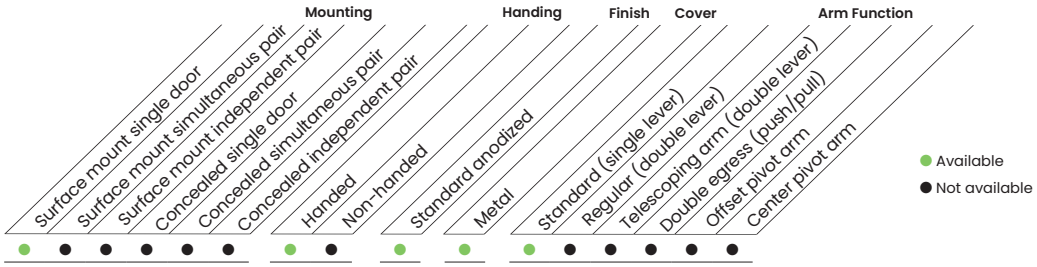
- Capability to operate and control doors of up to 600 pounds
- Power Assist and Push and Go to allow for easy manual operation
- Auto Reverse on Closing to minimize potential damage from obstructions
- Opening Speed and Force programmed separately for further customization
- Off/Hold-Open/Auto switch hidden outside the cover for easy yet discreet access
- On-board power supply (24VDC Output) to power actuators, card readers, and safety circuits
- Built-in support for up to four optional safety sensors

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Minimum 33"- 48" • Single door - width per leaf 33" minimum to 48" maximum
Door weight	Up to 600 lbs
Warranty	2 years

Fasteners	Machine screws (MS)
Mounting	Single door, surface mount, offset pivot, butt hinge, pull side
Arms	Standard arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Cover	Metal cover (MC)
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

User-Adjustable Features

- Opening Speed
- Opening Force
- Hold Open Delay
- Backcheck Speed
- Backcheck Angle
- Closing Speed of Door 1
- Latch Angle
- Smart Power Boost
- Smart Power Boost Angle
- Smart Power Boost Force
- Power Assist
- Power Assist Force
- Push & Go
- Alternate Action
- Auto Reverse on Closing
- Electric Lock Delay
- Preload Release
- DMSS Safety Action
- DMSS Safety Side Ignore Angle
- Actuator 2 Enable
- Audible Beep

Accessories

End Cap

9530IQ-3179
Rocker Switch Assembly
- This is an exterior Off/HO/ Auto three-way rocker switch on the end cap of the metal cover. The switch is concealed from view, and is accessed by pulling the switch open from the end cap.

9530IQ-163-1
End Cap Cover Insert
- This cover insert is used to fill the end cap(s) that do not contain the Rocker Switch Assembly Insert.

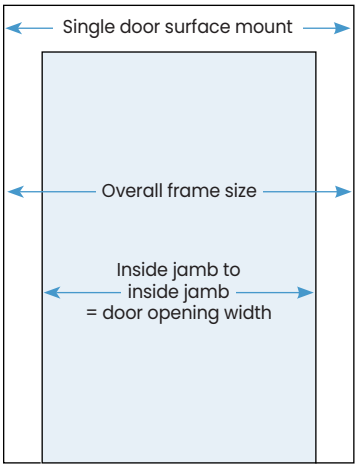
Ordering Information

How to Order a 9530IQ Series Operator		
1	Choose operator	9531IQ
2	Motor gearbox	Standard
3	Controller	Standard
4	Metal cover	COV - Single door header - 33" - 48" COV2 - Double door header - 48.125" - 98"
5	Specify door opening width (jamb to jamb)	33" - 98"
6	Select arm	STD - Standard arm
7	Track	STD - Standard track
8	Specify handing	RH - Right hand LH - Left hand
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized
12	Rocker switch assembly	SW - Yes NS - No

Operator will be shipped with:

- Motor gearbox mounting bracket
- Controller box mounting hooks (2)
- Machine screws
- Baseplate (manufactured at specified door width)
- Cover end cap kit (one left, one right, cover insert(s), fasteners)

Measuring Door Opening Width



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9540IQ Series

Electromechanical Automatic Operators

Overview

The LCN® 9540IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a surface mount on single door applications, the 9540IQ is paired with a regular arm for a push-side configuration.

When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 9540IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

AdaptivIQ™

This built-in technology allows our operator to automatically adjust to external pressures and resistance during both opening and closing cycles. Through a combination of dynamic braking, responsive motor control, and Smart Power Boost technology, our operator compensates for wind, carpet drag, and HVAC stack pressure, allowing the door to latch securely and minimize the risk of slamming.

Fully-Loaded Controller

With 23 total programmable settings all accessible through a user-friendly LCD screen, a self-calibration cycle that establishes default settings based on the physical aspects of the door and the opening area, and real-time error code and diagnostic information, this loaded control box provides users with complete control of our automatic operator.

Single-Person Mechanical Installation

Our motor gearbox and controller are each mounted to a specially designed hook-and-cleat, allowing them to simply hook onto the backplate to provide a hands-free holding option while each component is secured. Not only is this a simplified install, but it is also a much safer install and can reduce mistakes for less familiar installers.

Sleek Industrial Design

Designed to blend in as part of any environment, the rounded corners, sleek edges, and multiple finish options allow architects and end users alike to better curate their aesthetic vision without being interrupted by the necessary hardware.

Features & Benefits

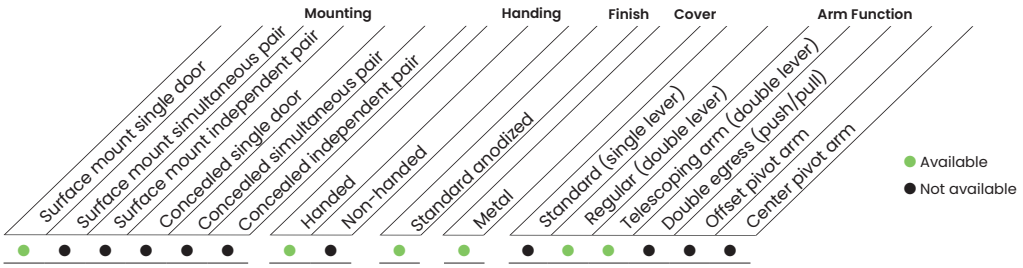
- Capability to operate and control doors of up to 600 pounds
- Power Assist and Push and Go to allow for easy manual operation
- Auto Reverse on Closing to minimize potential damage from obstructions
- Opening Speed and Force programmed separately for further customization
- Off/Hold-Open/Auto switch hidden outside the cover for easy yet discreet access
- On-board power supply (24VDC Output) to power actuators, card readers, and safety circuits
- Built-in support for up to four optional safety sensors

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, UL1998, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Combined width min 33"- 48" • Single door - width per leaf 33" minimum to 48" maximum
Door weight	Up to 600 lbs
Warranty	2 years

Fasteners	Machine screws (MS)
Mounting	Single door, surface mount, offset pivot, butt hinge, push side
Arms	Regular arm Long arm Telescoping arm Telescoping long arm
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, anodized
Cover	Metal cover (MC)
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



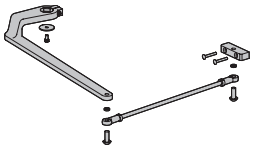
Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

User-Adjustable Features

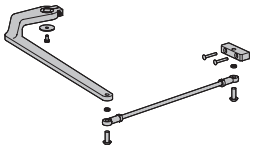
- Opening Speed
- Opening Force
- Hold Open Delay
- Backcheck Speed
- Backcheck Angle
- Closing Speed of Door 1
- Latch Angle
- Smart Power Boost
- Smart Power Boost Angle
- Smart Power Boost Force
- Power Assist
- Power Assist Force
- Push & Go
- Alternate Action
- Auto Reverse on Closing
- Electric Lock Delay
- Preload Release
- DMSS Safety Action
- DMSS Safety Side Ignore Angle
- Actuator 2 Enable
- Audible Beep

Accessories

Arms



9540IQ-3077
Regular Arm (REGARM)
- Handed
- A regular length, double lever, non-hold open arm for push-side applications.



9540IQ-3077L
Long Arm (LONG)
- Handed
- An extended arm for deep reveals or other special configurations on push-side applications.

9540IQ-3077TLS
Telescoping Arm (TLS)
- A regular length, double lever, non-hold open arm for push-side applications with a fully adjustable linkage assembly (no hacksaw required).

9540IQ-3077LNGTLS
Telescoping Arm Long (LNGTLS)
- An extended arm for deep reveals or other special configurations on push-side applications with a fully adjustable linkage assembly (no hacksaw required).

End Cap

9540IQ-3179
Rocker Switch Assembly
- This is an exterior Off/HO/Auto three-way rocker switch on the end cap of the metal cover. The switch is concealed from view, and is accessed by pulling the switch open from the end cap.

9540IQ-163-1
End Cap Cover Insert
- This cover insert is used to fill the end cap(s) that do not contain the Rocker Switch Assembly Insert.

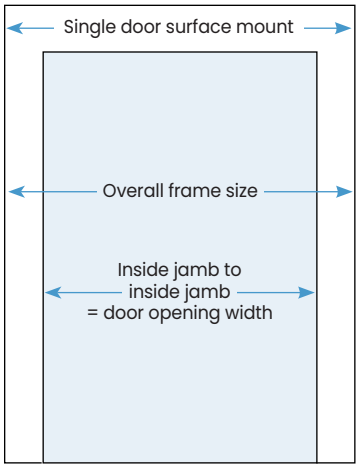
Ordering Information

How to Order a 9540IQ Series Operator		
1	Choose operator	9542IQ
2	Motor gearbox	Standard
3	Controller	Standard
4	Metal cover	COV - Single door - 33" - 48" COV2 - Double door - 48.125" - 98"
5	Specify door opening width (jamb to jamb)	33" - 98"
6	Select arm	REG - Regular arm (standard selection) LONG - Long arm TLS - Telescoping arm LNGTLS - Telescoping long arm
7	Track	LESS - No track
8	Specify handing	RH - Right hand LH - Left hand
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) 12.25 SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized
12	Rocker switch assembly	SW - Yes NS - No

Operator will be shipped with:

- Motor gearbox mounting bracket
- Controller box mounting hooks (2)
- Machine screws
- Baseplate (manufactured at specified door width)
- Cover end cap kit (one left, one right, cover insert(s), fasteners)

Measuring Door Opening Width



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9550IQ Series

Electromechanical Automatic Operators

Overview

The LCN® 9550IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a surface mount on double door applications, this configuration is ideal for simultaneous double door operation and features two motor gearboxes with one controller. The 9550IQ can be mounted with either two regular arms (push), two standard arms (pull), or one of each (double egress), allowing flexibility for a variety of opening needs.

When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. The 9550IQ can also be operated manually for regular pedestrian traffic and includes both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

AdaptivIQ™

This built-in technology allows our operator to automatically adjust to external pressures and resistance during both opening and closing cycles. Through a combination of dynamic braking, responsive motor control, and Smart Power Boost technology, our operator compensates for wind, carpet drag, and HVAC stack pressure, allowing the door to latch securely and minimize the risk of slamming.

Fully-Loaded Controller

With 23 total programmable settings all accessible through a user-friendly LCD screen, a self-calibration cycle that establishes default settings based on the physical aspects of the door and the opening area, and real-time error code and diagnostic information, this loaded control box provides users with complete control of our automatic operator.

Single-Person Mechanical Installation

Our motor gearbox and controller are each mounted to a specially designed hook-and-cleat, allowing them to simply hook onto the backplate to provide a hands-free holding option while each component is secured. Not only is this a simplified install, but it is also a much safer install and can reduce mistakes for less familiar installers.

Sleek Industrial Design

Designed to blend in as part of any environment, the rounded corners, sleek edges, and multiple finish options allow architects and end users alike to better curate their aesthetic vision without being interrupted by the necessary hardware.

Features & Benefits

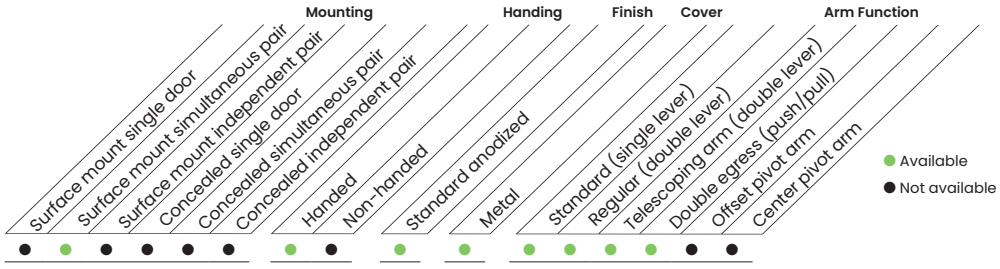
- Capability to operate and control doors of up to 600 pounds
- Power Assist and Push and Go to allow for easy manual operation
- Auto Reverse on Closing to minimize potential damage from obstructions
- Opening Speed and Force programmed separately for further customization
- Off/Hold-Open/Auto switch hidden outside the cover for easy yet discreet access
- On-board power supply (24VDC Output) to power actuators, card readers, and safety circuits
- Built-in support for up to six optional safety sensors

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Door width	• Minimum combined door width 52"- 98" (push) • Minimum combined door width 60"- 98" (pull; double egress) • Simultaneous pair - width per leaf 30" minimum - 48" maximum
Warranty	2 years
Door weight	Up to 600lbs

Fasteners	Machine screws (MS)
Mounting	Simultaneous pair, surface mount, pull side, push side, double egress
Arms	Standard arms (pull) Regular arms (push) Long arms (push) Telescoping arms (push) Telescoping long arms (push) Regular + standard arm (double egress) Telescoping + standard arm (double egress)
Cover	Metal cover
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark brown, anodized • 711 - Matte black, adonized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

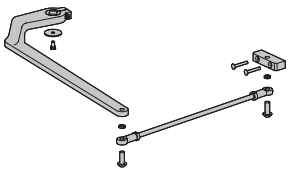
User-Adjustable Features

- Opening Speed
- Opening Force
- Hold Open Delay
- Backcheck Speed
- Backcheck Angle
- Closing Speed of Door 1
- Closing Speed of Door 2
- Latch Angle
- Smart Power Boost
- Smart Power Boost Angle
- Smart Power Boost Force
- Power Assist
- Power Assist Force
- Push & Go
- Alternate Action
- Auto Reverse on Closing
- Electric Lock Delay
- Preload Release
- DMSS Safety Action
- DMSS Safety Side Ignore Angle
- Actuator 2 Enable
- Audible Beep

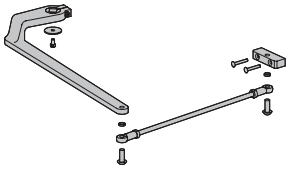
Accessories

Arms

9550IQ-3077T
Standard Arm (STDTRKARM)
- Handed
- A non-handed, single lever arm that directly connects the cylinder and track/roller assembly on the door or frame for pull-side applications.



9550IQ-3077
Regular Arm (REGARM)
- Handed
- A regular length, double lever, non-hold open arm for push-side applications.



9550IQ-3077L
Long Arm (LONG)
- Handed
- An extended arm for deep reveals or other special configurations on push-side applications.

9550IQ-3077TLS
Telescoping Arm (TLS)
- A regular length, double lever, non-hold open arm for push-side applications with a fully adjustable linkage assembly (no hacksaw required).

9550IQ-3077LNGTLS
Telescoping Arm Long (LNGTLS)
- An extended arm for deep reveals or other special configurations on push-side applications with a fully adjustable linkage assembly (no hacksaw required).

End Cap

9550IQ-3179
Rocker Switch Assembly
- This is an exterior Off/HO/Auto three-way rocker switch on the end cap of the metal cover. The switch is concealed from view, and is accessed by pulling the switch open from the end cap.

9550IQ-163-1
End Cap Cover Insert
- This cover insert is used to fill the end cap(s) that do not contain the Rocker Switch Assembly Insert.

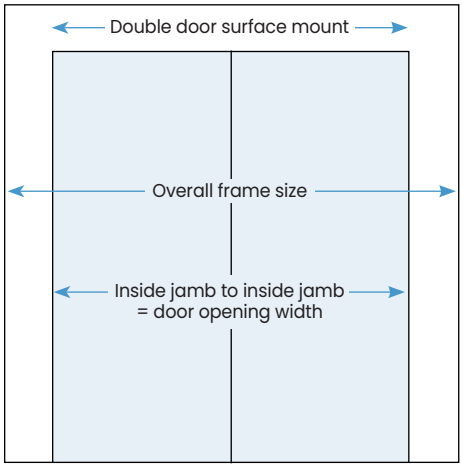
Ordering Information

How to Order a 9550IQ Series Operator		
1	Choose operator	9553IQ
2	Motor gearboxes	Two standard
3	Controller	Standard
4	Metal cover	COV2 - Double door
5	Specify door opening width (jamb to jamb)	52" - 98" (push) 60" - 98" (pull, double egress)
6	Select arms	STDTRACKARM2 - Two standard arms - double pull REGARM2 - Two regular arms - double push LONG2 - Two long arms - double push TLS2 - Two telescoping arms - double push LNGTLS2 - Two telescoping long arms - double push REG/STD - Regular + standard arm - double egress TLS/STD - Telescoping + standard arm - double egress
7	Track	LESS - No track STD - Single standard track STD2 - Two standard tracks
8	Specify handing	RH - Right Hand LH - Left Hand Non-handed - Double push/double pull
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized
12	Rocker switch assembly	SW - Yes NS - No

Operator will be shipped with:

- Motor gearbox mounting bracket (2)
- Controller box mounting hooks (2)
- Machine screws
- Baseplate (manufactured at specified door width)
- Cover end cap kit (one left, one right, cover insert(s), fasteners)

Measuring Door Opening Width



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9560IQ Series

Electromechanical Automatic Operators

Overview

The LCN® 9560IQ Senior Swing is a heavy-duty electromechanical swing door operator. Designed for a surface mount on double door applications, this configuration is ideal for independent double door operation and features two motor gearboxes and two separate controllers. The 9560IQ can be mounted with either two regular arms (push), two standard arms (pull), or one of each (double egress), allowing flexibility for a variety of opening needs.

When activated, this operator provides a smooth and seamless opening experience to accommodate those with accessibility needs or a pedestrian with their hands full. Each of the double doors controlled by the 9560IQ can also be operated manually and independently for regular pedestrian traffic and include both Power Assist and Push n' Go, which can be activated for an easy, smooth manual open.

AdaptivIQ™

This built-in technology allows our operator to automatically adjust to external pressures and resistance during both opening and closing cycles. Through a combination of dynamic braking, responsive motor control, and Smart Power Boost technology, our operator compensates for wind, carpet drag, and HVAC stack pressure, allowing the door to latch securely and minimize the risk of slamming.

Fully-Loaded Controller

With 23 total programmable settings all accessible through a user-friendly LCD screen, a self-calibration cycle that establishes default settings based on the physical aspects of the door and the opening area, and real-time error code and diagnostic information, this loaded control box provides users with complete control of our automatic operator.

Single-Person Mechanical Installation

Our motor gearbox and controller are each mounted to a specially designed hook-and-cleat, allowing them to simply hook onto the backplate to provide a hands-free holding option while each component is secured. Not only is this a simplified install, but it is also a much safer install and can reduce mistakes for less familiar installers.

Sleek Industrial Design

Designed to blend in as part of any environment, the rounded corners, sleek edges, and multiple finish options allow architects and end users alike to better curate their aesthetic vision without being interrupted by the necessary hardware.

Features & Benefits

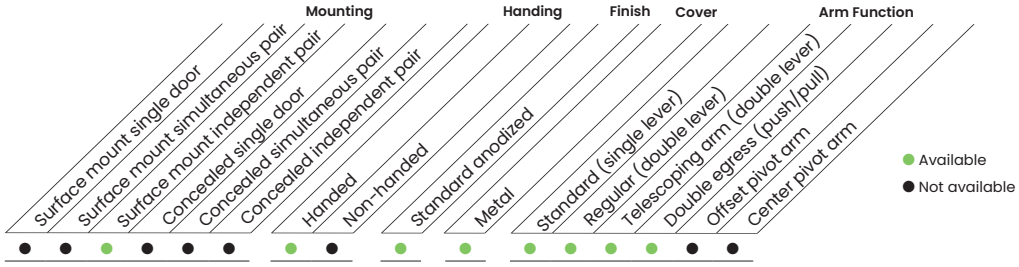
- Capability to operate and control doors of up to 600 pounds
- Power Assist and Push and Go to allow for easy manual operation
- Auto Reverse on Closing to minimize potential damage from obstructions
- Opening Speed and Force programmed separately for further customization
- Off/Auto/Hold-Open switch hidden outside the cover to easy yet discreet access
- On-board power supply (24VDC Output) to power actuators, card readers, and safety circuits
- Built-in support for up to six optional safety sensors

Features

Certifications	Grade 1 – ANSI A156.19, UL325, UL228, UL10C, ADA, 100 Hour Salt Spray, CSFM, Meets BAA – Buy American Act
Handing	Handed
Warranty	2 years
Cover	Metal cover (MC)
Door width	Minimum combined door width: 65" - 98" Simultaneous pair - width per leaf 30" - 48"
Door weight	Up to 600lbs

Fasteners	Machine screws (MS)
Mounting	Independent pair, surface, pull, push, double egress
Arms	Standard arms (pull) Regular arms (push) Long arms (push) Telescoping arms (push) Telescoping long arms (push) Regular + standard arm (double egress) Telescoping + standard arm (double egress)
Finishes/colors/ powder coat	• 628 - Aluminum, anodized • 710 - Dark bronze, anodized • 711 - Matte black, adonized
Power input	115VAC single phase @60Hz, 230VAC single phase @50Hz
Power output	2A @ 24VDC

Product Configurations



Note: Special Templates - Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

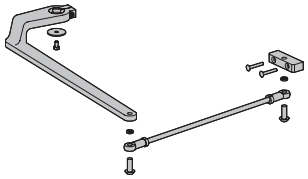
User-Adjustable Features

- Opening Speed
- Opening Force
- Hold Open Delay
- Backcheck Speed
- Backcheck Angle
- Closing Speed of Door 1
- Closing Speed of Door 2
- Latch Angle
- Smart Power Boost
- Smart Power Boost Angle
- Smart Power Boost Force
- Power Assist
- Power Assist Force
- Push & Go
- Alternate Action
- Auto Reverse on Closing
- Electric Lock Delay
- Preload Release
- DMSS Safety Action
- DMSS Safety Side Ignore Angle
- Actuator 2 Enable
- Audible Beep

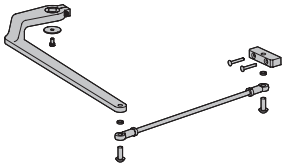
Accessories

Arms

9560IQ-3077T
Standard Arm (STDTRKARM)
- A non-handed, single lever arm that directly connects the cylinder and track/roller assembly on the door or frame for pull-side applications.



9560IQ-3077
Regular Arm (REGARM)
- Handed
- A regular length, double lever, non-hold open arm for push-side applications.



9560IQ-3077L
Long Arm (LONG)
- Handed
- An extended arm for deep reveals or other special configurations on push-side applications.

9560IQ-3077TLS
Telescoping Arm (TLS)
- A regular length, double lever, non-hold open arm for push-side applications with a fully adjustable linkage assembly (no hacksaw required).

9560IQ-3077LNGTLS
Telescoping Arm Long (LNGTLS)
- An extended arm for deep reveals or other special configurations on push-side applications with a fully adjustable linkage assembly (no hacksaw required).

End Cap

9550IQ-3179
Rocker Switch Assembly
- This is an exterior Off/HO/Auto three-way rocker switch on the end cap of the metal cover. The switch is concealed from view, and is accessed by pulling the switch open from the end cap.

9550IQ-163-1
End Cap Cover Insert
- This cover insert is used to fill the end cap(s) that do not contain the Rocker Switch Assembly Insert.

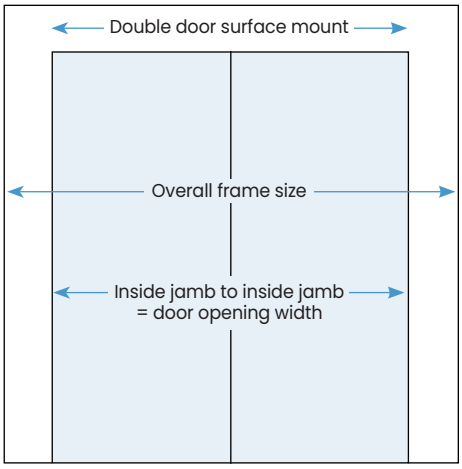
Ordering Information

How to Order a 9560IQ Series Operator		
1	Choose operator	9563IQ
2	Motor gearboxes	Two standard
3	Controllers	Two standard
4	Metal cover	COV2 - Double door
5	Specify door opening width (jamb to jamb)	65" - 98"
6	Select arm	STDTRACKARM2 - Two standard arms - double pull REG2 - Two regular arms - double push LONG2 - Two long arms - double push TLS2 - Two telescoping arms - double push LNGTLS2 - Two telescoping long arms - double push REG/STD - Regular + standard arm - double egress TLS/STD - Telescoping + standard arm - double egress
7	Track	LESS - No track STD - Single standard track STD2 - Two standard tracks
8	Specify handing	RH - Right hand LH - Left hand Non-handed (double push/double pull)
9	Voltage	115V (standard selection) 230V
10	Spindle center	2.75 (standard selection) SPEC
11	Select finish	628 - Aluminum, clear anodized 710 - Dark bronze, anodized 711 - Matte black, anodized
12	Rocker switch assembly	SW - Yes NS - No

Operator will be shipped with:

- Motor gearbox mounting brackets (2)
- Controller box mounting hooks (4)
- Machine screws
- Baseplate (manufactured at specified door width)
- Cover end cap kit (one left, one right, cover insert(s), fasteners)

Measuring Door Opening Width



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Fire/Life Safety Closers/Holders Series

Overview

Sentronic Series LCN closers/holders combine heavy duty closers with electrically controlled hold-open functions to control fire and smoke barrier doors. Automatic detection and containment of fire and smoke are the best ways to minimize danger to life and property. Patented Sentronic door closer/holders are designed to hold swinging doors open in normal use then release and automatically close the doors under fire conditions. These products integrate into your complete fire and life safety system.

LCN's fire/life safety closers/holders series includes:

- SE Series - offers adjustable single-point hold-open function controlled by solenoid assembly located in the SE track
- ME Series - offers infinitely adjustable, multi-point hold-open function controlled by solenoid on the cylinder assembly
- SEM Series - Electromagnetic door holders work with manual door closer to provide single-point hold-open
- HSA Series - Best suited for high traffic emergency doors, this product provides easy passage for groups of pedestrians through high traffic doors with electronically controlled closer/holder

Features & Benefits

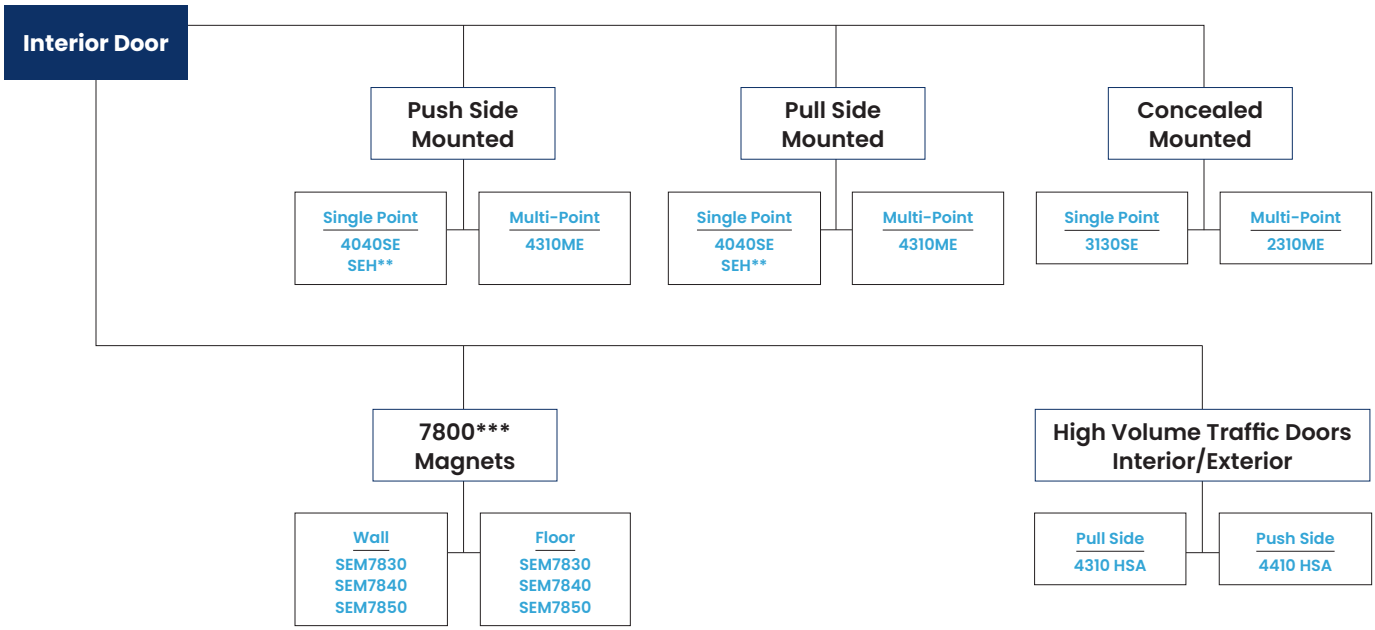
- Conforms to NFPA 101 and ANSI 156.15
- 24V AC/DC or 120V AC input
- When current is interrupted, hold-open releases and door closes
- Adjustable hydraulic backcheck cushions opening swing prior to 90°
- Separate regulation of general closing speed and latching speed
- Available in wide range of powder coated finishes to blend with door and frame (SEM magnets available in aluminum and dark bronze only)
- Circuit automatically handles AC or DC input
- Can be pushed safely and easily out of hold-open
- Functions as full rack and pinion door closer when hold-open is not engaged or current is interrupted
- High strength cast iron cylinder
- Forged steel main arm and piston
- All weather fluid

Holding Solenoids Current Draw

SE/ME
- 24V AC/DC (+10% - 15%) at 90 mA maximum
- 120V AC/DC (+10% - 15%) at 30 mA maximum

SEM (tri-volt)
- 12V DC (+10% - 15%) at 30 mA maximum
- 24V AC/DC (+10% - 15%) at 20 mA maximum
- 120V AC/DC (+10% - 15%) at 20 mA maximum

HSA
- 24V AC/DC (+10% - 15%) at 120 mA maximum



**See SEH section (cylinder not included).
***SEM 7800 Series are die cast.

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Actuators & Sensors

Overview

LCN actuators and sensors are designed to be used with LCN automatic operators. The desired function, traffic patterns and physical design of the opening will determine the type of actuator used.

Safety and activation sensors are designed to protect pedestrians and help prolong the life of an automatic operator. LCN safety sensors can be used on all automatic operators.

LCN also offers a full line of activation device accessories, including surface and flush mounted boxes, weather rings, escutcheons, wireless transmitters and receivers (1 channel), key chain activation devices (up to 4 buttons), sequencers, and a bollard post (used with 4-3/4" square actuator.)

Features & Benefits

- Complies with ANSI 156.19
- Can be ordered individually or in kits that combine common products for a specific application
- Beveled edges provide a tamper and vandal resistant solution to push plate needs, allowing no room for objects to get between plate and mounting box
- An all-active plate activates with any “push” location
- Stainless steel finish will not deteriorate or rust where it is touched — scratch and scuff resistant
- All activation push plates are available with ADA logo art and text or with ADA logo art only
- Text and ADA Compliant logo art are baked onto the surface for added durability
- Active-style wheelchair push plates now available

Stainless Steel Push Plates

Round push plates

6" Round style push plate

4-1/2" Round style push plate

Square push plates

4-3/4" Square style push plate

Jamb push plates

Jamb style push plate

Dual jamb style push plate

Ready Mount Actuators

6" Slim profile push plate

4-3/4" Square style push plate

36" x 6" Full length actuator

Touchless Actuators

8310-810R

8310-813R

8310-815

Sensors

Door Mount Safety Sensor

Header Mount Safety sensor

Monitored Safety Sensor Kit

Actuator Accessories

LCN offers a full line of activation device accessories, including: surface and flush mounted boxes, weather rings, escutcheons, wireless transmitters and receivers (1 channel), key chain activation devices (up to 4 buttons), sequencers, and a bollard post (used with 4-3/4" square actuator).

Mounting boxes

Weather rings

Bollard post

Wireless transmitters/receivers

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ALLEGION

Readers

This section of the Electronic Access control catalog covers Schlage mobile enabled multi-technology, multi-technology, smart, proximity, keypad and enrollment readers and accessories.

Overview

Schlage® readers offer a complete solution that features functionality allowing for an effortless migration path from legacy cards to future technologies, including NFC and Bluetooth® mobile credentials.

Benefits

- Adaptability
  - Extensive range to accommodate any business requirement
  - NFC mobile credentials in Apple Wallet® and Google Wallet™, Bluetooth mobile and MIFARE®
- Flexibility
  - Compatible with Schlage and other industry manufacturers' credentials and functionality for effortless migration to the latest credential technology
- Reliability
  - Limited lifetime warranty

Schlage Credential Services

At Schlage, we understand that credentials are the key to a successful access control plan. And we know that some solutions available in the market today can lock you into a proprietary path that limits your options in the future. That is why we offer Schlage Credential Services with programs that are designed to provide you with a whole new level of security, adaptability and flexibility.

Services include:

- Custom encryption keys
- Schlage standard encryption keys
- CardTrax™
- Custom format consulting
- Custom artwork

Check out our Schlage Credential Services

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Multi-Technology Readers

Schlage multi-technology readers are designed to simplify your access control solutions and allow a transition from existing population proximity or magnetic stripe to more secure encrypted card technology at your own pace—without having to change readers as new technologies are available. Five available models to fit any need and works with multiple form factors including wristbands, cards, fobs and tags.

- **MT11:** Mullion mount multi-technology reader
- **MT15:** Single gang mount multi-technology reader
- **MTK15:** Single gang mount multi-technology reader with keypad reader
- **MTMS15:** Single gang mount multi-technology reader with magnetic stripe reader
- **MTMSK15:** Single gang mount multi-technology reader with magnetic stripe reader and keypad

Mobile Enabled Multi-Technology Readers

Schlage mobile enabled multi-technology readers are designed to simplify your access control solutions and ease the transition from an existing proximity system to a secure encrypted card technology or mobile solution at your own pace—without having to change readers. Three models are available to fit any need and operate with multiple credential form factors including wristbands, cards, fobs and tags.

- **MTB11:** Mobile enabled; Mullion mount
- **MTB15:** Mobile enabled; Single gang mount
- **MTKB15:** Mobile enabled; Single gang mount with keypad
- Schlage multi-technology readers contain NFC mobile, 125 kHz proximity and 13.56 MHz contactless smart card capability in one unit, handling multiple formats simultaneously; mobile enabled models can also read 2.4 GHz Bluetooth mobile credentials; OSDP verified
- Wiegand and RS-485 output available for simple interface with most access control panels
- Compatible with NFC-open smart devices
- Limited lifetime warranty
- See datasheet for additional features
- Choose -485 models for applications requiring approval by the U.S. Government under HSPD-12 for FIPS201-1 and FIPS201-2[1] as PIV transparent readers.

Smart Readers

The Schlage SM10 mini-mullion smart reader is one of the most secure readers in the industry. Instead of using open transmission protocols, the SM10 smart card reader utilizes high security data. Each message between the card and the reader is digitally signed using message authentication coding (MAC) to ensure the integrity of the data.

- 13.56 MHz contactless smart card capability and can also read NFC wallet-based mobile credentials
- In addition, smart reader technology can be used in applications such as logical access, cashless vending and cafeteria services.

Enrollment Readers

The Schlage® MT20W multi-technology enrollment reader is designed to simplify the enrollment of smart and multi-technology credentials in “No-Tour” multifamily applications. Site administrators use the MT20W to program encrypted credentials, such as a keyfob, over USB connection to PC. When presented at a lock by the resident or user, the pre-programmed credentials automatically update the lock database. This eliminates the need for the property staff to have to visit each lock to deliver updates.

The MT20W is compatible with Schlage smart credentials (MIFARE Classic®, MIFARE Plus® and MIFARE® DESFire®) and supports no-tour access control when used with supported locks.

Proximity Readers

Schlage’s low-frequency proximity reader is an approachable solution that integrates seamlessly with access control systems. Schlage’s proximity readers are sleek, compact and provide a cost-effective option for applications requiring lower security. The mini-mullion design makes the readers ideal for installation in tight spaces. The PR10 recognizes most industry leading 125 kHz proximity credentials and can be easily integrated into existing legacy proximity systems.

- **PR10:** Mini-Mullion Mount
- Reads 125 kHz proximity credentials
- Wiegand output for simple interface with most access control panels
- LED (red, green or amber) visual indicator and other industry manufacturers’ credentials
- Limited lifetime warranty
- Compatible with Schlage and other industry manufacturers’ credentials
- See datasheet for additional features

Additional Supporting Readers

Schlage offers an extensive range of reader technologies to meet any business need. Complementing the Schlage multi-technology, smart technology and proximity technology reader options include: keypads, scramble keypads, magnetic stripe, and bar code readers and encoders.

- OEM200
- SERIII-W Scramble Keypad Reader
- SEKPDWG Electronic Keypad Reader
- SEKPDMGW Electronic Keypad Reader
- CL-ENCODER2 Magnetic Stripe Credential Encoder
- MT20 Multi-Technology Enrollment Reader for ENGAGE™ solution
- MT20W Multi-Technology Enrollment Reader for ENGAGE™ No-Tour solution

1. See FIPS201 Compliant Readers Data Sheet for additional details.

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Mobile Enabled Multi-Technology Readers

Overview

The Schlage® mobile enabled multi-technology readers are designed to simplify your access control solutions and ease the transition from an existing proximity system to a secure, encrypted card technology or mobile solution at your own pace—without having to change readers. Three available models fit any need and operate with multiple credential form factors including wristbands, cards, fobs and tags.

- **MTB11:** Mullion mount mobile enabled multi-technology reader
- **MTB15:** Single gang mount mobile enabled multi-technology reader
- **MTKB15:** Single gang mount mobile enabled multi-technology with keypad reader

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Schlage Mobile Bluetooth Credential
- Other manufacturer credentials including:
  - LenelS2™ BlueDiamond™ MIFARE® DESFire® EV3 and NFC mobile credentials
  - TRANSACT, Brivo, Kastle and more
- See the Credential Compatibility Guide for full details

Schlage Credential Services

- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

Color Options

Black (standard)

Cream

Features & Benefits

- Multi-technology platform offers support for a wide range of credential technologies including mobile (2.4 GHz) Bluetooth and NFC, high-frequency (13.56 MHz) smart and low-frequency (125 kHz) proximity
- Supports Bluetooth and NFC wallet-based credentials
- OSDP, RS485, Wiegand support
- Plug & Play mode for straight out of the box functionality
- Commission via ENGAGE™ mobile app for reader updates and easy configuration.
- Broad voltage range of 5V to 28V for simplified power management
- Accommodates interior, exterior, metal and non-metal installation environments
- Improved quick-connect cable allows for easy installation
- Easy-to-install mounting bracket
- Available finishes include: Black (standard) and cream

Check out our Schlage Credential Services

Model	MTB11	MTB15	MTKB15
Reader type	Mobile enabled multi-technology	Mobile enabled multi-technology	Mobile enabled multi-technology with keypad
Mounting style	Mullion	Single gang	Single gang
Standards	ISO 14443A, ISO 15693		
Certifications	FCC Certification - IC Certification - UL 294/cUL Listed - RED Directive - CE Mark - IP65 - REACH - Bluetooth SIG - RoHS 3		
Frequency	2.4 GHz, 13.56 MHz and 125 kHz		
FIPS 201 compliant	No		
Technology supported[5]			
CSN[1]	●	●	●
Proximity[2]	●	●	●
Smart[3]	●	●	●
Mobile (NFC)[4]	●	●	●
Mobile (Bluetooth)[4]	●	●	●
Read range (Based on ISO Card form factor)			
Prox FSK	Up to 2.25" (5.7 cm)	Up to 4.5" (11.4 cm)	Up to 4.5" (11.4 cm)
Prox ASK	Up to 2.0" (5.1 cm)	Up to 3.75" (9.5 cm)	Up to 3.75" (9.5 cm)
MIFARE Classic® EV1	Up to 2" (5.1 cm)	Up to 2.25" (5.7 cm)	Up to 2.25" (5.7 cm)
MIFARE Plus®	Up to 1" (2.5 cm)	Up to 1.5" (3.8 cm)	Up to 1.5" (3.8 cm)
MIFARE® DESFire® EV1/EV3	Up to 1.25" (3.2 cm)	Up to 1.75" (4.4 cm)	Up to 1.75" (4.4 cm)
MIFARE® DESFire® EV2	Up to 2" (5.1 cm)	Up to 2.25" (5.7 cm)	Up to 2.25" (5.7 cm)
Schlage Mobile Credential (Bluetooth)	Up to 30'+ (9.1 m)	Up to 30'+ (9.1 m)	Up to 30'+ (9.1 m)
System interface	Wiegand / Clock & Data / RS-485 (OSDP, OSDP Secure)		
Voltage range	5-28 VDC		
Current requirements	80mA Average (190mA Peak) @12V 45mA Average (100mA Peak) @24V	80mA Average (190mA Peak) @12V 45mA Average (100mA Peak) @24V	80mA Average (200mA Peak) @12V 45mA Average (105mA Peak) @24V
Pigtail specification	22 AWG, 12 conductor, 12" length		
Tamper	Yes		
Physical dimensions	5.91" x 1.72" x 0.81" 15 cm x 4.4 cm x 2.1 cm	5.1" x 3.25" x 0.76" 12.9 cm x 8.3 cm x 1.9 cm	5.1" x 3.25" x 0.76" 12.9 cm x 8.3 cm x 1.9 cm
Operating temperatures	-40° to 158° F (-40° to 70° C)		
Weight	3.8 oz	6.0 oz	6.1 oz

1. DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, ST Microelectronics® CSN, Texas Instruments Tag-It® CSN, Phillips I-Code® CSN.
2. Schlage® Proximity, HID® Proximity up to 37 bit lengths, GE/CASI® Proximity, AWID® Proximity, LenelProx®.
3. Schlage smart cards using MIFARE Classic® EV1, Schlage smart cards using MIFARE Plus®, Schlage smart cards using MIFARE® DESFire® EV1, Schlage smart cards using MIFARE® DESFire® EV2, Schlage smart cards using MIFARE® DESFire® EV3.
4. Compatible with Bluetooth and NFC-enabled smartphones.
5. For more detail, see Schlage Credentials Compatibility Guide for readers and locks.

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013251, Rev. 05/25

Multi-Technology Readers

Overview

Schlage® multi-technology readers are designed to simplify your access control solutions and allow a transition from existing population proximity or magnetic stripe to more secure encrypted card technology at your own pace—without having to change readers as new technologies are available. Five available models to fit any need and works with multiple form factors including wristbands, cards, fobs and tags.

- **MT11:** Mullion mount multi-technology reader
- **MT15:** Single gang mount multi-technology reader
- **MTK15:** Single gang mount multi-technology reader with keypad reader
- **MTMS15:** Single gang mount multi-technology reader with magnetic stripe reader
- **MTMSK15:** Single gang mount multi-technology reader with magnetic stripe reader and keypad

Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key developed by Schlage Custom Encryption Key Service (SCEKS) including NXP and NFC
- Schlage MIFARE® DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Other manufacturer credentials including:
  - LenelS2™ BlueDiamond™ MIFARE® DESFire® EV3 and NFC mobile credentials
  - TRANSACT, Brivo and more
- See the Credential Compatibility Guide for full details

Schlage Credential Services

- CardTrax™ credential format sequencing service offering industry standard formats
- Custom format development

Color Options

Black (standard) | Cool tone gray | Cream | Warm tone brown

Note: Lead time may apply for non-standard colors.

Features & Benefits

Multi-technology platform offers support for both high-frequency (13.56 MHz) smart and low-frequency (125 kHz) proximity credentials.

- Supports NFC wallet-based credentials
- Wiegand and RS-485 support
- Limited lifetime warranty
- Accommodates interior, exterior, metal and non-metal installation environments
- Quick-connect cable allows for easy installation
- Easy-to-install mounting bracket
- Available finishes include: black (standard), cool-tone gray, cream and warm-tone brown

Check out our Schlage Credential Services

Multi-Technology Readers

Model[1]	MT11	MT15	MTK15	MTMS15	MTMSK15
Reader type	Mullion	Single gang	Keypad single gang	Magnetic stripe	Magnetic stripe and keypad
Frequency	13.56 MHz and 125 kHz			13.56 MHz and 125 kHz and magnetic stripe	
FIPS 201-1 & 201-2 compliant	Yes, requires RS-485 interface–See Schlage FIPS 201 Compliant Readers Datasheet for details				
Standard default PIV output	75 bit PIV[2]				
Standards	SO 14443A, 14443B, 15693				
Certifications	FCC Certification • IC Certification • UL 294 Listed • RED Directive (15 EU Countries) • CE Mark • IP65				
Voltage range	5-16 VDC				
Power supply	Linear DC				
Current requirement (at 12 VDC and 25 C; mAmps)	MT11 Avg. 100 mA Peak 170 mA MT11-485 Avg. 115 mA Peak 145 mA	MT15 & MT15-485 Avg. 120 mA Peak 200 mA	MTK15 & MTK15-485 Avg. 120 mA Peak 230 mA	MTMS15 & MTMS15-485 Avg. 120mA Peak 200mA	MTMSK15 & MTMSK15-485 Avg. 120mA Peak 230mA
Technology supported[3]					
CSN[4]	●	●	●	●	●
Proximity[5]	●	●	●	●	●
Smart[6]	●	●	●	●	●
Mobile (NFC)[7]	●	●	●	●	●
Read range	Proximity: Up to 5" (12.7 cm) MIFARE Classic: Up to 4" (10 cm MIFARE Plus: Up to 1" (2.5 cm) MIFARE DESFire EV1 / EV3: Up to 2" (5.1 cm) PIV credential: Up to 2.5" (6.5 cm)				
Cable specification	18 AWG, 5 conductor stranded/shielded				
System interfaces	Wiegand / Clock & Data / RS-485[8] (OSDP)				
Cabling distance	Wiegand output: 500 ft (152 m)				
Physical dimensions (H x W x D)	5.91" x 1.72" x 0.81" 15 cm x 4.4 cm x 2.1 cm	5.1" x 3.25" x 0.76" 12.9 cm x 8.3 cm x 1.9 cm	5.1" x 3.25" x 0.76" 12.9 cm x 8.3 cm x 1.9 cm	5.17" x 4.43" x 1.15" 13.13 cm x 11.25 cm x 2.92 cm	5.17" x 4.43" x 1.15" 13.13 cm x 11.25 cm x 2.92 cm
Operating temperatures	-40° to 158°F (-40° to 70°C)	-40° to 158°F (-40° to 70°C)	-40° to 158°F (-40° to 70°C)	-31° to 151°F (-35° to 67°C)	-31° to 151°F (-35° to 67°C)
Weight	5.7 oz	9.1 oz	9.3 oz	8.9 oz	9.5 oz
Material	PBT Polymer				

1. Some features and benefits listed on the front may not be applicable to the smart-only and proximity-only readers.
2. Other output options available through configuration.
3. For more detail, see Schlage Credentials Compatibility Guide for readers and locks.
4. DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, ST Microelectronics® CSN, Texas Instruments Tag-It® CSN, Phillips I-Code® CSN.
5. Schlage® Proximity, HID® Proximity up to 37 bit lengths, GE/CASI® Proximity, AWID® Proximity, LenelProx®.
6. Schlage smart cards using MIFARE Classic® EV1, Schlage smart cards using MIFARE Plus®, Schlage smart cards using MIFARE® DESFire® EV1, Schlage smart cards using MIFARE® DESFire® EV2, Schlage smart cards using MIFARE® DESFire® EV3.
7. Compatible with Bluetooth and NFC-enabled smartphones.
8. RS-485 model numbers include "-485" after the original model number. For example, MT11-485 is the RS-485 version of the multi-technology mini-mullion reader. Multi-drop, Open Standard Device Protocol (OSDP).

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005354, Rev. 11/25

Single Technology Readers

Overview

Schlage's SM10 smart technology and PR10 proximity readers are sleek, compact and cost-effective. The SM10 is compatible with Schlage NFC Mobile and 13.56 MHz credentials including MIFARE Classic® and MIFARE® DESFire® and is recommended for mid-level to high security applications where secure, encrypted technology is required. The PR10 is compatible with 125 kHz low frequency credentials and can be used for low to midlevel security applications. The mini-mullion design allows for these readers to fit into almost any application.

Features & Benefits

- Reduced model lineup and one size fits all reader offering limits complexity
- Limited lifetime warranty
- Accommodates interior, exterior, metal and non-metal installation environments
- Quick-connect cable allows for easy installation
- Easy-to-install mounting bracket
- PR10 is a cost-efficient reader used in 125 kHz proximity applications
- SM10 can support 13.56 MHz and NFC wallet-based mobile secure technologies in higher security applications

Check out our Schlage Credential Services

Model	PR10	SM10
Reader type	Proximity	Smart
Mounting style	Mini-mullion	Mini-mullion
Standards	N/A	ISO 14443A, 14443B, 15693
Certifications	FCC certification; IC certification; UL 294 listed; RED directive; CE Mark; IP65-rated	
Credential frequency supported	125 kHz	13.56 MHz
Technology supported[1]		
Proximity[2]	●	
CSN[3]		●
Smart[4]		●
Mobile (NFC)[5]		●
Read range	Proximity Up to 3" (7.5 cm)	Schlage MIFARE®: Up to 3" (7.5 cm) Schlage MIFARE® DESFire® EV1/EV2/EV3: Up to 2" (5.1 cm) NFC: Up to 2" (5.1 cm)
System interface	Wiegand	Wiegand / Clock and Data
Voltage range	5-16 VDC	
Current requirements	Average: 65 mA Peak: 110 mA	Average: 95 mA Peak: 195 mA
Dimensions (HxWxD)	4.26" x 1.72" x 0.81" 10.8 cm x 4.4 cm x 2.1 cm	
Operating temperatures	-31 to 151F (-35 to 67C)	
Weight	4.1 oz	3.9 oz
Material	PBT polymer	

1. For more detail, see Schlage Credentials Compatibility Guide for readers and locks.
2. Schlage® Proximity, HID® Proximity up to 37 bit lengths, GE/CASI® Proximity, AWID® Proximity, LenelProx®.
3. DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, ST Microelectronics® CSN, Texas Instruments Tag-It® CSN, Phillips I-Code® CSN.
4. Schlage smart cards using MIFARE Classic® EV1, Schlage smart cards using MIFARE Plus®, Schlage smart cards using MIFARE® DESFire® EV1, Schlage smart cards using MIFARE® DESFire® EV2, Schlage smart cards using MIFARE® DESFire® EV3.
5. Compatible with Bluetooth and NFC-enabled smartphones.

Color Options

Black (standard)

Cool tone gray

Cream

Warm tone brown

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013788, Rev. 11/25

FIPS 201 Compliant Readers

Overview

Schlage® multi-technology readers have been approved by the U.S. Government under HSPD-12 for FIPS 201-1 and FIPS 201-2* compliance as PIV transparent readers. PIV compliance is available on five reader models, including the MT11-485 multi-technology mullion, MT15-485 multi-technology, MTK15-485 multi-technology with keypad, MTMS15-485 multi-technology with magnetic stripe and MTMSK15-485 multi-technology with magnetic stripe and keypad.

Schlage multi-technology readers are a unique and critical component of successful security upgrades in all sectors of the government. FIPS 201-1 and 201-2 are Federal Information Processing Standards ("FIPS") developed by the National Institute of Standards and Technology ("NIST") to satisfy the requirements of HSPD-12, a Homeland Security Presidential Directive. One of the main objectives of HSPD-12 is to ensure government-wide interoperability for information technology and security through the implementation of a range of federal standards and product requirements. FIPS 201 seeks to improve identification and authentication of federal employees and contractors for access to the federal facilities and information systems.

Schlage FIPS 201 PIV compliant readers are available with multiple data output formats, which provide unprecedented versatility within the PIV and PIV-I specification.

In addition to reading approved FIPS 201-1 and 201-2 PIV and PIV-I credentials, Schlage smart and multi-technology readers are also compatible with many standard proximity and leading smart card technologies (see specifications). The ability to read multiple existing card types and PIV and PIV-I cards simultaneously is a tremendous benefit to those agencies looking to transition seamlessly from older proximity technologies to new, mandated PIV and PIV-I credentials. A mixed population of old proximity credentials and new PIV and PIV-I credentials is unavoidable during the government's multi-year upgrade path to FIPS 201 compliance.

GSA FIPS 201 APPROVED

* Disclaimer: FIPS201-1 certification is standard with all Schlage and Schlage readers noted. FIPS201-2 certification is tested and listed in conjunction with a full access control system, including panel, reader, and software components. For a full list of full access control systems that are certified with Schlage and Schlage readers, please refer to the APL at idmanagement.gov.

Features & Benefits

- Compatibility: compatible with industry standard magnetic stripe technology (tracks 1, 2, or 3) and 125 kHz and 13.56 MHz contactless technologies
- Read range: up to 6" (proximity), up to 2" for PIV and PIV-I credentials
- Tri-state LED (red, green, amber): visual indicator and audio feedback representing status and activity information
- Tamper detection
- Environment: accommodates interior, exterior, metal and non-metal installation environments

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Additional features

- **Compliance:** compatible with applicable ISO standards
- **Warranty:** limited lifetime against defective workmanship and materials

Additional Technologies Supported

- Magnetic stripe
  - Track 1, 2, or 3
- Proximity
  - Schlage
  - HID® Proximity[1] (certain formats)
  - GE/CASI ProxLite™
  - AWID® Proximity
- Smart card (secure sector only)
  - Schlage MIFARE Classic®
  - Schlage MIFARE Plus®
  - Schlage MIFARE® DESFire®
  - PIV and PIV-I
- Smart card (card serial number only)
  - DESFire® application HID iClass®
  - Inside contactless PicoTag™

Ordering Information

- **MT11-485** - Multi-technology mullion reader
- **MT15-485** - Multi-technology single gang reader
- **MTK15-485** - Multi-technology with keypad single gang reader
- **MTMS15-485** - Multi-technology magnetic stripe reader
- **MTMSK15-485** - Multi-technology with magnetic stripe reader and keypad

Note: A Schlage CE configuration card is required based on credential requirements. Schlage PIV readers have been approved by the GSA lab as compliant with FIPS 201-1 and the appropriate PIV credentials.Please see Schlage multi-technology readers data sheet for specific technical information.

1. Proximity bit lengths greater than 37 not supported.

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004256, Rev. 11/25

Reader Accessories

Reader cover style C1

Reader cover style C2

Overview

Schlage® offers a variety of accessories and replacement parts to ensure your readers are always performing well.

Reader Covers

Replacement reader covers can be used to replace faded or cracked covers and to change the color of your readers along with any updates to the facility's décor. We offer four color options — black, cream, cool tone gray and warm tone brown. Please note that the MTB Series is only available in Black (standard) and cream.

Cosmetic Backplate Covers

While replacing legacy readers with Schlage readers, the footprint of the legacy reader may be larger than that of the new reader. Cosmetic backplate covers accommodate this issue. Available in three sizes, our cosmetic backplate covers are designed to cover holes and unpainted areas that you do not wish to invest time and money to repair.

Quick-Connect Cable

The quick connect cable allows the installer to connect the necessary reader wires without the hassle of a reader case hanging off the other end. Simply connect the wiring harness and plug the reader in, it's that easy. Every reader already comes with a quick-connect cable, but you can order the cable separately if you need extras, or to convert wiring with an adapter from MT to MTB.

Other Accessories

Following repeated use, the magnetic stripe read head in a reader can wear down. We offer a replacement magnetic stripe read head for our Schlage multi-technology magnetic stripe readers.

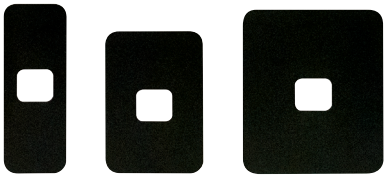
Reader mounting backplates are designed as a quick mounting bracket for a simplified installation process. Every reader comes with a reader backplate, but you can also order these separately if you need replacements and extras.

Color Options

- Black (standard)
- Cool tone gray
- Cream
- Warm tone brown

Note: MTB Series covers only available in Black (standard) and Cream. C2 cover style only available in Black.

Cosmetic Backplate Covers

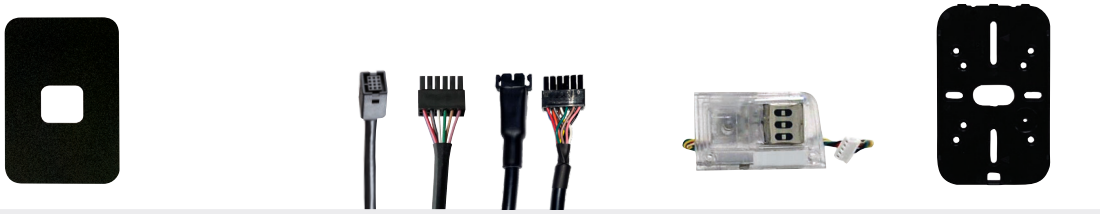


Quick-Connect Cable

MT *MTB* *MT to MTB*

Check out our Schlage Credential Services

Reader Model		PR10 & SM10	MT11 / MTB11	MT15 / MTB15	MTK15 / MTKB15	MTMS15	MTMSK15
MT Series part number	Black C1	47317553	47317557	47317563	47317569	47317575	47317579
	Black C2	N/A	47744033-SCH	47744034-SCH	47744035-SCH	N/A	N/A
	Brown	47317554	47317559	47317565	47317571	47317576	47317580
	Gray	47317555	47317560	47317566	47317572	47317577	47317581
	Cream	47317556	47317561	47317567	47317573	47317578	47317582
MTB Series part number	Black C1	N/A	47317558	47317564	47317570	N/A	N/A
	Black C2	N/A	47744033-SCH-B	47744034-SCH-B	47744035-SCH-B	N/A	N/A
	Cream	N/A	47317562	47317568	47317574	N/A	N/A
Reader type	N/A	Mini-mullion	Mullion	Single gang	Single gang with keypad	Magnetic stripe	Magnetic stripe with keypad
Dimensions (HxWxD)	N/A	4.26" x 1.72" x 0.81"	5.91" x 1.72" x 0.81"	5.1" x 3.25" x 0.76"	5.1" x 3.25" x 0.76"	5.17" x 4.43" x 1.15"	5.17" x 4.43" x 1.15"
Material	N/A	PNT polymer	PNT polymer	PNT polymer	PNT polymer	PNT polymer	PNT polymer



Part	Cosmetic Backplate Cover		Quick Connect Cable/Pigtail	Magnetic Stripe Read Head	Mounting Backplate	
Part number	Mini-mullion/ mullion	CP-11	MT Series pigtail 18 inches - 23846462 MTB Series pigtail 12 inches - 47265286 Adapter cable, MT connector to MTB reader - 47569692	47252693	Mini-mullion	23846355
					Mullion	23846397
	Single gang	CP-15			Single gang	23846439
	Mid range	CP-21			Magnetic stripe	24152654
Dimensions	Mini-mullion/ mullion	6.70" x 2.50"	N/A	N/A	5.10" x 3.25" x 0.76"	
	Single gang	5.65" x 3.85"				
	Mid-range	6.45" x 5.50"				

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009621, Rev. 11/25

Enrollment Readers

Overview

Schlage® offers a comprehensive portfolio of electronic access control solution products. Create a simple enrollment process with the Schlage CRM2 magnetic stripe enrollment reader, Schlage CRP2 proximity enrollment reader or the Schlage MT20 USB multitechnology enrollment reader with ENGAGE technology.

Features & Benefits

CRM2 Magnetic Stripe Credential Enrollment Reader

- Design allows easy enrollment of credentials into the Schlage Express access control system (version 4.0 and higher)
- Eliminates the need for manual data entry and provide error-free identification and security throughout the facility
- Allows for keystrokes to be added before and after the card's data, providing flexibility and data customization
- Reads data from any data track location on the card
- USB connectivity
- Plug-and-play functionality

The Schlage MT20 Multi-Technology Enrollment Reader

- Design simplifies the enrollment of smart and multi-technology credentials
- Access rights can be assigned to a user without property staff having to visit the lock
- USB cable powers the device
- Use Wi-Fi connection for enrollment including no-tour credentials
- Use a computer and the ENGAGE web app to easily enroll credentials
- Recognizes Schlage smart and multi-technology credentials
- Limited Lifetime Warranty

Check out our Schlage Credential Services

Model	MT20
Reader type	USB
Software and operating system requirements	N/A - USB
Bit formats recognized	26A, 32X, 34N, 34S, 35C, 37X, 37H, 40X
Technologies supported	Schlage Proximity HID® Proximity GE/CASI ProxLite® AWID® Proximity LenelProx® Schlage MIFARE Classic® Secure Sector Schlage MIFARE Plus® Secure Sector Schlage MIFARE® DESFire® with PACSA Secure Sector DESFire® CSN HID iClass® CSN Inside Contactless PicoTag® CSN ST Microelectronics® CSN Texas Instruments Tag-It® Serial Number Phillips I-Code® CSN
Physical dimensions (L x W x H)	5.56" x 2.00" x .695"
Operating temperatures	32° to 104° F (0° to 40° C)
Weight	4.1 oz
Power supply	Connect to powered USB port or via USB power supply
Interface	USB
Current requirement	Normal - 160 mA; Peak - 300mA
Default configuration	CE-401-073, for use with ENGAGE web applicaton
Octal output	CE-401-061, for use with SMS Express
FC/BID output	CE-401-060 (SUSB89 default,) for use as keystroke emulator
BID only	CE-401-069, for use as keystroke emulator

Model	CRM2
Desktop dimensions (H x W x D)	3.674" x 1.325" x 1.193" (93.32 x 33.65 x 30.3 mm); Optional base: 3.375" x 3.5" x 0.5" (86 x 89 x 13 mm)
Desktop weight	4.6 oz (136 g); Base: 13 oz (369 g)
Media thickness	0.015" (0.127 mm) to 0.038" (1.14 mm)
Slot width	0.040" (1.0 mm)
Swipe speed	3 to 60 inches per second, bi-directional
Power supply and interface	USB: self-powered; RS-232 [DB9F] model: 5V supplied by either PS/2 keyboard pass-through or USB power tap
Indicators	Tri-state LED, beeper
Operating temperature range	32° to 131°F (0° to 55°C)
Operating humidity range	5% to 95% relative humidity, non-condensing
Storage temperature range	-22° to 158°F (-30° to 70°C)
Cable length	6 foot articulated cable
Operating life	1,000,000 cycles minimum
Warranty	One year for material/workmanship and defects

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SERIII–W

Scramble Keypad

Overview

The SERIII scramble keypad is a keypad reader designed to prevent onlookers from detecting the PIN code being entered. The LED's display a randomly allocated set of numbers from 0 to 9. The position of the numbers change every time the keypad is activated. Only the user standing directly in front of the keypad can see the scrambled digits.

Features & Benefits

- Very narrow viewing angle of the lighted, scrambled digits
- The membrane keypad is extremely durable
- Random allocation of digits ensures even wear to the keys
- Individual PIN codes can be up to 9 digits in length
- The SERIII has a weatherproof rating of IP65
- An audible alarm signals when a button is depressed
- Robust polycarbonate enclosure
- The unit is equipped with power-up diagnostics and self-test routine
- The SERIII is provided with Wiegand communication protocol
- Over 3.6 million unique permutations are available
- Terminal connection on the rear of the unit

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SERIII-W Specifications	
Dimensions (H x W x D)	5.39" x 4.17" x 2.05"
Input voltage	8 - 12 VDC
Input current	500mA max.
Operating temperature	5° F to 122° F
Weight	16.76 oz
Cable distance (Wiegand)	500' with 22AWG 6 conductor stranded with overall shield

Ordering Information

- **SERIII-W-GR** - Scramble keypad (gray)
- **SERIII-W-BLK** - Scramble keypad (black)

- **SMK-2-GR** - Scramble keypad surface mount kit (gray)
- **SMK-2-BLK** - Scramble keypad surface mount kit (black)
- **SSMK-2-ADA** - Scramble keypad surface mount kit (ADA compliant)

- **PMK-2-GR** - Panel mount kit (gray)
- **PMK-2-BLK** - Panel mount kit (black)
- **SPMK-2-GR** - Panel mount kit with steel back box (gray)
- **SPMK-2-BLK** - Panel mount kit with steel back box (black)

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SEKPDWG & SEKPDMWG

Electronic Keypads

Overview

The fully encapsulated electronic keypad can be used by itself or next to another reader device for additional security. Its stainless steel construction is ideal for indoor or outdoor applications. The two designs, single gang box or the mullion mount style, give it the diversity needed for any application.

Features & Benefits

- Field selectable keypad configurations
- SEKPDWG mounts directly to a single gang electrical box
- SEKPDMWG mounts to any mullion style frame
- No moving parts to replace
- Heavy-duty piezoelectric keypad
- Industry standard outputs
- Billion Cycle Switch Technology™
- I\Io Moving Parts
- All Weather -40˚C to +70˚C
- Vandal resistant design
- Encapsulated electronics assembly
- Single gang or mullion
- Stainless steel
- Designed and manufactured in the USA

SEKPDWG & SEKPDMWG Specifications	
Dimensions	SEKPDWG: 5.125" x 3.375" x .437" SEKPDMWG: 7.125" x 1.75" x .75"
Power supply	5-12 VDC (field selectable)
Operating temperature	-40° F to 160° F
Weight	SEKPDWG: 16 oz SEKPDMWG: 4.4 oz
Material	316L stainless steel
Standby current draw	SEKPDWG: 5V-20mA, SEKPDMWG: 5V-20mA

Ordering Information

- **SEKPDWG** - Single gang style keypad
- **SEKPDMWG** - Mullion style keypad
- **SEKPD8B** - Mullion style keypad (8 bit)

Note: Specify 5V or 12V

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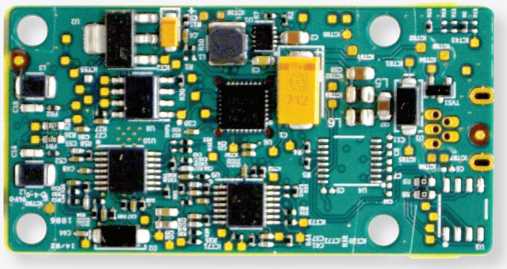
OEM 200 Module



Overview

Today's customers want to extend the use of credentials beyond physical access control to maximize their investment and provide the added convenience of using a single credential for multiple applications. To help meet customers' needs, the OEM 200 module can be embedded into third-party products so that solution providers can seamlessly support RFID technology as part of their offering.

An 80mm antenna is available in a multi-technology version that combines 125 kHz proximity and 13.56 MHz smart card technology. The multi-technology antennas interface with Schlage® smart credentials (MIFARE Classic®, MIFARE Plus® and MIFARE® DESFire® EV3) and can read the card serial numbers (CSN) of a variety of smart cards from other manufacturers. Additionally, the OEM 200 module is already NFC compatible and able to support NFC and NFC wallet-based mobile credentials.

The OEM 200 has been designed for easy integration, but should you need any assistance, our knowledgeable application engineering team is ready to assist you with any design or technology questions you may have.

Features & Benefits

- Multi-technology version: Reads 125 kHz proximity credentials and 13.56 MHz smart credentials
- Supports NFC and NFC wallet-based mobile credentials or similar
- Wiegand and UART-TTL output available for simple interface with most third-party products
- Antenna connects easily to main board with flat flexible cable (FFC) (provided)
- LEDs for debugging and diagnostics
- Allegion integration support

OEM200 Specifications		
Dimensions	Main board	1.11" x 2.165" x 0.39" (28.0mm x 55.0mm x 9.9mm)
	80mm antenna board	1.35" x 3.125" x 0.14" (34.3mm x 79.4mm x 3.4mm)
125 kHz Technologies	Schlage and XceedID proximity	
	GE/CASI ProxLite®	
	HID® Proximity	
	AWID® Proximity	
	LENEL® Proximity	
13.56 MHz Technologies	Schlage MIFARE Classic, MIFARE DESFire EV1 (with PACSA enabled) or MIFARE Plus	
	Schlage NFC mobile credentials	
	PIV (FASC-N output options)	
	PIV-1 (GUID output options)	
	CSN for HID iCLASS®, ISO 15693, ISO 14443	

Card read range in free space[1]

Card	Card type	Read range
125 kHz	ASK, FSK	Up to 2.75”
13.56 MHz	ISO 15693	Up to 2.75”
13.56 MHz	ISO 14443A MIFARE Standard	Up to 3.25”
13.56 MHz	ISO 14443A MIFARE DESFire EV1	Up to 1.25”
13.56 MHz	ISO 14443A MIFARE Plus	Up to 1.0”

Electrical specifications	Operating temperature: -31 to 149°F (-35 to 65°C)	
	Frequency: 125 kHz and 13.56 MHz	
	Voltage input: 5-16V	
	Average system current: 50 mAmps (180 mAmps max)	
	Communication: Wiegand or UART-TTL	

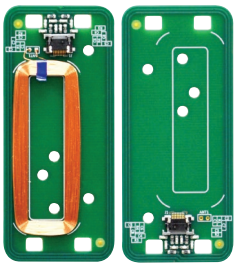
1. Antenna location inside end product and surrounding materials will affect the read range performance.

Ordering Information

Part # OEM200 TTL (module)

47259227 OEM200 80mm Antenna Multi-tech

Antenna Option:



80 mm antenna
(multi-technology)

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010175, Rev. 10/24

ALLEGION

Reader Controllers

This section of the Electronic Access control catalog covers the Schlage RC reader controller, CTE single door controller, and CT5000 single door controller.

Overview

Schlage delivers a comprehensive but straightforward controller portfolio where the need for traditional access control is made possible with more versatility than your previous Wiegand-hardwired, networked solution. Leveraging online wireless controllers, integrated edge reader controllers, and standalone controllers with no network connection requirement, we have an answer that fits the needs and location of all your openings.

The enclosure controller and reader controller offerings from Schlage feature standalone and/or online access control boasting the latest Bluetooth, Wi-Fi®, and Ethernet technologies that fit every step along the continuum of your security strategy.

Benefits

- Security
  - Electronics bring more visibility and control to virtually every opening
- Convenience
  - Offline and real-time based online solutions through the latest technology - LE, Wi-Fi® and Ethernet
- Efficiency
  - Manage users and assign access privileges from virtually anywhere

Schlage Credential Services

At Schlage, we understand that credentials are the key to a successful access control plan. And we know that some solutions available in the market today can lock you into a proprietary path that limits your options in the future. That is why we offer Schlage Credential Services with programs that are designed to provide you with a whole new level of security, adaptability and flexibility.

Services include:

- Custom encryption keys
- Default keys
- CardTrax™
- Custom format consulting
- Custom artwork

Check out our Schlage Credential Services

CTE ENGAGE™ Single Door Controller with Multi-Technology Reader

The CTE is an ENGAGE™ enabled single opening controller that allows perimeter and common area openings to be managed in a single system along with Schlage Control® smart locks, NDE and LE wireless locks. It is ideal for multifamily, commercial mixed use, narrow stile and retail storefront applications. The CTE is designed to work with a Schlage mobile enabled multi-technology reader and interface with an electrified lock, electromagnetic lock, electric strike, automatic operator, or exit device to control an opening.

Schlage RC Multi-Technology Reader Controller

The Schlage® RC is an IP reader controller that combines patented Pure IP™ access control technology together with Schlage's intelligent hardware, delivering a cost-effective all-in-one edge device that easily integrates into open PACS solutions. The Schlage RC connects to existing IT networks via a single PoE cable; reducing installation time and eliminating the need to run separate power to the door. The Schlage RC provides real-time connectivity with local mode feature, and can be managed in the same system as Schlage NDE and LE wireless locks.

Reader covers

Enrollment reader stand

Quick-connect cable

Advanced security module

Magnetic lock kit

Pure IP Reader Controller Accessories

Schlage® offers the following accessories and replacement parts to ensure your reader controllers are always secure and performing well.

- Reader controller covers
- Advanced security module
- Quick-connect cable
- Magnetic lock kit
- Enrollment reader stand

The CT5000 Offline Controller

The CT5000 offline single opening controller is also available for standalone applications. The CT5000 can support up to two separate Wiegand readers as well as interface with peripheral devices such as automatic operators, electric strikes, and electromagnetic locks.

The CT5000 offline single opening controller is an ideal solution for narrow stile store front and exit door applications. The CT5000 can operate in the same system as the AD Series and CO Series electronic locks. If networked functionality is required in the future, the CT5000 can be easily upgraded to a networked WRI400 wireless reader interface.

1. Some options are dependent upon choice of class and chassis; see price book for complete details.

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RC Series

Multi-Technology Reader Controllers

Overview

The Schlage® RC is an IP reader controller that combines patented Pure IP™ access control technology together with Schlage's intelligent hardware, delivering a cost-effective all-in-one edge device that easily integrates into open PACS solutions. The Schlage RC connects to existing IT networks via a single PoE cable; reducing installation time and eliminating the need to run separate power to the door. The Schlage RC provides real-time connectivity with local mode feature, and can be managed in the same system as Schlage NDE and LE wireless locks.

Three models are available to allow for common mounting options; creating a simple install process at each door.

- **RC11:** Mullion mount, multi-technology IP reader controller
- **RC15:** Single gang mount, multi-technology IP reader controller
- **RCK15:** Single gang mount, multi-technology IP reader controller with keypad

Schlage RC reader controllers provide both a modern look and an advanced feature set. Designed with technology to support Bluetooth® and NFC (Near Field Communication) mobile credentials, smart credentials (13.56 MHz) and standard proximity credentials (125 kHz); end users can define their migration path to secure credentials.

Features & Benefits

- Host and local modes supported
  - Host mode allows for real time connectivity where the host makes real time decisions for access, LED and buzzer sequencing, etc. Should the connection drop, the device will switch to local mode.
  - Local mode allows functionality without a connection to the network. This results in faster user response times, less network traffic, and reduced host system loading.
- Reader controllers support 125 kHz proximity, 13.56 MHz smart technology, 2.4 GHz Bluetooth and Near Field Communication (NFC)
- Tamper detection via accelerometer senses any type of altering and prevents a security breach with the reader.
- Communication is secured using industry standard TLS 1.2 encryption
- Supports network communication speeds of 10 or 100 mbps half or full duplex
- Commission via ENGAGE™ mobile app for easy configuration
- Three configurable inputs; Door Position (DPS), Request to Exit (REX), and Auxiliary (AUX)
- Mullion, wall mount and wall mount with keypad form factors
- Credential parity with Schlage readers and wireless locks; ISONAS credential parity is a factory orderable option
- Accommodates interior, exterior, metal and non-metal installation environments

CYBERSECURITY
Learn about Allegion's commitment

Specifications

Model	RC11	RC15	RCK15
Reader technology	Mobile (NFC and Bluetooth), smart, proximity	Mobile (NFC and Bluetooth), smart, proximity	RC15 + keypad
Mounting style	Mullion	Single gang	Single gang
Modes and capacity	**Host mode:** real time connectivity; unlimited credential, events, time schedules, and holidays capacity* **Local mode:** decisions made at device when connection is offline or configured to local; 64,000 credentials - 5,000 events - 32 time schedules - 32 holidays * Host capacity is based on your host programming; contact your support team		
Network communications	10/100 Ethernet - half or full duplex - Cat5e, Cat6, or better cable WebSockets - Network host or client modes - DHCP addressing TLS1.2		
Visual and audible communications	LED (red, amber, green) Audible indicator (on/off)		
System Interfaces	2 TTL Lines / Clock & Data (for use with Advanced Security Module [ASM])		
Inputs	Request to Exit (REX) / Auxiliary Input (AUX) / Door Position Switch (DPS)		
Tamper	Yes		
Power input	PoE or PoE+ (IEEE 802.3af, Class 0) DC power: 10-13 VDC Please note: 24 VDC is not approved for this device		
Power output	600 mA maximum output current @ 12 VDC		
PoE / PoE+ Pigtail	26 AWG, Cat5E, 8" length		
Physical dimensions	5.94" x 1.77" x 1.0" (15.1cm x 4.5cm x 2.5cm)	5.13" x 3.25" x 1.0" (13.0cm x 8.3cm x 2.5cm)	5.13" x 3.25" x 1.0" (13.0cm x 8.3cm x 2.5cm)
Weight	5.8 oz (164.4 g)	8.1 oz (229.6 g)	8.2 oz (232.5 g)
Software compatibility	Works with open PACS systems including ISONAS Pure Access™ Cloud. See us.allegion.com/alliances for details.		
FIPS201 compliant	No		
Certifications	FCC, IC, UL294 V7 / cUL Listed RED Directive, CE Mark, IP65, REACH, Bluetooth SIG, RoHS3		
Frequency	2.4 GHz Bluetooth, 13.56 MHz Smart, 125 kHz Proximity		
Standards	ISO 14443A, ISO 15693		
Operating temperatures	-31° to 151°F (-40° to 66°C)		

Cover Options

C2 covers (default)

C1 legacy cover

Color Options

Black (standard)

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Pure IP™ Reader Controller Accessories

Reader covers

Overview

Schlage® offers a variety of accessories and replacement parts to ensure your reader controllers are always secure and performing well.

Reader Controller Covers

Replacement reader covers can be used to replace faded or cracked covers.

Advanced Security Module

Add an additional level of security for exterior doors, the advanced security module kit prevents the lock wires from being in contact with the unsecure side of the door.

Quick-Connect Cable

The quick connect cable allows the installer to connect the necessary reader controller wires without the hassle of the reader controller hanging off the other end. Simply connect the wiring harness and plug the reader controller in, it's that easy.

Magnetic Lock Kit

This part protects your reader controller from in-rush voltages and is primarily used for magnetic door locks.

Enrollment Reader Stand

Make the enrollment process even easier and quicker with this enrollment reader stand.

Color Options

Black (standard)

Advanced Security Module

Quick-connect cable

Magnetic lock kit

Enrollment reader stand

Specifications

Part	Cover	Cover	Cover
Part number C1	47317541	47317539	47317540
Part number C2	47787013-SCH	47787014-SCH	47787015-SCH
Corresponding controller reader model	RC11	RC15	RCK15
Reader controller type	Mullion	Single gang	Single gang with keypad
Dimensions (HxWxD)	5.91" x 1.72" x 0.81"	5.1" x 3.25" x 0.76"	5.1" x 3.25" x 0.76"
Material	PNT polymer	PNT polymer	PNT polymer

Part	Quick Connect Cable/Pigtail	Advanced Security Module (ASM)	Magnetic Lock Kit - In Rush Suppressor	RC15 Enrollment Reader Stand
Part number	47274561 - 10 FT Cable 47274562 - 25 FT Cable 47609539 - RC04 to RC11/ RC15 Adapter Cable 47884474- 18" Pigtail Cable	ACC-EDK-3A	ACC-IRS-4700	47962621
Product specifications	• 12 pin snap-in MOLEX connector • Jacketed cable for protection and improved cable pulls • 12 conductor cable, 22 AWG wires • Cable jacket pre-stripped for connections to the door's components • Being detachable simplifies the system's maintenance and troubleshooting	• For exterior doors, this kit provides an increased level of security by preventing the lock wires from being in contact with the unsecure side of the door • Durable plastic enclosure • Polycarbonate blend, UV stabilized • Potted for greater weather resistance • Powered by Schlage reader-controller; no additional power required • Rated for 3 amps at 12v DC • Proprietary encrypted serial data • 2 sets of terminal blocks for easy installation • Two LED indicators • Required for magnetic lock installations powered via PoE • Dimensions: 2-3/4" X 1-1/4" X 3/4"	• Any installation that is using magnetic locks that are equipped with a "quick-release feature" should have this in-rush protection installed • Dimensions: 1-1/4" x 1-1/4" x 2-1/4"	• Desktop stand designed to hold RC15 reader when used as an enrollment reader for Zentra or other PACS partners • RC15 reader fits tight and back slot allows for IP Pigtail to sit • Correctly positions credential fobs for easy enrollment into software • Works with both the C1 and C2 cover designs • Dimensions: 4" x 3-1/2" x 5" 1/4"

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CTE

ENGAGE™ Single Door Controller with Mobile Enabled Multi-Technology Reader

Overview

The CTE is an ENGAGE™ enabled single opening controller that allows perimeter and common area openings to be managed in a single system along with Schlage Control® Mobile Enabled Smart Locks, NDE cylindrical and LE mortise wireless locks. It is ideal for multifamily, commercial mixed use and retail store front applications.

The CTE is designed to work with a Schlage® mobile enabled multitechnology credential reader and interface with an electrified lock, electromagnetic lock, electric strike, automatic operator, or exit device to control an opening.

The CTE single door controller is designed for flexibility and can be managed with ENGAGE™ web and mobile apps or with one of our Physical Access Control Software (PACS) provider systems.

Features & Benefits

- Enables around the door solution with ENGAGE functionality
- Built-in Bluetooth® and Wi-Fi®
- Complete with Schlage MTB11 or MTB15 reader (required reader interface RS-485)
- No-Tour capable
- Flexible connectivity options: manage with ENGAGE web and mobile apps or with one of our PACS providers
- Inputs: door position (DPS), request to exit (REX), request to enter (REN), remote release (REL)
- Outputs: lock relay, alarm relay, auxiliary (Aux) relay
- Input Power: 12 or 24 VDC or Power over Ethernet (PoE/PoE+)
- Provides DC output power and dry control contacts

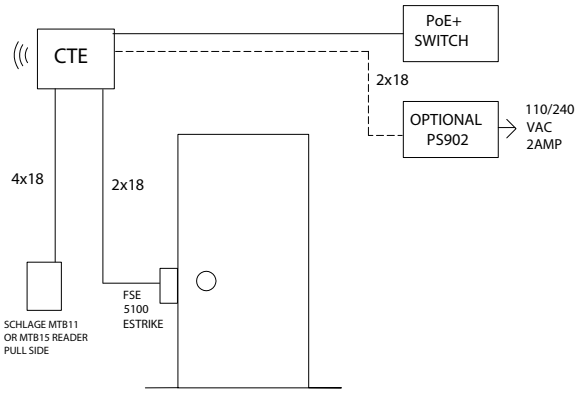
Check out our Schlage Credential Services

CTE Single Door Controller Specifications	
Users	Up to 5,000
Audits	Up to 2,000
Schedules	Up to 16
Holidays	Up to 32
Time zones	Up to 16
Communication standards	Bluetooth® Low Energy (version 4.2)
	2.4 GHz Wi-Fi® (IEEE 802.11b/g/n)
	WPA2, WPA, WEP, 802.1x (PEAP)
	Transport Layer Security (TLS) version 1.2
	Advanced Encryption Standard (AES), 256-bit
Gateway communication range	Up to 30' in typical building environments. A detailed site survey is recommended. Reference ENGAGE™ Gateway data sheet for additional details.
Connectivity options	Mobile (send updates at door)
	Wi-Fi access point (automatic daily updates)
	ENGAGE Gateway, IP to host (Networked wireless reader interface)
	No-Tour[1]
Power inputs	12 or 24 VDC at 3 amps input for powered outputs to get Max 2 amp output on relays, 0.5 amp minimum input when using dry contacts.
	PoE/PoE+ (IEEE 802.3af/at)
Powered outputs: Locking mechanism, alarm, aux	12 VDC input: 2A @ 12 VDC max (combined output across powered outputs)
	24 VDC input: 2A @ 24 VDC max (combined output across powered outputs)
	PoE input: 0.5A @ 12 VDC max (combined output across powered outputs)
	PoE+ input: 1.5A @ 12 VDC max (combined output across powered outputs)
Dry outputs: locking mechanism, alarm, aux	Locking mechanism: 2A @ 30 VDC max
Reader interface	0.3A @ 12 VDC Max (up to 500 ft.)
	12 or 24 VDC input: 12V @ 0.3A max output POE or POE+ input: 12V @ 0.3A max output
	Aux: 2A @ 30 VDC max
	Alarm: 2A @ 30 VDC max
	Reader (Schlage MTB11 or MTB15) (Required to utilize -485 interface)
Signal inputs	Request-to-Enter (REN)
	Request-to-Exit (REX)
	Remote Release (REL) — wired
	Door Position Switch (DPS)
	Tamper (TAMP)
Operating temperature (indoor)	-31°F (-35°C) to 151°F (66°C)
Operating humidity	0 - 100% Non-condensing
Certifications	UL 294 Indoor, FCC Part 15, NEMA Enclosure Indoor (Type 1, 4, and 4X), ULC S319 Indoor, RoHS
Dimensions	2.96" x 5.89" x 7.86"

1. With MT20W and smart credential or mobile credential (consult your access control software provider for specific support).

The CTE single door controller with mobile enabled multi-technology reader kit can be used in a variety of applications. Below are a few examples:

ENGAGE™ cloud via mobile device or Wi-Fi, or PACS provider via Wi-Fi or GWE with IP to host



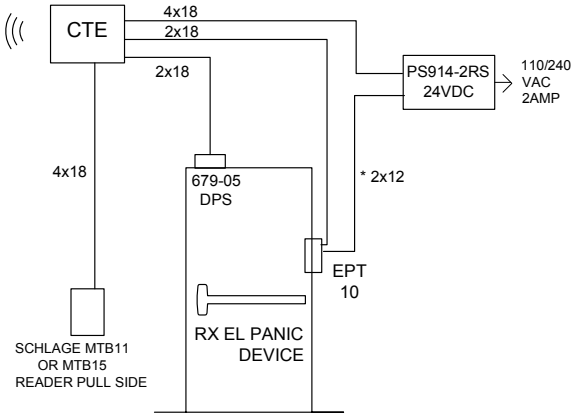
Operation:

Presenting a valid credential to Schlage MTB11 or MTB15 reader will cause fail secure 5100 electric strike to release for authorized entrance. Free egress always.

Products:

We offer a variety of electric strikes from Locknetics® and Von Duprin®, as well as Schlage Power Supplies to meet the specific needs of the opening.

ENGAGE™ cloud via mobile device or Wi-Fi, or PACS provider via Wi-Fi or GWE with IP to host



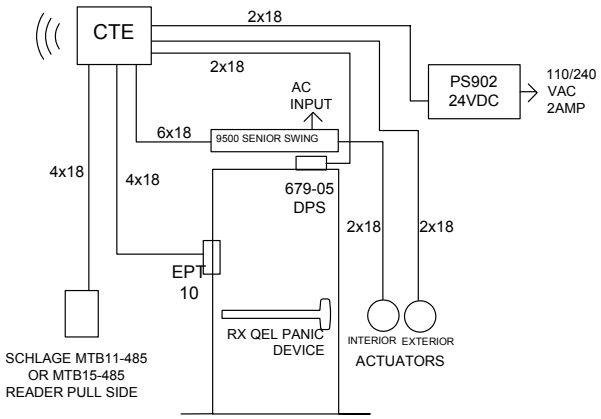
Operation:

Presenting a valid credential to Schlage MTB11 or MTB15 reader will cause EL panic device to retract for authorized entrance. Free non-alarmed egress at all times.

Products:

We offer a variety of Falcon® and Von Duprin exit devices, and Von Duprin power supplies to meet the specific needs of the opening.

ENGAGE™ cloud via mobile device or Wi-Fi, or PACS provider via Wi-Fi or GWE with IP to host



Operation:

Presenting a valid credential to Schlage MTB11 or MTB15 will cause QEL panic device to retract for authorized entrance and enable exterior actuator. Free non-alarmed egress at all times. Interior actuator always active to retract QEL panic and open door.

Products:

We offer a variety of hardware and accessories from Von Duprin, LCN®, Schlage, and Locknetics to meet the specific needs of the opening.

Please note all components sold separately.

Reader Requirement

MTB11 *MTB15*

The CTE Single Door Controller Kit is Available with Two Reader Options and Two Cover Options:

- **CTE-MTB11:** CTE with mobile enabled multi-technology mullion reader kit
- **CTE-MTB15**: CTE with mobile enabled multi-technology single gang reader kit
- **47317558-SCH-B: MTB11:** Standard reader cover - Black, Schlage Bluetooth logo
- **47317564-SCH-B: MTB15:** Standard reader cover - Black, Schlage Bluetooth logo
- **47744033-SCH-B: MTB11 C2:** Reader cover - Black, Schlage Bluetooth logo
- **47744034-SCH-B : MTB15 C2:** Reader cover - Black, Schlage Bluetooth logo

Notes:

- Reader color (black or cream) can be specified; black is the default
- Custom reader configuration can be specified
- Required to utilize RS-485 interface

Credential Compatibility

Mobile Enabled Multi-Technology Reader Specification	
Proximity credential compatibility	Compatibility: Schlage®, ISONAS™, HID[5], GE/CASI ProxLite®, AWID® and LenelProx® Schlage credential style formats: Clamshell, ISO card, ISO card with magnetic stripe, keyfob, thin keyfob, and PVC adhesive disc
Smart credential compatibility[1]	Secure sector compatibility: Schlage MIFARE Classic®, Schlage MIFARE Plus®, Schlage MIFARE® DESFire® with PACSA CSN only compatibility[2]: HID iClass®, Inside Contactless Pico Tag®, MIFARE Classic/Plus/DESFire, ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code® Schlage credential style formats: Clamshell, ISO card, ISO card with magnetic stripe, keyfob, thin keyfob, wearable wristband, PVC adhesive patch
Mobile credential compatibility	Compatibility: Schlage Mobile Bluetooth® Credential[3], Integrated PACS Mobile Credential with Bluetooth[4], NFC mobile credentials in Apple Wallet® and Google Wallet™ [4]

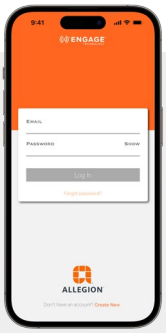
1. No-Tour applications using smart credentials require minimum memory size of 8k bit/1K byte.
2. Configuration card required to enable CSN.
3. Supported through ENGAGE.
4. Dependent on PACS provider integrations and capabilities. Go to us.allegion.com/alliances for more information.
5. Proximity bit lengths greater than 37 not supported.

The CTE can operate in the same system as Schlage Control®, NDE and LE wireless locks.

Manage with ENGAGE™ cloud based web and mobile apps or with one of our PACS providers.

To learn more, visit allegionengage.com.

Allegion takes a broad and deep approach to ensuring the safety and security of its products. The cybersecurity program at Allegion is designed around four pillars: security and privacy by design, built on proven security practices, security updates and vulnerability management, and testing by internal and external experts.



Use the ENGAGE mobile app to commission and connect devices to your access control system of choice

Download on the App Store

ANDROID APP ON Google play

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CT5000

Offline Controller

Overview

The CT5000 is an offline single opening controller designed for applications where the security and convenience of offline electronic access control is desired, but an integrated electronic lock may not be practical. It is an ideal solution for narrow stile aluminum store front applications because it can work with a variety of readers, as well as interface with peripheral devices such automatic operators, electric strikes, and electromagnetic locks.

The CT5000 is compatible with many brands and types of credential technologies including magnetic stripe (tracks 1, 2, and 3), 125 kHz proximity, and 13.56 MHz smart cards. It also supports a variety of card functions including: normal, toggle, freeze, pass through, construction, lockdown and card + PIN applications.

As a complement to your facility's portfolio of CO Series and AD Series devices and networked readers, CT5000 is also capable of upgrade should your needs change to a wireless networked solution.

With the addition of a networked communication board and upgraded firmware, the CT5000 becomes a wireless reader interface capable of communicating via 900MHz signal to an AD Series PIM400. As a wireless reader interface, it can connect to your networked access control system, eliminating the need to run additional wires to the door, saving you time and money on installation.

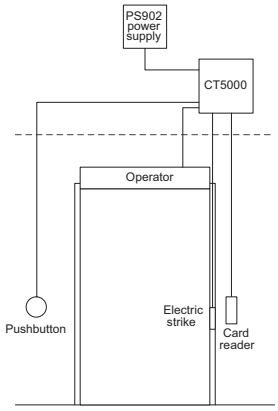
Features & Benefits

- Three form C relay outputs and three inputs that can include door position and request to exit
- CT5000 strike relay can be configured to fail safe or fail secure
- Upgradable to a wireless reader interface configuration to allow networked communication as your security needs evolve
- Supports up to two parallel Wiegand or Clock & Data reader inputs on a single opening
- Programmable via Schlage Utility Software (SUS) mobile app on compatible Android™ devices and SUS-A cable
- Includes a 15' cable and wallplate connection to enable programming using the SUS Android mobile app from a remote connection point with a 125' cable option available
- Up to 5,000 unique users[1] with audit trail of up to 5,000 events[1]
- Up to 16 holidays and 8 time zones enables auto lock and unlock during specified periods with Schlage Express software use
- Door monitoring capable including door position and request-to-exit (remote release)

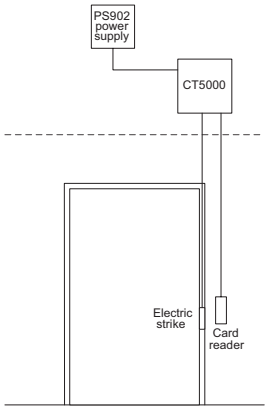
1. Depending on your access control software

CT5000 Offline Controllers

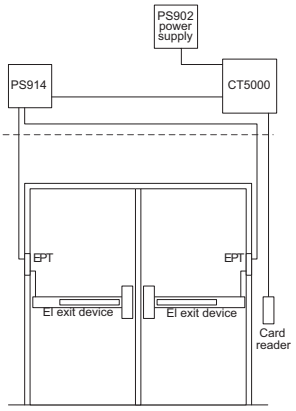
The CT5000 can be used for front door applications with an automatic operator, electric strike and card reader



For narrow stile applications, the CT5000 can be used with an electric strike and card reader



The CT5000 and a card reader along with the Von Duprin 914 Power Supply can control two EL exit devices for double door applications



Note: PS902 and Von Duprin PS914 are sold separately.

CT5000 Offline Controller Specifications		
Users		Up to 5000
Audits		Up to 5000
Power supply		12 VDC or 24 VDC (sold separately, must be UL 294 Class 2 listed power supply)
Voltage range		9.5 VDC to 26 VDC
Connector cable specifications	DC power input	18AWG, 2 conductor (Belden 8760 or equivalent) up to 1000 ft (305 m)
	Credential readers (x2)	Data signals: 22AWG, 6 conductor (Alpha 1296C or equivalent) up to 500 feet (152 meters) Reader tamper signals: 18AWG, twisted pair shielded (Belden 8760 or equivalent) up to 500 feet (152 meters)
	Strike/aux relay outputs	18AWG, 2 conductor (Belden 8760 or equivalent) up to 2000 feet (610 meters)
Relay output tolerances	Strike output relay	Form C relay; 6 amps @ 24VDC or 6 amps @ 20 VAC or 3 amps @ 240 VAC
	Auxiliary output relay	Form C relay; 6 amps @ 24VDC or 6 amps @ 20 VAC or 3 amps @ 240 VAC
	Alarm output relay	Form C relay; 6 amps @ 24VDC or 6 amps @ 20 VAC or 3 amps @ 240 VAC
Operating temperature		-31°F (-35°C) to 151°F (66°C)
Operating humidity		0 - 100% condensing
Certifications		UL 294; Canada UL; FCC Part 15; RoHS
Dimensions		10.43" x 7.28" x 3.79" 26.49 cm x 18.49 cm x 9.63 cm
Programming method		Manually programmed via compatible keypad or computer programmed via the Schlage Utility Software (SUS) mobile app on compatible Android devices and SUS-A cable. Also supports the legacy Schlage Handheld Device (HHD) with SUS.
Optional accessories		125 foot USB remote cable connector, PS902, PS904 or Von Duprin® PS914 (sold separately)

Credential Compatibility (Software & Reader Dependent)	
Magnetic stripe card	Field configurable track 1, 2, or 3
Proximity card	Schlage, ISONAS® (34X, 35X, 35C, 37X bit formats), HID,® GE/CASI ProxLite™ and AWID® 26 bit format
Smart card	Schlage MIFARE® DESFire®, HID iCLASS® CSN only 26 bit format, PIV and PIV-I

The Following Readers are UL 294 Listed for Use With the CT5000:

- Essex Electronics model KTP-162
- Mercury Security models MR-5 and MR-20
- Schlage model PR10
- Schlage models MTB11, MTB15, MTKB15, MT11, MT15, MTK15, MTMS15, MTMSK15, and SM10

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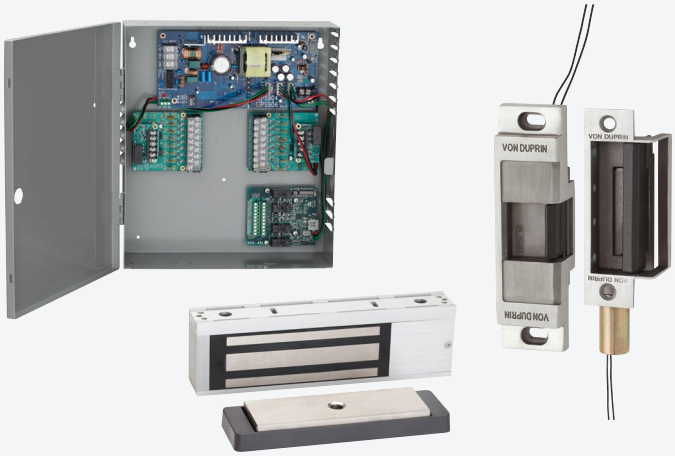
ALLEGION

System Components



The systems components category features a variety of devices which are utilized as part of an access control system. Products include electric strikes, electromagnetic locks, power supplies, and system accessories.

Electric Strikes

Overview

Electric strikes provide remote release of a locked door, allowing a door to be opened without retracting the latch bolt. Von Duprin offers a selection of strikes for a variety of applications and door preps.

Features

The 4200 Series is a great choice for commercial applications where traffic control is the primary function. It is designed for use with cylindrical locks and can be used with all Schlage and Falcon locks as well as those of many other manufacturers'.

The 5100 Series is a versatile electric strike designed for medium-duty applications, specifically to control traffic flow through openings in retail and commercial facilities.

Two series of heavy-duty stainless steel strike families are designed for use with rim exit devices. The 6100 Series comes in five configurations including a rim nightlatch strike. 6300 Series is a single, surface mounted strike great for aftermarket replacement.

The 6200 Series includes 17 strike configurations featuring stainless steel construction for heavy duty applications. Use them with mortise or cylindrical locks. Both the 6100 and 6200 Series are available with a variety of options including AC operation, dual switch monitoring, entry buzzer, fail secure and fail safe.

The 6400 Series is an all-in-one modular strike for both cylindrical and mortise applications. Its field configurable deadbolt keeper and dead latch ramp to allow for alignment with a wide variety of doors and frames.

Benefits

Electric strikes can be used in standalone applications or as part of a sophisticated access control system and can be deployed on a variety of openings. In many cases electric strikes are an ideal solution for end users who are ready to migrate from mechanical to electronic access control.

Electromagnetic Locks

Overview

The broad portfolio of Schlage electromagnetic locks offers a solution for most every application. Whether it's securing a hospital laboratory, monitoring a controlled area in an airport or providing traffic control for doors in an institutional building, Schlage electromagnetic door locks are designed to exceed the standards set by the Builders Hardware Manufacturers Association (BHMA). The portfolio encompasses a variety of hold force ratings including 500 lbs. for traffic control, 1000 lbs. for high security and 1500 lbs. for maximum security, as well as specialty locks for unique applications.

Features

The M400 Series electromagnetic locks are available in two configurations to meet your specific security needs. M420, M450 and M490 provide basic security while models M420P, M450P and M490P provide intelligent sensing and reporting features needed to integrate with access control systems. The M400 Series is available with BHMA hold force ratings of 500 lbs, 1000 lbs and 1500 lbs.

Schlage also offers a variety of electromagnetic locks for specialty applications including the M490DE for delayed egress, 490G for gates, GF3000 shear locks for mortised/ vertical doors, and the 320M for sliding door applications.

Benefits

The M400 Series electromagnetic locks feature a bayonet mounting system that allows the installer to have their hands free during the mounting process. All M400 Series electromagnetic locks are symmetrical with field-selectable handing, allowing for optimum placement of the magnet no matter the application.

Schlage specialty electromagnetic locks are each designed with specific feature sets to optimize performance in the variety of unique, harsh and complex environments for which they are suited.

Power Supplies

Overview

PS900 Series power supplies and accessories offer enhanced flexibility and functionality specific to the changing needs of the access control market. The PS900 Series can be used in a variety of applications to convert high voltage AC power into the low voltage DC outputs required by most access control devices. The PS900 Series protects devices downstream by providing Class 21, filtered and regulated power. The full line is UL 294 certified.

Features

The PS900 Series features three Schlage branded models; PS902 - 2 amp, PS904 - 4 amp, and PS906 – 6 amp. The PS900 Series also features the Von Duprin PS914 – 4 amp with high in-rush which is designed specifically for use with electrified exit devices. The full series of power supplies can be outfitted with a variety of distribution options including basic fuse protection, simple relay, and advanced logic providing complex sequencing and timing functions.

Benefits

Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. An optional fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when alarm signal is provided.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This new design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified strikes, electromagnetic locks, card readers, etc).

System Accessories

Overview

System accessories include a variety of devices that enable specific functionality whether in standalone applications or as part of networked access control systems. The category is comprised of pushbuttons, key switches, request-to-exit bars, monitoring stations and consoles, exit sensors, electric horns and more.

Features

The specially designed 620/631 Series heavy-duty pushbuttons and 700 Series general purpose pushbuttons, as well as the 650 Series heavy-duty keyswitches, offer momentary or maintained SPDT or DPDT contact configurations.

The 700 Series pushbuttons are used to control the ingress and/ or egress of a door.

The 600 Series pushbuttons are heavy-duty and have multiple button configurations and finish options.

The 650 Series keyswitches utilize an innovative magnetic spring design which allows installers to quickly configure both clockwise and counterclockwise key turn direction, as well as momentary or maintained action.

The 740 Series emergency break glass releases are designed for use as emergency releases of non-designated egress doors such as in individual and partitioned laboratories, secluded testing areas, or other isolated work rooms that are purposely provided with exit doors.

The 672/692 Series request-to-exit bars are non-latching releasing devices which allow egress at doors with electric locking devices, such as electromagnetic locks.

The SCAN II is a passive infrared (PIR) sensor specifically designed for request-to-exit applications.

The 8200 Series consoles provide door control and monitoring for up to eight zones. The 8204 is used for one to four zones and the 8208 for one to eight zones.

The 800/801 Series monitoring stations can provide monitoring for a single zone with up to 2 LED indicators. The 801 unit includes an audible and visual indication of lock status and delay activation.

The 660 Series mini station control is designed for concealed desk application, and it is used to release an electric or electronic locking mechanism from a remote location.

Electric horns are designed for use as an immediate local audible warning device incorporated in a security system. Horns are field selectable 12 or 24 VDC with eight combinations of volume, tone and code.

High security door position sensors are ideal for high security applications including server farms, government facilities, and military bases.

Magnetic door position switches can be used to monitor a wide range of conditions for doors, roof hatches, gates or the proximity of any two objects.

Electric power transfers (EPT) are also used when installing electrified exit devices or electrified locks. They provide a means of transferring electrical power from a door frame to the edge of a swinging door.

Electrified hinges and power transfer pivots integrate seamlessly with your access control system and your door mounted electrified hardware.

Armored door cords are used when installing electric exit devices or electric locks and provide a simple and economical solution for transferring power from frame to door.

The 442S cabinet lock by Schlage provides a versatile solution to add access control to a cabinet.

The PB405 PowerBolt is a mortise, right angle deadbolt with which is available with fail-safe or fail-secure options..

Benefits

System accessories allow you to customize each opening to meet specific security and safety needs. Schlage offers a variety of the most popular accessories designed for medium to heavyduty applications. By choosing Schlage components, you can be assured that the system will meet the requirements of the job, whether new construction or aftermarket.

Power Supplies - Schlage & Von Duprin

	PS902	PS904	PS906	PS914
Features				
Input voltage	120V/240V AC, 50/60 Hz, universal input			
Output voltage	2 amp @ 12V or 24V DC, field selectable	4 amp @ 12V or 24V DC, field selectable	6 amp @ 12V or 24V DC, field selectable	4 amp, High Inrush @ 12V or 24V, field selectable
Distribution/option board connectors	1	2	3	2
Fire alarm plug-in connector	Yes	Yes[1]	Yes[1]	Yes[1]
Battery backup plug-in connector	Yes	Yes	Yes	Yes
Enclosure				
Dimensions (H x W x D)	14 in x 12 in x 4 in			
Key lock option	Y	Y	Y	Y
Battery backup				
900-BB: battery backup board only	Y	Y	Y[3]	Y
900-BBK: battery backup kit	Y	Y	Y[3]	Y
Option boards				
900-FA: fire alarm	Y	Y (Must be installed on an option board)	Y (Must be installed on an option board)	Y (Must be installed on an option board)
900-2RS: 2 relay option board	Y	Y	Y	Y
900-4R: 4 relay option board	Y	Y	Y	Y
900-4RL: 4 relay logic board	Y	Y	Y	Y
900-8F: fuse protected 8 zone board	Y	Y	Y	Y
900-8P: PTC 8 zone distribution board	Y	Y	Y (Class 2 rated on PS906 only)	Y
Certifications				
UL 294	Y	Y	Y	Y
ULC-S318	Y	Y	Y	Y
Class 2	Y	Y	Y [2]	Y
RoHS	Y	Y	Y	Y
FCC Part 15	Y	Y	Y	Y

1. Requires available option board for connection.
2. Class 2 rated outputs can be provided using 900-8P distribution board in conjunction with the PS906.
3. Addition of battery in compartment limits option board application to two.

Electromagnetic Locks

M400 Electromagnetic Locks					
	M420, M420P	**M450, M450P**	**M490, M490P**	**M490DE, M490DEP**	**M490G**
Features					
Hold force	500 lbs.	1000 lbs	1500 lbs	1300 lbs	1500 lbs
Input voltage	12V/24V DC	12V/24V DC	12V/24V DC	12V/24V DC	12V/24V DC
Current draw	0.75A @ 12V DC 0.38A @ 24V DC	0.75A @ 12V DC 0.38A @ 24V DC	0.65A @ 12V DC 0.35A @ 24V DC	.75A @ 12V DC .45A @ 24V DC	0.65A @ 12V DC 0.35A @ 24V DC
Dimensions					
Lock dimensions (H x L x W)	2.5 in x 9 in x 1.375 in	3 in x 10.25 in x 1.75 in	3 in x 12.5 in x 1.75 in	3 in x 12.5 in x 3.0625 in	3 in x 11 in x 1.75 in
Weight	6 lbs	10 lbs	14 lbs	16 lbs	14 lbs
Certifications					
ANSI/BHMA 156.23	Y	Y	Y	-	Y - Outdoor Rated
ANSI/BHMA 156.24	-	-	-	Y	-
UL 10C	3-hour	3-hour	3-hour	3-hour	-
UL 1034	Y	Y	Y	-	-
UL 294	Y	Y	Y	Y	-
cUL	Y	Y	Y	Y	-
CSFM	Y	Y	Y	Y	-

M490DEP also meets NFPA 101 Life Safety Code and can be ordered as BOCA compliant.

