

Smoke Aspiration System

TP-1/A

- **Monitoring of one or two independent areas**
- **Four sensitivity levels selectable**
- **Adjustable air flow monitoring**
- **Serial interface for the communication with the PC software**
- **LEDs for the indication of operation, fault and alarm**
- **Detector modules with different sensitivities can be used**



Description

The Smoke Aspiration System TP-1/A serves for the monitoring of one or two independent areas. The housing is prepared for the connection of one pipe network. By breaking out the second aspiration hole, the housing is upgraded to a two-channel smoke aspiration system. Thanks to the high response sensitivity of the detector modules, the system can be used for early fire detection in rooms as well as for monitoring technical equipment, such as switch cabinets or computer systems.

Via the pipe network, air is sampled from the monitored room and directed to a detector module, which analyses the air samples. If the smoke concentration exceeds the permissible value, an alarm is activated, which is optically indicated on the unit and transmitted to the fire detection control panel.

The continuous air flow, which is generated by a ventilator in the smoke aspiration system housing, is permanently monitored. A failure of the ventilator, a blockage of the aspiration holes or a pipe burst are detected and

optically indicated on the unit and transmitted to the fire detection control panel as fault message.

Depending on whether the device is used as single channel or two-channel smoke aspiration system, the Front Foil FW-TP-1 or FW-TP-2 is stuck on the front of the housing. The front foil is used for labelling the display elements.

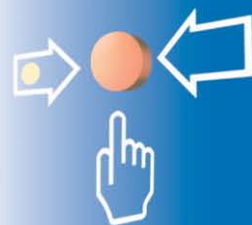
The smoke aspiration system housing is provided with the entire evaluation electronics. However, the detector module, the front foil and the sensor pipe network are not included. A serial interface for communication with a PC software is installed in the unit. Light emitting diodes on the front of the unit indicate operation, fault and alarm/area 1 and alarm/area 2.

To minimise the risk of false alarms, it is possible to connect a single pipe network to both sensing chambers and to operate the detectors in interdependence of two detectors.

Specifications

Supply voltage	14 – 30VDC
Current consumption at 24V	
one detector module	max. 200mA (quiescent), 210mA (alarm)
two detector modules	max. 220mA (quiescent), 240mA (alarm)
Pipe length	2 × max. 280m
Number of aspiration holes	2 × max. 32

Building Safety. Building Security.



Ambient temperature	-20°C to +60°C
Dimensions W × H × D	200 × 292 × 113 (mm)
Colour	papyrus white, RAL 9018
Weight	1.35kg
Approvals	VdS G202064 0786-CPD-20685
Order number	244181
Order name	Smoke Aspiration System Housing TP-1/A

Detector modules

The Detector Modules DM-TP are used as detection and analysis unit in a Smoke Aspiration System Housing TP-1/A. They analyse the air that the smoke aspiration system samples from the area that is to be monitored. The detector module measures both the light obscuration and the air flow.

The response thresholds for both parameters can be set separately. Dry contacts in the evaluation electronics of the smoke aspiration system housing signal the exceeding of alarm and fault thresholds.

Specifications

Detector Module DM-TP-01-L

Response thresholds	
Light obscuration	0.12 – 0.06 – 0.03 – 0.015%/m (fire alarm)
Air flow monitoring	4 levels
Order number	244322
Order name	Detector Module DM-TP-01-L

Detector Module DM-TP-10-L

Response thresholds	
Light obscuration	0.8 – 0.4 – 0.2 – 0.1%/m (fire alarm)
Air flow monitoring	4 levels
Order number	244321
Order name	Detector Module DM-TP-10-L

Detector Module DM-TP-50-L

Response thresholds	
Light obscuration	1.0 – 0.5%/m (fire alarm)
Air flow monitoring	4 levels
Order number	244320
Order name	Detector Module DM-TP-50-L

Front foil for 1 detector module

Order number	244184
Order name	Front Foil/1 Detector Module FW-TP-1

Front foil for 2 detector modules

Order number	244185
Order name	Front Foil/2 Detector Modules FW-TP-2