FF742N

16581 Dual IR Flame Detector In Die-Cast Zinc Alloy Housing

General

The FF742N is a IR² flame detector in a die-cast zinc alloy housing. IR² models have excellent response to flame while providing immunity to extraneous sources. New micro-processor technology makes the detectors independent of flame intensity enabling it to operate through smoke, a layer of oil, dust, or water vapor. A high and low sensitivity setting according to EN54-10 is provided.

Successor of FF742

Installer and maintenance friendly

The units can be wired as conventional 2 wire, 4-20 mA, or relay contacts (fire, fault and pre alarm) in latching or non-latching operation. Remote test inputs are available to activate self-test.

A stainless steel adjustable bracket and weather shield is also available.

The units are tolerant to vibration, and wind does not affect the performance. The IR² unit has excellent tolerance to detector window contamination and can detect flame through glass windows.

A flame sensor test unit is available for accurate testing of the detectors.

Reducing false alarms

Most IR flame sensors respond to 4.3µm light, emitted by hydrocarbon flames. By responding to 1.0 to 2.7µm light emitted by every fire, all flickering flames can be detected. Gas fires not visible to the naked eye e.g. hydrogen may also be detected.

The IR² detectors, responding to adjacent IR wavelengths, enable it to discriminate between flames and spurious sources of IR radiation.

The combination of filters and signal processing allows the sensor to be used without risk of false alarms in difficult situations characterised by factors such as flickering sunlight.



Details

- Dual IR detector
- High specification units for critical applications
- IP65 Housing
- Low current consumption
- 2 Wire, 4 - 20 mA and relay operation
- Latching and non latching operation
- High / Low sensitivity setting
- Tolerance to detector window contamination
- Remote self test facility
- Microprocessor controlled
- Immunity to false sources (arc welding, lightning and static)
- Conforms to EN54: Part 10

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Technical specifications

Electrical

Operating voltage	14 to 30 VDC

Physical

Net weight	2 kg
Mounting type	Surface mount

Environmental

Operating temperature	-10 to +55°C
Storage temperature	-20 to +65°C
Relative humidity	95% max. noncondensing
Environment	Indoor
IP rating	IP65

Supply voltage

	14 - 30 VDC

Supply current

	3/9, 4/8/14, 4-20, 8-20 mA

Relay contact ratings

	1 A @ 30 VDC (resistive load)

Field of view

	90° min. cone

Spectral response (IR)

	1 to 2.7 µm

Operating temperature

	-10°C to 55°C

Storage temperature

	-20°C to 65°C

Relative humidity

	95% non-condensing

IP Rating

	IP65

Weight

	2 kg

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