

# UL MAGLOCKS 600LB USER'S GUIDE

**ELECTROMAGNETIC LOCKS** 

## 1 Description

The Electromagnetic Lock (Maglock) series is a surface-mounted, magnetic-lock assembly. They are available in single- and dual-lock varieties, various holding forces, and also availbe with or without built-in Door Status Switch ("DS" versions). All models are designed for standard installation on most types of doors.



	door configuration		door status sensor	
	single	dual	with	without
10MAGLOCK3UL	✓			<b>✓</b>
10MAGLOCK3ULDS	✓		✓	
10MAGLOCK6UL		✓		✓
10MAGLOCK6ULDS		<b>√</b>	✓	

# 2 Specifications

ATTENTION: This product must be powered from a UL-listed, regulated, power-limited, power supply!

DESCRIPTION	10MAGLOCK3UL 10MAGLOCK3ULDS	10MAGLOCK6UL 10MAGLOCK6ULDS	
Lock:	single	dual	
Input Voltage:	12 or 24 VDC	12 or 24 VDC	
Relay Rating:	1.0 A @ 24 VDC resistive	1.0 A @ 24 VDC resistive	
Reed Switch Rating:	SPDT 0.5 amp @ 30 VAC/VDC resistive	SPDT 0.5 amp @ 30 VAC/VDC resistive	
Power Consumption:	505 mA @ 12 VDC / 260 mA @ 24 VDC	505 × 2 mA @ 12 VDC / 260 × 2 mA @ 24 VDC	
Dimensions:	9.84 x 1.65 x 1.02 in 250 x 42 x 26 mm	19.76 x 1.65 x 1.02 in 502 x 42 x 26 mm	
Certification:	UL1034	UL1034	
Operating Temperature:	14 – 131 °F (-10 – 55 °C)	14 – 131 °F (-10 – 55 °C)	
Operating Humidity:	0 – 95%	0 – 95%	

**NOTE:** The specifications listed above are for an indoor, dry, installation location.

## 3 Precautions



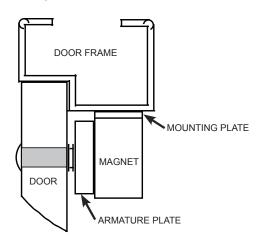
- Shut off all power going to door or header before attempting any wiring procedures.
- ☑ Maintain a clean and safe environment when working in public areas.
- ☑ Constantly be aware of pedestrian traffic around the door area.
- Always stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door.
- Always check placement of all wiring before powering up to ensure that moving door parts will not catch any wires and cause damage to equipment or cable insulation.
- Ensure compliance with all applicable safety standards (i.e. ANSI A156.10) upon completion of installation.

## 4 Installation Notes

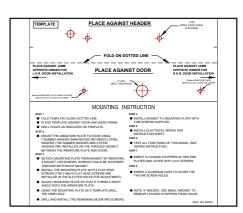
- ☑ Handle the equipment with care. Damaging the mating surfaces of the magnet and armature plate may reduce locking efficiency.
- ☑ The maglock mounts rigidly to the door frame. The armature plate mounts to the door with the hardware provided. This allows the armature plate to pivot about its center to compensate for door wear and misalignment.
- ☑ Template use must take place with the door in its normally closed position.
- ☑ Add threadlocker to all screws before installing, and firmly tighten screws.
- ✓ Install only for indoor, dry applications.
- ☑ Installation and wiring must be performed in compliance with ANSI/NFPA70 regulations.
- The Maglock shall be installed within the same room as other equipment and circuitry connecting to the Maglock (per UL 864).

## 5 Installation – Mechanical

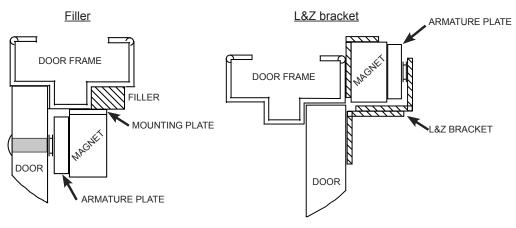
#### TYPICAL INSTALLATION



Use the applicable mounting template. See image of template below.



