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.

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.

Table of Contents

Component Selection .................................................. 3

Locking Devices ......................................................... 5
Electric Strikes .......................................................... 6
Delayed Egress ............................................................ 9
Magnetic Locks ......................................................... 13-21

Access Controls ......................................................... 23
Key Switches .............................................................. 24, 27
Keypads ................................................................. 25-26

Ingress & Egress Devices ........................................... 29
2972/2972 IET Exit Switch .......................................... 30
2973 Code Compliant Exit Switch ................................. 31
2-679-0611/12 PIR Egress Sensor ................................. 32
2977 Piezoelectric Exit Switch ..................................... 33
2978 Touchless Exit Switch ......................................... 34
4801 Non-Latching Pressure Sense Push Bar .................. 35
2-679-0708 Emergency Door Release ......................... 36
Electric Power Transfer Devices ................................. 37
Door Position Sensors ............................................... 39
Power Supply & Door Controllers ............................. 41

Low Energy Power Operators ................................. 51
Component Selection ............................................... 53
8400 Series .............................................................. 60
8300 Series .............................................................. 67
Actuators ................................................................. 79
Pedestrian Presence Sensors ...................................... 89
Accessories ............................................................... 93
COMPONENT SELECTION

1 Locking Devices (Pages 5-21)
- Electric Strike
- Delayed Egress
- Electrified Lockset
- Exit Device
- Frame Actuator Lockset
- Magnetic Lock

2 Access Controls (Pages 23-27)
- Standalone or Network
  - Keyswitch
  - Digital Keypad
  - Card Reader

3 Egress Devices (Pages 29-36)
- Exit Switch
- PIR Egress Sensor
- Exit Sense Bar
- Emergency Door Release

4 Electric Power Transfer Devices (Pages 37-38)
- Required With Locksets & Exit Devices
  - Electric Power Hinge
  - Power Transfer Loop
  - Concealed Power Transfer
  - Electrified Roton

5 Door Position Sensors (Pages 39-40)

6 Power Supply & Door Controllers (Pages 41-49)
2901 Power Supply
- Designed to operate exit devices equipped with electric latch retraction (ELR)

2902 Power Supply
- Designed to operate exit devices equipped with electric latch retraction with day/night mode feature (ELR)

2903 Power Supply
- Provides power for Fail Safe or Fail Secure locking devices
- 24 V output; 2 AMP capacity
- Filtered/regulated

2904 Power Supply
- Provides power and control for openings with an electrified locking device and automatic door operator
- 24 V output; 2 AMP capacity
- Filtered/regulated

2908 Power Supply
- Modular
- Provides power for Fail Safe or Fail Secure locking devices
- 12/24 V output; 1 AMP capacity
- Filtered/regulated

2909 Power Supply
- Provides power for Fail Safe or Fail Secure locking devices
- 12/24 V output; 2 AMP capacity
- Filtered/regulated
Hager offers a comprehensive product line of electronic locking devices ranging from strikes, delayed egress systems, and magnetic locks.

Electric door strikes allow 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

**MODELS**
- 2925

**WARRANTY**
- One-year warranty

**APPLICATION**
- Cylindrical locksets with up to 5/8” (15mm) throw latch bolts
- Access controlled ingress for fail secure or fail safe openings (field selectable)
- Economy option provides great performance and value

**Latch:**
- 1/2” (13 mm) [5/8” (16 mm) with 1/8” (3 mm) door gap]

**FEATURES**

**Components:**
- Quick and easy installation with low profile 1-1/4” (32 mm) backset
- All stainless steel parts with durable diecast body for corrosion resistance
- Compact low profile design with internally mounted solenoid and factory supplied mounting tabs
- Non-handed (reversible)
- Latch status output (standard)

**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
- Plug-In Buzzer 12/24VDC
- Indicates fail secure strike is energized and unlocked

**RECT**
- Part no. 2-679-0029
- Converts AC to DC
- Wire leads

**FINISHES**
- US32D
### LOCKING DEVICES - 2928 MULTI-APPLICATION ELECTRIC STRIKE

**MODELS**
- 2928-SC
- 2928-RC
- 2928-6R
- 2928-7R

**WARRANTY**
One-year warranty

**APPLICATION**
- Quick and easy installation with low profile 1-3/16" backset
- Latch position status (standard)
- Keeper locked/unlocked status (standard)
- Keeper open/closed status (optional)
- Compact low profile design with internally mounted solenoid and factory supplied mounting tabs
- Non-handed (reversible)
- 1/4" (6 mm) horizontal alignment adjustment
- All stainless steel parts with durable diecast body for corrosion resistance
- Stainless steel is standard with square corner faceplates
- Aluminum standard with radius corner faceplates
- Plug in tail connectors

**FEATURES**

**Components:**
- ANSI A156.31, Grade 2

**OPTIONS**
- ALM (standard with 2928-RC, 2928-6R, 2928-7R)

**CERTIFICATION**

**OPTIONS**
- KOC: Keeper/open closed status

**ELECTRICAL SPECIFICATIONS**

**Inputs:**
- Current/Voltage
  - 200/100 mA @ 12/24VDC
  - 140/70 mA @ 12/24VAC

**Monitoring:**
- Latch Status (Std.)
  - SPDT, Dry 3 A @ 30VDC
- Keeper Locked Status (Std.)
  - SPDT, Dry 3 A @ 30VDC
- Keeper Open Status (Opt.)
  - SPDT, Dry 3 A @ 30VDC

**MECHANICAL SPECIFICATIONS**

**Dimensions:**
1-1/4" (32 mm) W x 4-7/8" (124 mm) H x 1-3/16" (30 mm) D

**ACCESSORIES**
- BUZZ
  - Part no. 2-679-0028
  - Plug-In Buzzer 12/24VDC
  - Indicates fail secure strike is energized and unlocked

**FINISHES**
- US32D (2928-SC only)
- ALM (standard with 2928-RC, 2928-6R, 2928-7R)
LOCKING DEVICES - 2930 UNIVERSAL APPLICATION ELECTRIC STRIKE

MODELS
2930-CYL
2930-MOR
2930-MDB

WARRANTY
One-year warranty

APPLICATION
• Heavy duty electric strike
• 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)
• Designed for new construction and retrofit applications
• Field selectable fail safe or fail secure (default setting) with no disassembly
• For use on fire-rated and non fire-rated doors
• Fail safe is not permitted on fire-rated doors

FEATURES
Components:
• Retrofits existing ANSI 4-7/8” (124 mm) strike prep - no centerline relocation
• Fail secure standard; field reversible to fail safe (no disassembly)
• Up to 3/4” (919 mm) latch bolt and 1” (25 mm) deadbolt
• Non-handed (reversible)
• 1/8” (3 mm) horizontal alignment adjustment
• Factory tested 2,500 lbs.
• Exceeded 1,000,000 cycles
• UL tested 1,500 lbs.
• 70 ft-lb dynamic strength
• Internally mounted solenoid, no heat in keeper
• Tamper resistant
• All stainless steel parts with durable diecast body for corrosion resistance
• Plug in tail connectors

Certification:
• ANSI A156.31 compliant, Grade 1
• UL - 1034 Burglary Resistant (interior use application)
• BP - 10254
• IL10C.3H Fire-Rated, 4’ x 8’ door
• NFPA 252
• CAN 4-5104 (Fail Secure Only)

ELECTRICAL & MECHANICAL SPECIFICATIONS

Input:
Current/Voltage
600/300 mA @ 12/24V DC

Monitoring:
LBM (Opt.)
SPDT, Dry 5 A @ 30V DC

DSM (Opt.)
SPDT, Dry 5 A @ 30V DC

DBM (Opt.)
SPDT, Dry 5 A @ 30V DC (Handed)

ACCESSORIES
BUZZ
• Part no. 2-679-0028
• Plug-In Buzzer 12/24 VDC
• Indicates fail secure strike is energized and unlocked

RECT
• Part no. 2-679-0029
• Converts AC to DC
• Wire leads

FINISHES

OPTIONS
LBM
• Latch Bolt Monitor
• Door closed/latched or open/unlatched status
• Access control anti-tailgate/timer reset signal

DSM
• Door Secure Monitor (DSM)
• Door secure and unlocked monitoring
• Mantraps, interlocks, airlocks

DBM
• Deadbolt Monitoring (DBM - Handed)
• Signals deadbolt projected or retracted
• Occupied signal rooms/bathrooms
• Manual lockout of access control by deadbolt

NOTES
Fire-Rated:
Not approved for fail safe operation on fire-rated doors

Handing:
• CYL, MOR with monitoring are non-handed
• DBM with monitoring is handed
MODELS
4501 OBDE  On Board Delayed Egress Exit Device

WARRANTY
One-year warranty

APPLICATION
• Control pedestrian traffic
  - Airport & Public Facility Security and Safety
  - Loss Prevention
• Wandering Patient and Infant Protection (Compatible with Hugs® and other patient tracking systems)
• Intended for single or double doors that require panic hardware

