Effective December 2021 Supersedes June 2009

# OTS/bell alarm in Magnum low voltage circuit breakers

### 🛆 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.

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THE INSTRUCTIONS CONTAINED IN THIS IL AND ON PRODUCT LABELS MUST BE FOLLOWED. OBSERVE THE FIVE SAFETY RULES.

- DISCONNECTING;
- ENSURE THAT DEVICES CANNOT BE ACCIDENTALLY RESTARTED;
- VERIFY ISOLATION FROM THE SUPPLY;
- EARTHING AND SHORT-CIRCUITING; AND;
- COVERING OR PROVIDING BARRIERS TO ADJACENT LIVE PARTS.

## **Section 1: General information**

An overcurrent trip switch (bell alarm) provides an electrical indication when a circuit breaker trips as a result of the trip unit reacting to an overcurrent condition or by an enhanced protection feature (if programmed, available on Digitrip 1150+ and PXR 25). Opening as a result of a circuit breaker's manual open button, shunt trip, or undervoltage release does **not** cause the overcurrent trip switch to operate.

This product is intended for use in Magnum circuit breakers with PXR or Digitrip trip units equipped with a mechanical trip indicator without overcurrent trip switch (bell alarm) contacts.

**Note:** All images show a Magnum circuit breaker with a PXR trip unit unless stated otherwise. Some components, such as the trip unit, not shown for clarity.

# Section 2: Installation of OTS/ bell alarm

To install the OTS/bell alarm, proceed with the following steps:

**Step 1:** Remove the front cover by unscrewing the hex-head captive bolts (four for three-pole, six for four-pole) that join the cover to the breaker housing using a 10 mm 1/4-inch drive socket. Then hold the charge handle down to pull off the cover.

**Step 2:** Place the appropriate label on the front cover nameplate space located under "Accessories."

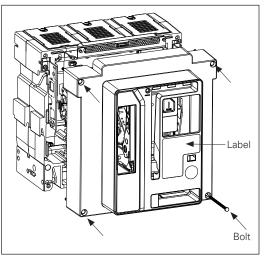


Figure 1. Step 1 and 2.

**Step 3:** With the red reset button in the forward position, mount the two switches using M2.5 x 20 mm self-tapping screws.



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**Step 4:** Verify that the overcurrent trip switches are in the open position when the trip indicator has tripped. Verify that the overcurrent trip switches are in the closed position when the trip indicator has not tripped.

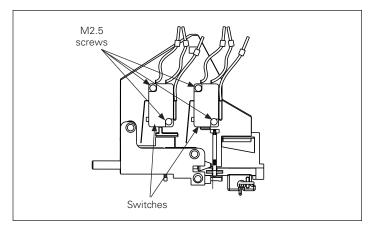


Figure 2. Step 3 and 4 Magnum with Digitrip.

**Step 5:** Connect the wire leads to the secondary connector as referenced in Table 1. Terminal maps for the secondary connectors are located on top of the secondary connectors.

#### Table 1. Secondary connector overcurrent trip switch positions

Trip unit	OTS 1 make	OTS 1 com	OTS 1 break	OTS 2 make	OTS 2 com	OTS 2 break
Digitrip (Fig. 3)	A1	A2	A3	A4	A5	A6
PXR (Fig. 4)	C1	C2	С3	C4	C5	C6

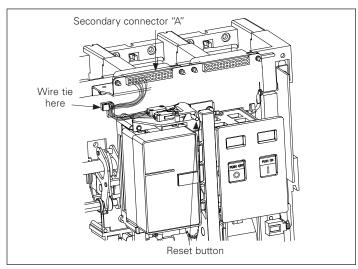


Figure 3. Step 5 Magnum with Digitrip.

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Figure 4. Step 5 Magnum with PXR.

Step 6: Reinstall the front cover removed in Step 1.

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