## **Electrified Solutions**

Hager Companies offers a range of electrified door hardware to help you meet customer expectations while also meeting building codes and ensuring life safety. Hager's complete electrified solutions are proven designs with versatile applications and simplified installation.

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Hager's line of electric strikes fit any application. All of our strikes have compact designs, are non-handed, and can be field selectable to fail safe or fail secure configurations allowing for universal installations and simpler inventory management.

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## **COMPONENT SELECTION**



2016

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Filtered/regulated

# Locking Devices

Hager offers a comprehensive product line of electronic locking devices ranging from strikes, delayed egress systems, and magnetic locks.

Electric door strikes allows for a range of functionality for any access control system. Ranging from an exterior door such as an employee entrance or an interior door such as a stairwell, Hager's electric strikes have a variety of universal features as well as factory configurations to accommodate a range of locksets, doors, frames, applications, and building codes.

Delayed egress systems are ideal for security, safety, and loss prevention applications. Many of Hager's delayed egress systems are installed in public facilities such as airports to control pedestrian traffic. Other Hager units are installed in brick and mortar retail stores to prevent theft while other installations include assisted living facilities to protect patients and childcare facilities to protect children.

Typically used on exit doors, when unauthorized egress is initiated when in the locked mode. The system delays egress through the door for 15 or 30 seconds (where approved). Meanwhile, the person exiting must wait while personnel or security respond. The door unlocks after 15 seconds has elapsed, permitting egress. A signal from the fire life safety system will release the lock for uninhibited egress in an emergency. Typical installations include airports, convention halls, wholesale stores, retail stores, long term care, drug and alcohol rehab, psychiatric care, infant nurseries, museums, art galleries, warehouses, and technological facilities.

Hager's magnetic locks are designed to be used on interior doors, perimeter exit doors, and entrances that require fail safe emergency release. Hager's magnetic locks have no moving parts and provides positive and instantaneous release, whether caused by a signal from the fire command center, remote control or access control.





## **LOCKING DEVICES - 2925 ELECTRIC STRIKE**

<b>MODELS</b> 2925	4-7/8" (124 mm) faceplate for aluminum, wood, and hollow metal frames
WARRANTY	One-year warranty
APPLICATION	<ul> <li>Cylindrical locksets with up to 5/8" (15mm) throw latch bolts</li> <li>Access controlled ingress for fail secure or fail safe openings (field selectable)</li> <li>Economy option provides great performance and value</li> </ul>
Latch:	1/2" (13 mm) [5/8" (16 mm) with 1/8" (3 mm) door gap]
FEATURES	
Components:	<ul> <li>Quick and easy installation with low profile 1-1/4" (32 mm) backset</li> <li>All stainless steel parts with durable diecast body for corrosion resistance</li> <li>Compact low profile design with internally mounted solenoid and factory supplied mounting tabs</li> <li>Non-handed (reversible)</li> <li>Latch status output (standard)</li> </ul>
ELECTRICAL SPECIFICATIONS	

Input: Current/Voltage 200/100 mA @ 12/24VDC (Field selectable) Monitoring:

Latch Status (Std) SPDT, DRY 3A @ 30VDC

#### **MECHANICAL SPECIFICATIONS**

Dimensions:	1-1/4" (32 mm) W x 4-7/8" (124 mm) H x 1-1/4" (32 mm) D
ACCESSORIES	
BUZZ	• Part no. 2-679-0028

	<ul><li>Plug-In Buzzer 12/24VDC</li><li>Indicates fail secure strike is energized and unlocked</li></ul>
RECT	<ul> <li>Part no. 2-679-0029</li> <li>Converts AC to DC</li> <li>Wire leads</li> </ul>
FINISHES	US32D







## LOCKING DEVICES - 2928 MULTI-APPLICATION ELECTRIC STRIKE

MODELS 2928-SC 2928-RC 2928-6R 2928-7R	<ul> <li>4-7/8" (124 mm) x 1-1/4" (32 mm) square corner faceplate</li> <li>4-7/8" (124 mm) x 1-1/4" (32 mm) radius corner faceplate</li> <li>6-7/8" (175 mm) x 1-1/4" (32 mm) radius corner faceplate</li> <li>7-15/16" (202 mm) x 1-7/16" (36 mm) radius corner faceplate</li> </ul>
WARRANTY	One-year warranty
APPLICATION	<ul> <li>Cylindrical and mortise locksets with up to 3/4" (19 mm) throw latch bolts with 1/8" door gap</li> <li>Access controlled ingress for fail secure or fail safe openings (field selectable)</li> <li>Field selectable voltage - 12/24V, AC/DC</li> <li>Ideal for medium traffic openings</li> </ul>
Latch:	• 1/2" (13 mm) • 5/8" (16 mm) with 1/8" (3 mm) door gap • 3/4" (19 mm)
FEATURES Components:	<ul> <li>Quick and easy installation with low profile 1-3/16" backset</li> <li>Latch position status (standard)</li> <li>Keeper locked/unlocked status (standard)</li> <li>Keeper open/closed and status (optional)</li> <li>Compact low profile design with internally mounted solenoid and factory supplied mounting tabs</li> <li>Non-handed (reversible)</li> <li>1/4" (6 mm) horizontal alignment adjustment</li> <li>All stainless steel parts with durable diecast body for corrosion resistance</li> <li>Fewer moving parts for maximum life</li> <li>Stainless steel is standard with square corner faceplates</li> <li>Aluminum standard with radius corner faceplate</li> <li>Plug in tail connectors</li> </ul>
Certification: <b>OPTIONS</b> KOC:	• ANSI A156.31, Grade 2 Keeper/open closed status
ELECTRICAL SP	ECIFICATIONS
Inputs: Current/Voltage Monitoring:	• 200/100 mA @ 12/24VDC • 140/70 mA @ 12/24VAC
Latch Status (Std.) Keeper Locked	SPDT, Dry 3 A @ 30VDC
Status (Std.) Keeper Open	SPDT, Dry 3 A @ 30VDC
Status (Opt.)	SPDT, Dry 3 A @ 30VDC
MECHANICAL SI Dimensions:	PECIFICATIONS 1-1/4" (32 mm) W x 4-7/8" (124 mm) H x 1-3/16" (30 mm) D
ACCESSORIES BUZZ	<ul> <li>Part no. 2-679-0028</li> <li>Plug-In Buzzer 12/24VDC</li> <li>Indicates fail secure strike is energized and unlocked</li> </ul>
FINISHES	<ul> <li>US32D (2928-SC only)</li> <li>ALM (standard with 2928-RC, 2928-6R, 2928-7R)</li> </ul>





## LOCKING DEVICES - 2930 UNIVERSAL APPLICATION ELECTRIC STRIKE

MODELS 2930-CYL 2930-MOR 2930-MDB	<ul> <li>For use with Grade 1 cylindrical locksets</li> <li>For use with Hager mortise locks</li> <li>For use with Hager mortise locks with deater the second secon</li></ul>	adbolt	æ
WARRANTY	One-year warranty		
APPLICATION	<ul> <li>Heavy duty electric strike</li> <li>Designed for installation in hollow metal frames with Grade 1 cylindrical and mortise locksets with up to 3/4" (19 mm) throw latch bolts and 1" deadbolts (25 mm)</li> <li>Designed for new construction and retrofit applications</li> <li>Field selectable fail safe or fail secure (default setting) with no disassembly</li> <li>For use on fire-rated and non fire-rated doors</li> <li>Fail safe is not permitted on fire-rated doors</li> </ul>		
FEATURES Components:	<ul> <li>Retrofits existing ANSI 4-7/8" (124 mm) s</li> <li>Fail secure standard; field reversible to fai</li> <li>Up to 3/4" (919 mm) latch bolt and 1" (2.</li> <li>Non-handed (reversible)</li> <li>1/8" (3 mm) horizontal alignment adjustm</li> <li>Factory tested 2,500 lbs.</li> <li>Exceeded 1,000,000 cycles</li> <li>UL tested 1,500 lbs.</li> <li>70 ft-lb dynamic strength</li> <li>Internally mounted solenoid, no heat in ke</li> <li>Tamper resistant</li> <li>All stainless steel parts with durable dieca</li> <li>Plug in tail connectors</li> </ul>	il safe (no disassem 5 mm) deadbolt nent eeper	nbly)
Certification:	<ul> <li>ANSI A156.31 compliant, Grade 1</li> <li>UL - 1034 Burglary Resistant (interior use</li> <li>BP - 10254</li> <li>IL10C.3H Fire-Rated, 4' x 8' door</li> <li>NFPA 252</li> <li>CAN 4-5104 (Fail Secure Only)</li> </ul>	application)	
ELECTRICAL & N	MECHANICAL SPECIFICATIONS	OPTIONS	
Input: Current/Voltage	600/300 mA @ 12/24V DC	LBM	<ul> <li>Latch Bolt Monitor</li> <li>Door closed/latched or open/unlatched status</li> <li>Access control anti-tailgate/timer reset signal</li> </ul>
Monitoring: LBM (Opt.) DSM (Opt.) DBM (Opt.)	SPDT, Dry 5 A @ 30V DC SPDT, Dry 5 A @ 30V DC SPDT, Dry 5 A @ 30V DC <i>(Handed)</i>	DSM	<ul> <li>Door Secure Monitor (DSM)</li> <li>Door secure and unlocked monitoring</li> <li>Mantraps, interlocks, airlocks</li> </ul>
ACCESSORIES BUZZ	<ul> <li>Part no. 2-679-0028</li> <li>Plug-In Buzzer 12/24 VDC</li> <li>Indicates fail secure strike is energized and</li> </ul>	DBM	<ul> <li>Deadbolt Monitoring (DBM - Handed)</li> <li>Signals deadbolt projected or retracted</li> <li>Occupied signal rooms/bathrooms</li> <li>Manual lockout of access control by deadbolt</li> </ul>
RECT	<ul> <li>Part no. 2-679-0029</li> <li>Converts AC to DC</li> <li>Wire leads</li> </ul>	<b>NOTES</b> Fire-Rated:	Not approved for fail safe operation on fire-rated doors
FINISHES	US4, US10, US10B, US26, US26D, US32D (standard)	Handing:	<ul><li>CYL, MOR with monitoring are non-handed</li><li>DBM with monitoring is handed</li></ul>





## LOCKING DEVICES - ON BOARD DELAYED EGRESS

MODELS 4501 OBDE	On Board Delayed Egress Exit Device
WARRANTY	One-year warranty
APPLICATION	<ul> <li>Control pedestrian traffic <ul> <li>Airport &amp; Public Facility Security and Safety</li> <li>Loss Prevention</li> </ul> </li> <li>Wandering Patient and Infant Protection (Compatible with Hugs® and other patient tracking systems)</li> <li>Intended for single or double doors that require panic hardware</li> </ul>
FEATURES Components	<ul> <li>15 (or optional 30) second egress delay</li> <li>1 or 2 second nuisance delay</li> <li>Built-in function keypad provides alarm and lock reset, 1 to 30 second bypass, sustained bypass,</li> </ul>
	<ul> <li>and additional key switch</li> <li>Control inputs include 1 to 30 second request-to-exit and access bypass with anti-tailgate and alarm reset</li> <li>Field selectable trigger modes from exit device (N/O or N/C)</li> <li>Field selectable automatic or manual power up after emergency release or power loss</li> </ul>
Built-In	
Annunciation:	<ul> <li>Armed mode</li> <li>Nuisance mode</li> <li>Irreversible egress mode</li> <li>Release mode</li> <li>Digital countdown display</li> <li>Field selectable voice notification or tone</li> </ul>
Monitoring	• Field selectable male voice with security message or female voice with safety message
Outputs:	<ul> <li>Armed status</li> <li>Egress initiation status</li> <li>Released status</li> </ul>
Power Up Modes:	Field selectable automatic or manual power up after emergency release or power loss
Code Compliance:	<ul> <li>Use of manual power up complies with California Building Code (OSHPD) requirements</li> <li>International Fire Code (IFC) 1008.1.8.6 Delayed Egress Locks</li> <li>International Building Code (IBC) 1008.1.8.6 Delayed Egress Locks</li> <li>NFPA 101, Life Safety Code 7.2.1.6.1 Delayed Egress Lock</li> <li>NFPA 1 Uniform Fire Code</li> <li>California Building Code (CBC) 1008.1.8.6 Special Egress Control Devices</li> </ul>
Note:	<ul> <li>Requires 3902 Mortise Cylinder, sold separately (Conventional Core Only, 1-1/8" length recommended)</li> <li>Exit Device cannot be cut down once the OnBoard Delayed Egress modification has been made to the device</li> <li>Requires Mortise Cylinder, sold separately</li> </ul>
ELECTRICAL SP	ECIFICATIONS
<b>Inputs:</b> Voltage Input:	Single 430mA @ 24VDC     Tandem 680mA @ 24CVDC
Reset Input: REX Input: Trigger:	N/O, Dry input N/C, Dry input N/C, Dry input





## LOCKING DEVICES - ON BOARD DELAYED EGRESS

#### Monitoring Outputs:

Alarm relay - 1 amp @ 30VDC SPDT, Dry Door security relay - 1 amp @30VDC SPDT, Dry

#### MONITORING Alarm Output:

SPDT Dry, 1A @ 30 VDC, Dry

SPDT Dry, 1A @ 30 VDC, Dry Locked Output:

#### CONTROL **INPUTS:**

- Field selectable 1-30 second request to exit with anti-tailgate and door prep alarm
- Bypass
- Reset
- Remote trigger (for pairs of doors)
- BPS (required for door forced, prop and anti-tailgate)

#### FINISHES

- US3 • US4
- US10
- US10B
- US26
- US26D • US32D



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## LOCKING DEVICES - DELAYED EGRESS

## MODELS

4501 DE/4601 DE 2-679-0630	Delayed Egress Exit Device Delayed Egress Wall Mount Controller - Must be ordered separately
WARRANTY	One-year warranty
APPLICATION	<ul> <li>Control pedestrian traffic <ul> <li>Airport &amp; Public Facility Security and Safety</li> <li>Loss Prevention</li> </ul> </li> <li>Wandering Patient and Infant Protection (Compatible with Hugs® and other patient tracking systems)</li> </ul>
FEATURES	<ul> <li>Intended for single or double doors that require panic hardware</li> </ul>
Components:	<ul> <li>Alternating 85 db tone and voice message (75 db @ 3 feet)</li> <li>Voice and digital display provides informative annunciation for people without prior knowledge, including the blind and hearing impaired</li> <li>Voice provides warning or safety message, countdown and time of door release</li> <li>Digital countdown display indicated if the door was opened after lock release</li> <li>15 or 30 second egress delay</li> <li>1 or 2 second nuisance delay</li> <li>Built-in function keypad provides alarm and lock reset, 1 to 30 second bypass, sustained bypass, and additional key switch</li> <li>Control inputs include 1 to 30 second request-to-exit and access bypass with anti-tailgate and alarm reset</li> <li>Field selectable trigger modes from exit device (N/O or N/C)</li> </ul>
	<ul> <li>Field selectable automatic or manual power up after emergency release or power loss</li> </ul>
Built-In	
Annunciation:	<ul> <li>Armed mode</li> <li>Nuisance mode</li> <li>Irreversible egress mode</li> <li>Release mode</li> <li>Digital countdown display</li> <li>Field selectable voice notification or tone</li> <li>Field selectable male voice with security message or female voice with safety message</li> </ul>
Monitoring	
Outputs:	<ul> <li>Armed status</li> <li>Egress initiation status</li> <li>Released status</li> </ul>
Power Up Modes:	Field selectable automatic or manual power up after emergency release or power loss
Code Compliance:	<ul> <li>Use of manual power up complies with California Building Code (OSHPD) requirements</li> <li>International Fire Code (IFC) 1008.1.8.6 Delayed Egress Locks</li> <li>International Building Code (IBC) 1008.1.8.6 Delayed Egress Locks</li> <li>NFPA 101, Life Safety Code 7.2.1.6.1 Delayed Egress Lock</li> <li>NFPA 1 Uniform Fire Code</li> <li>California Building Code (CBC) 1008.1.8.6 Special Egress Control Devices</li> </ul>
ELECTRICAL SPE	CIFICATIONS
<b>Inputs:</b> Voltage Input:	Single 430mA @ 24VDC     Tandem 680mA @ 24CVDC

Reset Input:	N/O, Dry input
REX Input:	N/C, Dry input
Trigger:	N/C, Dry input



## **LOCKING DEVICES - DELAYED EGRESS**

#### Monitoring Outputs:

Alarm output - 1 amp @ 30VDC SPDT, Dry Locked output - 1 amp @30VDC SPDT, Dry

#### MONITORING

Alarm Output: SPDT Dry, 1A @ 30 VDC, Dry

Locked Output: SPDT Dry, 1A @ 30 VDC, Dry

#### MECHANICAL SPECIFICATIONS Controller

Dimensions: 6-1/2" (165 mm) W x 4-1/2" (114 mm) H x 1-1/2" (38 mm) D

Controller Mounting:

Recessed or Surface Mount

#### ACCESSORIES

2-679-0641 3-gang interior surface mount box

2-679-0642 Shroud for surface mount box

## **FINISHES** Controller:

- Aluminum anodized (standard)
  - Dark Bronze anodized
  - Black anodized

#### NOTES

- SVR exits must include rod covers
  - Door position switch (DPS) is recommended for higher security. Contact Hager Tech Support for additional information.



