



Electronic Access Control Catalog

for Open Architecture Solutions

April 2013 Edition



Thank you for choosing Ingersoll Rand Security Technologies electronic access control products. This catalog contains overviews and technical specifications. In the back of the catalog you will find several 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 by clicking on the registration button in the toolbar seen on the left side of your viewer. By registering and providing your email address, you will receive important updates to your catalog, and other product and solution information from Ingersoll Rand.

Quick Links

Ingersoll Rand Security Technologies Website
securitytechnologies.ingersollrand.com

YouTube Channel
<http://www.youtube.com/IngersollRandST>

Facebook Page
facebook.com/IngersollRandST

Blog
<http://blog.securitytechnologies.com>

Twitter
<http://twitter.com/IngersollRandST>

Contact Information

Customer Care & Sales Support:
877-671-7011

Technical Support
www.schlage.com/support



Electronic Access Control Catalog

Open Architecture Products and Solutions

Table of Contents

Networked Locking Solutions

005022 Networked Locking Solutions Introduction

Networked Locks

004446 AD-400 Networked Wireless Electronic Lock
004870 AD-401 Wireless Electronic Integrated Lock with
FIPS 201 Compliant Multi-Tech + Keypad Reader
004448 AD-300 Networked Hardwired Electronic Lock
004869 AD-301 Hardwired Electronic Integrated Lock with
FIPS 201 Compliant Multi-Tech + Keypad Reader
004382 AD-Series Exit Trim Compatibility

Networked Accessories

004447 PIM400-485 Panel Interface Module For RS485
Communication
004441 PIM400-TD2 Panel Interface Module
Wiegand or Clock & Data Communication
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
004443 Schlage Utility Software (SUS) on the Handheld
Device (HHD)

Standalone Locking Solutions

005427 Standalone Locking Solutions Introduction

Standalone Locks and Devices

004442 AD-200 Standalone Electronic Lock
004436 AD-250 Standalone Electronic Lock
004382 AD-Series Exit Trim Compatibility
004186 CO-100 Standalone Electronic Lock
004185 CO-200 Standalone Electronic Lock
004184 CO-250 Standalone Electronic Lock
004183 CO-Series Exit Trim Compatibility

004016 CT5000 Offline Controller

Standalone Accessories

004443 Schlage Utility Software (SUS) on the Handheld
Device (HHD)
003940 Schlage Express™ Offline Access Control Software
009396 Schlage Express™ Compatibility Matrix

Electromechanical Locks

005024 Electromechanical Locks Introduction
004998 L-Series Mortise Electrified Lock
004999 ND-Series Cylindrical Electrified Lock

Readers

005025 Readers Introduction
005354 Multi-Technology Readers
009209 Multi-Technology Magnetic Stripe Readers
004256 FIPS 201-1 Compliant Readers
004250 SERIII-W Scramble Keypad
004246 SMR10 & SMR20 Mercury Magnetic Stripe Readers
004253 SMR5 Magnetic Stripe Reader
004252 SEKPDWG & SEKPDGMW Essex Electronic Keypads
005000 KP212 and KP232 Mullion Mounted Keypad
005132 CRM2 and CRP2 Enrollment Readers

Credentials

005388 Credentials Introduction
005424 Smart Credentials
005425 Multi-Technology Credentials
005426 Proximity Credentials

Biometrics

005027 Biometrics Introduction

HandKey® Biometric Hand Geometry Readers

004397 Biometric Access Control Products Quick Reference
004535 HandKey® II Biometric Hand Geometry Reader

004400	Biometric Terminal Accessories for HandKey®
004398	Enclosure Options for the HandKey® Series
004399	HandNet® for Windows
002872	Biometrics for Access Control Training Course Outline

System Components

005028	System Components Introduction
--------	--------------------------------

Electric Strikes

005282	6100 Series Electric Strikes
005368	6200 Series Electric Strikes
003242	6300 Series Surface Mount Electric Strikes
009011	ES-6400 Series Modular Strike
ES-5990	5100 Series Electric Strikes

Electromagnetic Locks

M400 Series

004204	M490/492 Electromagnetic Locks
004205	M450/452 Electromagnetic Locks
004206	M420/422 Electromagnetic Locks
ES-6012	M490G Electromagnetic Gate Lock
004762	M490DE Delayed Egress Electromagnetic Lock

Specialty

004160	GF3000 Mortise Mounted Shear Lock
004159	GF3000 Surface Mounted Shear Lock
ES-6013	320M Mortise Mount MiniLine™ Electromagnetic Lock
004156	40/70 Series Electromagnetic Locks
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
ES-5977	740 Series Emergency Break Glass Release
003912	660 Series Mini Station Control

Keyswitches

ES-5978	650 Series Keyswitches
---------	------------------------

Request to Exit Bars

003909	672 Series TouchBar
003904	692 Series SmartBar™

Monitoring Stations and Consoles

ES-5988	800 Series Remote and Local Monitoring Stations
ES-5983	8200 Series Consoles

Other

ES-5984	Scan II™ Passive Infrared Motion Sensors
ES-5985	Electronic Horns
ES-5986	Door Position Switches
005006	Armored Door Cords with Caps
005011	PB405 and PB405S Electrified Deadbolts

Appendix

005138	Appendix Introduction
--------	-----------------------

Resource Guides

004085	AD-Series Resource Guide
004084	CO-Series Resource Guide

Solution Sheets

000076	Open Architecture Solution
--------	----------------------------

Wiring Diagrams

104967	2 Door PS902-4RL-SI 2xM400Plus Maglocks 2xCard Reader - Rev B
104968	2 Single Doors 7982 Controller 2x4840 4xPushbuttons - Rev B
105234	Pair PS914-2RS 2xEL-RX99 XF1500 2xDPS - Rev A
104970	Pair PS914-2RS EL 4640 2xPB Keyswitch x Remote PB
104972	Single 4600AO 6000FSE Electric Strike 2xPB - Rev B
104973	Single PS914-FA CX99 EPT10 DPS - Access Control Option - Rev B
104984	Single PS904 PS914 2xEL99 HKII Remote Release Computer
105348	Single AD-300 PIB300-2D ACP by others Weigand - Rev A
105349	Single AD-300 IR Integrated Partner ACP RS485 - Rev A
105350	Single AD-400 PIM400-TD2 ACP by others Wiegand - Rev A
105351	Single AD-400 PIM400-485 IR Integrated Partner ACP RS485 - Rev A

Networked Locking



This section of the Electronic Access Control catalog covers networked AD-Series adaptable electronic locks and other devices and accessories that can be easily integrated into an access control system.

Overview

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.

Features

The AD-Series simplifies installation by combining the electrified lock, reader, door position switch, request-to-exit, and other status monitors together. Panel interface options such as RS-485, Wiegand and Clock & Data ensure seamless, real-time communication with the access control system. The AD-Series is available with seven different credential reader options. For added convenience, security personnel can configure failure modes, card formats and other features in the field. The AD-Series is compatible with most popular models of standard, SFIC and FSIC cylinders. It is also compatible with popular exit devices with low current REX switches including Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on Metal doors

only), Von Duprin 22/22F (Rim & SVR only) as well as Falcon 25 (Rim only).

The AD-Series is ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and is UL 294 Listed.

Benefits

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.

Lock Options:

AD-Series networked locks have several options to choose from including:

- **Class:** AD-300 Hardwired, AD-400 Wireless, AD-301 FIPS 201-1 Compliant*, AD-401 FIPS 201-1 Compliant.* Note: Choice of class may limit other available options.
- **Chassis:** Cylindrical, Mortise, Mortise Deadbolt, Exit Trim
- **Function**:** Classroom/Storeroom, Office, Privacy, Apartment
- **Readers**:** Keypad, magnetic stripe, and multi-technology (proximity 125 kHz and smart card 13.56 MHz). All card readers are available with + PIN option for added security.
- **Lever Style:** Sparta, Rhodes, Athens, Tubular (Tactile warning available)
- **Finishes:** 626 Satin Chrome, 605 Bright Brass, 606 Satin Brass, 612 Satin Bronze, 619 Satin Nickel, 625 Bright Chrome, 643e Aged Bronze, 626AM Satin Chrome with Antimicrobial

**Check with Access Control provider to verify support of reader/credential formats and lock functions.

Keyway/Cylinders:

Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7 pin	SFIC 6 & 7 pin
Schlage	●		●	●
Falcon	▲	◆		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (includes Medeco 31 *0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options ◆ = less cylinder, only with Sparta and Rhodes levers ▲ = less cylinder only
Note: See pricebook for specific configurations.

Exit Trim:

Compatibility		
Devices	AD-300/AD-301	AD-400/AD-401
Von Duprin 98/99 and 98/99XP Rim/SVR/CVR†/CVC†/Mortise	X	X
Von Duprin 22/22F Rim/SVR	X	X
Falcon 25 Rim	X	X

† Metal Doors Only

Note: AD-300/301 and AD-400/401 exit trim is exclusively compatible with Von Duprin 98/99, 98/99XP (Rim, Mortise, and SVR. CVC and CVR on Metal doors only) and 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.

Part Numbers for Request to Exit Switch: Von Duprin: 050281 | Falcon: 650359

***AD-Series FIPS 201-1 Compliant Solution:**

The AD-Series is an ideal solution for applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 compliance. In order to meet requirements, both the AD-301 Hardwired lock as well as the AD-401 Wireless lock must be sold as a complete unit with the FMK Multi-Technology + Keypad Reader.

Extend the reach of access control with proven 900 MHz wireless technology

The Schlage AD-Series Wireless System allows users to extend the reach of access control to areas where running wires is difficult, expensive or virtually impossible. Installations on interior doors, remote doors, historic buildings, 24/7 facilities, elevators and parking gates are now made possible by eliminating the need to run wires directly to the access point. Options are available to accommodate Wiegand, Clock & Data as well as RS-485 connections to the access control system.

The AD-Series Wireless System communicates via 900 MHz frequency to a Panel Interface Module (PIM) which is then hardwired back to the access control panel. Each PIM can support up to 16 wireless devices within a 200' range in most facilities and up to 1000' with clear line of site.

The 900 MHz band enables longer transmission ranges; wavelengths travel a greater distance and better penetrate typical building construction – allowing for simplified system design. And since 900 MHz operates on a different frequency versus WiFi, it won't burden existing IT infrastructure.

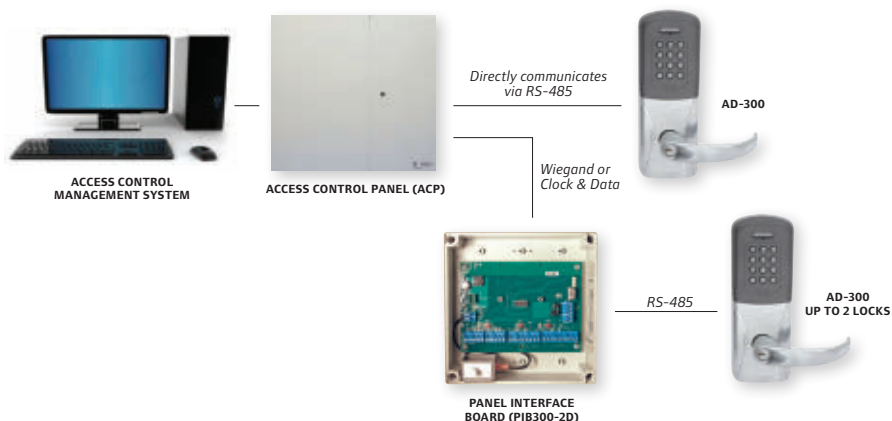
Secure and reliable wireless communication

(heartbeat) from the PIM to the Access Control System occurs on a periodic basis and is field configurable; the factory default is set at 10 minutes. The AD-Series Wireless System utilizes patent-pending Wake-Up On Radio™ technology to deliver real-time activation at a remote wireless lock while maintaining up to a 2 year battery life. This feature, which is configurable from 10 seconds to as fast as 1 second, enables centralized emergency lockdown and unlock commands in applications where both speed and battery life are critical.

In addition to the AD-Series Locks, a variety of wireless devices are available to extend the reach of access control to applications which may be difficult to wire. These include wireless remote antennas (ANT400), wireless portable readers (WPR400), wireless reader interfaces (WRI400), wireless repeaters (REPTR400), wireless gate control kits (GCK400) and wireless elevator control kits (ECK400).

AD-300 Networked Hardwired Solution:

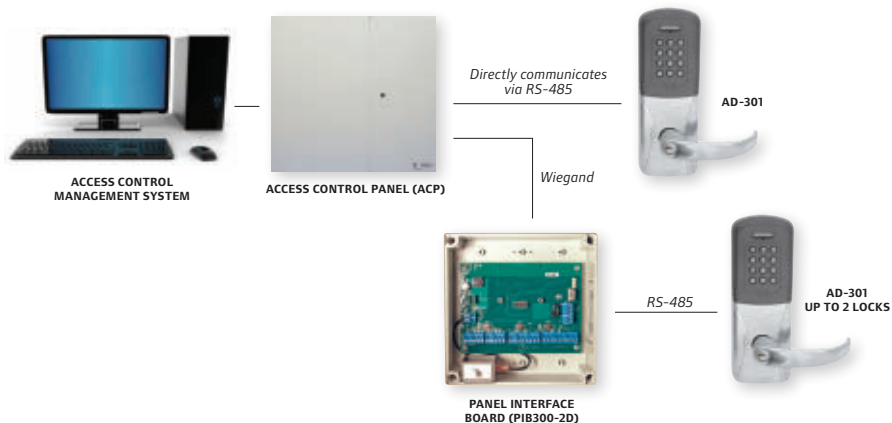
System Configuration



- Direct connection from lock to ACP via RS-485 with specific integrated access control software providers.
- PIB300-2D required for Wiegand or Clock and Data connection; supports up to 2 AD-300 devices.
- Utilize Relay/Dry Contact Board (RLBD) if supervised inputs are required in Wiegand systems.
- Verify requirements for Reader Interface or Gateway with your OEM Access Control Provider.

AD-301 Networked Hardwired FIPS 201-1 Compliant Solution:

System Configuration



- Must be purchased as a complete lock with FMK reader.
- Direct connection from lock to ACP via RS-485 with specific integrated access control software providers.
- PIB300-2D required for Wiegand connection; supports up to 2 AD-301 devices.
- Utilize Relay/Dry Contact Board (RLBD) if supervised inputs are required in Wiegand systems.
- Verify requirements for Reader Interface or Gateway with your OEM Access Control Provider.

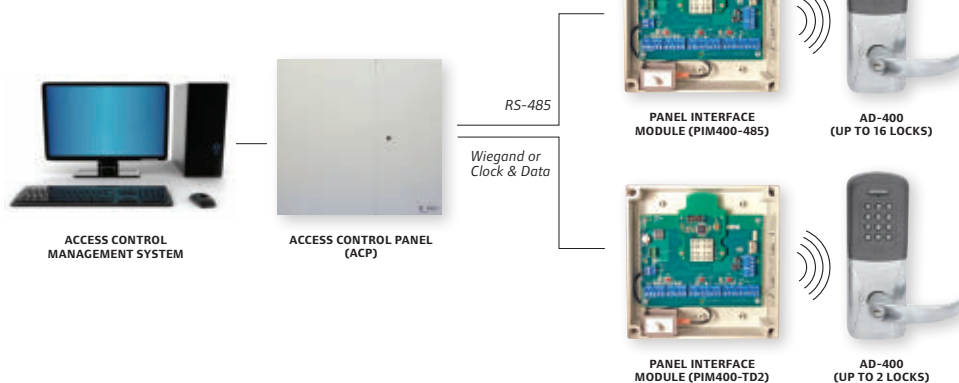
	Hardwired	Hardwired FIPS 201-1 Compliant	Hardwired	Hardwired FIPS 201-1 Compliant
	AD-300	AD-301	AD-300	AD-301
System Info - Consult with OEM Access Control System Provider for Specific Requirements				
Communication to/from Controller	Direct - RS-485		Wiegand or Clock & Data	
Panel Interface Module	N/A	N/A	PIB300-2D	
Number of Locks Per Panel Interface Module	N/A	N/A	Up to 2	
Relay/Dry Contact Board (RLBD)	N/A	N/A	Yes, if supervised inputs are required	
Reader Interface/Gateway	As required by OEM Access Control System			
Device Capacity				
Number of Users	As supported by OEM Access Control System			
Number of Audits				
Degraded Cache Mode in Lock**	Yes**			
Reader Options - Consult with OEM Access Control System Provider for Credential Format Compatibility				
Keypad Only	Yes, as supported by OEM Access Control System	No	Yes, as supported by OEM Access Control System	No
Magnetic Stripe Card		No		No
FIPS 201-1 Multi-Technology - 125 kHz and 13.56 MHz	No	Yes	No	Yes
Multi-Technology - 125 kHz and 13.56 MHz	Yes, as supported by OEM Access Control System	No	Yes, as supported by OEM Access Control System	No
PIV & PIV-I Compatible†		Yes		Yes
Card + PIN		Yes		Yes
Status Monitors - Consult with OEM Access Control System Provider for Specific Support				
Request to Exit	Yes, as supported by OEM Access Control System			
Door Position Switch				
Interior Tamper Guard				
Lock/Unlock Status Clutch Position	Yes, as supported by OEM Access Control System	No		
Mechanical Key Override (ATK)				
Request to Enter	Yes, as supported by OEM Access Control System			
Battery Status	N/A			
Battery Voltage Level				
Communication Status	Yes			
Remote Lockdown (from Host)				
Remote Unlock (from Host)				
Deadbolt Position	Yes, as supported by OEM Access Control System	No		
Interior Push Button				
Chassis Options - Consult with OEM Access Control System Provider for Specific Support				
Cylindrical	Yes			
Mortise				
Mortise Deadbolt	Yes, as supported by OEM Access Control System	No		
Exit Trim	Yes - See Exit Trim Compatibility Data Sheet for specifics			
Functions - Consult with OEM Access Control System Provider for Specific Support				
Classroom/Storeroom (70)	Yes - Classroom/Storeroom is not available with Mortise Deadbolt Chassis			
Privacy (40)	Yes - Classroom/Storeroom is not available with Mortise Deadbolt Chassis. Privacy, Office and Apartment as supported by OEM Access Control System			No
Office (50)				
Apartment (60)				
Accessories - Consult with OEM Access Control System Provider for Specific Support				
HHD - Handheld Programming Device	Yes			

* If enabled, grants access to last 113 unique user ID's, option to expand to 1,000. Or, use facility/site codes instead of user ID's. No events are captured in audit trail when operating in cache mode.

† 75 bit output format default. Configurable to other output formats. Check with access control provider for specific support.

AD-400 Networked Wireless Solution:

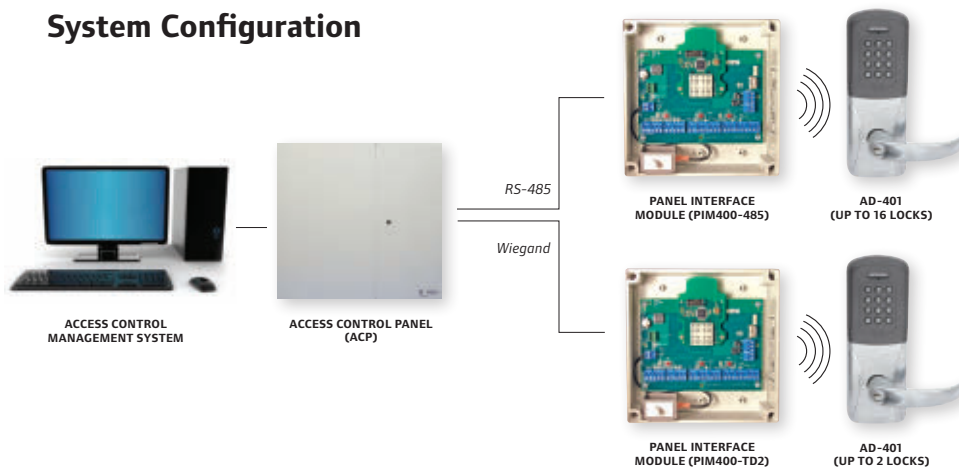
System Configuration



- PIM400-TD2 required for Wiegand or Clock and Data connections; supports up to 2 AD Series devices.
- PIM400-485, if supported by OEM provider, supports up to 16 AD-400 devices.
- Utilize Relay/Dry Contact Board (RLBD) if supervised inputs are required in Wiegand systems.
- Verify requirements for Reader Interface or Gateway with your OEM Access Control Provider.

AD-401 Networked Wireless FIPS201-1 Compliant Solution:

System Configuration



- Must be purchased as a complete lock with FMK reader.
- PIM400-485 required for RS-485 connection with integrated access control software providers; supports up to 16 AD-401 devices.
- PIM400-TD2 required for Wiegand connection; supports up to 2 AD-401 devices.
- Utilize Relay/Dry Contact Board (RLBD) if supervised inputs are required in Wiegand systems.
- Verify requirements for Reader Interface or Gateway with your OEM Access Control Provider.

	Hardwired	Hardwired FIPS 201-1 Compliant	Hardwired	Hardwired FIPS 201-1 Compliant
	AD-400	AD-401	AD-400	AD-401
System Info - Consult with OEM Access Control System Provider for Specific Requirements				
Communication to/from Controller	Direct - RS-485		Wiegand or Clock & Data	
Panel Interface Module	PIM400-485*		PIM400-TD2	
Number of Locks Per Panel Interface Module	Up to 16		Up to 2	
Relay/Dry Contact Board (RLBD)	No		Yes, if supervised inputs are required	
Reader Interface/Gateway	As required by OEM Access Control System			
Device Capacity				
Number of Users	As supported by OEM Access Control System			
Number of Audits				
Degraded Cache Mode in Lock**	Yes**			
Reader Options - Consult with OEM Access Control System Provider for Credential Format Compatibility				
Keypad Only	Yes, as supported by OEM Access Control System	No	Yes, as supported by OEM Access Control System	No
Magnetic Stripe Card		No		No
FIPS 201-1 Multi-Technology - 125 kHz and 13.56 MHz	No	Yes	No	Yes
Multi-Technology - 125 kHz and 13.56 MHz	Yes, as supported by OEM Access Control System	No	Yes, as supported by OEM Access Control System	No
PIV & PIV-I Compatible†		Yes		Yes
Card + PIN		Yes		Yes
Status Monitors - Consult with OEM Access Control System Provider for Specific Support				
Request to Exit	Yes, as supported by OEM Access Control System			
Door Position Switch				
Interior Tamper Guard				
Lock/Unlock Status Clutch Position	Yes, as supported by OEM Access Control System	No		
Mechanical Key Override (ATK)				
Request to Enter	Yes, as supported by OEM Access Control System			
Battery Status				
Battery Voltage Level	Yes, as supported by OEM Access Control System	No		
Communication Status	Yes			
Remote Lockdown (from Host)	Yes, as supported by OEM Access Control System		Yes, requires configuration at PIM via HHD	
Remote Unlock (from Host)				
Deadbolt Position			No	
Interior Push Button				
Chassis Options - Consult with OEM Access Control System Provider for Specific Support				
Cylindrical	Yes			
Mortise				
Mortise Deadbolt	Yes, as supported by OEM Access Control System	No		
Exit Trim	Yes - See Exit Trim Compatibility Data Sheet for specifics			
Functions - Consult with OEM Access Control System Provider for Specific Support				
Classroom/Storeroom (70)	Yes - Classroom/Storeroom is not available with Mortise Deadbolt Chassis			
Privacy (40)	Yes - Classroom/Storeroom is not available with Mortise Deadbolt Chassis. Privacy, Office and Apartment as supported by OEM Access Control System		No	
Office (50)				
Apartment (60)				
Accessories - Consult with OEM Access Control System Provider for Specific Support				
HHD - Handheld Programming Device	Yes, as supported by OEM Access Control System			
Wireless Portable Reader (WPR400/401)				
Wireless Reader Interface (WRI400)				
Wireless Repeater (REPTR400)				
Wireless Antenna (ANT400)				
Wireless Signal Test Kit (TK400)				
Wireless Gate Kit (GCK400)				
Wireless Elevator Kit (ECK400)				

*PIM400-485 sold exclusively through OEM providers.

**If enabled, grants access to last 113 unique user ID's, option to expand to 1,000. Or, use facility/site codes instead of user ID's. No events are captured in audit trail when operating in cache mode.

†75 bit output format default. Configurable to other output formats. Check with access control provider for specific support.

THIS PAGE IS INTENTIONALLY BLANK.



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 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 credential readers, chassis type, network configurations, 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.

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 -enter sensors, door position switch, tamper guard 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.

The AD-400 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 your access control software partner for details on the integration of specific features.



Networked Locking Solutions
AD-400 Wireless

Features and Benefits

- Open Architecture platform
- Panel interface options ensure seamless communication with your system
- 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 with deadbolt and exit trim
- Compatible with major brands of master key systems
- Wireless accessories available for remote, gate, elevator and portable (mustering) applications
- AD-Series with multi-technology readers are NFC compatible
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS, Industry Canada(IC)

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 travels a greater distance and better penetrates typical building construction – allowing for simplified system design.

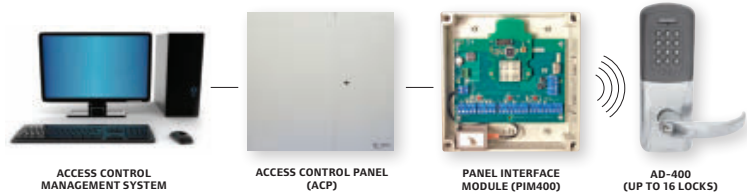
Wake-Up On Radio

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.

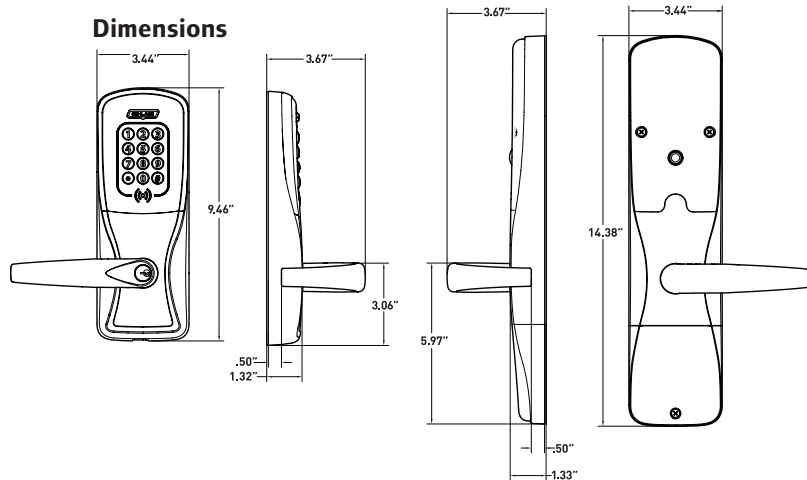
Panel Interface Module (PIM400)

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.

System Configuration



Dimensions



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*
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 w/ obstructions (normal building construction), up to 1000 ft clear line of site
RF Interference Avoidance	Configurable Dynamic Channel Switching
Data Rate	RF: 40 kbps
Visual/Audible Communications	Tri-colored LED's & 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)
Operating Temperature/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, UL10 C, FCC Part 15, ADA, RoHS
Accessories	Panel Interface Module (PIM400), Handheld Device (HHD), Remote antennas for PIM400 to extend range, Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

Functions

- ▶ Classroom/Storeroom
- ▶ Office**
- ▶ Privacy**
- ▶ Apartment**

Note: BHMA/ANSI functions such as these can be implemented by the Software when Door Position, Deadbolt Position and/or Interior Push button are monitored. Consult Software provider for specific capabilities. Classroom/Storeroom and Office function not available with Mortise Deadbolt option.

Available 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**

* Lock requires less than 100 msec, response time does not include latency time of ACP.

** Consult your access control software provider for specific scope of support. Interior pushbutton, mechanical key override and deadbolt position are only available when linked via PIM400-485.

† Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch position unless monitored on RS-485** connection.

Mechanical Specifications		
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)	
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only
Latch Bolt	1/2" throw security latch standard, 3/4" throw optional	3/4" throw with anti-friction tongue standard, 1" throw deadbolt on Mortise Deadbolt option*
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest 29 S123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

*Classroom/Storeroom and Office options not available with deadbolt.

AD-Series Exit Trim

AD-300 and AD-400 exit trim is exclusively compatible with Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on Metal doors only), Von Duprin 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.

Part Numbers for Request to Exit Switch:
• Von Duprin: 050281
• Falcon: 650359

Multi-Technology Reader Specification	
Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25" on 125 kHz proximity, up to 0.75" on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible XceedID Credentials	125 kHz Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (7000 Series)
13.56 MHz Compatible aptiQ™ Credentials	aptiQ™ smart cards using MIFARE® in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob and PVC Patch (9000 Series); aptiQ™ smart cards using MIFARE DESFire™ EV1 in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (8000 Series)
Certifications/Standards	FCC, Industry Canada(IC), UL 294, Listed, ISO Standard 15693, and ISO Standard 14443
Style/Layout	Option for 12 button, 3x4 matrix backlit keypad

Notes:

** FIPS 201-1 Compliant Option Available: The AD-Series can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 Compliance. Specific components are required, please see the AD-401 data sheet or AD-301 data sheet for complete details.

† 75 bit output format default. Configurable to other output formats

Benefits of AD-Series Multi-Technology Readers:

- Reads multiple brand of both proximity (125 kHz) and smart (13.56 MHz) technologies with single device
- AD-Series multi-technology readers are NFC compatible
- Allows end user to migrate to more secure credentials over time and as budgets permit

Additional Readers

Magnetic Stripe

- Now available with choice of Insertion or Swipe style readers
- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- Option for 12 button, 3x4 matrix backlit keypad

Keypad

- Backlit keypad
- 12 button, 3x4 matrix

Available AD-Series Reader Modules



- Multi-Technology
- Proximity
- Smart Card
- + KEYPAD



- Multi-Technology
- Proximity
- Smart Card



- Magnetic Stripe (Insertion)
- + KEYPAD



- Magnetic Stripe (Insertion)



- Magnetic Stripe (Swipe)
- + KEYPAD



- Magnetic Stripe (Swipe)



- Keypad

Ordering Information

Available through one of our GSA Schedule 84 approved distributors; BAA options available

AD-400-CY-70-MG-SPA-626-PD-S123-RH-4B-13-049-10-025-1-3/4													
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Battery	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis		6 Lever		11 Battery	
CY	Cylindrical	SPA	Sparta	4B	4AA
MS	Mortise	RHO	Rhodes	8B	8AA
MD	Mortise Deadbolt	ATH	Athens	12 Backset & Latch or Armor Front	
993R	Exit Trim – Rim/CVC/CVR	TLR	Tubular	Cylindrical	
993S	Exit Trim – SVR	<i>Available with knurled surface</i>		13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"	
993M	Exit Trim – Mortise	7 Finish		Mortise	
993DT	Non-Functioning Dummy Trim for Exit	626	Satin Chrome	09-663 Armor Front, 1-1/4" Wide, Square Corner	
4 Function		605	Bright Brass	<i>See price book for mortise deadbolt and other backset and latch options or armor front options</i>	
70	Classroom/Storeroom	606	Satin Brass	13 Strike	
50	Office	612	Satin Bronze	Cylindrical	
40	Privacy	619	Satin Nickel	10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"	
60	Apartment	625	Bright Chrome	Mortise	
<i>Lock function capabilities are determined by users access control system</i>		643e	Aged Bronze	10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box	
5 Reader		626AM	Satin Chrome Antimicrobial	<i>See price book for other available strikes</i>	
KP	Keypad	8 Lever Cylinder Type		14 Door Thickness	
MG	Magnetic Stripe (Insertion)	PD	Schlage 6-pin Full Cylinder	1-3/4"	
MGK	Magnetic Stripe + Keypad (Insertion)	<i>See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale</i>		Other thicknesses available between 1-3/8" and 2-3/4"	
MS	Magnetic Stripe (Swipe)	9 Keyway Type		<i>See price book for detail</i>	
MSK	Magnetic Stripe + Keypad (Swipe)	S123 Everest 29			
MT	Multi-Technology (125 kHz and 13.56 MHz)	<i>See price book for other available keyway options including master keying</i>			
MTK	Multi-Technology + Keypad (125 kHz and 13.56 MHz)	10 Handing			
DT	Dummy Trim	RH Right Handed			
		LH Left Handed			
		<i>Field reversible</i>			

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



643e
Aged Bronze

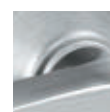
Cool tone finishes



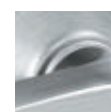
619
Satin Nickel



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome with Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin, Falcon and aptiQ are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Inside PicoTag is a trademark of Inside Technologies. GE, CASI and ProxLite are trademarks of General Electric Corporation. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. Tag-It is a trademark of Texas Instruments. STMicroelectronics is a trademark of STMicroelectronics Inc. Infineon and my-d are trademarks of Infineon Technologies. AWID is a trademark of Applied Wireless Identifications Group. All other trademarks are the property of their respective owners.





AD-401

FIPS 201-1 Compliant Networked Wireless Lock with Multi-Technology & Keypad Reader

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.

The AD-401 is an ideal solution for applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201 Compliance. The AD-401 electronic integrated lock with FMK multi-technology reader + keypad is FIPS 201-1 compliant for use in U.S. Federal Agency Buildings using smart card technology. The AD-401 lock with an FMK reader allows both a Wiegand and RS-485 solution.

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 for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit and -enter sensors, door position switch, tamper guard and more.

The AD-401 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.

The AD-401 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 your access control software partner for details on the integration of specific features.



Features and Benefits

- Open Architecture platform
- Panel interface options ensure seamless communication with your system:
 - AD-401 with integrated RS-485 software providers will require the use of a PIM400-485 Panel Interface Module which can support up to 16 AD-401 devices
 - AD-401 in Wiegand systems will require the use of a PIM400-TD2 Panel Interface Module which can support up to 2 AD-401 devices and may require the optional dry-contact relay board (RLBD)
- 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 with deadbolt and exit trim
- Compatible with major brands of master key systems
- Wireless accessories available for remote, gate, elevator and portable (mustering) applications
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS, Industry Canada(IC), FIPS 201-1

Networked Locking Solutions
AD-401 FIPS 201-1 Compliant Wireless

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 travels a greater distance and better penetrates typical building construction – allowing for simplified system design.

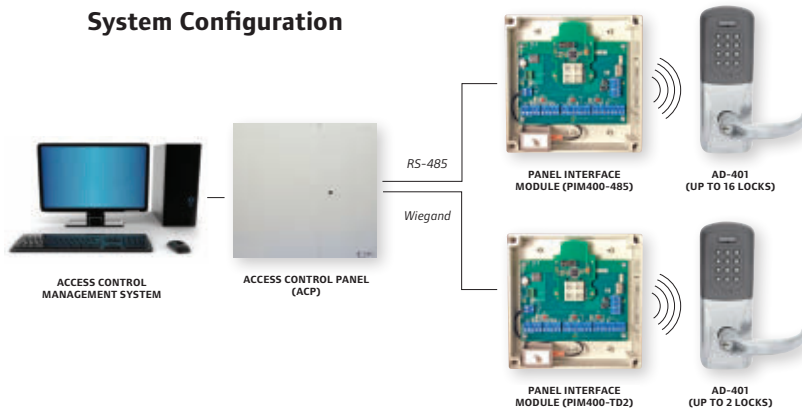
Wake-Up On Radio

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.

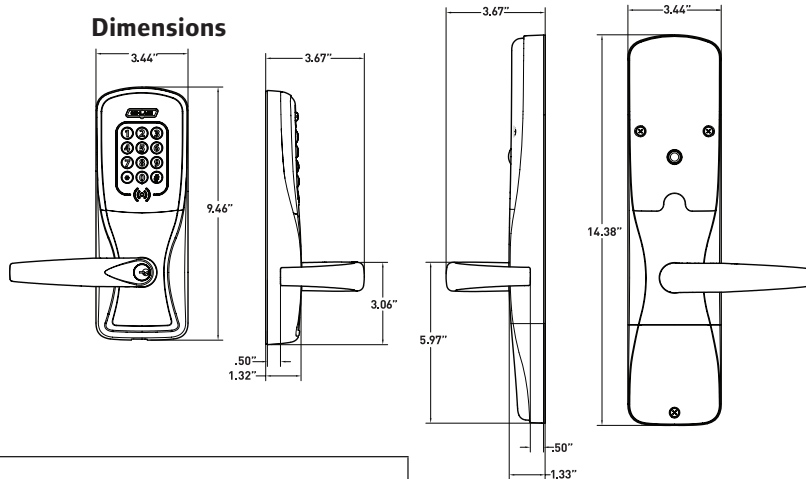
Panel Interface Module (PIM400)

The PIM400 (sold separately) is required for communication between the AD-401 wireless lock and the access control panel, and can support up to 16 locks depending on your access control system.

System Configuration



Dimensions



AD-401 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*
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 w/ obstructions (normal building construction), up to 1000 ft clear line of site
RF Interference Avoidance	Configurable Dynamic Channel Switching
Data Rate	RF: 40 kbps
Visual/Audible Communications	Tri-colored LED's & 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)
Operating Temperature/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, UL10 C, FCC Part 15, ADA, RoHS, FIPS 201-1
Accessories	Panel Interface Module (PIM400), Handheld Device (HHD), Remote antennas for PIM400 to extend range, Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

Functions

- ▶ Classroom/Storeroom
- ▶ Office**
- ▶ Privacy**
- ▶ Apartment**

Note: BHMA/ANSI functions such as these can be implemented by the Software when Door Position, Deadbolt Position and/or Interior Push button are monitored. Consult Software provider for specific capabilities. Classroom/Storeroom and Office function not available with Mortise Deadbolt option.

Available 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*

* Lock requires less than 100 msec, response time does not include latency time of ACP.

** Consult your access control software provider for specific scope of support. Interior pushbutton, mechanical key override and deadbolt position are only available when linked via PIM400-485.

† Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch position unless monitored on RS-485** connection.

Mechanical Specifications		
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)	
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only
Latch Bolt	1/2" throw security latch standard, 3/4" throw optional	3/4" throw with anti-friction tongue standard, 1" throw deadbolt on Mortise Deadbolt option*
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest 29 S123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

*Classroom/Storeroom and Office options not available with deadbolt.

AD-Series Exit Trim

AD-301 and AD-401 exit trim is exclusively compatible with Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on metal doors only), Von Duprin 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.

Part Numbers for Request to Exit Switch:
 • Von Duprin: 050281
 • Falcon: 650359

FMK Multi-Technology Reader Specification	
Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25" on 125 kHz proximity, up to 0.75" on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible XceedID Credentials	125 kHz Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (7000 Series)
13.56 MHz Compatible aptiQ™ Credentials	aptiQ™ smart cards using MIFARE® in Clamshell, ISO Card, ISO Card w/Magnetic Stripe, Keyfob and PVC Patch (9000 Series); aptiQ™ smart cards using MIFARE DESFire™ EV1 in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (8000 Series)
Certifications/Standards	FCC, Industry Canada(IC), UL 294, Listed, ISO Standard 15693, and ISO Standard 14443, FIPS 201-1
Style/Layout	12 button, 3x4 matrix backlit keypad

Notes:

** The AD-Series FIPS 201-1 Compliant Option can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 Compliance.

† 75 bit output format default. Configurable to other output formats

AD-Series FMK Reader Module



- **FIPS 201-1 Compliant Multi-Technology**
 - FMK reader required for FIPS 201-1 Compliant multi-technology & keypad reader supporting both proximity and smart cards

 **KEYPAD**

Ordering Information

Available through one of our GSA Schedule 84 approved distributors; BAA options available

AD-401-CY-70-FMK-SPA-626-PD-S123-RH-4B-13-049-10-025-1-3/4													
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Battery	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis		6 Lever		11 Battery	
CY	Cylindrical	SPA	Sparta	4B	4AA
MS	Mortise	RHO	Rhodes	8B	8AA
MD	Mortise Deadbolt	ATH	Athens	12 Backset & Latch or Armor Front	
993R	Exit Trim – Rim/CVC/CVR	TLR	Tubular	Cylindrical	
993S	Exit Trim – SVR	<i>Available with knurled surface</i>		13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"	
993M	Exit Trim – Mortise	7 Finish		Mortise	
993DT	Non-Functioning Dummy Trim for Exit	626	Satin Chrome	09-663 Armor Front, 1-1/4" Wide, Square Corner	
4 Function		605	Bright Brass	<i>See price book for mortise deadbolt and other backset and latch options or armor front options</i>	
70	Classroom/Storeroom	606	Satin Brass	13 Strike	
50	Office	612	Satin Bronze	Cylindrical	
40	Privacy	619	Satin Nickel	10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"	
60	Apartment	625	Bright Chrome	Mortise	
<i>Lock function capabilities are determined by users access control system</i>		643e	Aged Bronze	10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box	
5 Reader		626AM	Satin Chrome Antimicrobial	<i>See price book for other available strikes</i>	
FMK	FIPS 201-1 Multi-Technology + Keypad (125 kHz and 13.56 MHz)	8 Lever Cylinder Type		14 Door Thickness	
		PD	Schlage 6-pin Full Cylinder	1-3/4"	
		<i>See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale</i>		Other thicknesses available between 1-3/8" and 2-3/4"	
		9 Keyway Type		<i>See price book for detail</i>	
		S123 Everest 29			
		<i>See price book for other available keyway options including master keying</i>			
		10 Handing			
		RH Right Handed			
		LH Left Handed			
		<i>Field reversible</i>			

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



643e
Aged Bronze

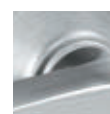
Cool tone finishes



619
Satin Nickel



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome with Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin, Falcon and aptiQ are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Inside PicoTag is a trademark of Inside Technologies. GE, CASI and ProxLite are trademarks of General Electric Corporation. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. Tag-It is a trademark of Texas Instruments. STMicroelectronics is a trademark of STMicroelectronics Inc. Infineon and my-d are trademarks of Infineon Technologies. AWID is a trademark of Applied Wireless Identifications Group. All other trademarks are the property of their respective owners.





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 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 credential readers, 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 for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit and -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 your access control software partner for details on the integration of specific features.



Networked Locking Solutions
AD-300 Hardwired

Features and Benefits

- Open Architecture platform
- Panel interface options ensure seamless communication with your 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 with deadbolt and exit trim
- Compatible with major brands of master key systems
- A wide selection of credential readers and networking options to choose from
- AD-Series with multi-technology readers are NFC compatible
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS, Industry Canada(IC)

AD-300 Electronic Lock Specifications	
Credential Verification Time	< 1 second
Data Rate	RS-485 : 9.6 kbps
Visual/Audible Communications	Tri-colored LED's & 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 1000 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, UL10 C, FCC Part 15, ADA, RoHS
Accessories	Panel Interface Board (PIB300), Handheld Device (HHD), Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

† Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch positions unless monitored on RS-485* connection

Functions

- ▶ Classroom/Storeroom
- ▶ Office*
- ▶ Privacy*
- ▶ Apartment*

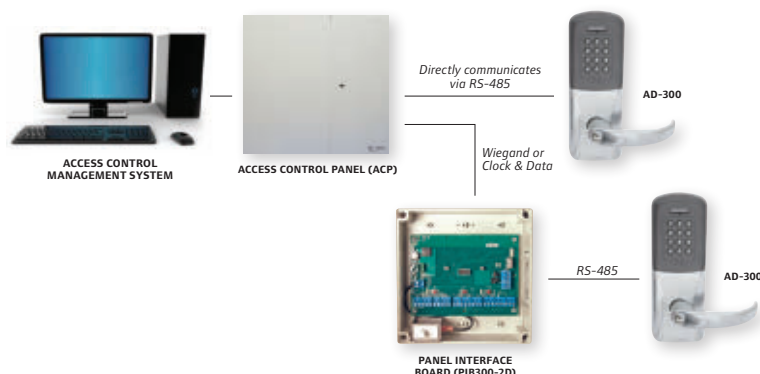
Note: BHMA/ANSI functions such as these can be implemented by the Software when Door Position, Deadbolt Position and/or Interior Push button are monitored. Consult Software provider for specific capabilities. Classroom/Storeroom and Office function not available with Mortise Deadbolt option.

Available Status Signals

- ▶ Lock/Unlock Status†
- ▶ Request-to-Exit
- ▶ Door Position
- ▶ Mechanical Key Override*
- ▶ Deadbolt Position*
- ▶ Interior Cover Tamper Guard*
- ▶ Communication Status*
- ▶ Interior Push Button*
- ▶ Request-to-Enter*

* Consult your access control software provider for specific scope of support. Interior pushbutton, mechanical key override and deadbolt position are only available when linked via PIM400-485.

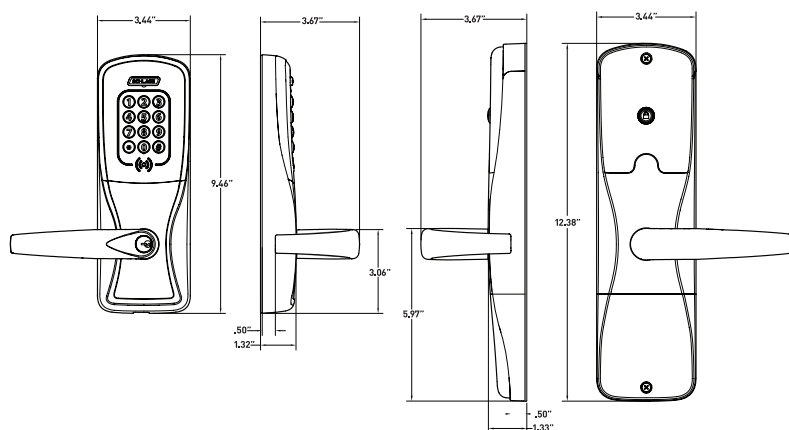
System Configuration



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.

Dimensions



PIB300-2D Specifications

Communication Range	PIB300 to Lock, RS-485: up to 4000' PIB300 to ACP, Wiegand or Clock & Data: up to 500'
Visual/Audible	13 LEDs for Status Indicators
System Interface	Wiegand or Clock & Data
Voltage Range	9.5 VDC to 26 VDC
Power Supply	12 VDC or 24 VDC
Max Current Requirements	Up to 250 mA
Operating Temperature	-31° to 151°F (-35° to 66°C)
Dimensions (HWD)	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

Mechanical Specifications		
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)	
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only
Latch Bolt	1/2" throw security latch standard, 3/4" throw optional	3/4" throw with anti-friction tongue standard, 1" throw deadbolt on Mortise Deadbolt option*
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest 29 S123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

**Classroom/Storeroom and Office options not available with deadbolt.

AD-Series Exit Trim

AD-300 and AD-400 exit trim is exclusively compatible with Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on metal doors only), Von Duprin 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.

Part Numbers for Request to Exit Switch:
 • Von Duprin: 050281
 • Falcon: 650359

Multi-Technology Reader Specification	
Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25" on 125 kHz proximity, up to 0.75" on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-†**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible XceedID Credentials	125 kHz Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (7000 Series)
13.56 MHz Compatible aptiQ™ Credentials	aptiQ™ smart cards using MIFARE® in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob and PVC Patch (9000 Series); aptiQ™ smart cards using MIFARE DESFire™ EV1 in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (8000 Series)
Certifications/Standards	FCC, Industry Canada(IC), UL 294, Listed, ISO Standard 15693, and ISO Standard 14443
Style/Layout	Option for 12 button, 3x4 matrix backlit keypad

Notes:

** FIPS 201-1 Compliant Option Available: The AD-Series can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 Compliance. Specific components are required, please see the AD-401 data sheet or AD-301 data sheet for complete details.

† 75 bit output format default. Configurable to other output formats

Benefits of AD-Series Multi-Technology Readers:

- Reads multiple brands of both proximity (125 kHz) and smart (13.56 MHz) technologies with single device
- AD-Series multi-technology readers are NFC compatible
- Allows end user to migrate to more secure credentials over time and as budgets permit

Additional Readers

Magnetic Stripe

- Now available with choice of Insertion or Swipe style readers
- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- Option for 12 button, 3x4 matrix backlit keypad

Keypad

- Backlit keypad
- 12 button, 3x4 matrix

Available AD-Series Reader Modules



- Multi-Technology
- Proximity
- Smart Card
- + KEYPAD



- Multi-Technology
- Proximity
- Smart Card



- Magnetic Stripe (Insertion)
- + KEYPAD



- Magnetic Stripe (Insertion)



- Magnetic Stripe (Swipe)
- + KEYPAD



- Magnetic Stripe (Swipe)



- Keypad

Ordering Information

Available through one of our GSA Schedule 84 approved distributors; BAA Options Available

AD-300-CY-70-MG-SPA-626-PD-S123-RH-13-049-10-025-1-3/4												
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis	
CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Non-Functioning Dummy Trim for Exit
4 Function	
70	Classroom/Storeroom
50	Office
40	Privacy
60	Apartment
<i>Lock function capabilities are determined by users access control system</i>	
5 Reader	
KP	Keypad
MG	Magnetic Stripe (Insertion)
MGK	Magnetic Stripe + Keypad (Insertion)
MS	Magnetic Stripe (Swipe)
MSK	Magnetic Stripe + Keypad (Swipe)
MT	Multi-Technology (125 kHz and 13.56 MHz)
MTK	Multi-Technology + Keypad (125 kHz and 13.56 MHz)
DT	Dummy Trim

6 Lever	
SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular
<i>Available with knurled surface</i>	
7 Finish	
626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial
8 Lever Cylinder Type	
PD	Schlage 6-pin Full Cylinder
<i>See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale</i>	
9 Keyway Type	
S123	Everest 29
<i>See price book for other available keyway options including master keying</i>	

10 Handing	
RH	Right Handed
LH	Left Handed
<i>Field reversible</i>	
11 Backset & Latch or Armor Front	
Cylindrical	
13-049	2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"
Mortise	
09-663	Armor Front, 1-1/4" Wide, Square Corner
<i>See price book for mortise deadbolt and other backset and latch options or armor front options</i>	
12 Strike	
Cylindrical	
10-025	1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"
Mortise	
10-072	1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box
<i>See price book for other available strikes</i>	
13 Door Thickness	
1-3/4"	
Other thicknesses available between 1-3/8" and 2-3/4"	
<i>See price book for detail.</i>	

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



643e
Aged Bronze

Cool tone finishes



619
Satin Nickel



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome with Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin, Falcon and aptiQ are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Inside PicoTag is a trademark of Inside Technologies. GE, CASI and ProxLite are trademarks of General Electric Corporation. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. Tag-It is a trademark of Texas Instruments. STMicroelectronics is a trademark of STMicroelectronics Inc. Infineon and my-d are trademarks of Infineon Technologies. AWID is a trademark of Applied Wireless Identifications Group. All other trademarks are the property of their respective owners.





AD-301

FIPS 201-1 Compliant Networked Hardwired Lock with Multi-Technology & Keypad Reader

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.

The AD-301 is an ideal solution for applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 Compliance. The AD-301 electronic integrated lock with FMK multi-technology reader + keypad is FIPS 201-1 compliant for use in U.S. Federal Agency Buildings using smart card technology. The AD-301 lock with an FMK reader allows both a Wiegand and RS-485 solution.

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 for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit and -enter sensors, door position switch, tamper switch and more.

The AD-301 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 your access control software partner for details on the integration of specific features.



Features and Benefits

- Open Architecture platform
- Panel interface options ensure seamless communication with your system:
 - AD-301 locks can wire directly into the RS-485 partners access control panel.
 - AD-301 in Wiegand solutions will require the use of a PIB300-2D Panel Interface Board which can support up to 2 AD-301 devices and may require the optional dry-contact relay board (RLBD).
- 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 with deadbolt and exit trim
- Compatible with major brands of master key systems
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS, Industry Canada(IC), FIPS 201-1

AD-301 Electronic Lock Specifications	
Credential Verification Time	< 1 second
Data Rate	RS-485 : 9.6 kbps
Visual/Audible Communications	Tri-colored LED's & 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-301 to Power Supply: up to 1000 ft (303 m)
Cable Specifications for Data	24AWG, 2 or 4 Conductor Shielded (Belden 9841, 9842 or equivalent)
Cabling Distance for Data	AD-301 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, UL10 C, FCC Part 15, ADA, RoHS, FIPS 201-1
Accessories	Panel Interface Board (PIB300), Handheld Device (HHD), Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

† Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch positions unless monitored on RS-485* connection

Functions

- ▶ Classroom/Storeroom
- ▶ Office*
- ▶ Privacy*
- ▶ Apartment*

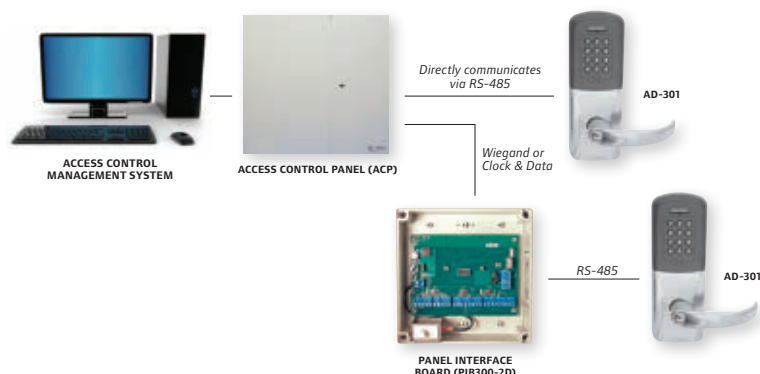
Note: BHMA/ANSI functions such as these can be implemented by the Software when Door Position, Deadbolt Position and/or Interior Push button are monitored. Consult Software provider for specific capabilities. Classroom/Storeroom and Office function not available with Mortise Deadbolt option.

Available Status Signals

- ▶ Lock/Unlock Status†
- ▶ Request-to-Exit
- ▶ Door Position
- ▶ Mechanical Key Override*
- ▶ Deadbolt Position*
- ▶ Interior Cover Tamper Guard*
- ▶ Communication Status*
- ▶ Interior Push Button*
- ▶ Request-to-Enter*

* Consult your access control software provider for specific scope of support. Interior pushbutton, mechanical key override and deadbolt position are only available when connected via RS-485.

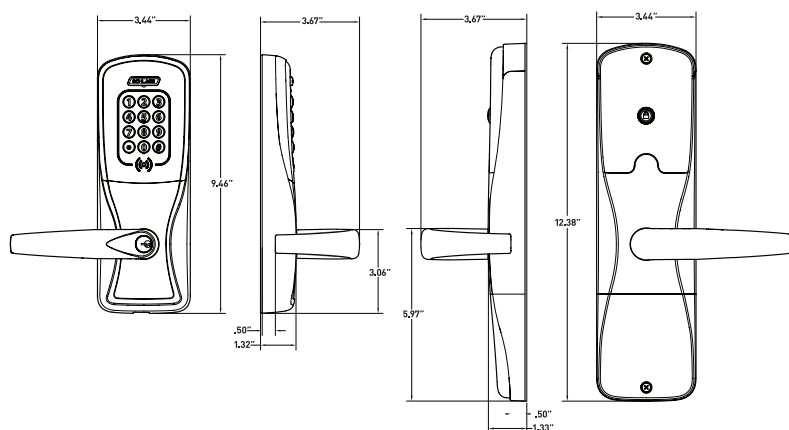
System Configuration



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-301 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.

