

# Conventional IR<sup>2</sup> Flame Detector



## Technical Data

All data is supplied subject to change without notice. Specifications are typical at 24V, 23°C and 50% RH unless otherwise stated.

<b>Sensor supply voltage</b>	14 - 30 V dc
<b>Supply current</b>	See DIL switch settings in Table 1
<b>Test signal voltage</b>	14 - 28 V dc
<b>Maximum power up time</b>	2 seconds
<b>Relay contact ratings:</b>	
<b>Current</b>	1.0 A max.
<b>Voltage</b>	50 V dc max.
<b>Resistive loads only, power</b>	30W max.
<b>Performance:</b>	
<b>Range (EN 54-10)</b>	Class 1 0.1 m <sup>2</sup> n-heptane at 25m Class 3 0.1 m <sup>2</sup> n-heptane at 12m
<b>Field of view</b>	90° min. Cone
<b>Spectral response</b>	IR 0.75 to 2.7 µm
<b>Sensitivity</b>	High - Class 1 Low - Class 3
<b>Operating temperature</b>	-10°C to +85°C
<b>Storage temperature</b>	-20°C to +65°C
<b>Relative humidity</b>	0% to 95% RH (no condensation or icing)
<b>Vibration, impact and shock</b>	EN 54-10
<b>IP Rating</b>	IP65
<b>EMC immunity / emissions</b>	EN 61000-6-1, EN 61000-6-2, EN 50130-4, EN 55022
<b>Housing Material</b>	Die Cast Zinc Alloy
<b>Standards and approvals</b>	LPCB, EN 54-10, CPD
<b>Housing Colour</b>	Blue
<b>Dimensions</b>	108 mm wide x 142 mm high x 82 mm deep
<b>Weight</b>	1kg
<b>Cable Gland Entries</b>	2mm x 20mm

## Product Overview

<b>Product Type</b>	IR <sup>2</sup> Flame Detector
<b>Part No.</b>	55000-060

## Approvals



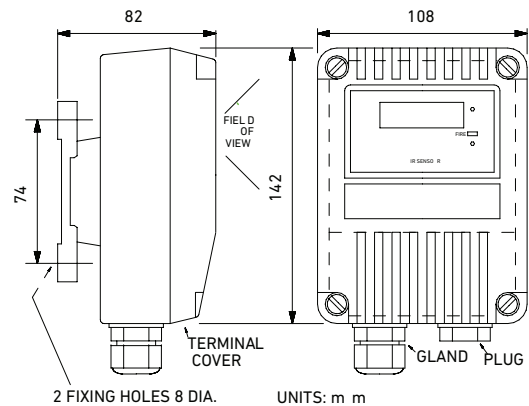
## Product Information

The IR<sup>2</sup> Flame Detector is sensitive to low frequency, flickering IR radiation emitted by flames during combustion.

The IR<sup>2</sup> Flame Detector has two IR sensors that respond to different IR wavelengths in order to discriminate between flames and spurious sources of radiation.

- Selectable output options: Conventional two-wire, 4-20 mA, latching or non-latching, relay contacts, fire/fault, pre-alarm
- Class 1 sensitivity to EN54-10 detects 0.1 m<sup>2</sup> fire at 25 m
- High optical interference immunity
- Selectable response speed
- Optical self-test
- Low power consumption

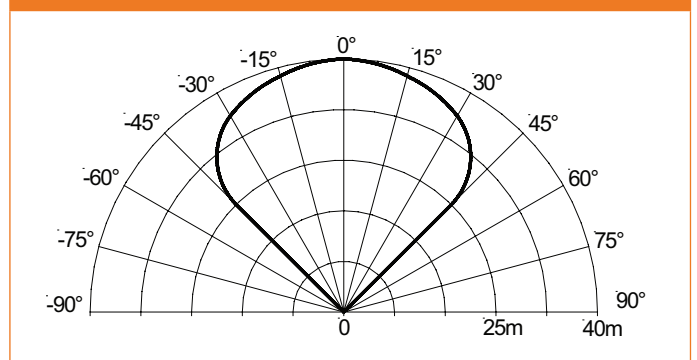
## UV/IR<sup>2</sup> Flame Detector dimensions



## Selectable options

	DIL switch settings	
<b>Relay RL2 function</b>	1	1
RL2 off	0	0
RL2 off	1	1
IR fire or pre-alarm	0	1
Fault (Energised if OK)	1 ~ 1	
<b>Alarm currents [RL1 Flame Relay]</b>	3	4
3.9 mA RL1 Only, 4/8/14 mA RL2 and RL1	0	0
4 - 20 mA, 4/20 mA, No relays /or	1	0
8 - 20 mA, 8/20 mA and relays - Proportional	0	1
8/28 mA and relays	1~1	
<b>Output mode</b>	5	
Non-latching (-)	0	
Latching (/)	~1	
<b>Response time</b>	6	7
Slowest $\approx$ 8 s	0	0
Medium $\approx$ 4 s	1 ~ 0	
Fast $\approx$ 2 s	0	1
Very fast $\approx$ 1s	1	1
<b>Sensitivity</b>	8	
Low	0	
High	~1	

## Field of view



## Flame size and distance from the detector

