I-9103 Intelligent Rate of Rise and Fixed Temperature Heat Detector

Features

◇ Twin LED for 360° view.

◇ Electronically addressed in field.

◇ Built-in microprocessor stores 14 history data.

◇ Rate of rise and fixed temperature alarm modes.

◇ Self-diagnostic.

◇ Remote indicator output available.

◇ Complies with EN 54-5 standard.

Description

I-9103 Intelligent Rate of Rise and Fixed Temperature Heat Detector is an addressable fire alarm device cooperating with GST intelligent fire alarm control panels to build a fire detection system.

The detector shows fire alarm by the LED indicators. It uses thermistor as its sensor and transmits the signal to a microprocessor which, after voltage transfer, processes the signal using intelligent arithmetic and sends any fire alarm to the control panel. The LED indicators will then be lit by the control panel.

Connection and Cabling
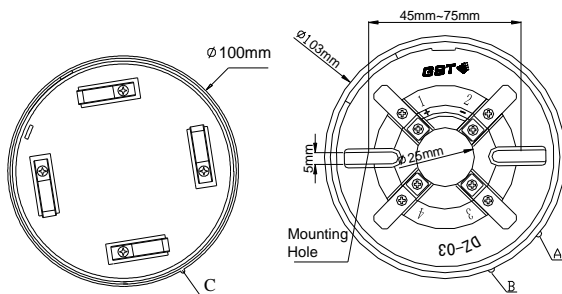
Fig.1 shows the detector bottom and Fig. 2 the base.

Fig. 1   Fig. 2

There are four terminals with numbers on the base.

1&3: Loop connection (polarity-insensitive)

2: Positive terminal of remote indicator

4: Negative terminal of remote indicator

Recommended Cabling

$1.0mm^2$ or above fire cable is recommended but subject to local codes.

Installation

A fixed installation direction is ensured by the location elements on the detector and the base. Fix the base with two tapping screws, and then align mark C on the detector with A on the base, rotate the detector to align mark C with mark B (Refer to Fig. 1 and 2 for the position of the marks), the detector will be fitted to the base.

Note: The detector shall be horizontally installed. If it has to be installed on an inclined plane, the inclination angle shall not be over 45º.
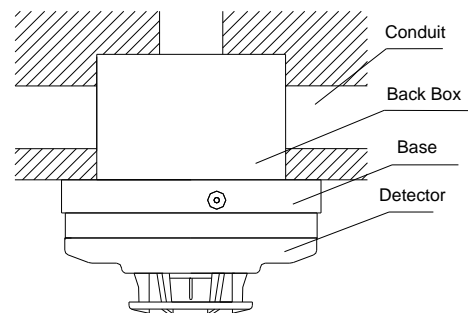
Fig. 3 shows the installation of the detector.

Fig.3

Application

The detector is especially applicable to places where fire occurs with sharp rise of temperature. Used together with smoke detectors, it can detect fire with more reliability to reduce losses.

The detector can be addressed in field by using P-9910B programmer. Please refer to *P-9910B Hand Held Programmer Installation and Operation Manual* for details.

Maintenance

1. The detector should be installed just before commission and kept well before installation, taken corresponding measures for dust-proof, damp-proof and corrosion-proof.

2. The dust-proof cover should not be removed until the project has been plunged into usage. Otherwise it may not report alarm properly.

3. Fire simulation test should be done to the detector at least every 6 months.

Specification

Operating Voltage	Loop 24V (16V～28V)
Standby Current	≤0.8mA
Alarm Current	≤5.0mA
Indicators	Red. Flashes in normal condition, and illuminates in alarming
Remote indicator output	Directly connect to remote indicator (built-in 5.1kΩ resistor in series. Max. output current is 5.0mA). Quiet in normal condition. Illuminates in alarming.
Action Temperature	58℃
Class	A1R
Programming Method	Electronically programming
Code Range	One address within 1～242.
Wiring	Non-polarized 2-core for loop. Polarized 2-core for remote indicator.
Ingress Protection Rating	IP33
Ambient Temperature	−10℃～+50℃
Relative Humidity	≤95%, non condensing
Material and Color of Enclosure	ABS, white (RAL 9016)
Dimensions	Diameter: 100mm Height: 58mm (with base)
Mounting Hole Distance	45mm～75mm
Weight	About 120g

Accessories and Tools

Model	Name	Remarks
P-9910B	Hand Held Programmer	Order separately
DZ-03	Base	Order separately

Limited Warranty

GST warrants that the product will be free of charge for repairing or replacing from defects in design, materials and workmanship during the warranty period. This warranty does not cover any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.

This Data Sheet is subject to change without notice. Please contact GST for more information or questions.