Specialty Electromagnetic Locks			
	GF3000SM (Surface mount)	**GF3000 (Mortise mount)**	**320M**
Features			
Hold force	3000 lbs	3000 lbs	400/550 lbs
Input voltage	12V/24V DC	12V/24V DC	12V/24V DC
Current draw	0.90A @ 12V DC 0.45A @ 24V DC	0.90A @ 12V DC 0.45A @ 24V DC	0.23A @12V DC 0.45A @ 24V DC
Dimensions			
Lock dimensions (H x L x W)	1.25 in X 9.8125 in X 1.5 in	1.5 in X 9.5 in X 1.5 in	1.375 in x 7 in x 1.875 in
Weight	9 lbs	7 lbs	6 lbs
Certifications			
ANSI/BHMA 156.23	Y	Y	N/A
ANSI/BHMA 156.24	-	-	-
UL 10C	3-hour	3-hour	3-hour
UL 1034	-	-	-
UL 294	-	-	-
cUL	Y	Y	Y
CSFM	Y	Y	Y

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VON DUPRIN®

4200 Series

Electric Strike for Cylindrical Locks & Deadlatches

Overview

4200 Series is designed to offer versatility in two commercial-duty electric door strike models. They are a great choice for applications where interior traffic control is the primary function.

Designed for compatibility with a wide range of cylindrical devices, they are able to address a broad range of needs. You'll find 4200 Series strikes work with all Schlage and Falcon cylindrical locks as well as those of many other manufacturers.

These reliable strikes are easy to order, configure and install. Field selectable options include changing fail safe and fail secure modes without disassembly. They also feature a 12/24 dual-voltage solenoid for field wiring of either input voltage. Factory orderable options include an entry buzzer and rectifier kits to provide even greater flexibility and available parts include square or round cornered ANSI faceplates.

Features & Benefits

- Designed for cylindrical applications
- Capable of four in-field configurations
- Shallow 1-3/8" backbox depth
- Field selectable 12/24 VDC voltage
- Non-handed, internal solenoid design
- Low current draw for PoE installations
- Field selectable power failure mode (fail-safe/fail-secure) without disassembly
- Heavy-duty stainless steel faceplate
- Latchbolt monitoring available (4212 model)
- Options include entry buzzer and rectifier kits

Lockset Compatibility

The 4200 series is compatible with all Schlage and Falcon cylindrical locks as well as cylindrical and deadlatch locks of many other manufacturers.

- The 4211 is compatible with locksets with 5/8" (15 mm) throw latchbolts, or up to 3/4" (19mm) throw latchbolts with a 1/8" door gap.
- The 4212 is compatible with locksets with 1/2" (12.7mm) throw latchbolts, or up to 5/8" (15 mm) throw latchbolts with a 1/8" door gap.

4200 Series Power Requirements

Model	Voltage	Current	Duty	Amps	Ohms
4211 or 4212	12V	DC	Continuous	0.20	
4211 or 4212	24V	DC	Continuous	0.10	

4212 Latchbolt monitor switch rating: 30VDC at 0.20 A

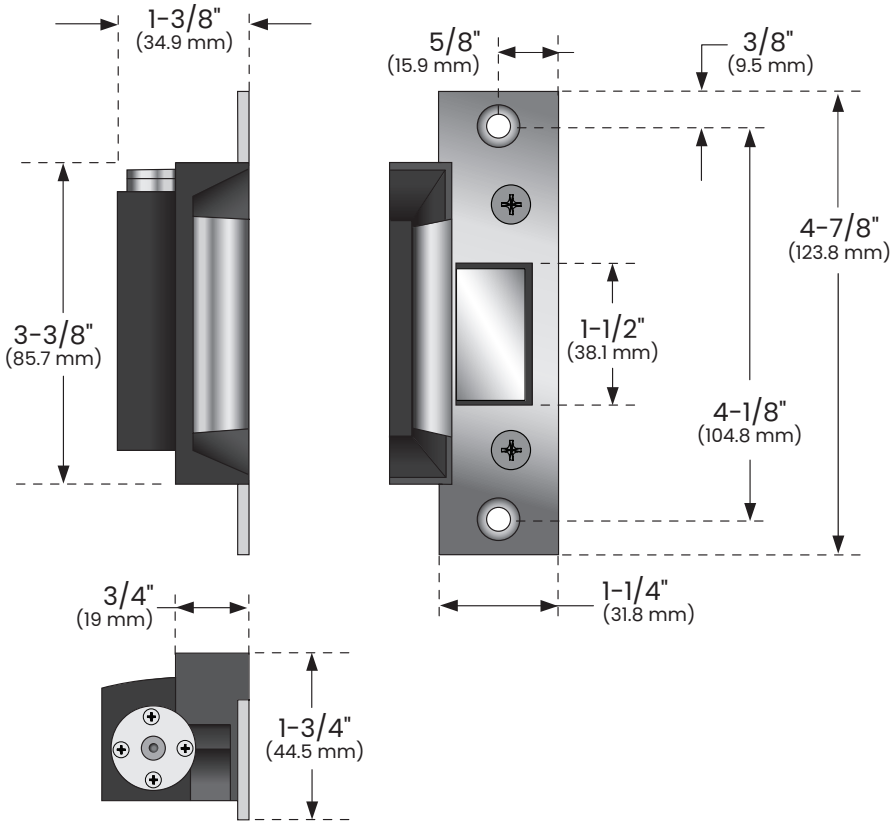
The 4200 series requires a DC regulated power supply, and the Schlage PS900 series power supplies are recommended.

Continuous duty = Energized 1 minute or more

Model Specifications

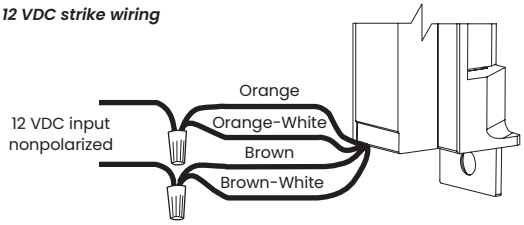
Model number		4211	4212
Retrofits model		HES 5200, RCI 6 Series	HES 5000, RCI 6 Series
Latchbolt throw		3/4"	5/8"
Latchbolt monitor switch		---	•
Face plate length		4-7/8"	4-7/8"
Backbox depth		1-3/8"	1-3/8"
Finish (faceplate)		BHMA 630/US32D	
Lockset	Cylindrical	•	•
	Deadlatch	•	•
	Mortise	---	---
Number of doors	Single	•	•
	Pair	---	---
Frame type	Hollow metal	•	••
	Aluminum	•	•
	Wood	---	---
Options	EB (entry buzzer - fail-secure only)	•	•
	S012 & S024 rectifier kit for AC to DC operation	•	•

Dimensions

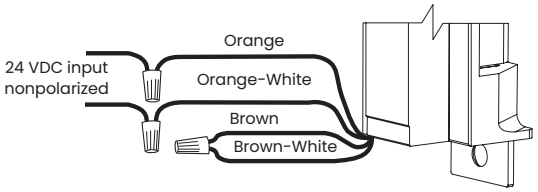


Wiring

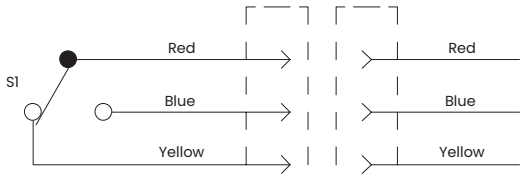
12 VDC strike wiring



24 VDC strike wiring



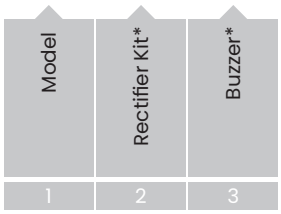
Latchbolt monitoring switch (4212 only)



Switch shown with latch status tripper depressed

Ordering Information

4200 - S024 - EB



*Optional

Selections correspond with the numbers above.

1 Model	
4211	See model specification chart to make the proper selection
4212	See model specification chart to make the proper selection

2 Rectifier Kit (optional)	
S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid

3 Buzzer (optional)	
EB	Entry Buzzer, with fail-secure (FSE) configured

Standard Features

- Power failure mode: Field configurable fail-secure/fail-safe
- Voltage: Field configurable 12 VDC/24 VDC dual voltage solenoid
- Finish: BHMA 630/US32D satin stainless steel
- Includes mounting tabs, fail secure conversion hex key, wood and machine screws, plus a suppressing diode.

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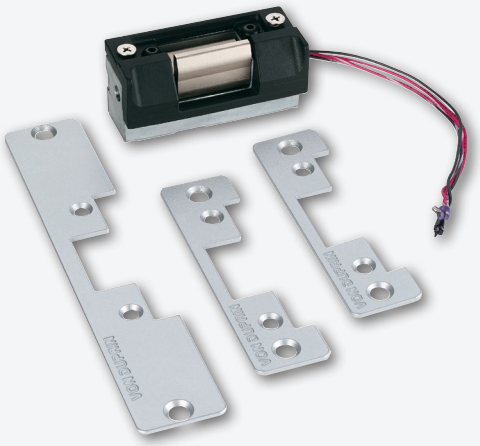
VON DUPRIN®

5100 Series

Electric Strike for Cylindrical Locksets & Deadlatches



Overview

The Von Duprin 5100 Series electric door strike has been designed to offer flexibility and convenience for locksmiths and security professionals alike. This easy-to-install electric strike was created for medium-duty applications, specifically to control traffic flow through openings in retail and commercial environments.

The 5100 electric strike is compatible with a wide range of cylindrical devices and is extremely versatile for field conversions. The combination of three faceplate options plus field selectable voltage and power fail modes allows it to be changed on the job site to create as many as 12 different configurations. An adjustable keeper also improves fit for applications with weather stripping or tight door preps. In short, the 5100 provides added convenience by ensuring the right parts are in the box to get the job done.

Like other Von Duprin strikes, the 5100 was developed to meet high standards and engineered for reliability and quality. Its durable construction and tamper-resistant design stands up to abuse and is burglary-resistant (UL 1034).

Features & Benefits

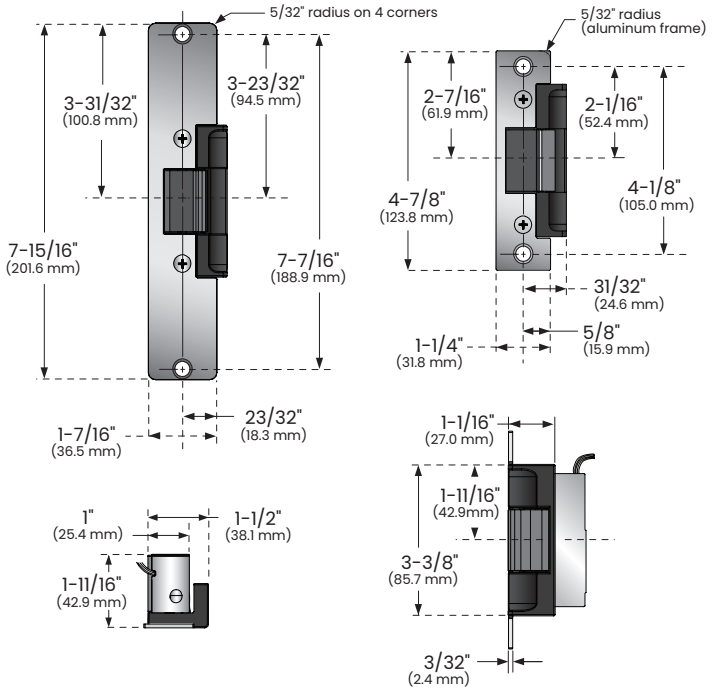
- Designed for cylindrical applications
- Capable of 12 in-field configurations
- Three faceplates standard in every box
- Field selectable 12/24 voltage
- Non-handed, internal solenoid design
- Field selectable power failure mode (fail-safe/fail-secure)
- Adjustable keeper improves fit on tight door preps
- Options include 12 and 24 VAC to VDC rectifier kits
- Available in three finishes to suite with existing hardware
- UL 1034 listed for burglary-resistant electric door strikes

5100 Series Power Requirements					
Model	Voltage	Current	Duty	Amps	Ohms
5100	12V	DC	Continuous	0.38	32
5100	24V	DC	Continuous	0.19	128

Continuous duty = Energized 1 minute or more

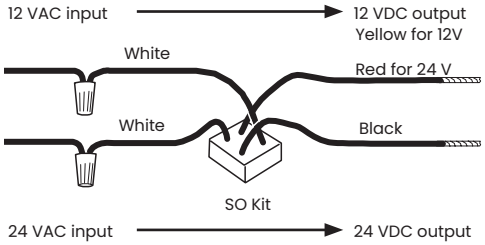
Model Specifications	
Model Number	5100
Retrofits Model	HES 5000C, 5200C, RCI 7 Series
Latchbolt Throw	1/2" to 5/8" (1/2" keeper depth)
Face Plate Length	4-7/8" or 7-15/16"
Backbox Depth	1-11/16"
Lockset	Cylindrical and deadlatch
Number of Doors	Single
Frame Type	Hollow metal, aluminum and wood
Application Notes	Versatile electric strike for aftermarket, covering multiple applications in one SKU.

Lockset compatibility: Keeper depth of 1/2" is sufficient to accommodate all cylindrical locks up to 5/8" throw and most aluminum narrow stile deadlatches.

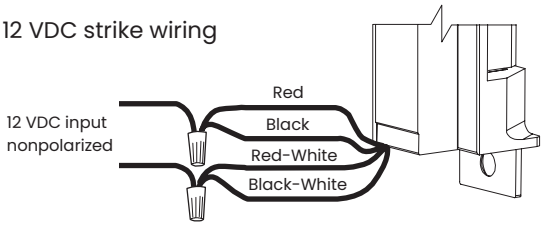


Solenoid power requirements; 12VDC, 0.38 A, 24 VDC, 0.19 A

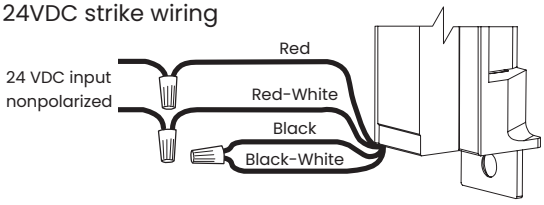
For DC operation, Von Duprin PS902 series power supply is recommended.
For AC operation, Von Duprin SO24 kit is recommended.



12 VDC strike wiring



24VDC strike wiring



Ordering Information

5100 - US19 - S024

Model	Finish	Rectifier Kit*
1	2	3

* Optional

Selections correspond with the numbers above.

1	Model	
5100	Electric strike for cylindrical locksets	
2	**Finish**	
US SP28/BHMA 689	Aluminum	
US 19/BHMA 622	Flat Black	
US SP313/BHMA 695	Dark brown	
3	**Rectifier Kit (optional)**	
S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid	
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid	

Standard Features

- Power failure mode: Field configurable fail-secure/fail-safe
- Voltage: Field configurable 12VDC/24 VDC dual voltage solenoid
- Mounting tabs and shims
- Self-adhesive neoprene filler for retrofits

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VON DUPRIN®

6100 Series

Strikes for Rim Exit Devices

Overview

Von Duprin electric strikes are known for their reliability, durability and security. The 6100 Series strikes are designed to withstand abuse. Their heavy-duty stainless steel construction is UL1034 listed.

6100 Series electric door strikes are designed for use with a variety of rim exit devices including rim nightlatch. Electrified strikes allow remote release of a locked door by activating a movable lip (keeper) using an entry/exit button or credential reader and can be a cost effective means for managing access. 6100 Series strikes come standard as 24 VDC in fail secure mode. 12 VDC and AC operation can be selected, as can fail safe mode and other options that enable you to configure these strikes to fit your exact needs.

Use 6100 Series electric strikes for retrofit applications or new construction. To assure the proper selection of an electric strike on new applications, lockset compatibility charts are shown on the next page. When using a lockset not listed or if retrofitting a strike to an existing application, please contact Von Duprin technical support for application assistance.

Features & Benefits

- Five configurations available for rim exit and nightlatch devices
- Heavy-duty stainless steel construction
- Strike box allows horizontal adjustment to compensate for misalignment of the door or frame
- 24 VDC standard with 12 VDC and AC operation optional
- Two-piece plug connectors are furnished for ease of installation and removal during strike servicing
- Options include rectifier kit for VAC to VDC conversion, dual monitor switches, entry buzzer and Allegion Connect wire extension
- Six popular finishes available to suite with existing hardware
- UL 10C 3-hour fire-rated electric strike (models 6111, 6112 and 6113 – fail secure only)
- UL 1034 listed for burglary-resistant electric door strikes
- Static strength: 1500 lbs
- Dynamic strength: 70 ft-lbs
- UL 294 listed for access control system

Model Specifications						
Model number		6111	6112	6113	6114	6121
Retrofits model		VD 3031	FA 310-4	VD 3011 VD 3021	FA 310-5	FA 310-4-100
Latchbolt throw		3/4"	3/4"	3/4"	3/4"	3/4"
Face plate length		6"	9"	6"	7-1/2"	9-1/8"
Backbox depth		1-5/8"	1-11/16"	1-15/16"	N/A	N/A
Lockset		Rim exit device	Rim exit device	Rim exit device	Rim nightlatch	Rim exit device
Number of doors	Single	•	•	•	•	---
	Double door with mullion	•	---	---	---	---
	Double door without mullion	---	---	---	---	•
Door/frame type	Hollow metal	•	•	•	•	•
	Aluminum	•	•	•	•	•
	Wood	•	•	•	---	•
Options	Blade stop shim	Yes	No	Yes	No	No
	DS or DS-LC (dual monitor switches)	Yes	Yes	Yes	Yes	Yes
	EB (entry buzzer - fail-secure only)	Yes	Yes	Yes	Yes	Yes
Certifications/ Listings	UL 1034	•	•	•	•	•
	UL 10C Single Door	3 hour	3 hour	3 hour	---	---
	UL 10C Pair Door*	90 Minutes	90 Minutes	90 Minutes	---	---
Application notes		1	2	3	4	5

*With manufacturer's mullion.

Note: 16 VDC and 28 VDC solenoid are sold as replacement parts for existing strikes. Please contact customer care for details.

Application notes:

1. 1/2" projection blade stop shim 010055-XX available for use on cased opening or blade stop frames. Specify when using 55 rim devices. May also be used with vertical rod exit devices noted on previous page x Pullman latch LBR (non-fire rated).
2. When used to replace Folger Adam 310-4, minor fame prep modification required.
3. 1/2" projection blade stop shim 010055-XX available for use on cased opening or blade stop frames (non-fire rated).
4. Surface applied strike designed to replace Folger Adam 310-5 with different mounting hole locations from Folger Adam.
5. Designed to mount on inactive leaf.

Rim Exit Device Compatibility for 6111, 6112, 6113 and 6121 Strikes	
Manufacturer	Device
Von Duprin	22, 33A, 35A, 551, 88, 98, 99 8827 LBR4 x Pullman latch Non-Fire rated 9827 LBR4 x Pullman latch Non-Fire rated 9927 LBR4 x Pullman latch Non-Fire rated
Falcon[2]	19-R, 24-R, 25-R
Falcon	1790
Precision[2]	2100
Sargent	2800, 6500, 6800, 8500, 8800, 9500, 9800[3], 9898
Yale	1500, 700

1. Strike must be factory modified, specify when using with a 55 Rim device.
2. Deadlocking feature will not properly function, consult factory.
3. Panic only, not fire-rated.
4. 6111 is recommended for LBR applications.

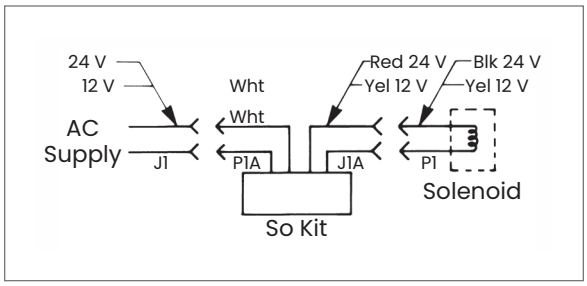
Note: When using a lockset not listed or when retrofitting an existing application, please contact Von Duprin technical support for application assistance.

6100 Series Power Requirements					
Models	Voltage	Current	Duty	Amps	Ohms
All	12V	DC	Continuous	0.60	21
All	24V	DC	Continuous	0.33	83

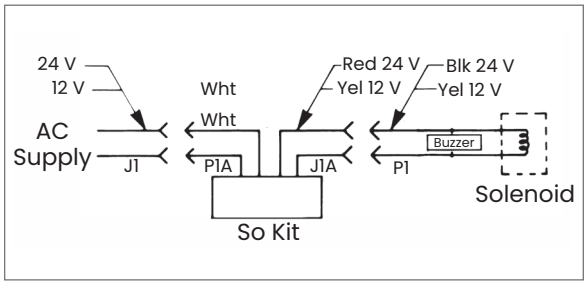
Continuous duty = Energized 1 minute or more

Wiring

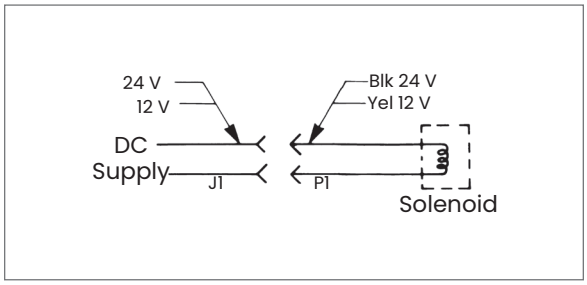
AC



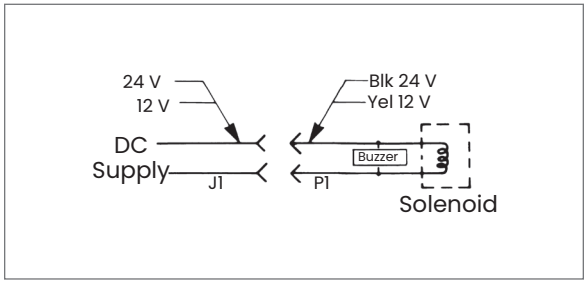
AC with buzzer



DC

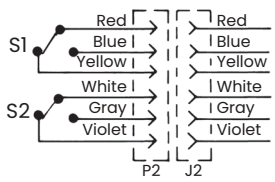


DC with Buzzer



Optional DS (FSE Shown)

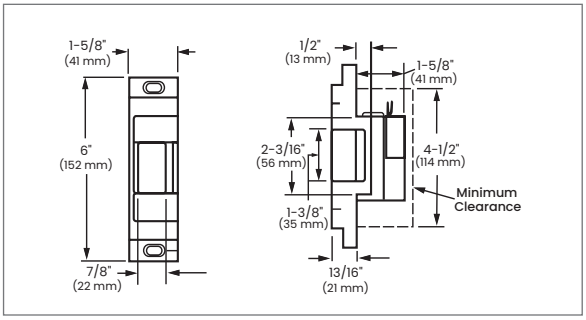
Wiring shown with strike locked
and monitor trippper depressed



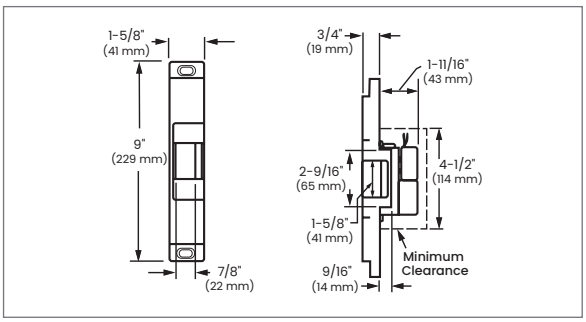
Different wiring configurations are used
depending on Backbox type and FS or FSE.

Dimensions

6111



6112



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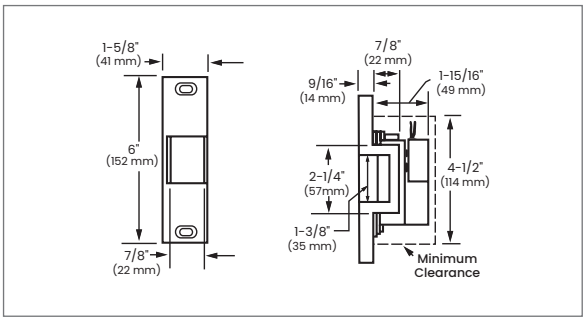

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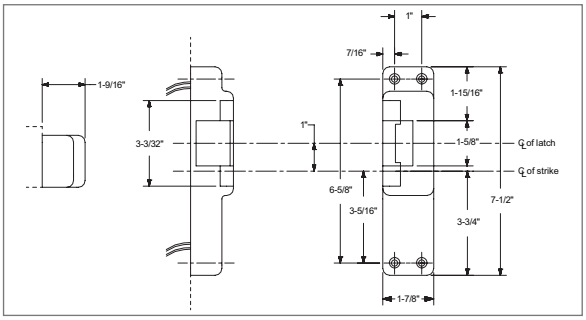

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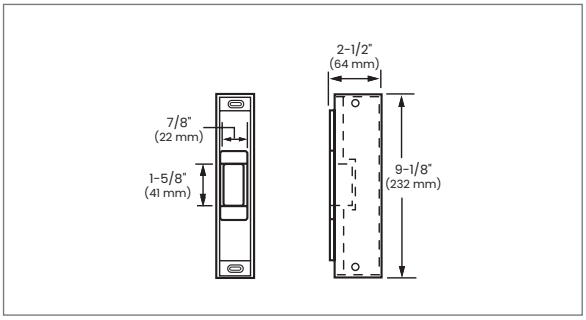

Ordering Information

6112	-	FSE	-	DS	-	24	-	S024	-	US3	-	EB	-	CON
Model		Power failure mode		Dual switch*		Voltage		Rectifier kit*		Finish		Buzzer*		Allegion Connect*
1		2		3		4		5		6		7		8

* Optional

Selections correspond with the numbers above.

1	Model
Reference specification chart to make the proper model selection	
2	**Power failure mode**
FSE	Fail-secure. Requires power to be applied to unlock the strike lip. On loss of power, the strike lip is locked. Fire-rated.
FS	Fail-safe. Requires power to be applied to lock the strike lip. On loss of power, the strike lip is unlocked. Non-fire-rated.
3	**Dual switch (optional)**
DS	Monitors latch bolt and lock status. DS switches rated for 24 VDC at .050-2.0 amps.
DS-LC	Low current option for computer monitoring. Monitors latch bolt & lock status. DS-LS switches rated for 24 VDC at .050 amp or less.
4	**Voltage (VDC)**
24	Low voltage DC power
12	Low voltage DC power

If AC power is required, specify rectifier kit.

5	Rectifier kit (optional)
S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid
6	**Finish**
US3/BHMA 605	Plated polished brass on stainless steel
US4/BHMA 606	Plated satin brass on stainless steel
US10/BHMA 612	Plated satin bronze on stainless steel
US10B/BHMA 613	Plated dark bronze, oil rubbed on stainless steel
US32/BHMA 629	Stainless steel, polished
US32D/BHMA 630	Stainless steel, satin
7	**Buzzer (optional)**
EB	Entry Buzzer
Only available if Fail-Secure (FSE) is specified.	
8	**Allegion Connect**
CON	Allegion Connect Connector

6 in. wire extension harness available

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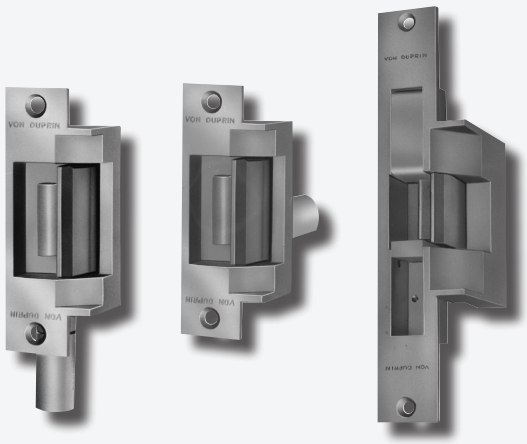
005282, Rev. 01/24

VON DUPRIN®

6200 Series

Strikes for Mortise or Cylindrical Devices



Overview

Von Duprin electric strikes are known for their reliability, durability and security. The 6200 Series strikes are designed to withstand abuse. Their heavy-duty stainless steel construction is fully UL 1034 and UL 10C listed.

6200 Series electric door strikes are designed for use with a variety of mortise or cylindrical locksets. Electrified strikes allow remote release of a locked door by activating a movable lip (keeper) using an entry/exit button or credential reader and can be a cost effective means for managing access. 6200 Series strikes come standard as 24 VDC in fail secure mode. 12 VDC and AC operation can be selected, as can fail safe mode and other options that enable you to configure these strikes to fit your exact needs.

Use 6200 Series electric strikes for retrofit applications or new construction. To assure the proper selection of an electric strike on new applications, lockset compatibility charts are shown on the next page. When using a lockset not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for application assistance.

Features & Benefits

- 17 configurations available for cylindrical and mortise applications
- Heavy-duty stainless steel construction
- 24 VDC standard with 12, 16 and 28 VDC operation optional
- Two-piece plug connectors are furnished for ease of installation and removal during strike servicing
- Options include rectifier kit for VAC to VDC conversion, dual monitor switches, entry buzzer and Allegion Connect wire extension
- Six popular finishes available to suite with existing hardware
- UL 10C 3-hour fire-rated (fail secure only)
- UL 1034 listed for burglary-resistant electric door strikes
- Static strength: 1500 lbs
- Dynamic strength: 70 ft-lbs
- UL 294 listed for access control system

* Certification detail is listed within Model Specifications.

6200 Series Power Requirements

Models	Voltage	Current	Duty	Amps	Ohms
All	12V	DC	Continuous	0.60	21
All	16V	DC	Continuous	0.40	38
All	24V	DC	Continuous	0.33	83
All	28V	DC	Continuous	0.25	111

Continuous duty = Energized 1 minute or more

Mortise Lockset Compatibility[1, 3]
6211, 6211AL, 6211WF, 6212, 6213, 6214, 6215, 6221, 6222, 6223, 6224, 6224AL, 6225 and 6226 strikes

Manufacturer	Model number
Von Duprin	7500
Adams Rite	4510, 4710
Baldwin	6000
Best	24H, 30H, 45H
Corbin	9000
Falcon	MA2300, MA2500, MA2600, MA3300, MA3500, MA3600
Precision	Mortise
Russwin	Mortise
Sargent	7700, 8100, 9000
Schlage	L9000, K30, K40, K50, K60
Yale	7030, 7130, 8600, 8700

Mortise Lockset Compatibility[1, 3]
6210

Manufacturer	Model number
Von Duprin	7500
Best	30H (not 45H/47H)
Corbin/Russwin	ML2200, 5000, 9000, CR2200 (not 2000)
Falcon	MA100, MA200, MA300, MA400, MA500, MA600
Sargent	7700, 8100 (not 7800/8200)
Schlage	L9000
Yale	8700 (not 8800)

Cylindrical Lockset Compatibility[1, 3]
6211, 6211AL, 6211WF, 6212, 6213, 6214, 6215, 6221, 6222, 6223, 6224, 6224AL, 6225 and 6226 strikes

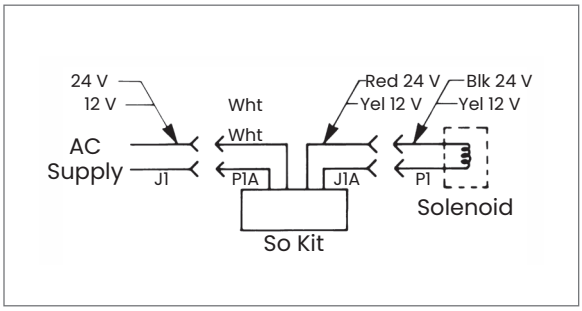
Manufacturer	Cylindrical latchbolt projection
Baldwin	1/2" – 3/4" (13 mm – 19 mm)
Best	3/8" – 3/4" (10 mm – 19 mm)[2]
Corbin	1/2" – 3/4" (13 mm – 19 mm)
Falcon	1/2" – 3/4" (13 mm – 19 mm)
Russwin	1/2" – 3/4" (13 mm – 19 mm)
Sargent	1/2" – 3/4" (13 mm – 19 mm)
Schlage	3/8" – 3/4" (10 mm – 19 mm)[2]
Yale	1/2" – 3/4" (13 mm – 19 mm)

Note: When using device not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for application assistance.

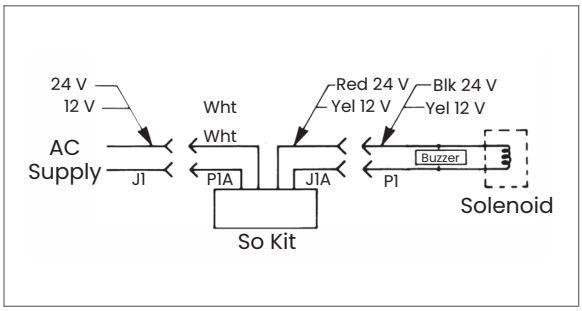
1. Von Duprin cannot guarantee compatibility, as other manufacturer's designs may change without notice.
2. Signalling may not function when using 3/8" (10 mm) throw bolt. Deadlocking cannot be guaranteed with all locks.
3. When using a lockset not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for assistance.

Wiring

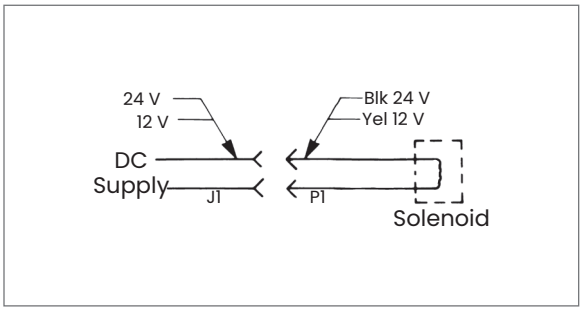
AC



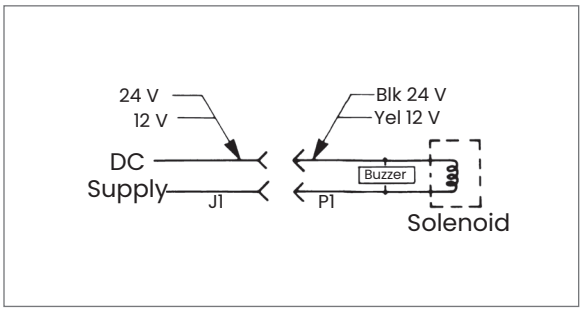
AC with Buzzer



DC

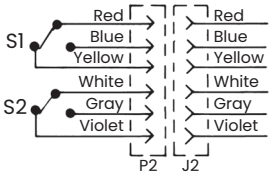


DC with Buzzer



Optional DS (FSE Shown)

Wiring shown with strike locked and monitor trippper depressed



Different wiring configurations are used depending on Backbox type and FS or FSE.

Model Specifications

Model number		6210	6211	6211AL	6211WF	6212
Retrofits model		N/A	VD 3140 FA 712	FA 722	FA 732	VD 3146
Latchbolt throw		3/4"	3/4"	3/4"	3/4"	3/4"
Face plate length		4-7/8"	4-7/8"	4-7/8"	4-7/8"	6-3/8"
Backbox depth		1-3/4"	1-11/16"	1-11/16"	4-1/2"	1-21/32"
Lockset	Mortise without deadbolt	•	•	•	•	•
	Mortise with deadbolt 1" throw	---	---	---	---	---
	Cylindrical	---	•	•	•	•
Number of doors	Single	•	•	•	•	•
	Pair	---	---	---	---	---
Door and frame type	Hollow metal	•	•	---	---	•
	Aluminum	•	•	•	---	•
	Wood	---	---	---	•	---
Options	DS or DS-LC (dual monitor switches)	•	•	•	•	•
	EB (entry buzzer - fail-secure only)	•	•	•	•	•
	28 VDC AC rectifier kit	•	•	•	•	•
	16 VDC solenoid	•	•	•	•	•
Certifications/ Listings	UL 1034	•	•	•	•	•
	UL 10C	3 hour	3 hour	3 hour	3 hour	3 hour
	ANSI/BHMA 156.31, Grade 1	•	•	•	•	---
Application Notes		1	---	---	2	3

Application notes:

1. For use in ANSI prep at standard height. Strike pocket inserts are provided to accommodate different manufacturers deadlocking trigger locations.
2. Designed to replace Folger Adams 732. Wood frame horizontal solenoid location differs from Folger Adams. Requires additional frame prep when retrofitting.
3. Fits modified ANSI 115.2 cutout. Designed to replace Von Duprin 3146.

Model Specifications

Model number		6212WF	6213	6214	6215	6216	6221
Retrofits model		N/A	VD 3041, 3042, 3061, 3062	FA 310-2-3/4	FA 310-2	FA 310-3-1	VD 3071 VD 3072
Latchbolt throw		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Face plate length		6-3/8"	6"	9"	9"	9"	6"
Backbox depth		4-1/2"	2-1/2"	2"	1-5/8"	2-7/8"	4-3/4"
Lockset	Mortise without deadbolt	•	•	•	•	---	•
	Mortise with deadbolt 1" throw	---	---	---	---	•	---
	Cylindrical	•	•	•	•	---	•
Number of doors	Single	•	•	•	•	•	---
	Pair	---	---	---	---	---	•
Door and frame type	Hollow metal	---	•	•	•	•	•
	Aluminum	---	•	•	•	•	•
	Wood	•	See note 1 below	---	---	•	•
Options	DS or DS-LC (dual monitor switches)	•	•	•	•	•	---
	EB (entry buzzer - fail-secure only)	•	•	•	•	•	•
	28VDC AC rectifier kit	•	•	•	•	•	•
	16VDC solenoid	•	•	•	•	•	•
Certifications/ Listings	UL 1034	•	•	•	•	•	•
	UL 10C	3 hour	3 hour	3 hour	3 hour	3 hour	3 hour*
Application notes		---	1	---	---	2	3

* When pair door has inactive leaf.

Application notes:

1. Includes wood frame for retrofit applications.
2. Deadbolt must be manually operated.
3. Open back electric strike for use on 1-3/4" (44 mm) thick double door applications. 4-3/4" (120 mm) minimum stile required. For a concealed vertical rod and mortise device combination, specify "A" backbox.

Model Specifications

		6222	6223	6224	6224AL	6225	6226
Model number							
Retrofits model		FA 310-2-3/4 OB	VD 3091 VD 3092	FA 310-2-3/4	FA 310-2RF	FA 310-2 OB	FA 310-2
Latchbolt throw		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Face plate length		9"	6"	9"	9"	9"	9"
Backbox depth		2"	4-1/2"	2"	1-5/8"	1-5/8"	1-5/8"
Lockset	Mortise without deadbolt	•	•	•	•	•	•
	Mortise with deadbolt 1" throw	---	---	---	---	---	---
	Cylindrical	•	•	•	•	•	•
Number of doors	Single	---	---	---	---	---	---
	Pair	•	•	•	•	•	•
Door and frame type	Hollow metal	•	•	•	---	•	•
	Aluminum	•	•	•	•	•	•
	Wood	---	•	---	---	---	---
Options	DS or DS-LC (dual monitor switches)	---	•	•	•	---	•
	EB (entry buzzer - fail-secure only)	•	•	•	•	•	•
	28VDC AC rectifier kit	•	•	•	•	•	•
	16VDC solenoid	•	•	•	•	•	•
Certifications/ Listings	UL 1034	•	•	•	•	•	•
	UL 10C	3 hour*	3 hour*	3 hour*	3 hour*	3 hour*	3 hour*
Application notes		1	2	3	4	5	6

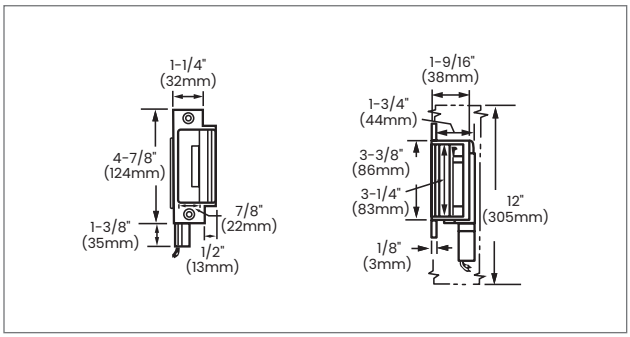
* When pair door has inactive leaf.

Application notes:

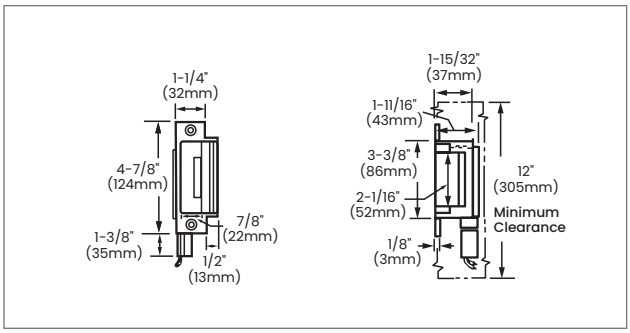
1. Open back electric strike for use on 1-3/4" (44 mm) thick double door applications
2. Closed back electric stirke for use on 1-3/4" (44 mm) thick double door applications. 4-3/4" (120 mm) minimum stile required. For a concealed vertical rod and mortise device combination specify "A" backbox.
3. Closed back electric strike for use on 1-3/4" (44 mm) or 2-1/4" (57 mm) thick double door applications.
4. Closed back electric strike for use on 1-3/4" (44 mm) or 2-1/4" (57 mm) thick aluminum double door applications.
5. Open back electric stirke for use on 1-3/4" (44 mm) thick double door applications.
6. Closed back electric strike for use on 1-3/4" (44 mm) or 2-1/4" (57 mm) thick double door applications.

Dimensions

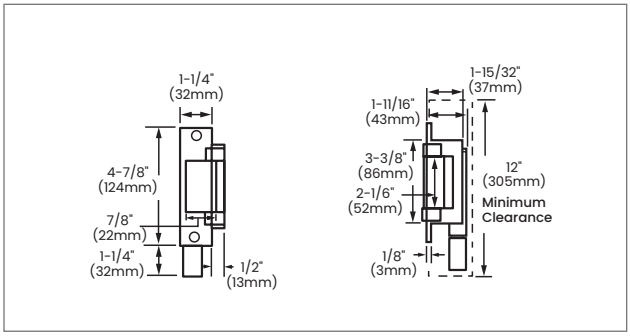
6210



6211



6211AL



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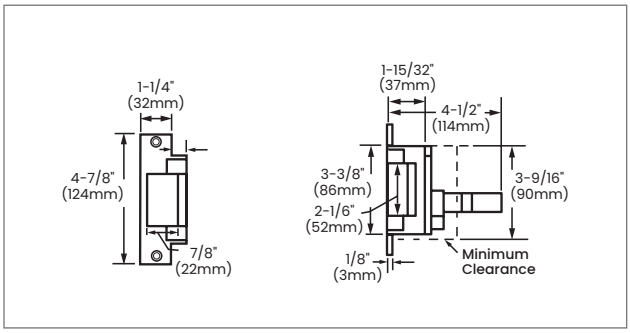

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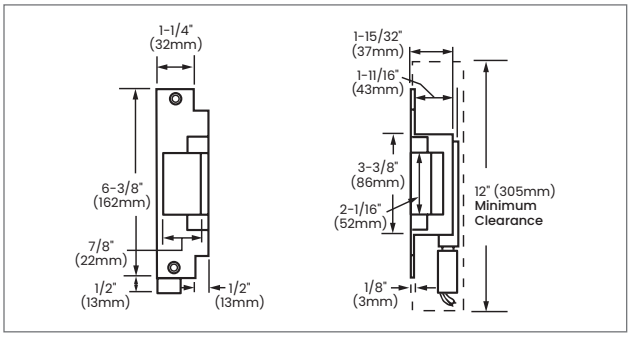
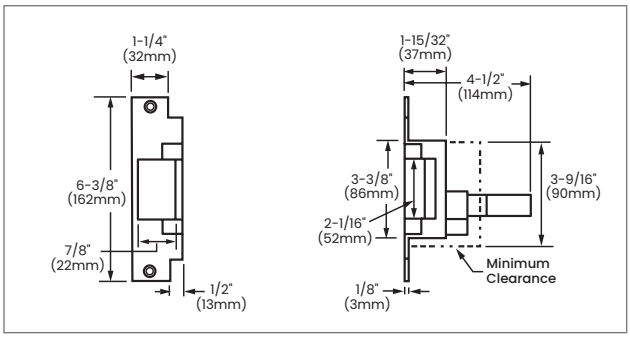


6212WF



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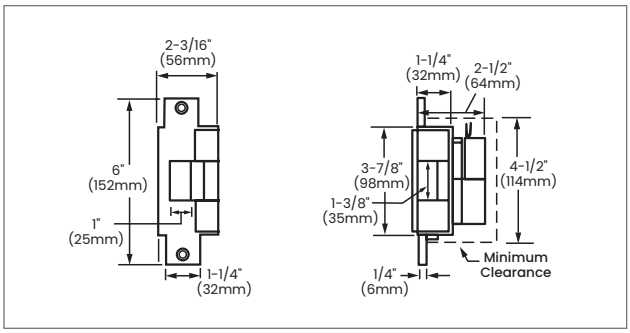

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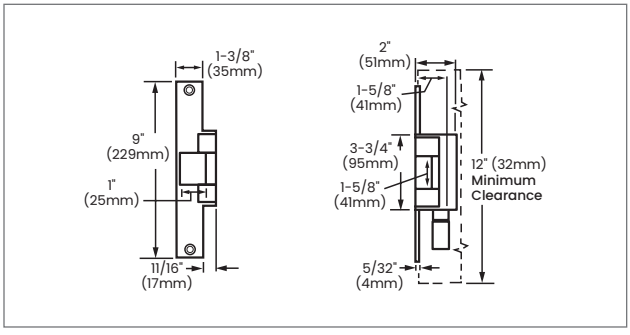

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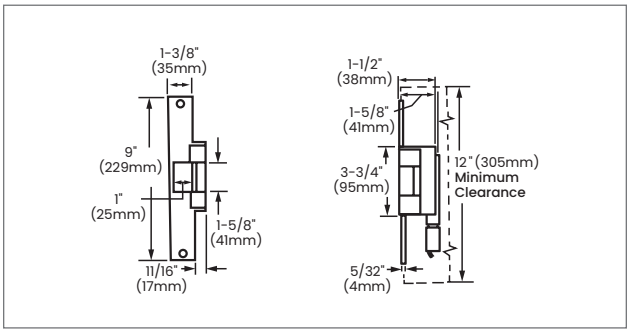

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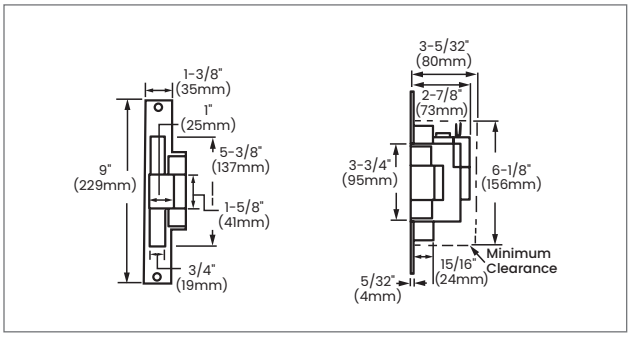
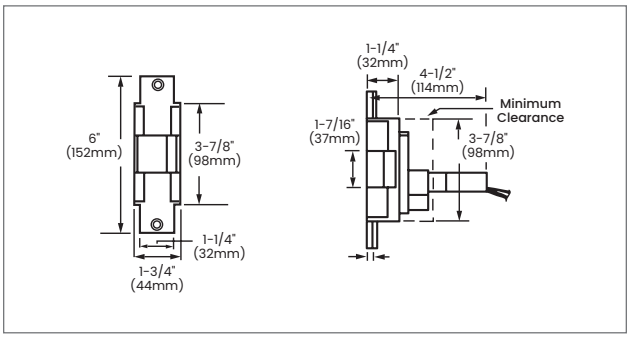


Dimensions

6221



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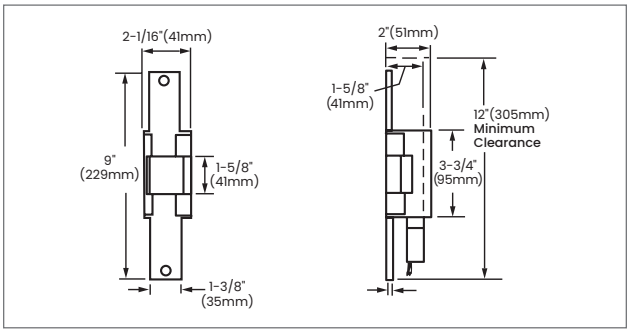

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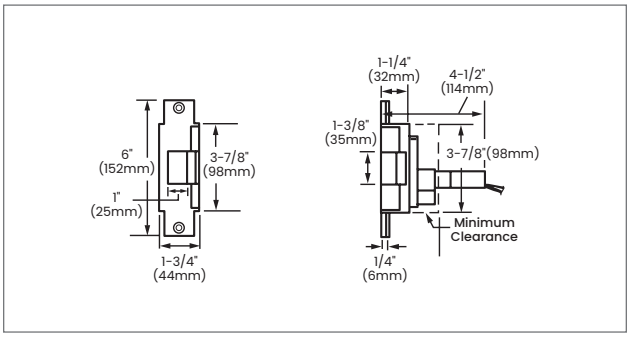

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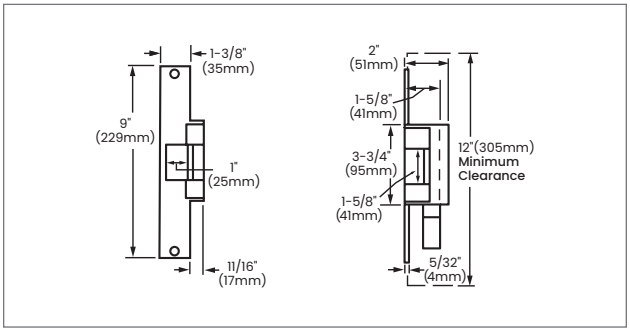
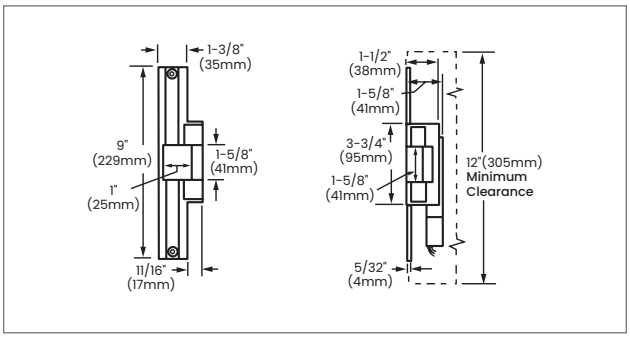


6224AL



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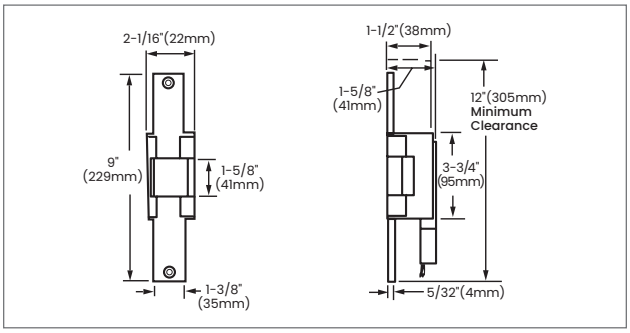
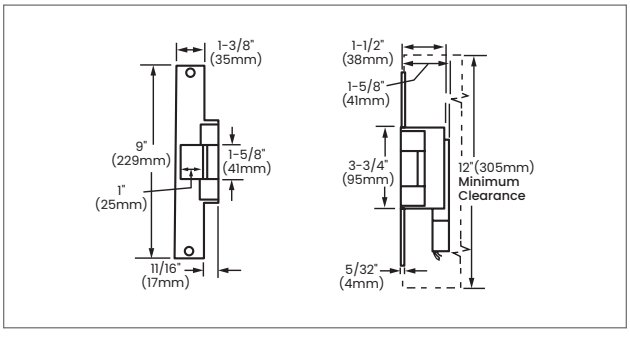


6226



Ordering Information

6210	-	FSE	-	DS	-	24	-	S024	-	US3	-	EB	-	CON
Model		Power failure mode		Dual switch*		Voltage		Rectifier kit*		Finish		Buzzer*		Allegion Connect*
1		2		3		4		5		6		7		8

* Optional

Selections correspond with the numbers above.

1	Model
Reference specification chart to make the proper model selection	

2	Power failure mode
FSE	Fail-secure. Requires power to be applied to unlock the strike lip. On loss of power, the strike lip is locked. **Fire-rated.**
FS	Fail-safe. Requires power to be applied to lock the strike lip. On loss of power, the strike lip is unlocked. **Non-fire-rated.**

3	Dual switch (optional)
DS	Monitors latch bolt and lock status. DS switches rated for 24 VDC at .050 - 2.0 amps.
DS-LC	Low current option for computer monitoring. Monitors latch bolt & lock status. DS-LS switches rated for 24 VDC at .050 amp or less.

4	Voltage (VDC)
24	Low voltage DC power (standard)
12	Low voltage DC power
16	Low voltage DC power (solenoid sold separately)
28	Low voltage DC power (solenoid sold separately)

If AC power is required, specify rectifier kit.

5	Rectifier kit (optional)
S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid

6	Finish
US3/BHMA 605	Plated polished brass on stainless steel
US4/BHMA 606	Plated dull brass on stainless steel
US10/BHMA 612	Plated dull bronze on stainless steel
US10B/BHMA 613	Plated dark bronze, oil rubbed on stainless steel
US32/BHMA 629	Stainless steel, polished
US32D/BHMA 630	Stainless steel, satin

7	Buzzer (optional)
EB	Entry Buzzer

Only available if Fail-Secure (FSE) is specified.

8	Allegion Connect
CON	Allegion Connect Connector

6 in. wire extension harness available

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005368, Rev. 03/25

VON DUPRIN®

6300 Series

Surface Mounted Strike for Rim Exit Devices

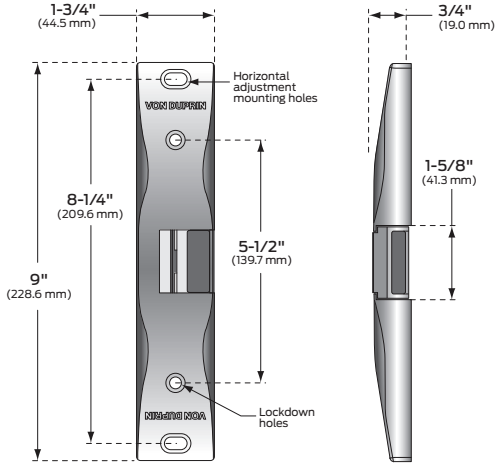
Overview

Von Duprin electric strikes are known for their reliability, durability and security. The 6300 Series strike is designed to withstand abuse with its heavy-duty stainless steel certification construction is fully UL 1034 and UL 10C listed.

The 6300 Series strike is designed for use with a variety of rim exit devices. As an electrified strike, it allows remote release of a locked door by activating a movable lip (keeper) using an entry/exit button or credential reader and can be a cost effective means for managing access. It is ideal for aftermarket applications and designed to install without modifying or altering the door frame.

Designed for fail-secure (FSE) only mode, the 6300 Series strike achieves compliance with UL10C for 3-hour fire-rated openings. It also enables fieldselectable 12 or 24 VDC with AC conversion optional.

To assure the proper selection of an electric strike on new applications, lockset compatibility charts are shown on the next page. When using a lockset not listed or when retrofitting a strike to an existing application, please contact Von DuprinTechnical Support for application assistance.



Features & Benefits

- Designed for use with rim exit devices
- Heavy-duty stainless steel construction in BHMA 630 satin finish
- Surface mounted — requires no alteration or cutting to existing frame
- Field selectable voltage 12VDC or 24VDC
- Plug-in voltage connectors included for ease of installation and removal during strike servicing
- Non-handed design provides greater flexibility
- UL 10C 3-hour fire-rated (fail secure only)
- UL 1034 listed for burglary-resistant electric door strikes
- UL 294 listed for access control system
- Dynamic strength: 70 ft-lbs
- Static strength: 1500 lbs

6300 Series Power Requirements					
Models	Voltage	Current	Duty	Amps	Ohms
6300	12V	DC	Continuous	0.50	22
6300	24V	DC	Continuous	0.24	89

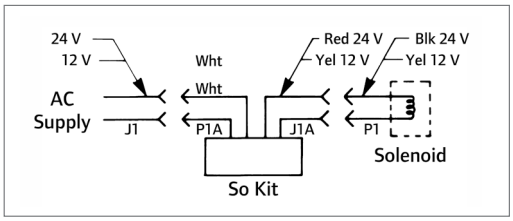
Continuous duty = Energized 1 minute or more

Rim Exit Device Compatibility 6300 Strikes	
Manufacturer	Model Number
Von Duprin	VD 22/22-F Rim
Von Duprin	VD 33A/35A Rim*
Von Duprin	VD 55 Rim
Von Duprin	VD 88 Rim
Von Duprin	VD 98/99 and 98/99-F Rim
Falcon	Falcon 24/24-F Rim*
Falcon	Falcon 25/25-F Rim
Falcon	Falcon 19/19-F Rim
Falcon Doromatic	Falcon Doromatic 1590*
Falcon Doromatic	Falcon Doromatic 1790*
Falcon Doromatic	Falcon Doromatic 2090*

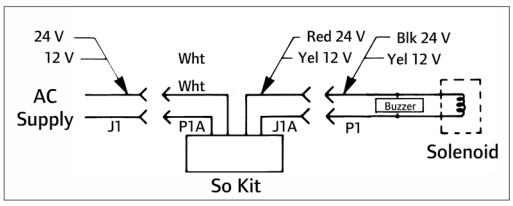
*Stile and frame condition may affect compatibility.

Model Specifications	
Model number	6300
Retrofits model	N/A
Latchbolt throw	3/4"
Face plate length	9"
Projection	3/4"
Lockset	Rim exit device
Number of doors	Single or pair with mullion
Door/frame type	Hollow metal, aluminum and wood
EB (entry buzzer)	Optional
Certifications/ listings	UL 1034, UL 10C, ULw294, CSFM
Application notes	Surface mounted electric strike ideal for aftermarket applications. Strike designed for use with Von Duprin 98/99, however it can be used with most rim exit devices.

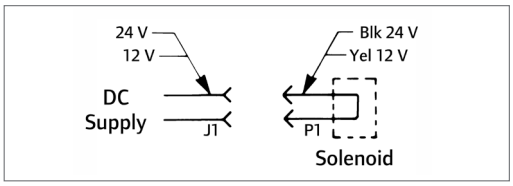
AC



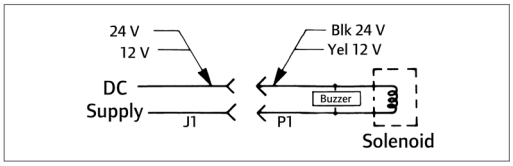
AC with buzzer



DC



DC with Buzzer



Standard Features

- Power failure mode: Fail-secure only (FSE)
- Voltage: field selectable 24 VDC or 12 VDC
- Finish: stainless steel, satin (BHMA 630/US32D)

Ordering Information

6300 - S024 - EB

1 Model	2 Rectifier kit*	3 Dual switch*

* Optional

Selections correspond with the numbers above.

1	Model
6300	Surface mounted strike for rim exit devices
2	**Rectifier Kits (optional)**
S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid

3	Buzzer (optional)
EB	Entry Buzzer

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VON DUPRIN®

6400 Series

Modular Strike for Mortise & Cylindrical Locksets

Overview

The 6400 electric door strike from Von Duprin is designed to be modular and highly configurable to fit nearly any mortise or cylindrical lock. This versatile strike allows the installer to insert and lock-in the deadbolt keeper or plug and deadlatch ramp anywhere within its 3 1/8" vertical opening to fit the latch position and functional needs. This, combined with a 1 /8" horizontal adjustment, makes this easy-to-install design a good fit for installations where misalignment or a tight fit may be a problem.

Use it as a time-saving, “go to” strike. The 6400 comes ready for use with prewired plug-in connectors for 12 or 24 VDC voltage that can be changed over to 12 or 24 VAC without a converter kit, two faceplates—one each for offset and centerline locks as well as a trim filler plate, mounting tabs and shims and a self-adhesive template for frame cuts. An optional “plug in” latchbolt monitor is also available and can be added in the field at any time after installation.

Features & Benefits

- Modular design fits cylindrical and nearly any mortise lock
- Heavy-duty stainless steel construction in BHMA 630 satin finish
- Vertical adjustments allow for alignment with a wide variety of mortise locks with offset latches
- Horizontal adjustment of up to 1/8" improves fit on tight door preps
- Can accommodate up to 1" deadbolt (for night latch only)
- Field selectable voltage 12 or 24VDC and 12 to 24VAC
- Plug-in voltage connectors are included for ease of installation and removal during strike servicing
- Optional plug-in latchbolt monitor can be added in the field
- Non-handed, unique internal solenoid design prevents keeper from heating up
- Low current draw (0.19 amps @ 24 VDC)
- 3-hour fire-rated to UL 10C (fail secure only)
- UL 1034 listed for burglary-resistant electric door strikes
- UL 294 listed for access control system
- Static strength: 1500 lbs
- Dynamic strength: 70 ft-lbs

Lockset Compatibility

Vertical adjustment of the deadbolt keeper or deadlatch ramp allows for alignment with a wide variety of mortise locks with offset latches. Accommodates up to 1" deadbolt*. Up to 1/8" horizontal adjustment for misaligned frames.

* Night-latch function only, bolt will not release

Wiring Instructions

Use the appropriate wire harness supplied.

- 12V for 12VDC and 12-24VAC
- 24 for 24VDC only

Attach the red wire to (+) positive of the power supply. Attach the black wire to the (-) negative of the power supply. If using AC power, polarity is not observed.

Note: If a suppression diode is required for access control, observe proper polarity.

Latch monitor wires

Black = Common (C)

Blue = Normal Close (NC)

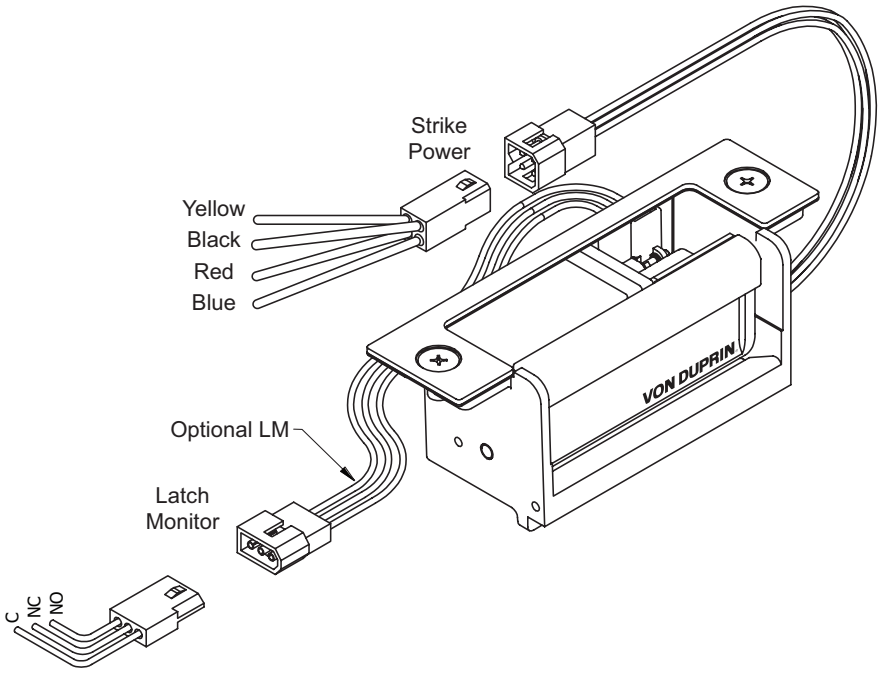
Orange = Normal Open (NO)

6400 Series Power Requirements

Model	Mode	Voltage	Duty	Sound	Amps[1]	Ohms[2]
6400	Fail-locked	12 VDC	Continuous	Silent	.375	37
6400	Fail-locked	24 VDC	Continuous	Silent	.190	148
6400	Fail-locked	12-24 VAC	Intermittent	Buzz	.280 - .565	37

Intermittent duty = Energized less than 1 min. with duty ratio 1:5; Continuous duty = Energized 1 min. or more.

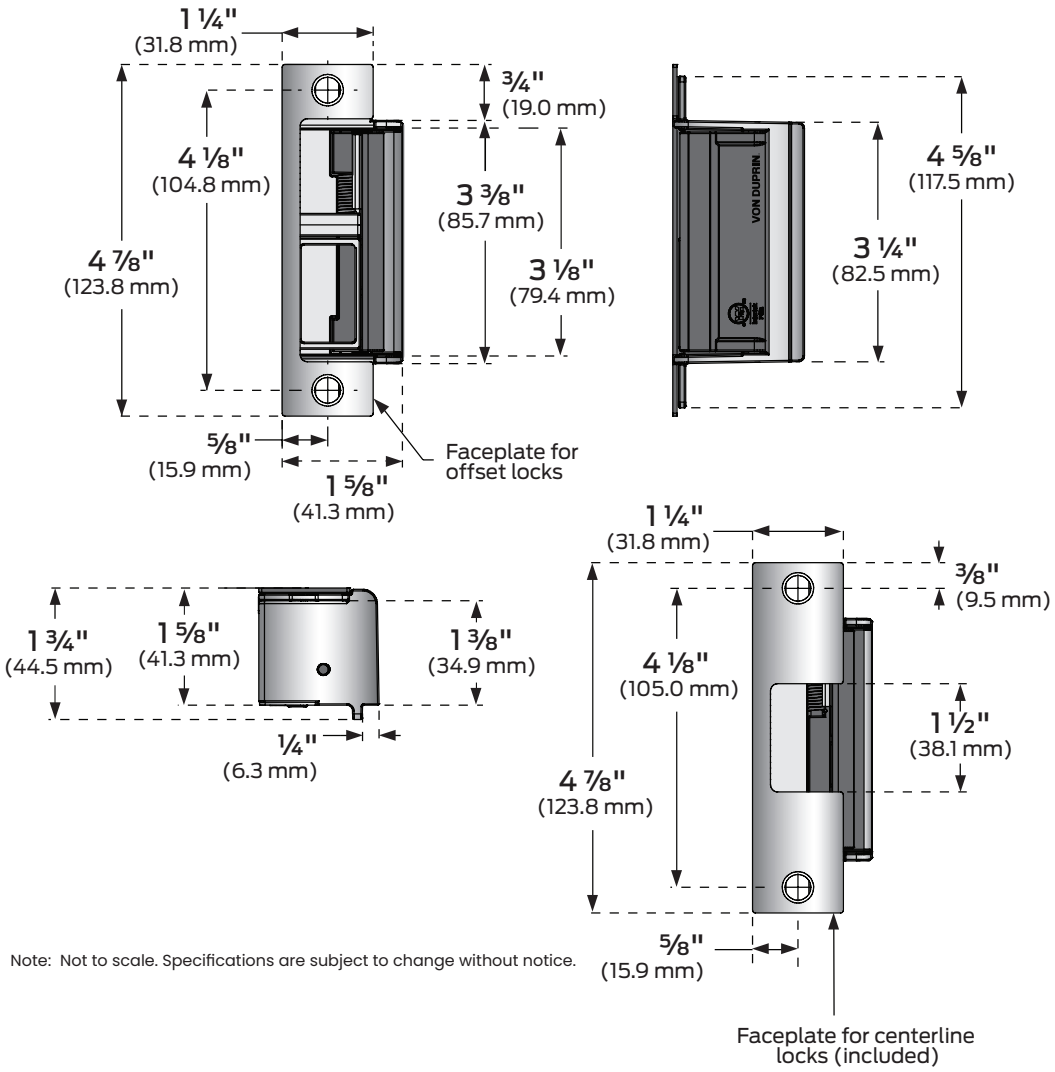
1. Ratings are based on maximum current draw at +10°C and include initial power-up current draw.
2. Nominal resistance at +25°C +/- 7% tolerance.



Model Specifications

Model number	6400
Latchbolt throw	3/4" (Also accomodates 1" deadbolt as a nightlatch only - no release)
Face plate length	4-7/8" (Includes two face plates: Centerline and Off-set latch entries)
Backbox depth	1-3/4"
Finish	US 32D/BHMA 630
Lockset	Cylindrical, mortise, mortise exit
Number of doors	Single
Door/frame type	Hollow metal, aluminum & wood
Options	2 Rectifier kits: • S012 Converts 12 VAC voltage to 12 VDC to operate the solenoid • S024 Converts 24 VAC voltage to 24 VDC to operate the solenoid EB (Entry Buzzer)
Certifications/ Listings	ANSI/BHMA A156.31 Grade 1, 3-hour fire rated to UL 10C (FSE only), UL 1034, UL 294, CSFM
Application notes	Modular electric strike ideal for aftermarket applications. Fail-secure only for fire-rated openings.

Dimensions



Note: Not to scale. Specifications are subject to change without notice.

Ordering Information

6400 - S024 - EB

Model	Rectifier Kit*	Buzzer*
1	2	3

* Optional

Selections correspond with the numbers above.

1	Model
6400	Modular Strike
2	**Rectifier Kit (optional)**
	S012 Converts 12 VAC voltage to 12 VDC to operate the solenoid S024 Converts 24 VAC voltage to 24 VDC to operate the solenoid
3	**Buzzer (optional)**
EB	Entry buzzer

Accessories

- LM6400 Latchbolt monitor—indicates when door is latched (ships separately)

Standard Features

- Power failure mode: Fail-secure only (FSE)
- Voltage: Field selectable 12 or 24 VDC and 12 or 24 VAC voltage
- Finish: Stainless steel, satin (BHMA 630/US 32D)
- Centerline and offset face plates included
- Also includes: two plug-in voltage connectors, self-adhesive template for frame cuts, trim filler plate, mounting tabs and shims, as well as tamper-resistant screws with a security driver bit

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M490/492

Electromagnetic Locks

Overview

M400 Series electromagnetic locks from Schlage are designed with the customer in mind to be robust, easy-to-install, and secure. The unique bayonet mounting feature makes installation easier, allowing the installer to have their hands free during the mounting process.

All M400 Series electromagnetic locks are symmetrical with field-selectable handing, allowing optimum placement of the magnet no matter the application. They are designed to provide automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. M490 models are tested and certified to meet or exceed UL 1034 and BHMA 1500 lb. hold force requirements.

The M490 electromagnetic locks come in four configurations to meet your specific security needs. Single and double door models are offered in standard configurations. Plus versions of these models with "P" designations add intelligent sensing and reporting features needed to integrate with access control systems along with additional available options. Kits are also available for top jam, double door, and glass door applications.

Features & Benefits

- 1500 lb. hold force rating for maximum security applications
- "Plus" models offer Magnetic Bond Sensor (MBS), adjustable Relock Time Delay (RTD) and Door Position Switch (DPS)
- Automatic Voltage Selection (AVS)
- Symmetrical design with field-selectable handing for optimum placement
- Bayonet mount simplifies installation by eliminating the need to hold lock overhead while securing
- Armature mount pivot feature compensates for slight opening imperfections
- Optional mounting kits available for top jamb mount, double door and HERCULITE® brand glass doors
- Aluminum housing in 628 satin finish
- ANSI/BHMA 156.23 Grade 1, UL 1034, UL 10C, UL 294, cUL, CFSM certifications
- Limited lifetime warranty on magnetic coil assembly

Additional Features

All Models

- Automatic Voltage Selection (AVS) senses the voltage applied to the lock and responds accordingly

M490P/M492P

- Magnetic Bond Sensor (MBS) monitors the strength of the bond between the lock and armature so you know the door is secure
- Door Position Switch (DPS) monitors whether the door is open or closed
- Relock Time Delay (RTD) provides a relock delay that is adjustable from 0.5 to 30 seconds

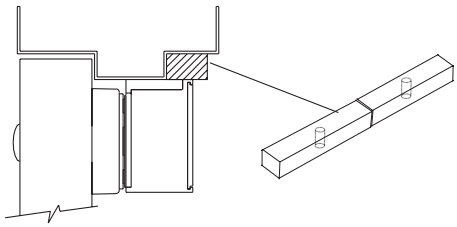
Optional accessories (P models only)

- ATS/LED combines Anti-Tamper Switch (ATS) with Magnetic Bond Sensor in one kit
  - ATS provides an indication that the cover of the magnet is securely fastened to the lock and that the on-board circuitry is secure
  - Magnetic Bond Sensor indicator (LED) provides visual indication of magnetic bond at the lock

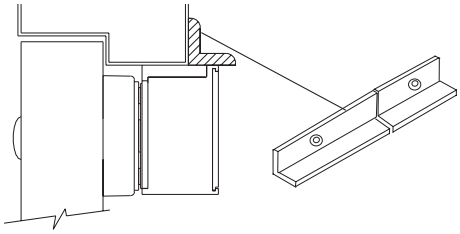
Optional Accessories (For All)

- Glass door bracket kit designed for use with HERCULITE® brand glass door
- Top jamb (inswinging doors) kit
- Double door connector kit (converts two single magnetic locks to a double)

Filler plate



Angle bracket



M490/M492 Electromagnetic Lock Specifications

Specification	M490/M490P	M492/M492P
Holding force	Meets or exceeds BHMA standard of 1500 lbs.	Meets or exceeds BHMA standard of 1500 lbs.
Door type	Single	Double
Input voltage (auto selected)	12/24 VDC	12/24 VDC
Current draw	.65A @ 12 VDC .35A @ 24 VDC	1.3A @ 12 VDC .7A @ 24 VDC
Height	3"	3"
Length	12-1/2"	25-1/16"
Depth	1-3/4"	1-3/4"
Weight (approximate)	14 lbs.	28 lbs.
Certifications	UL 10C, UL 1034, UL 294, ANSI/BHMA A156.23, cUL, CSFM	UL 10C, UL 1034, UL 294, ANSI/BHMA A156.23, cUL, CSFM
Temperature	0° to 49°C (32° to 120° F)	0° to 49°C (32° to 120° F)
Wire gauge	14-22 AWG	14-22 AWG

Filler Plates and Angle Brackets Specifications

Filler Plates

Width x Height	Length	Plate No.
1-1/4" x 1/8"	12-1/2"	4901F
1-1/4" x 1/4"	12-1/2"	4902F
1-1/4" x 3/8"	12-1/2"	4903F
1-1/4" x 1/2"	12-1/2"	4904F
1-1/4" x 5/8"	12-1/2"	4905F
3/4" x 1/2"	12-1/2"	4906F
3/4" x 5/8"	12-1/2"	4907F
3/4" x 3/4"	12-1/2"	4908F

Angle Brackets

Width x Height	Length	Bracket No.
1" x 1"	12-1/2"	4901A
1-1/2" x 1"	12-1/2"	4902A
1-1/2" x 1-1/2"	12-1/2"	4903A
1-1/2" x 2"	12-1/2"	4904A
1-1/2" x 2-1/2"	12-1/2"	4905A

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004204, Rev. 01/24

M450/452

Electromagnetic Locks

Overview

M400 Series electromagnetic locks from Schlage are designed with the customer in mind to be robust, easy-to-install, and secure. The unique bayonet mounting feature makes installation easier, allowing the installer to have their hands free during the mounting process.

All M400 Series electromagnetic locks are symmetrical with field-selectable handing, allowing optimum placement of the magnet, no matter the application. They are designed to provide automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. M450 models are tested and certified to meet or exceed UL 1034 and BHMA 1000 lb hold force requirements.

The M450 electromagnetic locks come in four configurations to meet your specific security needs. Single and double door models are offered in standard configurations. Plus versions of these models with "P" designations add intelligent sensing and reporting features needed to integrate with access control systems along with additional available options. Kits are also available for top jam, double door, and glass door applications.

Features & Benefits

- 1000 lb. hold force rating for high security applications
- "Plus" models offer magnetic bond sensor (MBS), adjustable relock time delay (RTD) and door position switch (DPS)
- Automatic voltage selection (AVS)
- Symmetrical design with field-selectable handing for optimum placement
- Bayonet mount simplifies installation by eliminating the need to hold lock overhead while securing
- Armature mount pivot feature compensates for slight opening imperfections
- Optional mounting kits available for top jamb mount, double door and HERCULITE® brand glass doors
- Aluminum housing in 628 satin finish
- ANSI/BHMA 156.23 Grade 1, UL 1034, UL 10C, UL 294, cUL, CFSM certifications
- Limited lifetime warranty on magnetic coil assembly

Additional Features

All Models

- Automatic Voltage Selection (AVS) senses the voltage applied to the lock and responds accordingly

M450P/M452P

- Magnetic Bond Sensor (MBS) monitors the strength of the bond between the lock and armature so you know the door is secure
- Door Position Switch (DPS) monitors whether the door is open or closed
- Relock Time Delay (RTD) provides a relock delay that is adjustable from 1 to 30 seconds

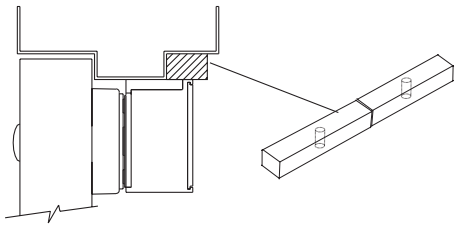
Optional accessories (P models only)

- ATS/LED Combines anti-tamper switch (ATS) with magnetic bond sensor in one kit
  - ATS provides an indication that the cover of the magnet is securely fastened to the lock and that the on board circuitry is secure
  - Magnetic bond sensor indicator (LED) provides visual indication of magnetic bond at the lock

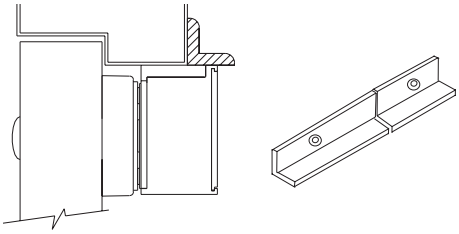
Optional accessories (for all)

- Glass door bracket kit designed for use with HERCULITE® brand glass doors
- Top jamb (inswinging doors) kit
- Double door connector kit (converts two single magnetic locks to a double)

Filler plate



Angle bracket



M450/M452 Electromagnetic Lock Specifications

Specification	M450/M450P	M452/M452P
Holding force	Meets or exceeds BHMA standard of 1000 lbs.	1000 lbs. per door leaf
Door type	Single	Double
Input voltage (auto selected)	12/24 VDC	12/24 VDC
Current draw	.75A @ 12 VDC .38A @ 24 VDC	1.5A @ 12 VDC .75A @ 24 VDC
Height	3"	3"
Length	10-1/4"	20-9/16"
Depth	1-3/4"	1-3/4"
Weight (approximate)	10 lbs.	20 lbs.
Certifications	UL 1034, UL 10C, UL 294, ANSI/BHMA156.23, cUL, CSFM	UL 1034, UL 10C, UL 294, ANSI/BHMA156.23, cUL, CSFM
Temperature	0° to 49°C (32° to 120° F)	0° to 49°C (32° to 120° F)
Wire gauge	14-22 AWG	14-22 AWG

Filler Plates and Angle Brackets Specifications

Filler Plates

Width x Height	Length	Plate No.
1-1/4" x 1/8"	10-1/4"	4501F
1-1/4" x 1/4"	10-1/4"	4502F
1-1/4" x 3/8"	10-1/4"	4503F
1-1/4" x 1/2"	10-1/4"	4504F
1-1/4" x 5/8"	10-1/4"	4505F
3/4" x 1/2"	10-1/4"	4506F
3/4" x 5/8"	10-1/4"	4507F
3/4" x 3/4"	10-1/4"	4508F

Angle Brackets

Width x Height	Length	Bracket No.
1" x 1"	10-1/4"	4501A
1-1/2" x 1"	10-1/4"	4502A
1-1/2" x 1-1/2"	10-1/4"	4503A
1-1/2" x 2"	10-1/4"	4504A
1-1/2" x 2-1/2"	10-1/4"	4505A

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M420/422

Electromagnetic Locks

Overview

M400 Series electromagnetic locks from Schlage are designed with the customer in mind to be robust, easy-to-install, and secure. The unique bayonet mounting feature makes installation easier, allowing the installer to have their hands free during the mounting process.

All M400 Series electromagnetic locks are symmetrical with field-selectable handing, allowing optimum placement of the magnet, no matter the application. They are designed to provide automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. M420 models are tested and certified to meet or exceed UL 1034 and BHMA 500 lb hold force requirements.

The M420 electromagnetic locks come in four configurations to meet your specific security needs. Single and double door models are offered in standard configurations. Plus versions of these models with "P" designations add intelligent sensing and reporting features needed to integrate with access control systems along with additional available options. Kits are available for top jam, double door, and glass door applications.

Features & Benefits

- 500 lb. hold force rating for traffic control applications
- "Plus" models offer magnetic bond sensor (MBS), adjustable relock time delay (RTD) and door position switch (DPS)
- Automatic voltage selection (AVS)
- Symmetrical design with field-selectable handing for optimum placement
- Bayonet mount simplifies installation by eliminating the need to hold lock overhead while securing
- Armature mount pivot feature compensates for slight opening imperfections
- Optional mounting kits available for top jamb mount, double door and HERCULITE® brand glass doors
- Aluminum housing in 628 satin finish
- ANSI/BHMA 156.23 Grade 1, UL 1034, UL 10C, UL 294, cUL, CFSM certifications
- Limited lifetime warranty on magnetic coil assembly

Additional Features

All Models

- Automatic Voltage Selection (AVS) senses the voltage applied to the lock and responds accordingly

M450P/M452P

- Magnetic Bond Sensor (MBS) monitors the strength of the bond between the lock and armature so you know the door is secure
- Door Position Switch (DPS) monitors whether the door is open or closed
- Relock Time Delay (RTD) provides a relock delay that is adjustable from 1 to 30 seconds

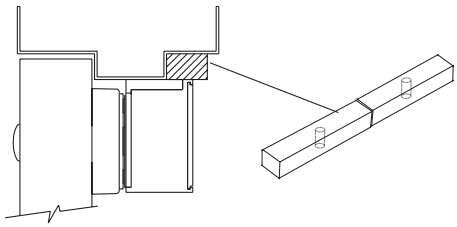
Optional accessories (P models only)

- ATS/LED Combines anti-tamper switch (ATS) with magnetic bond sensor in one kit
  - ATS provides an indication that the cover of the magnet is securely fastened to the lock and that the on board circuitry is secure
  - Magnetic bond sensor indicator (LED) provides visual indication of magnetic bond at the lock

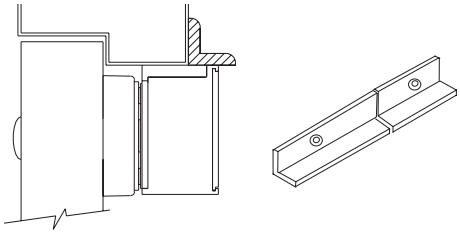
Optional Accessories (For All)

- Glass door bracket kit designed for use with HERCULITE® brand glass doors
- Top jamb (inswinging doors) kit
- Double door connector kit (converts two single magnetic locks to a double)

Filler plate



Angle bracket



M420/M422 Electromagnetic Lock Specifications

Specification	M420/M420P	M422/M422P
Holding force	Meets or exceeds BHMA standard of 500 lbs.	Meets or exceeds BHMA standard of 500 lbs.
Door type	Single	Double
Input voltage (auto selected)	12/24 VDC	12/24 VDC
Current draw	.75A @ 12 VDC .38A @ 24 VDC	1.5A @ 12 VDC .76A @ 24 VDC
Height	2-1/2"	2-1/2"
Length	9"	18-1/16"
Depth	1-3/8"	1-3/8"
Weight (approximate)	6 lbs.	12 lbs.
Certifications	UL 1034, UL 10C, UL 294, ANSI/BHMA 156.23, cUL, CSFM	UL 1034, UL 10C, UL 294, ANSI/BHMA 156.23, cUL, CSFM
Temperature	0° to 49°C (32° to 120° F)	0° to 49°C (32° to 120° F)
Wire gauge	14-22 AWG	14-22 AWG

Filler Plates and Angle Brackets Specifications

Filler Plates

Width x Height	Length	Plate No.
1-1/4" x 1/8"	9"	4201F
1-1/4" x 1/4"	9"	4202F
1-1/4" x 3/8"	9"	4203F
1-1/4" x 1/2"	9"	4204F
1-1/4" x 5/8"	9"	4205F
3/4" x 1/2"	9"	4206F
3/4" x 5/8"	9"	4207F
3/4" x 3/4"	9"	4208F

Angle Brackets

Width x Height	Length	Bracket No.
1" x 1"	9"	4201A
1-1/2" x 1"	9"	4202A
1-1/2" x 1-1/2"	9"	4203A
1-1/2" x 2"	9"	4204A
1-1/2" x 2-1/2"	9"	4205A

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004206, Rev. 01/24

M490G

Electromagnetic Gate Lock

Overview

The Schlage M490G is a weather resistant electromagnetic gate lock with 1500 lbs of holding force designed for use on all types of sliding and swinging gates. As a high security magnetic lock, it can accommodate misalignment problems while supplying superior holding force.

A 1/2" compression connector is provided for installation of 1/2" EMT conduit, ensuring protection of hook-up wiring from weather and vandalism. Heavy-duty plating resists corrosion of mating surfaces, providing a low maintenance locking device.

A modified top jamb mounting bracket allows a single M490G to be mounted in a variety of positions. The M490G gate lock may be mounted to any gate frame or post. Special brackets may be required to adapt the lock to a particular frame or post. It is important that the lock is mounted so that the armature pulls straight back from the magnet face.

The M490G can be field configured for either 12 or 24 VDC operation. Magnetic Bond Sensor (MBS) and Gate Status Monitor (DPS) are standard.

Features & Benefits

- 1500 lb. hold force rating
- Magnetic bond sensor (MBS) and gate status monitor (DPS)
- Field selectable 12 or 24VDC operation
- Built-in voltage spike suppressor
- Electroless nickel plated finish
- Corrosion and weather resistant for exterior use
- Universal mounting brackets for swinging or sliding gate applications
- 1/2" EMT compression fitting protects hookup wires from weather and vandalism
- Two foot wire leads
- Accommodates gate misalignment
- No moving parts - low maintenance
- Limited lifetime warranty on magnetic coil assembly
- ANSI/BHMA 156.23 Outdoor rated

Additional Features

M490G

- **Magnetic Bond Sensor (MBS)** monitors the strength of the bond between the lock and armature so you know the door is secure
- **Door Position Switch (DPS)** monitors whether the door is open or closed
- Universal Mounting Brackets for swinging or sliding gate applications
- Built-in voltage spike suppression
- 1/2" EMT compression fitting
- Special corrosion resistant plating

M490G Electromagnetic Gate Lock Specifications

Specification	M490G
Holding force	Meets or exceeds BHMA standard of 1500 lbs.
Input voltage (auto selected)	12/24 VDC
Current draw (amps standard unit)	.65A @ 12 VDC .35A @ 24 VDC
Height	3"
Length	11"
Depth	1-3/4"
Weight (approximate)	14 lbs.
Certifications	ANSI/BHMA 156.23 Outdoor rated
Temperature	-31° to 151° F (-35° to 66° C)
Wire gauge	14-22 AWG

Filler Plates and Angle Brackets Specifications

Filler Plates

Width x Height	Length	Plate No.
1-1/4" x 1/8"	11"	49G1F
1-1/4" x 1/4"	11"	49G2F
1-1/4" x 3/8"	11"	49G3F
1-1/4" x 1/2"	11"	49G4F
1-1/4" x 5/8"	11"	49G5F
3/4" x 1/2"	11"	49G6F
3/4" x 5/8"	11"	49G7F
3/4" x 3/4"	11"	49G8F

Angle Brackets

Width x Height	Length	Bracket No.
1" x 1"	11"	49G1A
1-1/2" x 1"	11"	49G2A
1-1/2" x 1-1/2"	11"	49G3A
1-1/2" x 2"	11"	49G4A
1-1/2" x 2-1/2"	11"	49G5A

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004158, Rev. 01/24

M490DE

Delayed Egress Electromagnetic Lock

Overview

The Schlage M490DE delayed egress electromagnetic lock is designed to meet NFPA 101 Life Safety Code while providing the same robust, easy-to-install, security of our M400 Series magnetic locks. The M490DE has a 15-second delayed egress timer with audible alarm which can be configured to trigger by an internal "plunger switch," or by external contacts, such as a request-to-exit push bar.

All M400 Series electromagnetic locks are symmetrical with field-selectable handing, allowing optimum placement of the magnet no matter the application. They are designed to provide automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex.

M490DE electromagnetic locks come in four configurations to meet your specific security needs. Single and double door models are offered in standard configurations. Plus versions of these models with "P" designations add intelligent sensing and reporting features needed to integrate with access control systems.

This easy-to-install, cost effective solution provides maximum access security and safety.

Features & Benefits

- 1300 lb. hold force rating for maximum security applications
- 15 second delay - activated by internal plunger switch or auxiliary input
- LED Indication with audible alerts
- Release input, reset input, fire alarm input
- Plus models offer magnetic bond sensor (MBS), adjustable relock time delay (RTD) and door position switch (DPS)
- Automatic voltage selection (AVS)
- Bayonet mount simplifies installation by eliminating the need to hold lock overhead while securing
- Armature pivot feature compensates for slight opening imperfections
- Aluminum housing in 628 satin finish
- ANSI/BHMA 156.24, UL special locking arrangements, UL 10C, cUL, CSFM, UL294 certifications
- Meets NFPA 101 life safety code
- BOCA compliant option available
- Limited lifetime warranty on magnetic coil assembly

Additional Features

All Models

- Auto Voltage Selection (AVS) senses the voltage applied to lock and responds accordingly
- Internal plunger switch activates delayed egress timer

Optional accessories

- Designed for use with HERCULITE® brand glass doors

M490DEP/M490DEP-2

- **Magnetic Bond Sensor (MBS)** monitors the strength of the bond between the lock and armature so you know the door is secure
- **Door Position Switch (DPS)** monitors whether the door is open or closed
- **BOCA compliant** (upon request) with options for 15- or 30-second time delay

Ordering Information

Standard Models

- **M490DE** - Single lock, 15-second delay
- **M490DE-2** - Double lock, separate housing, 15-second delay

Optional preset

- **M490DE-30S** - Single lock, factory set 30-second delay (requires fire marshal letter of approval)

Plus Models

- **M490DEP** - Single lock, 15-second delay
- **M490DEP-2** - Double lock, 15-second delay
- **M490DEP-BC** - BOCA compliant single lock, factory set 15-second delay with auto re-armed and locked state after door is opened and re-closes
- **M490DEP-BC30S** - BOCA compliant single lock, factory set 30-second delay with auto re-armed and locked state after door is opened and re-closes (requires fire marshal letter of approval)

M490DE Electromagnetic Delayed Egress Lock Specifications

Specification	M490DE/M490DEP	M490DE-2/M490DEP-2
Holding force	1300 lbs.	1300 lbs. per door leaf
Door type	Single	Double
Input voltage (auto selected)	12/24 VDC	12/24 VDC
Current draw	.75A @ 12 VDC .45A @ 24 VDC	1.25A @ 12 VDC .76A @ 24 VDC
Height	3"	3"
Length	12-1/2"	25-1/16"
Depth	3-1/16"	3-1/16"
Weight (approximate)	16 lbs.	32 lbs.
Certifications	ANSI/BHMA 156.24, UL special locking arrangement, UL10C, cUL, CSFM, UL294	
Temperature	0° to 49°C (32° to 120° F)	0° to 49°C (32° to 120° F)
Wire gauge	14-22 AWG	14-22 AWG

Filler Plates and Angle Brackets Specifications

Filler Plates

Width x Height	Length	Plate No.
1-1/4" x 1/8"	12-1/2"	4901F
1-1/4" x 1/4"	12-1/2"	4902F
1-1/4" x 3/8"	12-1/2"	4903F
1-1/4" x 1/2"	12-1/2"	4904F
1-1/4" x 5/8"	12-1/2"	4905F
3/4" x 1/2"	12-1/2"	4906F
3/4" x 5/8"	12-1/2"	4907F
3/4" x 3/4"	12-1/2"	4908F

Angle Brackets

Width x Height	Length	Bracket No.
1" x 1"	12-1/2"	4901A
1-1/2" x 1"	12-1/2"	4902A
1-1/2" x 1-1/2"	12-1/2"	4903A
1-1/2" x 2"	12-1/2"	4904A
1-1/2" x 2-1/2"	12-1/2"	4905A

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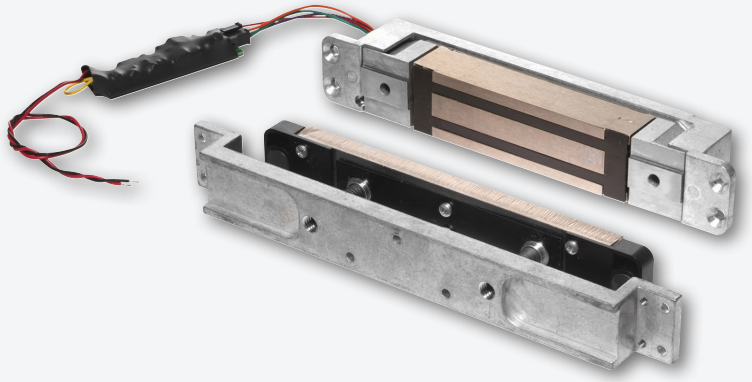
004762, Rev. 01/24

GF3000

Mortise Mounted Shear Lock



Overview

GF3000 Series shear locks feature a patented design, offering advances over any shear lock in the market.

A microprocessor-based control module provides advanced electronic features. This circuitry automatically senses and adjusts input voltage, allowing for operation from 12 to 24 volt DC power sources.

These mortise shear locks offer the advantage of a totally concealed locking mechanism, providing superior security and appearance while allowing for normal door movement. The patented design incorporates locking "tabs" on the magnet assembly with mating grooves in the armature plate.

The GF3000 Series locks are ideally suited for commercial grade quality hollow metal doors and frames, and are designed to be compatible with HERCULITE® brand glass doors with top rail. Advances in design provide low operating temperatures, making these shear lock suitable for use in the growing demand for concealed locks in wood frames.

The GF3000TRD model is available when armature adjustment is required from the edge of the door due to flush ceiling conditions. The GF3000BRD model is available when no top rail mounting is available.

Features & Benefits

- 3000 lb. hold force rating
- Fully concealed shear lock mortise design
- Automatic voltage selection (AVS) 12/24 VDC (filtered and regulated)
- Built-in automatic relock switch
- Adjustable time delay on relock, 2-30 seconds
- Low temperature operation
- Microprocessor controlled
- Optional Magnetic Bond Sensor (MBS) and Door Status Monitor (DSM) to monitor the secure/not secure condition of the lock and to sense the open/closed position of the door
- ANSI/BHMA 156.23, UL 10C, cUL, and CSFM certifications
- Limited lifetime warranty on magnetic coil

GF3000 Mortise Mounted Shear Lock Specifications			
Specification	**GF3000**	**GF3000TRD**	**GF3000BRD**
Holding force	3000 lbs.	3000 lbs.	3000 lbs.
Input voltage*	12/24 VDC	12/24 VDC	12/24 VDC
Current draw	.90A @ 12 VDC .45A @ 24 VDC	.90A @ 12 VDC .45A @ 24 VDC	.90A @ 12 VDC .45A @ 24 VDC
Lock body dimensions (L x H x D)	9-1/2" x 1-1/2" x 1-1/2"	9-1/2" x 1-1/2" x 1-1/2"	N/A
Lock body with mounting tabs	11-9/16" x 1-1/2" x 1-1/2"	11-9/16" x 1-1/2" x 1-1/2"	7-1/16" x 1-1/2" x 1-3/16"
Threshold box	N/A	N/A	7-1/2" x 2-1/4" x 1-3/4"
Armature	8-3/8" x 1-3/8" x 1/2"	8-3/8" x 1-3/8" x 1/2"	6-1/8" x 1-3/8 " x 7/16"
Armature bracket	10-5/8" x 1-3/8" x 1"	6-1/4" x 1-3/8" x 1-1/4"	6-1/4" x 1-3/8" x 1-1/4"
Weight	7 lbs.	6 lbs.	6 lbs.
Certifications	UL 10C, cUL, CSFM, ANSI/BHMA 156.23	UL 10C, cUL, CSFM ANSI/BHMA 156.23	UL 10C, cUL, CSFM, ANSI/BHMA 156.23

*Requires filtered, regulated power supply.

Ordering Information

- **GF3000 (Standard Model):** Fully concealed shear lock. The armature mounts into top of door or top rail and magnet mounts into header or frame. Air gap adjustment is from top edge of door.
- **GF3000TRD (Top Rail Door):** Fully concealed shear lock intended for use when top of door is not accessible for air gap adjustment after door is hung. Armature mounts into top of door or top rail and magnet mounts into header or frame. Air gap adjustment is from latch edge of door
- **GF3000BRD (Bottom Rail Door):** Fully concealed shear lock intended for use when top of door is not accessible for air gap adjustment after door is hung. Armature mounts into bottom of door or bottom rail and magnet mounts into floor. Air gap adjustment is from edge of armature. Popular application compatible with HERCULITE® brand glass doors.

Options

- **DSM/MBS** - Door Status Monitor/Magnetic Bond Sensor

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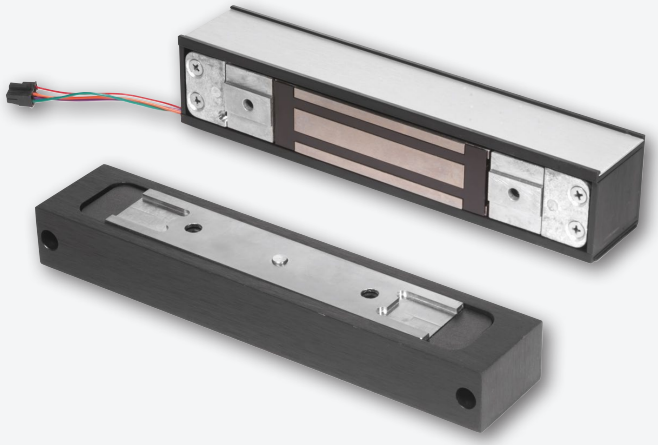
GF3000

Surface Mounted Shear Lock



Overview

GF3000 Series shear locks' patented design provides powerful holding force in low profile models for inswinging and outswinging doors. A microprocessor-based control module provides advanced electronic features. This circuitry automatically senses and adjusts input voltage, allowing for operation from 12 to 24 volt DC power sources.

The lightweight, black anodized housing can be quickly mounted without need of brackets and is finished off with a satin aluminum decorative plate for a clean look.

Features & Benefits

- 3000 lb. hold force rating
- Automatic voltage selection (AVS) 12/24 VDC (filtered and regulated)
- Built-in automatic relock switch
- Adjustable time delay on relock, 2-30 seconds
- Low temperature operation
- Microprocessor controlled
- Optional Magnetic Bond Sensor (MBS) and Door Status Monitor (DSM) to monitor the secure/not secure condition of the lock and to sense the open/closed position of the door
- Housing is black anodized with BHMA 628 satin aluminum decorative plate
- ANSI/BHMA 156.23, UL 10C, cUL, and CSFM certifications
- Limited lifetime warranty on magnetic coil assembly

GF3000 Surface Mounted Shear Lock Specifications		
Specification	**GF3000SM**	**GF3000TJ**
Holding force	3000 lbs.	3000 lbs.
Door type	Outswinging	Inswinging
Current draw	.90A @ 12 VDC .45A @ 24 VDC	.90A @ 12 VDC .45A @ 24 VDC
Lock housing (L x H x D)	9-13/16" x 1-1/4" x 1-1/2"	9-13/16" x 1-1/4" x 1-1/2"
Armature housing (L x H x D)	8-3/8" x 1-3/8" x 1/2"	8-3/8" x 1-3/8" x 1/2"
Weight	9 lbs.	9 lbs.
Certifications	UL 10C, cUL, CSFM, ANSI/BHMA 156.23	UL 10C, cUL, CSFM, ANSI/BHMA 156.23

Ordering Information

- **GF3000SM (Surface Mounted):** Surface mounted shear lock intended for use on outswinging doors. Surface mounted magnet mounts under header and surface mounted armature assembly mounts into door just under magnet assembly. Air gap adjustment is from top of door
- **GF3000TJ (Top Jamb):** Surface mounted shear lock intended for use on inswinging doors that are flush with frame's inner face. Surface mounted armature assembly mounts onto top of door or top rail and surface mounted magnet mounts onto frame's face. Air gap adjustment is from top of door.

Options

- **DSM/MBS** - Door Status Monitor/Magnetic Bond Sensor

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320M

Mortise Mount Sliding Door Electromagnetic Lock

Overview

Schlage provides the industry's most complete selection of electromagnetic locks. The 320M MiniLine™ is a UL listed, for mortise mounted electromagnetic lock designed for use on sliding doors. It interfaces with electronic access control systems, automatic door operators, and fire or hazard sensing systems to provide egress upon detectable emergency. With a fail-safe design, it offers an excellent solution for both security and life safety requirements when connected to the fire alarm circuit.

The 320M has been installed in thousands of locations worldwide including airports, hospitals, nursing homes, schools, universities, libraries, museums, retail and office buildings, laboratories, and government buildings.

Features & Benefits

- 550 lb. hold force rating with 24 VDC
- Compact, mortise mount design for sliding doors
- Includes mounting tabs and armature mounting block
- Low maintenance - no moving parts
- Meets security and life safety requirements
- Field selectable 12 or 24 VDC operation
- Standard features include adjustable time delay (ATD), door status monitor (DSM), and magnetic bond sensor (MBS)
- cUL and CSFM certified
- UL 10C listed for positive pressure fire tests of door assemblies: 3 hours
- Limited lifetime warranty on magnetic coil assembly

320M Mortise Mounted Sliding Door Electromagnetic Lock Specifications	
Specification	**320M**
Holding force	400 lbs. @ 12 VDC, 550 lbs @ 24 VDC
Input voltage	12/24 VDC
Current draw (Dual Voltage Field Selectable)	.23A @ 12 VDC .45A @ 24 VDC
Wiring	Wire leads 12" long
Lock body (L x H x D)	7" x 1-3/8" x 1-7/8"
Armature (L x H x D)	4-1/4" x 1-1/2" x 5/8"
Weight	6 lbs.

Note for wood frames: Due to higher ambient operating temperatures, it is required that the 12 VDC configuration be used.

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M390RFK

Retrofit
Electromagnetic Lock

Overview

The M390RFK is designed to retrofit the Locknetics 390+ without any additional prep. This ensures ease of installation for retrofit applications. The M390RFK comes standard with a Door Status Monitor (DSM), Magnetic Bond Sensor (MBS), and Relocking Time Delay (RTD). It's design employs a standardized circuit board with easy-to-install connectors, adjustable mounting brackets and integrated mounting screws. The armature housing was designed to eliminate noise and sagging, increasing the overall reliability of the product. The armature housing also holds magnets for the DSM feature without having to mount an additional plate to the armature, ensuring quicker, more reliable installations.

The M390RFK easily interfaces with most electronic access control systems in the market today, as well as automatic door operators and fire, or other hazard sensing systems for egress and emergency egress.

Features & Benefits

- Direct retrofit for Locknetics 390+ electromagnetic lock for outswinging doors
- Single lock model has 1500 lbs. of holding force for maximum security applications
- Automatic voltage selection (AVS)
- Adjustable mounting brackets
- Standard features include door status monitor (DSM), magnetic bond sensor with LED indicator (MBS) and a relocking time delay (RTD) of 0-110 seconds
- UL 10C listed for positive pressure fire tests of door assemblies: 3 hours
- ANSI/BHMA 156.23 Grade 1, cUL certified
- Limited lifetime warranty on magnetic coil assembly

M390RFK Retrofit Electromagnetic Lock Specifications	
Specification	**M390RFK**
Holding force	1500 lbs.
Door type	Single outswinging only
Input voltage (standard unit)	12/24 VDC
Current draw (amps standard unit)	.65A @ 12 VDC .45A @ 24 VDC
Height	2-7/8"
Length	10-1/2"
Depth	1-5/8"
Weight (approximate)	12.4 lbs.
Certifications	ANSI/BHMA 156.23, UL 10C, cUL
Temperature	0° to 49° C (32° to 120° F)

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009007, Rev. 01/24

PS906

6 amp Power Supply

Photo as shown includes optional board(s). Please contact your local sales office or visit the support section on our website for configuration assistance.

Overview

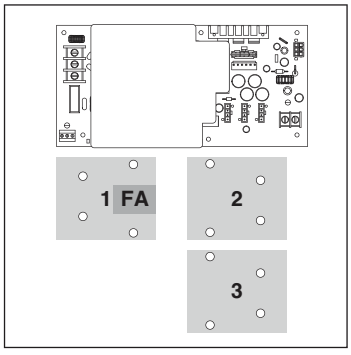
The Schlage comprehensive line of power supplies and option boards was designed to address the changing needs of the access control market.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified strikes, electromagnetic locks, card readers, etc.).

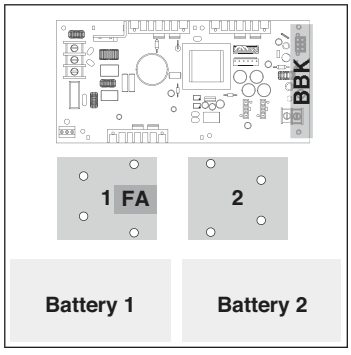
Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal is provided.

Configuration Options

Available option board, fire alarm and battery backup connection locations:



PS906 without battery backup



PS906 with battery backup

Features & Benefits

- 6A @ 12/24 VDC constant output, field selectable with jumper
- Provides low-voltage, Class 1, filtered and regulated power (Class 2 when used with 900-8P option board)
- Universal 120-240 VAC, fused primary input
- Three polarized option board connectors eliminate need for racks and side connectors
- AC input and DC output monitoring circuit with LED indicators
- Externally visible AC input indicator with isolated SPDT contacts
- High-voltage protective cover for AC circuitry (not shown)
- Battery back-up board auto-selects voltage
- Optional Fire Alarm plug-in board available
- UL 294, ULC-S318, RoHS, and FCC Part 15 certified

PS906 Power Supply Specifications	
Specification	**Description**
Input voltage	120/240 VAC, 50/60 Hz, universal input
Output voltage	6A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 240mVpp max ripple
Enclosure	Grey/baked enamel 14"x 12"x 4" (H x W x D) Eight 1/2" x 3/4" knockouts NEMA Grade 1 Hinged cover with lock down screws
Operating temperature	32˚ - 120˚F (0˚ - 49˚C)
Certifications	ANSI/UL 294 ULC-S318 RoHS FCC Part 15 Class 1 (Class 2 when used with 900-8P option board)
Battery backup (install on main board)	900-BB: Battery backup board only 900-BBK: Battery backup kit (backup board plus battery pack)
Available option boards	900-FA: Plug-in fire alarm (must be installed on option board) 900-2RS*: 2 Relay option board capable of individual or sequential operation for single and pair door applications 900-4R*: 4 Relay option board 900-4RL*: 4 Relay option board with integrated logic and individual or sequential operation capability for controlling security interlocks, auto operators and time delay function 900-8F*: Fused, 8 zone option board 900-8P*: PTC, 8 zone option board
AC primary fuse size	6.3A, 250v, 5 x 20 mm
Battery fuse size	7.5A 32v ATO blade style
DC output protection	Overload protection - current limited foldback circuit
Indicators	LED indicators: - AC input (visible on outside of enclosure) - DC output Isolated SPDT contacts to monitor AC power status
Weight (power supply)	Approx. 9.0 lbs
Weight (each battery)	4.0 lbs
AC input termination	3 position terminal block with protective cover Wire capacity: 10 AWG max.
DC output termination	2 position terminal block Wire capacity: 12 AWG max.
Option board connectors	3
Fire alarm board connector	Yes (requires connection on option board)
Keylock	Optional
Accessories	900-BAT: Backup battery pack

* Compatible with plug-in fire alarm board (900-FA)

Exit Device Support	
Von Duprin QEL	Up to 8[1]
Von Duprin EL	None
Falcon EL	None

1. Requires the use of two 900-4RL option boards

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PS904

4 amp Power Supply

Photo as shown includes optional board(s). Please contact your local sales office or visit the support section on our website for configuration assistance.