## LOCKING DEVICES - 2958 INTEGRATED DELAYED EGRESS LOCK

MODELS			
2958	Single magnetic lock with 1650 lbs. holding force (748 kg)	2	
2958T	Tandem magnetic lock with 1650 lbs. holding force (748 kg)		
WARRANTY	One-year warranty		
APPLICATION	<ul> <li>Control pedestrian traffic</li> <li>Airport &amp; Public Facility Security and Safety</li> <li>Loss Prevention</li> <li>Wandering Patient and Infant Protection (Compatible with Hugs® and other patient tracking systems)</li> <li>Intended for single doors with latching or non-latching hardware</li> <li>Tandem model intended for use with pairs of doors with latching or non-latching hardware where activating the lock unlocks both doors</li> </ul>		
FEATURES			
Components:	<ul> <li>Field selectable voice and tone or tone only (75 db @ 3 feet) <ul> <li>Voice and digital display provides informative annunciation for people without prior knowledge, including the blind and hearing impaired</li> <li>Voice provides warning or safety message, countdown and time of door release</li> <li>Digital countdown display indicated if the door was opened after lock release</li> </ul> </li> <li>Choice of 15 second exit and 1 second nuisance delay or field selectable 15 or 30 second exit delay and 1 or 2 second nuisance delay</li> <li>Field selectable security or safety message</li> <li>Field selectable activation</li> <li>Field selectable automatic or manual relock upon power up after emergency release</li> <li>Integrated 3 position key switch <ul> <li>Provides lock and alarm reset Manual power up sustained bypass, time bypass, adjustment for 1, 15, 20 or 30 seconds</li> </ul> </li> <li>Field selectable door prop alarm <ul> <li>Alarm sounds when the door has been left open after selected bypass time has elapsed</li> </ul> </li> <li>Anti-tailgate feature</li> <li>Alternating 85db tone and voice message</li> </ul>		
Control Inputs: Monitoring Outputs:	<ul> <li>Remote access control and REX input, field adjustable for 1, 15, 20, or 30 seconds</li> <li>Remote reset input</li> <li>Manual power-up input</li> <li>Emergency release input</li> <li>Anti-tailgate input</li> <li>Door secure and unlocked output</li> <li>Delayed egress activation alarm output</li> </ul>		
Certifications:	ANSI certified, ANSI Grade 1		
Code Compliance:	<ul> <li>International Building Code (IBC) 1008.1.8.6 Delayed Egress Locks</li> <li>International Fire Code (IFC) 1008.1.8.6 Delayed Egress Locks</li> <li>NFPA 101, Life Safety Code 7.2.1.6.1 Delayed Egress Lock</li> <li>California Building Code (CBC) 1008.1.8.6 Special Egress Control Devices</li> <li>BOCA, National Building Code 1017.4.1.2 Special Locking Arrangements</li> <li>Chicago Building Code 10 (13-160-269) Electromagnetic Locking Devices <ul> <li><i>Certificate of approval available</i></li> </ul> </li> </ul>		





## LOCKING DEVICES - 2958 INTEGRATED DELAYED EGRESS LOCK

#### **OPTIONS**

DPS	Door Position Switch
MBS	Magnetic Bond Sensor
ATS	Anti-Tamper Switch

#### DECET & CONTROL

RESET & CONTROL		
PS NS	Built-in reset push switch, available with NFPA (NA) only Less key switch or push switch	
Input Voltage:	Auto Sensing 12 to 24VDC	
Current: 2958	830mA @ 12VDC 450mA @ 24VDC	
2958T	1500mA @ 12VDC 850mA @ 24VDC	
Reset Input: REX Input: Trigger Input: Fire Alarm Input:	N/O, Dry input N/O, Dry input N/O, Dry input N/O, Dry input	
<b>MONITORING</b> Alarm Output:	SPDT Dry, 1A @ 30VDC	
Lock Secure Unlocked:	SPDT Dry, 1A @ 30VDC	
Door Position Switch:	SPDT Dry, 250mA @ 30VDC	
Magnetic Bond Sensor:	SPDT Dry, 250 mA @ 30VDC	
Anti-Tamper Switch:	SPDT Dry, 1A @ 30VDC	
MECHANICAL SPECIFICATIONS		
Dimensions: 2958	11" (279 mm) W x 2-3/4" (70 mm) H x 2-5/8" (67 mm) D	
2958T Master	11" (279 mm) W x 2-3/4" (70 mm) H x 2-5/8" (67 mm) D	
2958T Slave	11" (279 mm) W x 2-3/4" (70 mm) H x 2-5/8" (67 mm) D	
Armature	7-3/8" (187 mm) W x 2-3/8" (60 mm) H x 9/16" (14 mm) D	

#### FINISHES

FINISHES ALM	Aluminum anodized (standard)
DBZ	Dark bronze anodized
BLK	Black anodized

### NOTES

Local Approval: All installations must be approved by the Authority Having Jurisdiction (AHJ)





## LOCKING DEVICES - 2941 MAGNETIC LOCK

WARRANTY	One-year warranty
<b>MODELS</b> 2941	600 lbs. holding force (272 kg)
APPLICATION	For interior door traffic control where physical attack is not a concern
FEATURES Components:	<ul> <li>Designed for system integrators, distributors, installers, and building owners presently using low cost import or private label brand access control hardware</li> <li>Interlocking quick mount assembly</li> <li>Provides superior, less obtrusive appearance compared to stainless steel epoxy sealed magnetic locks</li> <li>Full monitoring is standard</li> <li>Door status, lock status and bi-color LED included</li> <li>Adjustable mounting bracket with choice of self-drilling and tapping mounting screws or machine screws</li> <li>Wire access chamber with terminal block</li> <li>Printed circuit board with voltage and current spike protection</li> <li>Instant release anti-residual magnetism circuit</li> </ul>
Certification:	ANSI/BHMA A156.23 Grade 1, Compliant
ELECTRICAL SP	ECIFICATIONS
<b>Input:</b> Current/Voltage:	500mA/250mA @ 12/24VDC (field selectable)
<b>MONITORING</b> Lock Status:	SPDT, Dry 2mA @ 30VDC
Door Status:	SPDT, Dry 500mA @ 30VDC
ACCESSORIES 2-679-0101 2-679-0103 2-679-0106 2-679-0107 2-679-0108	Top Jamb Kit Glass Armature Mounting Kit Angle Bracket (cut to fit 2941) Stop Filler Plate (field cut for 2941) Stop Filler Plate (field cut for 2941)
MECHANICAL SI Lock Dimensions:	PECIFICATIONS 9-7/8" (251 mm) W x 2" (51 mm) H x 1" (25 mm) D
Armature Dimensions:	7-5/16" (186 mm) W x 1-1/2" (38 mm) H x 1/2" (13 mm) D

FINISHES

Aluminum anodized



## LOCKING DEVICES - 2942 MAGNETIC LOCK

<b>MODELS</b> 2942	1200 lbs. holding force (545 kg)
WARRANTY	One-year warranty
APPLICATION FEATURES	For perimeter and interior door security and access control
Components:	<ul> <li>Designed for system integrators, distributors, installers, and building owners presently using low cost import or private label brand access control hardware</li> <li>Interlocking quick mount assembly</li> <li>Provides superior, less obtrusive appearance compared to stainless steel epoxy sealed magnetic locks</li> <li>Full monitoring is standard</li> <li>Door status, lock status and bi-color LED included</li> <li>Adjustable mounting bracket with choice of self-drilling and tapping mounting screws or machine screws</li> <li>Wire access chamber with terminal block</li> <li>Printed circuit board with voltage and current spike protection</li> <li>Instant release anti-residual magnetism circuit</li> </ul>
Certification:	ANSI/BHMA A156.23 Grade 1, Compliant

#### **ELECTRICAL SPECIFICATIONS**

#### **Input:** Current/Voltage:

age: 500mA/250mA @ 12/24VDC (field selectable)

### MONITORING

Lock Status: SPDT, Dry 2mA @ 30VDC

Door Status: SPDT, Dry 500mA @ 30VDC

#### ACCESSORIES

2-679-0100	Top Jamb Kit
2-679-0102	Glass Armature Mounting Kit
2-679-0106	Angle Bracket
2-679-0107	Stop Filler Plate
2-679-0108	Stop Filler Plate

#### **MECHANICAL SPECIFICATIONS**

Lock Dimensions: | 10-1/2" (267 mm) W x 2-7/8" (73 mm) H x 1-5/8" (41 mm) D

Armature

Dimensions: 7-5/16" (186 mm) W x 2-3/8" (60 mm) H x 1/2" (13 mm) D

FINISHES Aluminum anodized





## LOCKING DEVICES - 2941 AND 2942 ACCESSORIES

#### TOP JAMB MOUNTING KITS FOR INSWING DOORS



**2-679-0100** Top jamb kit for use with 2942

**2-679-0101** Top jamb kit for use with 2941

#### **GLASS DOOR ARMATURE MOUNTING KITS**



**2-679-0102** Glass door kit for use with 2942

2-679-0103 Glass door kit for use with 2941



#### **TOP FILLER PLATES**

Used where the frame stop does not provide enough mounting surface area for proper lock mounting.

#### 2-679-0107

Stop filler plate for use with 2942 Cut for use with 2941 1/2" (h) x 10-1/2" (l) x 3/4" (d) [12 (h) x 266 (l) x 19 (d) mm]

#### 2-679-0108

Stop filler plate for use with 2942 Cut for use with 2941 3/4" (h) x 10-1/2" (l) x 3/4" (d) [19 (h) x 266 (l) x 19 (d) mm]

#### **ANGLE BRACKETS**



Used for the extension of a narrow frame header mounting surface, the bracket provides additional surface area for proper lock mounting.

**2-679-0106** Angle bracket for use with 2942 cut for use with 2941 10-1/2" (I) x 1-1/2" (h) x 3/4" (d) [266 (I) x 12 (h) x 19 (d) mm]





## LOCKING DEVICES - 2950 MAGNETIC LOCK

#### MODELS

2951 2952 2953 2954	Single magnetic lock with 1650 lbs. holding force (748 kg) Double magnetic lock with 1650 lbs. holding force (748 kg) Single magnetic lock with 1200 lbs. holding force (545 kg) Double magnetic lock with 1200 lbs. holding force (545 kg)
WARRANTY	Lifetime warranty
APPLICATION	For perimeter and interior door security and access control
FEATURES Components:	<ul> <li>Modular design</li> <li>Modular upgrade kits</li> <li>Field upgradeable without removal</li> <li>Uniform design and installation</li> <li>Identical housing, template, and accessories</li> <li>Quick mount assembly</li> <li>Compatible with any access control system</li> <li>Secure wiring and mounting screws with interlocking mounting plate</li> </ul>
Certification:	ANSI/BHMA A156.23 Grade 1 Compliant
OPTIONS	Duilt in field a diverse sets 0.20 accords up lack dalary

Time	Built-in field adjustments 0-30 seconds re-lock delay
DPS	Door Position Switch indicates door open and door closed
ATS	Anti Tamper Switch indicates access cover removal
MBS	Magnetic Board Sensor indicates locked and unlocked, low holding power, tampering and obstruction between armature and magnetic core

#### **ELECTRICAL SPECIFICATIONS**

Input:	I.			
Current/	Voltage:			
2951	_	Auto Sensing 670mA/350mA @ 12/24 VDC		
2952		Auto Sensing 1.34A /700mA @ 12/24VDC		
2953		Auto Sensing 250mA/125mA @ 12/24VDC		
2954		Auto Sensing 500mA/250mA @ 12/24VDC		

#### MONITORING

PIONITIONING	
Time	SPDT, Dry 20mA @ 30VDC
DPS	SPDT, Dry 20mA @ 30VDC
ATS	SPDT, Dry 20mA @ 30VDC
MBS	SPDT, Dry 20mA @ 30VDC

#### ACCESSORIES

2-679-0109	Timer Input Module
2-679-0110	Door Position Sensor
2-679-0111	Magnetic Bond Sensor
2-679-0112	Anti-Tamper Switch

#### **MECHANICAL SPECIFICATIONS**

2951 & 2953 Dimensions: 11" (279 mm) W x 2-3/4" (70 mm) H x 1-9/16" (40 mm) D

2952 & 2954 22" (559 mm) W x 2-3/4" (70 mm) H x 1-9/16" (40 mm) D Dimensions:

### FINISHES

FINISHES	
ALM	Aluminum anodized (standard)
DBZ	Dark bronze anodized



#### MOUNTING KITS

- Top Jamb Kit
- Glass Door Kit
- Universal Header Bracket
- Spacer Bracket
- Armature Mounting Plate with and without
- Sensor Door Coordinator Lock Mounting Kit • Filler Plates
- Angle Brackets
- See Mounting Kits Reference File for complete list of all mounting kits and part number





## **LOCKING DEVICES - 2950 SERIES ACCESSORIES**

#### **MODULAR KITS**

#### 2-679-0109

Timer Input Module Built-in field adjustable 0-30 seconds re-lock delay

#### 2-679-0110

Door Position Sensor Indicates door open and door closed

#### 2-679-0111

Magnetic Bond Sensor Indicates locked and unlocked, low holding power, tampering and obstruction between armature and magnetic core

#### 2-679-0112

Anti-Tamper Switch Indicates access cover removal.

#### TOP JAMB MOUNTING KITS FOR INSWING DOORS



#### 2-679-0120

Top jamb kit for use with 2951 and 2953 ALM

#### 2-679-0130

Top jamb kit for use with 2952 and 2954  $\ensuremath{\mathsf{ALM}}$ 

#### **GLASS DOOR ARMATURE MOUNTING KITS**



**2-679-0160** Glass door kit for use with 2951 and 2953 ALM

Note: For 2952 and 2954, order two (2) glass door armature mounting kits.

#### UNIVERSAL HEADER BRACKET

Used in lieu of angle brackets, a universal header bracket provides a faster mounting solution, saving time and labor costs. Reduce potential for missized and misaligned mounting holes, broken taps, removal of broken taps. Combined with



interlocking easy mount assembly, save up to a half day's labor with the installation of 12 locks.

