

AC Normally Closed Solid State Relay Installation

Quick Reference Guide

Required Tools and Equipment

- ▶ Antistatic wrist strap
- ▶ Small Phillips (#2) screwdriver
- ▶ Wire stripper and wire cutter
- ▶ Adjustable wrench
- ▶ Voltmeter
- ▶ Crimpers
- ▶ Drill/drill bits



80V AC Normally Closed Solid State Relay



100V AC Normally Closed AC Solid State Relay

Installing the Equipment

WARNING: To prevent electrostatic discharge (ESD) damage when handling electronic equipment, always wear an antistatic wrist strap attached to an unpainted, grounded metal object. Ensure the wrist strap has maximum contact with bare skin. **If wires are to be buried or covered, conduit must be used to protect the wires.**

1 Power Off Rectifier & Install AC Normally Closed Solid State Relay Inside Rectifier

- 1 Power off the rectifier.

NOTE: The **AC Normally Closed Solid State Relay** must be installed inside the rectifier. The relay can be mounted on a panel or placed on the rectifier floor, depending on available space.

- 2 If mounting the **AC Normally Closed Solid State Relay**, use one of the drill pattern templates printed on the back of this Guide to drill holes for either the 80A or 100A **AC Normally Closed Solid State Relay** in a rectifier panel.

- 3 Install **AC Normally Closed Solid State Relay** with the heat sink fins in a vertical position to optimize air flow.



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2 Connect Relay to Rectifier

- 1 Remove the tap change bar from the COARSE taps.
- 2 Route the black wires of the **AC Normally Closed Solid State Relay** toward the front of the rectifier to the taps. See photo.
- 3 Connect black wires to the taps.

NOTE: Connect **AC Normally Closed Solid State Relay** wires to the same taps that were connected by the change bar.



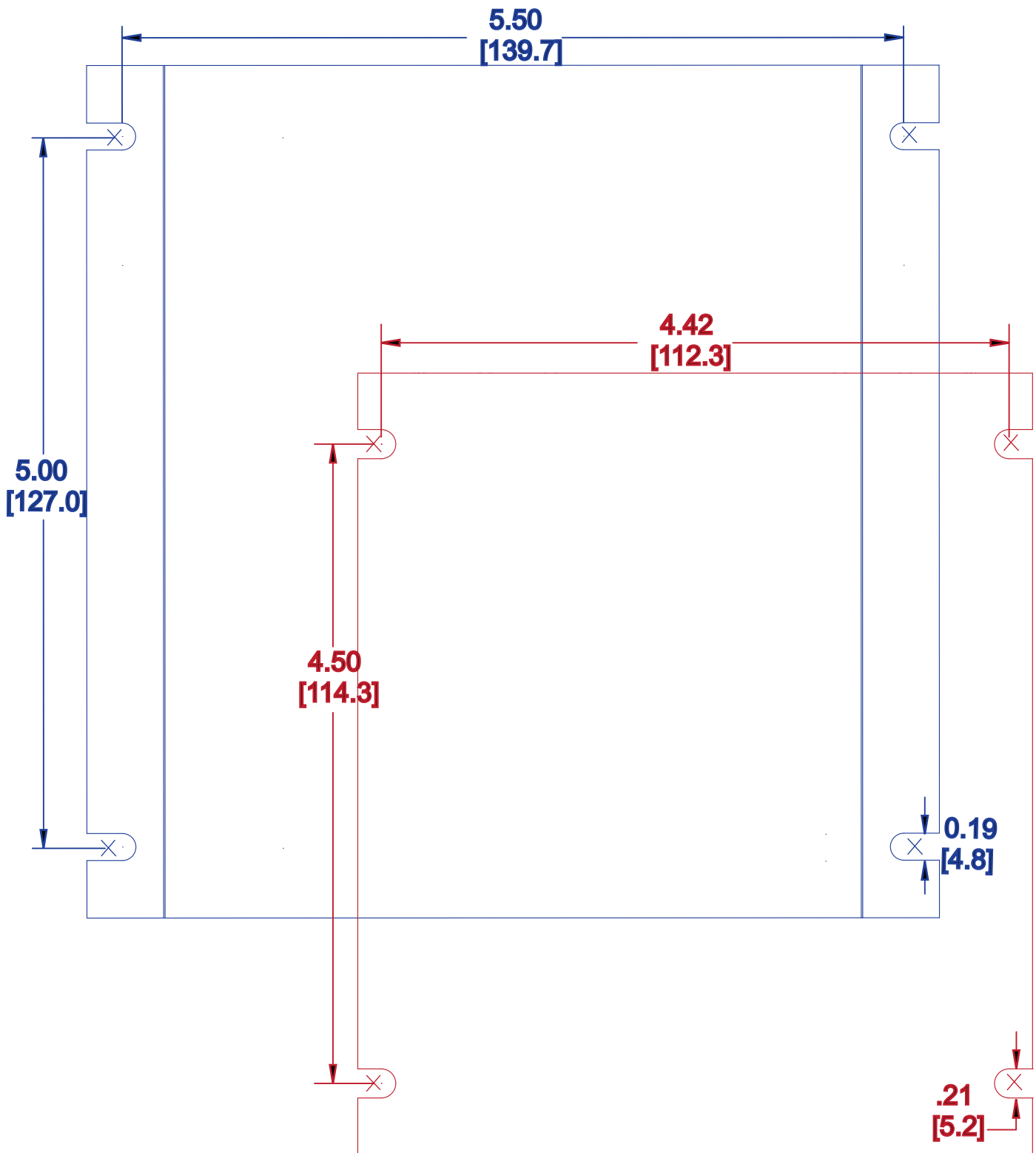
AC Normally Closed Solid State Relay Connected to Rectifier Taps

3 Connect Relay to Remote Monitoring Unit

- 1 Connect red wires of the **AC Normally Closed Solid State Relay** to the remote monitoring unit. Route wires as necessary through rectifier. Wrap and secure loose wires.
- 2 Power on the rectifier and other devices.

IMPORTANT: After installing the AC solid state relay, you may see a decrease in rectifier output due to a slight voltage (up to 1.7V) drop across the relay. The decrease will be based on the current across the relay.

NOTE: These procedures are general steps for a typical installation. If your installation requires additional technical assistance, please call the Technical Services group at 1-800-229-3404.



100V AC Solid State Relay

80V AC Solid State Relay

Tolerances: ± 0.02 in / 0.5 mm. All dimensions are in inches [millimeters].