Dimensions



PIB300-2D Specifications

Communication Range	PIB300 to Lock, RS485: up to 4000' PIB300 to ACP, Wiegand or Clock & Data: up to 500'
Visual/Audible	13 LEDs for Status Indicators
System Interface	Wiegand or Clock & Data
Voltage Range	9.5 VDC to 26 VDC
Power Supply	12 VDC or 24 VDC
Max Current Requirements	Up to 250 mA
Operating Temperature	-31° to 151°F (-35° to 66°C)
Dimensions (HWD)	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, FIPS 201-1

Mechanical Specifications			AD-Series Exit Trim <i>AD-301 and AD-401 exit trim is exclusively compatible with Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on metal doors only), Von Duprin 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.</i> <i>Part Numbers for Request to Exit Switch:</i> • Von Duprin: 050281 • Falcon: 650359
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)	
Handing	Handed to Order, Field Reversible		
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security	
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only	
Latch Bolt	1/2" throw security latch standard, 3/4" throw optional	3/4" throw with anti-friction tongue standard, 1" throw deadbolt on Mortise Deadbolt option*	
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols	
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available	
Cylinder & Keys	Schlage 6-pin Everest 29 S123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands		
*Classroom/Storeroom and Office options not available with deadbolt.			

FMK Multi-Technology Reader Specification	
Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25" on 125 kHz proximity, up to 0.75" on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible XceedID Credentials	125 kHz Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (7000 Series)
13.56 MHz Compatible aptiQ™ Credentials	aptiQ™ smart cards using MIFARE® in Clamshell, ISO Card, ISO Card w/Magnetic Stripe, Keyfob and PVC Patch (9000 Series); aptiQ™ smart cards using MIFARE DESFire™ EV1 in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (8000 Series)
Certifications/Standards	FCC, Industry Canada(IC), UL 294, Listed, ISO Standard 15693, and ISO Standard 14443, FIPS 201-1
Style/Layout	12 button, 3x4 matrix backlit keypad

Notes:

** The AD-Series FIPS 201-1 Compliant Option can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1.

† 75 bit output format default. Configurable to other output formats

AD-Series FMK Reader Module



• FIPS 201-1 Compliant Multi-Technology

- FMK reader required for FIPS 201-1 Compliant multi-technology & keypad reader supporting both proximity and smart cards

 **KEYPAD**

Ordering Information

Available through one of our GSA Schedule 84 approved distributors; BAA Options Available

AD-301-CY-70-FMK-SPA-626-PD-S123-RH-13-049-10-025-1-3/4												
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis	
CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Non-Functioning Dummy Trim for Exit
4 Function	
70	Classroom/Storeroom
50	Office
40	Privacy
60	Apartment
<i>Lock function capabilities are determined by users access control system</i>	
5 Reader	
FMK	FIPS 201-1 Compliant Multi-Technology + Keypad (125 kHz and 13.56 MHz)

6 Lever	
SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular
<i>Available with knurled surface</i>	
7 Finish	
626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial
8 Lever Cylinder Type	
PD	Schlage 6-pin Full Cylinder
<i>See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale</i>	
9 Keyway Type	
S123	Everest 29
<i>See price book for other available keyway options including master keying</i>	

10 Handing	
RH	Right Handed
LH	Left Handed
<i>Field reversible</i>	
11 Backset & Latch or Armor Front	
Cylindrical	
13-049	2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"
Mortise	
09-663	Armor Front, 1-1/4" Wide, Square Corner
<i>See price book for mortise deadbolt and other backset and latch options or armor front options</i>	
12 Strike	
Cylindrical	
10-025	1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"
Mortise	
10-072	1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box
<i>See price book for other available strikes</i>	
13 Door Thickness	
1-3/4"	
Other thicknesses available between 1-3/8" and 2-3/4"	
<i>See price book for detail.</i>	

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



643e
Aged Bronze

Cool tone finishes



619
Satin Nickel



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome with Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin, Falcon and aptiQ are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Inside PicoTag is a trademark of Inside Technologies. GE, CASI and ProxLite are trademarks of General Electric Corporation. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. Tag-It is a trademark of Texas Instruments. STMicroelectronics is a trademark of STMicroelectronics Inc. Infineon and my-d are trademarks of Infineon Technologies. AWID is a trademark of Applied Wireless Identifications Group. All other trademarks are the property of their respective owners.





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 Cable or Concealed Vertical Rod (CVC and CVR for metal doors only)
- 993S – Surface Vertical Rod
- 993M – Mortise

Compatibility			
Devices	AD-200/250	AD-300/301	AD-400/401
Von Duprin 98/99 and 98/99XP Rim/SVR/CVR* / CVC*/Mortise	X	X	X
Von Duprin 22/22F Rim/SVR	X	X	X
Falcon 25 Rim	X	X	X
Sargent® 80† Rim	X		
Precision™ 21 Rim (2100 converts to 21 with Precision's BP21 kit)	X		
Yale® 7000 Rim	X		
Corbin Russwin® 5000 Rim	X		
Dorma® 9300 Rim	X		

* For metal doors only

† Narrow design & reversible rim exits not compatible

The proper low current request to exit switch (RX-LC) is required for AD-300/301 and AD-400/401.

Part Numbers for Request to Exit Switch:

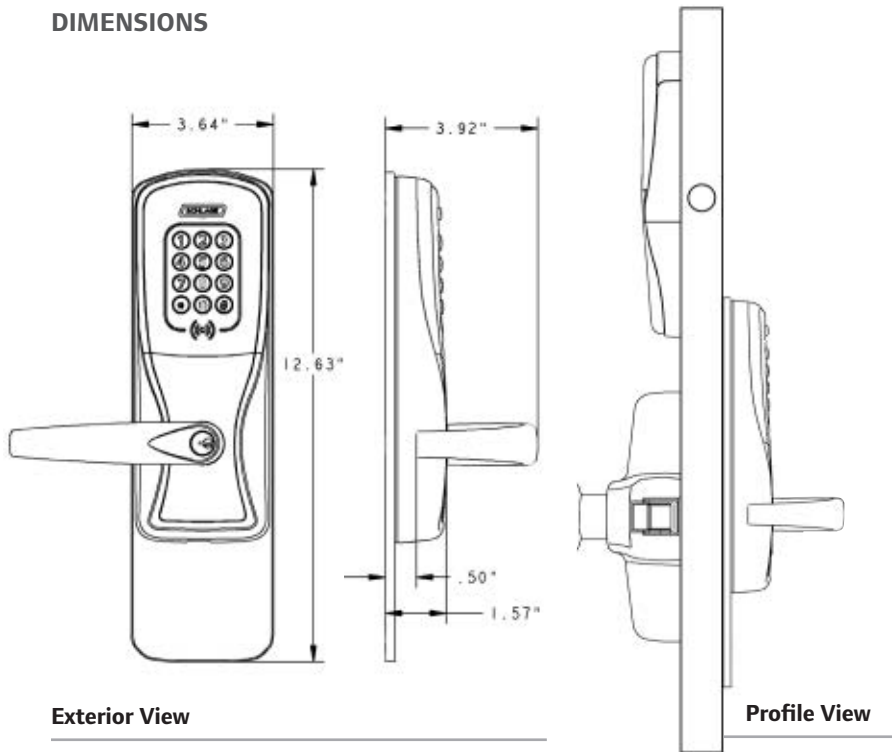
- Von Duprin: 050281
- Falcon: 650359



Features and 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 most Standard, FSIC or SFIC keyways from major brands of master key systems including Schlage, Sargent®, Corbin®, Medeco® and Yale®

DIMENSIONS



Exterior View

Profile View

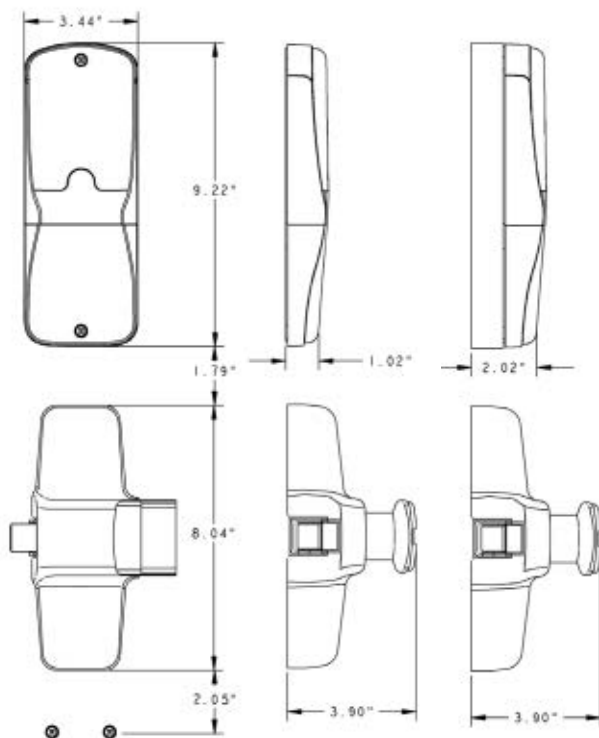
AD-Series - 993 Exit Trim

Available AD-Series Reader Modules

- Multi-Technology (125 kHz proximity and 13.56 MHz smart card)
 - FIPS 201-1 Compliant Multi-Technology (125 kHz proximity and 13.56 MHz smart card) sold complete with AD-301 and AD-401 only
 - Magnetic Stripe
 - Keypad Only
 - All credential readers available + Keypad
- * unlike other AD-Series chassis styles, upgrading reader modules on the 993 Exit Trim requires the exterior escutcheon to be removed from the door

Available Communication Options

- AD-400: Networked Wireless Locks
- AD-401: Networked Wireless Locks - FIPS 201-1 compliant
- AD-300: Networked Hardwired Locks
- AD-301: Networked Hardwired Locks - FIPS 201-1 compliant
- AD-250: Offline, access rights stored on the magnetic stripe credential
- AD-200: Offline, access rights stored on the lock



Interior View

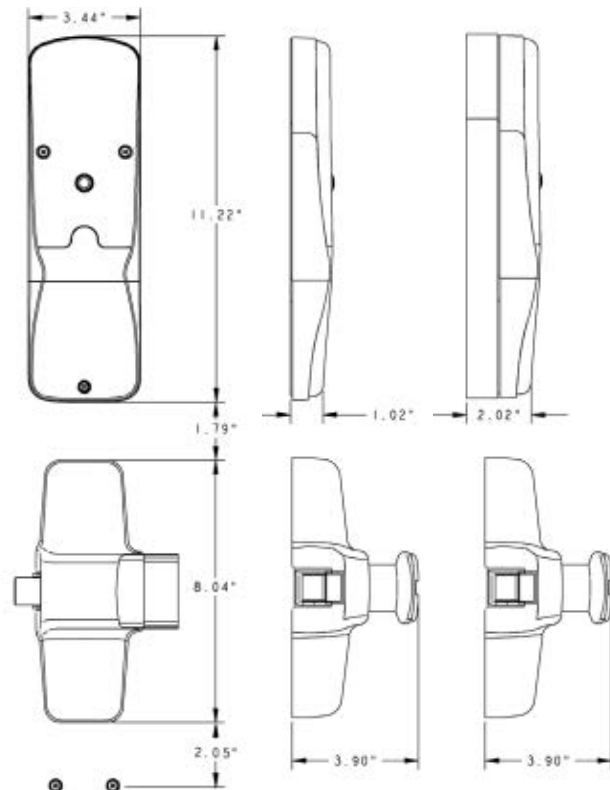
Side View

Side View

AD-200/250/300*/301*
- all styles

AD-200/250/300*/
301* - RIM/CVR/CVC
or Mortise

AD-200/250/300*/
301* SVR



Interior View

Side View

Side View

AD-400/401
all styles

AD-400/401
RIM/CVR/CVC
or Mortise

AD-400/401
SVR

* AD-300/301 includes LED indicator

Note: (2) #7 fasteners with decorative washers located 11.88" below bottom edge of lock

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, Von Duprin and Falcon are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Sargent is a trademark of Sargent Manufacturing Company. Precision is a trademark of Stanley Black & Decker. Yale is a trademark of Yale Security, Inc. Corbin Russwin is a trademark of Corbin Russwin, Inc. Dorma is a trademark of DORMA Door Controls, Inc. All other trademarks are the property of their respective owners.



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 several technological advances and incorporated 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

Patent-pending 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 and 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
- Certifications
 - NEMA 1, 4, 4X, 6
 - UL 294
 - FCC Part 15
 - RoHS
 - Industry Canada(IC)

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 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

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*
Communication Range	Up to 200 ft (61 m) with obstructions Up to 1000 ft (305 m) clear line of site Up to 2000 ft (609 m) line of site with high gain antenna on PIM400 Up to 4000 ft (1219 m) line of site 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 - 100% condensing
Dimensions (HWD)	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 (305 m) PIM400-485 to ACP: 24AWG, 2 or 4 Conductor Shielded (Belden 9842, 9841 or equivalent) up to 4000 ft (1219 m)
Data Rate	RF: 40 kbps; RS-485: 9.6 kbps
Certifications	NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; Industry Canada(IC), RoHS

*Dependant on latency time of access control panel.

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
- **HH KIT** – Handheld Device with SUS installed and HH-USB cable
- **593PI-12DC** – 12 VDC power supply





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 several technological advances and incorporated 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

Patent-pending 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.



Networked Locking Solutions
PIM400-TD2 Panel Interface Module

Features and 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
- Certifications:
 - NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; RoHS; Industry Canada(IC)

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

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*
Communication Range	Up to 200 ft (61 m) with obstructions Up to 1000 ft (305 m) clear line of site Up to 2000 ft (609 m) line of site with high gain antenna on PIM400 Up to 4000 ft (1219 m) line of site 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% condensing
Dimensions (HWD)	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, FCC Part 15; RoHS, Industry Canada(IC)

*Dependant on latency time of access control panel.

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
- **HHK KIT** – Handheld Device with SUS installed and HH-USB cable
- **593PI-12DC** – 12 VDC power supply

Available through one of our GSA Schedule 84 approved distributors





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), Wireless Portable Reader (WPR400) and Wireless Status Monitor (WSM400) 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, rechargeable batteries, charger and a convenient carrying case. The WPR400-DT operates on rechargeable batteries making it economical and easy to use 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 ft with normal building construction and up to 1000 ft with clear line of site. The TK400 can be used to determine the proper location of each panel interface module to optimize system design. When installed properly, an AD-400 wireless solution is an extremely reliable and cost effective alternative to a hard-wired networked system.



Features and 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
 - Rechargeable Batteries
 - Battery Charger
 - 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

Wireless Portable Signal Tester	
Frequency Range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Communication	Up to 200 ft w/ obstructions (normal building); up to 1000 ft clear line of site
Operating Temperature	0°C (32°F) to 49°C (120°F)
Humidity	0% to 100% non-condensing
Battery Type	Removable, NiMH
Battery Recharge Time	4-6 hours
Dimensions (HWD)	2.375" x 5.0" x 6.25" (6.03 cm x 12.7 cm 15.88 cm)
Weight	1.5 lb (0.68 kg)
Certifications	<ul style="list-style-type: none"> • FCC Part 15 • Industry Canada(IC) • RoHS

Visual LED Indications

- Wireless Signal Quality
- Low Battery
- Battery Charge Complete

PIM400-TD2	
Frequency Range	902-928 MHz
Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Communication	Up to 200 ft w/ obstructions (normal building); up to 1000 ft clear line of site
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 (HWD)	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	<ul style="list-style-type: none"> • NEMA 1, 4, 4X, 6 • UL 294 • FCC Part 15 • Industry Canada(IC) • RoHS

Visual LED Indications

- Power On
- Linking Status to AD-400 Devices
- PIM Transmitting/Receiving RF Data

Available through one of our GSA Schedule 84 approved distributors



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 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 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 1,000 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.



Networked Locking Solutions
WPR400 Wireless Portable Reader

Features and Benefits

- Fully compatible with Schlage AD-Series Credential Reader Modules & Panel Interface Modules
- Reader options include multi-technology (reads both 13.56 MHz smart card and 125 kHz proximity, magnetic stripe and keypad)
- WPR401 with FIPS 201-1 compliant multi-technology reader is available and must be ordered as a complete unit
- Card reader options available with keypad for multi-factor authentication
- Rechargeable battery and charger (included)
- Cache Mode option for offline applications
- Field configurable to work as a Wireless Portable Signal Tester
- Configured with Schlage Hand Held Device (HHD)
- LED indicators communicate valid (green) and invalid (red) credential status
- Communicates to access control system via PIM400
- FCC Part 15, Industry Canada(IC), RoHS

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 WPR400/401 and the access control panel, and can support up to 16 AD-400 devices depending on your access control system.

Included with WPR400

- AD-Series Credential Reader Module Specified at Ordering
- WPR400/TK400 Battery Charger

Modes of Operation

- Reader Mode (default)
- Wireless Test Mode (field configurable)

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*
Communication Range	Up to 200 ft w/ obstructions (normal building); up to 1000 ft clear line of site
RF Interference Avoidance	Configurable Dynamic Channel Switching
Data Rate	40 kbps
Operating Temperature	0°C (32°F) to 49°C (120°F)
Humidity	0% to 100% non-condensing
Battery Type	Rechargeable, Removable, NiMH
Battery Life (fully charged)	100,000 card reads or PIN codes
Battery Recharge Time	4-6 hours
Dimensions – (HWD, 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	FCC Part 15, Industry Canada(IC), RoHS
Additional Accessories	Panel Interface Module (PIM400), Handheld Device (HHD)

*WPR requires less than 100 msec, response time does not include latency time of ACP.

Available AD-Series Reader Modules



Multi-Technology

- Proximity
- Smart Card

+ KEYPAD

FIPS 201-1 Compliant Multi-Technology

- Proximity
- Smart Card

+ KEYPAD

Multi-Technology

- Proximity
- Smart Card

Magnetic Stripe

+ KEYPAD

Magnetic Stripe

Magnetic Stripe (Swipe)

Magnetic Stripe (Swipe)

+ KEYPAD

Keypad

Dummy Trim Reader Module also available. Please see AD-Series Data sheets for more details on credential reader modules.

ORDERING INFORMATION:

Available through one of our GSA Schedule 84 approved distributors





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 and 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.



Networked Locking Solutions
WRI400 Wireless Reader Interface

Features and 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 255bits
- Magnetic Stripe (clock & data) up to 255bits

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

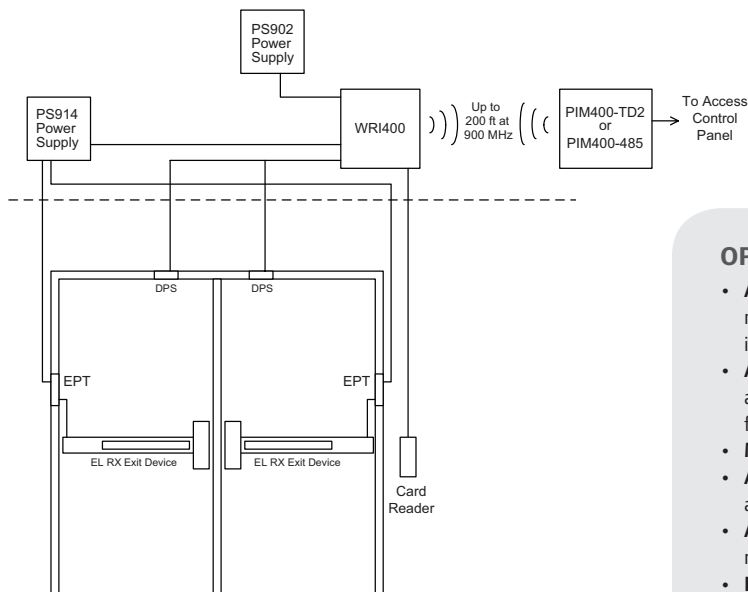
Certification:

- NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; Industry Canada(IC), RoHS

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
Data rate		RF: 40 kbps
Credential Verification time		< 1 second*
Communication range		Up to 200 ft (61 m) with obstructions; Up to 1000 ft (305 m) clear line of site (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 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 & -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 (HWD)		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

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
- **HH KIT** – Handheld Device with SUS installed and HH-USB cable
- **593PI-12DC** – 12 VDC power supply

Available through one of our GSA Schedule 84 approved distributors





GCK400 & ECK400

Wireless Gate Control Kits and 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 site. The PIM400-TD2 is hardwired to the access control panel where decisions are validated and recorded.

The GCK400 kit eliminates 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 eliminates the need for traveling cables to elevators applications simplifying installation. Access control can be applied to elevators at a much faster rate, reducing downtime and disruption within the facility.



Features and Benefits

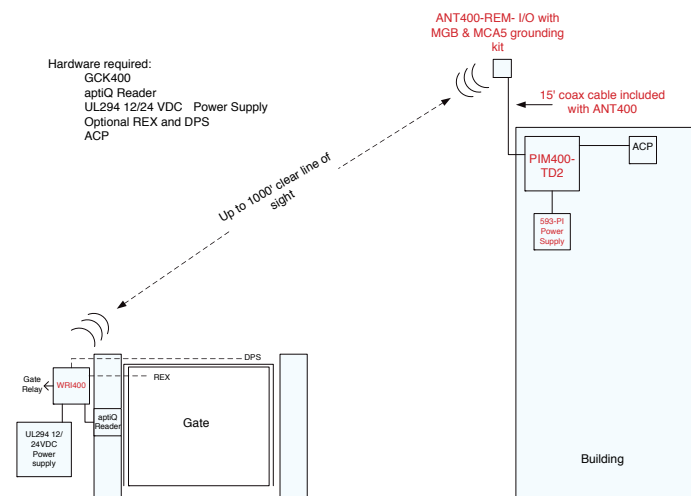
- Real time access control
- Reduced installation time
- Eliminates trenching to gates
- Eliminates traveling cables in elevators
- 2 reader inputs
- Supports all Wiegand (data1/data0) and magnetic stripe (clock/data) reader technologies

GCK400 Contents	
Qty	Description
1	ANT400-REM-I/O
1	WRI400
1	PIM400-TD2
1	593PI-12
1	MGB-MCA5

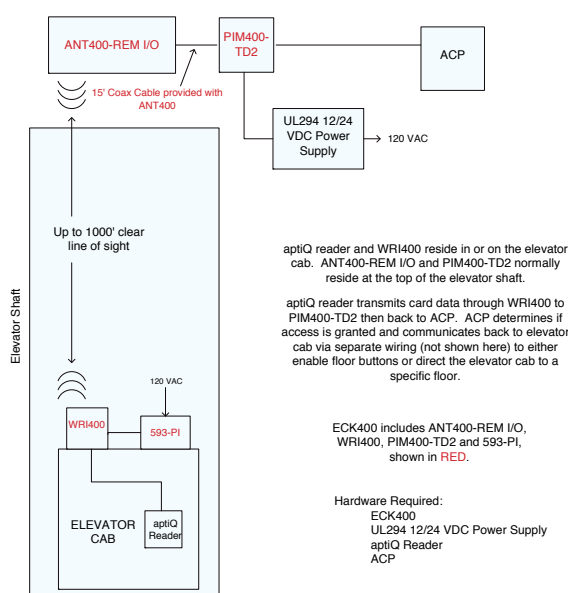
ECK400 Contents	
Qty	Description
1	ANT400-REM-I/O
1	WRI400
1	PIM400-TD2
1	593PI-12

PIM400 - TD2 Specification	
Frequency Range	902 - 928 MHz
Transmission / Encryption	AES - 128 Bit (optional)
Communication Range	Up to 200ft (61m) with obstructions
	Up to 1000ft (305m) clear line of sight
	Up to 2000ft (609m) line of site with high gain antenna on PIM400
	Up to 4000ft (1219m) line of site with high gain antennas on PIM400 and WRI400
Dimensions (HWD)	7.1" X 7.1" X 3.0" (18.0 cm X 18.0 cm X 7.6 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 (HWD)	10.43" X 7.28" X 3.79" (26.49cm X 18.49cm X 9.63cm)
Operating Temperatures	- 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):	8.7in x 6.94in x 4.5in (220mm x 176mm x 140mm)
Weight	4.2 oz. (120 grams)



GCK includes WRI400, PIM400-TD2, ANT-REM I/O, MGB + MCA5 and 593-PI and are shown in RED. Items not included are in Black. DPS and REX are optional.



ECK400 includes ANT400-REM I/O, WRI400, PIM400-TD2 and 593-PI, shown in RED.

Hardware Required:
ECK400
UL294 12/24 VDC Power Supply
aptIQ 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 - Directional, flat panel remote indoor/outdoor antenna with 6 DB gain.

MGB + MCA5 - Antenna Grounding Kit for Outdoor Applications

ANT400 - REM-I/O - Omni directional, Flat Panel, Remote Indoor/Outdoor Antenna with Adjustable Mount

Available through one of our GSA Schedule 84 approved distributors





ANT400-REM

AD-Series Remote Antennas for Wireless System

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 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 15ft 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.



Note: Images not to scale

Features and Benefits

- Use with PIM400, WRI400 and WSM400
- 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

Remote Antenna Models			
Model			Description
ANT400-REM-I/O	Type	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, 15ft coax cable, coax whip, articulated wall/post mounting bracket. <i>Requires Grounding Kit (MGB+MCA5) for outdoor installations.</i>
	Communication Range Extension	15ft due to cable length	
	Location	Indoor/Outdoor	
	Dimensions (HxWxD):	9.1" x 8.4" x 1.2"	
	Weight:	0.5kg	
	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, 15ft coax cable, coax whip, articulated wall/post mounting bracket. <i>Requires Grounding Kit (MGB+MCA5) for outdoor installations.</i>
	Range Extension	Up to x2 the original range without antenna (single direction), plus 15ft due to cable length	
	Location	Indoor/Outdoor	
	Dimensions (HxWxD):	9.1" x 8.4" x 1.2"	
	Weight:	0.5kg	
	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, 15ft coax cable, and coax whip.
	Communication Range Extension	15ft due to cable length	
	Location	Indoor	
	Dimensions (HxWxD):	3.5"(height) x 8.1"(diameter)	
	Weight:	0.22kg	
	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, 15ft coax cable, and coax whip.
	Communication Range Extension	15ft due to cable length	
	Location	Indoor	
	Dimensions (HxWxD):	7.2" x 3.9" x 4.9"	
	Weight:	0.24kg	
	Temperature Range:	-10° C to + 65°C (14° F to + 150° F)	

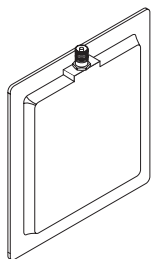
ACCESSORIES

MGB+MCA5 Grounding Kit

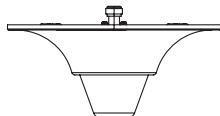
- The National Electrical Code (NEC) requires that any outdoor antenna be properly grounded.
- The Schlage remote antenna grounding kit is compatible with all models of remote antenna.

CERTIFICATION

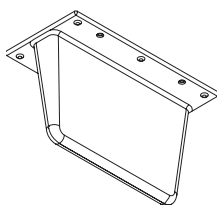
- FCC Part 15



ANT400-REM-IO
ANT400-REM-IO+6db



ANT400-REM-CEILING



ANT400-REM-HALL

ORDERING INFORMATION:

Available through one of our GSA Schedule 84 approved distributors

Note: These are the only remote antennas that have been approved by FCC for use with Ingersoll Rand AD-Series 900MHz Communication Modules. Any other antenna with an Ingersoll Rand AD-Series 900MHz Communication Modules would be in violation of FCC regulation.



RLBD

AD-Series Dry Contact Relay Board

Overview

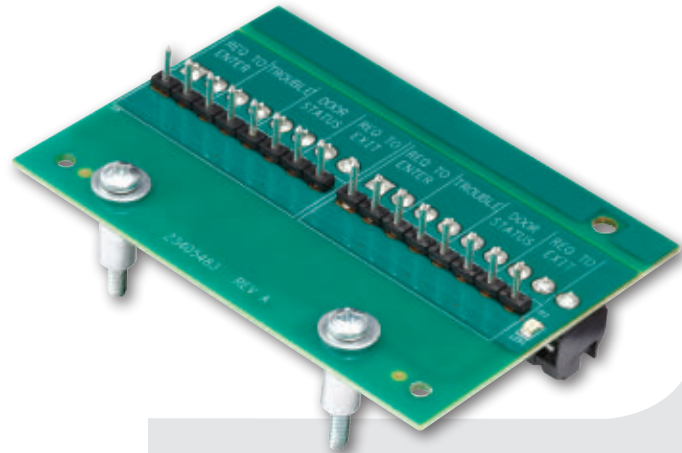
The Schlage AD-Series Relay Board (RLBD) supports the open architecture of AD-Series by building a bridge between Schlage technology and third party access control systems that use mechanical, relay-based communication.

The RLBD relay board is used to extend the existing access point status signals on PIM400-TD2 (for AD-400 applications) or PIB300-2D (for AD-300 applications) devices for each access point controlled by the Interface Module.

The optional RLBD relay board removes the need for custom 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 with access control systems that use signal based communication such as RS485 and Wiegand.

Note: The RLBD does not use mechanical relays which may have different electrical tolerances. Please consider RLBD electrical specifications when implementing this device with another system.



Features and Benefits

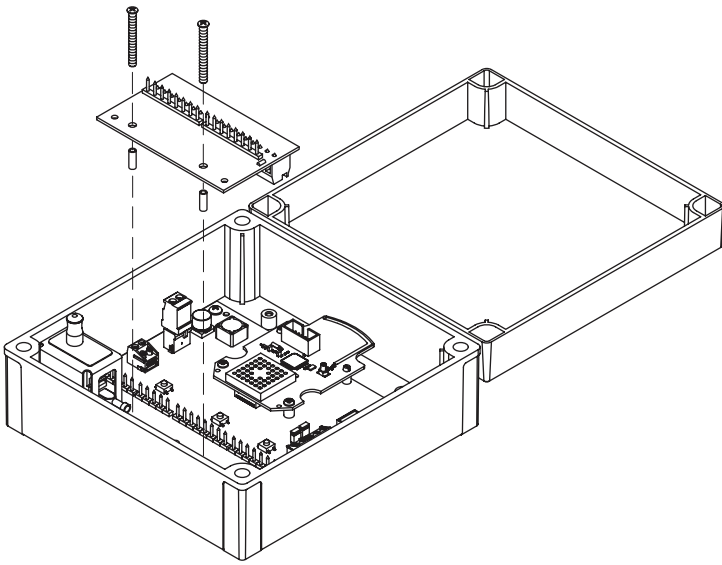
- Use with PIM400-TD2 or PIB300-2D
- Red LED light indicates power status
- Longer cycle lifetime than traditional mechanical-based relay solutions

Access Point Status Signals

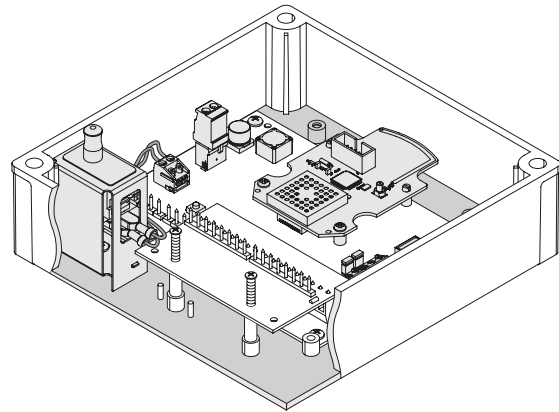
- Request-to-Enter
- Request-to-Exit
- Door Position/Status
- Tamper Switch

RLBD Specifications

Voltage Maximum (contact-to-contact)	28V
Input Current Maximum	400mA
"Open" State Resistance	5 mega-ohms
"Closed" State Resistance	2 ohms
Dimensions (HWD)	2.1" x 3.5" x 1.0" (5.33 cm x 8.89cm 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% condensing



Installation of RLBD in a PIM400-TD2



RLBD Installed in PIM400-TD2

ORDERING INFORMATION:

Available through one of our GSA Schedule 84 approved distributors





REPTR400

Wireless Repeater Kit



Networked Locking Solutions
REPTR400 Wireless Repeater

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. 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. The WRI400 gathers signals from around the door components and wirelessly transmits them back to the PIM400-TD2.

The REPTR400 extends the wireless range by receiving information on one radio frequency (RF) channel and retransmits it on another RF channel. Each REPTR400 can extend the wireless range of your access control system by up to 200 feet indoors or up to 1000 feet, line of site.

The use of multiple REPTR400's in series allows an indefinite expansion of the RF signal between the access control panel and the Schlage AD-Series Wireless Reader Interface of Schlage AD-400 electronic locks.

Use of the REPTR400 allows you to extend the reach of your access control system to remote locations without running wires, thus saving you time and money on installation.

For example, the REPTR400 can be used for gate applications. The PIM400 is located inside of a building up to 500 feet from the access control panel. A remote antenna (sold separately) can be wired into the PIM400 and installed on the exterior of the building. The REPTR400 can be installed at the gate up to 1000 feet away with a clear line of site, connecting the card reader and locking hardware to the WRI400. This solution eliminates the need for considerable trenching and the installation of an access control panel at the gate location, while giving the access control system real-time information at the remote gate.

Features and Benefits

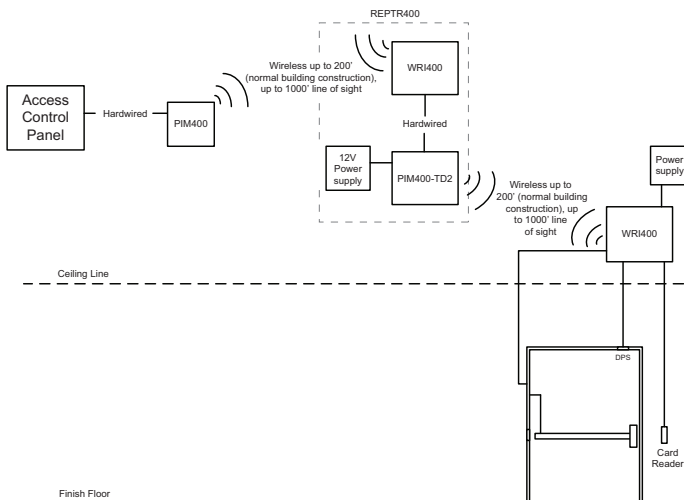
- Convenient kit includes the WRI400 & PIM400-TD2
- Extends the reach of your access control system to remote locations without running wires

WRI400

- 2 form C relay outputs –strike & auxiliary
- Each RF transmission is encrypted with AES-128 bit keys
- Reader Interfaces Support– Wiegand (data1/data 0) up to 255bits & Magnetic Stripe (clock & data) up to 255bits
- UL 294 certified

PIM400-TD2

- 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
- UL 294 certified



Note: There are many other applications that use different wireless access points; this is one example of how a REPTR400 can be used.

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 site
Operating Temperature	-31° to 151°F (-35° to 66°C)
Humidity	0 - 100% condensing
Power Supply	12 VDC or 24VDC (12 VDC power supply included)
Dimensions (HWD)	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	<ul style="list-style-type: none"> • NEMA 1, 4, 4X, 6 • UL 294 • FCC Part 15 • Industry Canada(IC) • RoHS

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*
Communication range		Up to 200 ft (61 m) normal building construction Up to 1000 ft (305 m) clear line of site (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 & -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 (HWD)		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

Available through one of our GSA Schedule 84 approved distributors.





Schlage Utility Software (SUS) on the Handheld Device (HHD)

Overview

Schlage Utility Software (SUS) is designed specifically for use on the Handheld Device (HHD) as the link between your access control management software and Schlage electronic offline and networked locks and accessories.

This solution consolidates and simplifies programming and managing your access control system. The SUS and HHD is used to initialize, configure and test product operation, and also provides an easy way to manage people, audits, locks and other network panel interface devices for simple access control. The intuitive screen layout for the SUS provides easy navigation during use.

For offline products the SUS is utilized to transfer access control data, such as authorized user lists, via the HHD to the locks. The SUS is also utilized to download audit trail information from offline devices to the HHD and then transfer that data to the access control management software.

In addition the SUS can configure other networked electronic devices (including PIM and PIB) and update firmware revision updates to the devices as desired.

The HHD connects with Schlage AD-Series electronic locks and accessories via a USB interface and utilizes Active Synch or Win Mobile Device Manager to communicate with your PC via the USB port. The HHD is also able to connect to the SPED, KC2, CM, CL, CT500, CT1000, CL Controller and WA-Series PIMs via a serial cable connection.



Features and Benefits

- Handheld Device with Schlage Utility Software installed
- Touch Screen operation
- Initialize Lock and Accessories with SUS
- Configure and Test Devices
- New device template simplifies configuration

FEATURES AND SPECIFICATIONS

Schlage Utility Software

- Initialize Lock and Accessories
- 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 & Diagnostics
 - Battery Status
 - Validate hardware and software revision
 - Troubleshooting Status Signals
 - Firmware Upgrades

HHD Specifications

- 3.5 in LCD display
- Touch Screen with Backlit Keypad
- 32-bit processor
- Operating System: Windows Mobile 5.0
- Memory: 128 MB RAM / 256 MB ROM
- Battery: Rechargeable 3.7 V, 1,230mAh, Li-ion
- Dimensions (HWD): 5.3" X 2.9" X 0.7"
(13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

How-To-Videos

- Specially formatted How-To-Videos for the HHD are available
- They can be downloaded from www.schlage.com/support
- If additional storage is needed, a standard mini SD memory card can be used
- Videos should be saved on the SD card or in a new folder on the device rather than in the shared sync folder or root directory

HHD Compatible Devices and Required Cable and Adaptors

Devices	Cable and Adaptors
AD-Series and CO-Series Locks PIM400, WRI400, ECK400, GCK400, WPR400, TK400 and CT5000 controller	HH-USB (included in HHD-Kit)
BE367, KC-2, CM, CL, CT500, CT1000, CL-Controller	HH-Serial + CIP
WA-Series PIM	HH-Serial + PIMWA-CV

ORDERING INFORMATION

HHD KIT – Handheld Device with SUS installed and HH-USB cable

HH-USB – USB Cable

HH-SERIAL – Serial Cable used to connect HHD to CIP

PIMWA-CV – Converter used to connect HH-SERIAL to WA-Series PIM

P512112 – CIP, utilized with HH-SERIAL to connect to CM, CL and KC-2 locks



Standalone Locking



This section of the Electronic Access Control catalog covers standalone locks, controllers and accessories including the AD-Series, CO-Series and CT5000.

Overview

Standalone access control solutions provide added security, convenience and efficiency for openings that do not require real-time monitoring. They allow you to reduce rekeying costs by issuing electronic credentials which can easily be added or deleted at any time. Audit trails tell you who requested access and when. You can also save time and money by setting automatic lock and unlock schedules for specific time zones and holidays.

Schlage AD-Series and CO-Series are the first electronic locks to achieve UL 294 certification which is the standard for safety of access control units. Both models feature a robust integrated design which incorporates many of the components typically found around the door including the lockset, credential reader and door position switch. They also offer a choice of chassis, credential reader, lever and finish options to meet the needs of a variety of applications and facilities.

The AD-Series:

Features

The AD-Series is a flexible, adaptable and scalable solution that provides you with an extended breadth of options as well as a migration path to future technologies. It is ideal for applications with more advanced security needs.

Two different classifications are offered in the AD-Series for standalone applications. The AD-200 is a computer managed system where user access rights are stored in the lock. Modifications to user access privileges as well as audits are transferred between the access control software and the lock with the handheld programming device (HHD).

The AD-250 is a computer managed system where user access rights are stored on magnetic stripe cards. The AD-250 is often used in campus-like environments with a large number of users and offline openings.

The AD-Series offers keypad, magnetic stripe, and multi-technology readers (reads both 125 kHz proximity and 13.56 MHz smart). All AD-Series card readers are all available with dual authentication for added security (card + PIN).

Benefits

The AD-Series can be customized to meet the specific needs of each opening in a facility with a wide variety of factory orderable and field configurable options. The innovative modular design of the AD-Series allows you to upgrade from standalone to networked if your needs change in the future. The AD-Series also allows you to upgrade credential readers, for example, from magnetic stripe to multi-technology.

Options*

The AD-Series has several options to choose from including:

Class: AD-200, AD-250 (For AD-300 and AD-400 Networked Options, see the Networked Locking Introduction pages of this catalog)

Chassis: Cylindrical, Mortise, Mortise Deadbolt, Exit Trim

Function*: Classroom/Storeroom, Office, Privacy, and Apartment

Readers*: Keypad, magnetic stripe and multi-technology readers (reads both 125 kHz proximity and 13.56 MHz smart). All card readers are available with + PIN option for added security.

Lever Style: Sparta, Rhodes, Athens, Tubular (Tactile warning available)

Finishes: 626 Satin Chrome, 605 Bright Brass, 606 Satin Brass, 612 Satin Bronze, 619 Satin Nickel, 625 Bright Chrome, 643e Aged Bronze, 626AM Satin Chrome with Antimicrobial

*Some options are dependent upon choice class and chassis; see price book for complete details

The CO-Series:**Features**

The CO-Series is a reliable, compatible 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-100 is a manually programmed keypad only lock which allows up to 500 unique PIN codes for user access. The CO-200 can be manually programmed or computer managed in which case user access rights are stored in the lock. Modifications to user access privileges as well as audits are transferred between the access control software to the lock with a handheld programming device (HHD). The CO-250 is a computer managed system where user access rights are stored on magnetic stripe cards.

The CO-250 is often used in campus-like environments with a large number of users and offline openings.

The CO-Series offers keypad, magnetic stripe and proximity readers (125 kHz); CO-Series readers are all available with dual authentication for added security (card + PIN). The CO-Series is an excellent choice if the needs of the facility are not expected to change in the future.

Benefits

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.

Options*

The CO-Series has several options to choose from including:

Class: CO-100, CO-200, CO-250

Chassis: Cylindrical, Mortise, Mortise Deadbolt, Exit Trim

Function*: Classroom/Storeroom, Office, and Privacy

Readers*: Keypad, magnetic stripe, proximity (125 kHz); all card readers are available with + PIN option for added security*.

Lever Style: Sparta, Rhodes, Athens, Tubular (Tactile warning available)

Finishes: 626 Satin Chrome, 605 Bright Brass, 606 Satin Brass, 612 Satin Bronze, 619 Satin Nickel, 625 Bright Chrome, 643e Aged Bronze, 626AM Satin Chrome with Antimicrobial

AD-Series & CO-Series Compatibility**Keyway/Cylinders:**

Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7 pin	FSIC 6 & 7 pin
Schlage	●		●	●
Falcon	▲	◆		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (includes Medeco 31 *0100 FSIC)			▲	▲
Best®				▲
● = with cylinder or less cylinder options ◆ = less cylinder, only with Sparta and Rhodes levers ▲ = less cylinder only Note: See pricebook for specific configurations.				

Exit Trim:

Compatibility	
Devices	AD-Series (AD-200 & AD-250) and CO-Series
Von Duprin 98/99 and 98/99XP Rim/SVR/CVR†/CVC†)/Mortise	X
Von Duprin 22/22F Rim/SVR	X
Falcon 25 Rim	X
Sargent 80 (Narrow design & reversible rim exits not compatible) Rim	X
Precision® 21 Rim (2100 converts to 21 with Precision's BP21 kit)	X
Yale 7000 Rim	X
Corbin Russwin 5000 Rim	X
Dorma® 9300 Rim	X

*Options may be limited by your choice of class.

†Metal door only

	CO-100	CO-200	CO-250	AD-200	AD-250
System Info	n/a	Consult with OEM Access Control System Provider for Specific Requirements			
Communication to/from Controller	n/a	Standalone: HHD is the link to the Access Control Software			
Device Capacity					
Number of Users	500	2000*	Unlimited*	5000*	Unlimited*
Number of Audits	n/a	2000*	4000*	5000*	10000*
Reader Options	n/a	Consult with OEM Access Control System Provider for Credential Format Compatibility			
Keypad Only	Yes	Yes	No	Yes	No
Magnetic Stripe Card	No		Yes		Yes
125 kHz Proximity Card		No	No	No	
Multi-Technology - 125 kHz proximity and 13.56 MHz smart			Yes		
PIV & PIV-I Card Compatible			Yes*†		
Card + PIN		Yes			
Status Monitors					
Request to Exit	No			Yes**	
Door Position Switch					
Interior Cover Tamper Guard					
Lock/Unlock Status Clutch Position					
Mechanical Key Override (ATK)	Yes				
Request to Enter	No				
Battery Status	Yes				
Battery Voltage Level	No			No	
Communication Status					
Remote Lockdown (from host)					
Remote Unlock (from host)					
Deadbolt Position					
Interior Push Button					
Chassis Options					
Cylindrical	Yes				
Mortise					
Mortise Deadbolt	No	Yes			
Exit Trim	Yes				
Functions	n/a	Consult with OEM Access Control Provider for Specific Support			
Classroom/Storeroom (70)	Yes				
Privacy (40)	No	Yes			
Office (50)	Yes				
Apartment (60)	No			Yes	
Accessories	n/a	Consult with OEM Access Control Provider for Specific Support			
HHD - Handheld Programming Device	No	Yes			

*Depending on your access control software

**Built in status signals available to enable migration to networked, not monitored in standalone application

† 75 bit output format default. Configurable to other output formats. Check with access control provider for specific support

Accessories:

A variety of accessories are available for use with AD-Series and CO-Series standalone locks including:

- The Schlage Utility Software (SUS) on the Handheld Programming Device (HHD) provides an easy way to retrieve audits and transfer information between your access control software and electronic locks.
- The combo proximity keyfobs with iButton® option is available which allows you to manage proximity and iButton® technologies in the same facility.
- Decorative plates are available for retrofit applications where the new lock does not completely cover the existing door prep

The CT5000 Offline Controller:**Features**

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.

Benefits

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.

THIS PAGE IS INTENTIONALLY BLANK.



AD-200

Standalone Electronic Lock

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 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 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.



Standalone Locking Solutions
AD-200 Standalone

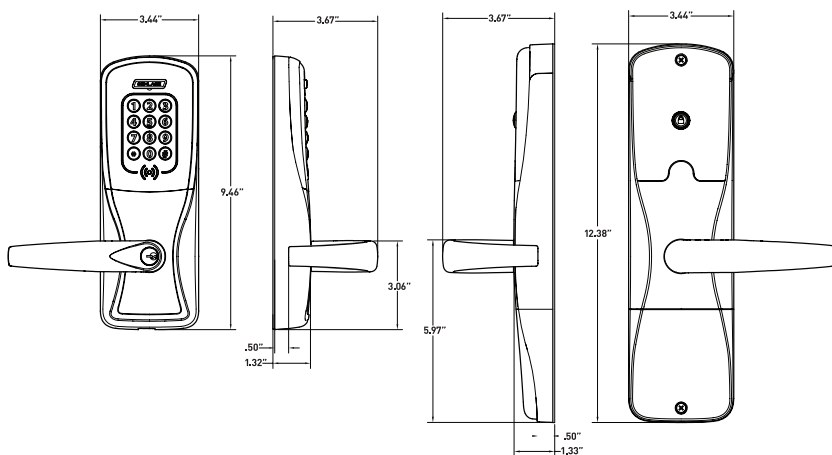
Features and Benefits

- 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 with deadbolt and exit trim
- Compatible with major brands of master key systems and exit devices
- Now available with Magnetic Swipe Reader
- AD-Series with multi-technology readers are NFC compatible
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS

AD-200 Electronic Lock Specifications	
Users	Up to 5,000
Audits	Up to 5,000
Credential Verification Time	≤ 1 second*
Visual/Audible Communications	Tri-colored LED's & audible indicators (field configurable)
System Interface	Handheld Device
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)
Operating Temperature - 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, UL10 C, FCC Part 15, ADA, RoHS
Accessories	Handheld Device (HHD)

* Verification time is dependent on size of user base

Dimensions



Schlage Utility Software on Handheld Device

The Schlage Utility Software (SUS) on the Handheld Device (HHD) 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 & Diagnostics
 - Battery Status
 - Validate hardware and software revision
 - Troubleshooting Status Signals
- New device template simplifies configuration

HHD

- 3.5 in LCD display
- Touch Screen/Keypad Backlit
- 32-bit processor
- OS: Windows Mobile 5.0
- Memory: 128 MB RAM/256 MB ROM
- Battery: Rechargeable 3.7 v, 1,230 mAh, Li-ion
- Dimensions: 5.3" x 2.9" x 0.7" (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs. (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

HHD is also compatible with CM, CL, VIP, WA and KC2 Series locks in a serial cable connection.

Functions

- ▶ Classroom/Storeroom
- ▶ Office
- ▶ Privacy
- ▶ Apartment

Note: Classroom/Storeroom and Office function not available with Mortise Deadbolt option. To ensure safety, all functions always allow for free egress.

Standard Status Signals

- ▶ Lock/Unlock Status
- ▶ Mechanical Key Override
- ▶ Battery Status



The HHD connects with AD-Series and CO-Series locks and accessories via the USB interface

Mechanical Specifications		
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)	
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only
Latch Bolt	1/2" throw security latch standard 3/4" throw optional	3/4" throw with anti-friction tongue standard 1" throw deadbolt on Mortise Deadbolt option*
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest 29 S123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

*Classroom/Storeroom and Office options not available with deadbolt.

AD-Series Exit Trim

The AD-Series Exit Trim (installed with a universal mounting plate) is compatible with the following exit devices:

Von Duprin 98/99 & 98/99XP*

Rim, Surface Vertical Rod, Mortise. Concealed Vertical Cable and Concealed Vertical Rod on metal doors only.

Von Duprin 22/22F*

Rim, Surface Vertical Rod

Falcon 25* - Rim

Sargent® 80† Series - Rim

Precision™ 21 Rim

2100 converts to 21 with Precision's BP21 kit

Corbin Russwin® 5000 Series - Rim

Yale® 7000 - Rim

Dorma® 9300 - Rim

* Request-to-Exit Switch optional for future network migration.

† Narrow design & reversible rim exits not compatible

Multi-Technology Reader Specification	
Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25" on 125 kHz proximity, up to 0.75" on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I*†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible XceedID Credentials	125 kHz Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (7000 Series)
13.56 MHz Compatible aptiQ™ Credentials	aptiQ™ smart cards using MIFARE® in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob and PVC Patch (9000 Series); aptiQ™ smart cards using MIFARE DESFire™ EV1 in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (8000 Series)
Certifications/Standards	FCC, UL 294, Listed, ISO Standard 15693, and ISO Standard 14443
Style/Layout	Option for 12 button, 3x4 matrix backlit keypad

† 75 bit output format default. Configurable to other output formats. Check with access control provider for specific support.

* Smart card functionality dependant on access control software.

Benefits of AD-Series Multi-Technology Readers:

- Reads both proximity (125 kHz) and smart (13.56 MHz) technologies with single device
- AD-Series multi-technology readers are NFC compatible
- Allows end user to migrate to more secure credentials over time and as budgets permit

Additional Readers

Magnetic Stripe

- Now available with choice of Insertion or Swipe style readers
- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- Option for 12 button, 3x4 matrix backlit keypad

Keypad

- Backlit keypad
- 12 button, 3x4 matrix

Available AD-Series Reader Modules



• Multi-Technology

- Proximity
- Smart Card

+ KEYPAD

• Multi-Technology

- Proximity
- Smart Card

• Magnetic Stripe (Insertion)

- + KEYPAD

• Magnetic Stripe (Insertion)

- + KEYPAD

• Magnetic Stripe (Swipe)

- + KEYPAD

• Magnetic Stripe (Swipe)

- + KEYPAD

• Keypad

Ordering Information

Available through one of our GSA Schedule 84 approved distributors, BAA options available

AD-200-CY-70-MG-SPA-626-PD-S123-RH-4B-13-049-10-025-1-3/4													
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Battery	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis		6 Lever		11 Battery	
CY	Cylindrical	SPA	Sparta	4B	4AA
MS	Mortise	RHO	Rhodes	8B	8AA
MD	Mortise Deadbolt	ATH	Athens	12 Backset & Latch or Armor Front	
993R	Exit Trim – Rim/CVR/CVC	TLR	Tubular	Cylindrical	
993S	Exit Trim – SVR	<i>Available with knurled surface</i>		13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"	
993M	Exit Trim – Mortise	7 Finish		Mortise	
993DT	Non-Functioning Dummy Trim for Exit	626 Satin Chrome		09-663 Armor Front, 1-1/4" Wide, Square Corner	
4 Function		605 Bright Brass		<i>See price book for mortise deadbolt and other backset and latch options or armor front options</i>	
70	Classroom/Storeroom	606 Satin Brass		13 Strike	
50	Office	612 Satin Bronze		Cylindrical	
40	Privacy	619 Satin Nickel		10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"	
60	Apartment	625 Bright Chrome		Mortise	
5 Reader		643e Aged Bronze		10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box	
KP	Keypad	626AM Satin Chrome Antimicrobial		<i>See price book for other available strikes</i>	
MG	Magnetic Stripe (Insertion)	8 Lever Cylinder Type		14 Door Thickness	
MGK	Magnetic Stripe + Keypad (Insertion)	PD Schlage 6-pin Full Cylinder		1-3/4"	
MS	Magnetic Stripe (Swipe)	<i>See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale</i>		Other thicknesses available between 1-3/8" and 2-3/4"	
MSK	Magnetic Stripe + Keypad (Swipe)	9 Keyway Type		<i>See price book for detail</i>	
MT	Multi-Technology	S123 Everest 29			
MTK	Multi-Technology + Keypad	<i>See price book for other available keyway options including master keying</i>			
DT	Dummy Trim Reader Cover	10 Handing			
		RH Right Handed			
		LH Left Handed			
		<i>Field reversible</i>			

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605 Bright Brass



606 Satin Brass



612 Satin Bronze



643e Aged Bronze

Cool tone finishes



619 Satin Nickel



625 Bright Chrome



626 Satin Chrome



626AM Satin Chrome with Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin, Falcon and aptiQ are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Inside PicoTag is a trademark of Inside Technologies. GE, CASI and ProxLite are trademarks of General Electric Corporation. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. Tag-It is a trademark of Texas Instruments. STMicroelectronics is a trademark of STMicroelectronics Inc. Infineon and my-d are trademarks of Infineon Technologies. AWID is a trademark of Applied Wireless Identifications Group. Sargent is a trademark of Sargent Manufacturing Company. Corbin Russwin is a trademark of Corbin Russwin, Inc. Yale is a trademark of Yale Security, Inc. Best and Precision are trademarks of Stanley Black & Decker. Dorma is a trademark of DORMA Door Controls, Inc. All other trademarks are the property of their respective owners.





AD-250

Standalone Electronic Lock

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 -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.



Features and Benefits

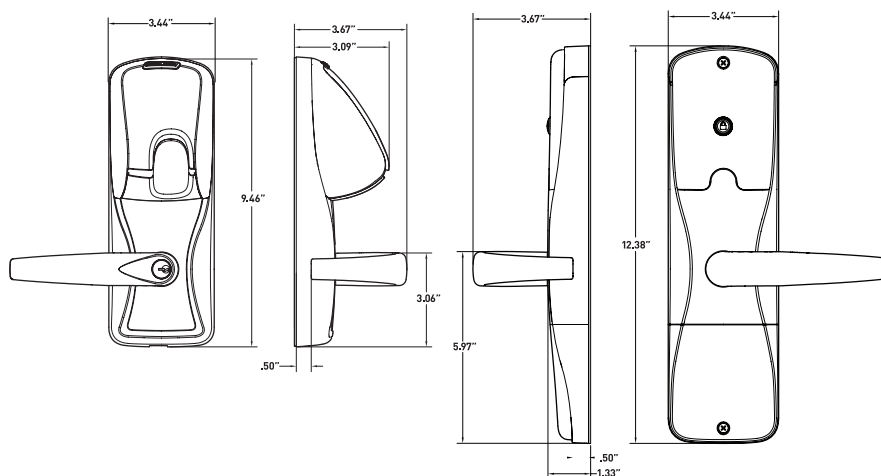
- Security that's more intelligent and convenient than traditional mechanical locking devices
- Audit trail reports that allow you to track usage
- Update users and access rights using credentials instead of having to visit each lock
- The ability to upgrade to a networked solution without removing the lock from the door
- Available in cylindrical, mortise, mortise with deadbolt and exit trim
- Compatible with major brands of master key systems and exit devices
- Now available with Magnetic Swipe Reader
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS

Standalone Locking Solutions
AD-250 Standalone

AD-250 Electronic Lock Specifications

Users	Unlimited, dependant on software
Audits	Up to 10,000
Credential Verification Time	≤ 1 second
Visual/Audible Communications	Tri-colored LED's & audible indicators (field configurable)
System Interface	Handheld Device
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)
Operating Temperature - 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, UL10 C, FCC Part 15, ADA, RoHS
Accessories	Handheld Device (HHD), Magnetic Stripe Credential Encoder (CL-Encoder 2)

Dimensions



Functions

- ▶ Classroom/Storeroom
- ▶ Office
- ▶ Privacy
- ▶ Apartment

Note: Classroom/Storeroom and Office function not available with Mortise Deadbolt option. To ensure safety, all functions always allow for free egress.