Overview

The Schlage comprehensive line of power supplies and option boards was designed to address the changing needs of the access control market.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified strikes, electromagnetic locks, card readers, etc.).

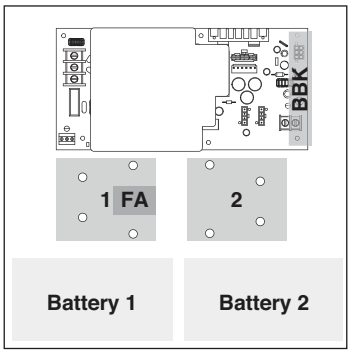
Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal is provided.

Features & Benefits

- 4A @ 12/24 VDC constant output, field selectable with jumper
- Provides low-voltage, Class 2, filtered and regulated power
- Universal 120-240 VAC, fused primary input
- Two polarized option board connectors eliminate need for racks and side connectors
- AC input and DC output monitoring circuit with LED indicators
- Externally visible AC input indicator with isolated SPDT contacts
- High-voltage protective cover for AC circuitry (not shown)
- Battery back-up board auto-selects voltage
- Optional Fire Alarm plug-in board available
- UL 294, ULC-S318, RoHS, and FCC Part 15 certified

Configuration Options

Available option board, fire alarm and battery backup connection locations:



PS904 Power Supply Specifications

Specification	Description
Input voltage	120/240 VAC, 50/60 Hz, universal input
Output voltage	4A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 240mVpp max ripple
Enclosure	Grey/baked enamel 14" x 12" x 4" (H x W x D) Eight 1/2" x 3/4" knockouts NEMA Grade 1 Hinged cover with lock down screws
Operating temperature	32° - 120°F (0° - 49°C)
Certifications	ANSI/UL 294 ULC-S318 RoHS FCC Part 15 Class 2
Battery backup (install on main board)	900-BB: Battery backup board only 900-BBK: Battery backup kit (backup board plus battery pack)
Available option boards	900-FA: Plug-in fire alarm (must be installed on option boards) 900-2RS*: 2 Relay option board capable of individual or sequential operation for single and pair door applications 900-4R*: 4 Relay option board 900-4RL*: 4 Relay option board with integrated logic and individual or sequential operation capability for controlling security interlocks, auto operators and time delay function 900-8F*: Fused, 8 zone option board 900-8P*: PTC, 8 zone option board
AC primary fuse size	4A, 250v, 5 x 20mm
Battery fuse size	7.5A 32v ATO blade style
DC output protection	Overload protection - current limited foldback circuit
Indicators	LED indicators: - AC input (visible on outside of enclosure) - DC output Isolated SPDT contacts to monitor AC power status
Weight (power supply)	Approx. 9.0 lbs
Weight (each battery)	4.0 lbs
AC input termination	3 position terminal block with protective cover Wire capacity: 10 AWG max.
DC output termination	2 position terminal block Wire capacity: 12 AWG max.
Option board connectors	2
Fire alarm board connector	Yes (requires connection on option board)
Keylock	Optional
Accessories	900-BAT: Backup battery pack

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PS902

2 amp Power Supply

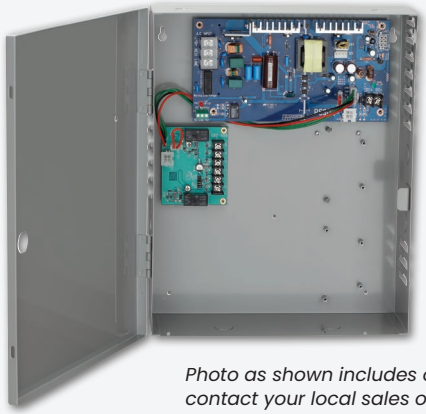


Photo as shown includes optional board(s). Please contact your local sales office or visit the support section on our website for configuration assistance.

Overview

The Schlage comprehensive line of power supplies and option boards was designed to address the changing needs of the access control market.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified strikes, electromagnetic locks, card readers, etc.).

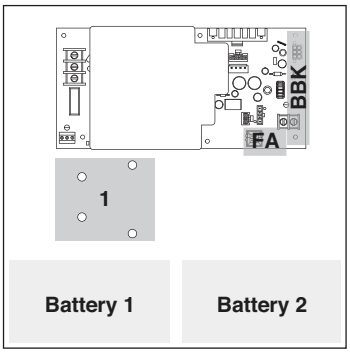
Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal is provided.

Features & Benefits

- 2A @ 12/24 VDC constant output, field selectable with jumper
- Provides low-voltage, Class 2, filtered and regulated power
- Universal 120-240 VAC, fused primary input
- Single polarized option board connector
- AC input and DC output monitoring circuit with LED indicators
- Externally visible AC input indicator with isolated SPDT contacts
- High-voltage protective cover for AC circuitry (not shown)
- Battery back-up board auto-selects voltage
- Optional Fire Alarm plug-in board available
- UL 294, ULC-S318, RoHS, and FCC Part 15 certified

Configuration Options

Available option board, fire alarm and battery backup connection locations:



Exit Device Support	
Von Duprin QEL	Up to 2[1]
Von Duprin EL	None
Falcon EL	None

1. Requires the use of one 900-2RS option board

PS902 Power Supply Specifications	
Specification	**Description**
Input voltage	120/240 VAC, 50/60 Hz, universal input
Output voltage	2A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 240mVpp max ripple
Enclosure	Grey/baked enamel 14" x 12" x 4" (H x W x D) Eight 1/2" x 3/4" knockouts NEMA Grade 1 Hinged cover with lock down screws
Operating temperature	32°–120°F (0°–49°C)
Certifications	ANSI/UL 294 ULC-S318 RoHS FCC Part 15 Class 2
Battery backup (install on main board)	900-BB: Battery backup board only 900-BBK: Battery backup kit (backup board plus battery pack)
Available option boards	900-FA: Plug-in fire alarm (install on main or option board) 900-2RS: 2 Relay option board capable of individual or sequential operation for single and pair door applications 900-4R: 4 Relay option board 900-4RL: 4 Relay option board with integrated logic and individual or sequential operation capability for controlling security interlocks, auto operators, and time delay function 900-8F: Fused, 8 zone option board 900-8P: PTC, 8 zone option board
AC primary fuse size	3.15A, 250v, 5 x 20mm
Battery fuse size	7.5A 32v ATO blade style
DC output protection	Overload protection—current limited foldback circuit
Indicators	LED indicators: - AC input (visible on outside of enclosure) - DC output Isolated SPDT contacts to monitor AC power status
Weight (power supply)	Approx. 9.0 lbs
Weight (each battery)	4.0 lbs
AC input termination	3 position terminal block with protective cover Wire capacity: 10 AWG max.
DC output termination	2 position terminal block Wire capacity: 12 AWG max.
Option board connectors	1
Fire alarm board connector	Yes
Keylock	Optional
Accessories	900-BAT: Backup battery pack

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VON DUPRIN®

PS914

4 amp High In Rush Power Supply

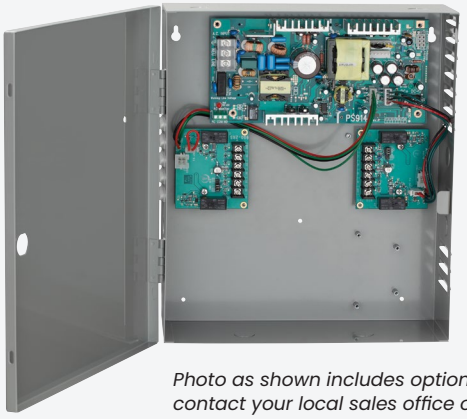


Photo as shown includes optional board(s). Please contact your local sales office or visit the support section on our website for configuration assistance.

Overview

Von Duprin power supply and option board products were designed to meet the specific requirements of electrified fire exit devices.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified panic devices, strikes, card readers, etc.).

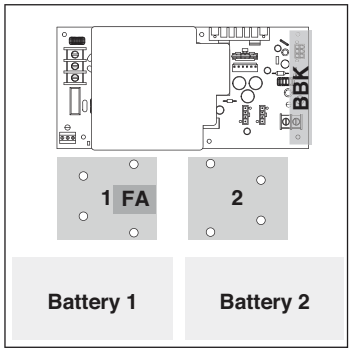
Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal is provided.

Features & Benefits

- 4A @ 12/24 VDC constant output, field selectable with jumper
- Designed for use with electrified panic devices requiring high in rush current
- Provides low-voltage, Class 2, filtered and regulated power
- Universal 120-240 VAC, fused primary input
- Two polarized option board connectors
- AC input and DC output monitoring circuit with LED indicators
- Externally visible AC input indicator with isolated SPDT contacts
- High-voltage protective cover for AC circuitry (not shown)
- Battery back-up board auto-selects voltage
- Optional Fire Alarm plug-in board available
- UL 294, ULC-S318, RoHS, and FCC Part 15 certified

Configuration Options

Available option board, fire alarm and battery backup connection locations:



Exit Device Support	
Von Duprin QEL	Up to 8[1]
Von Duprin EL	Up to 8[1,2]
Falcon EL	Up to 8[1,2]

1. Requires the use of two 900-4RL option boards
2. Distance from power supply may be limited with multiple EL applications - consult technical support for wire run lengths

PS914 Power Supply Specifications	
Specification	Description
Input voltage	120/240 VAC, 50/60 Hz, universal input
Output voltage	4A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 360mVpp max ripple
Enclosure	Grey/baked enamel 14" x 12" x 4" (H x W x D) Eight 1/2" x 3/4" knockouts Hinged cover with lock down screws
Operating temperature	32° - 120°F (0° - 49°C)
Certifications	ANSI/UL 294 ULC-S318 RoHS FCC Part 15 Class 2
Battery backup (install on main board)	900-BB: Battery backup board only 900-BBK: Battery backup kit (backup board plus battery pack)
Available option boards	900-FA: Plug-in fire alarm (must be installed on option board) 900-2RS*: 2 Relay option board capable of individual or sequential operation for single and pair door applications 900-4R*: 4 Relay option board 900-4RL*: 4 Relay option board with integrated logic and individual or sequential operation capability for controlling security interlocks, auto operators and time delay function 900-8F*: Fused, 8 zone option board 900-8P*: PTC, 8 zone option board
AC primary fuse size	6.3A, 250v, 5 x 20mm
Battery fuse size	7.5A 32v ATO blade style
DC output protection	Overload protection - current limited foldback circuit
Indicators	LED indicators: - AC input (visible on outside of enclosure) - DC output Isolated SPDT contacts to monitor AC power status
Weight (power supply)	Approx. 9.0 lbs
Weight (each battery)	4.0 lbs
AC input termination	3 position terminal block with protective cover Wire capacity: 10 AWG max.
DC output termination	2 position terminal block Wire capacity: 12 AWG max.
Option board connectors	2
Fire alarm board connector	Yes (requires connection on option board)
Keylock	Optional
Accessories	900-BAT: Backup battery pack

* Compatible with plug-in fire alarm board (900-FA)

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620/631 Series

Heavy-Duty Pushbuttons

Overview

Schlage® pushbuttons are used to control the ingress and/or egress of a door. The 620 and 631 Series pushbuttons are easy to install and operate. Their standard and narrow stile plates offer ultimate flexibility. The 620 Series have multiple button configuration and finish options provide enhanced architectural appeal.

Schlage 620 Series pushbuttons also offer significant installer-friendly innovations such as screw terminal connections for the momentary action models and easy-to-install L2/ILL optional PC board. The 621/623 models offer glow-in-the-dark button options as well as backlit illumination for the cone with green, yellow and red LEDs. Additional options include maintained or delayed action, double pole double throw switches, narrow stile faceplates and heavy-duty faceplates with several architectural finishes.

Features & Benefits

- 620 Series offered in 5 button colors
- "PUSH TO EXIT" message and handicap symbol choices provide obvious action indication
- Glow-in-the-dark buttons and illuminated cone options on 621 and 623 models
- Momentary action is standard; factory orderable with delayed (0-60 second) or alternate action
- Double pole, double throw optional (not available with delayed action)
- Standard, heavy-duty single gang faceplate or narrow stile option
- 1-1/4" inset, 1-5/8" mushroom and 2-3/4" large mushroom buttons
- 630 Satin Stainless Steel standard plus three other finish options
- Extreme duty 631 models are cast zinc with 626 Satin Chrome finish only
- UL 294 Listed

Ordering Information

621 - GID - DA - SF-626

Model	Button	Options	Finish
1	2	3	4

1 Model	
621	1-1/4" Button, single gang
623	1-5/8" Mushroom button, single gang
625	2-3/4" Mushroom button, single gang
631	1-1/4" Metal button, single gang

2 Button	
GID-EX	Glow-in-the-dark "PUSH TO EXIT"
GID	Glow-in-the-dark
RD-EX	Red, "PUSH TO EXIT"
RD	Red
GR-EX	Green, "PUSH TO EXIT"
GR	Green
BL-H	Blue, handicapped symbol
BK	Black
AL-EX-RD	Aluminum button red coated, engraved "PUSH TO EXIT"
AL-EX	Aluminum button, engraved "PUSH TO EXIT"
AL	Aluminum button

3 Options	
DA	Delayed action (0-60 seconds)
AA	Alternate action - maintained
DP	Double pole double throw (not available with DA option)
L2/ILL	3 LEDs - green/yellow/red concealed within opaque cone (only available for the 621 and 623 models)
NS	Narrow stile faceplate (1-3/4" x 4-1/2")

4 Finish	
630	Satin Stainless Steel (standard) on .035 steel
SF-626	Satin Chrome (standard on 631 models)
SF-613	Oil Satin Bronze
SF-625	Bright Chrome

Note: Non-standard finishes on heavy-duty plate (HDP) 1/4" thick cast zinc

Button Configurations

	GID-EX	GID-H	GID	RD-EX	RD	GR-EX	GR	BL-H	BK
621	PUSH TO EXIT	–		PUSH TO EXIT		PUSH TO EX IT			
623	PUSH TO EXIT	–		PUSH TO EXIT		PUSH TO EXIT			
625	–	–	–			PUSH TO EXIT			

	AL-EX	AL	AL-RD-EX
621	PUSH TO EXIT		PUSH TO EXIT

	AL-EX	AL	AL-RD-EX
631	PUSH TO EXIT		PUSH TO EXIT

Multiple Button Configurations

621 *- 1-1/4" Button*

623 *- 1-5/8" Mushroom button*

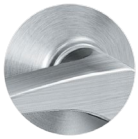
625 *- 2-3/4" Mushroom button*

631 *- Extreme-duty 1-1/4" Metal button*

Optional Finishes

SF-613
Oil Rubbed Bronze

SF-625
Bright Chrome



SF-626
Satin Chrome (standard on 631 models)

Note: Optional finishes not available on 631 models.

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700 Series

Pushbuttons

Overview

Schlage pushbuttons are used to control the egress of a door. The 700 Series pushbuttons are easy to install, entry level pushbuttons that are designed to meet commercial applications. Use with indoor swinging or sliding doors that are electrically or electronically locked. 700 Series entry level pushbuttons are available for single gang and narrow stile applications. The 709 model includes backlit buttons with "PUSH TO EXIT" or handicap symbol to meet ADA requirements for the ingress or egress of a door.

Features & Benefits

- Illuminated 2" square large button options or 5/8" and 7/8" round button options
- Optional dual LED status indicators in green and red
- For indoor use
- Momentary switch standard or factory orderable with maintained (alternate action) switch
- Handicapped symbol option
- Single gang or narrow style faceplate cover options
- Satin stainless steel finish
- UL 294 Listed

700 Series Pushbutton Specifications		
Specification	**701**	**709**
Contact ratings	3A @ 30VAC/VDC, momentary SPDT contacts	5A @ 30VAC/VDC, momentary SPDT contacts
Wire leads	20 awg – 6" long	20 awg – 8" long
Input requirements with LED option		
Voltage	12/24 VDC	12/24 VDC
Current draw	30 mA	30 mA
Wire leads	24 awg – 6" long	24 awg – 6" long
Input requirements with ILL option		
Voltage	24 VDC	12/24 VDC

Ordering Information

- **701RD** - 7/8" Red mushroom button
- **701BK** - 7/8" Black mushroom button
- **701RD EX** - 5/8" Red button - engraved "PUSH TO EXIT"
- **701RD EX ILL** - 5/8" Red button – illuminated "PUSH TO EXIT"
- **709RD EX ILL** - 2" Red square - illuminated "PUSH TO EXIT"
- **709GR EX ILL** - 2" Green square – illuminated "PUSH TO EXIT"
- **709BLH ILL** - 2" Blue square – illuminated handicapped symbol

Options

- **L2** - Two LEDs, red and green, dual voltage for status indication
- **AA** - Alternate action – maintained (701 Series only)
- **NS** - Narrow stile plate (701 Series only)

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740 Series

Emergency Break Glass Releases

Overview

Schlage 740 Series emergency break glass releases are designed for use as emergency releases of non-designated egress doors such as in individual and partitioned laboratories, secluded testing areas or other isolated work rooms that are purposely provided with exit doors. In perimeter protection systems that involve the central control of electric locking devices, an on-site emergency release may be required. The “break glass” concept may be preferred over the pull station, because it is less vulnerable to misuse or tamper actuation.

The 740 Series emergency break glass units consist of a replacement break glass cartridge that normally holds the plunger-activated switch depressed until the cartridge lens is broken. When the lens is broken, the plunger moves forward and alters the switch contact position. Four replacement lens disks are provided with each assembly. The small hammer is attached to the break glass assembly via a mounting clip, along with a 12" chain, to insure it will not detach from the assembly.

Features & Benefits

- Surface mount in a standard 3-gang enclosure
- Compatible with all fail-safe type electronic locking systems
- An effective alternative to the standard pull box
- Stainless steel standard finish
- Models with LED or audible alarm
- Clearly marked signage indicating purpose of the release
- Includes 4 replacement lens disks

740 Series Specifications	
Contact rating	6A @ 30 VDC Form Z switch

Ordering Information

- **740** – Includes break glass switch assembly and hammer mounted to a silk-screened 3-gang stainless switch plate
- **741** – With indicator light
- **742** – With Sonalert horn operating at 80 dB @ 2 feet

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660 Series

Concealed Remote Button

Overview

The 660 Series concealed remote button is designed for under the counter or concealed desk applications, and it is used to release an electric or electronic locking mechanism from a remote location. The 660 Series concealed remote button is mounted in a mini aluminum box, 2" x 2" x 1". The 660 is available with a momentary action pushbutton or maintained action toggle switch. Both can be surface mounted.

Features & Benefits

- Surface mount application
- Choice of maintained or momentary action
- Compact size
- Recommended for concealed desk application

660 Series Specifications	
Switch contact rating	6 amp @ 120 VAC
Length	2"
Width	2"
Height	1"

Ordering Information

- **660-T4** - SPDT maintained toggle
- **660-PB** - SPDT momentary pushbutton

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650 Series

Keyswitches

Overview

Schlage 650 Series keyswitches utilize an innovative magnetic spring design which allows installers to configure both clockwise and counterclockwise key turn direction as well as momentary or maintained action in seconds. Single gang and narrow stiles are available with numerous options which include heavy-duty plate, weather resistant cover (single gang size only), 2 LED lights – green/red, anti-tamper switch and Schlage Everest cylinder. in addition to the standard (630) satin stainless steel finish, there are three additional architectural finishes to choose from.

Features & Benefits

- Easy to install and maintain
- Single gang and narrow stile offer ultimate flexibility
- Patented magnetic spring design allows installers to configure momentary to maintained action in seconds
- UL 294 Listed

650 Series Specifications	
Switch contact rating	5 amp @ 30 VDC
	SPDT contacts

ATS switch closes when cover is on 0.025A@28VDC

LED indicator lights operate at 12/24 VDC 0.500A @ 30VDC

Ordering Information

- **653-04** - SPDT maintained single direction
- **653-05** - SPDT momentary single direction
- **653-14** - DPDT maintained single direction
- **653-15** - DPDT momentary single direction
- **653-1414** - (2) DPDT maintained bi-direction
- **653-1415** - DPDT maintained x DPDT momentary
- **653-1515** - (2) DPDT momentary bi-direction
- **653-041** - SPDT maintained x key remove one position
- **653-0404** - (2) SPDT maintained bi-direction
- **653-0405** - SPDT maintained x SPDT momentary
- **653-141** - DPDT maintained x key remove one position
- **653-0505** - (2) SPDT momentary bi-direction

Options

- **L2** - Two LEDs (red/green), dual voltage
- **NS** - Narrow stile - stainless steel plate (1-3/4" x 4-1/2")
- **ATS** - Anti-tamper switch
- **WP** - Weather-resistant cover fits 1-1/8" cylinder only (not available with NS and L2 options)
- **CYL** - 1-1/4" Schlage Everest® mortise cylinder and 1/8" spacer ring (keyed different)
- **CYL-KA** - 1-1/4" Schlage Everest mortise cylinder and 1/8" spacer ring (keyed alike)

Finishes

- **630** - Satin finish on .035 stainless steel (standard)
- **SF-626** - Satin Chrome on heavy-duty zinc
- **SF-613** - Oil Rubbed Bronze on heavy-duty zinc
- **SF-625** - Bright Chrome on heavy-duty zinc

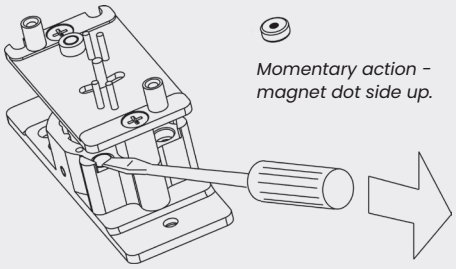
Note: 650 Series keyswitches operate with either a 1-1/8", 1-1/4", 1-3/8", or 1-1/2" cylinder having a straight type cam.

- 1-1/8" mortise cylinder fits direct in key switch - no blocking ring required.
- 1-1/4" cylinders require a 1/8" blocking/spacer ring, Schlage part number 36-079-012 or equivalent (included with the CYL and CYL-KA options).
- 3/8" mortise cylinder housing for SFIC cores - requires 1/4" blocking ring Schlage part number 36-079-025 or equivalent.
- 1-1/2" mortise cylinder housing for FSIC cores - requires 3/8" blocking ring Schlage part number 36-079-037 or equivalent.

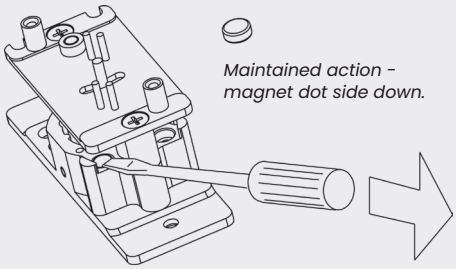
All cylinders, except 1-1/4" as CYL or CYL-KA options, must be ordered separately.

Innovative magnetic spring technology allows installers to configure models in seconds

Momentary action



Maintained action



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672 Series

Touchbar

Overview

The 672 touchbar is a request-to-exit device which releases electronic locking devices, most commonly electromagnetic locks when the bar is depressed. The “PUSH TO EXIT” signage provides an obvious exit indication for building occupants and the simplified design allows for reversing the signage in the field. The new pivoting bar design allows 1/4" activation and the 2-1/4" low profile provides ample clearance through the door - notably less than others in the industry.

The 672 touchbar request-to-exit device is easy to install and simple to wire. The device’s rugged cast ramped end caps deflect blows and provide extra durability.

- 1/4" Movement activates immediate release
- Standard double pole, double throw switch utilized

Features & Benefits

- 1/4" movement of bar activates immediate release
- Large “PUSH TO EXIT” lettering provides obvious exit indication with glow-in-the-dark option
- Low profile provides ample clearance through the door
- Releases electromagnetic or electrified locks when bar is depressed
- Left- or right-hand reverse (field reversible)
- Field sized or orderable for 36", 42" or 48" doors
- For aluminum, hollow metal and wood doors
- Pivoting bar design allows 1/4” activation
- Heavy-duty aluminum extrusion with powder coat cast metal end caps for maximum durability
- Quick installation brackets/universal mounting system
- UL 294 and UL 1034 Listed

672 Touchbar Electrical Specifications	
Switch	DPDT contacts rated 4 amps @ 30 VDC
Wiring	6 conductor cable - 20 AWG (standard)

Ordering Information

Models

- **672 RD** - Black with red “PUSH TO EXIT”
- **672 GID** - Black with glow in the dark “PUSH TO EXIT”

Door Size

- 36", 42" or 48"

Finishes

- **628** - Satin anodized aluminum (standard)
- **313** - Dark satin bronze anodized aluminum

Handing

- **RHR** - Right hand reverse
- **LHR** - Left hand reverse -field reversible

Options

- **WD -** Through bolt door kit for heavy-duty wood door and hollow metal door applications
- **AR** - 18" x 1/2" armored door cord (less wire)
- **SHK** - Aluminum door mounting shim kit includes brackets, shims and screws for narrow stile aluminum doors.*

* Note: Screw pack has self-drilling and self-tapping screws for aluminum and wood door applications and rivnuts for hollow metal door applications.

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692 Series

SmartBar™

Overview

The 692 SmartBar is an electronic switching device with no moving parts, which serves as a non-latching request-to-exit device. It allows one motion egress at doors equipped with an electronic locking device, most commonly an electromagnetic lock, with “no prior knowledge” required by the user. Touching the SmartBar at any point on the bar activates internal circuitry which controls power to the locking device. No moving parts results in low maintenance and long life.

The 692 SmartBar provides two directionally opposed infrared detection circuits to sense an exit request. As a person touches the bar, the light beam is broken. The redundant system provides a high level of life safety and peace of mind to the end user.

An audible alarm is standard. This feature provides a security alarm to alert when there is a prolonged unlocked condition caused by a continued break in the light beam. This feature is desirable in applications requiring monitoring of security conditions or delayed egress.

- Dual Infrared detection circuits
- No moving parts – one motion egress
- Audible alarm standard, alerts prolonged unlock condition
- Standard double pole, double throw switch utilized

Features & Benefits

- Infrared detection along bar releases locking device when light beam is broken
- One motion egress when installed with electromagnetic or electrified locks
- Large “PUSH TO EXIT” lettering provides obvious exit indication with glow-in-thedark option
- Low profile provides ample clearance through the door
- Audible alarm is standard
- Left- or right-hand reverse (field reversible)
- Field sized or orderable for 36”, 42” or 48” doors
- For aluminum, hollow metal and wood doors
- No moving parts for low maintenance and long life
- Heavy-duty aluminum extrusion with cast metal end caps for maximum durability
- Quick installation brackets/universal mounting system
- UL 294 and UL 1034 Listed

692 SmartBar Electrical Specifications	
Input voltage	12 or 24 VDC maximum current draw .5 amps
Switch	DPDT contacts rated 4 amps @ 30 VDC
Wiring	8 conductor cable - 20 AWG (standard)

Ordering Information

Models

- **692 RD** - Black with red "PUSH TO EXIT"
- **692 GID** - Black with glow in the dark "PUSH TO EXIT"

Door Size

- 36", 42" or 48"

Finishes

- **628** - Satin anodized aluminum (standard)
- **313** - Dark satin bronze anodized aluminum

Handing

- **RHR** - Right hand reverse
- **LHR** - Left hand reverse -field reversible

Options

- **WD -** Through bolt door kit for heavy-duty wood door and hollow metal door applications
- **SHK** - Aluminum door mounting shim kit includes brackets, shims and screws for narrow stile aluminum doors.*

* Note: Screw pack has self-drilling and self-tapping screws for aluminum and wood door applications and rivnuts for hollow metal door applications. 18" x 1/2" armored door cord shipped standard.

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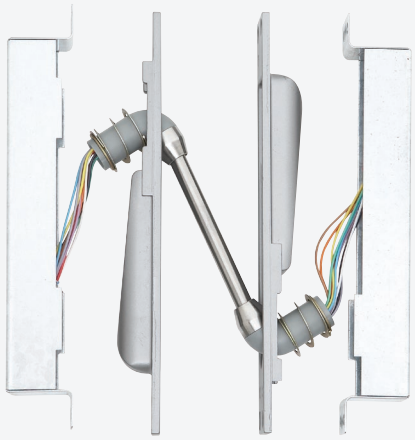
VON DUPRIN®

Electrical Power Transfer



Overview

Electric power transfer provides a means of transferring electrical power from a door frame to the edge of a swinging door. The units are completely concealed when the door is in the closed position, and are ideally suited for installations involving abuse or heavy traffic.

Two models are available; EPT-2, two 18 gauge wires and EPT-10, ten 24 gauge wires.

Features & Benefits

- UL Listed for use on fire doors
- UL listed as Miscellaneous Door Accessory
- Ball-and-socket joint construction provides cut and pinch protection for wiring
- Built for heavy traffic and high abuse openings
- EPT-2 and EPT-10 are UL634, ULC/ORD C634 and UL10C/CAN-ULC-S104 certified
- PNT-1 is UL10C/CAN-ULC-S104 certified

Door Applications

- Automatic Voltage Selection (AVS) senses the voltage applied to the lock and responds accordingly

Finishes

- 622 - Powder Coated Matte Black
- 689 - Powder Coated Aluminum
- 695 - Powder Coated Dark Bronze

Dimensions	
Housing	9" X 1-1/4 X 1-5/8 (229mm X 32mm X 38mm)
EPT-2	Two 18 gauge wires, up to 2 AMPS @ 24VDC, with a 16 AMPS maximum surge
EPT-10	Ten 24 gauge wires, up to 1 AMPS @ 24VDC, with a 16 AMPS maximum surge
PNT-1	5/32" tubing

To Order, Specify:

- EPT-2, EPT-10 or PNT-1
- Finishes: 622, 689, 695

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Electrified Hinges

Overview

Ives offers electrification options on a wide variety of our 3 knuckle and 5 knuckle hinges, including standard and heavy weight. These hinges transfer power and signals from the frame to the door. Electrified hinges hide wiring from view to provide a more pleasing aesthetic and a more secure application.

Electrified hinges integrate seamlessly with your access control system and your door mounted electrified hardware. Ives electrified offering comes standard with Allegion Connect, a quick and easy way to connect power sources for the entire opening. With no wire cutting needed, you can reduce installation and maintenance time, ultimately cutting cost. After installation, Allegion Connect continues to provide benefits throughout the lifetime of the opening by offering a comprehensive service kit.

For more information about the Allegion Connect offering, contact customer support at 877-671-7011.

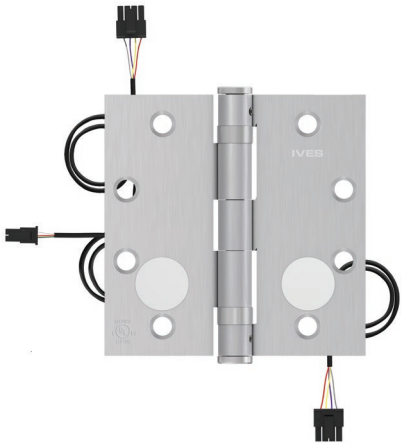
Features & Benefits

- Electrified hinge available in 3 and 5 knuckle
- High quality brass ferrules and plastic tubing protect the wires
- Comes standard with Allegion Connect 8-pin connectors
- Available in four wire (TW4), eight wire (TW8) and twelve wire (TW12)
- Available electrical monitor for door position monitoring (MON, TW4M, TW8M)
- Through-wire hinges cycle tested to ensure durability
- UL Listed - UL634
- Certified to ANSI/BHMA A156.1
- Come standard with Non-Removeable Pin (NRP) option
- Packaged one hinge per box with standard wood and machine screws
- Quick ship available on select models; view the Ives Pricebook for details

Available Options

- Through-wire – TW4 (4 wires), TW8 (8 wires), and TW12 (12 wires)*
- Monitor – MON**
- Through-wire with monitor – TW4M and TW8M**
- Through-wire is rated for 50 volts AC/DC at 3.5 AMP continuous and 16 AMP pulse, maximum pulse 400 millisecond
- Monitor rated 30VDC at .25 AM

* Not available on 3PB1 models, or hinges size 4 x 4 or smaller.
** Not available on 3PB1, 3CB1, 3SP1 and 5PB1 models or hinges size 4 x 4 or smaller.



Features 5BB1 hinge and the through-wire 8 with monitor (TW8M)

Finishes											
Brass											
Ives finish	US3	US4	US10	US10B	US10A	US11E	US15	US19	US26	US26D	
BHMA	605	606	612	613	614	B643e/716	619	B-BLK	625	626	
Steel											
Ives finish	USP	US3	US4	US10	US10B	US10A	US11E	US15	US19	US26	US26D
BHMA	600	632	633	639	640	641	F643e/716	646	F-BLK	651	652
Stainless steel											
Ives finish	US32	US32D									
BHMA	629	630									

For more information, such as install instructions and templates, visit US.Allegion.com.

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788/798 Series

Armored Door Cords

Overview

Used when installing electric exit devices or electrified locks, armored door cords provide a simple and economical solution for transferring power from frame to door. Schlage flexible door cords are offered in two lengths each with options for less wires or including four, 20 gauge conductor wires (red, green, white and black). For doors with a 90 degree swing.

Features & Benefits

- ANSI/UL 10C, CAN/ULC-S104-15

Specifications

Acceptable Wire Size Combinations

- Five 18 gauge
- Two 18 gauge and four 20 gauge
- Two 18 gauge and seven 22 gauge
- Seven 20 gauge
- Twelve 22 gauge

5/16" Interior Diameter; 3/8" Outside Diameter Flexible Door Cord

- **788-12** - 12" x 3/8" less wires (inswinging)
- **788C-12** - 12" x 3/8" with four 20 gauge, 20" long conductor wires (red, green, white, black)
- **788-18** - 18" x 3/8" less wires (outswinging)
- **788C-18** - 18" x 3/8" with four 20 gauge, 26" long conductor wires (red, green, white, black)

3/8" Interior Diameter; 1/2" Outside Diameter Flexible Door Cord

Acceptable wire size combinations

- **798-12** - 12" x 1/2" less wires (inswinging)
- **798C-12** - 12" x 1/2" with four 20 gauge, 20" long conductor wires (red, green, white, black)
- **798-18** - 18" x 1/2" less wires (outswinging)
- **798C-18** - 18" x 1/2" with four 20 gauge, 26" long conductor wires (red, green, white, black)

Certification

- **UL 10C**

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800/801 Series

Remote & Local Monitoring Stations

Overview

800 Series Local & Remote Monitoring Station

The 800 Series monitoring stations can provide monitoring for a single zone with choice of audible or visual monitoring.

801 Series Local & Remote Monitoring Station

The 801 unit includes an audible and visual indication of lock status and delay activation. Interfaces with electromagnetic locks with magnetic bond sensor (MBS) option. Unit mounts in a standard single gang electrical box. The 801-KS fulfills a code requirement stating that a local signal assures users that a delayed egress system is functional. The unit includes an audible and visual indication of lock status and delay activation. Provides a Single Pole, Double Throw (SPDT) momentary x SPDT maintained contact arrangement keyswitch for legal release and reset of the system, which interfaces with a standard 1-1/4" mortise cylinder with standard straight cam. Option to interface with electromagnetic locks with Magnetic Bond Sensor (MBS). Unit mounts in a standard double gang electrical box.

Features & Benefits

- 800 Series local and remote monitoring stations
  - 800L1 with one LED indicator (red, green or amber)
  - 800L2 with two LED indicators (red, green or amber) (photo)
  - 800A horn monitor, 70 dB @ 2 ft
- 801 Series local and remote monitoring stations
  - 801 with three LED indicators and horn monitor, 70 dB @ 2 ft
  - 801KS with LED indicators, horn monitor and keyswitch (photo)

800 Specifications	
LED operating power	12-24 VDC
LED current draw	3-14 mA each
Audible input	10-28 VDC
Audible current draw	3-14 mA
Decibel rating	70 dB @ 2 ft
Single gang unit	
Width	2-3/4"
Depth	1-1/8"
Height	4-1/2"
Finish	Stainless steel
800L1	One (1) LED indicator - red, green and amber
800L2	Two (2) LED indicators - red, green and amber
800A	Audible sounder

801 Specifications	
LED operating power	12-24 VDC
LED current draw	3-14 mA each
Audible input	10-28 VDC
Audible current draw	3-14 mA
Decibel rating	70 dB @ 2 ft
Single gang unit - 801* Local or remote monitoring system	
Width	2-3/4"
Depth	1-1/8"
Height	4-1/2"
Finish	Stainless steel
Double gang unit - 801-KS* local or remote monitoring system with keyswitch (less cylinder)	
Width	4-9/16"
Depth	1-15/16"
Height	4-1/2"
Finish	Stainless steel
Keyswitch contacts	5 Amp @ 30 VDC

*Note: 801/801-KS requires MBS on locking device.

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8200 Series

Remote Monitor & Control Console

Overview

Schlage 8200 Series desk consoles provides door control and monitoring for up to eight zones. Designed to meet a wide range of security requirements, the 8200 Series can control and monitor electric strikes, electromagnetic locks, electromechanical exit devices or other electric locks. The console can also be used for surveillance of monitoring devices.

The circuit boards inside the console are shipped for four or eight zone applications. This design allows for momentary or maintained switch operation. Pushbuttons control and monitor assigned zones, and a signaling horn provides an audible alert of any conditions change that is associated with the red indicator lamp. Console control can be disabled with the security keyswitch.

Features & Benefits

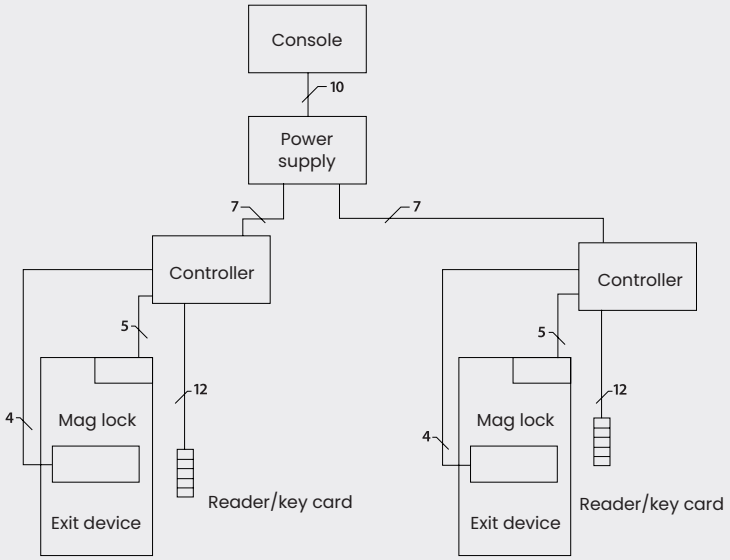
- Slope front design, with anodized face plate and durable housing
- Each station provides maintained or momentary Single Pole, Double Throw (SPDT) pushbutton switch
- Red and green indicator lamps
- Security keyswitch
- Signaling horn
- Alarm reset button
- 24 VDC operation

8200 Specifications	
Switches (momentary or maintained)	1.0 amps 24 VDC
Lamps #85 red/green	40 mA @24 VDC
Terminal block	18/22 gauge wire
Alarm output	0.5 amps @ 24 VDC (breaker protected)
Temperature range	32˚ to 120˚F (0˚ to 49˚C)
Input voltage	24 VDC, +/- 15%

System Design Guide

There are a number of applications where an 8200 Series Console is used to monitor and control multiple door openings. It is ideal for use at a guard or nurse station. (An example of a riser diagram for a two door nurse's station console is shown below.)

Riser Diagram



Description of System Operation

Two single doors, each normally closed and secured by a magnetic lock. Magnetic lock to include Magnetic Bond Sensor (MBS) for remote monitoring of secure/not-secure condition. Legal access to be provided by keypad system. Egress to be provided by touch sensitive exit bars. Remote control and monitoring to be by a slope front desktop console. Each of two stations shall provide a momentary pushbutton switch for legal release, a red indicator for "not-secure" condition and a green indicator for "secure" condition.

Ordering Information

Last digit indicates number of zones:

4 station console	8 station console
8204	8208

Pushbutton function								
	1	2	3	4	5	6	7	8
8204	●	●	●	●				
8208	●	●	●	●	●	●	●	●

Pushbutton Function

- Select pushbutton function by zone.
- Select M (momentary) or A (alternate action, maintain) for each zone.

Accessories

Field installable push buttons

- 8200MS – Momentary switch assembly
- 8200AS – Alternate action (maintained) switch assembly

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Scan II™

Passive Infrared Motion Sensors

Overview

The Scan II™ is a compact, passive infrared detector specifically designed for “requestto-exit” applications. It features adjustable relay latch time, an externally visible activation LED, and two form “C” relays.

The high-impact ABS plastic enclosure in black or white comes apart in 3 pieces for easy mounting and lock-in-place scanner angle adjustment. Internal angle setting marks aide optimal coverage configuration for both wall and ceiling mounting. Mounting height is 7 to 15 feet allowing coverage area of the Scan II sensor of up to 8 by 10 ft (2.4 m by 3 m).

Features & Benefits

- Adjustable relay latch time from 0.5 to 64 seconds
- Field-selectable fail safe/fail secure
- Included pattern masking kit snaps in place to narrow scan field and help prevent unwanted activations
- Activation LED is visible at a distance and can be configured to OFF as needed
- Intended for indoor use only
- Wall or ceiling mounted with lock-in-place angle adjustment
- UL294 and ULC-S319, Class 1 listed by manufacturer
- High-impact ABS plastic enclosure and internal electronics can endure temperatures of -20° to 120°F
- Inconspicuous unit is only 1.5” x 6.25” x 1.5” in either black or white

Specifications

Models

- Scan II-B: black with externally visible activation LED
- Scan II-W: white with externally visible activation LED

Power Requirements

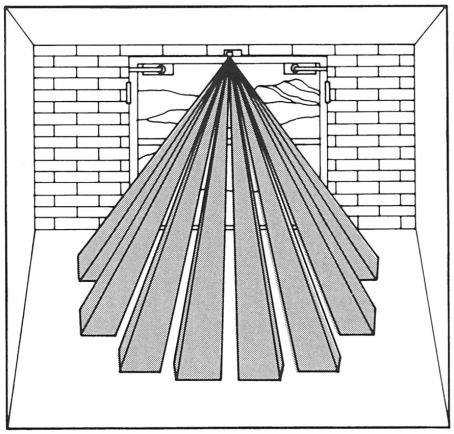
- 12/24 VDC: 35 mA @ 12 VDC; 38 mA @ 24 VDC when activated
- 2/24 VAC: 42 mA @ 12 VAC; 48 mA @ 24 VAC when activated
- 38 mAh required for standby operation (no internal standby battery)

Relay

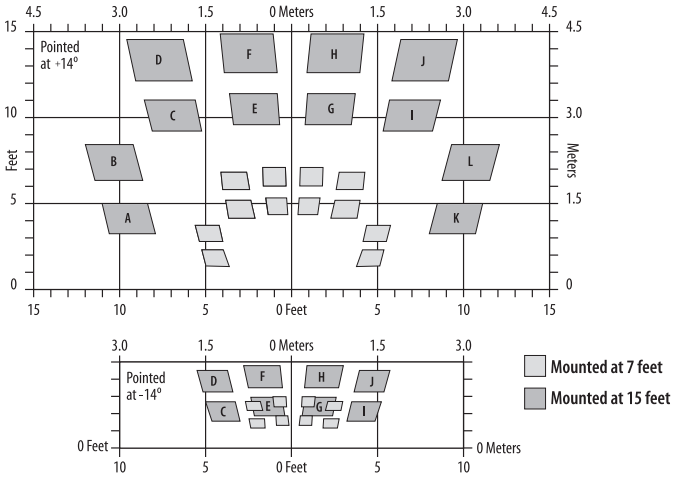
- Two form "C" relay contacts rated 2.0 Amp @ 30 VDC or VAC maximum for DC resistive load

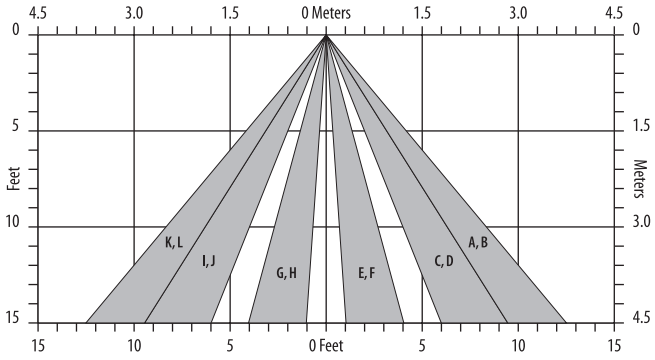
Installation Options

- Adjustable relay latch time from 0.5 to 64 seconds
- Relay mode can be programmed to reset when timer expires or remain activated until motion stops
- Field-selectable fail safe/fail secure
- Mounting height of 7 to 15 feet (indoors only)
- Lock-in-place pattern adjustment is +/- 14° with separate settings for wall vs. ceiling application

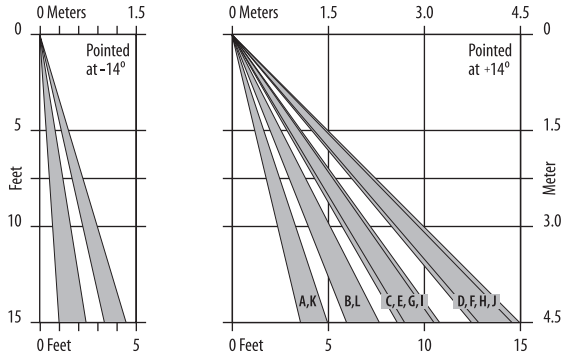


Standard pattern
Shown wall mounted, angled 14° down.





Front view



Side view

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1910 Series

Electronic Horns

Overview

Electric horns are designed for use as an immediate local audible warning device incorporated in a security system. 1910 celica horns have six combinations of volume using continuous or intermittent tone that are easy to configure. Latching models can be set up to sound when a door latchbolt retracts or the door opens. Strobe light models are also available.

Units are flush (partially recessed) or surface mounted using a 4" black box and attached using two #8-32 X 3/4" screws. Surface and flush mounting kits are included with all horns.

Features & Benefits

- Latching models alarm upon the latch release or opening of a connected door
- Audible warning has six combinations of volume using intermittent or continuous tone with loudest tested to 102 dba
- Strobe option adds visual warning indication
- Intended for indoor use only
- Flush mount to wall over a standard one- or two-gang electrical box
- Surface mount using pull through wiring and the backbox kit included with the product
- Horn shell and trim skirt in off-white
- Unit dimensions: 4-3/4" W x 5-1/2" H

Specifications

Models

- **1910-1:** 12/24 VDC horn
- **1910S-1:** 24 VDC horn with strobe
- **L1910-1:** 24 VDC horn with latching
- **L1910S-1:** 24 VDC horn with strobe and latching

Power Requirements

- Less than 14 mA @ 12 VDC
- Less than 28 mA @ 24 VDC
- Less than 71 mA @ 24 VDC with strobe

Other

- Operating temperature: 32°F to 120°F
- Anechoic chamber tested @30 V 102 dba
- UL reverberant room tested @30 V 88 dba

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Door Position Switches

Overview

Door position switches are used to detect the open or closed status of an opening and then send this status to a control panel. They come in a variety of shapes and sizes and are designed for monitoring door positions, roof hatches, gates etc.

Concealed SPDT Magnetic Switches

- For wood doors and frames
- 0.3 Amps @ 30 VDC
- UL10C/CAN-ULC-S104

679-05

- For hollow metal doors and frames
- 0.3 Amps @ 30 VDC
- UL10C/CAN-ULC-S104

679-05HM

- For wood doors and metal frames
- 0.3 Amps @ 30 VDC
- UL10C/CAN-ULC-S104

679-05WD

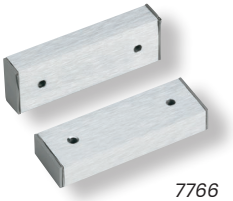
Concealed/Flush Mount Magnetic Switches

- For aluminum, wood and hollow metal doors
- 0.25 Amps @ 30 VDC
- UL10C/CAN-ULC-S104

7764

Surface Mount Magnetic Switches

- For aluminum, wood and hollow metal doors
- 0.25 Amps @ 30 VDC
- UL10C/CAN-ULC-S104



7766

Overhead Door, Floor Mount Magnetic Switches

- For aluminum, wood and hollow metal doors
- 0.25 Amps @ 30 VDC
- UL10C/CAN-ULC-S104

674-OH

Ordering Information

- **674-OH** - Overhead door floor mount
- **679-05** - Wood door and frame
- **679-05HM** - Hollow metal door and frame
- **679-05WD** - Wood door and metal frame
- **7764** - Concealed/flush mount
- **7766** - Surface mount

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FSS1

High-Security Door Position Sensor

Overview

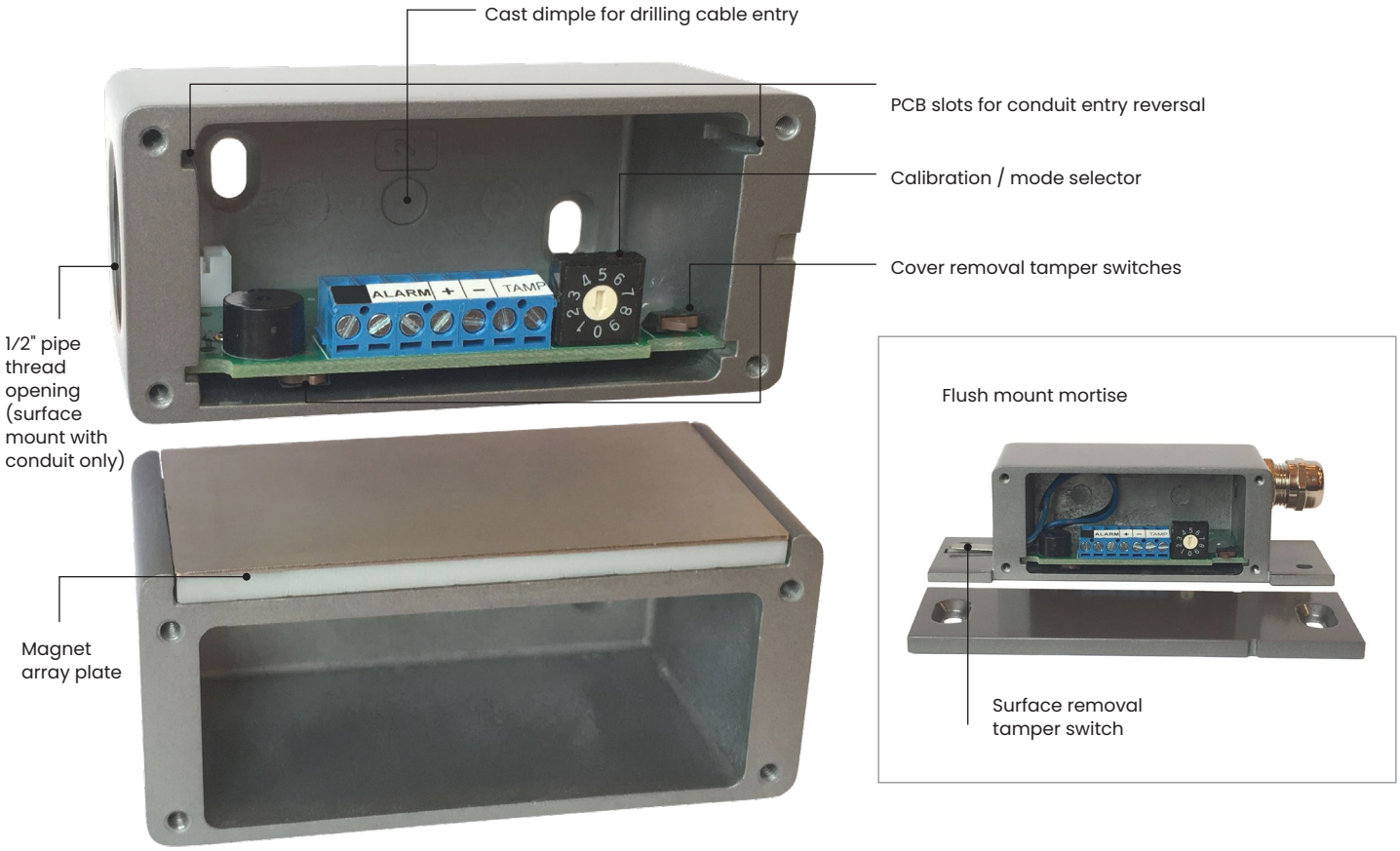
The FSS1 Series of high-security Door Position Sensors (DPS) are designed to provide a true high-security solution with adjustable anti-tamper features to help prevent against attacks through magnetic, electronic or physical means. It is a state-of-the-art monitoring solution with a flush mount version for new construction, and surface mount version as a superior replacement for traditional magnetic balanced reed sensors.

Specifically developed for high-security applications in government and military installations, FSS1 Series high-security DPS consist of magnetic sensors that are used to detect a unique magnetic footprint from an array of magnets on the opposing magnetic faceplate. The FSS1 learns its three-dimensional environment using one sensor to detect the distance of the magnetic faceplate in relation to the device, while the other sensors are used to determine the polarity, size, strength and position of the magnets on the unique faceplate. This three-dimensional data is registered into the memory of the device. Any interruption, change or tampering with the device cover will trigger a response at the door and/or through the network as a silent or audible alarm.

Features & Benefits

- Ideal for high security applications including server farms, government facilities, and military bases
- Utilizes sensors to detect a unique magnetic footprint created from an array of magnets in the faceplate
- Sensors “learn” a three-dimensional unique magnetic signature created by the polarity, size, strength, and position of the magnetic array plate
- Sensors can be recalibrated to accommodate for door replacement or maintenance
- Anti-tamper feature creates an audible and/or network notification in case of tampering to either the magnetic field or the device cover
- Low voltage, solid-state components
- 3 models: surface mount with conduit, surface mount no conduit, and flush mount (hinged doors only)
- Can be deployed in existing and new high-security facilities

FSS1 High Security DPS Specifications			
Part number	**194555101647**	**194555101654**	**194555101661**
Part description	Surface mount with conduit	Surface mount without conduit	Flush mount mortised
Door type	Hinged	Hinged	Hinged
Voltage / current	10-30VDC/<45mA	10-30VDC/<45mA	10-30VDC/<45mA
Sensor	Hall effect	Hall effect	Hall effect
Alarm and tamper contacts	2 by N.C. (normal closed) common N.O. (normal open), 0.2A @ 30V		
Door gap	.04-.26in vertical door gap, and up to .59in door movement for alarm to trigger 1-7mm vertical door gap, and up to 15mm door movement for alarm to trigger		
End of line compatibility	Space for type 1 and 2 end-of-line encryption modules		
Dimensions	L=2.96in H=1.34in D=1.38in L=75mm H=34mm D=35mm	L=2.96in H=1.34in D=1.38in L=75mm H=34mm D=35mm	L=4.33in D=1.26in W=1.38in L=110mm D=32mm W=35mm
Approvals	UL 634 High Security Level 2 - listed equipment BP9752		
Patents	Patents granted and pending worldwide based on PCT/AU2014/000210		
Manufacture	Designed and manufactured in Australia		



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013632, Rev. 01/24

PB405 & PB405S

Electrified Powerbolts

Overview

The PB405 powerbolt is a mortise, right angle deadbolt with a .61" diameter bolt and a .67" throw. It is available fail-safe PB405 or fail-secure PB405S. Powerbolts install in the door frame for minimal impact to the door and a clean, cohesive opening

Features & Benefits

- 12/24V DC
- Magnetic door position switch
- Built in relocking time delay, field selectable for 0, 3, 6 or 9 seconds
- Fail-safe or fail-secure
- Mortise mount powerbolts furnished in satin aluminum finish

Note: Electromechanical powerbolts not recommended where life safety may be compromised or where panic bar hardware is the only means of egress.

Specifications

PB405 Electric Powerbolt Lock (Fail-Safe)

- Door position switch
- 12/24 VDC dual voltage, field selectable
- Current draw: 0.9A @ 12 VDC, 0.45A @ 24 VDC
- Fail-safe type (power to lock)
- Built-in relocking option
- Relocking time delay time: 0 sec., 3 sec., 5 sec., 9 sec. field selectable utilizing two simple dip switches
- Bolt diameter: 0.61 in
- Bolt throw: 0.67 in
- Weight: 1.9 lbs
- Dimension (L x W x D): 7.87 in x 1.26 in x 1.57 in

PB405S Electric Powerbolt Lock (Fail-Secure)

- Door position switch
- 12/24 VDC dual voltage, field selectable
- Current draw: 0.9A @ 12 VDC, 0.45A @ 24 VDC
- Fail-secure type (power to open.), MOV surge protection.
- Relocking time delay time: 0 sec., 3 sec., 5 sec., 9 sec. field selectable utilizing two simple dip switches
- Built-in relocking option
- Bolt diameter: 0.61 in
- Bolt throw: 0.67 in
- Weight: 1.9 lbs
- Dimension (L x W x D): 7.87 in x 1.26 in x 1.57 in

Ordering Information

- **405** - Rectangular front, fail-safe
- **405S** - Rectangular front, fail-secure
- **Fail-secure lock** – Requires power to unlock
- **Fail-safe lock** – Requires power to lock

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005011, Rev. 01/24

442S

Electronic Cabinet Lock

Overview

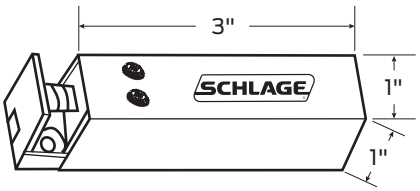
The 442S is a compact and easy to install hardwired cabinet lock. It is fail secure and driven by a dual voltage solenoid. The voltage is field selectable 12 or 24 VDC. This makes ordering easy and provides greater flexibility in the field.

The 442S can be mounted horizontally or vertically to control access to a wide range of swinging or sliding cabinets and drawers. The 442S can be controlled by any kind of access control system that provides a dry contact output. Its small size and versatile mounting position allows you to bring increased monitoring and control to hard to reach applications such as pharmaceutical cabinets, cash drawers and display cases.

Features & Benefits

- Fail-secure power failure mode
- Dual voltage 12/24 VDC, field selectable
- Open architecture design, compatible with wide range of Physical Access Control Software (PACS) providers
- Flexible mounting options
- Ideal for pharmaceutical cabinets, cash drawers and display cases

Specifications	
Input voltage	12/24VDC dual voltage, field selectable
Current draw	.5 Amp @ 12VDC .25 Amp @ 24VDC
Dimensions (L x W x D)	3" x 1" x 1"



Ordering Information

Select Model

- 442S cabinet lock

Standard Features

- 12/24 VDC (field selectable)
- Fail secure
- Black Lexan finish

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ALLEGION

Appendix

This section of the Electronic access control catalog includes a number of wiring and riser diagrams for a variety of electronic access control applications.

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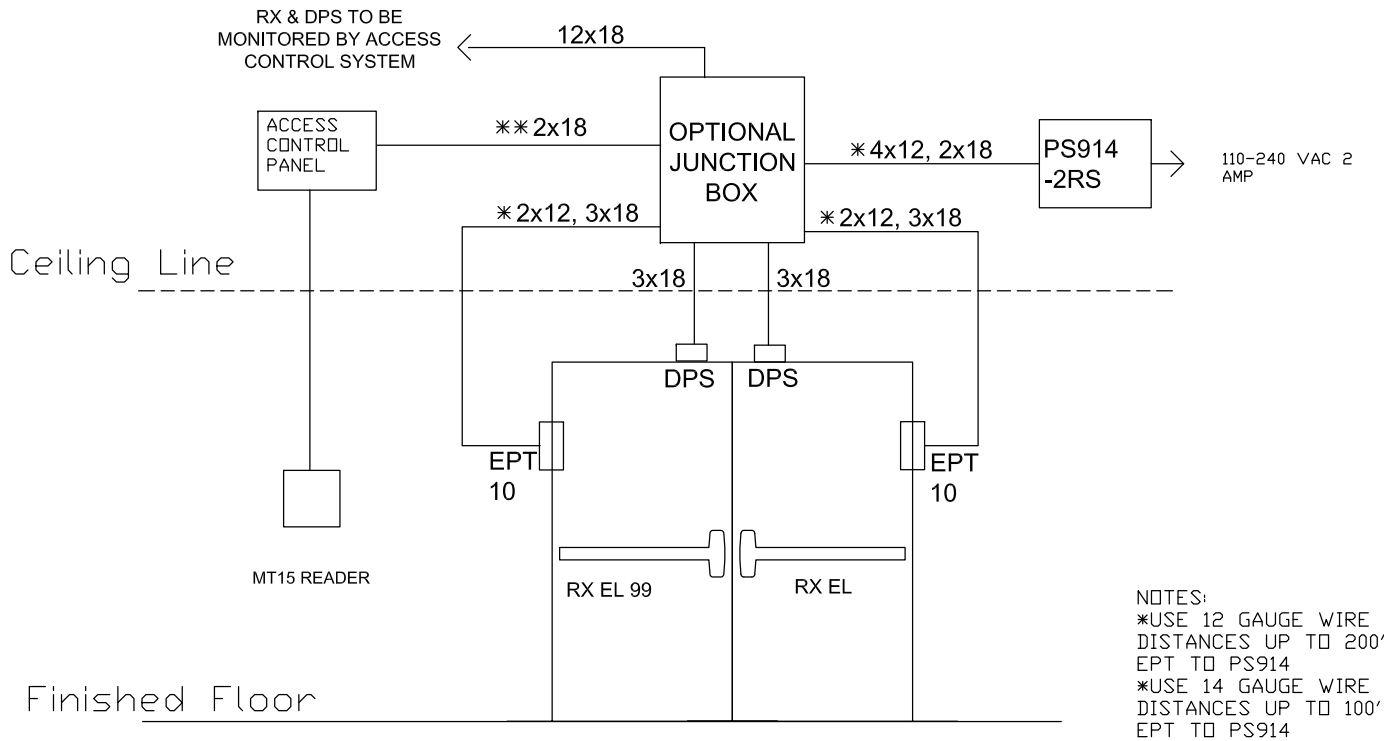
005138, Rev. 01/24

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
*USE 12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE 14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914
** ADDITIONAL WIRING REQUIRED. SEE MANUFACTURERS INSTALLTION INSTRUCTIONS.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 - PS914-2RS
2 RX-EL99
2 DOOR POSITION SWITCHES
1 MT15 READER & ACP
2 EPT10
1 OPTIONAL JUNCTION BOX

TYPE
DOUBLE DOORS

OPERATION:
DOOR NORMALLY CLOSED & LATCHED BY ACCESS CONTROL SYSTEM.

VALID CREDENTIAL RETRACTS ELECTRIC PANIC DEVICES TO ALLOW ENTRY.

FREE EGRESS AT ALL TIMES.

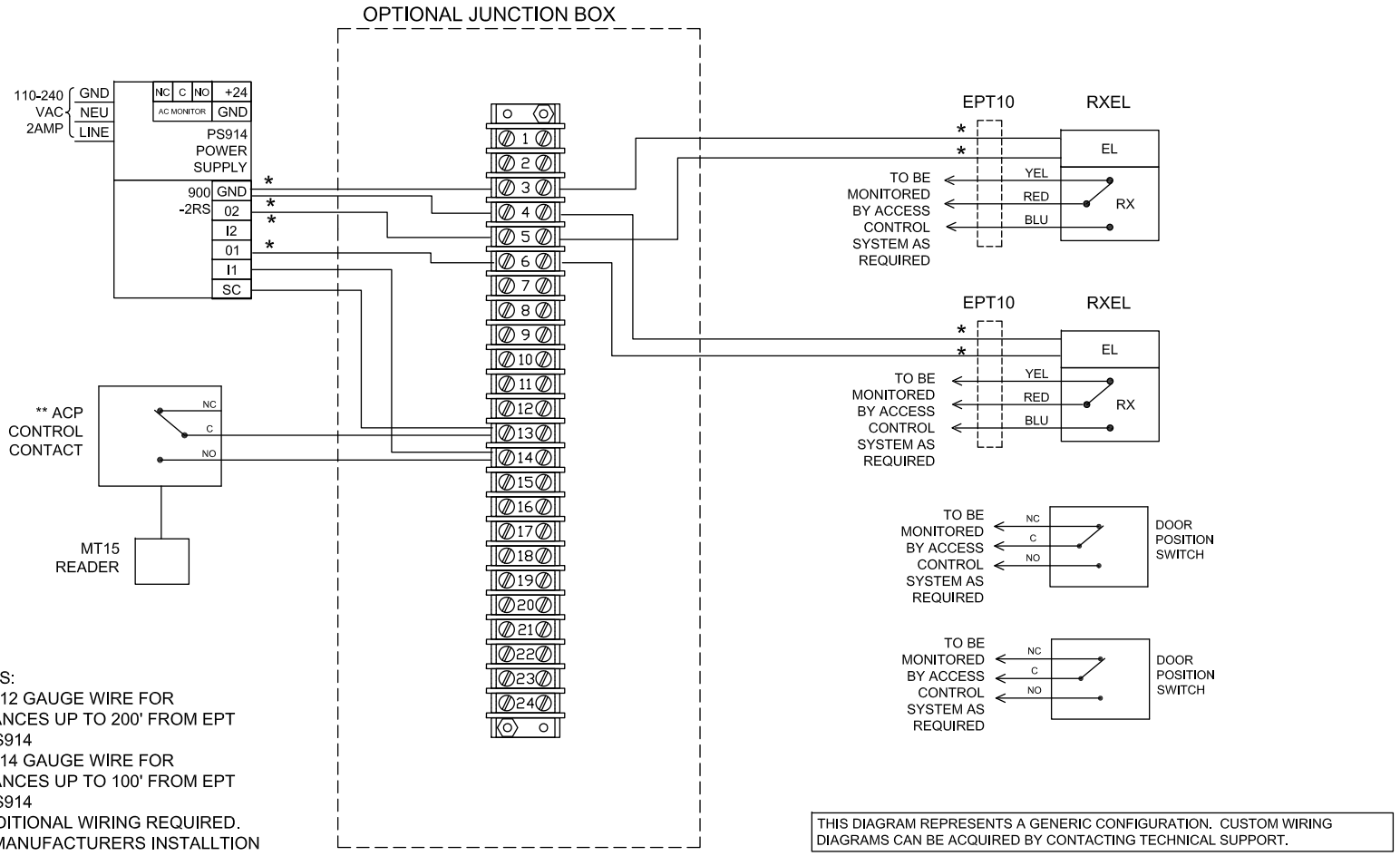
DOOR POSITION & RX SWITCHES TO BE MONITORED BY ACCESS CONTROL SYSTEM.

DATE DRAWN: 03-27-13
REVISION DATE: 04-15-14
DRAWN BY: B DOVE
APPROVED BY: MH

ALLEGION™

TITLE: PS914-2RS WITH 2 RXEL99 RIM, MT15, DPS

DRAWING TYPE: RISER
DWG NO: 105234
DRAWN/CHECKED BY: B DOVE
REV: D



NOTES:
*USE 12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE 14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914
** ADDITIONAL WIRING REQUIRED. SEE MANUFACTURERS INSTALLTION INSTRUCTIONS.

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 - PS914-2RS
2 RX-EL99
2 DOOR POSITION SWITCHES
1 MT15 READER & ACP
2 EPT10
1 OPTIONAL JUNCTION BOX

TYPE
DOUBLE DOORS

OPERATION:
DOOR NORMALLY CLOSED & LATCHED BY ACCESS CONTROL SYSTEM.

VALID CREDENTIAL RETRACTS ELECTRIC PANIC DEVICES TO ALLOW ENTRY.

FREE EGRESS AT ALL TIMES.

DOOR POSITION & RX SWITCHES TO BE MONITORED BY ACCESS CONTROL SYSTEM.

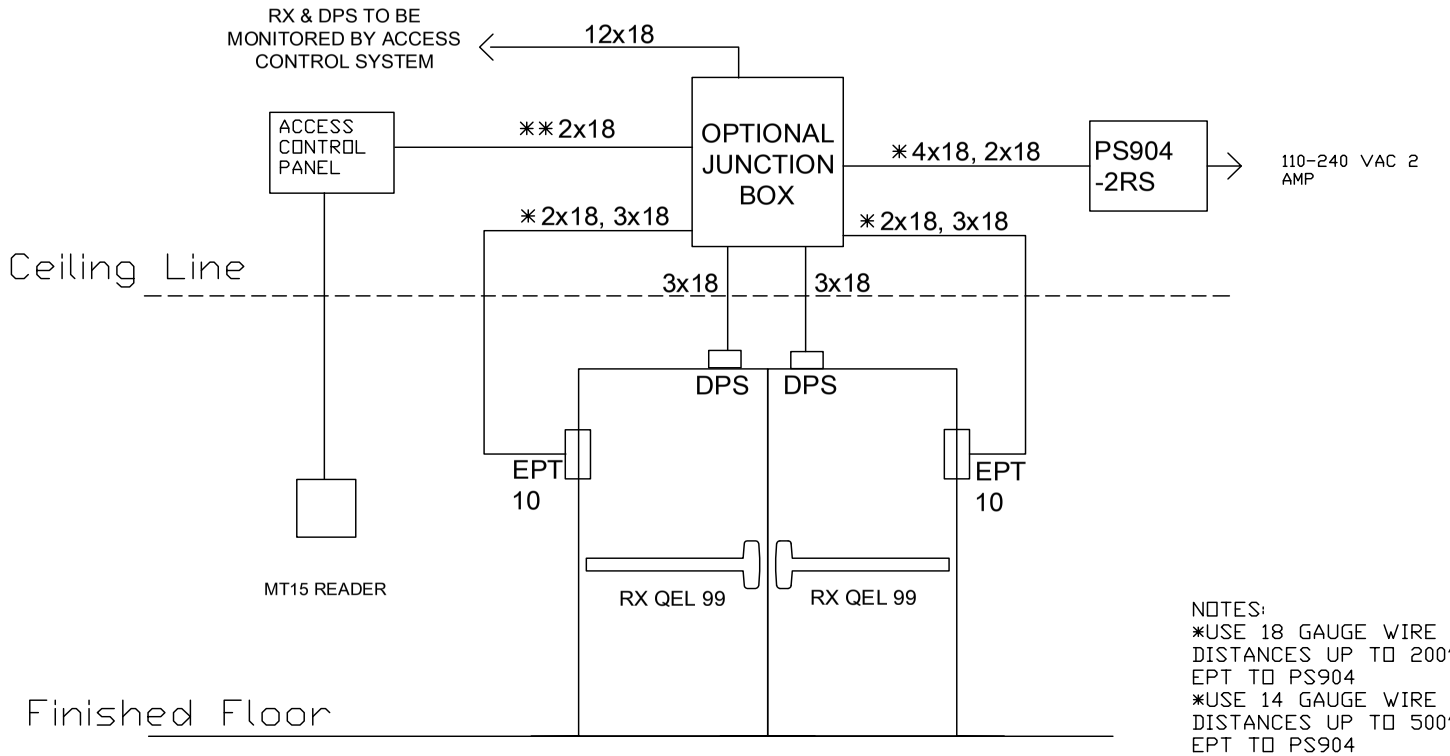
DATE DRAWN: 03-27-13
REVISION DATE: 04-15-14
DRAWN BY: B DOVE
APPROVED BY: MH

ALLEGION™

TITLE: PS914-2RS WITH 2 RXEL99 RIM, MT15, DPS

DRAWING TYPE: WIRING
DWG NO: 105234
REV: D
DRAWN/CHECKED BY: B DOVE

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
*USE 18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS904
*USE 14 GAUGE WIRE FOR DISTANCES UP TO 500' FROM EPT TO PS904
** ADDITIONAL WIRING REQUIRED. SEE MANUFACTURERS INSTALLTION INSTRUCTIONS.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
- 1 - PS904-2RS
- 2 RX-QEL99
- 2 DOOR POSITION SWITCHES
- 1 MT15 READER & ACP
- 2 EPT10
- 1 OPTIONAL JUNCTION BOX

TYPE
DOUBLE DOORS

OPERATION:
DOOR NORMALLY CLOSED & LATCHED BY ACCESS CONTROL SYSTEM.

VALID CREDENTIAL RETRACTS QUIET ELECTRIC PANIC DEVICES TO ALLOW ENTRY.

FREE EGRESS AT ALL TIMES.

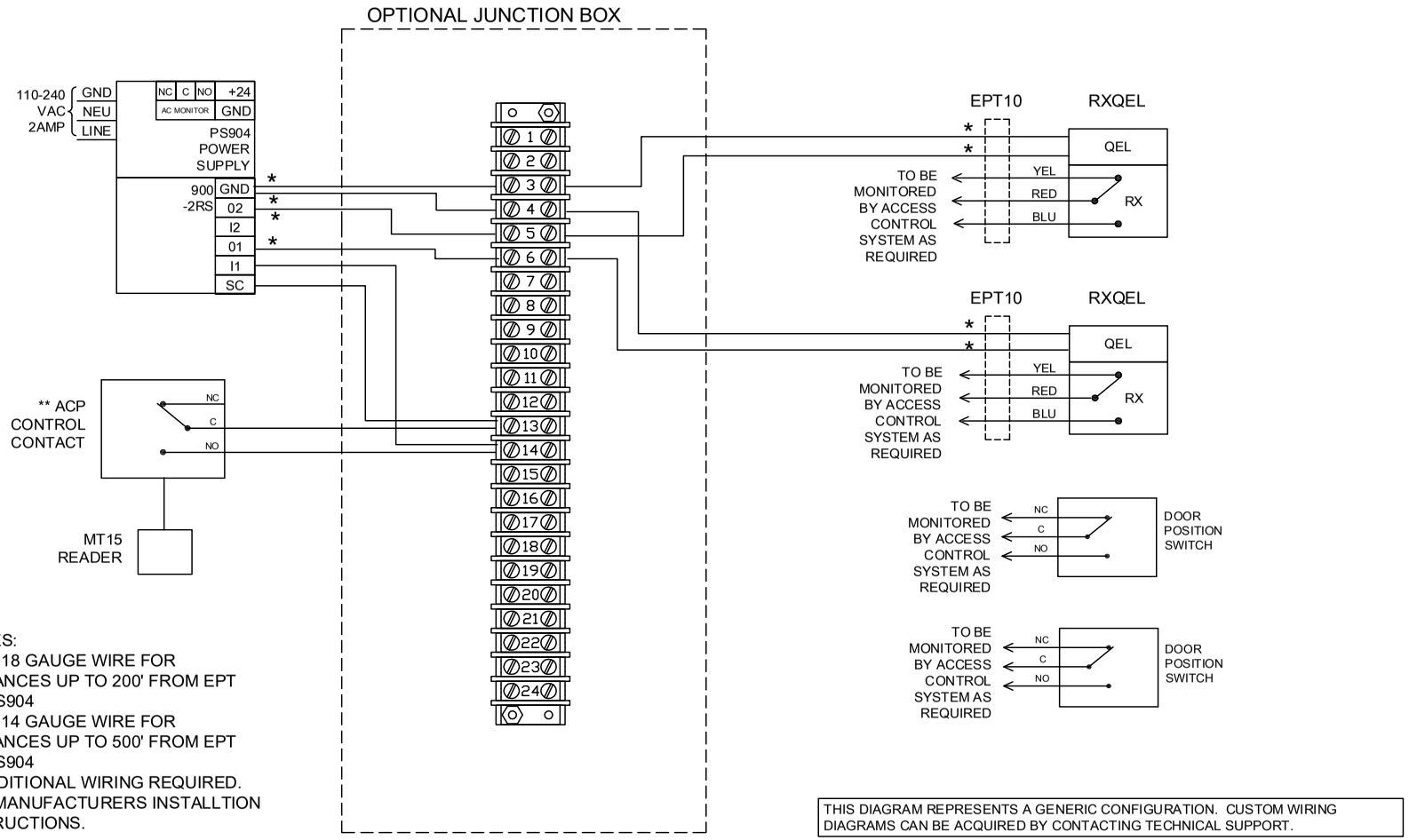
DOOR POSITION & RX SWITCHES TO BE MONITORED BY ACCESS CONTROL SYSTEM.

DATE DRAWN: 02-16-18
REVISION DATE: 02-16-18
DRAWN BY: B DOVE

ALLEGION™

TITLE: PS904-2RS WITH 2 RXQEL99 RIM, MT15, DPS

DRAWING TYPE: RISER
DWG NO: 112131R
REV: A
DRAWN/CHECKED BY: B DOVE



NOTES:
*USE 18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS904
*USE 14 GAUGE WIRE FOR DISTANCES UP TO 500' FROM EPT TO PS904
** ADDITIONAL WIRING REQUIRED. SEE MANUFACTURERS INSTALLTION INSTRUCTIONS.

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

1 - PS904-2RS
2 RX-QEL99
2 DOOR POSITION SWITCHES
1 MT15 READER & ACP
2 EPT10
1 OPTIONAL JUNCTION BOX

TYPE

DOUBLE DOORS

OPERATION:
DOOR NORMALLY CLOSED & LATCHED BY ACCESS CONTROL SYSTEM.

VALID CREDENTIAL RETRACTS QUIET ELECTRIC PANIC DEVICES TO ALLOW ENTRY.

FREE EGRESS AT ALL TIMES.

DOOR POSITION & RX SWITCHES TO BE MONITORED BY ACCESS CONTROL SYSTEM.

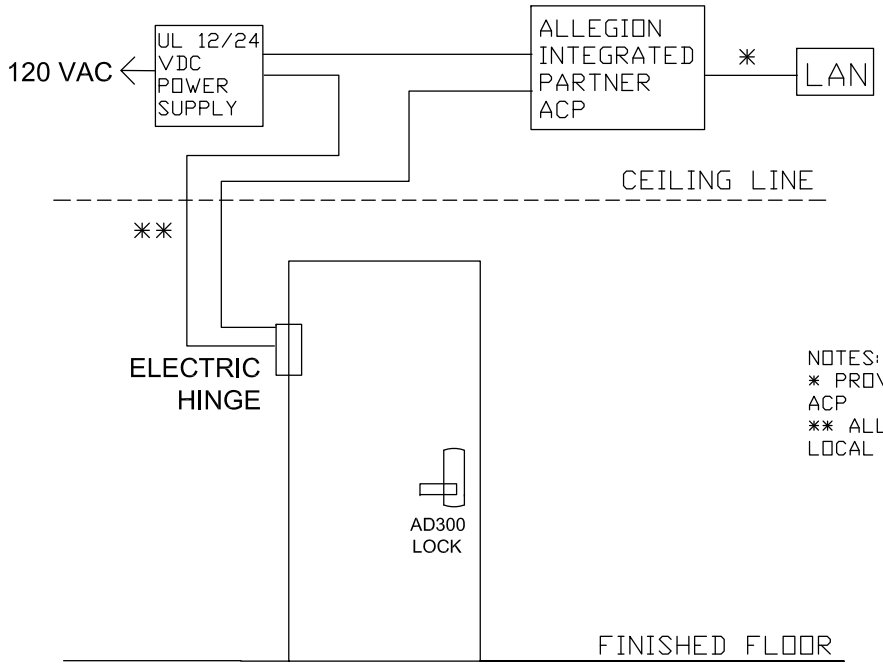
DATE DRAWN: 02-16-18
REVISION DATE: 02-16-18
DRAWN BY: B DOVE

ALLEGION™

TITLE: PS904-2RS WITH 2 RXQEL99 RIM, MT15, DPS

DRAWING TYPE: WIRING
DWG NO: 112131W
DRAWN/CHECKED BY: B DOVE
REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
* PROVIDE NETWORK CONNECTION AS REQUIRED BY ACP
** ALL WIRING MUST COMPLY WITH NFPA70 (NEC) & LOCAL CODES & MEET ACP PROVIDER REQUIREMENTS.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 SCHLAGE AD-300 LOCK

1 ELECTRIC HINGE

1 UL LISTED 12/24 VDC POWER SUPPLY

1 ALLEGION AD LOCK INTEGRATED PARTNER ACP

TYPE
SINGLE DOOR
AD-300 RS485

OPERATION:

DOOR NORMALLY CLOSED & LOCKED

VALID CREDENTIAL UNLOCKS DOOR.

FREE GRESS AT ALL TIMES.

CONSULT ACCESS CONTROL SYSTEM PROVIDER FOR SPECIFIC READER CAPACITY AND POINT-TO-POINT WIRING PER ACP.

DATE DRAWN: 4-3-13
REVISION DATE: 5-9-2014

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ALLEGION™

TITLE:
SINGLE AD300 ALLEGION INTEGRATED PARTNER ACP RS485

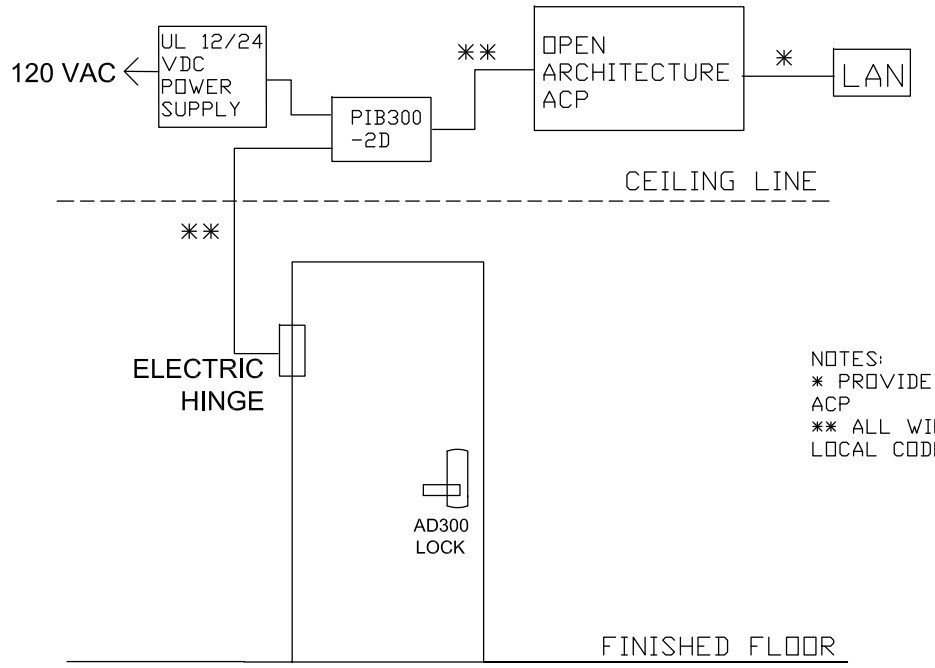
DRAWING TYPE:
RISER DIAGRAM

DWG NO: 105349

DRAWN/CHECKED BY: B DOVE

REV
C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
* PROVIDE NETWORK CONNECTION AS REQUIRED BY ACP
** ALL WIRING MUST COMPLY WITH NFPA70 (NEC) & LOCAL CODES & MEET ACP PROVIDER REQUIREMENTS.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 SCHLAGE AD-300 LOCK
1 ELECTRIC HINGE
1 PIB300-2D
1 UL LISTED 12/24 VDC POWER SUPPLY
1 OPEN ARCHITECTURE ACP

TYPE
SINGLE DOOR
AD-300 WIEGAND

OPERATION:
DOOR NORMALLY CLOSED & LOCKED
VALID CREDENTIAL UNLOCKS DOOR.
FREE GRESS AT ALL TIMES.
CONSULT ACCESS CONTROL SYSTEM PROVIDER FOR SPECIFIC READER CAPACITY AND POINT-TO-POINT WIRING PER ACP.

DATE DRAWN: 4-3-13
REVISION DATE: 5-9-2014

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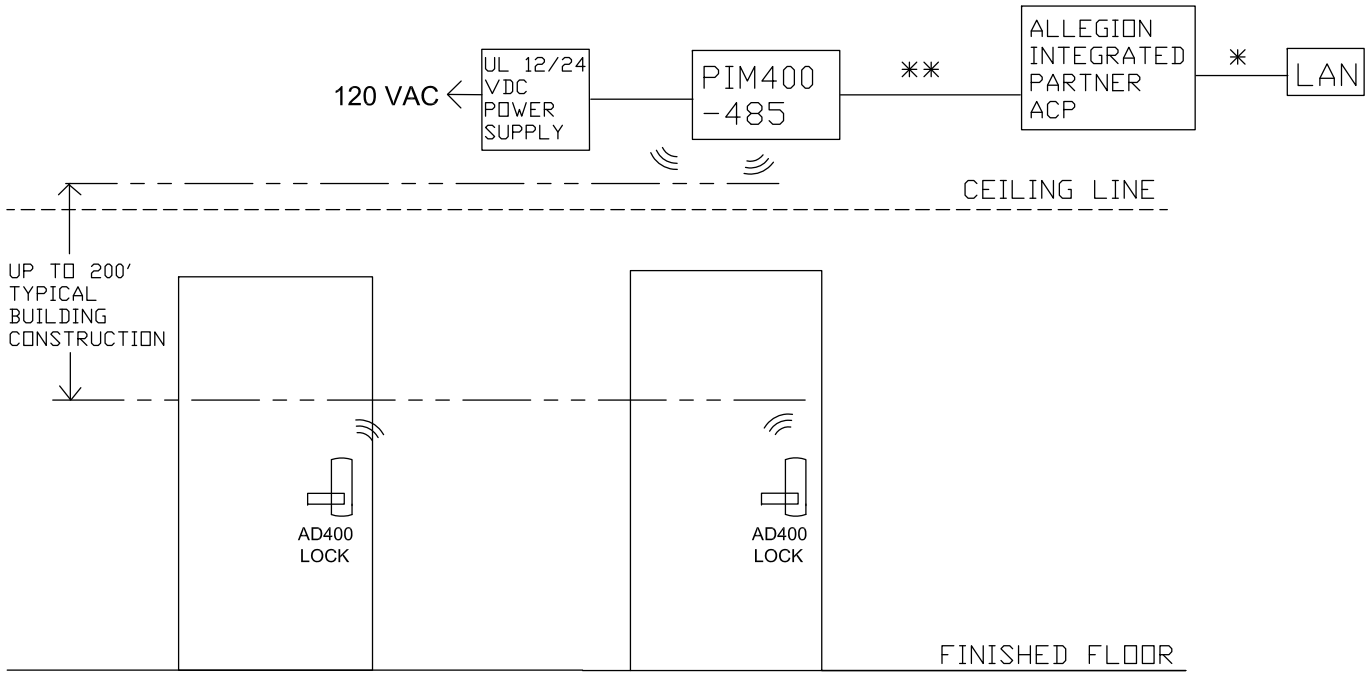
ALLEGION™

TITLE:
SINGLE AD300 OPEN ARCHITECTURE ACP WIEGAND

DRAWING TYPE: RISER DIAGRAM
DWG NO: 105348
DRAWN/CHECKED BY: B DOVE
REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
* PROVIDE NETWORK CONNECTION AS REQUIRED BY ACP
** ALL WIRING MUST COMPLY WITH NFPA70 (NEC) & LOCAL CODES & MEET ACP PROVIDER REQUIREMENTS.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
UP TO 16 SCHLAGE AD-400 DEVICES

1 UL LISTED 12/24 VDC POWER SUPPLY

1 PIM400-485

1 ALLEGION AD LOCK INTEGRATED PARTNER ACP

TYPE
AD-400 INTEGRATED RS485 ACP

OPERATION:

DOOR NORMALLY CLOSED & LOCKED
VALID CREDENTIAL UNLOCKS DOOR.
FREE EGRESS AT ALL TIMES.
EACH PIM400-485 CAN SUPPORT UP TO SIXTEEN AD-400 DEVICES.
CONSULT ACCESS CONTROL SYSTEM PROVIDER FOR SPECIFIC READER CAPACITY AND POINT-TO-POINT WIRING PER ACP.

DATE DRAWN: 4-3-13
REVISION DATE: 5-9-14

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ALLEGION™

TITLE: AD400 ALLEGION INTEGRATED PARTNER ACP RS485

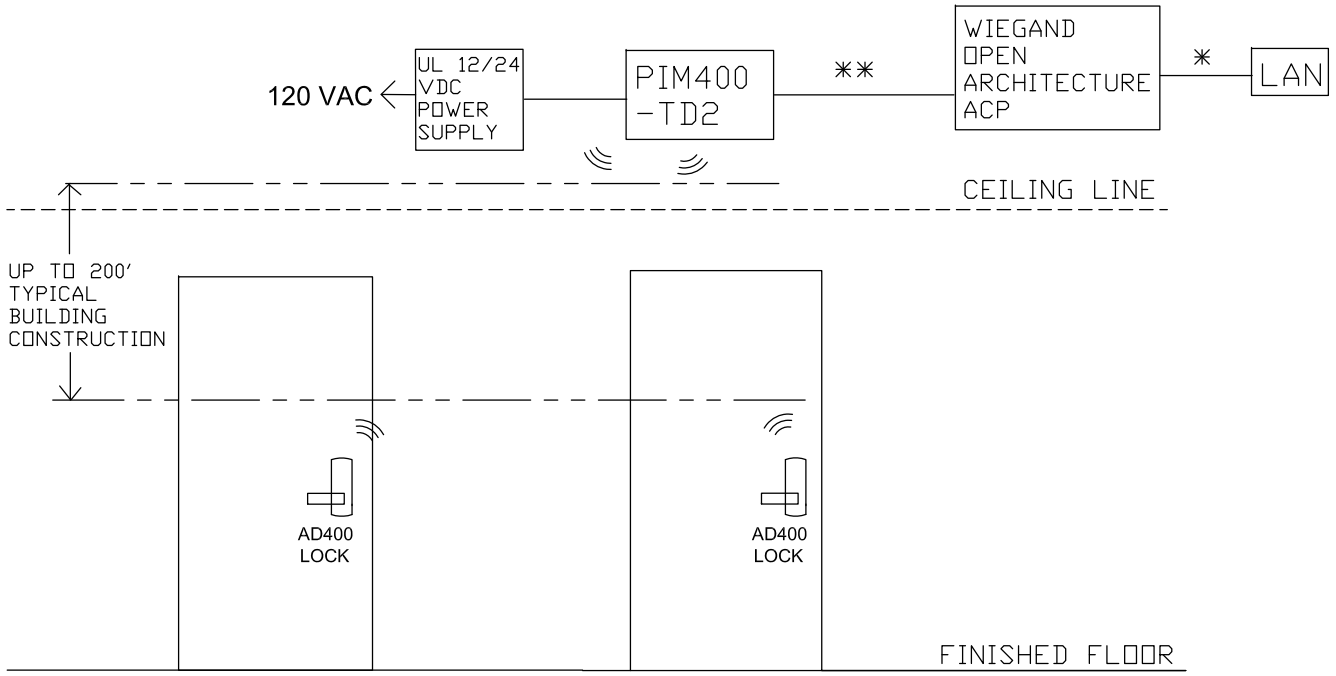
DRAWING TYPE: RISER DIAGRAM

DWG NO: 105351

DRAWN/CHECKED BY: B DOVE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
* PROVIDE NETWORK CONNECTION AS REQUIRED BY ACP
** ALL WIRING MUST COMPLY WITH NFPA70 (NEC) & LOCAL CODES & MEET ACP PROVIDER REQUIREMENTS.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
UP TO 2 SCHLAGE AD-400 DEVICES

1 UL LISTED 12/24 VDC POWER SUPPLY

1 PIM400-TD2

1 OPEN ARCHITECTURE ACP

TYPE
AD-400 OPEN ARCHITECTURE

OPERATION:

DOOR NORMALLY CLOSED & LOCKED
VALID CREDENTIAL UNLOCKS DOOR.
FREE EGRESS AT ALL TIMES.
EACH PIM400-TD2 CAN SUPPORT UP TO 2 AD-400 DEVICES.
CONSULT ACCESS CONTROL SYSTEM PROVIDER FOR SPECIFIC READER CAPACITY AND POINT-TO-POINT WIRING PER ACP.

DATE DRAWN: 4-3-13
REVISION DATE: 5-9-14

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ALLEGION™

TITLE: AD400 OPEN ARCHITECTURE ACP RS485

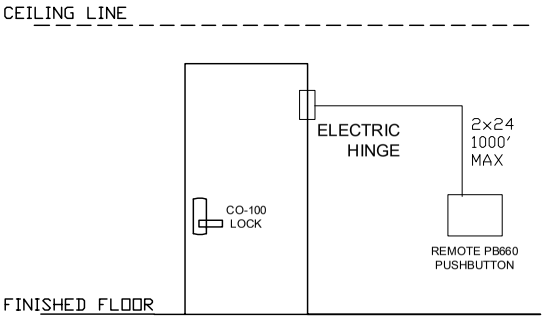
DRAWING TYPE: RISER DIAGRAM

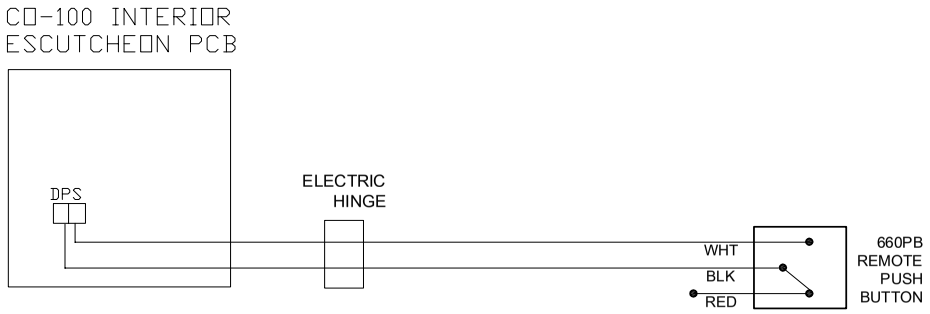
DWG NO: 105350

DRAWN/CHECKED BY: B DOVE

REV C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.





NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

1 SCHLAGE CO-100 50 OFFICE FUNCTION STANDALONE LOCK MIN FW VERSION 2.6.2

1 ELECTRIC HINGE

1 PB660 REMOTE PUSHBUTTON

TYPE
CO100 WITH REMOTE PUSHBUTTON

OPERATION:

DOOR NORMALLY CLOSED & LOCKED

VALID PIN UNLOCKS DOOR. REMOTE PUSHBUTTON RELEASES DOOR FOR THE PRE-PROGRAMMED RELOCK DELAY.

FREE GRESS AT ALL TIMES.

DATE DRAWN: 02-13-18

REVISION DATE: 02-13-18

ALLEGION™

TITLE:
CO100 WITH REMOTE PUSHBUTTON

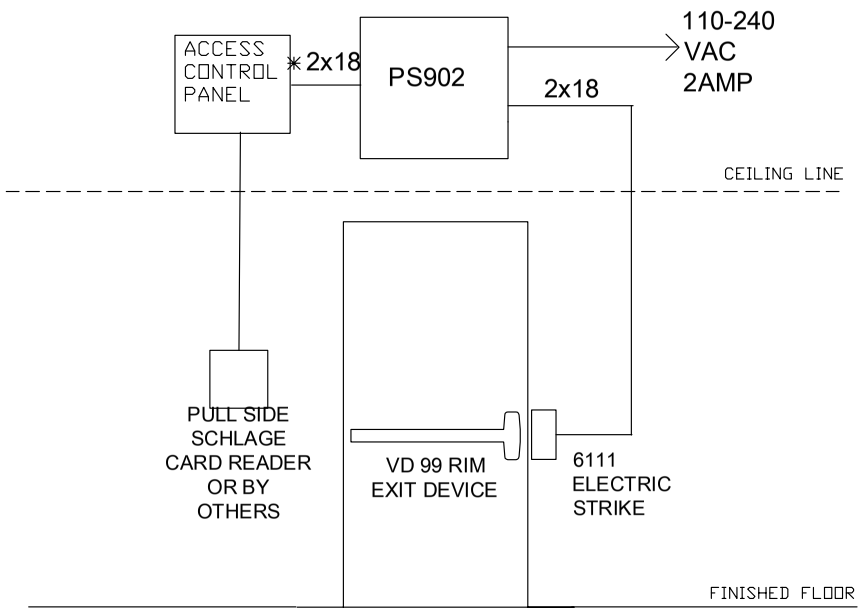
DRAWING TYPE:
RISER DIAGRAM

DWG NO: 112121

DRAWN/CHECKED BY: B DOVE

REV
A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

6111 FSE 24VDC Electric Strike

VD 99 Rim Exit device

PS902 Power Supply

Schlage or Card Reader By Others with Access Control Panel

TYPE 6111 FSE ESTRIKE WITH SCHLAGE OR CR BO

OPERATION:

OPERATION:
PULL SIDE CARD READER TO UNLOCK ELECTRIC STRIKE TO ALLOW ENTRY.

6111 FSE ESTRIKE WILL LOCK ON POWER OUTAGE.

FREE EGRESS ALWAYS FROM PUSH SIDE OF 99 RIM EXIT DEVICE

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS902 ENCLOSURE.

DATE DRAWN: 3-13-13

REVISION DATE: 3-13-13

ALLEGION™

TITLE: FSE 6111 WITH PS902 AND SCHLAGE OR CARD READER BY OTHERS

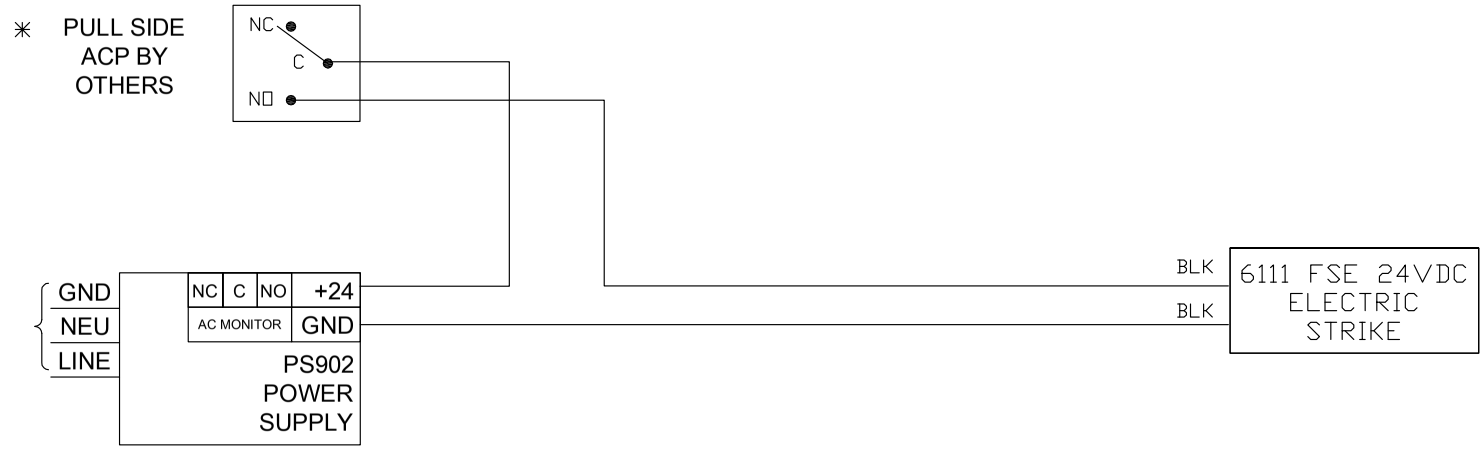
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109439

DRAWN/CHECKED BY: B DOVE/ B DYE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
✳ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ✳ CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

6111 FSE 24VDC Electric Strike

VD 99 Rim Exit device

PS902 Power Supply

Schlage or Card Reader By Others with Access Control Panel

TYPE
6111 FSE ESTRIKE WITH SCHLAGE OR CR BO

OPERATION:
PULL SIDE SCHLAGE OR CARD READER BY OTHERS TO UNLOCK ELECTRIC STRIKE TO ALLOW ENTRY.

6111 FSE ESTRIKE WILL LOCK ON POWER OUTAGE.

FREE EGRESS ALWAYS FROM PUSH SIDE OF 99 RIM EXIT DEVICE

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS902 ENCLOSURE.

DATE DRAWN: 3-13-13

REVISION DATE: 3-13-13

ALLEGION™

TITLE:
FSE 6111 WITH PS902 AND SCHLAGE OR CARD READER BY OTHERS

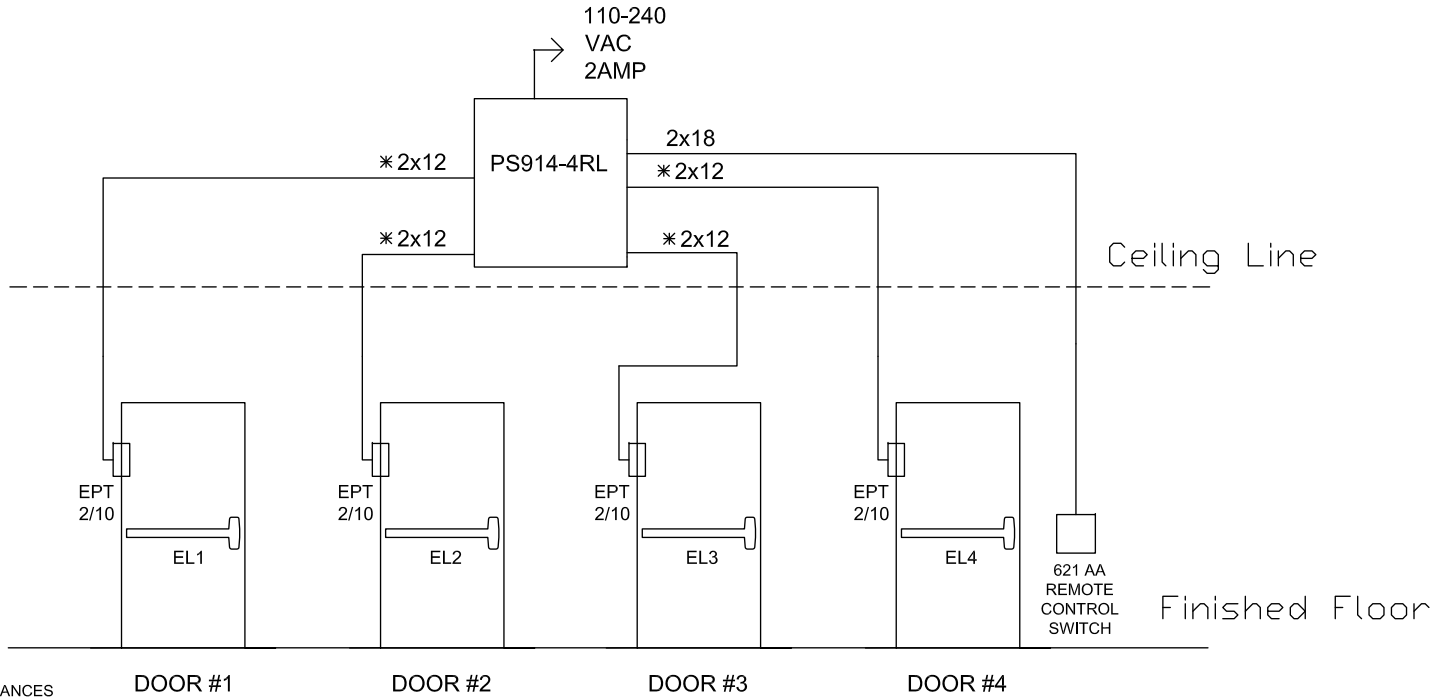
DRAWING TYPE:
WIRING DIAGRAM

DWG NO: 109439

DRAWN/CHECKED BY:
B DOVE/ B DYE

REV
C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

4 VON DUPRIN OR FALCON EL PANIC DEVICES

1 PS914-4RL POWER SUPPLY

4 EPT POWER TRANSFERS

621 AA REMOTE CONTROL PUSH BUTTON

TYPE
REMOTE 621AA PB WITH 4 ALLEGION EL DEVICES

OPERATION:
REMOTE CONTROL 621 AA PB TO SIGNAL ALL FOUR ELECTRIC PANIC BARS TO RETRACT FOR ENTRY.

THIS CONFIGURATION REPRESENTS A NON FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 3-20-13
REVISION DATE: 3-14-14

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ALLEGION™

TITLE:
REMOTE 621AA PB WITH 4 ALLEGION EL PANICS

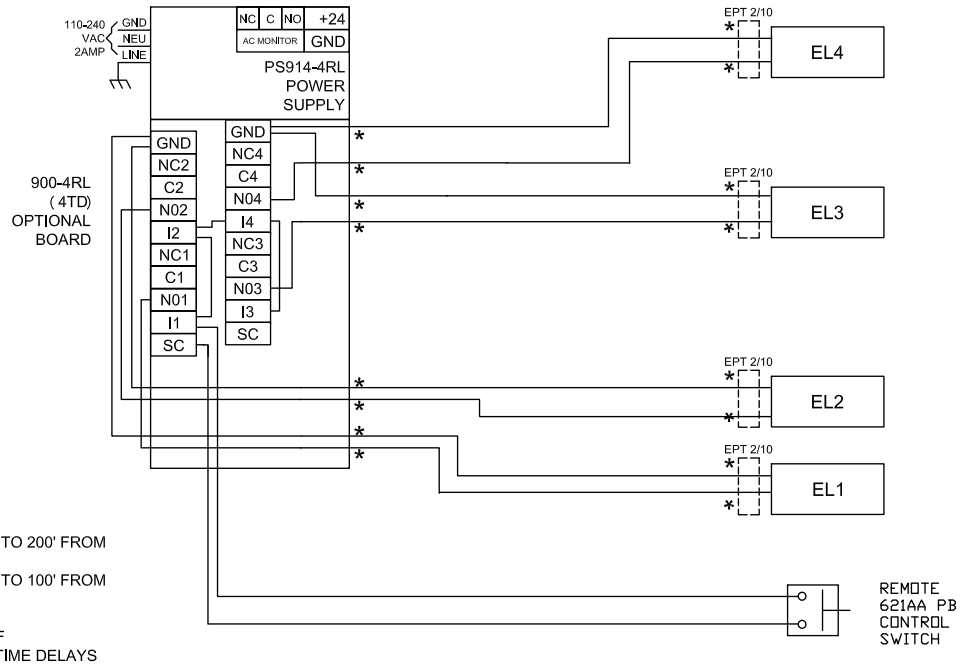
DRAWING TYPE:
RISER DIAGRAM

DWG NO: 109440

DRAWN/CHECKED BY:
B DOVE/ B DYE

REV
C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

900-4RL CARD SW2 SET SWITCH 1 AND 2 OFF
900-4RL CARD SW1 SET AS REQUIRED FOR TIME DELAYS
- SEE INSTRUCTION SHEET FOR DETAILS

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

4 VON DUPRIN OR FALCON EL PANIC DEVICES

1 PS914-4RL POWER SUPPLY

4 EPT POWER TRANSFERS

621 AA REMOTE CONTROL SWITCH

TYPE
REMOTE 621AA PB WITH 4 ALLEGION EL DEVICES

OPERATION:
REMOTE CONTROL 621AA PB TO SIGNAL ALL FOUR ELECTRIC PANIC BARS TO RETRACT FOR ENTRY.