• Solid 1" (25 mm) bar provides

higher security and superior aesthetics

- Machined wire chase provides concealed and secure wiring
- Multiple pre-drilled and tapped mounting holes to accommodate the use of several different locks on either 4" (102 mm) or 4-1/2" (114 mm) aluminum frames

#### 2-679-0180

For use with 2951 and 2953 1 x 1 x 11 in (25 x 25 x 279 mm) ALM

#### 2-679-0190

For use with 2952 and 2954 1 x 1 x 22 in (25 x 25 x 559 mm) ALM

#### 2-679-0191

For use with 2952 and 2954 1 x 1 x 22 in (25 x 25 x 559 mm) DBZ





## **LOCKING DEVICES - 2950 SERIES ACCESSORIES**

#### SPACER BRACKETS



Aluminum frames with blade stop lowers magnetic lock below blade stop. Concrete filled hollow metal frames - provides multiple points for concealed wire entry.

- Pre-drilled and tapped specifically for 2951 and 2952 magnetic locks
- Machined wire chase provides multiple points for concealed wire entry from concrete filled frames
- ALM (aluminum) finish

#### 2-679-0200

Bracket for 2951 and 2953 1/2 x 1-1/2 x 11 in (13 x 38 x 279 mm)

**2-679-0201** Bracket for 2952 and 2954 1/2 x 1-1/2 x 22 in (13 x 38 x 559 mm)

#### ARMATURE MOUNTING PLATE

Armature mounting plates provide a solution for mounting



magnetic locks to the top rail of aluminum, glass, wood, and hollow metal doors that do not permit the use of thru bolts.

**2-679-0204** Armature mounting plate

**2-679-0205** Armature mounting plate with sensor

Note: For 2952 and 2954, order two (2) armature mounting plates.

#### **FILLER PLATES**

Filler plates are for extension of the stop to provide a proper mounting surface on the underside of the header. Available in



Aluminum (ALM) or Dark Bronze (DBZ) finish. Contact Hager Tech Support for part numbers for additional finishes (including BRZ, BLK, US3, US4, US26, and US26D).

For 11" (279 mm) Single Magnetic Lock Models (2951/2953)

#### 2-679-0281

ALM 1/8 x 1-1/4 in (3 x 32 mm)

**2-679-0283** DBZ 1/8 x 1-1/4 in (3 x 32 mm) **2-679-0291** ALM 1/4 x 1-1/4 in (6 x 32 mm)

**2-679-0293** DBZ 1/4 x 1-1/4 in (6 x 32 mm)

2-679-0311

ALM 1/2 x 1-1/4 in (13 x 32 mm)

#### 2-679-0313

DBZ 1/2 x 1-1/4 in (13 x 32 mm)

#### 2-679-0321

ALM 5/8 x 1-1/4 in (16 x 32 mm)

#### 2-679-0323

DBZ 5/8 x 1-1/4 in (16 x 32 mm)

## For 22" (559 mm) Double Magnetic Lock Models (2952/2954)

**2-679-0381** ALM 1/8 x 1-1/4 in (3 x 32 mm)

#### 2-679-0383

DBZ 1/8 x 1-1/4 in (3 x 32 mm)

**2-679-0391** ALM 1/4 x 1-1/4 in (6 x 32 mm)

#### 2-679-0393

DBZ 1/4 x 1-1/4 in (6 x 32 mm)

## **2-679-0411**

ALM 1/2 x 1-1/4 in (13 x 32 mm)

**2-679-0413** DBZ 1/2 x 1-1/4 in (13 x 32 mm)

**2-679-0421** ALM 5/8 x 1-1/4 in (16 x 32 mm)

**2-679-0423** DBZ 5/8 x 1-1/4 in (16 x 32 mm)





## **LOCKING DEVICES - 2950 SERIES ACCESSORIES**



#### ANGLE BRACKETS

Angle brackets are used as extensions on shallow door frames to provide adequate mounting surface. Available in Aluminum (ALM) or Dark Bronze

(DBZ) finish. Contact Hager Tech Support for part numbers for additional finishes (including BRZ, BLK, US3, US4, US26, and US26D).

## For 11" (279 mm) Single Magnetic Lock Models (2951/2953)

#### 2-679-0491

ALM 1-1/2 x 1-1/2 in (38 x 38 mm)

#### 2-679-0493

DBZ 1-1/2 x 1-1/2 in (38 x 38 mm)

### **2-679-0501** ALM

2 x 1-1/2 in (51 x 38 mm)

#### 2-679-0503

DBZ 2 x 1-1/2 in (51 x 38 mm)

For 22" (mm) Double Magnetic Lock Models (2952/2954)

#### 2-679-0571

ALM 1-1/2 x 1-1/2 in (38 x 38 mm)

#### **2-679-0573** DBZ

1-1/2 x 1-1/2 in (38 x 38 mm)

#### 2-679-0581

ALM 2 x 1-1/2 in (51 x 38 mm)

#### 2-679-0583

DBZ 2 x 1-1/2 in (51 x 38 mm)



#### DOOR COORDINATOR LOCK MOUNTING KITS

#### 2-679-0210

Door coordinator lock mounting kit for use with 2951 and 2953 ALM

#### 2-679-0220

Door coordinator lock mounting kit for use with 2952 and 2954 DBZ





## LOCKING DEVICES - 2961 SERIES MAGNETIC SHEAR LOCK

<b>MODELS</b> 2961	Single magnetic shear lock with 2000 lbs. holding force (907 kg)			
WARRANTY	One-year warranty	0		
APPLICATION	For commercial grade hollow metal and wood doors and frames and Herculite doors with top rails	0	• • • • • • •	
FEATURES	<ul> <li>Concealed, high security, Fail Safe locking mechanis</li> <li>Incorporates floating armature assembly and specia alloy steel locking tabs on both lock and armature a</li> <li>May be adjusted both vertically and laterally to competition</li> </ul>	l ssemblies	gaps and warped or misaligned doors	
Components:	<ul> <li>2,000 lbs (907 kg) holding force without current inrush or high operating temperature</li> <li>8" x 1-1/2" (203 mm x 38 mm) lock</li> <li>Integrated electronics</li> <li>1-5/8" (41 mm) depth for 1-3/4" - 2" (44 mm - 51 mm) frames</li> <li>Armature supplied with lock (specify type required - ITC, FTC, or HTC)</li> <li>Door static sensor ensures door is at rest and aligned, before the magnet is permitted to energize (eliminates the potential for lock misalignment)</li> <li>Lateral adjustment of shear tabs to compensate for warped or misaligned doors, permitting accurate locking</li> <li>Vertical adjustment of both the armature and the adjustable delay relock sensor compensates for wide door gaps</li> <li>Alloy shear tabs ensure continued high holding force</li> <li>No profiling of the soft armature steel that may be prone to wear and reduced holding force</li> <li>Advanced electronic circuitry that incorporates door static, positioning and timed relock sensor and automatic voltage sensing for 12/24 VDC input</li> <li>Noise dampeners reduce the noise associated with locking and unlocking</li> </ul>			
OPTIONS MBS	<ul> <li>Bond sensor indicates proper armature contact or reduced holding power due to improper armature contact or tampering</li> <li>SPDT 0.25 amp</li> </ul>			
DPS	<ul> <li>Door position switch indicates door open or closed</li> <li>SPDT 0.25 amp maximum</li> </ul>			
HTR	Herculite top rail armature adjustment bracket for lea	ding edge adjustme	ents	
ELECTRICAL SP Input: Voltage:	ECIFICATIONS Auto Sensing 650/350 mA @ 12/24 VDC	MECHANICAL SI Lock Dimensions:		
<b>MONITORING</b> DPS MBS	SPDT, Dry 20mA @ 30VDC SPDT, Dry 20mA @ 30VDC	Armature Dimensions:	8″ (203 mm) W x 1-1/2″ (38 mm) H x 7/8″ (48 mm) D	
<b>ACCESSORIES</b> 2-679-0600	Wood door reinforcement box (sold separately)	FINISHES ALM	Aluminum anodized (standard)	
ARMATURES ITC Armature	Standard mounting armature kit for aluminum and hollow metal doors with 7/8" to 1-1/8" deep top channels, wood doors, and factory prepared hollow metal flush edge doors			
FTC Armature	Mounting kit for field prepared horizontal mounting in hollow metal doors with flush edge			
HTC Armature	Mounting kit for 1-15/16" deep Herculite channels			





## LOCKING DEVICES - 2965 MAGNETIC SHEAR LOCK

<b>MODELS</b> 2965	Single magnetic shear lock with 2700 lbs. holding force (1225 kg)			
WARRANTY	One-year warranty			
APPLICATION	For commercial grade hollow metal and wood do frames and Herculite doors with top rails	ors and	F 9	
FEATURES	<ul> <li>Concealed, high security, Fail Safe locking mechanism</li> <li>Incorporates floating armature assembly and special alloy steel locking tabs on both lock and armature assemblies</li> <li>May be adjusted both vertically and laterally to compensate for wide door gaps and warped or misaligned doors</li> </ul>			
Components:	<ul> <li>2,700 lbs (1225 kg) holding force without current inrush or high operating temperature</li> <li>10-7/16" x 1-1/2" (265 mm x 38 mm) lock</li> <li>Integrated electronics</li> <li>1-5/8" (41 mm) depth for 1-3/4" - 2" (44 mm - 51 mm) frames</li> <li>Armature supplied with lock (specify type required - ITC, FTC, or HTC)</li> <li>Door static sensor ensures door is at rest and aligned, before the magnet is permitted to energize (eliminates the potential for lock misalignment)</li> <li>Lateral adjustment of shear tabs to compensate for warped or misaligned doors, permitting accurate locking</li> <li>Vertical adjustment of both the armature and the adjustable delay relock sensor compensates for wide door gaps</li> <li>Unique floating action for easy armature lift when the magnet is energized and provides ability to overcome wide door gaps</li> <li>Alloy shear tabs ensure continued high holding force</li> <li>No profiling of the soft armature steel that may be prone to wear and reduced holding force</li> <li>Advanced electronic circuitry that incorporates door static, positioning and timed relock sensor and automatic voltage sensing for 12/24 VDC input</li> <li>Noise dampeners reduce the noise associated with locking and unlocking</li> </ul>			
OPTIONS MBS	<ul> <li>Bond sensor indicates proper armature contact or reduced holding power due to improper armature contact or tampering</li> <li>SPDT 0.25 amp</li> </ul>			
DPS	<ul> <li>Door position switch indicates door open or closed</li> <li>SPDT 0.25 amp maximum</li> </ul>			
HTR	Herculite top rail armature adjustment bracket for	r leading edge adju	istments	
ELECTRICAL SPE Input: Voltage:	CIFICATIONS Auto Sensing 800/400 mA @ 12/24 VDC	MECHANICAL SE Lock Dimensions:	PECIFICATIONS 10-7/16" (265 mm) W x 1-1/2" (38 mm) H x 1-5/8" (41 mm) D	
<b>MONITORING</b> MBS DPS	SPDT, Dry 250mA @ 30VDC SPDT, Dry 250mA @ 30VDC	Armature Dimensions:	11″ (279 mm) W x 1-1/2″ (38 mm) H x 7/8″ (48 mm) D	
ACCESSORIES 2-679-0601	Wood door reinforcement box (sold separately)	<b>FINISHES</b> ALM	Aluminum anodized (standard)	
ARMATURES ITC Armature	Standard mounting armature kit for aluminum and hollow metal doors with 7/8" to 1-1/8" deep top channels, wood doors, and factory prepared hollow metal flush edge doors			
FTC Armature	Mounting kit for field prepared horizontal mounti in hollow metal doors with flush edge	ng		
HTC Armature	Mounting kit for 1-15/16" deep Herculite channe	s		



## Access Controls

As the demand for access controls continue to grow, Hager Companies offers proven, reliable, and innovative solutions. While access control keypad devices are fairly definitive, customer requirements and building codes can vary. Hager Companies keypad product line offers solutions for these differing demands and requirements.

Key switches are ideal for a range of electrified openings such as an auditorium or gate operation that you might find near a hotel pool. With many different types of applications, key switches are an economical and viable devices in many installations.

Hager's line of heavy duty keypads has an array of ideal installations. The 2915 is perfect for secure areas such as a records archive room or server room. The 2916 and 2916P are ideal for outdoor installations such as college dormitories, apartment buildings, remote buildings, and office buildings.

Hager Companies provides proven and reliable products for the ever growing access control market. For more information, please visit the Hager Companies website at www.hagerco.com







## **ACCESS CONTROLS - 29KS KEY SWITCH**

<b>MODELS</b> 29KS	Key switch
WARRANTY	One-year warranty
APPLICATION	<ul> <li>Access control</li> <li>Automatic gate operation</li> <li>Alarm shunt</li> <li>Alarm reset</li> <li>Machine operation</li> </ul>
FEATURES	<ul> <li>Provides an economical method of providing authorized control for a variety of applications</li> <li>Choice of several contact configurations ensures compatibility with virtually any system</li> <li>Compatible with U.S. standard 1.125" and 1.25" mortise key cylinders and interchangeable core cylinders (not included)</li> <li>Compatibility with a new or existing facility mechanical key system is maintained</li> <li>Standard switch assemblies are single gang box mounted</li> </ul>
Components:	<ul> <li>Single gang, wall mounted, recessed key cylinder</li> <li>Tamper resistant, recessed cylinder</li> <li>Tamper resistant spanner screws</li> <li>Heavy duty all steel assembly</li> <li>20 gauge stainless steel faceplate</li> <li>Large actuator for positive and consistent activation</li> <li>Compatible with 1.125" or 1.25" mortise cylinder (non included)</li> </ul>
Functions: ASD MSD ADD MDD	Alternate Action (on/off) SPDT Momentary SPDT Alternate Action (on/off) DPDT Momentary DPDT
ELECTRICAL SP Voltage:	ECIFICATIONS • 6 amp @ 30 VDC • 7", 22 gauge wire leads
<b>OPTIONS</b> LEDG LEDR 2LED	One (1) green LED One (1) red LED One (1) green and one (1) red LED
<b>CYLINDER</b> 3902 3978	1-1/8" recommended (order separately) Cam required (order separately)
<b>MECHANICAL S</b> Dimensions:	PECIFICATIONS 2-7/8" (73 mm) W x 4-1/2" (114 mm) H x 20 Gauge (0.912 mm)
FINISHES	US32D
NOTES	<ul><li>Single switch assembly requires cloverleaf cam</li><li>Dual switch assembly requires standard cam</li></ul>





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## **ACCESS CONTROLS - 2915 HEAVY DUTY KEYPAD**

<b>MODELS</b> 2915	Heavy Duty Keypad
WARRANTY	One-year warranty
APPLICATION	<ul> <li>Single gang indoor keypad</li> <li>Designed to control access of a single entry point for facilities with up to 500 users</li> <li>Each user assigned a personal identification number (PIN)</li> </ul>
FEATURES Components:	<ul> <li>Blue backlit, moisture-resistant keypad</li> <li>3/32" (2 mm) thick stainless steel faceplate</li> <li>1/4" (6 mm) wall extrusion depth</li> <li>500 users, 4-6 digit PIN codes</li> <li>4 outputs, 2 relay and 2 solid status outputs timed or latching (on/off)</li> <li>Assign entry PINs to relays 1 and/or 2</li> <li>LED status: access, lockout</li> <li>Tactile audible key press, select volume</li> <li>Timed anti-passback</li> <li>Keypad tamper lockout</li> <li>Code activated timed entry PIN disable</li> <li>Request-to-exit/Enter input, egress keypad input</li> <li>Choice of door sense/relay inhibit input functions (forced entry, door ajar, inhibit relay 1 or 2, auto relock when doer along of the set of the set</li></ul>

when door closes) • Choice of 2 solid status output functions (alarm shunt, forced entry, door ajar, tamper lockout, keypad active)

