

Electrified Locks, Relays and Timers

# CX-ED0010 Electromechanical Cabinet Lock

## INSTALLATION INSTRUCTIONS

### THIS PACKAGE INCLUDES:

- |                 |                       |                        |
|-----------------|-----------------------|------------------------|
| 1 x Lock Body   | 1 x Strike Plate      | 2 x M4.2 Screws        |
| 1 x Cover Plate | 4 x M3 x 0.5mm Screws | 1 x Door Status Sensor |



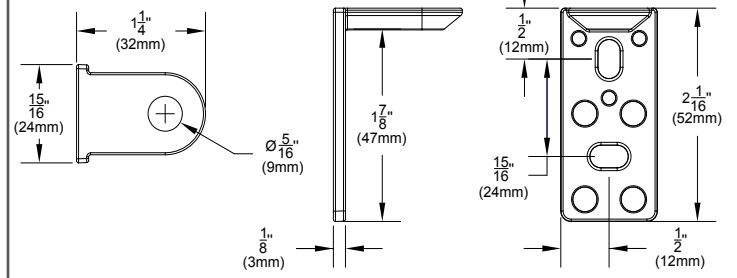
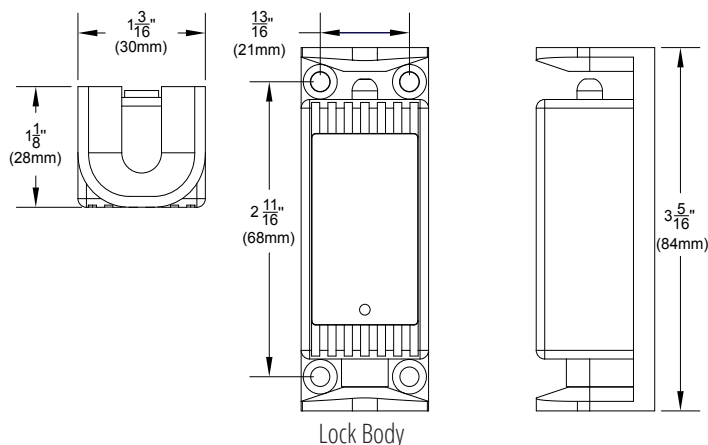
### 1. GENERAL DESCRIPTION

The CX-ED0010 Electromechanical Cabinet Lock represents an evolution in secure locking systems, designed for a broad range of enclosures that use swinging doors, drawers, and sliding doors. This lock supports both 12V and 24V power supplies and introduces the flexibility of operating in either fail-safe or fail-secure modes, accommodating diverse security needs. Its inclusion of door and lock status sensors further enhances its functionality, providing real-time security status.

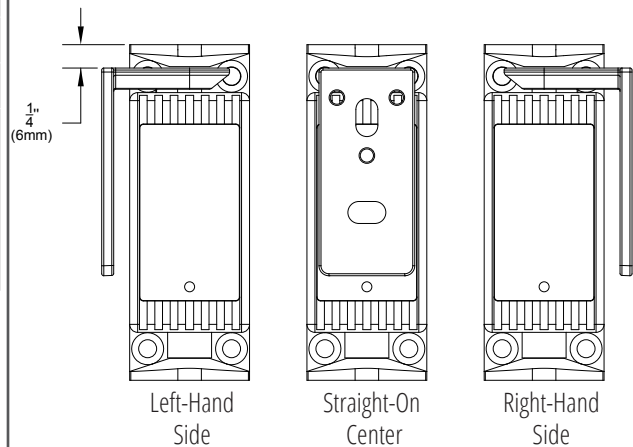
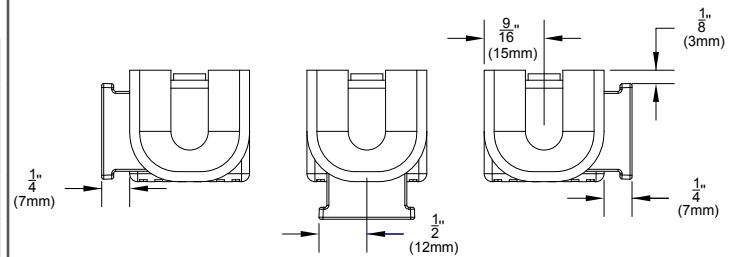
### 2. SPECIFICATIONS

