FF756N

16521 UV/IR² Flame Detector in Eexd - IIC T6 Flame Proof Housing

General

The FF756N is a UV / IR² flame detector in a flame proof housing. UV / 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 FF756

Operation

The FF756N has a UV sensor and two IR sensors which respond to different wavelengths of both the ultra-violet and the infrared spectrum. The signals from these sensors are processed by the detector and checked for characteristics of a flame. The simultaneous detection of both the UV and the IR light by the sensors will signal an alarm. False alarms from flickering sunlight, arc welding and lightning are eliminated by a combination of UV and dual IR signal processing techniques.

The FF756N has selectable output options of relay contacts or 4-20mA signal, as standard.

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.



Details

- Highest immunity to false sources like arc welding, lightning, and solar blind
- Tolerant of fumes, vapours, dust and mist
- Unaffected by convection currents, draughts or wind
- Suitable for indoor and outdoor areas
- Proven response to multiple fuel types due to multi-spectrum detection
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- Selectable output options,response speed and sensitivity levels
- Built in auto and manual test
- Low current consumption

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Technical specifications

Electrical

Operating voltage	14 to 30 VDC
Current consumption	8 mA (Quiescent - RL2 energised) 4 mA (Quiescent - current loop, RL2 off) 3 mA (Quiescent - RL2 off) 28 mA (Alarm - RL1 & RL2 energised) 20 mA (Alarm - current loop, RL1 & 2 off) 28 mA (Alarm - RL1 energised)
Cable specification	1.0 to 4.0 mm²

Detection

Field of view	< 90° Cone
Range	< 50 m
Lateral detection	< 45°
Optical wave length (all languages)	185 to 260 nm (UV)
	0.75 to 2.7 µm (IR)
Response time (all languages)	8 s @ 25 m (n-Heptane - yellow flame of 0.3 x 0.3 m @ 25 m)
	12 s @ 25 m (Methylated Spirit - clear flame of 0.5 x 0.5 m @ 25 m)
	16 s @ 25 m (Hydrogen - non-visible flame of 0.1 x 0.5 m @ 12 m)

Output

Output quantity	2
Output type and rating	Normally open or Normally closed (< 1 A @ 50 VDC - < 30 W resistive load)
Programmable	Latching or non-latching

Physical

Physical dimensions	150 x 146 x 137 mm (h x w x d)
Net weight	2.5 kg
Colour	Red
Mounting type	Surface mount
Cable entries	3 x 20 mm
Material (body)	Copper free aluminium alloy
Fixing centres	58 mm

Environmental

Vandal proof	No
Operating temperature	-10 to +55°C
Storage temperature	-20 to +65°C
Relative humidity	< 95% noncondensing
Environment	Exd, Indoor, Outdoor
IP rating	IP66

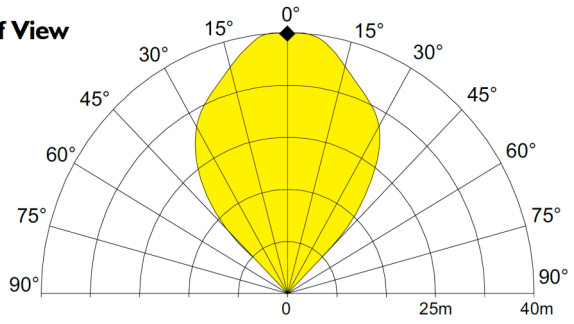
Regulatory

Compliancy	CE, REACH, RoHS 3, WEEE
Certification	CENELEC/ATEX, CPR
Voluntary marks	LPCB, VdS
Standards	EN54-10

IEC marking

	EEx d IIC T6

Field of View



EDWARDS
Built for Resilience

As a company of innovation, Kidde Global Solutions reserves the right to change product specifications without notice. For the latest product specifications, visit firesecurityproducts.com online or contact your sales representative.

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