

# IZM65/67 mechanical interlock

## WARNING

- (1) **ONLY QUALIFIED ELECTRICAL PERSONNEL SHOULD BE PERMITTED TO WORK ON THE EQUIPMENT.**
- (2) **ALWAYS DE-ENERGIZE PRIMARY AND SECONDARY CIRCUITS IF A CIRCUIT BREAKER CANNOT BE REMOVED TO A SAFE WORK LOCATION.**
- (3) **DRAWOUT CIRCUIT BREAKERS SHOULD BE LEVERED (RACKED) OUT TO THE DISCONNECT POSITION.**
- (4) **ALL CIRCUIT BREAKERS SHOULD BE SWITCHED TO THE OFF POSITION AND MECHANISM SPRINGS DISCHARGED.**

**FAILURE TO FOLLOW THESE STEPS FOR ALL PROCEDURES DESCRIBED IN THIS INSTRUCTION LEAFLET COULD RESULT IN DEATH, BODILY INJURY, OR PROPERTY DAMAGE.**

### Section 1: General information

The mechanical interlock is used to interlock between two or three circuit breakers. A mechanical interlock enables one or more circuit breakers to remain in the tripped state (to prevent from being closed).

### Tools required

- Phillips screwdriver
- Knife

### Mechanical interlock for drawout type

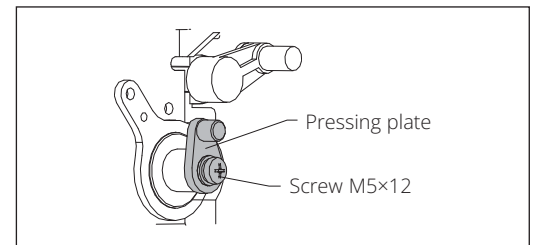
### Kit parts identification

- Mechanical interlock (1)
- Screw M5×12 (1)
- Screws M5×8 (4)

### Section 2: Installing the mechanical interlock

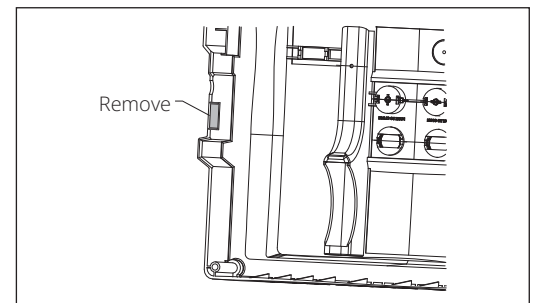
Follow below steps for installation:

Step 1: Lever out the basic device for removal, then remove the cover. Mount the pressing plate on the right side of the operating mechanism and secure it with the M5×12 screw.



**Figure 1. Step 1**

Step 2: Remove the small square groove, as indicated in the figure, in the cover with the knife, then put the cover back.



**Figure 2. Step 2**

Step 3: Mount the mechanical interlock onto the right panel and secure it with 4 screws (M5×8). Then, lever the basic device to the Connected position.

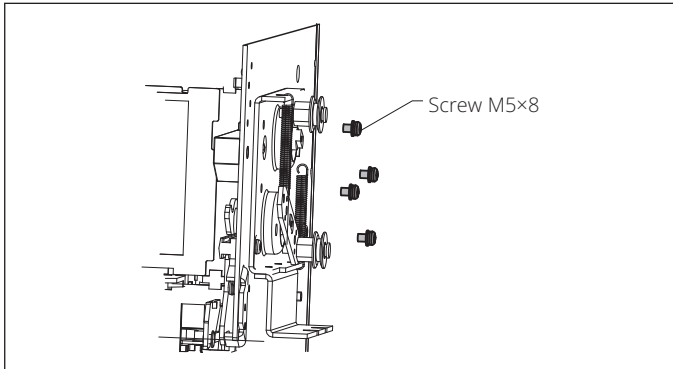


Figure 3. Step 3

Step 4: Mount the other one or two interlocks in the same manner.

### Mechanical interlock for fixed type

#### Kit parts identification

- Mechanical interlock (1)
- Mounting panel (1)
- Screws M5×12 (5)
- Screws M5×8 (4)

### Section 2: Installing the mechanical interlock

Follow below steps for installation:

Step 1: Remove the cover, mount the pressing plate on the right side of the operating mechanism with the M5×12 screw.

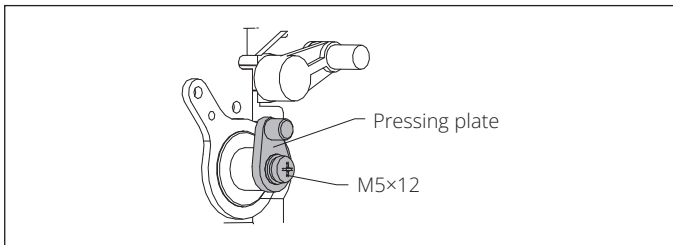


Figure 4. Step 1

Step 2: Remove the small square groove, as indicated in the figure, in the cover with the knife, then put the cover back.

