Conventional Rate of Rise and Fixed Temperature Heat Detector

EDC-M9103

SIGNALING UL LISTED

Overview

EDC-M9103 Conventional Rate of Rise and Fixed Temperature With built-in microprocessor, it works stably by being fixed with highly reliable fire judging program.

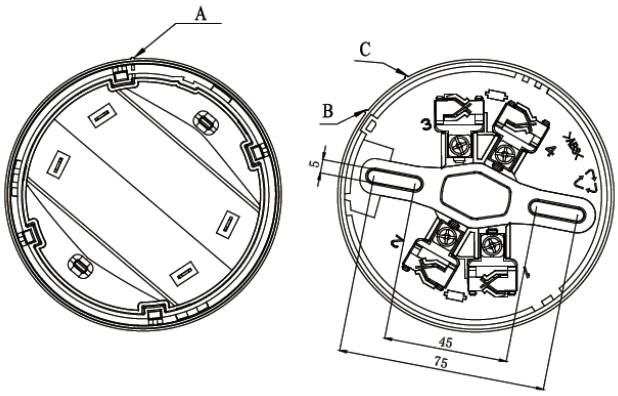
On detecting a fire signal, it can change its own current to transmit the signal to fire alarm control panel (FACP) or addressable zone monitor unit. The detector keeps illuminating fire LED until it is reset by power-down.

Standard Features

- Reed switch testing
- The fire LED allows 360°viewing.
- Providing alarm output terminal connecting with remote indicator.
- Rate of rise and fixed temperature
- Complying with UL 521.

Typical Wiring

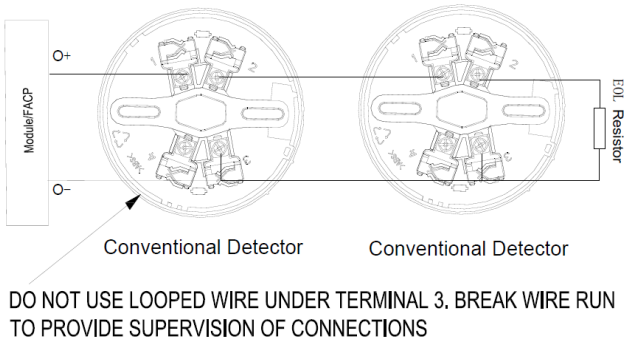
Below figures show the detector bottom and terminals of the base.



There are four terminals with numbers on the base.

1: Detection zone positive IN
2: Detection zone positive OUT
3: Detection zone negative IN and OUT
2: Positive terminal of alarm output
4: Negative terminal of alarm output

Refer to respective Module/FACP Installation sheets for the wiring connections



Recommended Cabling

1.0mm^2 or above fire cable for all terminals laid through metal conduit or flame retardant conduit, subject to local codes.

Note: It's recommended to use cables of different colors to avoid incorrect wiring.

Application

Warning:

The detector should be connected with fire alarm control panel or other devices with current limit function. Otherwise the detector may be damaged by too heavy alarm current.

The alarm current depends on the current limit of the control panel or interface unit.

Compatible control panels and modules connected to the detector, and the max. quantity of detectors per zone are shown in the table below.

Control Panel	Modules	Detector Capacity
EST3	3-IDC8/4	19
	SIGA-UM	10
3X-SFS1B/3X-SFS1R	3-IDC8/4	19
	SIGA-UM	10
IO64G-2/IO64R-2	SIGA-UM	10
IO1000G-2/IO1000R-2	RZI16-2	25
FSP302/502/1004	IDC ccts	25

Technical Specification

Operating Voltage	16VDC~28VDC
Standby Current	≤ 60μA
Alarm Current	≤ 55mA
LED Indicator	Red, periodically flash once Periodically flash twice in fault; illuminate in alarming.
Alarm Output	Polarized output. Cycle 0.25S, duty ratio 1/2, Voltage range 13V~24V（built in 10k resistor in series, maximum output current is 2.0(mA)
Maximum Ripple Voltage	2V (peak-to-peak)
Alarm Reset	Instantaneous power down (Min.10sn, Max. 1.0VDC)
Class and Setup	Rate of rise and fixed temperature
Rate of Rise	15°F /min (8.3°C/min)
Fixed Temperature	135°F (57°C)
Maximum spacing	50 ft. (15.2 m)
Power-up Time	≤ 10s
Wiring	Two-wire, polarity sensitive
Ambient Temperature	32°F (0°C) - 100°F (37.8°C) (UL 521)
Operating Temperature	14°F (-10°C) - 122°F (+50°C)
Relative Humidity	≤ 95%, non-condensing
Material of Enclosure	ABS White (RAL 9016)
Ingress Protection Rating	IP2X
Dimensions	Diameter: 100mm Height: 53.3mm (with base)
Mounting Hole Distance	45mm-75mm
Weight	110g
Listing	UL 521

Ordering Information

Part No.	Description
EDC-M9103	Conventional Rate of Rise and Fixed Temperature Detector

Accessories and Tools	
EDB-M01	Detector Base
T-MT	Commission Tool