FEATURES
Components
• 15 (or optional 30) second egress delay
• 1 or 2 second nuisance delay
• Built-in function keyswitch provides alarm and lock reset, 1 to 30 second bypass, sustained bypass, and additional key switch
• Control inputs include 1 to 30 second request-to-exit and access bypass with anti-tailgate and alarm reset
• Field selectable trigger modes from exit device (N/O or N/C)
• Field selectable automatic or manual power up after emergency release or power loss

Built-In Annunciation:
• Armed mode
• Nuisance mode
• Irreversible egress mode
• Release mode
• Digital countdown display
• Field selectable voice notification or tone
• Field selectable male voice with security message or female voice with safety message

Monitoring Outputs:
• Armed status
• Egress initiation status
• Released status

Power Up Modes:
Field selectable automatic or manual power up after emergency release or power loss

Code Compliance:
• Use of manual power up complies with California Building Code (OSHPD) requirements
• International Fire Code (IFC) 1008.1.8.6 Delayed Egress Locks
• International Building Code (IBC) 1008.1.8.6 Delayed Egress Locks
• NFPA 101, Life Safety Code 7.2.1.6.1 Delayed Egress Lock
• NFPA 1 Uniform Fire Code
• California Building Code (CBC) 1008.1.8.6 Special Egress Control Devices

Note:
• Requires 3902 Mortise Cylinder, sold separately (Conventional Core Only, 1-1/8” length recommended)
• Exit Device cannot be cut down once the OnBoard Delayed Egress modification has been made to the device
• Requires Mortise Cylinder, sold separately

ELECTRICAL SPECIFICATIONS
Inputs:
Voltage Input:
• Single 540mA @ 24VDC
• Tandem 790mA @ 24VDC

Reset Input:  N/O, Dry input
REX Input:    N/C, Dry input
Trigger:      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
Locked Output: SPDT Dry, 1A @ 30 VDC, Dry

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

- ON BOARD DELAYED EGRESS
MODELS
4501 DE/4601 DE Delayed Egress Exit Device
2-679-0630 Delayed Egress Wall Mount Controller
- Must be ordered separately

WARRANTY
One-year warranty

APPLICATION
- Control pedestrian traffic
  - Airport & Public Facility Security and Safety
  - Loss Prevention
- Wandering Patient and Infant Protection (Compatible with Hugs® and other patient tracking systems)
  - Intended for single or double doors that require panic hardware

FEATURES
Components:
- Alternating 85 db tone and voice message (75 db @ 3 feet)
  - Voice and digital display provides informative annunciation for people without prior knowledge, including the blind and hearing impaired
  - Voice provides warning or safety message, countdown and time of door release
  - Digital countdown display indicated if the door was opened after lock release
- 15 or 30 second egress delay
- 1 or 2 second nuisance delay
- Built-in function keypad provides alarm and lock reset, 1 to 30 second bypass, sustained bypass, and additional key switch
- Control inputs include 1 to 30 second request-to-exit and access bypass with anti-tailgate and alarm reset
- Field selectable trigger modes from exit device (N/O or N/C)
- Field selectable automatic or manual power up after emergency release or power loss

Built-In
Annunciation:
- Armed mode
- Nuisance mode
- Irreversible egress mode
- Release mode
- Digital countdown display
- Field selectable voice notification or tone
- Field selectable male voice with security message or female voice with safety message

Monitoring
Outputs:
- Armed status
- Egress initiation status
- Released status

Power Up Modes:
- Field selectable automatic or manual power up after emergency release or power loss

Code Compliance:
- Use of manual power up complies with California Building Code (OSHPD) requirements
- International Fire Code (IFC) 1008.1.8.6 Delayed Egress Locks
- International Building Code (IBC) 1008.1.8.6 Delayed Egress Locks
- NFPA 101, Life Safety Code 7.2.1.6.1 Delayed Egress Lock
- NFPA 1 Uniform Fire Code
- California Building Code (CBC) 1008.1.8.6 Special Egress Control Devices

ELECTRICAL SPECIFICATIONS
Inputs:
Voltage Input:
- Single 430mA @ 24VDC
- Tandem 680mA @ 24VDC

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)

2958T
Tandem magnetic lock with 1650 lbs. holding force (748 kg)

WARRANTY
One-year warranty

APPLICATION

• Control pedestrian traffic
  - Airport & Public Facility Security and Safety
  - Loss Prevention
• Wandering Patient and Infant Protection (Compatible with Hugs® and other patient tracking systems)
• Intended for single doors with latching or non-latching hardware
• Tandem model intended for use with pairs of doors with latching or non-latching hardware where activating the lock unlocks both doors

FEATURES

Components:
• Field selectable voice and tone or tone only (75 db @ 3 feet)
  - Voice and digital display provides informative annunciation for people without prior knowledge, including the blind and hearing impaired
  - Voice provides warning or safety message, countdown and time of door release
  - Digital countdown display indicated if the door was opened after lock release
• 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
• Field selectable security or safety message
• Field selectable activation
• Field selectable automatic or manual relock upon power up after emergency release
• Integrated 3 position key switch
  - Provides lock and alarm reset Manual power up sustained bypass, time bypass, adjustment for 1, 15, 20 or 30 seconds
• Field selectable door prop alarm
  - Alarm sounds when the door has been left open after selected bypass time has elapsed
• Anti-tailgate feature
• Alternating 85db tone and voice message

Control Inputs:
• Remote access control and REX input, field adjustable for 1, 15, 20, or 30 seconds
• Remote reset input
• Manual power-up input
• Emergency release input
• Anti-tailgate input

Monitoring Outputs:
• Door secure and unlocked output
• Delayed egress activation alarm output

Certifications:
ANSI certified, ANSI Grade 1

Code Compliance:
• International Building Code (IBC) 1008.1.8.6 Delayed Egress Locks
• International Fire Code (IFC) 1008.1.8.6 Delayed Egress Locks
• NFPA 101, Life Safety Code 7.2.1.6.1 Delayed Egress Lock
• California Building Code (CBC) 1008.1.8.6 Special Egress Control Devices
• BOCA, National Building Code 1017.4.1.2 Special Locking Arrangements
• Chicago Building Code 10 (13-160-269) Electromagnetic Locking Devices
  - Certificate of approval available
## LOCKING DEVICES - 2958 INTEGRATED DELAYED EGRESS LOCK

### OPTIONS
- **DPS**: Door Position Switch
- **MBS**: Magnetic Bond Sensor
- **ATS**: Anti-Tamper Switch

### RESET & CONTROL
- **PS**: Built-in reset push switch, available with NFPA (NA) only
- **NS**: Less key switch or push switch

#### Input Voltage:
- **Auto Sensing**: 12 to 24VDC

#### Current:
- **2958**
  - 830mA @ 12VDC
  - 450mA @ 24VDC
- **2958T**
  - 1500mA @ 12VDC
  - 850mA @ 24VDC

#### Input Types:
- **Reset Input**: N/O, Dry input
- **REX Input**: N/O, Dry input
- **Trigger Input**: N/O, Dry input
- **Fire Alarm Input**: N/O, Dry input

### MONITORING
#### 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
- **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

### MODELS
- **2941**
  - 600 lbs. holding force (272 kg)

### APPLICATION
- For interior door traffic control where physical attack is not a concern

### FEATURES
**Components:**
- Designed for system integrators, distributors, installers, and building owners presently using low cost import or private label brand access control hardware
- Interlocking quick mount assembly
- Provides superior, less obtrusive appearance compared to stainless steel epoxy sealed magnetic locks
- Full monitoring is standard
- Door status, lock status and bi-color LED included
- Adjustable mounting bracket with choice of self-drilling and tapping mounting screws or machine screws
- Wire access chamber with terminal block
- Printed circuit board with voltage and current spike protection
- Instant release anti-residual magnetism circuit

**Certification:**
- ANSI/BHMA A156.23 Grade 1, Compliant

### ELECTRICAL SPECIFICATIONS
**Input:**
- Current/Voltage: 500mA/250mA @ 12/24VDC (field selectable)

**MONITORING**
- **Lock Status:** SPDT, Dry 2mA @ 30VDC
- **Door Status:** SPDT, Dry 500mA @ 30VDC

### ACCESSORIES
- 2-679-0101 Top Jamb Kit
- 2-679-0103 Glass Armature Mounting Kit
- 2-679-0106 Angle Bracket (cut to fit 2941)
- 2-679-0107 Stop Filler Plate (field cut for 2941)
- 2-679-0108 Stop Filler Plate (field cut for 2941)

### MECHANICAL SPECIFICATIONS
- **Lock Dimensions:** 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

MODELS
2942

1200 lbs. holding force (545 kg)

