Remote latch check switch (LCS) for 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.

Section 1: General information

A latch check switch (LCS) indicates when the circuit breaker is "ready to close" (Figure 1). The external version used for remote indication consists of 1 Form C contact wired to the circuit breaker secondary contacts for integration into external control schemes.

Note: Wiring the LCS for remote indication directly in series with the SR accessory is not recommended as this will override the "anti-pump" feature.

Required tools
- 1/4-inch drive ratchet
- 10 mm socket

Kit parts identification
Refer to Figure 1 for visual identification of the contents of kit.

Section 2: Installation of external remote LCS

To install the LCS, proceed with the following six 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 at about a 45-degree angle to pull off the cover.

Figure 1. Contents of Kit

Figure 2. Step 1
**Remote latch check switch (LCS) for Magnum low voltage circuit breakers**

**Step 2:** Remove the accessory (if installed) from the indicated position on the accessory tray by lifting its lock up and sliding the accessory toward the front of the breaker. Then lift accessory up and out of tray. Do not disconnect the wiring.

![Figure 3. Step 2](image)

**Step 3:** Connect three wires from the LCS to secondary block positions B28, B29, and B30 per wire markings. Check that all wire terminals are secure by pulling gently. Then push the LCS into center slot in the accessory tray. Make sure the LCS is fully seated.

![Figure 4. Step 3](image)

**Step 4:** Reinstall any accessory that was removed in Step 2.

**Step 5:** Test the installation.

**CAUTION**

**DO NOT TOUCH THE INTERIOR OF THE BREAKER WHILE THE SPRING IS CHARGED. PUSH THE OFF BUTTON FIRST TO ENSURE THAT THE BREAKER IS NOT CLOSED. FAILURE TO FOLLOW THIS ACTION COULD RESULT IN A SERIOUS INJURY.**

Measure the continuity of the LCS with an Ohm meter during this step. With the breaker OPEN and DISCHARGED, push and release the OFF button. The LCS should not operate. This is indicated by the absence of an audible “click” from the switch. The Ohm meter verifies there is no change in continuity of the LCS contacts.

Now charge the breaker using the manual charge handle. When the breaker is fully charged, repeat the above test by pushing the OFF button again. An audible “click” from the LCS should be heard and continuity as measured by the Ohm meter should change.

![Figure 5. Step 5](image)

**Step 6:** Reinstall the front cover. Push the CLOSE and then the OPEN pushbuttons to discharge all energy from the mechanism, leaving it in an OPENED and DISCHARGED status.

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