DI-9104Exd
Digital Flame Proof
UV Flame Detector

Description

DI-9104Exd is a light-sensitive detector that detects fire by sensing the ultraviolet light from flaming material. It's designed for areas where an open fire is liable to occur with large amount of radiation and no smoldering stage, or where quick response to a fire is required. This detector can be applicable to zone 1 and 2 of explosive areas.

The detector is able to work either in addressable mode connecting with GST intelligent fire alarm control panel to transmit signal through detection loop or in non-addressable mode connecting to 24VDC power supply to transmit signal by outputting different resistance values.
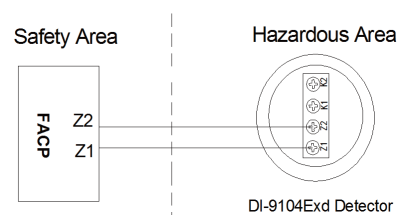
Features and Benefits

- Intelligent signal-processing and communication with integrated microprocessor
- Intelligent algorithm ensures quick response with minimized false alarm
- Three sensitivity levels
- High sensitivity, reliable performance
- Dust-proof, damp-proof and corrosion-proof

Terminals and Installation Holes

Below figures show the terminals and connection of the detector in addressable mode.

Z1 and Z2 connect with the loop of FACP, non-polarized.

Below figures show the terminals and connection of the detector in non-addressable mode.
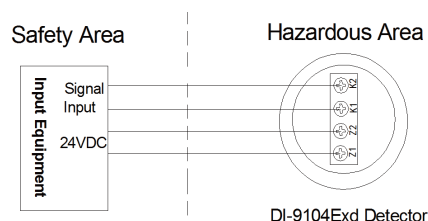
Z1, Z2: Power input, non-polarized

K1, K2: Signal output.

Normal Status: 4k7 Ω Resistance

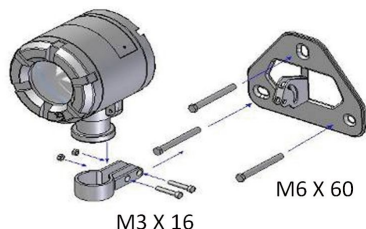Alarm Status: Short Circuit

Fault Status: Open Circuit

Recommended Cabling

1.0mm^2 or above fire cable are recommended, but subject to local codes, outer diameter φ8mm is required. The joint washer matches with the cable diameter.

https://www.gst.com.cn/en/about.asp

Application

Install the detector to solid and fixed support as shown in below drawing.

M6 X 60

M3 X 16

The detector should be installed facing the possible fire risk area, with calculated protection distance and space.

Note: The detector shall be installed in compliance with relative installation codes. Make sure the housing is in good condition.

Test method:

Test fire: The flame generated by 2000g of alcohol in a container with bottom area 33cm×33cm and height 5cm.

Sensitivities:

The detector has 3 sensitivity levels. The factory default is Level 1. The address and sensitivity can be set through P-9910B Programmer.

Detection Distance:

Level I: 25m

Level II: 17m

Level III: 12m

Cautions

Installation and maintenance should strictly comply with relative codes for explosive and hazardous areas.

Never open the cover for maintenance in field.

The enclosure must be earthed.

The detector is not suitable for the following places

- Where flameless fires are expected
- Where intensive smoke spreads before flames
- Where the "view" of the detector is easy to be obscured
- Where the sun can directly shine on the detection window
- Where the detector may encounter frequent vibration

Certificates and Compliance

- Explosion-proof Mark: Ex d Ⅱ CT6Gb
- ATEX Certificate NO.: Presafe 14 ATEX 5547

Technical Specification

Operating Voltage	Addressable Mode: Loop voltage: 24V
	Non-addressable Mode:Voltage: 24VDC
Operation Current	Addressable Mode: Standby current ≤ 2mA Alarm current ≤ 3mA
	Non-addressable Mode: Standby current ≤13mA Alarm current ≤ 23mA
Power-up Time	≤10s
Indicator	Red. It flashes when polling, and illuminates steadily in alarm.
Programming Mode	Electronic programming. Occupying one loop address.
Address Range	1 ~ 242
Spectrum Response Range	185nm ~ 260nm
Ingress Protection	IP66
Ambient Temperature	-20°C ~ +60°C
Relative Humidity	≤95%RH, non-condensing
Dimensions	147mm×106mm×92mm
Material and Color	ZL102 aluminum alloy, silvery grey.
Weight	1.5kg
Installation Hole Spacing	110mm×72mm
Explosion-proof Mark	Ex dIICT6

Order Information

Part No.	DI-9104Exd
Device Name	Digital Flame Proof UV Flame Detector
Product No.	10103097
Compatible Products	GST Intelligent Fire Alarm Control Panel

Accessories and Tools

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