WARRANTY
One-year warranty

APPLICATION
For perimeter and interior door security and access control

FEATURES
Components:
• Designed for system integrators, distributors, installers, and building owners presently using low cost import or private label brand access control hardware
• Interlocking quick mount assembly
• Provides superior, less obtrusive appearance compared to stainless steel epoxy sealed magnetic locks
• Full monitoring is standard
• Door status, lock status and bi-color LED included
• Adjustable mounting bracket with choice of self-drilling and tapping mounting screws or machine screws
• Wire access chamber with terminal block
• Printed circuit board with voltage and current spike protection
• Instant release anti-residual magnetism circuit

Certification: ANSI/BHMA A156.23 Grade 1, Compliant

ELECTRICAL SPECIFICATIONS
Input:
Current/Voltage: 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

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” (l) x 1-1/2” (h) x 3/4” (d)
[266 (l) x 12 (h) x 19 (d) mm]

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]

TOP FILLER PLATES

Used where the frame stop does not provide enough mounting surface area for proper lock mounting.
MODELS
2951 Single magnetic lock with 1650 lbs. holding force (748 kg)
2952 Double magnetic lock with 1650 lbs. holding force (748 kg)
2953 Single magnetic lock with 1200 lbs. holding force (545 kg)
2954 Double magnetic lock with 1200 lbs. holding force (545 kg)

APPLICATION
For perimeter and interior door security and access control

FEATURES
Components:
- Modular design
- Modular upgrade kits
- Field upgradeable without removal
- Uniform design and installation
- Identical housing, template, and accessories
- Quick mount assembly
- Compatible with any access control system
- Secure wiring and mounting screws with interlocking mounting plate

Certification: ANSI/BHMA A156.23 Grade 1 Compliant

OPTIONS
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:
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
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
Dimensions:
22” (559 mm) W x 2-3/4” (70 mm) H x 1-9/16” (40 mm) D

FINISHES
ALM Aluminum anodized (standard)
DBZ Dark bronze anodized

WARRANTY
Lifetime warranty
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.

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

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
ALM
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)
ANGLED 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

MODELS
2961 Single magnetic shear lock with 2000 lbs. holding force (907 kg)

WARRANTY
One-year warranty

APPLICATION
For commercial grade hollow metal and wood doors and frames and Herculite doors with top rails

FEATURES
• Concealed, high security, Fail Safe locking mechanism
• Incorporates floating armature assembly and special alloy steel locking tabs on both lock and armature assemblies
• May be adjusted both vertically and laterally to compensate for wide door gaps and warped or misaligned doors

Components:
• 2,000 lbs (907 kg) holding force without current inrush or high operating temperature
• 8” x 1-1/2” (203 mm x 38 mm) lock
• Integrated electronics
• 1-5/8” (41 mm) depth for 1-3/4” - 2” (44 mm - 51 mm) frames
• Armature supplied with lock (specify type required - ITC, FTC, or HTC)
• Door static sensor ensures door is at rest and aligned, before the magnet is permitted to energize (eliminates the potential for lock misalignment)
• Lateral adjustment of shear tabs to compensate for warped or misaligned doors, permitting accurate locking
• Vertical adjustment of both the armature and the adjustable delay relock sensor compensates for wide door gaps
• Unique floating action for easy armature lift when the magnet is energized and provides ability to overcome wide door gaps
• Alloy shear tabs ensure continued high holding force
• No profiling of the soft armature steel that may be prone to wear and reduced holding force
• Advanced electronic circuitry that incorporates door static, positioning and timed relock sensor and automatic voltage sensing for 12/24 VDC input
• Noise dampeners reduce the noise associated with locking and unlocking

OPTIONS
MBS
• Bond sensor indicates proper armature contact or reduced holding power due to improper armature contact or tampering
• SPDT 0.25 amp

DPS
• Door position switch indicates door open or closed
• SPDT 0.25 amp maximum

HTR
Herculite top rail armature adjustment bracket for leading edge adjustments

ELECTRICAL SPECIFICATIONS
Input:
Voltage:
Auto Sensing 650/350 mA @ 12/24 VDC

MONITORING
DPS
SPDT, Dry 20mA @ 30VDC
MBS
SPDT, Dry 20mA @ 30VDC

ACCESSORIES
2-679-0600
Wood door reinforcement box (sold separately)

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

MECHANICAL SPECIFICATIONS
Lock Dimensions: 8” (203 mm) W x 1-1/2” (38 mm) H x 1-5/8” (41 mm) D

Armature
Dimensions: 8” (203 mm) W x 1-1/2” (38 mm) H x 7/8” (48 mm) D

FINISHES
ALM Aluminum anodized (standard)
LOCKING DEVICES - 2965 MAGNETIC SHEAR LOCK

MODELS
2965 Single magnetic shear lock with 2700 lbs holding force (1225 kg)

WARRANTY
One-year warranty

APPLICATION
For commercial grade hollow metal and wood doors and frames and Herculite doors with top rails

FEATURES
• Concealed, high security, Fail Safe locking mechanism
• Incorporates floating armature assembly and special alloy steel locking tabs on both lock and armature assembles
• May be adjusted both vertically and laterally to compensate for wide door gaps and warped or misaligned doors

Components:
• 2,700 lbs (1225 kg) holding force without current inrush or high operating temperature
• 10-7/16” x 1-1/2” (265 mm x 38 mm) lock
• Integrated electronics
• 1-5/8” (41 mm) depth for 1-3/4” - 2” (44 mm - 51 mm) frames
• Armature supplied with lock (specify type required - ITC, FTC, or HTC)
• Door static sensor ensures door is at rest and aligned, before the magnet is permitted to energize (eliminates the potential for lock misalignment)
• Lateral adjustment of shear tabs to compensate for warped or misaligned doors, permitting accurate locking
• Vertical adjustment of both the armature and the adjustable delay relock sensor compensates for wide door gaps
• Unique floating action for easy armature lift when the magnet is energized and provides ability to overcome wide door gaps
• Alloy shear tabs ensure continued high holding force
• No profiling of the soft armature steel that may be prone to wear and reduced holding force
• Advanced electronic circuitry that incorporates door static, positioning and timed relock sensor and automatic voltage sensing for 12/24 VDC input
• Noise dampeners reduce the noise associated with locking and unlocking

OPTIONS
MBS
• Bond sensor indicates proper armature contact or reduced holding power due to improper armature contact or tampering
• SPDT 0.25 amp

DPS
• Door position switch indicates door open or closed
• SPDT 0.25 amp maximum

HTR
Herculite top rail armature adjustment bracket for leading edge adjustments

ELECTRICAL SPECIFICATIONS
Input:
Voltage: Auto Sensing 800/400 mA @ 12/24 VDC

MONITORING
MBS SPDT, Dry 250mA @ 30VDC
DPS SPDT, Dry 250mA @ 30VDC

ACCESSORIES
2-679-0601 Wood door reinforcement box (sold separately)

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

MECHANICAL SPECIFICATIONS
Lock Dimensions: 10-7/16” (265 mm) W x 1-1/2” (38 mm) H x 1-5/8” (41 mm) D

Armature Dimensions: 11” (279 mm) W x 1-1/2” (38 mm) H x 7/8” (48 mm) D

FINISHES
ALM Aluminum anodized (standard)
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

### MODELS

| 29KS | Key switch |

### WARRANTY

| One-year warranty |

### APPLICATION

- Access control
- Automatic gate operation
- Alarm shunt
- Alarm reset
- Machine operation

### FEATURES

- Provides an economical method of providing authorized control for a variety of applications
- Choice of several contact configurations ensures compatibility with virtually any system
- Compatible with U.S. standard 1.125” and 1.25” mortise key cylinders and interchangeable core cylinders (not included)
- Compatibility with a new or existing facility mechanical key system is maintained
- Standard switch assemblies are single gang box mounted

### Components:

- Single gang, wall mounted, recessed key cylinder
- Tamper resistant, recessed cylinder
- Tamper resistant spanner screws
- Heavy duty all steel assembly
- 20 gauge stainless steel faceplate
- Large actuator for positive and consistent activation
- Compatible with 1.125” or 1.25” mortise cylinder (non included)

### Functions:

- **ASD**: Alternate Action (on/off) SPDT
- **MSD**: Momentary SPDT
- **ADD**: Alternate Action (on/off) DPDT
- **MDD**: Momentary DPDT

### ELECTRICAL SPECIFICATIONS

- **Voltage**
  - 6 amp @ 30 VDC
  - 7”, 22 gauge wire leads

### OPTIONS

- **LEDG**: One (1) green LED
- **LEDR**: One (1) red LED
- **2LED**: One (1) green and one (1) red LED

### CYLINDER

- **3902**: 1-1/8” recommended (order separately)
- **3978**: Cam required (order separately)

### MECHANICAL SPECIFICATIONS

- **Dimensions**: 2-7/8” (73 mm) W x 4-1/2” (114 mm) H x 20 Gauge (0.912 mm)

### FINISHES

| US32D |

### NOTES

- Single switch assembly requires cloverleaf cam
- Dual switch assembly requires standard cam
## ACCESS CONTROLS - 2915 HEAVY DUTY KEYPAD