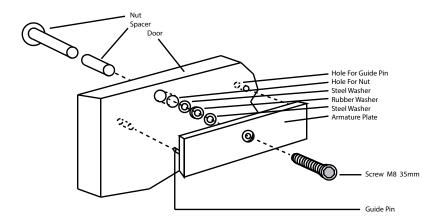
#### Mounting Options



See User's Guide 75.5643 for U-bracket installation (to be used with glass doors).

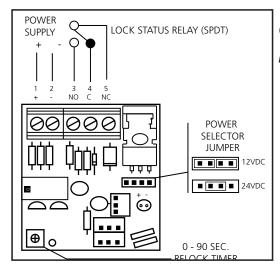
DO NOT over-tighten the armature plate.

## 6 Armature Plate Installation



Align the black, plastic piece of the armature plate with the cover plate (i.e. magnet must line up with the switch).

## 7 Installation – Electrical



#### **CIRCUIT BOARD**

NOTE: Terminals ratings: 12~24AWG



#### **POWER**

The product must be powered from a UL-listed, regulated, power-limited, power supply.

If power switch is not wired between DC source voltage(+) and magnet, it will take a longer time to de-energize the magnet simulating residual magnetism.

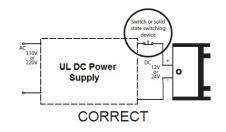
Dual MAGLOCK models have two circuit boards that must both be powered; repeat these steps on each side.

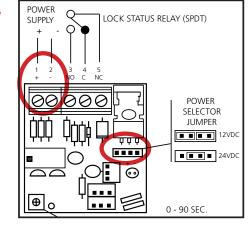
## **12 VDC INPUT**

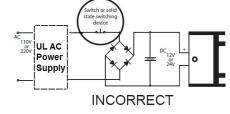
- Required power: See Specifications on page 2.
- Connect positive (+) lead from a 12 VDC power source to Terminal 1.
- Connect negative (-) lead from a 12 VDC power source to Terminal 2.
- Check jumper for 12 VDC operation.

#### 24 VDC INPUT

- Required power: See Specifications on page 2.
- Connect positive (+) lead from a 24 VDC power source to Terminal 1.
- Connect negative (-) lead from a 24 VDC power source to Terminal 2.
- Check jumper for 24 VDC operation.



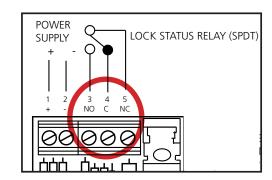




#### **SWITCHES**

#### LOCK STATUS RELAY CONTACTS (SPDT)

- Relay dry contacts are rated 1A at 24 VDC for safe operation, DO NOT exceed this rating.
- If a NO switch is required, connect the wires from the system to Terminal 3 and Terminal 4
- If a NC switch is required, connect the wires from the system to Terminal 4 and Terminal 5.

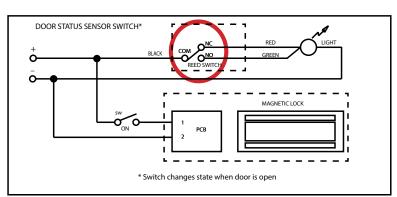


## **DOOR STATUS SWITCH (DS versions only)**

- Connect the positive (+) lead from the power source to the black wire of the Door Status Sensor switch.
- Connect the negative (-) lead from the power source to one end of the light for door status.
- Connect the red or green wire of the Door Status Sensor switch to the other end of the light for door status.

red = light off with door closed green = light on with door closed

 Reed switch dry contacts are rated 0.25 amp at 30 VAC/VDC for safe operation. Do not exceed this rating.



## BEA, INC. INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS

BEA Inc., the sensor manufacturer, cannot be held responsible for incorrect installations or incorrect adjustments of the sensor/device; therefore, BEA Inc. does not guarantee any use of the sensor/device outside its intended purpose.

BEA Inc. strongly recommends that installation and service technicians be AAADM-certified for pedestrian doors, IDA-certified for doors/gates, and factory-trained for the type of door/gate system.

Installers and service personnel are responsible for executing a risk assessment following each installation/service performed, ensuring that the sensor/device system performance is compliant with local, national, and international regulations, codes, and standards.

Once installation or service work is complete, a safety inspection of the system shall be performed and documented per the manufacturer's recommendations or industry guidelines. Examples of compliance may apply to ANSI 156.10, ANSI 156.19, ANSI/DASMA 102, ANSI/DASMA 107, UL294, UL325, and International Building Code.