



Intrinsically Safe Combined Detector

C-9101 EX

Description

C-9101Ex Explosion-proof Combination Heat/Photoelectric Smoke Detector is a kind of combination detector consisting of smoke sensing parts and semi-conductor heat sensing parts in technological structure and circuit structure. It's applicable to zone 1 and zone 2 of areas with explosion-proof requirement in petroleum and chemical industries.

It can match with fire alarm controller, explosion-proof addressable interface box, explosion-proof detector and terminal resistor produced by GST to conduct the processing of detector signals.

Technical Specifications

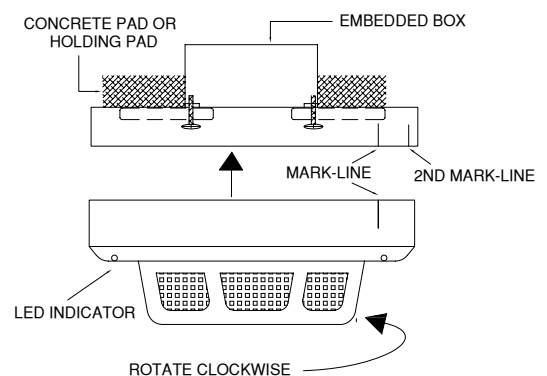
- Operating Voltage: DC24V, range allowed: DC16V~DC28V
- Operating Current:
 - Standby: ≤60mA; Alarm: ≤30mA
- Alarm Temp: 58 °C/3 °C Rate of Rise
- Safety Barrier Parameters: $U_0=28VDC$, $I_0=93mA$
- Indicator: RED –Steady on alarm
- Remote Indicator output: Directly connecting with indicator (built-in 5.1kΩ resistor, maximum output current is 5.0mA). Quiet in normal condition. Illuminates steadily in alarm.
- EX Mark: ExibIICT6
- Class: A2R
- Dimension:
 - Diameter: 100mm, Height: 42mm (excluding the base), 56mm (with base)
- Operating Environment:
 - Temperature: -10°C+50
 - Relative Humidity: ≤95%, no condensation
- Monitoring Area: When space height is 6m to 12m, the monitoring area of a detector is 80m² for normal protection area; when space height is less than 6m, it is 60 m².
- Protection Level: IP22
- Material and Color of Enclosure: ABS (Surface resistance ≤109Ω), white (RAL 9016)

Features and Benefits

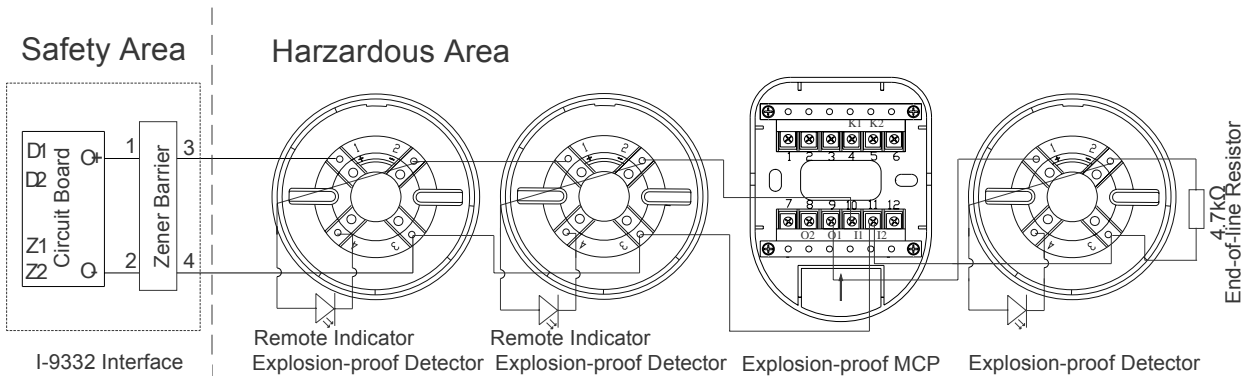
- Multifunctional and highly reliable detector
- Sensing chamber for exceptional dust proof ability
- Twin LED for 360° vision
- Low profile design
- Initiated by fire alarm point using I-9332Ex Interface

Detector Installation

The detector should be installed in compliance with all local codes having a jurisdiction in your area or BS 5389 Part 1 and EN54. Before installation verify the proper wiring and base are firmly mounted to prevent detector damage before the installation. Point the detector in the base by the mark-line and secure the detector in that position by rotating it clockwise until it reaches the next mark line. Do not remove red plastic dust cover until the final handover is done.

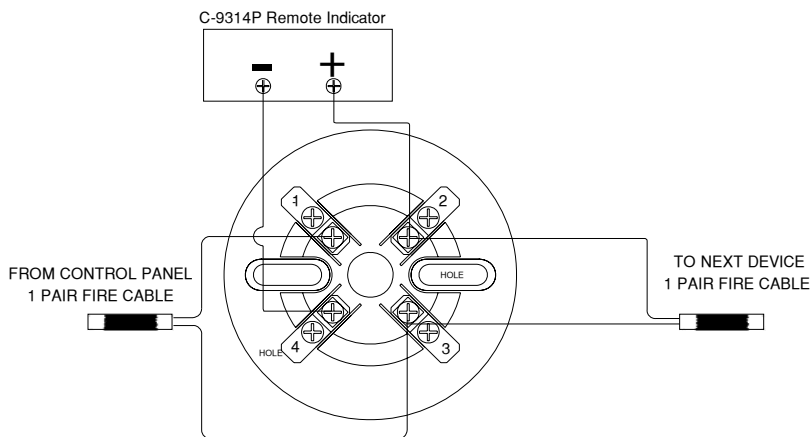


Wiring and Connection



Sample wiring diagram above show detectors are connected with I-9332 Interface. There are four terminals with numbers on the explosion-proof orientation base:

- Terminal 1: Detection zone positive IN
- Terminal 2: Detection zone positive OUT
- Terminal 3: Detection zone negative IN and OUT
- Terminal 2: Positive terminal of remote indicator
- Terminal 4: Negative terminal of remote indicator



Selection of compatible Control Panels

Compatible with all GST Intelligent Fire Alarm Panels via I-9332 Explosion Proof Interface and GST-AS-Series for conventional panel (purchased separately)

Accessories



Part Number: DZ-03 EX
Description: Intrinsically Safe Detector Base
Weight / Kg.: 0.050
Pack Qty. per Box: 300

Ordering Information



Part Number: C-9101 EX
Description: Intrinsically Safe Combined Detector
Weight / Kg.: 0.123
Pack Qty. per Box: 100



Part Number: I-9332
Description: Interface Module for Intelligent Panel
Weight / Kg.: 1.5
Pack Qty. per Box: 1