<table>
<thead>
<tr>
<th>MODELS</th>
<th>Heavy Duty Keypad</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARRANTY</td>
<td>One-year warranty</td>
</tr>
</tbody>
</table>
| APPLICATION | • Single gang indoor keypad  
• Designed to control access of a single entry point for facilities with up to 500 users  
• Each user assigned a personal identification number (PIN) |
| FEATURES Components: | • Blue backlit, moisture-resistant keypad  
• 3/32” (2 mm) thick stainless steel faceplate  
• 1/4” (6 mm) wall extrusion depth  
• 500 users, 4-6 digit PIN codes  
• 4 outputs, 2 relay and 2 solid status outputs timed or latching (on/off)  
• Assign entry PINs to relays 1 and/or 2  
• LED status: access, lockout  
• Tactile audible key press, select volume  
• Timed anti-passback  
• Keypad tamper lockout  
• Code activated timed entry PIN disable  
• 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)  
• Choice of 2 solid status output functions (alarm shunt, forced entry, door ajar, tamper lockout, keypad active) |

### ELECTRICAL SPECIFICATIONS

**Inputs:**

- **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)  

**Outputs**

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

### MECHANICAL SPECIFICATIONS

- **Dimensions:** 3” (76 mm) W x 4-3/4” (121 mm) H x 1-1/2” (38 mm) D  
## ACCESS CONTROLS

### MODELS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2916</td>
<td>Heavy Duty Keypad</td>
</tr>
<tr>
<td>2916P</td>
<td>Heavy Duty Keypad</td>
</tr>
</tbody>
</table>

### WARRANTY

- One-year warranty

### APPLICATION

- Surface mount indoor/outdoor keypad
- Designed to control access of a single entry point for facilities with up to 500 users
- Each user assigned a personal identification number (PIN)

### FEATURES

**Components:**
- Heavy cast vandal resistant housing
- Heavy cast metal blue backlit keys
- 500 users, 4-6 digit PIN codes
- 4 outputs, 2 relay and 2 solid status outputs timed or latching (on/off)
- Assign entry PINs to relays 1 and/or 2
- LED status: access, lockout
- Tactile audible key press, select volume
- Timed anti-passback
- Keypad tamper lockout
- Code activated timed entry PIN disable
- 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:**

- **Voltage:** Auto Sensing 12 to 24VAC/DC
- **Current:** 30mA typical, 150mA maximum
- **Operating Temperature:** -20° to 130°F (-30° to 54°C)
- **Operating Humidity:** 5 - 95% (non-condensing)

**Outputs**

- **Relay 1:** Form “C”, 5 amps @ 28VDC
- **Relay 2:** Form “C”, 2 amps @ 28VDC
- **Switch to common outputs 3 & 4:** 100mA @ 30VDC

### MECHANICAL SPECIFICATIONS

**Dimensions:**

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

### ACCESSORIES

- 2-679-0669: Protective Shroud

### FINISHES

- US32D
## ACCESS CONTROLS - 2-679-0708 UNDER DESK PUSH SWITCH

<table>
<thead>
<tr>
<th>MODELS</th>
<th>Under Desk Switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-679-0708</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WARRANTY</th>
<th>One-year warranty</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>Enables the remote control of doors equipped with electric locks and access controls</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>Mounts to the underside of a desk for remote door control</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ELECTRICAL SPECIFICATIONS</th>
<th>Momentary push switch</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>MECHANICAL SPECIFICATIONS</th>
<th>1” (25 mm) W x 2-1/4” (57 mm) H x 2-1/2” (63 mm) D</th>
</tr>
</thead>
</table>
29EA
Door Prop Alarm
Key Switches

DESCRIPTION
• Provides audible alarm when a door is accessed or left open
• Installs in single gang or double gang enclosures
• Compatible with U.S. standard 1.125” and 1.25” mortise key cylinders and interchangeable core cylinders (Sold Separately)

FUNCTIONS
• N - No Key Switch
• M - Mortise Cylinder Switch (Sold Separately)
• K - Key Switch

FEATURES
• Audible sirens with adjustable timer settings
• Bypass status indicator light
• Vandal-resistant aluminum construction with security screws
• Optional key switch or mortise cylinder
• Adjustable Timed Delay
• Exit Alarm on Door Opening
• Automatic or Manual Alarm Reset
• Output Relays
• Integral Bi-color LED Status Indicator
• Compact Universal Mounting
• 85dB Piezo Buzzer Alarm

ELECTRICAL SPECIFICATIONS
Inputs:
Voltage: 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.

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

LED Indicators:
Green - Normal Operation
Red - Alarm Activated

CYLINDER
3902 - 1-1/8” recommended (order separately)
HS4 - HG02 GEO Mortise Cylinder
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.
# EGRESS DEVICES - 2972 EXIT SWITCH

## MODELS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2972-M</td>
<td>Momentary SPDT Exit Switch</td>
</tr>
<tr>
<td>2972-T</td>
<td>Integrated electric timer (adjustable 1-60 seconds) exit switch</td>
</tr>
</tbody>
</table>

## WARRANTY

One-year warranty

## APPLICATION

- 2” (50 mm) illuminated switch button for easy activation
- High impact resistant material stands up to abuse
- "Push to Exit" sign complies with NFPA requirements
- Blue illuminate button designed for access and egress applications for the disabled

## OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEDG</td>
<td>One (1) green LED</td>
</tr>
<tr>
<td>LEDR</td>
<td>One (1) red LED</td>
</tr>
<tr>
<td>2LED</td>
<td>One (1) green and one (1) red LED</td>
</tr>
<tr>
<td>BLU</td>
<td>Disabled access button</td>
</tr>
</tbody>
</table>

## ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2972M</td>
<td>SPDT, 5A @ 30 VDC</td>
</tr>
<tr>
<td>2972T</td>
<td>SPDT, 2A @ 12/24VDC</td>
</tr>
<tr>
<td>Wire Leads</td>
<td>6” (152 mm) - 20 gauge</td>
</tr>
</tbody>
</table>

## MECHANICAL SPECIFICATIONS

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

## FINISHES

<table>
<thead>
<tr>
<th>Finish</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>US32D</td>
<td></td>
</tr>
</tbody>
</table>
# Egress Devices - 2973 Code Compliant Exit Switch

## Models
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2973</td>
<td>Code Compliant Exit Switch with integrated timer (fixed 30 seconds)</td>
</tr>
</tbody>
</table>

## Warranty
- One-year warranty

## Application
- Code compliant manual releasing devices and sensors
- Switch and sensor used together comply with manual releasing device and sensor device requirements for access controlled egress doors

## Certification:
- 2006 IBC 1008.1.3.4
- 2012 IBC 1008.1.9.8
- NFPA 7.2.1.6.2
- IFC 1008.1.3.4
- California Fire Code

## Options
<table>
<thead>
<tr>
<th>LEDG</th>
<th>One (1) green LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEDR</td>
<td>One (1) red LED</td>
</tr>
<tr>
<td>2LED</td>
<td>One (1) green and one (1) red LED</td>
</tr>
</tbody>
</table>

## Electrical Specifications
- Output: SPDT, 5A @ 30 VDC
- 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

## Finishes
- US32D
EGRESS DEVICES - PIR EGRESS SENSOR

MODELS
2-679-0611 White PIR egress sensor
2-679-0612 Black PIR egress sensor

WARRANTY
One-year warranty

APPLICATION
• Access control system unit
• Unlocks doors automatically when persons approaching door are detected
• Compiles with national fire and building code requirements for access controlled egress doors
• Code compliant Fail Safe mode releases locks when power to PIR sensor is interrupted

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

| 2977 | Stainless Steel Piezoelectric Request-to-Exit Switch |

## WARRANTY

One-year warranty

## APPLICATION

- Designed for indoor, outdoor, commercial, and industrial egress applications
- Ideal for harsh or high traffic conditions

## FEATURES

**Components:**
- Vandal and weather resistant
- 3/32” (2 mm) stainless steel vandal resistant faceplate
- No moving parts
- Selectable bi-color illumination status (Relay OFF - red or green) (Relay ON - red or green)
- Adjustable timer output, 1-30 seconds
- Superior performance in virtually any environment
- Can be used to control an automatic door, electromechanical lock, strike, or magnetic lock
- May be tied into the remote bypass (request-to-exit) input of an access control system
- Can be used to shunt an alarm system to allow egress from a secure area

## 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: |
| 100,000 cycles @ 3 A 30 VDC life expectancy |
| 200,000 cycles @ 1.5 A 30 VDC life expectancy |

## MECHANICAL SPECIFICATIONS

| 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

## Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2978</td>
<td>Touchless Exit Switch</td>
</tr>
</tbody>
</table>

## Warranty

- One-year warranty

## Application

- Designed to control electric locks/strikes, magnetic locks, or automatic door operators
- No touch wave-to-exit switch
- Active with wave of the hand
- For sanitary entry/exit applications

## Features

- Bi-color status illumination
- Quick connect screwless terminal block for easy installation
- No moving parts
- Uses infrared sensor technology

## 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
- **Range:** 4” (10 cm)

## Mechanical Specifications

- **Dimensions:** 2-3/4” (70 mm) W x 4-1/2” (114 mm) H
- **Finishes:** US32D
Egress Devices - 4801 Non-Latching Pressure Sense Push Bar

Models
4801

The Sure Exit is a non-latching, heavy duty, request-to-exit push bar that will activate the 2958 & 2958T when slight pressure is applied to the bar.

