

Magnum ANSI cassette cell switch field option kit

⚠ 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 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.

DISCONNECT THE EQUIPMENT FROM THE SUPPLY, USE ONLY AUTHORIZED SPARE PARTS IN THE REPAIR OF EQUIPMENT. THE SPECIFIED MAINTENANCE INTERVALS AS WELL AS THE INSTRUCTIONS FOR REPAIR AND EXCHANGE MUST BE STRICTLY ADHERED TO IN ORDER TO PREVENT INJURY TO PERSONNEL AND DAMAGE TO THE SWITCHBOARD.

Required tools

- Phillips screwdriver (#2 recommended)

Section 1: General information

The cell switch assembly consists of four form C switches operated by a common actuator. The wiring diagram in **Figure 1** illustrates the switch contacts in the normal (unactuated) position (with the breaker fully withdrawn). As the breaker is levered to the CONNECTED position, all switches change state. Operation of the switch indicates that the primary contacts are adequately engaged.

This product is intended for use with Magnum circuit breakers with PXR or Digitrip trip units.

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.

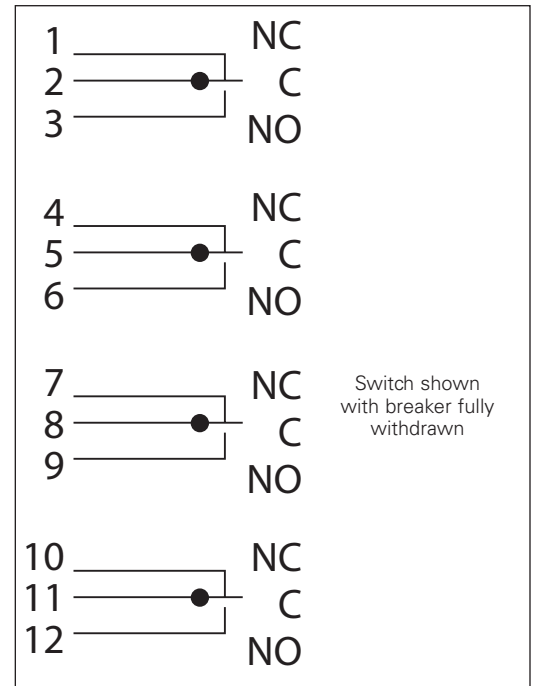


Figure 1. Cell switch wiring diagram



Powering Business Worldwide

Section 2: Installation of ANSI cassette cell switch

Step 1: Install the wire markers. Three sets of 12 wire markers are included with each cassette cell switch assembly, for the purpose of identifying the switch wire lead connection to the appropriate terminal block. If only 1 switch assembly (4 form C switches) is used, apply the "K" labels near the ends of the leads. If a second switch is needed, apply the "D" labels near the end of these leads. Discard any unused labels.

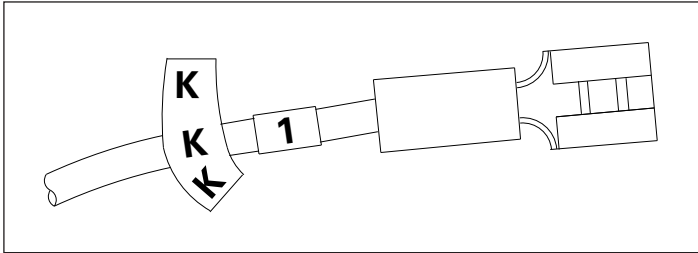


Figure 2. Step 1

Step 2: Attach the cell switch assembly to the inside of the cutout in the side sheet. Right side mounting is shown but the assembly may be mounted on either side. Note the position of the sheet metal between the 3 tabs along the edge of the plastic molding.

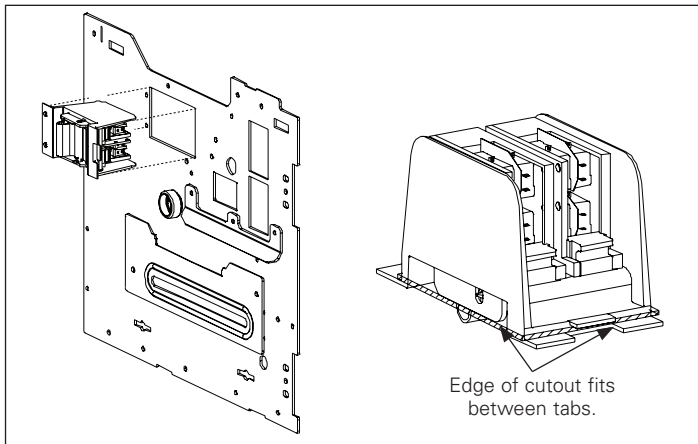


Figure 3. Step 2

Step 3: Fasten the assembly to the side sheet from inside the cassette with 2 M6 x 10 mm thread forming screws and torque to 40-50 inch-lbs (4.5-5.6 Nm).

