

# DC-9103(IS)

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



# Ex

### Description

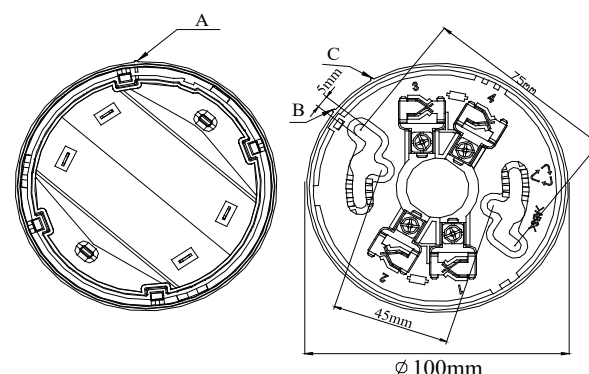
DC-9103(IS) Intrinsically Safe Conventional Rate of Rise and Fixed Temperature Heat Detector is applicable to Zone 1 and Zone 2 of areas with explosion-proof requirement in petroleum, chemical industries and ships. The detector has two classes, A1R and BS, can be set through programmer on site.

### 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

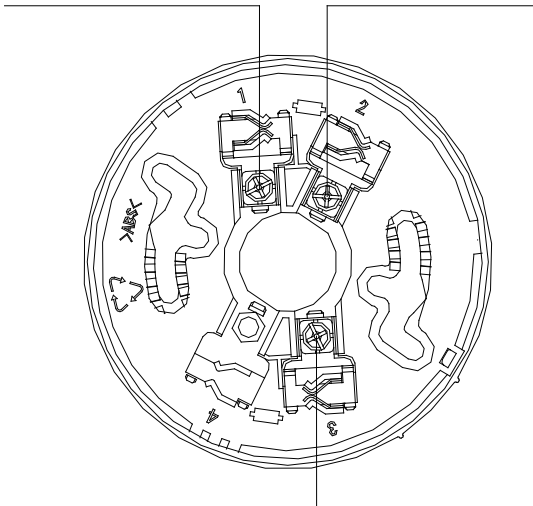
### Recommended Cabling

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

## 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