## **ELECTRICAL SPECIFICATIONS**

<b>Inputs:</b> Voltage:	Auto Sensing 12 to 24 VAC/DC
Current:	30mA typical, 150 mA maximum
Operating Temperature:	-20° to 130°F (-30° to 54°C)
Operating Humidity:	5 - 95% (non-condensing)
<b>OUTPUTS</b> Relay 1	Form "C", 5 amps @ 28VDC
Relay 2	<ul> <li>Form "C", 2 amps @ 28VDC</li> <li>Switch to common outputs 3 &amp; 4, 100 mA @ 30VDC</li> </ul>

#### **MECHANICAL SPECIFICATIONS**

Dimensions:	3" (76 mm) W x 4-3/4" (121 mm) H x 1-1/2" (38 mm) D
FINISHES	US3, US4, US10B, US26, US32D







## **ACCESS CONTROLS**

#### MODELS

<b>MODELS</b> 2916 2916P	Heavy Duty Keypad Heavy Duty Keypad
WARRANTY	One-year warranty
APPLICATION	<ul> <li>Surface mount indoor/outdoor keypad</li> <li>Designed to control access of a single entry point for facilities with up to 500 users</li> <li>Each user assigned a personal identification number (PIN)</li> </ul>
FEATURES	
Components:	<ul> <li>Heavy cast vandal resistant housing</li> <li>Heavy cast metal blue backlit keys</li> <li>500 users, 4-6 digit PIN codes</li> <li>4 outputs, 2 relay and 2 solid status outputs timed or latching (on/off)</li> <li>Assign entry PINs to relays 1 and/or 2</li> <li>LED status: access, lockout</li> <li>Tactile audible key press, select volume</li> <li>Timed anti-passback</li> <li>Keypad tamper lockout</li> <li>Code activated timed entry PIN disable</li> </ul>

- Request-to-exit/Enter input, egress keypad input
- Choice of door sense/relay inhibit input functions (forced entry, door ajar, inhibit relay 1 or 2, auto relock when door closes)

#### **ELECTRICAL SPECIFICATIONS**

#### Inputs:

Current: 30mA typical, 150mA maximum

Operating

Temperature: -20° to 130°F (-30° to 54°C)

Operating

Humidity: 5 - 95% (non-condensing)

#### **OUTPUTS**

Form "C", 5 amps @ 28VDC Relay 1 Form "C", 2 amps @ 28VDC Relay 2 Switch to common outputs 3 & 4, 100mA @ 30VDC

#### **MECHANICAL SPECIFICATIONS**

3" (76 mm) W x 5-3/4" (146 mm) H x 1-7/16" (37 mm) D Dimensions:

#### ACCESSORIES

2-679-0669 Protective Shroud

US32D

#### **FINISHES**





## ACCESS CONTROLS - 2-679-0708 UNDER DESK PUSH SWITCH

<b>MODELS</b> 2-679-0708	Under Desk Switch
WARRANTY	One-year warranty
APPLICATION	Enables the remote control of doors equipped with electric locks and access controls
<b>FEATURES</b> Components:	Mounts to the underside of a desk for remote door control



#### **ELECTRICAL SPECIFICATIONS**

Momentary push switch

#### **MECHANICAL SPECIFICATIONS**

Dimensions: 1" (25 mm) W x 2-1/4" (57 mm) H x 2-1/2" (63 mm) D





## **ACCESS CONTROLS - DOOR PROP ALARM**



#### 29EA **Door Prop Alarm** Key Switches

<b>DESCRIPTION</b> FUNCTIONS	<ul> <li>Provides audible alarm when a door is accessed or left open</li> <li>Installs in single gang or double gang enclosures</li> <li>Compatible with U.S. standard 1.125" and 1.25" mortise key cylinders and interchangeable core cylinders (Sold Separately)</li> <li>N - No Key Switch</li> <li>M - Mortise Cylinder Switch (Sold Separately)</li> <li>K - Key Switch</li> </ul>
FEATURES	<ul> <li>Audible sirens with adjustable timer settings</li> <li>Bypass status indicator light</li> <li>Vandal-resistant aluminum construction with security screws</li> <li>Optional key switch or mortise cylinder</li> <li>Adjustable Timed Delay</li> <li>Exit Alarm on Door Opening</li> <li>Automatic or Manual Alarm Reset</li> <li>Output Relays</li> <li>Integral Bi-color LED Status Indicator</li> <li>Compact Universal Mounting</li> <li>85dB Piezo Buzzer Alarm</li> </ul>
ELECTRICAL SP Inputs: Voltage:	ECIFICATIONS 12 or 24 VDC
Trigger Input:	Dry, N/O or N/C (Selectable by on board jumper), Door Contact (Sold Separately)
Remote Reset/ Bypass Input:	Dry, N/O or N/C. Reset by momentarily shorting the input when alarmed. Bypass by shorting & holding the input when secure.

Form C, 2A @ 30VDC max. Follows Door Contact input, or Alarm output (fieldselectable)

Auxiliary Output:

LED Indicators:

CYLINDER

OUTPUTS Alarm Output:

Form C, 2A @ 30VDC max

Green - Normal Operation Red - Alarm Activated

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# **Egress Devices**

Just as important as access controls are egress controls. With fail secure openings, egress controls send a signal to unlock the locking device. With low energy automatic operators, knowing acts are needed to send signals to the power operator. These are all essential functions to an electrified opening. Hager Companies provides a wide range of egress controls that will satisfy your customers while being easy to install.

HAGER







## **EGRESS DEVICES - 2972 EXIT SWITCH**

#### MODELS

<b>MODELS</b> 2972-M 2972-T	Momentary SPDT Exit Switch Integrated electric timer (adjustable 1-60 seconds) exit switch
WARRANTY	One-year warranty
APPLICATION	<ul> <li>2" (50 mm) illuminated switch button for easy activation</li> <li>High impact resistant material stands up to abuse</li> <li>"Push to Exit" sign complies with NFPA requirements</li> <li>Blue illuminate button designed for access and egress applications for the disabled</li> </ul>
OPTIONS	
LEDG	One (1) green LED
LEDR	One (1) red LED
21 FD	One (1) green and one (1) red LED



LEDG	One (1) green LED
LEDR	One (1) red LED
2LED	One (1) green and one (1) red LED
BLU	Disabled access button

#### **ELECTRICAL SPECIFICATIONS**

2972M	SPDT, 5A @ 30 VDC
2972T	SPDT, 2A @ 12/24VDC
Wire Leads	6" (152 mm) - 20 gauge

#### **MECHANICAL SPECIFICATIONS**

	1 Gang
Dimensions:	2-7/8" (73 mm) W x 4-1/2" (114 mm) H

US32D FINISHES



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## **EGRESS DEVICES - 2973 CODE COMPLIANT EXIT SWITCH**

<b>MODELS</b> 2973	Code Compliant Exit Switch with integrated timer (fixed 30 seconds)	
WARRANTY	One-year warranty	
APPLICATION	<ul> <li>Code compliant manual releasing devices and sensors</li> <li>Switch and sensor used together comply with manual releasing device and sensor device requirements for access controlled egress doors</li> </ul>	
Certification:	<ul> <li>2006 IBC 1008.1.3.4</li> <li>2012 IBC 1008.1.9.8</li> <li>NFPA 7.2.1.6.2</li> <li>IFC 1008.1.3.4</li> <li>California Fire Code</li> </ul>	
OPTIONS LEDG LEDR 2LED	One (1) green LED One (1) red LED One (1) green and one (1) red LED	
ELECTRICAL SPECIFICATIONS		
Output: Wire Leads	SPDT, 5A @ 30 VDC 6" (152 mm) - 20 gauge	
MECHANICAL SPECIFICATIONS		
Dimensions:	1 Gang 2-7/8" (73 mm) W x 4-1/2" (114 mm) H	





FINISHES

US32D



## **EGRESS DEVICES - PIR EGRESS SENSOR**

MODELS 2-679-0611 2-679-0612	White PIR egress sensor Black PIR egress sensor	
WARRANTY	One-year warranty	
APPLICATION	<ul> <li>Access control system unit</li> <li>Unlocks doors automatically when persons approaching door are detected</li> <li>Compiles with national fire and building code requirements for access controlled egress doors</li> <li>Code compliant Fail Safe mode releases locks when power to PIR sensor is interrupted</li> </ul>	
Certification:	UL Listed 294	
ELECTRICAL SPECIFICATIONS         Input:       12 or 24 VAC/DC @ 26 mA max		

Output: 2 SPDT dry, 2 amp @ 30VDC

Operating

Temperature: -20° to 120°F (-30° to 49°C)

#### **MECHANICAL SPECIFICATIONS**

1-1/2" (38 mm) W x 6-1/4" (159 mm) H x 1-1/2 (38 mm) D Dimensions:







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DDS DDS

## **EGRESS DEVICES - 2977 PIEZOELECTRIC EXIT SWITCH**

<b>MODELS</b> 2977	Stainless Steel Piezoelectric Request-to-Exit Switch	dan sa an
WARRANTY	One-year warranty	DUC
APPLICATION	<ul> <li>Designed for indoor, outdoor, commercial, and industrial egress applications</li> <li>Ideal for harsh or high traffic conditions</li> </ul>	PUS
FEATURES Components:	<ul> <li>Vandal and weather resistant <ul> <li>3/32" (2 mm) stainless steel vandal resistant faceplate</li> </ul> </li> <li>No moving parts</li> <li>Selectable bi-color illumination status (Relay OFF - red or green) <ul> <li>(Relay ON - red or green)</li> </ul> </li> <li>Adjustable timer output, 1-30 seconds</li> <li>Superior performance in virtually any environment</li> <li>Can be used to control an automatic door, electromechanical lock, strike, or magnetic may be tied into the remote bypass (request-to-exit) input of an access control system to allow egress from a secure area</li> </ul>	

#### **ELECTRICAL SPECIFICATIONS**

Input:	12/24 AC/DC
Current:	Idle - 30 mA Active - 150 mA
Output:	SPDT dry contact, 3 amp @ 30 VDC
Operating Temperature:	-40° to 160°F (-40° to 71°C)
Relay:	<ul> <li>100,000 cycles @ 3 A 30 VDC life expectancy</li> <li>200,000 cycles @ 1.5 A 30 VDC life expectancy</li> </ul>

#### **MECHANICAL SPECIFICATIONS** Button Switch: 1 billion cycle life

Button Switch:	1 billion cycle life expectancy
Dimensions:	3" (76 mm) W x 4-3/4" (121 mm) H
FINISHES	US32D







## **EGRESS DEVICES - 2978 TOUCHLESS EXIT SWITCH**

<b>MODELS</b> 2978	Touchless Exit Switch	
WARRANTY	One-year warranty	
APPLICATION	<ul> <li>Designed to control eletric locks/strikes, magnetic locks, or automatic door operators</li> <li>No touch wave-to-exit switch</li> <li>Active with wave of the hand</li> <li>For sanitary entry/exit applications</li> </ul>	
FEATURES Components:	<ul> <li>Bi-color status illumination</li> <li>Quick connect screwless terminal block for easy installation</li> <li>No moving parts</li> <li>Uses infrared sensor technology</li> </ul>	
ELECTRICAL SPECIFICATIONS         Current:       • 30 mA standby; 70 mA Active @ 12 VDC         • 15 mA standby; 35 mA Active @ 24 VDC		
Output:	DPDT, 3 amp dry contact	
Activation Time:	1 second or as long as sensor is triggered	
LED Color:	Standby - red; Active - green	

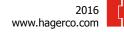


Current:	<ul> <li>30 mA standby; 70 mA Active @ 12 VDC</li> <li>15 mA standby; 35 mA Active @ 24 VDC</li> </ul>
Output:	DPDT, 3 amp dry contact
Activation Time:	1 second or as long as sensor is triggered
LED Color:	Standby - red; Active - green
Range:	4″ (10 cm)

#### MECHANICAL SPECIFICATIONS

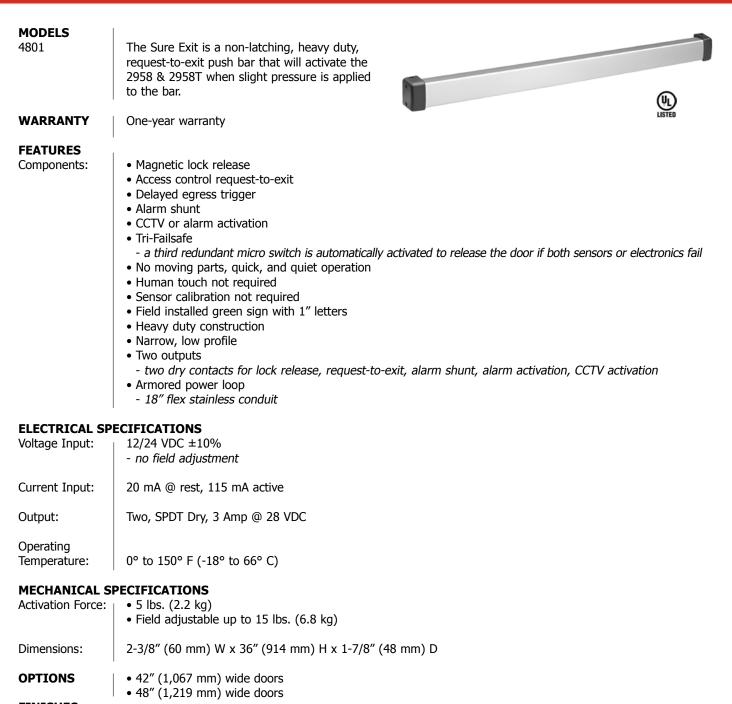
2-3/4" (70 mm) W x 4-1/2" (114 mm) H Dimensions:

FINISHES US32D





#### **EGRESS DEVICES - 4801 NON-LATCHING PRESSURE SENSE PUSH BAR**



- FINISHES
- ALM BLK
- **NOTES** Length:

Bars may be field cut

Aluminum anodized

Black anodized



#### **EGRESS DEVICES - 2-679-0650 EMERGENCY DOOR RELEASE**

**MODELS** 2-679-0650

Break glass emergency door release 3V-28 VDC, 18 mA with siren (blue)

WARRANTY

APPLICATION

**FEATURES** 

Components:

- Breakable glass emergency door release with siren
  Ideal for immediate unlocking of doors that are equipped with fail safe electric locks and may influence approval of an electronic lock system
- Built-in alarm may be used as a local door annunciator



• Remote monitoring

One-year warranty

- CCTV activation or alarm activation
- Single gang box mounted
- Two replacement glass plates included

#### **ELECTRICAL SPECIFICATIONS**

Output: DPDT dry contact, 10 amp @ 28VDC

#### **MECHANICAL SPECIFICATIONS**

Dimensions: 5-1/2" (140 mm) W x 3-1/2" (90 mm) H x 1-3/8" (35 mm) D



# Electric Power Transfer Devices

Electrified cylindrical locks, mortise locks, and exit devices all require power provided to them. The most effective way to do this is to run power through the middle of the door. With Hager, you can select the hinge type that you need and that your customer wants and know that all of those products can be electrified. Stay with the proven name in hinges – Hager. Since 1849, Hager has been manufacturing hinges in the U.S. and as we continue to build on our rich history, we will continue to bring our customers reliability, value, and peace of mind. Whether you need electrified conventional hinges, electrified geared Roton hinges, concealed power transfers or a transfer loop, knowing that you chose Hager as your preferred hinge brand will prove to be a wise decision.







