



SENSE-WARE
THE FLAME DETECTOR
COMPANY



Model IR3-109/1

Triple Infrared Flame Detector

- Three Infrared Sensors
- Corrosion proof
GRP housing
- Non-Incendive for Zone 2
- Weather Resistant
- Relay & 4-20 mA Outputs
- Automatic & Manual
Self Test
- 5 Year Warranty
- ATEX, IECEx &
FM3611 Approved
- EN54-10 & FM3260
Approved
- Suitable for Zone 2 &
Safe Areas
- Low Power

The Sense-WARE Triple IR3 Flame Detector is designed to give optimum performance for Zone 2 and Safe Area flame detection. Designed to detect all types of hydrocarbon fires and immune to false alarms, the Model IR3-109/1 offers a cost effective solution for Zone 2 and Safe Area industrial and commercial applications.

The Retroreflective ring around the window allows for easy testing with a Sense-Ware Test Lamp. The Pressure Compensating Element (PCE), prevents water ingress damaging the electronics.

Sense-WARE Flame Detectors offer fast performance, with a 5 year warranty making them the Best in Class.

Typical Applications

- Aircraft Hangars • Atriums • Biogas • Car, Train Bus, Tram and Train Parkings • CNG Filling • Conveyor Belts
- Diesel Engine Rooms • Electric Power Transformers
- Engine Test Cells • Gas Cabinets • Gasoline/Gas Engine Rooms • Service & Charging Stations
- Hydraulics e.g. Extruders • Chemical, Fuel & Solvent Storage • Hydrocarbon Storage and Processing
- Laboratories • Loading / Unloading Terminals
- Monitoring of Machinery • Chemical Storage • Oil and Gas Pipe Line and Pumping Stations • Powder Coating & Paint Booths • Recycling and Waste Processing Plants • Wind Turbines

Specifications

Spectral Range
2.7 - 5.0 Microns

Maximum Range
35 Meters (115 ft)
0.09 m² (1 Sq.Ft.) Heptane pan fire

Typical Response
<10 Seconds

Field of View
90° x 90°

Input Power
10-28 VDC

Current (Normal)
25 mA @ 24 VDC
(40 mA peak during Self-Test)

Current (Alarm)
35 mA @ 24 VDC

Start Up Time
<10 Seconds

Analogue Signal - Sink
0-20 mA

Power Fault
0 mA

Optical Fault
2 mA

Normal Operation
4 mA

Alarm
20 mA

Relays
Alarm & Fault SPDT

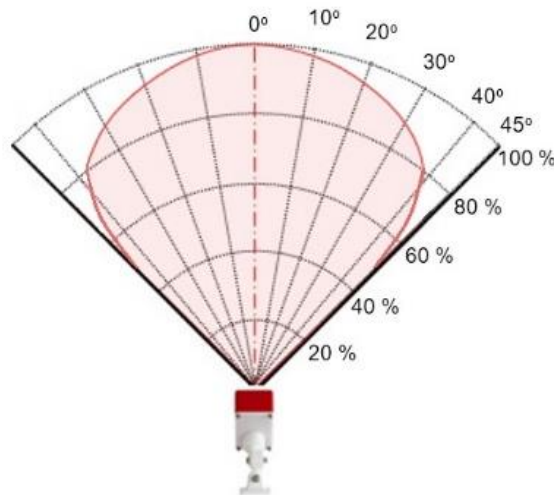
Relay Contact Rating
30 VDC / 2 A / 60 W

Latching (default) / Non Latching
DIL Switch selectable

Normal Operation
Green LED

Alarm Indication
Red LED

Fault Indication
Yellow LED



Automatic Self-Test
Once per Hour

Manual Self-Test
Available (see Manual)

Cable gland (pre-mounted)
1 x M20

Cable diameter
5.5-13 mm / 20-60 AWG

Housing
GRP

Temperature Range
-25 °C to +70 °C Hazardous Area
-40 °C to +70 °C Safe Area

Humidity
0-95 % Non Condensing

Ingress Protection
IP65

Pressure Compensation
PCE

Weight
465 g

Dimensions
125 x 80 x 57 mm

Warranty
5 Years

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Approvals

EN54-10
Performance, Class 1

ATEX, IEC Hazardous Area
II 3G Ex nA IIC T4 Gc,
II 3D EX tc IIIC T71°C Dc

FM3260
Performance (see Manual)

FM3611 Hazardous Area
Non-Incendive: Class I, II, III,
Div 2, Groups A,B,C,D,F,G
(see Manual)

Accessories

I.S. Test Lamp
TC-940/1Z

Non EX Test Lamp
TC-169/1

Swivel Mount
SM21

Specifications may be subject to change

www.sense-ware.com

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