



# S50/S65

## Ionisation smoke detector for ceiling mounting

Used to detect smoke in all kinds of areas. Constructed to meet the high demands of a modern fire installation.

- Ionisation smoke detector with a minimum of active material
- Protected against RFI (Radio Frequency Interference)
- Multiple detectors can be connected to one control unit

S50/S65 is an ionisation smoke detector for mounting in all kinds of rooms. It reacts to visible and invisible smoke particles and can therefore detect fire at an early stage. The detector consists of a detector head and a socket.

### Models

The standard model S65 has functions for smoke detection. Model S50 with service alarm also detects when it needs to be cleaned, which can prevent possible false alarms caused by contamination.

### Work principle

The detector uses the two-chamber principle. The outer chamber registers the particle density in the air and the inner chamber compensates for slow changes in the surrounding air. Smoke in the outer chamber affects the balance between the two chambers, which triggers an alarm.

### Alarm indication

The LED in the detector is normally not lit. When there is a fire alarm, the LED lights up red.

### Service alarm

Smoke detector S50 has a service alarm, a built-in function for detecting contamination that occurs over time. When the degree of contamination has reached a level where there is a risk of false alarms, a red LED will light up on the detector and a yellow LED on the control unit, ABV-S-300/D or ABV24-S-300/D.

- Model S50 has service alarm
- Compact plastic cover. Bayonet socket simplifies service och maintenance
- Temperature range -20...60°C

### Test

The function of the detector can easily be tested, for example with a test gas.

### Approval

The detector is approved according to EN54 and has been tested and approved by SBSC. The detector is also approved by the Swedish Radiation Protection Authority.

### Mounting

The detector should be mounted in a representative place on the ceiling where good smoke detection can be achieved.

The detector is wired to the control unit with a two-wire current loop. The last detector in the loop is also connected to the end resistor, which closes the loop.

With the sockets S-BPR-S50 and S-BPR-S65, the unit can send an alarm itself via the built-in relay.

### Maintenance

The detector should be tested and cleaned yearly to ensure proper function. The cover can be cleaned with a vacuum cleaner.

The inside of the detector should only be cleaned by the supplier. For this purpose, there is an exchange system with cleaned detector heads.

Defective detectors should be returned to the supplier.

## Models

S65	Standard model (no socket)
S50	With service alarm (no socket)
S-BP	Socket for ceiling mounting
S-BPR-S50	Socket for ceiling mounting with built-in changing relay
S-BPR-S65	Socket for ceiling mounting with built-in changing relay

## Technical data

Supply voltage 17...28 V DC (via control unit)

### Power consumption (Including end resistor)

normally	11 mA at 24 V DC
during alarm	50 mA at 24 V DC
during service alarm	20 mA at 24 V DC

Temperature range -20...+60°C (Non condensating)

Air humidity Max 95% RH

Max air velocity 10 m/s

### Detector material

house and socket	White poly carbonate plastic, V-0
socket contacts	Stainless steel

Socket type Bayonet socket

Detector principle Ionising, two-chamber

Radio activity 0,9 mci Americum 241, 33 kBq, ISO 2919 tested

Protection class IP43

### Indication

smoke alarm	Red LED
service alarm	Red LED (yellow on the control unit)

Quality control Each detector has been tested non-stop for 24 hours.

**CE** This product conforms with the requirements of European EMC standards CENELEC EN50081-1 and EN50082-1 and carries the CE mark.

## Wiring & Dimensions