Standard Status Signals

- ▶ Lock/Unlock Status
- ▶ Mechanical Key Override
- ▶ Battery Status

AD-Series Exit Trim

The AD-Series Exit Trim (installed with a universal mounting plate) is compatible with the following exit devices:

Von Duprin 98/99 & 98/99XP*

Rim, Surface Vertical Rod, Mortise. Concealed Vertical Cable and Concealed Vertical Rod on metal doors only.

Von Duprin 22/22F*

Rim, Surface Vertical Rod

Falcon 25* - Rim

Sargent® 80' Series - Rim

Precision™ 21 Rim

2100 converts to 21 with Precision's BP21 kit

Corbin Russwin® 5000

Series - Rim

Yale® 7000 - Rim

Dorma® 9300 - Rim

* Request-to-Exit Switch optional for future network migration.

† Narrow design & reversible rim exits not compatible

Schlage Utility Software on Handheld Device

The Schlage Utility Software (SUS) on the Handheld Device (HHD) 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 & Diagnostics
 - Battery Status
 - Validate hardware and software revision
 - Troubleshooting Status Signals
- New device template simplifies configuration

HHD

- 3.5 in LCD display
- Touch Screen/Keypad Backlit
- 32-bit processor
- OS: Windows Mobile 5.0
- Memory: 128 MB RAM/256 MB ROM
- Battery: Rechargeable 3.7 v, 1,230 mAh, Li-ion
- Dimensions: 5.3" x 2.9" x 0.7" (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs. (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

HHD is also compatible with CM, CL, VIP, WA and KC2 Series locks via a serial cable connection.



The HHD connects with AD-Series and CO-Series locks and accessories via the USB interface

Mechanical Specifications		
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)	
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only
Latch Bolt	1/2" throw security latch standard 3/4" throw optional	3/4" throw with anti-friction tongue standard 1" throw deadbolt on Mortise Deadbolt option*
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available
Cylinder & Keys	Schlage 6-pin Everest 29 S123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands	

*Classroom/Storeroom and Office options not available with deadbolt.

Reader Specifications and Modules



Magnetic Stripe (Swipe)

+ KEYPAD



Magnetic Stripe (Swipe)



Magnetic Stripe (Insertion)

+ KEYPAD



Magnetic Stripe (Insertion)

- 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

- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard

Ordering Information

Available through one of our GSA Schedule 84 approved distributors, BAA options available

AD-250-CY-70-MG-SPA-626-PD-S123-RH-4B-13-049-10-025-1-3/4													
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Battery	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis		7 Finish		11 Battery	
CY	Cylindrical	626	Satin Chrome	4B	4AA
MS	Mortise	605	Bright Brass	8B	8AA
MD	Mortise Deadbolt	606	Satin Brass	12 Backset & Latch or Armor Front	
993R	Exit Trim – Rim/CVR/CVC	612	Satin Bronze	Cylindrical	
993S	Exit Trim – SVR	619	Satin Nickel	13-049 2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"	
993M	Exit Trim – Mortise	625	Bright Chrome	Mortise	
993DT	Non-Functioning Dummy Trim for Exit	643e	Aged Bronze	09-663 Armor Front, 1-1/4" Wide, Square Corner	
4 Function		626AM	Satin Chrome Antimicrobial	See price book for mortise deadbolt and other backset and latch options or armor front options	
70	Classroom/Storeroom	8 Lever Cylinder Type		13 Strike	
50	Office	PD Schlage 6-pin Full Cylinder		Cylindrical	
40	Privacy	See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale		10-025 1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"	
60	Apartment	9 Keyway Type		Mortise	
5 Reader		S123 Everest 29		10-072 1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box	
MG	Magnetic Stripe (Insertion)	See price book for other available keyway options including master keying		See price book for other available strikes	
MGK	Magnetic Stripe + Keypad (Insertion)	10 Handing		14 Door Thickness	
MS	Magnetic Stripe (Swipe)	RH Right Handed		1-3/4"	
MSK	Magnetic Stripe + Keypad (Swipe)	LH Left Handed		Other thicknesses available between 1-3/8" and 2-3/4"	
DT	Dummy Trim	Field reversible		See price book for detail.	
6 Lever					
SPA	Sparta				
RHO	Rhodes				
ATH	Athens				
TLR	Tubular				
Available with knurled surface					

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



643e
Aged Bronze

Cool tone finishes



619
Satin Nickel



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome with Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, Von Duprin and Falcon are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Sargent is a trademark of Sargent Manufacturing Company. Corbin Russwin is a trademark of Corbin Russwin, Inc. Yale is a trademark of Yale Security, Inc. Best and Precision are trademarks of Stanley Black & Decker. Dorma is a trademark of DORMA Door Controls, Inc. All other trademarks are the property of their respective owners.





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 Cable or Concealed Vertical Rod (CVC and CVR for metal doors only)
- 993S – Surface Vertical Rod
- 993M – Mortise

Compatibility			
Devices	AD-200/250	AD-300/301	AD-400/401
Von Duprin 98/99 and 98/99XP Rim/SVR/CVR* / CVC*/Mortise	X	X	X
Von Duprin 22/22F Rim/SVR	X	X	X
Falcon 25 Rim	X	X	X
Sargent® 80† Rim	X		
Precision™ 21 Rim (2100 converts to 21 with Precision's BP21 kit)	X		
Yale® 7000 Rim	X		
Corbin Russwin® 5000 Rim	X		
Dorma® 9300 Rim	X		

* For metal doors only

† Narrow design & reversible rim exits not compatible

The proper low current request to exit switch (RX-LC) is required for AD-300/301 and AD-400/401.

Part Numbers for Request to Exit Switch:

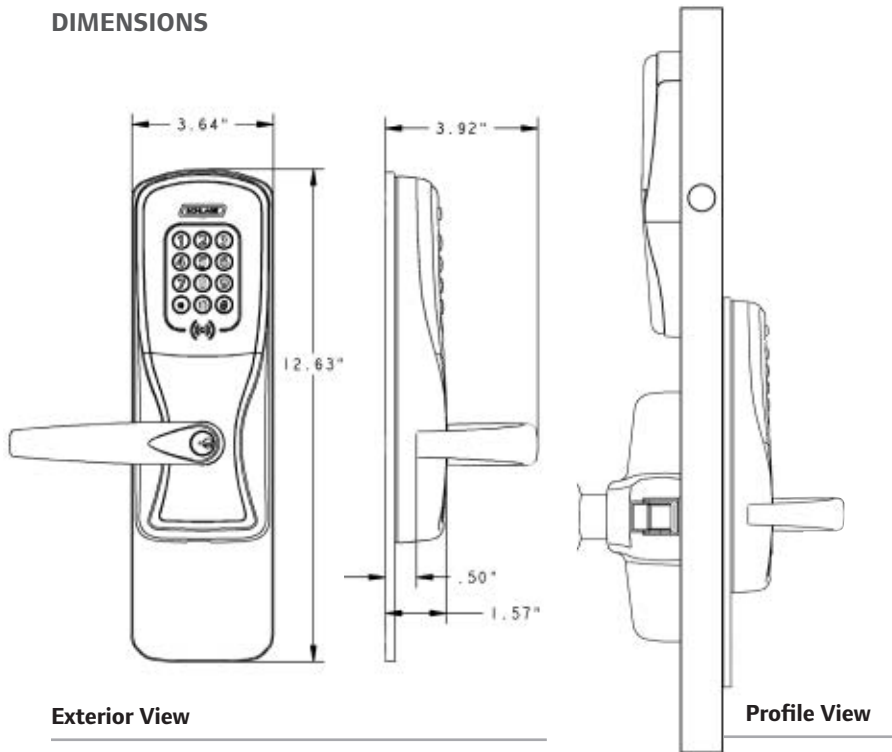
- Von Duprin: 050281
- Falcon: 650359



Features and 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 most Standard, FSIC or SFIC keyways from major brands of master key systems including Schlage, Sargent®, Corbin®, Medeco® and Yale®

DIMENSIONS



Exterior View

Profile View

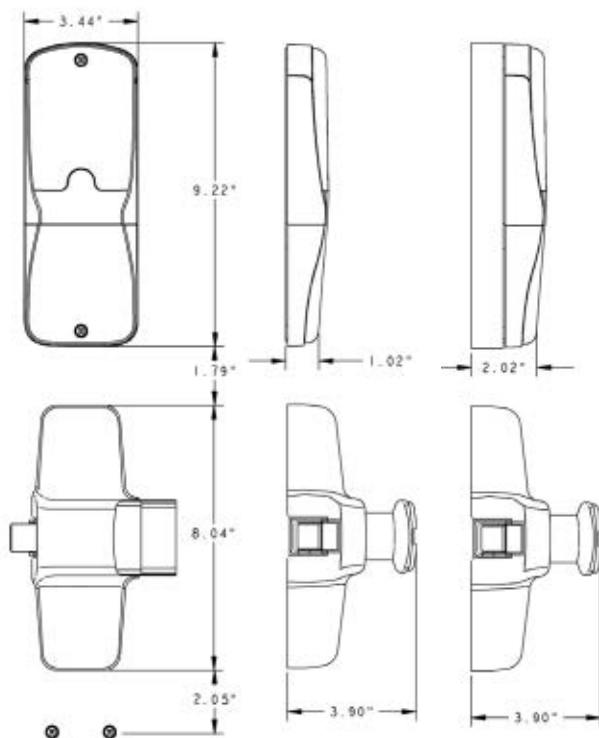
AD-Series - 993 Exit Trim

Available AD-Series Reader Modules

- Multi-Technology (125 kHz proximity and 13.56 MHz smart card)
 - FIPS 201-1 Compliant Multi-Technology (125 kHz proximity and 13.56 MHz smart card) sold complete with AD-301 and AD-401 only
 - Magnetic Stripe
 - Keypad Only
 - All credential readers available + Keypad
- * unlike other AD-Series chassis styles, upgrading reader modules on the 993 Exit Trim requires the exterior escutcheon to be removed from the door

Available Communication Options

- AD-400: Networked Wireless Locks
- AD-401: Networked Wireless Locks - FIPS 201-1 compliant
- AD-300: Networked Hardwired Locks
- AD-301: Networked Hardwired Locks - FIPS 201-1 compliant
- AD-250: Offline, access rights stored on the magnetic stripe credential
- AD-200: Offline, access rights stored on the lock



Interior View

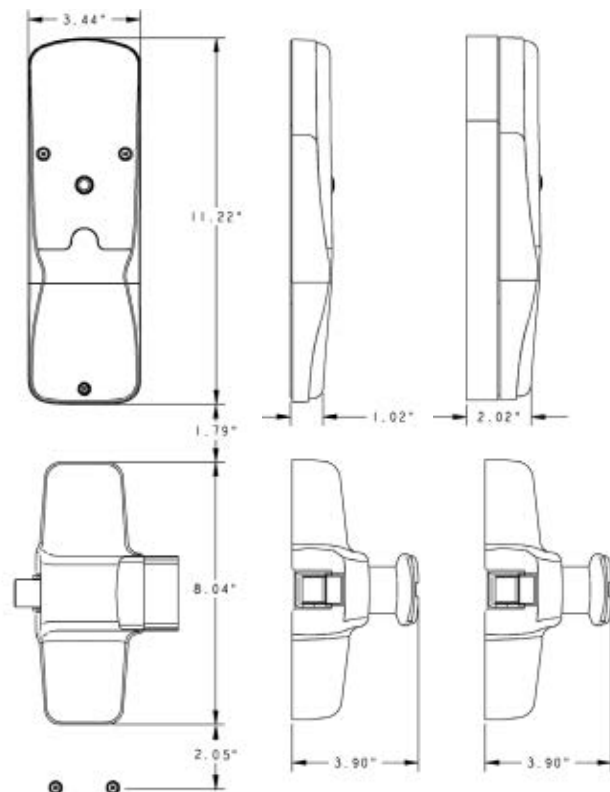
Side View

Side View

AD-200/250/300*/301*
- all styles

AD-200/250/300*/
301* - RIM/CVR/CVC
or Mortise

AD-200/250/300*/
301* SVR



Interior View

Side View

Side View

AD-400/401
all styles

AD-400/401
RIM/CVR/CVC
or Mortise

AD-400/401
SVR

* AD-300/301 includes LED indicator

Note: (2) #7 fasteners with decorative washers located 11.88" below bottom edge of lock

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, Von Duprin and Falcon are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Sargent is a trademark of Sargent Manufacturing Company. Precision is a trademark of Stanley Black & Decker. Yale is a trademark of Yale Security, Inc. Corbin Russwin is a trademark of Corbin Russwin, Inc. Dorma is a trademark of DORMA Door Controls, Inc. All other trademarks are the property of their respective owners.



CO-100

Standalone Electronic Lock

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-100 is a standalone lock that is manually programmable. User rights for the CO-100 are stored on the lock. Unique PIN codes can be 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 offers you many choices. Cylindrical, mortise, 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 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.



Images shown are not to scale.

Features and Benefits

- Manually Programmable
- Up to 500 unique 3-6 digit PIN codes stored on the lock
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 listed
- Classroom/Storeroom function and Office function available
- Chassis options include cylindrical, mortise, and exit trim
- Compatible with most major brands of key systems and exit devices
- Normal, toggle, pass through, and freeze credential attributes available

Standalone Locking Solutions
CO-100 Standalone

Specifications

CO-100 Electronic Lock Specifications	
Users	500
Credential Verification Time (Keypad Only)	≤ 1 second
Visual/Audible Communications	Tri-colored LED's & 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)
Operating Temperature - Interior	32° to 120°F (0° to 49°C) due to battery
Operating Humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL 10 C, FCC Part 15, ADA and RoHS

Functions

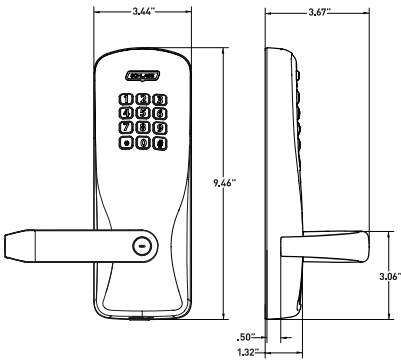
- ▶ Classroom/Storeroom
- ▶ Office

Standard Status Signals

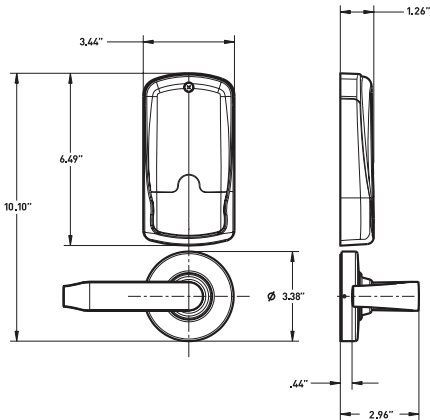
- ▶ Battery Status - indicated by blinking lights

Dimensions

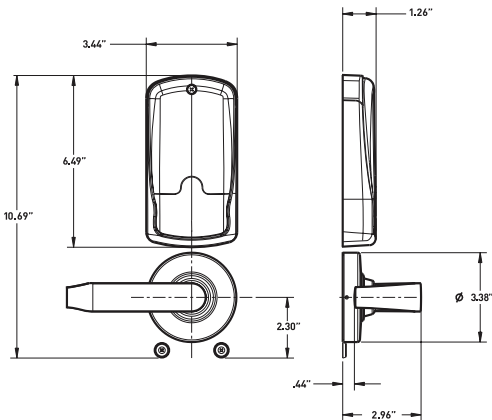
Exterior of the Lock



Interior of the Lock
Cylindrical



Mortise



Manually Programmable Options	
Credential Type	Function
Programming*	Used to enable programming of the lock. Does not unlock the lock.
Normal Use*	Unlocks the lock momentarily when in a normally secured state.
Toggle*	Changes the state of the lock unless in Freeze state.
Freeze*	Maintains the lock in current state until Freeze PIN is entered again.
Pass-through*	Unlocks a lock momentarily, regardless of state.

*Credentials can be 3-6 digits in length.

Mechanical Specifications		
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)	
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only
Latch Bolt	1/2" throw security latch standard 3/4" throw optional	3/4" throw with anti-friction tongue standard
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available

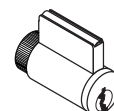
Compatibility

Exit Device Compatibility		Rim	SVR	CVR/CVC	Mortise
Von Duprin	98/99 and 98/99 XP	✓	✓	✓*	✓
Von Duprin	22/22F	✓	✓		
Falcon	25	✓			
Corbin Russwin®	5000	✓			
Precision™ 21 Rim 2100 converts to 21 with Precision's BP21 kit		✓			
Yale®	7000	✓			
Dorma®	9300	✓			
Sargent®	80†	✓			

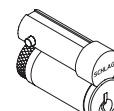
* Metal door only

† Narrow design & reversible rim exits not compatible

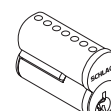
Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7pin	SFIC 6 & 7pin
Schlage	●		●	●
Falcon	▲	◆		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (also includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲
● = with cylinder or less cylinder options ◆ = less cylinder, only with Sparta and Rhodes levers ▲ = less cylinder only Note: See pricebook for specific configurations.				



Full Cylinder



Full Size
Interchangeable Core



Small Format
Interchangeable Core

Ordering Information

Available through one of our GSA Schedule 84 approved distributors

Required Fields								Factory Defaults & Options				
CO - 100 - CY - 70 - KP - SPA - 626 - PD - S123 - RH - 13-049 - 10-025 - 1-3/4												
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis		7 Finish		11 Backset & Latch or Armor Front	
CY	Cylindrical	626	Satin Chrome	Cylindrical	
MS	Mortise	605	Bright Brass	13-049	2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"
993R	Exit Trim – Rim/CVR/CVC	606	Satin Brass	Mortise	
993S	Exit Trim – SVR	612	Satin Bronze	09-663	Armor Front, 1-1/4" Wide, Square Corner
993M	Exit Trim – Mortise	619	Satin Nickel	12 Strike	
993DT	Exit Dummy Trim	625	Bright Chrome	Cylindrical	
4 Function		643e	Aged Bronze	10-025	1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"
70	Classroom/Storeroom	626AM	Satin Chrome Antimicrobial	Mortise	
50	Office	8 Lever Cylinder Type		10-072	1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box
5 Reader		PD Schlage 6-pin Full Cylinder		<i>See price book for other available strikes</i>	
KP	Keypad	9 Keyway Type		13 Door Thickness	
6 Lever		S123 Everest 29		1-3/4"	
SPA	Sparta	<i>See price book for other available keyway options including master keying</i>		Other thicknesses available between 1-3/8" and 2-3/4"	
RHO	Rhodes	10 Handing		<i>See price book for details</i>	
ATH	Athens	RH Right Handed			
TLR	Tubular	RHR Right Handed Reverse			
<i>Available with knurled surface</i>		LH Left Handed			
		LHR Left Handed Reverse			
		RV Right Hand/Left Hand Reverse			
		Vertical Lever			
		LV Left Hand/Right Hand Reverse			
		Vertical Lever			
		<i>Field reversible</i>			

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



643e
Aged Bronze

Cool tone finishes



619
Satin Nickel



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin and Falcon are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Sargent is a trademark of Sargent Manufacturing Company. Corbin Russwin is a trademark of Corbin Russwin, Inc. Yale is a trademark of Yale Security, Inc. Best and Precision are trademarks of Stanley Black & Decker. Dorma is a trademark of DORMA Door Controls, Inc. All other trademarks are the property of their respective owners.





CO-200

Standalone Electronic Lock

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 Handheld Device (HHD) used in conjunction with your access control software, 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, magnetic stripe, and proximity. The magnetic stripe and proximity readers are also available with keypad for the added security of 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.



Images shown are not to scale.

Features and Benefits

- Computer programmable with audit trail
- Up to 2000 users & up to 2000 audits*
- Up to 32 holidays & 16 time zones*
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 listed
- 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

*Depending on access control software.

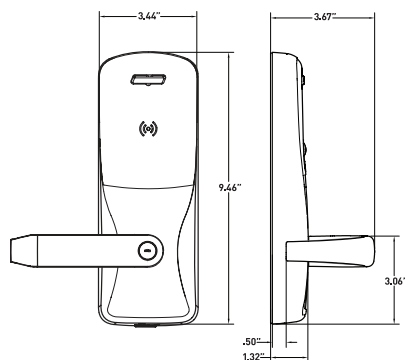
Specifications

CO-200 Electronic Lock Specifications	
Users	Up to 2,000*
Audits	Up to 2,000*
Credential Verification Time	≤ 1 second
Visual/Audible Communications	Tri-colored LED's & audible indicators
Power Supply	4 AA batteries (standard off the shelf: included)
Voltage Range	4 VDC to 7 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)
Operating Temperature - 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, UL 10 C, FCC Part 15, ADA and RoHS

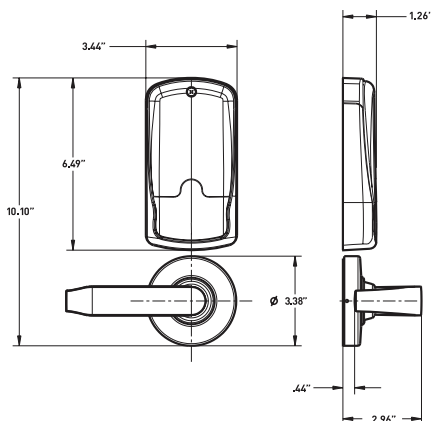
*Depending on access control software.

Dimensions

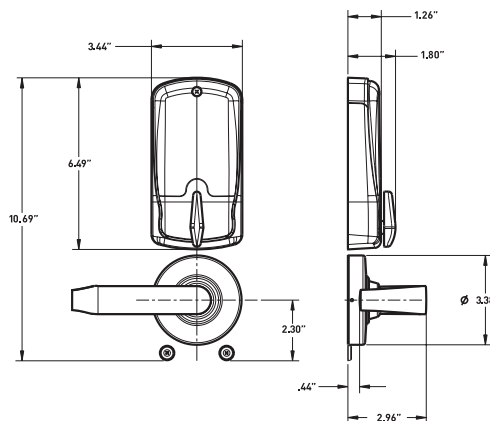
Exterior of the Lock



Interior of the Lock
Cylindrical



Mortise Deadbolt



Functions

- ▶ Classroom/Storeroom
- ▶ Office
- ▶ Privacy*

Note: Classroom/Storeroom and Office function not available with Mortise Deadbolt option. To ensure safety, all functions always allow for free egress.

*Door position switch is required for cylindrical and mortise chassis with privacy function.

Standard Status Signals

- ▶ Mechanical Key Override
- ▶ Battery Status - indicated by blinking lights

Schlage Utility Software on Handheld Device

The Schlage Utility Software (SUS) on the Handheld Device (HHD), in conjunction with your access control software, 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 & Diagnostics
 - Battery Status
 - Validate hardware and software revision
 - Troubleshooting Status Signals
- New device template simplifies configuration

HHD is also compatible with CM, CL, VIP, WA, and KC2 series locks via a serial cable connection.

HHD

- 3.5 in LCD display
- Touch Screen/Keypad Backlit
- 32-bit processor
- OS: Windows Mobile 5.0
- Memory: 128 MB RAM/256 MB ROM
- Battery: Rechargeable 3.7 v, 1,230 mAh, Li-ion
- Dimensions: 5.3" x 2.9" x 0.7" (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs. (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

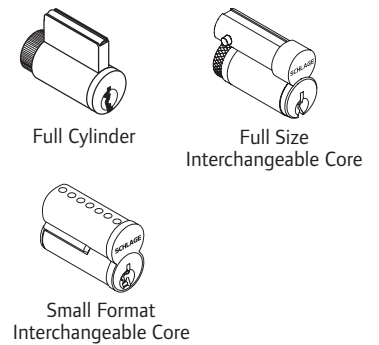


The HHD connects with CO-Series and AD-Series locks and accessories via the USB interface

Mechanical Specifications		
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)	
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only
Latch Bolt	1/2" throw security latch standard 3/4" throw optional	3/4" throw with anti-friction tongue standard 1" throw deadbolt on Mortise Deadbolt option
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available

Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7 pin	SFIC 6 & 7 pin
Schlage	●		●	●
Falcon	▲	◆		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (also includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options
 ▲ = less cylinder only
 ◆ = less cylinder, only with Sparta and Rhodes levers
 Note: See pricebook for specific configurations.



Reader Specifications			
	Keypad	Magnetic Stripe	Proximity
Frequency Standards	N/A	ABA, ISO76XX Standard High & Low Coercivity	125 kHz
Maximum Read Range	N/A	N/A (Swipe card)	up to 1.25"
Compatibility	3-6 digit pin code	Triple Track Reader (1, 2 or 3), field configurable	Schlage, XceedID®, HID®, GE/CASI ProxLite™ and AWID®
Compatible XceedID/Schlage Credentials	N/A	Configurable to read complete track 1, 2 or 3	125 kHz Clamshell, ISO Card, ISO Card with Magnetic Stripe, Keyfob, and PVC Disk (7000 Series)
Style/Layout	12-button, 3x4 matrix	Option for 12-button, 3x4 matrix	Option for 12-button, 3x4 matrix

The combo proximity keyfobs with iButton® option are available which allows you to manage proximity and iButton® technologies in the same facility.



Available CO-200 Reader Options



• Keypad



• Proximity
+ KEYPAD



• Proximity



• Magnetic Stripe



• Magnetic Stripe
+ KEYPAD

Ordering Information

Available through one of our GSA Schedule 84 approved distributors

Required Fields								Factory Defaults & Options				
CO-200-CY-70-PR-SPA-626-PD-S123-RH-13-049-10-025-1-3/4												
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis		7 Finish		11 Backset & Latch or Armor Front	
CY	Cylindrical	626	Satin Chrome	Cylindrical	
MS	Mortise	605	Bright Brass	13-049	2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"
MD	Mortise Deadbolt	606	Satin Brass	Mortise	
993R	Exit Trim – Rim/CVR/CVC	612	Satin Bronze	09-663	Armor Front, 1-1/4" Wide, Square Corner
993S	Exit Trim – SVR	619	Satin Nickel	<i>See price book for mortise deadbolt and other backset and latch options or armor front options</i>	
993M	Exit Trim – Mortise	625	Bright Chrome	12 Strike	
993DT	Exit Dummy Trim	643e	Aged Bronze	Cylindrical	
		626AM	Satin Chrome Antimicrobial	10-025	1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"
4 Function		8 Lever Cylinder Type		Mortise	
70	Classroom/Storeroom	PD	Schlage 6-pin Full Cylinder	10-072	1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box
50	Office	<i>See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale</i>		<i>See price book for other available strikes</i>	
40	Privacy	9 Keyway Type		13 Door Thickness	
5 Reader		S123 Everest 29		1-3/4"	
KP	Keypad	<i>See price book for other available keyway options including master keying</i>		Other thicknesses available between 1-3/8" and 2-3/4"	
MS	Magnetic Stripe	10 Handing		<i>See price book for detail</i>	
MSK	Magnetic Stripe + Keypad	RH	Right Handed		
PR	Proximity	RHR	Right Handed Reverse		
PRK	Proximity + Keypad	LH	Left Handed		
6 Lever		LHR	Left Handed Reverse		
SPA	Sparta	RV	Right Hand/Left Hand Reverse Vertical Lever		
RHO	Rhodes	LV	Left Hand/Right Hand Reverse Vertical Lever		
ATH	Athens	<i>Field reversible</i>			
TLR	Tubular				
<i>Available with knurled surface</i>					

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



643e
Aged Bronze

Cool tone finishes



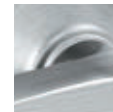
619
Satin Nickel



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin and Falcon are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Sargent is a trademark of Sargent Manufacturing Company. Corbin Russwin is a trademark of Corbin Russwin, Inc. Yale is a trademark of Yale Security, Inc. Best and Precision are trademarks of Stanley Black & Decker. Dorma is a trademark of DORMA Door Controls, Inc. All other trademarks are the property of their respective owners.





CO-250

Standalone Electronic Lock

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-250 is a computer programmable offline lock that stores user rights on the magnetic stripe credential, and captures an audit trail in the lock. The CO-250 provides dynamic rights management, meaning you do not have to visit the door to change user access rights. This makes it a cost effective solution for offline environments with a large number of users. The CO-250 also allows you to retrieve audits by using the Handheld Device (HHD) in conjunction with your access control software.

The CO-250 from Schlage offers you many choices. 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 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.



Images shown are not to scale.

Features and Benefits

- Computer programmable with audit trail
- Unlimited number of users and up to 4000 audits*
- Available with Magnetic Stripe and Magnetic Stripe plus Keypad
- Up to 32 holidays & 16 time zones*
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified and UL 294 listed
- User rights stored on the magnetic stripe credential
- The ability to easily add and delete users
- 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

*Depending on access control software.

Standalone Locking Solutions
CO-250 Standalone

Specifications

CO-250 Electronic Lock Specifications	
Users	Unlimited*
Audits	Up to 4,000*
Credential Verification Time	≤ 1 second
Visual/Audible Communications	Tri-colored LED's & audible indicators
System Interface	Handheld Device
Power Supply	4 AA batteries
Battery Life	Up to 2 yrs with 4 AA batteries
Operating Temperature - Exterior	-31° to 151°F (-35° to 66°C)
Operating Temperature - 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, UL 10 C, FCC Part 15, ADA and ROHS
Accessories	Handheld Device (HHD), Magnetic Stripe Credential Encoder (CL-Encoder 2)

*Depending on access control software.

Functions

- ▶ Classroom/Storeroom
- ▶ Office
- ▶ Privacy*

Note: Classroom/Storeroom and Office function not available with Mortise Deadbolt option. To ensure safety, all functions always allow for free egress.

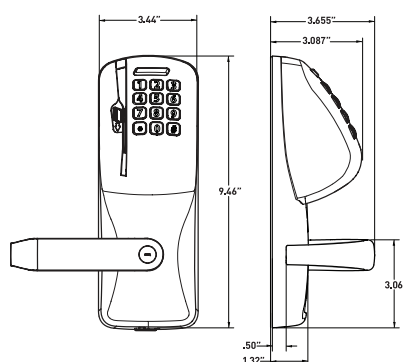
*Door position switch is required for cylindrical and mortise chassis with privacy function.

Standard Status Signals

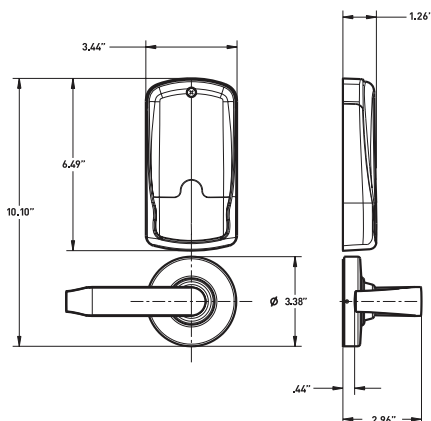
- ▶ Mechanical Key Override
- ▶ Battery Status

Dimensions

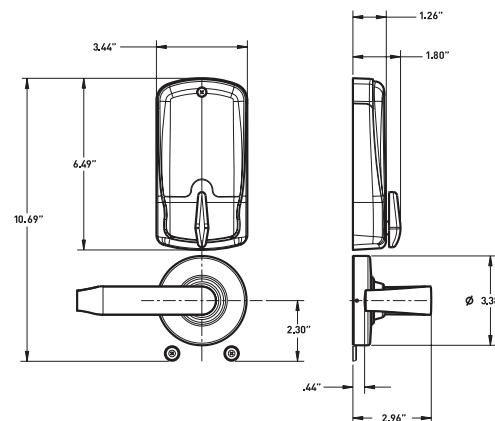
Exterior of the Lock



Interior of the Lock
Cylindrical



Mortise Deadbolt



Schlage Utility Software on Handheld Device

The Schlage Utility Software (SUS) on the Handheld Device (HHD), in conjunction with your access control software, 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 & Diagnostics
 - Battery Status
 - Validate hardware and software revision
 - Troubleshooting Status Signals
- New device template simplifies configuration

HHD

- 3.5 in LCD display
- Touch Screen/Keypad Backlit
- 32-bit processor
- OS: Windows Mobile 5.0
- Memory: 128 MB RAM/256 MB ROM
- Battery: Rechargeable 3.7 v, 1,230 mAh, Li-ion
- Dimensions: 5.3" x 2.9" x 0.7" (13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs. (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides



The HHD connects with CO-Series and AD-Series locks and accessories via the USB interface

HHD is also compatible with CM, CL, VIP, WA, and KC2 series locks via a serial cable connection.

Mechanical Specifications		
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)
Handing	Handed to Order, Field Reversible	
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)	
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only
Latch Bolt	1/2" throw security latch standard 3/4" throw optional	3/4" throw with anti-friction tongue standard 1" throw deadbolt on Mortise Deadbolt option
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available

Compatibility

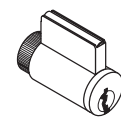
Exit Device Compatibility	Rim	SVR	CVR/CVC	Mortise
Von Duprin 98/99 and 98/99 XP	✓	✓	✓*	✓
Von Duprin 22/22F	✓	✓		
Falcon 25	✓			
Corbin Russwin® 5000	✓			
Precision™ 21 Rim 2100 converts to 21 with Precision's BP21 kit	✓			
Yale® 7000	✓			
Dorma® 9300	✓			
Sargent® 80†	✓			

* Metal door only

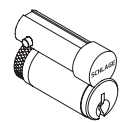
† Narrow design & reversible rim exits not compatible

Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7pin	SFIC 6 & 7pin
Schlage	●		●	●
Falcon	▲	◆		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

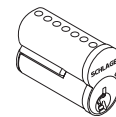
● = with cylinder or less cylinder options ▲ = less cylinder only
 ◆ = less cylinder, only with Sparta and Rhodes levers Note: See pricebook for specific configurations.



Full Cylinder



Full Size Interchangeable Core



Small Format Interchangeable Core

Reader Specifications



Magnetic Stripe

+ KEYPAD

- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- 12 button, 3x4 matrix keypad



Magnetic Stripe

- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard

Ordering Information

Available through one of our GSA Schedule 84 approved distributors

Required Fields							Factory Defaults & Options					
CO-250-CY-70-MS-SPA-626-PD-S123-RH-13-049-10-025-1-3/4												
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis		7 Finish		11 Backset & Latch or Armor Front	
CY	Cylindrical	626	Satin Chrome	Cylindrical	
MS	Mortise	605	Bright Brass	13-049	2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"
MD	Mortise Deadbolt	606	Satin Brass	Mortise	
993R	Exit Trim – Rim/CVR/CVC	612	Satin Bronze	09-663	Armor Front, 1-1/4" Wide, Square Corner
993S	Exit Trim – SVR	619	Satin Nickel	<i>See price book for mortise deadbolt and other backset and latch options or armor front options</i>	
993M	Exit Trim – Mortise	625	Bright Chrome		
993DT	Exit Dummy Trim	643e	Aged Bronze		
		626AM	Satin Chrome Antimicrobial		
4 Function		8 Lever Cylinder Type		12 Strike	
70	Classroom/Storeroom	PD	Schlage 6-pin Full Cylinder	Cylindrical	
50	Office	<i>See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale</i>		10-025	1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"
40	Privacy			Mortise	
5 Reader		9 Keyway Type		10-072	1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box
MS	Magnetic Stripe	S123	Everest 29	<i>See price book for other available strikes</i>	
MSK	Magnetic Stripe + Keypad	<i>See price book for other available keyway options including master keying</i>			
6 Lever		10 Handing		13 Door Thickness	
SPA	Sparta	RH	Right Handed	1-3/4"	
RHO	Rhodes	RHR	Right Handed Reverse	Other thicknesses available between 1-3/8" and 2-3/4"	
ATH	Athens	LH	Left Handed	<i>See price book for detail.</i>	
TLR	Tubular	LHR	Left Handed Reverse		
<i>Available with knurled surface</i>		RV	Right Hand/Left Hand Reverse Vertical Lever		
		LV	Left Hand/Right Hand Reverse Vertical Lever		
		<i>Field reversible</i>			

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



643e
Aged Bronze

Cool tone finishes



619
Satin Nickel



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin and Falcon are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Sargent is a trademark of Sargent Manufacturing Company. Corbin Russwin is a trademark of Corbin Russwin, Inc. Yale is a trademark of Yale Security, Inc. Best and Precision are trademarks of Stanley Black & Decker. Dorma is a trademark of DORMA Door Controls, Inc. All other trademarks are the property of their respective owners.





CO-Series

Exit Trim Compatibility

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®, 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

Compatibility			
Devices	CO-100	CO-200	CO-250
Von Duprin 98/99 & 98/99 XP Rim/SVR/CVR*/CVC*/Mortise	X	X	X
Von Duprin 22/22F Rim/SVR	X	X	X
Falcon 25 Rim	X	X	X
Sargent® 80† Rim	X	X	X
Precision™ 21 Rim 2100 converts to 21 with Precision's BP21 kit	X	X	X
Yale® 7000 Rim	X	X	X
Corbin Russwin® 5000 Rim	X	X	X
Dorma® 9300 Rim	X	X	X

* Metal door only

† Narrow design & reversible rim exits not compatible



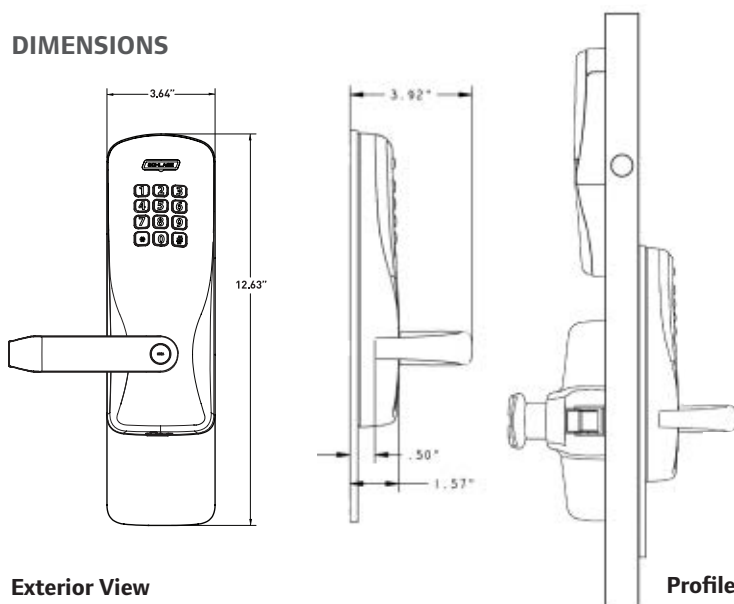
Features and Benefits

- Multiple Credential Reader Options
- A wide variety of finishes and lever styles
- Powered by 4 AA batteries*
- Compatible with most Standard, FSIC or SFIC keyways from major brands of master key systems including Schlage, Sargent®, Corbin®, Medeco® and Yale®
- UL 294 listed, ANSI/BHMA A156.25, ANSI/BHMA Grade 1 certified**

*Excluding 993DT

**UL 294 does not apply to dummy trim devices

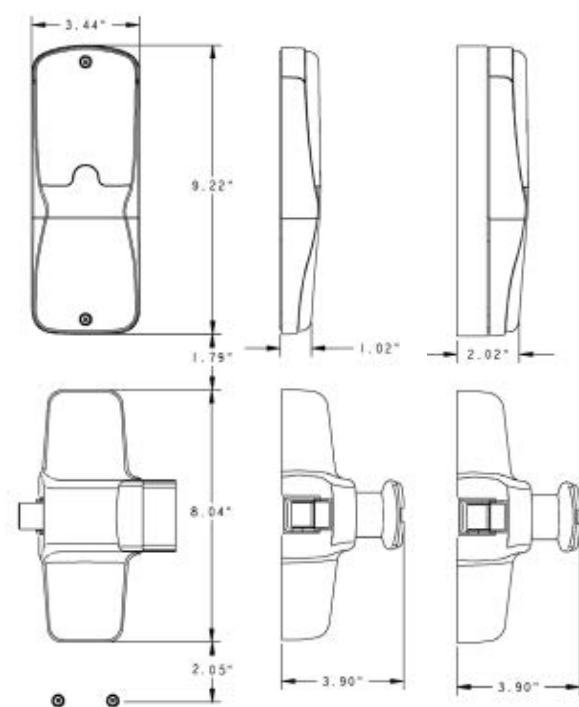
DIMENSIONS



Exterior View

Profile View

CO-Series - 993 Exit Trim



Interior View

Side View

Side View

CO-100/200/250 -
all styles

CO-100/200/250 -
RIM/CVR/CVC or
Mortise

CO-100/200/250
SVR

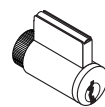
Compatibility

Reader Options	CO-100	CO-200	CO-250
KP Keypad	X	X	
PR Proximity		X	
PRK Proximity + Keypad		X	
MS Magnetic Stripe		X	X
MSK Magnetic Stripe + Keypad		X	X
Programming Options			
Computer		X	X
Manual	X	X	

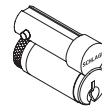
Cylinder Compatibility	Full Size key-in-lever 6 pin	Full Size key-in-lever 7 pin	FSIC 6 & 7pin	SFIC 6 & 7pin
Schlage	●		●	●
Falcon	▲	◆		▲
Sargent®	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (also includes Medeco 31*0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options ▲ = less cylinder only
 ◆ = less cylinder, only with Sparta and Rhodes levers
 Note: See pricebook for specific configurations.

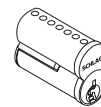
Note: (2) #7 fasteners with decorative
washers located 11.88\"/>



Full Cylinder



Full Size
Interchangeable Core



Small Format
Interchangeable Core

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin and Falcon are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Sargent is a trademark of Sargent Manufacturing Company. Corbin Russwin is a trademark of Corbin Russwin, Inc. Yale is a trademark of Yale Security, Inc. Best and Precision are trademarks of Stanley Black & Decker. Dorma is a trademark of DORMA Door Controls, Inc. All other trademarks are the property of their respective owners.





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 as automatic operators, electric strikes, and electromagnetic locks.

The CT5000 supports up to two separate Wiegand reader inputs. It is compatible with many types of credential technologies. The CT5000 has three form C relay outputs, for strike, auxiliary and alarm. It also has three inputs that include door position and request-to-exit.

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.

The CT5000 offline controller has the unique ability to be programmed locally via keypad or via the Schlage Handheld Programming Device. The CT5000 is compatible with Schlage SMS Express, Premier or Enterprise access control software. The CT5000 compliments your facility's portfolio of CO-Series and AD-Series devices along with all of your other networked readers.

If networked functionality is required in the future, the CT5000 can be upgraded. With the addition of a networked communication board and upgraded firmware, the CT5000 becomes a wireless reader interface (WRI400). The WRI400 communicates via 900MHz wireless signals to an AD-Series PIM400 which connects to the networked access control system. The WRI400 eliminates the need to run additional wires to the door, saving you time and money on installation.



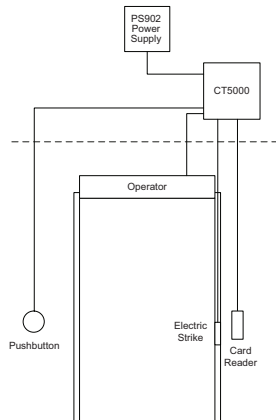
Features and Benefits

- Supports up to 5000 users and 5000 audits
- UL 294, Canada UL, FCC Part 15, RoHs
- Includes 15 foot USB remote cable connector and decorative wall plate with USB input
- Supports up to two wiegand reader inputs
- Programmed using Schlage Handheld Device (HHD) via USB connection or compatible keypad
- Requires 2 Amp power supply, such as the Schlage PS902 (sold separately)
- Request-to-exit (remote release)
- LED visual indicators (including low battery and state of the relay)

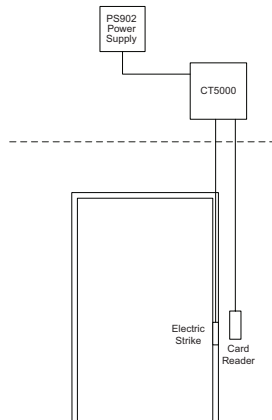
CT5000

Offline Controllers

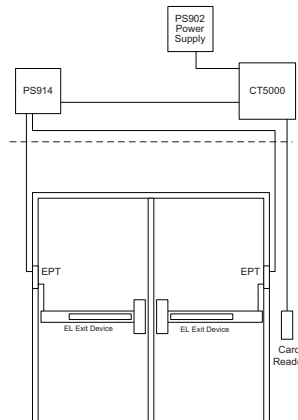
The CT5000 can be used for front door applications with an automatic operator, electric strike and card reader



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 SUS Software on the Schlage Handheld Programming Device (HHD)
Optional Accessories		125 foot USB remote cable connector, PS902, PS904, or Von Duprin PS914 (sold separately)

Credential Compatibility (software and reader dependent)

Magnetic Stripe Card	Field configurable track 1, 2, or 3
125 kHz Proximity Card	Schlage, XceedID® (34X, 35X, 35C, 37X bit formats), HID®, GE/CASI ProxLite™ and AWID® 26 bit format
13.56 MHz Smart Card	aptiQ™ smart cards featuring MIFARE DESFire™ EV1 HID iCLASS® CSN only 26 bit format

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
- XceedID model PR10
- aptiQ models MT11, MT15, MTK15, MTMS15, MTMSK15, and SM10

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin and aptiQ are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. GE, CASI and ProxLite are trademarks of General Electric Corporation. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. AWID is a trademark of Applied Wireless Identifications Group. Essex Electronics is a registered trademark of Essex Electronics, Inc. Mercury Security is a registered trademark of Mercury Security, Corp. All other trademarks are the property of their respective owners.





Schlage Utility Software (SUS) on the Handheld Device (HHD)

Overview

Schlage Utility Software (SUS) is designed specifically for use on the Handheld Device (HHD) as the link between your access control management software and Schlage electronic offline and networked locks and accessories.

This solution consolidates and simplifies programming and managing your access control system. The SUS and HHD is used to initialize, configure and test product operation, and also provides an easy way to manage people, audits, locks and other network panel interface devices for simple access control. The intuitive screen layout for the SUS provides easy navigation during use.

For offline products the SUS is utilized to transfer access control data, such as authorized user lists, via the HHD to the locks. The SUS is also utilized to download audit trail information from offline devices to the HHD and then transfer that data to the access control management software.

In addition the SUS can configure other networked electronic devices (including PIM and PIB) and update firmware revision updates to the devices as desired.

The HHD connects with Schlage AD-Series electronic locks and accessories via a USB interface and utilizes Active Synch or Win Mobile Device Manager to communicate with your PC via the USB port. The HHD is also able to connect to the SPED, KC2, CM, CL, CT500, CT1000, CL Controller and WA-Series PIMs via a serial cable connection.



Features and Benefits

- Handheld Device with Schlage Utility Software installed
- Touch Screen operation
- Initialize Lock and Accessories with SUS
- Configure and Test Devices
- New device template simplifies configuration

FEATURES AND SPECIFICATIONS

Schlage Utility Software

- Initialize Lock and Accessories
- 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 & Diagnostics
 - Battery Status
 - Validate hardware and software revision
 - Troubleshooting Status Signals
 - Firmware Upgrades

HHD Specifications

- 3.5 in LCD display
- Touch Screen with Backlit Keypad
- 32-bit processor
- Operating System: Windows Mobile 5.0
- Memory: 128 MB RAM / 256 MB ROM
- Battery: Rechargeable 3.7 V, 1,230mAh, Li-ion
- Dimensions (HWD): 5.3" X 2.9" X 0.7"
(13.5 cm x 7.3 cm x 1.8 cm)
- Weight: 0.42 lbs (190 g)
- 4 ft. (1.2 m) drop to steel surface, 2 drops per 6 sides

How-To-Videos

- Specially formatted How-To-Videos for the HHD are available
- They can be downloaded from www.schlage.com/support
- If additional storage is needed, a standard mini SD memory card can be used
- Videos should be saved on the SD card or in a new folder on the device rather than in the shared sync folder or root directory

HHD Compatible Devices and Required Cable and Adaptors

Devices	Cable and Adaptors
AD-Series and CO-Series Locks PIM400, WRI400, ECK400, GCK400, WPR400, TK400 and CT5000 controller	HH-USB (included in HHD-Kit)
BE367, KC-2, CM, CL, CT500, CT1000, CL-Controller	HH-Serial + CIP
WA-Series PIM	HH-Serial + PIMWA-CV

ORDERING INFORMATION

HHD KIT – Handheld Device with SUS installed and HH-USB cable

HH-USB – USB Cable

HH-SERIAL – Serial Cable used to connect HHD to CIP

PIMWA-CV – Converter used to connect HH-SERIAL to WA-Series PIM

P512112 – CIP, utilized with HH-SERIAL to connect to CM, CL and KC-2 locks





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 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.



Standalone/Offline Locking Solutions
Schlage Express™ Offline Access Control Software

Features and Benefits

- A variety of credential functions are supported including normal, toggle, one time & 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, AD-200, CM, KC-2, CT-1000, CT5000 and BE367
- Supports Windows 7 (32 and 64 bit) Professional and higher
- 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

Accessories

- HHD KIT - Handheld device to manage Schlage offline locks (USB Cable included for managing AD-Series and CO-Series locks)
- HHD-USB - Additional or replacement cable used to connect HHD to AD-Series and CO-Series products
- HH-Serial - Serial Cable used in conjunction with HHD KIT and CIP for managing legacy Schlage offline locks
- 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 P512112)
- 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

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	1 GB 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 and XP Professional SP1/SP2, Windows Vista 32-bit (except Home or Starter Edition), Windows 7 32-bit & 64-bit Professional and higher
Reports with the built-in viewer Internet Explorer 6 or higher must be installed.	
Required for programming	For offline locking system programming using a Schlage approved HHD device the following is required: <ul style="list-style-type: none">• Available USB port on the PC• Approved HHD device with installed communications software and interface cables from Schlage
	For offline legacy locking system programming done directly from the PC, the following is required: <ul style="list-style-type: none">• Available USB port on the PC• Programming interface cables

ORDERING INFORMATION

SXPR-SFT-1 - Schlage Express software only





Schlage Express™ Offline Access Control Software Matrix Capability Matrix

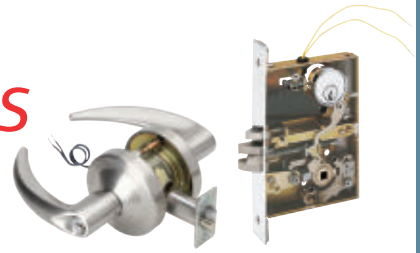
Offline Locks	CO-200		AD-200	
Feature	Schlage Express™		Schlage Express™	
System Capacity at Lock				
Number of Users or Audits/Locks	2,000 Users/Audits	1,000 Users/Audits	2,000 Users/Audits	1,000 Users/Audits
	50 Lock max.	100 Lock max.	50 Lock max.	100 Lock max.
Holidays	16		16	
1st Person In	Yes		Yes	
Time Zones	8		8	
Auto Unlocks	8		8	
Reader				
Keypad Only	Yes		Yes	
Magnetic Stripe Card	Yes		Yes	
125 kHz Prox Card	Yes		Yes	
Multi-Technology - 125 kHz Prox & 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	
Lock Functions				
Classroom/Storeroom	Yes		Yes	
Office/Toggle	Yes		Yes	
Privacy	Yes		Yes	
Apartment	No		Yes	
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	

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.

THIS PAGE IS INTENTIONALLY BLANK.

Electromechanical Solutions



This section of the Electronic Access Control catalog covers mechanical Schlage products which can be equipped with electronic features for added security and functionality.

Overview

The mechanical 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 in some cases be durable enough to handle direct attack or abuse. Without such durability and integrity, the building's assets and people are at risk.

Features

The two primary electromechanical Schlage products are the L-Series Mortise Lock and the ND-Series Cylindrical Lock. Both of these are offered as mechanical solutions without electronic capabilities; however, they may be ordered to incorporate electronic wiring and function. The L-Series and ND-Series can both be equipped with electrified locking capabilities. When triggered by the corresponding access control system, the lock will engage or disengage depending on the command.

The L-Series and ND-Series can also be fitted with Vandlgard® technology exclusive to Schlage

products. The Vandlgard® option allows the lever to be rotated down even when the door is in the locked position. This prevents the lever from being vandalized or damaged when locked, improving both the functional integrity of the lock as well as the security which it provides. A full array of options, including levers, functions, and finishes are also available with both the L-Series and ND-Series.

Benefits

Years of engineering and design have been put into the L-Series and ND-Series from Schlage. This means with both sets of locks, strength, dependability, and flexibility are the best on the market today. Even after purchasing an expensive electronic access control system, there can still be a point of weakness at the opening if the mechanical lock does not function properly or stand up to abuse. Moreover, many tenants are depending on the mechanical aspects of an opening to be completely functional every day. When so much is at stake, you can rely on Schlage products to be dependable, strong, and flexible.