Power Input	12 VDC/24 VDC
Current Draw	280mA@12VDC, 140mA@24VDC
Static Strength	440 lbs (200 kg)
Endurance	250,000 Cycles
Temperature Rating	-4 °F to 140 °F (-20 °C to 60 °C)
Operation Mode	Fail-Safe and Fail-Secure
Installation Options	Front Mount
Door Status Sensor	200mA@30VDC (Max) Form C
Lock Status Sensor	1A@30V DC (Max)
Dimensions (Lock Body)	3-5/16" (H) x 1-3/16" (W) x 1-1/8" (D) 84mm (H) x 30mm (W) x 28mm (D)
Dimensions (Strike Plate)	2-1/16" (H) x 15/16" (W) x 1-1/4" (D) 52mm (H) x 24mm (W) x 32mm (D)

### 3. DIMENSIONS



Strike Plate



Strike Plate Orientation

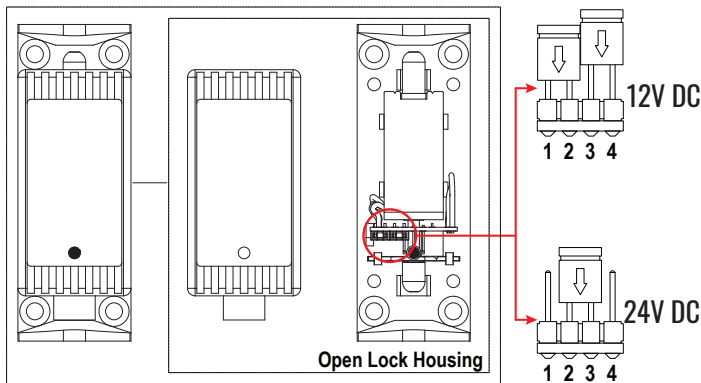
## 4. INSTALLATION AND WIRING GUIDE

The CX-ED0010 is versatile, designed for installation on swinging doors, sliding doors, and drawers. The installation process involves mounting the strike plate on the door or drawer and the main lock unit on the frame or cabinet body.

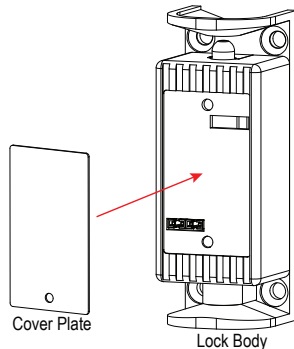
**1. Select Lock Mode:** Fail-secure (default) or Fail-safe. Adjust the lock mechanism accordingly by opening the lock housing and repositioning the chassis if switching to fail-safe. (Refer section 5 for more details.)

**2. Power Input Setting:** The strike is preset to operate with a 12V DC power input. To switch to a 24V DC configuration, simply open the case and adjust the jumper setting according to the instructions provided below.

- **For 12 VDC Input:** Ensure PIN-1 and PIN-2, and PIN-3 and PIN-4 are closed. This setup is standard and supports the basic operational needs of the lock.
- **For 24 VDC Input:** Close PIN-3 and PIN-4 only. This configuration is used for higher power requirements or specific operational modes.



**3. Cover Plate:** After setting the input power, attach the Cover Plate to the front of the Lock Body with the hole aligned with the LED. Peel the adhesive at the back of the Cover Plate.