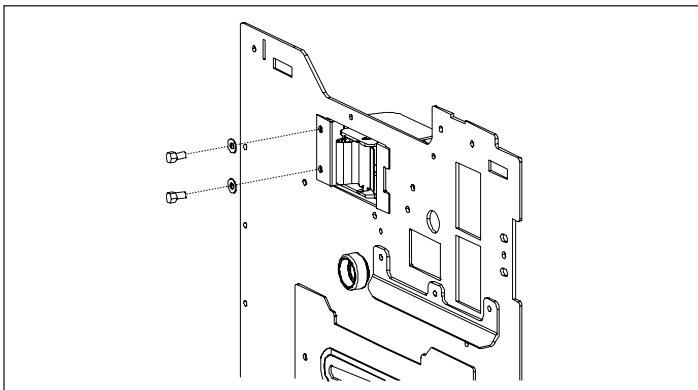


Figure 4. Step 3

Step 4: If the secondary terminal bracket has empty slots, terminal blocks should be located at the end of each row and should have the appropriate labels (K1 through K6 and K7 through K12) on them. If there are no empty slots in the secondary terminal bracket, an external terminal block extension bracket kit can be ordered, MEXTBKIT, or a customer may supply their own. Match the markings on the switch wires with the markings on the terminal blocks and route the switch to the associated location.

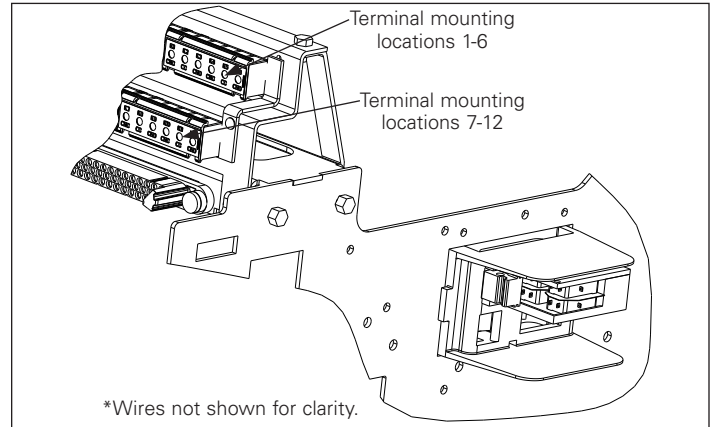


Figure 5. Step 4

Step 5: Switch leads are terminated with quick disconnect connectors that plug into the rear of the terminal blocks.

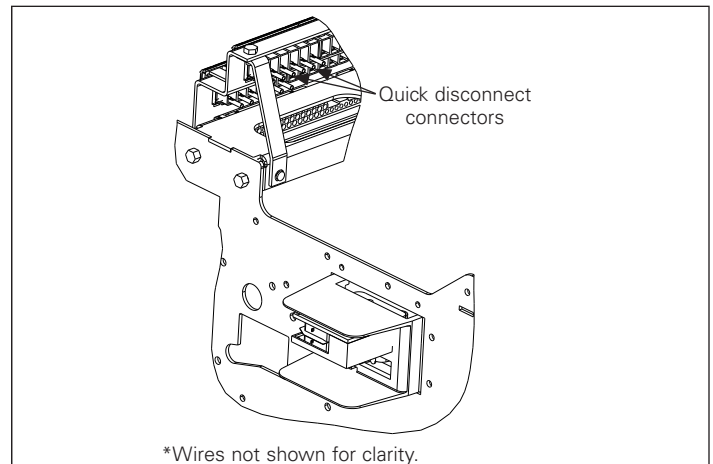


Figure 6. Step 5

Step 6: If a second switch is provided, locate 2 additional terminal blocks and repeat the wiring steps. Place the labels D1 through D6 and D7 through D12 on these blocks.

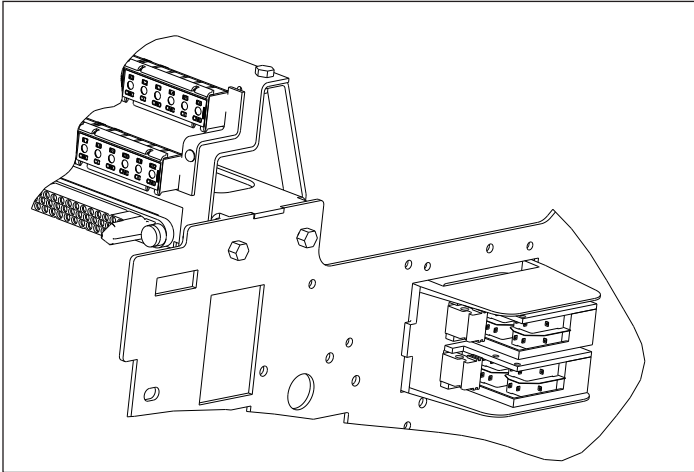


Figure 7. Step 6

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