ND-Series Mechanical Specifications

Handing	Non-handed
Door Thickness	1-5/8 in. to 2-1/8 in. standard
Backset	2-3/4 in. standard, 2-3/8 in., 3-3/4 in. and 5 in. optional
Faceplate	Brass, bronze or stainless steel. 1-1/8 in. x 2-1/4 in. (29mm x 57mm) square corner, beveled.
Lock Chassis	Zinc plated for corrosion resistance
Latchbolt	Steel, 1/2 in. (12mm) throw, deadlocking on keyed and exterior functions
Exposed Trim	Levers: Pressure cast zinc, plated to match finish symbols
Roses	Brass or bronze
Strike	ANSI curved lip strike 1-1/4 in. x 4-7/8 in. x 1-3/16 in. lip to center standard
Cylinders and Keys	6 pin solid brass cylinder is standard with Everest 29 S123 keyway furnished as default. Furnished with 2 Nickel Silver keys. Additional Schlage keyways available.
Cylinder Options	Available in Full Size Interchangeable Core (FSIC) and Small Format Interchangeable Core (SFIC). Also available less cylinder and less FSIC to allow for Primus XP cylinder usage.
Lever Design & Finish	All ND levers and all ND finishes available

ND-Series Electronic Specifications

Voltage	24V AC or 24V DC
Holding Current	.15A or .35A
Operating Temperature	Maximum +151°F (+66°C) Minimum -31°F (-33°C)
Rectifier used on AC operation unit only .35A @ 24V (Current requirements per lock)	

ND-Series Electrified Functions

Function	Outside Lever	Fail Safe/Secure?	Auxiliary Latch	Inside Lever	Vandlgard®
ND12DEL	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	No
ND12DEU	Continuously locked until unlocked by 24V AC or DC	Secure	Deadlocks latchbolt when door is closed	Always free for immediate exit	No
ND80PDEL	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	No
ND80PDEU	Continuously locked until unlocked by 24V AC or DC	Secure	Deadlocks latchbolt when door is closed	Always free for immediate exit	No
ND96PDEL	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	Yes
ND96PDEU	Continuously locked until unlocked by 24V AC or DC	Secure	Deadlocks latchbolt when door is closed	Always free for immediate exit	Yes

L-Series Mechanical Specifications

Handing	Non-handed
Door Thickness	1-3/4 in. (44mm) standard, 1-3/8 in. (35mm) to 2-1/2 in. (64mm) optional. Over 2-1/2 in. (64mm) door ranges vary by function. Specify door thickness if other than 1-3/4 in.
Backset	2-3/4 in. (70mm) only
Armored Front	1-1/4 in. x 8 in. x 7/32 in. (32mm x 203mm x 6mm) standard 1-1/16 in. x 8 in. x 7/32 in. (27 mm x 203 mm x 6mm) optional
Case Size	4-7/16 in. x 6-1/16 in. x 1 in. (113mm x 154mm x 25mm)
Spacing	Knob or lever to cylinder, 3-7/8 in. (98mm); knob or lever to thumbturn hub, 2-11/16 in. (68mm)
Bolts	1 in. (25mm) throw stainless steel deadbolt and 3/4 in. (19mm) throw stainless steel latch with anti-friction tongue
Cylinders and Keys	6 pin solid brass cylinder is standard with Everest 29 S123 keyway furnished as default. Furnished with 2 Nickel Silver keys. Additional Schlage keyways available.
Keying Options	Available in Full Size Interchangeable Core (FSIC) and Small Format Interchangeable (SFIC). Also available less cylinder and less FSIC to allow for Primus XP cylinder usage.
Strike	ANSI curved lip strike 1-1/4 in. x 4-7/8 in. (32mm x 124mm) x 1-3/16 in. (30mm) lip to center with dust box standard
Trim Combinations	Available with knobs both sides, levers both sides, or knob and lever with rose or escutcheon on each side
Escutcheons	L escutcheons are cold forged brass, bronze or stainless steel. N escutcheons are heavy wrought reinforced brass, bronze and stainless steel
Knobs	#41 and #42 heavy duty wrought brass, bronze or stainless steel knobs match D-Series knobs
Levers	All L series levers available; all levers made from forged brass or bronze or cast stainless steel. Designs available to match ND and S series levers along with Von Duprin exit devices.

L-Series Electronic Specifications

Voltage	24V AC or 24V DC (Max 26V; Min 22V)
Peak Current	1.3 Amps at 5 to 10 second intervals
Holding Current	.135 Amps between peak current intervals
Operating Temperature	Maximum +151°F (+66°C) Minimum -31°F (-33°C)
Interfacing devices	HandReaders, 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 Requirements for Request to Exit (RX) Function	Current: 1.0 Amps Voltage: 24V AC or 24V DC Peak Load: 5 Amps, 250V AC or DC

L-Series Electrified Functions

Function	Outside Lever	Fail Safe/ Secure?	Auxiliary Latch	Inside Lever	Latchbolt Retract	Request to Exit	Vandlgard®
L9080EL	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	Latchbolt retracted by key outside or by lever inside	None	Optional (LV9080EL)
L9080EU	Continuously locked until unlocked by 24V AC or DC	Secure	Deadlocks latchbolt when door is closed	Always free for immediate exit	Latchbolt retracted by key outside or by lever inside	None	Optional (LV9080EU)
L9080EL-RX*	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Always free for immediate exit	Latchbolt retracted by key outside or by lever inside	Allows for non- disruptive means of immediate egress	Optional (LV9080ELRX)
L9080EU-RX*	Continuously locked until unlocked by 24V AC or DC	Secure	Deadlocks latchbolt when door is closed	Always free for immediate exit	Latchbolt retracted by key outside or by lever inside	Allows for non- disruptive means of immediate egress	Optional (LV9080EURX)
L9082EL	Continuously locked electronically	Safe	Deadlocks latchbolt when door is closed	Locked by applying 24V AC or DC	Latchbolt is retracted by key on either side	None	None
L9082EU	Continuously locked until unlocked by 24V AC or DC	Secure	Deadlocks latchbolt when door is closed	Unlocked by applying 24V AC or DC	Latchbolt is retracted by key on either side	None	None

*Specify L283-263 with L functions, specify L283-239 with LV functions

ND-Series and L-Series Comparison

	ND-Series	L-Series
Handing	Non-handed	Field Reversible
Door Thickness	1-5/8 in. to 2-1/8 in. standard	1-3/4 in. (44mm) standard, 1-3/8 in. (35mm) to 2-1/2 in. (64mm) optional. Over 2-1/2 in. (64mm) door ranges vary by function. Specify door thickness other than 1-3/4 in.
Backset	2-3/4 in. standard, 2-3/8 in., 3-3/4 in. and 5 in. optional	2-3/4 in. (70mm) only
Levers	Pressure cast zinc, plated to match finish symbols	Forged brass, bronze or cast stainless steel. Designs available to match ND and S Series levers and Von Duprin exit devices. 93 lever design: Extruded brass, bronze, or stainless steel
Strike	ANSI curved lip strike 1-1/4 in. x 4-7/8 in. x 1-3/16 in. lip to center standard	ANSI curved lip strike 1-1/4 in. x 4-7/8 in. (32mm x 124mm) x 1-3/16 in. (30mm) lip to center with dust box standard
Cylinders and Keys	6 pin solid brass cylinder is standard with Everest 29 S123 keyway furnished as default. Furnished with 2 Nickel Silver keys. Additional Schlage keyways available.	6 pin solid brass cylinder is standard with Everest 29 S123 keyway furnished as default. Furnished with 2 Nickel Silver keys. Additional Schlage keyways available.



L-Series

Mortise Electrified Lock

Overview

The most complex electronic access systems still rely on mechanical hardware to operate properly. Advanced electronic technology can go to waste without adequate mechanical locking strength and functionality.

The Schlage L-Series is a mortise lock which can be equipped with an electrified locking option. The L-Series Mortise Lock is designed for the highest security applications, featuring a heavy-duty deadbolt and superior strength and durability.

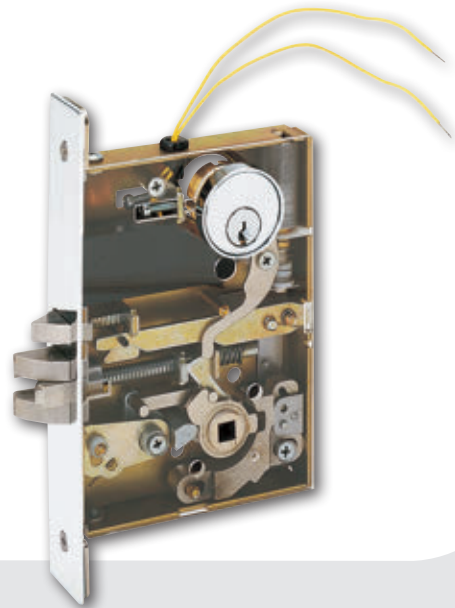
The L-Series can serve as the mechanical component to nearly any electronic access system. With the electrified option, the L-Series is wired to two sources; a regulating device and a power source. A regulating device such as a hand or card reader signals the L-Series to lock or unlock, while the power source serves as the energy source to change the status of the lock.

Top of the line security means getting the most of both mechanical and electrical components. The Schlage L-Series has a proven record of performance, strength, and durability from the most trusted name in the industry.

Recommended Applications

The L-Series Electrified Mortise Lock is useful for many applications, including but not limited to:

- Security control centers
- Cashier rooms
- Fire safety exits
- Equipment rooms
- Hazardous material storage



Features & Benefits

- Vandlgard® option prevents damage to internal lock when lever is subjected to force
- Fully wrapped heavy-gauge steel case protects against door edge attacks
- Universal lock case provides up to ten functions in one case
- Features reversible handing without opening the case
- Lever rotation up or down for easy use

L-Series Mechanical Specifications	
Handing	Non-handed
Door Thickness	1 3/4" (44mm) standard, 1 3/8" (35mm) to 2 1/2" (64mm) optional. Over 2 1/2" (64mm) door ranges vary by function. Specify door thickness other than 1 3/4".
Backset	2 3/4" (70mm) only
Armored Front	Standard: 1 1/4" x 8" x 7/32" (32mm x 203mm x 6mm) Optional: 1 1/16" x 8" x 7/32" (27 mm x 203 mm x 6mm)
Case Size	4 7/16" x 6 1/16" x 1" (113mm x 154mm x 25mm)
Spacing	Knob or Lever to cylinder, 3 7/8" (98mm); knob or lever to thumbturn hub, 2 11/16" (68mm)
Bolts	1" (25mm) throw stainless steel deadbolt and 3/4" (19mm) throw stainless steel latch with anti-friction tongue
Cylinders and Keys	6 pin solid brass cylinder is standard with Everest 29 S123 keyway furnished as default. Furnished with 2 Nickel Silver keys. Additional Schlage keyways available.
Keying Options	Available in Full Size Interchangeable Core (FSIC) and Small Format Interchangeable Core (SFIC). Also available less cylinder and less FSIC to allow for Primus XP cylinder usage.
Strike	ANSI curved lip strike 1 1/4" x 4 7/8" (32 mm x 124 mm) x 1 3/16" (30mm) lip to center with dust box standard
Trim Combinations	Available with knobs both sides, levers both sides, or knob and lever with rose or escutcheon on each side
Escutcheons	L escutcheons are cold forged brass or bronze and stainless steel. N escutcheons are heavy wrought reinforced brass, bronze or stainless steel
Knobs	#41 and #42 heavy duty wrought brass, bronze or stainless steel knobs match D-Series knobs
Levers	See pricebook for details.

L-Series Electronic Specifications	
Voltage	24V AC or 24 V DC (Max 26V; Min 22V)
Peak Current	1.3 Amps at 5 to 10 second intervals
Holding Current	.135 Amps between peak current intervals
Operating Temperature	Maximum +151 °F (+66 °C) Minimum -31 °F (-33 °C)
Interfacing devices	HandReaders, 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 Requirements for Request to Exit (RX) Function	Current: 1.0 Amps Voltage: 24V AC or 24V DC Peak Load: 5 Amps, 250 V AC or DC

L-Series Electrified Functions
Note: See pricebook for details.



ND-Series

Cylindrical Electrified Lock

Overview

Electronic access control systems can be installed in a variety of applications, but they always require a mechanical lock to ensure that safety and security needs are met.

The Schlage ND-Series is a cylindrical lock which can be equipped with an electrified locking option. It can be quickly and easily installed and integrates with various key systems for field adaptability.

The ND-Series serves as the mechanical component to nearly any electronic access system. With the electrified option, the ND-Series is wired to two sources; a regulating device and a power source. A regulating device such as a hand or card reader signals the ND-Series to lock or unlock, while the power source serves as the energy source to change the status of the lock.

When it comes to access control, mechanical components can be just as important as their electronic counterparts. The Schlage ND-Series provides versatility and easy installation to complete your access control system.



Features & Benefits

- Vandlgard® option prevents damage to internal lock when lever is subjected to force
- Exceeds ANSI A156.2 series 4000 Grade 1 torque requirements
- Extensive options for lever, finish, handing, and functions
- Can be set to fail safe or fail secure
- Is available with request to exit functionality

ND-Series Mechanical Specifications	
Handing	Non-handed
Door Thickness	1-5/8" to 2-1/8" standard including Vandlgard
Backset	2-3/4" standard, 2-3/8 in., 3-3/4" and 5" optional
Faceplate	Brass, bronze or stainless steel. 11/8" x 21/4" (29 mm x 57mm) square corner, beveled.
Lock Chassis	Zinc plated for corrosion resistance.
Latchbolt	Steel, 1/2" (12mm) throw, deadlocking on keyed and exterior functions. 3/4" (19mm) throw anti-friction latch available for pairs of fire doors.
Exposed Trim Levers	Pressure cast zinc, plated to match finish symbols.
Roses	Brass or bronze.
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard.
Cylinders and Keys	6 pin solid brass cylinder is standard with Everest 29 S123 keyway furnished as default. Furnished with 2 Nickel Silver keys. Additional Schlage keyways available.
Keying Options	Available in Full Size Interchangeable Core (FSIC) and Small Format Interchangeable Core (SFIC). Also available less cylinder and less FSIC to allow for Primus XP cylinder usage.
Lever Design & Finish	All ND levers and all ND finishes available

ND-Series Electronic Specifications	
Voltage	24V AC or 24 V DC
Holding Current	.35A or .15A
Operating Temperature	Maximum +151 °F (+66°C) Minimum -31 °F (-33°C)
Rectifier used on AC operation unit only .35A @ 24 (Current requirements per lock)	

ND-Series Electrified Functions
Note: See pricebook for details.

Readers



This section of the Electronic Access Control catalog covers XceedID® Proximity Readers and aptiQ™ Smart and Multi-Technology Readers from Ingersoll Rand Security Technologies.

Overview

Ingersoll Rand offers a comprehensive line of credential readers with a range of technologies and form factors to meet a variety of security needs and budgets. The aptiQ™ line of multi-technology readers deliver complete flexibility when transitioning from magnetic stripe or proximity to smart technology. A variety of reader designs are available to accommodate a wide range of mounting applications.

Proximity Readers

- XceedID proximity technology offers your facility an easy and convenient access control solution. Proximity technology, which operates on 125 kHz frequency, is easily integrated into existing legacy proximity systems or ideal for a new installation.
- The PR10 proximity mini-mullion reader is attractive, cost-effective, and well suited for exterior and interior applications. This reader also has a sleek and attractive architectural styling. The PR10 proximity reader by XceedID offers a visual indicator and audio feedback representing status and activity information which make access control simple for users to understand.
- The proximity reader by XceedID operates on a Wiegand interface, and is compatible with industry leading proximity credentials.

Smart Readers

- The aptiQ™ SM10 mini-mullion smart reader by Ingersoll Rand Security Technologies 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.
- Smart reader technology can be used in applications such as logical access, cashless vending, and cafeteria services.

Multi-Technology Readers

- aptiQ™ multi-technology readers are the most flexible readers in the industry. Finally, one reader handles all applicable ISO standards (14443) and can handle multiple formats simultaneously. aptiQ™ multi-technology readers contain both 125 kHz proximity and 13.56 MHz contactless smart card capability in one unit, which allows customers to economically migrate to the latest in smart card technology at their own pace.
- aptiQ™ MTMS15 and MTMSK15 multi-technology magnetic stripe readers can handle all applicable ISO standards (14443) and can handle multiple formats simultaneously. These multi-technology readers contain the contact technology of magnetic stripe and both 125 KHz proximity and 13.56 MHz contactless smart card capability in one unit.





aptiQ™ Multi-Technology Readers

Overview

aptiQ™ Multi-Technology Readers by Ingersoll Rand Security Technologies are designed to simplify your access control solutions. Transition your system from proximity to smart card technology at your own pace without having to change out readers as new technologies are available. aptiQ readers handle all applicable ISO standards (14443A, 14443B, 15693), are FIPS 201-1 compliant and are versatile enough to read 125kHz proximity and 13.56MHz contactless smart cards in a single unit. aptiQ multi-technology readers interface with aptiQ smart credentials (MIFARE® classic and MIFARE DESFire™ EV1) and can read the card serial numbers of a variety of smart cards from other manufacturers, making your next upgrade in technology simple and seamless. Additionally, aptiQ readers are already NFC compatible and able to communicate with NFC-enabled phones whenever you're ready to take that step.

aptiQ multi-technology readers use an open architecture platform designed to work with industry standards and common access control system interfaces. Multiple aptiQ reader form factors are designed to fit a variety of placement needs, with an attractive modern design which will complement any facility's architecture and décor. aptiQ readers are very easy to install with the quick-connect design and a standard wiring color scheme that most technicians are already accustomed to. But if you do have questions, you'll never worry about lack of service or assistance. As always, our knowledgeable sales & support staff is ready to assist you with any design or technology questions you may have.

Note: Magnetic stripe multi-technology readers also available.



Features & Benefits

- Accommodates interior, exterior, metal, and non-metal installation environments
- Recognizes most proximity credentials, and aptiQ smart credentials (MIFARE® classic and MIFARE DESFire™ EV1)
- FIPS 201-1 Compliant
- NFC Compatible
- Quick-connect design for easy installation
- Simple wiring – color scheme is identical to most readers in the market
- Easy-to-install mounting bracket
- Tri-state LED (red, green, amber) visual indicator and audio feedback representing status and activity information, easily discernible for the audibly or visually impaired.
- Wiegand output for simple interface with most access control panels
- Multiple reader cover color options
- Limited Lifetime Warranty
- Multi-technology readers may also be ordered with RS-485 capability



Model*	PR10	SM10	MTT1		MTT5	MTK15
Reader Type	Proximity Mini-Mullion *	Smart Mini-Mullion *	Multi-Technology Mullion		Multi-Technology Single Gang	Multi-Technology Single Gang Keypad
Frequency	125 kHz	13.56 MHz	13.56 MHz and 125 kHz			
FIPS 201-1 Compliant	No		Yes			
Standard Default PIV Output	n/a		75 bit PIV**			
Standards	n/a		ISO 14443A, 14443B, 15693			
Certifications	FCC Certification • IC Certification • UL 294 Listed • R&TTE 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)	Avg. 65 mA Peak 110 mA	Avg. 95 mA Peak 195 mA	MTT1 Avg. 100 mA MTT1 Peak 170 mA	MTT1-485 Avg. 115 mA MTT1-485 Peak 145 mA	MTT5 & MTT5-485 Avg. 120mA MTT5 & MTT5-485 Peak 200mA	MTK15 & MTK15-485 Avg. 120mA MTK15 & MTK15-485 Peak 230mA
Read Range	Proximity: Up to 3" (7.5 cm)	MIFARE: Up to 3" (7.5 cm) DESFire EV1: Up to 2" (5.1 cm)	Proximity: Up to 5" (12.7 cm) MIFARE: Up to 4" (10 cm) DESFire EV1: 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	Wiegand / Clock & Data	Wiegand / Clock & Data / RS-485*** (OSDP)			
Cabling Distance			Wiegand Output: 500 ft. (152 m)			
Physical Dimensions (HWD)	4.26" x 1.72" x 0.81" 10.8 cm x 4.4 cm x 2.1 cm		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		
Operating Temperatures	-40 to 158F (-40 to 70C)					
Weight	4.1 oz	3.9 oz	5.7 oz	9.1 oz	9.3 oz	
Material	PBT Polymer					
Technologies Supported in Default Mode	Schlage Proximity XceedID™ Proximity HID® Proximity GE/CASI ProxLite® AWID® Proximity LenelProx®		Schlage MIFARE® Secure Sector XceedID™ MIFARE® Secure Sector aptiQ™ MIFARE® Secure Sector aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA DESFire® CSN • HID iCLASS® CSN Inside Contactless PicoTag® CSN ST Microelectronics® CSN Texas Instruments Tag-It® Serial Number Philips I-Code® CSN			
			Schlage Proximity • XceedID™ Proximity • HID® Proximity GE/CASI ProxLite® • AWID® Proximity • LenelProx®			
			Schlage MIFARE® Secure Sector • XceedID™ MIFARE® Secure Sector aptiQ™ smart cards using MIFARE® • aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA DESFire® CSN • HID iCLASS® CSN • Inside Contactless PicoTag® CSN • ST Microelectronics® CSN Texas Instruments Tag-It® Serial Number • Philips I-Code® CSN			

Color Options



Black
(Standard)



Cream



Cool Tone
Gray



Warm Tone
Brown

aptiQ™ Smart Technology from Ingersoll Rand enhances the intelligence of products through a secure, open architecture design in readers, credentials, and smart phone applications. aptiQ™ seamlessly interfaces and communicates with a variety of products, and provides a platform that easily adapts as new innovations enter the marketplace.

INGERSOLL RAND, the Ingersoll Rand logo, Schlage, aptiQ and XceedID are trademarks of Ingersoll Rand plc, its subsidiaries and/or affiliates in the United States and other countries. XACT, ISOX Lite are trademarks of XceedID Corporation. GE, CASI and ProxLite are trademarks of General Electric Corporation. Inside PicoTag is a trademark of Inside Technologies. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. Tag-It is a trademark for Texas Instruments. STMicroelectronics is a trademark of STMicroelectronics Inc. AWID is a trademark of Applied Wireless Identifications Group. All other trademarks are the property of their respective owners.

* Some features and benefits listed on the front may not be applicable to the smart-only and proximity-only readers.
** Other output options available through configuration.

*** RS-485 model numbers include "-485" after the original model number. For example, MTT1-485 is the RS-485 version of the multi-technology mini-mullion reader. Multi-drop, Open Standard Device Protocol (OSDP).





aptiQ™ Multi-Technology Magnetic Stripe Readers

Overview

aptiQ™ Multi-Technology Magnetic Stripe Readers by Ingersoll Rand Security Technologies are designed to simplify your access control solutions. Transition your system from an existing population of magnetic stripe cards to more secure smart card technology at your own pace. aptiQ multi-technology readers are versatile enough to read magnetic stripe, 125 kHz proximity, and 13.56MHz contactless smart cards in a single unit, handle all applicable ISO standards (14443A, 14443B, 15693), and are FIPS 201-1 compliant. aptiQ multi-technology magnetic stripe readers interface with aptiQ™ smart credentials (MIFARE® classic and MIFARE® DESFire™ EV1), and can read the card serial numbers of a variety of smart cards from other manufacturers, making your next upgrade in technology simple and seamless. Additionally, aptiQ readers are already NFC compatible and able to communicate with NFC-enabled phones whenever you're ready to take that step.

aptiQ multi-technology magnetic stripe readers use an open architecture platform designed to work with industry standards and common access control system interfaces. And with an attractive modern design they'll complement any facility's architecture and décor. aptiQ readers are very easy to install with the quick-connect design and a standard wiring color scheme that most technicians are already accustomed to. But if you do have questions, you'll never worry about lack of service or assistance. As always, our knowledgeable sales & support staff is ready to assist you with any design or technology questions you may have.



Readers
aptiQ™ Magnetic Stripe Readers

Features & Benefits

- Accommodates interior, exterior, metal, and non-metal environments
- Recognizes magnetic stripe credentials, most proximity credentials, and aptiQ™ smart credentials (MIFARE® classic and MIFARE DESFire™ EV1)
- FIPS 201-1 Compliant
- NFC Compatible
- Quick-connect cable for easy installation
- Simple wiring – color scheme is identical to most readers in the market
- Easy-to-install mounting bracket
- Tri-state LED (red, green, amber) visual indicator and audio feedback representing status and activity information, easily discernible for the audibly or visually impaired
- Wiegand or RS-485 output for simple interface with most access control panels
- Multiple reader cover color options
- Limited Lifetime Warranty
- Magnetic stripe track 2 default, tracks 1 and 3 configurable



Model	MTMS15		MTMSK15
Reader Type	Multi-Technology Magnetic Stripe		Multi-Technology Magnetic Stripe with Keypad
Frequency	13.56MHz, 125 kHz, and magnetic stripe		
FIPS 201-1 Compliant	Yes		
Standard Default PIV Output	75 bit PIV*		
Standards	ISO 14443A, 14443B, 15693		
Certifications	FCC Certification · IC Certification · UL 294 Listed · R&TTE 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)	MTMS15 & MTMS15-485 Avg. 120mA MTMS15 & MTMS15-485 Peak 200mA		MTMSK15 & MTMSK15-485 Avg. 120mA MTKMS15 & MTMSK15-485 Peak 230mA
Read Range	Proximity: Up to 5" (12.7 cm) MIFARE: Up to 4" (10 cm) DESFire EV1: Up to 2" (5.1 cm) PIV Credential: Up to 2.5" (6.5 cm)		
Cable Specification	18 AWC, 5 Conductor Stranded/Shielded		
System Interfaces	Wiegand / Clock & Data / RS-485** (OSDP)		
Cabling Distance	Wiegand Output: 500 ft. (152 m)		
Physical Dimensions (HWD)	4.43" x 5.17" x 1.15" 11.25 cm x 13.13 cm x 2.92 cm		
Operating Temperatures	-31 to 151F (-35 to 67C)		
Weight	8.9 oz		9.5 oz
Material	PBT Polymer		
Technologies Supported in Default Mode	Magnetic Stripe (tracks 1, 2, or 3)*** Schlage Proximity · XceedID™ Proximity · HID® Proximity · GE/CASI ProxLite® · AWID® Proximity · LenelProx® · Schlage MIFARE® Secure Sector · XceedID™ MIFARE® Secure Sector · aptiQ™ smart cards using MIFARE® · aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA · DESFire® CSN · HID iClass® CSN · Inside Contactless PicoTag® CSN · ST Microelectronics® CSN · Texas Instruments Tag-It® Serial Number · Phillips I-Code® CSN		

Color Options



Black
(Standard)



Cream†



Cool Tone
Gray†



Warm Tone
Brown†

* Other output options available through configuration.

** RS-485 model numbers include "-485" after the original model number. For example, MTMS15-485 is the RS-485 version of the multi-technology mini-mullion reader. Multi-drop, Open Standard Device Protocol (OSDP).

*** By default, the MTMS15 and MTMSK15 readers will read track 2 of the magnetic strip. If you require the ability to read track 1 or track 3, please contact Technical Support at 1-877-671-7011 for configuration options.

† Lead Time may apply for non-standard colors

aptiQ™ Smart Technology from Ingersoll Rand enhances the intelligence of products through a secure, open architecture design in readers, credentials, and smart phone applications. aptiQ™ seamlessly interfaces and communicates with a variety of products, and provides a platform that easily adapts as new innovations enter the marketplace.

INGERSOLL RAND, the Ingersoll Rand logo, Schlage, aptiQ and XceedID, are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. XACTT, ISOX Lite are trademarks of XceedID Corporation. GE, CASI and ProxLite are trademarks of General Electric Corporation. Inside PicoTag is a trademark of Inside Technologies. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. Tag-It is a trademark for Texas Instruments. STMicroelectronics is a trademark of STMicroelectronics Inc. AWID is a trademark of Applied Wireless Identifications Group. All other trademarks are the property of their respective owners.





FIPS 201-1 Compliant Readers

Overview

aptiQ™ Smart and Multi-Technology Readers by Ingersoll Rand have been approved by the U.S. Government under HSPD-12 for FIPS 201-1 compliance as PIV Transparent Readers. PIV compliance is available on six reader models, including the SM10 Smart Mini-Mullion, MT11 Multi-technology Mullion, MT15 Multi-technology Single Gang, MTK15 Multi-technology Single Gang with Keypad, MTMS15 Multi-technology Magnetic Stripe and MTMSK Multi-technology Magnetic Stripe with Keypad.

aptiQ™ Multi-Technology readers are a unique and critical component of successful security upgrades in all sectors of the government. FIPS 201-1 is a Federal Information Processing Standard ("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 201-1 seeks to improve identification and authentication of Federal employees and contractors for access to the Federal facilities and information systems.

aptiQ™ FIPS 201-1 PIV compliant readers are available with multiple data output formats, which provide unprecedented versatility within the PIV & PIV-I specification.

In addition to reading approved FIPS 201-1 PIV & PIV-I credentials, aptiQ™ 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 & PIV-I cards simultaneously is a tremendous benefit to those agencies looking to transition seamlessly from older proximity technologies to new, mandated PIV & PIV-I credentials. A mixed population of old prox credentials and new PIV & PIV-I credentials is unavoidable during the government's multi-year upgrade path to FIPS 201-1 compliance.



Readers
FIPS 201-1 Compliant Readers

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 inches (proximity), up to 2 inches for PIV & 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

ADDITIONAL FEATURES

- Compliance: compatible with applicable ISO standards
- Compatible with all access control systems that support Wiegand format
- Warranty: limited lifetime against defective workmanship and materials
- Additional Technologies Supported
 - Magnetic Stripe
 - Track 1, 2, or 3
 - Proximity
 - Schlage
 - XceedID®
 - HID® Proximity (certain formats)
 - GE/CASI ProxLite™
 - AWID® Proximity
 - Smart Card (secure sector only)
 - Schlage
 - aptiQ™ using MIFARE®
 - aptiQ™ using MIFARE DESFire™ EV1
 - FIPS 201-1/PIV & PIV-I
 - Smart Card (card serial number only)
 - DESFire® Application HID iClass®
 - Inside Contactless PicoTag™

ORDERING INFORMATION

SM10 - Smart Mini-Mullion Reader

MT11 - Multi-Technology Mullion Reader

MT15 - Multi-Technology Single Gang Reader

MTK15 - Multi-Technology Single Gang Reader with Keypad

MTMS15 - Multi-Technology Magnetic Stripe Reader

MTMSK15 - Multi-Technology Magnetic Stripe Reader with Keypad

aptiQ™ PIV readers have been approved by the GSA lab as compliant with FIPS 201-1 and the appropriate PIV credentials.

Please see individual data sheets for each reader for more specific technical information.

INGERSOLL RAND, the Ingersoll Rand logo and XceedID, are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. XACTT, ISOX Lite are trademarks of XceedID Corporation. Inside PicoTag is a trademark of Inside Technologies. GE, CASI and ProxLite are trademarks of General Electric Corporation. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. AWID is a trademark of Applied Wireless Identifications Group. All other trademarks are the property of their respective owners.





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 and 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

Specifications	
Dimensions	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-BLK - 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 w/Steel Back Box (Gray)

SPMK-2-BLK - Panel Mount Kit w/Steel Back Box (Black)





SMR10 and SMR20 *Magnetic Stripe Readers*

Overview

The SMR10 and SMR20 Stripe Readers have a slim, mullion style design. The die cast metal housing makes it ideal for indoor or outdoor applications. The SMR20 has a 12 position membrane style keypad.



Readers

SMR10 & SMR20 Mag Stripe Readers

Features and Benefits

- Rugged Metal Housing
- All stainless steel hardware is standard
- Audiovisual indication provides Two LED's (red/green) and beeper sounds
- Static Discharge Protection
- Accepts low or high coercivity-magnetic cards
- Standard Track 2 encoding (Track 1 & 3 are available)
- One security screw mounting
- Supports Wiegand or Clock & Data interface formats via Dip Switches

Specifications	
Dimensions	1.95"W x 1.3"H x 5.5"L
Power requirements	5 or 12 VDC
Power consumption	20 mA at 12 VDC
Operating Temperature	-40° F to 170° F
Weight	10 oz.
Cable Distance	500' with 18AWG 6 conductor stranded with overall shield

ORDERING INFORMATION

SMR10-5V-BLK - 5 VDC standard, Magnetic Stripe Card Reader (black)

SMR10-5V-BG - 5 VDC standard, Magnetic Stripe Card Reader (beige)

SMR10-12V-BLK - 12 VDC Magnetic Stripe Card Reader (black)

SMR10-12V-BG - 12 VDC Magnetic Stripe Card Reader (beige)

SMR20-5V-BLK - 5 VDC standard, Magnetic Stripe Card Reader w/keypad (black)

SMR20-5V-BG - 5 VDC standard, Magnetic Stripe Card Reader w/keypad (beige)

SMR20-12V-BLK - 12 VDC Magnetic Stripe Card Reader w/keypad (black)

SMR20-12V-BG - 12 VDC Magnetic Stripe Card Reader w/keypad (beige)





SMR5

Magnetic Stripe Reader

Overview

The SMR5 Mercury Magnetic Stripe Reader has a slim, mullion style design. The die cast metal housing makes it ideal for indoor or outdoor applications.



Readers
SMR5 Magnetic Stripe Reader

Features and Benefits

- Rugged Metal Housing
- All stainless steel hardware is standard
- Audiovisual indication provides multicolor LED (red/green) and beeper sounds
- Static discharge protection
- Accepts low or high coercivity-magnetic cards
- Standard Track 2 encoding (Track 1 & 3 are available)
- One security screw mounting
- Supports Wiegand or Clock & Data interface formats

Specifications	
Dimensions	1.95"W x 1.3"H x 5.5"L
Power requirements	5 or 12 VDC
Power consumption	20 mA at 12 VDC
Operating Temperature	-40° F to 170° F
Weight	10 oz.
Cable Distance	500' with 18AWG 6 conductor stranded with overall shield

ORDERING INFORMATION

SMR5-5V-BLK - 5 VDC Magnetic Stripe Card Reader (black)

SMR5-5V-BG - 5 VDC Magnetic Stripe Card Reader (beige)

SMR5-12V-BLK - 12 VDC Magnetic Stripe Card Reader (black)

SMR5-12V-BG - 12 VDC Magnetic Stripe Card Reader (beige)





SEKPDWG and SEKPDMGW

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.



Readers
SEKPDWG & SEKPDMGW Keypads

Features and Benefits

- Field selectable keypad configurations
- SEKPDWG mounts directly to a single gang electrical box
- SEKPDMGW mounts to any mullion style frame
- No moving parts to replace

Specifications	
Dimensions	SEKPDWG: 5.125" x 3.375" x .437" SEKPDMGW: 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. SEKPDMGW: 4.4 oz
Material	316L Stainless Steel
Standby current draw	SEKPDWG: 5V-20mA, SEKPDMGW: 5V-20mA

ORDERING INFORMATION

SEKPDWG - Single Gang Style Keypad

SEKPDMGW - Mullion Style Keypad

SEKPD8B - Mullion Style Keypad (8 Bit)

Note: Specify 5V or 12V





KP212 and KP232

Mullion Mounted Keypad Series

Overview

The Mullion Keypad Series is a stand alone solution and is ideal for controlling electrified door hardware such as electric strikes or electromagnetic locks. The one-piece design allows easy installation, mounting directly to mullion. Designed with backlit keys and weather resistant, they are well suited for both indoor and outdoor applications.

The mullion stile readers can be programmed to accept up to 120 user codes, are equipped with a Form C, dry contact relay and can be released by using a momentary Request to Exit switch.

The KP232 is designed to meet most residential, commercial, and industrial single door access control needs, and has two inputs and four outputs and factory set access control.

KP2000

Single Gang Flush Mount

Overview

The KP2000 Series Single gang flush mount keypads manage up to 500 users and provide complete access control functionality including monitoring door position, controlling locking hardware, triggering propped or forced alert or alarm shunt output. Other applications for the KP2000 Series keypads include: controlling electronic devices such as handicapped doors, gate controls, alarm systems, ATM vestibules, and other types of machinery requiring momentary or latched outputs.

You can select between two modes of functionality with the KP2000 Series Keypads. They can operate most Wiegand access system controllers, or as standalone access control devices.

The KP2000 Series comes in two different styles: the "e" style and the "eM" style. The "e" style keypad uses hardened backlit keys while the "eM" style uses a durable metal keypad including Braille alpha-numeric keys. The KP2000 series can be used in interior and exterior applications. The flush-mount keypads are constructed to meet your aesthetic needs while ensuring long-term durability and high-quality performance.



Readers

KP212 and KP232 Mullion Mounted Keypad

Features and Benefits

KP212 and KP232





- Up to 120 Users
- Illuminated Hardened Keys
- Sounder
- Doorbell Relay
- Weather Resistant
- Programmable 00-99 Second Relay Activation Time
- Remote Trigger Input (REX)
- Bell Output (timed or continuous)
- Applications:
 - Heavy Traffic
 - Indoor/Outdoor

(KP2000 on back)

KP2000 Features

- 500 users
- Door position input
- Request to Exit input
- 2 Form C SPDT relay outputs – default for access control function
- Sounder for key press and alert conditions
- All outputs can be programmed independently if required
- Option for secure installation with control electronics in protected area
- Widest array of user type options including single use and two man rule
- 10-30 VDC and 12-24 VAC operation
- Over-voltage protection for reliable operation
- Single-gang flush mount design
- Indoor/outdoor use
- Keypad programmable
- Key press feedback via sounder and yellow LED
- Built-in assignable sounder
- Bi-color Red/Green LED indicates relay status

Reader Specifications

				
Feature Set	KP212	KP232	KP2000E	KP2000EM
Mounting	Mullion	Mullion	Single Gang/Flush	Single Gang/Flush
Users	120	120	500	500
PIN Length	1-6 digits	1-6 digits	1-10 digits	1-10 digits
Duty Cycles	Medium	Medium	Medium	Heavy Duty
Back Light	Yes	Yes	Yes	No
Keys	Hard Plastic	Hard Plastic	Heavy Duty Plastic	Heavy Duty Metal w Braille
Weather Resistant	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor
Doorbell Key	Yes	Yes	No	No
Wiegand Output	No	No	No	No
Remote Trigger (REX)	Yes	Yes	Yes	Yes
Access Control Functionality	Programmable relay activation time (0-99 seconds). Perfect for electric or magnetic locks requiring momentary control.	4 dedicated relay outputs (Lock release, door forced, door propped and alarm shunt)	Monitors DPS, controls various electronic hardware, triggers door propped, forced door alert or alarm shunt	Monitors DPS, controls various electronic hardware, triggers door propped, forced door alert or alarm shunt
Relays	2 Relays (Main and Aux)	Main, Prop Door, Forced Door and Alarm Shunt Relay	2 Form C, expandable to 10 programmable outputs	2 Form C, expandable to 10 programmable outputs
Outputs	2 Independent (configurable)	4 Independent (dedicated)	2 Independent (Programmable with the option to add 8 more)	Programmable
Finish	Aluminum	Aluminum	Aluminum	Aluminum
UL 294	No	No	Yes	Yes



CRM2 and CRP2 Enrollment Readers

Overview

The CRM2 Magnetic Stripe Credential Enrollment Reader and the CRP2 Proximity Credential Enrollment Reader are designed to allow easy enrollment of credentials into the Schlage Express access control system. These compact readers eliminate the need for manual data entry, and provide error-free identification and security throughout the workplace. The plug and play functionality provided via a convenient USB connection allows either of these readers to seamlessly integrate with the Schlage Express software. Additionally, the reader allows for keystrokes to be added before and after the card's data, providing flexibility and data customization.

Note: Compatible with Schlage Express version 4.0 and higher

Features and Benefits

CRM2

- Magnetic stripe reader
- Reads data from any data track location on the card
- USB connectivity
- Plug-and-play functionality

CRP2

- Proximity reader
- USB connectivity
- Plug-and-play functionality

CRP2 Specifications	
Typical Maximum read range:	1.0" – 3.0" (2.5 – 7.6cm) dependent upon proximity card type and environmental conditions
Dimensions:	3 3/8" x 2" x 0.6"
Weight:	0.45 lbs (12.7g)
Power supply and interface:	USB self-powered
Indicators:	Tri-state LED, beeper
Transmit frequency:	125 kHz
Operating temperature range:	-22° to 150°F (-30° to 65°C)
Operating humidity range:	5% to 95% relative humidity, non-condensing
Storage temperature range:	-40° to 185°F (-40° to 85°C)
Certifications:	FCC, United States; CE Mark Europe, C-tic Australia, RoHS
Warranty:	One year for material/workmanship and defects

CRM2 Specifications	
Desktop Dimensions:	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. (136g); Base: 13 oz. (369g)
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

Credentials



This section of the Electronic Access Control catalog covers proximity, smart, and multi-technology credentials from Ingersoll Rand Security Technologies.

Overview

XceedID® and aptiQ™ by Ingersoll Rand Security Technologies offers a comprehensive line of smart, multi-technology and proximity credentials with an array of technological capabilities and form factors to meet the security needs and budget of virtually any customer. Ingersoll Rand has a full offering of credentials to provide complete flexibility when transitioning from proximity to smart technology. Additionally, a variety of designs are available to accommodate a wide range of needs, from ISO card styles for name badges to keyfobs.

Proximity Credentials

- XceedID proximity technology offers your facility an easy and convenient access control solution. Proximity technology, which operates on 125 kHz frequency, is easily integrated into existing legacy proximity systems and new installations.
- Offered in several different form factors, XceedID has the proximity credentials to meet your needs.
 - The **clamshell style** is highly durable and more ridged than the typical credit card, making this card ideal for harsh environments.
 - The **ISO style card** is similar in size and thickness to a credit card and has the ideal surface to print custom artwork, images, and photographs for identification. This card can also include a magnetic stripe.
 - The **keyfob** can be easily attached to any key ring for convenience.
 - The **PVC patch** credential can be adhered to any frequently used surface.
- Proximity credentials by XceedID are compatible with most industry leading proximity readers and are completely ISO compliant. These credentials also have a passive design, requiring no batteries or maintenance for the life of the card.

Smart Credentials

- aptiQ™ contactless smart credentials (MIFARE® and MIFARE DESFire™ EV1) put you in control by delivering smarter solutions. Storage options of 2.5k, 8k, 16k, 32k, or 64k bits will meet the most demanding storage requirements, and allow for a wide range of card applications to be utilized.
- Aside from physical access, smart credential uses could include transit and point of sale applications, such as cashless vending and cafeteria services.
- aptiQ smart credentials operate on 13.56 MHz frequency, and utilize high security encrypted data, which is mutually authenticated in communication between the card and reader, providing optimum security.
- Smart credentials are also offered in **clamshell style, ISO style cards, keyfobs, and PVC patches.**

Multi-Technology Credentials

- aptiQ multi-technology credentials are extremely flexible. Particularly useful during a transition from proximity technology to smart technology, this card can be read by both proximity readers and smart readers, which allows customers to economically migrate to the latest in smart technology at their own pace.
- This type of credential is only available in an ISO style card.

	125 kHz Proximity Credentials				125 kHz/13.56 MHz Multi-Technology Credentials		
							
Model Number	7410	7510	7610	7710	9951	9958	8920/8940/8980
Credential Type	Clamshell	ISO-Glossy White*	Keyfob	PVC Disk	ISO-Glossy White*		
Credential Technology; ISO Standard	125 kHz Prox	125 kHz Prox	125 kHz Prox	125 kHz Prox	125 kHz Prox/MIFARE; ISO 14443		125 kHz Prox/MIFARE DESFire™ EV1; ISO 14443
Dimensions (HWT in inches)	3.37 x2.125 x0.075	3.37 x2.125 x0.033	2 x1.24 x0.38	1.38 in. or 35mm diameter	3.37x2.125 x0.033		
Slot Punch (Printed Guide)	Vertical (Punched)	Vertical or Horizontal	Key Ring	N/A	Vertical		
Memory Capacity; Application Sectors	N/A	N/A	N/A	N/A	8k bit/ 1K byte; 16 sectors	32k bit/ 4K byte; 40 sectors	2K/4K/8K byte

*All ISO glossy white cards are printable with a magnetic stripe option. Add M1 to the model number for magnetic stripes when ordering.

	13.56 MHz Smart Credentials											
												
Model Number	9420	9451	9520	9551	9558	9651	9751	9758	8420/ 8440/ 8480	8520/ 8540/ 8580	8620/ 8640/ 8680	8720/ 8740/ 8780
Credential Type	Clamshell		ISO-Glossy White*			Keyfob	PVC Patch		Clamshell	ISO Glossy White*	Keyfob	PVC Disk
Credential Technology; ISO Standard	MIFARE Lite; ISO 14443	MIFARE; ISO 14443	MIFARE; ISO 14443			MIFARE; ISO 14443	MIFARE; ISO 14443		MIFARE DESFire™ EV1	MIFARE DESFire™ EV1	MIFARE DESFire™ EV1	MIFARE DESFire™ EV1
Dimensions (HWT in inches)	3.37x2.125 x0.075		3.37x2.125x0.033			2 x1.24 x0.38	3.32x2.08x0.03		3.37 x2.125 x0.033	3.37 x2.125 x0.033	2 x1.24 x0.38	1.38 in. or 35mm diameter
Slot Punch (Printed Guide)	Vertical (Punched)		Vertical or Horizontal			Key Ring	Vertical		Vertical (Punched)	Vertical or Horizontal	Key Ring	N/A
Memory Capacity; Application Sectors	2.5k bit; 5 sectors	8k bit/ 1K byte; 16 sectors	2.5k bit; 5 sectors	8k bit/ 1K byte; 16 sectors	32k bit/ 4K byte; 40 sectors	8k bit/ 1K byte; 16 sectors	8k bit/ 1K byte; 16 sectors	32k bit/ 4K byte; 40 sectors	2k/4k/8k bytes	2k/4k/8k bytes	2k/4k/8k bytes	2k/4k/8k bytes

*All ISO glossy white cards are printable with a magnetic stripe option. Add M1 to the model number for magnetic stripes when ordering.



Smart Credentials

Overview

aptiQ™ contactless smart credentials put you in control by delivering smarter solutions. These credentials protect your most sensitive data by utilizing extra layers of security protection, and can be used for many other applications including transit, cashless vending, and cafeteria point of sale.

aptiQ™ contactless smart credentials operate on a 13.56 MHz frequency, and utilize high security encrypted data, which is mutually authenticated in communication between the card and reader, providing optimum security. aptiQ™ smart credentials offer the choice of 2.5k, 8k, 16k, 32k, and 64k bits of storage, which will meet the most demanding storage requirements.



Credentials
Smart Credentials

Features & Benefits

- Open architecture design is built on ISO 14443A standards, providing for a faster data transfer speed
- Offered in clamshell, ISO style cards, key fobs, and adhesive patches
- Utilize MIFARE® or MIFARE DESFire™ EV1 technology
- Custom artwork and laser engraving available for clamshell and ISO style cards



13.56 MHz Smart Credentials						
Model Number	9420	9451	9520	9551	9558	9651
Credential Type	Clamshell		ISO-Glossy White ¹			Keyfob
Credential Technology; ISO Standard	MIFARE; ISO 14443					MIFARE; 14443
Dimensions (HWT in inches)	3.37x2.125x0.075		3.37x2.125x0.033			2x1.24x0.038
Slot Punch (Printed Guide)	Vertical (Punched)		Vertical or Horizontal			Key Ring
Memory Capacity; Application Sectors	2.5k bit; 5 sectors	8k bit/ 1K byte; 16 sectors	2.5k bit; 5 sectors	8k bit/1K byte; 16 sectors	32k bit/ 4K byte; 40 sectors	8k bit/1K byte; 16 sectors
Warranty	Lifetime - Credentials have a lifetime warranty against manufacturers defects. See sales policy for complete warranty details.					



13.56 MHz Smart Credentials						
Model Number	9751	9758	8420/8440/8480	8520/8540/8580	8620/8640/8680	8720/8740/8780
Credential Type	PVC Patch		Clamshell	ISO-Glossy White ¹	Keyfob	PVC Disk
Credential Technology; ISO Standard	MIFARE; ISO 14443		MIFARE DESFire EV1			
Dimensions (HWT in inches)	3.37x2.125x0.033		3.37x2.125x0.075	3.37x2.125x0.033	2x1.24x0.28	35mm
Slot Punch (Printed Guide)	Vertical		Vertical (Punched)	Vertical or Horizontal	Keyring	N/A
Memory Capacity; Application Sectors	8k bit/1K byte; 16 sectors	32k bit/4K byte; 40 sectors	2K/4K/8K byte			
Warranty	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. Add M1 to the model number for a magnetic stripe when ordering.



Multi-Technology Credentials

Overview

aptiQ™ multi-technology credentials are extremely flexible. Particularly useful during a transition from proximity technology to smart technology, this card can be read by both proximity readers and smart readers. This allows customers to economically migrate to the latest smart technology at their own pace.

aptiQ™ multi-technology credentials contain both 125 kHz proximity and 13.56 MHz contactless smart card capability in one unit, and are available in the newest technologies of today, including both MIFARE® and MIFARE DESFire™ EV1 technology.



Features & Benefits

- Open architecture design is built on ISO 14443A standards, providing for a faster data transfer speed
- Only available in ISO style cards
- Utilize 125 kHz proximity and 13.56 MHz MIFARE® technology or 125 kHz proximity and 13.56 MHz MIFARE DESFire™ EV1 technology
- Custom artwork and laser engraving available



125 kHz/13.56 MHz Multi-Technology Credentials			
Model Number	9951	9958	8920/8940/8980
Credential Type	ISO-Glossy White ¹		
Credential Technology; ISO Standard	125 kHz Prox/MIFARE®; ISO 14443		125 kHz Prox/MIFARE DESFire™ EV1; ISO 14443
Dimensions (HWT in inches)	3.37x2.125 x0.033		
Slot Punch (Printed Guide)	Vertical		
Memory Capacity; Application Sectors	8k bit/1K byte; 16 sectors	32k bit/4K byte; 40 sectors	2K/4K/8K byte
Warranty	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. Add M1 to the model number for a magnetic stripe when ordering.



Proximity Credentials

Overview

XceedID® proximity technology is an easy, convenient access control solution. Proximity technology, which operates on 125 kHz frequency, is easily integrated into existing legacy proximity systems or ideal for a new installation. Proximity credentials can easily fit into a wallet or may be used as a strapped or clipped badge.

From highly durable clamshell-style cards, to basic ISO style cards, to keyfobs and adhesive patches, XceedID offers several different form factors to meet the needs of many different customers.

Proximity credentials by XceedID are compatible with all industry leading proximity readers and are also completely ISO compliant. These credentials also have a passive design, requiring no batteries or maintenance for the life of the card.



Features & Benefits

- Clamshell style offers high durability, and is suitable for harsh environments
- ISO style card is similar in size and thickness to a credit card, and has the ideal surface to print custom artwork, images, and photographs for identification
- Keyfob proximity credentials can easily be attached to any key ring for convenience
- Adhesive patch proximity credentials can be adhered to any frequently used surface
- Custom artwork and laser engraving available for clamshell and ISO style cards



125 kHz Proximity Credentials				
Model Number	7410	7510	7610	7710
Credential Type	Clamshell	ISO-Glossy White ¹	Keyfob	PVC Disk
Credential Technology; ISO Standard	125 kHz Prox			
Dimensions (HWT in inches)	3.37x2.125x0.075	3.37x2.125 x0.033	2x1.24 x0.38	35mm
Slot Punch (Printed Guide)	Vertical (Punched)	Vertical or Horizontal	Keyring	N/A
Memory Capacity; Application Sectors	N/A			
Warranty	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. Add M1 to the model number for a magnetic stripe when ordering.

Biometrics



This section of the Electronic Access Control catalog covers HandKey® biometric hand geometry readers and other accessories that can be easily integrated into an access control system.

Overview

HandKey® biometric hand geometry readers from Schlage provide increased security for the most important openings in your facilities. The HandKey utilizes the size and shape of the hand to verify the identity of the user, ensuring that only authorized users can access the door. While other credentials can be lost, stolen or duplicated without authorization, the HandKey eliminates this risk. The open-architecture design of the HandKey makes integrating biometric hand readers into critical access points easy, simple, and seamless for new or existing access control systems.

Features

The HandKey provides the flexibility to be used as a stand-alone device that protects a single critical access point, or integrated into virtually any new or existing access control system in the market. Standalone operation is enabled utilizing the built-in door lock output, and a programmable auxiliary output that can be used to output audible or silent alarms, or activate lighting systems or other peripheral devices. The same HandKey reader can be set up to operate in card reader emulation mode, outputting Wiegand data to an access control system. This enables the HandKey to look just like a card reader to your access control system, ensuring real-time monitoring and communication between the device and your access control panel.

Event monitoring alerts you in the event that the device has been tampered with, when a user is refused after exceeding the user definable

number of verification attempts, or when the user is under duress. With the HandKey, you can also customize security levels, time zones, holidays and languages based on your unique needs.

Benefits

The HandKey creates an affordable way to provide the highest level of security possible for your access control application. Verification of identity takes less than one second, making it ideal for even high throughput applications.

The hand reader ensures that you are only allowing the correct people, not just the proper cards, to access the most important areas of your facility. The cost commonly associated with managing an access control system can be minimized with the help of a HandKey. Since the credential cannot be forgotten or stolen, you eliminate the need to replace lost, damaged, or stolen cards or keys.

The HandKey readers measure the size and shape of a user's hand, including length, width, thickness and surface area, to verify identity. The HandKey does not read fingerprints or palm prints, and works effectively even if the user's hand is wet, dirty or injured.

Designed upon an open-architecture platform, the HandKey ensures that you can incorporate biometrics where you need them, whether it is on a single high-security door within your facility, or on many openings throughout your whole organization as part of an access control system.

Options

The HandKey Series readers have several options to choose from including:

- Biometric Reader Model: HandKey-II
- Communications: Ethernet or modem communications module options to meet the needs of your communication environment.
- Memory: Field-upgradeable and expandable memory options to support from 512 to 259,072 users.
- Outdoor Enclosures: To protect the reader from the elements and enable operations in a variety of outdoor or other harsh environments.
- Card Reader and Keypads: A variety of reader mounted or wall-mounted options, including proximity, magnetic stripe, barcode, HID iCLASS® and MIFARE®.
- Mounting Options: Enable mounting on table-top, surface wall-mount, or recessed wall-mount.

Accessories

A variety of HandKey accessories are available to maximize the flexibility of your solution:

- HandNet Lite provides an easy way to manage hand templates for up to 32 HandKeys.
- HandNet for Windows enables you to control and monitor a network of HandKey® readers. With one program you can monitor activity and alarms on all readers, manage hand templates between readers, and control the access of each user. HandNet for Windows comes in three tiers to enable flexibility based upon the size of your system. These tiers are upgradable for added flexibility to meet your future needs as your application grows.

	HandKey-II
Construction	Polycarbonate housing with aluminum fingerpins
Base Users	512 Users
User Memory Options	Expandable to 259,072 users
Template Size	9 bytes
Verification Time	Less than one second for comparison to reference template
ID Number Length	1-10 digits
Duress Code	1 leading digit, user definable
Communications	
RS232	Baud rate 300 bps to 28,800 bps
RS485	Baud rate 300 bps to 28,800 bps
RS422	Baud rate 300 bps to 28,800 bps
Optional Modem	Baud rate 300 bps to 14,400 bps
Optional Ethernet	Field Installable: 10 Base T
Mounting Options	
Table Mount	Option Available
Surface Wall Mount	Standard
Recessed Wall Mount	N/A
Left Hand Option	N/A
Antimicrobial Coating on Platen	Standard
Blue Hand Outline	Standard
Outdoor and Enclosure Options	Heater option available; Polyethylene enclosure with UV resistance available; Metal water tight enclosure available
Dimensions (HxWxD)	11.65 in. x 8.85 in. x 8.55 in.; 29.6 cm x 22.5 cm x 21.7 cm
Power Requirements	12 to 24 VDC or 12 to 24 VAC 50-60 Hz 7 Watts (without options)
Weight	5.3 lbs. (2.4 kgs.) (Without battery back-up or wall plate)
Temperature	
Operating	0° C to +45° C /32° F to 113° F
Non-Operating (Storage)	-10° C to +60° C /14° F to 140° F
Relative Humidity	
Operating	20% to 80% RH Non-condensing
Non-Operating (Storage)	5% to 85% RH Non-condensing
Inputs	
Standard	26 bit, 9 bit ID Wiegand
Optional	Mag stripe, bar code, smart card
HandKey Inputs	Request to Exit, Door switch input, 2 auxiliary inputs
Outputs	
Door Control	Lock output
Card Reader Emulation Mode	Wiegand (standard), mag stripe, bar code
Auxiliary Output	1 programmable auxiliary
Outputs to peripheral devices	Audible or silent alarms, door locks, lighting systems
Event Monitoring	
Tamper	HandKey opened or removed
ID Refused	User not verified after user definable number of tries exceeded
Duress	User entered duress code digit
Power Failure	HandKey switched to optional battery power
Programmable HandKey Commands	Add/remove users; Set global operating thresholds; Set individual user data (authority or threshold levels, time zones); Transmit data from Master to Remote; Data received by Master from Remote; Transmit/receive data from optional software; Check status of door (Tamper, Door monitor switch); Time zones – 62 total (2 fixed, 60 programmable); Set language; Set date format, date and time; Edit holidays

THIS PAGE IS INTENTIONALLY BLANK.



