

XP95

IR² Flame Detector



Product overview

Product	XP95 IR ² Flame Detector
Part No.	55000-280
Digital Communication	XP95 Native, Discovery Compatible

Product information

The XP95 IR² Flame Detector is designed to protect areas where open flaming fires may be expected.

The XP95 IR² Flame Detector has two 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.

- Sensitive to flickering IR radiation
- Detects through films of oil, dust, water and ice
- Responds to flickering flames, including those invisible to the naked eye
- Remote optical self-test function

Technical data

All data is supplied subject to change without notice. Specifications are typical at 24V, 25°C and 50% RH unless otherwise stated.

Supply voltage	17 - 28 V dc
Quiescent current	2.2 mA
Maximum power-up time	4 seconds
Remote LED current	Limited to 2 mA
Range of view	0.1 m ² n-heptane at 25 m 0.2 m ² n-heptane at 35 m 0.4 m ² n-heptane at 45 m
Field of view	90° cone
Spectral response	1.0 to 2.7 μm
Sensitivity	High - Class 1 Low - Class 3
Operating temperature	-10°C to 55°C
Storage temperature	-20°C to 65°C
Humidity (no condensing or icing)	0% to 95% RH
IP rating	IP65
Dimensions	142 mm wide x 108 mm high x 79 mm deep
Weight	1.75 kg
Materials	Die-cast zinc alloy
Housing Colour	Blue
Cable gland entries	2 x 20 mm

Features

The XP95 IR² Flame Detector is sensitive to low-frequency, flickering infra-red (IR) radiation emitted by flames during combustion. Since it responds to flickering radiation the XP95 IR² Flame Detector can operate even if the lens is contaminated by a layer of oil, dust, water-vapour or ice.

The XP95 IR² Flame Detector is set to respond to low-frequency radiation at one to 15 Hz (1 to 2.7 μm) in order to detect all flickering flames including those invisible to the naked eye, for example, those emitted by hydrogen fires.

Electrical considerations

The XP95 IR² Flame Detector is loop powered and needs no external supply. A remote LED alarm indicator may be connected to the flame detector.

Response Characteristics - High Sensitivity			
Fuel	Flame Size m ² (in ²)	Distance m (ft)	Approval
n-Heptane* (Yellow flame)	0.1 (144)	25 (82)	EN54-10
Methylated spirit* (Clear flame)	0.25 (400)	25 (82)	EN54-10

* Has been tested and approved at Class I

EMC Directive 2014/30/EU

The XP95 IR² Flame Detector complies with the essential requirements of the EMC Directive 2014/30/EU, provided that it is used as described in this datasheet.

A copy of the Declaration of Conformity is available from the Apollo website: www.apollo-fire.co.uk

Conformity of the XP95 IR² Flame Detector with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to them.

Construction Products Regulation 305/2011/EU

The XP95 IR² Flame Detector complies with the essential requirements of the Construction Products Regulation 305/2011/EU.

A copy of the Declaration of Performance is available from the Apollo website: www.apollo-fire.co.uk

Figure 1: Dimensional Drawings