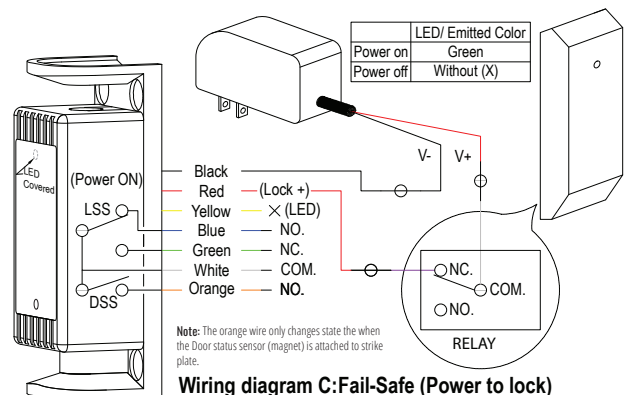
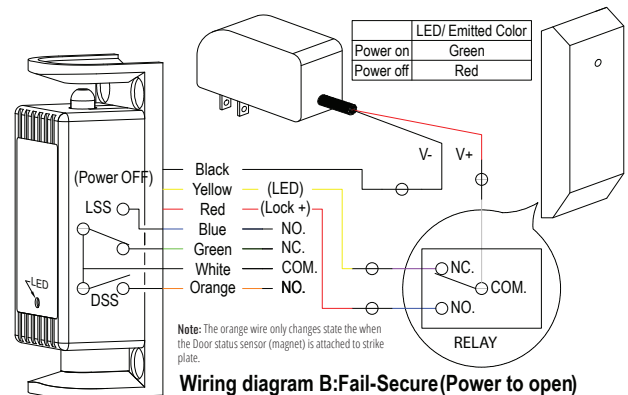
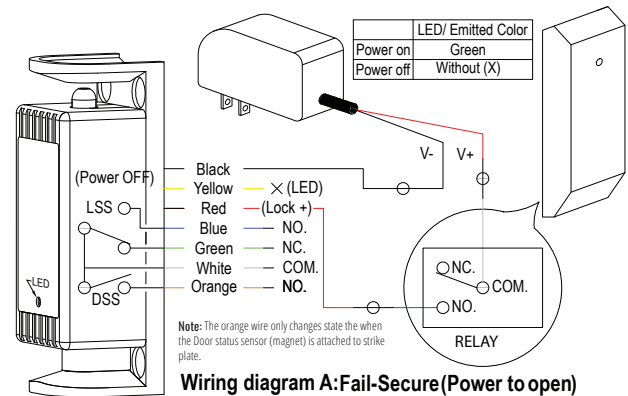
**4. Select Wiring Configuration:** Based on your operational mode and required features, select one of the following wiring configurations:

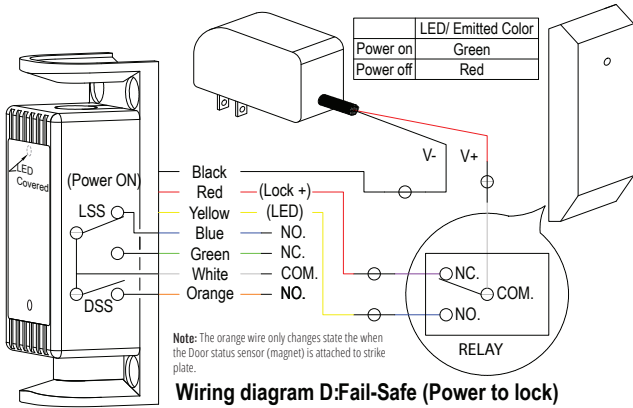
- **A:** This setting shows Green LED when the lock is powered and no LED when the lock is not powered.
- **B:** This setting shows Green LED when the lock is powered and Red LED when the lock is not powered.

**Note:** In fail-safe mode (Diagram C and D), there will be no LED indicator as the LED is covered by the plate.

**5. Wiring the Lock:** Follow the chosen wiring diagram carefully. Ensure all connections are secure and double-check each wire against the diagram to prevent any operational issues.

Wiring Diagram	Lock Mode	LED	When Powered	When Not Powered
A	Fail-Secure	Yes	Green	NO LED
B	Fail-Secure	Yes	Green	Red
C	Fail-Safe	Covered	Covered	Covered
D	Fail-Safe	Covered	Covered	Covered