Biometric Access Control Products

Quick Reference

HandKey® II

Part Number: HK-2-F3

- Convenience of multiple credential options such as proximity, magnetic stripe, barcode, HID iCLASS® and MIFARE®
- Field installable Ethernet module
- Outdoor enclosure options that make the HandKey II an ideal solution for outdoor usage
- Field upgradable and expandable memory options from 512 to 259,072 users for scalable security that grows with your needs
- Three user-definable outputs to connect to auxiliary devices such as audible or silent alarms, door locks or lighting systems
- Ability to write the industry's most compact biometric template on a card instead of in a database results in higher security & unlimited user capacity
- Specially formulated antimicrobial coating with silver ions on the platen to inhibit the growth of bacteria, mold and mildew to mitigate hygiene concerns. The coating is safe and lasts for the life of the product
- Blue hand outline on platen facilitates easy enrollment and reduces error rates during verification



FX Enclosure (FX-ENCL)

Biometric HandKey Enclosure

Constructed from high impact UV resistant polycarbonate material, the FX Enclosure provides a degree of protection against dusty, dirty, or rainy environments. This enclosure has been designed so that it can be added to an existing installation. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.



TX Enclosure (TX-ENCL)

Biometric HandKey Enclosure

The TX Enclosure provides a higher degree of protection against dusty, dirty, or rainy environments. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.





HandKey® II

Biometric Hand Geometry Reader

Nothing is tougher!

Our HandKey II product is ideal for applications where consistent and dependable security is of prime importance. The product is easy to maintain, and provides an ideal mix of convenience, security and peace of mind.

Top 10 reasons to select Hand Geometry

FIELD PROVEN RELIABILITY

1. Hundreds of thousands of HandKeys are installed all over the world in diverse applications providing millions of error free transactions every day

CONVENIENCE AND COST SAVINGS

2. Incredibly fast installation & intuitive enrollment increases user convenience
3. Verification in less than 1 second makes it ideal for high throughput applications
4. High product quality + Low maintenance costs = Low total cost of ownership
5. Eliminate the worry of lost, stolen or unauthorized transfer of ID cards plus the cost of purchasing and maintaining these cards

ELIMINATE PRIVACY CONCERNS

6. Hand Geometry technology is well accepted by end users as there are NO fingerprints or palm prints taken and the user does not leave behind any trace of their biometric data

AMAZING VERSATILITY

7. HandKeys can be used as standalone systems to protect critical access points that can be easily integrated into virtually every new or existing access control system in the market today
8. Ability to customize user specific security levels, time zones, holidays and languages based on your needs
9. Optional access control template management software allows the HandKeys to form a system that communicates alarms and transactions in real time, provides activity reports, allows supervised on-site or remote user enrollment and expiring privileges for temporary access
10. Environmental enclosures and integrated heater units make the HandKey an ideal solution for outdoor usage



Features and Benefits

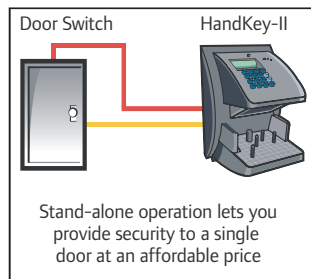
- Convenience of multiple credential options such as proximity, magnetic stripe, barcode, HID iCLASS® and MIFARE®
- Field installable Ethernet module
- Outdoor enclosure options that make the HandKey II an ideal solution for outdoor usage
- Field upgradable and expandable memory options from 512 to 259,072 users for scalable security that grows with your needs
- Three user-definable outputs to connect to auxiliary devices such as audible or silent alarms, door locks or lighting systems
- Ability to write the industry's most compact biometric template on a card instead of in a database results in higher security & unlimited user capacity
- Specially formulated antimicrobial coating with silver ions on the platen to inhibit the growth of bacteria, mold and mildew to mitigate hygiene concerns. The coating is safe and lasts for the life of the product
- Blue hand outline on the platen facilitates easy enrollment and reduces error rates during verification

Door control and monitoring

Each HandKey II is a complete, integrated door controller providing lock operation, request-for-exit and alarm monitoring. Biometric templates and decision-making capability reside locally, ensuring your doors are always secure and will continue to operate properly even if all communication to the main access control system is lost.

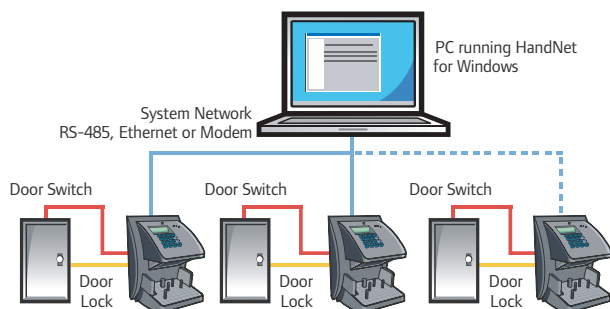
Stand-alone or fully integrated

HandKey readers can be used as a stand-alone unit or as part of an integrated access control system. The units easily integrate into existing systems using the card reader emulation mode. Or, by using the HandNet software for template management, thousands of units can be linked together to form a system that communicates alarms and transactions in real time, provides activity, user and systems reports, and allows supervised user enrollment and deletions at any reader. A variety of communications options, including dial-up modems and Ethernet, allow you to design a system that's right for your facilities.



In a network

Schlage's HandNet software links a virtually unlimited number of HandKey units into an integrated door access control system. All alarms and transactions report back in real time to the central computer, making door and alarm monitoring easy and efficient. Activity, user and system reports can be easily generated. The central computer handles all hand template management allowing supervised enrollment at any reader and system wide deletions. An optional internal modem lets you include remote site operations. Ethernet communication is also available.



Base Model	HandKey II
Description	HandKey with base memory for 512 users
Verification Time	≤ 1 second for comparison to reference template
ID Number Length	1 – 10 digits
Duress Code	1 leading digit, user definable
Communication	RS232: Baud rate 300 bps to 28,800 bps RS422: Baud rate 300 bps to 28,800 bps RS485: Baud rate 300 bps to 28,800 bps Optional Modem: Baud rate 300 bps to 14,400 bps Optional Ethernet: 10 Base T
Template Size	9 bytes
User Memory	512 users expandable to 259,072 users
Inputs	Standard: 26 bit, 9 bit ID Wiegand Optional: Mag stripe, bar code, smart card HandKey input: Request to Exit, Door switch input, 2 auxiliary inputs
Outputs	Door control: Lock output Card reader emulation mode: Wiegand, mag stripe, bar code 1 programmable auxiliary Outputs to peripheral devices: Audible or silent alarms, door locks, lighting systems
Event Monitoring	Tamper: HandKey opened or removed ID refused: User not verified after user definable number of tries exceeded Duress: User entered duress code digit Power failure: HandKey switched to optional battery power
Programmable HandKey Commands	<ul style="list-style-type: none"> Add / remove users Set global operating thresholds Set individual user data (authority or threshold levels, time zones) Transmit data from Master to Remote Data received by Master from Remote Transmit / receive data from optional software Check status of door (Tamper, Door monitor switch) Time zones – 62 total (2 fixed, 60 programmable) Set language Set date format, date and time Edit holidays
Antimicrobial	Available on Platen
Blue Hand Outline	Available on Platen
Dimensions HxWxD	11.65 in. x 8.85 in. x 8.55 in. 29.6 cm x 22.5 cm x 21.7 cm
Power Requirements	12 to 24 VDC or 12 to 24 VAC 50-60 Hz 7 Watts (without options)
Weight	5.3 lbs. (2.4 kgs.) (Without battery back-up or wall plate)
Temperature	Operating: 0 deg C to +45 deg C / 32 deg F to 113 deg F Non-Operating (Storage): -10 deg C to +60 deg C / 14 deg F to 140 deg F
Relative Humidity	Operating: 20% to 80% RH Non-condensing Non-operating (Storage): 5% to 85% RH Non-condensing



Biometric Terminal Options and Accessories for HandKey®

Schlage offers a number of accessories for access control HandReader terminals. From networking options to memory expansions, we'll help you create the solution to meet your specific needs.



Base Model	HandKey II
Card Readers	Prox: Externally top mounted HID prox reader. Factory option only HID iCLASS®: iCLASS reader, Factory option only SC-100: MIFARE® reader, Factory option only CR-2: Mag stripe wall mount card reader BC-100: Bar code reader, wall mount swipe
Memory	EM-801-F3: Field upgradable memory expansion up to 9,728 users EM-803-F3: Field upgradable memory expansion up to 32,512 users EM-813-F3: Memory expansion up to 64,768 users EM-823-F3: Memory expansion up to 129,536 users EM-833-F3: Memory expansion up to 194,304 users EM-843-F3: Memory expansion up to 259,072 users
Communication	EN-200: Field upgradable Ethernet communication module 10baseT MD-500: Internal Dial-up modem
Power Options	PS-110: Power supply, 120VAC to 13.5 VDC PS-220: Power supply, 220VAC to 13.5 VDC BB-250: Optional battery backup
Mounting	TM-100: Table top secure mount for flat surfaces
Left Hand Option	NA
Network Accessories	DC-102: Data converter for 4 wire system, RS-232 to RS-422 with 120V, 60Hz power supply DC-102 with 220V, 50Hz power supply DC-104: Data converter for 2 or 4 wire systems, RS232 to RS485/RS 422 with 120V, 60Hz power supply DC-104 with 220V, 50Hz power supply

THIS PAGE IS INTENTIONALLY BLANK.



Enclosure Options for the HandKey® Series

Overview

Schlage biometrics provides various options to protect your HandKeys® from the elements. Two different, proven solutions are available to ensure your HandKeys keep performing regardless of your environment.

FX Enclosure (FX-ENCL)

Biometric HandKey Enclosure

Constructed from high impact UV resistant polycarbonate material, the FX Enclosure provides a degree of protection against dusty, dirty, or rainy environments. This enclosure has been designed so that it can be added to an existing installation. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.

TX Enclosure (TX-ENCL)

Biometric HandKey Enclosure

The TX Enclosure provides a higher degree of protection against dusty, dirty, or rainy environments. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.





FX Enclosure



TX Enclosure

Specifications

	FX Enclosure	TX Enclosure
		
Part Number	FX-ENCL	TX-ENCL
Temperature Range	-20F to 120F / -29C to 49C	-45F to 120F / -43C to 49C
Dimensions H x W x D	14.75 in x 12.00 in x 10.50 in 37.5 cm x 30.5 cm x 26.7 cm	23.00 in x 14.00 in x 11.25 in 58.4 cm x 35.6 cm x 28.6 cm
Cross Weight (including reader)	7.3 lbs / 3.3 kg	45.0 lbs / 20.4 kg
HandReader Models	HK-2-F3	HK-2-F3
Heater	Factory installed option only, Model No. INT-HTR	Factory installed option only, Model No. INT-HTR

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, HandPunch and HandKey are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Specifications subject to change. Please check with your system vendor for details. All other trademarks are the property of their respective owners.



HandNet® for Windows

Overview

HandNet for Windows lets you control and monitor a network of HandKey readers. With just one comprehensive program, you can monitor activity and alarms on all readers, and control the access of each user.



Biometrics
HandNet® for Windows

Features and Benefits

- Automatic hand template management feature allows template distribution from an enrollment HandKey to other selected HandKeys thus eliminating the need for a user to be enrolled at every HandReader
- Independent door control capability without the need for an access control panel
- Monitor multiple remote sites from the convenience of your PC
- Remote enrollment feature enables a HandKey to be controlled from the software. For example, a guard behind a glass partition or a supervisor in a distant office can enroll new users without physically going to the HandKey
- Assign temporary access to selected users by specifying a user's access start and stop days and times
- Manage archive activity to keep old information available for reports
- Manage alarms for additional security

Specifications	HandNet For Windows	HandNet Lite
Computer	Pentium 233 MHz or higher (Minimum 133 MHz)	Intel 666 MHz or higher
Operating System	Windows XP Professional Service Pack 2 Windows XP Professional Service Pack 3 Windows Vista Business Service Pack 1 Windows 7 Pro Compatible 32 Bit Windows 7 Pro Compatible 64 Bit	Windows XP SP3, Vista Business SP1 Windows Server 2003 SP1 or greater Windows 2000 Professional or Server Editions SP4, and Windows 95 & 98
Drive	CD ROM for installation	CD ROM for installation
Hard Disk	50 MB Minimum, 10 MB Free space	60 GB Minimum, 10 GB Free space
Monitor	SVGA Color, 1024 x 768 recommended(800 x 600 minimum)	SVGA Color, 1024 x 768 recommended(800 x 600 minimum)
Memory	32 MB (Minimum 16 MB)	4 Gb (Minimum 2 GB)
Database	MS Access	MS SQL Server 2000 MSDE
Products Supported	HK-2-F3, ID3D-R / RW	HK-2-F3, ID3D-R/RW, DX-2000, DX-2100, DX-2200, DX-2400
Template Managements	Available	Available
Supported Communications	RS232, RS485, Ethernet, Modem RS232, RS485, Ethernet	RS232, RS485, Ethernet, Modem RS232, RS485, Ethernet
Smart Card Compatability	NA	HID iCLASS®, MIFARE®, MIFARE DESFire™ EV1
Time Zones	Available	Available
Reports	Available	Limited – use reports from an access control panel
Door Control	Available	NA – use panel door control
Alarms	Available	NA – use panel alarms
Open Door Remotely	Available	NA – use panel door control
Network Readers	Available	Available
Archive Activity	Available	Available – database backup
Remote Enrollment	Available	Available

OPTIONS

HN-2-T1

Manages up to 5 HandKeys

HN-2-T2

Manages up to 25 HandKeys

HN-2-T3

Manages an UNLIMITED number of HandKeys

HandNet Lite

Software program to manage up to 32 HandKeys



Biometrics for Access Control

Training Course Outline

Overview

Schlage biometrics offers training courses to provide you with the tools and services needed to optimize the performance and reliability of the HandKey® and related software solutions. Our comprehensive offering will help reacquaint you with HandKey hardware, installation, and its relationship with software operation. Training is regularly scheduled at our factory location or can be delivered at your location.

The HandKey Training Course Covers:

- Introduction to Biometrics
- Access Control Product Line
- Options & Accessories
- Installation
- Hands-on Training
- Troubleshooting

The Access Control HandKey Software Training Course Covers:

- Comparison of HandNet® for Windows vs. HandNet Lite
- Overview of HandNet for Windows & HandNet Lite
- Installing HandNet for Windows & HandNet Lite
- Adding Users
- Connecting to the HandKey
- Creating Reports
- Archiving
- Database Backup and Restore
- Troubleshooting

Schlage Biometrics ACCESS CONTROL Training Courses	
SBT-HK	1-Day Schlage Biometrics Training - HandKey
SBT-HNWL	1-Day Schlage Biometrics HandNet for Windows & HandNet Lite Software Training

SBT-HK	1-Day Schlage Biometrics Training - HandKey
SBT-HNWL	1-Day Schlage Biometrics HandNet for Windows & HandNet Lite Software Training



Training Courses

Keeping installers, technicians, and sales people current on the HandKey features, capabilities, troubleshooting techniques, and installation guidelines is key to profitability and maintaining customer satisfaction.

The goals of these courses are to provide a working knowledge of the HandKey hardware and software and be able to perform basic troubleshooting. The Schlage HandKey training classes are technically oriented and feature hands-on training through classroom exercises.

THIS PAGE IS INTENTIONALLY BLANK.

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 6000 Series features stainless steel construction for heavy duty applications. The 6100 Series is designed for use with rim exit devices and the 6200 Series is designed for use 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 6300 Series is a surface mounted electric strike which is ideal for aftermarket applications. It can be used with the Von Duprin 98/99 as well as most rim exit devices and can be mounted on any hollow metal, aluminum or wood frame.

The 5100 Series has been designed for medium duty applications, specifically to control traffic flow through interior and exterior openings in retail and commercial facilities.

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

Schlage offers a broad selection of electromagnetic locks – with feature and function sets to address a variety of applications. Whether it's securing a hospital laboratory, monitoring a controlled area in an airport or providing traffic control for doors in a commercial or education building, Schlage electromagnetic locks are designed to exceed the standards set by the Builders Hardware Manufacturers Association (BHMA).

Features

The newly designed M400 Series electromagnetic locks are available in two configurations to meet your specific security needs. The M420/450/490 provides basic security while the M420P/450P/490P provides 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.

For retrofit applications, the 40 Series and 70 Series electromagnetic locks are fully featured and cost effective. The 40 Series is rated to 500 lbs and the 70 Series is rated to 1000 lbs of hold force.

Schlage 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 were redesigned with a new bayonet mounting feature that allows the installer to have their hands free during the mounting process. The M400 Series electromagnetic locks are non-handed and symmetrical, allowing for optimum placement of the magnet no matter the application.

The 40 and 70 Series Electromagnetic locks feature common templates for cost effective retrofit installations. The specialty electromagnetic locks are designed with specific feature sets which optimize performance in a variety of unique, harsh and complex environments.

Power Supplies

Overview

The PS900 Series is a consolidated line of power supplies and accessories that 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 2*, 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. These PS900 Series 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. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal 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).

*Note: PS906 can provide Class 2 rated outputs when used with 900-8P distribution board.

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 & consoles, exit sensors, electric horns and more.

Features

The specially designed 620 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 620 to 631 Series 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 configure both clockwise and counterclockwise key turn direction as well as momentary or maintained action in seconds.

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 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 12 or 24VDC, field selectable and have eight sound tones up to 3000Hz.

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.

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 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 heavy duty applications. By choosing Schlage components you can be assured that the system will meet the requirements of the job, whether new construction or aftermarket.

	Schlage Power Supplies			Von Duprin Supplies
	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 with jumper, 240m Vpp max ripple, 5% regulation	4 amp @ 12V or 24V DC, field selectable with jumper, 240m Vpp max ripple, 5% regulation	6 amp @ 12V or 24V DC, field selectable with jumper, 240m Vpp max ripple, 5% regulation	4 amp, High Inrush @ 12V or 24V DC, field selectable with jumper, 360m Vpp max ripple, 5% regulation
AC Primary Fuse Size	3.15A, 250V, 5 x 20mm SLOW-BLOW	4A, 250V, 5 x 20mm SLOW-BLOW	6.3A, 250V, 5 x 20mm SLOW-BLOW	6.3A, 250V, 5 x 20mm SLOW-BLOW
Battery Fuse Size	7.5A 32V ATO Blade Style			
DC Output Protection	Overload Protection - current limited foldback circuit			
AC Input Termination	3 position terminal block with protective cover; wire capacity 10 AWG max			
DC Output Termination	2 position terminal block with protective cover; wire capacity 12 AWG max			
Operating Temperature	32 - 120°F (0 - 49°C)			
Distribution/Option Board Connectors	1	2	3	2
Fire Alarm Board Connector	Yes	No	No	No
Enclosure:				
Fire Alarm Board Connector	14 in. (h) x 12 in. (w) x 4 in. (d)			
Operating Temperature	32°F - 120°F (0°C - 49°C)			
Option Boards:				
900-BB: Battery Backup	Y	Y	Y	Y
900-BBK: Battery Backup Kit	Y	Y	Y	Y
900-FA: Fire Alarm	Y	Y (Must be installed on distribution boards)	Y (Must be installed on distribution boards)	Y (Must be installed on distribution boards)
900-2RS: 2 Relay EL Control Board				Y
900-2Q: 2 Relay QEL Control Board	Y	Y	Y	Y
900-4R: 4 Relay Output Board	Y	Y	Y	Y
900-4RL: 4 Relay Logic Board	Y	Y	Y	Y
900-8F: Fused 8 Zone Distribution Board	Y	Y	Y	Y
900-8P: PTC 8 Zone Distribution Board	Y	Y	Y	Y
Certifications				
UL294	Y	Y	Y	Y
Class 2	Y	Y	Y	Y
RoHS	Y	Y	Y*	Y
FCC Part 15	Y	Y	Y	Y

*Note: Class 2 rated outputs can be provided using 900-8P distribution board in conjunction with the PS906.

	M400 High Security Mag Locks								
	M420	M420P	M450	M450P	M490	M490P	M490DE	M490DEP	M490G
Features									
Hold Force	500 lbs.		1000 lbs		1500 lbs		1500 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		0.75A @ 12V DC		0.65A @ 12V DC		.75A @ 12V DC		0.65A @ 12V DC
	0.38A @ 24V DC		0.38A @ 24V DC		0.35A @ 24V DC		.45A @ 24V DC		0.35A @ 24V DC
Features									
Automatic Voltage Sensor (AVS)	Y		Y		Y		Y		Y
Voltage Suppression	Y		Y		Y		Y		Y
Internal Plunger Switch	-		-		-		Y		-
Auto Relocking Switch (ARS)	-		-		-		-		-
Magnetic Bond Sensor (MBS)	-	Y	-	Y	-	Y	-	Y	Y
Door/Gate Status Monitoring (DPS/DSM)	-	Y	-	Y	-	Y	-	Y	Y
Relock Time Delay	-	Y	-	Y	-	Y	-	Y	-
Anti-Tamper Switch (ATS)	-	O	-	O	-	O	-	O	-
MBS Indicator (LED)	-	O	-	O	-	O	-	O	-
Anti-Tailgate Feature	-		-		-	Y	-		-
Surface Mount	Y		Y		Y		Y		-
Mortise Mount	-		-		-		-		-
Top Jam (inswinging doors)	O		O		O		-		-
Herculite Door Bracket	O		O		O		O		-
Bayonet Mounting Bracket	Y		Y		Y		Y		-
Universal Mounting Bracket	-		-		-		-		Y
Field Configurable Handing	Y		Y		Y		Y		-
Lock Dimensions (H xW x L)	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									
BHMA Grade 1	Y		Y		Y		Y		-
UL1034	Y		Y		Y				-
UL10C	3HR		3HR		3HR		3HR		-
cUL	Y		Y		Y		Y		-
CSFM	Pending		Pending		Pending		Pending		-
NFPA101	-		-		-		Y		-
BOCA	-		-		-		Y		-

	Specialty Mag Locks			40/70 Standard Duty Mag Locks	
	GF3000SM (Surface Mount)	GF3000 (Mortise Mount)	320M	40	70
Features					
Hold Force	3000 lbs		500 lbs	500 lbs	1000 lbs
Input Voltage	12V/24V DC		12V/24V DC	12V/24V DC	12V/24V DC
Current Draw	0.90A @ 12V DC		0.23A @12V DC	0.32A @ 12V DC	0.25A @12V DC
	0.45A @ 24V DC		0.45A @ 24V DC	0.15A @ 24V DC	0.12A @ 24V DC
Features					
Automatic Voltage Sensor (AVS)	Y		Y	Y	Y
Voltage Suppression	Y		Y	Y	Y
Internal Plunger Switch	-		-	-	-
Auto Relocking Switch (ARS)	S		-	-	-
Magnetic Bond Sensor (MBS)	O		Y	Y	Y
Door/Gate Status Monitoring (DPS/DSM)	O		Y	Y	Y
Relock Time Delay	Y		Y	-	-
Anti-Tamper Switch (ATS)	-	-	-	-	-
MBS Indicator (LED)	-	-	-	-	-
Anti-Tailgate Feature	-	-	-	-	-
Surface Mount	Y	-	-	Y	Y
Mortise Mount	-	Y	Y	-	-
Top Jam (inswinging doors)	Y	-	-	O	O
Herculite Door Bracket	-	-	-	-	-
Bayonet Mounting Bracket	-	-	-	-	-
Universal Mounting Bracket	-	-	-	-	-
Field Configurable Handing	-	-	-	-	-
Lock Dimensions (H x W x L)	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.	1.875 in. x 8 in. x 1625 in.	3 in. x 8 in. x 1.875 in.
Weight	9 lbs.	7 lbs.	6 lbs.		8 lbs.
Certifications					
BHMA Grade 1	Y		Y	Y	Y
UL1034	-		Y	Y	Y
UI10C	3HR		3HR	1HR	1HR
cUL	Y		Y	Y	Y
CSFM	Y		Y	Y	Y
NFPA101	-		-	-	-
BOCA	-		-	-	-

THIS PAGE IS INTENTIONALLY BLANK.



6100 Series

Strikes for Rim Exit Devices

Models 6111, 6112, 6113 & 6121

Overview

Von Duprin electric strikes are known for their reliability, durability and security. The 6100 Series is designed to withstand abuse. Its heavy duty stainless steel construction is fully UL1034 and UL10C listed and ANSI/BHMA Grade 1 1500 lb. hold force rated.

6100 Series electric strikes are designed for use with a variety of Rim Exit Devices. They interface with the latch mechanism of the exit device. The movable lip (keeper) allows a door to open even when the latch bolt is extended. This feature, called remote release provides added benefits such as increased convenience and efficiency. The 6100 Series also provides added security and traffic control.

6100 Series electric strikes can be used 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.

The power failure mode of the 6100 can be specified at the time of order. Fail secure is available for fire rated openings. In a fail secure application the door is normally locked. To unlock the door power must be applied. Fail safe strikes which are commonly used for life safety applications are non-fire rated. To unlock a fail safe strike power is removed. The 6100 comes standard 24 VDC; 12 VDC and AC operation are optional.



Features and Benefits

- Non-handed design provides greater flexibility
- Strike box is adjustable to compensate for misalignment of the door or frame
- Two piece plug connectors are furnished for ease of installation and for removal during strike servicing
- ANSI 156.5 Grade 1 1500 lb. hold force rated
- UL1034 Burglary-Resistant & UL10C Electric Strike for Fire Door
- Six finishes available to suite with existing hardware
- Durable stainless steel construction
- 24 VDC standard with 12 VDC and AC operation optional

6100 Series Specifications

	12VDC	24VDC
Resistance in Ohms +/- 10% @ 70 F	21	82
Watt-seated @ 70 F	7.5	8
Amps-seated @ 70 F	0.6	0.33
Amps-inrush @ 70 F	0.6	0.33

Rim Exit Device Compatibility 6111, 6112, 6113 & 6121 Strikes

Manufacturer	Device
Von Duprin	22, 33A, 35A, 55*, 88, 98, 99 8827 LBR† x Pullman latch Non-Fire rated 9827 LBR† x Pullman latch Non-Fire rated 9927 LBR† x Pullman latch Non-Fire rated
Falcon Monarch **	XX-R, 18-R, 19-R, 24-R, 25-R
Falcon Doromatic	1790
Precision**	2100
Sargent	2800, 6500, 6800, 8500, 8800, 9500, 9800***, 9898
Yale	1500, 700

* Strike must be factory modified, specify when using with a 55 Rim device

** Deadlocking feature will not properly function, consult factory

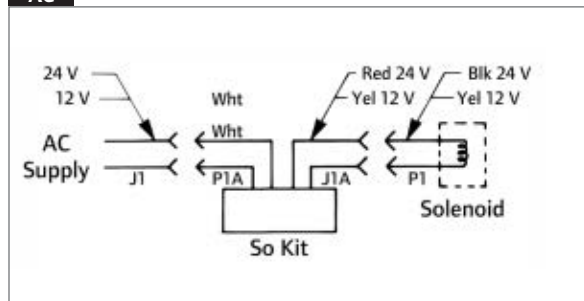
*** Panic only, NO Fire rated

† 6111 is recommended for LBR applications

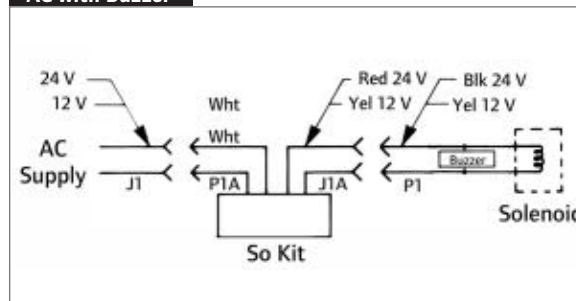
Note: When using a lockset not listed or when retrofitting an existing application, please contact Von Duprin Technical Support for application assistance

Wiring

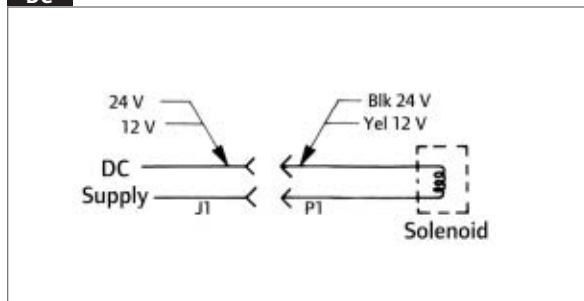
AC



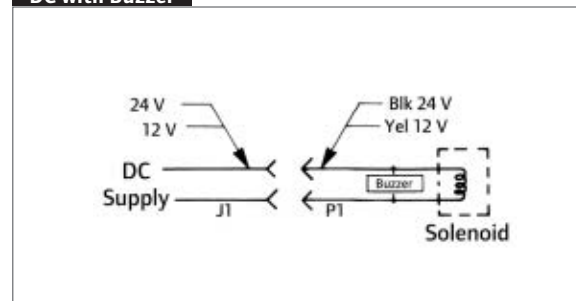
AC with Buzzer



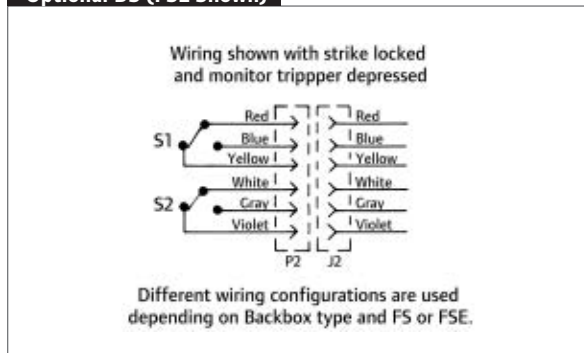
DC







DC with Buzzer



Optional DS (FSE Shown)



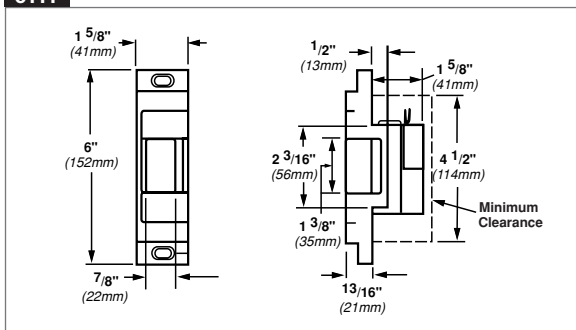
Model Specifications

Model Specifications					
Model #		6111	6112	6113	6121
Retrofits Model		VD 3031	FA 310-4	VD 3011 or 3021	FA 310-4-100
Latchbolt Throw		3/4"			
Face Plate Length		6"	9"	6"	9 1/8"
Backbox Depth		1 3/4"	1 3/4"	1 15/16"	N/A
Lockset		Rim Exit Device			
# Doors		Single, Double Door with Mullion	Single		Double Door without Mullion
Door/Frame Type		Hollow Metal, Aluminum & Wood			
Options	Blade Stop Shim	Yes	No	Yes	No
	DS or DS-LC (Dual Monitor Switches)	Yes			
	EB (Entry Buzzer - Fail Secure Only)	Yes			
Certifications		UL1034, UL10C, ANSI/BHMA 156.5 Grade 1 1500 lb. Hold force rated			
Application Notes		For use with rim exit devices on single doors or double doors with mullion applications. 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-fired rated.	For use with rim exit devices on single door applications. Designed to replace Folger Adam 310-4, minor frame prep modification required.	1/2" projection Blade Stop Shim 010055-XX available for use on cased opening or blade stop frames. Non-Fire rated.	Non-fire rated. For use with rim exit devices on double door applications without mullion. Strike mounts on inactive leaf. Replace Folger Adam 310-4-100.

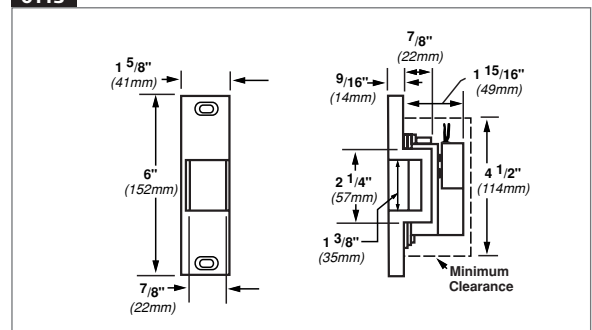
Note: 16 VDC and 28 VDC solenoid are sold as replacement parts for existing strikes. Please contact Customer Care for details.

Dimensions

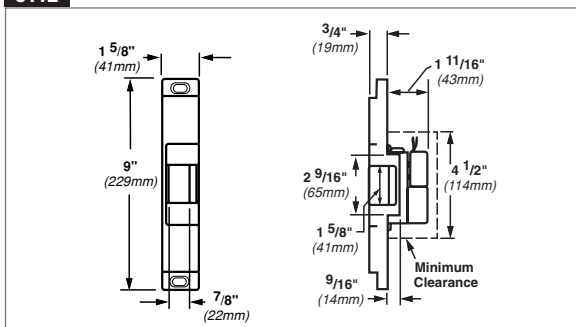
6111



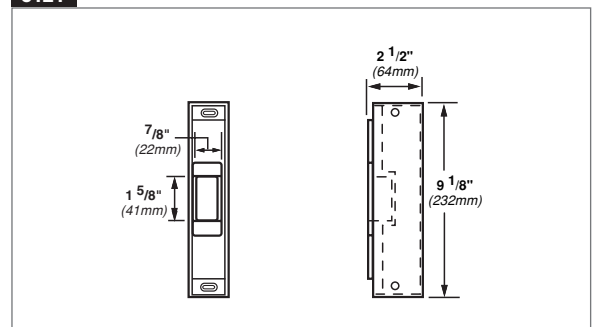
6113



6112



6121



Ordering Information

6112	FSE	DS	24	S024	US3	EB
Model	Power Failure Mode	Dual Switch*	Voltage	Rectifier Kit*	Finish	Buzzer*
1	2	3	4	5	6	7

*Optional

Selections Correspond With the Numbers Above

1 Model	
6111	See chart on page 3 to make the proper selection
6112	See chart on page 3 to make the proper selection
6113	See chart on page 3 to make the proper selection
6121	See chart on page 3 to make the proper 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 & lock status. DS Switches rated at 24 VDC 50 milliampere - 2 Amps.
DS-LC	Optional for computer monitoring. Monitors latch bolt & lock status. DS switches rated 24 VDC 50 milliampere or less.

4 Voltage (VDC)	
24	Low voltage DC power
12	Low voltage DC power
<i>If AC power is required specify rectifier kit below.</i>	

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 US Number/Von Duprin Number	
US3/85	Plated Polished Brass on Stainless Steel
US4/84	Plated Dull Brass on Stainless Steel
US10/06	Plated Dull Bronze on Stainless Steel
US10B/86	Plated Dark Bronze on Stainless Steel
US32/31	Stainless Steel, Polished
US32D/32	Stainless Steel, Satin

7 Buzzer (Optional)	
EB	Entry Buzzer. Only available if Fail Secure (FSE) is specified.

6200 Series

Strikes for Mortise or Cylindrical Devices

Models 6210, 6211, 6211AL, 6211WF, 6212, 6212WF, 6213, 6214, 6215, 6216, 6221, 6222, 6223, 6224, 6224AL, 6225 & 6226

Overview

Von Duprin electric strikes are known for their reliability, durability and security. The 6200 Series is designed to withstand abuse. Its heavy duty stainless steel construction is fully UL1034 and UL10C listed and ANSI/BHMA Grade 1 1500lb. hold force rated.

6200 Series electric strikes are designed for use with a variety of mortise or cylindrical locksets as well as mortise exit devices. It interfaces with the latch mechanism of the exit device. The 6200 Series movable lip (keeper) allows a door to open even when the latch bolt is extended. This feature, called remote release provides added benefits such as increased convenience and efficiency. The 6200 Series also provides added security and traffic control.

6200 Series electric strikes can be used 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.

The power failure mode of the 6200 Series can be specified at the time of order. Fail secure is available for fire rated openings. In a fail secure application the door is normally locked. To unlock the door power must be applied. Fail safe strikes which are commonly used for life safety applications are non-fire rated. To unlock a fail safe strike power is removed. The 6200 Series comes standard with 24 VDC; 12 VDC and AC operation are optional.



Features and Benefits

- Non handed design provides greater flexibility
- Strike box is adjustable to compensate for misalignment of the door or frame
- Two piece plug connectors are furnished for ease of installation and for removal during strike servicing.
- ANSI 156.5 Grade 1 1500lb. hold force rated
- UL1034 Burglary-Resistant & UL10C Electric Strike for Fire Door
- Six finishes available to suite with existing hardware
- Durable stainless steel construction
- 24 VDC standard with 12 VDC and AC operation optional

6200 Series Specifications

	12VDC	24VDC
Resistance in Ohms +/- 10% @ 70 F	21	82
Watt-seated @ 70 F	7.5	8
Amps-seated @ 70 F	0.6	0.33
Amps-inrush @ 70 F	0.6	0.33

Mortise Lockset Compatibility

6211, 6211AL, 6211WF, 6212, 6213, 6214, 6215, 6221, 6222, 6223, 6224, 6224AL, 6225 & 6226 Strikes

Manufacturer	Model Number
Von Duprin	7500
Adams Rite	4510, 4710
Baldwin	6000
Best	24H, 30H
Corbin	9000
Falcon	M2300, M2500, M2600, M3300, M3500, M3600
Precision	Mortise
Russwin	Mortise
Sargent	7700, 8100, 9000
Schlage	L9000, K30, K40, K50, K60
Yale	7030, 7130, 8600, 8700

Note: Von Duprin cannot guarantee compatibility as other manufacturer's designs may change without notice.

Mortise Lockset Compatibility 6210

Manufacturer	Model Number
Von Duprin	7500
Best	30H (Not 45H/47H)
Corbin/Russwin	ML2200, 5000, 9000, CR2200 (Not 2000)
Falcon	M100, M200, M300, M400, M500, M600
Sargent	7700, 8100 (Not 7800/8200)
Schlage	L9000
Yale	8700 (Not 8800)

Cylindrical Lockset Compatibility

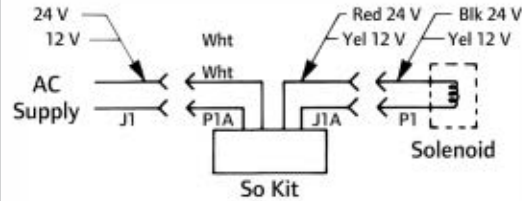
6211, 6211AL, 6211WF, 6212, 6213, 6214, 6215, 6221, 6222, 6223, 6224, 6224AL, 6225 & 6226 Strikes

Manufacturer	Cylindrical Latchbolt Projection
Baldwin	1/2" - 3/4" (13mm - 19mm)
Best	3/8" - 3/4" (10mm - 19mm)
Corbin	1/2" - 3/4" (13mm - 19mm)
Falcon	1/2" - 3/4" (13mm - 19mm)
Russwin	1/2" - 3/4" (13mm - 19mm)
Sargent	1/2" - 3/4" (13mm - 19mm)
Schlage	3/8" - 3/4" (10mm - 19mm)
Yale	1/2" - 3/4" (13mm - 19mm)

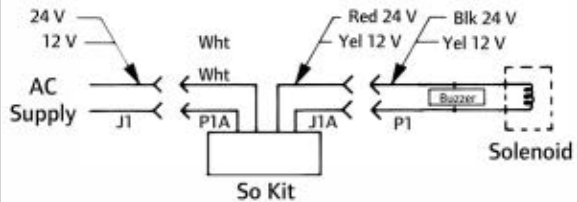
Note: Signalling may not function when using 3/8" (10mm) throw bolt. Deadlocking cannot be guaranteed with all locks.

Wiring

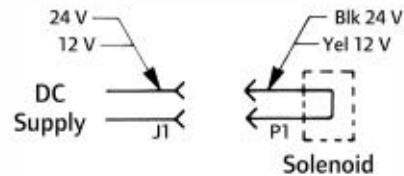
AC



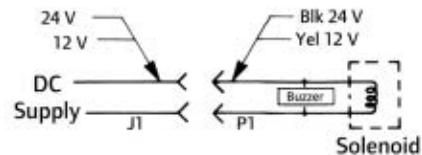
AC with Buzzer



DC

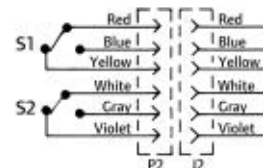


DC with Buzzer








Optional DS (FSE Shown)

Wiring shown with strike locked and monitor tripper depressed






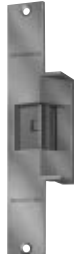


Different wiring configurations are used depending on Backbox type and FS or FSE.

Model Specifications

						
Model #		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 21/32"	1 21/32"	1 21/32"	4 1/2"	1 21/32"
Lockset	Mortise	•	•	•	•	•
	Cylindrical		•	•	•	•
# Doors	Single	•	•	•	•	•
	Pair					
Door & 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	UL1034	•	•	•	•	•
	UL10C	•	•	•	•	•
	ANSI/BHMA 156.5 Grade 1 1500lb. Hold force rated	•	•	•	•	•
Application Notes		1	2	3	4	5







Application Notes

- For use with mortise locks without deadbolt on single door, hollow metal frame applications and using ANSI prep at standard height. Strike pocket inserts are provided to accommodate different manufacturers deadlocking trigger locations.
- For use on new installations with mortise locks without deadbolt or cylindrical locks on single door, hollow metal frame applications. Designed to replace Von Duprin 3140 or Folger Adam 712.
- For use on new installations with mortise locks without deadbolt or cylindrical locks on single door, aluminum frame applications
- For use on new installations with mortise locks without deadbolt or cylindrical locks on single door wood frame applications. Designed to replace Folger Adams 732. Wood frame horizontal solenoid location differs from Folger Adams. Requires additional frame prep when retrofitting.
- For use with mortise locks without deadbolt or cylindrical locks on single door, hollow metal or aluminum frame applications. Fits modified ANSI 115.2 cutout. Designed to replace Von Duprin 3146

Model Specifications							
Model #		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 & 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 3/4"	2 1/2"	1 5/8"	1 5/8"	3 5/32"	4 3/4"
Lockset	Mortise	•	•	•	•	•	•
	Cylindrical	•	•	•	•		•
# Doors	Single	•	•	•	•	•	
	Pair						•
Door & Frame Type	Hollow Metal		•	•	•	•	•
	Aluminum		•†	•	•	•	•
	Wood	•	See note 7 below			•	•
Options	DS or DS-LC (Dual Monitor Switches)	•	•	•	•	•	•
	EB (Entry Buzzer - Fail Secure Only)	•	•	•	•	•	•
	28VDC AC rectifier kit	•	•	•	•	•	•
	16VDC solenoid	•	•	•	•	•	•
Certifications	UL1034	•	•	•	•	•	•
	UL10C	•	•	•	•	•	•
	ANSI/BHMA 156.5 Grade 1 1500lb. Hold force rated	•	•	•	•	•	•
Application Notes		6	7	8	9	10	11

Application Notes

- 6 For use with mortise locks without deadbolt or cylindrical locks on single door, wood frame applications.
- 7 For use with mortise locks without deadbolt or cylindrical locks on single door hollow metal or aluminum frame applications (includes wood frame on retrofit applications). Designed to replace Von Duprin 3041, 3042, 3061 and 3062.
- 8 For use with mortise locks without deadbolt or cylindrical locks on sing door hollow metal or aluminum frame applications. Designed to replace Folger Adams 310-2 3/4
- 9 For use with mortise locks without deadbolt or cylindrical locks on single door hollow metal or aluminum frame applications. Designed to replace Folger Adams 310-2.
- 10 For use with mortise locks with deadbolt 1" throw on single door hollow metal aluminum or wood frame applications. Deadbolt must be manually operated. Designed to replace Folger Adams 310-3-1.
- 11 Open back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4" (44mm) thick double door applications. 4 3/4" (120 mm) minimum stile required. For a concealed vertical rod and mortise device combination, specify "A" backbox.

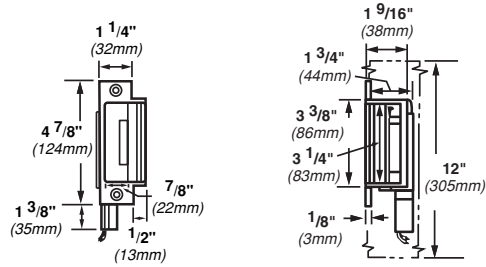
						Model Specifications	
6222	6223	6224	6224AL	6225	6226	Model #	
FA 310-23/ 4 OB	VD 3091 & 3092	FA 310-2 3/4	FA 310-2RF	FA 310-2 OB	FA 310-2	Retrofits Model	
¾"	¾"	¾"	¾"	¾"	¾"	Latchbolt Throw	
9"	6"	9"	9"	9"	9"	Face Plate Length	
1 ⅝"	4 ½"	1 ⅝"	1 ⅝"	1 ⅝"	1 ⅝"	Backbox Depth	
•	•	•	•	•	•	Mortise	Lockset
•	•	•	•	•	•	Cylindrical	
						Single	# Doors
•	•	•	•	•	•	Pair	
•	•	•		•	•	Hollow Metal	Door & Frame Type
•	•	•	•	•	•	Aluminum	
	•					Wood	
•	•	•	•	•	•	DS or DS-LC (Dual Monitor Switches)	Options
•	•	•	•	•	•	EB (Entry Buzzer – Fail Secure Only)	
•	•	•	•	•	•	28VDC AC rectifier kit	
•	•	•	•	•	•	16VDC solenoid	
•	•	•	•	•	•	UL1034	Certifications
•	•	•	•	•	•	UL10C	
•	•	•	•	•	•	ANSI/BHMA 156.5 Grade 1 1500lb. Hold force rated	
12	13	14	15	16	17	Application Notes	

Application Notes

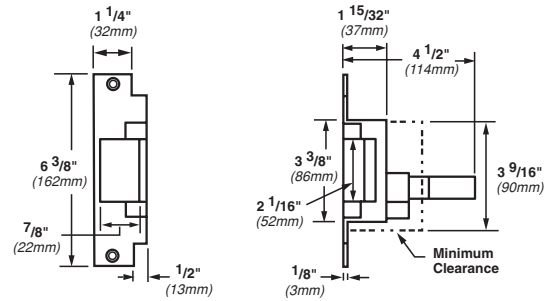
- 12 Open back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4" (44mm) thick double door applications
- 13 Closed back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4" (44mm) thick double door applications. 4 3/4" (120mm) minimum stile required. For a concealed vertical rod and mortise device combination specify "A" backbox.
- 14 Closed back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4" (44mm) or 2 1/4" (57mm) thick double door applications.
- 15 Closed back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4" (44mm) or 2 1/4" (57mm) thick aluminum double door applications.
- 16 Open back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4" (44mm) thick double door applications.
- 17 Closed back electric strike for use with mortise locks without deadbolt or cylindrical locks on 1 3/4" (44mm) or 2 1/4" (57mm) thick double door applications.

Dimensions

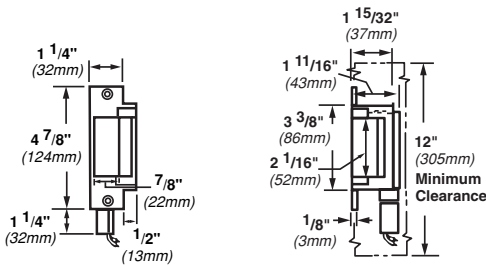
6210



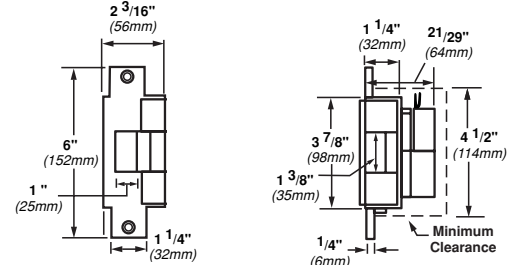
6212WF



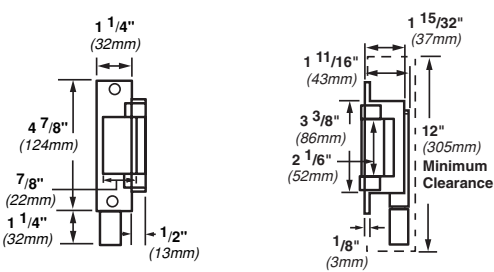
6211



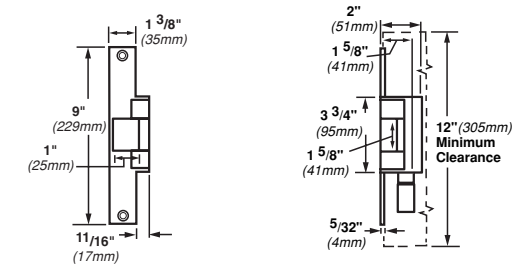
6213



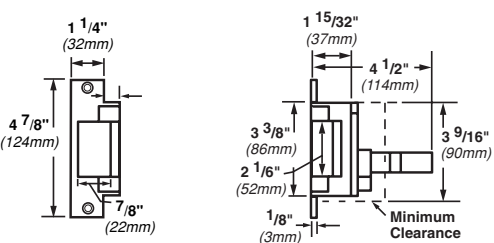
6211AL



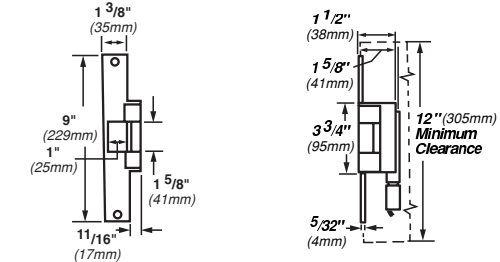
6214



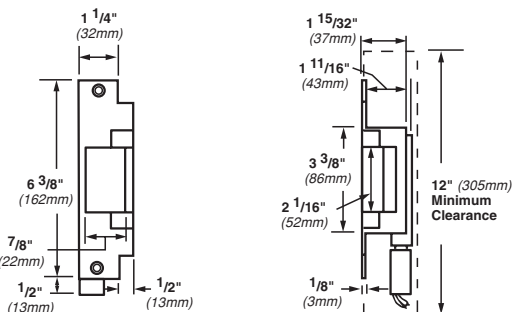
6211WF



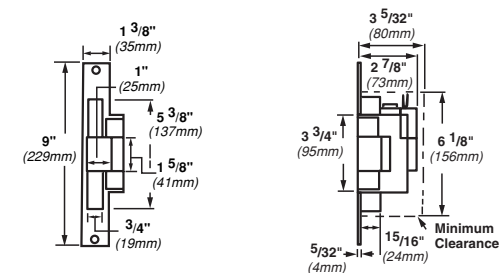
6215



6212

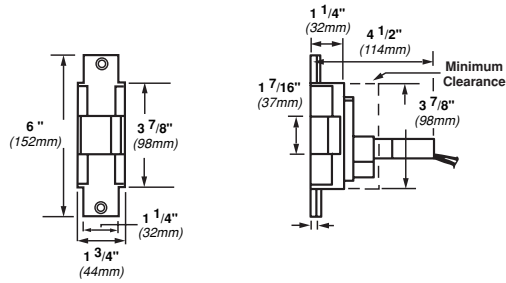


6216

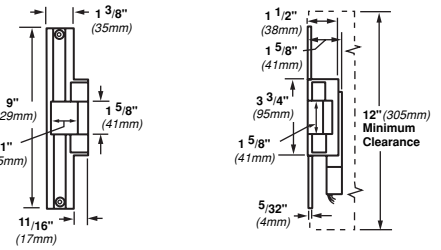


Dimensions

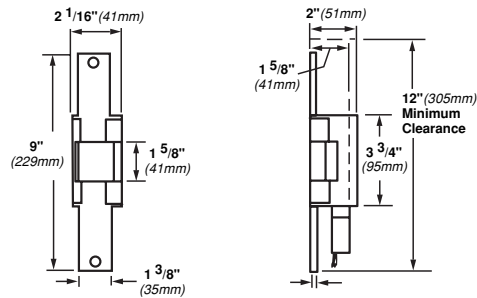
6221



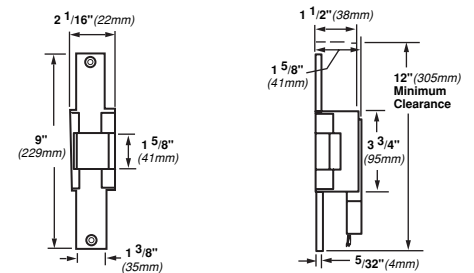
6224AL



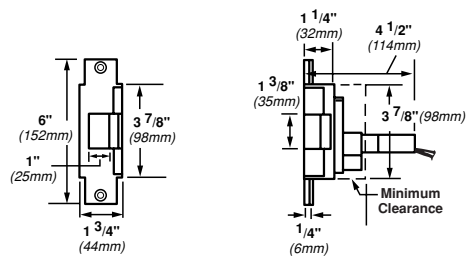
6222



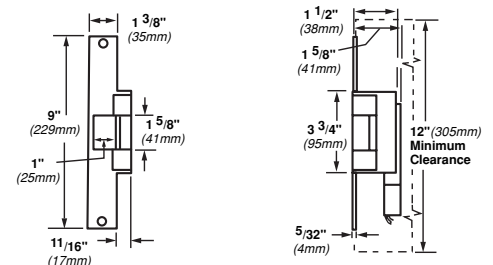
6225



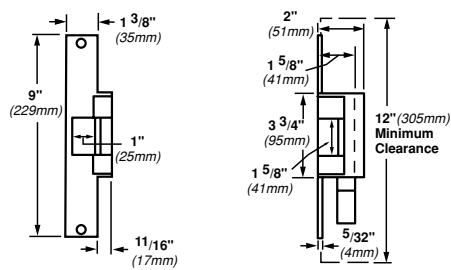
6223



6226



6224



Ordering Information

6210	–	FSE	–	DS	–	24	–	S024	–	US3	–	EB
Model		Power Failure Mode		Dual Switch *		Voltage		Rectifier Kit *		Finish		Buzzer *
1		2		3		4		5		6		7

*Optional

Selections Correspond With the Numbers Above

1 Model	
6210	See chart on page 3 to make the proper selection
6211	See chart on page 3 to make the proper selection
6211AL	See chart on page 3 to make the proper selection
6211WF	See chart on page 3 to make the proper selection
6212	See chart on page 3 to make the proper selection
6212WF	See chart on page 4 to make the proper selection
6213	See chart on page 4 to make the proper selection
6214	See chart on page 4 to make the proper selection
6215	See chart on page 4 to make the proper selection
6216	See chart on page 4 to make the proper selection
6221	See chart on page 4 to make the proper selection
6222	See chart on page 5 to make the proper selection
6223	See chart on page 5 to make the proper selection
6224	See chart on page 5 to make the proper selection
6224AL	See chart on page 5 to make the proper selection
6225	See chart on page 5 to make the proper selection
6226	See chart on page 5 to make the proper 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 & lock status. DS Switches rated at 24 VDC 50 milliampere – 2 Amps.
DS-LC	Optional for computer monitoring. Monitors latch bolt & lock status. DS-LC switches rated 24 VDC 50 milliampere or less.

4 Voltage (VDC)	
24	Low voltage DC power
12	Low voltage DC power
<i>If AC power is required specify rectifier kit below.</i>	

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 US Number/Von Duprin Number	
US3/85	Plated Polished Brass on Stainless Steel
US4/84	Plated Dull Brass on Stainless Steel
US10/06	Plated Dull Bronze on Stainless Steel
US10B/86	Plated Dark Bronze on Stainless Steel
US32/31	Stainless Steel, Polished
US32D/32	Stainless Steel, Satin

7 Buzzer (Optional)	
EB	Entry Buzzer. Only available if Fail Secure (FSE) is specified.

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 is designed to withstand abuse. Its heavy duty stainless steel construction is fully UL1034 and UL10C listed.

6300 Series electric strikes are designed for use with a variety of rim devices. It interfaces with the latch mechanism of the exit device. The movable lip (keeper) allows a door to open even when the latch bolt is extended. This feature, called remote release provides added benefits such as increased convenience and efficiency. The 6300 Series is also provides added security and traffic control.