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#### **ELECTRIC POWER TRANSFER DEVICES - HEAVY DUTY**



#### 2-679-0620 Concealed Mortise Mount Power Transfer Loop

- Frame mortised steel dust box with flexible steel loop and chrome finish
- Recommended for use with hollow metal frames
- UL Listed
- 11-1/2 (h) x 1 (w) x 3/4 in (d)
- (292 (h) x 25 (w) x 19 (d) mm)
- Provides a concealed and secure means of transferring electric lock and exit device power and signal wires from the frame to the door
- Completely concealed when the door is closed
- Ideal for heavy traffic and applications requiring higher security to inhibit tampering and abuse

#### MODELS

<u>2 conductor</u> Two (2) 18 ga. wires, 5 amp @ 12/24 V AC/DC

#### 2-679-0621

Aluminum powder coat (US28 equivalent)

2-679-0622 Dark brown powder coat (US10B equivalent)

10 conductor

Ten (10) 24 ga. wires, 1 amp @ 12/24 V AC/DC

#### 2-679-0623

Aluminum powder coat (US28 equivalent)

#### 2-679-0624

Dark brown powder coat (US10B equivalent)

#### FEATURES

- Power control, input for electric locks and exit devices, locked, latched, mantrap, forced entry, open status signal wiring
- Mortise door and frame installation
- PTM is completely concealed when the door is closed
- All metal design with stainless steel tubular wire transfer and heavy cast housing with steel back boxes provide weather and tamper resistance when door is open or closed
- Fasteners for wood, steel, and aluminum doors and frames included
- UL Listed Miscellaneous Fire Door Accessories
- UL 10C Listed for up to 3-hours on fire-rated doors and frames
- Classified according to Uniform Building Code (UBC) Standard 7-2, Fire Test of Door Assemblies (1997)



#### COMPATIBLE OPENINGS

- 1-3/4" (44 mm) thick doors
- 0-180° opening swing with up to 3/4" (19 mm) offset pivots
- 0-180° opening swing with up to 5" wide butt hinges
- 0-130° opening swing with up to 5-1/2" (140 mm) wide butt hinges
- 0-130° opening swing with up to 6" (152 mm) wide butt hinges
- Not compatible with center hung doors, swing clear hinges, pocket pivots, butt hinges larger than 6" (152 mm), and 1-1/2" (38 mm) offset pivots

#### DIMENSIONS

9" (h) x 1-1/4" (w) x 1-5/8" (d)

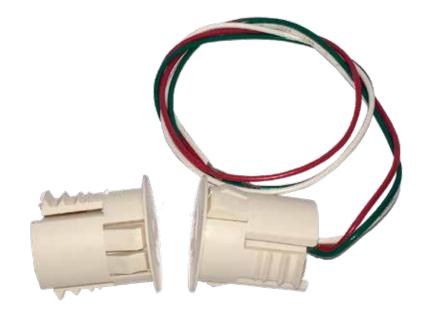
229 mm (h) x 32 mm (w) x 41 mm (d)



# Door Position Sensors

Monitoring the position of the door is crucial security. Hager Companies offers a mortise style door position sensor for new installations. We also offer a drill-in style to make retrofitting an opening quick and easy.

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#### **DOOR POSITION SENSORS**

<b>MODELS</b> 2-679-0625	Concealed Magnetic Contact Switch	
WARRANTY	One-year warranty	
APPLICATION	Installed in the mortise of a hollow metal or aluminum frame and wood, hollow metal or aluminum door	
ELECTRICAL SPECIFICATIONSContact:SPDT, 50mA @ 30 VDC		

#### **MECHANICAL SPECIFICATIONS**

Gap:	0.125″ (3 mm)
Faceplate:	<ul> <li>4.875" (h) x 1.25" (w) x 0.125" (d)</li> <li>123.83 mm (h) x 31.75 mm (w) x 3.18 mm (d)</li> </ul>

#### MODELS

2-679-0626	Magnetic Switch
WARRANTY	One-year warranty
APPLICATION	<ul> <li>Ideal for door status monitoring</li> <li>Easily installed in hollow metal and aluminum doors and frames</li> </ul>

#### **ELECTRICAL SPECIFICATIONS**

Contact: SPDT, 50mA @ 30 VDC

#### **MECHANICAL SPECIFICATIONS**

Gap:

0.5" (12.7 mm)





# Power Supply & Door Controllers

The functionality of power supplies differ based on the electrified components and their intended use. In order to have an optimized and properly operational electrified opening, the power supply should fit the opening, not the other way around. Hager offers different power supply solutions for different types of openings.

The 2901 and 2902 are specifically designed to operate electric latch retraction exit devices.

The 2903 is designed to optimize the functionality of Fail Safe or Fail Secure locking devices that interface with the building's alarm controls, card readers, keypads, and other access control systems.

The 2904 is designed to optimize openings that include a locking device and automatic door operator.

The 2908 and 2909 are modular designs that provide functionality for any type of opening whether it is an electric latch retraction exit device, locking devices that interface with other access controls, door operators with sequencing locking devices, or combination of all of those or just something completely different.







#### **POWER SUPPLY & DOOR CONTROLLERS - 2911**

<b>MODELS</b> 2911	6A Modular Power Supply
WARRANTY	One-year warranty
DESCRIPTION	<ul> <li>Modular design allows customization of each power supply</li> <li>Equipped with a high performance transformer and highly reliable electronic components</li> <li>Filtering and output voltage regulation provides protection and ensures the longevity of all system components</li> </ul>
FEATURES Components:	<ul> <li>Output filtering stabilizes the DC output voltage and eliminates AC line noise</li> <li>Regulator maintains output voltage at 12 or 24 VDC regardless of load changes and battery charging</li> <li>Fire alarm input that provides simultaneous release of all Fail Safe/Fail Secure locks and door holders in case of an emergency</li> <li>Field selectable output that provides 12 VDC or 24 VDC</li> <li>Circuit breaker protected AC input voltage - secondary output is PTC protected</li> <li>LED status indicators Separate PTC protected charging output</li> <li>Optional dual 12 VDC or 24 VDC outputs</li> </ul>
ELECTRICAL SP Input:	ECIFICATIONS • 800mA @ 115 VAC, 50/60Hz • 230 VAC optional

Output:	• 12/24 VDC, 2A • Class 2

Battery Charger: 13.5/27 VDC, 500 mA

#### LED INDICATORS

Amber:	AC and DC voltages are OK
Green:	No DC output
Red:	No AC input, powered by batteries

#### **MECHANICAL SPECIFICATIONS**

Dimensions: 12" x 12" x 4", 18 GA (305 x 305 x 102 mm) 20 gauge steel

#### ACCESSORIES

- ELR
- 2-679-0661 5 Amp hour battery backup
  - 2-679-0662 12 VDC output regulator module
  - 2-679-0664 Universal Relay Module
  - 2-679-0703 Sequencer Module
  - 2-679-0704 Access Control Module
  - 2-679-0705 16 Amp Power Boost Module
  - 2-679-0706 Power Supply Monitor Module







#### **POWER SUPPLY & DOOR CONTROLLERS - 2910**

MODELS	
2910	4A Modular Power Supply
WARRANTY	One-year warranty
DESCRIPTION	<ul> <li>Modular design allows customization of each power supply</li> <li>Equipped with a high performance transformer and highly reliable electronic components</li> <li>Filtering and output voltage regulation provides protection and ensures the longevity of all system components</li> </ul>
FEATURES Components:	<ul> <li>Output filtering stabilizes the DC output voltage and eliminates AC line noise</li> <li>Regulator maintains output voltage at 12 or 24 VDC regardless of load changes and battery charging</li> <li>Fire alarm input that provides simultaneous release of all Fail Safe/Fail Secure locks and door holders in case of an emergency</li> <li>Field selectable output that provides 12 VDC or 24 VDC</li> <li>Circuit breaker protected AC input voltage - secondary output is PTC protected</li> <li>LED status indicators Separate PTC protected charging output</li> <li>Optional dual 12 VDC or 24 VDC outputs</li> </ul>
ELECTRICAL SP Input:	ECIFICATIONS • 800mA @ 115 VAC, 50/60Hz • 230 VAC optional

Input:	<ul> <li>800mA @ 115 VA</li> <li>230 VAC optional</li> </ul>				

Output:	• 12/24 VDC, 2A • Class 2
Battery Charger:	13.5/27 VDC, 500 mA

#### LED INDICATORS

Amber:	AC and DC voltages are OK
Green:	No DC output
Red:	No AC input, powered by batteries

#### **MECHANICAL SPECIFICATIONS**

Dimensions: • 12" x 12" x 4", 18 GA (305 x 305 x 102 mm) • 20 gauge steel

#### ACCESSORIES

- ELR 2-679-0661 5 Amp hour battery backup • 2-679-0662 - 12 VDC output regulator module • 2-679-0664 - Universal Relay Module
  - 2-679-0703 Sequencer Module
  - 2-679-0704 Access Control Module
  - 2-679-0705 16 Amp Power Boost Module
  - 2-679-0706 Power Supply Monitor Module





One-year warranty

#### **POWER SUPPLY & DOOR CONTROLLERS - 2909**

2A Modular Access Control Power Supply

highly reliable electronic components

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**MODELS** 2909

WARRANTY

**APPLICATION** 

#### **FEATURES** Components:

- Output filtering stabilizes the DC output voltage and eliminates AC line noise
  - Regulator maintains output voltage at 12 or 24 VDC regardless of load changes and battery charging

Modular design allows customization of each power supply
Regulated modular access control power supply
Equipped with a high performance transformer and

 Filtering and output voltage regulation provide protection and ensure the longevity of all system components

- Fire alarm input that provides simultaneous release of all Fail Safe/Fail Secure locks and door holders in case of an emergency
   Provides simultaneous release of all Fail Safe/Fail Secure locks and door holder in case of emergency
- Circuit breaker protected AC input voltage secondary output is PTC protected
- LED status indicators separate PTC protected charging output
- Optional dual 12 VDC or 24 VDC outputs

#### ELECTRICAL SPECIFICATIONS Input: • 800mA @ 115 VAC, 50/60Hz

	230 VAC optional
Output:	<ul> <li>12/24 VDC, 2A</li> <li><i>field selectable</i></li> <li>Class 2</li> </ul>

Battery Charger: 13.5/27 VDC, 500 mA

#### LED INDICATORS

Amber:	AC and DC voltages are OK
Green:	No DC output
Red:	No AC input, powered by batteries

#### **MECHANICAL SPECIFICATIONS** Dimensions: • 4" (102 mm)

- 4" (102 mm) W x 12" (305 mm) H x 12" (305 mm) D
  - 12 gauge stéel

#### NOTES

- ELR
- Not suitable for use with solenoid actuated Electric Latch Retraction (ELR) exit devices
- Suitable for motor driven ELR exit devices





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#### **POWER SUPPLY & DOOR CONTROLLERS - 2908**

## **MODELS** 2908

1A Modular Access Control Power Supply

WARRANTY	One-year warranty	
APPLICATION	<ul> <li>Modular design allows customization of each power supply</li> <li>Regulated modular access control power supply</li> <li>Equipped with a high performance transformer and highly reliable electronic components</li> <li>Filtering and output voltage regulation provide protection and ensure the longevity of all system components</li> </ul>	
FEATURES		
Components:	<ul> <li>Fire alarm input</li> <li>Provides simultaneous release of all Fail Safe/Fail Secure locks and door holder in case of emergency</li> <li>Circuit breaker protected AC input voltage - secondary output and battery backup status</li> <li>Separate PTC protected charging output</li> <li>Optional dual 12 VDC or 24 VDC outputs</li> <li>Standard California compliant manual release</li> </ul>	
ELECTRICAL SPECIFICATIONS		
Input:	• 600mA @ 115 VAC, 50/60Hz • 230 VAC optional	

Output:	• 12/24 VDC, 1A - Field selectable

Battery Charger: 13.5/27 VDC, 500 mA

#### **MECHANICAL SPECIFICATIONS**

Dimensions:	• 4" (102 mm) W x 12" (305 mm) H x 12" (305 mm) D
	• 12 gauge steel
ACCESSORIES	
2-679-0661	<ul> <li>5 Amp hour battery backup</li> <li>Uses a separate, protected output for charging - includes a low battery disconnect that protects the battery from potential damage during extended battery powered situations</li> <li>When multiple batteries are used, install in parallel to increase current, or install in series to increase voltage. For more information, please contact Hager Tech Support.</li> </ul>
2-679-0662	12 VDC Output Regulator Module     - Enables dual 12V and 24V output
2-679-0664	Universal Relay Module
,, , , , , , , , , , , , , , , , , ,	- Multiple field selectable operational modes for up to two door stations
NOTES	
ELR	<ul> <li>Not suitable for use with solenoid actuated Electric Latch Retraction (ELR) exit devices</li> <li>Suitable for motor driven ELR exit devices</li> </ul>





#### POWER SUPPLY & DOOR CONTROLLERS - 2908 & 2909 MODULES

MODELS	
2-679-0661	5 Amp hour battery backup
WARRANTY	One-year warranty
APPLICATION	Allows continued operation of your access controlled opening upon power failure
<b>MODELS</b> 2-679-0662	12 VDC Output Regulator Module
	One-year warranty
APPLICATION	Allows for dual voltage output applications where openings require a 12VDC and 24VDC
ELECTRICAL SP Input:	ECIFICATIONS 24 VDC
Output:	500A @12 VDC
<b>MODELS</b> 2-679-0664	Universal Relay Module
WARRANTY	One-year warranty
APPLICATION	<ul> <li>Conventional Relay (CR)</li> <li>Dual Conventional Relay (2x CR)</li> <li>Time Delay Relay (TD) (1-60sec)</li> <li>Dual Time Delay Relay (2x TD) (1-60sec)</li> <li>Latching Relay (LR) - Separate Latch and Relase Inputs</li> <li>Dual Latching Relay (2x LR) Pulse on Pulse off</li> <li>Time Delay x Latching Relay</li> <li>Interlock A (Air Lock)</li> <li>Interlock B (2 Modules Required)</li> </ul>
ELECTRICAL SP	
Input:	120/175mA @ 12/24 VDC
Output: Wet Dry	2 each field selectable wet or dry 120/175mA@ 12/24 VDC SPDT, Dry 10A @ 30 VDC
<b>MODELS</b> 2-679-0703	Electric Latch Retraction Sequencer Module
WARRANTY	One-year warranty
APPLICATION	Allow for sequencing of electrified hardware on openings with Auto Operator
<b>ELECTRICAL SP</b> Input:	ECIFICATIONS 12 VDC or 24 VDC (+/- 10%) - 140 mA max
Exit & Operator Contacts:	N/C or N/O, field selectable 10 AMP @ 30 VDC (Resistive)
Access Control Inputs:	N/O Dry Contact





#### POWER SUPPLY & DOOR CONTROLLERS - 2908 & 2909 MODULES

<b>MODELS</b> 2-679-0704	Access Control Module
WARRANTY	One-year warranty
APPLICATION	Installer friendly relay board used to control and monitor openings
ELECTRICAL SF Input:	<ul> <li>PECIFICATIONS</li> <li>75mA@ 12/24 VDC</li> <li>3 - N/C Normally Closed Inputs</li> <li>3 - N/O Normally Open Inputs</li> </ul>
Output:	<ul> <li>5 Amp (Resistive) fail safe lock output</li> <li>5 Amp (Resistive) fail secure lock output</li> <li>Lock status: SPDT (Form C) dry contact</li> </ul>
<b>MODELS</b> 2-679-0705	16 Amp Power Boost Module
WARRANTY	One-year warranty
APPLICATION	Used for electric latch retraction exit devices that require 24 VDC with 16 amp inrush
ELECTRICAL SP Input:	• 85mA @ 24 VDC • Dry N/O trigger input ONLY
Output:	<ul><li>16A surge</li><li>1A continuous</li></ul>
Note:	Works with Hager 2909 Power Supply
<b>MODELS</b> 2-679-0706	Power Supply Monitor Module
WARRANTY	One-year warranty
APPLICATION	Provides outputs to monitor Hager 2909 power supply status and A/C power and DC output/battery status
ELECTRICAL SP	• 2 SPDT 1 amp repay outputs
	• On/off status