Warranty
One-year warranty

Features
Components:
- Magnetic lock release
- Access control request-to-exit
- Delayed egress trigger
- Alarm shunt
- CCTV or alarm activation
- Tri-Failsafe
  - a third redundant micro switch is automatically activated to release the door if both sensors or electronics fail
- No moving parts, quick, and quiet operation
- Human touch not required
- Sensor calibration not required
- Field installed green sign with 1” letters
- Heavy duty construction
- Narrow, low profile
- Two outputs
  - two dry contacts for lock release, request-to-exit, alarm shunt, alarm activation, CCTV activation
- Armored power loop
  - 18” flex stainless conduit

Electrical Specifications
Voltage Input: 12/24 VDC ±10%
- no field adjustment
Current Input: 20 mA @ rest, 115 mA active
Output: Two, SPDT Dry, 3 Amp @ 28 VDC
Operating Temperature: 0° to 150° F (-18° to 66° C)

Mechanical Specifications
Activation Force:
- 5 lbs. (2.2 kg)
- Field adjustable up to 15 lbs. (6.8 kg)
Dimensions: 2-3/8” (60 mm) W x 36” (914 mm) H x 1-7/8” (48 mm) D

Options
- 42” (1,067 mm) wide doors
- 48” (1,219 mm) wide doors

Finishes
ALM | Aluminum anodized
BLK | Black anodized

Notes
Length: Bars may be field cut
**RESTROOM CONTROLS**

**MODEL**
2-659-0368  
For single occupancy normally locked/unlocked restrooms

**KIT CONTENTS**
- 2-659-0240 Programmable Relay  
- 2-659-0369 DPS Switch  
- 2-659-0370 Push to Lock Switch  
- 2-659-0371 Single Gang Occupied When Lit indicator with buzzer

**2-659-0240**
Programmable Relay  
Supply Voltage: 12 to 24V AC/DC  
Power Consumption: 30 to 130 MA; DRY Output  
Temperature Range: -15 degrees to 150 degrees F  
Dimensions Housing: 5.2" x 2.2" x 1.0"  
Material Input: Clear ABS Plastic  
Specification WET: 1 to 4; DRY Contact  
Input Contact: 5 to 24V AC/DC  
Rating DRY:  
  - Relay #1: 3A @ 24 VAC/30VDC  
  - Relay #2: 3A @ 24 VAC/30VDC  
  - Relay #3: 1A @ 24 VAC/30VDC  
Contact Rating WET: 1A

**2-659-0369**
DSP Switch  
Max Current: 0.25A @ 30 VAC/DC  
Max Power: 3.0W  
Electrical Config.: SPDT  
Loop Type: Open or Close  
Max Gap Distance: 2"

**2-659-0370**
Push to Lock Switch  
Switch: SPST  
Max Current: 10A @ 125/250 FAC  
Max Power: 373W  
Config. High Volt: 15-24V AC/DC @ 0.06A  
Bulb Low Volt Bulb: 12-14V AC/DC @ 0.19A  
Mounting: Single Gang  
Dimensions: 2-19/25" (W) x 4-13/25" (H) x 3/4" (D)

**2-659-0371**
Occupied When Lit Indicator  
Voltage: 12-24V AC/DC +/- 10%  
Indicator: Audible Buzzer (selectable On/Off) and visual LED  
Material: Stainless Steel  
Certifications: FCC

**Building Codes**
Ontario Regulation 368/13 Compliant
# Restroom Controls

## 2-659-0372

### Emergency Kit

**In the event of an emergency push emergency button and audible and visual signal will be activated.**

- **Description:** For single occupancy restrooms where someone may require emergency assistance

- **Kit Contents**
  - 2-659-0373 Assistance Required Light
  - 2-659-0374 Push for Assistance button
  - Emergency signage

### 2-659-0373 Assistance Required Light

- **Material:** Stainless Steel and Polycarbonate

- **Lamp Voltage Rating:** 28V AC/DC

- **Sounder Voltage Rating:** 16-24V AC/DC

- **Sounder Current Rating:** 15 mA

- **Bulb Type:** Miniature Bayonet Type (#313)

- **Sounder & Lamp Terminal:** Two Pigtail Wires (each)

- **Dimensions:**
  - Single Gang Faceplate 2-3/4” (W) x 4-1/2” (H)
  - White Lens 2-1/4” (W) x 4” (H) x 3-1/8” (D)

### 2-659-0374 Push for Assistance Button

- **Voltage:** 12-24V AC/DC +/-10%

- **Material:** Stainless Steel and Polycarbonate

- **Indication:** Audible Buzzer (selectable On/Off and visual LED)

- **Button:** E-Stop button (push on/pull off)

- **Accessory:** Rubber Weather Gasket

- **Certifications:** FCC

### Emergency Signage

- **Material:** Polystyrene

- **Dimensions:** 12” (W) x 5-1/2” (H)

- **Language:** Double Sided (English and French)

- **Building Codes:** Ontario regulation 368-13 Compliant
2-679-0650
Emergency Door Release

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

WARRANTY  |  One-year warranty

APPLICATION  |  • 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

FEATURES  |  Components:
  • Remote monitoring
  • 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
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.
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

2 conductor
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)
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.
## DOOR POSITION SENSORS

<table>
<thead>
<tr>
<th>MODELS</th>
<th>Concealed Magnetic Contact Switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-679-0625</td>
<td>One-year warranty</td>
</tr>
</tbody>
</table>

### APPLICATION
Installed in the mortise of a hollow metal or aluminum frame and wood, hollow metal or aluminum door.

### ELECTRICAL SPECIFICATIONS
- Contact: SPDT, 50mA @ 30 VDC

### MECHANICAL SPECIFICATIONS
- Gap: 0.125” (3 mm)
- Faceplate: 4.875” (h) x 1.25” (w) x 0.125” (d)
- 123.83 mm (h) x 31.75 mm (w) x 3.18 mm (d)

---

<table>
<thead>
<tr>
<th>MODELS</th>
<th>Concealed Door Status Sensor</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-679-0626</td>
<td>One-year warranty</td>
</tr>
</tbody>
</table>

### APPLICATION
- Ideal for door status monitoring
- Easily installed in hollow metal and aluminum doors and frames

### ELECTRICAL SPECIFICATIONS
- Contact: SPDT, 50mA @ 30 VDC

### MECHANICAL SPECIFICATIONS
- Gap: 0.5” (12.7 mm)

### FIRE RATING
UL 10C Rated
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

MODELS
2911  6A Modular Power Supply

WARRANTY
One-year warranty

DESCRIPTION
• Modular design allows customization of each power supply
• Equipped with a high performance transformer and highly reliable electronic components
• Filtering and output voltage regulation provides protection and ensures the longevity of all system components

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
• Fire alarm input that provides simultaneous release of all Fail Safe/Fail Secure locks and door holders in case of an emergency
• Field selectable output that provides 12 VDC or 24 VDC
• 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:
• 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

- Modular design allows customization of each power supply
- Equipped with a high performance transformer and highly reliable electronic components
- Filtering and output voltage regulation provides protection and ensures the longevity of all system components

## 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
- Fire alarm input that provides simultaneous release of all Fail Safe/Fail Secure locks and door holders in case of an emergency
- Field selectable output that provides 12 VDC or 24 VDC
- 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:**

- 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 - 2909

MODELS
2909

WARRANTY
One-year warranty

APPLICATION
• Modular design allows customization of each power supply
• Regulated modular access control power supply
• Equipped with a high performance transformer and highly reliable electronic components
• Filtering and output voltage regulation provide protection and ensure the longevity of all system components

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
• 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:
• 12/24 VDC, 2A
  - field selectable
• 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:
• 4” (102 mm) W x 12” (305 mm) H x 12” (305 mm) D
• 12 gauge steel

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 - 2908**

### MODELS

| 2908 | 1A Modular Access Control Power Supply |

### WARRANTY

- One-year warranty

### APPLICATION

- Modular design allows customization of each power supply
- Regulated modular access control power supply
- Equipped with a high performance transformer and highly reliable electronic components
- Filtering and output voltage regulation provide protection and ensure the longevity of all system components

### FEATURES

**Components:**

- Fire alarm input
  - 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 and battery backup status
- Separate PTC protected charging output
- Optional dual 12 VDC or 24 VDC outputs
- Standard California compliant manual release

### 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
  - 5 Amp hour battery backup
    - Uses a separate, protected output for charging - includes a low battery disconnect that protects the battery from potential damage during extended battery powered situations
    - 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.