6300 Series electric strikes are ideal for aftermarket applications. It is easy to install without modifying or altering the door frame. 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.

The 6300 is fail secure (FSE) only to achieve compliance with UL10C for fire rated openings. In a fail secure application the door is normally locked. To unlock the door power must be applied. The 6300 strike can be used with either 12VDC or 24VDC. There are 2 connectors that ship with it and the appropriate connector for either 12VDC or 24VDC will be used based upon the available voltage at the opening.



Features and Benefits

- Non handed design provides greater flexibility
- Requires no alteration or cutting to existing frame
- UL1034 Burglary-Resistant & UL10C Electric Strike for Fire Door
- Stainless steel (satin) finish
- Durable stainless steel construction
- Field selectable voltage 12VDC or 24VDC

6300 Surface Mount Specifications

Model	Voltage	Current	Duty	Amps	Ohms
6300	12V	DC	Continuous	0.50	22
6300	24V	DC	Continuous	0.24	89

DC = Direct Current

Continuous Duty = Energized 1 min. or more

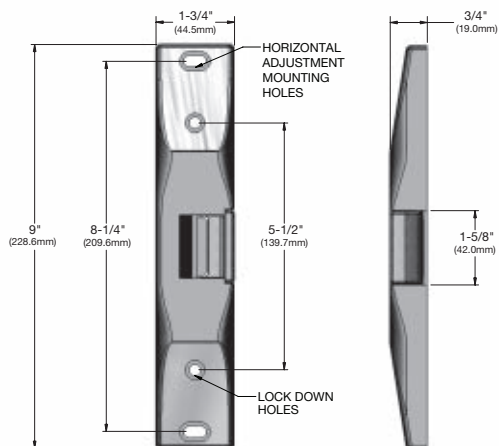
Rim Exit Device Compatibility 6300 Strikes

Manufacturer	Model Number
Von Duprin	VD 22/22-F Rim
Von Duprin	VD 33A/35A Rim
Von Duprin	VD 55 Rim
Von Duprin	VD 88/88-F Rim device
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 1790
Falcon Doromatic	Falcon Doromatic 2090

* Note: When using device not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for application assistance.

Model Specifications

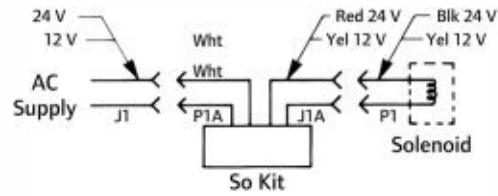
Model #	6300
Retrofits Model	N/A
Latchbolt Throw	3/4"
Face Plate Length	9"
Projection	3/4"
Lockset	Rim Exit Device
# Doors	Single or Pair with Mullion
Door/Frame Type	Hollow Metal, Aluminum & Wood
EB (Entry Buzzer)	Optional
Certifications	UL1034, UL10C
Application Notes	Surface mounted electric strike ideal for aftermarket applications. Strike designed for use with Von Duprin 98/99, however it can be used with most rim exit devices.



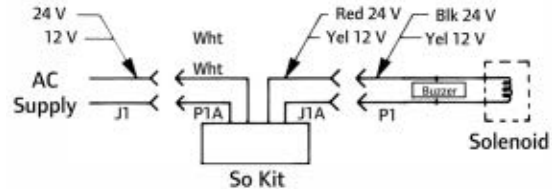
INGERSOLL RAND, the Ingersoll Rand logo, Von Duprin, the Von Duprin logo, Falcon, and Falcon Doromatic are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries.

Wiring

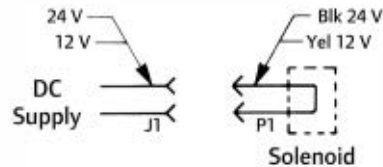
AC



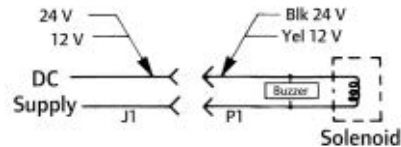
AC with Buzzer



DC



DC with Buzzer



Ordering Information

Model	Rectifier Kit *	Buzzer*
6300	S024	EB
1	2	3

Selections Correspond With the Numbers Above

* Optional

1 Model

6300 Surface Mounted Strike for Rim Exit Devices

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.

Standard Features:

- Power Failure Mode: Fail Secure (FSE)
- Voltage: Field selectable 24 VDC or 12 VDC
- Finish: Stainless Steel, Satin (US32D/32)





ES-6400 Series

Modular Strike

Overview

The ES-6400 fire rated strike from Schlage combines strength and convenience in an “all in one” compact, easy to install design. The ES-6400 is UL listed for 1500 lb. static strength.

The unique design of the ES-6400 allows the installer to move the deadbolt keeper or plug and deadlatch ramp vertically to align with a wide variety of mortise locks with offset latches. This combined with a $\frac{1}{8}$ ” horizontal adjustment provides a highly flexible and easy to install design while also eliminating the need for special face plates.

A trim plate for frame cuts and a hands-free adhesive paper template are provided to simplify installation. Additional flexibility is provided by a “plug in” latch monitor switch that can be added in the field at any time after installation.

The power failure mode of the ES-6400 is fail secure only for fire rated openings. In a fail secure application the door is normally locked without power. To unlock the door power must be applied. The voltage of the ES-6400 is also field selectable 12 or 24 VDC and 12 to 24 VAC.



System Components
ES-6400-Series Modular Strike

Features and Benefits

- Vertical adjustment of the deadbolt keeper or deadlatch ramp allows for alignment with a wide variety of mortise locks with offset latches
- Field selectable voltage 12 or 24VDC and 12 to 24VAC
- Accommodates $\frac{3}{4}$ ” latch projection
- Centerline face plate included for centerline entry
- Accommodates up to 1” deadbolt (for night latch application only, bolt will not release)
- Horizontal adjustment of up to $\frac{1}{8}$ ” for misaligned frames
- Heavy duty stainless steel construction
- Plug connectors are furnished for ease of installation and removal during strike servicing
- Optional plug-in latch monitor can be added in the field
- Non-handed design provides greater flexibility
- Tamper-resistant screws included
- Hex and security driver bit included
- Low current draw (0.19 amps @ 24 VDC)
- Unique solenoid design prevents keeper from heating up
- Trim plate included
- Adhesive paper template included
- UL listed for 1500 lb. static strength, UL 1034 burglary-resistant listed & UL 10 C 3 hour fire-rated (fail secure only)

Technical Specifications

Model	Mode	Voltage	Duty	Sound	Amps*	Ohms†
ES-6400	Fail Locked	12 VDC	Continuous	Silent	.375	37
ES-6400	Fail Locked	24 VDC	Continuous	Silent	.190	148
ES-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
* Ratings are based on maximum current draw at +10°C and include initial power-up current draw.
† Nominal resistance at +25°C ± 7% tolerance.

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.

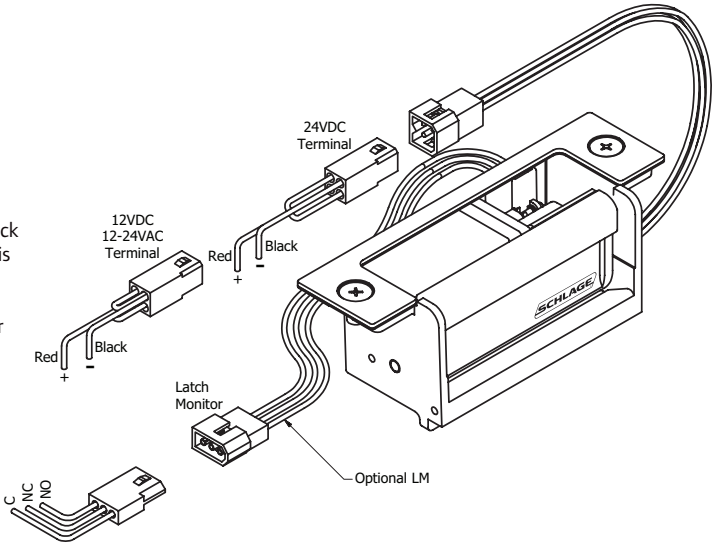
* Night-latch function only, bolt will not release

Wiring Instructions

Use the appropriate wire harness supplied.
12V for 12VDC & 12-24VAC
24 for 24VDC only
Attached 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.

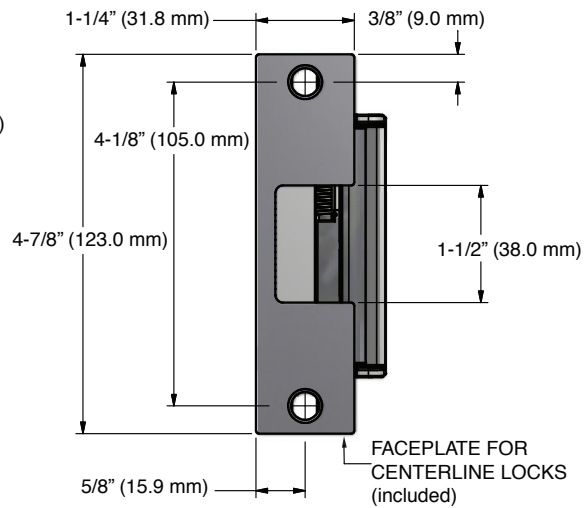
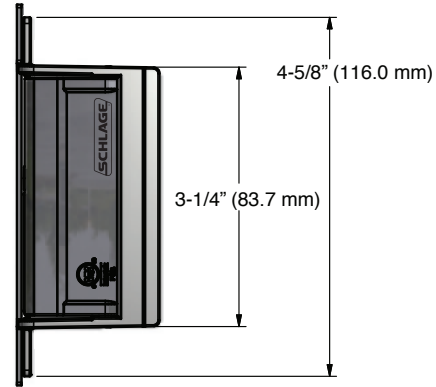
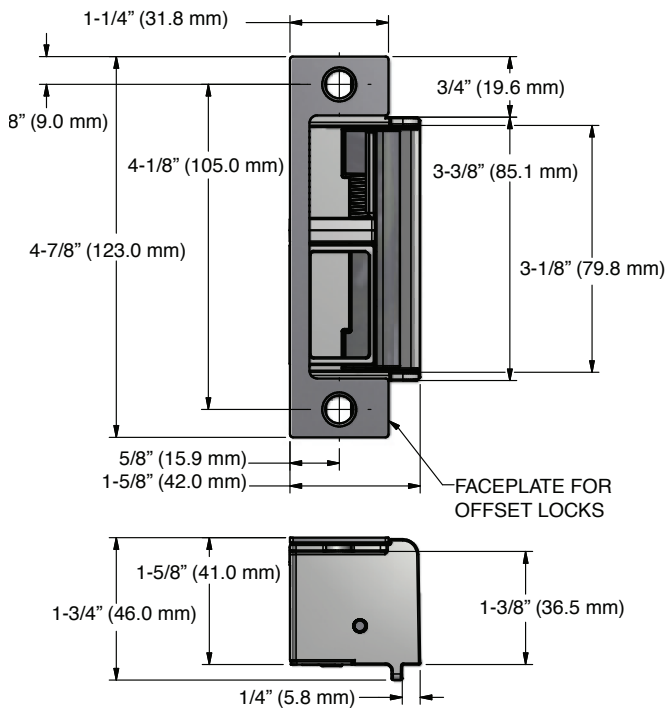
Latch Monitor Wires
Black = Common (C)
Blue = Normal Close (NC)
Orange = Normal Open (NO)



Model Specifications

Model #	ES-6400
Latchbolt Throw	3/4"
Face Plate Length	4 7/8"
Depth	1 5/7"
Lockset	Cylindrical, Mortise, Mortise Exit
Door/Frame Type	Hollow Metal, Aluminum & Wood
Certifications	UL listed for 1500 lb. static strength, UL 1034 burglary-resistant listed & UL 10 C 3 hour fire-rated (fail secure only)
Application Notes	Modular electric strike ideal for aftermarket applications. Fail secure only for fire rated openings.

Dimensions



Certifications/Listings

UL1034 Listed - Burglary Resistant

UL10C Certified - 3 Hour Fire Rated

NOTE: Not to scale. Specifications are subject to change without notice.

ORDERING INFORMATION

ES-6400 - Modular Strike

OPTIONS

LM – Indicates when door is latched (ships separately)

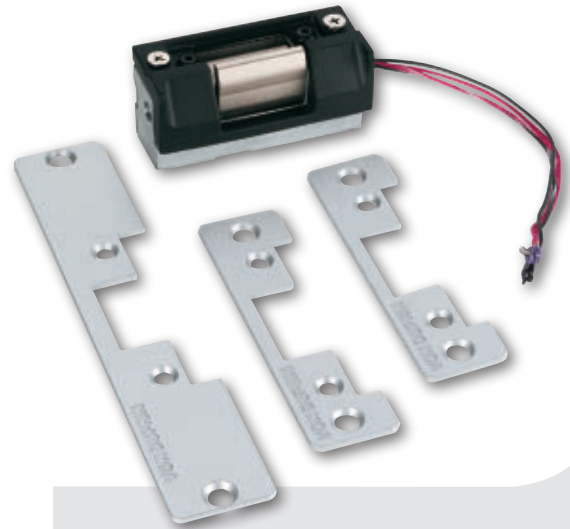
STANDARD FEATURES

- Power Failure Mode: Fail secure only for fire rated openings
- Voltage: 12 or 24 VDC and 12 to 24 VAC voltage is field selectable
- Finish: Stainless Steel, Satin (US32D)

5100 Series Electric Strikes

Overview

The Von Duprin 5100 Electric Strike has been designed and manufactured to meet the needs of locksmiths and security professionals. This easy-to-install electric strike was created for medium duty applications, specifically to control traffic flow through interior and exterior openings in retail and commercial environments.



Features and Benefits

- Three faceplates standard in every box
- 12/24 dual-voltage
- Fail-safe/fail-secure
- Adjustable keeper
- Internal solenoid
- Non-handed
- Backbox depth of 1 11/16"
- Keeper depth of 1/2"
- Mounting tabs
- Retrofit kit
- Illustrated installation instructions
- Tamper resistant
- 1 year electrical product warranty
- Continuous duty operation
- Heavy duty construction

POWER OPTIONS

- DC: Regulated Power Supplies (Recommended)
 - PS902 Power Supply
- DC: 24V Unregulated Power Supplies (Acceptable)
 - Schlage 593 PI-24DC (Plug-In)
 - Schlage 592-24RC (Hard-Wired)
- AC/DC Conversion:
 - Von Duprin SO-24 Kit

Specifications		
ANSI/BHMA 156.5 Grade 1		
UL 1034 Burglary Listing		
	12VDC	24VDC
Resistance (Ohms)	32	128
Power (watts)	4.5	4.5
Current (amps)	0.38	0.19
All specs ± 10% @77°F/25°C		

STANDARD CONFIGURATION

- 24 volts DC
- Fail-secure
- Field convertible to Fail-safe

DIMENSIONS

- Backbox: 3 3/8" x 1" x 1 11/32"
- Overall Strike Depth: 1 11/16"
- Faceplates:
 - 4 7/8" round corner ANSI A115.2 standard frame prep
 - 4 7/8" square corner ANSI A115.2 standard frame prep
 - 7 15/16" long, round corner wood frame prep
- Keeper pocket: 1 7/16"L x 1/2"D x 11/16" - 13/16"W (adjustable)
- Lip Attachment cut-out depth: 1 1/16"





M490/492

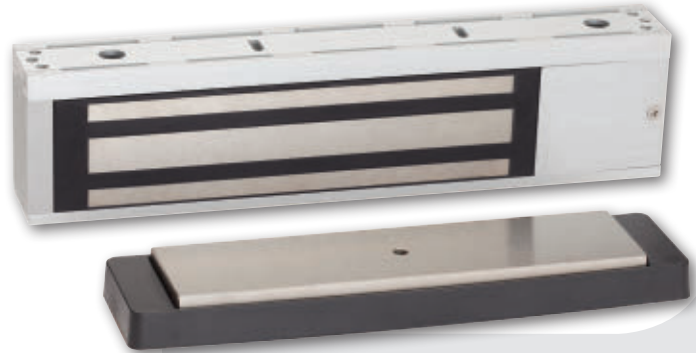
Electromagnetic Locks

Overview

The M400 Series line of electromagnetic locks from Schlage are designed with the customer in mind to be robust, easy to install, and secure. The new bayonet mounting feature makes installs easier, allowing the installer to have their hands free during the mounting process. There is no need to consider door handing as all the M400 Series electromagnetic locks are both non-handed and symmetrical, allowing optimum placement of the magnet no matter the application.

All M400 Series locks have automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. The M490 is tested and certified to meet or exceed UL1034 and BHMA 1500lb. hold force requirements.

The M490 electromagnetic lock comes in two configurations to meet your specific security needs. The M490 provides basic security, while the M490P provides intelligent sensing and reporting features needed to integrate with access control systems. Additional options are available for the M490P. Kits are available for top jam, double door, and glass door applications.



System Components
M490/492 Mag Lock

Features and Benefits

- Bayonet mount makes installation simpler by not requiring magnet to be held overhead while mounting screws are installed
- New design allows for RH/LH configuration in the field
- Armature mount allows armature to pivot compensating for slight opening imperfections
- Limited Lifetime Warranty
- UL1034 Burglary-Resistant Electronic Locking Mechanisms, UL10C Positive Pressure Fire Tests of Door Assemblies and ANSI/BHMA Grade 1 certifications
- 1500 lb. Hold Force
- See page 2 for additional features and options

ADDITIONAL FEATURES

M490/M492

- **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

- **Anti-Tamper Switch (ATS)** provides an indication that the cover of the magnet is securely fastened to the lock and that the on board circuitry is secure
- **MBS Indicator (LED)** provides visual indication of magnetic bond at the lock

OPTIONS (FOR ALL)

- Herculite Door Bracket
- Top Jamb (inswinging doors)

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.
Input Voltage (Standard Unit)	12/24 VDC	
Current Draw (Amps Standard Unit)	.65A @ 12 VDC .35A @ 24 VDC	1.3A @ 12 VDC .7A @ 24 VDC
Automatic Dual Voltage	12/24 VDC	
Height	3"	3"
Length	12 - 1/2"	25 - 1/16"
Width	1 - 3/4"	1 - 3/4"
Weight (approximate)	14 lbs.	28 lbs.
Certifications	UL10C, UL1034, ANSI/BHMA A156.23	
Temperature	0°-49° C (32°-120° F)	
Wire Gauge	14-22 AWG	

Filler Plates and Angle Brackets Specifications		
	M490	M492
Length	10-1/2"	20- 5/8"
Filler Plates		
Width x Height		
1-1/4" x 1/8"	4901F	4921F
1-1/4" x 1/4"	4902F	4922F
1-1/4" x 3/8"	4903F	4923F
1-1/4" x 1/2"	4904F	4924F
1-1/4" x 5/8"	4905F	4925F
3/4" x 1/2"	4906F	4926F
3/4" x 5/8"	4907F	4927F
3/4" x 3/4"	4908F	4928F
Angle Brackets		
Width x Height	Plate No.	Plate No.
1"x1"	4901A	4921A
1-1/2" x 1"	4902A	4922A
1-1/2" x 1-1/2"	4903A	4923A
1-1/2" x 2"	4904A	4924A
1-1/2" x 2 -1/2"	4905A	4925A





M450/452

Electromagnetic Locks

Overview

The M400 Series line of electromagnetic locks from Schlage are designed with the customer in mind to be robust, easy to install, and secure. The new bayonet mounting feature makes installs easier, allowing the installer to have their hands free during the mounting process. There is no need to consider door handing as all the M400 Series electromagnetic locks are both non-handed and symmetrical, allowing optimum placement of the magnet no matter the application.

All M400 Series locks have automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. The M450 is tested and certified to meet or exceed UL1034 and BHMA 1000lb. hold force requirements.

The M450 electromagnetic lock comes in two configurations to meet your specific security needs. The M450 provides basic security, while the M450P provides intelligent sensing and reporting features needed to integrate with access control systems. Additional options are available for the M450P. Kits are available for top jam, double door, and glass door applications.



Features and Benefits

- Bayonet mount makes installation simpler by not requiring magnet to be held overhead while mounting screws are installed
- New design allows for RH/LH configuration in the field
- Armature mount allows armature to pivot compensating for slight opening imperfections
- Limited Lifetime Warranty
- UL1034 Burglary-Resistant Electronic Locking Mechanisms, UL10C Positive Pressure Fire Tests of Door
- 1000 lb. Hold Force
- See page 2 for additional features and options

System Components
M450/452 Mag Lock

ADDITIONAL FEATURES

M450/M452

- **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 0.5 to 30 seconds

Optional (P models only)

- **Anti-Tamper Switch (ATS)** provides an indication that the cover of the magnet is securely fastened to the lock and that the on board circuitry is secure
- **MBS Indicator (LED)** provides visual indication of magnetic bond at the lock

OPTIONS (FOR ALL)

- Herculite Door Bracket
- Top Jamb (inswinging doors)

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
Input Voltage (Standard Unit)	12/24 VDC	
Current Draw (Amps Standard Unit)	.75A @ 12 VDC .38A @ 24 VDC	1.5A @ 12 VDC .75A @ 24 VDC
Automatic Dual Voltage	12/24 VDC	
Height	3"	3"
Length	10 - 1/4"	20 - 9/16"
Width	1 - 3/4"	1 - 3/4"
Weight (approximate)	10 lbs.	20 lbs.
Certifications	UL1034, UL10C, ANSI/BHMA156.23	
Temperature	0°-49° C (32°-120° F)	
Wire Gauge	14-22 AWG	

Filler Plates and Angle Brackets Specifications	
	M450
Length	10-1/2"
Filler Plates (Order 2 if purchasing a double lock)	
Width x Height	
1-1/4" x 1/8"	4501F
1-1/4" x 1/4"	4502F
1-1/4" x 3/8"	4503F
1-1/4" x 1/2"	4504F
1-1/4" x 5/8"	4505F
3/4" x 1/2"	4506F
3/4" x 5/8"	4507F
3/4" x 3/4"	4508F
Angle Brackets (Order 2 if purchasing a double lock)	
Width x Height	Plate No.
1"x1"	4501A
1-1/2" x 1"	4502A
1-1/2" x 1-1/2"	4503A
1-1/2" x 2"	4504A
1-1/2" x 2 -1/2"	4505A





M420/422

Electromagnetic Locks

Overview

The M400 Series line of electromagnetic locks from Schlage are designed with the customer in mind to be robust, easy to install, and secure. The new bayonet mounting feature makes installs easier, allowing the installer to have their hands free during the mounting process. There is no need to consider door handing as all the M400 Series electromagnetic locks are both non-handed and symmetrical, allowing optimum placement of the magnet no matter the application.

All M400 Series locks have automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. The M420 is tested and certified to meet or exceed UL1034 and BHMA 500lb. hold force requirements.

The M420 electromagnetic lock comes in two configurations to meet your specific security needs. The M420 provides basic security, while the M420P provides intelligent sensing and reporting features needed to integrate with access control systems. Additional options are available for the M420P. Kits are available for top jam, double door, and glass door applications.



System Components
M420/422 Mag Lock

Features and Benefits

- Bayonet mount makes installation simpler by not requiring magnet to be held overhead while mounting screws are installed
- New design allows for RH/LH configuration in the field
- Armature mount allows armature to pivot compensating for slight opening imperfections
- Limited Lifetime Warranty
- UL1034 Burglary-Resistant Electronic Locking Mechanisms, UL10C Positive Pressure Fire Tests of Door Assemblies and ANSI/BHMA Grade 1 certifications
- 500 lb. Hold Force
- See page 2 for additional features and options

ADDITIONAL FEATURES

M420/M422

- **Automatic Voltage Selection (AVS)** senses the voltage applied to the lock and responds accordingly

M420P/M422P

- **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 (P models only)

- **Anti-Tamper Switch (ATS)** provides an indication that the cover of the magnet is securely fastened to the lock and that the on board circuitry is secure
- **MBS Indicator (LED)** provides visual indication of magnetic bond at the lock

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.
Input Voltage (Standard Unit)	12/24 VDC	
Current Draw (Amps Standard Unit)	.75A @ 12 VDC .38A @ 24 VDC	1.5A @ 12 VDC .76A @ 24 VDC
Automatic Dual Voltage	12/24 VDC	
Height	2-1/2"	2-1/2"
Length	9"	18-1/16"
Width	1 - 3/8"	1 - 3/8"
Weight (approximate)	6 lbs.	12 lbs.
Certifications	UL1034, UL10C, ANSI/BHMA156.23	
Temperature	0°-49° C (32°-120° F)	
Wire Gauge	14-22 AWG	

OPTIONS (FOR ALL)

- Herculite Door Bracket
- Top Jamb (inswinging doors)

Filler Plates and Angle Brackets Specifications		
	M420	M422
Length	10-1/2"	20- 5/8"
Filler Plates		
Width x Height		
1-1/4" x 1/8"	4201F	4221F
1-1/4" x 1/4"	4202F	4222F
1-1/4" x 3/8"	4203F	4223F
1-1/4" x 1/2"	4204F	4224F
1-1/4" x 5/8"	4205F	4225F
3/4" x 1/2"	4206F	4226F
3/4" x 5/8"	4207F	4227F
3/4" x 3/4"	4208F	4228F
Angle Brackets		
Width x Height	Plate No.	Plate No.
1"x1"	4201A	4221A
1-1/2" x 1"	4202A	4222A
1-1/2" x 1-1/2"	4203A	4223A
1-1/2" x 2"	4204A	4224A
1-1/2" x 2 -1/2"	4205A	4225A





M490G

Electromagnetic Gate Lock

Overview

The Schlage M490G Electromagnetic Gate Lock is a weather resistant electromagnetic 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, insuring 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.



System Components
M490G Magnetic Gate Lock

Features and Benefits

- 1500 lbs. of direct holding force
- Magnetic Bond Sensor (MBS) and Gate Status Monitor (DPS)
- Field Selectable 12 or 24VDC operation
- Built-in voltage spike suppressor
- Electroless nickel plated finish
- Universal mounting brackets
- 1/2" EMT compression fitting
- Two foot wire leads
- Weather resistant for exterior use
- Accommodates gate misalignment
- No moving parts - low maintenance

STANDARD 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**
- **½" EMT compression fitting**
- **Special corrosion resistant plating**

M490G Electromagnetic Gate Lock Specifications	
Specifications	M490/M490G
Holding Force	Meets or exceeds BHMA standard of 1500 lbs.
Input Voltage (Field Selectable)	12/24 VDC
Current Draw (Amps Standard Unit)	.65A @ 12 VDC
	.35A @ 24 VDC
Height	3"
Length	11"
Width	1-3/4"
Weight (approximates)	14 lbs.
Temperature	0° - 49° C (32° - 120° F)
Wire Gauge	14-22 AWG

Filler Plates	
Electromagnetic Lock	M490G
Length	9"
Width x Height	Plate No.
1-1/4" x 1/8"	49G1F
1-1/4" x 1/4"	49G2F
1-1/4" x 3/8"	49G3F
1-1/4" x 1/2"	49G4F
1-1/4" x 5/8"	49G5F
1-1/4" x 3/4"	49G6F
3/4" x 1/2"	49G7F
3/4" x 5/8"	49G8F

Angle Brackets	
Electromagnetic Lock	M490G
Length	9"
Width x Height	Bracket No.
1" x 1"	49G1A
1-1/2" x 1"	49G2A
1-1/2" x 1-1/2"	49G3A
1-1/2" x 2"	49G4A
1-1/2" x 2-1/2"	49G5A





M490DE

Delayed Egress Electromagnetic Lock



Overview

The Schlage M490DE Delayed Egress Locking System is designed to meet NFPA 101 Life Safety Code, while providing the same robust, easy to install, security of our M400 Series line of electromagnetic 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 an request to exit push bar.

All M400 Series locks have automatic voltage sensing for 12 and 24 volts along with polarity protection to make wiring less complex. The M490DE is tested and certified to meet or exceed UL special locking arrangements and BHMA 1500lb. hold force requirements.

The M490DE electromagnetic lock comes in two configurations to meet your specific security needs. The M490DE provides basic security and delayed egress functionality, while the M490DEP provides intelligent sensing and reporting features needed to integrate with access control systems.

This easy to install, cost effective solution provides the highest access security and safety.

Features and Benefits

- Bayonet mount makes installation simpler by not requiring magnet to be held overhead while mounting screws are installed
- 15 Second Delay - Activated by internal plunger switch or auxiliary input
- Automatic Voltage Selection
- LED Indication with Audible Alerts
- Release Input
- Reset Input
- Fire Alarm Input
- UL Special Locking Arrangements, ANSI/BHMA 156.23 Grade 1, UL10C Positive Pressure Fire Tests of Door Assemblies Certifications
- 1500 lbs. Hold Force

STANDARD FEATURES

M490DE/M490DE-2

- **Auto Voltage Selection (AVS)** senses the voltage applied to lock and responds accordingly
- **Internal Plunger Switch** activates delayed egress timer

Additional Options and Accessories

- Herculite Door Bracket (HDB)

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
- **Relocking Time Delay**
- **BOCA Compliant** (upon request)

M490DE Electromagnetic Delayed Egress Lock Specifications		
Specification	M490DE	M490DE-2
Holding Force	meets or exceeds BHMA standard of 1500 lbs.	meets or exceeds BHMA standard of 1500 lbs. per door leaf
Input Voltage (Standard Unit)	12/24 VDC	
Current Draw (Amps Standard Unit)	.75A @ 12 VDC .45A @ 24 VDC	1.25A @ 12 VDC .76A @ 24 VDC
Height	3"	3"
Length	12 - 1/2"	25 - 1/16"
Width	3 - 1/16"	3 - 1/16"
Weight (approximate)	16 lbs.	32 lbs.
Certifications	UL294 Special Locking Arrangement including BOCA, UL1034, UL10C, ANSI/BHMA156.23	
Temperature	0°-49° C (32°-120° F)	
Wire Gauge	14-22 AWG	

Filler Plates	
Electromagnetic Lock	M490DE/M490DE-2
Length	12-1/2"
Width x Height	Plate No.
1-1/4" x 1/8"	4901F
1-1/4" x 1/4"	4902F
1-1/4" x 3/8"	4903F
1-1/4" x 1/2"	4904F
1-1/4" x 5/8"	4905F
3/4" x 1/2"	4906F
3/4" x 5/8"	4907F
3/4" x 3/4"	4908F

Angle Brackets	
Electromagnetic Lock	M490DE/M490DE-2
Length	10-1/2"
Width x Height	Bracket No.
1" x 1"	4901A
1-1/2" x 1"	4902A
1-1/2" x 1-1/2"	4903A
1-1/2" x 2"	4904A
1-1/2" x 2-1/2"	4905A





GF3000

Mortise Mounted Shear Lock

Overview

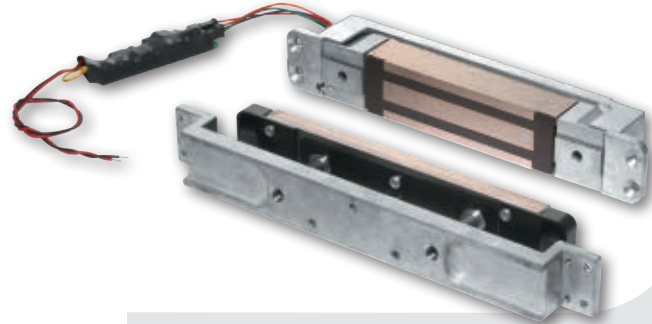
The GF3000 Series Shear Lock features a patented design offering advances over any Shear Lock in the market.

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.

The mortise Shear Lock offers the advantage of a totally concealed locking mechanism providing superior security and appearance. The patented design incorporates locking “tabs” on the magnet assembly with mating grooves in the armature plate. The flexible mounting features allows for normal door and frame movement.

The Shear Lock is ideally suited for commercial grade quality hollow metal doors and frames as well as herculite doors with top rail. Advances in design provide low operating temperatures, making this Shear Lock suitable for use in the growing demand for concealed locks in wood frames.

The GF3000 TRD 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 and Benefits

- Automatic voltage selection 12/24 VDC (Filtered)
- 3000 lbs. of holding force
- Requires filtered, regulated power supply
- Built-in Automatic Relock Switch
- Adjustable time delay on relock, 0-30 seconds
- Low temperature operation
- Microprocessor controlled
- Optional Magnetic Bond Sensor (MBS) to monitor the secure/not secure condition of the lock
- Optional Door Status Monitor (DSM) to sense the open/closed position of the door
- UL 10C Positive Pressure Fire Tests of Door Assemblies, cUL, CSFM and MEA listed to use on fire labeled openings
- Meet ANSI/BHMA A156.23 standards

Specifications	
Holding Force	3000 lbs
Current Draw	0.90 Amp @ 12 VDC 0.45 Amp @ 24VDC
Weight	7 lbs
Lock Body: Length x Height x Depth	9-1/2" x 1-1/2" x 1-1/2"
w/Mounting Tabs: Length x Height x Depth	11-9/16" x 1-1/2" x 1-1/2"
Armature: Length x Height x Depth	8-3/8" x 1-3/8" x 1/2"
Armature Bracket: Length x Height x Depth	10-5/8" x 1-3/8" x 1"
Certifications	UL 10C Positive Pressure Fire Tests of Door Assemblies ANSI/BHMA A156.23 1500 lbs

ORDERING INFORMATION

- GF3000** Adjustable from top edge of door
- GF3000TRD** Mounting assembly which provides armature adjustable from the latch edge of the door. Recommended with zero clearance condition between top of door and ceiling.
- GF3000BRD** Mounting assembly to mortise armature into bottom rail of door. Magnet is installed in floor/threshold. Provides solution when no top rail is available.

OPTIONS

- DSM/MBS** Door Status Monitor/Magnetic Bond Sensor





GF3000

Surface Mounted Shear Lock

Overview

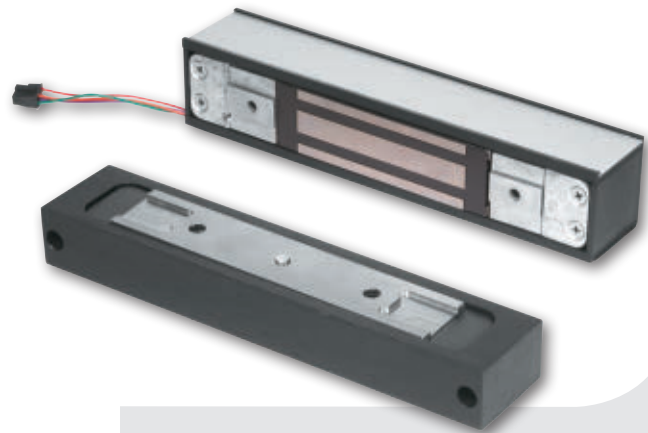
The GF3000 Series Shear Lock features a patented design offering advances over any Shear Lock on the market.

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.

The surface Shear Lock offers the advantage of a totally concealed locking mechanism, providing superior security and appearance. The patented design incorporates locking “tabs” on the magnet assembly with mating grooves in the armature plate. While the strength afforded by this design is a major advantage, the flexible mounting features are as important. This design allows for normal door and frame movement.

This Surface Shear Lock offers maximum versatility in application. The GF3000SM model provides a low profile, surface mount lock for outswinging doors. The GF3000TJ model provides a low profile, surface mount lock for inswinging doors. It provides a unique mounting solution with no brackets needed, which are standard with direct pull magnets.

The GF3000SM and TJ models feature a black anodized housing with the choice of modular finish plates.



Features and Benefits

- Automatic Voltage Selection 12/24 VDC (filtered)
- 3000 lbs. of holding force
- Requires filtered, regulated power supply
- Built-in Automatic Relock Switch
- Adjustable time delay on relock, 0-30 seconds
- Low temperature operation
- Microprocessor controlled
- Optional Magnetic Bond Sensor (MBS) to monitor the secure/not secure condition of the lock
- Optional Door Status Monitor (DSM) to sense the open/closed position of the door
- Modular, slide-in finish plates on SM and TJ models
- UL10C Positive Pressure Fire Test of Door Assemblies, cUL, CSFM and MEA listed to use on fire labeled openings
- Meets ANSI/BHMA 156.23 standards

Specifications	
Holding Force	3000 lbs
Current Draw	0.90 Amp @ 12 VDC 0.45 Amp @ 24VDC
Weight	9 lbs
Lock Housing: Length x Height x Depth	9-13/16" x 1-7/8" x 2"
Armature Housing: Length x Height x Depth	9-13/16" x 1-1/4" x 2"
Certifications	UL 10C Positive Pressure Fire Tests of Door Assemblies ANSI/BHMA A156.23

Selections Correspond With the Numbers to the left

1 Model		
GGF3000SM	Standard Unit (outswinging doors). Adjustable from top edge of armature. Available in special finishes.	
GF3000TJ	Top Jamb Unit (inswinging doors). Magnet mounts on inside top jamb. Adjustable from top edge of armature. Available in special finish.	
2. Options		
DSM/MBS	Door Status Monitor/Magnetic Bond Sensor	
3. Finish (for GGF3000SM & GF3000TJ only)		
628	US28	Satin Aluminum, Anodized (standard)
335	US19	Satin Black, Anodized
613	US10B	Dark Satin Bronze, Anodized
626	US26D	Satin Chrome
606	US4	Satin Brass
630	US32D	Satin Stainless Steel
612	US10	Satin Bronze
625	US26	Bright Chrome
605	US3	Bright Brass





320M

Mortise Mount MiniLine™ Electromagnetic Locks

Overview

Schlage provides the industry's most complete selection of electromagnetic locks. The 320M Mortise Mounted Electromagnetic Lock is designed to interface with electronic access control systems, automatic door operators, and fire or hazard sensing systems, to provide egress upon detectable emergency. With no moving parts and 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 on thousands of locations worldwide including airports, hospitals, nursing homes, schools, universities, libraries, museums, retail and office buildings, laboratories, and government buildings.

The 320M MiniLine is UL listed and engineered to meet the ANSI/BHMA standards for electromagnetic locks.



Features and Benefits

- Mortise mount for sliding doors
- Includes mounting tabs and armature mounting block
- Low maintenance - no moving parts
- Meets security and life safety requirements
- Fields Selectable 12 or 24 VDC operation
- UL listed
- Meets ANSI/BHMA standards
- ATD - Adjustable Time Delay
- DSM - Door Status Monitor
- MBS - Magnetic Bond Sensor

Specifications	
Holding Force	Meets or exceeds BHMA standard of 500 lbs.
Input Voltage	12/24 VDC
Current Draw	.45A@ 12 VDC .23A @ 24 VDC
Wiring	Wire leads 12" long
Lock Body: Length x Height x Depth	7" x 1 3/8" x 1 7/8"
Armature: Length x Height x Depth	4-1/4" x 1-1/2" x 5/8"
Weight	6 lbs.

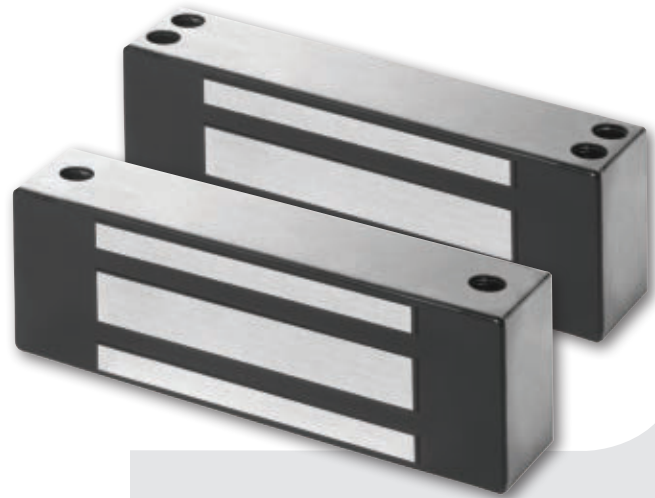
Note for Wood Frames: Due to higher ambient operating temperatures, it is required that the 12 VDC configuration be used



40/70 Series Electromagnetic Locks

Overview

Schlage introduces the integrator's answer to retrofit needs for electromagnetics locks. These "Full Featured" electromagnetic locks are easy to stock, easy to select and easy to install. With common templating and standard features, the 40 and 70 Series Electromagnetic Locks for retrofit make sense for virtually every application.



System Components
40/70 Series Mag Lock

Features and Benefits

- Stainless steel housing - standard
- Low amp draw:
 - 70 Series - .12A @ 24 VDC, 25A @ 12 VDC
 - 40 Series - .15A @ 24 VDC, 32A @ 12 VDC
- Simplified armature installation
- Strong holding forces:
 - 70 Series - BHMA Grade 1 Certified 1000 lb. rating
 - 40 Series - BHMA Grade 1 Certified 500 lb. rating
- Universal Header Bracket (UHB)
- Double magnet available with 70 series
- ANSI/BHMA A156.23 Grade 1
- UL 10C - 1 Hour Fire Rated
- UL1034 Certified: Burglary-Resistant Electronic Locking Mechanisms

Specifications	40	40TJ
Holding Force	BHMA 500 lb rating	BHMA 500 lb rating
Input Voltage	12/24 VDC	12/24 VDC
Current Draw	.32A @ 12 VDC .15A @ 24VDC	.32A @ 12 VDC .15A @ 24VDC
Length	8"	8"
Height	1 7/8"	1 7/8"
Depth	1 5/8"	1 5/8"
Weight	4 lbs.	4 lbs.
Certifications	ANSI/BHMA A156.23, UL10C & UL1034	ANSI/BHMA A156.23, UL10C & UL1034

72 Specifications	
Holding Force	BHMA 1000 lb rating per door leaf
Input Voltage	12/24 VDC
Current Draw	.50A @ 12 VDC .25A @ 24 VDC
Length	22"
Height	3"
Depth	1 7/8"
Weight	15 lbs.
Certifications	ANSI/BHMA A156.23, UL10C & UL1034

Specifications	70	70TJ
Holding Force	BHMA 1000 lb rating	BHMA 1000 lb rating
Input Voltage	12/24 VDC	12/24 VDC
Current Draw	.25A @ 12 VDC .12 @24 VDC	.25A @ 12 VDC .12 @24 VDC
Length	8"	8"
Height	3"	3"
Depth	1 7/8"	1 7/8"
Weight	8 lbs.	12 lbs.
Certifications	ANSI/BHMA A156.23, UL10C & UL1034	ANSI/BHMA A156.23, UL10C & UL1034

Filler Plates
Filler Plates Available in 628 Satin Aluminum or 335 Satin Black Finishes
1-1/4" x 1/8"
1-1/4" x 1/4"
1-1/4" x 3/8"
1-1/4" x 1/2"
1-1/4" x 5/8"

ORDERING INFORMATION

40	Single Lock
70	Single Lock
72	Double Lock

ACCESSORIES

HDB70	Herculite Door Bracket
HDB40	Herculite Door Bracket
UHB	Universal Header Bracket
HEB	Header Extension Bracket
CWB70	Concrete/Wood Bracket
CWB40	Concrete/Wood Bracket
ASB70	Aluminum Spacer Brackets
ASB40	Aluminum Spacer Brackets
DC70	Dress Cover
DC40	Dress Cover
OSA	1/4" offset Armature Strike

FINISHES (ACCESSORIES ONLY)

628	US28 Satin Aluminum, Anodized (standard)
605	US3 Bright Brass (Dress Cover Only)
335	US19 Satin Black, Anodized





M390RFK

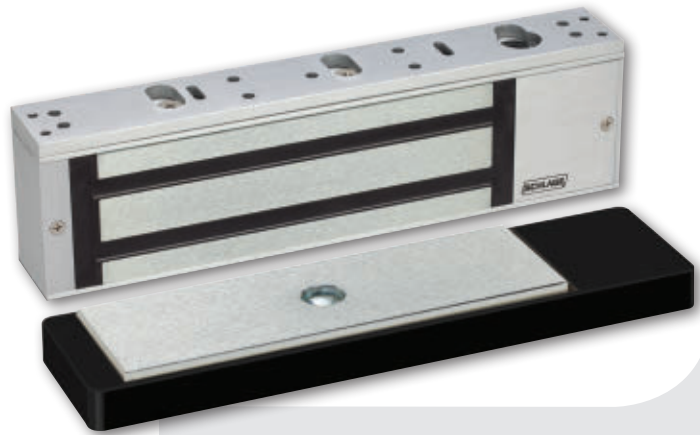
Electromagnetic Locks

Overview

The M390RFK surface mounted electromagnetic lock is ideal for high security applications. It's modular design employs a standardized circuit board with easy-to-install connectors, adjustable mounting brackets and integrated mounting screws. The armature housing holds the armature in place, eliminating noise and sagging, and increasing the overall reliability of the product. The armature housing also provides an aesthetically pleasing look over traditional armature mountings allowing it to blend into the surrounding environment. The armature housing also holds magnets for the DSM option without having to mount an additional plate to the armature, ensuring quicker, more reliable installations.

All models easily interface 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.

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 position switch (DPS), magnetic bond sensor (MBS), and relocking time delay (RTD).



Features and Benefits

- Direct replacement for the Locknetics 390+ with same template
- Door position switch (DPS)
- Magnetic bond sensor with LED indicator (MBS)
- Relocking time delay (RTD)
- Field selectable 12/24 VDC
- Adjustable mounting brackets
- ANSI/BHMA A156.23 Grade 1 with 1500 lbs. direct holding force
- UL listed for 3 hour fire rating

System Components
M390RFK Mag Lock

M390RFK Electromagnetic Lock Specifications	
Holding Force	1500 lbs
Input Voltage (Standard Unit)	12 or 24 VDC
Current Draw (Amps Standard Unit)	.65A @ 12 VDC .45A @ 24 VDC
Height	2 ⁷ / ₈ "
Length	10 ¹ / ₂ "
Width	1 ⁵ / ₈ "
Weight (approximate)	12.4 lbs.
Certifications	ANSI/BHMA A156.23 Grade 1 with 1500 lbs. direct holding force, and UL listed for 3 hour fire rating and for burglary resistance
Temperature	14° – 140° F





PS906

6 amp Power Supply

Overview

Schlage's comprehensive line of power supplies and option boards were 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 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).

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 provided.

* All PS900 Series of power supplies and option boards have been tested and certified to meet UL 294.



*Photo as shown includes optional board(s)
Please contact your local sales office or visit the support section on our website for configuration assistance.*

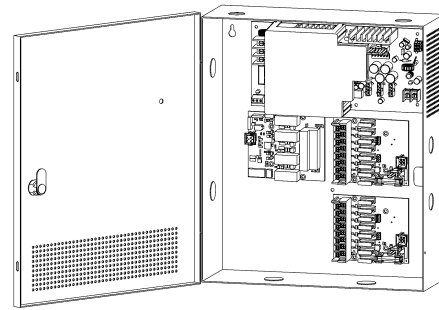
System Components
PS906 Power Supply

Features and Benefits

- 6A @ 12/24 VDC output, field selectable with jumper
- Universal 120 -240 VAC input
- Low voltage DC, regulated and filtered
- Three polarized connectors for distribution boards
- Fused primary input
- AC input and DC output monitoring circuit w/ LED indicators
- Cover mounted AC input indication
- Hinged cover w/ lock down screws
- High voltage protective cover

OPTIONS

- Emergency Interface Relay (FA)
 - Must be installed on distribution boards
- Battery Backup
- 2 relay QEL panic device control board
- 4 relay distribution board
- 4 relay distribution board with logic
 - Field configurable for:
 - Time delay function
 - Auto operator
 - Security interlock
- 8 fused output distribution board
- 8 PTC output distribution board



PS906

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"H x 12"W x 4"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	UL 294 RoHS FCC Part 15
Option Board Compatibility	900-BB: Battery Backup 900-BBK: Battery Backup Kit (backup board and battery pack) 900-FA: Fire Alarm (<i>Must be installed on distribution boards</i>) 900-2RS: 2 Relay EL Panic Device Control Board 900-2RS-FA: 2 Relay Board Output with FA 900-4R: 4 Relay Output Board 900-4RL: 4 Relay Logic Board 900-8F: Fused 8 Zone Distribution Board 900-8P: PTC 8 Zone Distribution Board
AC Primary Fuse Size	6.3A, 250v, 5 x 20mm SLOW-BLOW
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.
Distribution board connectors	3
Fire Alarm board connector	No
Keylock	Optional



PS904

4 amp Power Supply

Overview

Schlage's comprehensive line of power supplies and option boards were 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 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).

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 provided.

* All PS900 Series of power supplies and option boards have been tested and certified to meet UL 294.



*Photo as shown includes optional board(s)
Please contact your local sales office or visit the support section on our website for configuration assistance.*

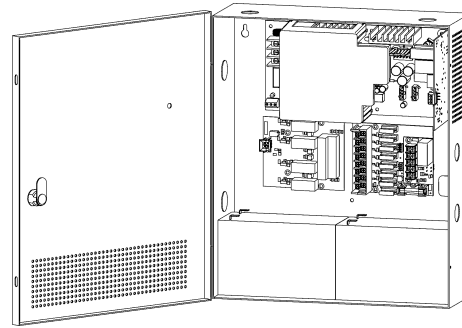
System Components
PS904 Power Supply

Features and Benefits

- 4A @ 12/24 VDC output, field selectable with jumper
- Class 2 Rated power limited output
- Universal 120 -240 VAC input
- Low voltage DC, regulated and filtered
- Two polarized connectors for distribution boards
- Fused primary input
- AC input and DC output monitoring circuit w/ LED indicators
- Cover mounted AC input indication
- Hinged cover w/ lock down screws
- High voltage protective cover

OPTIONS

- Emergency Interface Relay (FA)
 - Must be installed on distribution boards
- Battery Backup
- 2 relay QEL panic device control board
- 4 relay distribution board
- 4 relay distribution board with logic
 - Field configurable for:
 - Time delay function
 - Auto operator
 - Security interlock
- 8 fused output distribution board
- 8 PTC output distribution board



PS904

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"H x 12"W x 4"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	UL 294 Class 2 RoHS FCC Part 15
Option Board Compatibility	900-BB: Battery Backup 900-BBK: Battery Backup Kit (backup board and battery pack) 900-FA: Fire Alarm (<i>Must be installed on distribution boards</i>) 900-2RS: 2 Relay EL Panic Device Control Board 900-2RS-FA: 2 Relay Board Output with FA 900-4R: 4 Relay Output Board 900-4RL: 4 Relay Logic Board 900-8F: Fused 8 Zone Distribution Board 900-8P: PTC 8 Zone Distribution Board
AC Primary Fuse Size	4A, 250v, 5 x 20mm SLOW-BLOW
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.
Distribution board connectors	2
Fire Alarm board connector	No
Keylock	Optional



PS902

2 amp Power Supply

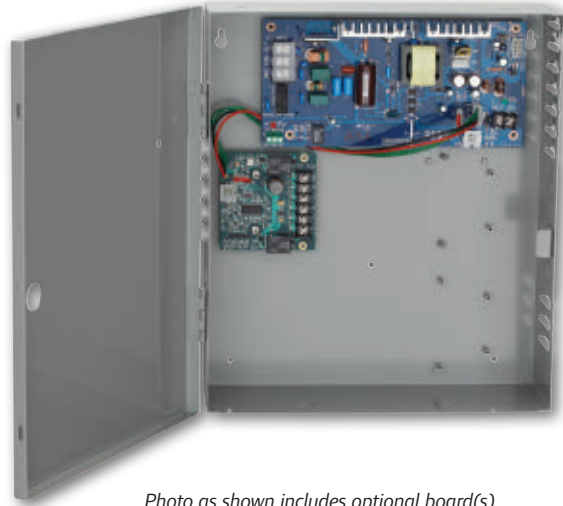
Overview

Schlage's comprehensive line of power supplies and option boards were 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 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).

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 provided.

* All PS900 Series of power supplies and option boards have been tested and certified to meet UL 294.



*Photo as shown includes optional board(s)
Please contact your local sales office or visit the support section on our website for configuration assistance.*

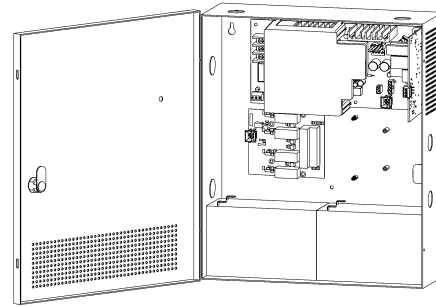
System Components
PS902 Power Supply

Features and Benefits

- 2A @ 12/24 VDC output, field selectable with jumper
- Class 2 Rated power limited output
- Universal 120 -240 VAC input
- Low voltage DC, regulated and filtered
- Single polarized connector for distribution board
- Fused primary input
- AC input and DC output monitoring circuit w/ LED indicators
- Cover mounted AC input indication
- Hinged cover w/ lock down screws
- High voltage protective cover

OPTIONS

- Emergency Interface Relay (FA)
- Battery Backup
- 2 relay QEL panic device control board
- 4 relay distribution board
- 4 relay distribution board with logic
 - Field configurable for:
 - Time delay function
 - Auto operator
 - Security interlock
- 8 fused output distribution board
- 8 PTC output distribution board



PS902

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"H x 12"W x 4"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	UL 294 Class 2 RoHS FCC Part 15
Option Board Compatibility	900-BB: Battery Backup 900-BBK: Battery Backup Kit (backup board and battery pack) 900-FA: Fire Alarm 900-2RS: 2 Relay EL Panic Device Control Board 900-2RS-FA: 2 Relay Board Output with FA 900-4R: 4 Relay Output Board 900-4RL: 4 Relay Logic Board 900-8F: Fused 8 Zone Distribution Board 900-8P: PTC 8 Zone Distribution Board
AC Primary Fuse Size	3.15A, 250v, 5 x 20mm SLOW-BLOW
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.
Distribution board connectors	1
Fire Alarm board connector	Yes
Keylock	Optional

PS914

4 amp Power Supply (Von Duprin)

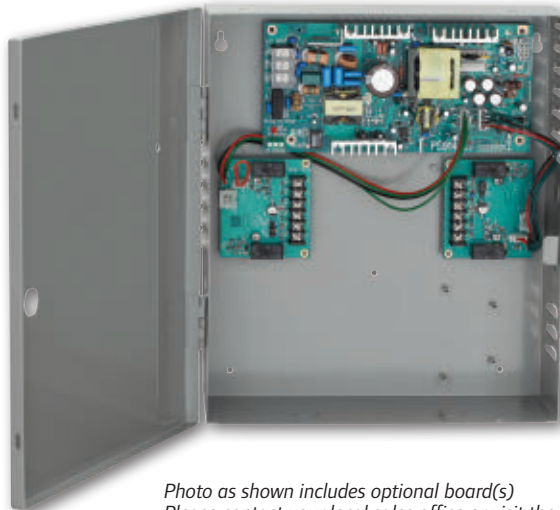
Overview

Von Duprin's power supply and option boards 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 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 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 provided.

* All PS900 Series of power supplies and option boards have been tested and certified to meet UL 294.



