DI-M9101
Intelligent Combination Heat Photoelectric Smoke Detector

SIGNALING
UL LISTED
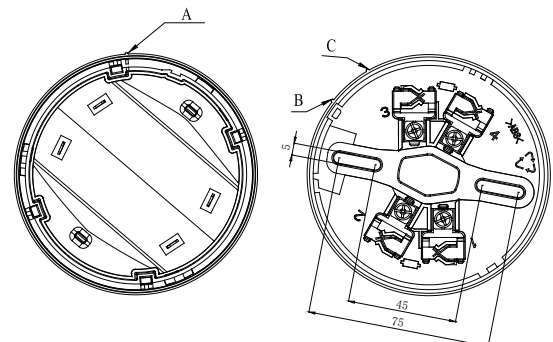Fire Alarm
Subassembly

Description

DI-M9101 Intelligent Combination Heat Photoelectric Smoke Detector integrates photoelectric detection, fixed temperature and rate of rise detection technology. The smoke sensor and heat sensor are integrated in mechanism and circuitry structure, provide wide range of application, to detect more types of fire conditions like black smoke with small particles and alcohol flame.

Features and Benefits

- Electrically addressed, can be modified by programmer
- Strong environmental adaptability due to drift compensation
- Self-diagnostic
- Reed switch test
- Dirty chamber checking
- Fire LED allows 360° viewing
- LED indication for both fire and normal status
- LED indication for normal status can be turned off by handheld programmer
- Remote indicator output
- 2 levels smoke sensitivities programmable

Terminals and Installation Holes

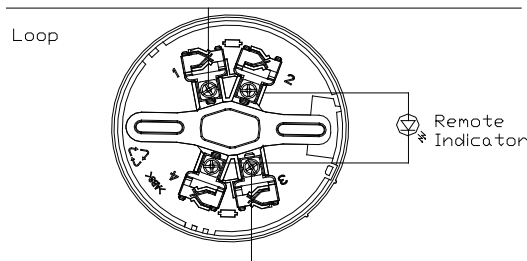Below figures show the detector bottom and terminals of the base.

1&3: Loop connection (non-polarized)
2: Positive terminal of remote indicator
4: Negative terminal of remote indicator

Recommended Cabling

17AWG ~ 14AWG fire cable is recommended, but subject to local codes.

Application

The wiring diagram is shown below

Address can be set through P-9910B programmer, also the sensitivity.
Below table shows relative setting codes for sensitivity levels and working modes. Factory defaults at Level 2 + Fixed Temperature + Normal LED.

Detector Code	Smoke Sensitivity	Class	Polling LED
1	1	Fixed Temperature	Normal
2	2	Fixed Temperature	Normal
129	1	Fixed Temperature	OFF
130	2	Fixed Temperature	OFF

Certificates and Compliance

- Standards: UL 268 / UL521
- Listed by UL
- WEEE & RoHS Compliant

Order Information

Part No.	DI-M9101
Device Name	Intelligent Combination Heat Photoelectric Smoke Detector
Product No.	10104835
Compatible Products	GST-M200, GST-IFP4M Intelligent Fire Panel

Technical Specification

Operating Voltage	Loop 24VDC
Standby Current	≤0.8mA
Alarm Current	≤1.8mA (without remote indicator) ≤ 3.8mA (with remote indicator)
LED Indicator	Red Normal: Flash on polling Fire: Steadily ON
Remote Indicator Output	Polarized output. Directly connect to remote indicator (built in 10k resistor in series, output current is 2mA); Flash in alarming and do not illuminate in normal.
Maximum Ripple Voltage	2V (peak-to-peak)
Programming	Electronically addressing from 1 to 242
Sensitivity and range	Level 1: 1.23%~2.7% per ft Level 2: 2.0%~3.89% per ft
Maximum spacing (When Used as a Heat Detector only)	50 ft. (15.2 m)
Action Temperature	135°F (57.2°C)
UL Temperature Range	32°F (°C) - 100°F (37.8°C)
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: 54.5mm (with base)
Mounting Hole Distance	45mm-75mm
Weight	110g

Accessories and Tools

Part No.:	DC-M9402
Device name:	Conventional Sounder Base
Product No.:	10106029

Part No.:	DB-M01
Device name:	Common Detector Base
Product No.:	30205767

Part No.:	C-9314P
Device name:	Remote Indicator
Product No.:	10102339

Part No.:	P-9910B
Device name:	Handheld Programmer
Product No.:	10104894