UG-3-NS-AOS UNIGUARD SUPERFLOW

Analogue and addressable smoke detector for duct installation.
Optical function.

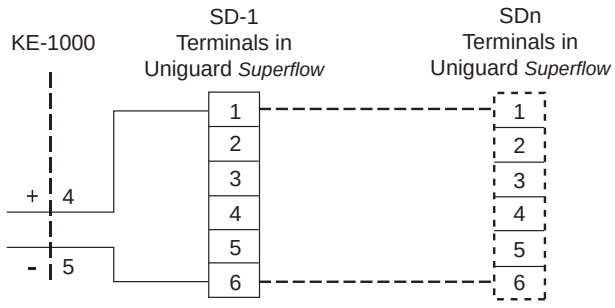
CE

TECHNICAL DATA

Detector type:	Optical UG-3-NS-AOS
Central panel:	KE-1000, having changing relay contacts for service- and fire alarm
Operating temperature:	-10°C to +55°C
Maximum humidity:	99% rH
Approvals	
Detector head:	EN-54-7
Service alarm, KE-1000:	Indicated with yellow LED
Fire alarm, KE-1000:	Indicated with red LED
Adaptor housing:	ABS
Weight:	800g
Protection:	IP-54

WIRING DIAGRAM

CONTROL UNIT SMOKE DETECTORS



ACCESSORIES

Article code	Description
UG-MB	Mounting bracket (for insulated/ circular ducts)
UG-COVER	Waterproof housing (for mounting outdoors, in cold attics etc.)
VR-0.6M	Venturi pipe (length 0,6 m)
VR-1.5M	Venturi pipe (length 1,5 m)
VR-2.8M	Venturi pipe (length 2,8 m)

CHARACTERISTICS

- **Patented venturi pipe and duct housing**
- **One-pipe air sampling system Uniguard Superflow**
- **Cross-section (shape) of the venturi pipe gives an optimum of venturi effect**
- **Intelligent service alarm**
- **Automatic sensitivity adjustment**
- **Test hole on cover**
- **Simple installation**
- **Sensitive flow indication**
- **Simple service and maintainance**
- **Installer-friendly connection of cables**
- **Foolproof installation of sampling tube**

FUNCTION

Uniguard has been developed to detect smoke in ventilation ducts and consists of a smoke detector, mounted in an adapter system where both tube and housing are specially designed for optimum airflow through the smoke detector.

The system fulfills all the requirements for good fire detection with airflow speeds from 0.2 m/s to 20m/s.

A venturi pipe with auxiliary fan should be used to detect smoke in situations where ventilation is turned off and there is limited airflow in the duct.

UG-3-NS-AOS is used together with control unit KE-1000 to control fire dampers and fans, activate acoustic and/or optical alarms etc.

The detector is equipped with a bayonet mount, which makes it easy to replace.

The detector's address is set with a DIL-switch. The DIL-switch allows 32 addresses to be set. When an alarm occurs, the detector's address is shown on a display. The detector contains an intelligent monitoring circuit that adjusts the sensitivity to give optimum functionality during the whole life of the detector. When the detector can no longer compensate for environmental influences, a service alarm is indicated.

For alarm- and service alarm function, please see next page.

Uniguard Superflow has 4 pre-assembled Klikseal-type IP67-approved cable entries with automatic load anchorage for cable diameters 4 - 11 mm.

BASIC PRINCIPLES FOR POSITIONING

For the airflow through the adaptor to be representative of the airflow in the ventilation duct, install the detector at a place where normally flow meters etc. should be mounted, please see our installation instructions.
You can also use your national or local rules for mountage according to "Methods for measuring airflow in ventilation systems".

Phone: +46 31-69 53 00 Fax: +46 31-29 32 91 info@calectro.com www.calectro.com

CALECTRO®

UG-3-NS-AOS UNIGUARD SUPERFLOW

Analogue and addressable smoke detector for duct installation.
Optical function.

CE

INSTALLATION

The tube is made of aluminium and can easily be shortened to suit the diameter of the duct. Hole diameter is 35 mm. With insulated or circular ducts - use the mounting bracket, hole diameter is then 51 mm.

MAINTAINANCE

When the detector becomes contaminated, and when the detector no longer can compensate for it, the central panel will indicate a service alarm. This can be avoided for a considerable time by cleaning the detector once a year with a vacuum cleaner.

