Flame Detector IR³
16589

- **Triple infrared sensor according to EN 54-10, Class 1**
- **Detection of open flames through flickering infrared radiation**
- **Very high immunity to deceptive alarms**
- **Selectable response delay**
- **Relay contacts for alarm and fault**
- **Integrated optical test function**

Description

The Flame Detector 16589 responds to the flickering infrared radiation of open flames. Therefore, it is extremely well suitable for the detection of fires which are difficult to detect with common smoke detectors – for example, alcoholic fires or gas flames.
The detector is ideal for the following applications:
- Pharmaceutical industry
- Paint shops
- Warehouses
- Nuclear facilities
- Tunnels

With three independent infrared sensors for different wavelengths and with an intelligent evaluation logic, the detector can safely distinguish between alarm situations and deceptive alarms. Therefore, it is particularly insensitive to disturbance sources such as sunlight, fluorescent lamps or electric arcs.

The detector complies with EN 54-10, Class 1, which means it is suitable to detect flames up to a distance of 25m.

The response delay of the detector can be selected in 4 steps between 1 and 8s. An alarm and a fault condition is signalled via two dry relay contacts. Conventional technology is used for alarm transmission to the fire detection control panel. The detector can be integrated into an ADM loop by means of a conventional zone module.

A simple test of the detector can be carried out by means of the integrated optical self test function, which does not require additional tools. During this self test, a built-in infrared source simulates a fire situation which activates the detector.

The detector has been designed for indoor and outdoor use. The optional Detector Mounting Bracket 7127 allows stepless horizontal and vertical adjustment for the easy adaptation of the detector to the required monitoring area.
For use in explosion-hazardous areas, an Ex version of the flame detector is available on request.

0832–CPD–0595

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Specifications

Operating voltage	14 – 30VDC
Current consumption at 24VDC	max. 8mA (quiescent), 14mA (alarm)
Monitored angle	90°
Range	max. 25m
Spectral sensitivity	0.75 – 2.7µm
Contact rating of relay outputs	max. 1A at 50VDC
Ambient temperature	-10°C to +55°C
Dimensions W × H × D	108 × 142 × 82 (mm)
Colour	sky blue, RAL 5015
Weight	2kg
Protection class	IP65
Approvals	LPCB 729a/01 0832-CPD-0595
Order number	243011
Order name	Flame Detector/IR3 16589

Detector Mounting Bracket	
Material	stainless steel
Adjustment range vertical	0 to -45°
Adjustment range horizontal	±45°
Dimensions W × H × D	82 × 98 × 90 (mm)
Weight	650g
Order number	249141
Order name	Detector Mounting Bracket/Flame Detector 7127

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