

# AF0025-SPM Arc-Flash Relay Installation Guide

This guide outlines the installation process for the AF0025 Arc-Flash Relay. For further technical information, refer to the product manual found at [Littelfuse.com/AF0025](http://Littelfuse.com/AF0025). Ensure that the work area is de-energized prior to product and accessory installation. Follow your company's safety policy and lockout procedures.

## INSTALLATION

- 1. Install AF0025:** The AF0025 can be surface or DIN-rail mounted. See Fig. 2.
- 2. Connect supply:** Use terminal 9 as the positive terminal. Use terminal 10 as the negative terminal. Connect terminal 11 ( $\perp$ ) to ground.
- 3. Install Arc-Flash Sensors:** Mount the PGA-LS10-01B sensor(s) in the locations to be monitored. Ensure the sensors are not blocked by fixed or moveable objects considering that light from the arc must fall upon a sensor to activate it. Treat all sensors and cables as though at ground potential, and do not place them where they may be in contact with energized conductors. Connect the sensors to the AF0025 (Fig. 1).
- 4. Connect Relay Outputs:** The ERROR and TRIP relays are Form-C contacts. By default, the operating mode of the TRIP relay is non-fail-safe and the ERROR (or unit health) relay is fail-safe. See Fig. 1 for one example application. See Section 6 in the AF0025 user manual to change the TRIP relay operating mode.

**NOTE:** The TRIP relay operates when an arc flash is detected, regardless of which sensor detected the arc.

- 5. Power and Reset:** Apply supply voltage. The AF0025 may indicate several alarms where the wiring differs from factory default. Press the RESET button for at least 10 seconds (but less than 20 seconds) to auto-detect the sensor configuration. Each connected sensor and power supply LED should be solid green.

## COMMISSIONING

- 6. Performance Test:** Use a high-intensity light source on each connected sensor independently and ensure that the TRIP output changes state and operates the attached device as expected. See section 7 in the AF0025 manual.

## REFERENCE

**Terminal Specifications:** Wire Clamping, 28-12 AWG (0.08 to 2.5 mm<sup>2</sup>) copper conductors; Torque: 4.4 lbf-in (0.5 N-m)

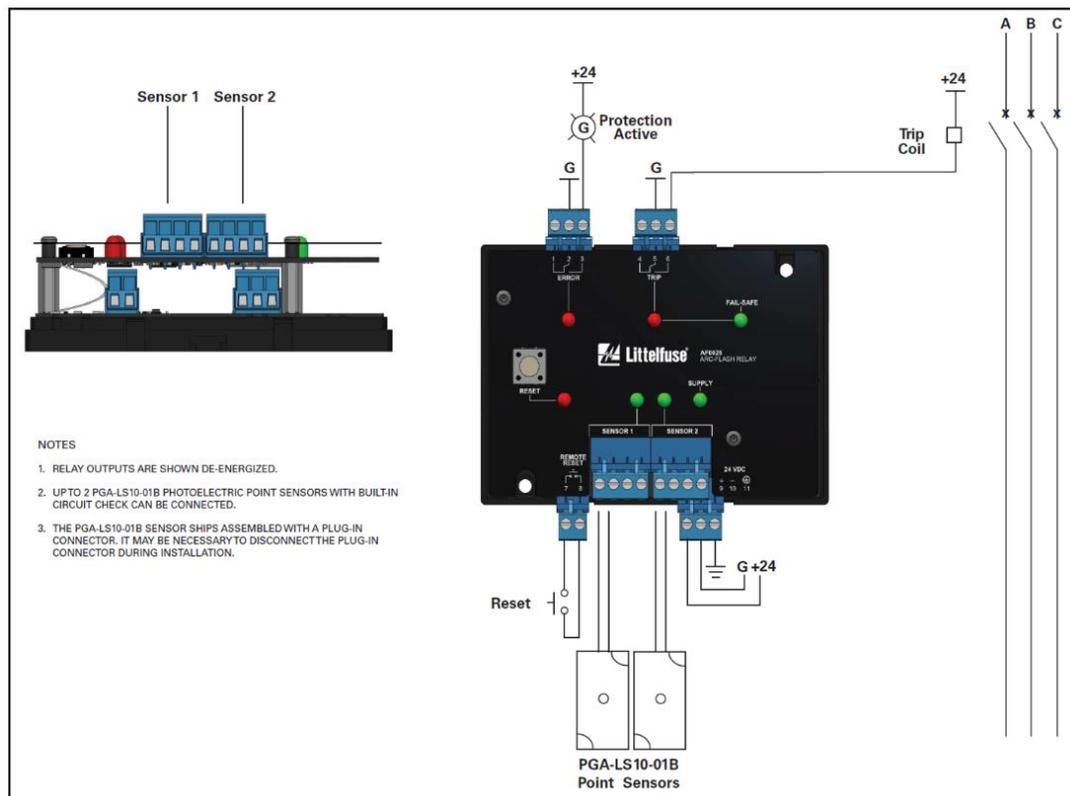


FIGURE 1. AF0025 Typical Wiring Diagram.

