

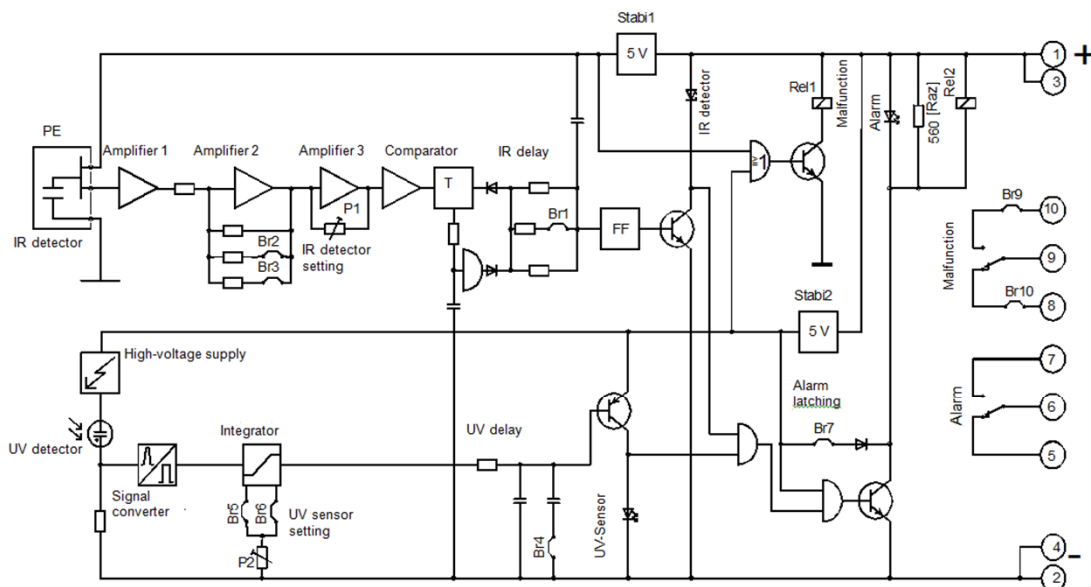


- ◆ The IR UV flame sensor is used for the detection of fires with open flames with the involvement of carbon
- ◆ The IR portion responds to the flickering of the flame and the spectral line of CO₂.
- ◆ The UV portion responds to the ultraviolet portion of the flame radiation mainly contained in the flame borders, in the range 185 to 235 nm (UV-C radiation)
- ◆ The alarm is first tripped, if IR **and** UV portion have detected a fire
- ◆ **Well suited for detecting:**
Open flames without smoke development
- ◆ **The sensor does no respond to:**
Sunlight, light bulbs, fluorescent lights, flying sparks, arcs, hydrogen flames, small flames without flickering, metal fires
- ◆ **False tripping is possible with very strong, pulsating radiation sources with high IR and UV portions**
- ◆ **Application limits:**
Smoke, dust and water vapor, as well as contamination of the panes on the sensor absorb radiation and negatively effect the response behavior of the sensor.

Technical data:

Infrared-Ultraviolet-combination flame sensor IU-

Operating voltage	10...30 VDC	Dimensions without ventilation	125 x 80 x 57 mm
Operating current two-wire technology	< 120µA	Dimensions with ventilation	125 x 80 x 75 mm
Alarm current at 24VDC	45mA	Weight without ventilation	540g
Alarm resistor two-line technology	560Ω	Weight with ventilation	600g
Alarm pulse without latching	approx. 1 s		
Trigger delay	5 s, 10 s		
Spectral sensitivity	185...235 nm, 4,26	Sensitivity (set to 2 cm gas flame from 3 mm tube, 30%prop. 70%But.)	80 cm <10 s
Viewing angle without ventilation	approx. 110°		
Viewing angle with ventilation	approx. 35°		
Connection for ventilation	0.1...1bar	Options:	
Temperature range	-20...+60°C	potential-free changeover contact for fault	
Housing safety class	IP65		
Special features	- Especially high interference reliability against false alarms due to other radiation sources		



IR part			UV-Teil		
Br1 Tripping delay	ON 5s	OFF 10s	Br4 Tripping delay	ON approx. 5s	OFF approx. 2s
Br2 Sensitivity	OFF ON ON		Br5 Sensitivity	ON ON OFF	
Br3 Sensitivity	OFF OFF ON		Br6 Sensitivity	ON OFF OFF	
	high medium low			high medium low	
Br7 Alarm latching	ON		Br7 Alarm no latching	OFF	

Standard jumper setting