THIS CONFIGURATION REPRESENTS A NON FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 3-20-13
REVISION DATE: 3-14-14

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ALLEGION™

TITLE: REMOTE 621AA PB WITH 4 ALLEGION EL PANICS

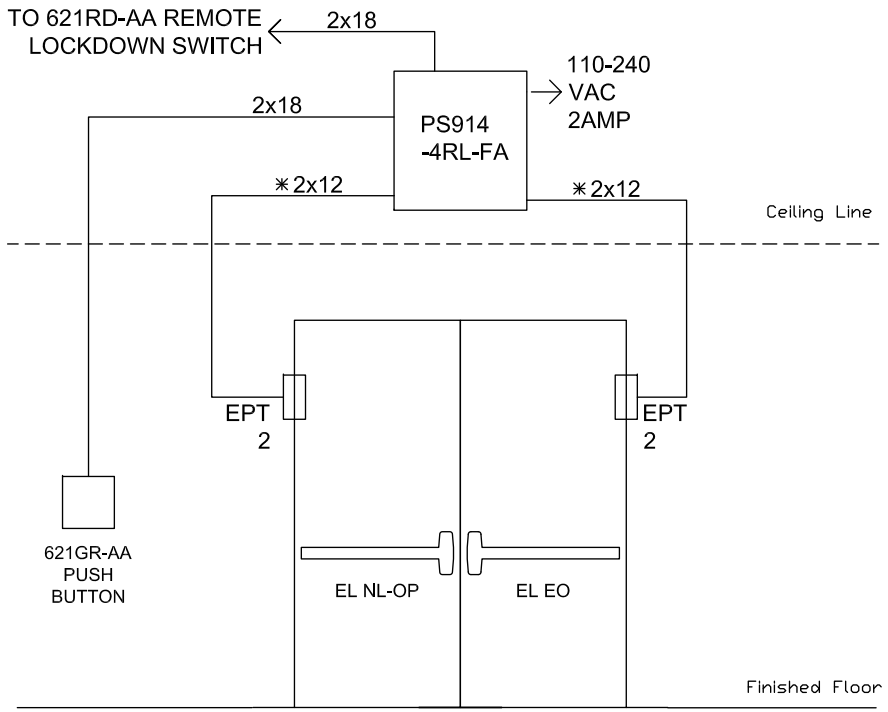
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109440

DRAWN/CHECKED BY: B DOVE/ B DYE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

2 VONDUPRIN OR FALCON EL PANIC DEVICES

1 621GR-AA PUSH BUTTON

1 621RD-AA PUSH BUTTON

1 PS914-4RL-FA POWER SUPPLY

TYPE: EMERGENCY RELEASE OF ALLEGION EL PANIC DEVICES

OPERATION:

EL LATCHES HELD SIGNALED TO RETRACT BY 621GR-AA PUSH BUTTON.

IN THE EVENT OF AN EMERGENCY PRESSING 621RD REMOTE PUSH BUTTON WILL CAUSE EL LATCHES TO EXTEND SECURING DOOR FROM PULL SIDE.

THIS EXAMPLE IS FOR A NON FIRE RATED APPLICATION.

IN THIS EXAMPLE ALL CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 3-21-13

REVISION DATE: 3-14-14

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ALLEGION™

TITLE: PS914-4RL-FA EL PAIR EMERGENCY RELEASE

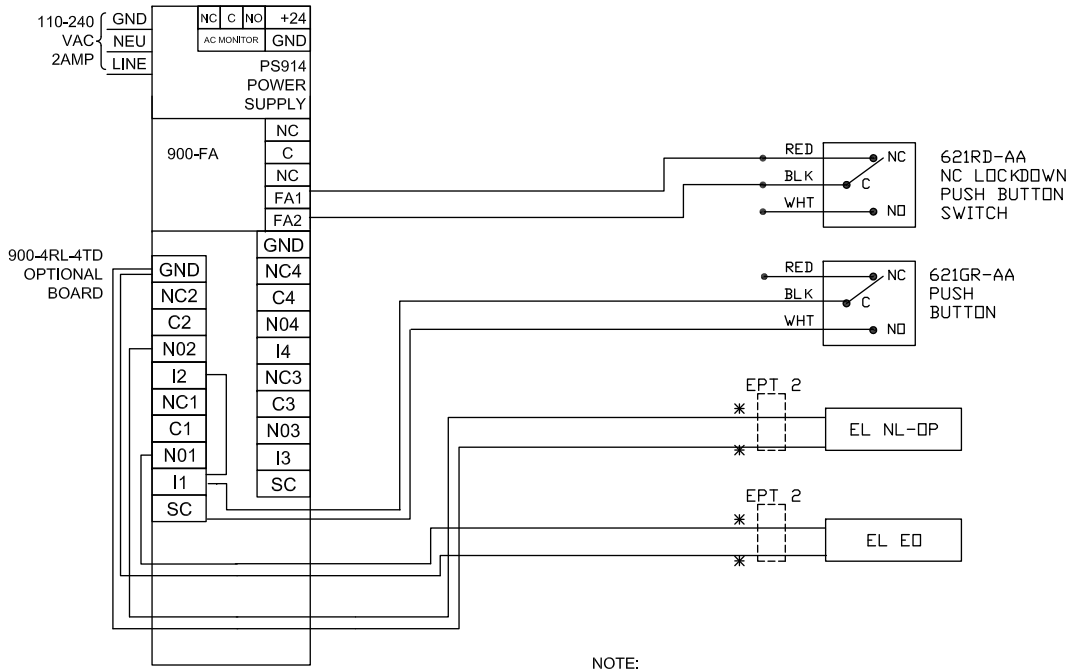
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109444

DRAWN/CHECKED BY: BRENDA DOVE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

2 VONDUPRIN OR FALCON EL PANIC DEVICES

1 621GR-AA PUSH BUTTON

1 621RD-AA PUSH BUTTON

1 PS914-4RL-FA POWER SUPPLY

TYPE
EMERGENCY RELEASE OF ALLEGION EL PANIC DEVICES

OPERATION:

EL LATCHES HELD SIGNALED TO RETRACT BY 621GR-AA PUSH BUTTON.

IN THE EVENT OF AN EMERGENCY PRESSING 621RD REMOTE PUSH BUTTON WILL CAUSE EL LATCHES TO EXTEND SECURING DOOR FROM PULL SIDE.

THIS EXAMPLE IS FOR A NON FIRE RATED APPLICATION.

IN THIS EXAMPLE ALL CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 3-21-13

REVISION DATE: 3-14-14

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ALLEGION™

TITLE: PS914-4RL-FA EL PAIR EMERGENCY RELEASE

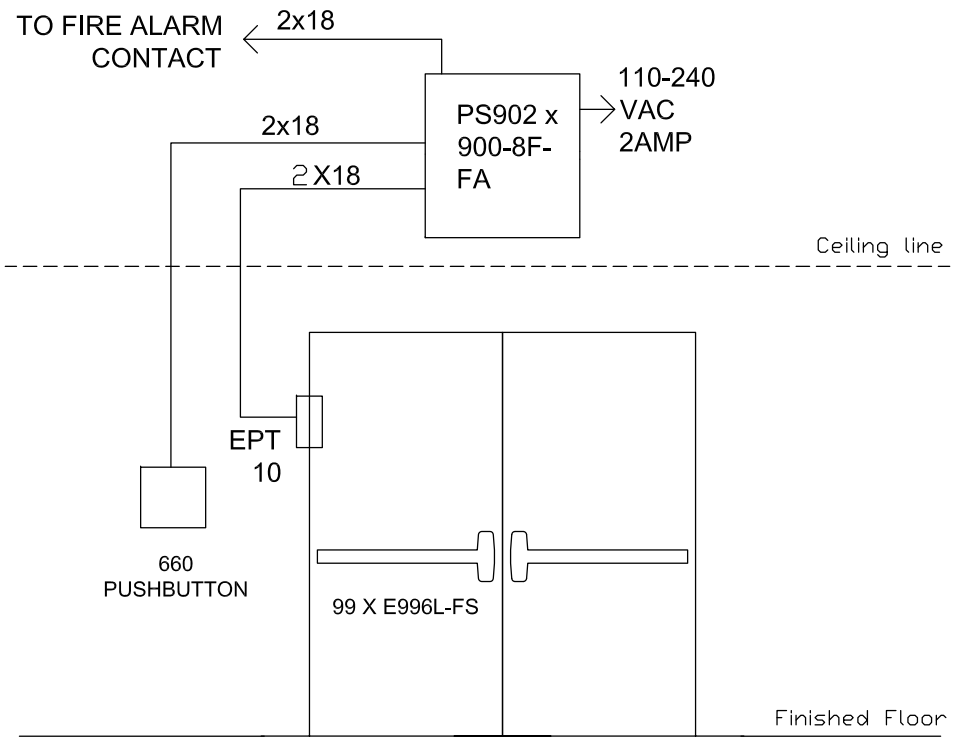
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109444

DRAWN/CHECKED BY: B DOVE/

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

1 VD 99 x E996L FS 24VDC

1 PS902-8F-FA Power Supply

1 660 Pushbutton

Fire Alarm Contact by Others

TYPE

FS E996L WITH 660 PB AND FIRE ALARM RELEASE

OPERATION:

660 PUSHBUTTON TO RELEASE FAIL SAFE E996L FOR AUTHORIZED ENTRY.

FIRE ALARM CONTACT TO RELEASE THE ELECTRIC TRIM TO ALLOW ENTRY.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

DATE DRAWN: 3-21-13

REVISION DATE: 3-21-13

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ALLEGION™

TITLE:

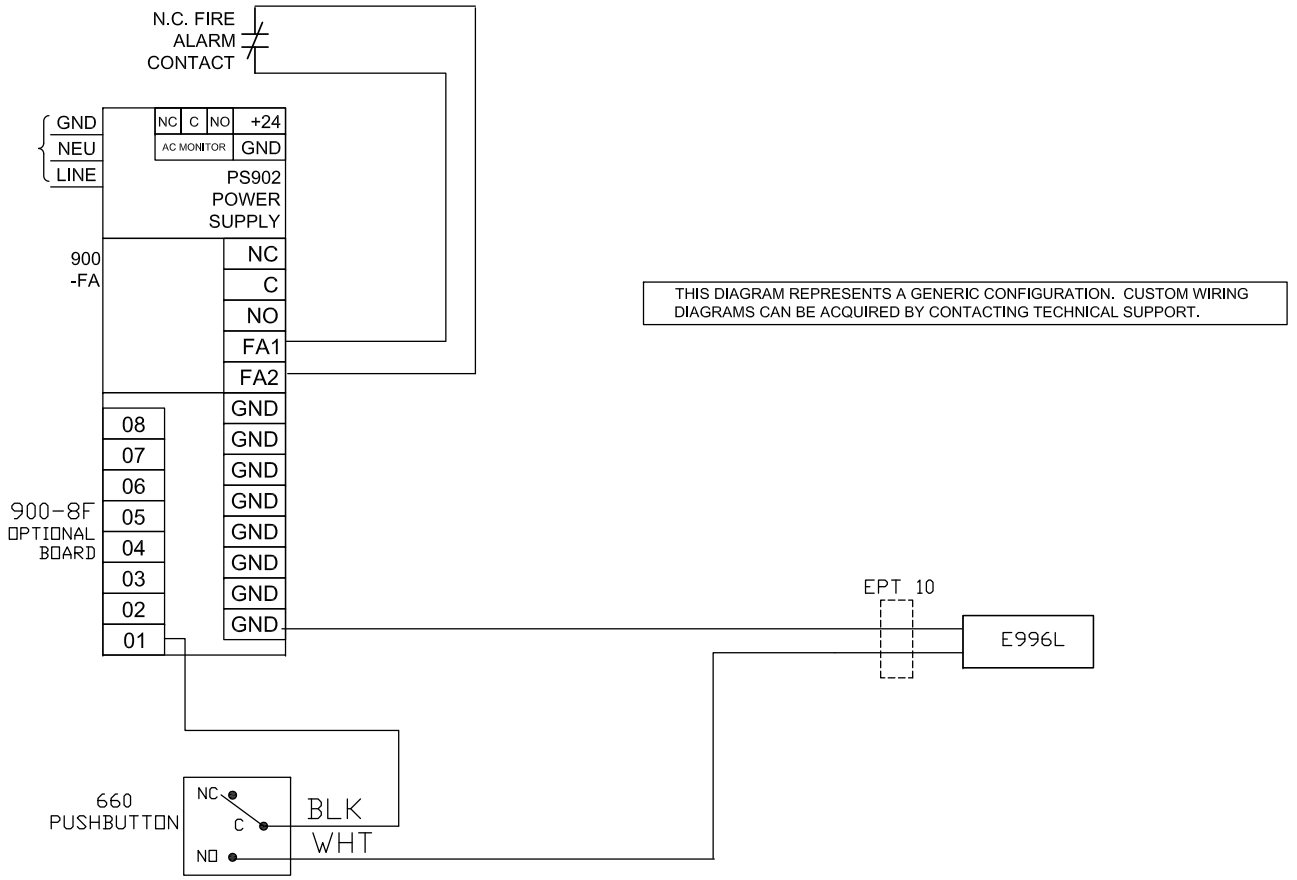
FS E996L WITH PS902-8F-FA

DRAWING TYPE: RISER DIAGRAM

DWG NO: 109445

DRAWN/CHECKED BY: B DOVE

REV A



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

1 VD 99 x E996L FS 24VDC

1 PS902-8F-FA Power Supply

1 660 Pushbutton

Fire Alarm Contact by Others

TYPE

FS E996L WITH 660 PB AND FIRE ALARM RELEASE

OPERATION:

660 PUSHBUTTON TO RELEASE FAIL SAFE E996L FOR AUTHORIZED ENTRY.

FIRE ALARM CONTACT TO RELEASE THE ELECTRIC TRIM TO ALLOW ENTRY.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

DATE DRAWN: 3-21-13

REVISION DATE: 3-21-13

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ALLEGION™

TITLE: FS E996L WITH PS902-8F-FA

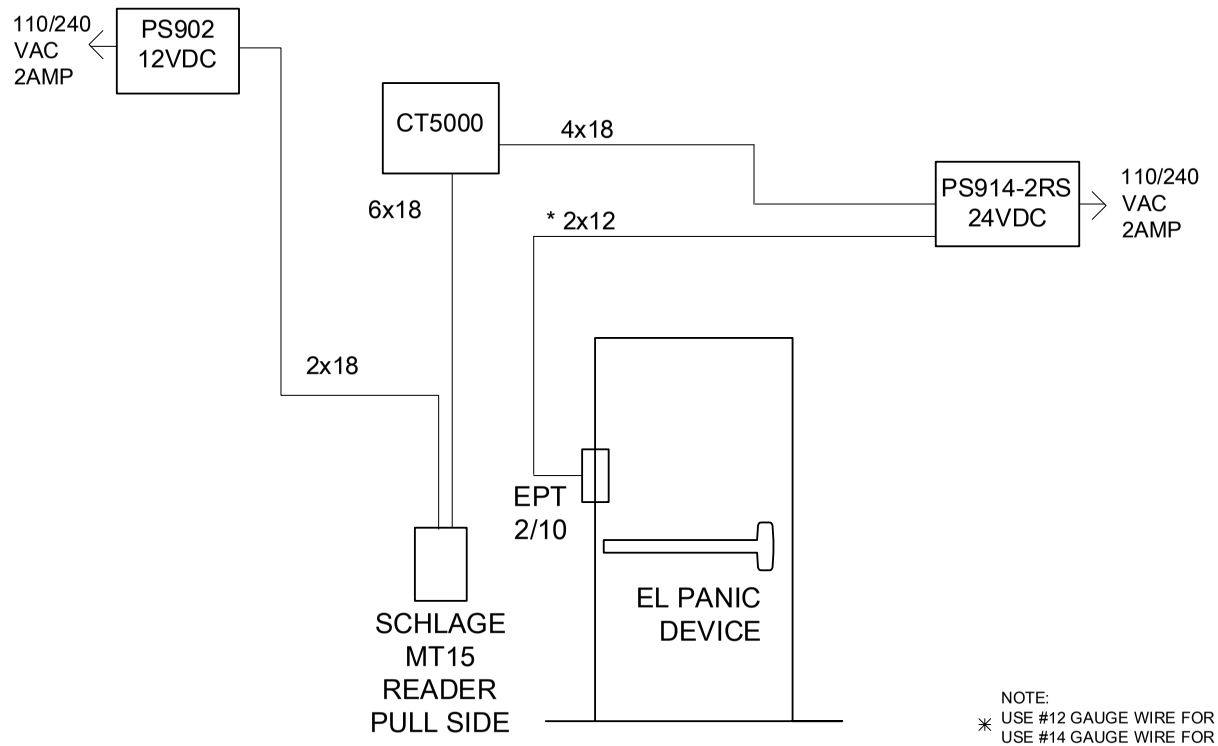
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109445

DRAWN/CHECKED BY: B DOVE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
* USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914.
USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 1 CT5000
- 1 MT15 SCHLAGE READER
- 1 VD OR FALCON EL PANIC
- 1 EPT2/10
- 1 PS902
- 1 PS914-2RS

TYPE ACCESS CONTROL WITH EL PANIC

OPERATION:
SCHLAGE MT15 READER TO RETRACT THE ELECTRIC LATCH ON PANIC BAR TO ALLOW ENTRY.

FREE EGRESS ALWAYS PERMITTED

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 3-26-13

REVISION DATE: 07-03-17

ALLEGION™

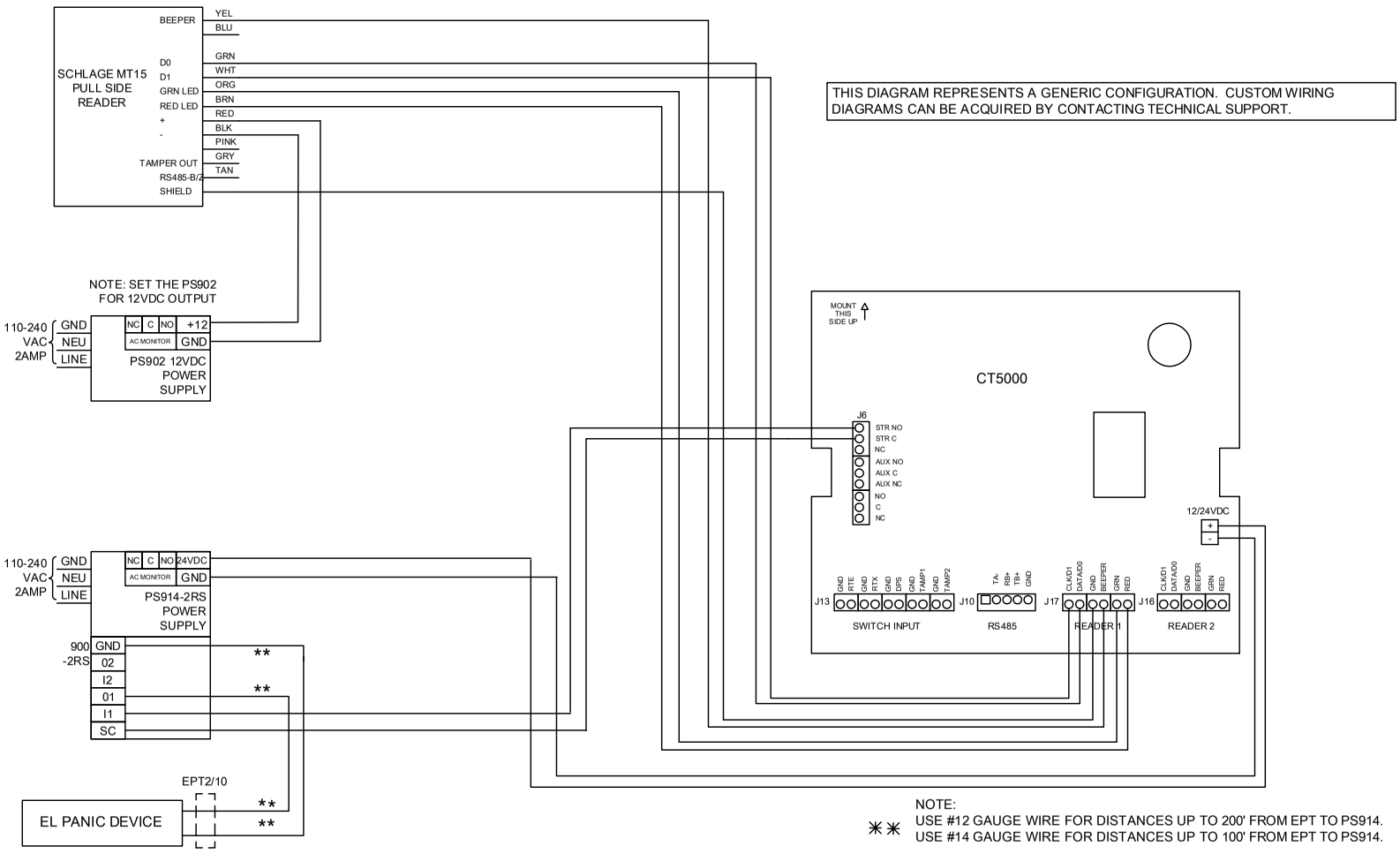
TITLE: CT5000 WITH EL AND PS914-2RS AND PS902

DRAWING TYPE: RISER DIAGRAM

DWG NO: 109499

DRAWN/CHECKED BY: BRENDA DOVE

REV B



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

1 CT5000
1 MT15 SCHLAGE READER
1 VD OR FALCON EL PANIC DEVICE
1 EPT2/10
1 PS902
1 PS914-2RS

TYPE
ACCESS CONTROL WITH EL PANIC

OPERATION:

SCHLAGE MT15 READER TO RETRACT THE ELECTRIC LATCH ON PANIC BAR TO ALLOW ENTRY.

FREE EGRESS ALWAYS PERMITTED.

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 3-26-13

REVISION DATE: 07-03-17

ALLEGION™

TITLE: CT5000 WITH EL AND PS914-2RS AND PS902

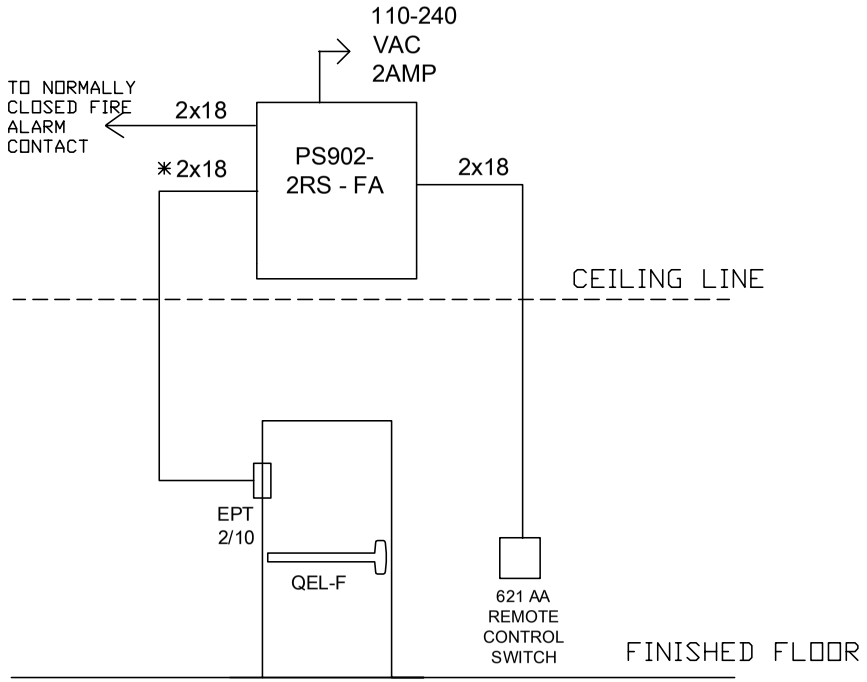
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109499

DRAWN/CHECKED BY: B DOVE

REV B

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
* USE #18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS902
* USE #14 GAUGE WIRE FOR DISTANCES UP TO 500' FROM EPT TO PS902

SET PS902 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 1 VON DUPRIN RATED QEL PANIC DEVICES
- 1 PS902-2RS POWER SUPPLY
- 1 EPT POWER TRANSFERS
- 1 621 AA REMOTE CONTROL PUSH BUTTON
- 1 FIRE ALARM CONTACT

TYPE REMOTE 621AA PB WITH SINGLE FIRE RATED ALLEGION QEL DEVICES

OPERATION:
REMOTE CONTROL 621 AA PB TO SIGNAL SINGLE QEL ELECTRIC PANIC BAR TO RETRACT FOR ENTRY.

RELEASING 621 AA PUSH BUTTON OR FIRE ALARM TO CAUSE QEL LATCHES TO EXTEND.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

DATE DRAWN: 02-16-18
REVISION DATE: 02-16-18

ALLEGION™

TITLE:
REMOTE 621AA PB WITH SINGLE FIRE RATED ALLEGION QEL PANICS

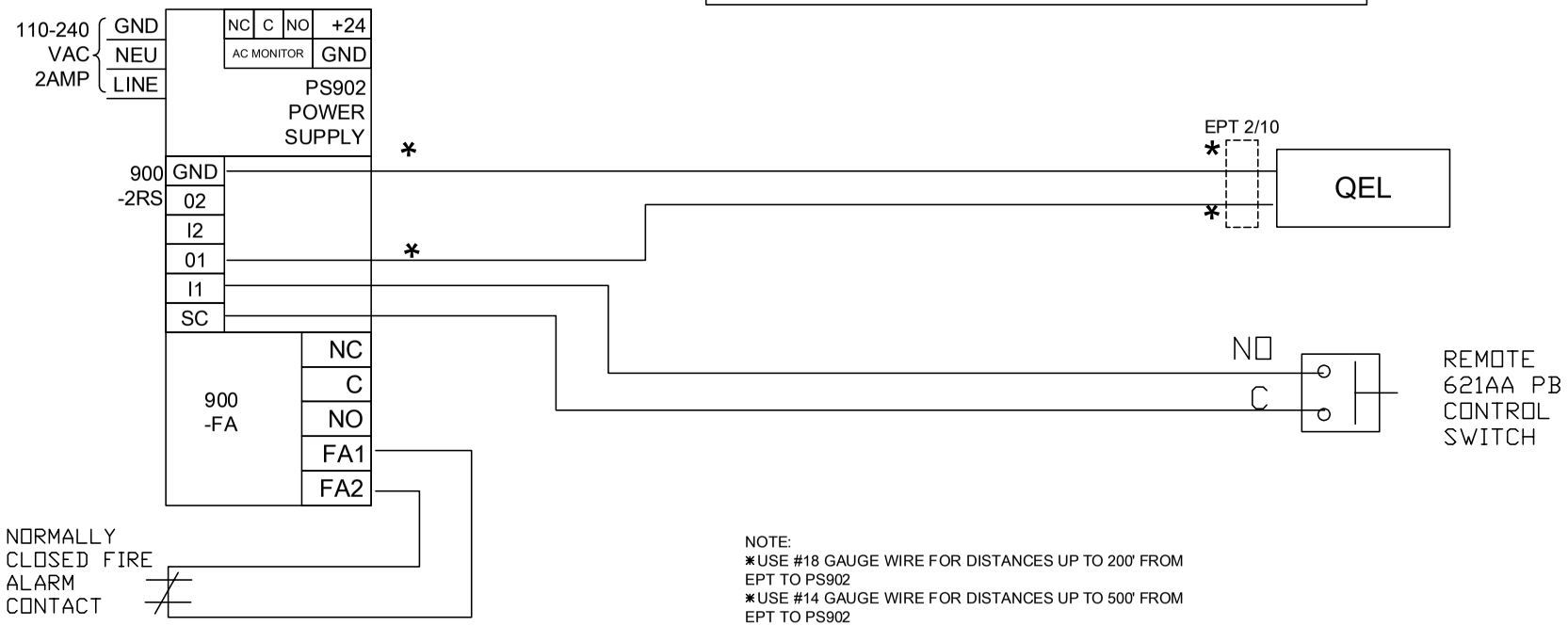
DRAWING TYPE: RISER DIAGRAM

DWG NO: 112133R

DRAWN/CHECKED BY: B DOVE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS902
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 500' FROM EPT TO PS902

SET PS902 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
1 VON DUPRIN RATED QEL PANIC DEVICES
1 PS902-2RS POWER SUPPLY
1 EPT POWER TRANSFERS
1 621 AA REMOTE CONTROL PUSH BUTTON
1 FIRE ALARM CONTACT

TYPE REMOTE 621AA PB WITH SINGLE FIRE RATED ALLEGION QEL DEVICES

OPERATION:
REMOTE CONTROL 621 AA PB TO SIGNAL SINGLE QEL ELECTRIC PANIC BAR TO RETRACT FOR ENTRY.

RELEASING 621 AA PUSH BUTTON OR FIRE ALARM TO CAUSE QEL LATCHES TO EXTEND.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

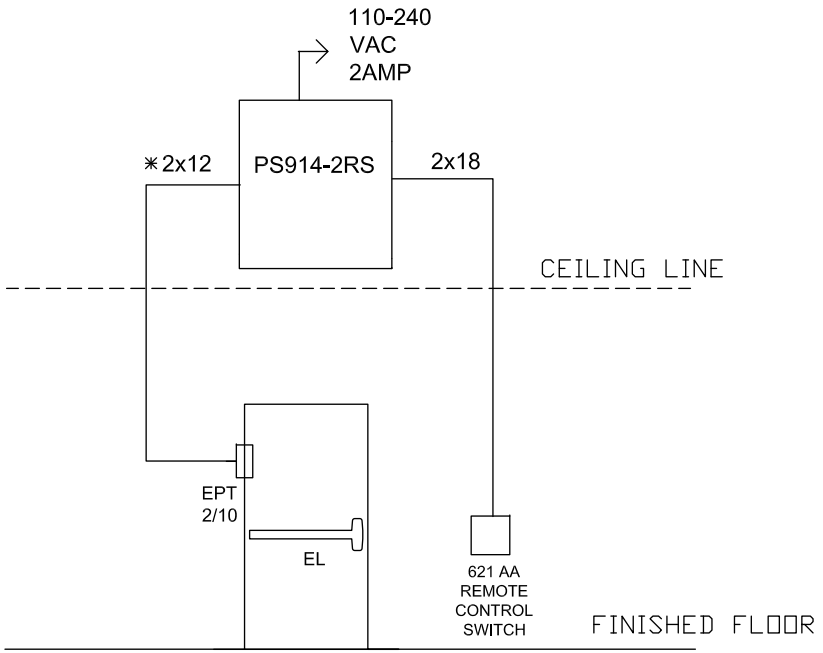
DATE DRAWN: 02-16-18
REVISION DATE: 02-16-18

ALLEGION™

TITLE: REMOTE 621AA PB WITH SINGLE FIRE RATED ALLEGION QEL PANICS

DRAWING TYPE: WIRING DIAGRAM
DWG NO: 112133W
DRAWN/CHECKED BY: B DOVE
REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

SETP PS914 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

1 VON DUPRIN OR FALCON EL PANIC DEVICES

1 PS914-2RS POWER SUPPLY

1 EPT POWER TRANSFERS

1 621 AA REMOTE CONTROL PUSH BUTTON

TYPE

REMOTE 621AA PB WITH SINGLE ALLEGION EL DEVICES

OPERATION:
REMOTE CONTROL 621 AA PB TO SIGNAL SINGLE EL ELECTRIC PANIC BAR TO RETRACT FOR ENTRY.

THIS CONFIGURATION REPRESENTS A NON FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 5-3-13

REVISION DATE: 3-14-14

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ALLEGION™

TITLE: REMOTE 621AA PB WITH SINGLE ALLEGION EL PANICS

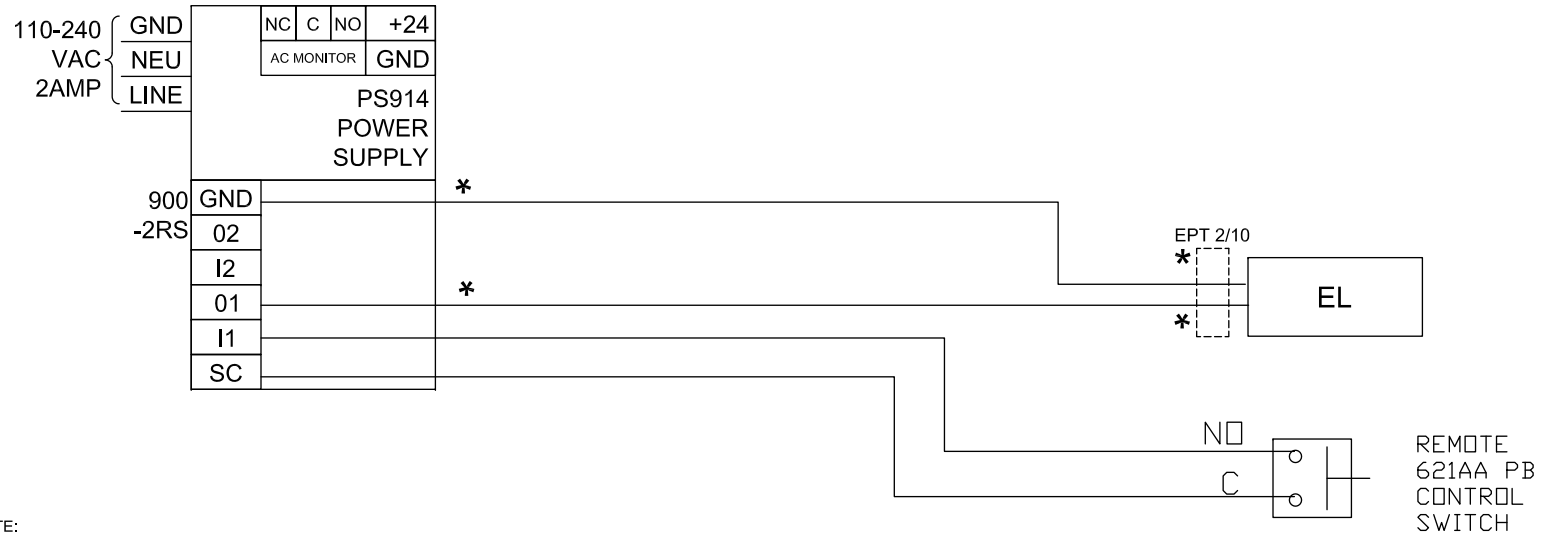
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109550

DRAWN/CHECKED BY: B DOVE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

SET PS914 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

1 VON DUPRIN OR FALCON EL PANIC DEVICES

1 PS914-2RS POWER SUPPLY

1 EPT POWER TRANSFERS

621 AA REMOTE CONTROL SWITCH

TYPE

REMOTE 621AA PB WITH SINGLE ALLEGION EL DEVICES

OPERATION:
REMOTE CONTROL 621AA PB TO SIGNAL SINGLE ELECTRIC PANIC BARS TO RETRACT FOR ENTRY.

THIS CONFIGURATION REPRESENTS A NON FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 5-3-13

REVISION DATE: 3-14-14

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ALLEGION™

TITLE: REMOTE 621AA PB WITH SINGLE ALLEGION EL PANICS

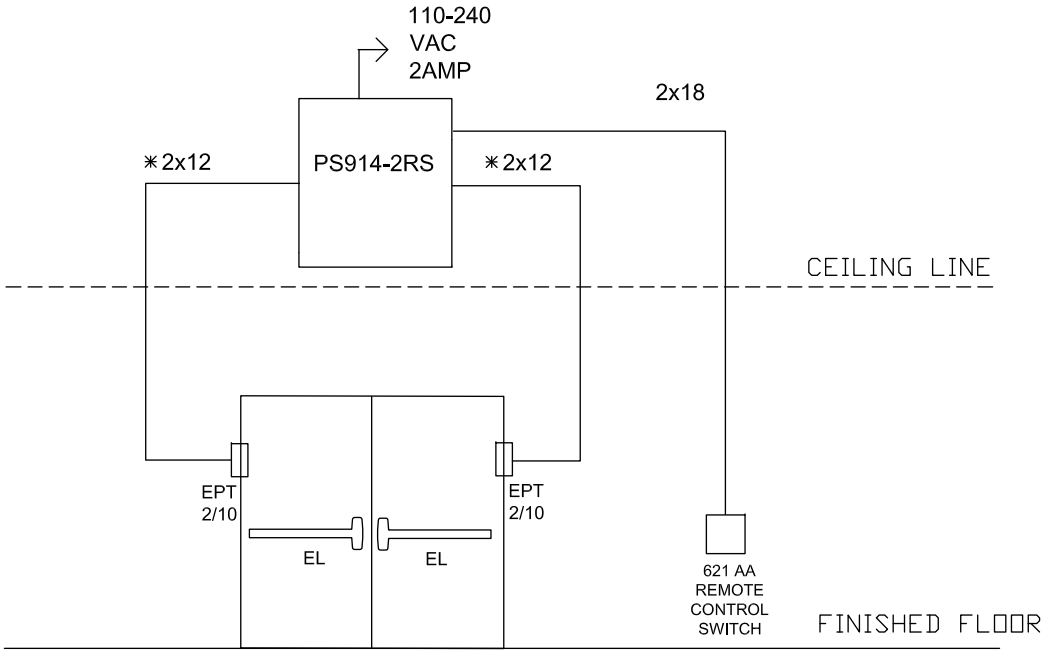
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109550

DRAWN/CHECKED BY: B DOVE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

SET PS914 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

2 VON DUPRIN OR FALCON EL PANIC DEVICES

1 PS914-2RS POWER SUPPLY

2 EPT POWER TRANSFERS

1 621 AA REMOTE CONTROL PUSH BUTTON

TYPE

REMOTE 621AA PB WITH PAIR ALLEGION EL DEVICES

OPERATION:
REMOTE CONTROL 621 AA PB TO SIGNAL PAIR EL ELECTRIC PANIC BAR TO RETRACT FOR ENTRY.

THIS CONFIGURATION REPRESENTS A NON FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 5-3-13

REVISION DATE: 3-14-14

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ALLEGION™

TITLE: REMOTE 621AA PB WITH PAIR ALLEGION EL PANICS

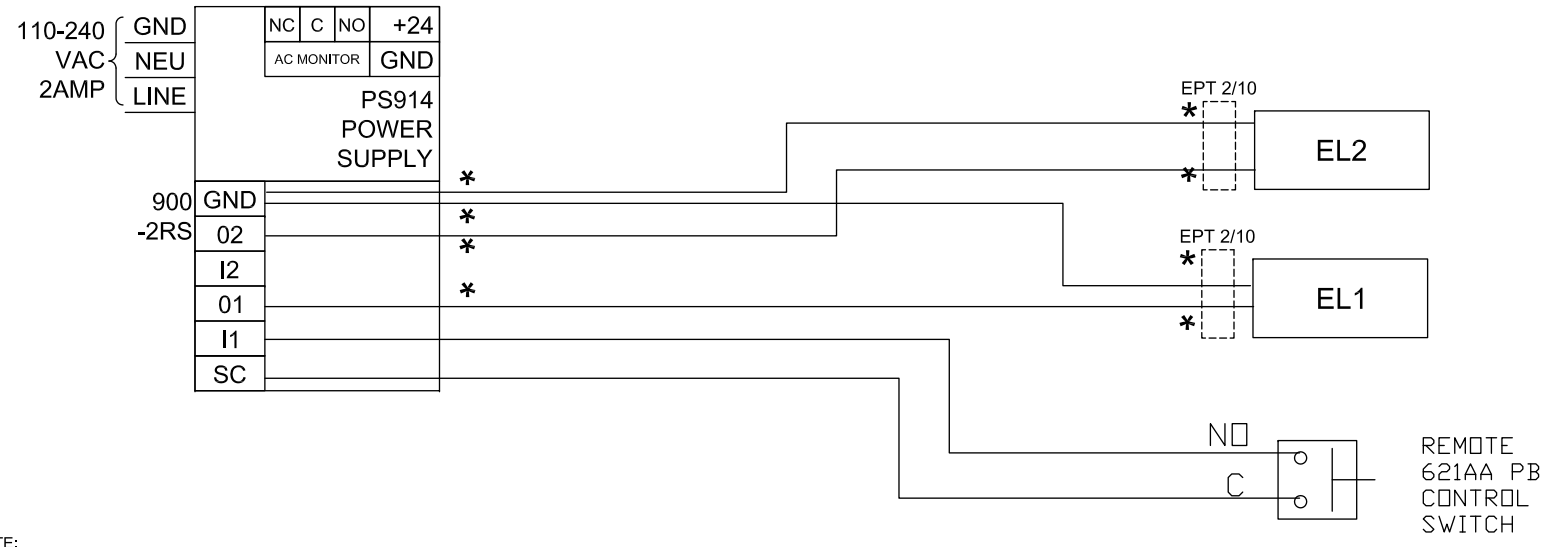
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109551

DRAWN/CHECKED BY: B DOVE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

SET PS914 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
2 VON DUPRIN OR FALCON FIRE RATED EL PANIC DEVICES

1 PS914-2RS POWER SUPPLY

2 EPT POWER TRANSFERS

621 AA REMOTE CONTROL SWITCH

TYPE REMOTE 621AA PB WITH PAIR NON FIRE RATED ALLEGION EL DEVICES

OPERATION:
REMOTE CONTROL 621AA PB TO SIGNAL PAIR ELECTRIC PANIC BARS TO RETRACT FOR ENTRY.

THIS EXAMPLE IS A NON FIRE RATED APPLICATION.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 5-3-13
REVISION DATE: 3-14-14

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ALLEGION™

TITLE: REMOTE 621AA PB WITH PAIR NON FIRE RATED ALLEGION EL PANICS

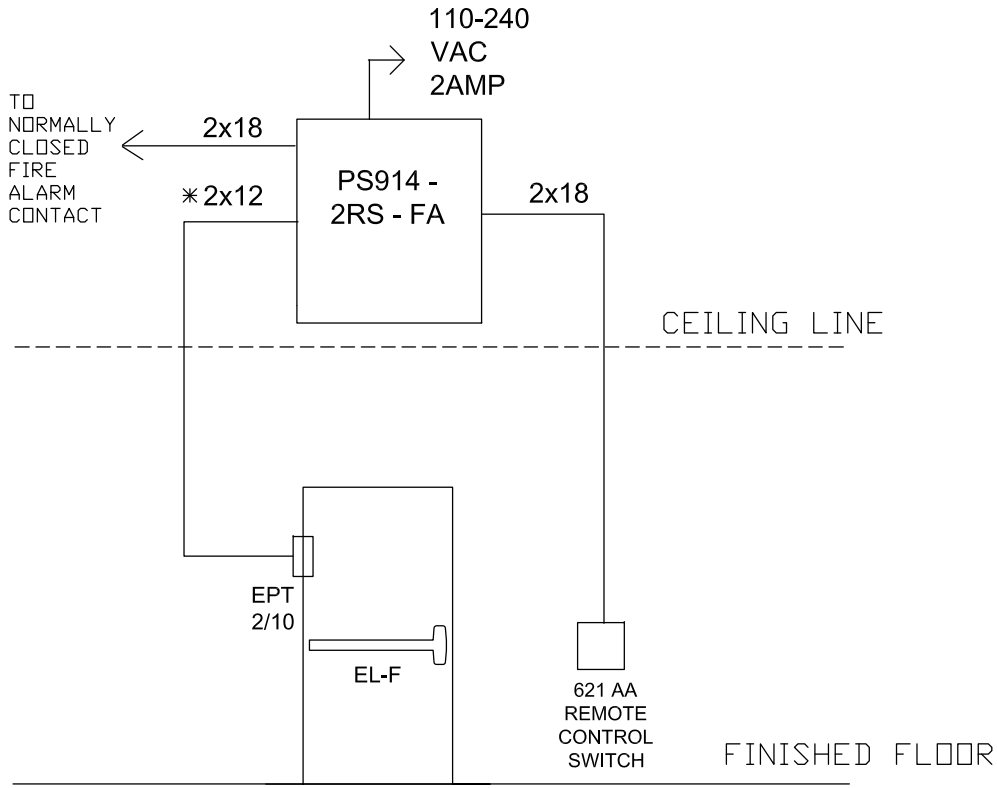
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109551

DRAWN/CHECKED BY: B DOVE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

SETP PS914 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 VON DUPRIN OR FALCON FIRE RATED EL PANIC DEVICES

1 PS914-2RS POWER SUPPLY

1 EPT POWER TRANSFERS

1 621 AA REMOTE CONTROL PUSH BUTTON

1 FIRE ALARM CONTACT

TYPE REMOTE 621AA PB WITH SINGLE FIRE RATED EL DEVICES

OPERATION:
REMOTE CONTROL 621 AA PB TO SIGNAL SINGLE EL ELECTRIC PANIC BAR TO RETRACT FOR ENTRY.

RELEASING 621 AA PUSH BUTTON OR FIRE ALARM TO CAUSE EL LATCHES TO EXTEND.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 5-3-13 | REVISION DATE: 5-3-13

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ALLEGION™

TITLE: REMOTE 621AA PB WITH SINGLE FIRE RATED EL PANICS

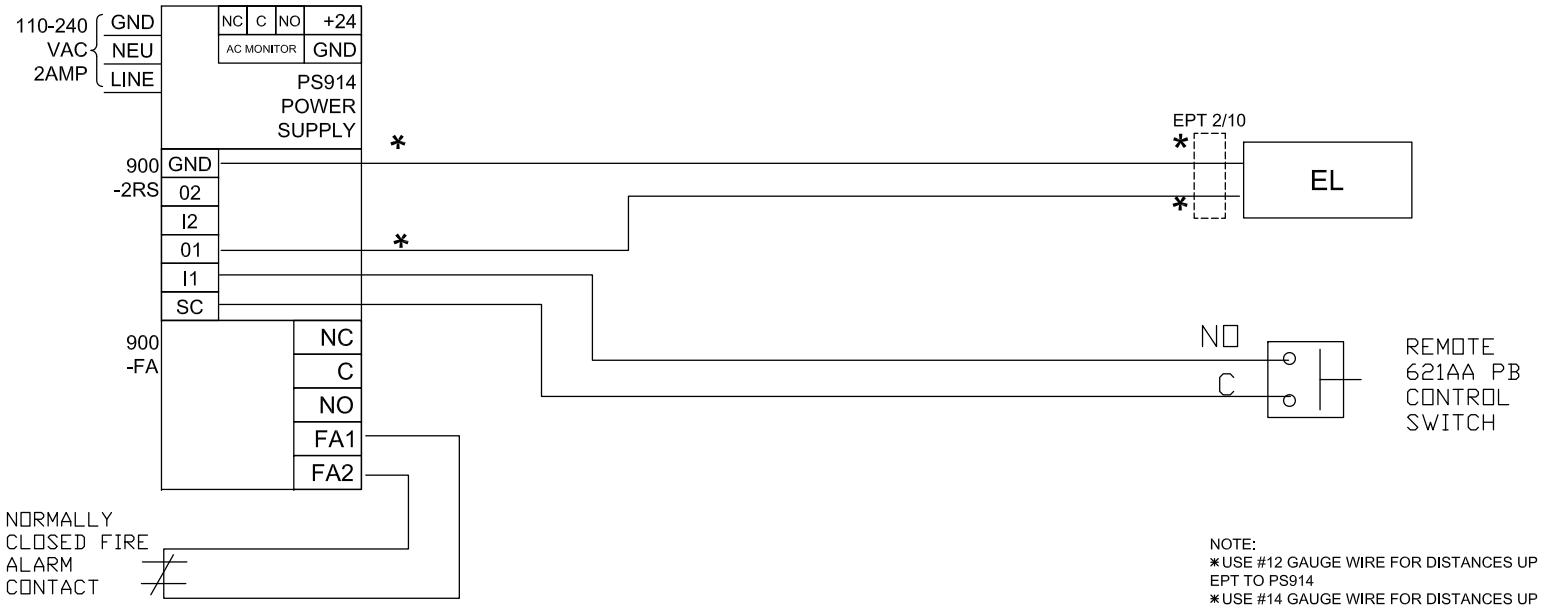
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109552

DRAWN/CHECKED BY: B DOVE

REV A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
* USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
* USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

SET PS914 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 VON DUPRIN OR FALCON FIRE RATED EL PANIC DEVICES

1 PS914-2RS POWER SUPPLY

1 EPT POWER TRANSFERS

621 AA REMOTE CONTROL SWITCH

1 FIRE ALARM CONTACT

TYPE REMOTE 621AA PB WITH SINGLE FIRE RATED EL DEVICES

OPERATION:
REMOTE CONTROL 621AA PB TO SIGNAL SINGLE ELECTRIC PANIC BARS TO RETRACT FOR ENTRY.

RELEASING 621AA PUSH BUTTON OR FIRE ALARM TO CAUSE EL LATCHES TO EXTEND.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 5-3-13

REVISION DATE: 5-3-13

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ALLEGION™

TITLE: REMOTE 621AA PB WITH SINGLE FIRE RATED EL PANICS

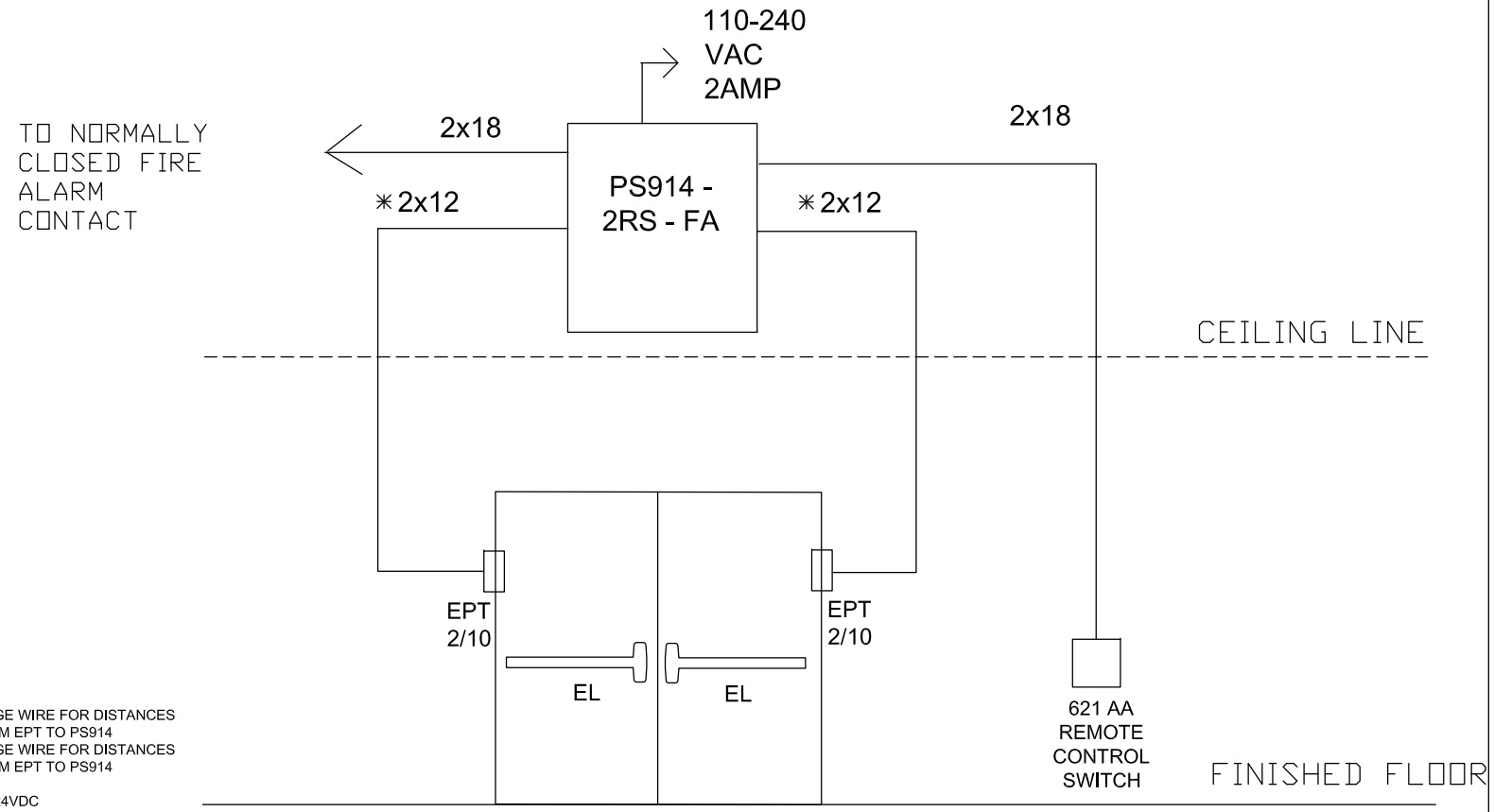
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109552

DRAWN/CHECKED BY: B DOVE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

SET PS914 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
2 VON DUPRIN OR FALCON FIRE RATED EL PANIC DEVICES

1 PS914-2RS-FA POWER SUPPLY

2 EPT POWER TRANSFERS

1 621 AA REMOTE CONTROL PUSH BUTTON

1 FIRE ALARM CONTACT

TYPE REMOTE 621AA PB WITH PAIR FIRE RATED EL DEVICES

OPERATION:
REMOTE CONTROL 621 AA PB TO SIGNAL PAIR FIRE RATED EL ELECTRIC PANIC BAR TO RETRACT FOR ENTRY.

RELEASING 621AA PUSH BUTTON OR FIRE ALARM WILL CAUSE EL LATCHES TO EXTEND.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 5-3-13

REVISION DATE 5-3-13

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ALLEGION™

TITLE: REMOTE 621AA PB WITH PAIR FIRE RATED EL PANICS

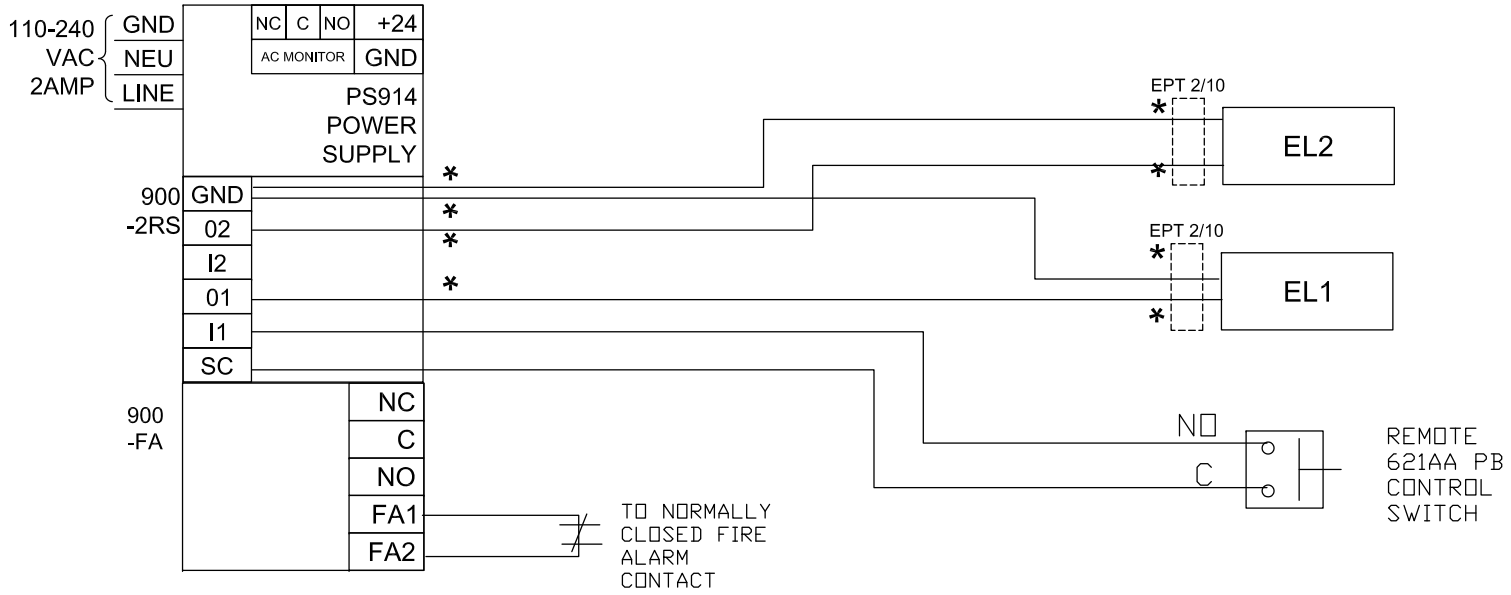
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109553

REV A

DRAWN/CHECKED BY: B DOVE

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

SET PS914 TO 24VDC

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
2 VON DUPRIN OR FALCON FIRE RATED EL PANIC DEVICES

1 PS914-2RS-FA POWER SUPPLY

2 EPT POWER TRANSFERS

621 AA REMOTE CONTROL SWITCH

1 FIRE ALARM CONTACT

TYPE REMOTE 621AA PB WITH PAIR FIRE RATED EL DEVICES

OPERATION:
REMOTE CONTROL 621AA PB TO SIGNAL PAIR FIRE RATED ELECTRIC PANIC BARS TO RETRACT FOR ENTRY.

RELEASING 621AA PUSH BUTTON OR FIRE ALARM TO CAUSE EL LATCHES TO EXTEND.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 5-3-13
REVISION DATE 5-3-13

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ALLEGION™

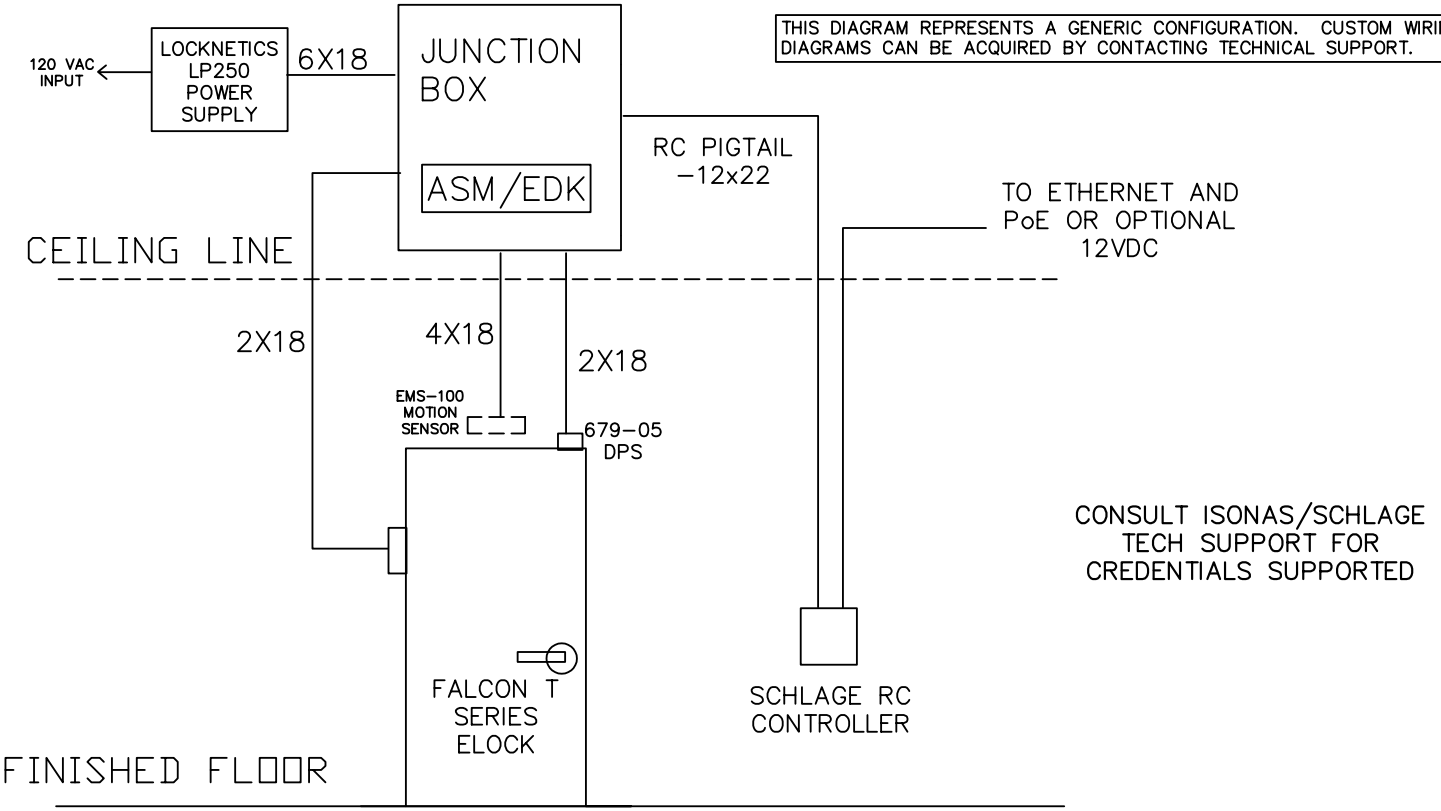
TITLE: REMOTE 621AA PB WITH PAIR FIRE RATED EL PANICS

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109553

DRAWN/CHECKED BY: B DOVE

REV A



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
FALCON T SERIES ELOCK
LOCKNETICS EMS-100 MOTION SENSOR
SCHLAGE 679-05 DPS
LOCKNETICS LP250 POWER SUPPLY
JUNCTION BOX

OPERATION:.
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL TO UNLOCK ELOCK OR KEY OVERRIDE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-15-20

REVISION DATE: 3-2-22

ALLEGION™

SCHLAGE RC CONTROLLER, ELOCK, DPS, MOTION SENSOR, LP250 PS - SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

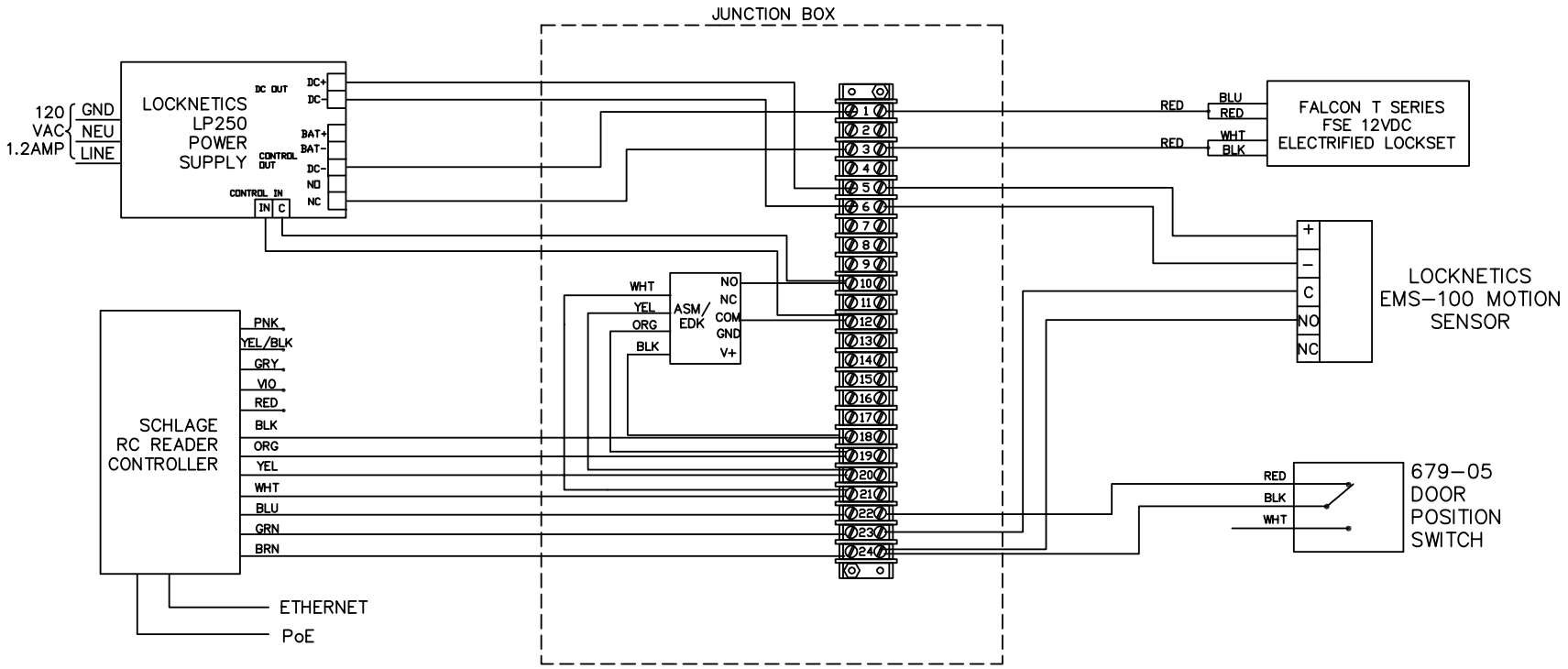
DWG NO: 113738R

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

REV B

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

CONSULT ISONAS/SCHLAGE TECH SUPPORT FOR CREDENTIALS SUPPORTED



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
FALCON T SERIES ELOCK
LOCKNETICS EMS-100 MOTION SENSOR
SCHLAGE 679-05 DPS
LOCKNETICS LP250 POWER SUPPLY
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL TO UNLOCK ELOCK OR KEY OVERRIDE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-15-20

REVISION DATE: 3-2-22

ALLEGION™

SCHLAGE RC CONTROLLER, ELOCK, DPS, MOTION SENSOR, LP250 PS - SINGLE DOOR

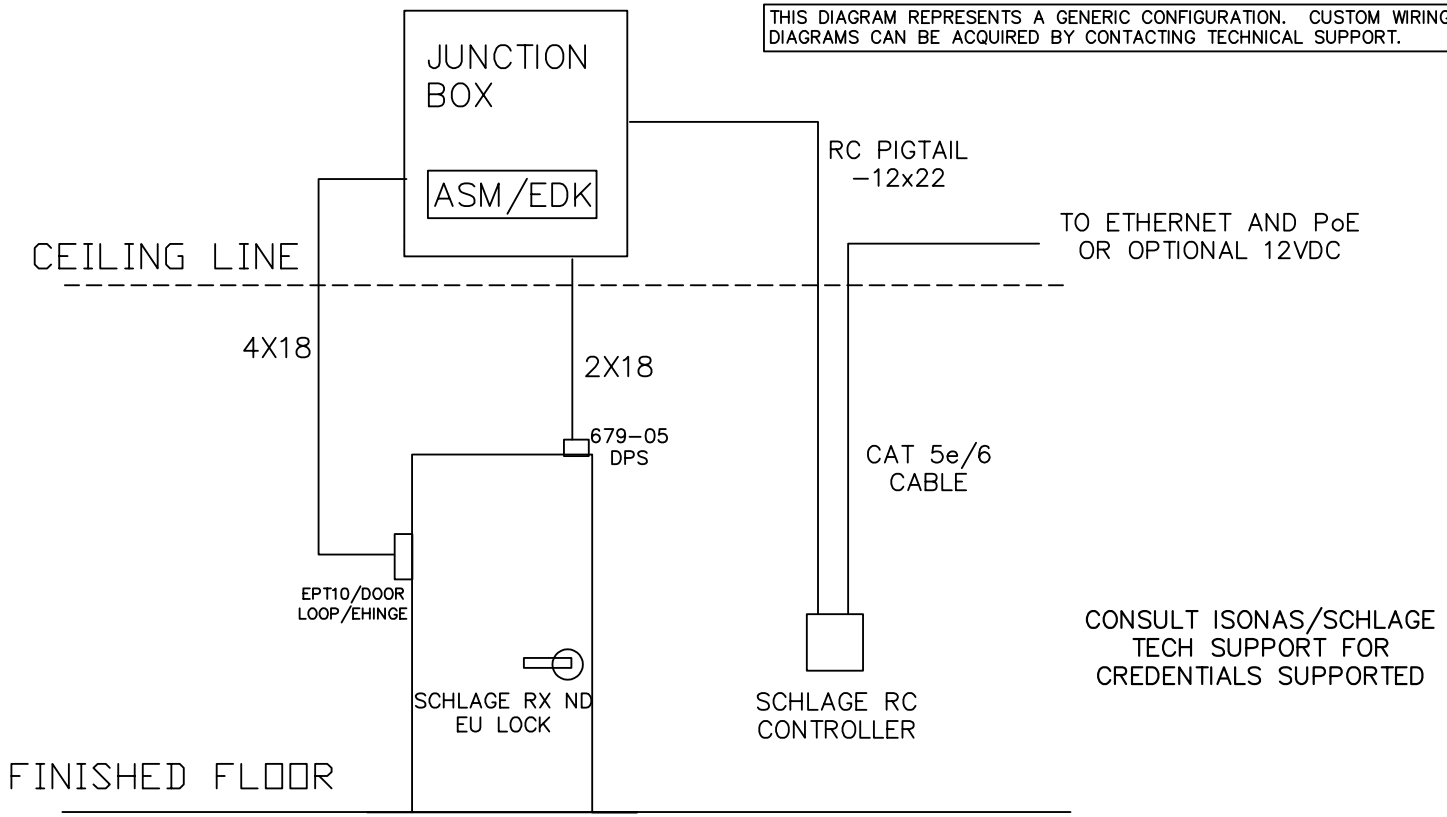
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113738W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
SCHLAGE RX ND EU LOCK
SCHLAGE 679-05 DPS
EPT10/DOOR LOOP/EHINGE
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL TO UNLOCK ELOCK OR KEY OVERRIDE.

RX SWITCH IN RX ND E LOCK TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

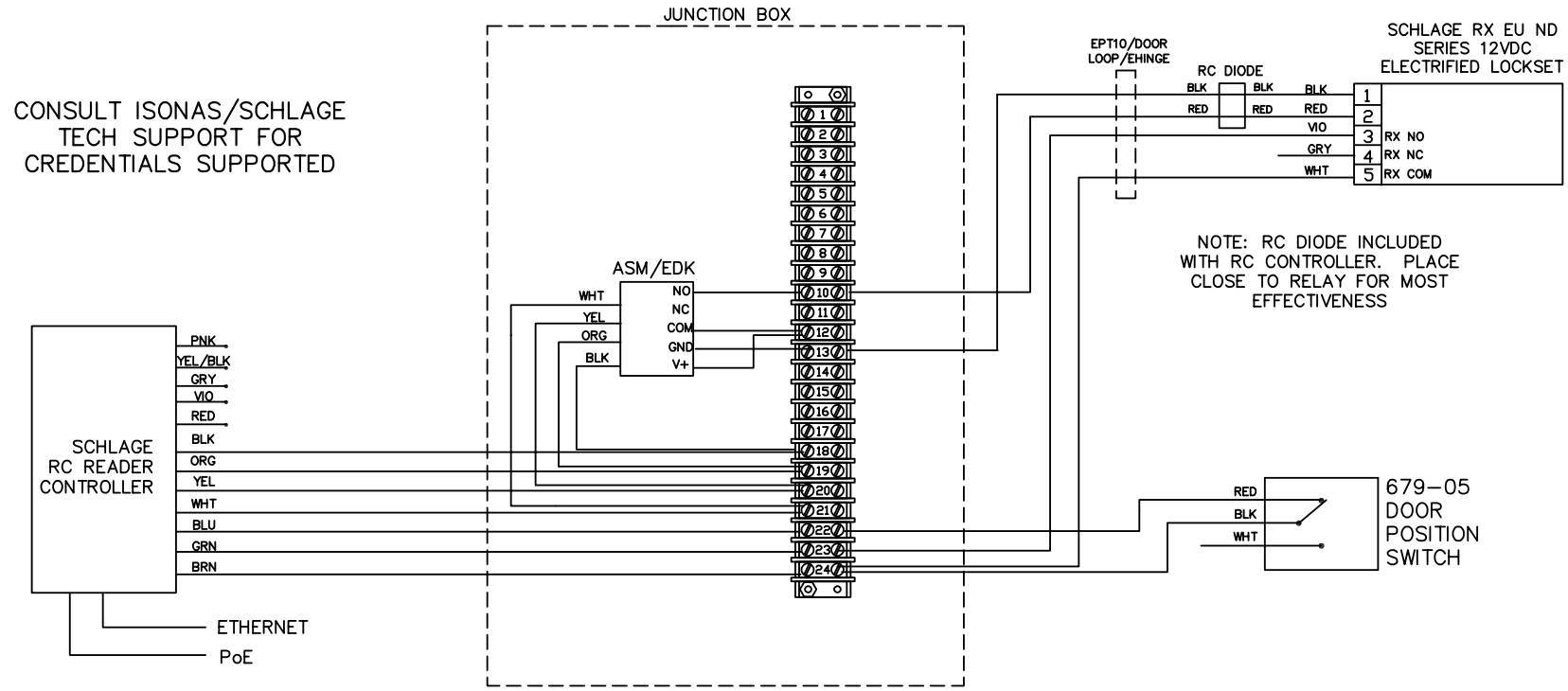
DATE DRAWN: 10-16-20
REVISION DATE: 3-3-22

ALLEGION™

SCHLAGE RC CONTROLLER, RX ND EU ELOCK, 679-05 DPS - SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM
DWG NO: 113739R
DRAWN/CHECKED BY: DOVE/TAMARCHENKO
REV: B

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
SCHLAGE RX ND EU LOCK
SCHLAGE 679-05 DPS
EPT10/DOOR LOOP/EHINGE
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL TO UNLOCK ELOCK OR KEY OVERRIDE.

RX SWITCH IN RX ND E LOCK TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-16-20

REVISION DATE: 3-3-22

ALLEGION™

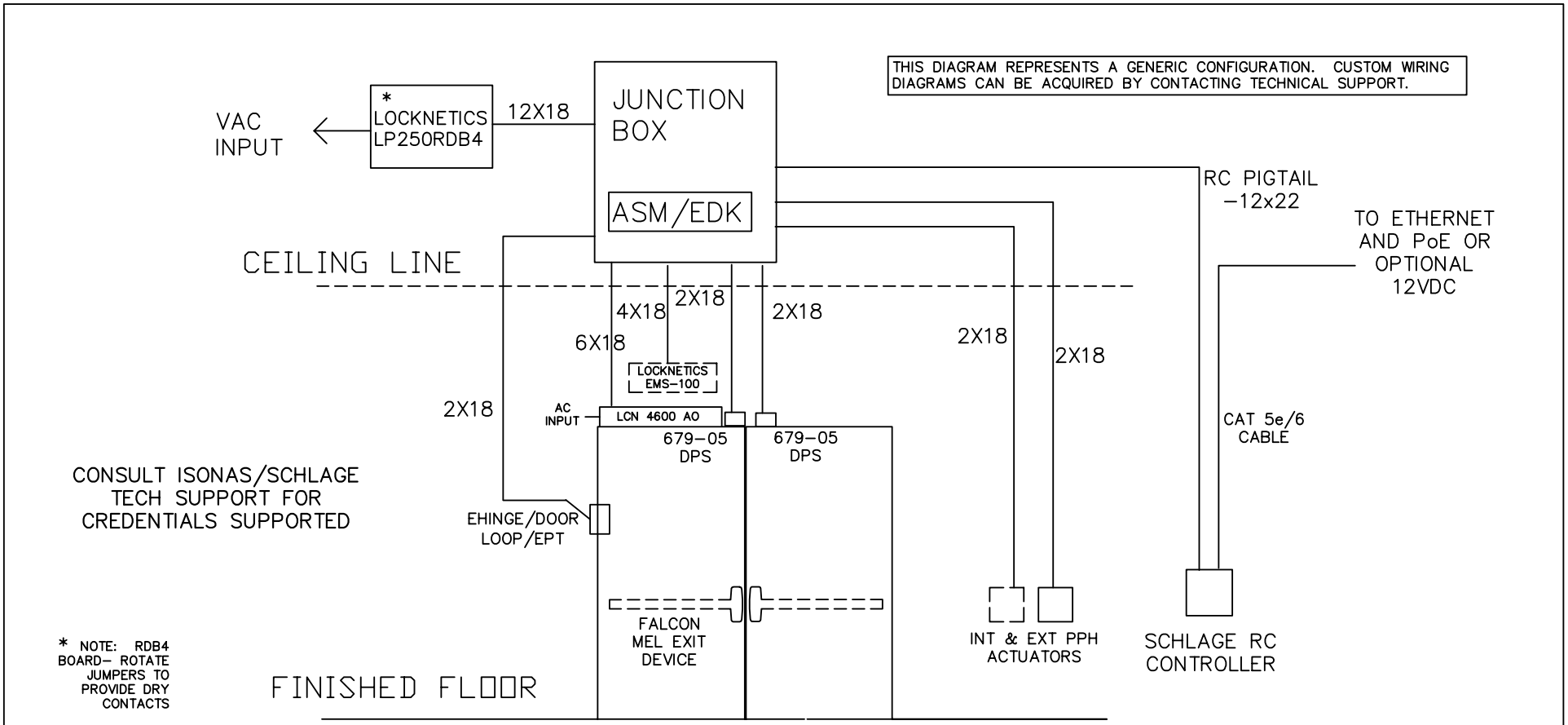
SCHLAGE RC CONTROLLER, RX ND EU ELOCK, 679-05 DPS - SINGLE DOOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113739W

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

REV: B



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS EMS-100 MOTION SENSOR
- 1 FALCON MEL 24/25 EXIT DEVICES
- 2 DOOR LOOP OR EHINGE OR EPT
- LCN 4600 AO
- 2 LOCKNETICS PPH ACTUATORS
- LOCKNETICS LP250RDB4
- 2 679-05 DPS
- 1 12VDC DPDT RELAY
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS MEL LATCH RETRACTION ON RHR LEAF PANIC DEVICE AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE.

EMS-100 MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 09-09-20

REVISION DATE: 3-2-22

ALLEGION™

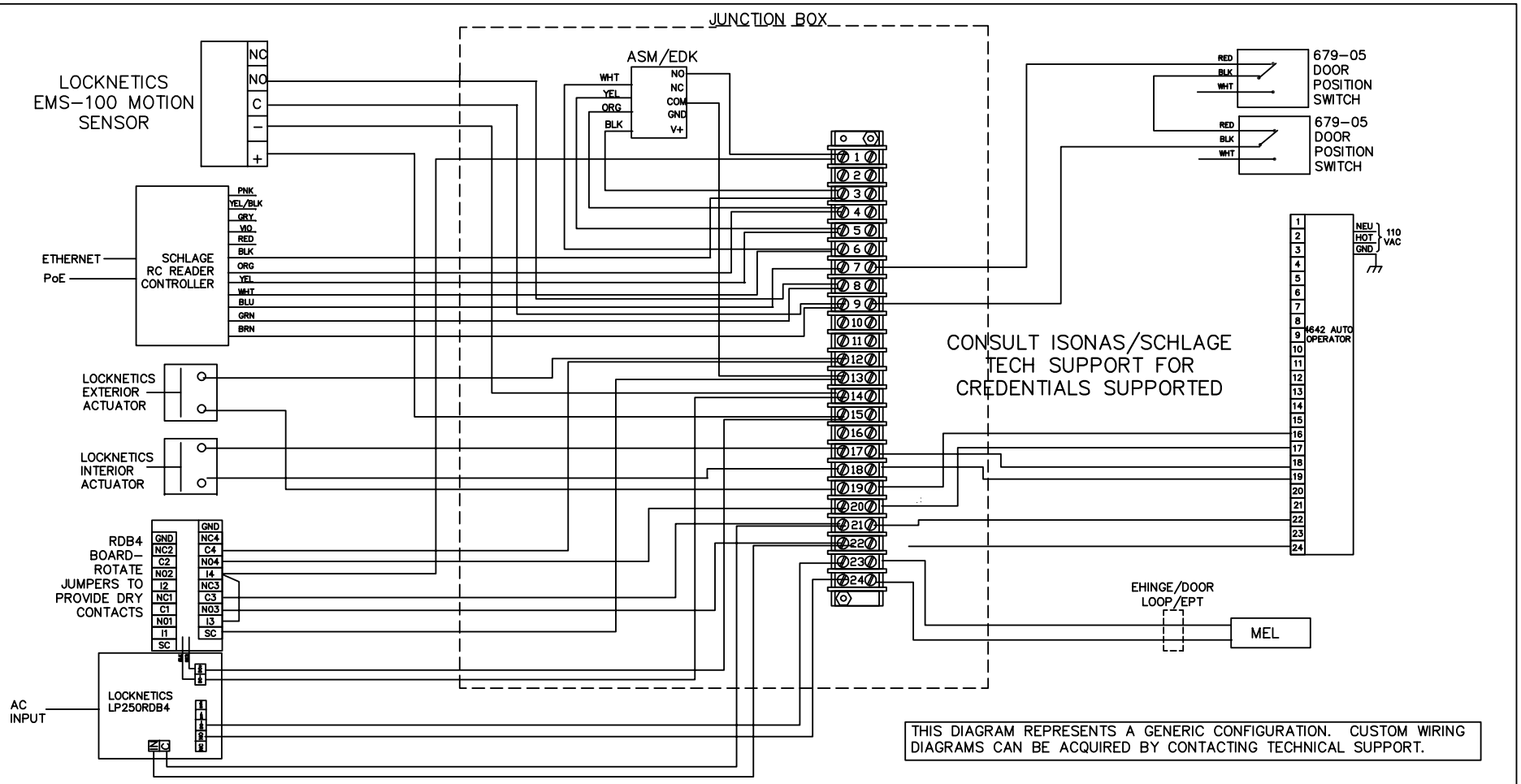
TITLE:
SCHLAGE RC CONTROLLER WITH MEL, AO, MOTION SENSOR, DPS PAIR OF DOORS

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113740R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS EMS-100 MOTION SENSOR
- 1 FALCON MEL 24/25 EXIT DEVICES
- 2 DOOR LOOP OR EHINGE OR EPT
- LCN 4600 AO
- 2 LOCKNETICS PPH ACTUATORS
- LOCKNETICS LP250RDB4
- 2 679-05 DPS
- 1 12VDC DPDT RELAY
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS MEL LATCH RETRACTION ON RHR LEAF PANIC DEVICE AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE.

EMS-100 MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 09-09-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE:
SCHLAGE RC CONTROLLER WITH MEL, AO, MOTION SENSOR, DPS PAIR OF DOORS

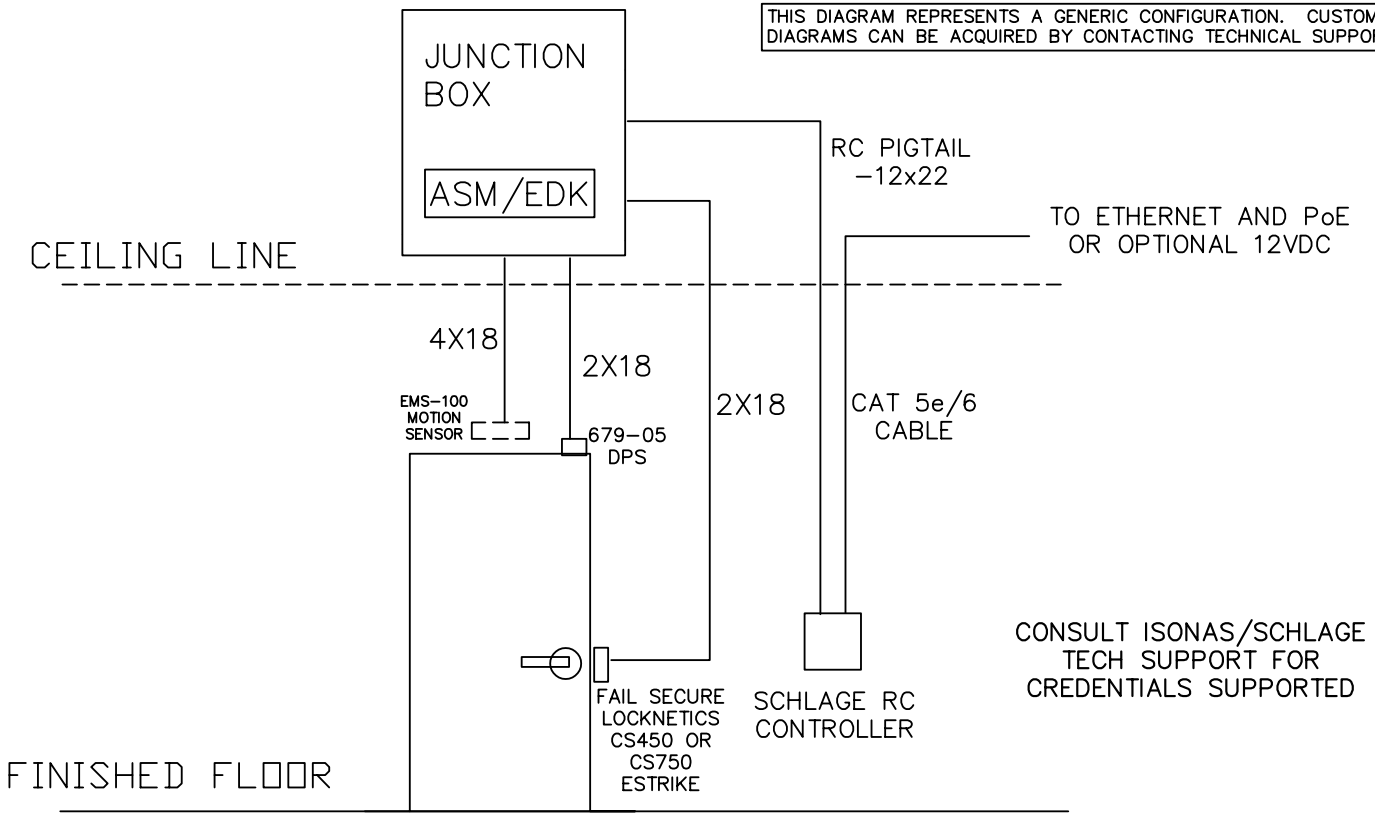
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113740W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS CS 450-750 STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE

MOTION SENSOR TO SHUNT DOOR FORCED ALARM

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-08-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH ESTRIKE-SINGLE DOOR

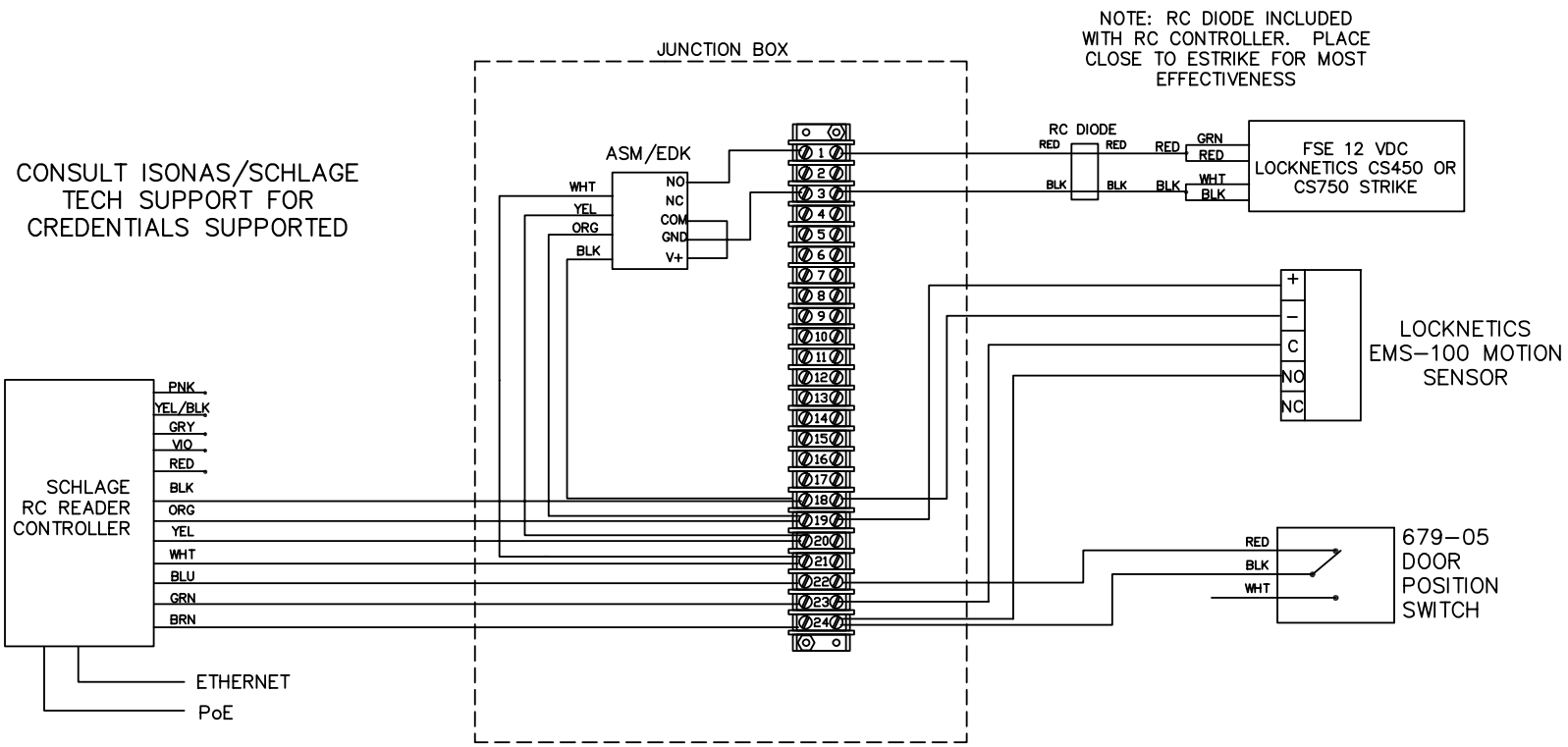
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113749R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS CS 450-750 STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE

MOTION SENSOR TO SHUNT DOOR FORCED ALARM

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-08-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH ESTRIKE-SINGLE DOOR

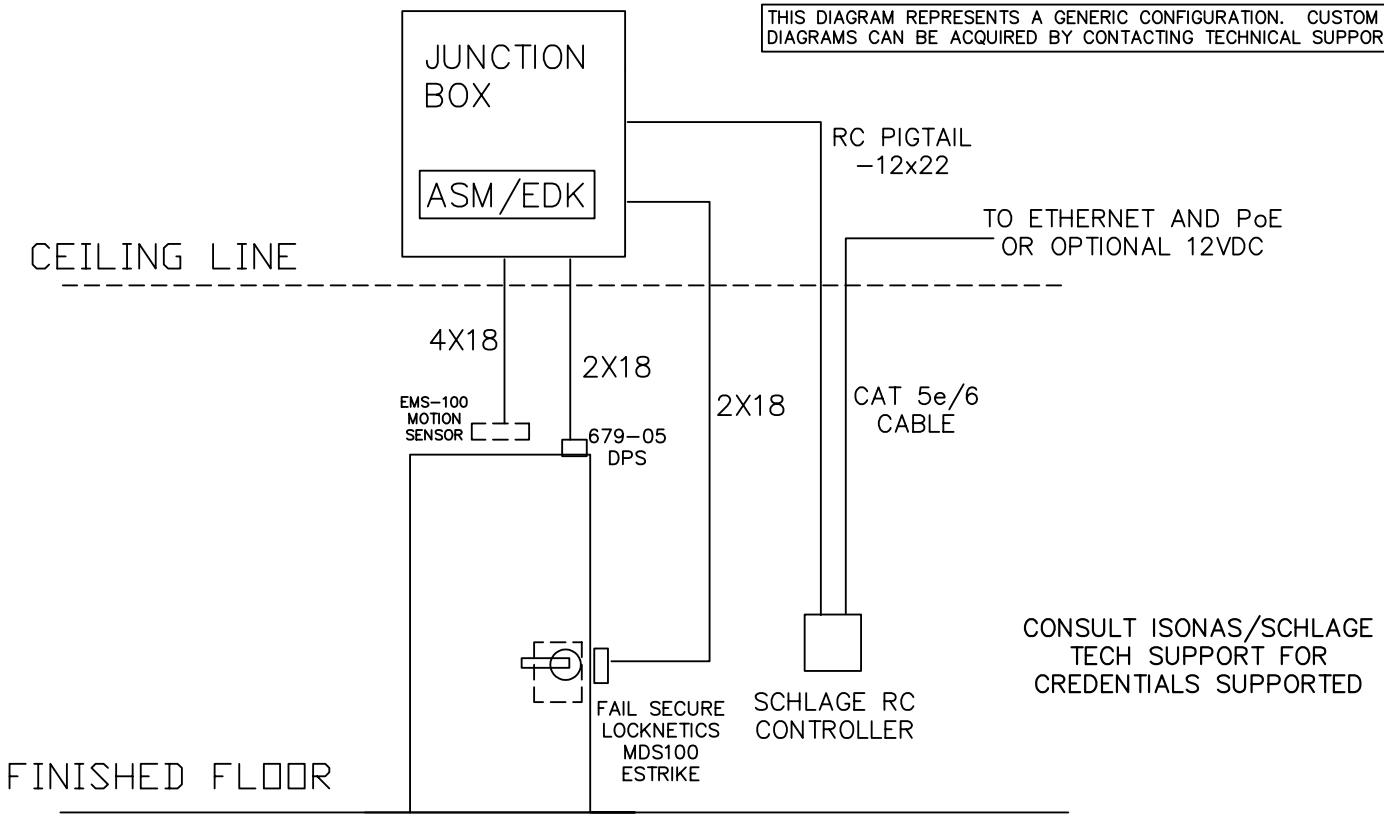
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113749W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS MDS100 STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE

MOTION SENSOR TO SHUNT DOOR FORCED ALARM

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-08-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH ESTRIKE-SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

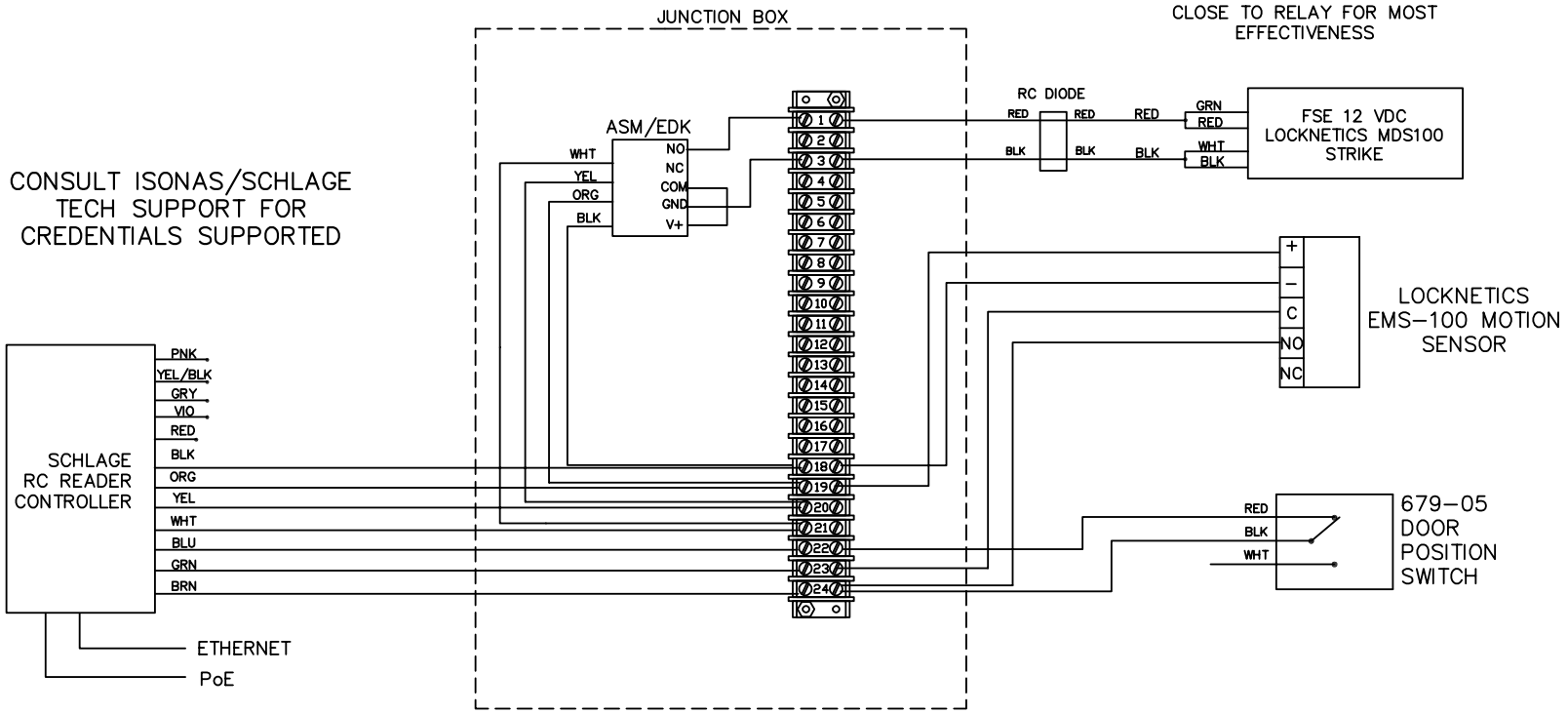
DWG NO: 113750R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTE: RC DIODE INCLUDED WITH RC CONTROLLER. PLACE CLOSE TO RELAY FOR MOST EFFECTIVENESS



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS MDS100 STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE

MOTION SENSOR TO SHUNT DOOR FORCED ALARM

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-08-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH ESTRIKE-SINGLE DOOR

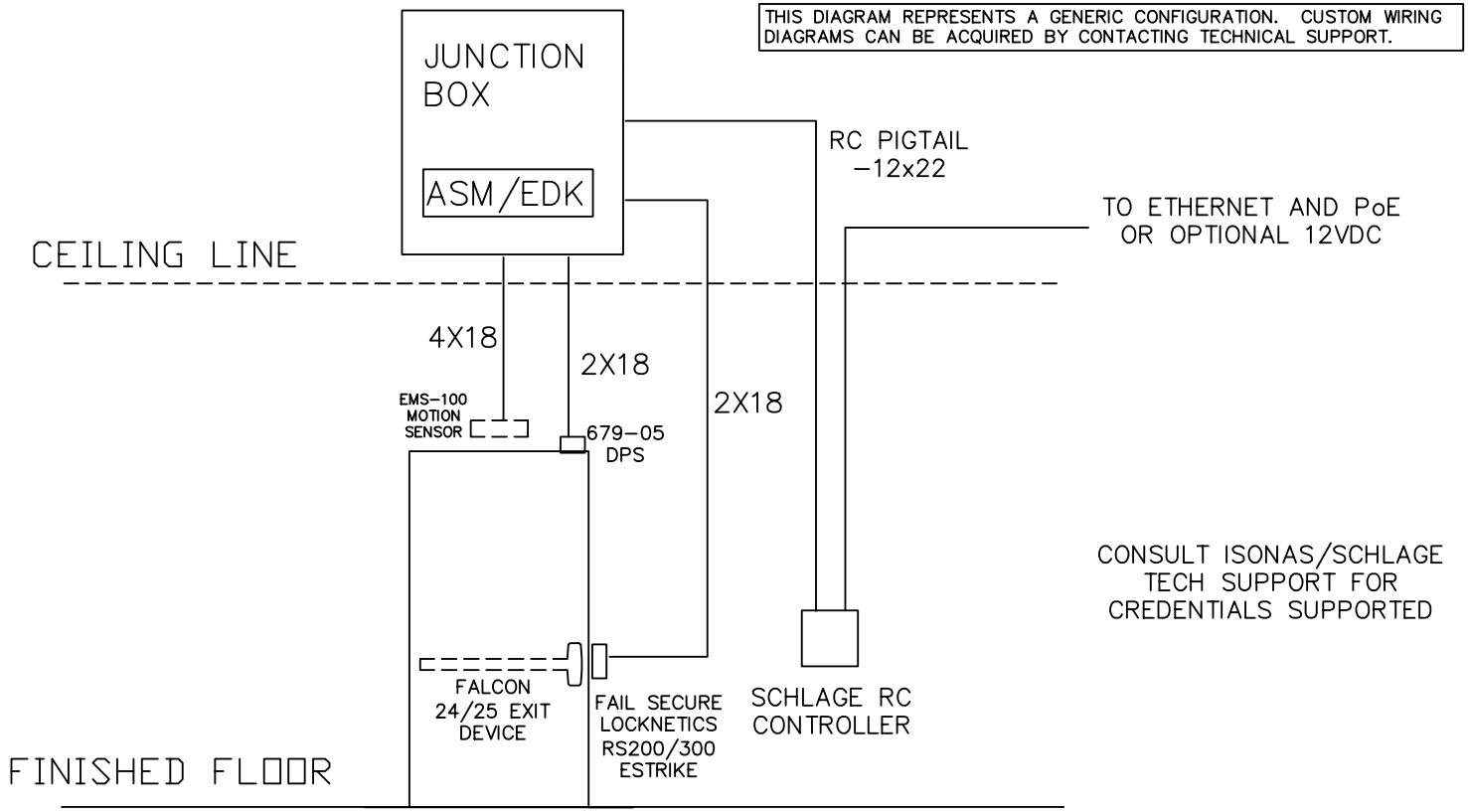
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113750W

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

REV: B

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS RS200-RS300 STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-14-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH ESTRIKE RIM PANIC-SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113751R

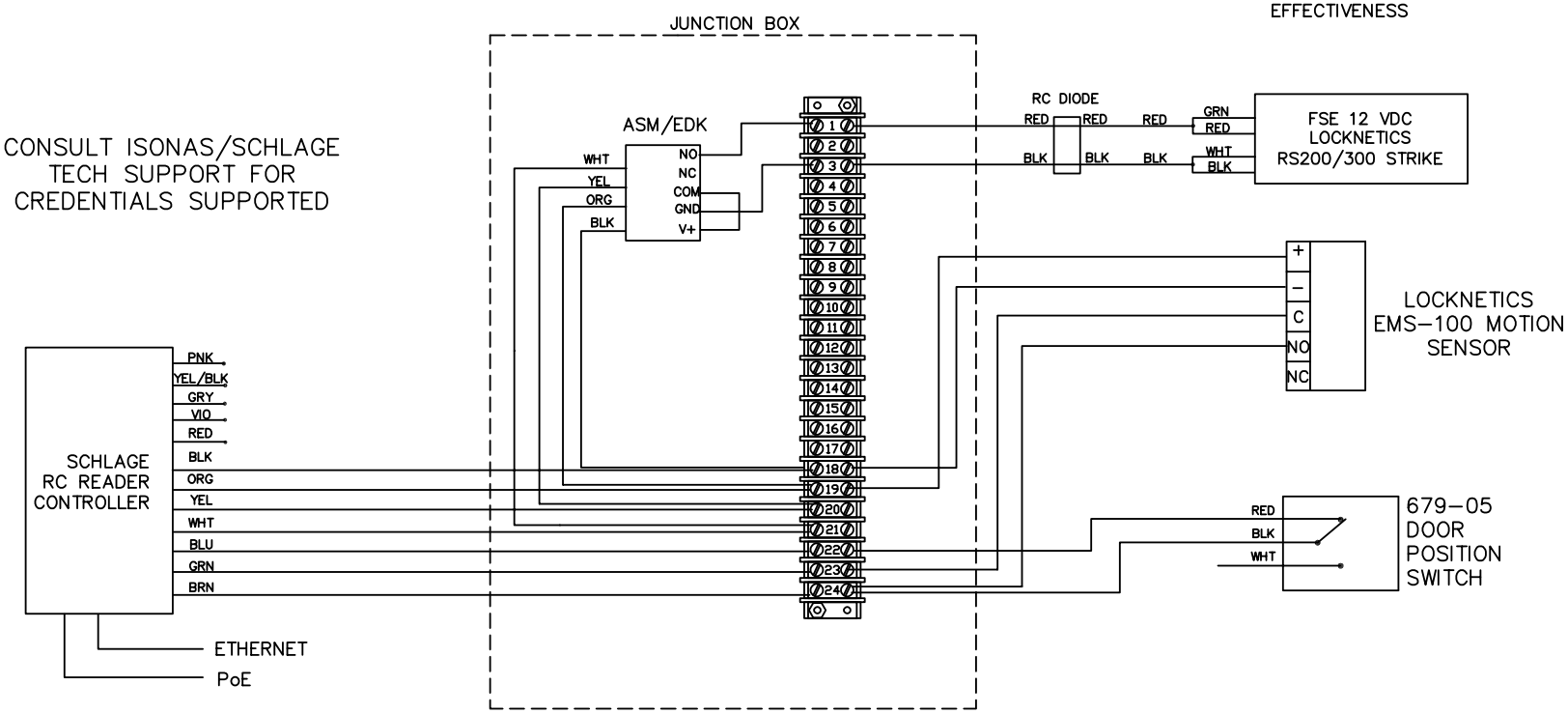
REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTE: RC DIODE INCLUDED WITH RC CONTROLLER. PLACE CLOSE TO RELAY FOR MOST EFFECTIVENESS

CONSULT ISONAS/SCHLAGE TECH SUPPORT FOR CREDENTIALS SUPPORTED



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS RS200-RS300 STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-14-20

REVISION DATE: 3-3-22

ALLEGION™

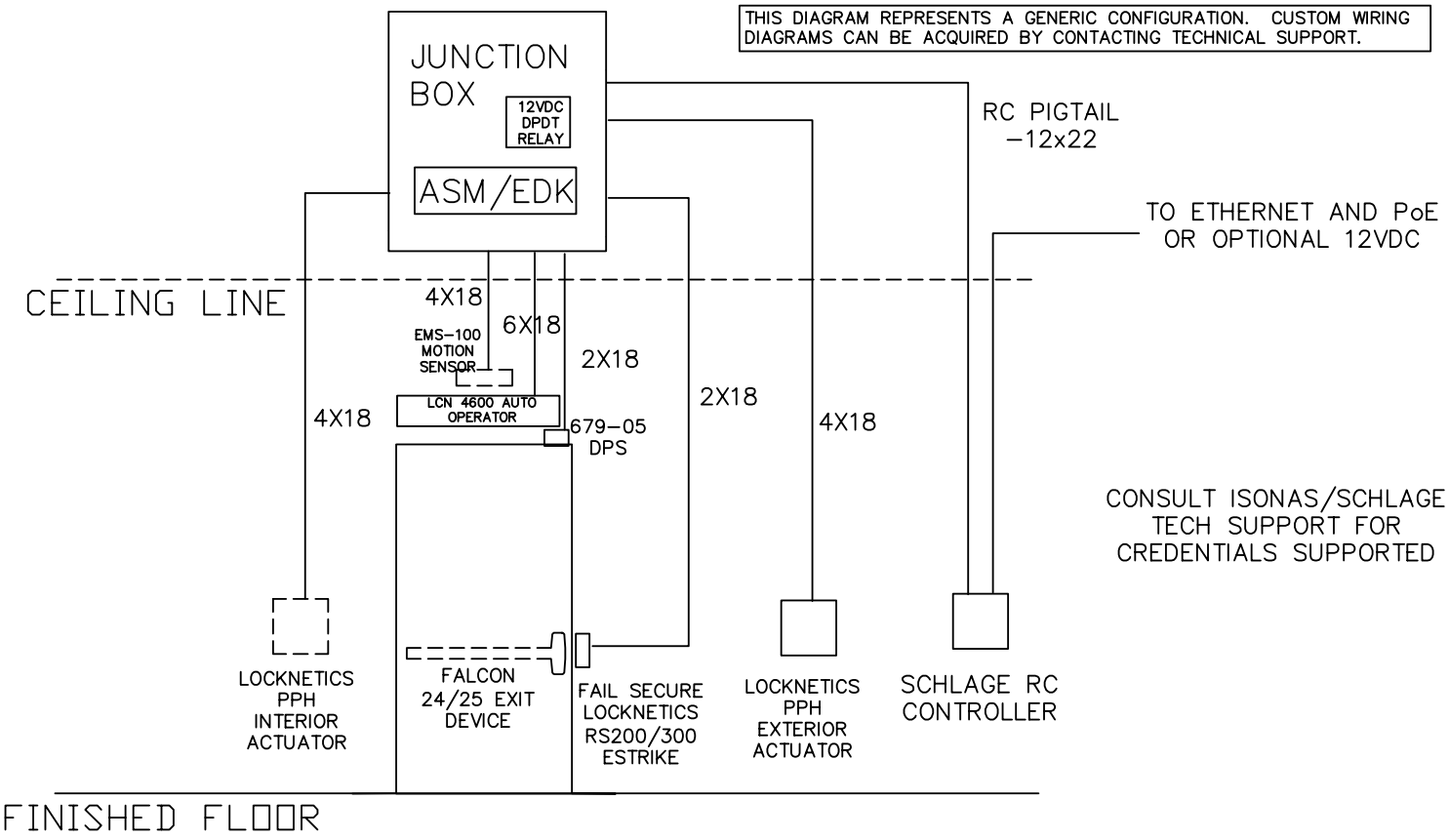
TITLE: SCHLAGE RC CONTROLLER WITH ESTRIKE RIM PANIC-SINGLE DOOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113751W

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

REV: B



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS RS200/300 ESTRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- 12 VDC DPDT RELAY
- LCN 4600 AUTO OPERATOR
- 2 LOCKNETICS PPH ACUTUATORS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE AND WILL ENABLE EXTERIOR ACTUATOR TO OPEN DOOR VIA AUTO OPERATOR.

