

# **FULL MORTISE - CONCEALED ELECTRIC**

#### **EXPOSED ELECTRIC MODIFICATIONS**

The following exposed electric modifications are available on our architectural grade ball bearing and anti-friction bearing hinges. To order a hinge with exposed electric modification, please add the modification code to the product number (for example, BB1279 E2).



#### **E2 Electric Contact**

- · Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- · Two contacts minimum required to transfer electrical current
- Design includes insulated copper contacts
- Furnished with non-removable pins





#### **E2/E1S Electric Contact/Switch**

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- · Single pole, double throw switch
- · Design includes insulated copper contacts
- Furnished with non-removable pins

Hinge Size		C
Inches	mm	Contacts
4 x 4	102 x 102	2 or 3
4-1/2 x 4-1/2	114 x 114	2, 3, or 4
5 x 5	127 x 127	2, 3, or 4

Contac	t Maximum El	ectrical Rating
Volts	Amperes	
48	3.5 amps	CONTINUOUS
VDC	16.0 amps	PULSE

Hinge Size	
Inches	mm
4 x 4	102 x 102
4-1/2 x 4-1/2	114 x 114
5 x 5	127 x 127

Contact Maximum Electrical Rating		
Volts	Amperes	
48 VDC	3.5 amps 16.0 amps	CONTINUOUS PULSE
Switch Maximum Electrical Rating		
24 VDC @ .250 amps		



### E1S

#### **Electric Switch** • Three or five knuckle

- · Available on architectural grade ball bearing and anti-friction bearing
- · Single pole, double throw switch
- Furnished with non-removable pins



Hinge Size		
Inches	mm	
4 x 4	102 x 102	
4-1/2 x 4-1/2	114 x 114	
5 x 5	127 x 127	

24 VDC @ .250 amps





## FULL MORTISE - CONCEALED ELECTRIC

#### **CONCEALED ELECTRIC MODIFICATIONS**

The following concealed electric modifications are available on our architectural grade ball bearing and anti-friction bearing hinges. To order a hinge with concealed electric modification, please add the modification code to the product number (for example, BB1279 EMN).





#### EMN Electric Monitor Only

- · Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 28 gauge wire standard
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- · Monitoring capability only
- Concealed subminiature snap action, SPDT switch
- Adjustment feature for a wide range of switch sensitivity
- Preset switching circuit
- For open loop secure, closed loop secure or single pole double throw (SPDT)







#### \*ETW

#### **Electric Through-Wire Only**

- Two, three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 18 and 28 gauge wire
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable -NRP variation is not available
- Low voltage electric current transfer capability only
- 4, 8, or 12 continuous electrical conductors
- For 6 wire, use 8
- For 10 wire, use 12

Wire Maximum Electrical Rating		
Volts	Amperes	
48	3.5 amps	CONTINUOUS
VDC	16.0 amps	PULSE





#### ETM Electric Through-Wire with Monitoring

- · Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 18 and 28 gauge wire
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Both continuous electric conductors and monitoring capability
- Concealed monitor switch and 4, 8 or 10 continuous electrical conductors
- Adjustment feature for a wide range of switch sensitivity
- For open loop secure, closed loop secure or single pole double throw (SPDT)

Volts	Amperes	
48 VDC	3.5 amps 16.0 amps	CONTINUOUS PULSE
witch	Maximum Ele	ctrical Rating

\*Quick Connect Option (QC) available with all ETW and ETM hinges - must specify.





# **FULL MORTISE - CONCEALED ELECTRIC**

#### **CONCEALED AIR TRANSFER**

The following hinges are available with a concealed air transfer (ATH) modification. They are available on architectural grade ball bearing and anti-friction bearing full mortise. Please note:

- ATH modification is for doors that require the transfer of compressed air.
- The hinges with ATH modification available use 5/32"
   (4 mm) plastic air tubing, have quick-connect fittings, and are capable of transferring 80-100 PSI through the air tubing.
- Steel or stainless steel hinges are acceptable for use on labeled or fire-rated doors.
- · Hinge pins are not field removable.
- NRP and safety stud are not available.



#### AB700 Standard Weight Steel

AB800 Standard Weight Stainless steel, brass



# AB750 Heavy Weight

Steel



AB850 Heavy Weight Stainless steel, brass



BB1191 Standard Weight Stainless steel, brass

### BB1279 Standard Weight Steel

BB1168 Heavy Weight Steel

BB1199 Heavy Weight Stainless steel, brass

Hinge Size	
Inches	mm
4-1/2 x 4	112 x 102
4-1/2 x 4-1/2	114 x 114
5 x 4	127 x 102
5 x 4-1/2	127 x 114
5 x 5	127 x 127

# c (h)

#### 430 Mortar Box

- Galvanized steel 0.040 (1 mm)
- Dimensions 9" (2.29 mm) length with tabs, 7" (1.78 mm) inside,
   1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension
- · Removable back for servicing
- · Serves as mortar shield
- Top and bottom knockouts for standard conduit fittings
- Fits hinge reinforcements for 4-1/2" (114 mm) or 5" (127 mm) architectural grade hinges