*Photo as shown includes optional board(s)
Please contact your local sales office or visit the support
section on our website for configuration assistance.*

Features and Benefits

- 4A @ 12/24 VDC output, field selectable with jumper
- Designed with high in rush current for powering electrified panic devices
- Universal 120 -240 VAC input
- Low voltage DC, regulated and filtered
- Electronic power limiting foldback circuit for AC current overload protection
- Two polarized connectors for distribution boards
- Fused primary input
- AC status monitor - isolated SPDT contacts
- AC input and DC output LED status indicators
- Cover mounted AC input indication
- Hinged cover w/ lock down screws
- High voltage protective cover

OPTIONS

- Fire Alarm Relay (FA)
 - Must be installed on distribution boards
- Battery Backup
- 2 relay EL panic device control board
- 2 relay QEL panic device control board
- 4 relay distribution board
- 4 relay distribution board with logic
 - Field configurable for:
 - Time delay function
 - Auto operator
 - Security interlock
- 8 fused output distribution board
- 8 PTC output distribution board

PS914Power 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"H x 12"W x 4"D Eight 1/2" x 3/4" Knockouts Hinged cover with lock down screws
Operating Temperature	32°-120° F (0°-49° C)
Certifications	UL 294 RoHS FCC Part 15 Class 2
Option Board Compatibility	900-BB: Battery Backup 900-BBK: Battery Backup Kit (backup board and battery pack) 900-FA: Fire Alarm (<i>Must be installed on distribution boards</i>) 900-2RS: 2 Relay Control Board 900-2RS-FA: 2 Relay Board Output with FA 900-4R: 4 Relay Output Board 900-4RL: 4 Relay Logic Board 900-8F: Fused 8 Zone Distribution Board 900-8P: PTC 8 Zone Distribution Board
AC Primary Fuse Size	6.3A, 250v, 5 x 20mm SLOW-BLOW
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.
Distribution board connectors	2
Fire Alarm board connector	No
Keylock	Optional





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 to 631 Series have multiple button configuration and finish options provide enhanced architectural appeal.

Schlage 620 and 631 Series Pushbuttons also offer significant installer friendly innovations: screw terminal connections for the momentary action models, easy to install L2/ILL optional PC board offering backlit illumination for the cone with green and red LEDs for monitoring purposes. Additional options include: Delayed Action, Double Pole Double Throw, Heavy Duty Plate, with several architectural finishes and extreme duty pushbuttons.



Features and Benefits

- Pushbuttons are available in 1-1/4", 1-5/8", and 2-3/4" sizes
- Two metal 1-1/4" button options: aluminum with engraved painted red "PUSH TO EXIT", and red coated aluminum button with engraved "PUSH TO EXIT"
- 631 Push button available in 1-1/4" metal button, single gang and narrow stile.
- Two models of metal 1-1/4" button: aluminum with engraved painted red "PUSH TO EXIT" and new red coated aluminum with engraved "PUSH TO EXIT"
- Variety of colors and finishes available

Button Configurations

	GID-EX	GID-H	GID	RD-EX	RD	GR-EX	GR	BL-H	BK
621									
623									
625									
	AL-EX	AL	AL-RD-EX						
621									
	AL-EX	AL	AL-RD-EX						
631									

Finishes

SF-626 Satin Chrome (standard)	SF-605 Bright Brass	SF-612 Satin Bronze	SF-613 Oil Rubbed Bronze
SF-625 Bright Chrome	SF-1 White Powder Coat	SF-2 Black Powder Coat	

Multiple Button Configuration

1-1/4" Button



1-5/8" Mushroom Button



2-3/4" Mushroom Button



1-1/4" Metal Button



Ordering Information

Selections Correspond With the Numbers to the left

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-H	Glow-in-the-dark handicapped symbol
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 (not available for 625/625-NS models)
NS	Narrow Stile - Stainless Steel Plate (1 3/4" x 4 1/2")

4. Finish	
SF-626	Satin Chrome (standard)
SF-605	Bright Brass
SF-612	Satin Bronze
SF-613	Oil Satin Bronze
SF-625	Bright Chrome
SF-1	White Powder Coat
SF-2	Black Powder Coat

Note: Heavy Duty Plate (HDP) 1/4" thick cast zinc standard





700 Series Pushbuttons

Overview

Schlage Pushbuttons are used to control the ingress and/or egress of a door. The 700 Series Pushbuttons are easy to install and operate.

Schlage 700 Series Entry Level Pushbuttons are designed to meet commercial applications. Use with egress 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.



System Components
700 Series Pushbuttons

Features and Benefits

- Single gang and narrow stile
- Standard stainless steel
- Momentary action (standard)
- Options include LEDs, alternate action – maintained (AA)

700 Specifications	
701 Pushbutton	
Contact Ratings	5A @ 30VAC/UDC, momentary SPDT contacts
Wire Leads	20 awg – 6" long
709 Pushbutton	
Contact Ratings	5A @ 30VAC/UDC, momentary SPDT contacts
Wire Leads	20 awg – 8" long
Input requirements with LED option	
Voltage	12/24 VDC
Current Draw	30 mA
Wire Leads	24 awg – 6" long
Input requirements with ILL option	
Voltage	12 VDC for 709 series only 24 VDC for 701/709 series

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
AA	Alternate Action – Maintained (not available for 709 models)
NS	Narrow Stile plate (not available for 709 models)





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 and 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

740 Specifications - Contact Box from “Z” switch	
Contact Rating	6A @ 120 VAC Normally Open (NO) Normally Closed (NC) contacts with color-coded leads
LED	12/24 VDC
Horn	3-18 mA
Input	6-28 VDC
Decibles	80 dB @ 2ft.

ORDERING INFORMATION

740 – Includes break glass switch assembly and hammer mounted to a silk-screened 3-gang stainless switch plate

741 – Includes an attached indicator light with red lens

742 – Includes a Sonalert horn for 6-24 VDC operation attached to the plate





660 Series

Mini Station Control

Overview

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. The 660 Series Mini Station Control 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. A typical application is under a desk to release an entrance door



Features and Benefits

- Surface mount application
- Choice of maintained or momentary action
- Compact size
- Recommended for concealed desk application

Specifications	
Switch contact rating:	6 AMP @ 120 VAC
Length	2"
Width	2"
Height	1

ORDERING INFORMATION

660-T4 SPDT Maintained Toggle

660-PB PB SPDT Momentary Pushbutton (DPDT Optional)





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 (626) Satin Chrome finish, there are five additional architectural finishes to choose from.



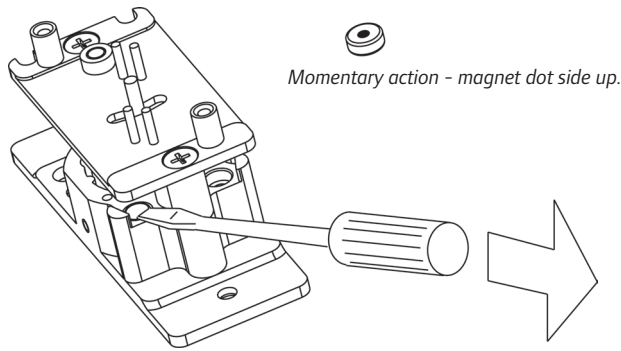
Features and Benefits

- Easy to install and maintain
- Single gang and narrow stile offer ultimate flexibility
- Multiple options

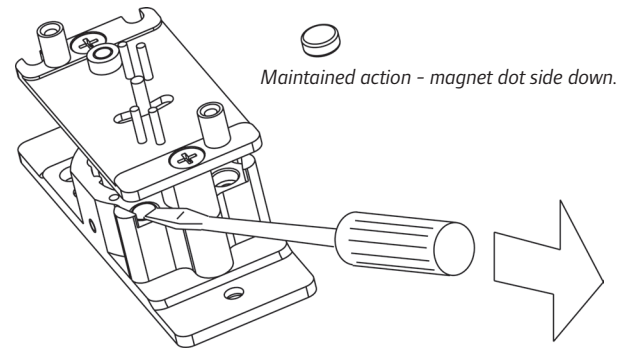
System Components
650 Series Keyswitches

Innovative magnetic spring technology allows installers to configure models in seconds

MOMENTARY ACTION



MAINTAINED ACTION



Specifications

Standard keyswitch

- 5 amp@250 VAC,
- dual voltage,
- SPDT contacts

ATS switch closes when cover is on 0.025A@28VDC

LED Indicator Lights operate at 12/24 VDC 0.025A@28VDC

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	2 LEDs green and red, dual voltage
NS	Narrow Stile - stainless steel plate (1 3/4" x 4 1/2")
ATS	Anti-Tamper Switch
HDP	Heavy Duty Plate 1/4" thick cast zinc (standard 626 Satin Chrome Finish with anti tamper plugs)
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 & 1/8" spacer ring (keyed different)
CYL-KA	1-1/4" Schlage Everest Mortise Cylinder & 1/8" spacer ring (keyed alike)

Note: 650 Series Keyswitches operate with either a 1-1/8" or 1-1/4" cylinder having a straight type cam. 1-1/4" cylinders require a 1/8" blocking/spacer ring (included with the CYL and CYL-KA options).

FINISH

SF-626	Satin Chrome (standard)
SF-605	Bright Brass
SF-612	Satin Bronze
SF-613	Oil Satin Bronze
SF-625	Bright Chrome
SF-2	Black Powder Coat





672 Series TouchBar

Overview

The 672 TouchBar is a request to exit device which releases electromagnetic or electronic locks when the bar is depressed. Designed for easy installation, smooth operation and maximum durability, the 672 TouchBar offers unmatched features and user benefits.

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
- DPDT (standard)

Features and Benefits

- Heavy duty aluminum extrusion with powder coat cast metal end caps - Maximum durability
- Field reversible, field sized
- Quick install brackets / Universal mounting system for aluminum, hollow metal and wood doors
- Low profile for greater clearance through door
- "PUSH TO EXIT" signage designates opening
- Glow in the Dark (GID) "PUSH TO EXIT" option

ORDERING INFORMATION

Door Size

36", 42" or 48"

Finishes

628 Satin Anodized Aluminum (standard)

313 Dark Satin Bronze Anodized Aluminum

TouchPads

RD Black with red "PUSH TO EXIT"

GID Black with Glow in the Dark "PUSH TO EXIT"

Handing

RHR Right Hand Reverse

LHR Left Hand Reverse -Field Reversible

Options

WD

Sexnut 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.*

672 TouchBar Electrical Specifications

Input Voltage	12 or 24 VDC maximum current draw .25 Amps
Switch	DPDT contacts rated 4 Amps @ 30 VDC
Wiring	6 Conductor Cable - 20 AWG (standard)



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 bar at an egress door. It allows one motion egress at doors equipped with electromagnetic or electronic locks, 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 patent pending 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 – patent pending
- No Moving Parts – One Motion Egress
- Audible alarm standard, alerts prolonged unlock condition
- DPDT relay standard – single access control panel or auxiliary device

Features and Benefits

- Heavy duty aluminum extrusion with cast metal end caps - Maximum durability
- Field reversible, field sized
- Quick install brackets / Universal mounting system for aluminum, hollow metal and wood doors
- Low profile for greater clearance through door
- “PUSH TO EXIT” signage designates opening
- Glow in the Dark “PUSH TO EXIT” option

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

Door Size

36", 42" or 48"

Finishes

628 Satin Anodized Aluminum (standard)

313 Dark Satin Bronze Anodized Aluminum

TouchPads

RD Black with red "PUSH TO EXIT"

GID Black with Glow in the Dark "PUSH TO EXIT"

Handing

RHR Right Hand Reverse

LHR Left Hand Reverse -Field Reversible

Options

WD

Sexnut 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.*

** Screw pack has self-drilling and self-tapping screws for aluminum and wood door applications and rivnuts for hollow metal door applications.*

Note: 18" x ½" Armoured door cord shipped standard





800 Series

Remote and Local Monitoring Stations

Overview

800 Series Local & Remote Monitoring Station

The 800 Series monitoring stations can provide monitoring for a single zone with up to 2 LED indicators.

801 Series Local & Remote Monitoring Stations

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. Interfaces with electromagnetic locks with magnetic bond sensor (MBS) option. Unit mounts in a standard double gang electrical box.



Features and Benefits

800 Series Local & Remote Monitoring Station

- Up to 2 LED Indicators

801 Series Local & Remote Monitoring Stations

- 801-KS Option

800 Specifications	
Operating Power:	12/24 VDC
LED Operating Power:	6-28 VDC
LED Current Draw:	30 mA ea.
Audible Input:	10-28 VDC
Audible Current Draw:	3-14 mA
Decibel Rating:	80 dB @ 2 ft.
Single Gang Unit	
Length:	2-3/4"
Width:	1-1/2"
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	
Operating Power:	12/24 VDC
LED Operating Power:	6-28 VDC
LED Current Draw:	30 mA ea.
Audible Input:	10-28 VDC
Audible Current Draw:	3-14 mA
Decibel Rating:	80 dB @ 2 ft.
Single Gang Unit 801* Local or Remote Monitoring System	
Length:	2-3/4"
Width:	1-1/2"
Height:	4-1/2"
Finish:	Stainless Steel
Double Gang Unit 801-KS* Local or Remote Monitoring System with Keyswitch (less cylinder)	
Length:	4-9/16"
Width:	1-15/16"
Height:	4-1/2"
Finish:	Stainless Steel
Keyswitch Contacts:	5A/250 VAC

*Note: 801/801-KS requires MBS on locking device.





8200 Series Consoles

Overview

Schlage 8200 Series desk consoles provide 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 and 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

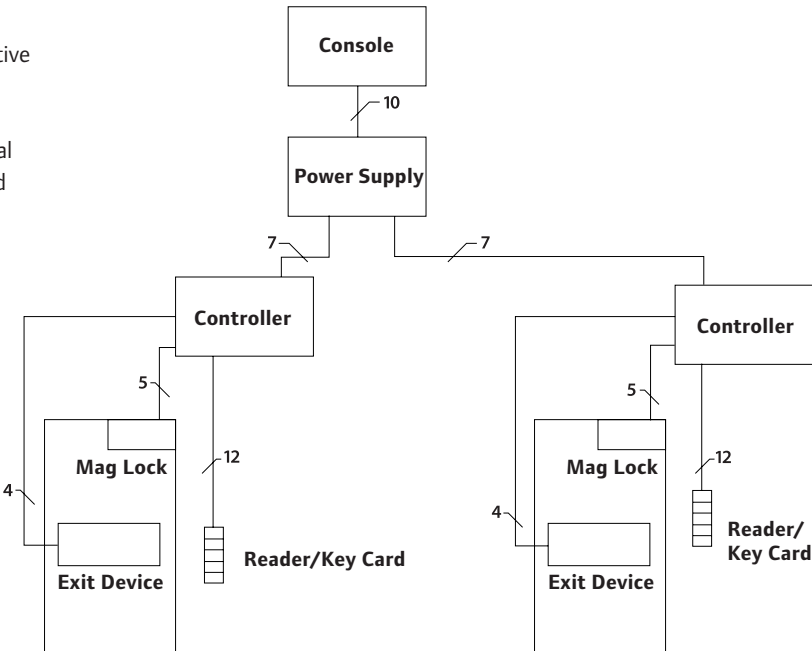
SYSTEM DESIGN GUIDE

There are a number of applications where and 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.)

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.

Riser Diagram



Specifications	
Switches (momentary or maintained)	1.0 amps 24 VDC
Lamps #85 Red/Green	04 amps @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%

ORDERING INFORMATION

Last Digit Indicates Number of Zones

4 Station Console	8 Station Console
8204	8208

PUSHBUTTON FUNCTION

Select pushbutton function by zone.
Select M (momentary) or A (alternate action, maintain) for each zone.

	1	2	3	4	5	6	7	8
8204	-	-	-	-				
8208	-	-	-	-	-	-	-	-

ACCESSORIES

Field Installable Push Buttons

- 8200MS – Momentary Switch Assembly
- 8200 MA – Alternate Action (Maintained) Switch Assembly





Scan II™

Passive Infrared Motion Sensors

Overview

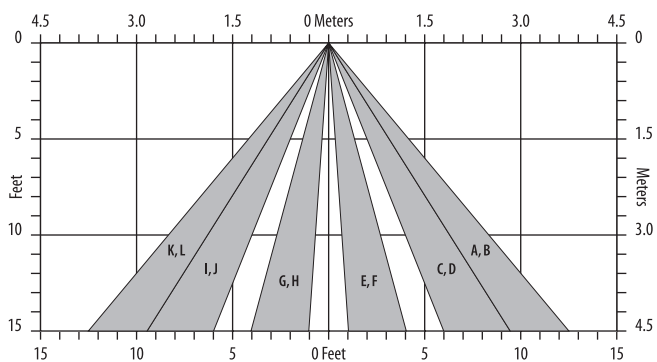
The Scan II™ is a Passive Infrared Detector specifically designed for “request to exit” applications. It has an adjustable relay latch time, is internally pointable, and provides two Form “C” sets of relay contacts.

The enclosure design consists of a three piece, high impact ABS plastic enclosure with fresnel lens and is available in white or black. The coverage area of Scan II™ is up to 8 by 10 feet (2.4m by 3m). Coverage is dependent upon mounting height and pattern angle. Pattern Pointability is $\pm 14^\circ$ @ vertical. Surface mounting height range is from 7 to 15 feet (2.1m to 4.5m). The unit also features an externally visible activation LED.

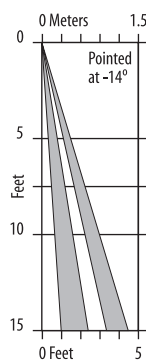


Features and Benefits

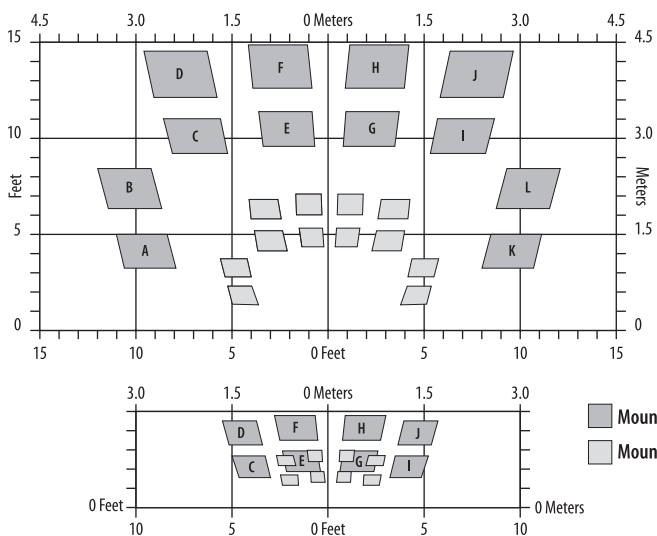
- Output – Two Form “C” relay contacts rated 1A @ 30 VDC for DC resistive loads
- Relay Latch Time is adjustable up to 60 seconds
- The relay mode can be programmed by the installer to reset when the timer expires or to remain activated until motion stops. The fail safe/fail secure mode can also be selected.
- 12/24 VDC, 26 mA @ 12 VDC or 24 VDC
- Output Two Form “C” relay contacts rated 1A @ 30 VDC for DC resistive loads
- Operating Temperature -20°F to 120°F (-29°C to 49°C)
- Size 1-1/2” (38mm) H x 6 1/4” (159mm) W x 1-1/2” (38mm) D
- UL Listed



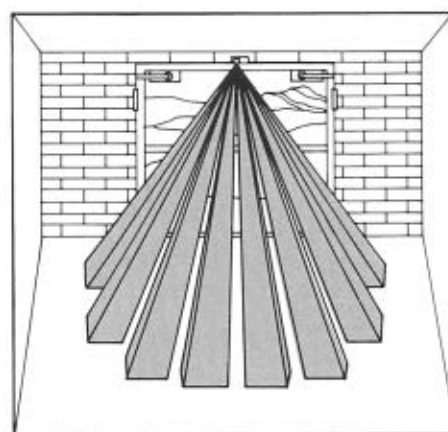
Front View



Side View



Standard Pattern
Shown wall mounted, angled 14° down.



Standard Pattern
Shown wall mounted, angled 14° down.

ORDERING INFORMATION

Scan II – B Black
Scan II – W White





Electronic Horns

Overview

Electric horns are designed for use as an immediate local audible warning device incorporated in a security system. 1910 Selica Horns have eight combinations of volume, tone, and code that are easily user configurable. Strobe and latching combinations are also available.

Units are flush and surface mountable using a standard one or two gang electrical box. Surface and flush mounting kits are included with all horns.



Features and Benefits

- All horns are off white in color and come with a skirt for a clean finish.
- Designed for indoor use only.
- Available in four models:
 - 1910-1 Horn 12/24 VDC
 - 1910S-1 Horn with Strobe 24 VDC
 - L1910-1 Horn with Latching 24 VDC
 - L1910S-1 Horn with Strobe and Latching 24 VDC
- Current Draw:
 - Less than 14 mA @ 12 V
 - Less than 28 mA @ 24 V
 - Less than 71 mA @ 24 V, with strobe
- Operating Temperature: 32°F to 120°F
- Anechoic Room @30 V 102 dba
- UL Reverbrant Room @30 V 88 dba

ORDERING INFORMATION

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





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

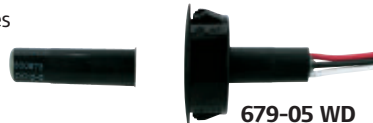
For Wood Doors and Frames
0.3 Amps @ 30 VDC



For Hollow Metal Doors and Frames
0.3 Amps @ 30 VDC

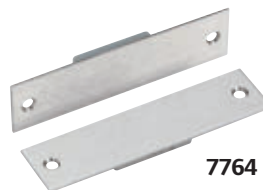


For Wood Doors and Metal Frames
0.3 Amps @ 30 VDC



Concealed/Flush Mount Magnetic Switches

For aluminum, wood and hollow metal doors 0.25 Amps @ 30 VDC
UL Listed



Surface Mount Magnetic Switches

For aluminum, wood and hollow metal doors 0.25 Amps @ 30 VDC UL Listed



Overhead Door, Floor Mount Magnetic Switch 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

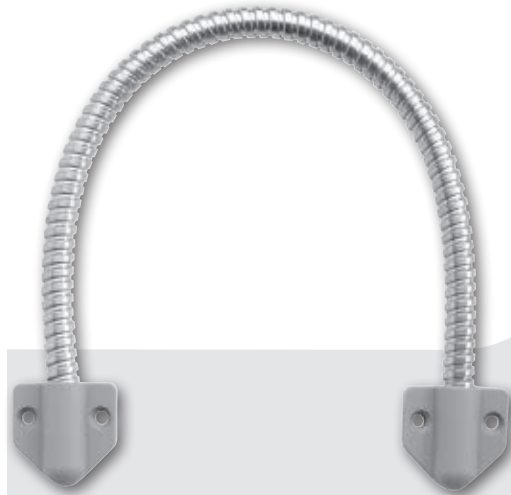




Armored Door Cords with Caps

Overview

Used when installing electric exit devices or electric locks, armored door cords provide a simple and economical solution for transferring power from frame to door.



System Components
Armored Door Cords

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

Model	Description
788-12	12" x 3/8" less wires (inswinging)
788C-12	12" x 3/8" with 20" 4-Conductor wire, 20 gauge wire
788-18	18" x 3/8" less wires (outswinging)
788C-18	18" x 3/8" with 26" 4-Conductor wire, 20 gauge wire

3/8" interior diameter;

1/2" outside diameter flexible door cord

Acceptable Wire Size Combinations

Model	Description
798-12	12" x 1/2" less wires (inswinging)
798C-12	12" x 1/2" with 20" 4-Conductor wire, 20 gauge wire
798-18	18" x 1/2" less wires (outswinging)
798C-18	18" x 1/2" with 26" 4-Conductor wire, 20 gauge wire





PB405 and PB405S

Electrified Dead Bolt Locks

Overview

The PB405 PowerBolt is a mortise, right angle deadbolt with a .61" bolt and a .67" throw. It is available fail safe PB405 or fail secure PB405S.

NOTE: Electromechanical locks not recommended where life safety may be compromised, or where panic bar hardware is the only means of egress.

Mortise mount electric bolts furnished in Satin Aluminum Finish.



Features

- 12/24V DC
- Magnetic door sensor
- Built in relocking option
- Fail-safe, or fail-secure

Specifications

PB405 Electric Dead Bolt Lock (Fail Safe)

1. Door sensor
2. 12V/24V DC
3. Current Draw: 0.9A @ 12 VDC, 0.45A @ 24 VDC;
12/24 VDC dual voltage, field selectable
4. Fail-safe type (Power to lock)
5. Built-in Relocking option
6. Operation delay time: 0 sec., 3 sec., 5 sec., 9 sec.
7. Bolt diameter: 0.61 in
8. Bolt throw: 0.67 in
9. Weight: 1.9lbs
10. Dimension: 7.87 in (L) x 1.26 in (W) x 1.57 in (D)

PB405S Electric Dead Bolt Lock (Fail Secure)

1. Door sensor
2. 12V/24V DC.
3. Current Draw: 0.9A @ 12 VDC, 0.45A @ 24 VDC;
12/24 VDC dual voltage, field selectable
4. Fail-secure type (Power to open.), MOV surge protection.
5. Operation delay time: 0 sec., 3 sec., 5 sec., 9 sec.
6. Built-in relocking option
7. Bolt diameter: 0.61 in
8. Bolt throw: 0.67 in
9. Weight: 1.9lbs
10. Dimension: 7.87 in (L) x 1.26 in (W) x 1.57 in (D)

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



Appendix

This section of the Electronic Access Control catalog includes:

- Resource Guides
- Solution Sheets
- Wiring Diagrams

THIS PAGE IS INTENTIONALLY BLANK.



AD-Series Resources

Literature

Location:

www.schlage.com/ad-series

- Utilize "search" on AD-Series page to locate each piece using the description in parentheses
 - Benefits Brochure (Benefits Brochure)
 - Selection Guide (Selection Guide)
 - Mini-Brochure (ES-5542)
 - Market Application Sheets
 - Higher Education (ES_5528)
 - K-12 (ES_5529)
 - Healthcare (ES_5527)



Selection Guide



Mini-Brochure

- Datasheets
 - AD-200 (004442)
 - AD-250 (004436)
 - AD-300 (004448)
 - AD-400 (004446)
 - AD-301 FIPS 201-1 Compliant (004869)
 - AD-401 FIPS 201-1 Compliant (004870)
 - SUS on HDD (004443)
 - Proximity or Smart Keyfobs (004227)
 - Exit Trim Companion Sheet (found in technical library)

[CLICK HERE](#)

Web & Interactive Tools

Location:

www.schlage.com/ad-series

- [Service and Support](#): includes Contact Us page, 150 FAQ's, & Technical Library
- [Interactive Benefits Overview](#): Learn about the flexible, scalable, and adaptable features
- [Interactive Product Tour](#): View product highlights and features in the 360° tour
- [Interactive Product Selector](#): Configure an AD-Series lock to fit your needs



Product Selector



Benefits Overview



Product Tour

[CLICK HERE](#)

Training

Location:

[YouTube and IRU](#)

- AD-Series e-Learning Courses on IRU
 - Today Meets Tomorrow - value proposition
 - Explore the Details - product information
 - Make the Case - return on investment



<http://schlage.com/onlinecourses>

- 27 AD-Series "How to Videos" are now available to view on the AD-Series YouTube Channel
 - <http://www.youtube.com/user/SchlageAD>
- Specialty formatted videos are available to download to your HDD at:
 - www.schlage.com/ad-series
> Service & Support > Download "How To" Videos

[CLICK HERE](#)



YouTube

For guest access enter your username and password.
First time users click on "Don't have a login?" for registration.

AD-Series Resources



Technical Documents

Location:

www.schlage.com/support



- The Technical Library contains:
 - Templates
 - Organized by Cylindrical, Mortise, Mortise Deadbolt, and 993/Exit
 - Retrofit Overlay Template available
 - User Guides (found under Installation Manuals)
 - Organized by AD-400, AD-300, AD-250, AD-200, AD-Series Exit Trim, PIM400-TD2, PIM400-485, HHD, SUS, and PIB300-2D
 - Installation Manuals
 - Organized by Cylindrical, Mortise, and Exit
 - Application Notes/Technical Bulletins
 - Firmware & Software
 - AD Firmware Package
 - Schlage SUS Software
 - Note: Check for updates on a regular basis
 - Also found within Technical Library
 - Brochures/Sales Materials
 - Datasheets and Solution Sheets
 - How To Videos
 - A&E Specs and More



Distributor & Channel Partner Tools

Location:

[PartnerLink](#)

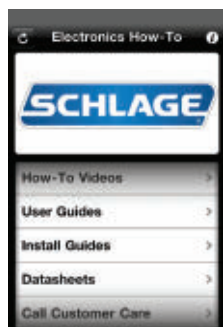


- Registered Users: <http://partnerlink-admin.ingersollrand.com/Pages/AD-Series.aspx>
- New Users: Go to <http://partnerlink.ingersollrand.com> and click on the new user link
 - AD-Series can be found at: PartnerLink > Product Info > Access Control & Video > AD-Series
- Tools not available on the public web:
 - Parts Guides
 - Cross-Reference Tools
 - Weights & Dimensions
 - Pricebooks
 - PartnerLink Connection Newsletter
 - And more



Additional Resources

- "How To" App for AD-Series



FREE DOWNLOAD
CLICK HERE



FREE DOWNLOAD
CLICK HERE



- EAC Catalog
<http://epub.securitytechnologies.com>
- Security Technologies Page:
<http://w3.securitytechnologies.com/irst/Pages/default.aspx>
- AD-Series Software Integrations:
<http://partnerlink-admin.ingersollrand.com/ProductInformation/AccessControl/AD-Series/Pages/AD-Series.aspx>





CO-Series Resources

Literature

Location:

www.schlage.com/support



CLICK HERE

- Brochures
 - Flipbook (004122)
 - Mini Brochure (ES-5916)
- Data Sheets
 - CO-100 (004186)
 - CO-200 (004185)
 - CO-250 (004184)
 - Schlage Utility Software (SUS) on Handheld Device (HHD) (004443)
 - Proximity or Smart KeyFobs (004227)
 - Exit Trim Companion Sheet (004183)



Mini Brochure



Flip Book

Web & Interactive Tools

Location:

www.schlage.com



CLICK HERE

- [CO-Series web page](#) can be found at: schlage.com > For Your Business > Products > Locks > Electronic Locks & System Components > CO-Series
- [Interactive Product Selector](#)
- [Service and Support](#): Includes Contact Us page, FAQ's & Technical Library
- [Interactive Product Tour](#): View product highlights and features in the 360° product tour



Product Selector



FAQ



360° Product Tour

Training

Location:

[IRU and CO Web Page](#)



CLICK HERE

- CO-Series e-Learning Courses on Ingersoll Rand University (IRU)
 - Get to Know the CO
- CO-Series How To Videos



schlage.com/onlinecourses

For guest access enter your username and password.

First time users click on "Don't have a login?" for registration.

CO-Series Resources



Technical Documents

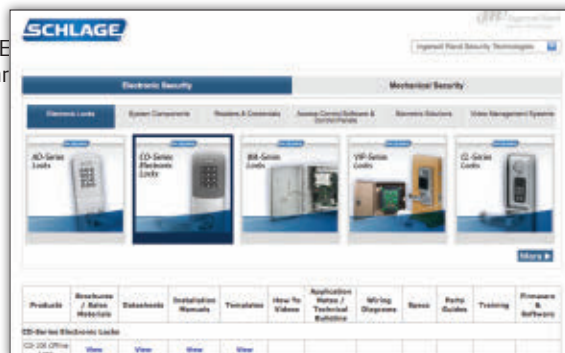
Location:

www.schlage.com/support



CLICK HERE

- The Technical Library contains:
 - Templates
 - Organized by Cylindrical, Mortise, Mortise Deadbolt, and Exit Trim
 - Retrofit Overlay Template available
 - User Guides (found under Installation Manuals)
 - Organized by CO-100, CO-200, CO-250, CO-Series E, Handheld Device (HHD), and Schlage Utility Software
 - Installation Manuals
 - Organized by Cylindrical, Mortise, and Exit Trim
 - Application Notes/Technical Bulletins
 - Firmware & Software
 - CO-Series Firmware Package
 - Schlage SUS Software
 - Note: Check for updates on a regular basis
 - Also found in Technical Library
 - Brochures/Sales Materials
 - Data Sheets
 - How To Videos (Coming Soon)
 - And More



Distributor & Channel Partner Tools

Location:

PartnerLink



CLICK HERE

- Registered Users:
 - <http://partnerlink-admin.ingersollrand.com/ProductInformation/AccessControl/ElectronicLockingPortfolio/CO-Series/Pages/CO-Series.aspx>
- New Users: Go to <http://partnerlink.ingersollrand.com> and click on the new user link
 - CO-Series can be found at: PartnerLink > Product Info > Access Control & Video > Electronic Locking Portfolio > CO-Series
- Tools not available on schlage.com:
 - PowerPoint Presentations
 - Image Library
 - Marketing Documents
 - Technical Bulletins
 - PartnerLink Connection Newsletter
 - And More



Additional Resources

Location:

www.schlage.com



CLICK HERE

- "How To" App for CO-Series
- Security Technologies Page:
 - <http://w3.securitytechnologies.com/first/Pages/default.aspx>
- EAC Catalog
 - <http://epub.securitytechnologies.com>



FREE DOWNLOAD
CLICK HERE



FREE DOWNLOAD
CLICK HERE





Open Architecture Solution

OEM Software with AD-Series Wireless and Hardwired Locks

The AD-Series Electronic Locking platform is designed to be open and flexible. With its open architecture, the AD-Series can be seamlessly integrated into most access control systems.

Schlage AD-Series electronic locks combine all of the components typically found around the door; such as the reader, door position switch and the request-to-exit switch into one device; which simplifies installation and saves money.

Schlage AD-Series electronic locks are available in hardwired and wireless configurations. The AD-300 locks are hardwired and provide the benefits of a traditional access control solution. The AD-400 locks are wireless and provide many of the key benefits without having to run wires directly to each opening.

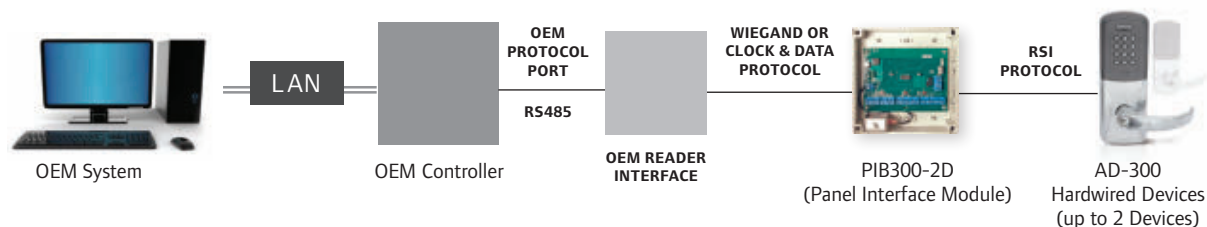
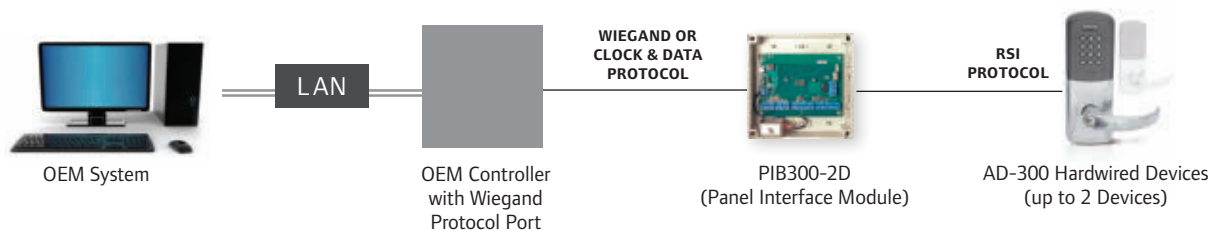
The AD-Series can be customized with seven (7) different credential reader options including keypad, magnetic stripe, and multi-technology which reads both proximity and smart cards. All card readers are available with keypad for multi-factor authentication, support is dependent on access control software. Designed to be modular, readers can easily be upgraded in the future to meet your changing credential needs.



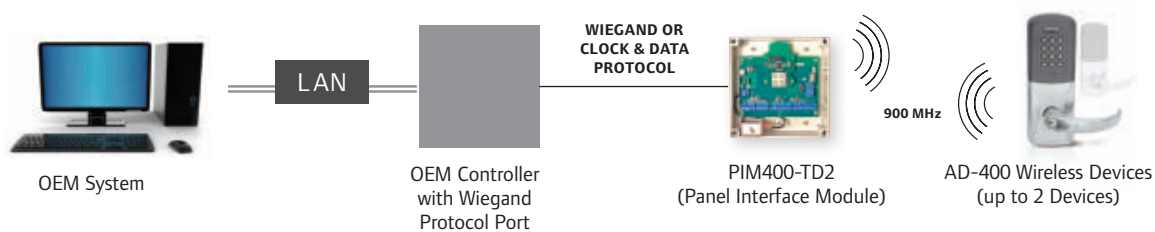
System Capabilities – Summary

- System Capabilities:
 - As determined by OEM software provider
- AD-400 Wireless Applications:
 - Communicates to the controller via PIM400-TD2 (Wiegand or Clock & Data); each supports up to 2 devices
 - 900 MHz communication between AD-400 and PIM400 for secure, AES-128 bit encrypted transmission
 - Patent-pending Wireless lockdown feature (10 seconds or less) preserves up to 2 year battery life
- AD-300 Hardwired Applications:
 - Communicates to the controller via PIB300-2D (Wiegand or Clock & Data); each supports up to 2 devices
- AD-Series available with seven reader options including
 - Keypad
 - Magnetic Stripe
 - Multi-Technology (reads both 125 kHz and 13.56 MHz)
 - All card readers available + PIN (if supported by access control software)
- AD-Series chassis options: Cylindrical, Mortise, Exit Trim
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL 10C

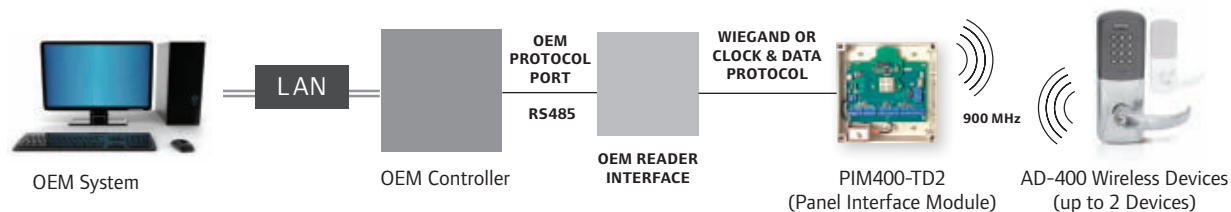
AD-300 Hardwired Wiegand System



AD-400 Wireless Wiegand System



Wireless range up to 200' in building construction, up to 1000' line of sight.



System Capabilities		
	AD400	AD300
	PIM400-TD2	PIB300-2D
Device Capacity at the PIM400:		
Number of Wireless Devices per PIM400	Up to 2	N/A
Number of Locks per PIB300	N/A	Up to 2
Other Requirements		
RLBD Dry Contact Relay Board**	Consult your access control system provider for capability	
Reader Interface/Gateway		
Readers (see supported credential formats to the right):		
Keypad Only	Consult your access control system provider for capability	
Magnetic Stripe Card		
Multi-Tech - 125 kHz Prox & 13.56 MHz Smart Card		
PIV & PIV-I Card Compatible*		
Card + PIN		
Status Monitors:††		
Request to Exit	Yes	
Door Position Switch	Yes	
Interior Cover Tamper Guard	Yes	
Lock/Unlock Status Clutch Position	No	
Mechanical Key Override (ATK)	No	
Request to Enter	Consult system provider	
Low Battery Status	Consult system provider	N/A
Battery Voltage Level	No	N/A
Communication Status	Yes	
Remote Lockdown (from host)	Yes (<10 secs)†	Yes
Remote Unlock (from host)	Yes (<10 secs)†	Yes
Deadbolt Position	No	
Interior Push Button	No	
Lock Functions		
Classroom/Storeroom	Yes	

Common Formats Supported:

Please contact your access control provider to verify support beyond listed credential formats.

Proximity Cards (125 kHz):

- AWID®
- GE/CASI®
- HID®
- Schlage
- XceedID®

Smart Cards (13.56MHz):

- aptiQ™ MIFARE Classic
- aptiQ™ MIFARE DESFire™ EV1
- PIV and PIV-I Compatible²

Smart Cards (13.56MHz)-

Reads Card Serial Number Only:

- HID iCLASS®
- DESFire®
- MIFARE®
- MIFARE DESFire™ EV1

Notes:

* FIPS 201 Compliant 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 Compliance. Specific components are required, please see the AD-401 data sheet or AD-301 data sheet for complete details. Contact your System Provider to confirm they are able to support your FIPS 201-1 credential format.

** Requires RLBD Dry Contact Board for supervised inputs. If supervised inputs are required our optional plugin relay board (RLBD) is required for the PIM400-TD2 and PIB300-2D. If unsupervised inputs are allowed then the RLBD is not needed.

† Wake-up on Radio over PIM400-TD2 on up to 2 doors requires configuration via SUS.

†† Chart represents default functionality in AD-Series devices

AD-Series Credential Reader Compatibility:



• Multi-Technology

- Proximity
- Smart Card



• Multi-Technology

- Proximity
- Smart Card



• Magnetic Stripe



• Magnetic Stripe

• Magnetic Stripe (Swipe)



• Magnetic Stripe

(Swipe)



• Keypad



• Handheld Device (HHD)

Used to initialize, configure, and test AD-Series Devices

AD-Series Electronic Locks from Schlage are built from the ground up to provide more options, more functionality and more compatibility than any other solution on the market today. Designed to suite with the most popular lever styles and finishes, Schlage AD-Series can be configured to accept most major key systems.



Mortise Lock
(AD-300/400-MS)



Cylindrical Lock
(AD-300/400-CY)



Exit Device Trim (AD-300/400-993)

The AD-300 and AD-400 exit trims are exclusively compatible with exit devices made by Ingersoll Rand when using the low current request to exit switch (RX-LC part # 050281 for Von Duprin 98/99 and Von Duprin 22/22F Rim/SVR devices and part # 650359 for Falcon 25 Rim devices)

Configure Your Lock:

We have created a web-based product selector tool that can help you configure your AD-Series lock to meet your needs. To check out the tool, please visit www.schlage.com.



Cylinder Compatibility	Full Size (key-in-lever 6 pin)	Full Size (key-in-lever 7 pin)	FSIC (6 & 7 pin)	SFIC (6 & 7 pin)
Schlage	●		●	●
Falcon®	▲	◆		▲
Sargent® (10L + 11L Full Size)	▲		▲	▲
Corbin Russwin®			▲	▲
Yale® (includes Medeco 31 *0100 FSIC)			▲	▲
Best®				▲

● = with cylinder or less cylinder options

▲ = less cylinder only

◆ = less cylinder, only with Sparta and Rhodes levers

Note: See pricebook for specific configurations.

Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

Warm tone finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



643e
Aged Bronze

Cool tone finishes



619
Satin Nickel



625
Bright
Chrome



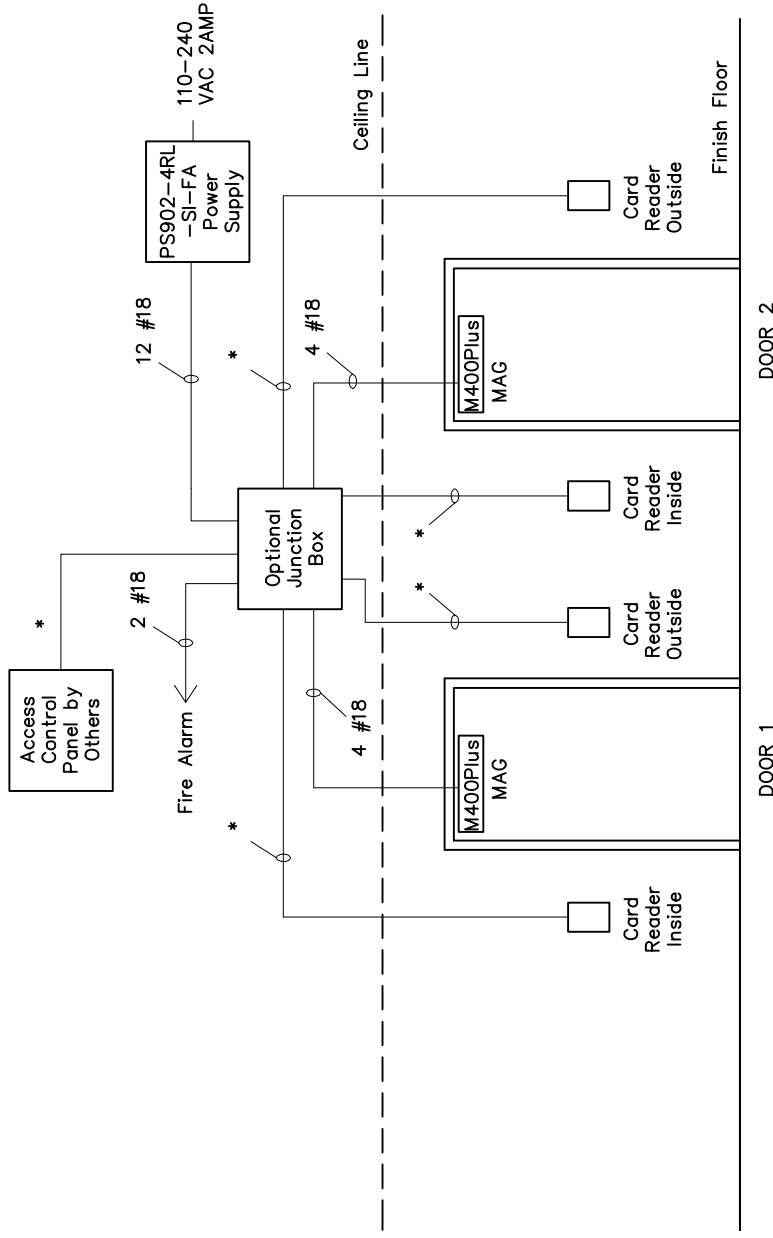
626
Satin Chrome



626AM
Satin Chrome
with Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin, Falcon and aptiQ are trademarks of Ingersoll Rand plc, its subsidiaries and/or affiliates in the United States and other countries. GE, CASI and ProxLite are trademarks of General Electric Corporation. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. AWID is a trademark of Applied Wireless Identifications Group. Corbin Russwin is a trademark of Corbin Russwin, Inc. Sargent is a trademark of Sargent Manufacturing Company. Yale is a trademark of Yale Security, Inc. Best is a trademark of Stanley Black & Decker. Dorma is a trademark of DORMA Door Controls, Inc. All other trademarks are the property of their respective owners.





2 Door Security Interlock

Drawing not to scale

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.

Function:

Door 1 and 2 shown locked and 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.

Type

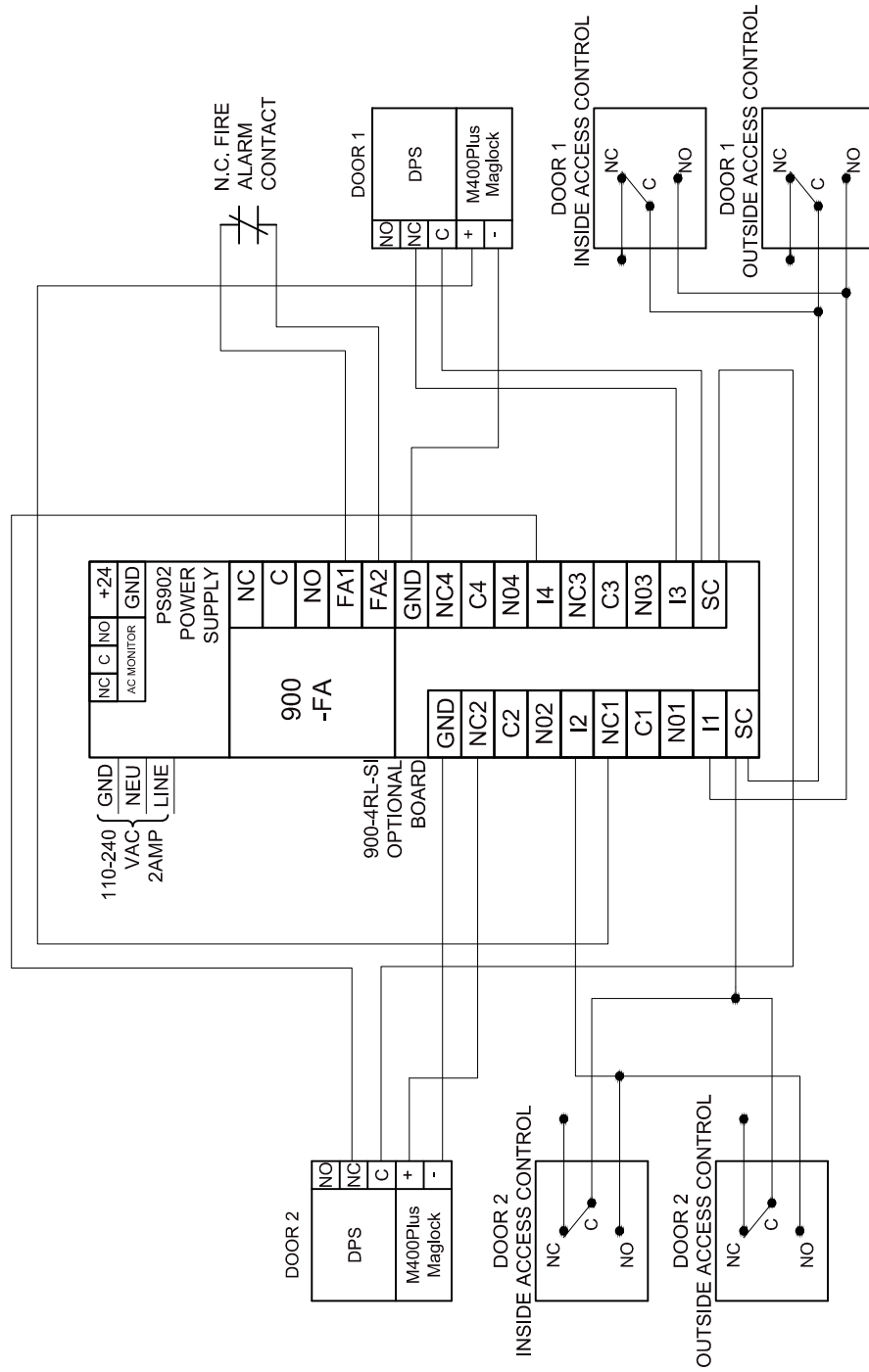
Interlock Doors



2 Door PS902-4RL-SI-FA x 2 M400 Plus
Maglocks x 4 Card Reader

Drawing Type: Riser
Drawing Number: 104967
Rev. B

© 2011 Ingersoll Rand



Drawing not to scale

- 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.

Function:

Door 1 and 2 shown locked and 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.

Type

Interlock Doors



2 Door PS902-4RL-SI-FA x 2 M400 Plus
Maglocks x 2 Card Reader

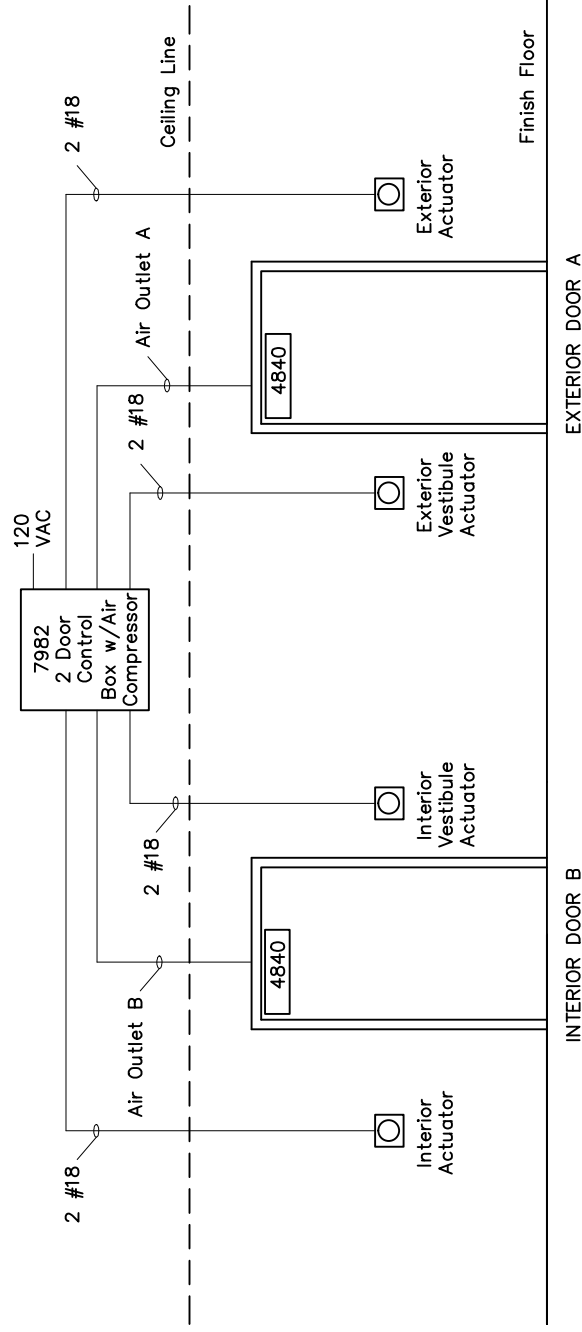
Drawing Type:

Wiring Diagram

Drawing Number:

104967

Rev.



- 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.

Function:
Door normally closed. Depressing interior vestibule actuator opens interior door. Depressing exterior vestibule actuator opens exterior door. Depressing interior actuator opens interior door and then exterior door in sequence. Depressing exterior actuator opens exterior door and then interior door in sequence. Free egress at all times.

Type
2 Single Doors

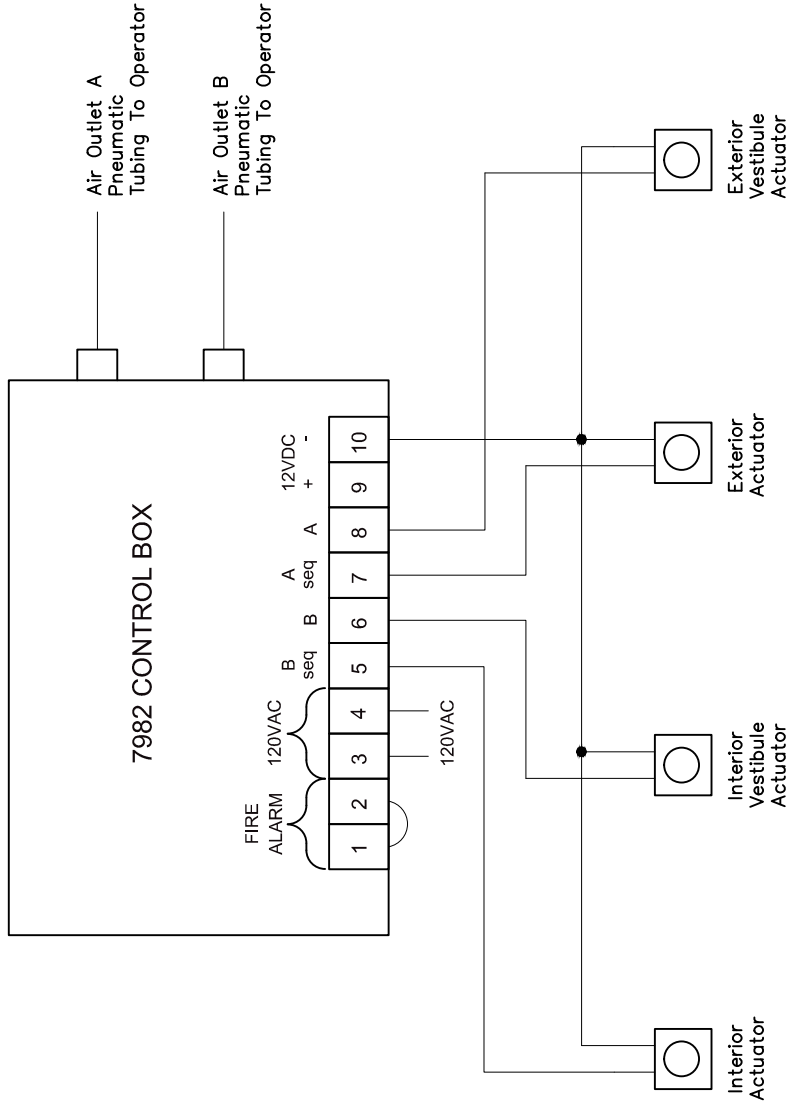
Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11



2 Single Doors 7982 Controller x 2 4840
x 4 Pushbutton

Drawing Type:	Drawing Number:
Riser	104968

Rev. B



Drawing not to scale

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.

