

Intelligent Flameproof Triple IR3 Flame Detector

Features

- Detects through films of oil, dust, water and ice
- Responds to flickering flames, including those invisible to the naked eye
- False alarms due to lighting or flickering sunlight are minimised
- Compatible with Discovery and XP95 protocols
- Loop-powered
- 90° field of view
- Up to 40m coverage
- IP65 rated

Description

The Intelligent Flameproof IR³ Flame Detector is designed for hazardous environments in either indoor or outdoor applications. It is sensitive to low-frequency, flickering infra-red radiation emitted by flames during combustion. These detectors are Baseefa approved and meet the requirements of ATEX Directive 94/9/EC.

The Flameproof Triple IR3 Flame Detector is set to respond to low frequency radiation at 1 to 15Hz (1 to 2.7µm) in order to detect all flickering flames, including those invisible to the naked eye, e.g. those emitted by hydrogen fires.

The XP95 Intelligent Triple IR3 Flame Detector has three IR sensors that respond to different IR wavelengths in order to discriminate between flames and spurious sources of radiation. False alarms due to such factors as flickering sunlight are avoided by a combination of filters and signal processing techniques.

The flame detector is loop powered and needs no external supply. The flame detector should be positioned at the perimeter of the room, pointing directly at the area of the anticipated flame or at the centre of the area to be protected. If the flame detector cannot see the whole of the area to be protected, one or more additional detectors may be required.

Flame detectors are used when detection is required to be unaffected by convection currents, draughts or wind.

Applications

- Agriculture – grain and malt processing
- Aircraft Hangars
- Automotive industry – spray booths, parts manufacture
- Chipboard and MDF manufacture
- Metal fabrication and Power Plants



Flameproof IR3 Flame Detector

Item Numbers

Australia	
201-0187	Flameproof Triple IR3 Flame Detector
201-0189	Flame Detector Bracket
201-0190	S/Steel Weather Shield
International	
55000-021APO	Flameproof Triple IR3 Flame Detector
29600-203	Flame Detector Bracket
29600-206	S/Steel Weather Shield

Specifications

Supply Voltage	17-28V DC
Quiescent Current	2.2mA
Alarm Current	4.2mA
Dimensions inc base	142 x 108 x 82mm
Cable Gland Entries	2 x 20mm
Operating Range	0.1m ² n-heptane at 25m 0.2m ² n-heptane at 35m 0.4m ² n-heptane at 45m
Operating Temperature	-10°C to +55°C
Relative Humidity	0 – 95% non-condensing
IP Rating	IP66
Weight	2kg