

D0100 SERIES & D0900 SERIES

Arc-Flash Relay

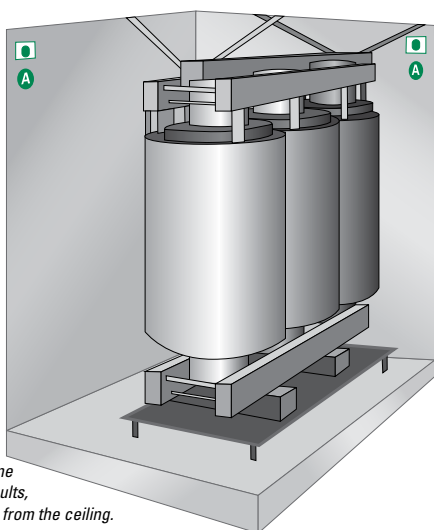


Description

The D0100/D0900 Arc-Flash relays provide a simple and cost-effective solution for Arc-Flash monitoring. Two light sensors can be connected directly to one relay, or optional junction boxes allow up to 16 sensors per relay.

Light Sensors react to light and are available with 180° or 360° detection area. Sensors are supplied with 5, 10 or 15 m of cable and a mounting bracket. 1-2 sensors are recommended per cubicle or drawer.

Installation Diagram



Place sensors in direct line of sight to possible arc faults, preferably pointing down from the ceiling.

Ordering Information

ORDERING NUMBER	CONTROL POWER
D0100.0010	48-220 Vdc
D0100.0020	24 Vdc
D0900.0010	220-250 Vac

ACCESSORIES	REQUIREMENT
A0033.0010 Detector cable 2 x 0.25 mm w/screen. 100 m	Optional
A0200.0010 Light Sensor 180°; 5 m cable	Required: At least 1 sensor per cubicle or drawer
A0200.0020 Light Sensor 180°; 10 m cable	
A0200.0030 Light Sensor 180°; 15 m cable	
A0300.0010 Light Sensor 360°; 5 m cable	
A0300.0020 Light Sensor 360°; 10 m cable	
A0300.0030 Light Sensor 360°; 15 m cable	
D0400.0010 Junction Box. For 8 sensors, without indication	Optional
D0500.0010 Junction Box. For 8 sensors, with indication	Optional
D1100.0010 Diode Logic Unit	Optional

Features & Benefits

FEATURES	BENEFITS
Compact module	Fits into wide range of Arc-Flash applications
Trip time <1 ms	Limits Arc-Flash damage and risk of injury
Two optical sensor types	Point sensors with 180° or 360° detection area depending on specific installation
Dual sensor input	Single Arc-Flash relay can monitor 2 sensors or junction boxes
Sensor expansion option	Junction box allows for up to 16 sensors per Arc-Flash relay (8 sensors/box)
Adjustable light sensitivity	Allows for operation in bright environments and maximum sensitivity in dark environments
Service mode	Allows for system test without tripping

Accessories



A0200 (180°)/A0300 (360°) Light Sensors

Line-of-sight light sensor detects an arc as small as 3 kA within a 2-m half-sphere. Available in 180° or 360°; 5, 10, or 15 m cable.



D0400/D0500 Junction Box for parallel connection of more than 2 sensors for one relay. Designed to connect up to 8 sensors, and is available with and without indication. Max. 2 junction boxes can be connected to one Arc-Flash relay.

Specifications

Voltage Supply	D0100.0010: 48-220 Vdc D0100.0020: 24 Vdc D0900.0010: 220-250 Vac D0900.0020: 220-250 Vac D0900.0030: 110 Vac
Thyristor Output Sensitivity	250 Vac/Vdc, 8 A cont., 25 A. for 0.1 s, min. load 50 mA
Number of Sensors	Adjustable 2,000-24,000 lux Max. 16 pcs. with 2 junction boxes
Response Time	Less than 1 ms
Power Consumption	D0100: 4.3 W; D0900: 3.5 W
Ambient Temperature	-25°C to +70°C
EMC	EN50081-1/2 and EN50082-1/2
Dimensions	H 90 mm (3.5"); W 105 mm (4.1"); D 75 mm (3.0")