

# DC-9103(IS)

## Intrinsically Safe Conventional Rate of Rise and Fixed Temperature Heat Detector



# Ex

### Description

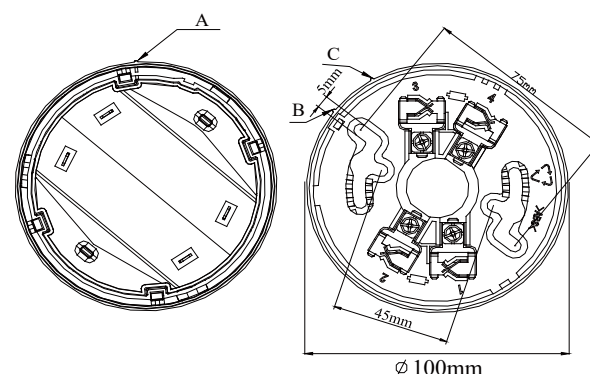
DC-9103(IS) Intrinsically Safe Conventional Rate of Rise and Fixed Temperature Heat Detector is applicable to Zone 1 and Zone 2 of areas with explosion-proof requirement in petroleum, chemical industries and ships. The detector has two classes, A1R and BS, can be set through programmer on site.

### Features and Benefits

- Integrated algorithm for analyzing fire, improving the sensitivity highly
- Self-diagnostic
- Stable and reliable performance
- Fire LED allows 360°viewing

### Terminals and Installation Holes

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



- 1: Detection zone positive IN
- 2: Detection zone positive OUT
- 3: Detection zone negative IN and OUT
- 4: Physical fix only

### Recommended Cabling

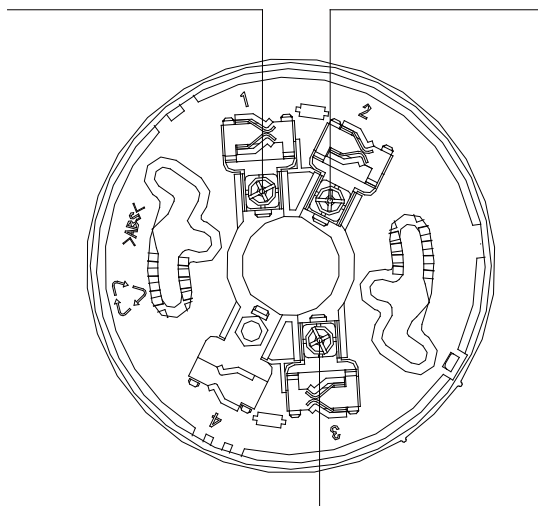
1.0mm<sup>2</sup> or above fire cable is recommended, laid through metal or flame-retardant conduit, but subject to local codes.

The capacitance distributed among cables should not be over 0.083μF, and the inductance distributed should not be over 4.1mH

IMPORTANT: This publication is a generic version in which product information is shown for informational purposes only and does not constitute a specific commitment or guarantee. We are constantly pursuing the improvement of product technology to improve product performance, for which we reserve the right to adjust the configuration and technical information of the related products without notice. In addition, the description of system performance in this publication applies only to the usual situation. As a result, there may be a variety of unpredictable special circumstances in the real world, so the realization of the relevant product performance will depend on the professional investigation and analysis and the design plan. Please contact us and we will be happy to provide you with professional advice.

## Application

The wiring diagram is shown below



Working mode of the detector can be set through P-9910B programmer. Below table shows the setting codes and working modes. Factory defaults at A1R.

Detector Code	Heat Class
1	BS
2	A1R

## Order Information

Part No.	DC-9102(IS)
Device Name	Intrinsically Safe Conventional Photoelectric Smoke Detector
Product No.	10105034
Compatible Products	I-9332 Flame Proof Zone Monitor Interface

## Technical Specification

Operating Voltage	24V (16V ~ 28V)
Standby Current	≤60uA
Alarm Current	10mA≤I≤30mA
Indicator	Red. Flashes in normal condition, and illuminates in alarm
Explosion-proof Mark	Ex ib IIC T6 Gb
Explosion-proof Certificate	CE17.2124
Zener Barrier	U0=28V I0=93mA C0=0.083μF L0=4mH Pi=651mW
Alarm Reset	Instantaneous Power-off (5s Min, 2.5VDC Max)
Detector Class	P (A1R and BS can be set, factory default is A1R)
Environment Temperature	A1R: typical 25 °C, ranging -10 °C - +50 °C BS : typical 40 °C, ranging -10 °C - +65 °C
Relative Humidity	≤95%, non condensing
Material of Enclosure	ABS
Dimensions	Diameter: 100mm Height: 53.3mm (with base)
Mounting Hole Distance	45mm ~ 75mm
Weight	About 130g

## Certificates and Compliance

- Explosion-proof Mark: Ex ib IIC T6 Gb
- Explosion-proof Certificate: CE17.2124

## Accessories and Tools



Part No.: DB-01(IS)  
Device name: Detector Base  
Product No.: 30205765