IP20 drawout safety shutters – RF

Instructions apply to:

UL489      : PD-RF
IEC        : PD-RF, IZMX40

--- 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.

--- WARNING ---
THE INSTRUCTIONS CONTAINED IN THIS IL AND ON PRODUCT LABELS HAVE TO BE FOLLOWED. OBSERVE THE FIVE SAFETY RULES:
– DISCONNECTING
– ENSURE THAT DEVICES CANNOT BE ACCIDENTALLY RESTARTED
– VERIFY ISOLATION FROM THE SUPPLY
– EARTHING AND SHORT-CIRCUITING
– COVERING OR PROVIDING BARRIERS TO ADJACENT LIVE PARTS
DISCONNECT THE EQUIPMENT FROM THE SUPPLY. USE ONLY AUTHORIZED SPARE PARTS IN THE REPAIR OF THE EQUIPMENT. THE SPECIFIED MAINTENANCE INTERVALS AS WELL AS THE INSTRUCTIONS FOR REPAIR AND EXCHANGE MUST BE STRICTLY ADHERED TO PREVENT INJURY TO PERSONNEL AND DAMAGE TO THE SWITCHBOARD.
**Section 1: General information**

Cassette safety shutters are insulating type shutters tested to IP20 protection. They operate automatically to cover a cassette's fixed primary contacts when the breaker is not in the CONNECT position (Figure 1). Provisions are provided for padlocking the shutters in the closed position.

**Figure 1. Drawout cassette (front view, shutters open).**

A complete drawout cassette shutter installation is comprised of two duplicate, already assembled, shutter assemblies (Figure 2). Become familiar with the shutter assemblies provided.

**Figure 2. Shutter assemblies.**

The two interchangeable shutter assemblies are installed in the rear backplane (Figure 3). The backplane is shown here removed from its cassette for clarification purposes only. Become familiar with the cassette’s rear backplane.

**Figure 3. Rear backplane only.**

**Note:** The content of this IL applies to both PXR and Digitrip equipped breakers. Appearance of product may vary.
Section 2: Installation of cassette safety shutter

This installation procedure will cover a three-pole installation. A four-pole installation is done in a similar fashion. Proceed with the following step for a three-pole installation:

**Step 1:** Note two mounting tabs located on the shutter assembly opposite the padlock hole and the shutter retainer on the opposite side (Figure 2).

It does not matter which shutter assembly is installed first, as long as the padlock hole is positioned toward the center of the backplane.

Insert either shutter assembly at an angle as shown so the mounting tabs engage small pockets in the backplane. Complete the installation by pushing down on the other end of the shutter assembly until the shutter retainer edge engages the backplane center divider, which is indicated by a click (Figure 3). Once both ends of a shutter assembly are engaged, test for a secure installation by gently tugging on the shutter assembly to ensure the proper engagement.

An installed shutter assembly will automatically return to the CLOSED position once it is not being held open.

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Section 3: Removal of cassette safety shutter

Proceed with the following step for the removal of a shutter assembly.

**Step 1:** Push the two retainer levers on the backplane center divider simultaneously (Figure 3) away from the shutter assembly being removed to release the retainer edge. The shutter assembly can be lifted up and out, once both tabs are released.

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![Figure 4. Shutter assembly.](image1)

![Figure 5. Shutter assemblies installed.](image2)

![Figure 6. Retainer tabs.](image3)
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