

# AF0100 SERIES

## Arc-Flash Relay



### Description

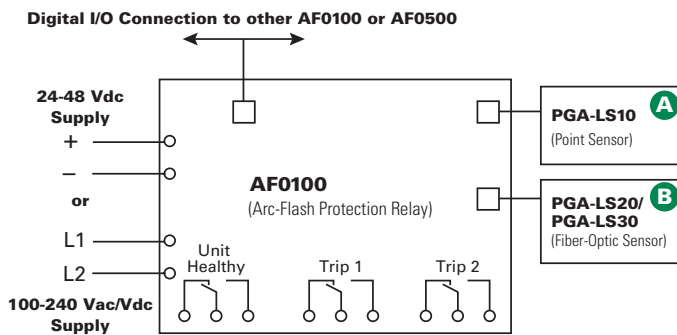
The AF0100 Series arc-flash relay is a cost-effective solution that reduces arc-fault damage by detecting the light from an arc flash and rapidly tripping. Two remote light sensors can be connected to one relay and multiple AF0100 and/or AF0500 relays can be connected to monitor additional sensors, providing 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
<b>Compact</b>	Fits into a wide range of arc-flash applications
<b>Two optical sensor types</b>	Point sensors or fiber-optic sensors can be used in any combination for coverage flexibility
<b>Dual sensor inputs</b>	One relay can monitor two arc-flash sensors
<b>Adjustable light sensitivity</b>	Allows for operation in bright environments and maximum sensitivity in dark environments
<b>Discrete wire networking</b>	Multiple AF0100 or AF0500 units can be interconnected to form a system
<b>Fail-safe system</b>	Continuous monitoring of optical sensors and inputs ensures protection
<b>USB interface</b>	Configuration software is easy to use with no drivers or software installation
<b>Unit health</b>	Ensures continuous protection with self diagnostic and remote unit-healthy indication
<b>LED Indication</b>	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

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

### Accessories

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