



- ◆ The ultraviolet flame sensor is used for the detection of fires with open flames and arcs
- ◆ The sensor responds to the ultraviolet portion of the flame radiation mainly contained in the flame borders, in the range 185 to 235 nm (UV-C radiation)
- ◆ **Well suited for detecting:**
Open flames without smoke development, arcs, for example, on insulators
- ◆ **The sensor does not respond to:**
Sunlight, light bulbs, fluorescent lights, flying sparks
- ◆ **Caution! False tripping possible with:**
UV radiating light sources, e.g., halogen and mercury vapor lamps, lightning, arcs during welding work and reflections of the above radiation sources
- ◆ **Application limits:**
Smoke, dust and water vapor, as well as contamination of the UV panes on the sensor absorb ultraviolet radiation and therefore negatively effect the response behavior of the sensor.

Technical data:

| Ultraviolet flame sensor UV-03.A | | | |
|--------------------------------------|-------------------------|--|-----------------|
| Operating voltage | 12...30 VDC | Control module dimensions | 98 x 64 x 35 mm |
| Operating current at 24V | < 50 µA | Tube housing dimensions | 55 x 25 x 25 mm |
| Alarm current at 24VDC | 45mA | Control module weight | 300g |
| Alarm resistor two-line technology | 560Ω | Tube housing weight | 100g |
| Alarm resistor multi-wire technology | 10 k | | |
| Alarm pulse without latching | approx. 1 s | | |
| Trigger delay | 200 ms, 2 s, 4 s, 6 s | | |
| Spectral sensitivity | 185...235 nm | Sensitivity (set to 2 cm gas flame from 3 mm tube, 30%prop. 70%But.) | 80 cm < 1 s |
| Viewing angle without ventilation | approx. 110° | | |
| Viewing angle with ventilation | approx. 35° | | |
| Connection for ventilation | 0.1...1bar | Options: | |
| Control module temperature range | -20...+60°C | potential-free relay contact, normally closed/normally open contacts, Photo- | 0,5 A / 30 VDC |
| Tube temperature range | -20...+70°C | | |
| Housing safety class | IP65 | | |
| Special features | - Recessed tube housing | | |