#### **POWER SUPPLY & DOOR CONTROLLERS - 2904**

<b>MODELS</b> 2904	MLR & Auto Operator Access Control Power Supply
WARRANTY	One-year warranty
APPLICATION	Provides power and control for openings with an electrified locking device and automatic door operator
FEATURES	
Components:	<ul> <li>Filtered and regulated 24 VDC output</li> <li>2A load capacity</li> <li>Class 2 rated outputs</li> <li>Overload, over voltage, and short circuit protection</li> <li>Automatically accepts 120 or 240 VAC input</li> <li>Built in fail safe or fail secure locking device controller</li> <li>Built in dry contact output for automatic door operator input</li> <li>Auxiliary 24 VDC constant voltage output (1 amp max output)</li> <li>Separate input for activation switch on entry and exit side of opening</li> <li>Fire alarm input</li> <li>Adjustable time delay</li> </ul>

#### ELECTRICAL SPECIFICATIONS

Input: 900mA @ 120 VAC, 60Hz 600mA @ 240 VAC, 50/60Hz

Output: 24 VDC, 2A

#### **MECHANICAL SPECIFICATIONS**

Dimensions: | 4-1/4" (108 mm) W x 10-1/4" (260 mm) H x 10-1/4" (260 mm) D

#### NOTES

- ELR
- Not suitable for use with solenoid actuated Electric Latch Retraction (ELR) exit devices
- Suitable for motor driven ELR exit devices





#### **POWER SUPPLY & DOOR CONTROLLERS - 2903**

MODELS 2903 WARRANTY	Access Control & Locking Device Power Supply One-year warranty	
APPLICATION	For use with Fail Safe and Fail Secure locking devices that interface with building alarm controls, card readers, keypads, and other door controls	
FEATURES Components:	<ul> <li>Filtered and regulated 24 VDC output</li> <li>2A load capacity</li> <li>Class 2 rated outputs</li> <li>Overload, over voltage, and short circuit protection</li> <li>Automatically accepts 120 or 240 VAC input</li> <li>Built in fail safe or fail secure locking device controller</li> <li>Surge suppression on fail safe and fail secure outputs</li> <li>Interface relay isolates locking device outputs from control switch</li> <li>Adjustable time delay</li> </ul>	
ELECTRICAL SPECIFICATIONS		
Input:	<ul> <li>900mA @ 120 VAC, 60Hz</li> <li>600mA @ 240 VAC, 50/60Hz</li> </ul>	
Output:	24 VDC, 2A	

#### •

#### **MECHANICAL SPECIFICATIONS**

Dimensions:

4-1/4" (108 mm) W x 10-1/4" (260 mm) H x 10-1/4" (260 mm) D

#### NOTES

- ELR
- Not suitable for use with solenoid actuated Electric Latch Retraction (ELR) exit devices
- Suitable for motor driven ELR exit devices

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#### **POWER SUPPLY & DOOR CONTROLLERS - 2902**

#### MODELS

2902

Electric Latch Retraction Controller & Power Supply with Day/Night Mode

WARRANTY One-year warranty

APPLICATION For use with Hager's 4500 Series Electric Latch Retraction (ELR) exit devices in a day/night mode of operation

#### FEATURES

- Components: Auxiliary 12 and 24 VDC outputs
  - Built-in dry contact output for automatic door operator input
    - Adjustable time delay
    - Fire alarm input
    - Operator day/night mode of operation

#### **ELECTRICAL SPECIFICATIONS**

Input:

750mA @ 120 VAC; 60Hz

Output: • 250mA @ 12.6-16.5 VDC; Unregulated & Unfiltered • 250mA @ 26.7-28.0 VDC; Unregulated & Unfiltered

#### **MECHANICAL SPECIFICATIONS**

Dimensions:

4-1/4" (108 mm) W x 10-1/4" (260 mm) H x 10-1/4" (260 mm) D







#### **POWER SUPPLY & DOOR CONTROLLERS - 2901**

<b>MODELS</b> 2901	Electric Latch Retraction Controller & Power Supply
WARRANTY	One-Year Warranty
APPLICATION	For use with Hager's 4500 Series Electric Latch Retraction (ELR) exit devices
FEATURES	
Components:	<ul> <li>Auxiliary 12 and 24 VDC outputs</li> </ul>
	• Built-in- dry contact output for automatic door operator input
	Adjustable time delay
	• Fire alarm input
	<ul> <li>Single or dual system latch retraction</li> </ul>

#### ELECTRICAL SPECIFICATIONS

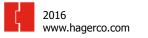
Input:	750mA @ 120 VAC; 60Hz
Output:	<ul> <li>250mA @ 12.6-16.5 VDC; Unregulated &amp; Unfiltered</li> <li>250mA @ 26.7-28.0 VDC; Unregulated &amp; Unfiltered</li> </ul>

#### **MECHANICAL SPECIFICATIONS**

Dimensions: 4-1/4" (108 mm) W x 10-1/4" (260 mm) H x 10-1/4" (260 mm) D







# 8400 Series Low Energy Power Operator

As more and more buildings are becoming ADA compliant, more options need to be made available. Hager's low energy operators allow you to do just that without a long list of part numbers to keep track of. Instead, Hager's low energy operators are customizable so that you can meet your customer's requirements and expectations each and every time.

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The 8400 Series is Hager's premium low energy operator that reduces installation costs by being designed in a unique way that allows for one person installation and each unit includes an on-board programmer so that the installer programs one unit and then uses a flash drive to set up the other units in the same way with the same functionality.



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#### LOW ENERGY POWER OPERATOR COMPONENT SELECTION



433 MHz Receiver

9-Volt Wireless Transmitter

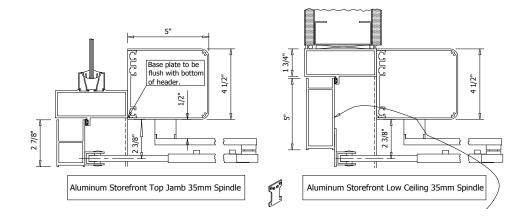


#### 8400 SERIES LOW ENERGY POWER OPERATOR - STANDARD APPLICATIONS

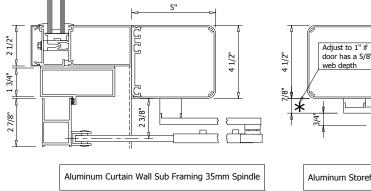
Hager Companies 8400 Series Low Energy Power Operator meets ANSI/BHMA A156.19 standards for power assist and low energy operators and is designed to meet the requirements of door openings that occasionally have the need for an automatic opening. These devices can be used on single and double doors including double egress applications. This door opening solution provides a consistent closing and opening of the door, which is especially beneficial in situations that require compliance with the Americans with Disabilities Act (ADA). The use of Hager's Low Energy Power Operator provides easy access for not only people with disabilities, but also allows for manual operation of the door when necessary.

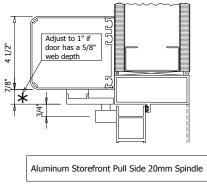
The 8400 Series is designed for ease of installation, allowing it to be installed by a single person. It also provides a quiet, smooth operation preventing any unwanted noise in the opening and surrounding area. The use of a digital display makes programming the operator uncomplicated and provides a resourceful tool for maintaining the device and assessing its status.

In addition to the Low Energy Power Operator, Hager offers a full range of actuators to be used in conjunction with the operator. The switches available for activation of the operator come in a variety of sizes and options, including wireless and hard wired. Hager also offers an option that exceeds the California Building Code, Section 1117B.6 by providing a push plate that meets height, reach range, and operation requirements for those with disabilities.



Note: Optional arm shoe drop plate is available for applications with a top rail less than 5". See page 9 for additional information.

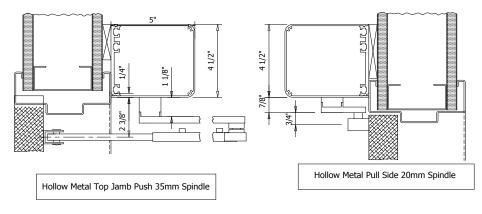




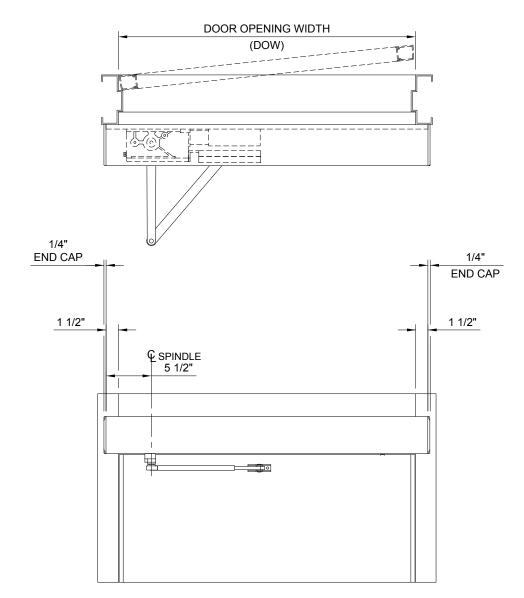




#### 8400 SERIES LOW ENERGY POWER OPERATOR - STANDARD APPLICATIONS



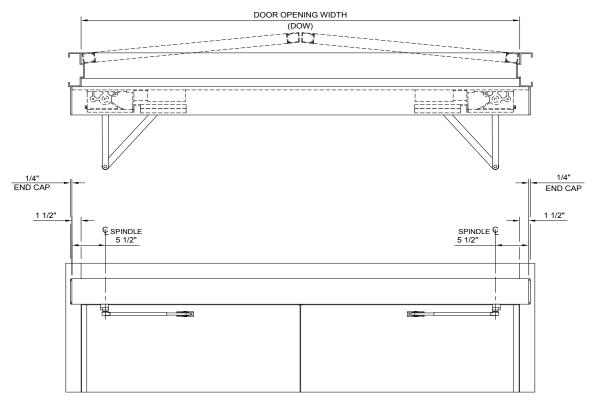
SINGLE OPERATOR

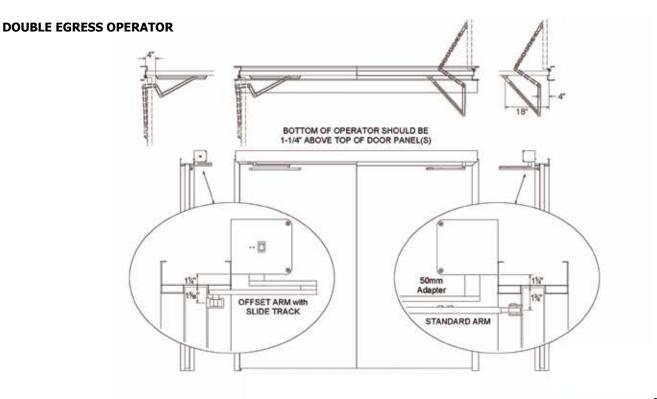


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#### 8400 SERIES LOW ENERGY POWER OPERATOR - STANDARD APPLICATIONS

#### PAIRED OPERATOR

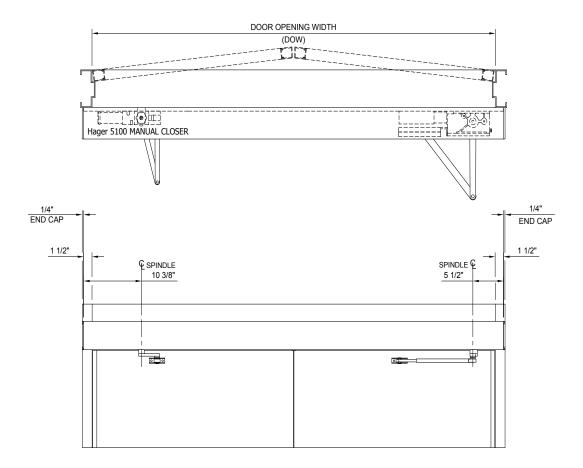




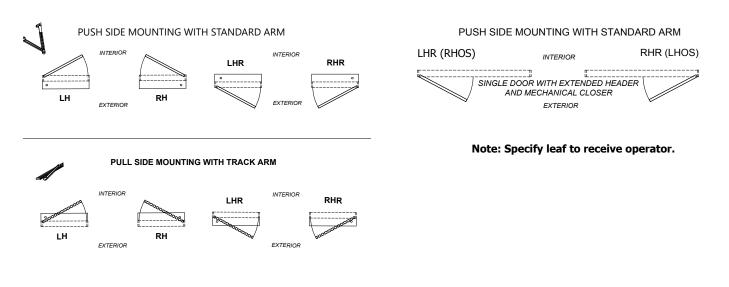


#### 8400 SERIES LOW ENERGY POWER OPERATOR - STANDARD APPLICATIONS

#### SINGLE OPERATOR PAIRED WITH MECHANICAL CLOSER

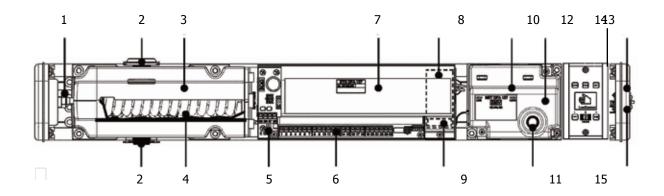


#### **OPERATOR HANDING IDENTIFICATION**





8400 SERIES LOW ENERGY POWER OPERATOR - PARTS AND ASSEMBLY DETAILS



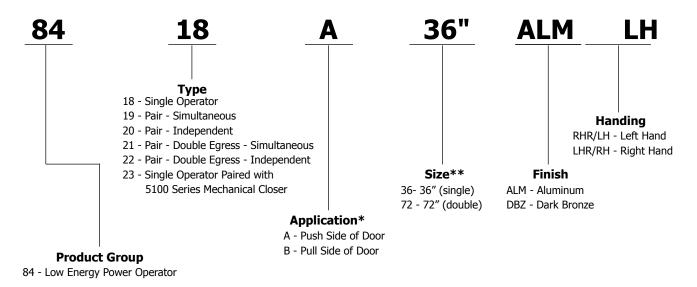
- 1. Adjusting screw for spring tension
- 2. Output shafts for arms & stop
- 3. Drive unit
- 4. Closing spring
- 5. Multifunction push button/control
- 6. Terminal blocks for I/O
- 7. Microprocessor control

- 8. Motor drive circuit board
- 9. Slide switch S1 (rotating direction)
- 10. Power supply
- 11. Fuse (2.0A, 5 x 20mm, Slo-Blo)
- 12. Power supply circuit board
- 13. Onboard programmer
- 14. On/Off/Open rocker switch
- 15. Status LED and reset push button



#### 8400 SERIES LOW ENERGY POWER OPERATOR - HOW TO ORDER

8400 SERIES



\* Note: Push side of door comes with standard arm. Pull side of door comes with track arm. \*\* Additional sizes available. See page 7 for additional information.

\* Note: Standard arm (push side, 0" - 4.1875" reveal) included.