- 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**

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

## MODELS
- **2-679-0662**
  - **12 VDC Output Regulator Module**

## WARRANTY
- One-year warranty

## APPLICATION
- Allows for dual voltage output applications where openings require a 12VDC and 24VDC

## ELECTRICAL SPECIFICATIONS
- **Input:**
  - 24 VDC
- **Output:**
  - 500A @12 VDC

## MODELS
- **2-679-0664**
  - **Universal Relay Module**

## WARRANTY
- One-year warranty

## APPLICATION
- • Conventional Relay (CR)
  - Dual Conventional Relay (2x CR)
  - Time Delay Relay (TD) (1-60sec)
  - Dual Time Delay Relay (2x TD) (1-60sec)
  - Latching Relay (LR) - Separate Latch and Release Inputs
  - Dual Latching Relay (2x LR) Pulse on Pulse off
  - Time Delay x Latching Relay
  - Interlock A (Air Lock)
  - Interlock B (2 Modules Required)

## ELECTRICAL SPECIFICATIONS
- **Input:**
  - 120/175mA @ 12/24 VDC
- **Output:**
  - 2 each field selectable wet or dry
  - Wet: 120/175mA@ 12/24 VDC
  - Dry: SPDT, Dry 10A @ 30 VDC

## MODELS
- **2-679-0703**
  - **Electric Latch Retraction Sequencer Module**

## WARRANTY
- One-year warranty

## APPLICATION
- Allow for sequencing of electrified hardware on openings with Auto Operator

## ELECTRICAL SPECIFICATIONS
- **Input:**
  - 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

MODELS 2-679-0704 | Access Control Module
WARRANTY | One-year warranty
APPLICATION | Installer friendly relay board used to control and monitor openings
ELECTRICAL SPECIFICATIONS
Input:
• 75mA@ 12/24 VDC
• 3 - N/C Normally Closed Inputs
• 3 - N/O Normally Open Inputs
Output:
• 5 Amp (Resistive) fail safe lock output
• 5 Amp (Resistive) fail secure lock output
• Lock status: SPDT (Form C) dry contact

MODELS 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 SPECIFICATIONS
Input:
• 85mA @ 24 VDC
• Dry N/O trigger input ONLY
Output:
• 16A surge
• 1A continuous
Note: Works with Hager 2909 Power Supply

MODELS 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 SPECIFICATIONS
• 2 SPDT 1 amp repay outputs
• On/off status
Note: Works with Hager 2909 Power Supply ONLY
### Models

| 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:**
- Filtered and regulated 24 VDC output
- 2A load capacity
- Class 2 rated outputs
- Overload, over voltage, and short circuit protection
- Automatically accepts 120 or 240 VAC input
- Built in fail safe or fail secure locking device controller
- Built in dry contact output for automatic door operator input
- Auxiliary 24 VDC constant voltage output (1 amp max output)
- Separate input for activation switch on entry and exit side of opening
- Fire alarm input
- Adjustable time delay

### 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
**MODELS**

| 2903 | Access Control & Locking Device Power Supply |

**WARRANTY**

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:

- Filtered and regulated 24 VDC output
- 2A load capacity
- Class 2 rated outputs
- Overload, over voltage, and short circuit protection
- Automatically accepts 120 or 240 VAC input
- Built in fail safe or fail secure locking device controller
- Surge suppression on fail safe and fail secure outputs
- Interface relay isolates locking device outputs from control switch
- Adjustable time delay

**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 - 2902**

<table>
<thead>
<tr>
<th>MODELS</th>
<th>Electric Latch Retraction Controller &amp; Power Supply with Day/Night Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARRANTY</td>
<td>One-year warranty</td>
</tr>
<tr>
<td>APPLICATION</td>
<td>For use with Hager’s 4500 Series Electric Latch Retraction (ELR) exit devices in a day/night mode of operation</td>
</tr>
<tr>
<td>FEATURES Components:</td>
<td>• Auxiliary 12 and 24 VDC outputs</td>
</tr>
<tr>
<td></td>
<td>• Built-in dry contact output for automatic door operator input</td>
</tr>
<tr>
<td></td>
<td>• Adjustable time delay</td>
</tr>
<tr>
<td></td>
<td>• Fire alarm input</td>
</tr>
<tr>
<td></td>
<td>• Operator day/night mode of operation</td>
</tr>
</tbody>
</table>

**ELECTRICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Input:</th>
<th>750mA @ 120 VAC; 60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output:</td>
<td>• 250mA @ 12.6-16.5 VDC; Unregulated &amp; Unfiltered</td>
</tr>
<tr>
<td></td>
<td>• 250mA @ 26.7-28.0 VDC; Unregulated &amp; Unfiltered</td>
</tr>
</tbody>
</table>

**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

MODELS
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:
• Auxiliary 12 and 24 VDC outputs
• Built-in dry contact output for automatic door operator input
• Adjustable time delay
• Fire alarm input
• Single or dual system latch retraction

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
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.

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.
LOW ENERGY POWER OPERATOR COMPONENT SELECTION

1 Low Energy Power Operators

8400 Series - (Pages 54-61)
- Premium Low Energy Power Operator
- Single Operator
- Paired Operator
- Double Egress Operator
- Single Operator Paired with Mechanical Closer

8300 Series - (Pages 67-69)
- Low Energy Power Operator
- Single Operator
- Double Egress Operator

2 Parts & Accessories

8400 Series - (Pages 63-65)
- Track Arm
- Standard Arm
- Standard Arm - Double Egress
- Track Arm - Double Egress
- Replacement Spindle

8300 Series (Pages 71-73)
- Standard Arm
- Standard Arm - Double Egress
- Track Arms
- Replacement Spindle 20 mm
- Replacement Spindle 35 mm
- Replacement Spindle 50 mm

3 Actuators (Pages 75-84)

- 4.5” Square Actuator
- 6” Square Actuator
- 4.5” Round Actuator
- 6” Round Actuator
- 1.5” x 4.75” Jamb Actuator
- 36” Low Profile Actuator
- 4.75” Vestibule Actuator
- Bollard Posts

4 Accessories (Pages 85-87)

- 433 MHz Receiver
- 3-Volt Wireless Transmitter
- 9-Volt Wireless Transmitter
- Wireless, One Button Transmitter
- Programmable Relay and Door Sequencer
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

DOOR OPENING WIDTH (DOW)

Hollow Metal Top Jamb Push 35mm Spindle
Hollow Metal Pull Side 20mm Spindle

NOTE: Optional arm shoe drop plate is available for applications with a top rail less than 5 3/4". See page 8 for additional information.

Adjust to 1" if door has a 5/8" web depth.
8400 SERIES LOW ENERGY POWER OPERATOR - STANDARD APPLICATIONS

**PAIRED OPERATOR**

**DOUBLE EGRESS OPERATOR**
SINGLE OPERATOR PAIRED WITH MECHANICAL CLOSER

OPERATOR HANDING IDENTIFICATION

Note: Specify leaf to receive operator.
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

**Product Group**
84 - Low Energy Power Operator

**8400 Series**

<table>
<thead>
<tr>
<th>Type</th>
<th>Application*</th>
<th>Size**</th>
<th>Finish</th>
<th>Handing</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 - Single Operator</td>
<td>A - Push Side of Door</td>
<td>36&quot; (single)</td>
<td>ALM - Aluminum</td>
<td>RHR/LH - Left Hand</td>
</tr>
<tr>
<td>19 - Pair - Simultaneous</td>
<td></td>
<td>72&quot; (double)</td>
<td>DBZ - Dark Bronze</td>
<td>LHR/RH - Right Hand</td>
</tr>
<tr>
<td>20 - Pair - Independent</td>
<td>B - Pull Side of Door</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - Pair - Double Egress - Simultaneous</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 - Pair - Double Egress - Independent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 - Single Operator Paired with 5100 Series Mechanical Closer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*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.
8400 SERIES LOW ENERGY POWER OPERATOR

MODELS
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
• For use on fire-rated and non-fire-rated outswing or inswing doors
• Built-in adjustable door stop for protection against wind or abusive environments
• Operates as a manual closer with or without power

FEATURES
Application
Features:
• Single person installation
• Pre-drilled mounting holes for ease of installation
• Three Operating Modes (On/Off/Hold Open)
• Designed for single doors from 36” to 48” (914 mm to 1,219 mm)
• Designed for double doors from 60” to 96” (1,524 mm to 2,438 mm)
• On-board power supply

Operational
Functionality:
• Built-in adjustable door stop for protection against wind or abusive environments
• Interfaces with electric door hardware
• Operates as a mechanical closer if power is disconnected
• Obstacle recognition upon opening and closing
• Blow open function for smoke ventilation