Function:
Door normally closed. Depressing interior vestibule actuator opens interior door. Depressing exterior vestibule actuator opens exterior door. Depressing interior vestibule actuator opens interior door and then exterior door in sequence. Depressing exterior vestibule opens exterior door and then interior door in sequence. Free egress at all times.

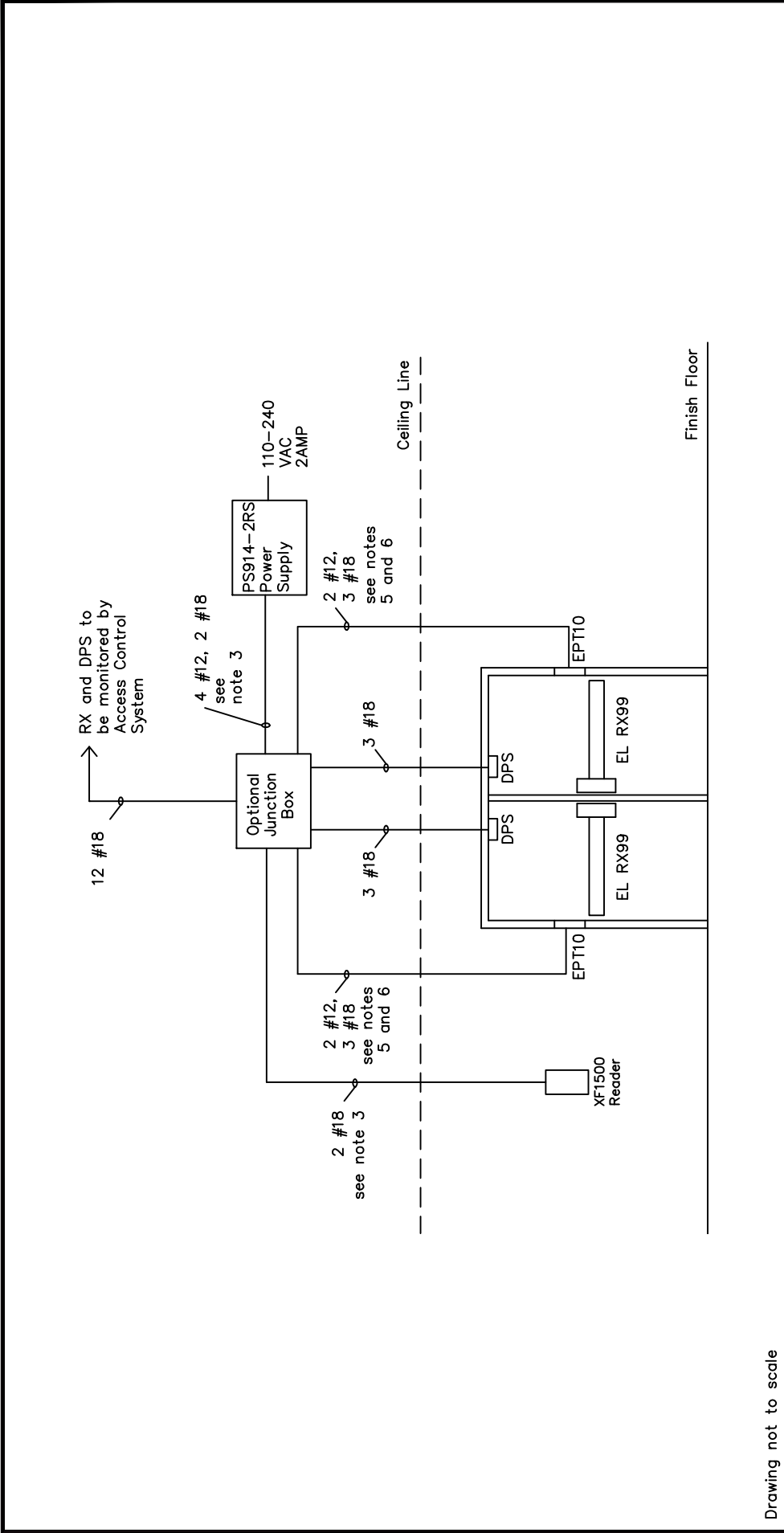
Type
2 Single Doors




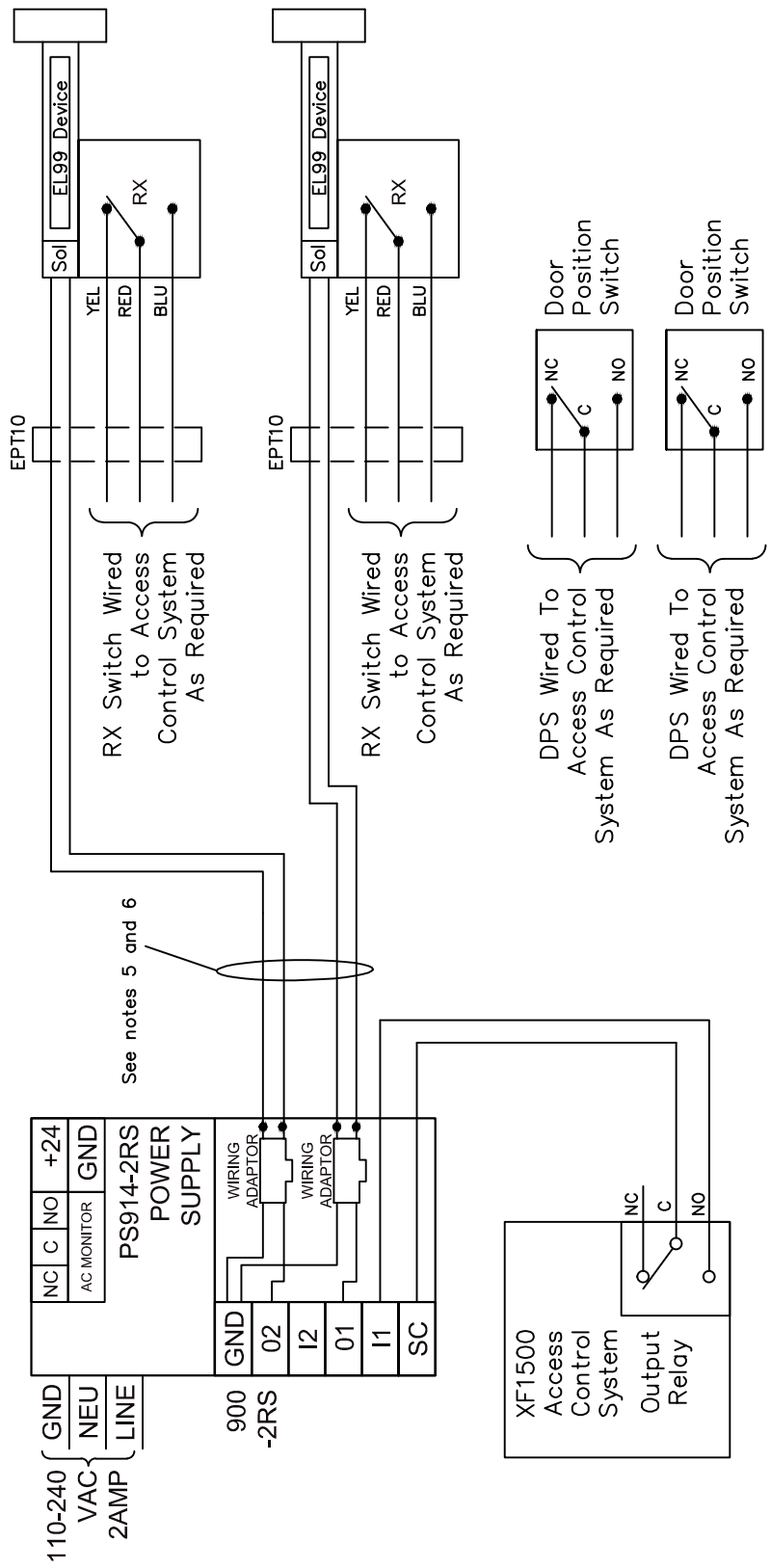
2 Single Doors 7982 Controller x 2 4840 x 4 Pushbuttons

Drawing Type: Wiring Diagram
Drawing Number: 104968
Rev. B

© 2011 Ingersoll Rand



<div>Notes:</div> <div>1) All low voltage wiring to be standard, multi-conductor color coded without splices.</div> <div>2) Wiring to conform to applicable national, state and local electrical codes.</div> <div>3) Refer to specific product installation instructions for specific wiring requirements.</div> <div>4) This drawing is for graphical representation of products detailed in the hardware set only.</div> <div>5) Use #12 gauge wire for distances up to 200' from EPT to PS914.</div> <div>6) Use #14 gauge wire for distances up to 100' from EPT to PS914</div>	<div>Function:</div> <div>Door normally closed and locked by access control system. Valid card read retracts electric panic devices to allow entry. Free egress at all times.</div> <div>Door position and RX switches to be monitored by access control system.</div> <div>Type</div> <div>Pair Doors</div>	<div>Drawn</div> <div>11-03-11</div>		<div>Pair PS914-2RS 2xEL-RX99 XF1500 2xDPS</div>	<div></div>	<div>Rev.</div> <div>A</div>		
		<div>Checked</div> <div>11-03-11</div>					<div>Drawing Type:</div> <div>Riser</div>	<div>Drawing Number:</div> <div>105234</div>
		<div>Approved</div> <div>11-03-11</div>						
		<div>© 2011 Ingersoll Rand</div>						



Drawing not to scale

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) Use #12 gauge wire for distances up to 200' from EPT to PS914.
- 6) Use #14 gauge wire for distances up to 100' from EPT to PS914

Function:
Door normally closed and locked by access control system. Valid card read retracts electric panic devices to allow entry. Free egress at all times.

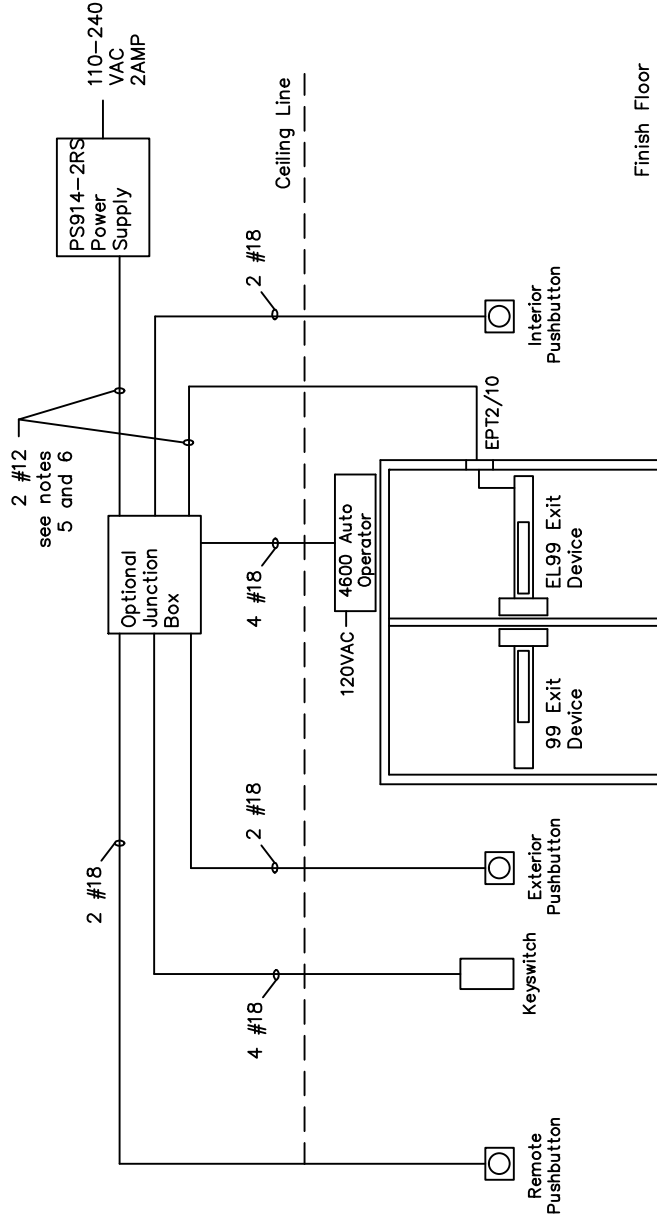
Door position and RX switches to be monitored by access control system.

Type
Double Doors



Pair PS914-2RS 2xEL-RX99 XF1500 2xDPS

Drawing Type: Wiring Diagram
Drawing Number: 105234
Rev. A



Drawing not to scale

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) Use #12 gauge wire for distances up to 200' from EPT to PS914.
- 6) Use #14 gauge wire for distances up to 100' from EPT to PS914.

Function:
Door normally closed and locked.
Keyswitch retracts latch and enables exterior pushbutton.
Interior and remote pushbutton are always active to retract the electric latch and automate door.
Free egress at all times.

Type
Double Door

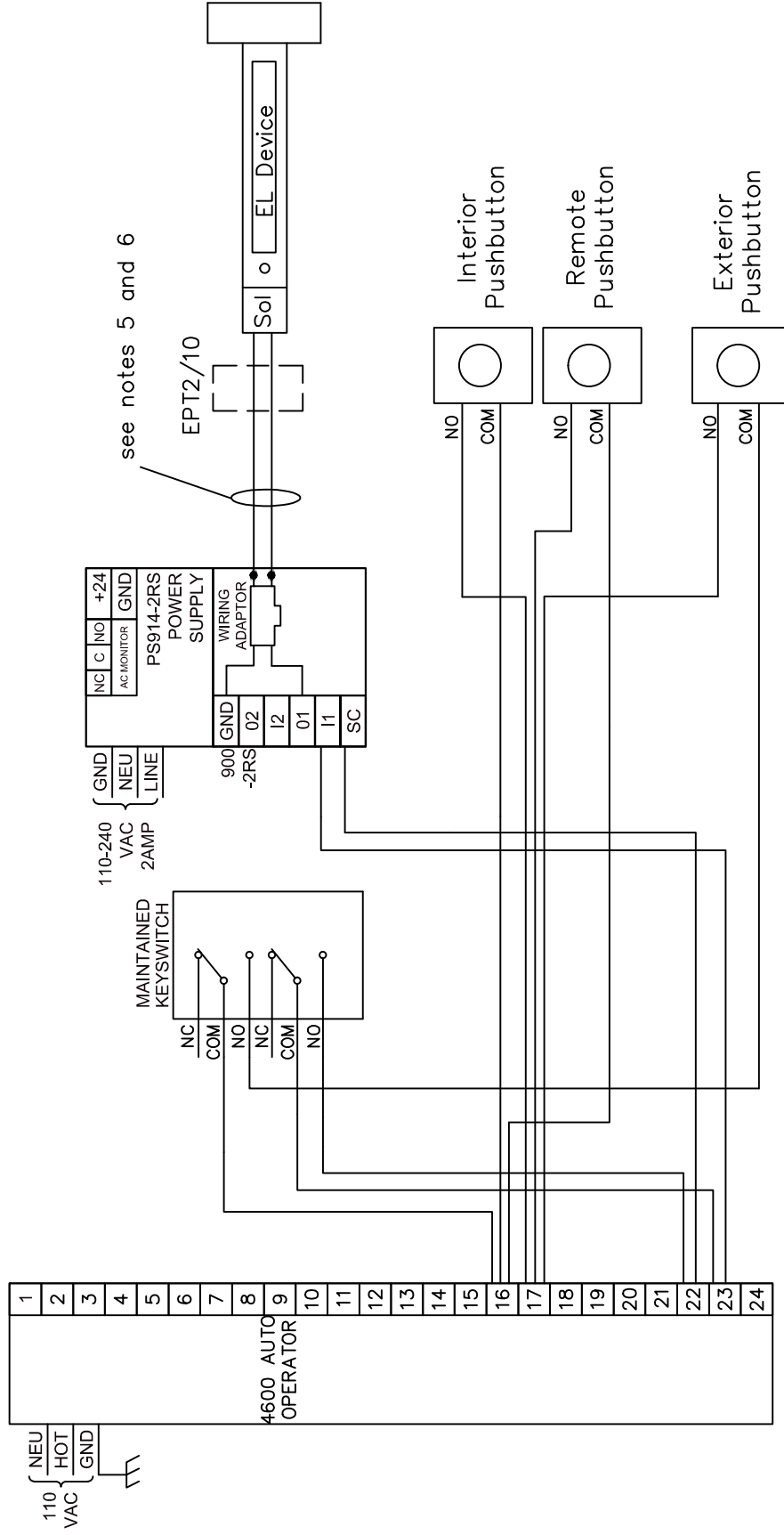


Pair PS914-2RS EL 4640 2xPB Keyswitch
x Remote PB

Drawing Type:
Riser

Drawing Number:
104970

Rev.
A



Drawing not to scale

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) Use #12 gauge wire for distances up to 200' from EPT to PS914.
- 6) Use #14 gauge wire for distances up to 100' from EPT to PS914.

Function:

Door normally closed and locked. Keyswitch retracts latch and enables exterior pushbutton. Interior and remote pushbutton are always active to retract the electric latch and automate door. Free egress at all times.

Type

Double Door



Pair PS914-2RS EL 4640 2xPB Keyswitch
x Remote PB

Drawn 08-09-11
Checked 08-10-11
Approved 08-10-11

© 2011 Ingersoll Rand

Drawing Type:

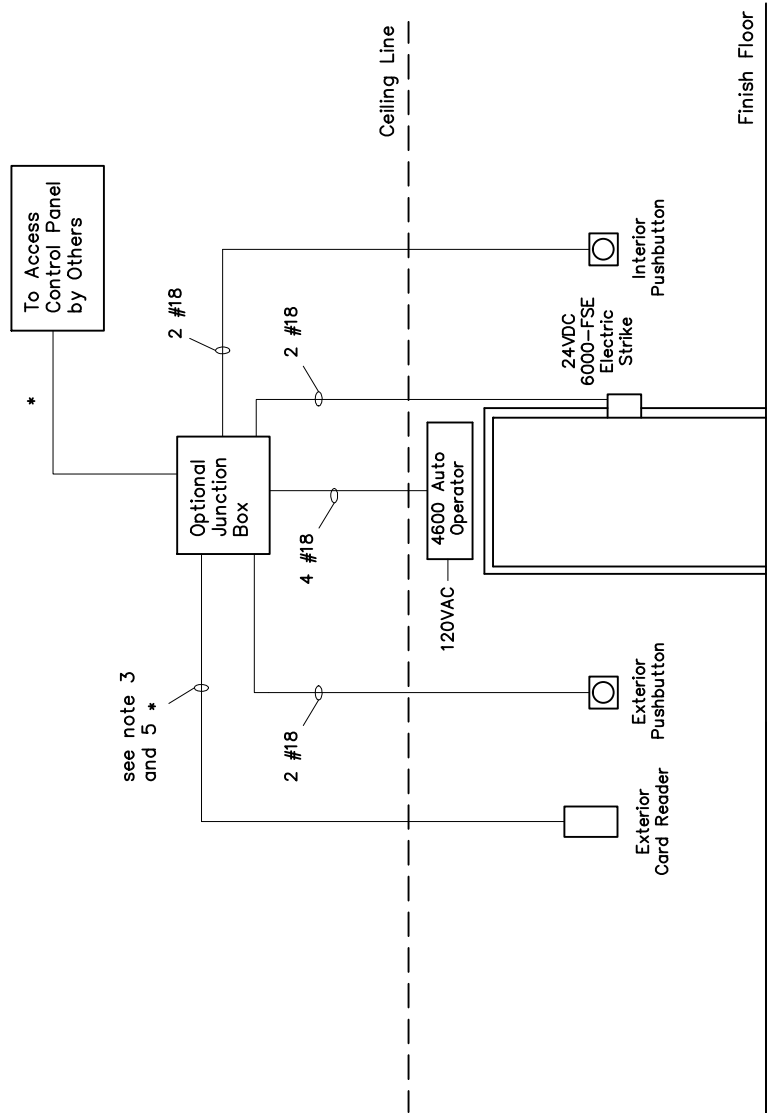
Wiring Diagram

Drawing Number:

104970

Rev.

A



Drawing not to scale

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.

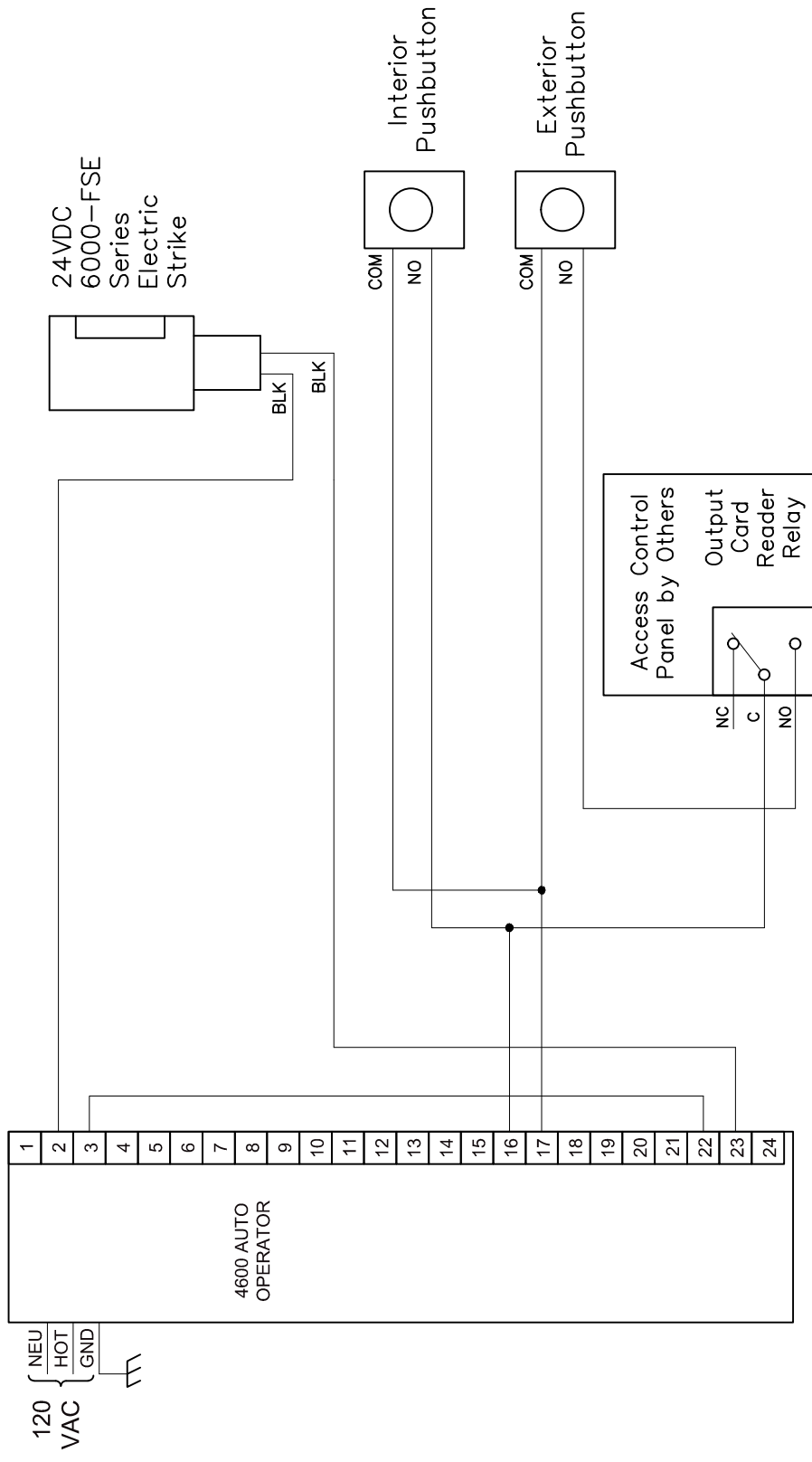
Function:
 Door normally closed and locked.
 Valid access control read enables exterior actuator.
 Depressing exterior actuator unlocks electric strike and automates door.
 Depressing interior actuator unlocks electric strike and automates door.
 Free egress at all times.

Type
 Single Door



Single 4600 AO 6000 FSE Electric Strike x
 2 PBxCard Reader

Approved	08-10-11	© 2011 Ingersoll Rand	Drawing Type: Riser	Drawing Number: 104972	Rev. B



Drawing not to scale

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.

Function:
Door normally closed and locked.
Valid access control read enables exterior actuator.
Depressing exterior actuator unlocks electric strike and automates door.
Depressing interior actuator unlocks electric strike and automates door.
Free egress at all times.

Type
Single Door



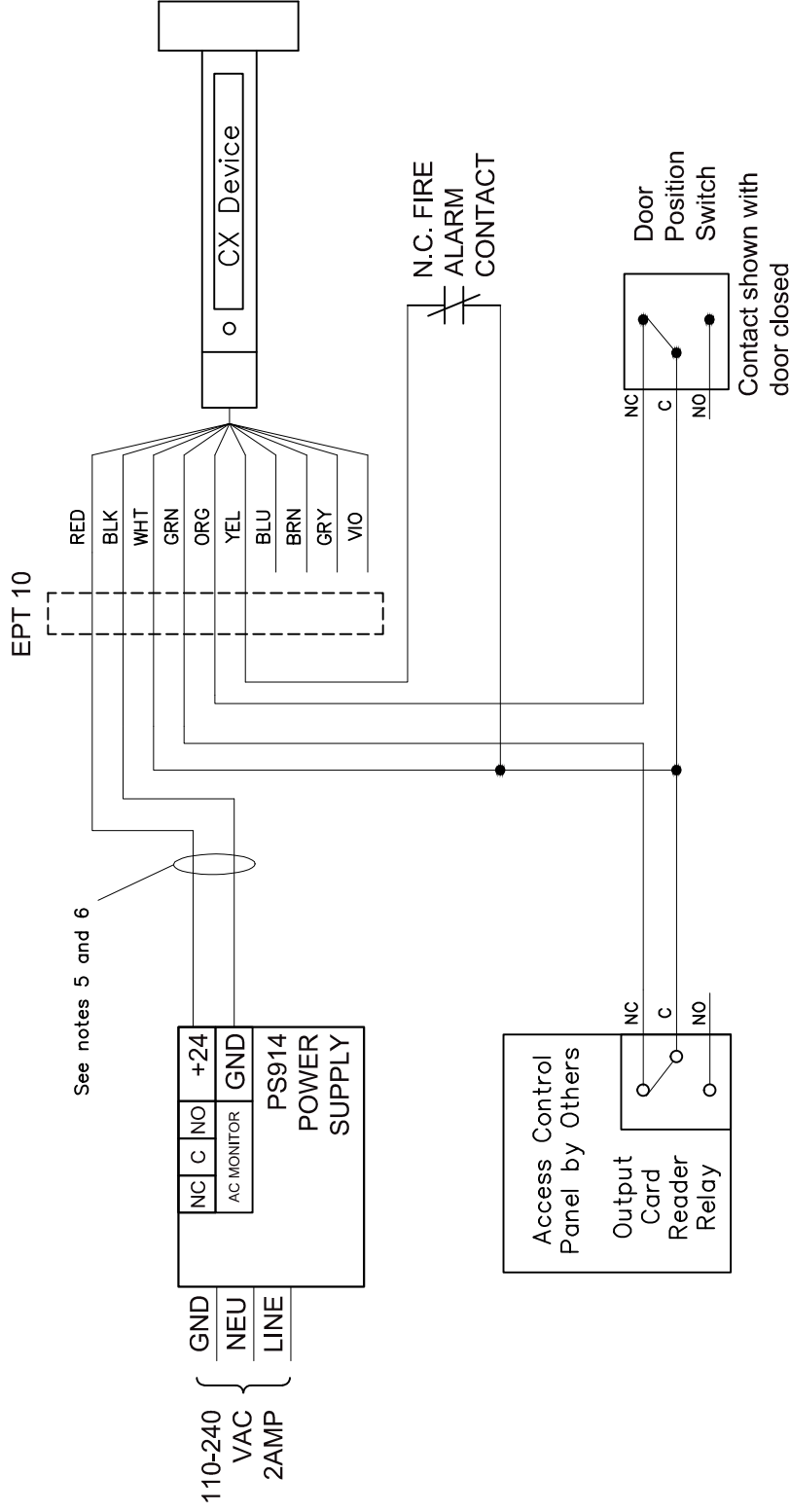
Single 4600 AO 6000 FSE Electric Strike x
2 PBxCARD Reader

Drawn	08-09-11
Checked	08-10-11
Approved	08-10-11
© 2011 Ingersoll Rand	

Drawing Type:
Wiring Diagram

Drawing Number:
104972

Rev.
B



Drawing not to scale

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) Use #12 gauge wire for distances up to 200' from EPT to PS914.
- 6) Use #14 gauge wire for distances up to 100' from EPT to PS914

Function:

Door normally closed and locked. Valid card read unlocks latch and disarms alarm. Pushing on locked panic device initiates a 15 second irreversible delay and audible alarm. After the 15 second delay, the device unlocks and allows egress. Activation of the fire alarm will immediately release the exit device. Access Control to shunt alarm allowing non alarmed exiting.

Type

Single Door



Single PS914 CX99 EPT10 DPS Card Reader

Drawn 08-09-11

Checked 08-10-11

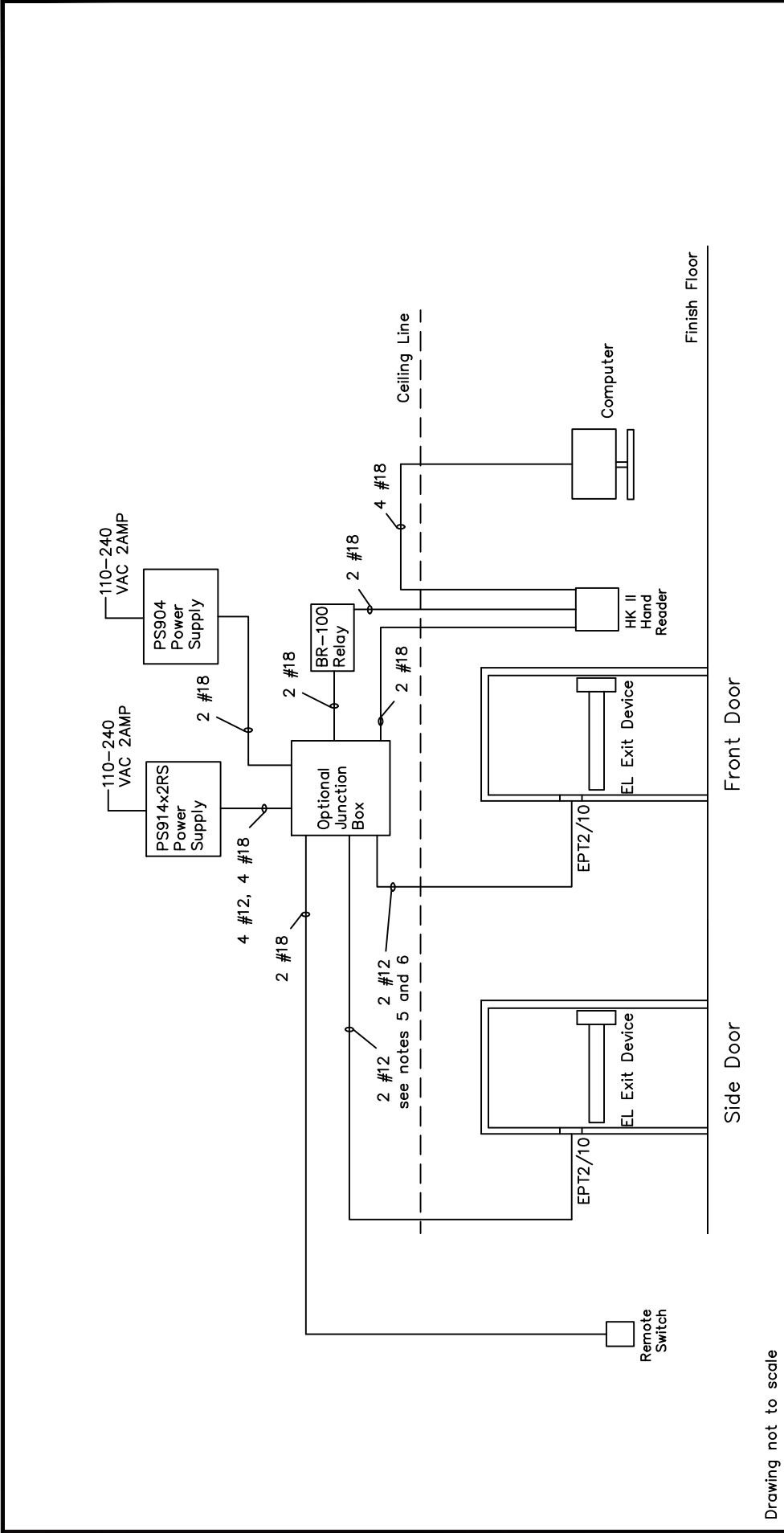
Approved 08-10-11

© 2011 Ingersoll Rand

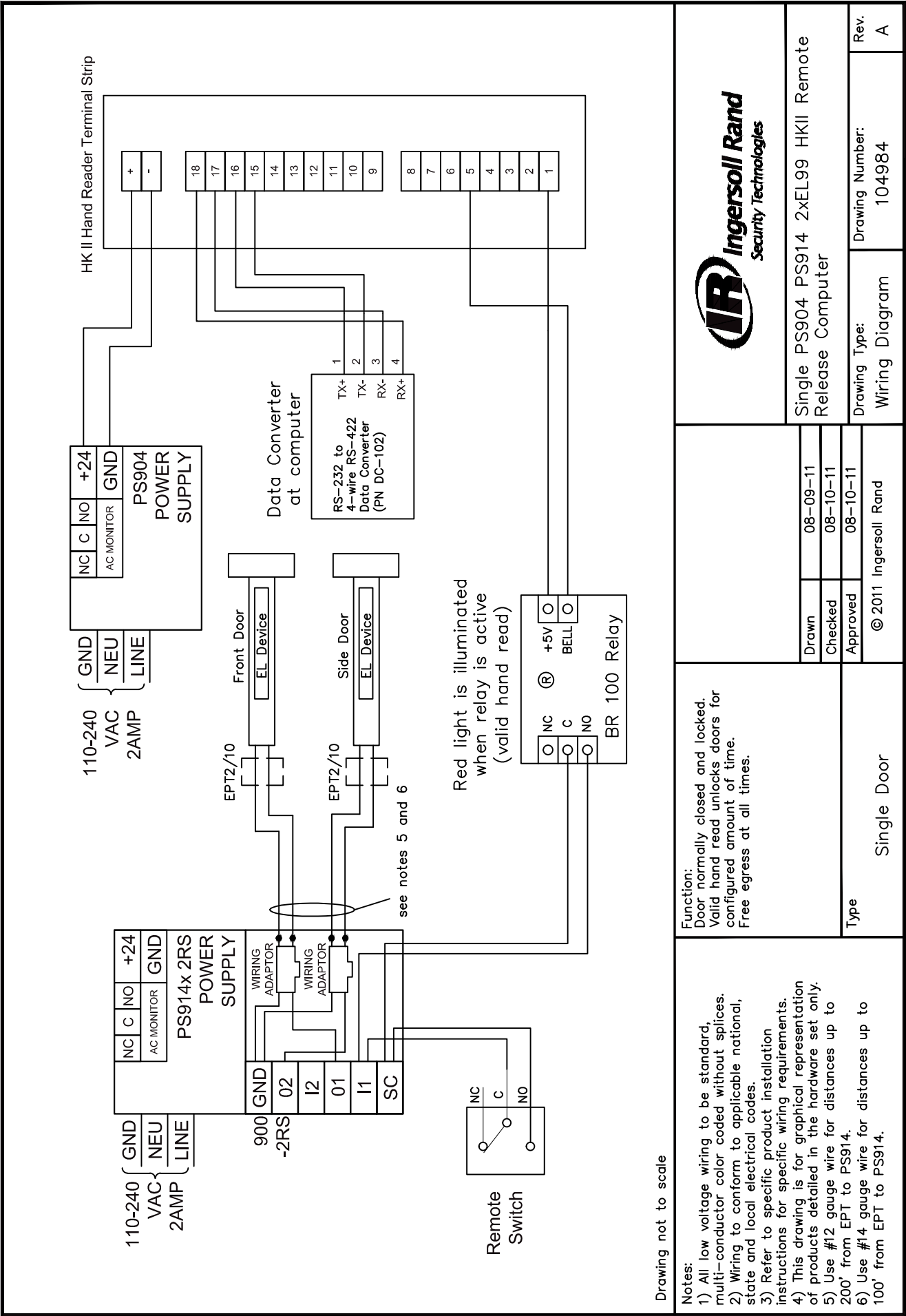
Drawing Type:
Wiring Diagram

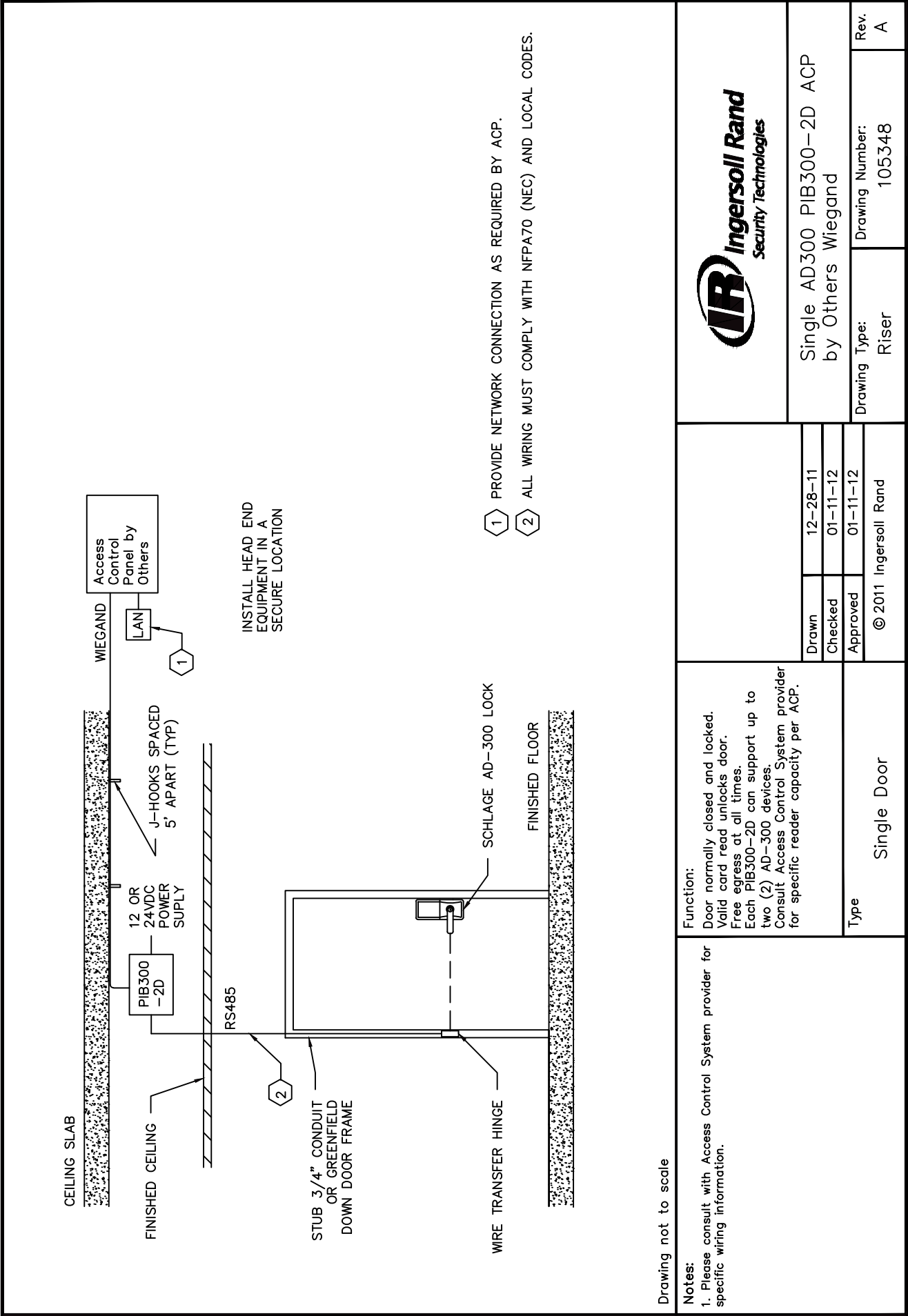
Drawing Number:
104973

Rev.
B



<p>Notes:</p> <ol style="list-style-type: none"> 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) Use #12 gauge wire for distances up to 200' from EPT to PS914. 6) Use #14 gauge wire for distances up to 100' from EPT to PS914. 		<p>Function:</p> <p>Door normally closed and locked. Valid hand read unlocks doors for configured amount of time. Free egress at all times.</p>			
<p>Type</p> <p>Single Door</p>		<p>Drawn</p> <p>08-09-11</p>		<p>Single PS904 PS914 2xEL99 HKII Remote Release Computer</p>	
		<p>Checked</p> <p>08-10-11</p>			
		<p>Approved</p> <p>08-10-11</p>			
		<p>© 2011 Ingersoll Rand</p>		<p>Drawing Type:</p> <p>Riser</p>	
				<p>Drawing Number:</p> <p>104984</p>	
				<p>Rev.</p> <p>A</p>	





Notes:
1. Please consult with Access Control System provider for specific wiring information.

Function:
Door normally closed and locked.
Valid card read unlocks door.
Free egress at all times.
Each PIB300-2D can support up to two (2) AD-300 devices.
Consult Access Control System provider for specific reader capacity per ACP.

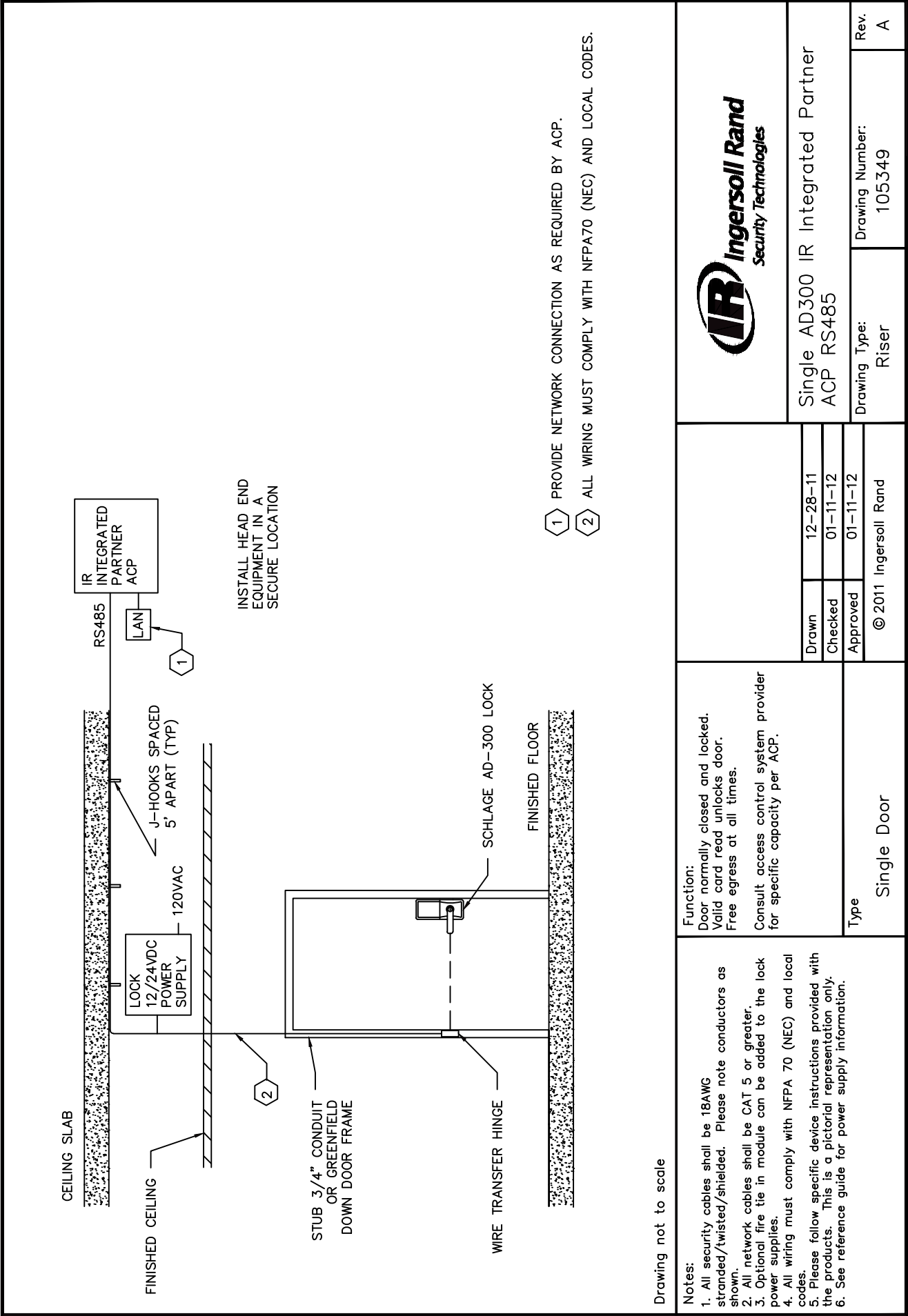
Type
Single Door



Single AD300 PIB300-2D ACP
by Others Wiegand

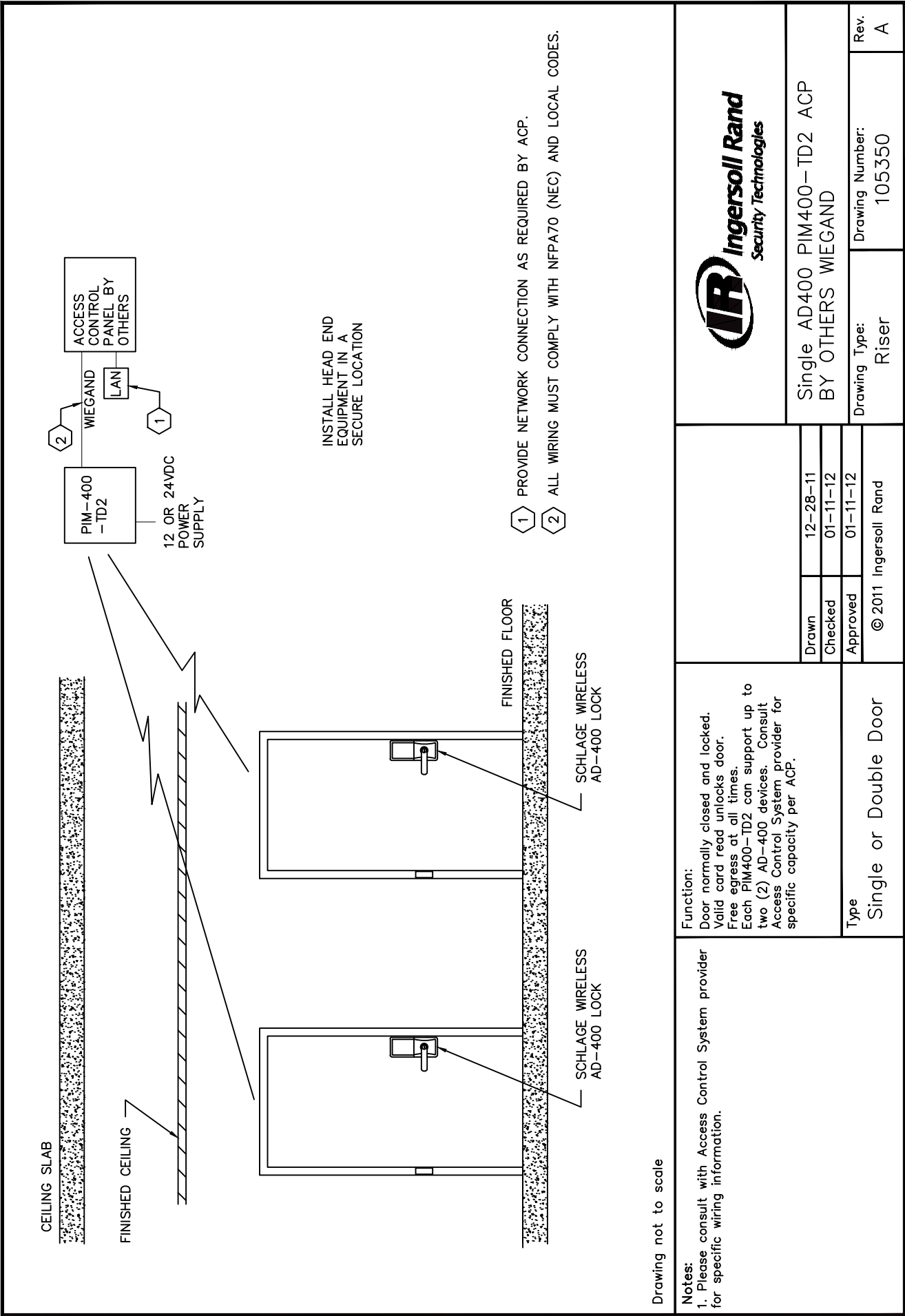
Drawing Type:	Riser	Drawing Number:	105348	Rev.	A
---------------	-------	-----------------	--------	------	---

Drawn	12-28-11
Checked	01-11-12
Approved	01-11-12
© 2011 Ingersoll Rand	

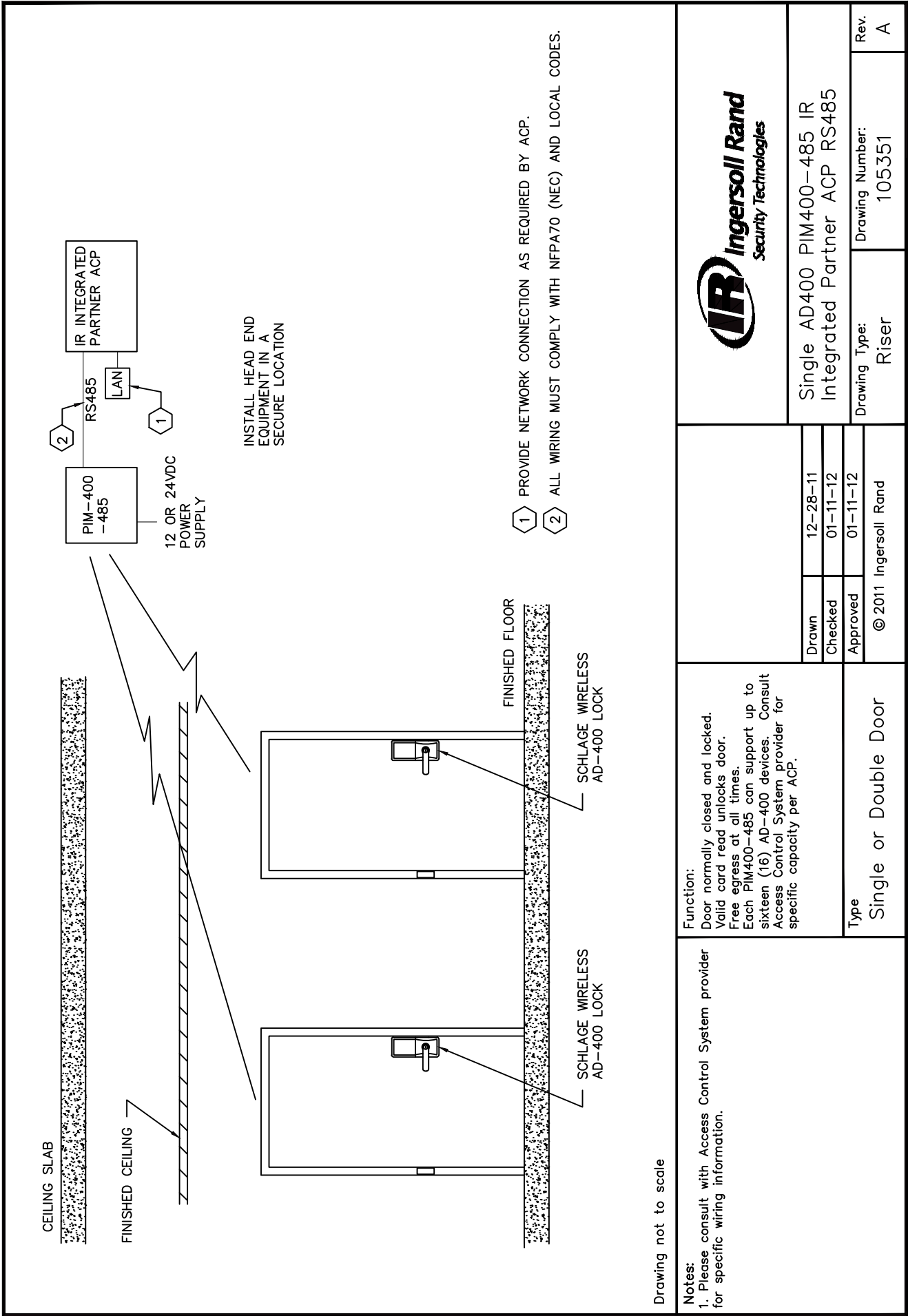


Single AD300 IR Integrated Partner
ACP RS485

Drawing Type: Riser
Drawing Number: 105349
Rev. A



<div>Notes:</div> <div>1. Please consult with Access Control System provider for specific wiring information.</div>	<div>Function:</div> <div>Door normally closed and locked. Valid card read unlocks door. Free egress at all times. Each PIM400-TD2 can support up to two (2) AD-400 devices. Consult Access Control System provider for specific capacity per ACP.</div>	<div>Drawn</div> <div>12-28-11</div>		<div>Single AD400 PIM400-TD2 ACP BY OTHERS WIEGAND</div>	<div>IR</div> <div>Ingersoll Rand</div> <div>Security Technologies</div>	Rev. A
		<div>Checked</div> <div>01-11-12</div>				
		<div>Approved</div> <div>01-11-12</div>				
		<div>© 2011 Ingersoll Rand</div>				
		<div>Type</div> <div>Single or Double Door</div>				
				<div>Drawing Type:</div> <div>Riser</div>	<div>Drawing Number:</div> <div>105350</div>	



Single AD400 PIM400-485 IR
Integrated Partner ACP RS485

Drawn 12-28-11

Checked 01-11-12

Approved 01-11-12

© 2011 Ingersoll Rand

Drawing Type:
Riser

Drawing Number:
105351

Rev.
A



Ingersoll Rand (NYSE:IR) advances the quality of life by creating and sustaining safe, comfortable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Schlage®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; secure homes and commercial properties; and increase industrial productivity and efficiency. Ingersoll Rand Security Technologies' market-leading products include electronic and biometric access control systems; time-and-attendance and personnel scheduling systems; mechanical locks; portable security; door closers, exit devices, architectural hardware, and steel doors and frames; and other technologies and services for global security markets. Ingersoll Rand is a \$14 billion global business committed to a world of sustainable progress and enduring results.

securitytechnologies.ingersollrand.com

ingersollrand.com