INTERIOR ACTUATOR ALWAYS ACTIVE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-15-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER, ESTRIKE AO, DPS, MOTION SENSOR, SINGLE DOOR

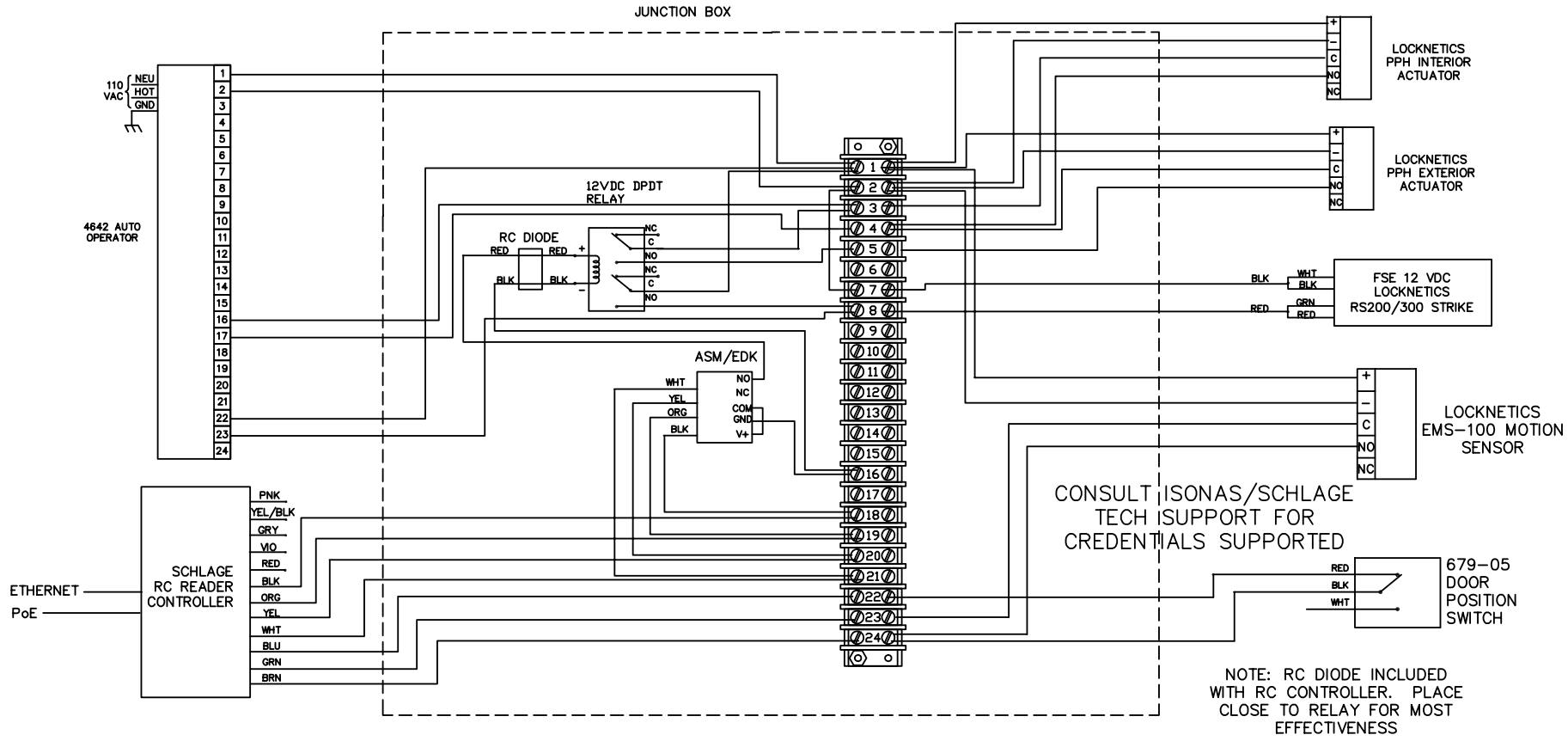
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113752R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
LOCKNETICS RS200/300 ESTRIKE
LOCKNETICS EMS-100 MOTION SENSOR
SCHLAGE 679-05 DPS
12 VDC DPDT RELAY
LCN 4600 AUTO OPERATOR
2 LOCKNETICS PPH ACUTUATORS
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE AND WILL ENABLE EXTERIOR ACTUATOR TO OPEN DOOR VIA AUTO OPERATOR.

INTERIOR ACTUATOR ALWAYS ACTIVE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-15-20

REVISION DATE: 3-3-22

ALLEGION™

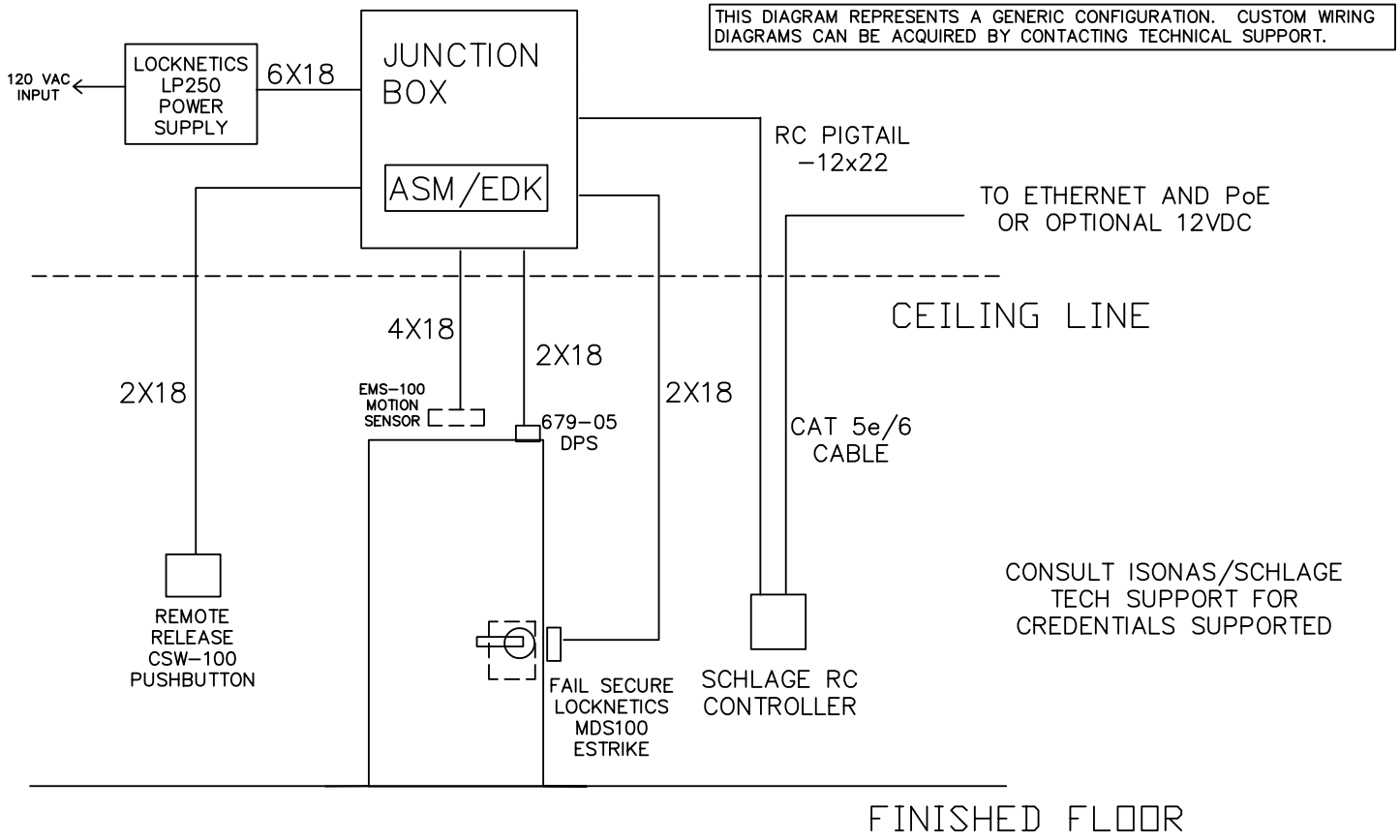
TITLE: SCHLAGE RC CONTROLLER, ESTRIKE AD, DPS, MOTION SENSOR, SINGLE DOOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113752W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS MDS100 STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- LOCKNETICS CSW100 REMOTE RELEASE
- LOCKNETICS LP250 POWER SUPPLY
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE.

REMOTE RELEASE VIA CSW100 PUSHBUTTON.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM .

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-15-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER, ESTRIKE, REMOTE RELEASE MOTION SENSOR, DPS-SINGLE DOOR

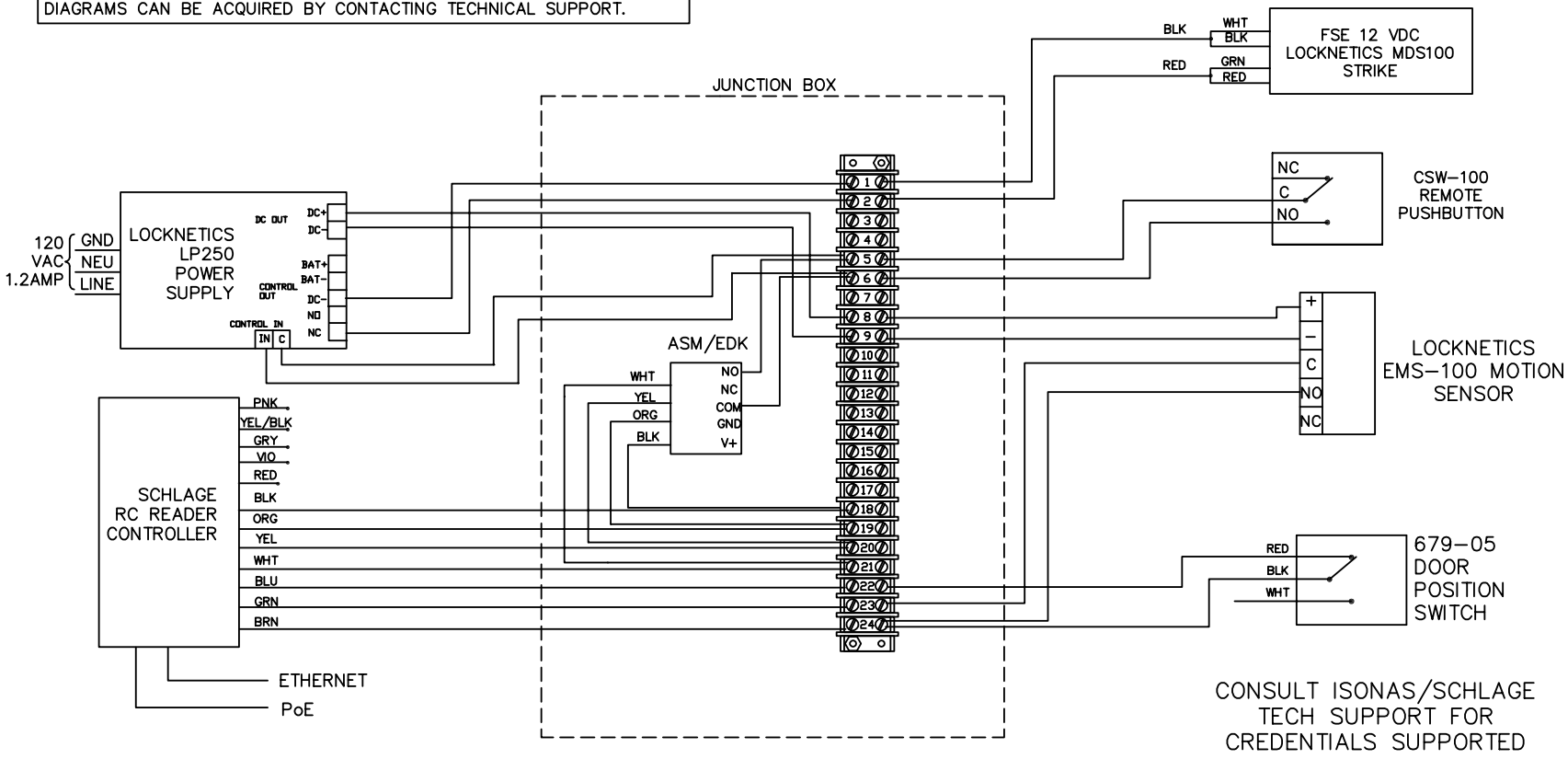
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113753R

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

REV: B

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS MDS100 STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- LOCKNETICS CSW100 REMOTE RELEASE
- LOCKNETICS LP250 POWER SUPPLY
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE.

REMOTE RELEASE VIA CSW100 PUSHBUTTON.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-15-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER, ESTRIKE, REMOTE RELEASE MOTION SENSOR, DPS-SINGLE DOOR

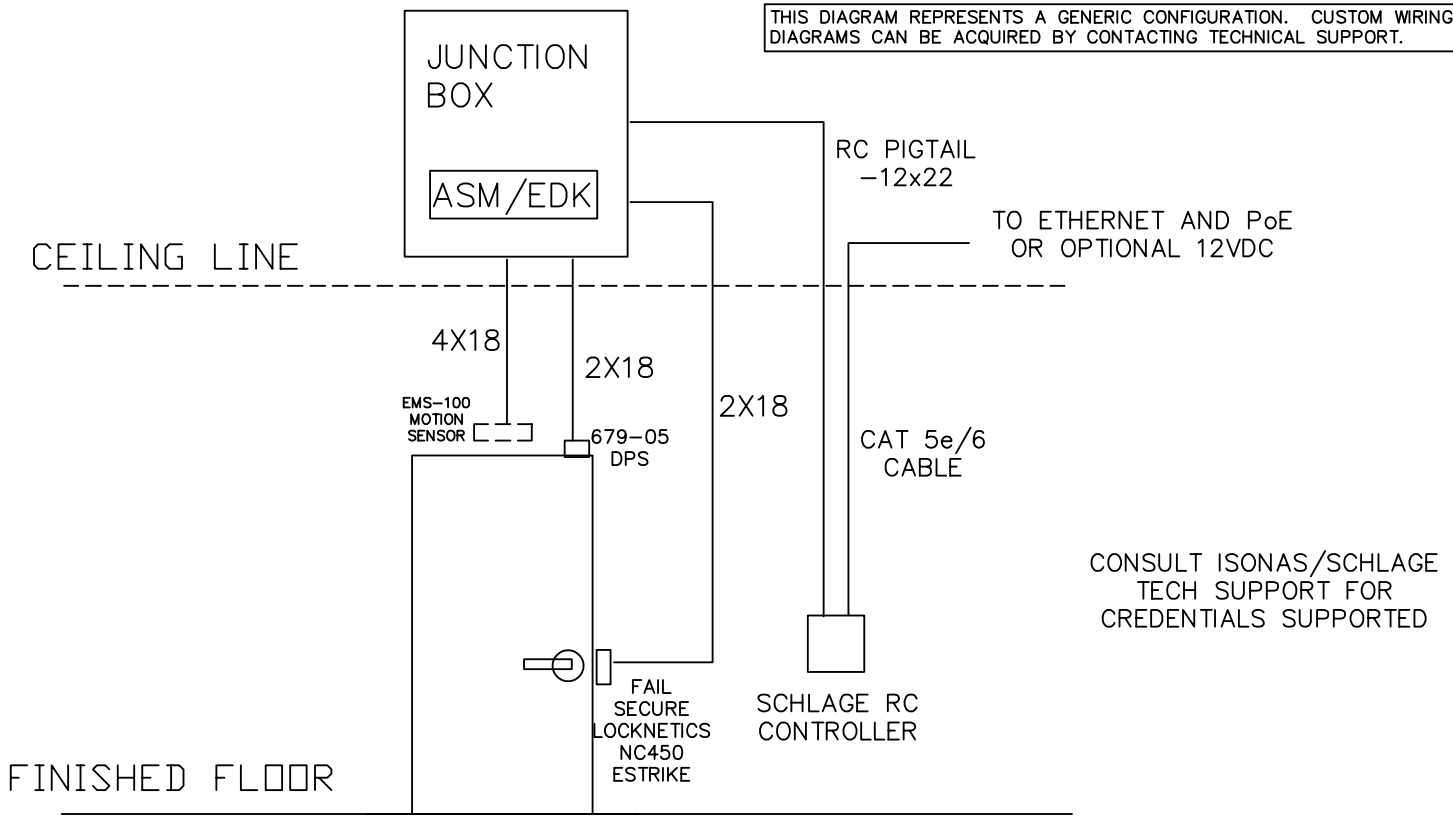
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113753W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS NC450 NO CUT STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE

MOTION SENSOR TO SHUNT DOOR FORCED ALARM

FREE EGRESS AT ALL TIMES

DATE DRAWN: 09-04-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH ESTRIKE-SINGLE DOOR

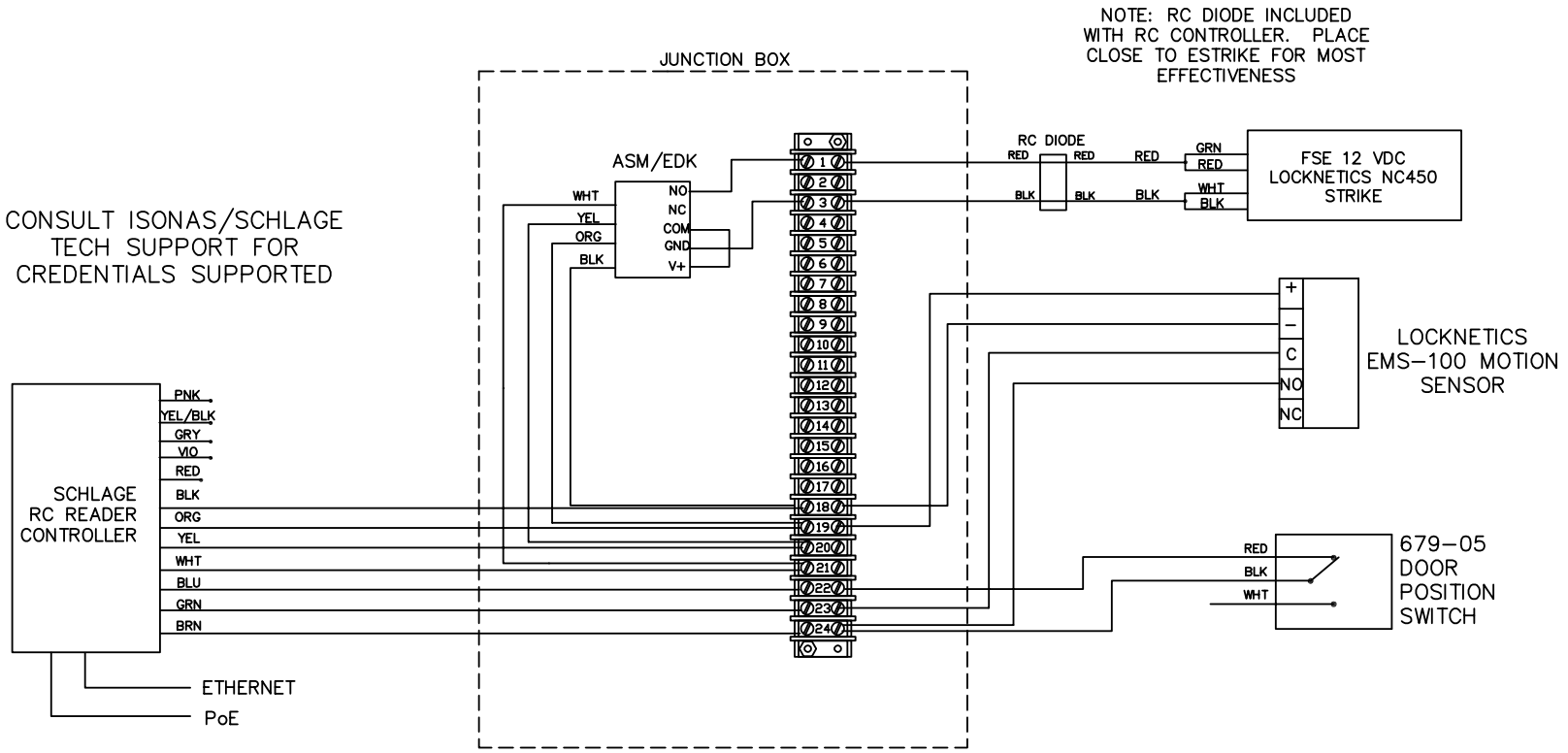
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113754R

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

REV: B

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS NC450 NO CUT STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE

MOTION SENSOR TO SHUNT DOOR FORCED ALARM

FREE EGRESS AT ALL TIMES

DATE DRAWN: 09-04-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH ESTRIKE-SINGLE DOOR

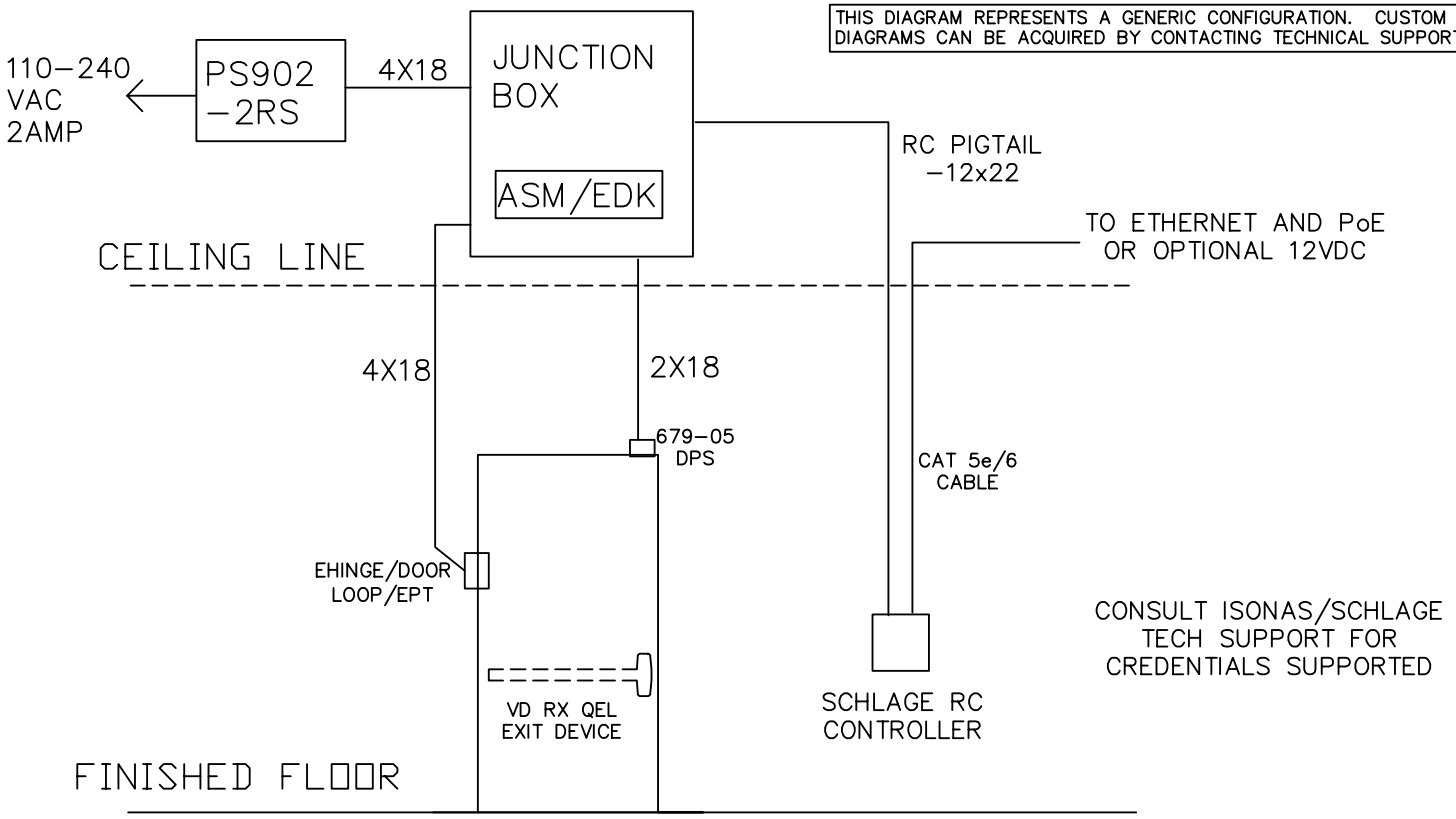
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113754W

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

REV: B

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- VON DUPRIN RX QEL
- 33A/35A/98/99 RIM EXIT DEVICE
- DOOR LOOP OR EHINGE OR EPT
- VON DUPRIN PS902x900-2RS
- 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNAL QEL LATCH RETRACTION ON PANIC DEVICE.

RX IN PANIC DEVICE TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 09-09-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE:
SCHLAGE RC CONTROLLER WITH RX QEL EXIT -SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

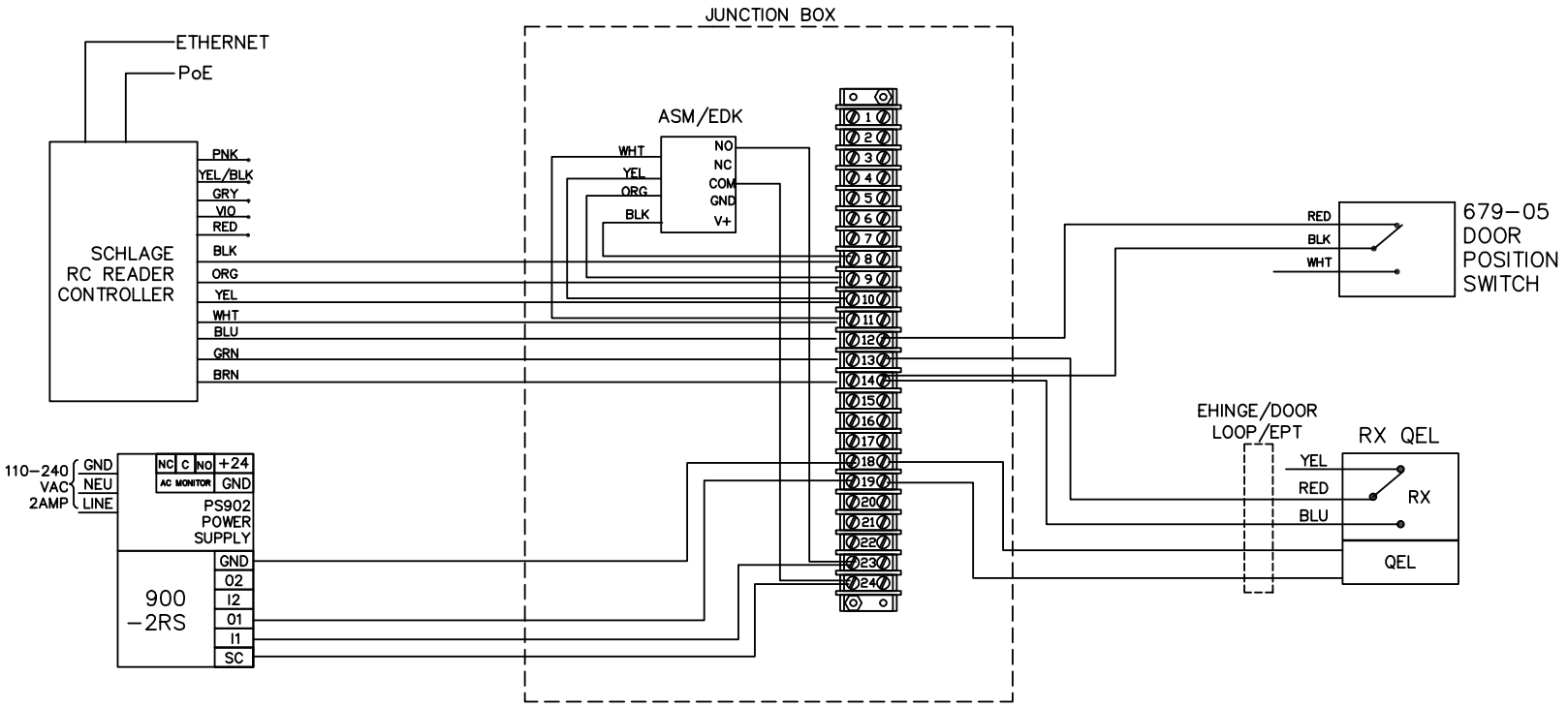
DWG NO: 113755R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

CONSULT ISONAS/SCHLAGE
TECH SUPPORT FOR
CREDENTIALS SUPPORTED

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- VON DUPRIN RX QEL
- 33A/35A/98/99 RIM EXIT DEVICE
- DOOR LOOP OR EHINGE OR EPT
- VON DUPRIN PS902x900-2RS
- 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNAL QEL LATCH RETRACTION ON PANIC DEVICE.

RX IN PANIC DEVICE TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 09-09-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE:
SCHLAGE RC CONTROLLER WITH RX QEL EXIT -SINGLE DOOR

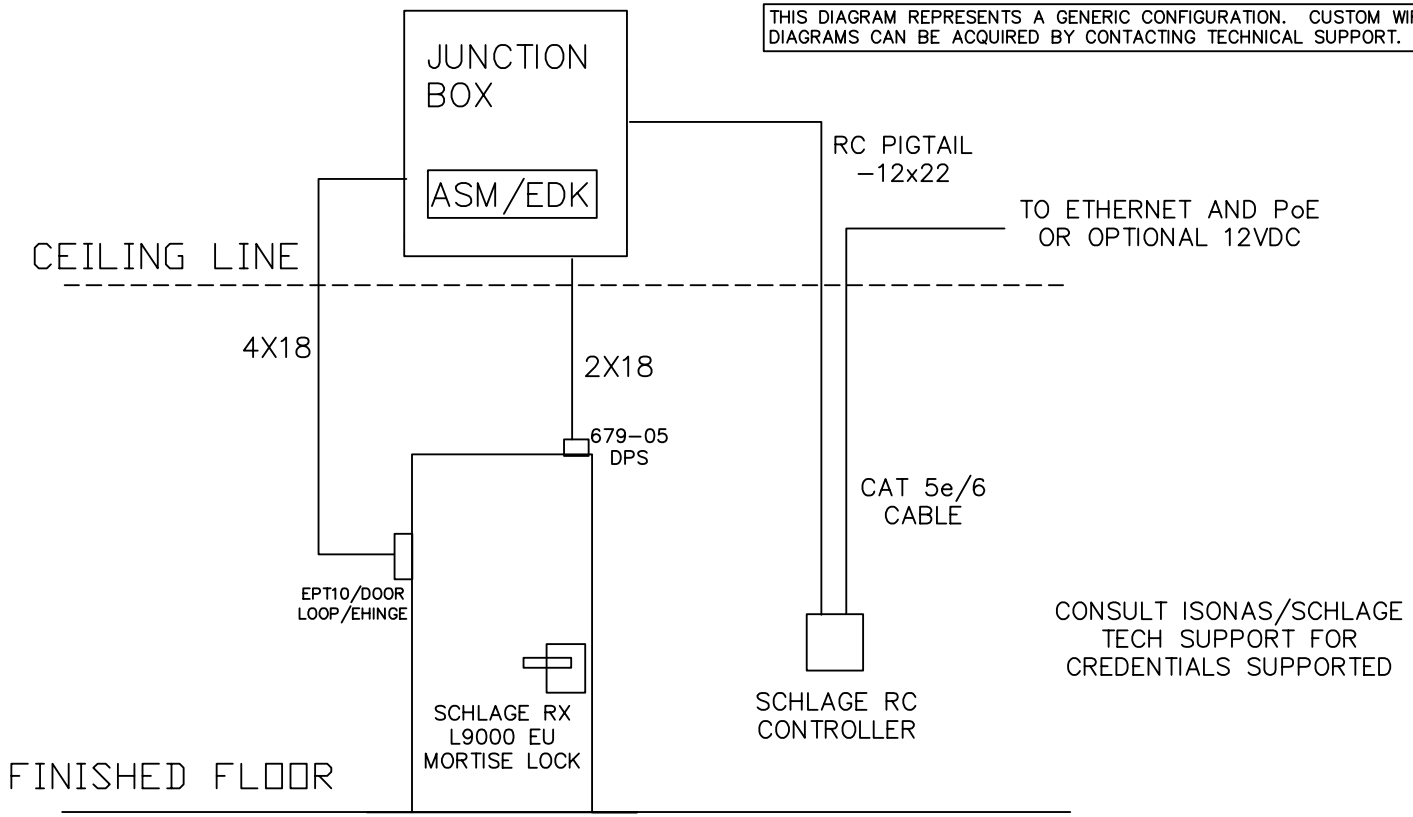
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113755W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
SCHLAGE RX L9000 EU MORTISE LOCK
SCHLAGE 679-05 DPS
EPT10/DOOR LOOP/EHINGE
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL TO UNLOCK ELOCK OR KEY OVERRIDE.

RX SWITCH IN RX L9000 EU MORTISE LOCK TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-16-20

REVISION DATE: 3-3-22

ALLEGION™

SCHLAGE RC CONTROLLER, RX L9000 EU MORTISE LOCK, 679-05 DPS - SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

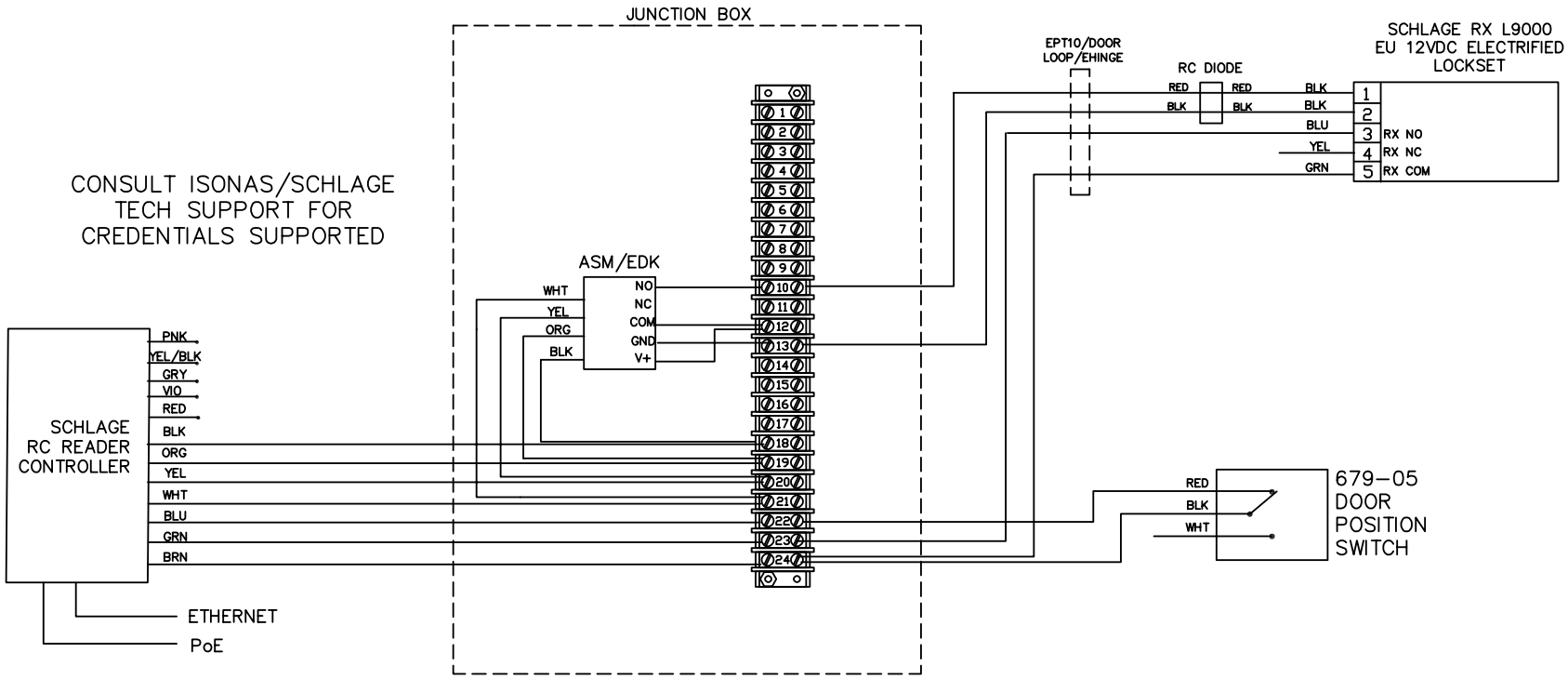
DWG NO: 113762R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTE: RC DIODE INCLUDED WITH RC CONTROLLER. PLACE CLOSE TO ELOCK FOR MOST EFFECTIVENESS



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
SCHLAGE RX L9000 EU MORTISE LOCK
SCHLAGE 679-05 DPS
EPT10/DOOR LOOP/EHINGE
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL TO UNLOCK ELOCK OR KEY OVERRIDE.

RX SWITCH IN RX L9000 EU MORTISE LOCK TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-16-20

REVISION DATE: 3-3-22

ALLEGION™

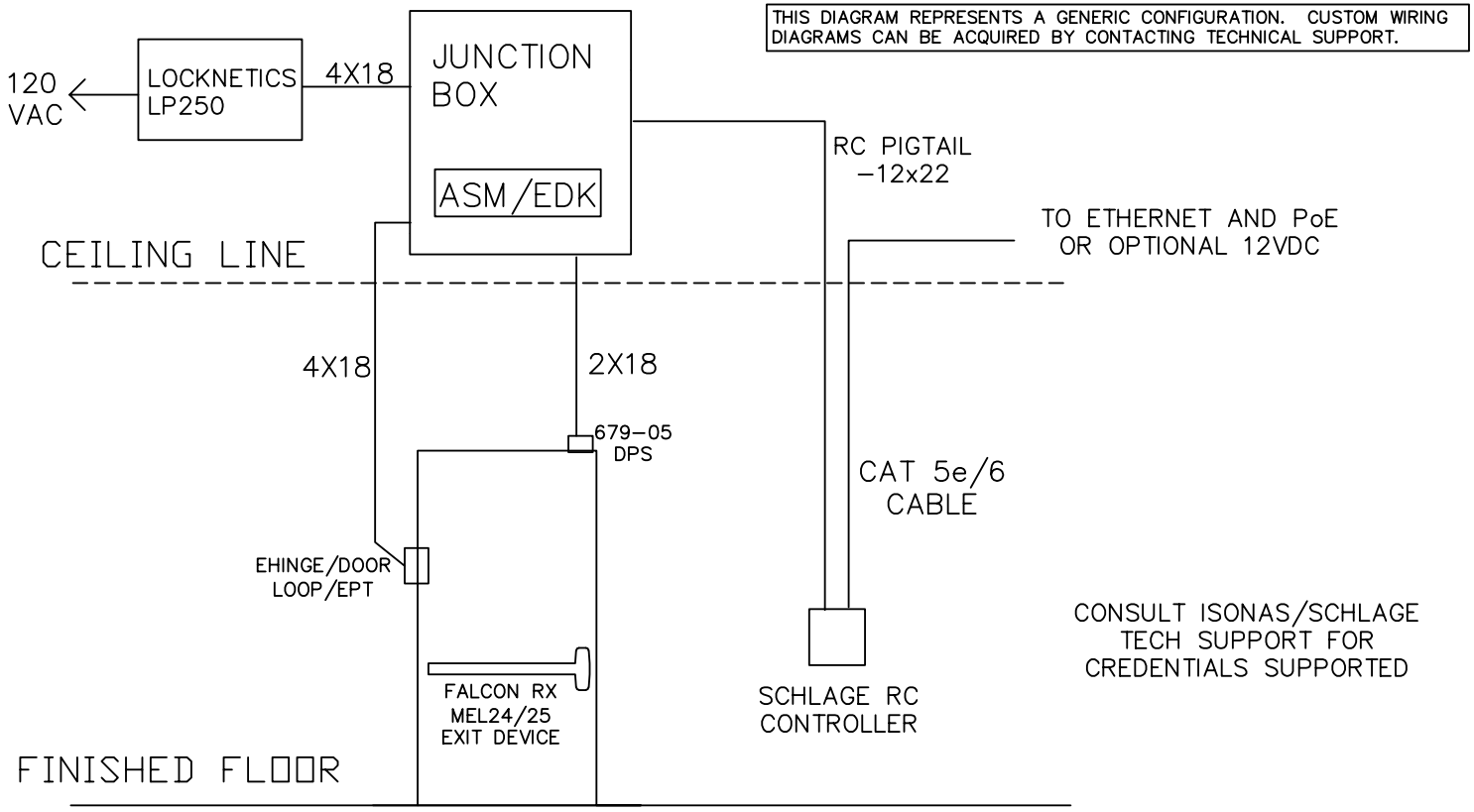
SCHLAGE RC CONTROLLER, RX L9000 EU MORTISE LOCK, 679-05 DPS - SINGLE DOOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113762W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- FALCON RX MEL 24/25 EXIT DEVICE
- DOOR LOOP OR EHINGE OR EPT
- LOCKNETICS LP250 POWER SUPPLY
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL TO SIGNAL MEL LATCH RETRACTION ON PANIC DEVICE.

RX IN PANIC DEVICE TO SHUNT DOOR FORCED ALARM .

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-16-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH RX MEL EXIT, DPS, LP250 -SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

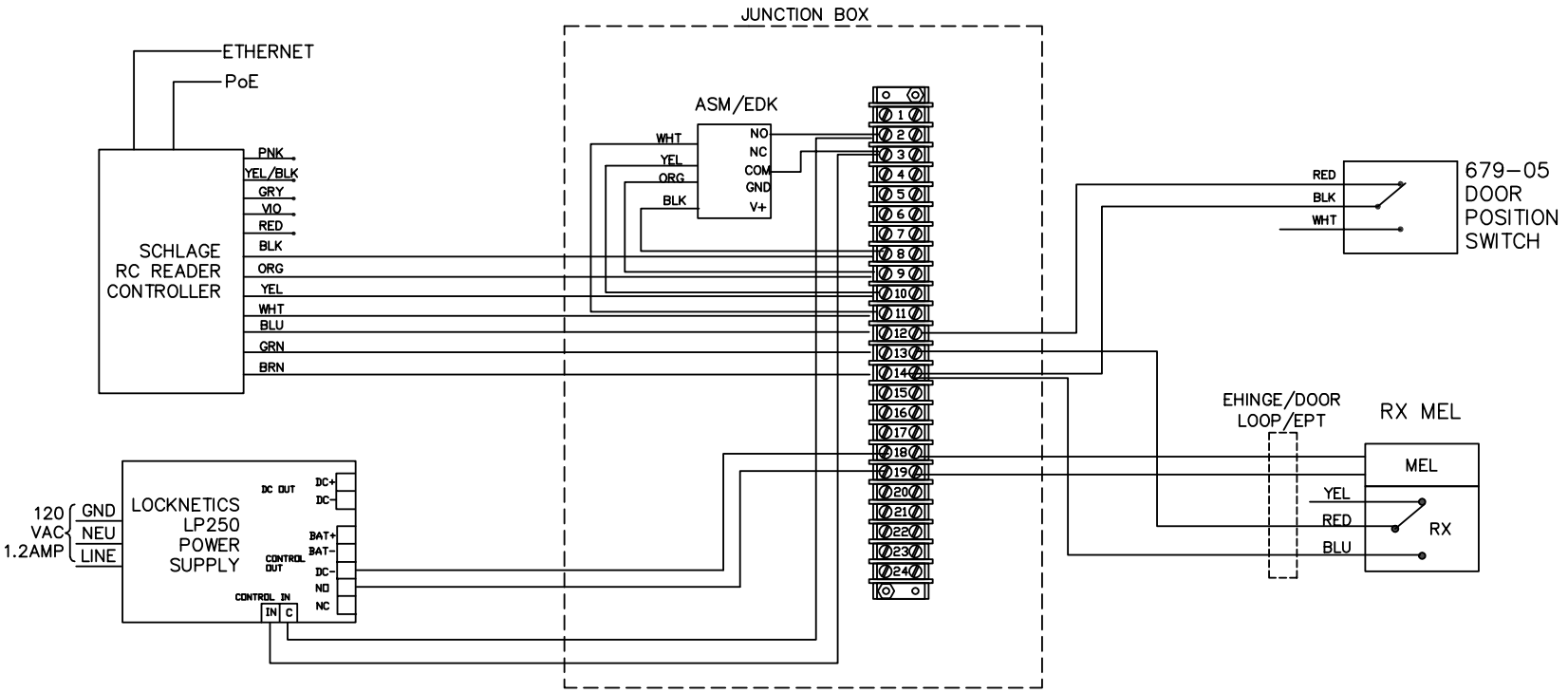
DWG NO: 113763R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

CONSULT ISONAS/SCHLAGE
TECH SUPPORT FOR
CREDENTIALS SUPPORTED

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- FALCON RX MEL 24/25 EXIT DEVICE
- DOOR LOOP OR EHINGE OR EPT
- LOCKNETICS LP250 POWER SUPPLY
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL TO SIGNAL MEL LATCH RETRACTION ON PANIC DEVICE.

RX IN PANIC DEVICE TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-16-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH RX MEL EXIT, DPS, LP250 -SINGLE DOOR

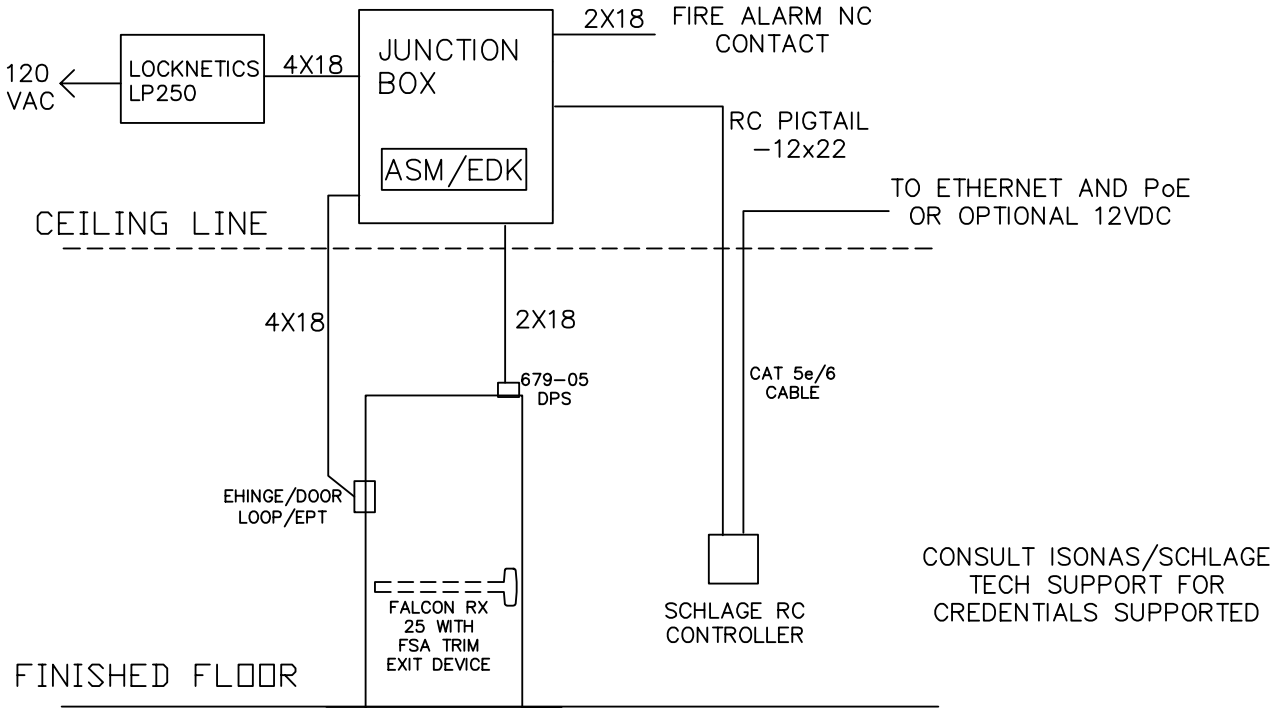
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113763W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- FALCON RX E 25 EXIT DEVICE WITH FSA TRIM
- DOOR LOOP OR EHINGE OR EPT
- LOCKNETICS LP250 POWER SUPPLY
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL TO SIGNAL UNLOCKING OF OUTSIDE TRIM ON PANIC DEVICE.

RX IN PANIC DEVICE TO SHUNT DOOR FORCED ALARM.

FSA TRIM ON PANIC IS FAIL SAFE AND WILL UNLOCK ON FIRE ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-19-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH RX 25 WITH FSA TRIM, DPS, LP250 -SINGLE DOOR FIRE RATED

DRAWING TYPE: RISER DIAGRAM

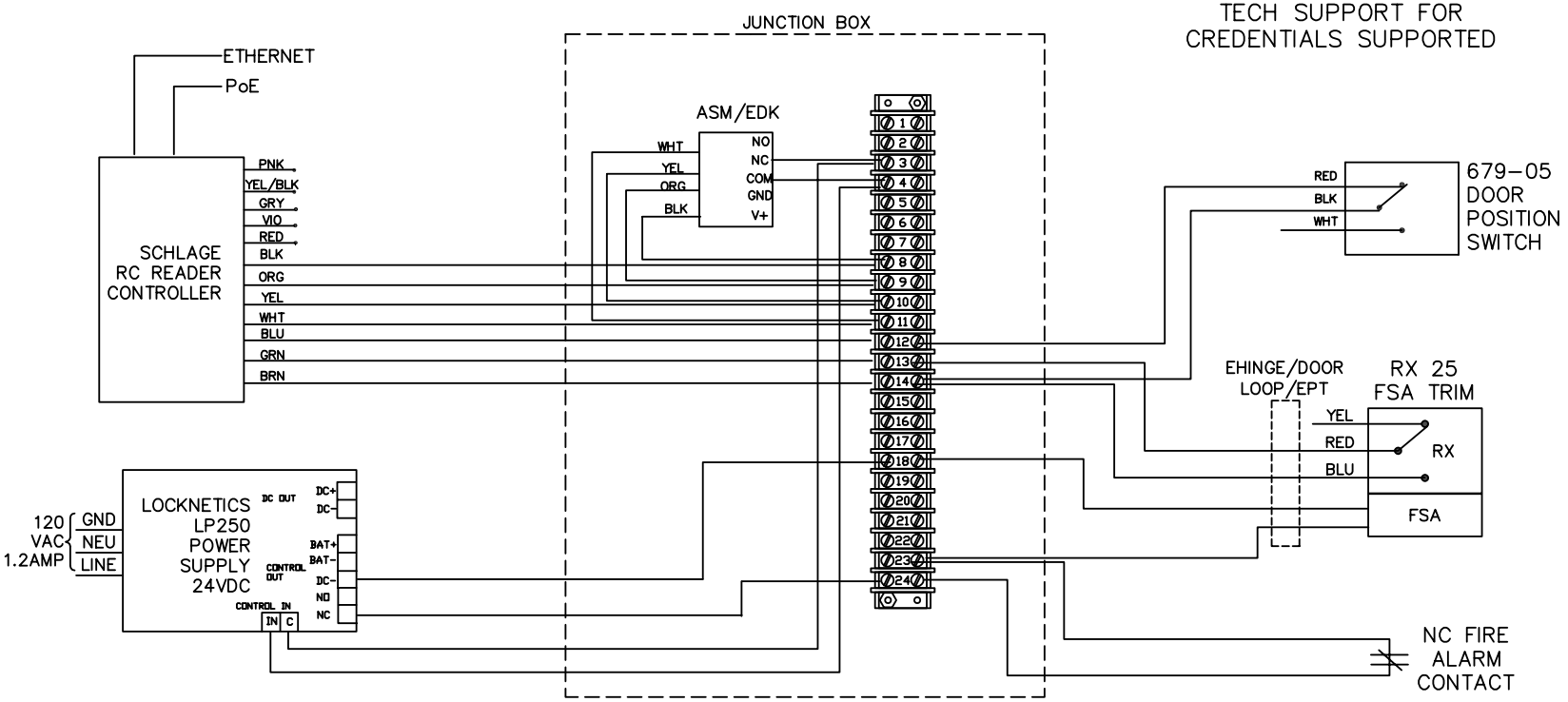
DWG NO: 113764R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

CONSULT ISONAS/SCHLAGE TECH SUPPORT FOR CREDENTIALS SUPPORTED



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
FALCON RX E 25 EXIT DEVICE WITH FSA TRIM
DOOR LOOP OR EHINGE OR EPT
LOCKNETICS LP250 POWER SUPPLY
SCHLAGE 679-05 DPS
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL TO SIGNAL UNLOCKING OF OUTSIDE TRIM ON PANIC DEVICE.

RX IN PANIC DEVICE TO SHUNT DOOR FORCED ALARM.

FSA TRIM ON PANIC IS FAIL SAFE AND WILL UNLOCK ON FIRE ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-19-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH RX 25 WITH FSA TRIM, DPS, LP250 -SINGLE DOOR FIRE RATED

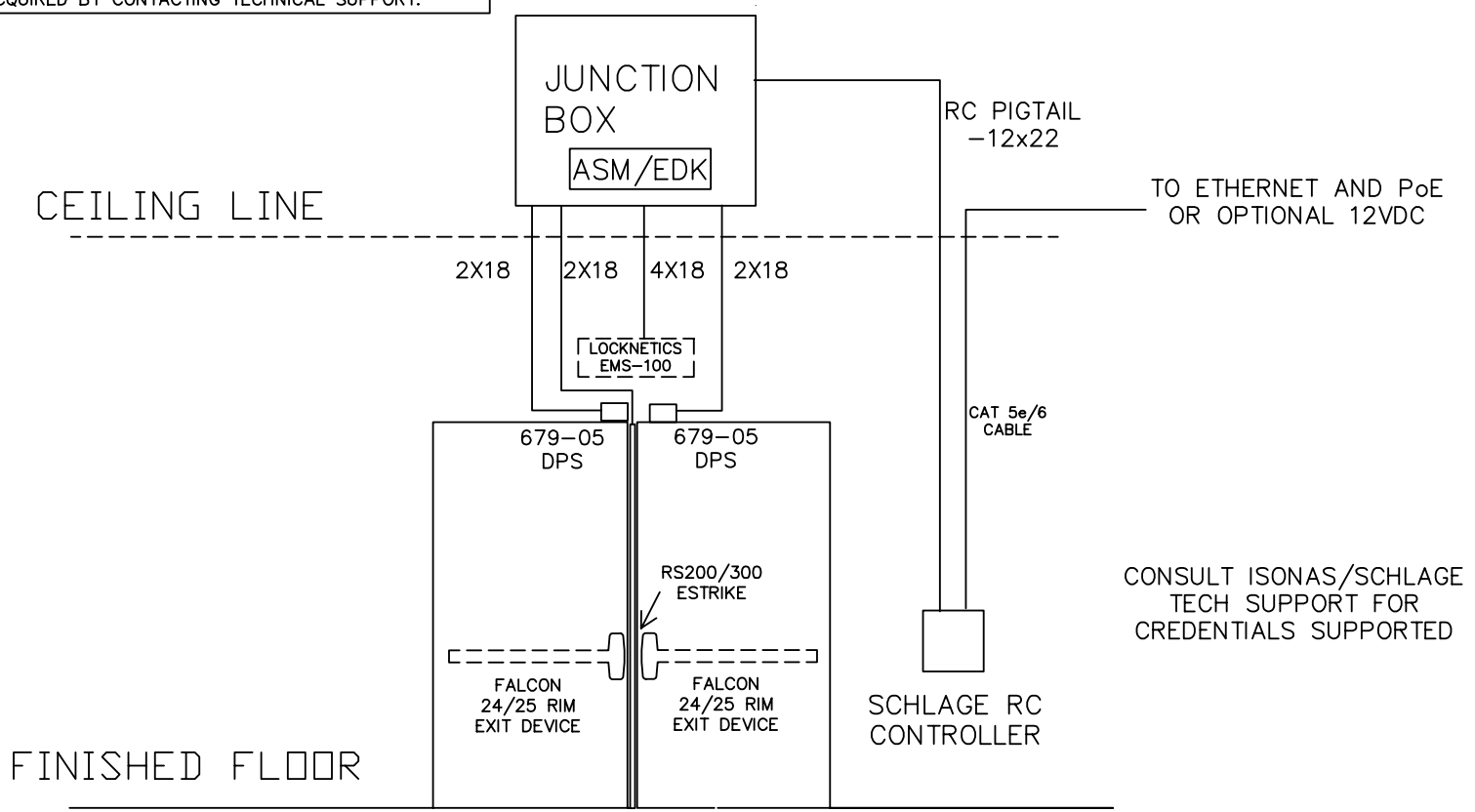
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113764W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- 1 RS 200/300 FSE RIM ESTRIKE
- 2 FALCON 24 25 RIM PANICS
- 1 MULLION
- LOCKNETICS EMS-100 MOTION SENSOR
- 2 SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. PROPER CREDENTIAL RELEASES FSE RS200 300 ESTRIKE.

EMS–100 MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-19-20

REVISION DATE: 3-3-22

ALLEGION™

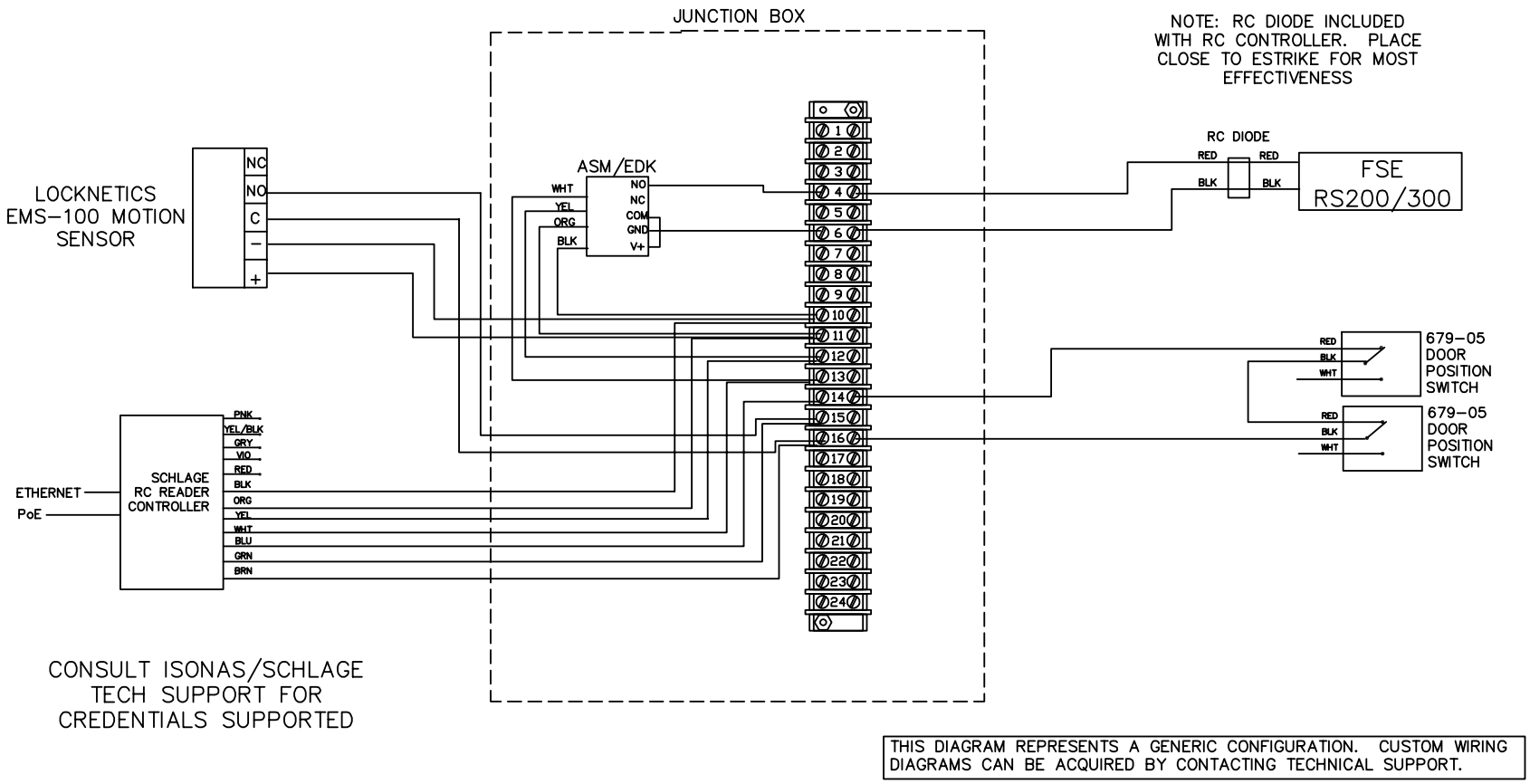
TITLE: SCHLAGE RC CONTROLLER WITH 24/25 RIM WITH MULLION, RS200/300, MOTION SENSOR, DPS PAIR OF DOORS

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113765R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- 1 RS 200/300 FSE RIM ESTRIKE
- 2 FALCON 24 25 RIM PANICS
- 1 MULLION
- LOCKNETICS EMS-100 MOTION SENSOR
- 2 SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. PROPER CREDENTIAL RELEASES FSE RS200 300 ESTRIKE.

EMS-100 MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-19-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH 24/25 RIM WITH MULLION, RS200/300, MOTION SENSOR, DPS PAIR OF DOORS

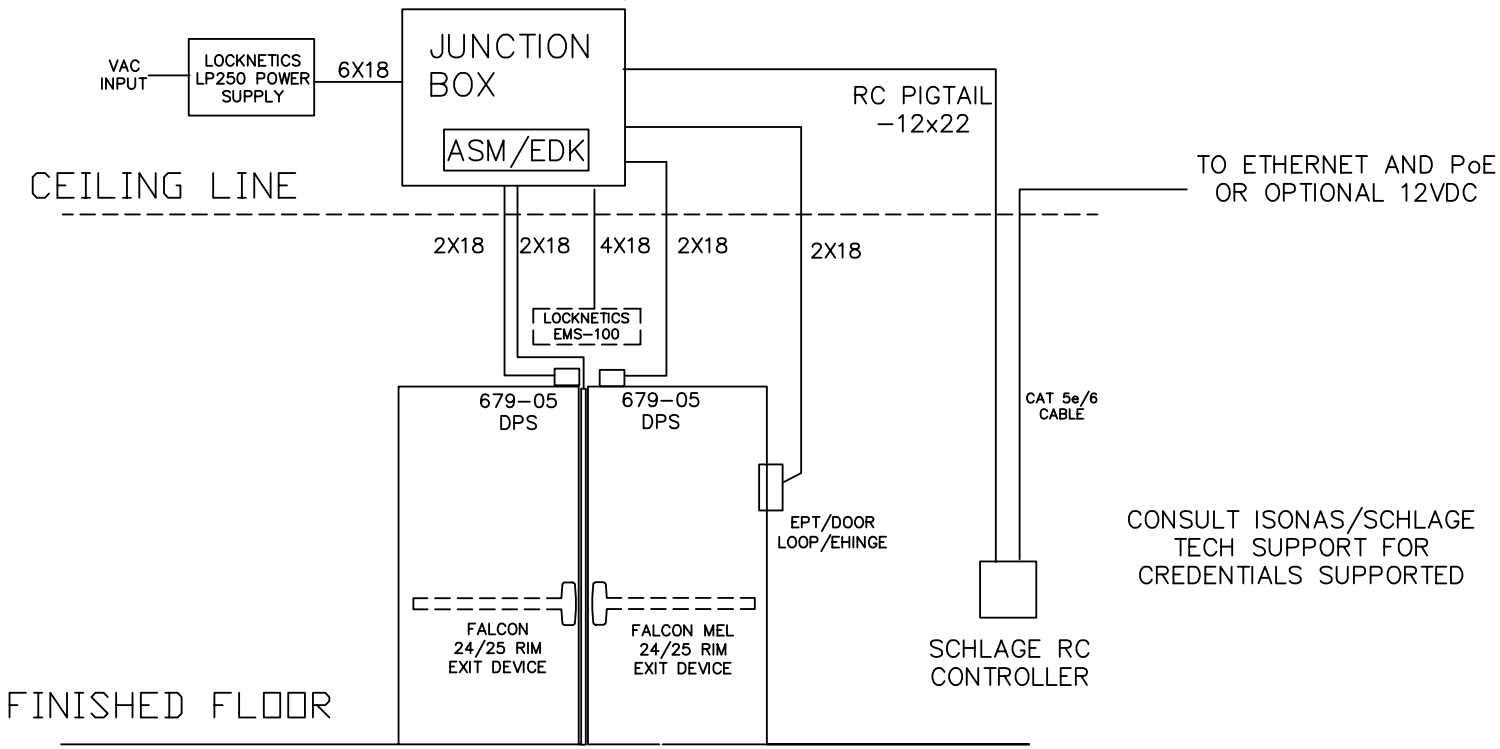
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113765W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- 1 FALCON MEL 24 25 RIM PANICS
- 1 EPT/DOOR LOOP/EHINGE
- 1 FALCON 24 25 RIM PANIC
- 1 MULLION
- LOCKNETICS EMS-100 MOTION SENSOR
- 1 LOCKNETICS LP250
- 2 SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. PROPER CREDENTIAL TO SIGNAL MEL LATCH RETRACTION ON RHR LEAF.

EMS-100 MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-19-20

REVISION DATE: 3-2-22

ALLEGION™

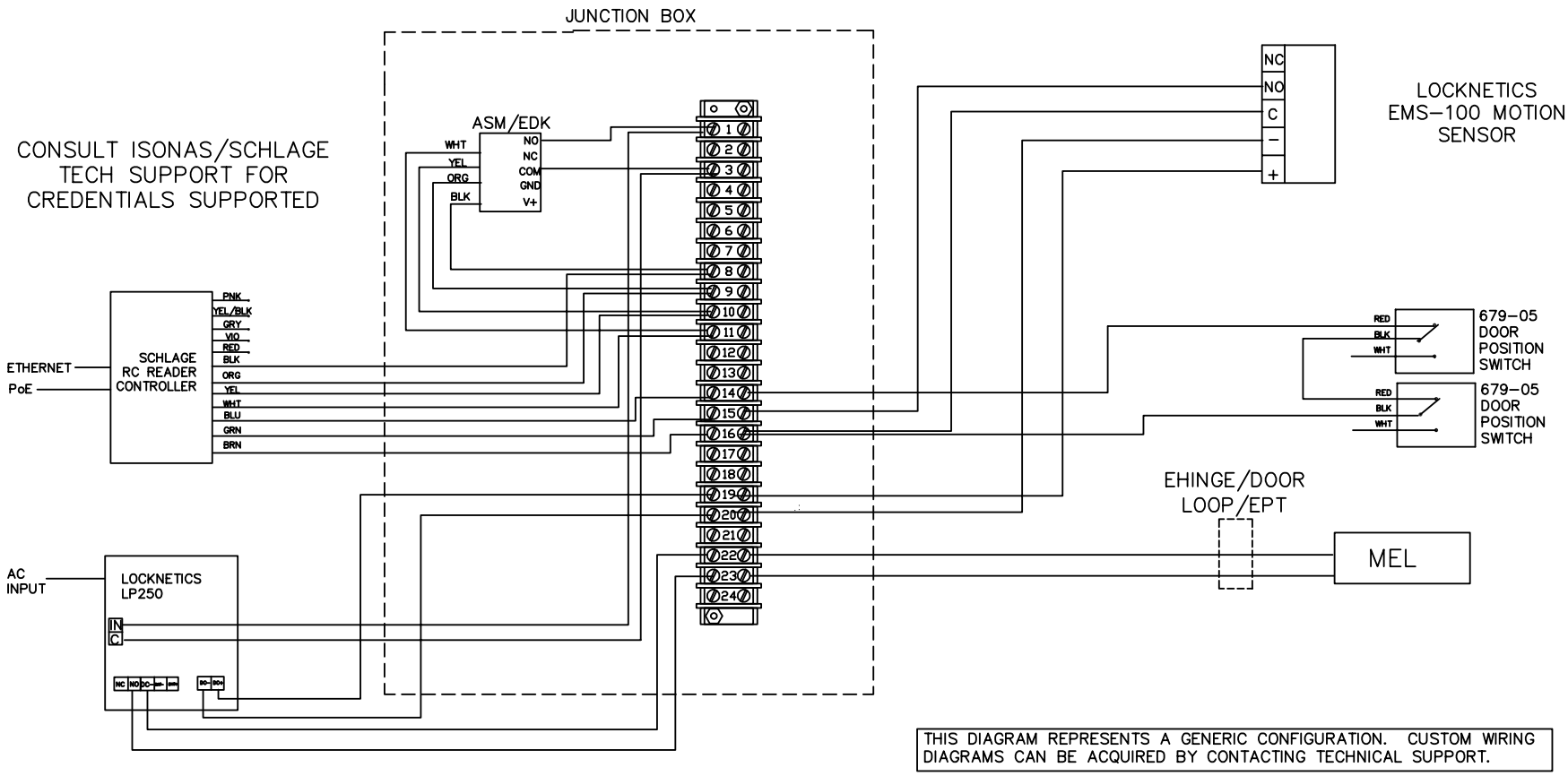
TITLE:
SCHLAGE RC CONTROLLER WITH MEL 24/25, MOTION SENSOR, DPS, LP250 PAIR OF DOORS

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113766R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- 1 FALCON MEL 24 25 RIM PANICS
- 1 EPT/DOOR LOOP/EHINGE
- 1 FALCON 24 25 RIM PANIC
- 1 MULLION
- LOCKNETICS EMS-100 MOTION SENSOR
- 1 LOCKNETICS LP250
- 2 SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. PROPER CREDENTIAL TO SIGNAL MEL LATCH RETRACTION ON RHR LEAF.

EMS–100 MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-19-20

REVISION DATE: 3-2-22

ALLEGION™

TITLE:
SCHLAGE RC CONTROLLER WITH MEL 24/25, MOTION SENSOR, DPS, LP250 PAIR OF DOORS

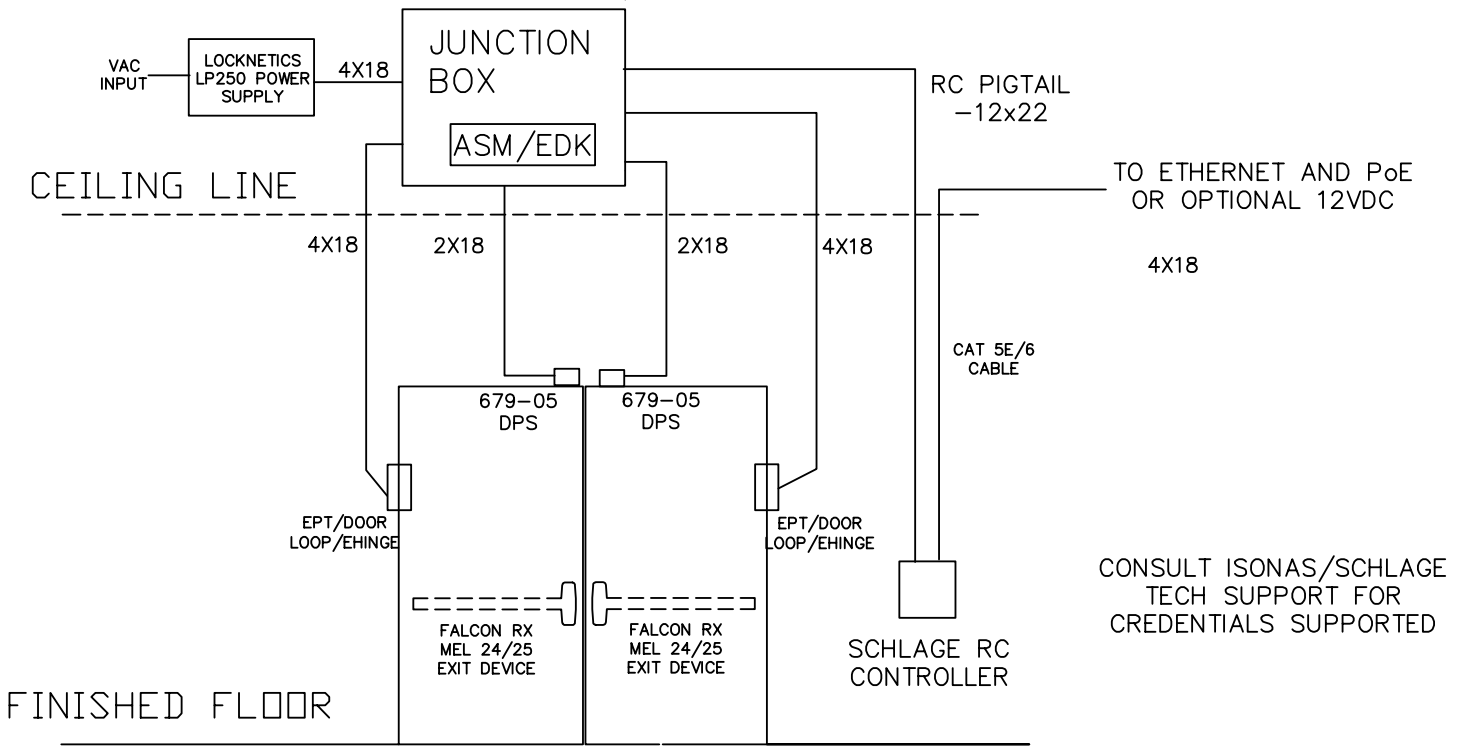
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113766W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- 2 FALCON RX MEL 24 25 PANICS
- 2 EPT/DOOR LOOP/EHINGE
- 1 LOCKNETICS LP250
- 2 SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. PROPER CREDENTIAL SIGNALS MEL LATCHES TO RETRACT ON BOTH PANICS.

RX SWITCH IN EACH PANIC TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-19-20

REVISION DATE: 3-3-22

ALLEGION™

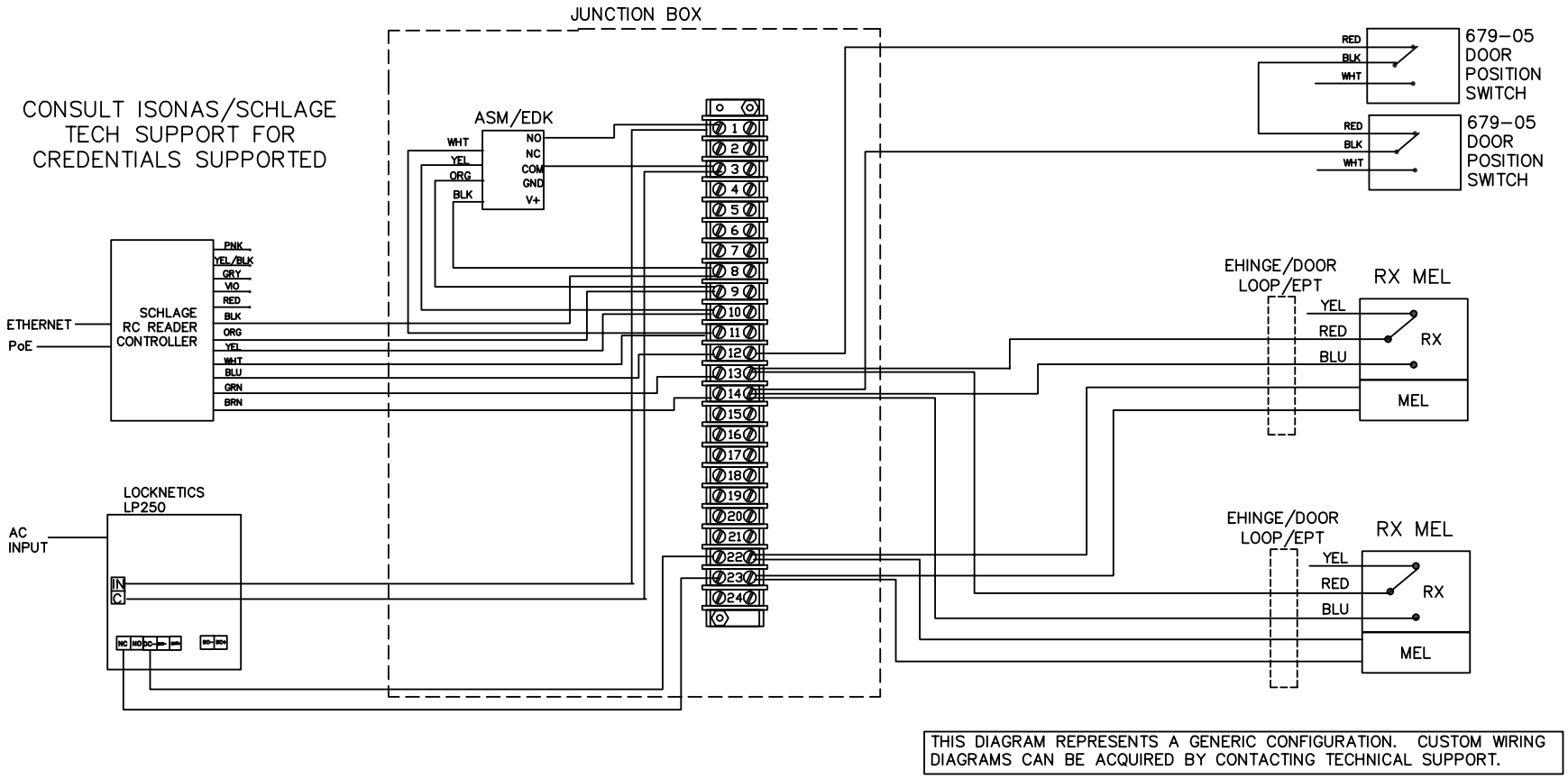
TITLE:
SCHLAGE RC CONTROLLER WITH PAIR RX MEL 24/25, DPS, LP250 PAIR OF DOORS

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113767R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- 2 FALCON RX MEL 24 25 PANICS
- 2 EPT/DOOR LOOP/EHINGE
- 1 LOCKNETICS LP250
- 2 SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. PROPER CREDENTIAL SIGNALS MEL LATCHES TO RETRACT ON BOTH PANICS.

RX SWITCH IN EACH PANIC TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-19-20

REVISION DATE: 3-3-22

ALLEGION™

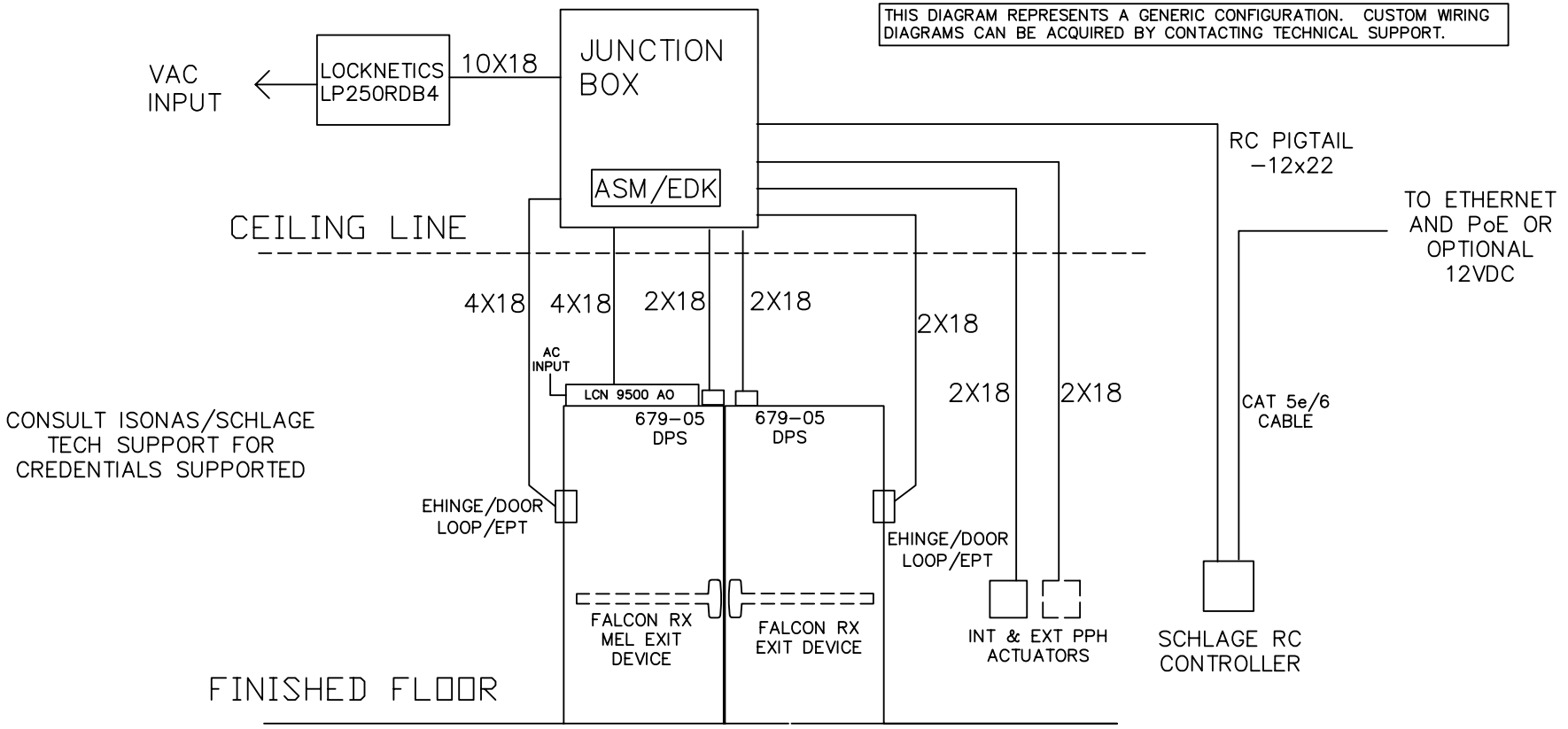
TITLE:
SCHLAGE RC CONTROLLER WITH PAIR RX MEL 24/25, DPS, LP250 PAIR OF DOORS

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113767W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
1 FALCON RX MEL 24/25 EXIT DEVICE
1 FALCON RX 24/25 EXIT DEVICE
2 DOOR LOOP OR EHINGE OR EPT
LCN 9500 AO
2 LOCKNETICS PPH ACTUATORS
LOCKNETICS LP250RDB4
2 SCHLAGE 679-05 DPS
1 12 VDC DPDT RELAY
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS MEL LATCH RETRACTION, LHR LEAF, AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE.

RX SWITCHES IN EXIT DEVICES TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

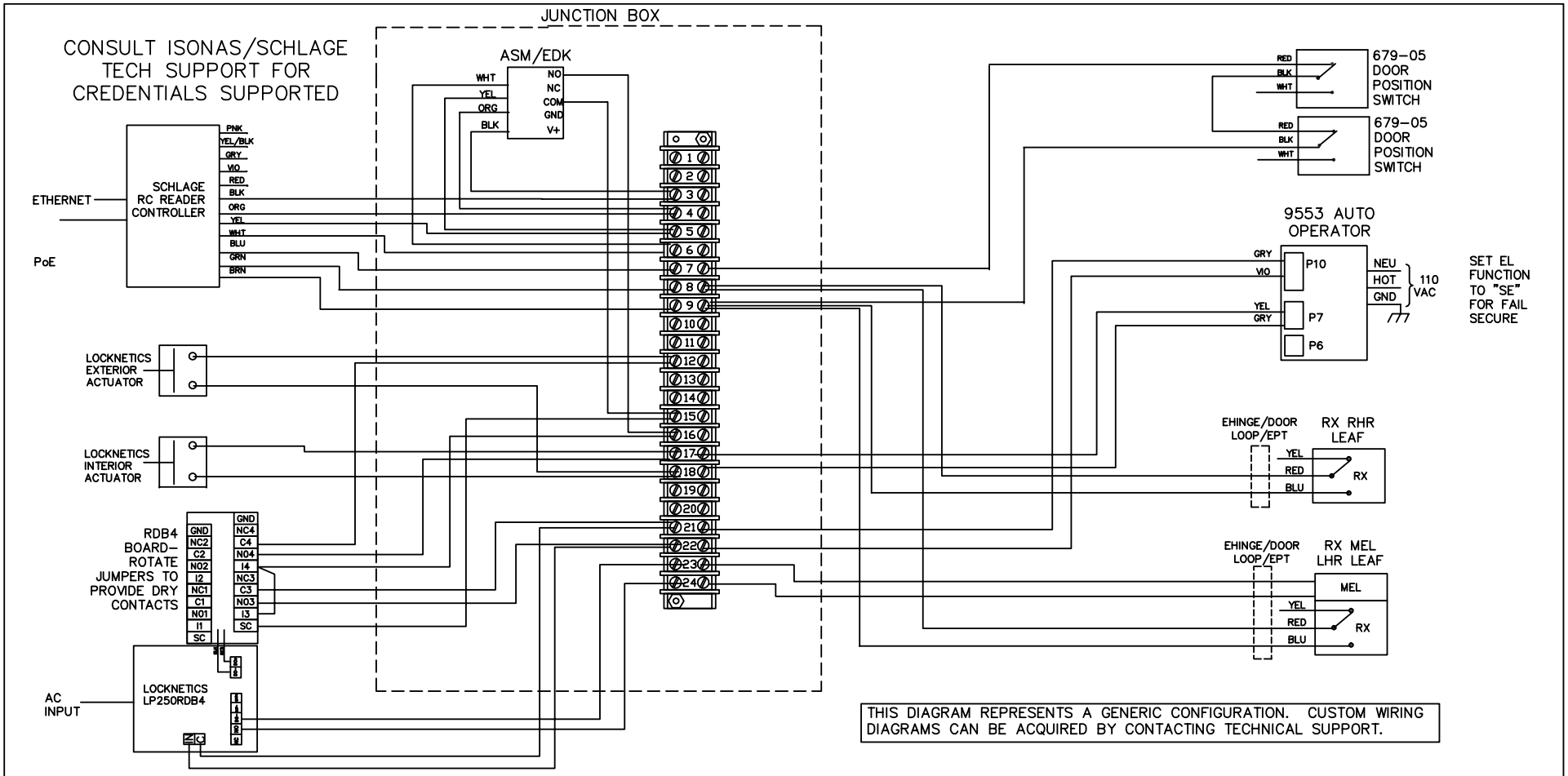
FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-20-20
REVISION DATE: 3-3-22

ALLEGION™

TITLE:
SCHLAGE RC CONTROLLER WITH RX MEL, RX, 9500 AO, DPS, LP250 PAIR OF DOORS

DRAWING TYPE: RISER DIAGRAM
DWG NO: 113768R
DRAWN/CHECKED BY: DOVE/TAMARCHENKO
REV: B



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- 1 FALCON RX MEL 24/25 EXIT DEVICE
- 1 FALCON RX 24/25 EXIT DEVICE
- 2 DOOR LOOP OR EHINGE OR EPT
- LCN 9500 AO
- 2 LOCKNETICS PPH ACTUATORS
- LOCKNETICS LP250RDB4
- 2 SCHLAGE 679-05 DPS
- 1 12 VDC DPDT RELAY
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS MEL LATCH RETRACTION, LHR LEAF, AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE.

RX SWITCHES IN EXIT DEVICES TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

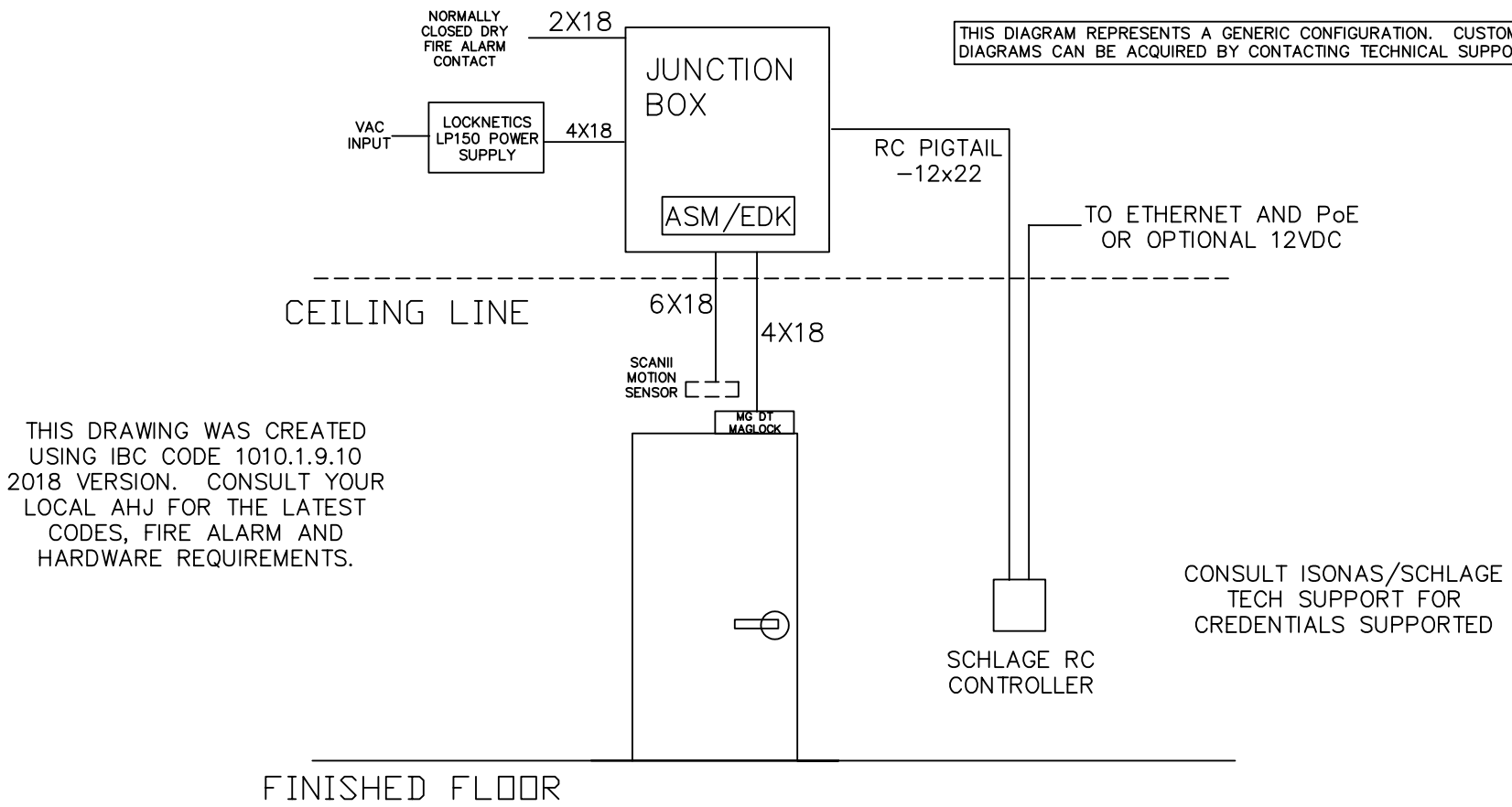
FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-20-20
REVISION DATE: 3-3-22

ALLEGION™

TITLE:
SCHLAGE RC CONTROLLER WITH RX MEL, RX, 9500 AO, DPS, LP250 PAIR OF DOORS

DRAWING TYPE:	DWG NO:	REV
WIRING DIAGRAM	113768W	B
	DRAWN/CHECKED BY: DOVE/TAMARCHENKO	



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

THIS DRAWING WAS CREATED USING IBC CODE 1010.1.9.10 2018 VERSION. CONSULT YOUR LOCAL AHJ FOR THE LATEST CODES, FIRE ALARM AND HARDWARE REQUIREMENTS.

CONSULT ISONAS/SCHLAGE TECH SUPPORT FOR CREDENTIALS SUPPORTED

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- SCHLAGE MAGLOCK IN-RUSH SUPPRESSOR
- LOCKNETICS MG DT MAGLOCK WITH INTEGRATED DPS
- LOCKNETICS LP150 POWER SUPPLY
- SCHLAGE SCANII MOTION SENSOR
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL TO RELEASE MG MAGLOCK.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM AND RELEASE MG MAGLOCK.

FIRE ALARM TO RELEASE MG MAGLOCK.

INSURE PoE+ POWER SOURCE APPROPRIATE FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-20-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER WITH MAGLOCK-SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

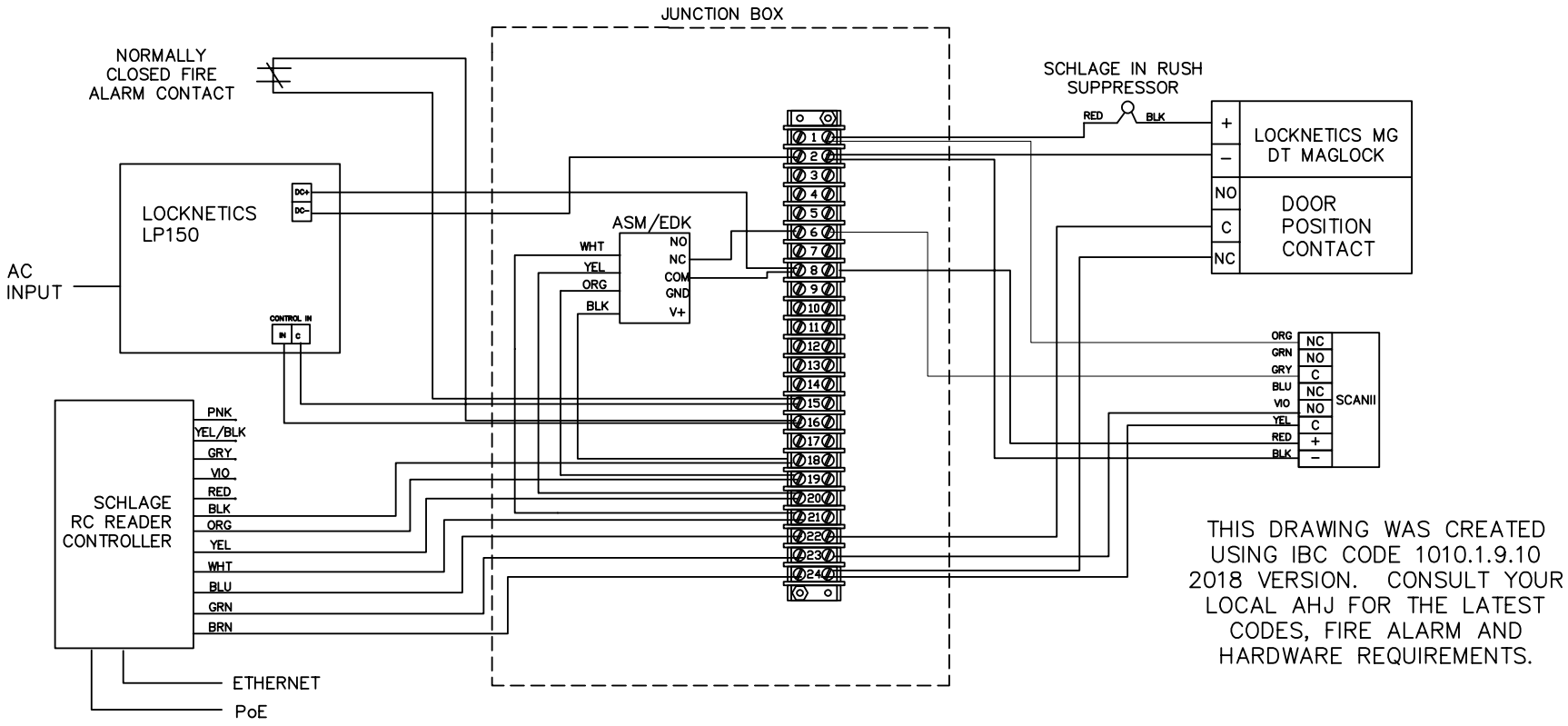
DWG NO: 113769R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

CONSULT ISONAS/SCHLAGE
TECH SUPPORT FOR
CREDENTIALS SUPPORTED

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



THIS DRAWING WAS CREATED USING IBC CODE 1010.1.9.10 2018 VERSION. CONSULT YOUR LOCAL AHJ FOR THE LATEST CODES, FIRE ALARM AND HARDWARE REQUIREMENTS.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
SCHLAGE MAGLOCK IN-RUSH SUPPRESSOR
LOCKNETICS MG DT MAGLOCK WITH INTEGRATED DPS
LOCKNETICS LP150 POWER SUPPLY
SCHLAGE SCANII MOTION SENSOR
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL TO RELEASE MG MAGLOCK.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM AND RELEASE MG MAGLOCK.

FIRE ALARM TO RELEASE MG MAGLOCK.

INSURE PoE+ POWER SOURCE APPROPRIATE FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-20-20

REVISION DATE: 3-3-22

ALLEGION™

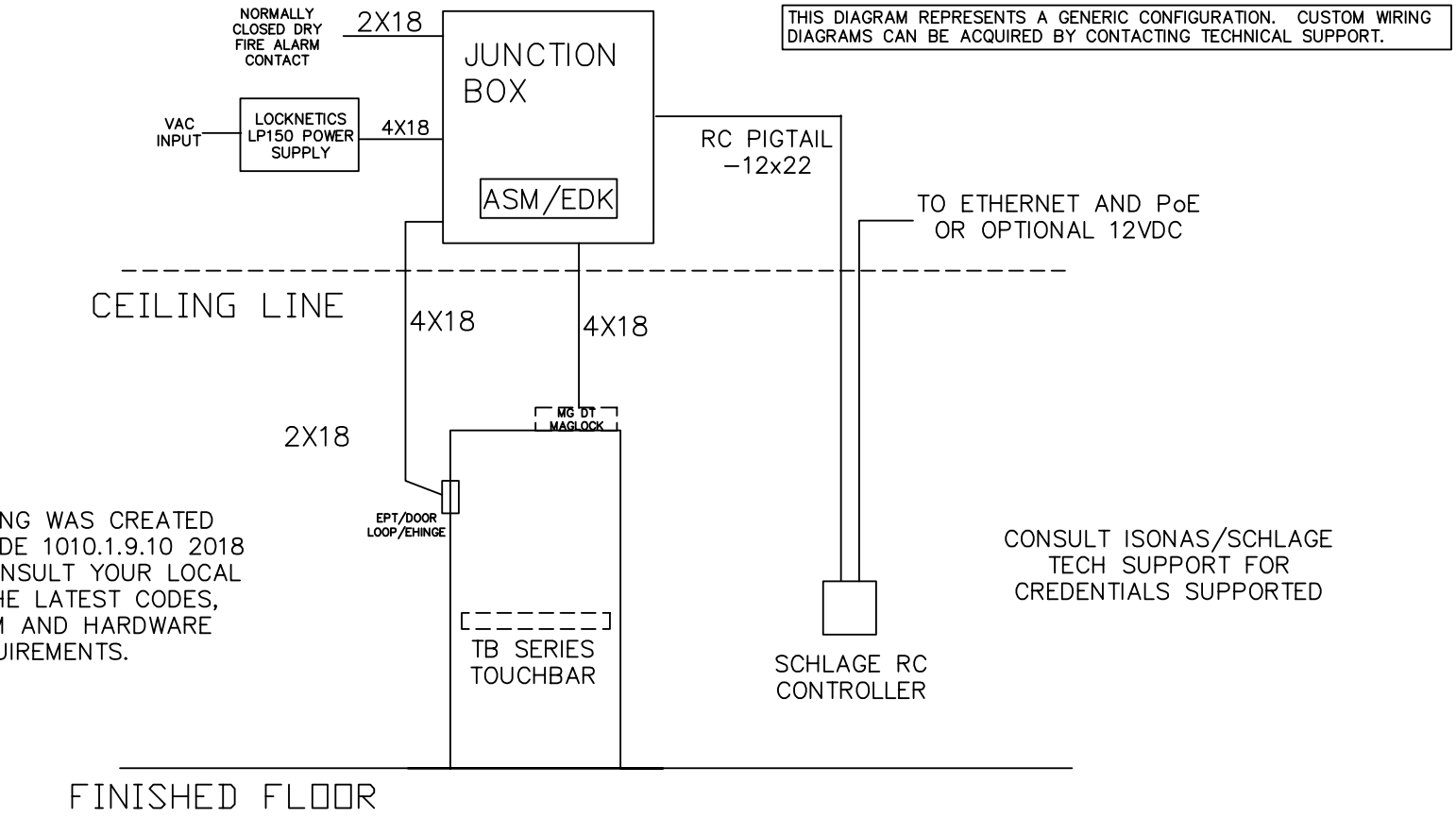
TITLE: SCHLAGE RC CONTROLLER WITH MAGLOCK-SINGLE DOOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113769R

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

REV: B



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

THIS DRAWING WAS CREATED USING IBC CODE 1010.1.9.10 2018 VERSION. CONSULT YOUR LOCAL AHJ FOR THE LATEST CODES, FIRE ALARM AND HARDWARE REQUIREMENTS.

CONSULT ISONAS/SCHLAGE TECH SUPPORT FOR CREDENTIALS SUPPORTED

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- SCHLAGE RC DIODE
- LOCKNETICS MG DT MAGLOCK WITH INTEGRATED DPS
- LOCKNETICS LP150 POWER SUPPLY
- LOCKNETICS TB TOUCH BAR
- EPT/DOOR LOOP/EHINGE
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL TO RELEASE MG MAGLOCK OR EXIT BY PRESSING TB TOUCHBAR. TOUCHBAR TO ALSO NOTIFY ACCESS CONTROL SYSTEM OF AUTHORIZED ACCESS.

INSURE PoE+ POWER SOURCE APPROPRIATE FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-20-20

REVISION DATE: 2-25-22

ALLEGION™

TITLE:
SCHLAGE RC CONTROLLER WITH MAGLOCK, TOUCH BAR -SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

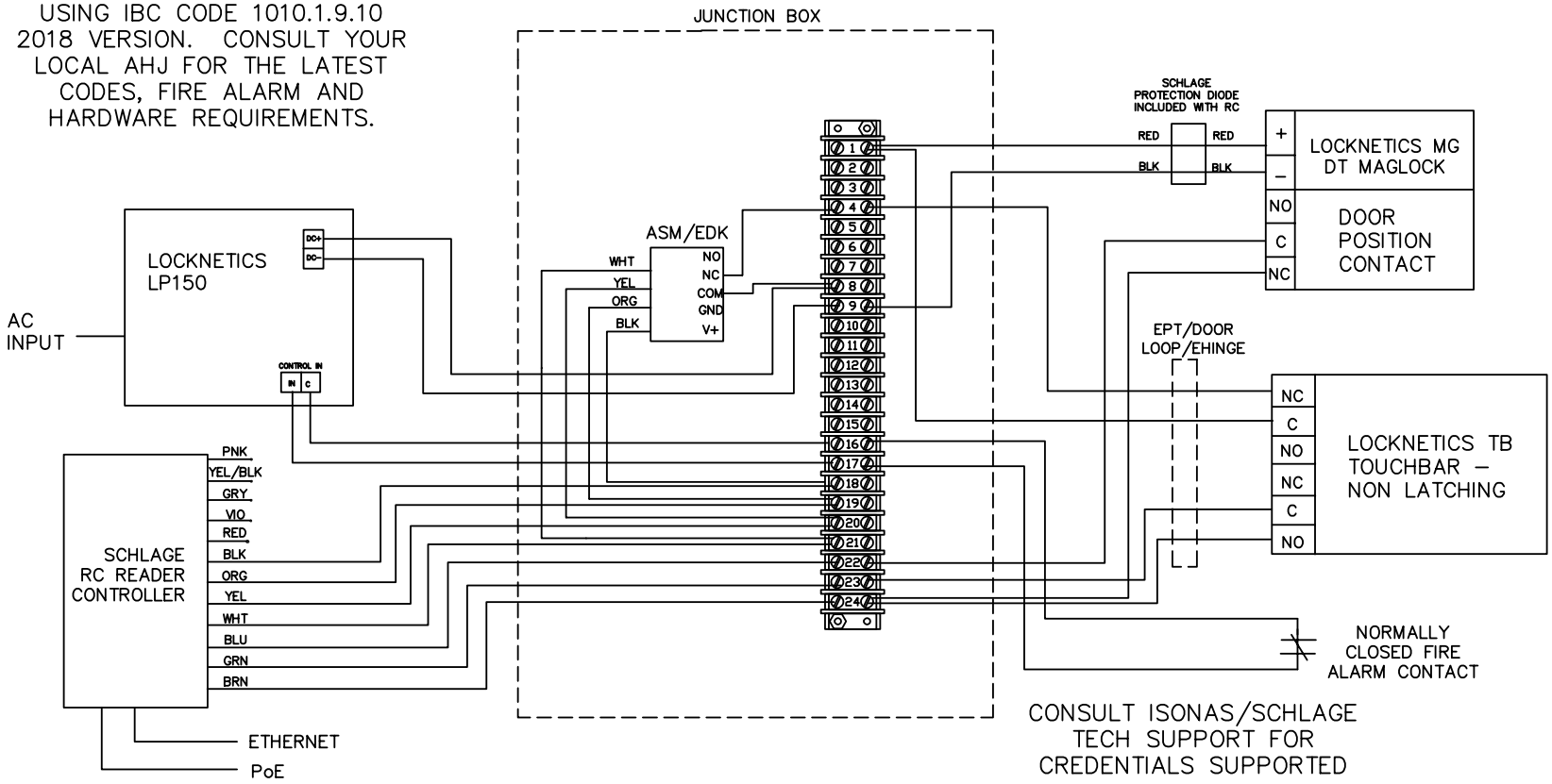
DWG NO: 113770R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

THIS DRAWING WAS CREATED USING IBC CODE 1010.1.9.10 2018 VERSION. CONSULT YOUR LOCAL AHJ FOR THE LATEST CODES, FIRE ALARM AND HARDWARE REQUIREMENTS.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- SCHLAGE RC DIODE
- LOCKNETICS MG DT MAGLOCK WITH INTEGRATED DPS
- LOCKNETICS LP150 POWER SUPPLY
- LOCKNETICS TB TOUCH BAR
- EPT/DOOR LOOP/EHINGE
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL TO RELEASE MG MAGLOCK OR EXIT BY PRESSING TB TOUCHBAR. TOUCHBAR TO ALSO NOTIFY ACCESS CONTROL SYSTEM OF AUTHORIZED ACCESS.

FIRE ALARM TO RELEASE MG MAGLOCK.