CHECKING AIR FLOW

The detector is equipped with a flow indicator which oscillates in the air stream when the detector is correctly installed. This gives simple confirmation that there is no leakage, and that air from the ventilation duct is flowing through the detector.

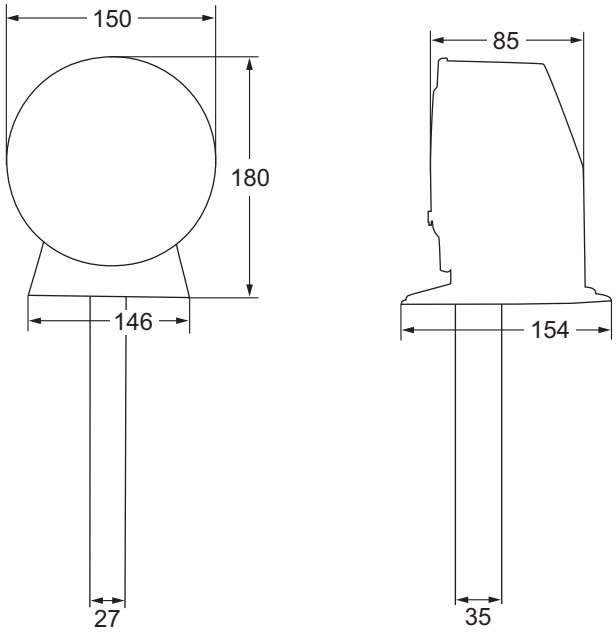
FUNCTION TEST

When installation is complete, the detector should be tested. This can be carried out with smoke or suitable testspray for example RDP-300 (from Calectro), use the test hole on cover. Do not forget to refit the plastic plug after test.

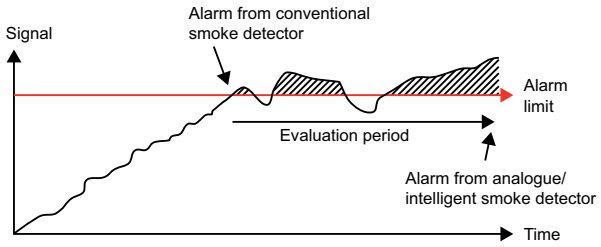
NOTE! When installing outdoors or in cold attics etc., where there is a risk for condensation, this requires that the detector is insulated from the surrounding air by means of for example our waterproof housing UG-SH, and marked with an extra indicator lamp, LED-03 and a sign marked ”Hidden Detector”.

DIMENSIONS

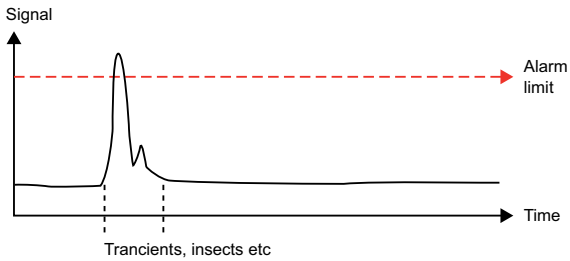
(mm)



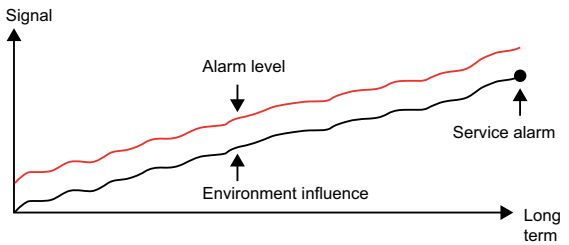
THE FUNCTION OF ANALOGUE DETECTORS



The analogue smoke detector controls the alarm signals from smoke in it´s chamber by measuring time, amplitude of signal and signal spread. Before transmitting a fire signal the smoke value must conform with preset data.



Short duration, large signals from disturbances such as transients or small insects will not influence the analogue smoke detector.



Reliable operation is ensured as the alarm limit of the analogue smoke detector is self compensating, i.e. it will always remain at the correct preset value due to the built-in intelligence compensating for environmental changes.

Historical data storage:
Each detector module maintains a historical database including the detector module identification number, number of alarms and faults and the date when the detector was placed in operation.

Phone: +46 31-69 53 00 Fax: +46 31-29 32 91 info@calectro.com www.calectro.com

CALECTRO®