# HAGER

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### 8400 SERIES LOW ENERGY POWER OPERATOR

<b>MODELS</b> 8418	Single Operator (handed)	
8419	Simultaneous Pair (2 units, 1 controller, doors operate at the same time) For use with Hager mortise locks with deadbolt	)
8420	Independent Pair (2 units, 2 controller, doors operate independently from each other)	
8421	Double Egress Simultaneous Pair (2 units, 1 controller, doors swing in opposite directions at same time)	
8422	Double Egress Independent Pair (2 units, 2 controller, doors swing in opposite directions at different times	)
8423	Single operator paired with 5100 Series closer for inactive door (handed)	
WARRANTY	Two-year warranty	
APPLICATION	<ul> <li>For use on fire-rated and non-fire-rated outswing or inswing doors</li> <li>Built-in adjustable door stop for protection against wind or abusive environments</li> </ul>	
FEATURES Application Features: Operational Functionality:	<ul> <li>Operates as a manual closer with or without power</li> <li>Single person installation</li> <li>Pre-drilled mounting holes for ease of installation</li> <li>Three Operating Modes (On/Off/Hold Open)</li> <li>Designed for single doors from 36" to 48" (914 mm to 1,219 mm)</li> <li>Designed for double doors from 60" to 96" (1,524 mm to 2,438 mm)</li> <li>On-board power supply</li> <li>Built-in adjustable door stop for protection against wind or abusive environments</li> <li>Interfaces with electric door hardware</li> <li>Operates as a mechanical closer if power is disconnected</li> <li>Obstacle recognition upon opening and closing</li> <li>Blow open function for smoke ventilation</li> </ul>	
Programmable Functionality:	<ul> <li>Boost on Close (selectable On/Off)</li> <li>Power Assist Close</li> <li>Power Boost Close - motor assist under wind and stack pressure</li> <li>Motor Hold Close</li> <li>Power Open and Hold - for smoke evacuation</li> <li>Adjustable Opening Force Limitation</li> <li>Adjustable Opening and Closing Speeds</li> <li>Adjustable Opening Angle</li> <li>Adjustable Hold Open Time for Door Activators (1 sec to continuous)</li> <li>Sequential Operation (push to open/push to close operation)</li> <li>Built-In Stop - Manual swing to 180°/ Power swing to 100°</li> <li>Fire Alarm input shunts swing activations until FACP is manually reset</li> <li>Internal LCD display</li> <li>Memory is flash upgradeable</li> </ul>	
Certification:	<ul> <li>ANSI A156.19 compliant</li> <li>UL/cUL Listed for up to 3-hours</li> <li>UL10C Listed for Positive Pressure Rating</li> <li>ADA compliant</li> </ul>	1
64	www.hagerco.com	٢



#### 8400 SERIES LOW ENERGY POWER OPERATOR

#### **ELECTRICAL SPECIFICATIONS**

Power Requirements:	115 VAC 60 HZ
Current Draw:	3A
Auxiliary Output Voltage:	500mA @ 24 VDC
Fuse Type:	2.0A, 5 x 20mm, Slo-Blo
Electric Lock Relay Type:	Form "C" SPDT
Lock Relay Rating:	5.0A @ 28 VDC
Operating Temperature:	-40° to 140° F (-40° to 160° C) ambient operating temperature in all climatic conditions

#### **MECHANICAL SPECIFICATIONS**

Dimensions:	5" H x 4-1/2" W x door width +3" L (127 mm x 114 mm)	
Reveal:	Up to 12" standard	
Spring Adjustment:	5 lbs to 20 lbs closing force	
Max Degree of Swing:	180°	
On/Off/Hold Open Switch:	Standard	
Swing Direction:	Inswing/Outswing	
Adjustable Swing Degree:	80° to 180°	
<b>FINISHES</b> ALM DBZ	Aluminum anodized (standard) Dark bronze anodized	
NOTES	Must specify push or pull side mount Specify handing	

# 8400 Series Parts & Accessories

In this section, you can find the various arms and spindles for the 8400 Series operator.





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#### ACCESSORIES



### 2-659-0151 | 2-659-0152

Track Arm

- 20 mm spindle
- For use on pull side of the door
- 2-659-0151 is ALM, 2-659-0152 is DBZ



#### 2-659-0153 | 2-659-0154 Standard Arm

- 35 mm spindle
- For use on push side of the door
- 2-659-0153 is ALM, 2-659-0154 is DBZ



#### 2-659-0220 | 2-659-0221

- **Standard Arm Double Egress** • 50 mm spindle
- For use on push side of the door
- 2-659-0220 is ALM, 2-659-0221 is DBZ

# 7

#### 2-659-0222 | 2-659-0223

Track Arm - Double Egress • 20 mm spindle



- For use on pull side of the door
- 2-659-0222 is ALM, 2-659-0223 is DBZ

#### 2-659-0224 | 2-659-0225 Replacement Spindle

- 20 mm
- For use with delayed egress or track arm assembly
- 2-659-0224 is ALM, 2-659-0225 is DBZ



#### 2-659-0226 | 2-659-0227 Replacement Spindle

#### • 35 mm

- For use with standard single and standard pair applications
- 2-659-0226 is ALM, 2-659-0227 is DBZ



#### 2-659-0228 | 2-659-0229 Replacement Spindle

- 50 mm
- For use with push side standard arm double egress only
- 2-659-0228 is ALM, 2-659-0229 is DBZ





#### ACCESSORIES



#### 2-659-0230 | 2-659-0231 Drop Plate

- For use with low ceiling clearance
- 2-659-0230 is ALM, 2-659-0231 is DBZ



#### 2-659-0236 Power Supply

- On-board replacement
- Power requirements: 115 VAC 60 Hz
- Output Voltage: 24 VDC 500mA



#### **2-659-0232 | 2-659-0233** Cover for Single Operator

- 36" length contact Hager Tech Support
- for special sizes
- Powder coatedAnodized aluminum
- 2-659-0232 is ALM, 2-659-0233 is DBZ



- 72" length contact Hager Tech Support for special sizes or 8423 cover
- Powder coated
- Anodized aluminum
- 2-659-0234 is ALM, 2-659-0235 is DBZ

Note: For additional replacement parts contact Hager Tech Support.



# 8300 Series Low Energy Power Operator

The 8300 Series is Hager's most versatile low energy power operator. The 8300 was designed for easy installation and programming, along with quiet operations and features that make it an ideal choice for ADA openings.

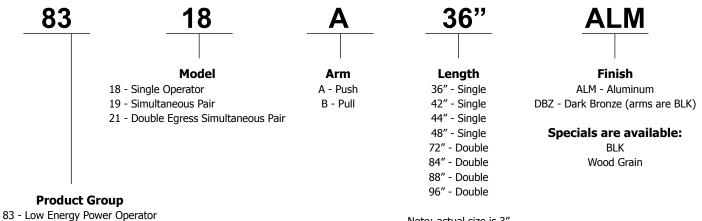






#### 8300 SERIES LOW ENERGY POWER OPERATOR - HOW TO ORDER

#### 8300 SERIES



Note: actual size is 3" additional width



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### 8300 SERIES LOW ENERGY POWER OPERATOR

<b>MODELS</b> 8318	Single Operator
8319	Simultaneous Pair
8321	Double Egress Simultaneous Pair
WARRANTY	Two-year warranty
APPLICATION	• For use on interior and exterior fire-rated outswing or inswing doors
FEATURES	
Application Features:	<ul> <li>Non-Handed</li> <li>Three Operating Modes (On/Off/Hold Open)</li> <li>Designed for doors up to 48" wide (1219 mm) single, 96" wide (2438 mm) double</li> <li>Designed for doors up to 350 lbs. (125 Kg)</li> </ul>
Operational Functionality:	<ul> <li>Power Open Spring Close</li> <li>Microprocessor controlled for ultra-flat reactions</li> </ul>
Certification:	<ul> <li>ANSI A156.19 compliant</li> <li>Complies with all U.S. and Canadian ADA requirements for low energy operators</li> <li>Appropriate door signage included with each operator</li> <li>ANSI/UL 325 listed for both United States and Canada</li> <li>ADA compliant</li> <li>UL/cUL Listed for up to 3-hours</li> <li>UL10C Listed for Positive Pressure Rating</li> </ul>
ELECTRICAL SP	ECIFICATIONS

Power Requirements:	115 VAC 60 HZ
Current Draw:	0.4 A to 1.2 A (Max)
Onboard Power Supply:	24 VDC 1 A
Electric Lock Relay Type:	Form "C" SPDT
Lock Relay Rating:	5.0A @ 28 VDC
Fused Protection:	3.5A Fuse



## 8300 SERIES LOW ENERGY POWER OPERATOR

#### MECHANICAL SPECIFICATIONS

Dimensions:	• 5" h x 4-1/2"d x Door Opening Width + 3"	
Reveal:	<ul> <li>Push Arm: 9-3/4"</li> <li>Pull Arm: 0"</li> <li>Double Egress Arm: 4"</li> <li>Extended Push Arm: 19"</li> </ul>	
Opening Force:	• < 15 lbs Exceeds all ADA Requirements	
Closing Force:	• > 8 lbs	
Max Degree of Swing:	• Powered - 180° (push), 140° (pull); Mechanical - 180°	
On/Off/Hold Open Switch:	• Standard	
On/Off Power Switch:	• Standard	
Swing Direction:	Inswing/Outswing	
Operating Temperature:	• -4°F to +131 °F	
Enclosure Protection:	<ul> <li>NEMA 3R (IP23) Protection against spray water (i.e. rainstorm)</li> </ul>	

#### **OPERATING PARAMETERS**

Adjustable Opening/Closing Speeds:	• Yes, Exceeds all ADA Requirements
Adjustable Swing Degree:	• 80° to 140°
Adjustable Latch Check Speed:	• Yes
Built-in-Stop:	<ul> <li>Manual swing to 180° / Power swing to 140° (pull), 180° (push)</li> </ul>
Hold Open Time:	• 5 Second Minimum (per ADA)
Fire Alarm Input:	• FA input shunts swing activations until FACP is manually reset
Obstruction Stop:	• Unit will stop cycle if an obstacle is detected in the swing path
Auto Reverse:	• If the unit detects an obsticle, the door will travel in the opposite path
Push to Start ("Push 'n Go")	• Yes * Safety Sensors required

#### **FINISHES** ALM DBZ

Aluminum anodized (standard) Dark Bronze anodized (ships with Black (BLK) arms) 8318, 8319 only



# 8300 Series Parts & Accessories

In this section, you can find the various arms and spindles for the 8300 Series operator.







## **8300 SERIES PARTS & ACCESSORIES**

2-679-0901	8300 - 20MM REPLACEMENT SPINDLE
2-679-0902	8300 - 35MM REPLACEMENT SPINDLE
2-679-0903	8300 - 50MM REPLACEMENT SPINDLE
2-679-0904	8300 - 80MM REPLACEMENT SPINDLE
2-679-0896	8300 - STANDARD ARM W/ 35MM SPINDLE (PUSH) ALM
2-679-0897	8300 - STANDARD ARM W/ 35MM SPINDLE (PUSH) BLK
2-679-0898	8300 - TRACK ARM W/ 20MM SPINDLE (PULL) ALM
2-679-0899	8300 - TRACK ARM W/ 20MM SPINDLE (PULL) BLK
2-679-0900	8300 - DBL EGRESS ARM W/ 20MM SPINDLE (PULL) ALM
2-679-0905	8300 - STANDARD ARM EXTENTION ALM
2-679-0906	8300 - STANDARD ARM EXTENTION BLK
2-679-0907	8300 - KP EVO PROGRAMMING DEVICE



# Actuators

Actuators are what allow the "knowing act" of a low energy operator. Hager offers various styles and types of actuators that will appeal to every installation. The typical 4.5" and 6" square or round actuators are available along with Hager's line of jamb operators. For more unique installations or installations with wheelchair traffic, refer to the low profile actuators that can be activated in a 36" range from ground up.

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## LOW ENERGY POWER OPERATOR ACTUATORS - TOUCHLESS ACTUATORS

### MODELS

MODELS 2-659-0303 2-659-0304 2-659-0307 2-659-0305 2-659-0306 2.659-0308	6" round with text & handicap logo 6" round with handicap logo only 6" round with text only 4.75" square with text & handicap logo 4.75" square with handicap logo only 4.75" square with text only	WAVE TO OF
WARRANTY	One-year warranty	
APPLICATION	<ul> <li>For use with ADA low energy power operators</li> <li>Employs capacitance technology similar to smart devices to operate low energy doors</li> <li>Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools</li> </ul>	Ŀ,
FEATURES	<ul> <li>Touchless design reduces the spread of bacteria and germs</li> <li>LED illumination increases plate visibility</li> <li>Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents</li> <li>Beveled edges</li> <li>Various design options</li> <li>Adjustable detection zone</li> <li>Audible alert (selectable On/Off)</li> </ul>	WAV TO OP
Certification:	NEMA rated	
SPECIFICATION	IS	6
Finish:	US32D with text and/or blue logo	L.
Faceplate:	16 gauge, 304 stainless steel	WAVE TO C
Backplate:	Illuminated Mounting Ring	16,
Input:	30 mA @ 12 to 24 VAC/VDC	
Operating Temperature:	-20° to 120°F (-30° to 49°C)	Ľ

6-32 x 3/4" mounting screws Fasteners:



PEN

E PEN

OPEN





## LOW ENERGY POWER OPERATOR ACTUATORS - 4.5" SQUARE ACTUATOR

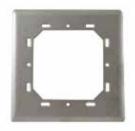
MODELS	
2-659-0172	4.5" square with text & handicap logo
2-659-0173	4.5" square with handicap logo only
2-569-0357	4.5" square with text & accessibility logo
WARRANTY	One-year warranty
APPLICATION	<ul> <li>For use with ADA low energy power operators</li> <li>Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools</li> </ul>
FEATURES	<ul> <li>Hard wired (standard) with wireless option</li> <li>Embossed graphics ensures durability</li> <li>Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents</li> <li>Beveled edges</li> </ul>
	Note: for wireless version, must order receiver and transmitter separately
Certification:	NEMA rated
SPECIFICATIONS	5
Finish:	US32D with text and/or blue logo
Faceplate:	16 gauge, 304 stainless steel
Backplate:	1/8" thick aluminum
Cherry Swtich:	Single-pole, 15A/COM/NO/NC contacts
Operating Temperature:	-20° to 120°F (-30° to 49°C)
Fasteners:	6 - 32" x 1" and 8 - 32" x 1" Allen head mounting screws
OPTIONS	
2-659-0174	Surface Mount Box for 4.5" Square Actuator • Provides adequate space for wireless transmitters • Simplified installation for applications with space limitations • Black finish
2-659-0241	Universal Backplate • For use when mounting actuator to bollard post • Stainless steel finish













## LOW ENERGY POWER OPERATOR ACTUATORS - 6" SQUARE ACTUATOR

MODELS	
2-659-0169	6" square with text & handicap logo
2-659-0170	6" square with handicap logo only
WARRANTY	One-year warranty
APPLICATION	<ul> <li>For use with ADA low energy power operators</li> <li>Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools</li> </ul>
FEATURES	<ul> <li>Hard wired (standard) with wireless option</li> <li>Embossed graphics ensures durability</li> <li>Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents</li> <li>Beveled edges</li> <li>Note: for wireless version, must order receiver and transmitter separately</li> </ul>
Certification:	NEMA rated
SPECIFICATION	IS
Finish:	US32D with text and/or blue logo
Faceplate:	16 gauge, 304 stainless steel
Backplate:	1/8" thick aluminum
Cherry Switch:	Single-pole, 15A/COM/NO/NC contacts
Operating Temperature:	-20° to 120°F (-30° to 49°C)
Fasteners:	6-32 x 1" and 8-32 x 1" Allen head mounting screws
OPTIONS	
2-659-0171	Surface Mount Box for 6" Square Actuator • Provides adequate space for wireless transmitters