Programmable
Functionality:
• Boost on Close (selectable On/Off)
• Power Assist Close
• Power Boost Close - motor assist under wind and stack pressure
• Motor Hold Close
• Power Open and Hold - for smoke evacuation
• Adjustable Opening Force Limitation
• Adjustable Opening and Closing Speeds
• Adjustable Opening Angle
• Adjustable Hold Open Time for Door Activators (1 sec to continuous)
• Sequential Operation (push to open/push to close operation)
• Built-In Stop - Manual swing to 180°/ Power swing to 100°
• Fire Alarm input shunts swing activations until FACP is manually reset
• Internal LCD display
• Memory is flash upgradeable

Certification:
• ANSI A156.19 compliant
• UL/cUL Listed for up to 3-hours
• UL10C Listed for Positive Pressure Rating
• ADA compliant
### ELECTRICAL SPECIFICATIONS

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

### 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° |

### FINISHES

- **ALM**: Aluminum anodized (standard)
- **DBZ**: Dark bronze anodized

### NOTES

- Must specify push or pull side mount
- Specify handing
In this section, you can find the various arms and spindles for the 8400 Series operator.
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

2-659-0222 | 2-659-0223
Track Arm - Double Egress
• 20 mm spindle
• Offset adaptor
• 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

2-659-0222 | 2-659-0223
Track Arm - Double Egress
• 20 mm spindle
• Offset adaptor
• For use on pull side of the door
• 2-659-0222 is ALM, 2-659-0223 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

2-659-0232 | 2-659-0233
Cover for Single Operator
- 36” length - contact Hager Tech Support for special sizes
- Powder coated
- Anodized aluminum
- 2-659-0232 is ALM, 2-659-0233 is DBZ

2-659-0234 | 2-659-0235
Cover for Dual Operators
- 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

2-659-0236
Power Supply
- On-board replacement
- Power requirements: 115 VAC 60 Hz
- Output Voltage: 24 VDC 500mA

Note: For additional replacement parts contact Hager Tech Support.
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

**Product Group**
83 - Low Energy Power Operator

**Model**
18 - Single Operator
19 - Simultaneous Pair
21 - Double Egress Simultaneous Pair

**Arm**
A - Push
B - Pull

**Length**
36" - Single
42" - Single
44" - Single
48" - Single
72" - Double
84" - Double
88" - Double
96" - Double

**Finish**
ALM - Aluminum
DBZ - Dark Bronze (arms are BLK)

Specials are available:
BLK
Wood Grain

Note: actual size is 3” additional width
8300 SERIES LOW ENERGY POWER OPERATOR

MODELS
8318  Single Operator
8319  Simultaneous/Independent 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:
• Non-Handed
• Three Operating Modes (On/Off/Hold Open). 8319: switch is shared between both doors on independent configurations.
• Designed for doors up to 48” wide (1219 mm) single, 96” wide (2438 mm) double
• Designed for doors up to 350 lbs. (125 Kg)

Operational Functionality:
• Power Open Spring Close
• Microprocessor controlled for ultra-flat reactions

Certification:
• ANSI A156.19 compliant
• Complies with all U.S. and Canadian ADA requirements for low energy operators
• Appropriate door signage included with each operator
• ANSI/UL 325 listed for both United States and Canada
• ADA compliant
• UL/cUL Listed for up to 3-hours
• UL10C Listed for Positive Pressure Rating

ELECTRICAL SPECIFICATIONS
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

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

## 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:** Manual swing to 180° / Power swing to 140° (pull), 180° (push)
- **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:** Yes If the unit detects an obstacle, the door will travel in the opposite path
- **Push to Start ("Push ‘n Go")** Yes *Safety Sensors required

## Finishes

- **ALM** Aluminum anodized (standard)
- **DBZ** Dark Bronze anodized (ships with Black (BLK) arms) 8318, 8319 only
In this section, you can find the various arms and spindles for the 8300 Series operator.
<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-679-0901</td>
<td>8300 - 20MM REPLACEMENT SPINDLE</td>
</tr>
<tr>
<td>2-679-0902</td>
<td>8300 - 35MM REPLACEMENT SPINDLE</td>
</tr>
<tr>
<td>2-679-0903</td>
<td>8300 - 50MM REPLACEMENT SPINDLE</td>
</tr>
<tr>
<td>2-679-0904</td>
<td>8300 - 80MM REPLACEMENT SPINDLE</td>
</tr>
<tr>
<td>2-679-0896</td>
<td>8300 - STANDARD ARM W/ 35MM SPINDLE (PUSH) ALM</td>
</tr>
<tr>
<td>2-679-0897</td>
<td>8300 - STANDARD ARM W/ 35MM SPINDLE (PUSH) BLK</td>
</tr>
<tr>
<td>2-679-0898</td>
<td>8300 - TRACK ARM W/ 20MM SPINDLE (PULL) ALM</td>
</tr>
<tr>
<td>2-679-0899</td>
<td>8300 - TRACK ARM W/ 20MM SPINDLE (PULL) BLK</td>
</tr>
<tr>
<td>2-679-0900</td>
<td>8300 - DBL EGRESS ARM W/ 20MM SPINDLE (PULL) ALM</td>
</tr>
<tr>
<td>2-679-0905</td>
<td>8300 - STANDARD ARM EXTENSION ALM</td>
</tr>
<tr>
<td>2-679-0906</td>
<td>8300 - STANDARD ARM EXTENSION BLK</td>
</tr>
<tr>
<td>2-679-0907</td>
<td>8300 - KP EVO PROGRAMMING DEVICE</td>
</tr>
</tbody>
</table>
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.
# Low Energy Power Operator Actuators - Touchless Actuators

## Models
- 2-659-0303: 6” round with text & handicap logo
- 2-659-0304: 6” round with handicap logo only
- 2-659-0307: 6” round with text only
- 2-659-0305: 4.75” square with text & handicap logo
- 2-659-0306: 4.75” square with handicap logo only
- 2-659-0308: 4.75” square with text only

## Warranty
- One-year warranty

## Application
- For use with ADA low energy power operators
- Employs capacitance technology similar to smart devices to operate low energy doors
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

## Features
- Touchless design reduces the spread of bacteria and germs
- LED illumination increases plate visibility
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges
- Various design options
- Adjustable detection zone
- Audible alert (selectable On/Off)

Certification: NEMA rated

## Specifications
<table>
<thead>
<tr>
<th>Finish</th>
<th>US32D with text and/or blue logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faceplate</td>
<td>16 gauge, 304 stainless steel</td>
</tr>
<tr>
<td>Backplate</td>
<td>Illuminated Mounting Ring</td>
</tr>
<tr>
<td>Input</td>
<td>30 mA @ 12 to 24 VAC/VDC</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20° to 120°F (-30° to 49°C)</td>
</tr>
<tr>
<td>Fasteners</td>
<td>6-32 x 3/4” mounting screws</td>
</tr>
</tbody>
</table>
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**
- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

**FEATURES**
- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

Note: for wireless version, must order receiver and transmitter separately

Certification: NEMA rated

**SPECIFICATIONS**

**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**

**2-659-0174**
- 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
- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

### FEATURES
- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

**Note: for wireless version, must order receiver and transmitter separately**

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Finish</th>
<th>US32D with text and/or blue logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faceplate</td>
<td>16 gauge, 304 stainless steel</td>
</tr>
<tr>
<td>Backplate</td>
<td>1/8” thick aluminum</td>
</tr>
<tr>
<td>Cherry Switch</td>
<td>Single-pole, 15A/COM/NO/NC contacts</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20° to 120°F (-30° to 49°C)</td>
</tr>
<tr>
<td>Fasteners</td>
<td>6-32 x 1” and 8-32 x 1” Allen head mounting screws</td>
</tr>
</tbody>
</table>

### 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
- 2-659-0165: 4.5” round with text & handicap logo
- 2-659-0166: 4.5” round with handicap logo only

WARRANTY
- One-year warranty

APPLICATION
- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

FEATURES
- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

Note: for wireless version, must order receiver and transmitter separately

Certification: NEMA rated

SPECIFICATIONS

| 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°F to 120°F (-30°C 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
# LOW ENERGY POWER OPERATOR ACTUATORS - 6” ROUND ACTUATOR

## MODELS
- 2-659-0161: 6” round with text & handicap logo
- 2-659-0162: 6” round with handicap logo only
- 2-659-0358: 6” round push to open text & accessibility logo

## WARRANTY
- One-year warranty

## APPLICATION
- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

## FEATURES
- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

**Note:** for wireless version, must order receiver and transmitter separately

## CERTIFICATION
- NEMA rated

## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finish</td>
<td>US32D with text and/or blue logo</td>
</tr>
<tr>
<td>Faceplate</td>
<td>16 gauge, 304 stainless steel</td>
</tr>
<tr>
<td>Backplate</td>
<td>1/8” thick aluminum</td>
</tr>
<tr>
<td>Cherry Switch</td>
<td>Single-pole, 15A/COM/NO/NC contacts</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20° to 120°F (-30° to 49°C)</td>
</tr>
<tr>
<td>Fasteners</td>
<td>6-32 x 1” and 8-32 x 1” Allen head mounting screws</td>
</tr>
</tbody>
</table>

## OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-659-0163</td>
<td>Surface Mount Box for 6” Round Actuator</td>
</tr>
<tr>
<td></td>
<td>• Provides adequate space for wireless transmitters</td>
</tr>
<tr>
<td></td>
<td>• Simplified installation for applications with space limitations</td>
</tr>
<tr>
<td></td>
<td>• Black finish</td>
</tr>
<tr>
<td>2-659-0164</td>
<td>Weather Ring for 6” Round Actuator</td>
</tr>
<tr>
<td></td>
<td>• Provides protection against moisture and weather elements</td>
</tr>
</tbody>
</table>
## LOW ENERGY POWER OPERATOR ACTUATORS - 1.5” x 4.75” JAMB ACTUATOR

### MODELS
- 2-659-0175: Push to Open text and handicap logo
- 2-659-0176: Handicap logo only

### WARRANTY
- One-year warranty

### FEATURES
- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

*Note: for wireless version, must order receiver and transmitter separately*

### SPECIFICATIONS
- **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
- 2-659-0177: 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**

### Certification:
- NEMA rated
# LOW ENERGY POWER OPERATOR ACTUATORS - 36” LOW PROFILE ACTUATOR

## MODELS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-659-0178</td>
<td>Push to Open text and handicap logo - Wireless</td>
</tr>
<tr>
<td>2-659-0179</td>
<td>Push to Open text and handicap logo - Hard wired</td>
</tr>
</tbody>
</table>

## WARRANTY

- One-year warranty

## APPLICATION

- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

## FEATURES

- Mounts to any flat surface
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Weather resistant
- Beveled edges
- 36” x 36” activation area and low profile 1” depth
- Four separate switches to allow activation from any angle
- Exceeds California Building Code, Section 1117B.6

## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finish</td>
<td>US32D with text and/or blue logo</td>
</tr>
<tr>
<td>Faceplate</td>
<td>16 gauge, 304 stainless steel</td>
</tr>
<tr>
<td>Backplate</td>
<td>1/8” thick aluminum</td>
</tr>
<tr>
<td>Transmitter</td>
<td>433 MHz</td>
</tr>
<tr>
<td>Dimensions</td>
<td>6” (152 mm) W x 36” (990 mm) H x 1 (25 mm) D</td>
</tr>
<tr>
<td>Fasteners</td>
<td>Due to various mounting types, no fasteners are supplied with the actuator</td>
</tr>
</tbody>
</table>
## MODEL

| 2-659-0242 | Push to Open text and logo |

## WARRANTY

| One-year warranty |

## APPLICATION

- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

## FEATURES

- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- 304 grade stainless steel finish - scratch resistant
- Interfaces with 2-659-0187 Programmable Relay and Door Sequencer for automatic sequencing applications
- Conserves energy and provides entrapment protection
- Beveled edges

## SPECIFICATIONS

| 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 |

## OPTIONS

| 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 |
LOW ENERGY POWER OPERATOR ACTUATORS - BOLLARD POST

<table>
<thead>
<tr>
<th>MODELS</th>
<th>Black Powder Coat</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-659-0180</td>
<td></td>
</tr>
<tr>
<td>2-659-0181</td>
<td>Bronze Powder Coat</td>
</tr>
<tr>
<td>2-659-0182</td>
<td>Silver Powder Coat</td>
</tr>
</tbody>
</table>

| WARRANTY        | One-year warranty        |

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>For use with Hager’s 4.5” square and 4.5” round actuators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Can be mounted on existing or newly poured concrete</td>
</tr>
<tr>
<td></td>
<td>UV resistant plastic cap allows for wireless transmissions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>Carbon steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material:</td>
<td>Carbon steel</td>
</tr>
<tr>
<td>Mounting</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Bracket:</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>41.5” H x 6.25” W x 4.25” D (with cap attached)</td>
</tr>
<tr>
<td>Weight:</td>
<td>35 lbs.</td>
</tr>
<tr>
<td>Fasteners:</td>
<td>Screws, expansion anchors, washers and nuts</td>
</tr>
<tr>
<td>Note:</td>
<td>Push plates not included - must order separately</td>
</tr>
</tbody>
</table>
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.
PEDESTRIAN PRESENCE SENSORS - OVERHEAD PRESENCE SENSOR

2-659-0332

DESCRIPTION
Overhead presence sensor designed for pedestrian automatic doors.

APPLICATIONS
- Mounts to the frame to provide protection for pedestrian automatic doors
- Prevents a closed door from opening and an open door from closing when a pedestrian is in the detection zone

FEATURES
- Versatile sensor can be used on single swing, simultaneous pair, dual egress and folding doors when coupled with an interface / lockout device
- Maximum flexibility with separate pattern width, depth and sensitivity for open and closed door states
- Visible LED monitoring indicator
- Active infrared technology and presence detection
- 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)
Input: 12-24VAC/VDC (50-60Hz VAC)
Contact Relay: 1A @ 60 VDC/125 VAC
0.5 - 9s Hold Time
Frequency: 50-60 Hz
Temperature: -22°F - 140°F
Relay Hold Time: 0.5-9.0 seconds
Dimensions: 11.8” (W) x 1.9” (H) x 1.9” (D)
2-659-0334 - Mounting Kit
PEDESTRIAN PRESENCE SENSORS - ACTIVE INFRARED SAFETY SENSOR

2-659-0335 / 2-659-0336
5 pers Active Infrared Safety Sensor

DESCRIPTION
Door mounted

APPLICATIONS
- Low energy swing doors
- Designed to mount at the top of the door to reduce accidental damage

FEATURES
- Detect the presence of a pedestrian, while the door is opening and closing using triangulation
- Each module detection zone can be adjusted independently
- Active Infrared with background suppression allow for infinite presence detection
- Each module detection zone can be adjusted independently

SPECIFICATIONS

Technology: Active infrared
Models:
- 2-659-0335 - Single module unit
- 2-659-0336 - Single unit w/ master and slave modules
Power Supply: 12-24 VAC/VDC
Detection Range: 0” - 96” (0’-8’)
Max. Mounting Height: 96” (8’)
Detection Time: < 50ms
Detection Mode: Presence (up to 8’)
Input Inhibit: 12 – 24 VAC ±10% / 12 – 24 VDC
±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
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 highly 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

2-659-0183
433MHz Receiver

2-659-0184
3-Volt Hard Wireless Transmitter (Hardwired to Hager Actuators)

2-659-0185
9-Volt Wireless Transmitter (Hardwired to Hager Actuators)

2-659-0186
Wireless, One Button Transmitter

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: 433 MHz
Input Voltage: 12 to 24 VAC/VDC
Radio Control Type: Digital
Emitted Radio Power: -28.7dBm (transmitter)
Number of Transmitters per Receiver: 100 maximum transmitters
LED Functions: Red = Relay Activity
Blue = Receiver / Transmitter Learn
Dimensions:
Receiver - 2.75" x 2.125" x 1.0"
Transmitter - 2.75" x 1.375" x 0.6"
Certifications: CE, FCC, IC
### FUNCTIONS

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>SUBJECT</th>
<th>MOST COMMON APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Simple Timer</td>
<td>Time delay relay</td>
</tr>
<tr>
<td>11</td>
<td>Ratchet / Latching</td>
<td>Push to open / Push to close</td>
</tr>
<tr>
<td>22</td>
<td>2 relay Sequence Inhibitor with Door Position Input</td>
<td>Automatic swing door with push plate, approach side SuperScan and Electric Strike. SuperScan is inhibited when door is closed.</td>
</tr>
<tr>
<td>28</td>
<td>2 Relay Sequence with Door Position Input</td>
<td>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</td>
</tr>
<tr>
<td>29</td>
<td>Relay 1 Deactivation Timer</td>
<td>Automatic swing door or sliding door with an electric locking device and door position switch to prevent lock from reengaging before door closes completely</td>
</tr>
<tr>
<td>36</td>
<td>3-Relay Sequencer + “1-shot”</td>
<td>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”</td>
</tr>
<tr>
<td>37</td>
<td>3-Relay Sequencer with “Independent Relay”</td>
<td>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 “independent” or sequenced.</td>
</tr>
<tr>
<td>50</td>
<td>Interlock Timer with Door Position Inputs</td>
<td>Interlock module that will only allow one door to open at a time and can be used with any automatic or manual door</td>
</tr>
<tr>
<td>55</td>
<td>Interlock Ratchet with Door Position Inputs</td>
<td>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</td>
</tr>
<tr>
<td>65</td>
<td>2-Way, 2 Relay Sequence</td>
<td>Two door vestibule sequencing with automatic swing doors traveling in either direction</td>
</tr>
</tbody>
</table>

### FUNCTIONS (continued)

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

### 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: 3A @24VAC / 30VDC
  - Relay #2: 3A @24VAC / 30VDC
  - Relay #3: 1A @24VAC / 30VDC
- **Contact Rating WET**:
  - Relay #1: 1A

Note: Functions 10, 11, 50, 55, 65, nL, and nU are NOT compatible with the WET input.