



**SDD-S60-R single tube smoke detector for duct mounting is intended for smoke detection in ventilation systems.**

- \* Smoke detector of ionising principle with a minimum of active material
- \* RFI-protected (radio interferences)
- \* One control unit can control several detectors
- \* Compact design. The detector is bayonet mounted to simplify service and maintenance
- \* Working range -20... + 60°C

## Function

SDD-S60-R is an ionising smoke detector intended for mounting on all duct types. It reacts on visible and invisible smoke particles and can therefore detect fire at an early stage.

The aluminium venturi tube is mounted in the duct through a hole, Ø30 mm. The tube length is 540 mm and can be shortened. It can thereby be adjusted to all duct sizes. The detector housing has a window giving a clear view of the flow indicator and the alarm LED. It also has a testplug for simple injection of test gas.

### Working principle

The detector uses the two-chamber principle. The outer chamber reacts to rapid fluctuations in particle density in the air. The inner chamber compensates for the long-term contamination of the detector. Smoke in the outer chamber affects the balance between the two chambers and will trigger an alarm.

### Alarm indication

When SDD-S60-R runs normally the LED is not lit. If there is a smoke alarm the red LED will be lit.

### Flow indication

The detector has a built-in flow indicator to indicate correct flow through the detector housing.

### Function test

On the side of the lid there is a red plastic plug. This can be used for easy injection of test gas for detector function control.

### Approval

Approved according to EN-54, also tested and approved by SBSC. The detector is also approved by the Swedish radiation protection authority.

## Models

SDD-S60-R Model with built-in relay (24 V)  
 TDS Plate for mounting at distance from duct

## Technical data

Supply voltage 17...28 V DC (via control unit)  
 Power consumption (including end resistor)  
 - at normal operation 11 mA at 24 V DC  
 - at alarm 50 mA at 24 V DC  
 Operating temp. -20...+60°C (not condensating)  
 Humidity Max 95% RH  
 Protection class IP54

Detector principle Ionising, Two-chamber  
 Radio-activity 0.9 mCi Americum 241  
 33 kBq, ISO 2919 tested

**CE** This product conforms with the requirements of European EMC standards CENELEC EN61000-6-1 and EN61000-6-3 and carries the CE-mark.

**Indication**  
 -smoke alarm Red LED  
**Venturi tube** Aluminium, 30 mm diameter.  
**Length** 540 mm for ducts up to 1.3 m  
**Relay** Change-over, 24 V AC/DC, 2 A

## Mounting and maintenance

### Mounting

Drill the required hole in the duct. The Venturi tube can be shortened when mounted in smaller ducts. The venturi tube has lips that match the tube holder on the housing. When mounting SDD-S60-R ensure that the airflow is representative of the airflow in the duct as a whole.

The detector should be mounted at least three duct-widths away from bends, intakes or other disturbances. The holder is designed so that it will also fit directly onto round ducts.

### Mounting plates

When the detector has to be mounted at a distance from the duct (i.e. when insulation material is used) the

mounting plate TDS should be used. Distance bushing for mounting on the venturi tube is delivered with the mounting plate.

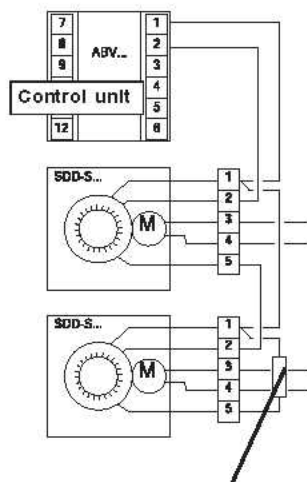
### Maintenance

Operation checks and cleaning of the detector should be carried out once a year to ensure continued maximum efficiency. The cover can be cleaned using a vacuum cleaner.

Cleaning of the inside of the detector head should only be undertaken by the supplier. For this purpose there is an exchange system whereby dirty detector heads can be exchanged for cleaned ones.

Defective detectors are to be returned to the supplier.

## Dimensions and connection



End resistor 2,2 KW (included in the control unit package)

### Relay function connection

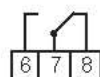
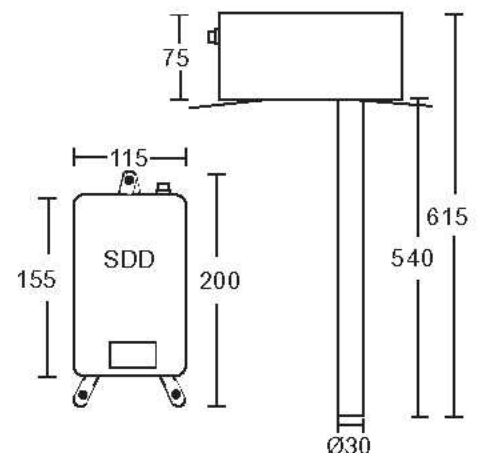


Figure shows relay in alarm position



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