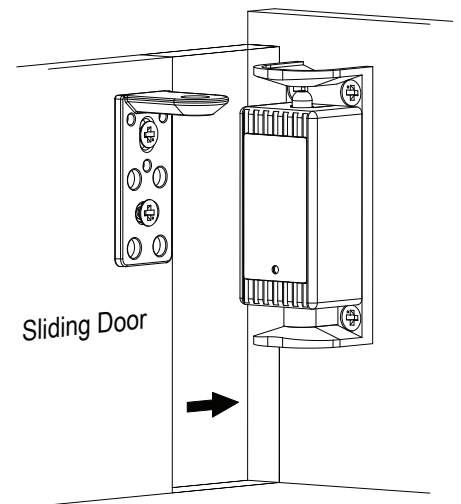
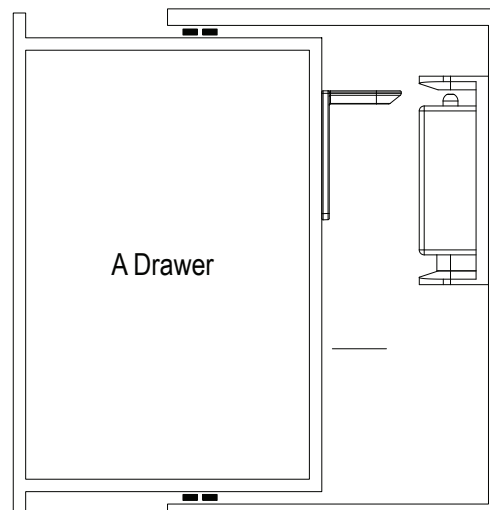
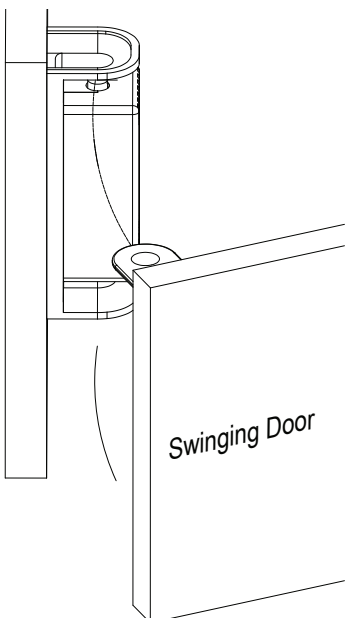


**Wiring diagram D: Fail-Safe (Power to lock)**

Sensor Type	Definition
LSS	Lock Status Sensor
DSS	Door Status Sensor

Wire Color	Function	Remark
Red	+ve	12 VDC/24 VDC Power Supply
Black	-ve	Ground
Yellow	LED	Turns green when lock is powered; turns red if the red wire is disconnected and the yellow wire is connected to the +ve.
Blue	NO	Relay contact, functions as Lock Status Sensor
Green	NC	Relay contact, functions as Lock Status Sensor
White	Common	Connection Point
Orange	NO	Only changes state when the Door Status Sensor is attached to strike plate

**6. Alignment:** Before starting, ensure that the strike plate pin and the lock hole align correctly. This step is crucial for proper lock function.



**7. Marking Locations:**

- On the door or drawer, mark where the strike plate will be installed.
- On the opposing side, mark the location for the main lock unit.

**8. Drilling:**

- **Lock Body:** At the marked location for the lock body, use a #32 drill bit to drill pilot holes appropriate for M3 x 0.5mm screws.
- **Strike Plate:** For the strike plate, drill pilot holes with a #29 drill bit. This size is optimal for M4.2x19mm screws, ensuring they hold firmly in place.

**9. Fastening:**

- **Lock Body:** Secure the main lock unit with four M3 x 0.5mm thread, 10mm long Phillips Flat Head screws into the pilot holes drilled earlier.
- **Strike Plate:** Secure the strike plate using two M4.2 size, 19mm self-threading Phillips flat head screws. The pre-drilled pilot holes ensure a tight fit and reduce the risk of material damage.

**10. Adjustment & Final Tightening:** After mounting, adjust the strike plate as necessary to ensure perfect alignment with the lock body. Once satisfied with the alignment, tighten all screws to secure the components firmly.

**11. Finalizing Installation:** Test the lock functionality thoroughly, including the operational mode, sensors, and LED indicators, to confirm everything is working as expected.

**5. OPERATION**

**Adjusting the Lock Mode from Fail-Secure to Fail-Safe:**

The cabinet lock is preset to operate in fail-secure mode. If you need to switch the operation to fail-safe mode, follow these simple steps:

**Open the Lock Housing:** Carefully remove the lock housing cover to access the internal components. Unscrew and remove the four outer screws along the corners of the back of the lock housing to remove the cover.

**Adjust the Chassis:** With the lock housing open, gently lift and turn the chassis (the main body of the lock) upside down. This action reverses the lock's internal mechanism.

**Location of Door Status Sensor:** For Fail-Safe mode, place the door status sensor in one of the top two slots, according to the orientation of the strike plate. For Fail-Secure mode, place the door status sensor in one of the bottom two slots, according to the orientation of the strike plate. Please see figure below for more details.

**Confirm the Change:** By repositioning the chassis, you've switched the lock's mode to fail-safe. In this configuration, the lock will require power to engage, allowing it to unlock automatically in the event of a power failure.