- Simplified installation for applications with space limitations
- Black finish









## LOW ENERGY POWER OPERATOR ACTUATORS - 4.5" ROUND ACTUATOR

## MODELS

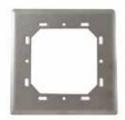
MODELS 2-659-0165 2-659-0166 WARRANTY APPLICATION FEATURES	<ul> <li>4.5" round with text &amp; handicap logo</li> <li>4.5" round with handicap logo only</li> <li>One-year warranty</li> <li>For use with ADA low energy power operators</li> <li>Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools</li> <li>Hard wired (standard) with wireless option</li> <li>Embossed graphics ensures durability</li> <li>Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents</li> <li>Beveled edges</li> </ul>
	Note: for wireless version, must order receiver and transmitter separately
Certification:	NEMA rated
SPECIFICATION	s
Finish:	US32D with text and/or blue logo
Faceplate:	16 gauge, 304 stainless steel
Backplate:	1/8" thick aluminum
Cherry Switch:	Single-pole, 15A/COM/NO/NC contacts
Operating Temperature:	-20° to 120°F (-30° to 49°C)
Fasteners:	6-32 x 1" and 8-32 x 1" Allen head mounting screws
OPTIONS	
2-659-0167	Surface Mount Box for 4.5" Round Actuator • Provides adequate space for wireless transmitters • Simplified installation for applications with space limitations • Black finish
2-659-0168	Weather Ring for 4.5" Round Actuator • Provides protection against moisture and weather elements
2-659-0241	Universal Backplate • For use when mounting actuator to bollard post • Stainless steel finish











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## LOW ENERGY POWER OPERATOR ACTUATORS - 6" ROUND ACTUATOR

<b>MODELS</b> 2-659-0161	6" round with text & handicap logo
2-659-0162 2-659-0358	6" round with handicap logo only 6" round push to open text & accessibility logo
WARRANTY	One-year warranty
APPLICATION	<ul> <li>For use with ADA low energy power operators</li> <li>Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools</li> </ul>
FEATURES	<ul> <li>Hard wired (standard) with wireless option</li> <li>Embossed graphics ensures durability</li> <li>Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents</li> <li>Beveled edges</li> <li>Note: for wireless version, must order receiver and transmitter separately</li> </ul>
Certification:	NEMA rated
SPECIFICATION	s
Finish:	US32D with text and/or blue logo
Faceplate:	16 gauge, 304 stainless steel
Backplate:	1/8" thick aluminum
Cherry Switch:	Single-pole, 15A/COM/NO/NC contacts
Operating Temperature:	-20° to 120°F (-30° to 49°C)
Fasteners:	6-32 x 1" and 8-32 x 1" Allen head mounting screws
OPTIONS	
2-659-0163	Surface Mount Box for 6" Round Actuator • Provides adequate space for wireless transmitters • Simplified installation for applications with space limitations • Black finish
2-659-0164	Weather Ring for 6" Round Actuator • Provides protection against moisture and weather elements







## LOW ENERGY POWER OPERATOR ACTUATORS - 1.5" x 4.75" JAMB ACTUATOR

### MODELS

<b>MODELS</b> 2-659-0175 2-659-0176	Push to Open text and handicap logo Handicap logo only
WARRANTY	One-year warranty
FEATURES	<ul> <li>Hard wired (standard) with wireless option</li> <li>Embossed graphics ensures durability</li> <li>Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents</li> <li>Beveled edges</li> <li>Note: for wireless version, must order receiver and transmitter separately</li> </ul>
Certification:	NEMA rated
SPECIFICATION	S
Finish:	US32D with text and/or blue logo
Faceplate:	16 gauge, 304 stainless steel
Backplate:	1/8" thick aluminum
Cherry Switch:	Single-pole, 15A/COM/NO/NC contacts
Operating Temperature:	-20° to 120°F (-30° to 49°C)
Fasteners:	6-32 x 1" and 8-32 x 1" Allen head mounting screws
<b>OPTIONS</b> 2-659-0177	Surface Mount Box for 1.5" x 4.75" Jamb Actuator • Provides adequate space for wireless transmitters • Simplified installation for applications with space limitations • Black finish







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## LOW ENERGY POWER OPERATOR ACTUATORS - 36" LOW PROFILE ACTUATOR

## MODELS

2-659-0178 2-659-0179	Push to Open text and handicap logo - Wireless Push to Open text and handicap logo - Hard wired	
WARRANTY	One-year warranty	
APPLICATION	<ul> <li>For use with ADA low energy power operators</li> <li>Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools</li> </ul>	
FEATURES	<ul> <li>Mounts to any flat surface</li> <li>Embossed graphics ensures durability</li> <li>Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents</li> <li>Weather resistant</li> <li>Beveled edges</li> <li>36" x 36" activation area and low profile 1" depth</li> <li>Four separate switches to allow activation from any angle</li> <li>Exceeds California Building Code, Section 1117B.6</li> </ul>	
Certification:	NEMA Rated	
SPECIFICATIONS		
Finish:	US32D with text and/or blue logo	
Faceplate:	16 gauge, 304 stainless steel	
Backplate:	1/8" thick aluminum	
Transmitter Frequencies:	433 MHz	
Dimensions:	6" (152 mm) W x 36" (990 mm) H x 1 (25 mm) D	

Fasteners: Due to various mounting types, no fasteners are supplied with the actuator

PUSH

TO

OPEN



TO

OPEN

## LOW ENERGY POWER OPERATOR ACTUATORS - 4.75" VESTIBULE ACTUATOR

#### MODEL

2-659-0242	Push to Open text and logo
WARRANTY	One-year warranty
APPLICATION	<ul> <li>For use with ADA low energy power operators</li> <li>Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools</li> </ul>
FEATURES	<ul> <li>Hard wired (standard) with wireless option</li> <li>Embossed graphics ensures durability</li> <li>304 grade stainless steel finish - scratch resistant</li> <li>Interfaces with 2-659-0187 Programmable Relay and Door Sequencer for automatic sequencing applications</li> <li>Conserves energy and provides entrapment protection</li> <li>Beveled edges</li> </ul>
SPECIFICATION	S
Finish:	US32D with blue text and logo
Faceplate:	16 gauge, 304 stainless steel
Base Material:	1/8" thick aluminum
Cherry Switch:	Single-pole, 15A/COM/NO/NC contacts
Compatible Wireless Frequencies:	433 MHz
Fasteners:	6 - 32" x 1", 8 - 32" x 1" stainless steel
<b>OPTIONS</b> 2-659-0243	Surface Mount Box for 4.75" Vestibule Actuator

- 2-659-0243
- Surface Mount Box for 4.75" Vestibule Actuator
- Provides adequate space for wireless transmitters
- Simplified installation for applications with space limitations
- Black finish

# HAGER

## LOW ENERGY POWER OPERATOR ACTUATORS - BOLLARD POST

Push plates not included - must order separately

### MODELS

Note:

FIODELS			
2-659-0180	Black Powder Coat		
2-659-0181	Bronze Powder Coat		
2-659-0182	Silver Powder Coat		
WARRANTY	One-year warranty		
FEATURES	<ul> <li>For use with Hager's 4.5" square (2-659-0172, 2-659-0173, 2-569-0357) and 4.5" round (2-659-0165, 2-659-0166, 2-659-0358) actuators</li> <li>Can be mounted on existing or newly poured concrete</li> <li>UV resistant plastic cap allows for wireless transmissions</li> </ul>		
SPECIFICATION	IS		
Material: Mounting	Carbon steel		
Bracket:	Stainless steel		
Dimensions:	41.5" H x 6.25" W x 4.25" D (with cap attached)		
Weight:	35 lbs.		
Fasteners:	Screws, expansion anchors, washers and nuts		



# Low Energy Operator Sensors

Pedestrian sensors are programmed with the door path and if there is anything within the path that was not mapped, it will stop the door from opening. These are useful on any ADA opening. Typically, assisted living facilities, daycare facilities, healthcare facilities, education institutions, multi-family, commercial structures, and government buildings all have ADA openings.

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## **PEDESTRIAN PRESENCE SENSORS - OVERHEAD PRESENCE SENSOR**

#### 2-659-0332

## **Bodyguard Overhead Presence Sensor Frame Mounted**

DESCRIPTION	Overhead presence sensor designed for pedestrian automatic doors.
APPLICATIONS	<ul> <li>Mounts to the frame to provide protection for pedestrian automatic doors</li> <li>Prevents a closed door from opening and an open door from closing when a pedestrian is in the detection zone</li> </ul>
FEATURES	<ul> <li>Versatile sensor can be used on single swing, simultaneous pair, dual egress and folding doors when coupled with an interface / lockout device</li> <li>Maximum flexibility with separate pattern width, depth and sensitivity for open and closed door states</li> <li>Visible LED monitoring indicator</li> <li>Active infrared technology and presence detection</li> </ul>

- Easy installation and adjustments with optional programming remote
- Immune to electrical and radio frequency interference

## SPECIFICATIONS

Technology: Triangulation Mounting Angles: 0° to 10° (5° is default setting) 12-24VAC/VDC (50-60HZ VAC) Input: 1A @ 60 VDC/125 VAC Contact Relay: 0.5 - 9s Hold Time 50-60 Hz Frequency: -22°F - 140°F Temperature: 0.5-9.0 seconds Relay Hold Time: 11.8" (W) x 1.9" (H) x 1.9" (D) Dimensions: 2-659-0333 - Programming Remote Opt. Accessories: 2-659-0334 - Mounting Kit





## **PEDESTRIAN PRESENCE SENSORS - ACTIVE INFRARED SAFETY SENSOR**

## 2-659-0335 / 2-659-0336 Superscan Active Infrared Safety Sensor

DESCRIPTION	Door mounted
APPLICATIONS	<ul> <li>Low energy swing doors</li> <li>Designed to mount at the top of the door to reduce accidental damage</li> </ul>
FEATURES	<ul> <li>Detect the presence of a pedestrian, while the door is opening and closing using triangulation</li> <li>Each module detection zone can be adjusted independently</li> <li>Active Infrared with background suppression allow for infinite presence detection</li> <li>Each module detection zone can be adjusted independently</li> </ul>
SPECIFICATIONS	5
Technology:	Active infrared
Models:	2-659-0335 - Single module unit
Power Supply:	2-659-0336 - Single unit w/ master and slave modules
Detection Range:	12-24 VAC/VDC 0" - 96" (0'-8')
Max. Mounting	
Height:	96″ (8′)
Detection Time: Detection Mode:	< 50ms
Input Inhibit:	Presence (up to 8') 12 – 24 VAC ±10% / 12 – 24 VDC
input innoit.	±10% /Inhibited when voltage is applied
Contact Relay:	1 A @ 30 V (resistive)
	0.1 s – 4.5s hold time
LED Indicators Master:	Red LED = Detection
Masler.	Green LED = Active Output
	Red LED = Detection
Operating Temp:	-30°F - 140°F
Dimensions:	34.5"(L) x 1.95" (W) x 1.89" (H)
Functions Selection	: Detection mode - NO or NC
	Normal mode Background analysis mode

Individual (2-659-0335) or single w/ slave module (2-659-0336)







Accessories can make any ordinary installation unique. Hager offers different wireless transmitters and receivers that are commonly used in executive installations or other highy automated installations.







## ACCESSORIES



433 MHz Transmitters and Receiver



#### 2-659-0237 RELAY BOARD

- 24VDC
- Current draw: 40mA
- Contact rating : 5amp/220 VAC or 28VDC DPDT contacts

- Universally compatible with any type of automatic door application
- Used for wireless activation or sequencing of doors
- Receiver can be programmed with up to 100 transmitters
- Activation of transmitter utilizes a rolling code providing a protected signal

#### MODELS



#### FEATURES

- Transmitters can be programmed to multiple receivers
- Optional delay no delay programming
- Toggle or pulse mode selectable by DIP switch
- Red LED on receiver verifies transmission and delivers troubleshooting assistance
- Red LED on transmitter ensures transmission and battery life
- Wire leads plug into terminals on Hager actuators 2-659-0184 and 2-659-0185

#### SPECIFICATIONS

Frequency: Input Voltage: Radio Control Type: Emitted Radio Power: Number of Transmitters per Receiver: LED Functions:

Dimensions:

Certifications:

433 MHz 12 to 24 VAC/VDC Digital -28.7dBm (transmitter) 100 maximum transmitters Red = Relay Activity Blue = Receiver / Transmitter Learn Receiver - 2.75" x 2.125" x 1.0" Transmitter - 2.75" x 1.375" x 0.6" CE, FCC, IC





## ACCESSORIES



#### 2-659-0240

#### **Programmable Relay and Door Sequencer**

- Provides a single solution for a variety of applications
- Three relays; two 3-AMP and one 1-AMP
- Built-in surge suppression eliminates the need for external components when installing electric locking devices
- Capable of door timing and advanced relay sequencing

### FUNCTIONS

FUNCTION	SUBJECT	MOST COMMON APPLICATIONS
10	Simple Timer	Time delay relay
11	Ratchet / Latching	Push to open / Push to close
22	2 relay Sequence Inhibitor with Door Position Input	Automatic swing door with push plate, approach side SuperScan and Electric Strike. SuperScan is inhibited when door is closed.
28	2 Relay Sequence with Door Position Input	Automatic swing door with a push plate and electric locking devices with a door position switch to prevent the delay from running during a recycle
29	Relay 1 Deactivation Timer	Automatic swing door or sliding door with an electric locking device and door position switch to prevent lock from reengaging before door closes completely
36	3-Relay Sequencer + ``1-shot″	Sequence of relay 1, relay 2, and relay 3 via trigger of input 1 or WET input relay 1, relay 2, and relay 3 can be maintained or "1-shot"
37	3-Relay Sequencer with ``Independent Relay″	Sequence of <b>relay 1</b> , <b>relay 2</b> , and <b>relay 3</b> via trigger of <b>input 1</b> or <b>WET input relay 1</b> , <b>relay 2</b> , and <b>relay 3</b> can be "independent" or sequenced.
50	Interlock Timer with Door Position Inputs	Interlock module that will only allow one door to open at a time and can be used with any automatic or manual door
55	Interlock Ratchet with Door Position Inputs	Interlock module that will only allow one door to open at a time with a ratchet / latching function and can be used with any automatic or manual door
65	2-Way, 2 Relay Sequence	Two door vestibule sequencing with automatic swing doors traveling in either direction
nL	Normally Locked Restroom	Sequence of <b>relay 1</b> (lock), <b>relay</b> <b>2</b> (door), and <b>relay 3</b> (occupied indicators) for normally locked, single occupancy restrooms

## **FUNCTIONS (continued)**

FUNCTION	SUBJECT	MOST COMMON APPLICATIONS
nU	Normally Unlocked Restroom	Sequence of <b>relay 1</b> (lock), <b>relay</b> <b>2</b> (door), and <b>relay 3</b> (occupied indicators) for normally unlocked, single occupancy restrooms
dn	3-Relay Sequencer + "Day/Night Mode"	Sequence of <b>relay 1</b> , <b>relay 2</b> , and <b>relay 3</b> via trigger of <b>input 1</b> or <b>WET input</b> , <b>input 2</b> operation dependent upon <b>input 4</b> ("day/ night mode")
00	Disable (default)	2-659-0240 disabled; 00 is the default setting and has no assigned function

#### SPECIFICATIONS

Supply Voltage	12 to 24 VAC / DC
Power Consumption	30 to 130 mA; DRY Output
Temperature Range	-15° to 150°F
Dimensions	5.2" x 2.2" x 1.0"
Housing Material	Clear ABS Plastic
Input Specification	1 to 4; DRY Contact
WET Input	5 to 24 VAC / DC
Contact Rating DRY Relay #1 Relay #2 Relay #3	3A @24VAC / 30VDC 3A @24VAC / 30VDC 1A @24VAC / 30VDC
Contact Rating WET Relay #1	1A