INSURE PoE+ POWER SOURCE APPROPRIATE FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-20-20

REVISION DATE: 2-25-22

ALLEGION™

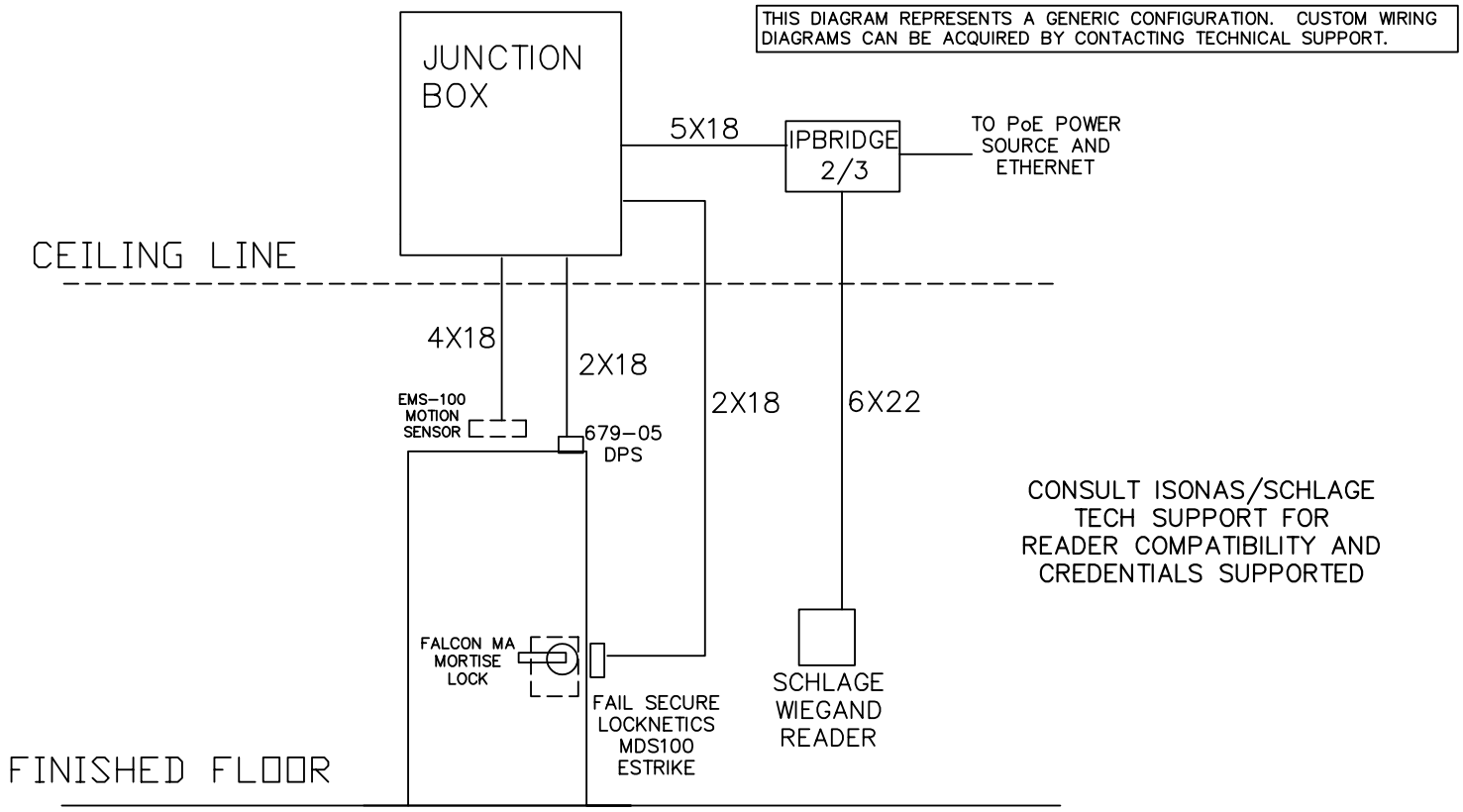
TITLE:
SCHLAGE RC CONTROLLER WITH MAGLOCK, TOUCH BAR -SINGLE DOOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113770W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE IPBRIDGE
- SCHLAGE WIEGAND READER
- LOCKNETICS MDS100 STRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

DATE DRAWN: 10-21-20

REVISION DATE: 3-7-22

ALLEGION™

TITLE: ISONAS IP BRIDGE WITH ESTRIKE-SINGLE DOOR

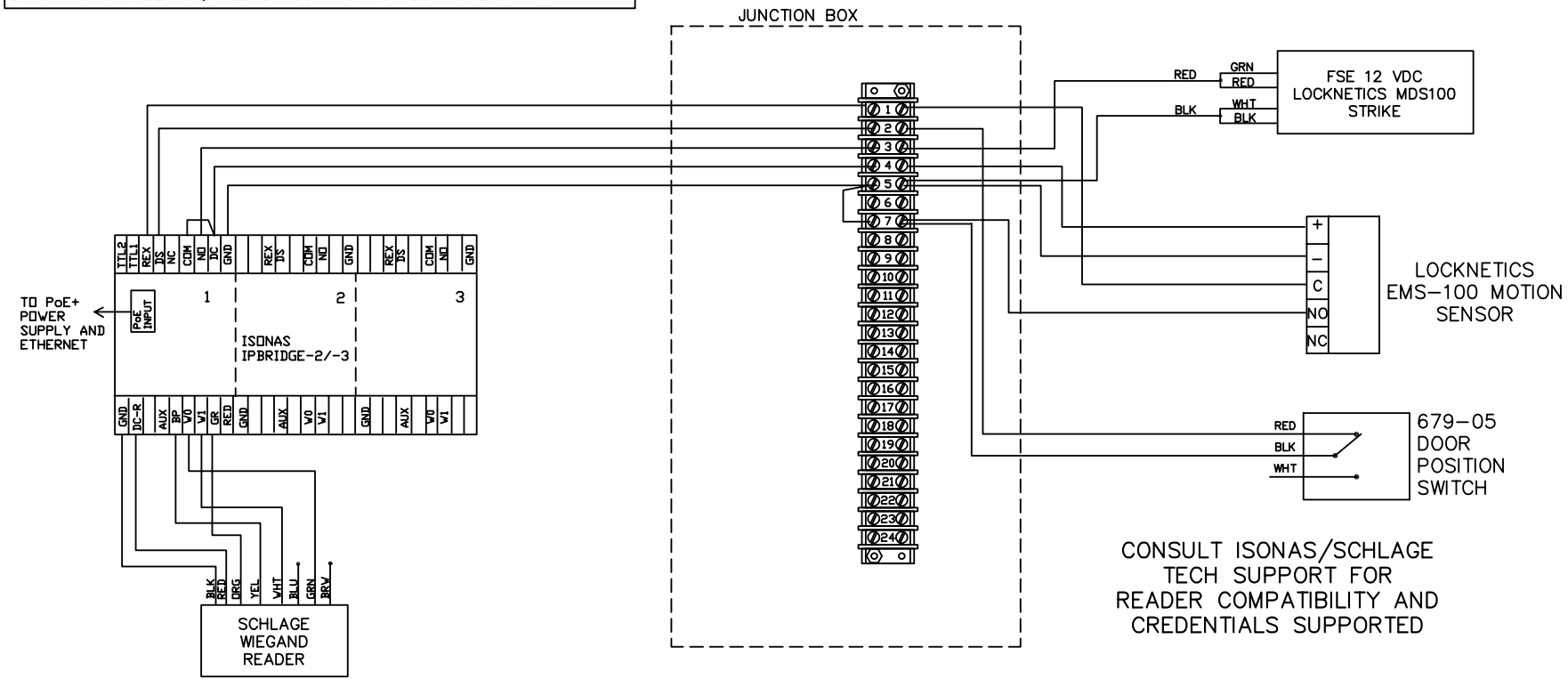
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113771R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:
SCHLAGE IPBRIDGE
SCHLAGE WIEGAND READER
LOCKNETICS MDS100 STRIKE
LOCKNETICS EMS-100 MOTION SENSOR
SCHLAGE 679-05 DPS
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

DATE DRAWN: 10-21-20

REVISION DATE: 3-7-22

ALLEGION™

TITLE: ISONAS IP BRIDGE WITH ESTRIKE-SINGLE DOOR

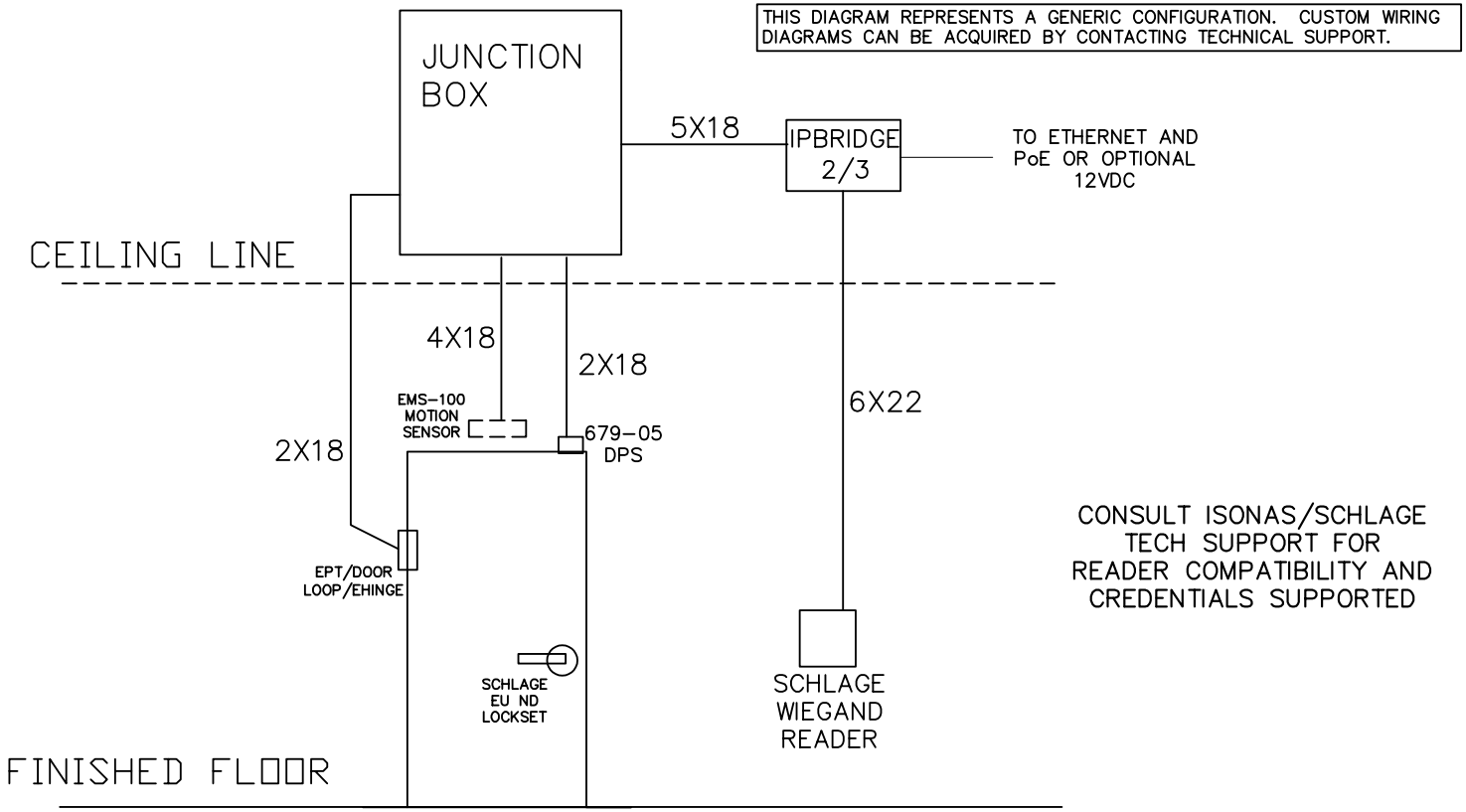
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113771W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



CONSULT ISONAS/SCHLAGE TECH SUPPORT FOR READER COMPATIBILITY AND CREDENTIALS SUPPORTED

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
ISONAS IPBRIDGE
SCHLAGE WIEGAND READER
SCHLAGE EU ND LOCKSET
LOCKNETICS EMS-100 MOTION SENSOR
EPT/DOOR LOOP/EHINGE
SCHLAGE 679-05 DPS
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. VALID CREDENTIAL WILL UNLOCK EU ND LOCKSET.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

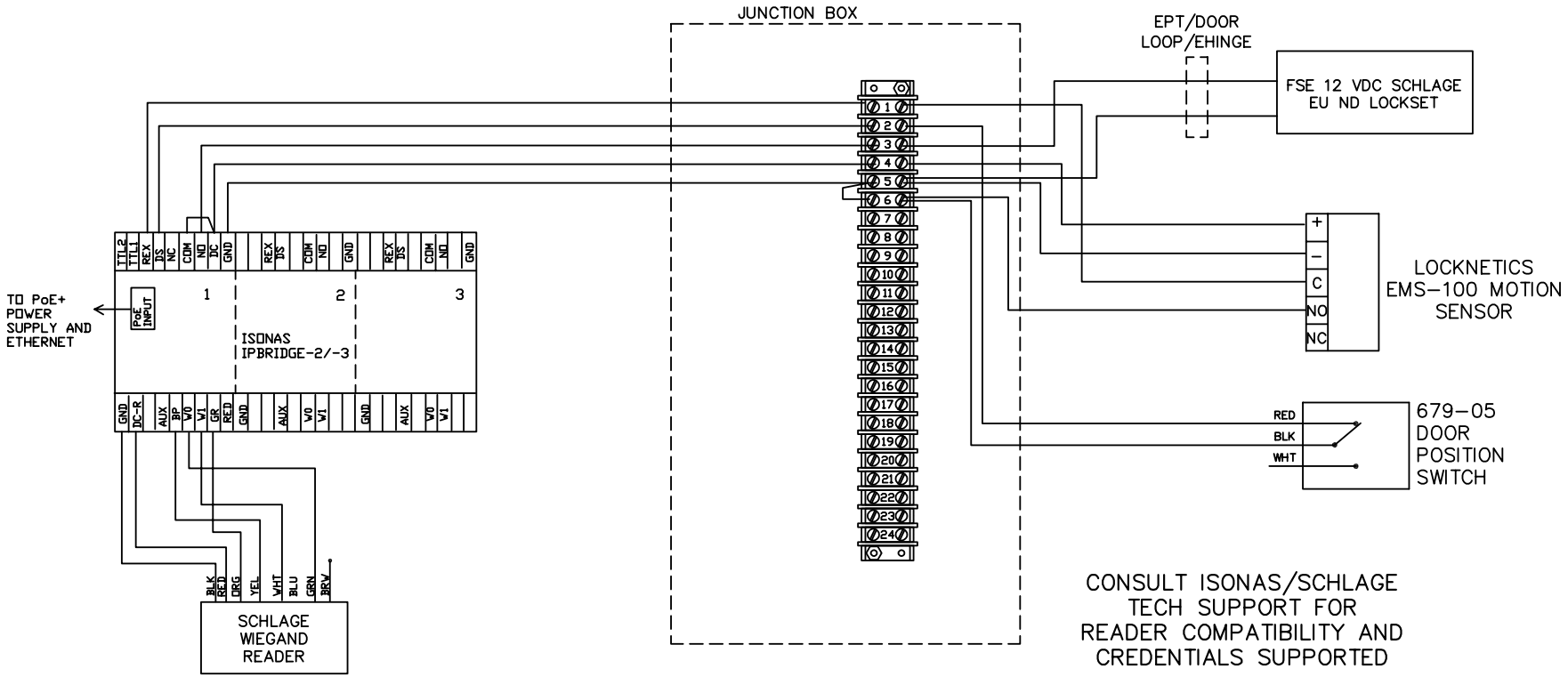
DATE DRAWN: 10-21-20
REVISION DATE: 3-7-22

ALLEGION™

TITLE: ISONAS IP BRIDGE WITH ELOCK-SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM
DWG NO: 113772R
REV: B
DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

ISONAS IPBRIDGE
SCHLAGE WIEGAND READER
SCHLAGE EU ND LOCKSET
LOCKNETICS EMS-100 MOTION SENSOR
SCHLAGE 679-05 DPS
EPT/DOOR LOOP/EHINGE
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. VALID CREDENTIAL WILL UNLOCK EU ND LOCKSET.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

DATE DRAWN: 10-21-20

REVISION DATE: 3-7-22

ALLEGION™

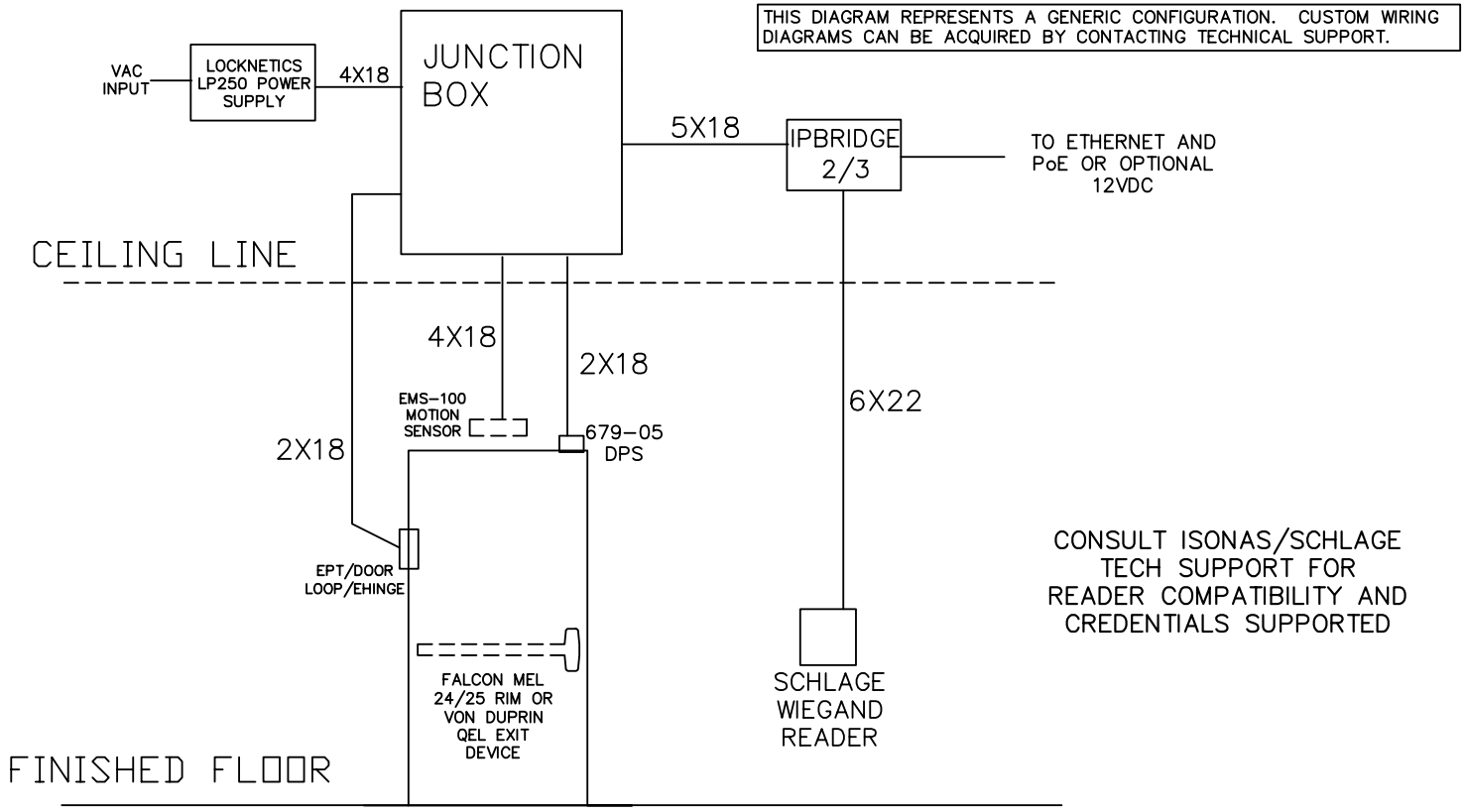
TITLE: ISONAS IP BRIDGE WITH ELOCK-SINGLE DOOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113772W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- ISONAS IPBRIDGE
- SCHLAGE WIEGAND READER
- FALCON MEL24/25 OR VON DUPRIN QEL PANIC
- LOCKNETICS LP250
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- EPT/DOOR LOOP/EHINGE
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. VALID CREDENTIAL WILL CAUSE MEL OR QEL TO RETRACT.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

DATE DRAWN: 10-21-20
REVISION DATE: 3-7-22

ALLEGION™

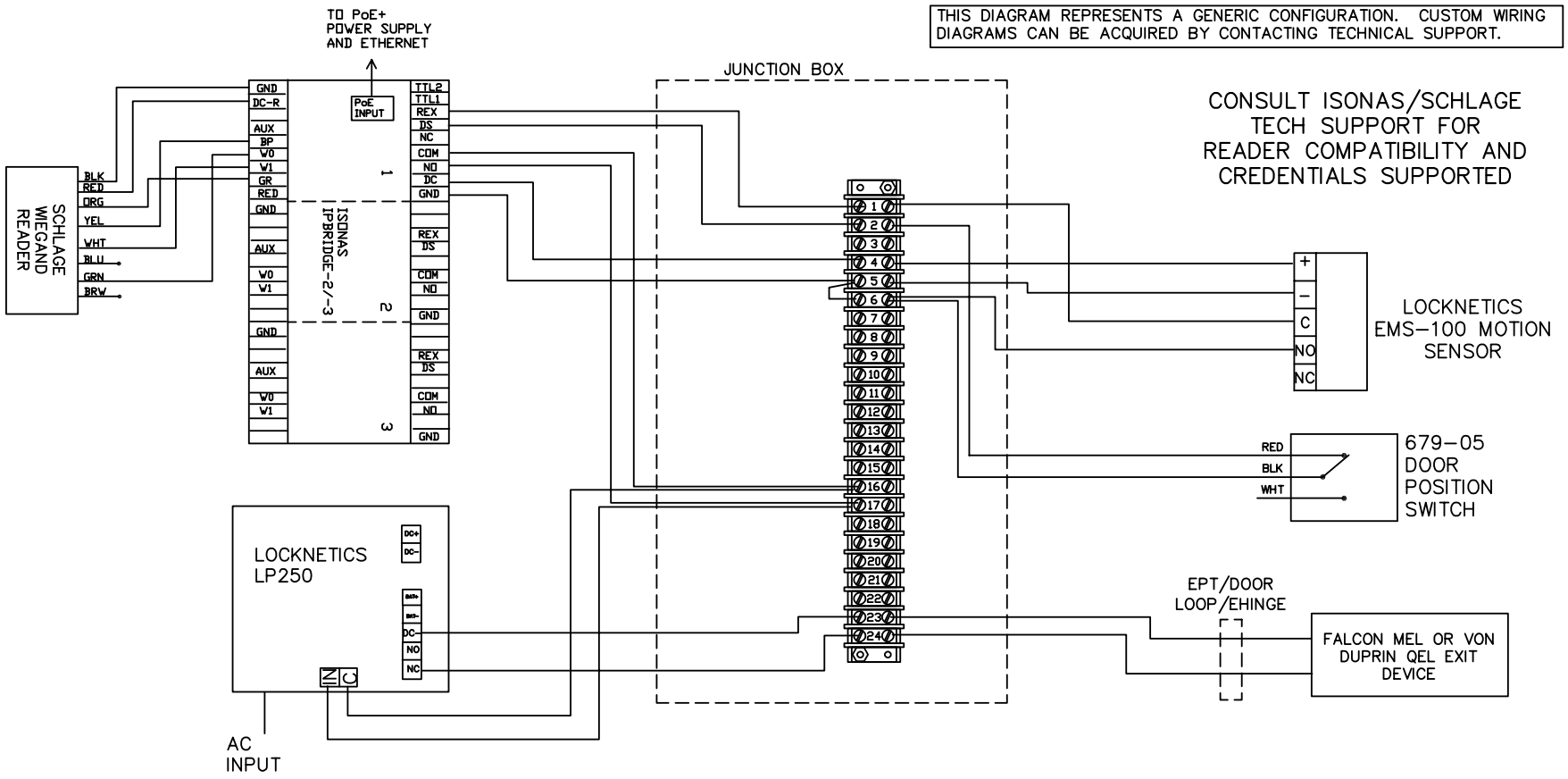
TITLE: ISONAS IP BRIDGE WITH QEL/MEL -SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113773R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

ISONAS IPBRIDGE
SCHLAGE WIEGAND READER
FALCON MEL24/25 OR VON DUPRIN QEL PANIC
LOCKNETICS LP250
LOCKNETICS EMS-100 MOTION SENSOR
SCHLAGE 679-05 DPS
EPT/DOOR LOOP/EHINGE
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. VALID CREDENTIAL WILL CAUSE MEL OR QEL TO RETRACT.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

DATE DRAWN: 10-21-20

REVISION DATE: 3-7-22

ALLEGION™

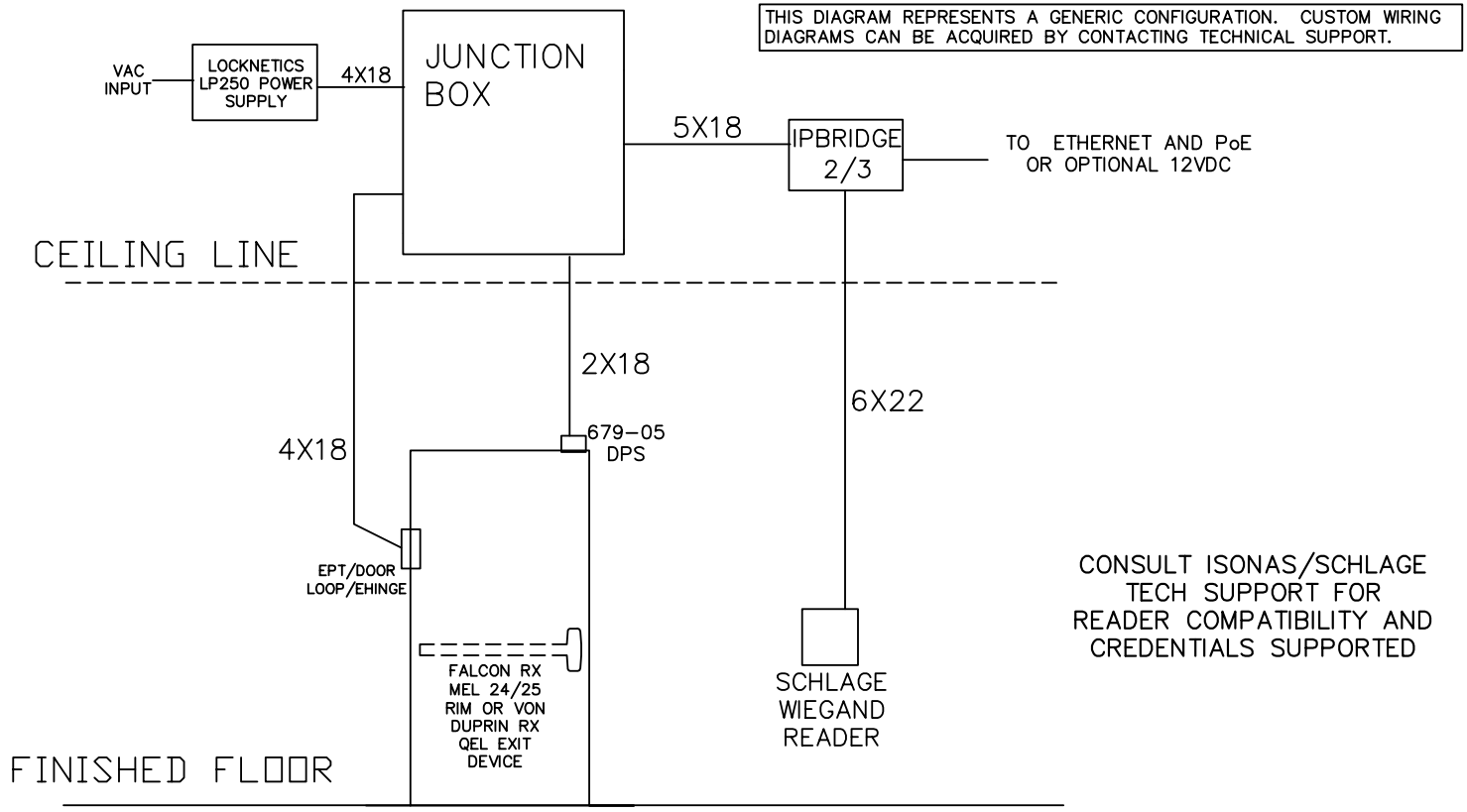
TITLE: ISONAS IP BRIDGE WITH QEL/MEL -SINGLE DOOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113773W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- ISONAS IPBRIDGE
- SCHLAGE WIEGAND READER
- FALCON RX MEL 24/25 OR VON DUPRIN RX QEL PANIC
- LOCKNETICS LP250
- EPT/DOOR LOOP/EHINGE
- SCHLAGE 679-05 DPS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. VALID CREDENTIAL WILL CAUSE MEL OR QEL TO RETRACT.

RX IN PANIC TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.
VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

DATE DRAWN: 10-21-20
REVISION DATE: 3-7-22

ALLEGION™

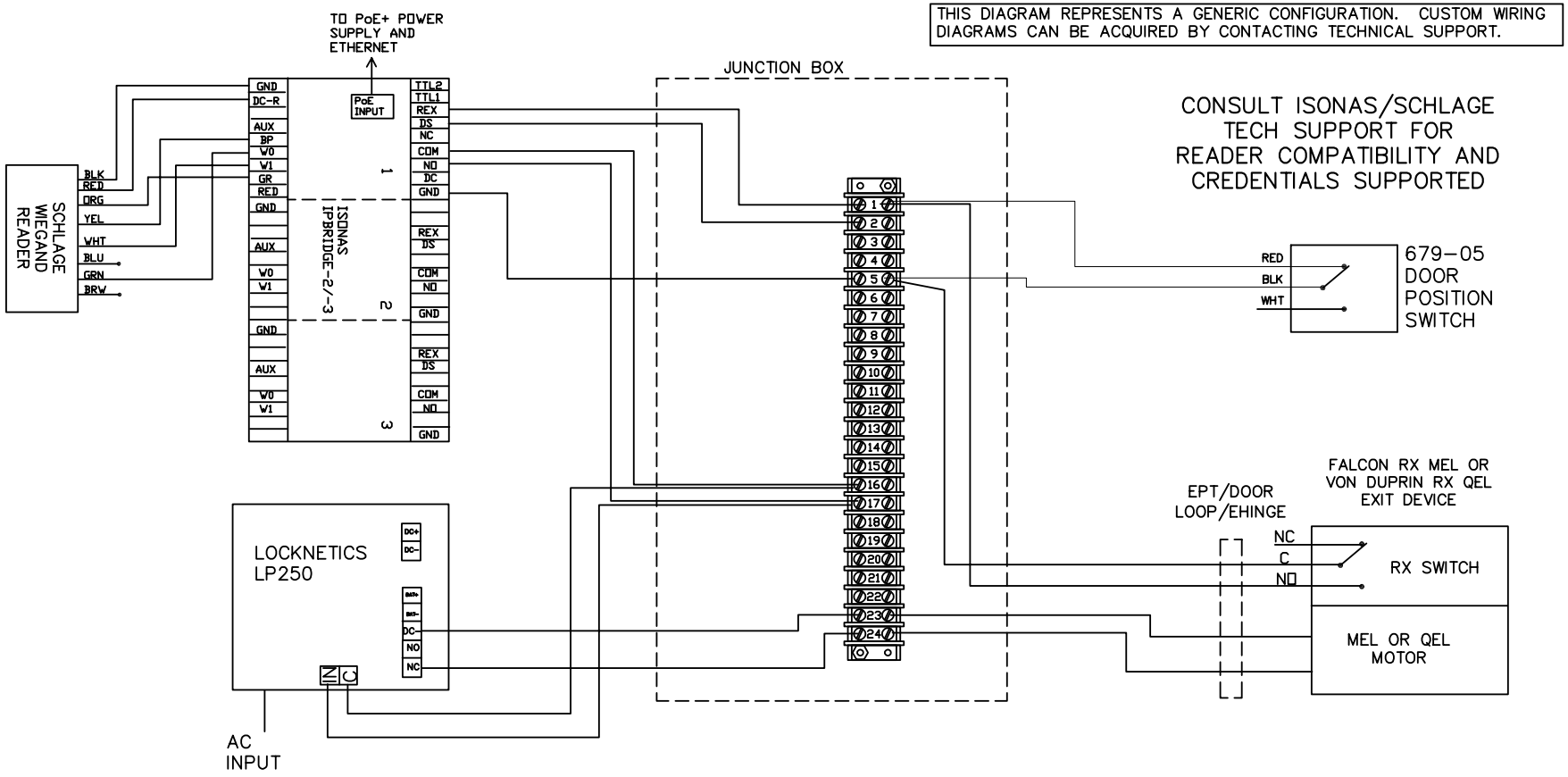
TITLE: ISONAS IP BRIDGE WITH RX QEL/RX MEL -SINGLE DOOR

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113774R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

ISONAS IPBRIDGE
SCHLAGE WIEGAND READER
FALCON RX MEL 24/25 OR VON DUPRIN RX QEL PANIC
LOCKNETICS LP250
EPT/DOOR LOOP/EHINGE
SCHLAGE 679-05 DPS
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. VALID CREDENTIAL WILL CAUSE MEL OR QEL TO RETRACT.

RX IN PANIC TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

DATE DRAWN: 10-21-20

REVISION DATE: 3-7-22

ALLEGION™

TITLE: ISONAS IP BRIDGE WITH RX QEL/RX MEL -SINGLE DOOR

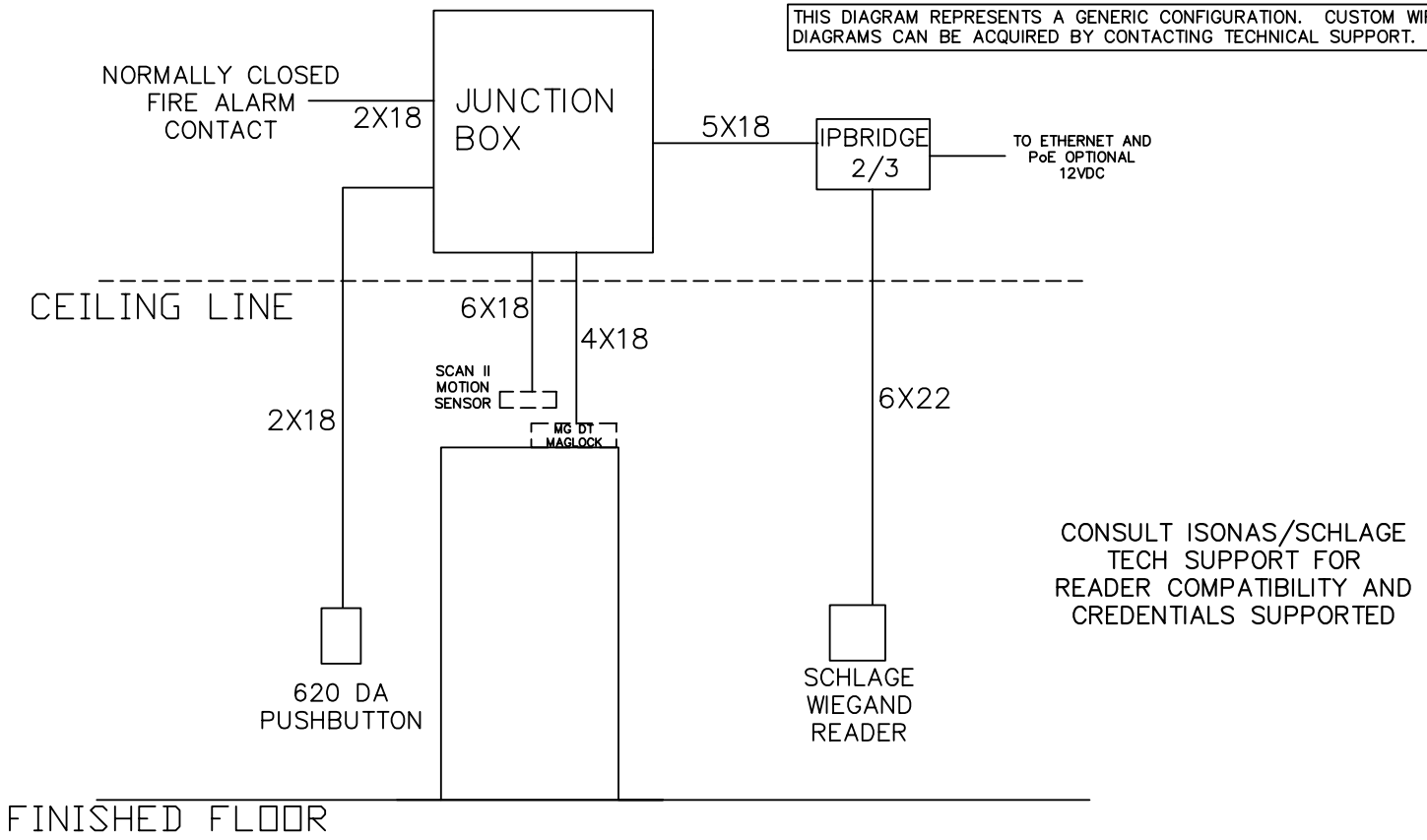
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113774W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



CONSULT ISONAS/SCHLAGE TECH SUPPORT FOR READER COMPATIBILITY AND CREDENTIALS SUPPORTED

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
ISONAS IPBRIDGE
SCHLAGE WIEGAND READER
MAGLOCK IN RUSH SUPPRESSOR
LOCKNETICS MG DT MAG LOCK WITH INTEGRATED DPS
SCHLAGE SCANII MOTION SENSOR
LOCKNETICS 620DA PUSHBUTTON JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. VALID CREDENTIAL WILL CAUSE MG MAGLOCK TO RELEASE.

SCAN II MOTION SENSOR OR 620DA OR TO SHUNT DOOR FORCED ALARM AND RELEASE DOOR FOR FREE EGRESS.

FIRE ALARM TO RELEASE MG MAGLOCK FOR FREE ACCESS FROM EITHER SIDE.

FREE EGRESS AT ALL TIMES.

VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

DATE DRAWN: 10-21-20
REVISION DATE: 3-7-22

ALLEGION™

TITLE: ISONAS IP BRIDGE WITH MG MAGLOCK -SINGLE DOOR

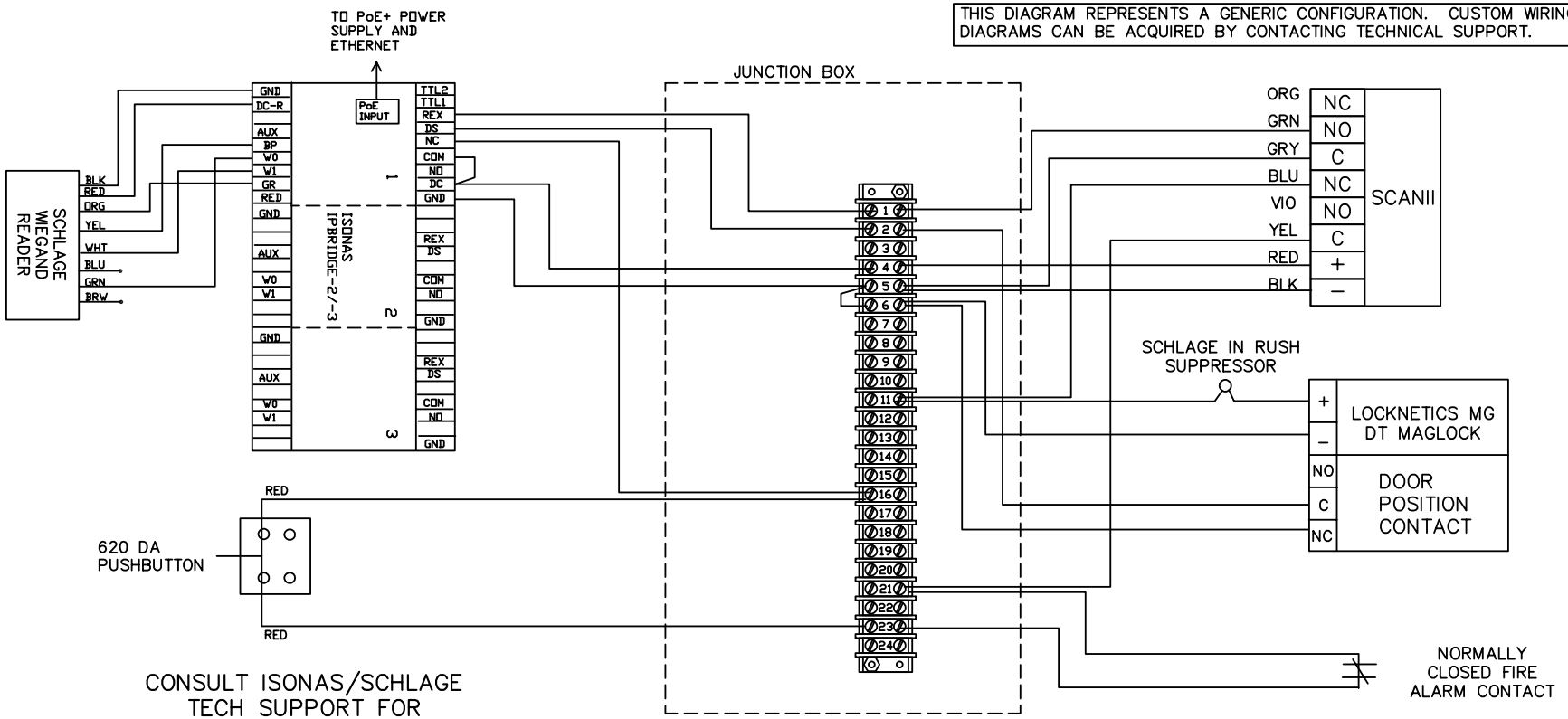
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113775R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



CONSULT ISONAS/SCHLAGE TECH SUPPORT FOR READER COMPATIBILITY AND CREDENTIALS SUPPORTED

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

ISONAS IPBRIDGE
SCHLAGE WIEGAND READER
MAGLOCK IN RUSH SUPPRESSOR
LOCKNETICS MG DT MAG LOCK WITH INTEGRATED DPS
SCHLAGE SCANII MOTION SENSOR
LOCKNETICS 620DA PUSHBUTTON
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. VALID CREDENTIAL WILL CAUSE MG MAGLOCK TO RELEASE.

SCAN II MOTION SENSOR OR 620DA OR TO SHUNT DOOR FORCED ALARM AND RELEASE DOOR FOR FREE EGRESS.

FIRE ALARM TO RELEASE MG MAGLOCK FOR FREE ACCESS FROM EITHER SIDE.

FREE EGRESS AT ALL TIMES.

VERIFY PoE+ POWER SOURCE ADEQUATE FOR LOAD.

DATE DRAWN: 10-21-20

REVISION DATE: 3-7-22

ALLEGION™

TITLE: ISONAS IP BRIDGE WITH MG MAGLOCK -SINGLE DOOR

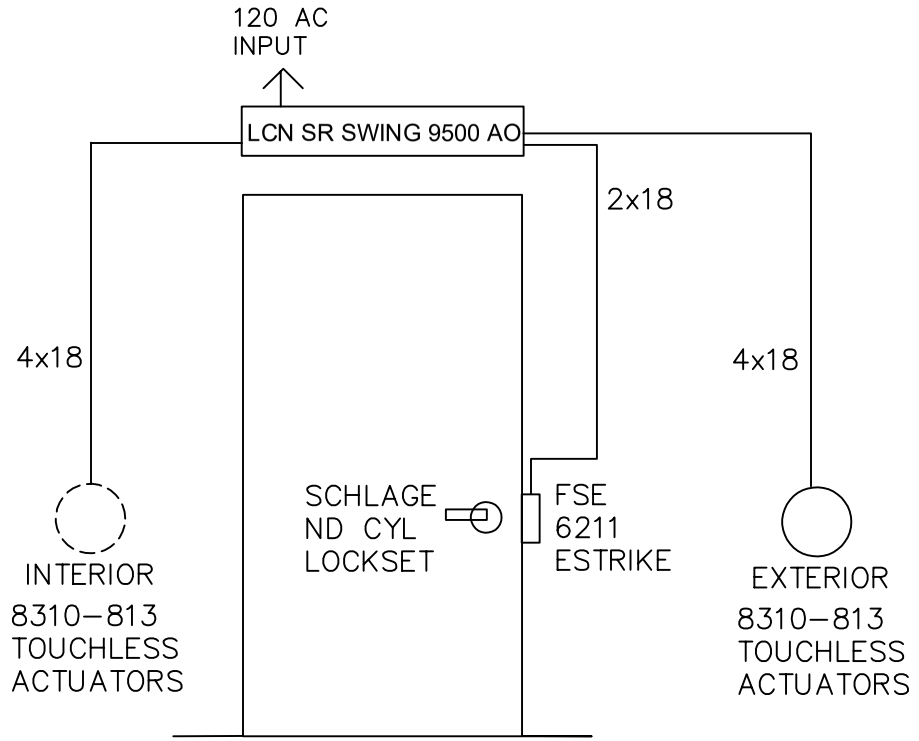
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113775W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
1 LCN 9500 SR SWING AO
2 LCN 8310-813 TOUCHLESS ACTUATOR
1 VD FSE 6211 ESTRIKE

TYPE
INTERIOR DOOR WITH VD ESTRIKE, LCN SR SWING AO AND TOUCHLESS ACTUATORS INTERIOR AND EXTERIOR

OPERATION:

EXTERIOR WAVING HAND IN FRONT OF 8310–813 TOUCHLESS ACTUATOR TO SIGNAL LCN SR SWING AO TO OPEN DOOR AND RELEASE 6211 ESTRIKE. MAY BE OPENED MANUALLY VIA ND CYL LOCK

INTERIOR WAVING HAND IN FRONT OF 8310–813 TOUCHLESS ACTUATOR TO SIGNAL LCN SR SWING AO TO RELEASE 6211 ESTRIKE AND OPEN DOOR. MAY BE OPENED VIA ND CYL LOCK.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE LCN SR SWING ENCLOSURE

DATE DRAWN: 04-03-20
REVISION DATE: 04-03-20

ALLEGION™

TITLE: INTERIOR DOOR WITH VD ESTRIKE, LCN SR SWING AO AND TOUCHLESS ACTUATORS INTERIOR AND EXTERIOR

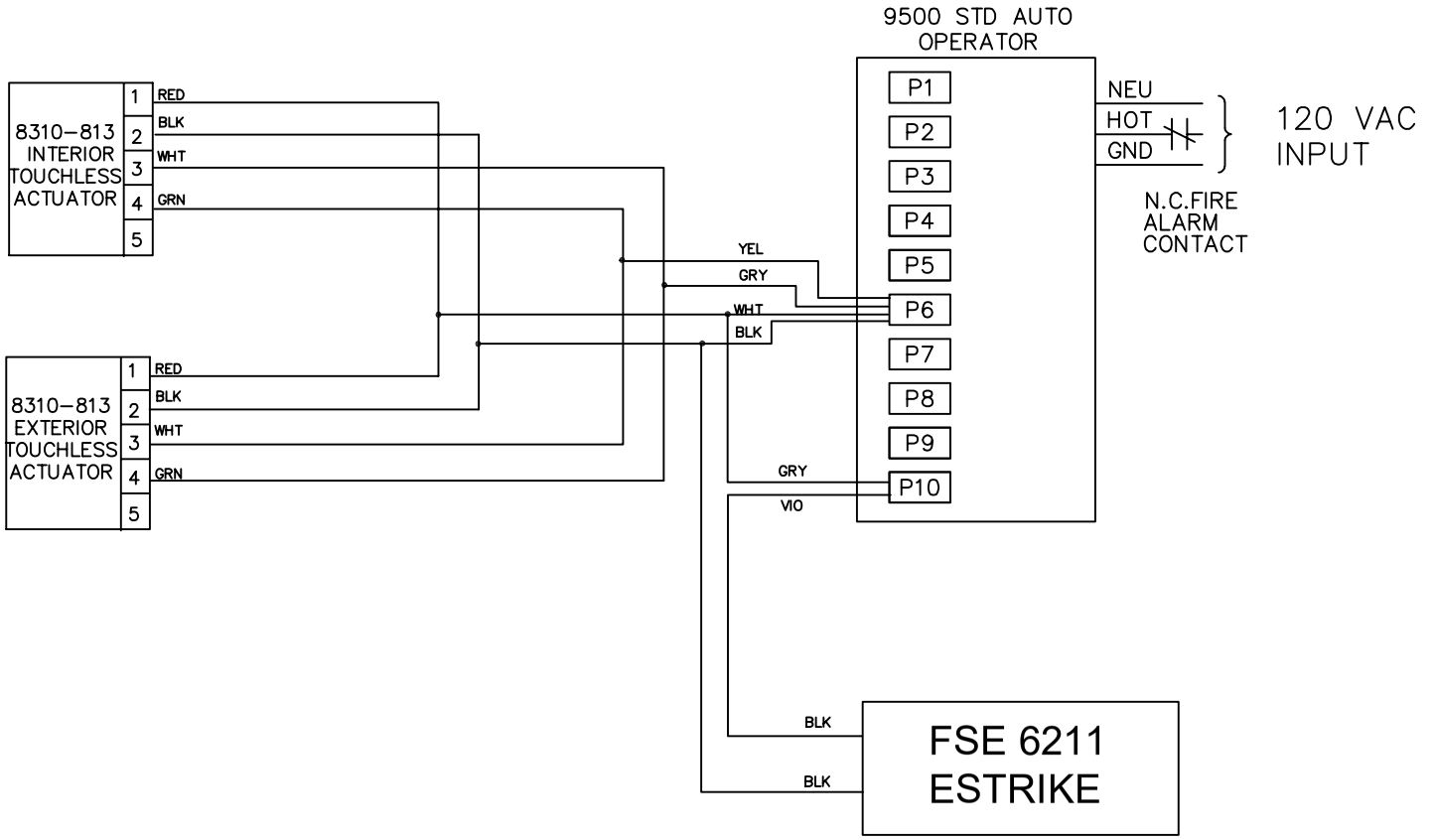
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113517 R

DRAWN/CHECKED BY: B DOVE/J WEISS

REV A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 LCN 9500 SR SWING AO
2 LCN 8310-813 TOUCHLESS ACTUATOR
1 VD FSE 6211 ESTRIKE

TYPE
INTERIOR DOOR WITH VD ESTRIKE, LCN SR SWING AO AND TOUCHLESS ACTUATORS INTERIOR AND EXTERIOR

OPERATION:

EXTERIOR WAVING HAND IN FRONT OF 8310–813 TOUCHLESS ACTUATOR TO SIGNAL LCN SR SWING AO TO OPEN DOOR AND RELEASE 6211 ESTRIKE. MAY BE OPENED MANUALLY VIA ND CYL LOCK

INTERIOR WAVING HAND IN FRONT OF 8310–813 TOUCHLESS ACTUATOR TO SIGNAL LCN SR SWING AO TO RELEASE 6211 ESTRIKE AND OPEN DOOR. MAY BE OPENED VIA ND CYL LOCK.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE IN THE LCN SR SWING ENCLOSURE

DATE DRAWN: 04-03-20
REVISION DATE: 04-03-20

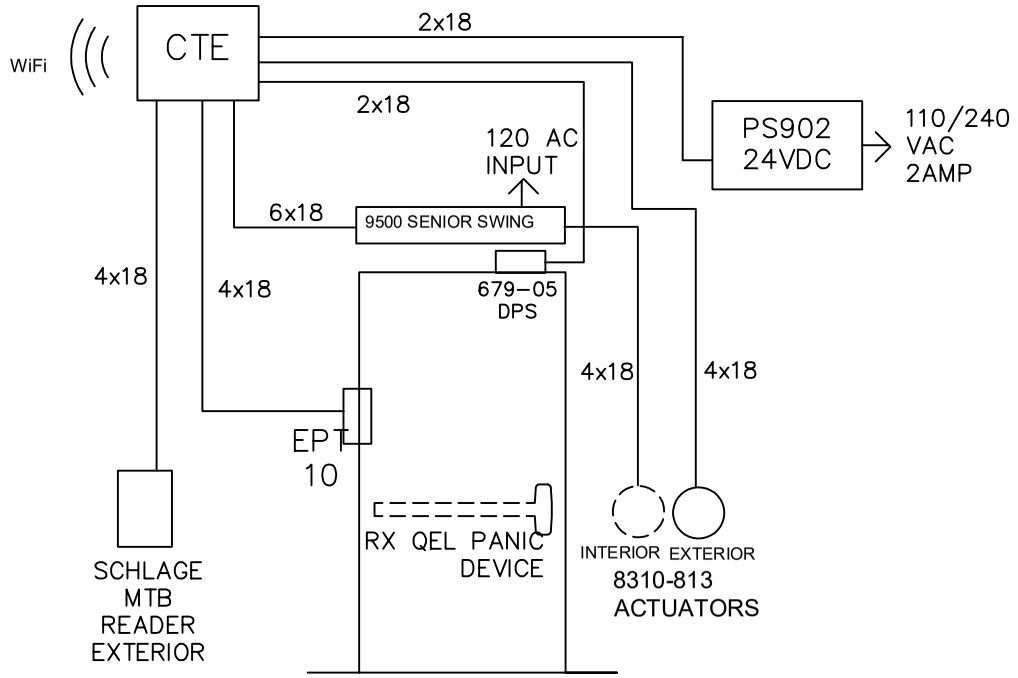
ALLEGION™

TITLE: INTERIOR DOOR WITH VD ESTRIKE, LCN SR SWING AO AND TOUCHLESS ACTUATORS INTERIOR AND EXTERIOR

DRAWING TYPE: WIRING DIAGRAM
DWG NO: 113517 W
DRAWN BY: B DOVE/J WEISS
REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

TO ENGAGE™ CLOUD OR INTEGRATED SOFTWARE ALLIANCE MEMBER(SAM) SYSTEM; WIFI OR BLUETOOTH



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 1 CTE x MTB SCHLAGE READER
- 1 VD QEL PANIC
- 1 EPT 10
- 1 PS902
- 1 679-05 DPS
- 1 LCN 9500 SENIOR SWING - SINGLE DOOR
- 2 8310-813 TOUCHLESS ACTUATORS

TYPE
CTE WITH QEL AND PS902 WITH 9500 SENIOR SWING AO, 8310-813 TOUCHLESS ACTUATORS

OPERATION:
SCHLAGE MTB READER TO SIGNAL EL TO RETRACT THE ELECTRIC LATCH ON VON DUPRIN RX QEL PANIC BAR AND ENABLE EXTERIOR ACTUATOR TO ALLOW ENTRY. FREE EGRESS ALWAYS PERMITTED. INTERIOR ACTUATOR ALWAYS ACTIVE.

ADDITIONAL WIRING WILL BE REQUIRED THAT IS NOT SHOWN HERE.

CTE TO COMMUNICATE TO ENGAGE™ CLOUD OR SOFTWARE ALLIANCE MEMBER(SAM)SYSTEM

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 03-27-20
REVISION DATE: 04-03-20

ALLEGION™

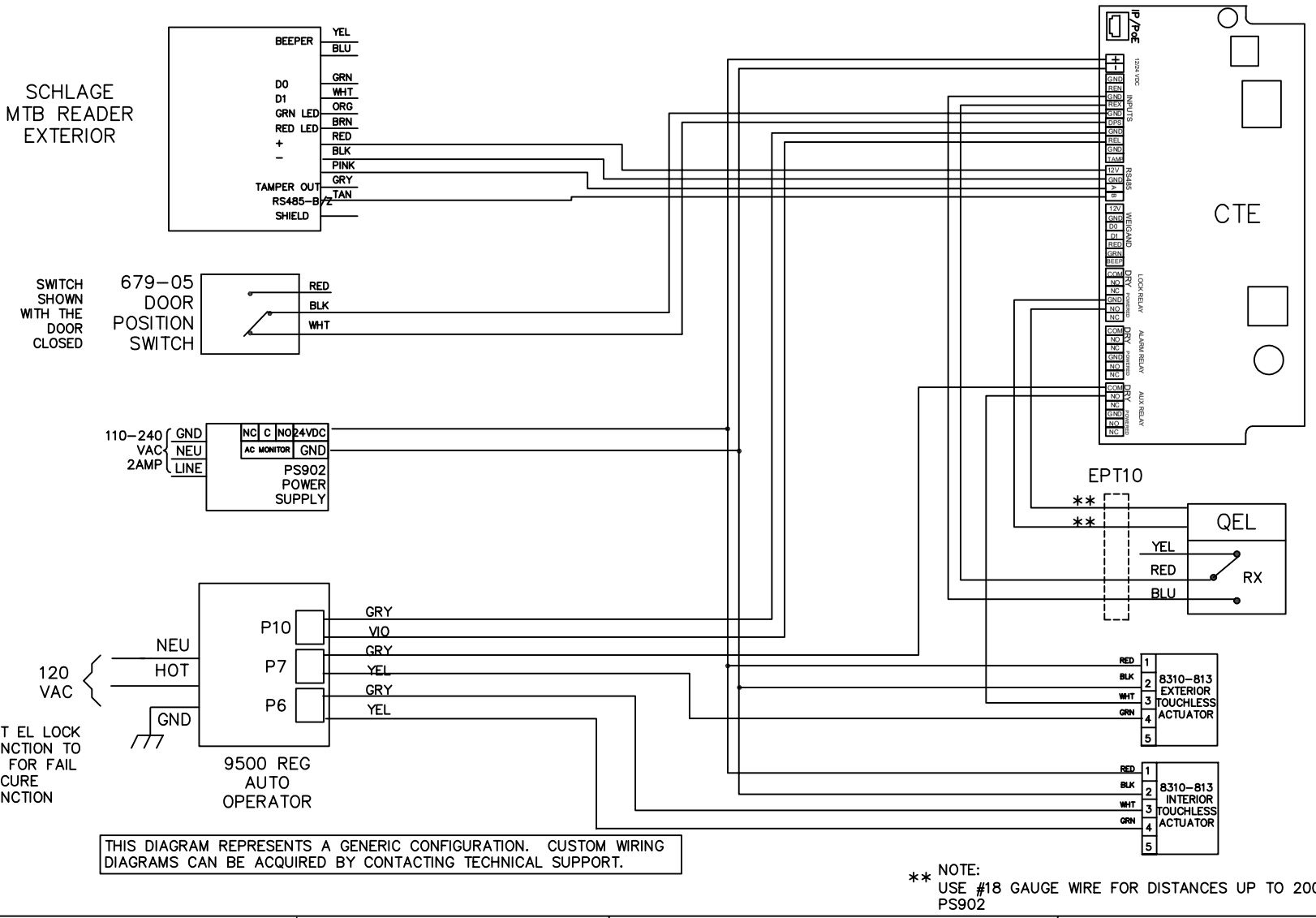
TITLE: CTE WITH QEL AND PS902 WITH 9500 SENIOR SWING AO, 8310-813 TOUCHLESS ACTUATORS

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113518 R

DRAWN BY/CHECKED BY: B DOVE/J WEISS

REV A



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

** NOTE:
USE #18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS902

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
- 1 CTE x MTB SCHLAGE READER
- 1 VD QEL PANIC
- 1 EPT 10
- 1 PS902
- 1 679-05 DPS
- 1 LCN 9500 SENIOR SWING - SINGLE DOOR
- 2 8310-813 TOUCHLESS ACTUATORS

TYPE
CTE WITH QEL AND PS902 WITH 9500 SENIOR SWING AO, 8310-813 TOUCHLESS ACTUATORS

OPERATION:
SCHLAGE MTB READER TO SIGNAL EL TO RETRACT THE ELECTRIC LATCH ON VON DUPRIN RX QEL PANIC BAR AND ENABLE EXTERIOR ACTUATOR TO ALLOW ENTRY. FREE EGRESS ALWAYS PERMITTED. INTERIOR ACTUATOR ALWAYS ACTIVE.

ADDITIONAL WIRING WILL BE REQUIRED THAT IS NOT SHOWN HERE.

CTE TO COMMUNICATE TO ENGAGE™ CLOUD OR SOFTWARE ALLIANCE MEMBER(SAM)SYSTEM

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 03-27-20

REVISION DATE: 04-03-20

ALLEGION™

TITLE: CTE WITH QEL AND PS902 WITH 9500 SENIOR SWING AO, 8310-813 TOUCHLESS ACTUATORS

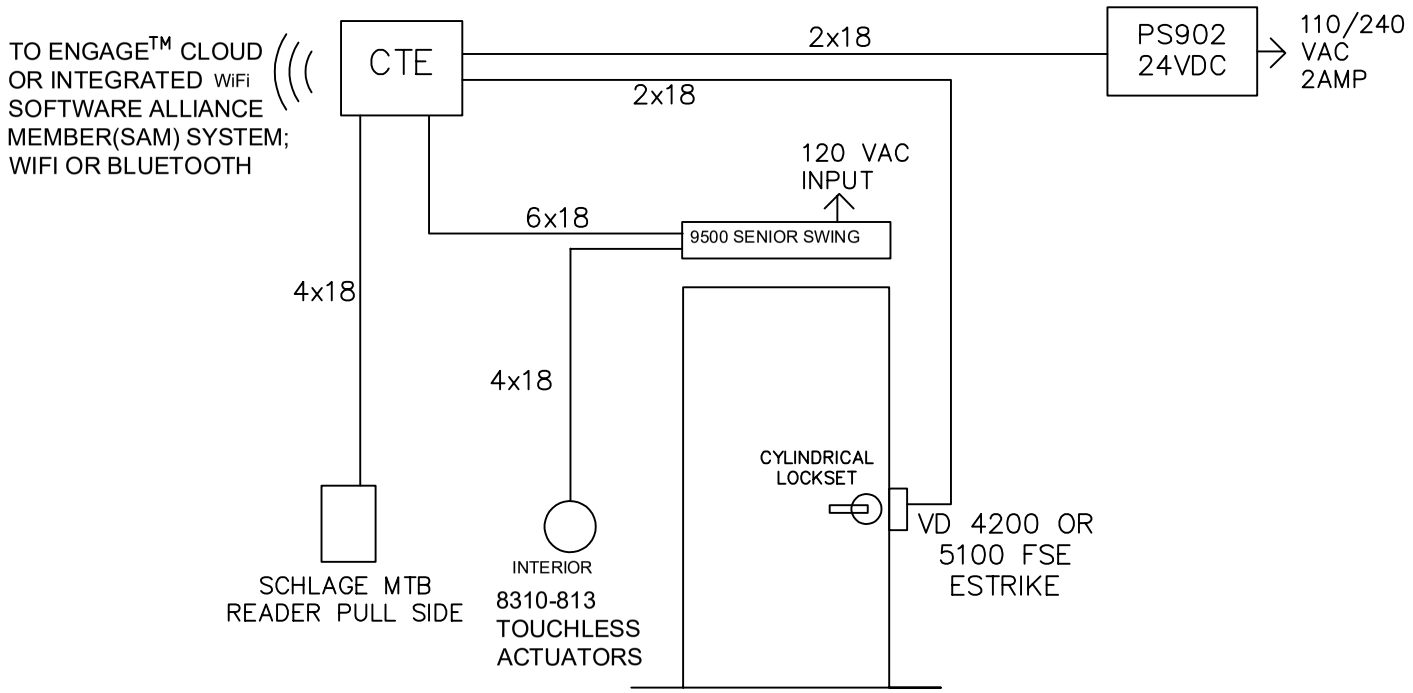
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113518W

REV: A

DRAWN/CHECKED BY: B DOVE /J WEISS

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 1 CTE
- 1 MTB SCHLAGE READER
- 1 VD 5100 OR 4200 FSE ESTRIKE
- 1 PS902
- 1 9500 SENIOR SWING - SINGLE DOOR
- 1 8310-813 TOUCHLESS ACTUATOR

TYPE
CTE ACCESS CONTROL WITH ESTRIKE WITH SENIOR SWING AO AND INTERIOR TOUCHLESS ACTUATOR

OPERATION:
SCHLAGE MTB READER TO SIGNAL ESTRIKE TO RELEASE AND SWING DOOR OPEN VIA 9500 AO. FREE EGRESS ALWAYS PERMITTED. INTERIOR ACTUATOR ALWAYS ACTIVE.

ADDITIONAL WIRING WILL BE REQUIRED THAT IS NOT SHOWN HERE.

CTE TO COMMUNICATE TO ENGAGE™ CLOUD OR SOFTWARE ALLIANCE MEMBER(SAM)SYSTEM

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 03-26-20

REVISION DATE: 04-03-20

ALLEGION™

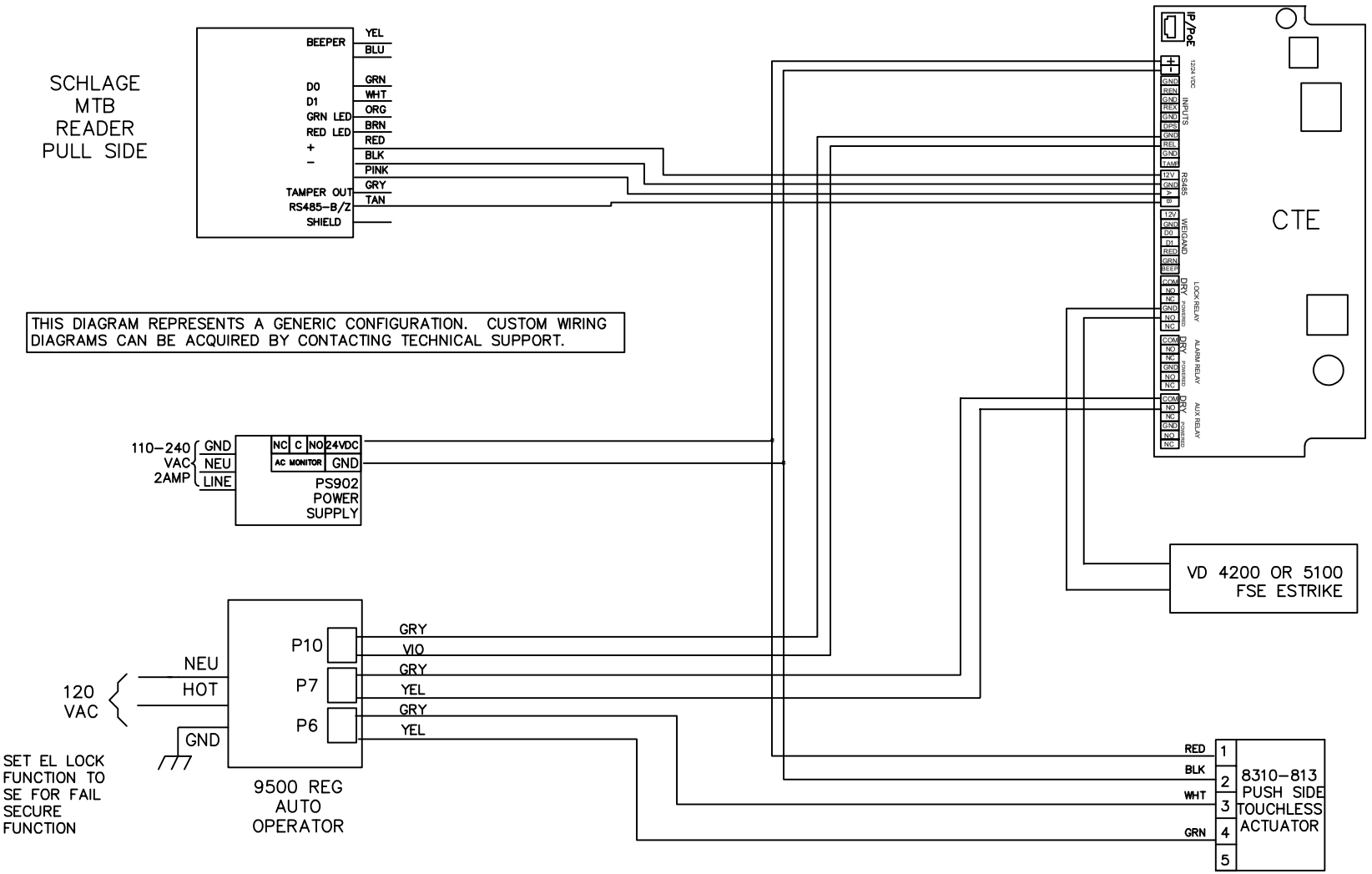
TITLE: CTE WITH ESTRIKE AND PS902 WITH 9500 SENIOR SWING AO AND INTERIOR TOUCHLESS ACTUATOR

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113520R

REV: A

DRAWN/CHECKED BY: B DOVE/J WEISS



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
- 1 CTE
- 1 MTB SCHLAGE READER
- 1 VD 4200 OR 5100 FSE ESTRIKE
- 1 PS902
- 1 LCN 9500 SENIOR SWING - SINGLE DOOR
- 1 LCN 8310-813 TOUCHLESS ACTUATOR

TYPE
CTE ACCESS CONTROL WITH ESTRIKE WITH SENIOR SWING AO AND INTERIOR TOUCHLESS ACTUATOR

OPERATION:
SCHLAGE MTB READER TO SIGNAL ESTRIKE TO RELEASE AND SWING DOOR OPEN VIA 9500 AO. FREE EGRESS ALWAYS PERMITTED. INTERIOR ACTUATOR ALWAYS ACTIVE.

ADDITIONAL WIRING WILL BE REQUIRED THAT IS NOT SHOWN HERE.

CTE TO COMMUNICATE TO ENGAGE™ CLOUD OR SOFTWARE ALLIANCE MEMBER(SAM)SYSTEM

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 03-26-20

REVISION DATE: 04-03-20

ALLEGION™

TITLE: CTE WITH ESTRIKE AND PS902 WITH 9500 SENIOR SWING AO AND INTERIOR TOUCHLESS ACTUATOR

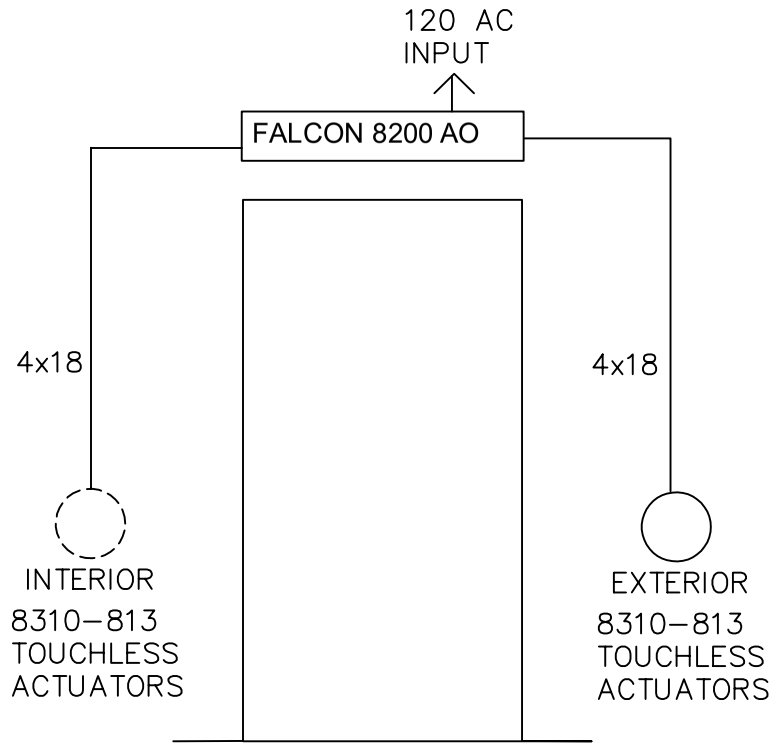
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113520W

REV: A

DRAWN/CHECKED BY: B DOVE /J WEISS

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

1 FALCON 8200 AO
2 8310-813 TOUCHLESS ACTUATOR

TYPE
NON LATCHING BATHROOM DOOR WITH TOUCHLESS ACTUATORS INTERIOR AND EXTERIOR

OPERATION:
SINGLE BATHROOM DOOR ENTRANCE, NON FIRE RATED, NO POSITIVE LATCHING.

EXTERIOR WAVING HAND IN FRONT OF 8310–813 TOUCHLESS ACTUATOR TO SIGNAL FALCON 8200 AO TO OPEN OR DOOR MAY BE PULLED OPEN MANUALLY VIA PULL ON DOOR

INTERIOR WAVING HAND IN FRONT OF 8310–813 TOUCHLESS ACTUATOR TO SIGNAL FALCON 8200 AO TO OPEN OR DOOR MAY BE PUSHED OPEN FROM INSIDE.

DATE DRAWN: 03-27-20
REVISION DATE: 04-03-20

ALLEGION™

TITLE: NON LATCHING BATHROOM DOOR WITH TOUCHLESS ACTUATORS INTERIOR AND EXTERIOR

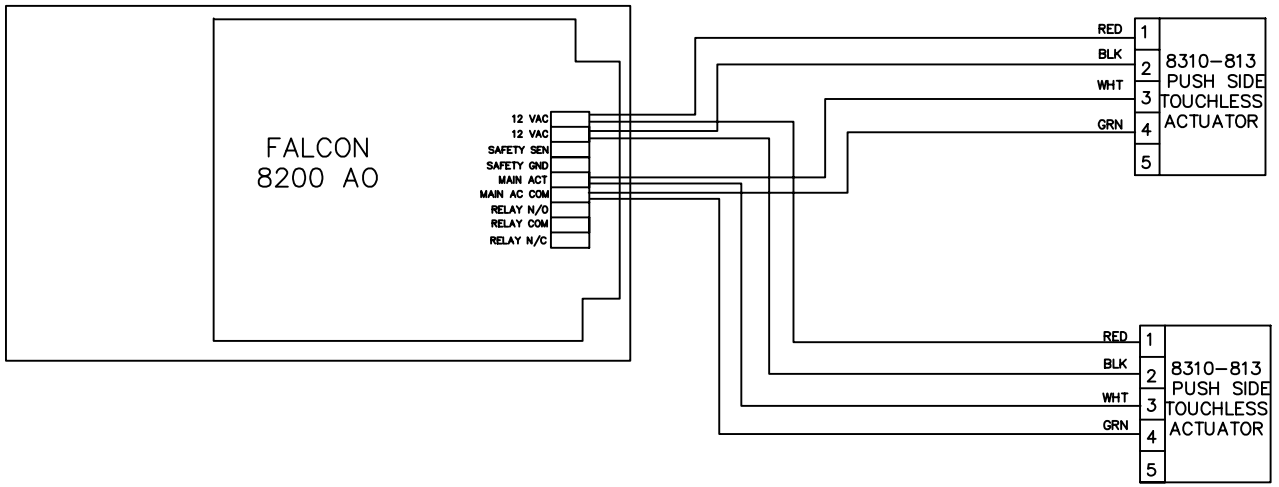
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113521R

DRAWN/CHECKED BY: B DOVE/J WEISS

REV A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

1 FALCON 8200 AO
2 8310-813 TOUCHLESS ACTUATOR

TYPE
NON LATCHING BATHROOM DOOR WITH TOUCHLESS ACTUATORS INTERIOR AND EXTERIOR

OPERATION:
SINGLE BATHROOM DOOR ENTRANCE, NON FIRE RATED, NO POSITIVE LATCHING.

EXTERIOR WAVING HAND IN FRONT OF 8310-813 TOUCHLESS ACTUATOR TO SIGNAL FALCON 8200 AO TO OPEN OR DOOR MAY BE PULLED OPEN MANUALLY VIA PULL ON DOOR

INTERIOR WAVING HAND IN FRONT OF 8310-813 TOUCHLESS ACTUATOR TO SIGNAL FALCON 8200 AO TO OPEN OR DOOR MAY BE PUSHED OPEN FROM INSIDE.

DATE DRAWN: 03-27-20

REVISION DATE: 04-03-20

ALLEGION™

TITLE: NON LATCHING BATHROOM DOOR WITH TOUCHLESS ACTUATORS INTERIOR AND EXTERIOR

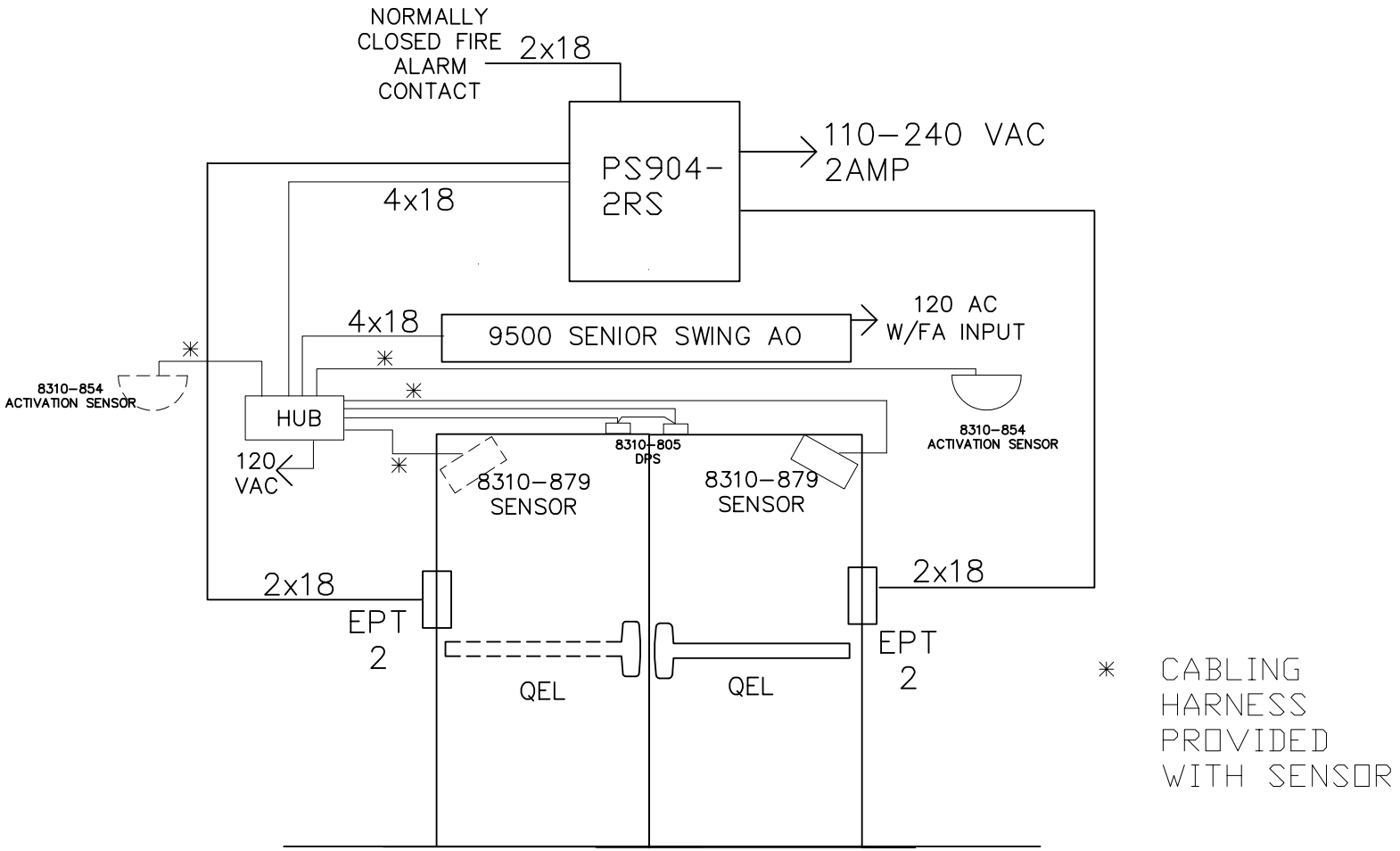
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113521W

REV: A

DRAWN/CHECKED BY: B DOVE/J WEISS

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
- 2 VD QEL PANIC DEVICE
- 1 PS904-2RS POWER SUPPLY
- 2 EPT POWER TRANSFER
- 1 9500 SENIOR SWING AUTO OPERATOR PAIR
- 2 PAIR 8310-879 SAFETY SENSORS WITH 1 CONTROLLER
- 2 8310-805 DPS
- 2 8310-854 ACTIVATION SENSORS

TYPE
PAIR QEL PANICS WITH AO AND SENSORS

OPERATION:
FIRE ALARM TO HOLD QEL LATCHES RETRACTED.

8310-854 ACTIVATION SENSORS TO SWING DOORS OPEN.

8310-879 SAFETY SENSORS TO KEEP DOORS FROM SWINGING INTO ONCOMING TRAFFIC

THIS CONFIGURATION REPRESENTS A FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS9104 ENCLOSURE OR AT HUB.

DATE DRAWN: 03-31-20
REVISION DATE: 03-31-20

ALLEGION™

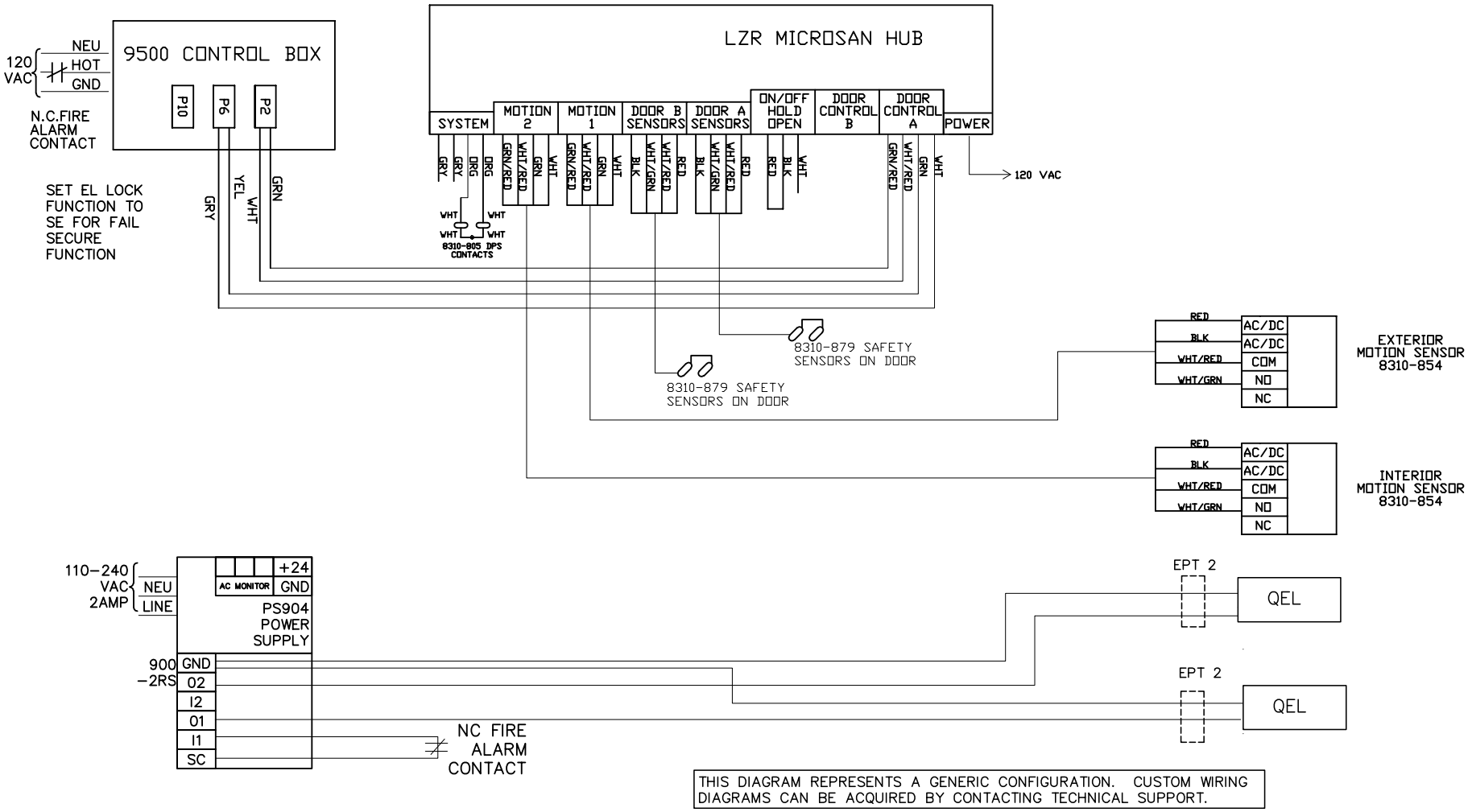
TITLE: DOUBLE EGRESS FIRE RATED PAIR, QEL, 9500 AO WITH SENSORS

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113522

DRAWN BY: B DOVE/J WEISS

REV: A



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
2 VD QEL PANIC DEVICE

1 PS904-2RS POWER SUPPLY

2 EPT POWER TRANSFER

1 9500 SENIOR SWING AUTO OPERATOR PAIR

2 PAIR 8310-879 SAFETY SENSORS WITH 1 CONTROLLER

2 8310-805 DPS

2 8310-854 ACTIVATION SENSORS

TYPE
PAIR QEL PANICS WITH AO AND SENSORS

OPERATION:
FIRE ALARM TO HOLD QEL LATCHES RETRACTED.

8310-854 ACTIVATION SENSORS TO SWING DOORS OPEN.

8310-879 SAFETY SENSORS TO KEEP DOORS FROM SWINGING INTO ONCOMING TRAFFIC

THIS CONFIGURATION REPRESENTS A FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS9104 ENCLOSURE OR AT HUB.

DATE DRAWN: 03-31-20

REVISION DATE: 03-31-20

ALLEGION™

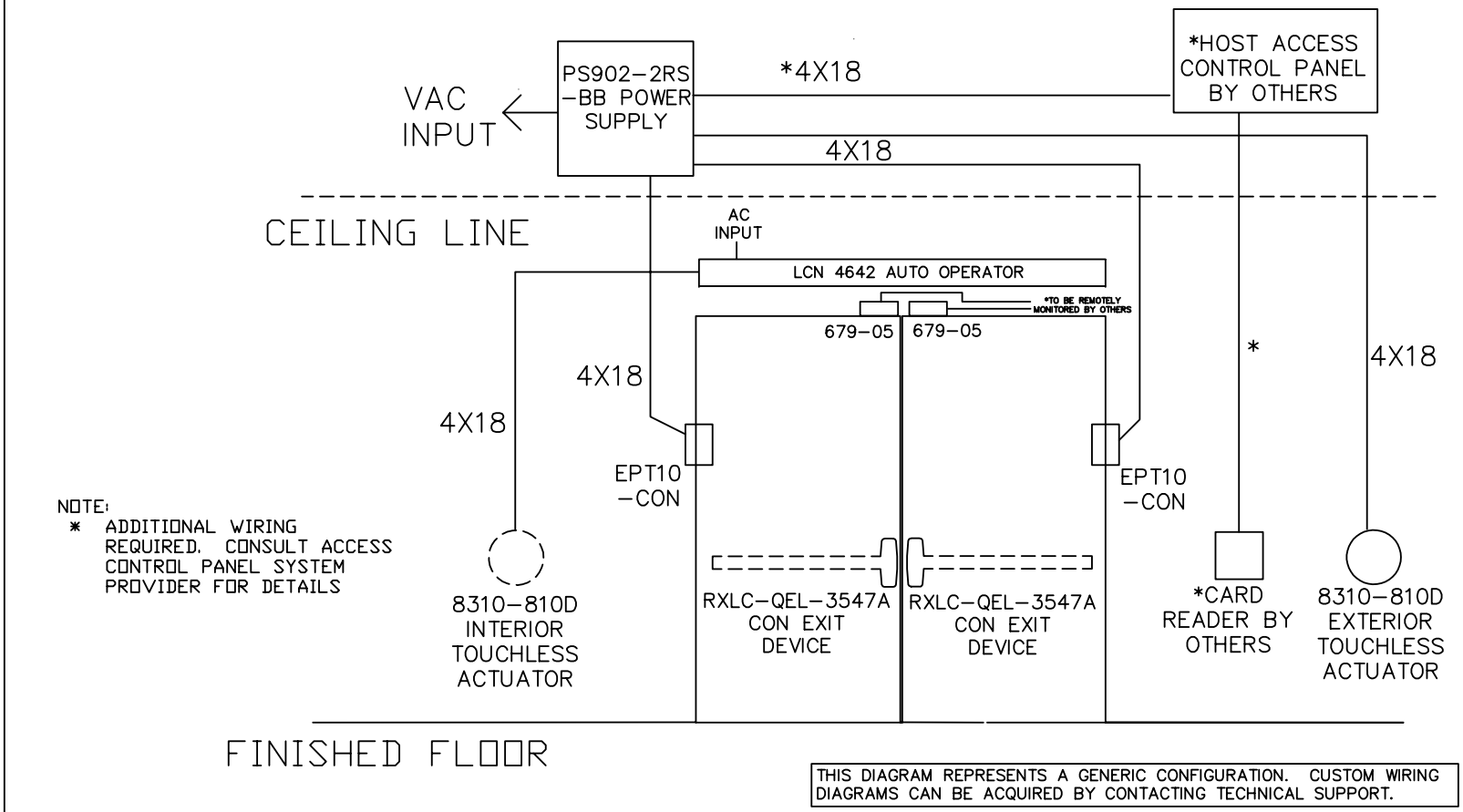
TITLE:
DOUBLE EGRESS FIRE RATED PAIR, QEL, 9500 AO WITH SENSORS

DRAWING TYPE:
WIRING DIAGRAM

DWG NO: 113522W

REV: A

DRAWN/CHECKED BY:
B DOVE/J WEISS



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

2 RXLC QEL 3547A CON EXIT DEVICES

2 EPT10 CON

1 LCN 4642 AUTO OPERATOR

2 LCN 8310-810D TOUCHLESS ACTUATORS

1 SCHLAGE PS902-2RS-BB POWER SUPPLY

2 679-05 DOOR POSITION SWITCHES

1 CARD READER BY OTHERS TO ACCESS CONTROL SYSTEM BY OTHERS

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS QEL LATCH RETRACTION ON BOTH EXIT DEVICES AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE TO RETRACT LATCHES AND OPEN DOOR.

RXLC AND 679 DPS SWITCHES TO BE REMOTELY MONITORED BY ACCESS CONTROL SYSTEM BY OTHERS.

THERE IS ADDITIONAL WIRING FOR THE ACCESS CONTROL SYSTEM, 679-05 DPS AND RX-LC SWITCHES THAT IS NOT SHOWN HERE.

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-13-20

REVISION DATE: 10-13-20

ALLEGION™

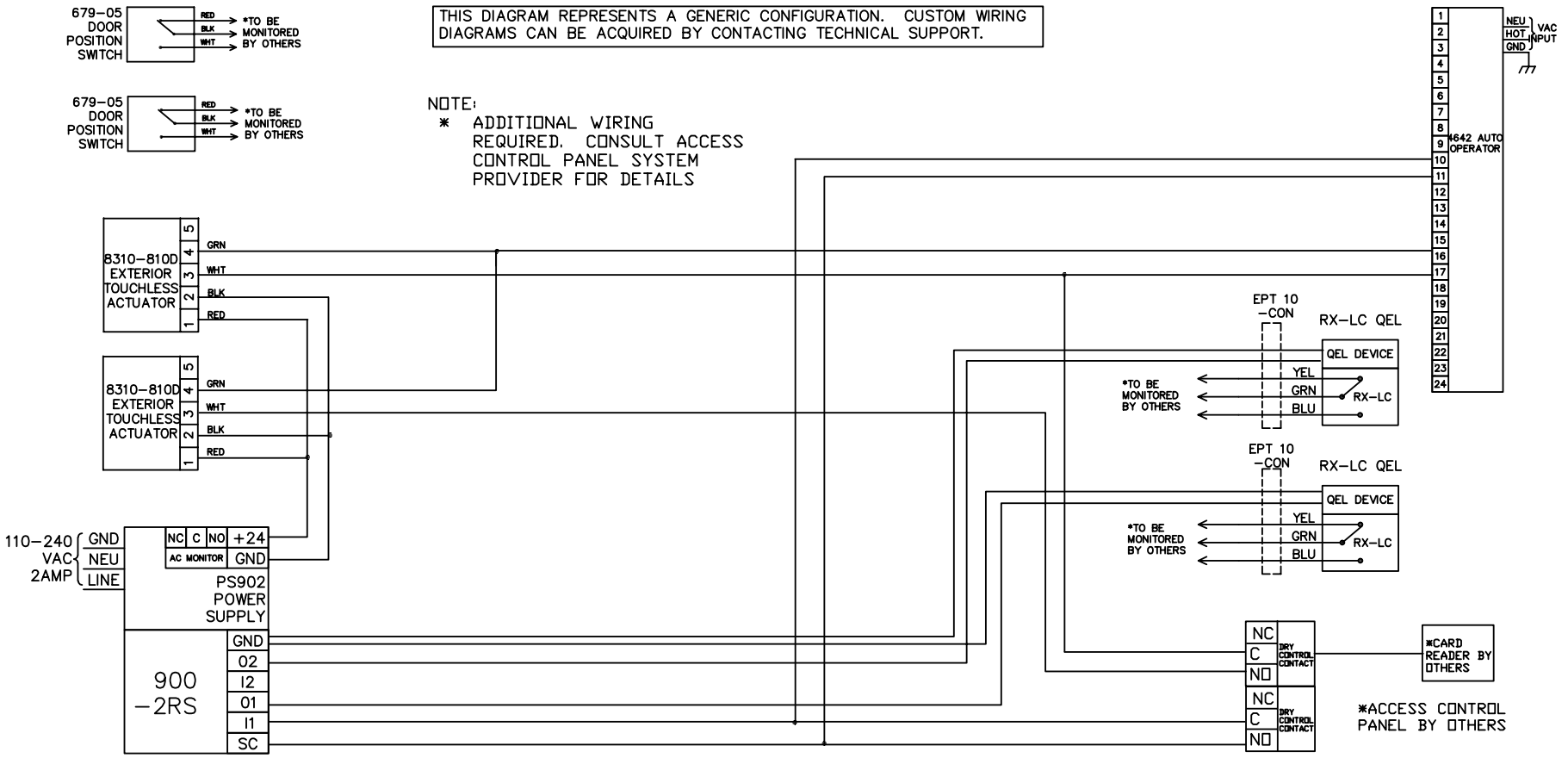
TITLE: EXTERIOR SECURED PAIR OF DOORS WITH AUTO OPERATOR

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113714

DRAWN/CHECKED BY: B DOVE

REV: A



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

2 RXLC QEL 3547A CON EXIT DEVICES

2 EPT10 CON

1 LCN 4642 AUTO OPERATOR

2 LCN 8310-810D TOUCHLESS ACTUATORS

1 SCHLAGE PS902-2RS-BB POWER SUPPLY

2 679-05 DOOR POSITION SWITCHES

1 CARD READER BY OTHERS TO ACCESS CONTROL SYSTEM BY OTHERS

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS QEL LATCH RETRACTION ON BOTH EXIT DEVICES AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE TO RETRACT LATCHES AND OPEN DOOR.

RXLC AND 679 DPS SWITCHES TO BE REMOTELY MONITORED BY ACCESS CONTROL SYSTEM BY OTHERS.

THERE IS ADDITIONAL WIRING FOR THE ACCESS CONTROL SYSTEM, 679-05 DPS AND RX-LC SWITCHES THAT IS NOT SHOWN HERE.

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-13-20

REVISION DATE: 10-13-20

ALLEGION™

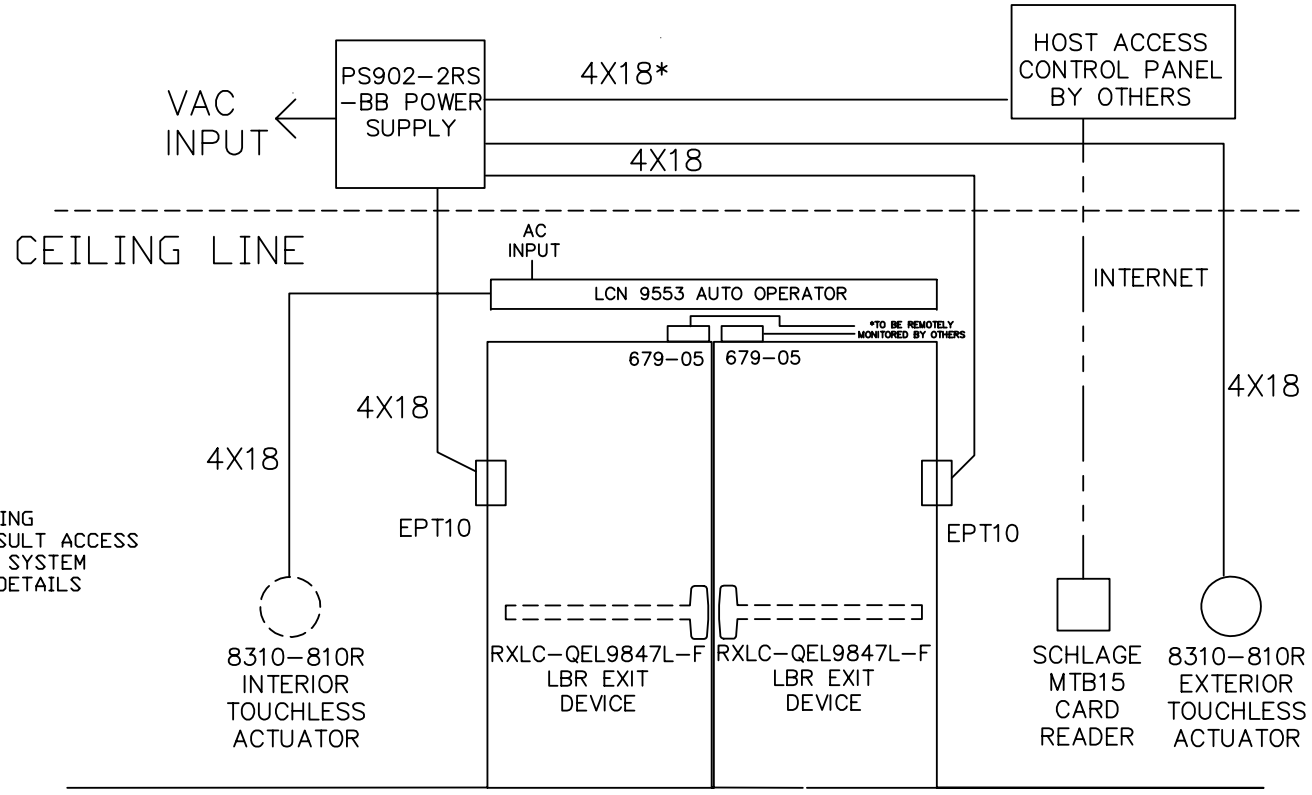
TITLE:
EXTERIOR SECURED PAIR OF DOORS WITH AUTO OPERATOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113714W

DRAWN/CHECKED BY: B DOVE

REV: A



NOTE:
* ADDITIONAL WIRING REQUIRED. CONSULT ACCESS CONTROL PANEL SYSTEM PROVIDER FOR DETAILS

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

2 RXLC QEL 9847L-F LBR FIRE RATED EXIT DEVICES

2 EPT10

1 LCN 9553 AUTO OPERATOR

2 LCN 8310-810R TOUCHLESS ACTUATORS

1 SCHLAGE PS902-2RS-BB POWER SUPPLY

2 679-05 DOOR POSITION SWITCHES

1 MTB15 READER TO ACCESS CONTROL SYSTEM BY OTHERS

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS QEL LATCH RETRACTION ON BOTH FIRE RATED EXIT DEVICE AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE TO RETRACT LATCHES AND OPEN DOOR.

RXLC AND 679 DPS SWITCHES TO BE REMOTELY MONITORED BY ACCESS CONTROL SYSTEM BY OTHERS, CONNECTIONS AND WIRING NOT SHOWN HERE.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-13-20

REVISION DATE: 10-13-20

ALLEGION™

TITLE:
INTERIOR CROSS-CORRIDOR, LATCHING, FIRE RATED PAIR OF DOORS WITH AUTO OPERATOR

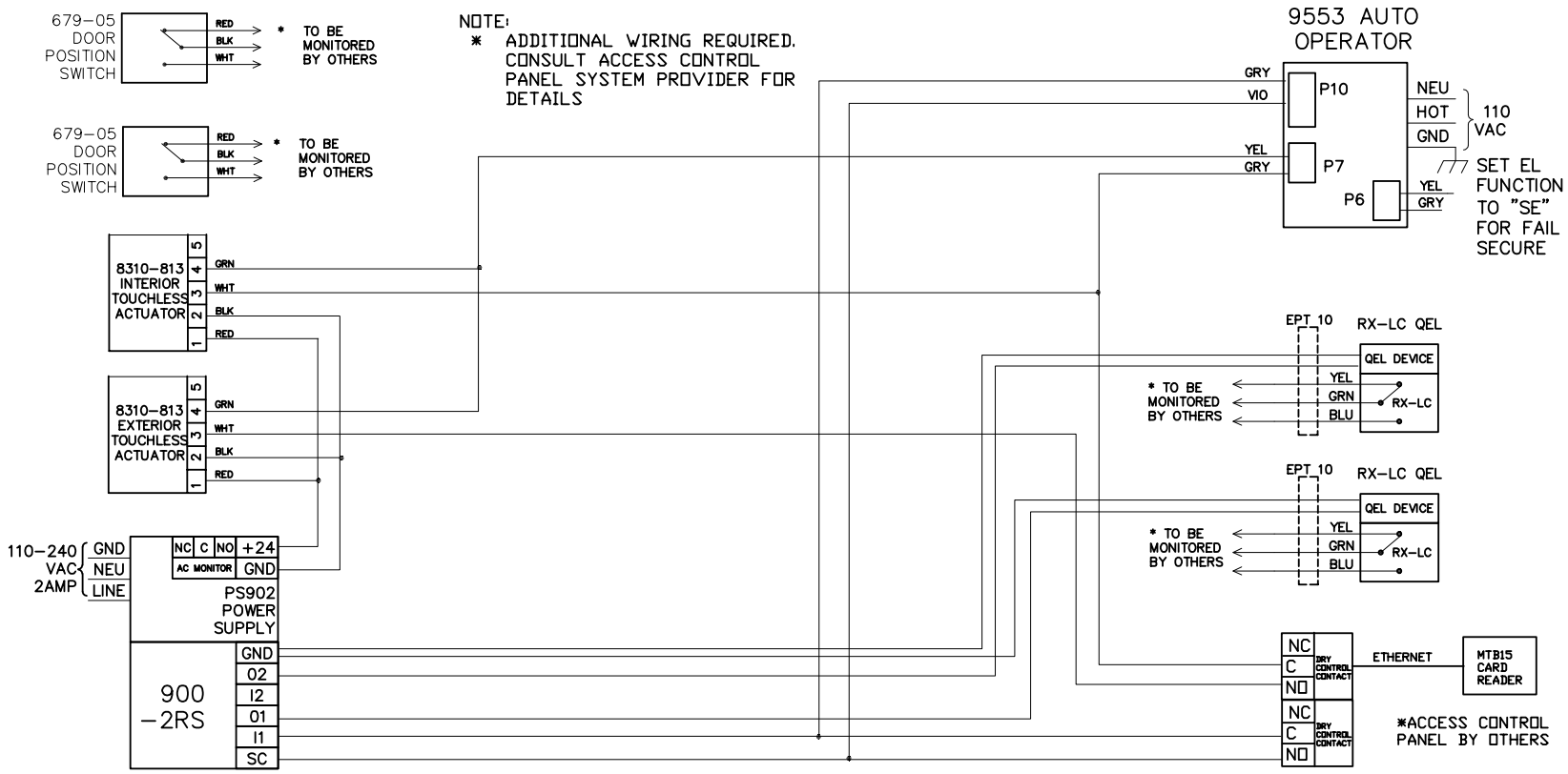
DRAWING TYPE:
RISER DIAGRAM

DWG NO: 113715R

DRAWN/CHECKED BY:
B DOVE

REV
A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

2 RXLC QEL 9847L-F LBR FIRE RATED EXIT DEVICES

2 EPT10

1 LCN 9553 AUTO OPERATOR

2 LCN 8310-810R TOUCHLESS ACTUATORS

1 SCHLAGE PS902-2RS-BB POWER SUPPLY

2 679-05 DOOR POSITION SWITCHES

1 MTB15 READER TO ACCESS CONTROL SYSTEM BY OTHERS

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS QEL LATCH RETRACTION ON BOTH FIRE RATED EXIT DEVICE AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE TO RETRACT LATCHES AND OPEN DOOR.

RXLC AND 679 DPS SWITCHES TO BE REMOTELY MONITORED BY ACCESS CONTROL SYSTEM BY OTHERS, CONNECTIONS AND WIRING NOT SHOWN HERE.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-13-20

REVISION DATE: 10-13-20

ALLEGION™

TITLE:
INTERIOR CROSS-CORRIDOR, LATCHING, FIRE RATED PAIR OF DOORS WITH AUTO OPERATOR

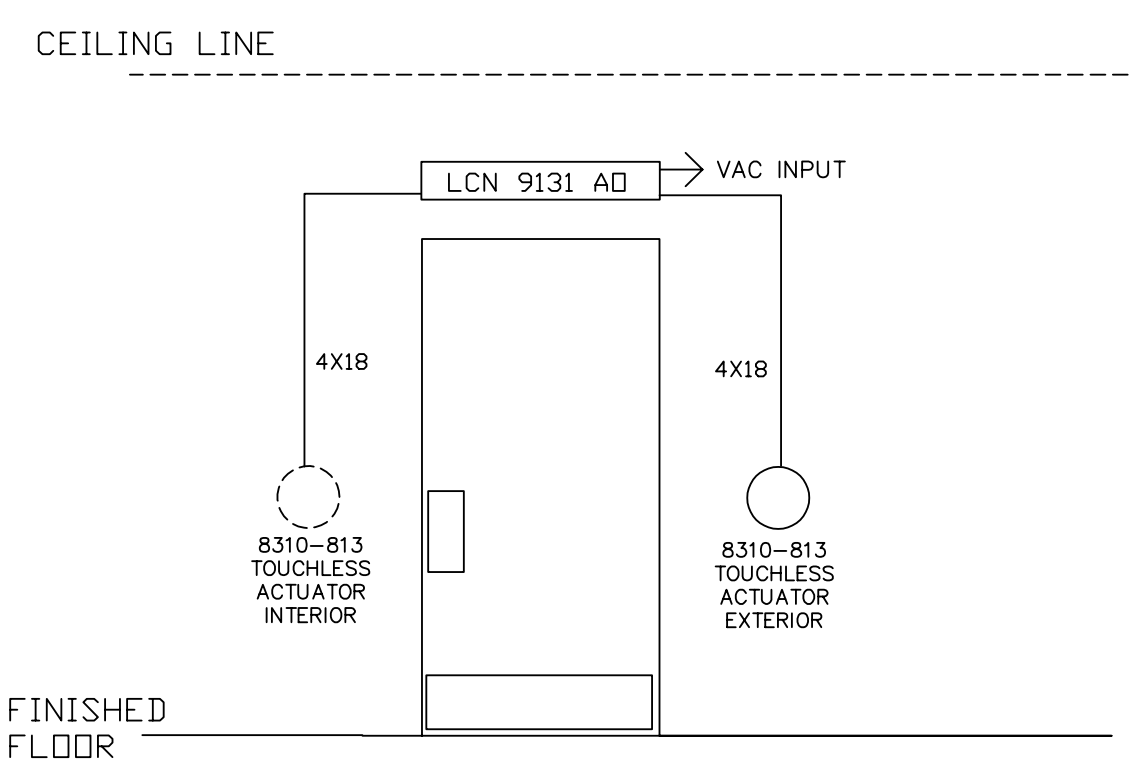
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113715W

DRAWN/CHECKED BY: B DOVE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
1 LCN 9131 AUTO OPERATOR

2 LCN 8310-813 TOUCHLESS ACTUATORS

OPERATION:

NON-LATCHING, NON RATED RESTROOM DOOR

PRESSING EITHER INTERIOR OR EXTERIOR ACTUATOR TO CAUSE DOOR TO OPEN VIA LCN 9131 AUTO OPERATOR.

