



- ◆ The infrared flame sensor is used for the detection of flickering fires with open flames with the involvement of carbon.
- ◆ The sensor detects flames based on the flickering and the spectral line of CO₂.
- ◆ **Well suited for detecting:**
Open flames with smoke development.
- ◆ **The sensor does not respond to:**
Sunlight, light bulbs (continuous/modulated), fluorescent lights, flying sparks, arcs, hydrogen flames, small flames without flickering, metal fires.
- ◆ **Caution! False tripping possible with:**
Intensive radiation sources, which lie in the infrared range and are located very near (<50cm) in front of the sensor.
- ◆ **Application limits:**
The sensor is less suitable for use in environments with intensive infrared radiation sources or heat haze.

Technical data:

Ultraviolet flame detector IR-12.1

Operating voltage	18...30 VDC	Dimensions without ventilation	98 x 64 x 36mm
Operating current at 24V	< 250 µA		
Alarm current at 24VDC	45mA	Weight	500g
Alarm resistor	560Ω		
Alarm pulse without latching	approx. 2 s		
Trigger delay	0.4...10 s		
		Sensitivity (set to 2 cm gas flame from 3 mm tube, 30%prop.70%but.)	80cm <1s
Viewing angle	approx. 50°		
		Options:	
Temperature range	-20...+70°C		
Housing safety class	IP65		

Special features

- Very high insensitivity to IR sources without spectral CO₂ peak
- Relay outputs (normally open contact) for faults and alarm
- Internal monitoring of operating voltage, fault with V_b < 16.5VDC
- Integrated test equipment

Settings:

- Br1 - BR4: Response time 0.5 – 10s
- Br4 on: Alarm memory on
- Br4 off: Alarm memory off
- Br5 on: Operation with interference relay and RE
- Br5 off: Operation without interference relay and RE