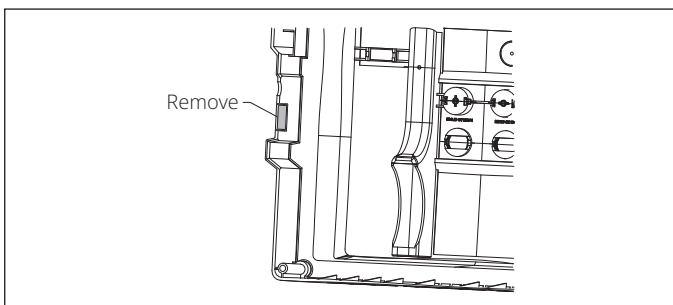


Figure 5. Step 2

Step 3: Secure the mounting panel to the right panel with 4 M5×20 screws.

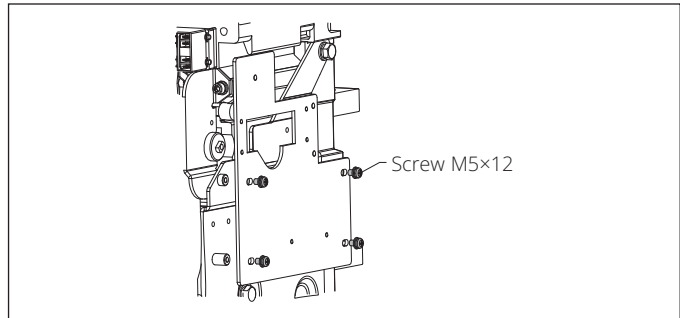


Figure 6. Step 3

Step 4: Mount the mechanical interlock onto the mounting panel with 3 screws (M5×8).

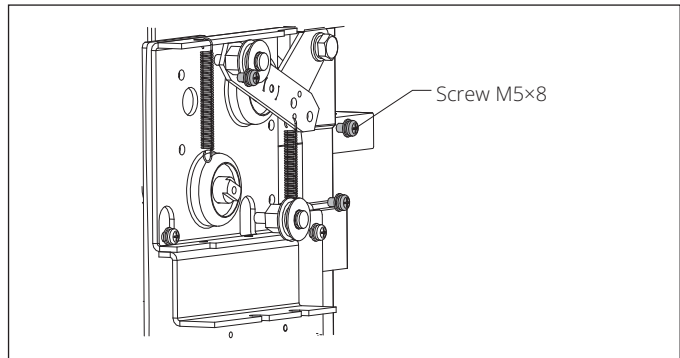


Figure 7. Step 4

Step 5: Mount the other one or two interlocks in the same manner.

### Section 3: Verifying the interlocking between circuit breakers

Interlocking between two circuit breakers:

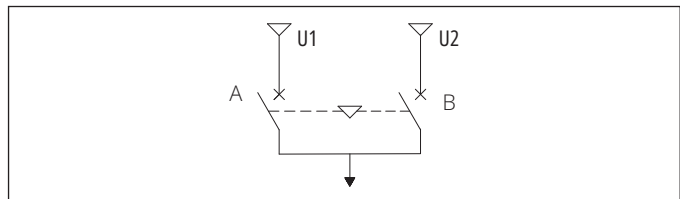
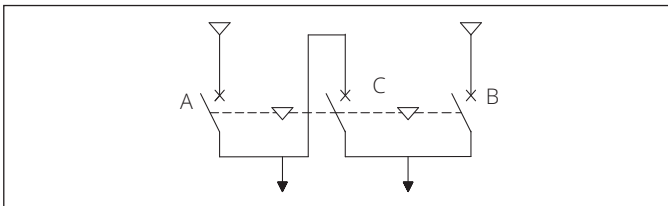


Figure 8: Schematic diagram of two interlocking devices

Both circuit breakers are in the charged status:

- When Circuit Breaker A is closed, Circuit Breaker B cannot be closed; Circuit breaker B can be closed after Circuit Breaker A is opened.
- When Circuit Breaker B is closed, Circuit Breaker A cannot be closed; Circuit breaker A can be closed after Circuit Breaker B is closed.

Interlocking between two circuit breakers:



**Figure 9: Schematic diagram of three interlocking devices**

Three circuit breakers are in the charged status:

- When Circuit Breaker A and B are closed, Circuit Breaker C cannot be closed; Circuit breaker C can be closed after Circuit Breaker A or B is opened.
- When Circuit Breaker A and C are closed, Circuit Breaker B cannot be closed; Circuit breaker B can be closed after Circuit Breaker A or C is opened.
- When Circuit Breaker B and C are closed, Circuit Breaker A cannot be closed; Circuit breaker A can be closed after Circuit Breaker B or C is opened.
- Among Circuit Breaker A, B and C, only one or two circuit breakers can be closed.

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**Eaton Corporation**  
**Asia Pacific Headquarter**  
No.3, Lane 280, Linhong Road,  
Changning District,  
Shanghai 200335  
Tel: 86-21-52000099  
Fax: 86-21-52000200

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