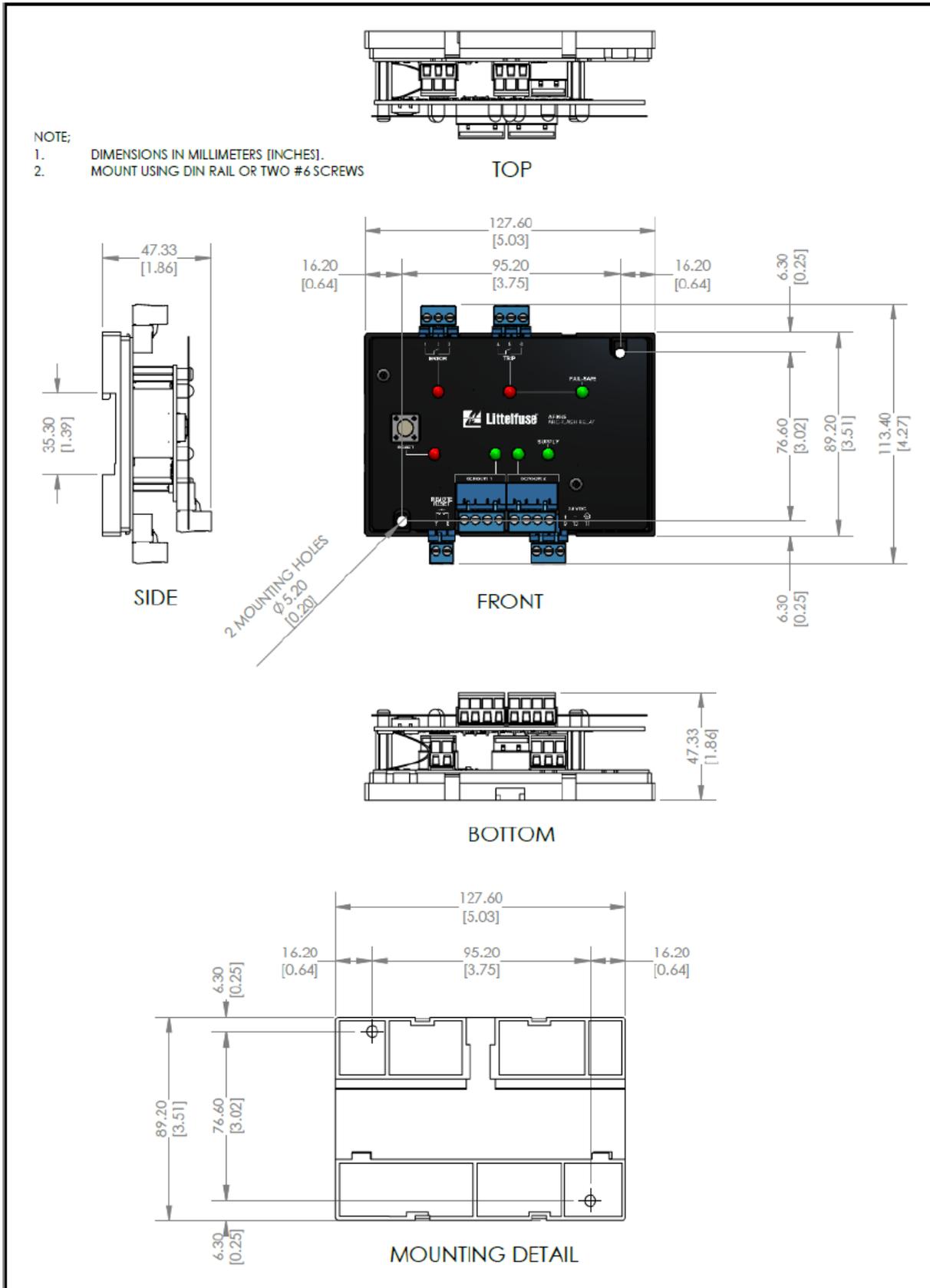


FIGURE 2. AF0025 Outline and Mounting Details.