

AF0100 SERIES

Arc-Flash Relay



Description

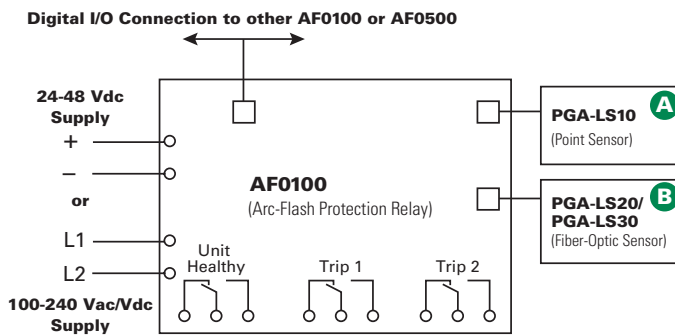
The AF0100 Series arc-flash relay is a cost-effective solution that reduces arc-fault damage by detecting the light from an arc flash and rapidly tripping. Two remote light sensors can be connected to one relay and multiple AF0100 and/or AF0500 relays can be connected to monitor additional sensors, providing complete coverage for a wide range of applications. The compact, DIN-rail or surface-mountable body makes this an ideal solution for equipment manufacturers.

Two isolated Form-C contacts are provided for applications with multiple devices that must be tripped. This is especially useful for generator applications where the generator and breaker need to be tripped in case of an arc flash.

The AF0100 accepts PGA-LS10 point sensors and PGA-LS20/PGA-LS30 fiber-optic sensors in any combination. Sensor health is continuously monitored to ensure fail-safe operation. A solid-state redundant trip circuit provides an internal fail-safe mechanism and fast arc-flash response during power up.

Front-panel and sensor LEDs indicate sensor health and fault location.

Simplified Circuit Diagram



Features & Benefits

FEATURES	BENEFITS
Compact	Fits into a wide range of arc-flash applications
Two optical sensor types	Point sensors or fiber-optic sensors can be used in any combination for coverage flexibility
Dual sensor inputs	One relay can monitor two arc-flash sensors
Adjustable light sensitivity	Allows for operation in bright environments and maximum sensitivity in dark environments
Discrete wire networking	Multiple AF0100 or AF0500 units can be interconnected to form a system
Fail-safe system	Continuous monitoring of optical sensors and inputs ensures protection
USB interface	Configuration software is easy to use with no drivers or software installation
Unit health	Ensures continuous protection with self diagnostic and remote unit-healthy indication
LED Indication	Trip and sensor status indication both on relay and sensors


Ordering Information

ORDERING NUMBER	DESCRIPTION
AF0100-00	Arc-Flash Relay, Universal Supply
AF0100-10	Arc-Flash Relay, 24-48 VDC

Specifications

Input Voltage	100-240 VAC/VDC, 24-48 VDC
AF0100-00	100-240 VAC/VDC, 24-48 VDC
AF0100-10	24-48 VDC
Dimensions	H 90 mm (3.5"); W 128 mm (5.0"); D 60 mm (2.4")
Trip, Error Relays	Form C, 250 VAC/30 VDC, 6 A resistive
Trip Time	5 ms (typical)
Sensitivity	10-25 klux programmable
Mounting	Surface, DIN rail
Operating Temperature	-40°C to +70°C (-40°F to 158°F)
Shipping Weight	1.0 kg (2.2 lb)
Certifications	UL Listed (UL 508), CE, RCM, FCC
Warranty	5 years

Accessories

A 	PGA-LS10 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.
B 	PGA-LS20/PGA-LS30 Fiber-Optic Sensor 360° light sensor to run along bus bars. Includes sensor health and trip indication.