

Flame Detectors IR + UV FL-50

100% MADE IN ITALY



EN54-10
PENDING

Technical features

The FL-50 flame detector is capable of detecting a flame produced by a fire within its field of view within seconds.

It is particularly useful in places where a fire may develop rapidly, such as warehouses storing petroleum products, paints, plastic materials, alcohols, etc.

The operating principle is based on the detection of infrared (IR) and ultraviolet (UV) radiation emitted by a flame.

Depending on the model, the detector can be equipped with the following sensors:

3 infrared sensors with different spectral windows

1 special sensor with a spectral window in the UV range

The use of multisensor technology and special microprocessor-controlled circuitry with software featuring specific algorithms make the detector highly efficient while also highly immune to false alarms typically caused by natural disturbances or environmental factors such as lights, welding flashes, hot objects, etc.

The detector is equipped with a special internal circuit for either periodic automatic testing or manual testing via remote command.

An optional automatic thermostatic system allows the detector to be used even at very low temperatures.

The device housing is made of aluminum alloy in an Ex-d certified ATEX version, providing remarkable robustness and ease of installation.

A special bracket with a swivel joint enables optimal positioning of the device.

Technical Data

Power supply voltage:	11 - 30 Vdc
Protection:	Against reverse polarity
Current:	180 mA - max
Class:	1 (for all sensitivity levels)
Maximum detection distance:	50 m (standard flame EN54-10)
ATEX zones:	1 - 2 - 21 - 22
Field of view:	90°
IR spectral response:	0,8 - 4,8 microns
UV spectral response:	15 - 260 nm
Ambient temperature:	-20 + 55°C
Relative humidity:	0 - 90% non condensing RH
Thermostated optics:	Automatic System
Regulation of sensitivity:	4 levels for IR and 4 for UV
Response delay:	5 - 10 - 20 - 30 sec
Alarm memory:	Programmable ON/OFF
Internal electronics:	Control Microprocessor
Analog voltage output:	0 - 5 V
Analog current output:	4 - 20 mA
Serial port:	RS485
Operational testing:	Manual and periodic automatic
Immune to electromagnetic interference:	Seconda norma EN50130-4
LED status indicator:	White (normal operation, pre-alarm) - Red (alarm) - Yellow
Alarm relay:	2A/250 Vac
Fault relay:	2A/250 Vac

Mechanical Data

Enclosure:	Aluminum Alloy - Stainless Steel AISI 304 - Stainless Steel AISI 316L
Cable outlet hole:	M20x1.5
Protection index:	IP65
Dimensions with bracket:	130x185 mm (see drawing on page 4)
Weight:	3 Kg

Certification

Construction:	EN54-10 standard (pending)	
EN54-10 standard Certification:	VDS - G222023 - CE CPR 0786 - CPR - 217054	
Explosion-proof Execution EX-d:	CE 0722 II 2GD	EX db op is IIC T6 Gb
ATEX Certification:	CESI II ATEX 019 X	

