

Arc-Flash Detection Relays

AF0025 Series

Arc-Flash Monitoring

CE FC



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
Compact solution	Our most compact arc-flash device, only 1.82" (46.23 mm) depth, for mounting into crowded cabinets
Two sensor inputs	Flexible installation for 1 or 2 sensor applications
Fixed light sensitivity	Unit requires no adjustments during installations
Internal fail-safe design	Redundant solid-state circuitry
Selectable fail-safe and non-fail-safe operation	Trip output can be configured to work with shunt-trip or undervoltage-trip devices
Error Output	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

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Specifications

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

Certification & Compliance

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

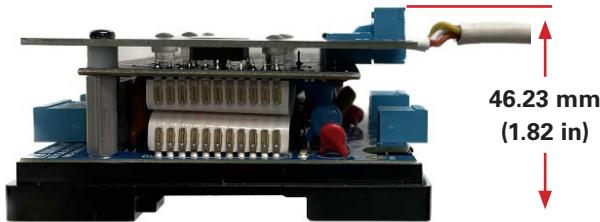
ORDERING NUMBER	DESCRIPTION
AF0025-00	Arc-Flash Relay, 24 V dc

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Dimensions Millimeters (inches)

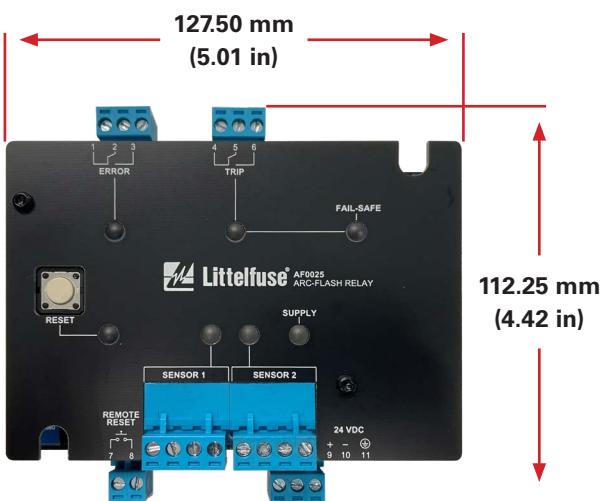
A. Side view with sensor connected



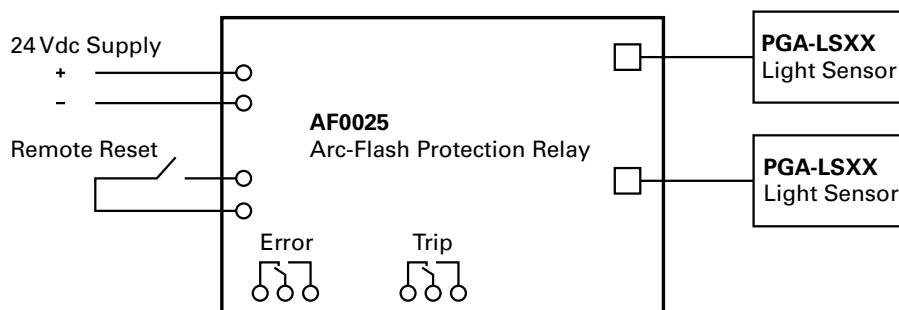
B. Side view with no sensor connected



C. Top View



Simplified Circuit Diagram



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