DATE DRAWN: 10-13-20

REVISION DATE: 10-13-20

ALLEGION™

TITLE: RESTROOM, NON-LATCHING WITH AUTO OPERATOR

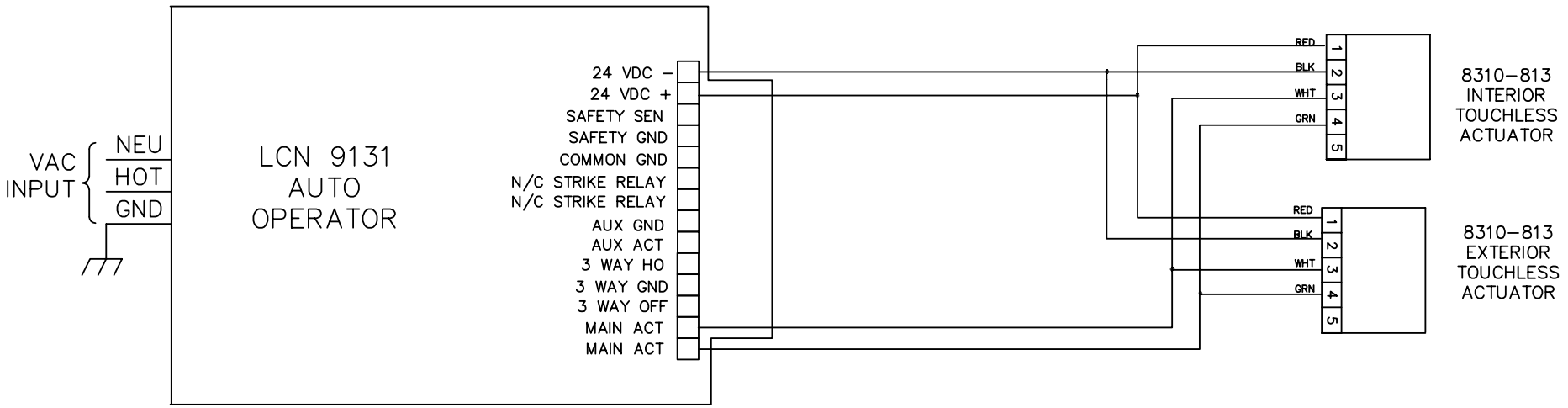
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113716R

DRAWN/CHECKED BY: B DOVE

REV A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

1 LCN 9131 AUTO OPERATOR

2 LCN 8310-813 TOUCHLESS ACTUATORS

OPERATION:

NON-LATCHING, NON RATED RESTROOM DOOR

PRESSING EITHER INTERIOR OR EXTERIOR ACTUATOR TO CAUSE DOOR TO OPEN VIA LCN 9131 AUTO OPERATOR.

DATE DRAWN: 10-13-20

REVISION DATE: 10-13-20

ALLEGION™

TITLE: RESTROOM, NON-LATCHING WITH AUTO OPERATOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113716W

DRAWN/CHECKED BY: B DOVE

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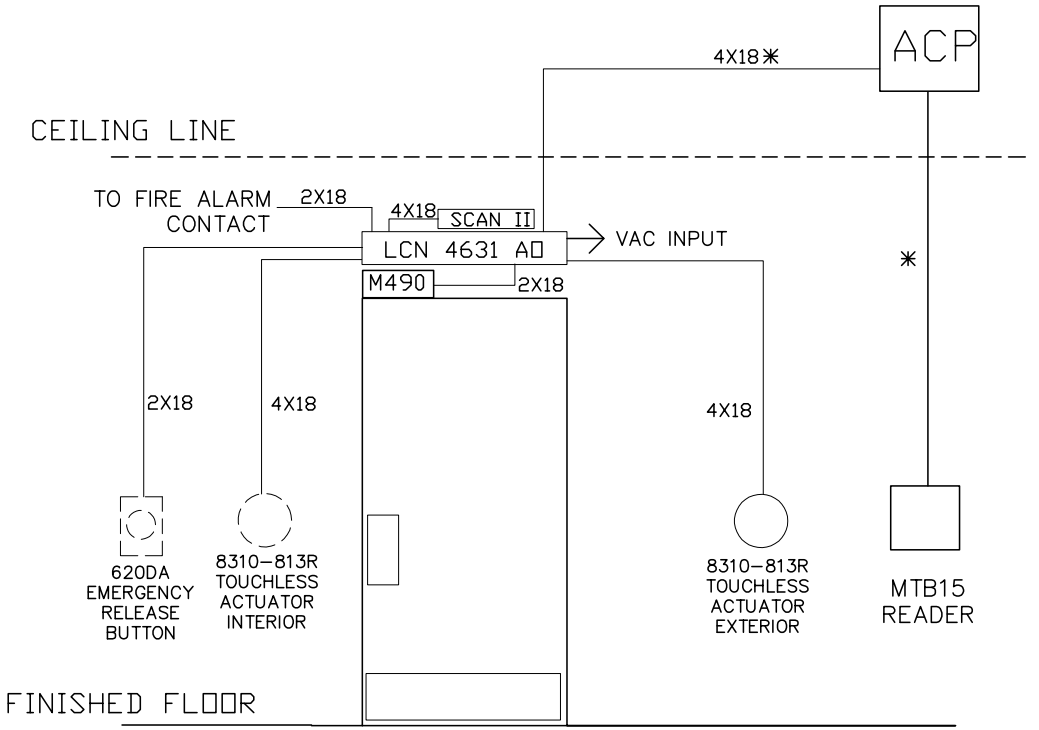
THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*ADDITIONAL WIRING IS REQUIRED FOR ACCESS CONTROL SYSTEM BY OTHERS. SEE MANUFACTURER INSTALLATION INSTRUCTION

IN THIS EXAMPLE ALL WIRING CONNECTIONS EXCEPT MTB15 READER ARE MADE AT THE LCN 4630 AUTO OPERATOR

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 1 LCN 4631 AUTO OPERATOR
- 2 LCN 8310-813R TOUCHLESS ACTUATORS
- 1 M490 MAG LOCK
- 1 SCAN II MOTION SENSOR
- 1 620DA PUSHBUTTON - FOR EMERGENCY RELEASE OF MAG LOCK
- 1 SCHLAGE MTB15 CARD READER BY OTHERS WITH ACP
- FIRE ALARM CONTACT BY OTHERS

OPERATION:
M490 MAG LOCK TO SECURE NON-LATCHING DOOR.

PRESENTING CREDENTIAL TO MTB15 READER TO CAUSE ACCESS CONTROLL SYSTEM BY OTHERS TO RELEASE MAGLOCK AND ENABLE EXTERIOR ACTUATOR.

SCANII MOTION SENSOR OR 620DA PUSH BUTTON TO RELEASE M490 MAG LOCK FOR FREE EGRESS.

INTERIOR ACTUATOR ALWAYS ACTIVE TO RELEASE M490 MAGLOCK AND OPEN DOOR.

FIRE ALARM TO RELEASE DOORS IMMEDIATELY.

DATE DRAWN: 10-12-20

REVISION DATE: 10-12-20

ALLEGION™

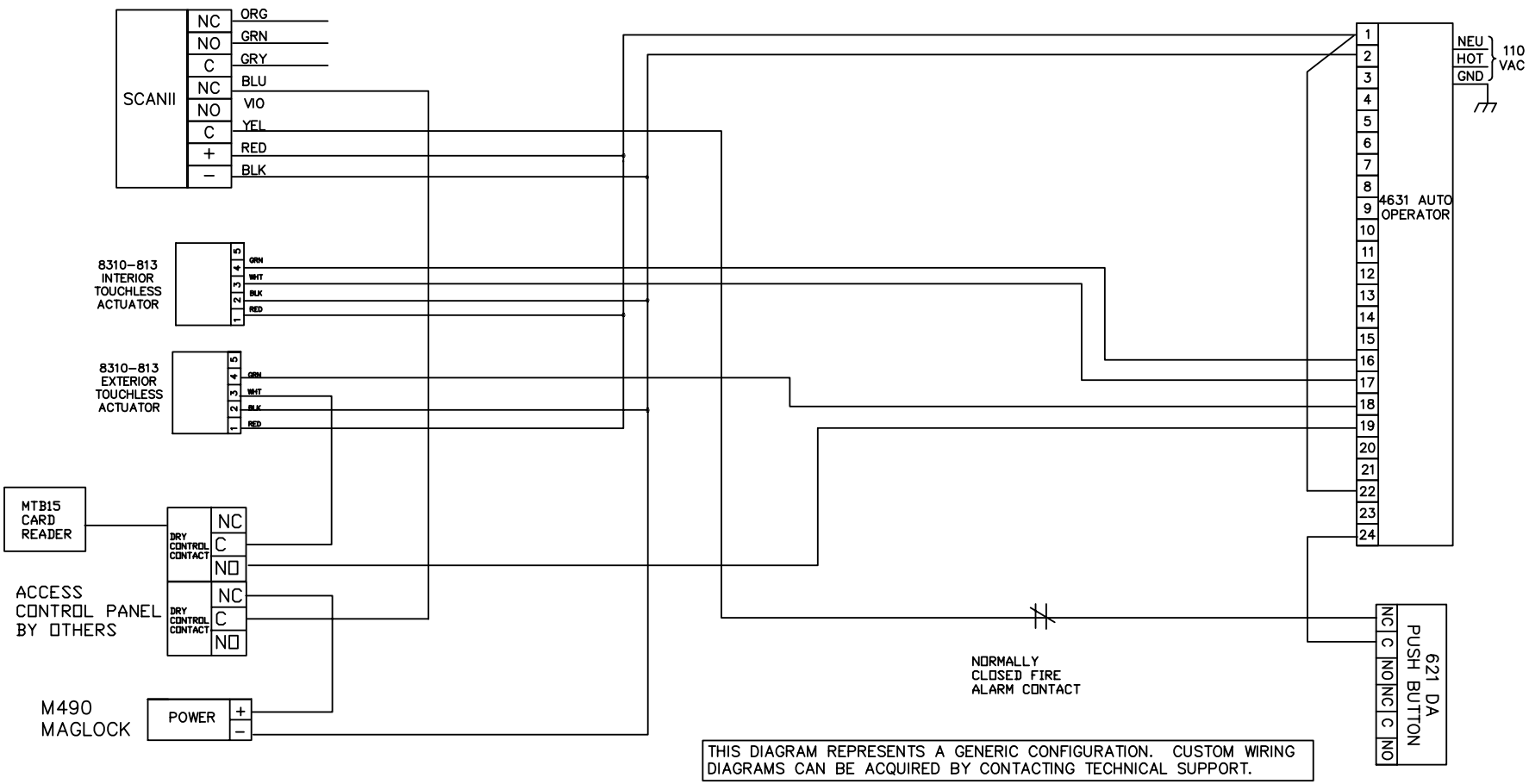
TITLE: COMMON AREA SINGLE DOOR – NON LATCHING WITH MAGLOCK

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113717R

DRAWN/CHECKED BY: B DOVE

REV: A



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
1 LCN 4631 AUTO OPERATOR

2 LCN 8310-813R TOUCHLESS ACTUATORS

1 M490 MAG LOCK

1 SCAN II MOTION SENSOR

1 620DA PUSHBUTTON - FOR EMERGENCY RELEASE OF MAG LOCK

1 SCHLAGE MTB15 CARD READER BY OTHERS WITH ACP

FIRE ALARM CONTACT BY OTHERS

OPERATION:
M490 MAG LOCK TO SECURE NON-LATCHING DOOR.

PRESENTING CREDENTIAL TO MTB15 READER TO CAUSE ACCESS CONTROLL SYSTEM BY OTHERS TO RELEASE MAGLOCK AND ENABLE EXTERIOR ACTUATOR.

SCANII MOTION SENSOR OR 620DA PUSH BUTTON TO RELEASE M490 MAG LOCK FOR FREE EGRESS.

INTERIOR ACTUATOR ALWAYS ACTIVE TO RELEASE M490 MAGLOCK AND OPEN DOOR.

FIRE ALARM TO RELEASE DOORS IMMEDIATELY.

DATE DRAWN: 10-12-20

REVISION DATE: 10-12-20

ALLEGION™

TITLE: COMMON AREA SINGLE DOOR – NON LATCHING WITH MAGLOCK

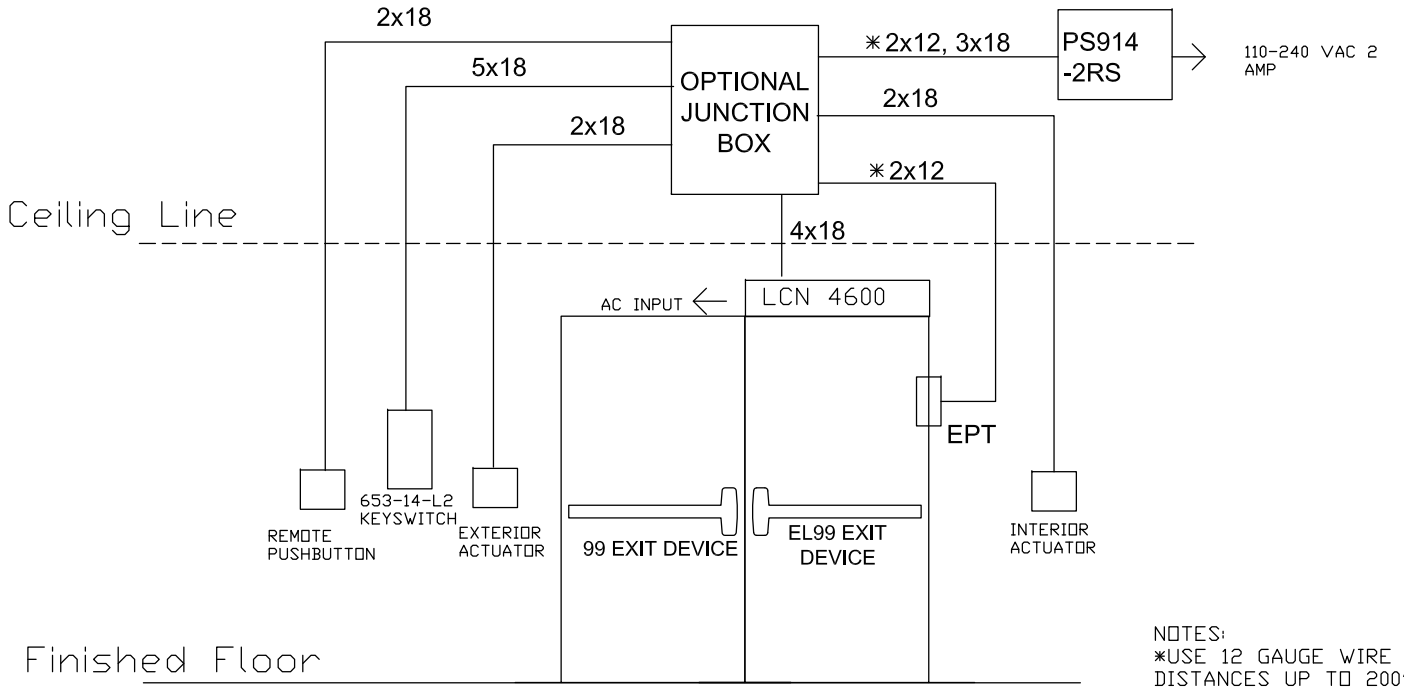
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113717W

DRAWN/CHECKED BY: B DOVE

A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
*USE 12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE 14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
- 1 - PS914-2RS
- 1 - 653-14-L2 KEYSWITCH
- 1 - LCN 4600 AUTO OPERATOR
- 2 - ACTUATORS
- 1 - PUSHBUTTON
- 1 - EL PANIC DEVICE
- 1 - EPT
- 1 - OPTIONAL JUNCTION BOX

TYPE: DOUBLE DOORS

OPERATION:
DOOR NORMALLY CLOSED & LOCKED.

KEYSWITCH RETRACTS LATCH & ENABLES EXTERIOR ACTUATOR.

INTERIOR & REMOTE PUSHBUTTONS ARE ALWAYS ACTIVE TO RETRACT THE ELECTRIC LATCH & SWING THE DOOR.

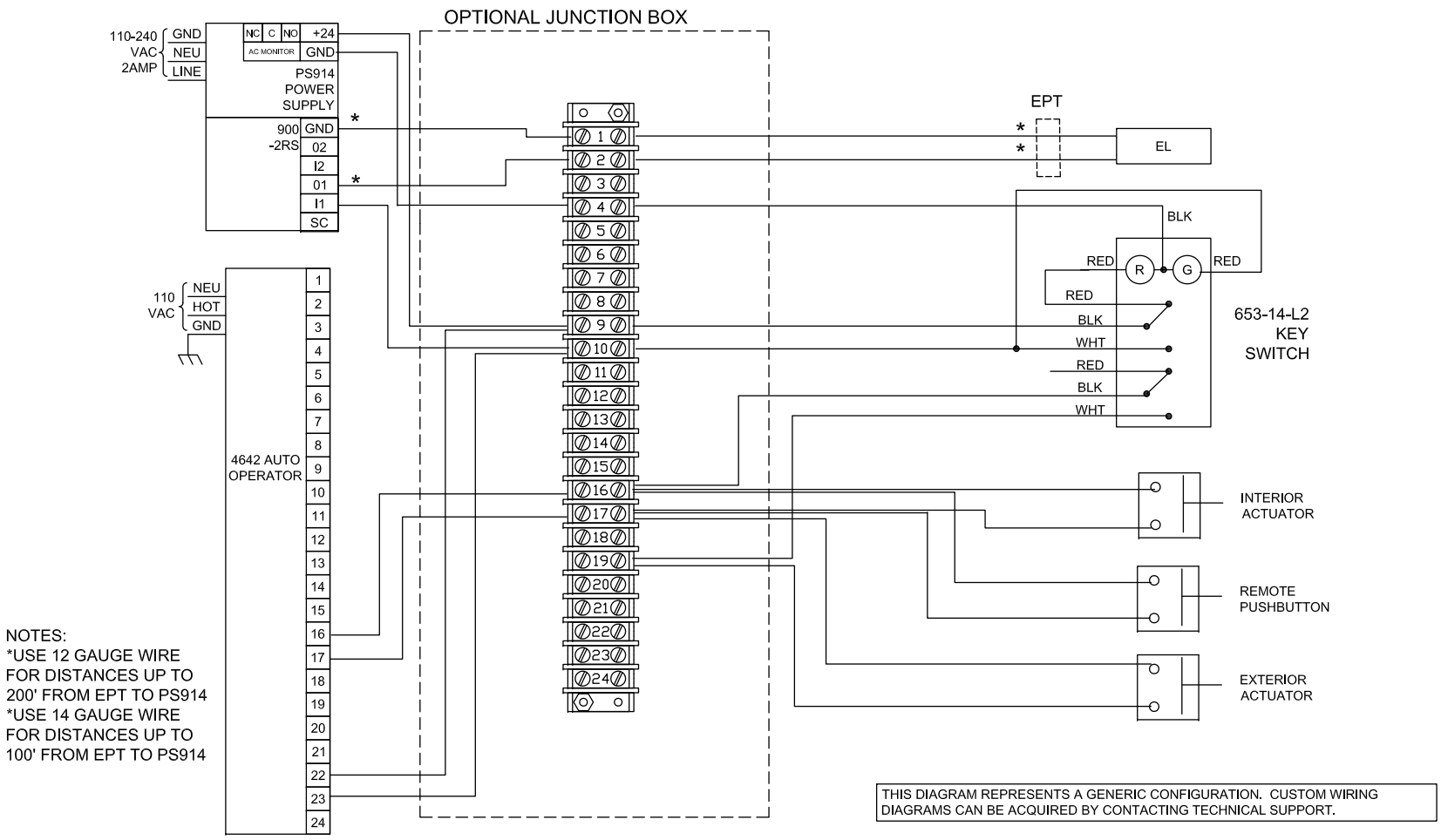
FREE EGRESS AT ALL TIMES.

DATE DRAWN: 03-26-13
REVISION DATE: 04-15-14
DRAWN BY: B DOVE
APPROVED BY: MH

ALLEGION™

TITLE: PS914-2RS EL 4640 2XPB 653-14-L2 X REMOTE PB

DRAWING TYPE: RISER
DWG NO: 104970
DRAWN/CHECKED BY: B DOVE
REV: D



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
- 1 - PS914-2RS
- 1 - 653-14-L2 KEYSWITCH
- 1 - LCN 4600 AUTO OPERATOR
- 2 - ACTUATORS
- 1 - PUSHBUTTON
- 1 - EL PANIC DEVICE
- 1 - EPT
- 1 - OPTIONAL JUNCTION BOX

TYPE
DOUBLE DOORS

OPERATION:
DOOR NORMALLY CLOSED & LOCKED.

KEYSWITCH RETRACTS LATCH & ENABLES EXTERIOR ACTUATOR.

INTERIOR & REMOTE PUSHBUTTONS ARE ALWAYS ACTIVE TO RETRACT THE ELECTRIC LATCH & SWING THE DOOR.

FREE EGRESS AT ALL TIMES.

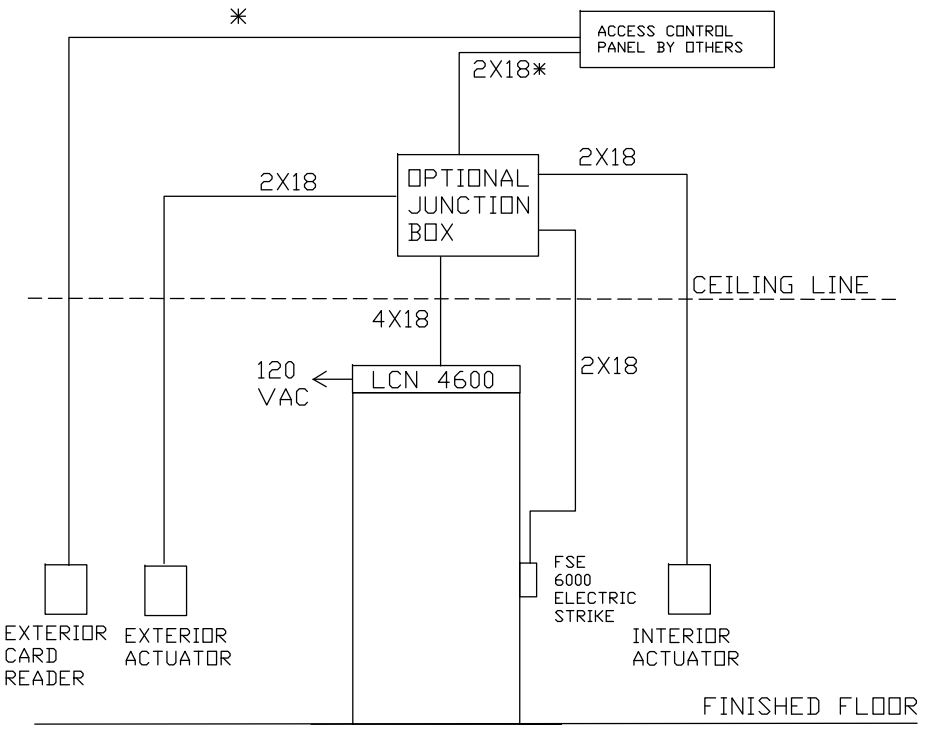
DATE DRAWN: 03-26-13
REVISION DATE: 04-15-14
DRAWN BY: B DOVE
APPROVED BY: MH

ALLEGION™

TITLE:
PS914-2RS EL 4640 2XPB 653-14-L2 X REMOTE PB

DRAWING TYPE: WIRING
DWG NO: 104970
DRAWN/CHECKED BY: B DOVE
REV: D

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
* CONSULT ACCESS CONTROL PANEL AND CARD READER PROVIDER TO DETERMINE CONDUCTOR COUNT AND WIRE SIZE.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 LCN 4600 AUTO OPERATOR
2 ACTUATORS
1 EXTERIOR CARD READER/ACP BY OTHERS
1 VD FSE 6000 ELECTRIC STRIKE
1 OPTIONAL JUNCTION BOX

TYPE
SINGLE DOOR

OPERATION:
DOOR NORMALLY CLOSED & LOCKED.
VALID ACCESS CONTROL READ ENABLES EXTERIOR ACTUATOR.
PRESSING EITHER ACTUATOR UNLOCKS ELECTRIC STRIKE AND OPENS DOOR.
FREE EGRESS AT ALL TIMES.

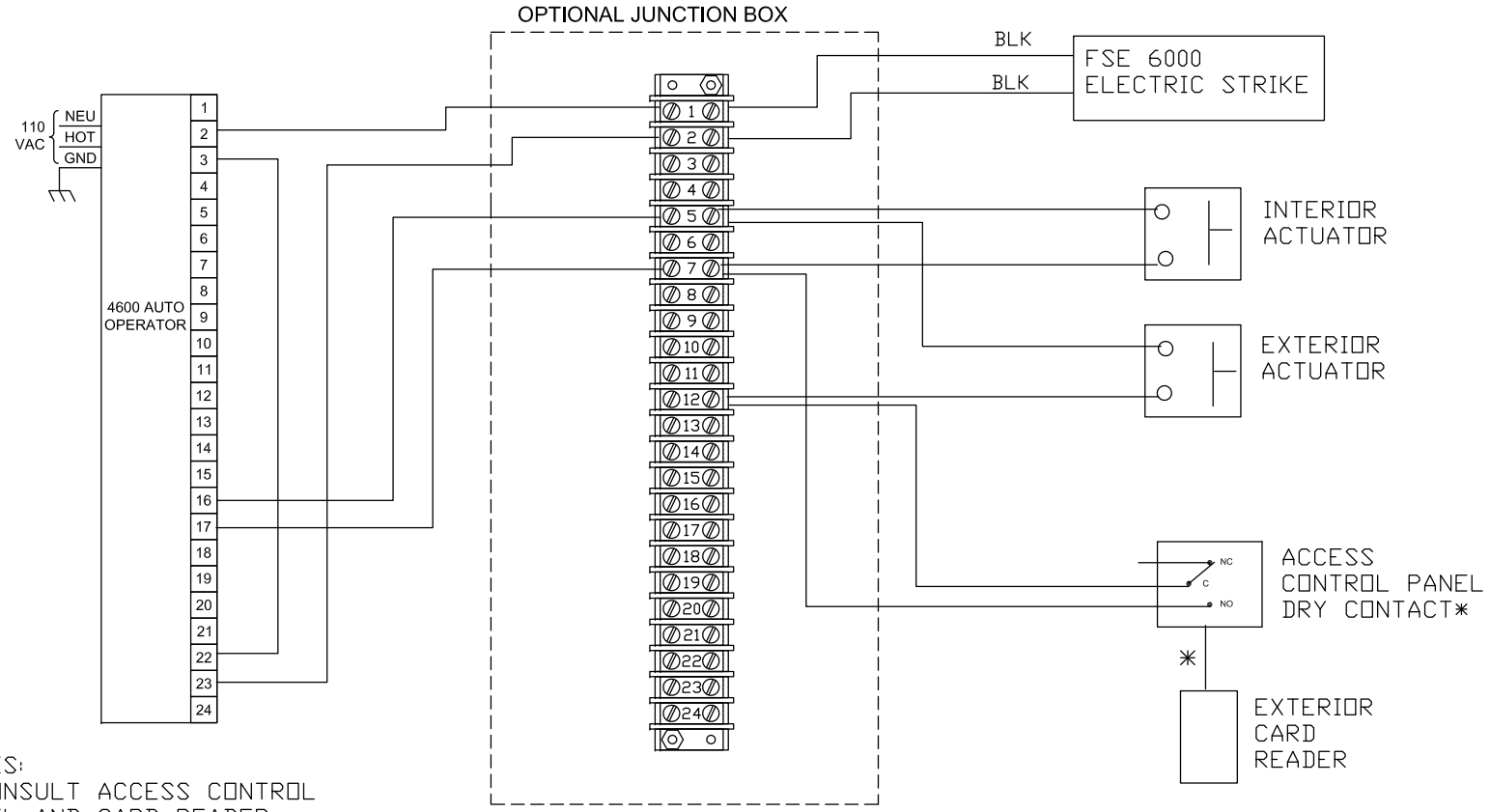
DATE DRAWN: 03-27-13
REVISION DATE: 04-16-14
DRAWN BY: B DOVE
APPROVED BY: MH

ALLEGION™

TITLE: SINGLE LCN 4600 AO 6000 FSE ELECTRIC STRIKE X 2 ACTUATORS X CARD READER/ACP

DRAWING TYPE: RISER
DWG NO: 104972
DRAWN/CHECKED BY: B DOVE
REV: D

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
* CONSULT ACCESS CONTROL PANEL AND CARD READER PROVIDER TO DETERMINE CONDUCTOR COUNT AND WIRE SIZE.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 LCN 4600 AUTO OPERATOR
2 ACTUATORS
1 EXTERIOR CARD READER/ACP BY OTHERS
1 VD FSE 6000 ELECTRIC STRIKE
1 OPTIONAL JUNCTION BOX

TYPE
SINGLE DOOR

OPERATION:
DOOR NORMALLY CLOSED & LOCKED.
VALID ACCESS CONTROL READ ENABLES EXTERIOR ACTUATOR.
PRESSING EITHER ACTUATOR UNLOCKS ELECTRIC STRIKE AND OPENS DOOR.
FREE EGRESS AT ALL TIMES.

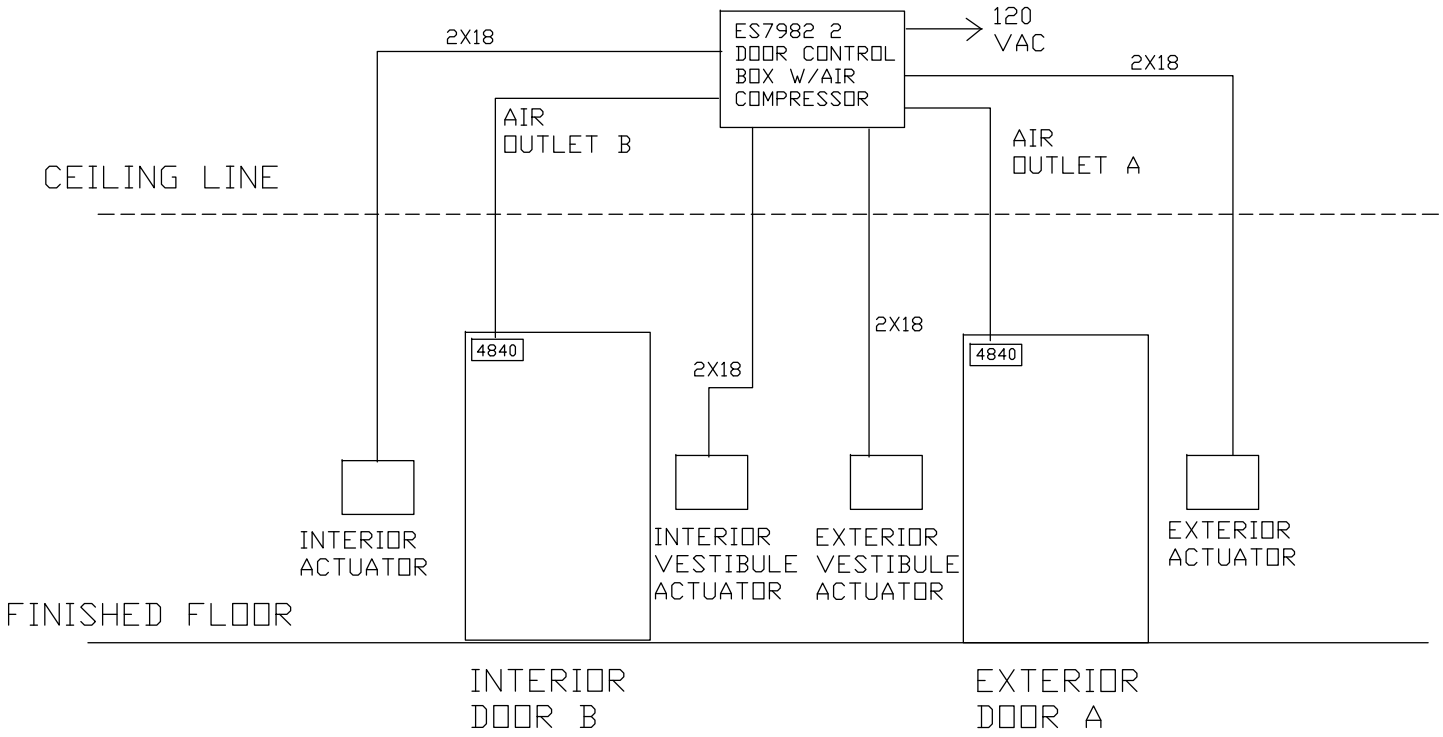
DATE DRAWN: 03-27-13
REVISION DATE: 04-16-14
DRAWN BY: B DOVE
APPROVED BY: MH

ALLEGION™

TITLE: SINGLE LCN 4600 AO 6000 FSE ELECTRIC STRIKE X 2 ACTUATORS X CARD READER/ACP

DRAWING TYPE: WIRING
DWG NO: 104972
DRAWN/CHECKED BY: B DOVE
REV: D

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 - ES7982 CONTROL BOX
4 - 4840 ACTUATORS
2 4840 AUTO OPERATORS

TYPE:
2 SINGLE DOORS

OPERATION:
DOORS NORMALLY CLOSED.
PUSHING INTERIOR VESTIBULE ACTUATOR OPENS INTERIOR DOOR.
PUSHING EXTERIOR VESTIBULE ACTUATOR OPENS EXTERIOR DOOR.
PUSHING INTERIOR ACTUATOR OPENS INTERIOR DOOR & THEN EXTERIOR DOOR IN SEQUENCE.
PUSHING EXTERIOR ACTUATOR OPENS EXTERIOR DOOR & THEN FREE EGRESS AT ALL TIMES.

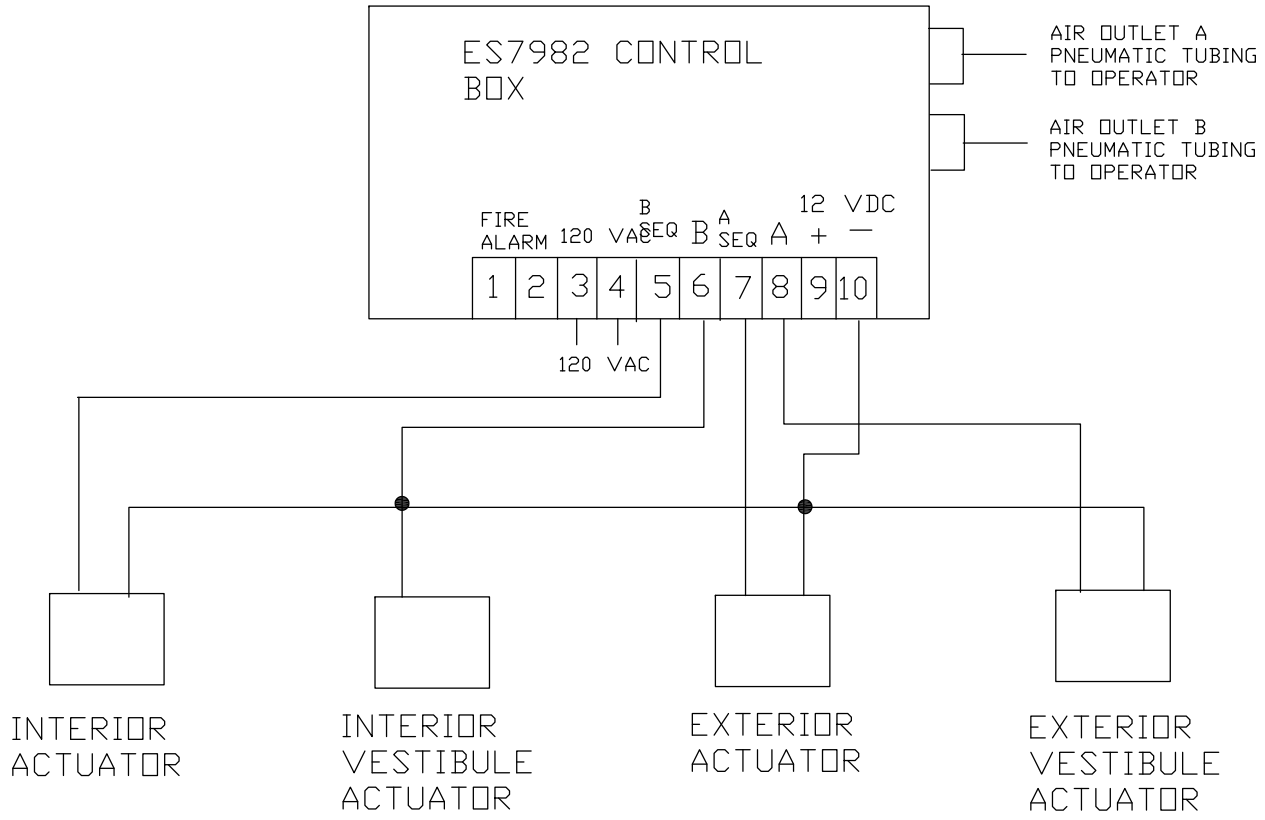
DATE DRAWN: 03-26-13
REVISION DATE: 04-16-14
DRAWN BY: B DOVE
APPROVED BY: MH

ALLEGION™

TITLE: 2 SINGLE DOORS ES7982 X 2 4840 ACTUATORS

DRAWING TYPE: RISER
DWG NO: 104968
DRAWN/CHECKED BY: B DOVE
REV: D

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 - ES7982 CONTROL BOX
4 - 4840 ACTUATORS
2 4840 AUTO OPERATORS

TYPE: 2 SINGLE DOORS

OPERATION:
DOORS NORMALLY CLOSED.
PUSHING INTERIOR VESTIBULE ACTUATOR OPENS INTERIOR DOOR.
PUSHING EXTERIOR VESTIBULE ACTUATOR OPENS EXTERIOR DOOR.
PUSHING INTERIOR ACTUATOR OPENS INTERIOR DOOR & THEN EXTERIOR DOOR IN SEQUENCE.
PUSHING EXTERIOR ACTUATOR OPENS EXTERIOR DOOR & THEN FREE EGRESS AT ALL TIMES.

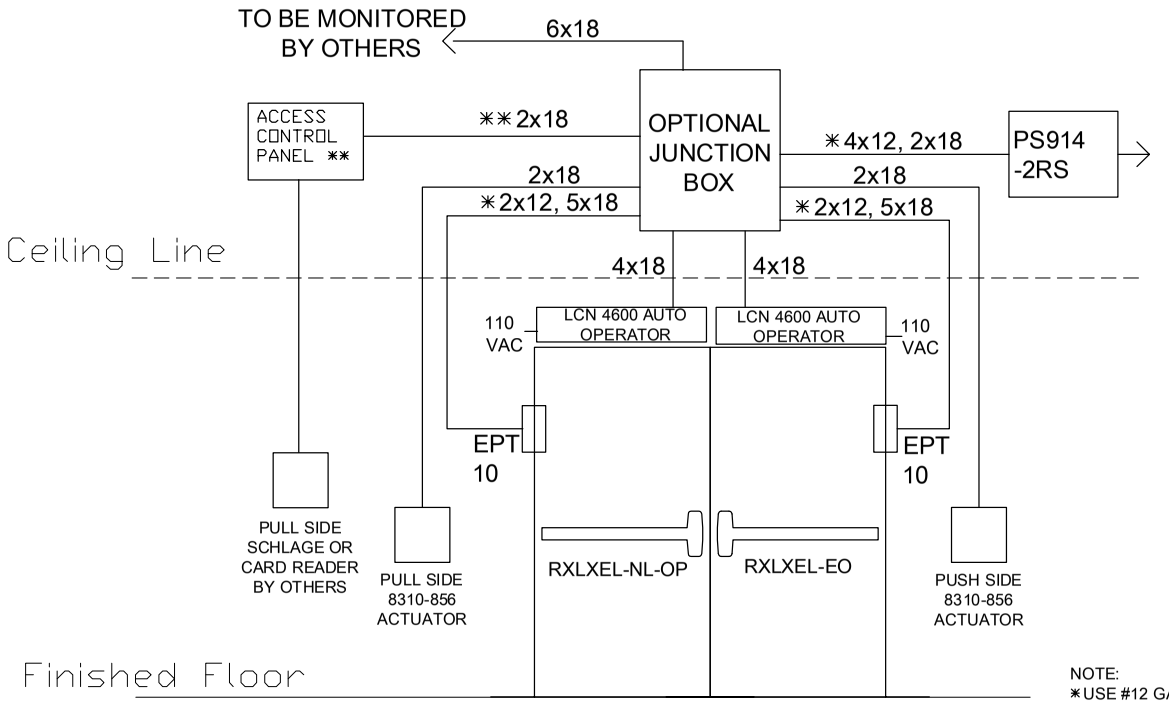
DATE DRAWN: 03-26-13
REVISION DATE: 04-16-14
DRAWN BY: B DOVE
APPROVED BY: MH

ALLEGION™

TITLE: 2 SINGLE DOORS ES7982 X 2 4840 ACTUATORS

DRAWING TYPE: WIRING
DWG NO: 104968
DRAWN/CHECKED BY: B DOVE
REV: D

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914
**ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

OPTIONAL JUNCTION BOX IS AVAILABLE FROM VON DUPRIN AS A JB7

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ** CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
1 RXLXEL EO PANIC
1 RXLXEL-NL-OP PANIC
2 EPT 10
2 8310-856 LCN ACTUATORS
2 4600 AUTO OPERATOR
1 SCHLAGE OR CARD READER BO WITH ACP BO

TYPE

OPERATION:
PUSH SIDE 8310-856 ACTUATOR TO RETRACT THE ELECTRIC PANIC BARS AND OPEN THE LCN 4600 AUTO OPERATORS.
SCHLAGE OR CARD READER BY OTHERS TO SIGNAL EL LATCH RETRACTION AND ENABLE EXTERIOR 8310-856 ACTUATOR

PULL SIDE 8310-856 ACTUATOR TO RETRACT THE ELECTRIC PANIC BARS WHEN ENABLED BY CARD READER AND ACCESS CONTROL PANEL

REQUEST EXIT SWITCH RX TO BE MONITORED BY OTHERS.

DATE DRAWN: 3-26-13
REVISION DATE: 07-03-17

ALLEGION™

TITLE: RXLXEL PAIR WITH LCN 4600 AO AND PS914-2RS

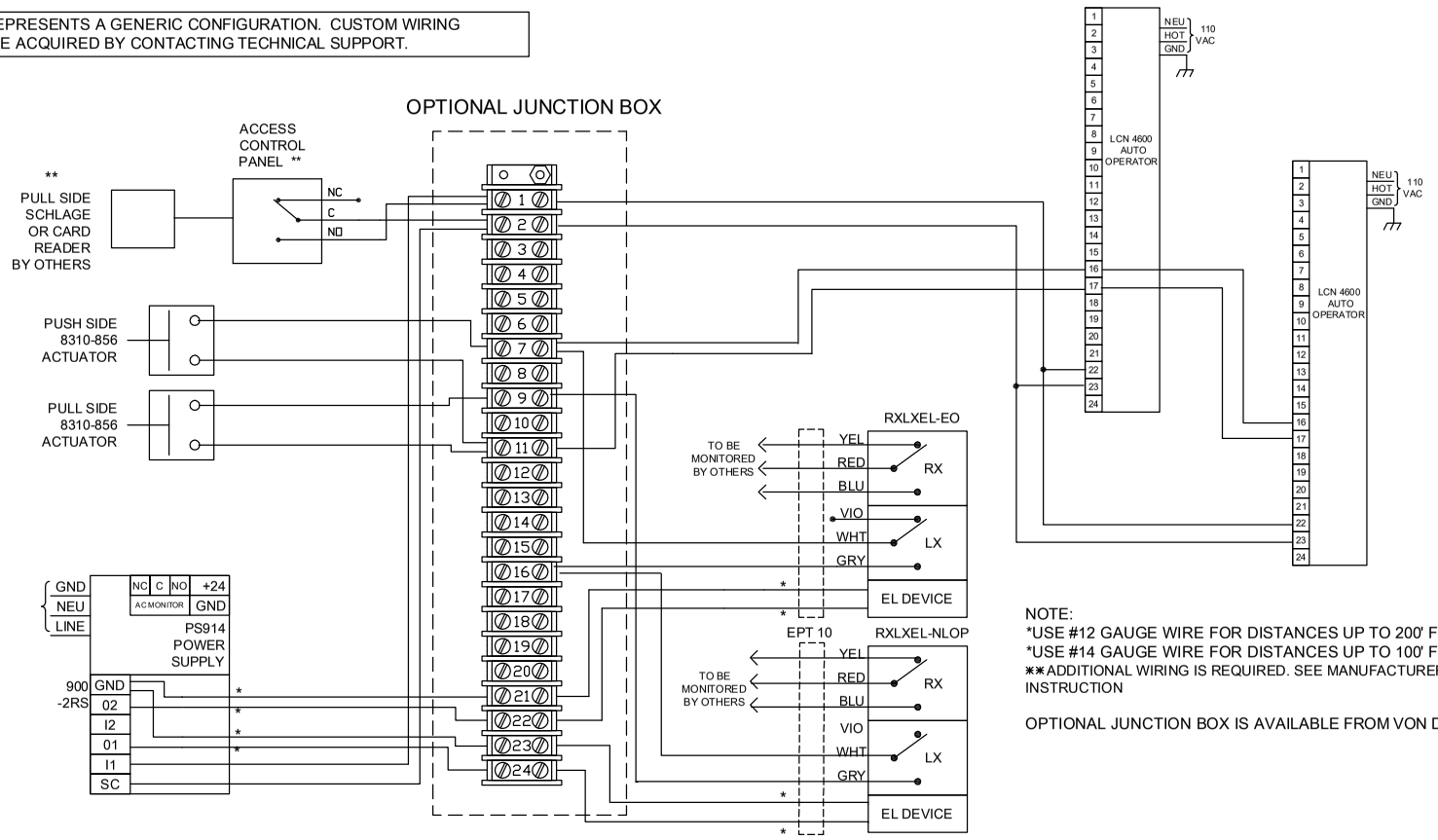
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109463

DRAWN/CHECKED BY: B DOVE/D BOLLENGIER

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914
**ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

OPTIONAL JUNCTION BOX IS AVAILABLE FROM VON DUPRIN AS A JB7

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ** CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
1 RXLXEL EO PANIC
1 RXLXEL-NL-OP PANIC
2 EPT 10
2 8310-856 LCN ACTUATORS
2 4600 AUTO OPERATOR
1 SCHLAGE OR CARD READER BO WITH ACP BO

TYPE

OPERATION:
PUSH SIDE 8310-856 ACTUATOR TO RETRACT THE ELECTRIC PANIC BARS AND OPEN THE LCN 4600 AUTO OPERATOR.

SCHLAGE OR CARD READER BY OTHERS TO SIGNAL EL LATCH RETRACTION AND ENABLE EXTERIOR 8310-856 ACTUATOR

PULL SIDE 8310-856 ACTUATOR TO RETRACT THE ELECTRIC PANIC BARS WHEN ENABLED BY CARD READER AND ACCESS CONTROL PANEL

REQUEST EXIT SWITCH RX TO BE MONITORED BY OTHERS.

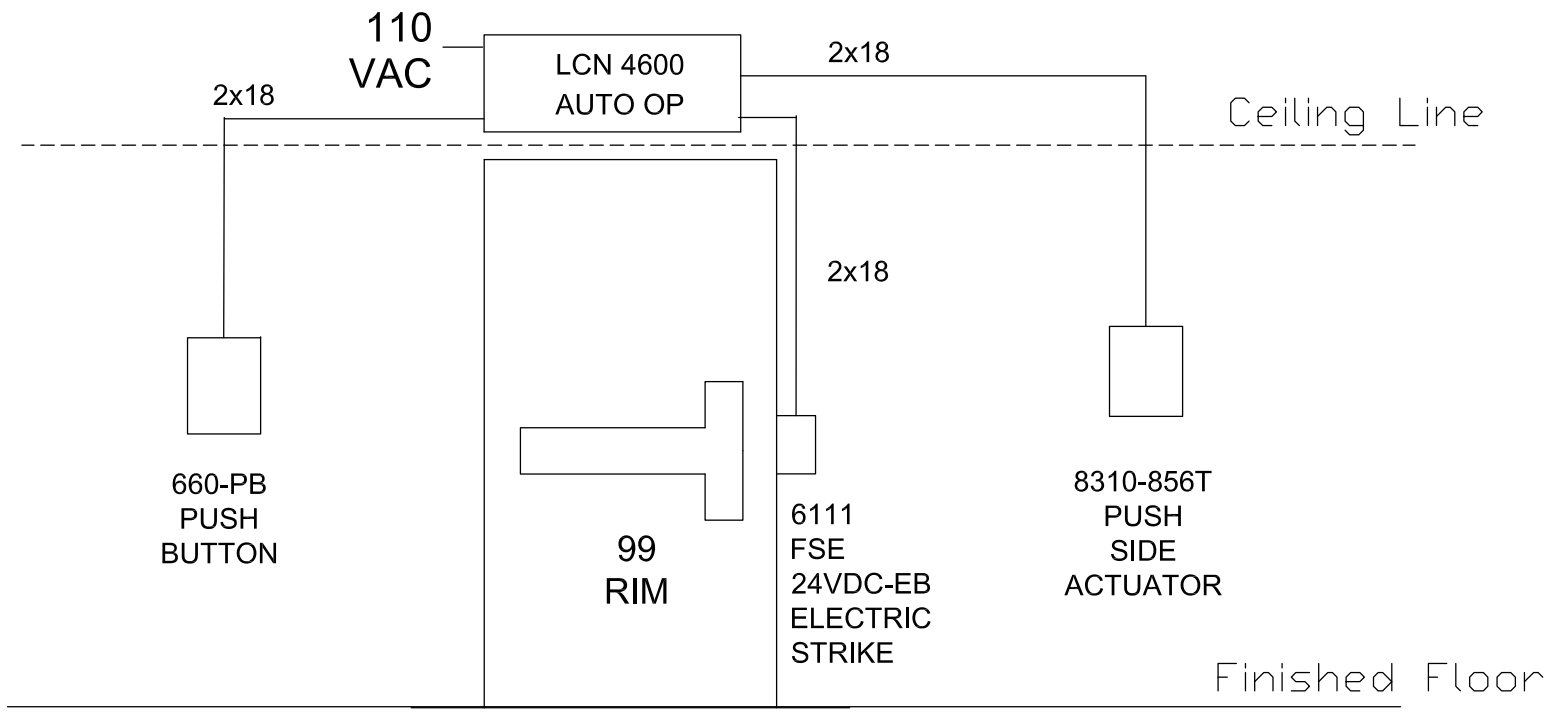
DATE DRAWN: 3-26-13
REVISION DATE: 07-03-17

ALLEGION™

TITLE: RXEL PAIR WITH LCN 4600 AO AND PS914-2RS

DRAWING TYPE: WIRING DIAGRAM
DWG NO: 109463
DRAWN/CHECKED BY: B DOVE/D BOLLENGIER
REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 4600 LCN AUTO OPERATOR
1 99 EXIT DEVICE
1 6111 FSE X EB ESTRIKE
1 660PB BUTTON
1 8310-856T ACTUATOR

TYPE
AUTO OPERATOR AND ACTUATORS

OPERATION:
8310-856 ACTUATOR FROM PUSH SIDE TO UNLOCK THE ELECTRIC STRIKE AND OPEN THE DOOR.

660PB REMOTE PUSH BUTTON TO UNLOCK THE 6111 FSE ELECTRIC STRIKE AND OPEN THE DOOR.

DATE DRAWN: 3-27-13
REVISION DATE: 3-27-13

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ALLEGION™

TITLE: LCN 4600 WITH 8310-856 ACT AND 660PB

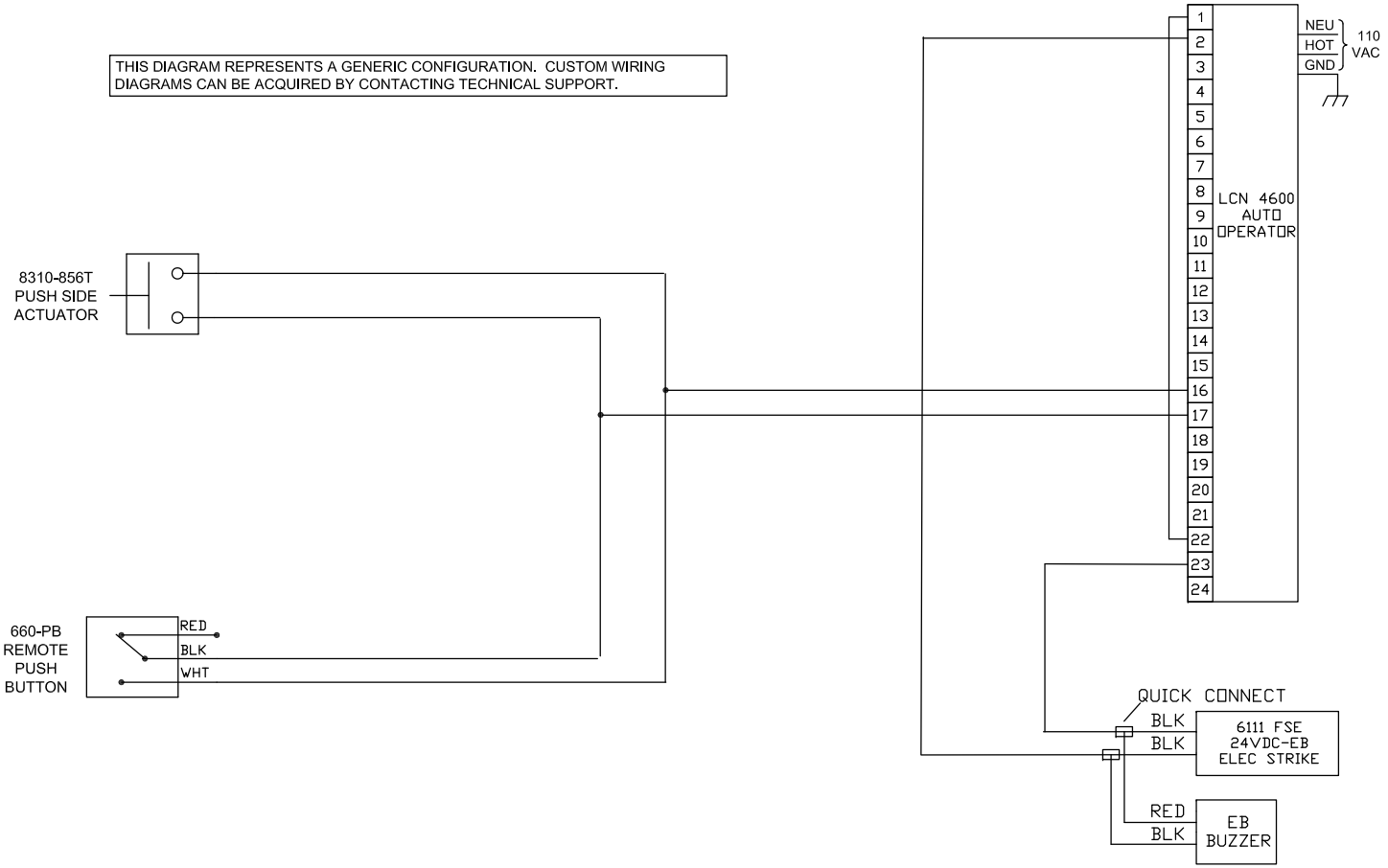
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109464

DRAWN/CHECKED BY: B DOVE/D BOLLENGIER

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 4600 LCN AUTO OPERATOR
1 99 EXIT DEVICE
1 6111 FSE X EB ESTRIKE
1 660PB BUTTON
1 8310-856T ACTUATOR

TYPE
AUTO OPERATOR AND ACTUATORS

OPERATION:
8310-856 ACTUATOR FROM PUSH SIDE TO UNLOCK THE ELECTRIC STRIKE AND OPEN THE DOOR.

660PB REMOTE PUSH BUTTON TO UNLOCK THE 6111 FSE ELECTRIC STRIKE AND OPEN THE DOOR.

DATE DRAWN: 3-27-13
REVISION DATE: 3-27-13

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ALLEGION™

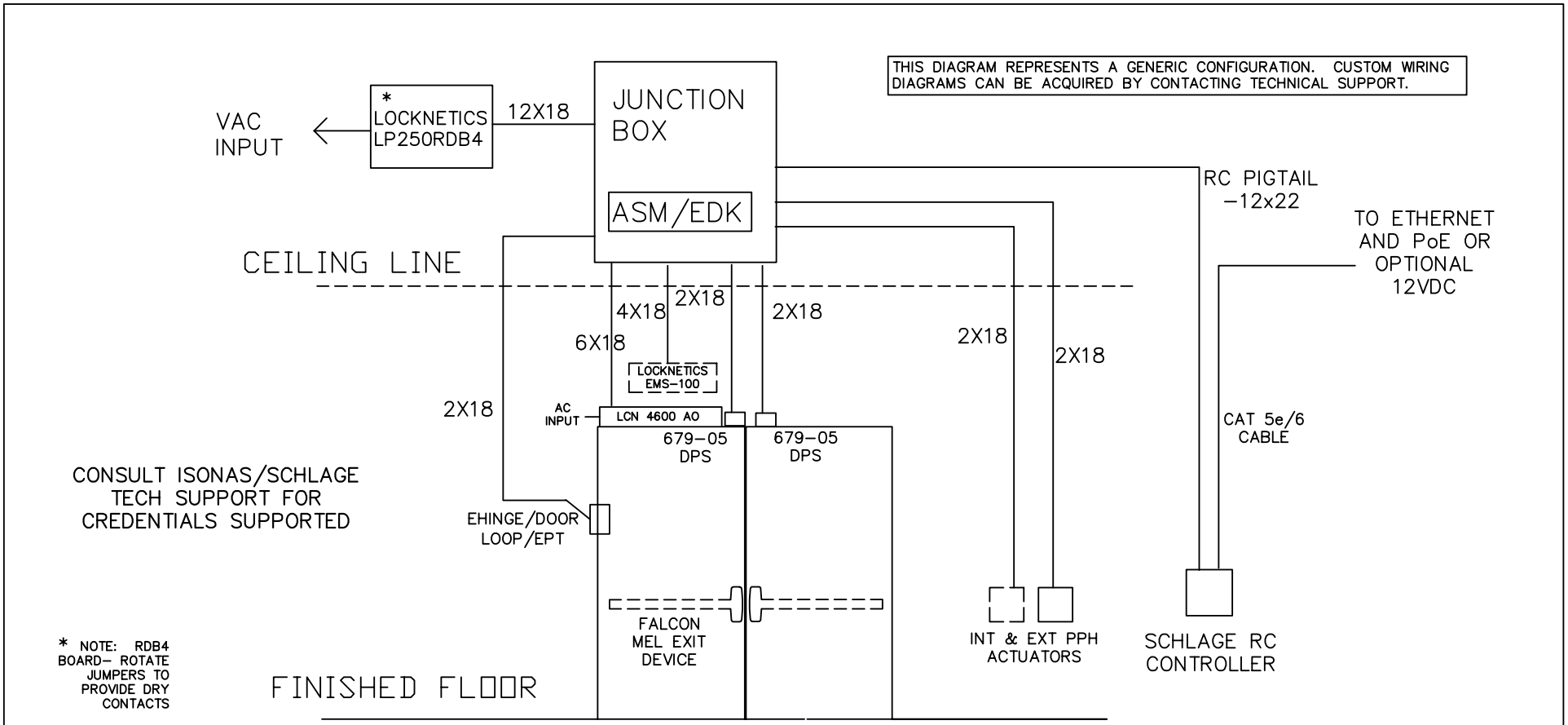
TITLE: LCN 4600 WITH 8310-856 ACT AND 660PB

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109464

REV: A

DRAWN/CHECKED BY: B DOVE/ D BOLLENGIER



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS EMS-100 MOTION SENSOR
- 1 FALCON MEL 24/25 EXIT DEVICES
- 2 DOOR LOOP OR EHINGE OR EPT
- LCN 4600 AO
- 2 LOCKNETICS PPH ACTUATORS
- LOCKNETICS LP250RDB4
- 2 679-05 DPS
- 1 12VDC DPDT RELAY
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS MEL LATCH RETRACTION ON RHR LEAF PANIC DEVICE AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE.

EMS-100 MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 09-09-20

REVISION DATE: 3-2-22

ALLEGION™

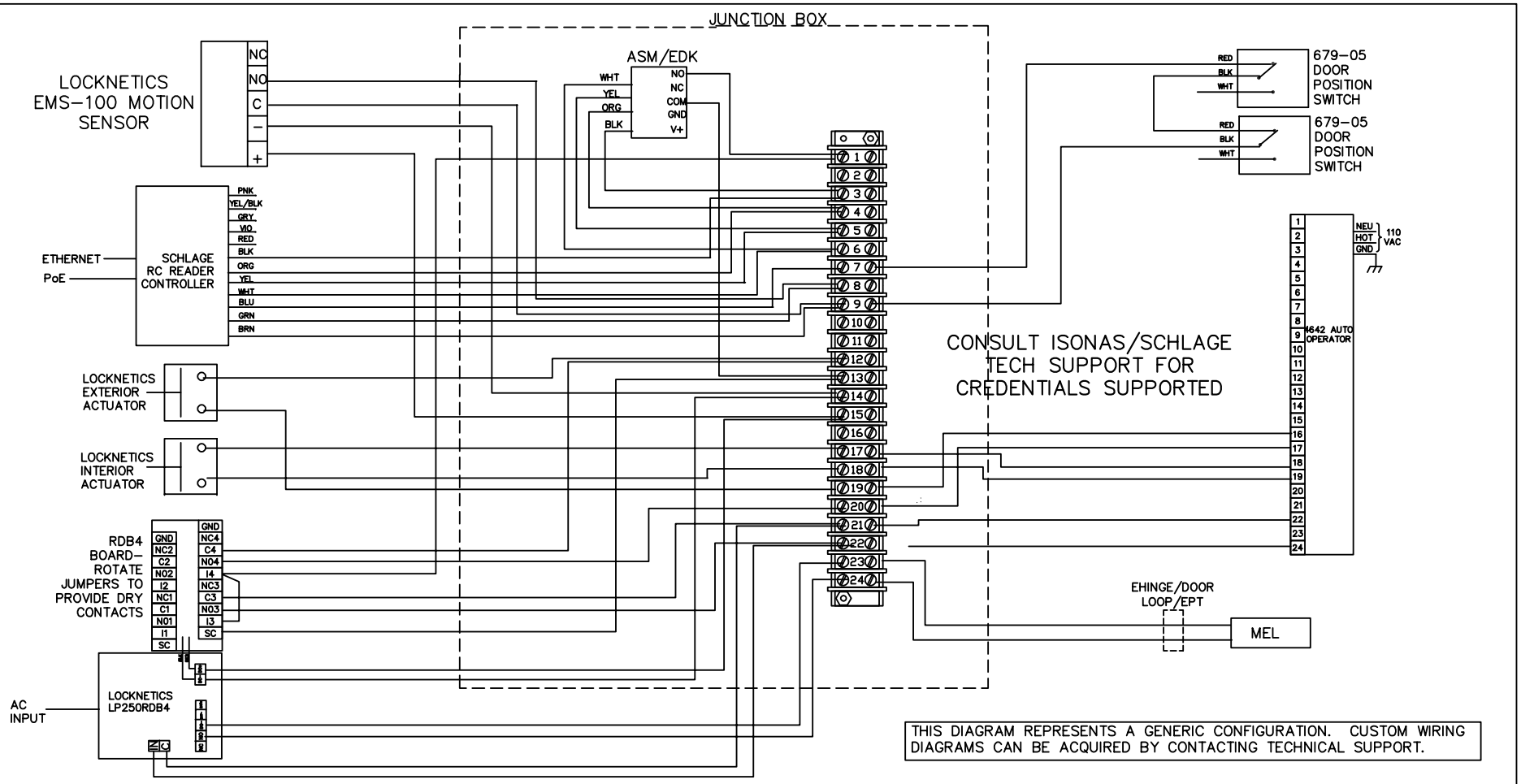
TITLE:
SCHLAGE RC CONTROLLER WITH MEL, AO, MOTION SENSOR, DPS PAIR OF DOORS

DRAWING TYPE: RISER DIAGRAM

DWG NO: 113740R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS EMS-100 MOTION SENSOR
- 1 FALCON MEL 24/25 EXIT DEVICES
- 2 DOOR LOOP OR EHINGE OR EPT
- LCN 4600 AO
- 2 LOCKNETICS PPH ACTUATORS
- LOCKNETICS LP250RDB4
- 2 679-05 DPS
- 1 12VDC DPDT RELAY
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS MEL LATCH RETRACTION ON RHR LEAF PANIC DEVICE AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE.

EMS-100 MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 09-09-20

REVISION DATE: 3-2-22

ALLEGION™

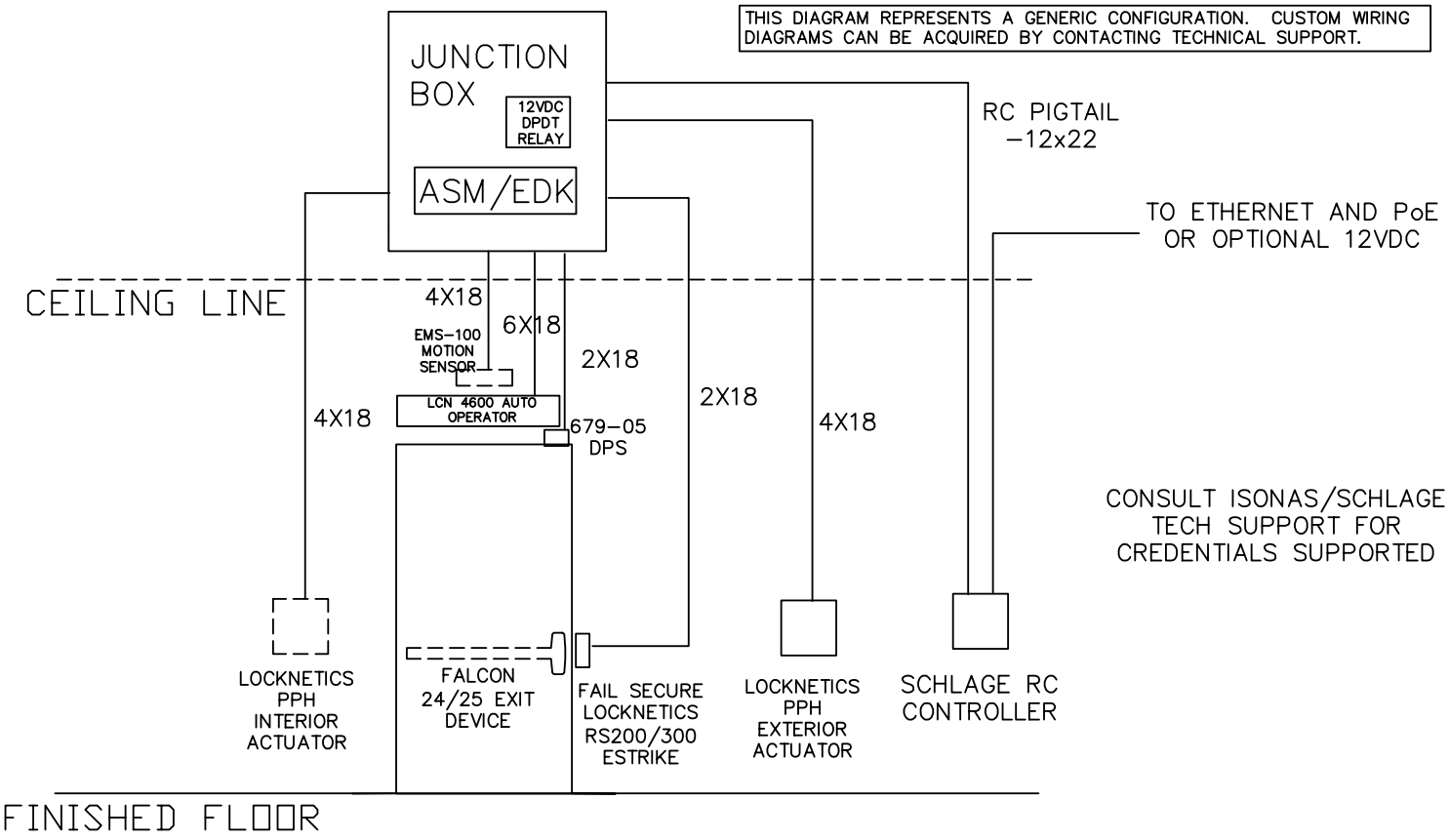
TITLE:
SCHLAGE RC CONTROLLER WITH MEL, AO, MOTION SENSOR, DPS PAIR OF DOORS

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113740W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- LOCKNETICS RS200/300 ESTRIKE
- LOCKNETICS EMS-100 MOTION SENSOR
- SCHLAGE 679-05 DPS
- 12 VDC DPDT RELAY
- LCN 4600 AUTO OPERATOR
- 2 LOCKNETICS PPH ACUTUATORS
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE AND WILL ENABLE EXTERIOR ACTUATOR TO OPEN DOOR VIA AUTO OPERATOR.

INTERIOR ACTUATOR ALWAYS ACTIVE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM.

FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-15-20

REVISION DATE: 3-3-22

ALLEGION™

TITLE: SCHLAGE RC CONTROLLER, ESTRIKE AO, DPS, MOTION SENSOR, SINGLE DOOR

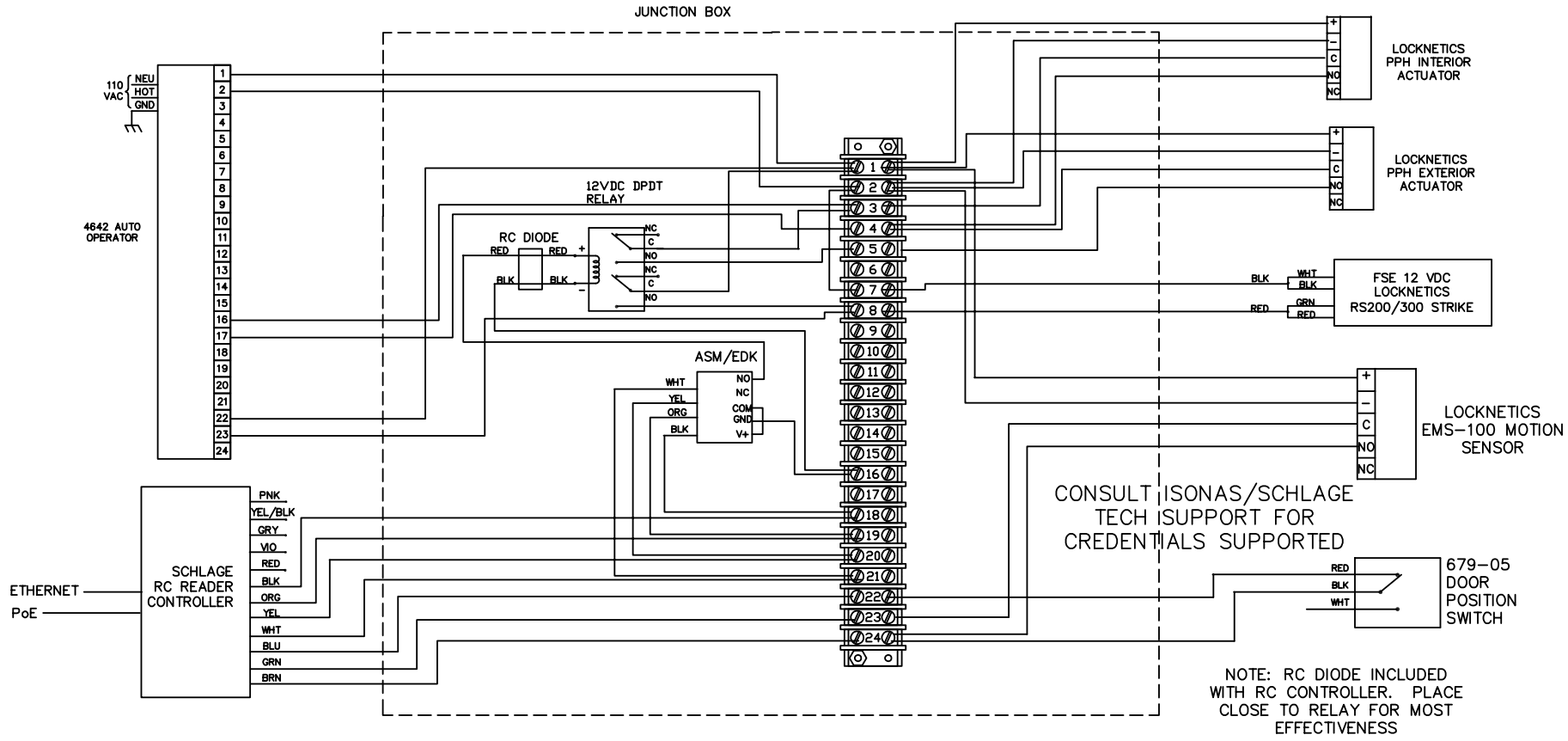
DRAWING TYPE: RISER DIAGRAM

DWG NO: 113752R

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

HARDWARE USED:

SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
LOCKNETICS RS200/300 ESTRIKE
LOCKNETICS EMS-100 MOTION SENSOR
SCHLAGE 679-05 DPS
12 VDC DPDT RELAY
LCN 4600 AUTO OPERATOR
2 LOCKNETICS PPH ACUTUATORS
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE AND WILL ENABLE EXTERIOR ACTUATOR TO OPEN DOOR VIA AUTO OPERATOR.

INTERIOR ACTUATOR ALWAYS ACTIVE.

MOTION SENSOR TO SHUNT DOOR FORCED ALARM

FREE EGRESS AT ALL TIMES

DATE DRAWN: 10-15-20

REVISION DATE: 3-3-22

ALLEGION™

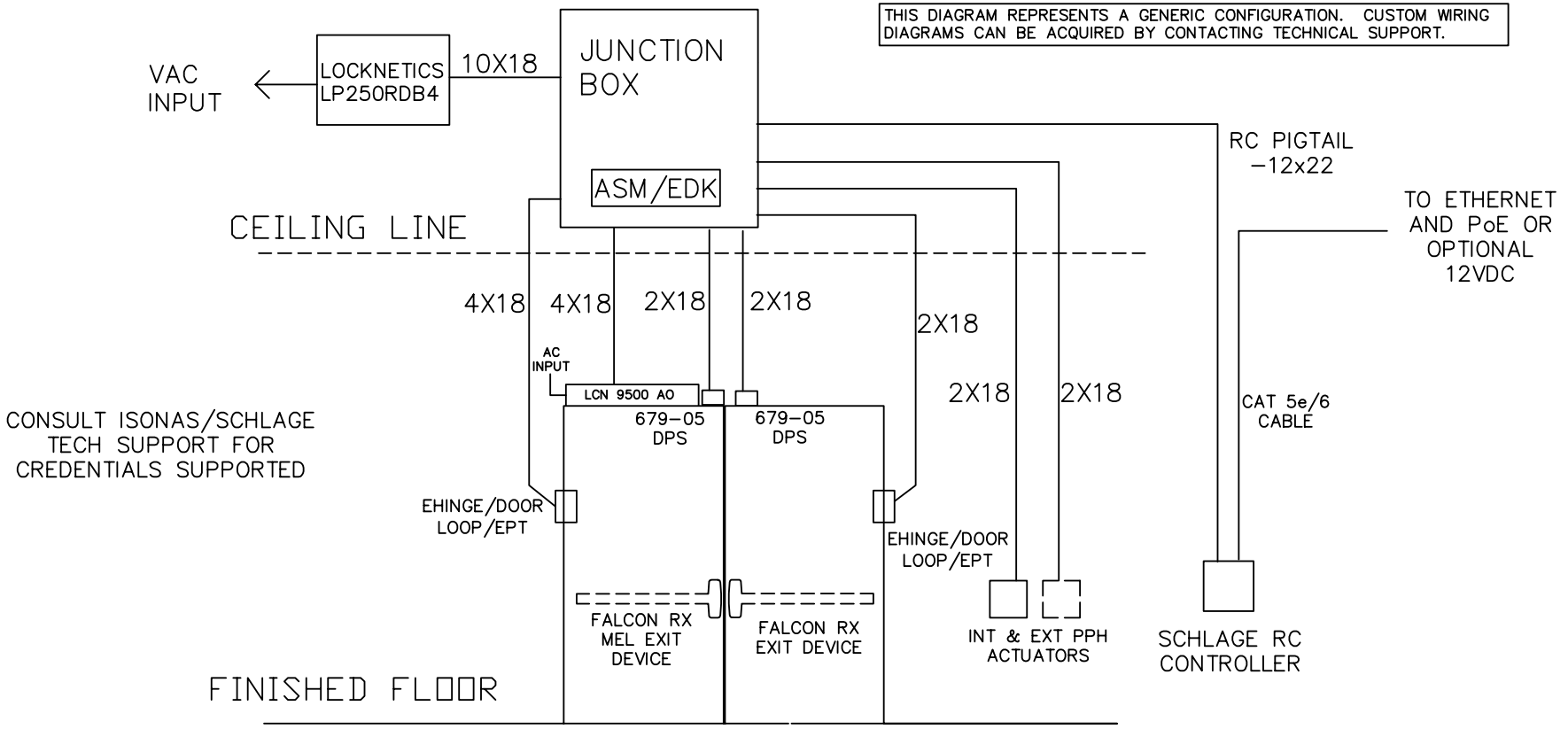
TITLE: SCHLAGE RC CONTROLLER, ESTRIKE AD, DPS, MOTION SENSOR, SINGLE DOOR

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 113752W

REV: B

DRAWN/CHECKED BY: DOVE/TAMARCHENKO



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
SCHLAGE RC CONTROLLER
SCHLAGE RC PIGTAIL
SCHLAGE ASM/EDK MODULE
1 FALCON RX MEL 24/25 EXIT DEVICE
1 FALCON RX 24/25 EXIT DEVICE
2 DOOR LOOP OR EHINGE OR EPT
LCN 9500 AO
2 LOCKNETICS PPH ACTUATORS
LOCKNETICS LP250RDB4
2 SCHLAGE 679-05 DPS
1 12 VDC DPDT RELAY
JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS MEL LATCH RETRACTION, LHR LEAF, AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE.

RX SWITCHES IN EXIT DEVICES TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

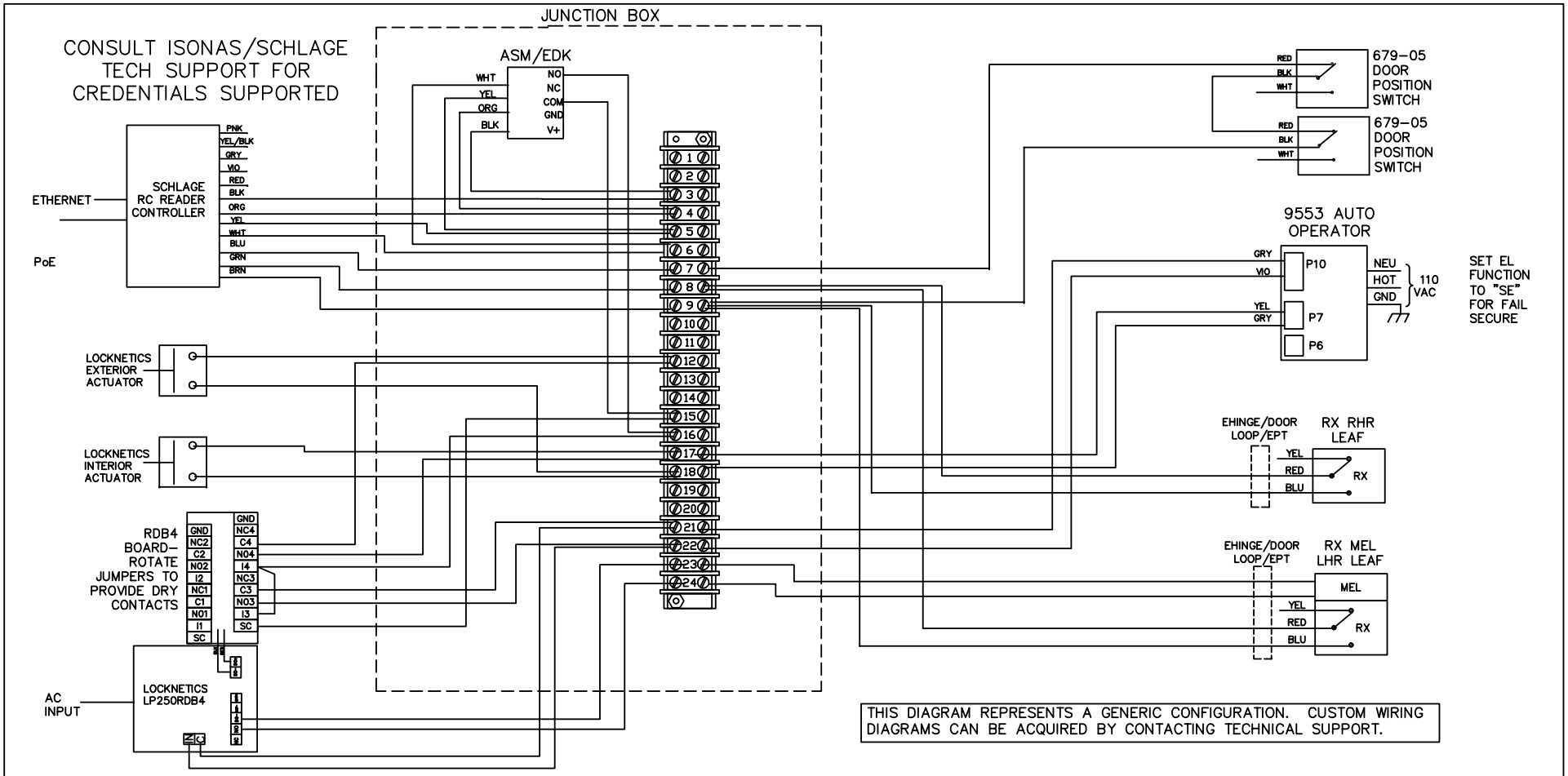
FREE EGRESS AT ALL TIMES.

DATE DRAWN: 10-20-20
REVISION DATE: 3-3-22

ALLEGION™

TITLE:
SCHLAGE RC CONTROLLER WITH RX MEL, RX, 9500 AO, DPS, LP250 PAIR OF DOORS

DRAWING TYPE: RISER DIAGRAM
DWG NO: 113768R
DRAWN/CHECKED BY: DOVE/TAMARCHENKO
REV: B



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- SCHLAGE RC CONTROLLER
- SCHLAGE RC PIGTAIL
- SCHLAGE ASM/EDK MODULE
- 1 FALCON RX MEL 24/25 EXIT DEVICE
- 1 FALCON RX 24/25 EXIT DEVICE
- 2 DOOR LOOP OR EHINGE OR EPT
- LCN 9500 AO
- 2 LOCKNETICS PPH ACTUATORS
- LOCKNETICS LP250RDB4
- 2 SCHLAGE 679-05 DPS
- 1 12 VDC DPDT RELAY
- JUNCTION BOX

OPERATION:
DOORS NORMALLY CLOSED AND LOCKED.

ENTRY BY VALID CREDENTIAL OR KEY OVERRIDE. CREDENTIAL SIGNALS MEL LATCH RETRACTION, LHR LEAF, AND ENABLES EXTERIOR ACTUATOR. INTERIOR ACTUATOR ALWAYS ACTIVE.

RX SWITCHES IN EXIT DEVICES TO SHUNT DOOR FORCED ALARM.

CONFIRM PoE SOURCE SUFFICIENT FOR LOAD.

FREE EGRESS AT ALL TIMES.

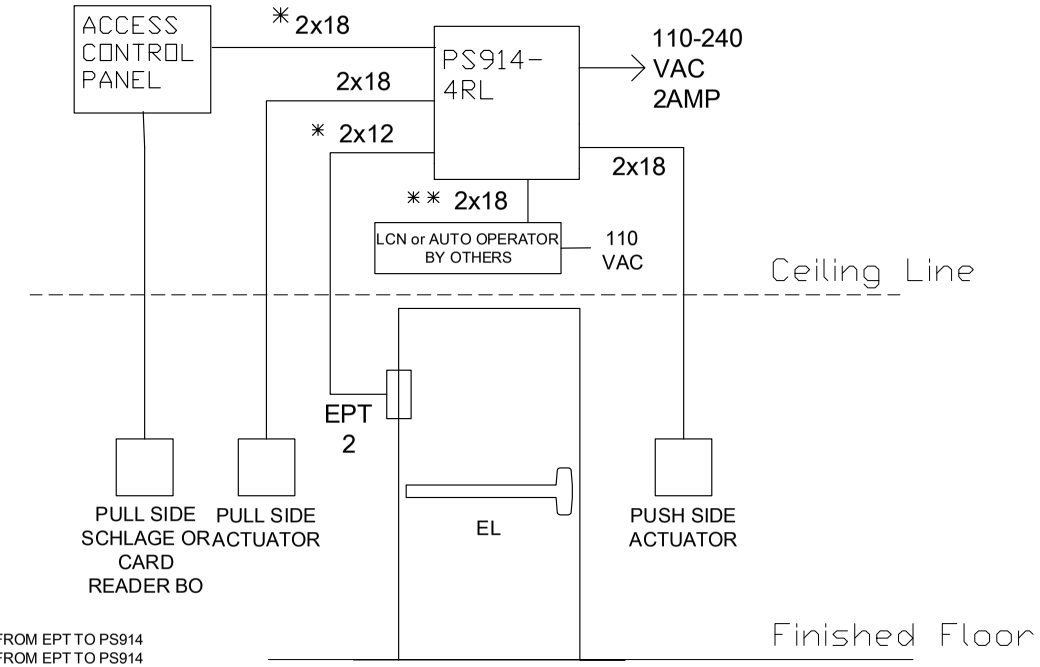
DATE DRAWN: 10-20-20
REVISION DATE: 3-3-22

ALLEGION™

TITLE:
SCHLAGE RC CONTROLLER WITH RX MEL, RX, 9500 AO, DPS, LP250 PAIR OF DOORS

DRAWING TYPE:	DWG NO:	REV
WIRING DIAGRAM	113768W	B
	DRAWN/CHECKED BY: DOVE/TAMARCHENKO	

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914
**ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 1 VONDUPRIN OR FALCON EL PANIC DEVICE
- 1 SCHLAGE OR CARD READER BY OTHERS WITH ACP
- 2 ACTUATORS
- 1 PS914-4RL POWER SUPPLY
- 1 EPT POWER TRANSFER
- 1 LCN OR AUTO OPERATOR BY OTHERS

TYPE: IR EL PANIC WITH AO

OPERATION:

PUSH SIDE ACTUATOR TO RETRACT THE ELECTRIC PANIC BAR AND OPEN THE DOOR.

PULL SIDE SCHLAGE OR CARD READER BO TO RETRACT THE ELECTRIC PANIC BAR AND ENABLE THE PULL SIDE ACTUATOR TO OPEN THE DOOR.

THIS CONFIGURATION REPRESENTS A NON FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS914 ENCLOSURE.

DATE DRAWN: 3-20-13

REVISION DATE: 07-03-17

ALLEGION™

TITLE: PS914-4RL AS AO WITH EL PANIC

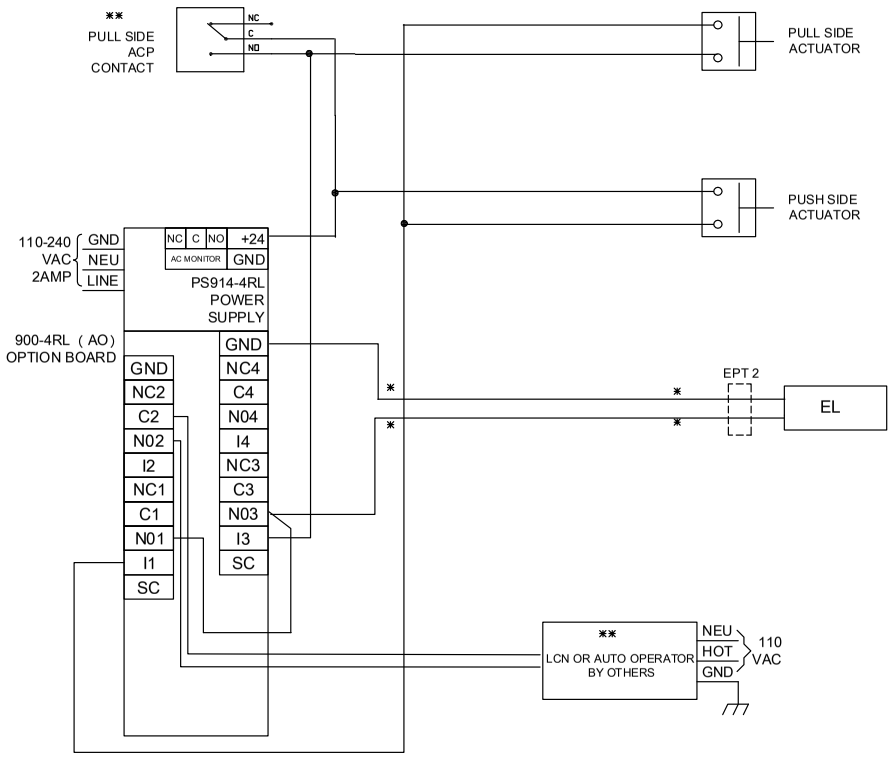
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109441

DRAWN/CHECKED BY: BRENDA DOVE

REV: D

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



SET 900-4RL CARD:
SW2 PACK-SW1 OFF AND SW2 ON.
SW1 PACK-SW1 ON, SW2 OFF, SW3 AND SW4 OFF AND OTHER SWITCHES AS REQUIRED FOR INSTALLTION. SEE 900-4RL INSTALLATION INSTRUCTIONS FOR DETAILS.

PROGRAM C2 AND NO2 FOR DRY CONTACT.

SET ALL OTHER SWITCHES AS REQUIRED FOR INSTALLATION

NOTE:
*USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914
**ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
1 VONDUPRIN OR FALCON EL PANIC DEVICE
1 SCHLAGE OR CARD READER BY OTHERS WITH ACP
2 ACTUATORS
1 PS914-4RL POWER SUPPLY
1 EPT POWER TRANSFER
1 LCN OR AUTO OPERATOR BY OTHERS

TYPE: IR EL PANIC WITH AO

OPERATION:

PUSH SIDE ACTUATOR TO RETRACT THE ELECTRIC PANIC BAR AND OPEN THE DOOR.

PULL SIDE SCHLAGE OR CARD READER BO TO RETRACT THE ELECTRIC PANIC BAR AND ENABLE THE PULL SIDE ACTUATOR TO OPEN THE DOOR.

THIS CONFIGURATION REPRESENTS A NON FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS914 ENCLOSURE.

DATE DRAWN: 3-20-13
REVISION DATE: 07-03-17

ALLEGION™

TITLE: PS902-4RL AS AO WITH QEL PANIC

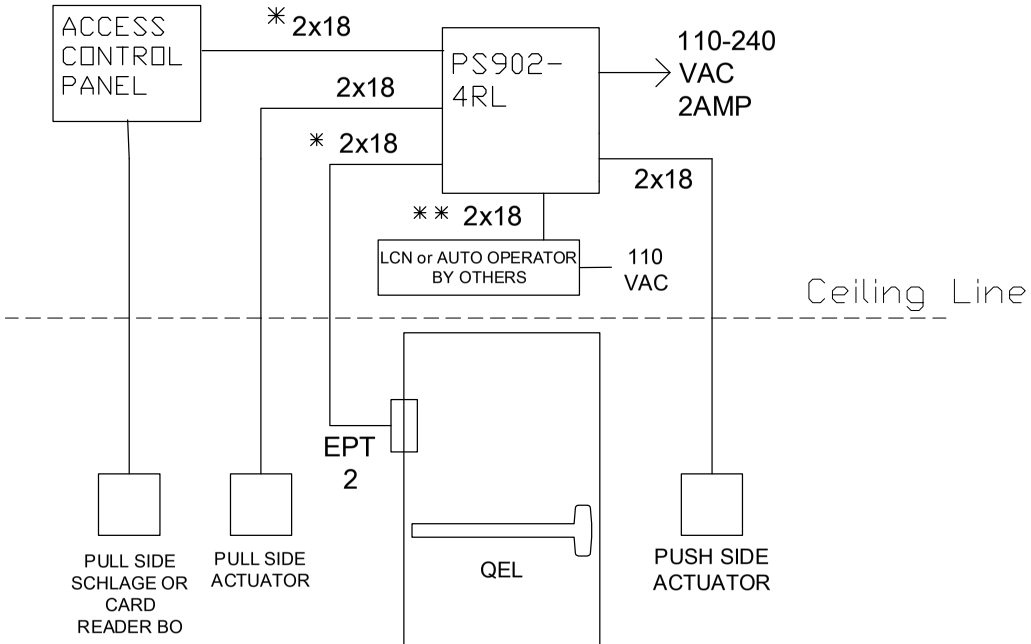
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 021618-2R

DRAWN/CHECKED BY: B DOVE/ B DYE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
* USE #18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS902
* USE #14 GAUGE WIRE FOR DISTANCES UP TO 500' FROM EPT TO PS902
** ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
1 VONDUPRIN QEL PANIC DEVICE
1 SCHLAGE OR CARD READER BY OTHERS WITH ACP
2 ACTUATORS
1 PS902-4RL POWER SUPPLY
1 EPT POWER TRANSFER
1 LCN OR AUTO OPERATOR BY OTHERS

TYPE QEL PANIC WITH AO

OPERATION:

PUSH SIDE ACTUATOR TO RETRACT THE QUIETELECTRIC PANIC BAR AND OPEN THE DOOR.

PULL SIDE SCHLAGE OR CARD READER BO TO RETRACT THE ELECTRIC PANIC BAR AND ENABLE THE PULL SIDE ACTUATOR TO OPEN THE DOOR.

THIS CONFIGURATION REPRESENTS A NON FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS902 ENCLOSURE.

DATE DRAWN: 02-16-18

REVISION DATE: 02-16-18

ALLEGION™

TITLE: PS902-4RL AS AO WITH QEL PANIC

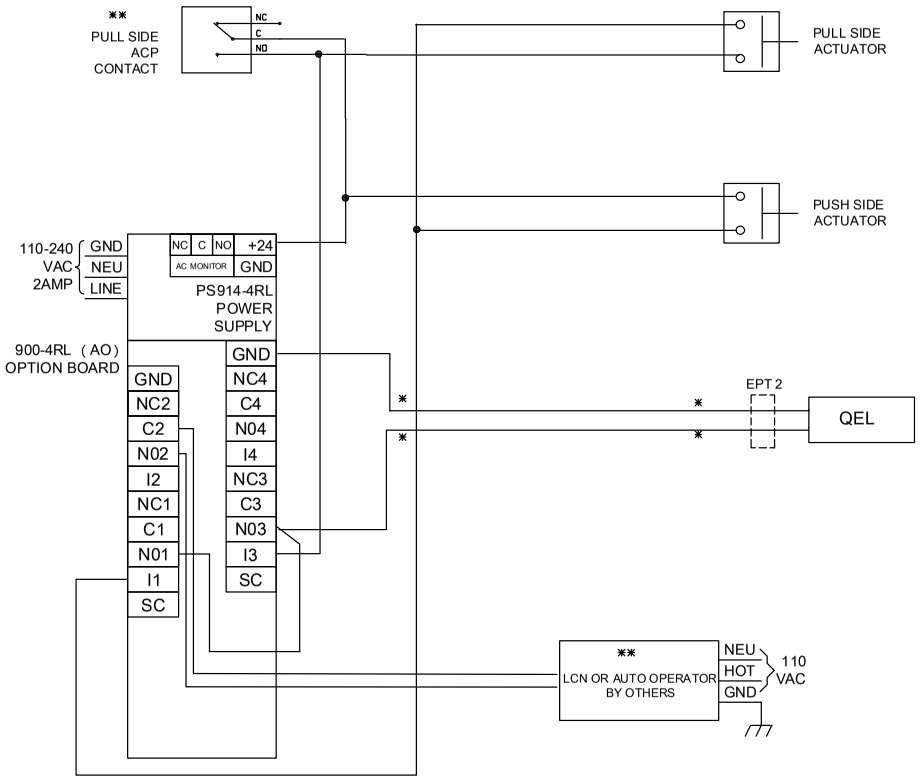
DRAWING TYPE: RISER DIAGRAM

DWG NO: 112132R

DRAWN/CHECKED BY: BRENDA DOVE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



SET 900-4RL CARD:
SW2 PACK-SW1 OFF AND SW2 ON.
SW1 PACK-SW1 ON, SW2 OFF, SW3 AND SW4 OFF AND OTHER SWITCHES AS REQUIRED FOR INSTALLTION. SEE 900-4RL INSTALLATION INSTRUCTIONS FOR DETAILS.

PROGRAM C2 AND NO2 FOR DRY CONTACT.

SET ALL OTHER SWITCHES AS REQUIRED FOR INSTALLATION

NOTE:
*USE #18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS902
*USE #14 GAUGE WIRE FOR DISTANCES UP TO 500' FROM EPT TO PS902
**ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
1 VONDUPRIN QEL PANIC DEVICE
1 SCHLAGE OR CARD READER BY OTHERS WITH ACP
2 ACTUATORS
1 PS902-4RL POWER SUPPLY
1 EPT POWER TRANSFER
1 LCN OR AUTO OPERATOR BY OTHERS

TYPE: QEL PANIC WITH AO

OPERATION:

PUSH SIDE ACTUATOR TO RETRACT THE QUIET ELECTRIC PANIC BAR AND OPEN THE DOOR.

PULL SIDE SCHLAGE OR CARD READER BO TO RETRACT THE ELECTRIC PANIC BAR AND ENABLE THE PULL SIDE ACTUATOR TO OPEN THE DOOR.

THIS CONFIGURATION REPRESENTS A NON FIRE RATED OPENING.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS902 ENCLOSURE.

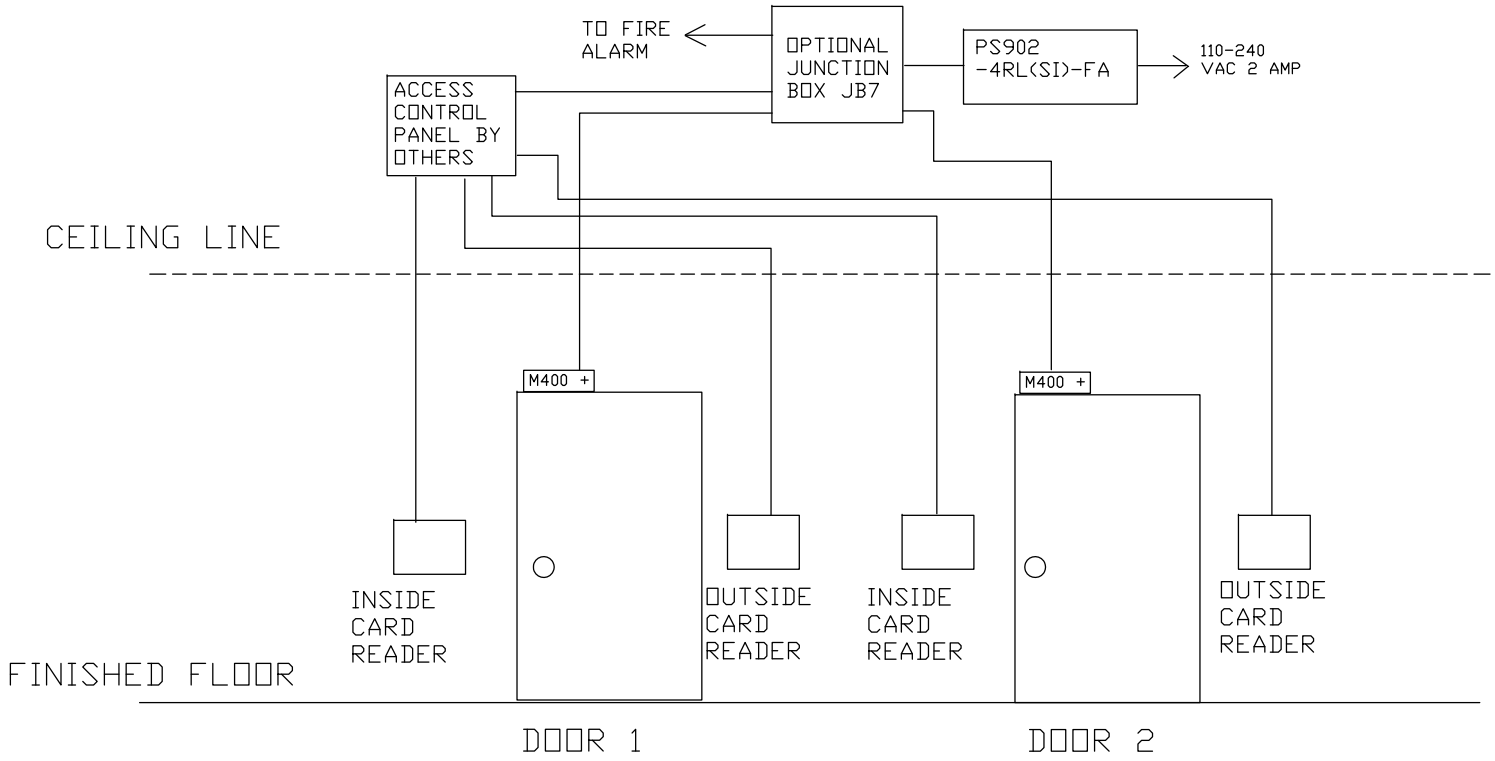
DATE DRAWN: 02-16-18
REVISION DATE: 02-16-18

ALLEGION™

TITLE: PS902-4RL AS AO WITH QEL PANIC

DRAWING TYPE: WIRING DIAGRAM
DWG NO: 112132W
DRAWN/CHECKED BY: B DOVE
REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 - PS902-4RL-FA
2 - M400 PLUS MAGLOCK
4 - CARDREADER 7 ACCESS CONTROL PANEL BY OTHERS
1 - FIRE ALARM CONTACT BY OTHERS
1 - OPTIONAL JUNCION BOX, JB7 BY VON DUPRIN

TYPE
2 DOOR SECURITY INTERLOCK

OPERATION:
DOOR 1 & 2 SHOWN LOCKED & CLOSED.

UNLOCKING DOOR 1 PREVENTS DOOR 2 FROM UNLOCKING UNTIL DOOR 1 IS CLOSED.

UNLOCKING DOOR 2 PREVENTS DOOR 1 FROM UNLOCKING UNTIL DOOR 2 IS CLOSED

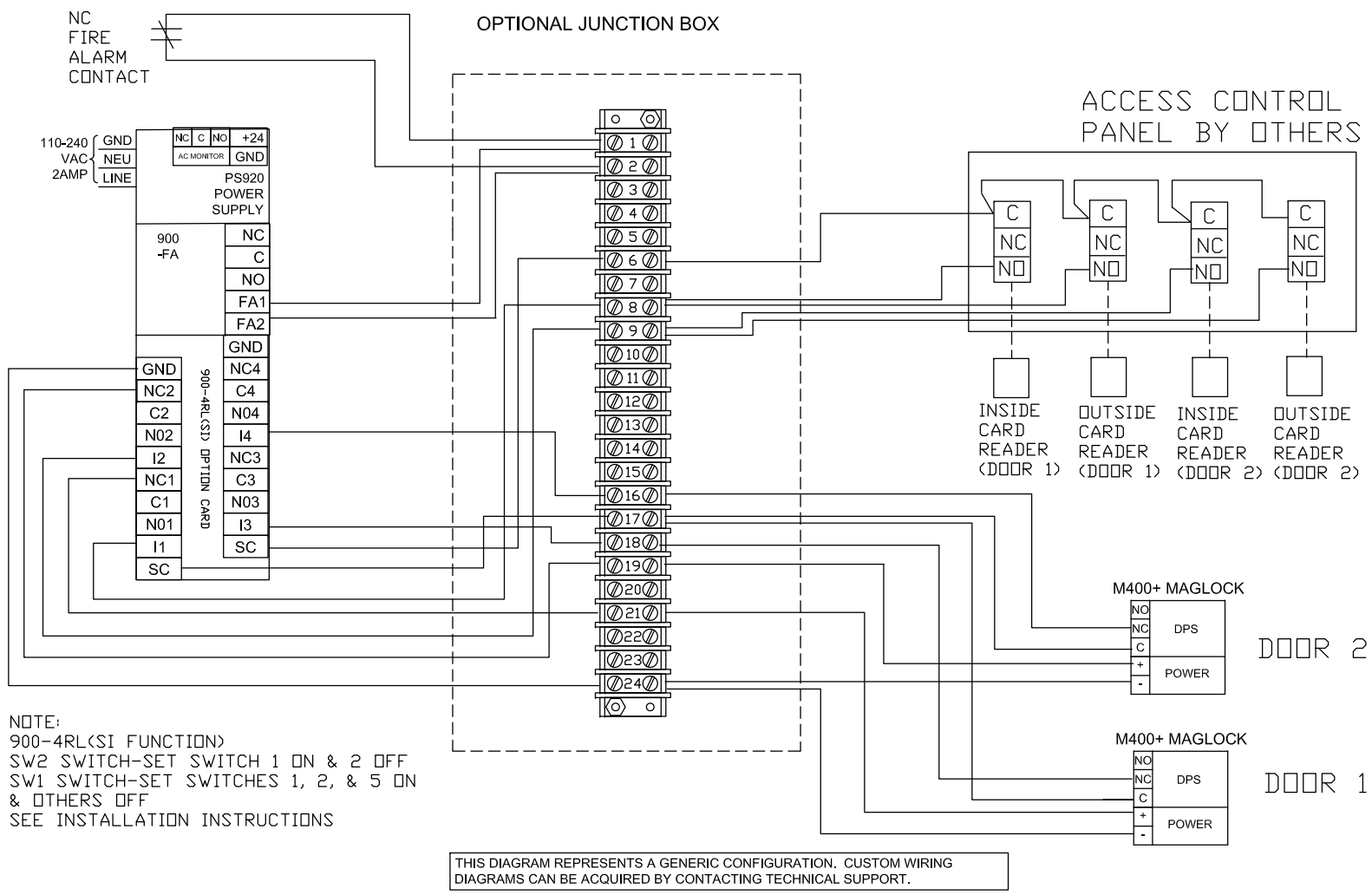
FIRE ALARM UNLOCKS BOTH DOORS.

DATE DRAWN: 03-26-13	REVISION DATE: 04-16-14
DRAWN BY: B DOVE	APPROVED BY: MH

ALLEGION™

TITLE:
2 DOORS PS902-4RL(SI)-fa X 2 M400 PLUS MAGLOCKS X 2 CARD READERS

DRAWING TYPE: RISER	DWG NO: 104967	REV D
	DRAWN/CHECKED BY: B DOVE	



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 - PS902-4RL-FA
2 - M400 PLUS MAGLOCK
4 - CARDREADER 7 ACCESS CONTROL PANEL BY OTHERS
1 - FIRE ALARM CONTACT BY OTHERS
1 - OPTIONAL JUNCION BOX, JB7 BY VON DUPRIN

TYPE
2 DOOR SECURITY INTERLOCK

OPERATION:
DOOR 1 & 2 SHOWN LOCKED & CLOSED.

UNLOCKING DOOR 1 PREVENTS DOOR 2 FROM UNLOCKING UNTIL DOOR 1 IS CLOSED.

UNLOCKING DOOR 2 PREVENTS DOOR 1 FROM UNLOCKING UNTIL DOOR 2 IS CLOSED

FIRE ALARM UNLOCKS BOTH DOORS.

