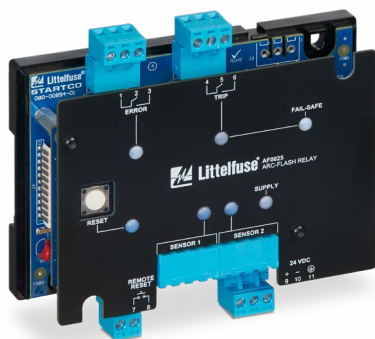


# Arc-Flash Detection Relays

## AF0025 Series

### Arc-Flash Monitoring



## Description

The AF0025 series arc-flash relay is a cost-effective and OEM-focused solution that provides innovative arc-flash protection in a compact package. The relay is able to significantly reduce arc-fault damage in ac and dc compartments by detecting the light from an arc flash using one or two optical sensors, and rapidly providing a trip signal. The compact design means it can be surface or DIN-rail mounted into the smallest spaces possible, making it an ideal OEM solution for tight cabinets such as combiner boxes and inverters. The AF0025 is conformal coated to provide protection from environmental concerns.

The use of one or two sensors makes it flexible for small or medium-size panels, with onboard or remote reset capability. There are no settings required, making it quick and easy to install without the need for a computer. The unit also includes a solid-state redundant trip circuit, providing an internal fail-safe mechanism and a very fast arc-flash response even during power up. One isolated changeover (Form C) output contact is provided to issue the trip signal to the interrupting device, which can be set to fail-safe or non-fail-safe operating modes. A second Form C contact is provided to signal an error condition such as a loss of communication to a sensor.

## Features & Benefits

| FEATURES                                                | BENEFITS                                                                                                  |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Compact solution</b>                                 | Our most compact arc-flash device, only 1.82" (46.23 mm) depth, for mounting into crowded cabinets        |
| <b>Two sensor inputs</b>                                | Flexible installation for 1 or 2 sensor applications                                                      |
| <b>Fixed light sensitivity</b>                          | Unit requires no adjustments during installations                                                         |
| <b>Internal fail-safe design</b>                        | Redundant solid-state circuitry                                                                           |
| <b>Selectable fail-safe and non-fail-safe operation</b> | Trip output can be configured to work with shunt-trip or undervoltage-trip devices                        |
| <b>Error Output</b>                                     | Fail-safe output confirms if arc-flash relay is experiencing an error or is actively providing protection |

## Applications

- Solar combiner boxes
- Inverters
- Industrial UPS
- Junction boxes
- OEM panels with little available space

# Arc-Flash Detection Relays

## AF0025 Series

### Specifications

|                                       |                                                                                   |
|---------------------------------------|-----------------------------------------------------------------------------------|
| <b>Input Voltage</b>                  | 24 V dc                                                                           |
| <b>Trip and Error Output Contacts</b> | Form C, 240 V ac/30 V dc, 6 A resistive                                           |
| <b>Trip Time</b>                      | <5 ms (typical)                                                                   |
| <b>Sensitivity</b>                    | 3 klx, fixed                                                                      |
| <b>Mounting Method</b>                | Surface mount (2 - #8 screws), or DIN rail                                        |
| <b>Conformal Coating</b>              | Yes                                                                               |
| <b>Operating Temperature</b>          | -40 °C to +70 °C (-40 °F to 158 °F)                                               |
| <b>Dimensions</b>                     | <b>H</b> 112.25 mm (4.42"); <b>W</b> 127.50 mm (5.01"); <b>D</b> 46.23 mm (1.82") |
| <b>Shipping Weight</b>                | 1.0 kg (2.2 lb)                                                                   |
| <b>Onboard and Remote Reset</b>       | Allows for flexible reset options, mounted internal or external to the cabinet    |

### Certification & Compliance

|                 |                                                           |
|-----------------|-----------------------------------------------------------|
| <b>CE</b>       | IEC/EN 60255-26:2013, IEC/EN 61010-1:2010 + AMD1:2016     |
| <b>FCC</b>      | FCC Part 15, Subpart B, Class A – Unintentional Radiators |
| <b>Warranty</b> | 2 Years                                                   |

### Accessories

#### PGA-LS10-01B Point Sensor

Line-of-sight light sensor detects an arc as small as 3 kA within a 2-m half-sphere. Includes sensor health and trip indication.

### Ordering Information

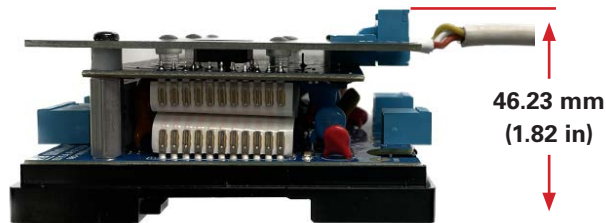
| ORDERING NUMBER | DESCRIPTION              |
|-----------------|--------------------------|
| AF0025-00       | Arc-Flash Relay, 24 V dc |

# Arc-Flash Detection Relays

## AF0025 Series

### Dimensions Millimeters (inches)

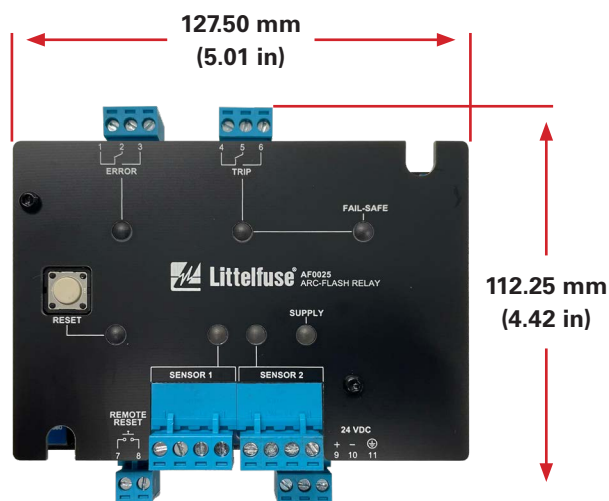
A. Side view with sensor connected



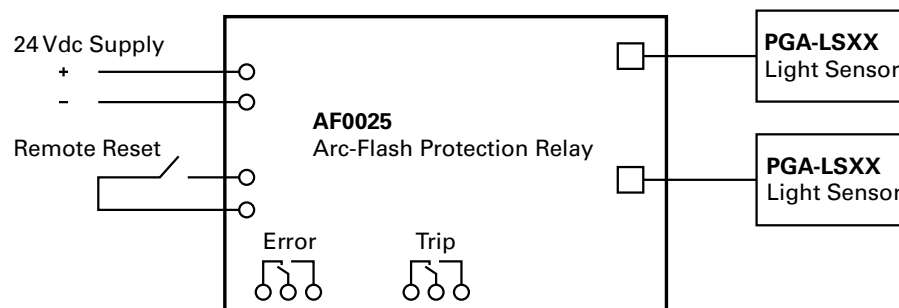
B. Side view with no sensor connected



C. Top View



### Simplified Circuit Diagram



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