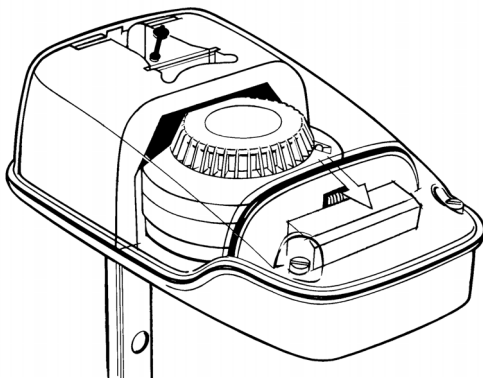


Air channel smoke switch

UG-2-A2-O-STAND-ALONE

UG-2-A3-O-STAND-ALONE



Technical data

Detector type:	scattered light (Tyndall effect)
Detector:	ST-P-DA
Voltage supply:	
UG-2-A2-O ...	jumper plugged in: 24 V DC \pm 10% jumper open: 24 V AC \pm 10%
UG-2-A3-O ...	230 V, 50-60 Hz \pm 10%
max. current consumption:	
Detector	55 mA
Option:	
Additional fan:	50 mA
Alarm relays	1 change-over contact 250 V, 2 A
Max. humidity:	99% relative humidity
Approvals:	
Detector chamber:	VdS, certified according to EN-54/7 no. G 202091
Air channel casing:	VdS guideline 2344 Jan. 2000 no. 200071
Contamination indication	green LED
Smoke alarm:	red LED
Adapter casing:	ABS
Air measuring tube:	aluminum, standard length 600 mm, hole diameter 35 mm

Accessories

Filter:	F-UG1/10 packages
Tubes:	Venturi 1.5 m (channel 600-1300 mm) Venturi 2.8 m (channel > 1300 mm)
Magnetic panel:	VB-UG (for insulated / round channels)
Water-tight casing:	UG-SH (in the open), IP 65 (cold environment, and similar conditions)

- **Single-tube air measuring system (Venturi principle)**
- **Testing opening in the casing cover**
- **Easy installation**
- **Susceptible flow indicator**
- **Filter for dusty environment (option)**
- **Easy service and maintenance**
- **Installation-friendly cable connections**
- **Reliable handling of the Venturi tube**
- **Reset push button in the casing**
- **Installed alarm relay**

Function

The air channel switch was developed for the smoke detection in ventilation channels. It is a combination of a smoke detector and an adapter system, the tube and the casing are adjusted specially for an optimum air flow through the smoke detector (Venturi principle).

The system fulfils all requirements for a safe smoke detection at air flow speeds ranging between 1 m/s and 20 m/s.

The air channel switch contains an alarm switch to switch off the fans, and to control other units, for example, in order to activate acoustic or visual signals. The integrated service alarm signals a maintenance message before the occurrence of false alarms.

The detector is fitted with a bayonet fastener in order to allow an easy installation and dismantling.

General installation instructions:

Install the detector in a position where usually flow measuring units and similar are fixed, so that the air flow passing the UG-2-A2-O-STAND-ALONE corresponds to the air flow in the ventilation channel.

(See also our installation notes)

Please also observe the national and regional instructions regarding the monitoring of air flows in ventilation systems.

Air channel smoke switch

UG-2-A2-O-STAND-ALONE

UG-2-A3-O-STAND-ALONE

Installation

The tube is made of aluminum and therefore, it is very easy to adjust it to the channel diameter. The hole diameter is 35 mm.

In case of insulated or round channels, please use our installation panel (VB-UG). In that case, the hole diameter is 48 mm.

Maintenance

In case of contamination of the detector, the sensitivity will increase, and false alarm could be actuated. You can avoid this by cleaning the detector in case the green LED lights up. In case of a complete contamination, it has to be replaced.

Check the air flow

The detector is equipped with a flow indication that vibrates in the air flow, if installed correctly. This results in the simple, visual confirmation that there are no leaks, and that the air of the ventilation channels flows through the detector.

Functional test

After the installation the detector has to be tested by means of smoke, or by means of a suitable test spray (e. g. RDP 300). For this purpose, use the test hole in the casing cover. Do not forget to close the hole after having carried out the test.

Note

If detectors are installed in the open air or in cold environments with the risk of the formation of condensation water, the detector has to be insulated from the surrounding air. For this purpose, please use the water-tight casing UG-SH.

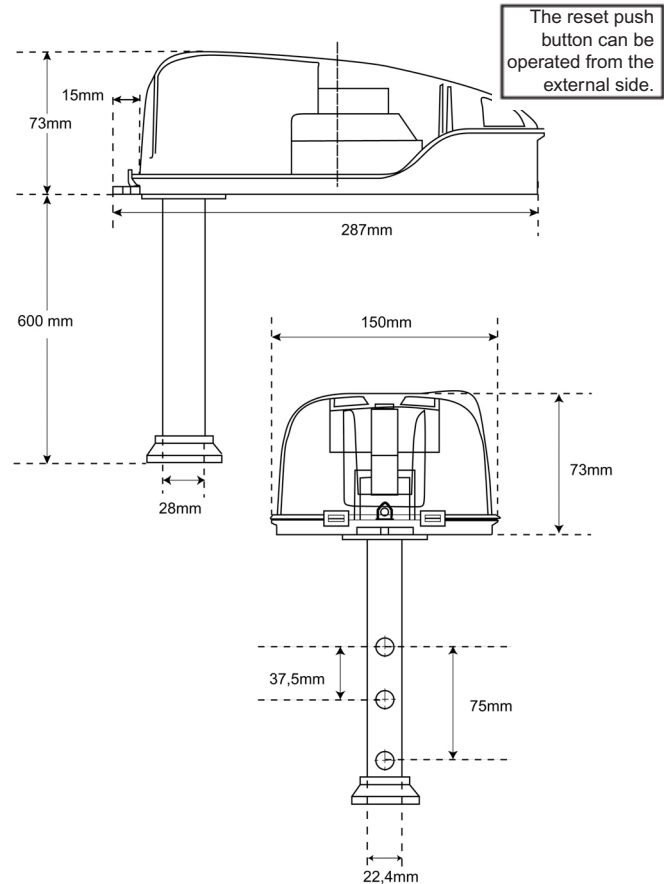
Function

In case of normal operation, the alarm relay is closed.

See wiring diagrams:

In case of a smoke alarm, the relay opens and locks.

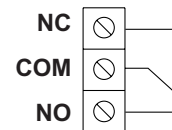
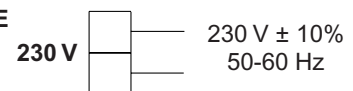
Unlock by means of the installed reset push button, or by interrupting the voltage.



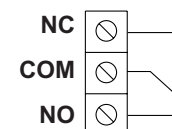
Circuit diagram

Representation of the contacts in idle (alarm) state

UG-2-A3-O-STAND-ALONE



UG-2-A2-O-STAND-ALONE



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