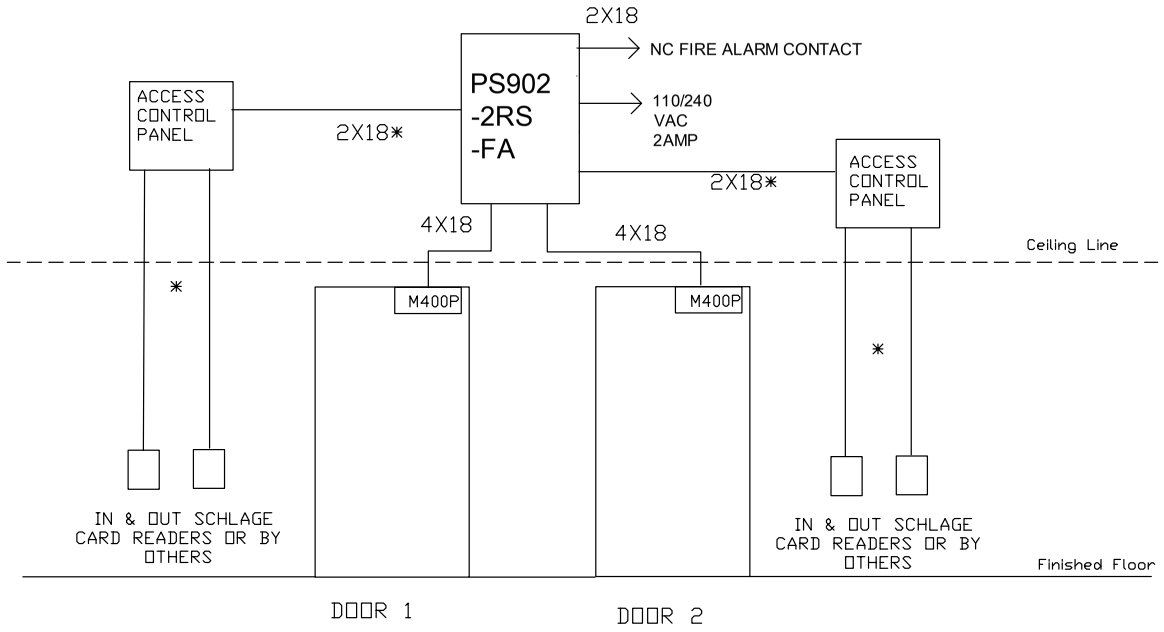
DATE DRAWN: 03-26-13
REVISION DATE: 04-16-14
DRAWN BY: B DOVE
APPROVED BY: MH

ALLEGION™

TITLE:
2 DOORS PS902-4RL(SI)-fa X 2 M400 PLUS MAGLOCKS X 2 CARD READERS

DRAWING TYPE: WIRING
DWG NO: 104967
DRAWN/CHECKED BY: B DOVE
REV: D

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



VERIFY OPERATION
ACCEPTABLE TO LOCAL AHJ.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

Hardware Used:

2 M400P MAGNETIC LOCKS

PS902-2RS-FA POWER SUPPLY

4 SCHLAGE CARD READERS OR BY OTHERS AND ACP

FIRE ALARM CONTACT BY OTHERS

Type
SECURITY INTERLOCK
2 DOOR

OPERATION:

SECURITY INTERLOCK - BOTH DOORS NORMALLY LOCKED. PRESENTING A VALID CREDENTIAL TO THE CARD READERS WILL RELEASE DOOR IF OTHER DOOR IS CLOSED AND LOCKED.

OPPOSITE DOOR REMAINS LOCKED AS LONG AS OTHER DOOR REMAINS UNLOCKED.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

FIRE ALARM TO RELEASE BOTH M490 MAG LOCKS.

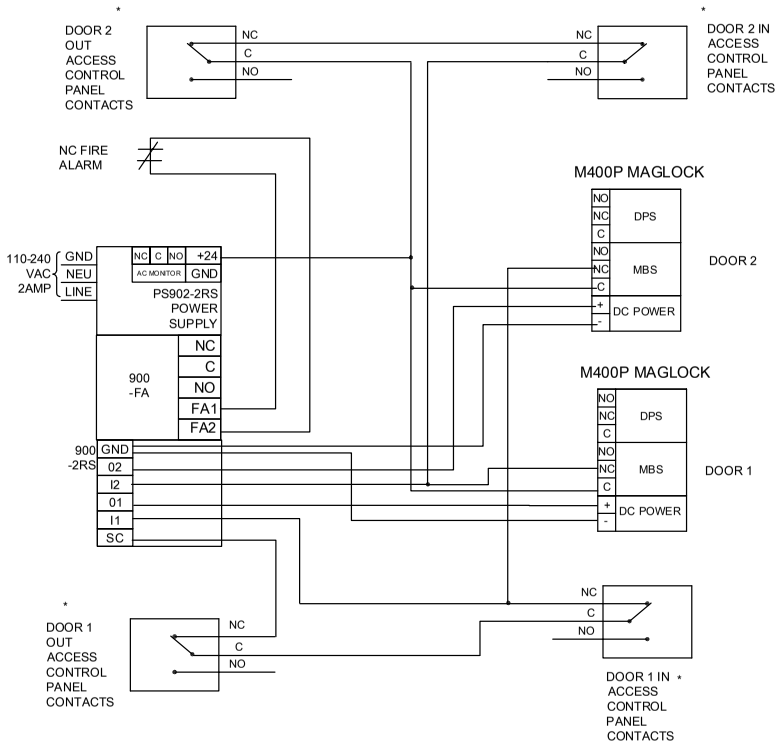
Date Drawn:	Revision Date:
3-13-13	07-03-17

ALLEGION™

TITLE: 2 Door PS902-2RS-FA x 2 M400 Plus Maglocks x 4 Card Readers

DRAWING TYPE:	DWG NO:	REV
RISER	109438	C
	DRAWN/CHECKED BY: B DOVE/ B DYE	

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



VERIFY OPERATION ACCEPTABLE TO LOCAL AHJ.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

Hardware Used:

2 M400P MAGNETIC LOCKS

PS902-2RS-FA POWER SUPPLY

4 SCHLAGE CARD READERS OR BY OTHERS WITH ACP

FIRE ALARM CONTACT BY OTHERS

Type
SECURITY INTERLOCK
2 DOOR

OPERATION:

SECURITY INTERLOCK - BOTH DOORS NORMALLY LOCKED. PRESENTING A VALID CREDENTIAL TO THE CARD READERS WILL RELEASE DOOR IF OTHER DOOR IS CLOSED AND LOCKED.

OPPOSITE DOOR REMAINS LOCKED AS LONG AS OTHER DOOR REMAINS UNLOCKED.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

FIRE ALARM TO RELEASE BOTH M490 MAG LOCKS.

Date Drawn: 3-13-13

Revision Date: 07-03-17

ALLEGION™

TITLE: 2 Door PS902-2RS-FA x 2 M400 Plus Maglocks x 4 Card Readers

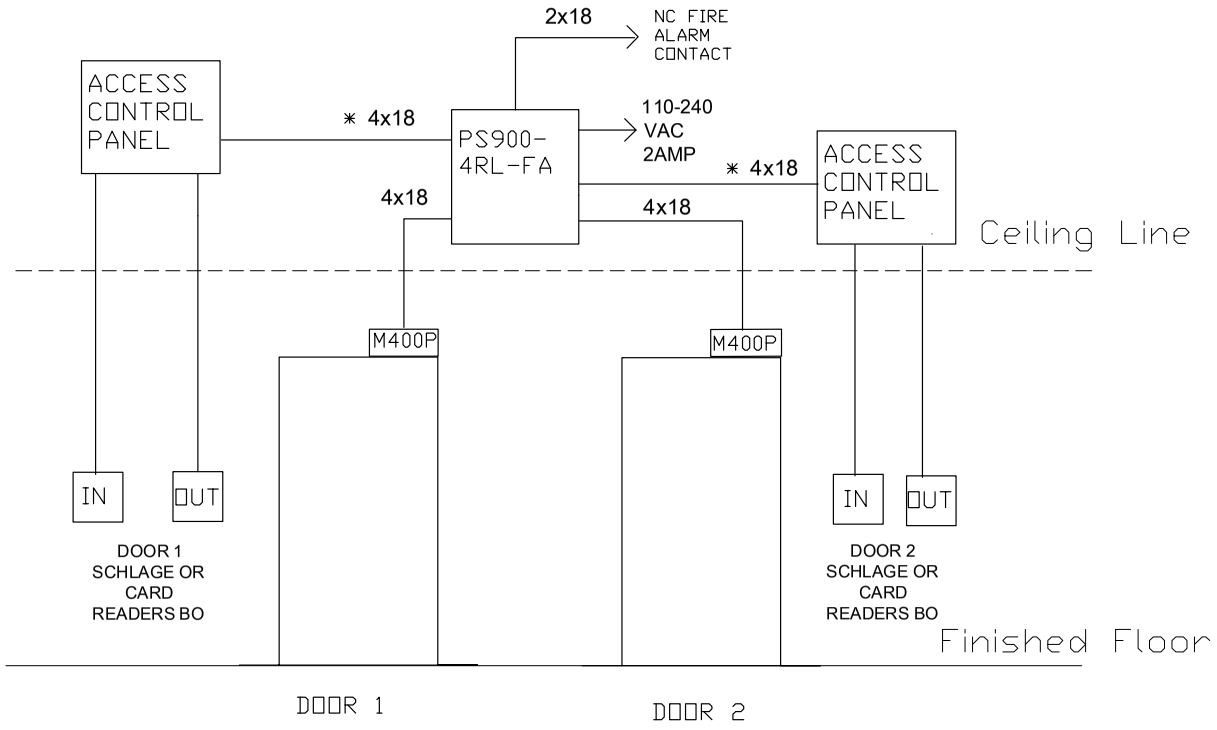
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109438

DRAWN/CHECKED BY: B DOVE/ B DYE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:

SET SW2 SWITCHES 1 ON AND 2 OFF TO CONFIG 900-4RL AS SI.
SET SW1 SWITCHES AS REQUIRED FOR PARTICULAR INSTALLATION.

* ADDITIONAL CONDUCTORS MAY BE REQUIRED. CONSULT MANUFACTURERS INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.

CONFIRM HARDWARE AND OPERATION ACCEPTABLE TO LOCAL AHJ.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

2 M400P MAG LOCKS

4 SCHLAGE OR CARD READER BY OTHERS WITH ACP

1 PS900-4RL-FA

FIRE ALARM CONTACT BY OTHERS

TYPE 2 DOOR SECURITY INTERLOCK WITH ACCESS CONTROL

OPERATION:

BOTH DOORS NORMALLY LOCKED. CARD READER TO OPEN DOOR ONLY IF OTHER DOOR IS CLOSED AND LOCKED.

NOTE, OPPOSITE DOOR WILL REMAIN LOCKED AS LONG AS OTHER DOOR IS UNLOCKED.

FIRE ALARM TO RELEASE BOTH M490 MAG LOCKS.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS900 ENCLOSURE.

DATE DRAWN: 3-21-13

REVISION DATE: 07-03-17

ALLEGION™

TITLE: PS900-4RL-FA SECURITY INTERLOCK WITH M400P MAG LOCKS

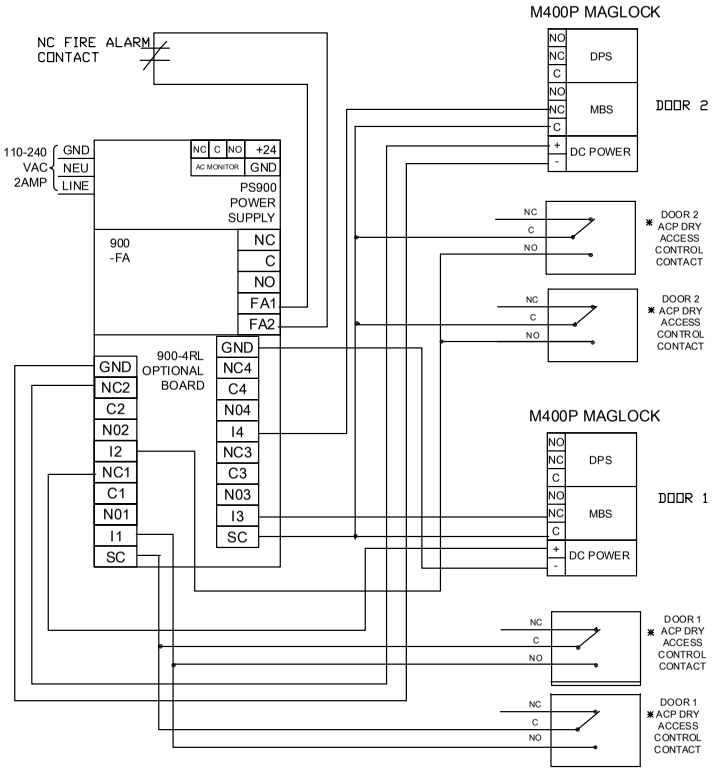
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109442

DRAWN/CHECKED BY: B DOVE/B DYE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:

SET SW2 SWITCHES 1 ON AND 2 OFF TO CONFIG 900-4RL AS SI.
SET SW1 SWITCHES AS REQUIRED FOR PARTICULAR INSTALLATION.

* ADDITIONAL CONDUCTORS MAY BE REQUIRED. CONSULT MANUFACTURERS INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.

CONFIRM HARDWARE AND OPERATION ACCEPTABLE TO LOCAL AHJ.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

2 M400P MAG LOCKS

4 SCHLAGE OR CARD READER BY OTHERS WITH ACP

1 PS900-4RL-FA

FIRE ALARM CONTACT BY OTHERS

TYPE 2 DOOR SECURITY INTERLOCK WITH ACCESS CONTROL

OPERATION:

BOTH DOORS NORMALLY LOCKED. CARD READER TO OPEN DOOR ONLY IF OTHER DOOR IS CLOSED AND LOCKED.

NOTE, OPPOSITE DOOR WILL REMAIN LOCKED AS LONG AS OTHER DOOR IS UNLOCKED.

FIRE ALARM TO RELEASE BOTH M490 MAG LOCKS.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS900 ENCLOSURE.

DATE DRAWN: 3-21-13

REVISION DATE: 07-03-17

ALLEGION™

TITLE:
PS900-4RL-FA SECURITY INTERLOCK WITH M400P MAG LOCKS

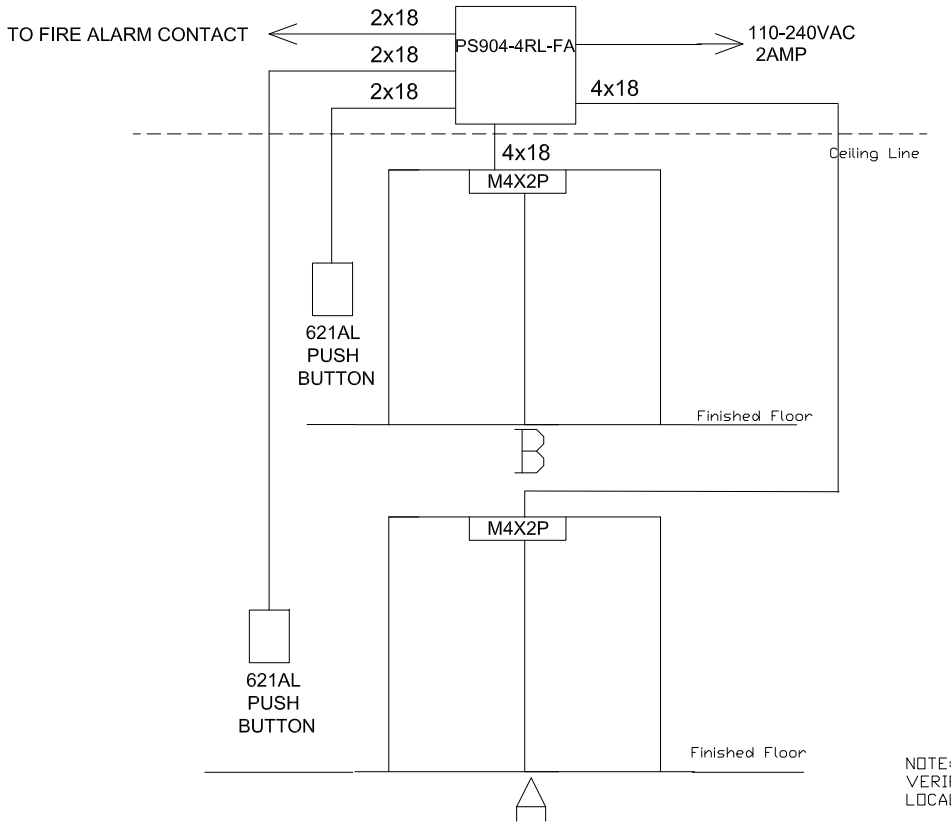
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109442

DRAWN/CHECKED BY: B DOVE/B DYE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
VERIFY HARDWARE AND OPERATION ACCEPTABLE TO LOCAL AHJ.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
2 M4X2P MAG LOCKS

2 621AL PUSH BUTTONS

1 PS904-4RL-FA POWER SUPPLY

FIRE ALARM CONTACT SUPPLIED BY OTHERS

TYPE
2 DOOR SAFETY INTERLOCK WITH OVERRIDE BUTTONS

DOORS ARE INTERLOCKED WITH EACH OTHER. BOTH DOORS ARE UNLOCKED UNTIL ONE DOOR IS OPENED THEN THE OTHER PAIR OF DOORS WILL BE LOCKED.

EITHER PUSHBUTTON OR FIRE ALARM CONTACT WILL DEACTIVATE BOTH MAGLOCKS.

IN THIS EXAMPLE ALL CONNECTIONS ARE MADE IN THE PS904 ENCLOSURE.

DATE DRAWN: 3-21-13
REVISION DATE: 3-21-13

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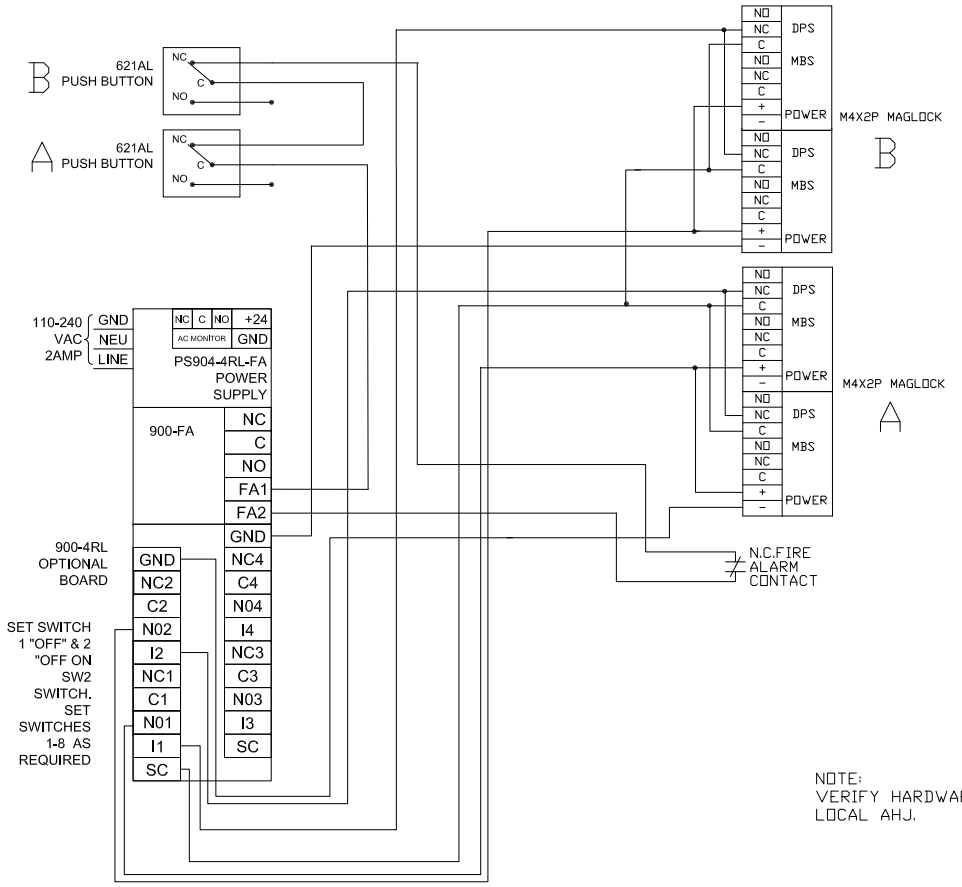
ALLEGION™

TITLE:
PS904 -4RL-FA, M4X2P
SAFETY INTERLOCK

DRAWING TYPE: RISER DIAGRAM
DWG NO: 109443
DRAWN/CHECKED BY: B DOVE
REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
VERIFY HARDWARE AND OPERATION ACCEPTABLE TO LOCAL AHJ.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
2 M4X2P MAG LOCKS

2 621AL PUSH BUTTONS

1 PS904-4RL-FA POWER SUPPLY

FIRE ALARM CONTACT SUPPLIED BY OTHERS

TYPE
2 DOOR SAFETY INTERLOCK WITH OVERRIDE BUTTONS

DOORS ARE INTERLOCKED WITH EACH OTHER. BOTH DOORS ARE UNLOCKED UNTIL ONE DOOR IS OPENED THEN THE OTHER PAIR OF DOORS WILL BE LOCKED.

EITHER PUSHBUTTON OR FIRE ALARM CONTACT WILL DEACTIVATE BOTH MAGLOCKS.

IN THIS EXAMPLE ALL CONNECTIONS ARE MADE IN THE PS904 ENCLOSURE.

DATE DRAWN: 3-21-13

REVISION DATE: 3-21-13

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ALLEGION™

TITLE:
PS904 -4RL-FA, M4X2P
SAFETY INTERLOCK

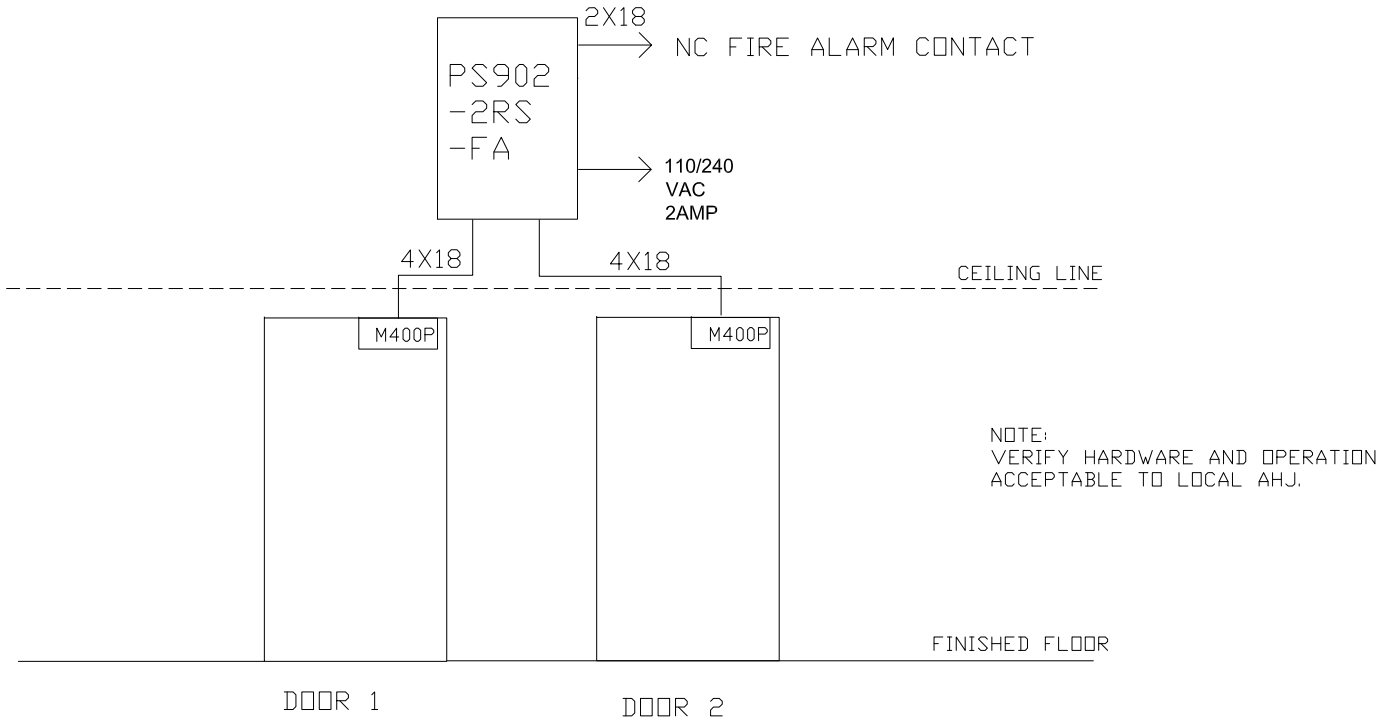
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109443

DRAWN/CHECKED BY: B DOVE

REV A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
VERIFY HARDWARE AND OPERATION ACCEPTABLE TO LOCAL AHJ.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

2 M400P MAGNETIC LOCKS

1 PS902-2RS-FA POWER SUPPLY

FIRE ALARM CONTACT SUPPLIED BY OTHERS

TYPE

2 DOOR SAFETY INTERLOCK

OPERATION:

SAFETY INTERLOCK - WHEN ONE DOOR OPENS OTHER DOOR LOCKS. WHEN BOTH DOORS CLOSED BOTH ARE UNLOCKED

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

FIRE ALARM TO RELEASE BOTH M400P MAG LOCKS

DATE DRAWN: 3-14-13

REVISION DATE: 3-14-13

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ALLEGION™

TITLE: PS902-2RS-FA x 2 M400+ MAG LOCKS X 4 CARD READERS

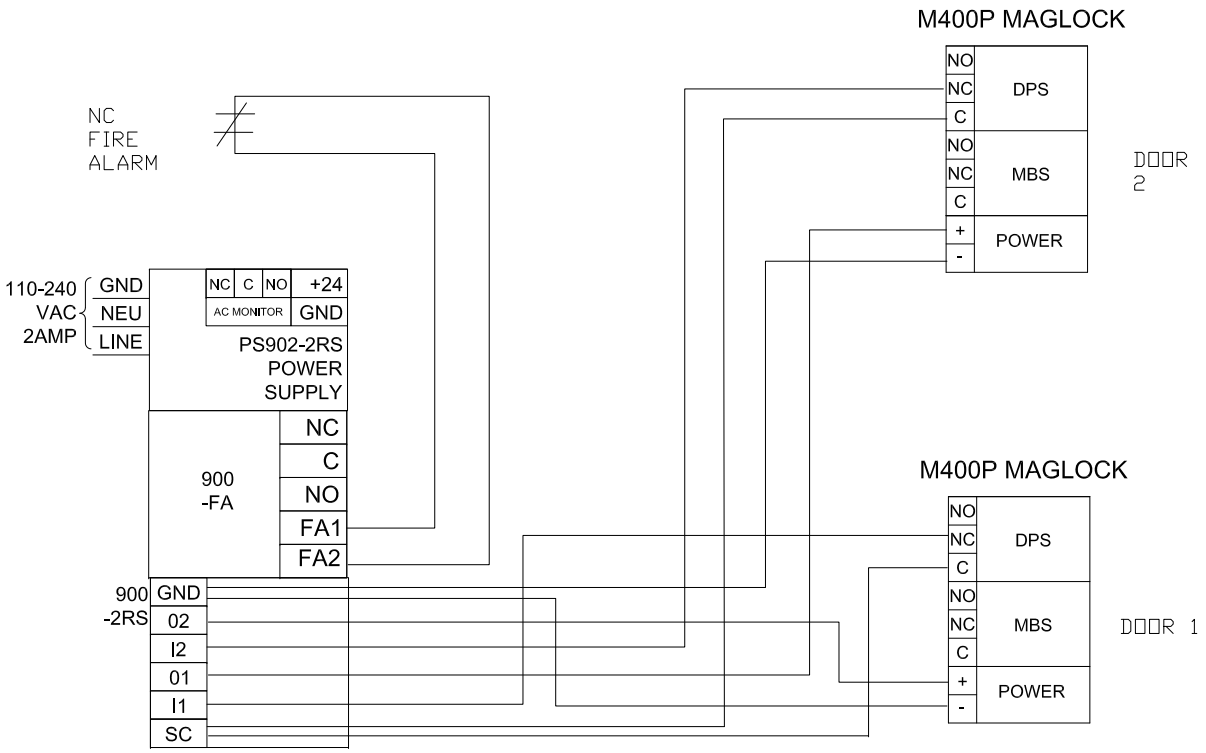
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109437

DRAWN/CHECKED BY: B DOVE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
VERIFY HARDWARE AND OPERATION ACCEPTABLE TO LOCAL AHJ.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

2 M400P MAGNETIC LOCKS

1 PS902-2RS-FA POWER SUPPLY

FIRE ALARM CONTACT SUPPLIED BY OTHERS

TYPE

2 DOOR SAFETY INTERLOCK

OPERATION:

SAFETY INTERLOCK - WHEN ONE DOOR OPENS OTHER DOOR LOCKS. WHEN BOTH DOORS CLOSED BOTH ARE UNLOCKED

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

FIRE ALARM TO RELEASE BOTH M400P MAG LOCKS

DATE DRAWN: 3-14-13

REVISION DATE: 3-14-13

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ALLEGION™

TITLE:
PS902-2RS-FA x 2 M400+ MAG LOCKS X 4 CARD READERS

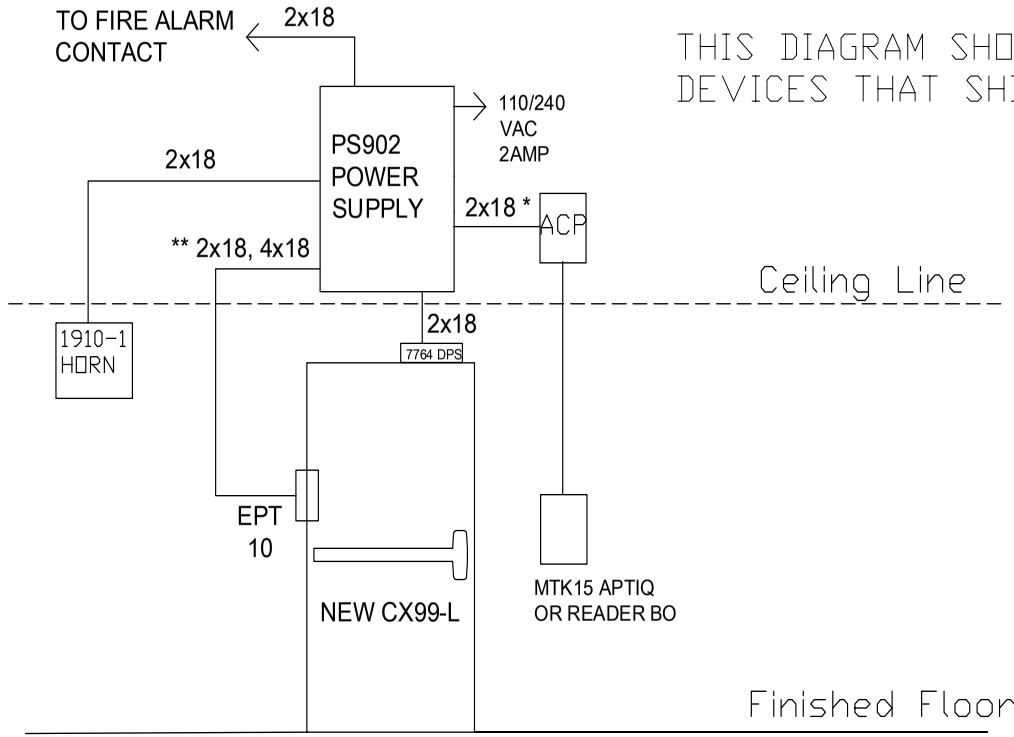
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109437

DRAWN/CHECKED BY: B DOVE

REV A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



THIS DIAGRAM SHOWS WIRING FOR CX DEVICES THAT SHIPPED AFTER 08-24-15

* CONDUCTOR COUNT AND CONNECTIONS TO BE DETERMINED BY ACP PROVIDER

** USE 18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS902 OR USE 14 GAUGE FOR DISTANCES UP TO 500' FROM EPT TO PS902

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

1 NEW CX 98/99-L RIM DEVICE
1 EPT10
1 7764 DPS
1 1910-1 HORN
1 PS902
1 MTK15 READER BY ACP BO
1 FIRE ALARM CONTACT

TYPE DELAYED EGRESS SINGLE DOOR

OPERATION:

CHEXIT TO PROVIDE DELAY EGRESS. WHEN CX IS IN ALARM AUDIBLE WILL SOUND IN CX DEVICE AND EXTERNAL 1910-1 HORN.

FIRE ALARM TO RELEASE DOOR FOR IMMEDIATE EGRESS.

MTK15 READER TO RELEASE CX THROUGH ACP CONTROL CONTACT FOR AUTHORIZED PASSAGE . MTK15 OR KEYSWITCH IN CX DEVICE TO RESET CX FROM ALARM.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

DATE DRAWN: 07-11-18

REVISION DATE: 07-11-18

ALLEGION™

TITLE: CX SINGLE DOOR CX WITH PS902

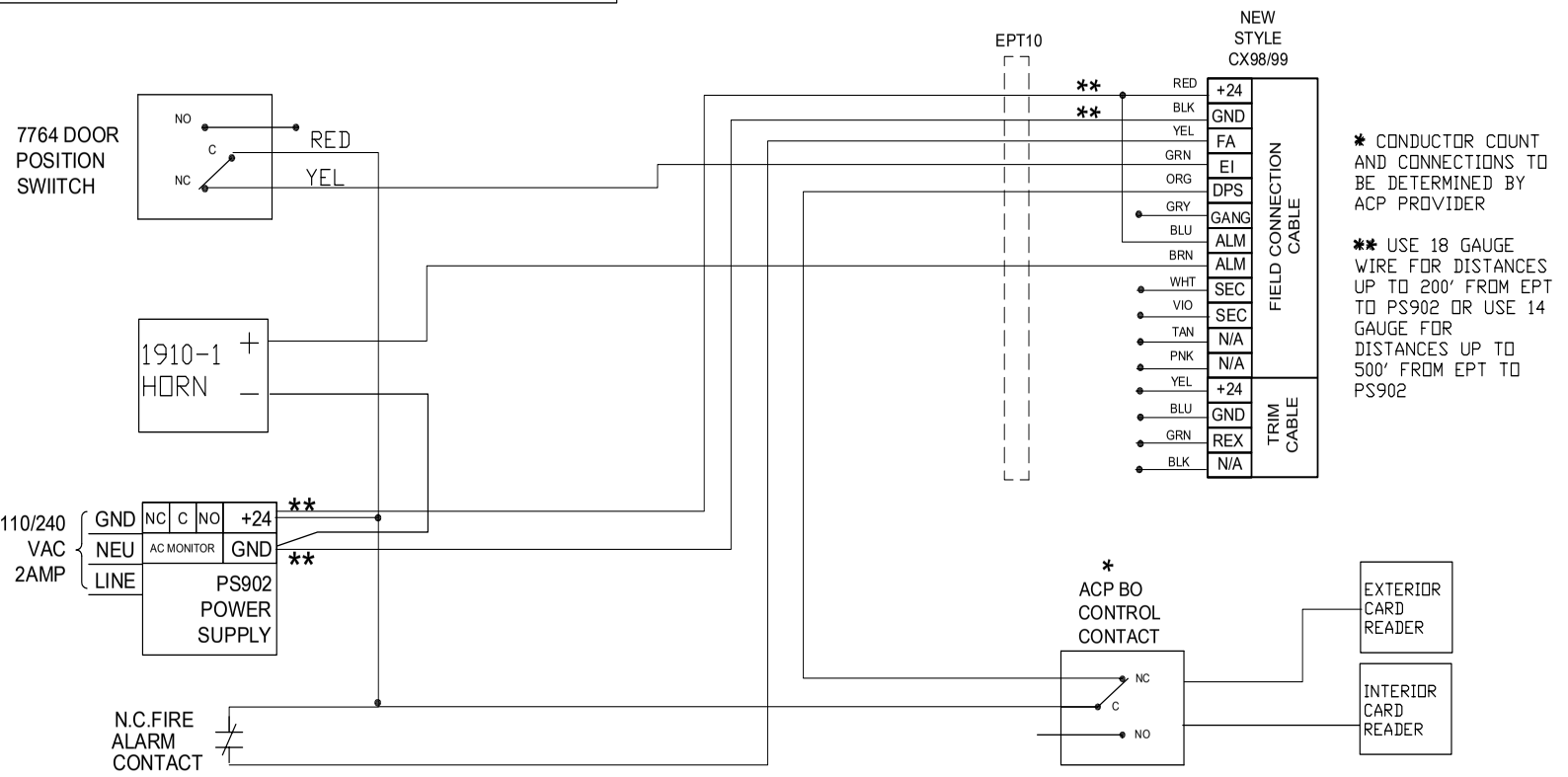
DRAWING TYPE: RISER DIAGRAM

DWG NO: 112289

DRAWN/CHECKED BY: B DOVE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



THIS DIAGRAM SHOWS WIRING FOR CX DEVICES THAT SHIPPED AFTER 08-24-15

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

1 NEW CX 98/99-L RIM DEVICE
1 EPT10
1 7764 DPS
1 1910-1 HORN
1 PS902
2 CARD READER BY ACP BO
1 FIRE ALARM CONTACT

TYPE
DELAYED EGRESS
SINGLE DOOR

OPERATION:

CHEXIT TO PROVIDE DELAY EGRESS. WHEN CX IS IN ALARM AUDIBLE WILL SOUND IN CX DEVICE AND EXTERNAL 1910-1 HORN.

FIRE ALARM TO RELEASE DOOR FOR IMMEDIATE EGRESS.

CARD READERS TO RELEASE CX THROUGH ACP CONTROL CONTACT FOR AUTHORIZED PASSAGE . CARD READER OR KEYSWITCH IN CX DEVICE TO RESET CX FROM ALARM.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS914 ENCLOSURE.

DATE DRAWN: 07-11-18
REVISION DATE: 07-11-18

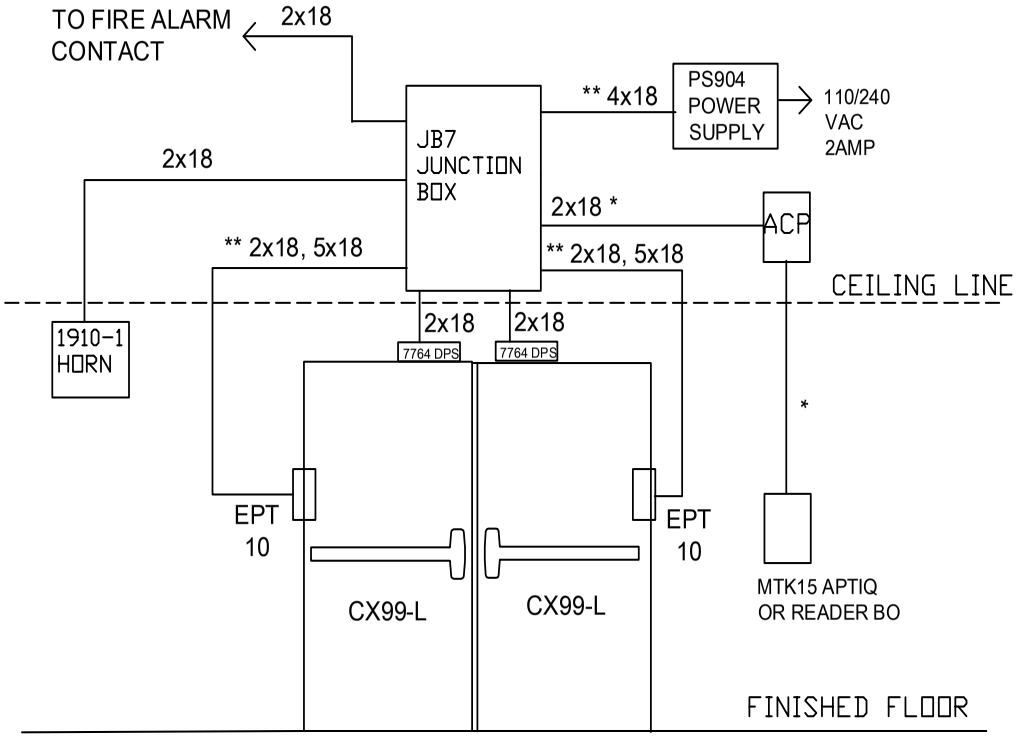
ALLEGION™

TITLE: CX SINGLE DOOR WITH PS902 AND INT/EXT CARD READERS

DRAWING TYPE: WIRING DIAGRAM
DWG NO: 112289
REV: A
DRAWN/CHECKED BY: B DOVE/

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

THIS DIAGRAM SHOWS WIRING FOR CX DEVICES THAT SHIPPED AFTER 08-24-15



* CONDUCTOR COUNT AND CONNECTIONS TO BE DETERMINED BY ACP PROVIDER

** USE 18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS902 OR USE 14 GAUGE FOR DISTANCES UP TO 500' FROM EPT TO PS902

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 2 NEW CX99-L RIM DEVICE
- 2 EPT10
- 2 7764 DPS
- 1 JB7 JUNCTION BOX
- 1 MULLION
- 1 1910-1 HORN
- 1 PS904
- 1 MTK15 READER BY ACP BO
- 1 FIRE ALARM CONTACT

TYPE DELAYED EGRESS DOUBLE DOOR

OPERATION:

CHEXITS TO PROVIDE DELAY EGRESS. WHEN CX IS IN ALARM AUDIBLE WILL SOUND IN CX DEVICE AND EXTERNAL 1910-1 HORN.

FIRE ALARM TO RELEASE DOORS FOR IMMEDIATE EGRESS.

STAGGER REARM TIMES ON CX DEVICES BY SETTING SWITCHES ON CX PCB DIFFERENTLY.

MTK15 READER TO RELEASE BOTH CX THROUGH ACP CONTROL CONTACT FOR AUTHORIZED PASSAGE . MTK15 OR KEYSWITCH IN CX DEVICE TO RESET CX FROM ALARM.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN JB7 JUNCTION BOX.

DATE DRAWN: 07-11-18

REVISION DATE: 07-11-18

ALLEGION™

TITLE: CX DOUBLE DOOR CX WITH PS904

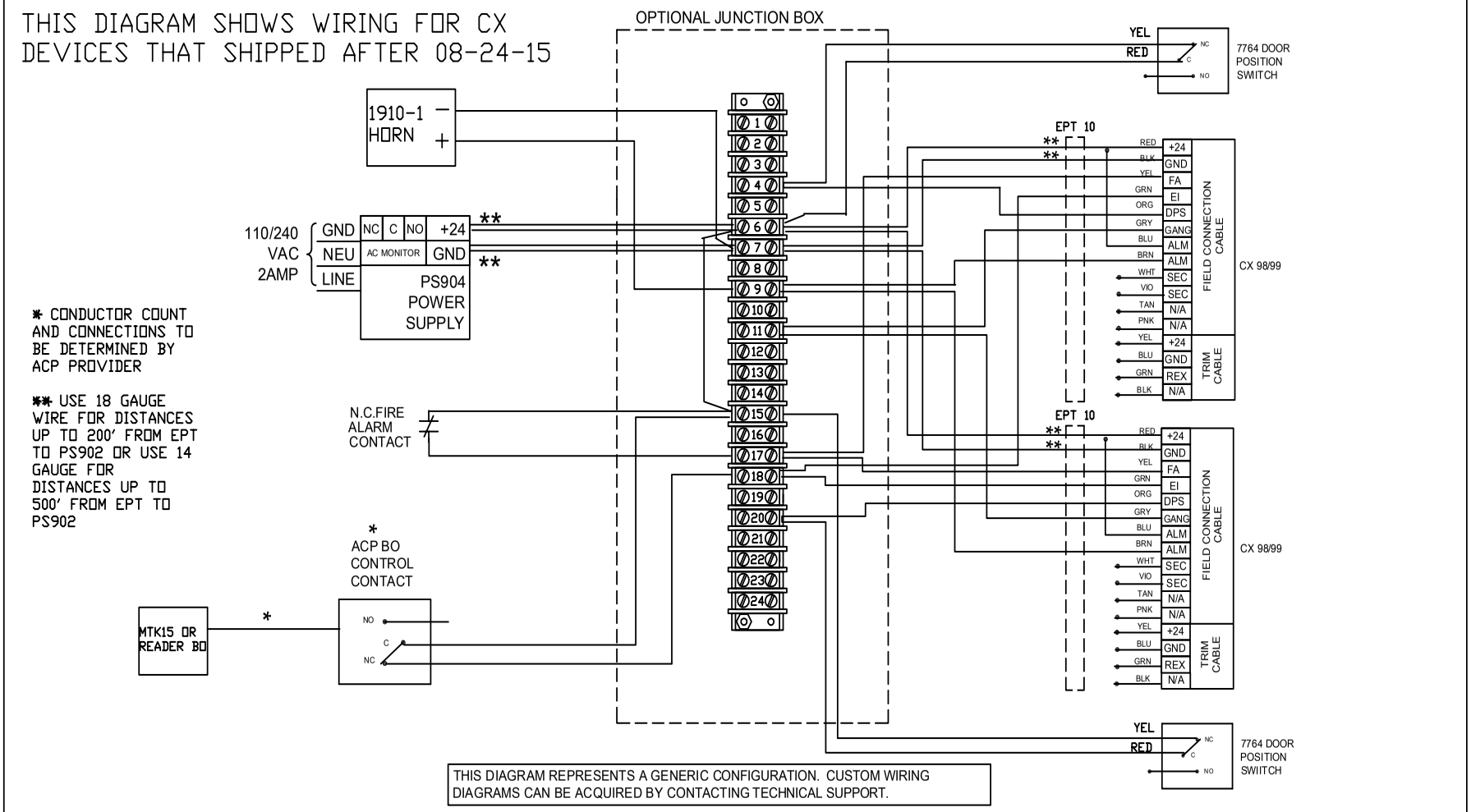
DRAWING TYPE: RISER DIAGRAM

DWG NO: 112290R

DRAWN/CHECKED BY: B DOVE

REV: A

THIS DIAGRAM SHOWS WIRING FOR CX DEVICES THAT SHIPPED AFTER 08-24-15



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:

2 CX 98/99-L RIM DEVICE
2 EPT10
2 7764 DPS
1 JB7 JUNCTION BOX
1 MULLION
1 1910-1 HORN
1 PS904
1 MTK15 READER BY ACP BO
1 FIRE ALARM CONTACT

TYPE
DELAYED EGRESS DOUBLE DOOR

OPERATION:

CHEXITS TO PROVIDE DELAY EGRESS. WHEN CX IS IN ALARM AUDIBLE WILL SOUND IN CX DEVICE AND EXTERNAL 1910-1 HORN.

FIRE ALARM TO RELEASE DOORS FOR IMMEDIATE EGRESS.

STAGGER REARM TIMES ON CX DEVICES BY SETTING SWITCHES ON CX PCB DIFFERENTLY.

MTK15 READER TO RELEASE BOTH CX THROUGH ACP CONTROL CONTACT FOR AUTHORIZED PASSAGE . MTK15 OR KEYSWITCH IN CX DEVICE TO RESET CX FROM ALARM.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN JB7 JUNCTION BOX.

DATE DRAWN: 07-11-18

REVISION DATE: 07-11-18

ALLEGION™

TITLE:
CX DOUBLE DOOR CX WITH PS904

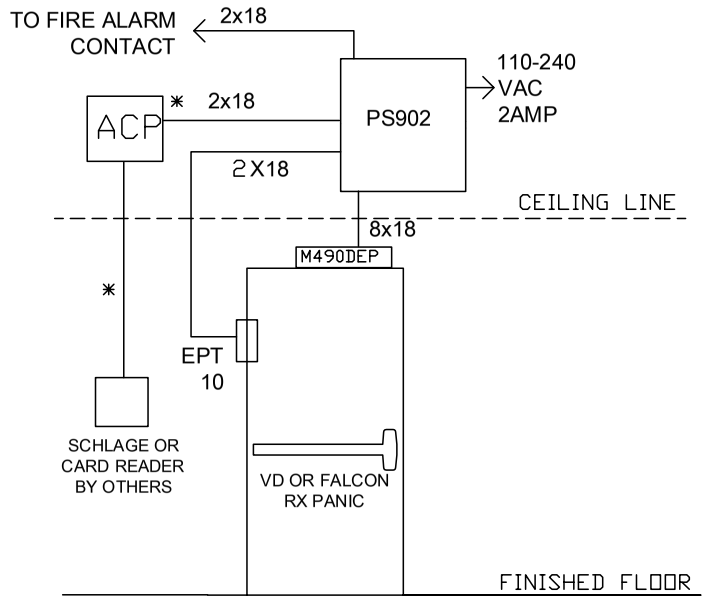
DRAWING TYPE:
WIRING DIAGRAM

DWG NO: 112290

DRAWN/CHECKED BY:
B DOVE/

REV
A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
* ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 1 VD OR FALCON RX PANIC DEVICE
- 1 EPT10 POWER TRANSFERS
- 1 M490DEP MAG LOCK
- 1 PS902 POWER SUPPLY
- 1 SCHLAGE OR CARD READER BY OTHERS WITH ACP
- FIRE ALARM CONTACT BY OTHERS

TYPE: DELAYED EGRESS SINGLE

OPERATION:
M490DEP MAG LOCK TO PROVIDE DELAYED EGRESS. PUSHING ON PANIC INITIATES 15 SECOND RELEASE COUNTDOWN.

FIRE ALARM TO RELEASE DOORS IMMEDIATELY.

NTERIOR SCHLAGE OR CARD READER BY OTHERS TO RELEASE DOORS FOR UNAUTHORIZED EGRESS OR WILL RESET M490PDEP FROM ALARM.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

DATE DRAWN: 4-4-2013
REVISION DATE: 07-03-17

ALLEGION™

TITLE: M490DEP WITH RX PANIC, ACCESS CONTROL AND PS902

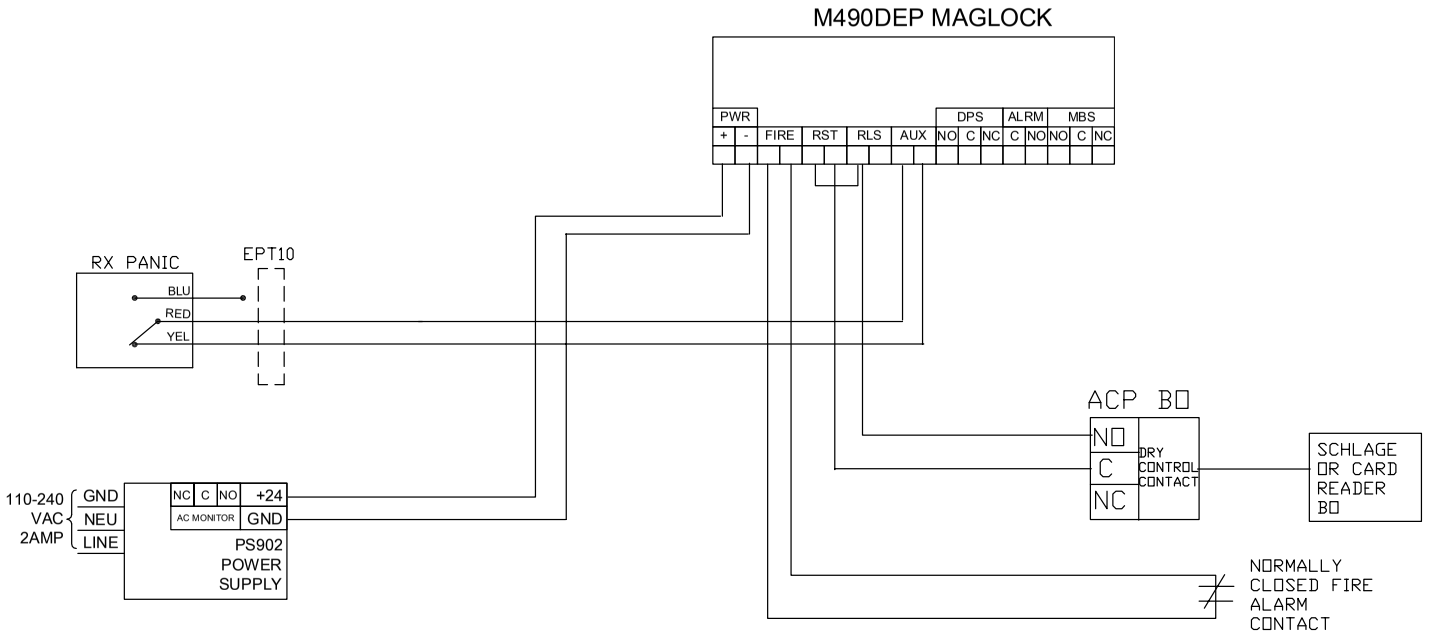
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109498

DRAWN/CHECKED BY: B DOVE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 1 VD OR FALCON RX PANIC DEVICE
- 1 EPT10 POWER TRANSFERS
- 1 M490DEP MAG LOCK
- 1 PS902 POWER SUPPLY
- 1 SCHLAGE OR CARD READER BY OTHERS WITH ACP
- FIRE ALARM CONTACT BY OTHERS

TYPE: DELAYED EGRESS SINGLE

OPERATION:
M490DEP MAG LOCK TO PROVIDE DELAYED EGRESS. PUSHING ON PANIC INITIATES 15 SECOND RELEASE COUNTDOWN.

FIRE ALARM TO RELEASE DOORS IMMEDIATELY.

NTERIOR SCHLAGE OR CARD READER BY OTHERS TO RELEASE DOORS FOR UNAUTHORIZED EGRESS OR WILL RESET M490PDEP FROM ALARM.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

DATE DRAWN: 4-4-2013

REVISION DATE: 07-03-17

ALLEGION™

TITLE: M490DEP WITH RX PANIC, ACCESS CONTROL AND PS902

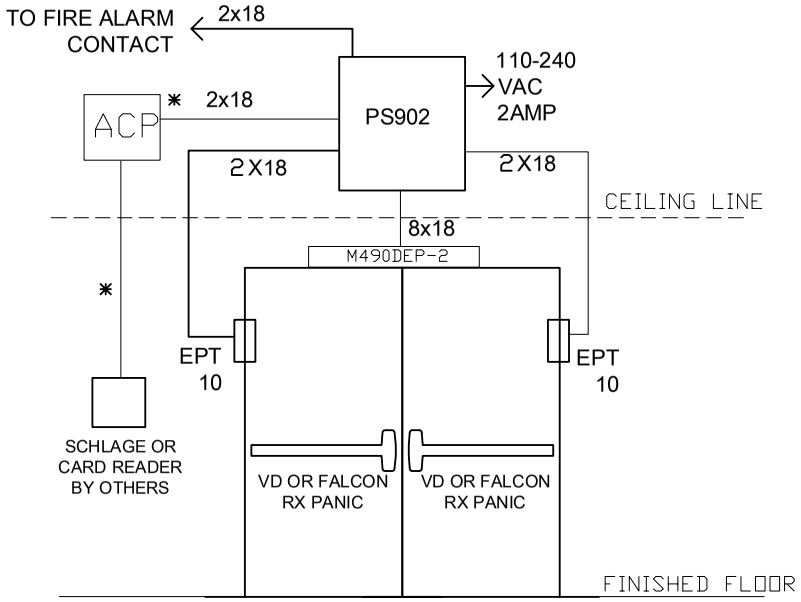
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109498

REV: C

DRAWN/CHECKED BY: B DOVE/

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
*ADDITIONAL WIRING IS REQUIRED. SEE MANUFACTURER INSTALLATION INSTRUCTION

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 2 VD OR FALCON RX PANIC DEVICES
- 2 EPT10 POWER TRANSFERS
- 1 M490DEP-2 MAG LOCK
- 1 PS902 POWER SUPPLY
- 1 SCHLAGE OR CARD READER BY OTHERS WITH ACP
- FIRE ALARM CONTACT BY OTHERS

TYPE DELAYED EGRESS PAIR

OPERATION:
M490DEP-2 MAG LOCK TO PROVIDE DELAYED EGRESS. PUSHING ON EITHER PANIC INITIATES 15 SECOND RELEASE COUNTDOWN.

FIRE ALARM TO RELEASE DOORS IMMEDIATELY.

NTERIOR SCHLAGE OR CARD READER BY OTHERS TO RELEASE DOORS FOR AUTHORIZED EGRESS OR WILL RESET M490DEP-2 FROM ALARM.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

DATE DRAWN: 4-3-2013
REVISION DATE: 07-03-17

ALLEGION™

TITLE: M490DEP-2 WITH PAIR RX PANICS, ACCESS CONTROL AND PS902

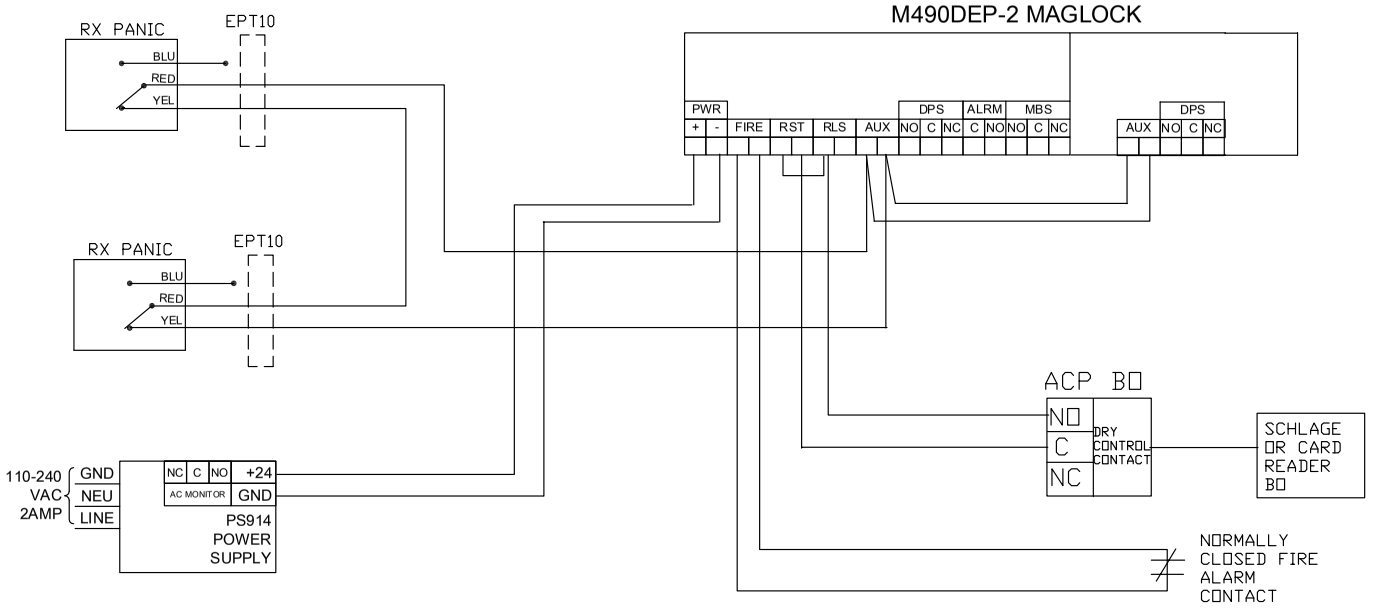
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109500

DRAWN/CHECKED BY: B DOVE

REV: C

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 2 VD OR FALCON RX PANIC DEVICES
- 2 EPT10 POWER TRANSFERS
- 1 M490DEP-2 MAG LOCK
- 1 PS902 POWER SUPPLY
- 1 SCHLAGE OR CARD READER BY OTHERS WITH ACP
- FIRE ALARM CONTACT BY OTHERS

TYPE: DELAYED EGRESS PAIR

OPERATION:
M490DEP-2 MAG LOCK TO PROVIDE DELAYED EGRESS. PUSHING ON EITHER PANIC INITIATES 15 SECOND RELEASE COUNTDOWN.

FIRE ALARM TO RELEASE DOORS IMMEDIATELY.

NTERIOR SCHLAGE OR CARD READER BY OTHERS TO RELEASE DOORS FOR AUTHORIZED EGRESS OR WILL RESET M490DE-2 FROM ALARM.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN PS902 ENCLOSURE.

DATE DRAWN: 4-3-2013

REVISION DATE: 07-03-17

ALLEGION™

TITLE: M490DE-2 WITH PAIR RX PANICS, ACCESS CONTROL AND PS902

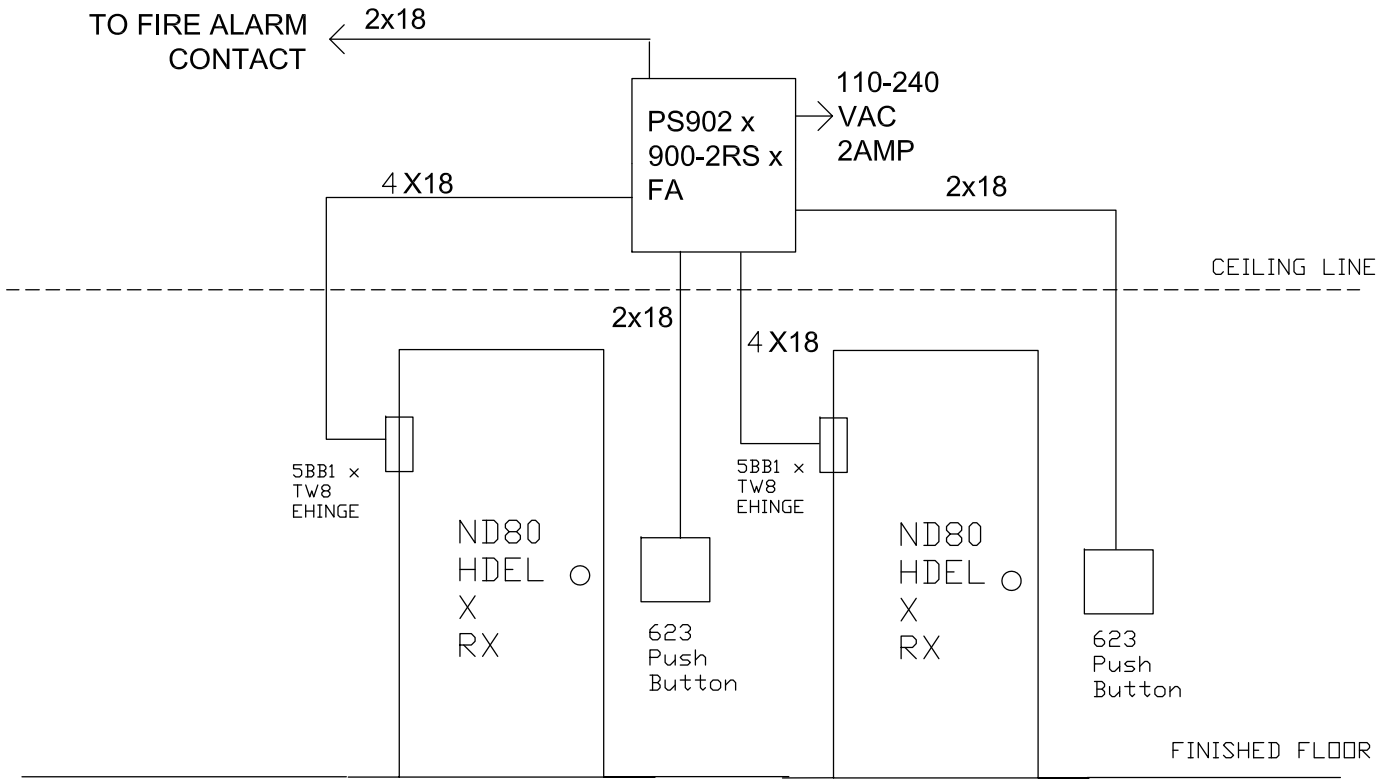
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109500

REV: C

DRAWN/CHECKED BY: B DOVE/

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

1 PS902-2RS-FA

2 623 PUSHBUTTONS

2 5BB1 TW8 EHINGES

2 ND80 HDEL X RX LOCKSETS

1 FIRE ALARM CONTACT BY BUILDING SYSTEM

TYPE

SHARED RESTROOM

OPERATION:
COMMON RESTROOM SHARED BY 2 ROOMS.

DOORS NORMALLY UNLOCKED.

UPON ENTERING RESTROOM ONE OF THE MOMENTARY 623 PUSHBUTTONS WILL BE PRESSED TO LOCK BOTH DOORS.

LEAVING THE RESTROOM - WHEN EITHER LEVER IS USED TO EXIT. RX SWITCH IN LEVER WILL ELECTRICALLY UNLOCK BOTH DOORS.

FIRE ALARM ACTIVATION TO CAUSE ND EL LOCKS TO UNLOCK.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS902 POWER SUPPLY.

DATE DRAWN: 4-25-13

REVISION DATE: 4-25-13

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ALLEGION™

TITLE: ND80 HDEL X RX LOCKSETS ON SHARED RESTROOM

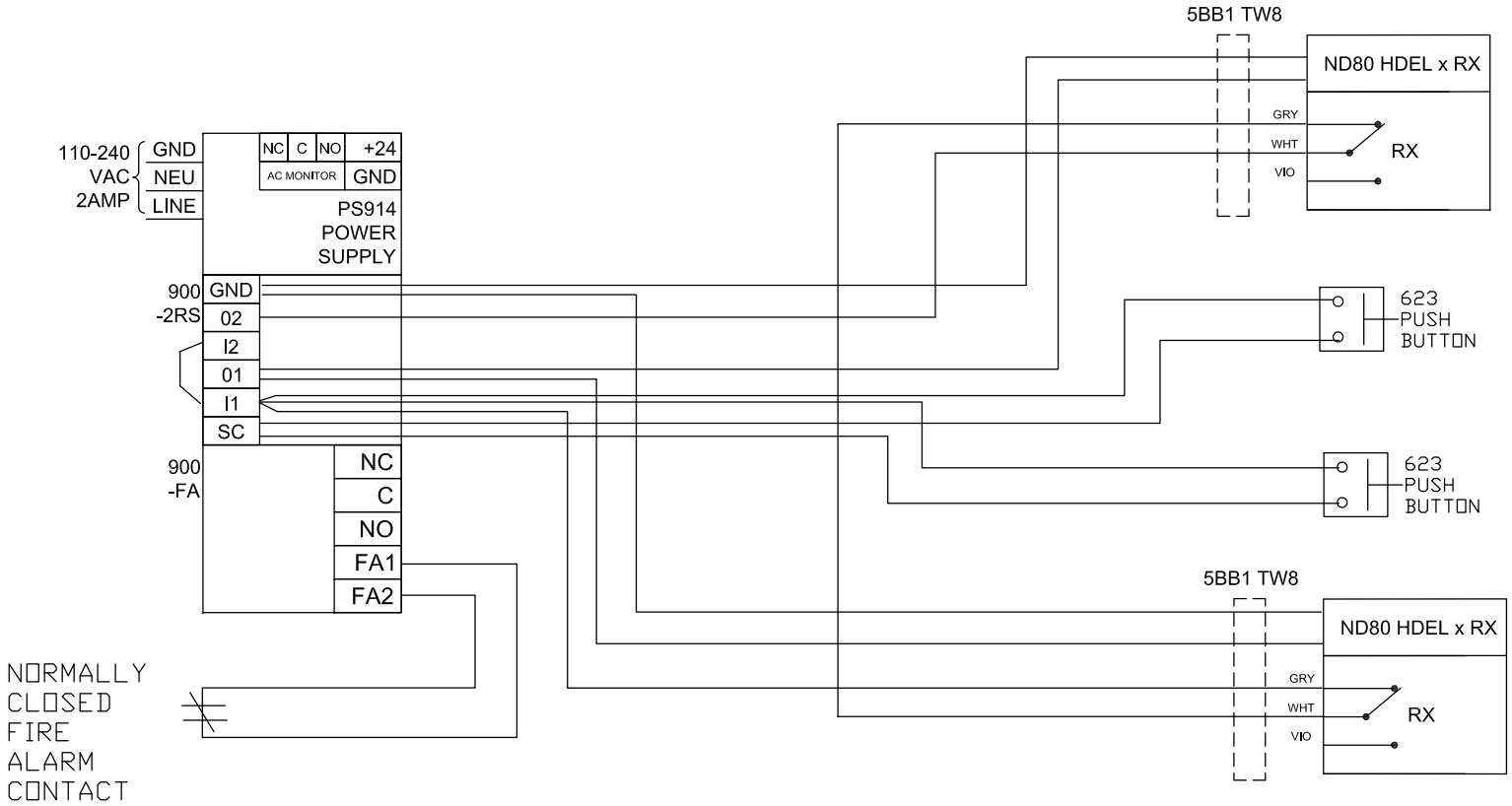
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109529

DRAWN/CHECKED BY: B DOVE

REV A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

1 PS902-2RS-FA

2 623 PUSHBUTTONS

2 5BB1 TW8 HINGES

2 ND80 HDEL X RX LOCKSETS

1 FIRE ALARM CONTACT BY BUILDING SYSTEM

TYPE

SHARED RESTROOM

OPERATION:
COMMON RESTROOM SHARED BY 2 ROOMS.

DOORS NORMALLY UNLOCKED.

UPON ENTERING RESTROOM ONE OF THE MOMENTARY 623 PUSHBUTTONS WILL BE PRESSED TO LOCK BOTH DOORS.

LEAVING THE RESTROOM - WHEN EITHER LEVER IS USED TO EXIT. RX SWITCH IN LEVER WILL ELECTRICALLY UNLOCK BOTH DOORS.

FIRE ALARM ACTIVATION WILL CAUSE BOTH ND EL LOCKS TO UNLOCK.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS902 POWER SUPPLY.

DATE DRAWN: 4-25-13

REVISION DATE: 4-25-13

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ALLEGION™

TITLE: ND80 HDEL X RX LOCKSETS ON SHARED RESTROOM

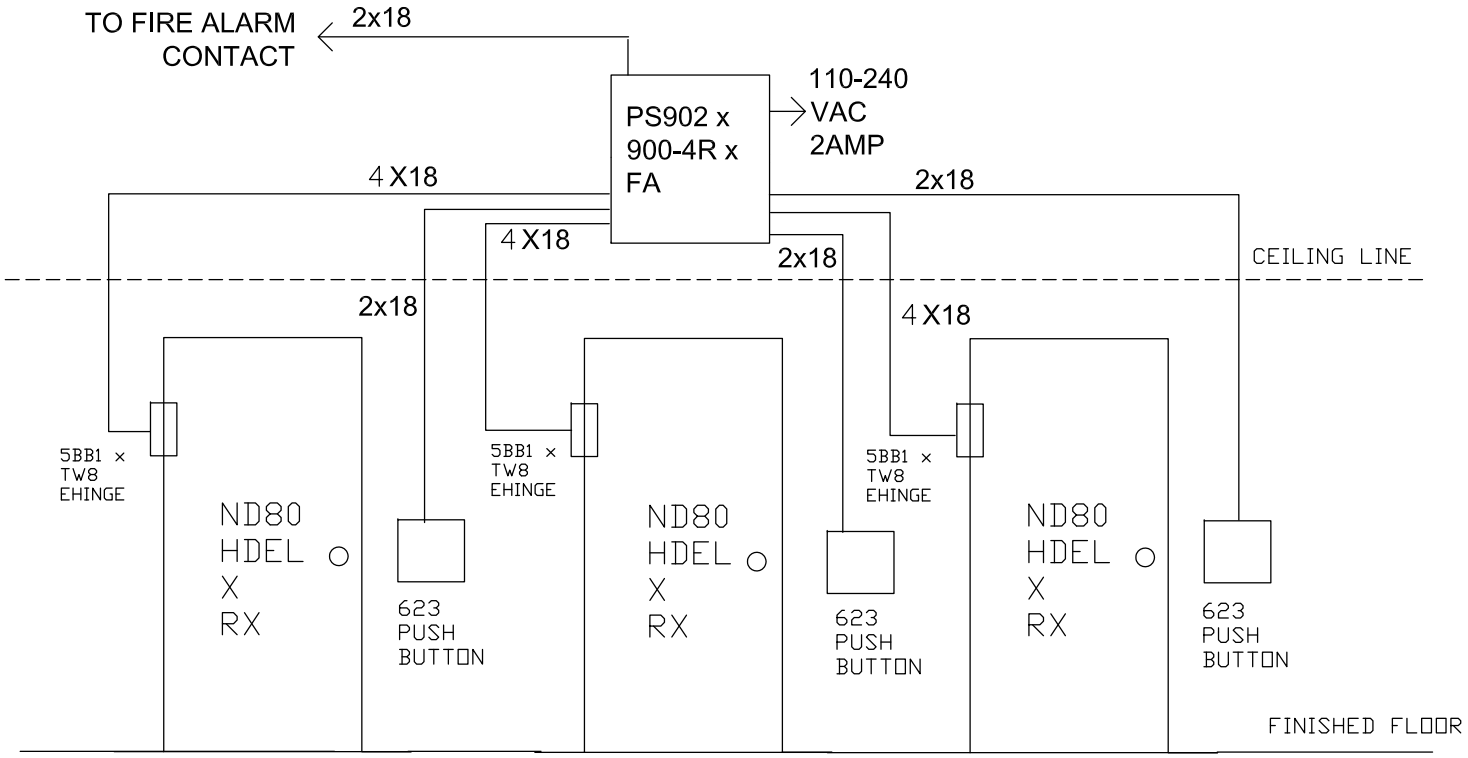
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 109529

DRAWN/CHECKED BY: B DOVE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:

1 PS902-4R-FA

3 623 PUSHBUTTONS

3 5BB1 TW8 EHINGES

3 ND80 HDEL X RX LOCKSETS

1 FIRE ALARM CONTACT BY BUILDING SYSTEM

TYPE
SHARED RESTROOM - 3 DOORS

OPERATION:
COMMON RESTROOM SHARED BY 3 ROOMS.

DOORS NORMALLY UNLOCKED.

UPON ENTERING RESTROOM ONE OF THE MOMENTARY 623 PUSHBUTTONS WILL BE PRESSED TO LOCK ALL DOORS.

LEAVING THE RESTROOM - WHEN ANY LEVER IS USED TO EXIT. RX SWITCH IN LEVER WILL ELECTRICALLY UNLOCK ALL DOORS.

FIRE ALARM ACTIVATION TO CAUSE ALL ND EL LOCKS TO UNLOCK.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS902 POWER SUPPLY.

DATE DRAWN: 4-30-13

REVISION DATE: 4-30-13

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ALLEGION™

TITLE: 3 ND80 HDEL X RX LOCKSETS ON SHARED RESTROOM

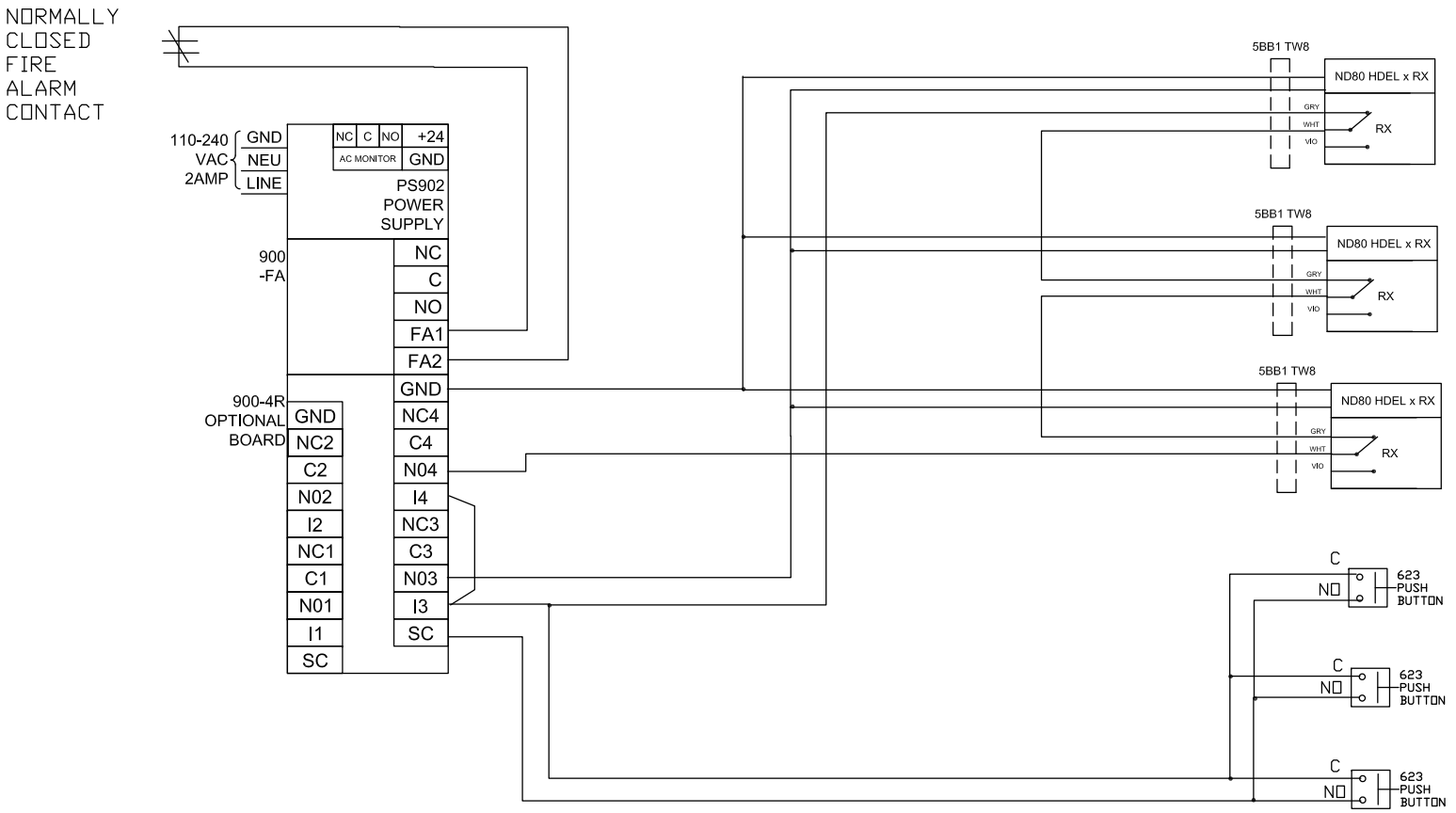
DRAWING TYPE: RISER DIAGRAM

DWG NO: 109537

DRAWN/CHECKED BY: B DOVE

REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPESCIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 PS902-4R-FA
3 623 PUSHBUTTONS
3 5BB1 TW8 EHINGES
3 ND80 HDEL X RX LOCKSETS
1 FIRE ALARM CONTACT BY BUILDING SYSTEM

TYPE SHARED RESTROOM - 3 DOORS

OPERATION:
COMMON RESTROOM SHARED BY 3 ROOMS.

DOORS NORMALLY UNLOCKED.

UPON ENTERING RESTROOM ONE OF THE MOMENTARY 623 PUSHBUTTONS WILL BE PRESSED TO LOCK ALL DOORS.

LEAVING THE RESTROOM - WHEN ANY LEVER IS USED TO EXIT. RX SWITCH IN LEVER WILL ELECTRICALLY UNLOCK ALL DOORS.

FIRE ALARM ACTIVATION TO CAUSE ALL ND EL LOCKS TO UNLOCK.

IN THIS EXAMPLE ALL WIRING CONNECTIONS ARE MADE IN THE PS902 POWER SUPPLY.

DATE DRAWN: 4-30-13
REVISION DATE: 4-30-13

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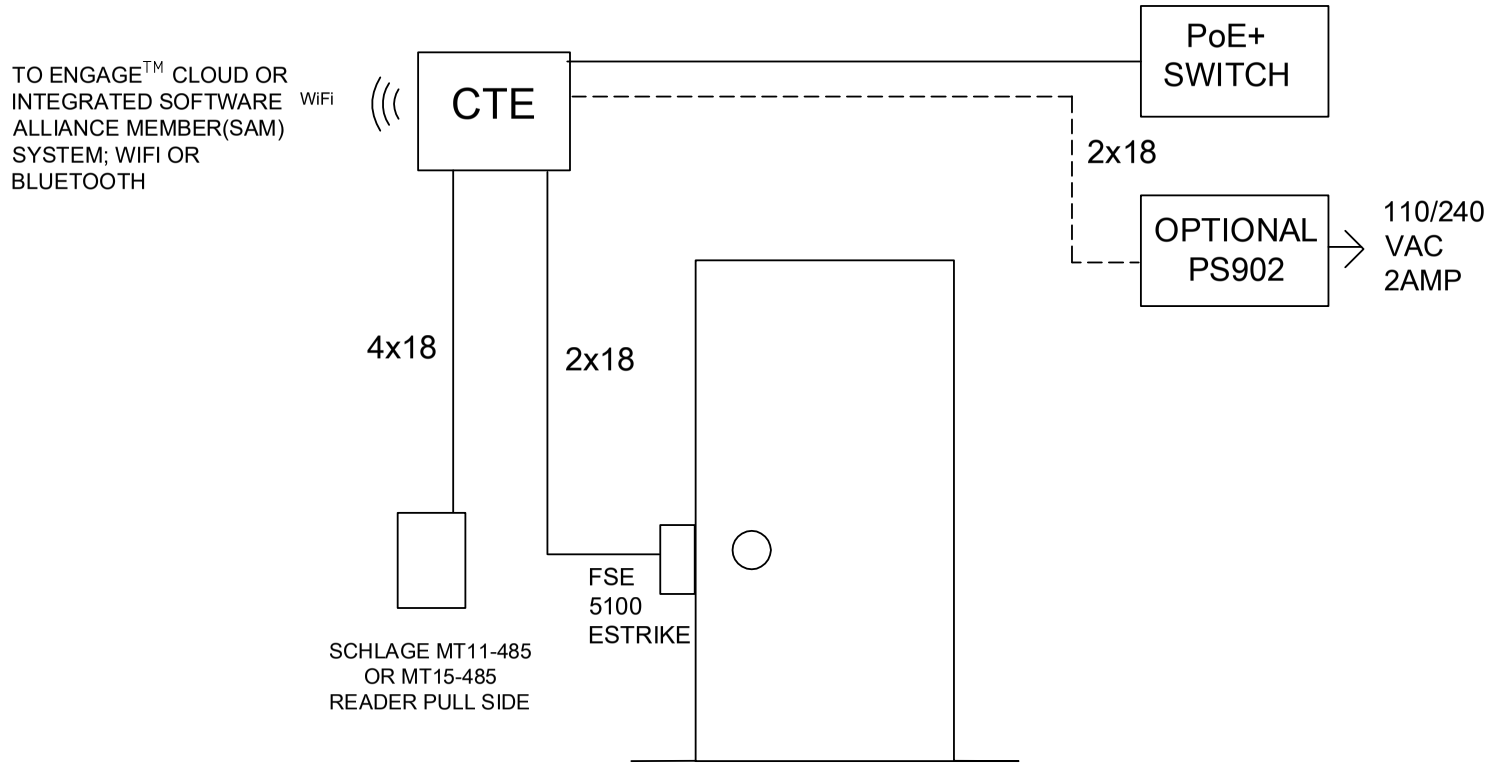
ALLEGION™

TITLE: 3 ND80 HDEL X RX LOCKSETS ON SHARED RESTROOM

DRAWING TYPE: WIRING DIAGRAM
DWG NO: 109537
DRAWN/CHECKED BY: B DOVE
REV: A

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 CTE
1 MT11-485 OR MT15-485 SCHLAGE READER
1 VD 5100 ESTRIKE
1 PoE+ SWITCH
1 OPTIONAL PS902

TYPE PoE+ CTE ACCESS CONTROL WITH 5100 ESTRIKE - BASIC

OPERATION:
SCHLAGE MT11-485 OR MT15-485 READER TO RELEASE FSE 5100 ESTRIKE TO ALLOW ENTRY.

CTE CAN BE USED WITH ENGAGE™ CLOUD OR SOFTWARE ALLIANCE MEMBER (SAM) SYSTEM

VERIFY PoE+ POWER SOURCE APPROPRIATE TO HANDLE LOAD AT OPENING. ADDITIONAL WIRING WILL BE REQUIRED THAT IS NOT SHOWN HERE.

FREE EGRESS ALWAYS PERMITTED.

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 08-21-17

REVISION DATE: 08-21-17

ALLEGION™

TITLE: PoE+ CTE WITH 5100 ESTRIKE BASIC CONFIGURATION

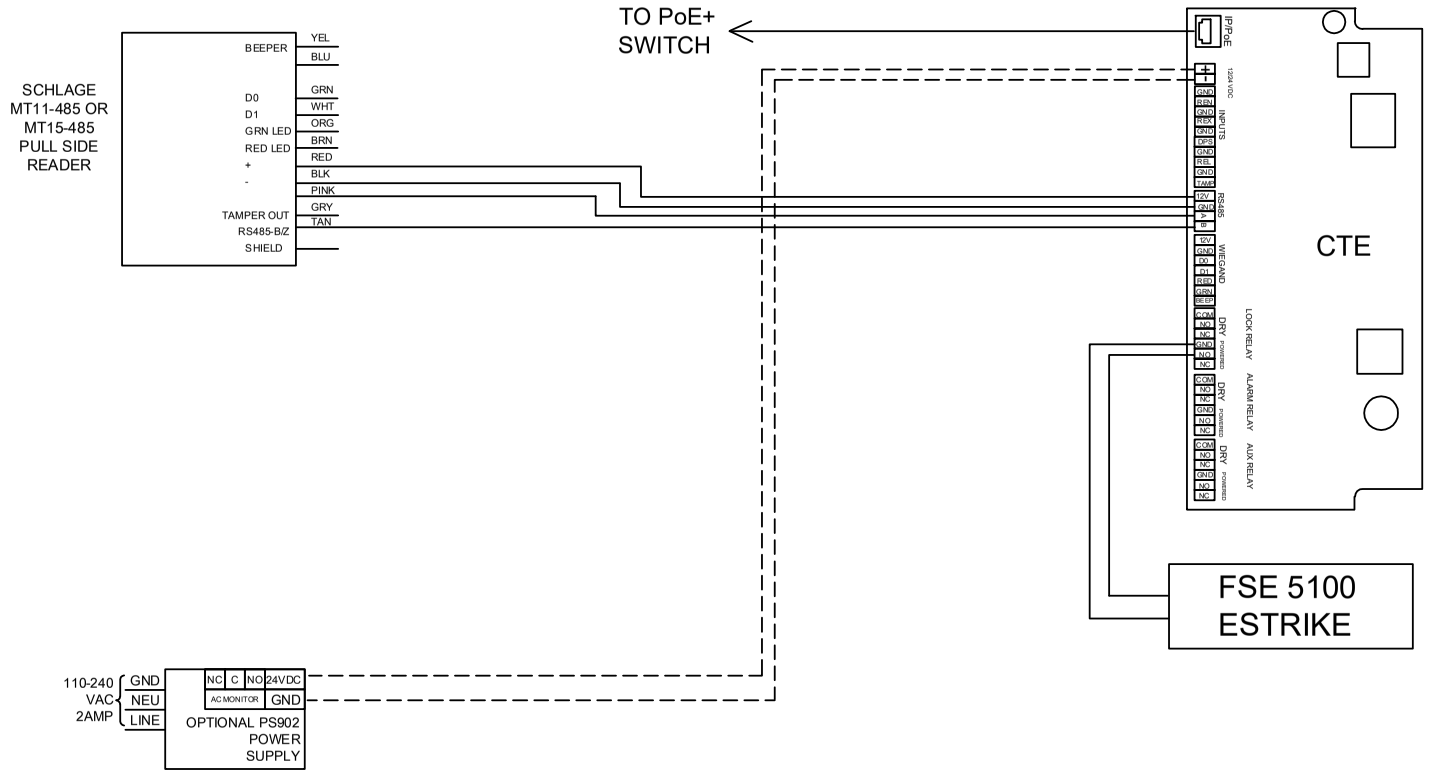
DRAWING TYPE:

DWG NO: 112089

REV: A

DRAWN/CHECKED BY: BRENDA DOVE

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
1 CTE
1 MT11-485 OR MT15-485 SCHLAGE READER
1 VD 5100 ESTRIKE
1 PoE+ SWITCH
1 OPTIONAL PS902

TYPE PoE+ CTE ACCESS CONTROL WITH 5100 ESTRIKE - BASIC

OPERATION:
SCHLAGE MT11-485 OR MT15-485 READER TO RELEASE FSE 5100 ESTRIKE TO ALLOW ENTRY.

CTE CAN BE USED WITH ENGAGE™ CLOUD OR SOFTWARE ALLIANCE MEMBER (SAM) SYSTEM

VERIFY PoE+ POWER SOURCE APPROPRIATE TO HANDLE LOAD AT OPENING. ADDITIONAL WIRING WILL BE REQUIRED THAT IS NOT SHOWN HERE.

FREE EGRESS ALWAYS PERMITTED.

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 08-21-17

REVISION DATE: 08-21-17

ALLEGION™

TITLE: PoE+ CTE WITH 5100 ESTRIKE BASIC CONFIGURATION

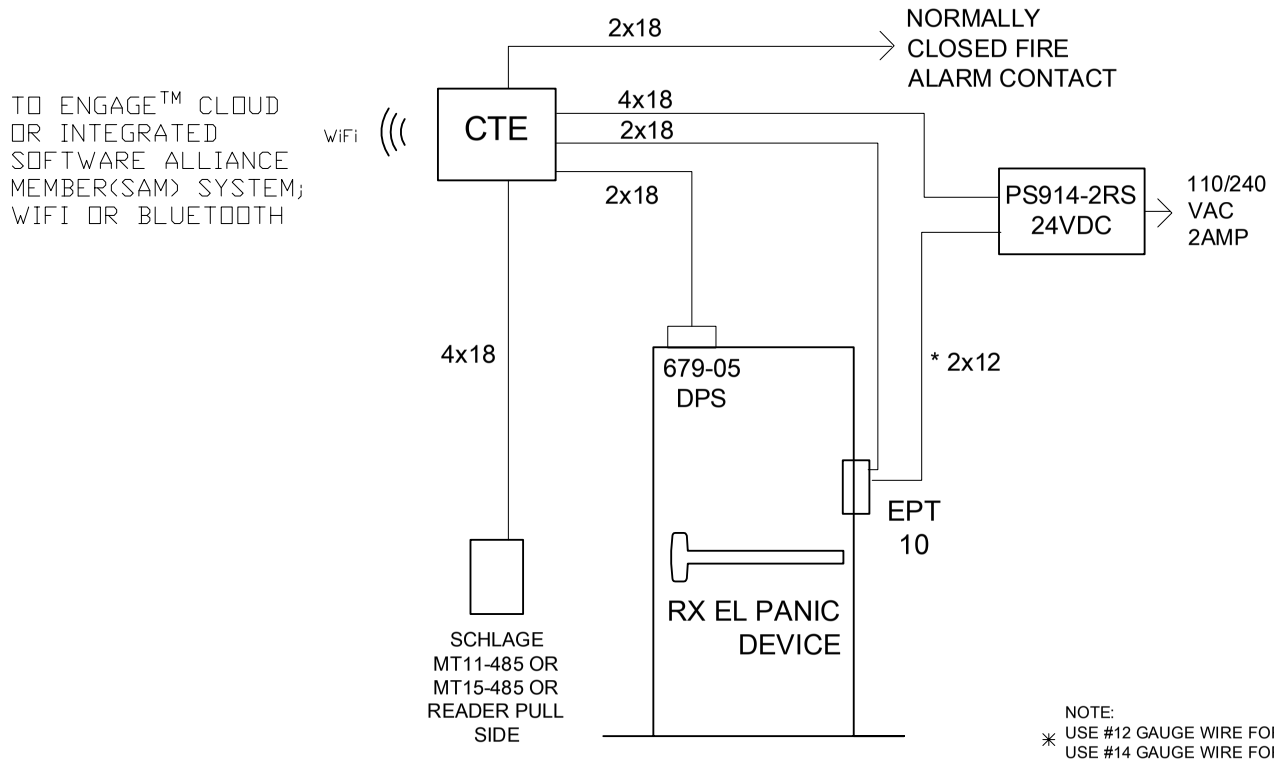
DRAWING TYPE:

DWG NO: 112089W

REV: A

DRAWN/CHECKED BY: BRENDA DOVE

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTE:
* USE #12 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS914.
USE #14 GAUGE WIRE FOR DISTANCES UP TO 100' FROM EPT TO PS914.

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
1 CTE
1 MT11-485 OR MT15-485 SCHLAGE READER
1 VD OR FALCON RX EL PANIC
1 EPT10
1 PS914-2RS
1 679-05 DPS

TYPE CTE ACCESS CONTROL WITH EL PANIC- FIRE RATED

OPERATION:
SCHLAGE MT11-485 OR MT15-485 READER TO SIGNAL EL TO RETRACT THE ELECTRIC LATCH ON PANIC BAR THROUGH THE CTE TO ALLOW ENTRY.

CTE CAN BE USED WITH ENGAGE™ CLOUD OR SOFTWARE ALLIANCE MEMBER (SAM) INTEGRATED SYSTEM.

FREE EGRESS ALWAYS PERMITTED.

FIRE ALARM TO EXTEND EL LATCH.

DATE DRAWN: 08-21-17
REVISION DATE: 08-21-17

ALLEGION™

TITLE: CTE WITH EL AND PS914-2RS - FIRE RATED

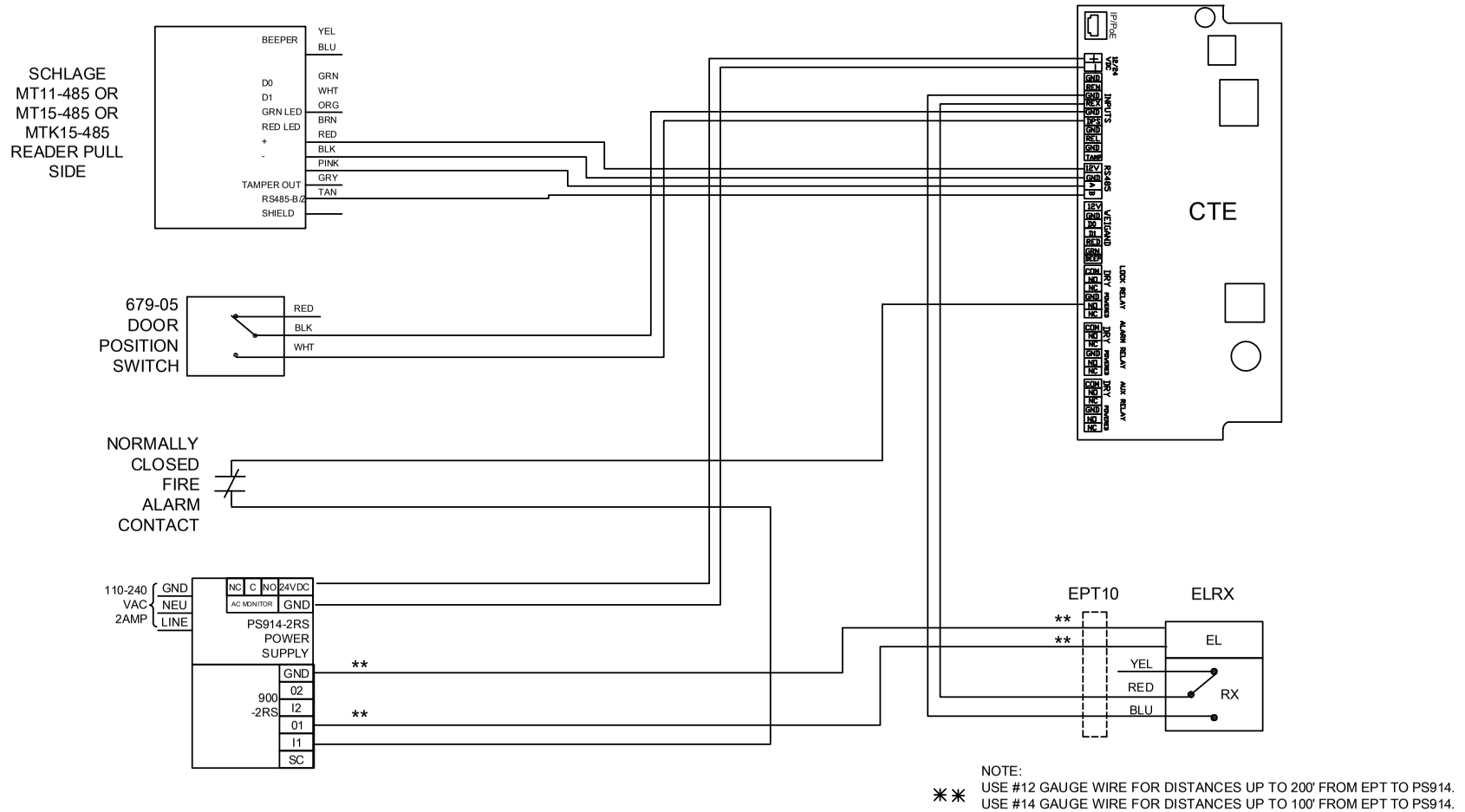
DRAWING TYPE: RISER DIAGRAM

DWG NO: 112090

REV: A

DRAWN/CHECKED BY: BRENDA DOVE

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
- 1 CTE
- 1 MT11-485 OR MT15-485 OR MTK15-485 SCHLAGE READER
- 1 VD OR FALCON RX EL PANIC
- 1 EPT10
- 1 PS914-2RS
- 1 679-05 DPS

TYPE: CTE ACCESS CONTROL WITH EL PANIC-FIRE RATED

OPERATION:
SCHLAGE MT11-485 OR MT15-485 OR MTK15-485 READER TO SIGNAL EL TO RETRACT THE ELECTRIC LATCH ON PANIC BAR THROUGH THE CTE TO ALLOW ENTRY.

CTE CAN BE USED WITH ENGAGE ™ CLOUD OR SOFTWARE ALLIANCE MEMBER (SAM) INTEGRATED SYSTEM.

FREE EGRESS ALWAYS PERMITTED.

FIRE ALARM TO EXTEND EL LATCH.

DATE DRAWN: 08-21-17

REVISION DATE: 08-21-17

ALLEGION™

TITLE: CTE WITH EL AND PS914-2RS-FIRE RATED

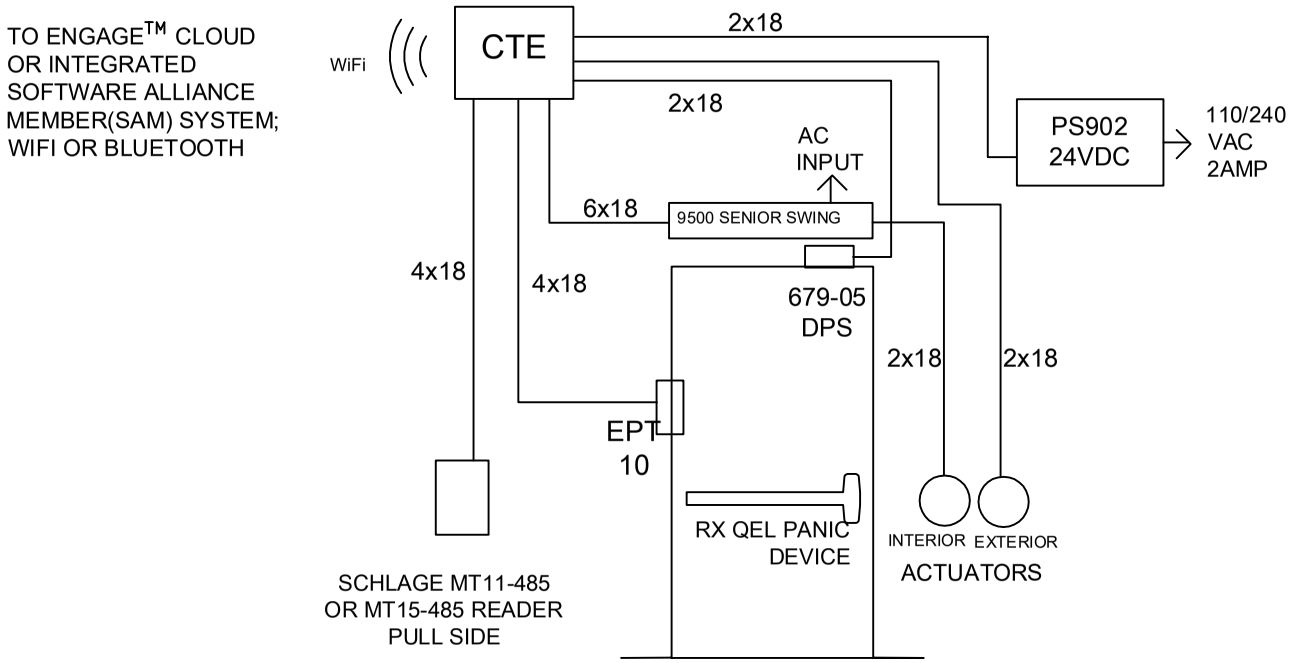
DRAWING TYPE: WIRING DIAGRAM

DWG NO: 112090

REV: A

DRAWN/CHECKED BY: BRENDA DOVE

THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.



NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) * CONDUCTOR COUNT TO BE DETERMINED BY ACCESS CONTROL PANEL PROVIDER.

HARDWARE USED:
- 1 CTE
- 1 MT11-485 OR MT15-485 SCHLAGE READER
- 1 VD QEL PANIC
- 1 EPT 10
- 1 PS902
- 1 679-05 DPS
- 1 9500 SENIOR SWING
- 2 ACTUATORS

TYPE: CTE ACCESS CONTROL WITH QEL PANIC WITH SENIOR SWING AO

OPERATION:
SCHLAGE MT11-485 OR MT15-485 READER TO SIGNAL EL TO RETRACT THE ELECTRIC LATCH ON VON DUPRIN RX QEL PANIC BAR AND ENABLE EXTERIOR ACTUATOR TO ALLOW ENTRY. FREE EGRESS ALWAYS PERMITTED. INTERIOR ACTUATOR ALWAYS ACTIVE.

ADDITIONAL WIRING WILL BE REQUIRED THAT IS NOT SHOWN HERE.

CTE TO COMMUNICATE TO ENGAGE™ CLOUD OR SOFTWARE ALLIANCE MEMBER (SAM) SYSTEM

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 08-24-17

REVISION DATE: 08-24-17

ALLEGION™

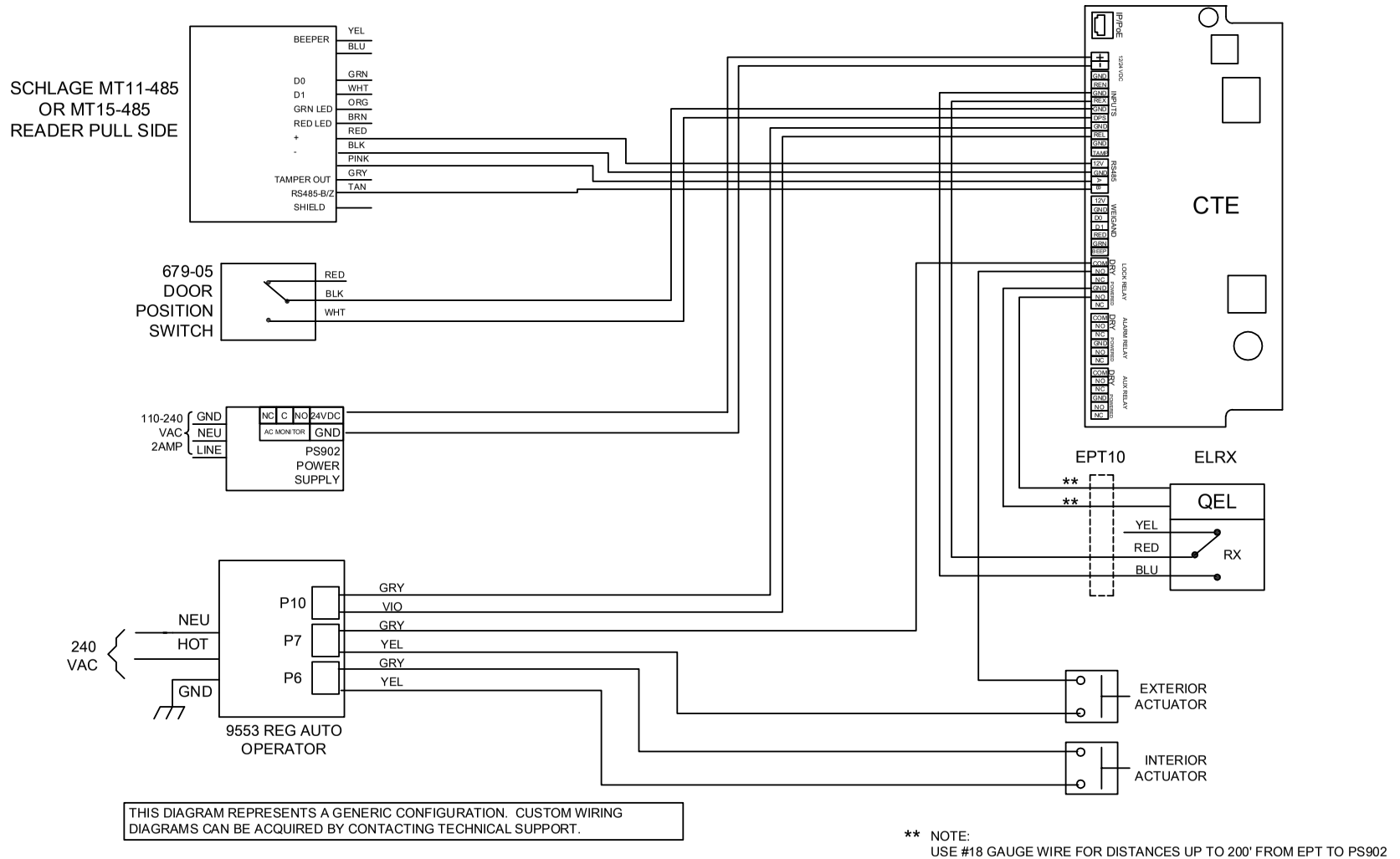
TITLE: CTE WITH QEL AND PS902 WITH 9500 SENIOR SWING AO

DRAWING TYPE: RISER DIAGRAM

DWG NO: 112091

DRAWN/CHECKED BY: BRENDA DOVE

REV: A



THIS DIAGRAM REPRESENTS A GENERIC CONFIGURATION. CUSTOM WIRING DIAGRAMS CAN BE ACQUIRED BY CONTACTING TECHNICAL SUPPORT.

** NOTE:
USE #18 GAUGE WIRE FOR DISTANCES UP TO 200' FROM EPT TO PS902

NOTES:
1) ALL LOW VOLTAGE WIRING TO BE STANDARD, MULTI-CONDUCTOR COLOR CODED WITHOUT SPLICES.

2) WIRING TO CONFORM TO APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

3) REFER TO SPECIFIC PRODUCT INSTALLATION INSTRUCTIONS FOR SPECIFIC WIRING REQUIREMENTS.

4) THIS DRAWING IS FOR GRAPHICAL REPRESENTATION OF PRODUCTS DETAILED IN THE HARDWARE SET ONLY.

5) ADDITIONAL WIRING WILL BE REQUIRED FROM ACP THAT IS NOT SHOWN HERE. CONSULT PROVIDER FOR DETAILS.

HARDWARE USED:
- 1 CTE
- 1 MT11-485 OR MT15-485 SCHLAGE READER
- 1 VD QEL PANIC
- 1 EPT 10
- 1 PS902
- 1 679-05 DPS
- 1 9500 SENIOR SWING
- 2 ACTUATORS

TYPE: CTE ACCESS CONTROL WITH QEL PANIC WITH SENIOR SWING AO

OPERATION:
SCHLAGE MT11-485 OR MT15-485 READER TO SIGNAL EL TO RETRACT THE ELECTRIC LATCH ON VON DUPRIN RX QEL PANIC BAR AND ENABLE EXTERIOR ACTUATOR TO ALLOW ENTRY. FREE EGRESS ALWAYS PERMITTED. INTERIOR ACTUATOR ALWAYS ACTIVE.

ADDITIONAL WIRING WILL BE REQUIRED THAT IS NOT SHOWN HERE.

CTE TO COMMUNICATE TO ENGAGE™ CLOUD OR SOFTWARE ALLIANCE MEMBER (SAM) SYSTEM

THIS IS NOT A FIRE RATED APPLICATION

DATE DRAWN: 08-24-17

REVISION DATE: 08-24-17

ALLEGION™

TITLE: CTE WITH QEL AND PS902 WITH 9500 SENIOR SWING AO

DRAWING TYPE: WIRING DIAGRAM

DWG NO: 112091

DRAWN/CHECKED BY: BRENDA DOVE

REV: A

About Allegion

At Allegion (NYSE: ALLE), we design and manufacture innovative security and access solutions that help keep people safe where they live, learn, work and connect. We're pioneering safety with our strong legacy of brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Our comprehensive portfolio of hardware, software and electronic solutions is sold around the world and spans residential and commercial locks, door closer and exit devices, steel doors and frames, access control and workforce productivity systems.

For more, visit **www.allegion.com**

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