

# S65 and S65-OE

Smoke detector for ceiling mounting

Smoke detector for all kinds of areas. Constructed to meet the high demands of a modern fire installation.

- ✓ Optical or Ionisation models available
- ✓ Multiple detectors can be connected to a single control unit
- ✓ Compact design
- ✓ Service alarm available
- ✓ The detector is bayonet mounted to simplify service and maintenance
- ✓ RFI-protected (radio interferences)

#### **Function**

The detectors come in two different models: one optical (S65-OE) and one ionisation (S65). They are intended for use together with Regin's ABV... series of control units.

The detectors are approved according to EN54 and have been tested and approved by SBSC. The detectors are also approved by the Swedish Radiation Protection Authority.

The detectors have a built-in service alarm function for sensing the dust and dirt accumulation which inevitably occurs over time. When the degree of dirt has reached the level at which there is the risk of false alarms, a service alarm is given indicating that cleaning is required.

The detectors should be tested and cleaned yearly to ensure proper function. The function of the detector can be tested by using test smoke (available from Regin). The detector can be cleaned with a vacuum cleaner.

#### **S65-OE**

The optical detector reacts to visible smoke particles (residues from combustion).

It works according to the reflection principle and consists of a measuring chamber that has air-inlets via a labyrinth which keeps out ambient light.

An infrared LED and a photo transistor are placed in the measuring chamber. They are located so the light from the LED doesn't shine on the light sensitive transistor.

If smoke particles enter the measuring chamber some of the light from the LED will be reflected by the particles and hit the photo transistor, which activates the alarm.

#### S65

The ionisation detector reacts to both visible and invisible smoke particles and can therefore detect fire at an early stage.

It uses the two-chamber principle, which means that the detector has an outer and an inner, more shielded, chamber. Since smoke reaches the outer chamber first, there will be imbalance and an alarm will be triggered.



#### **Features**

#### Alarm indication

The detector has a clearly visible red LED on the housing. The LED is normally off and lights up when there is a fire alarm.

#### Service alarm

A red LED lights up on the detector and a yellow LED on the connected control unit ABV... when the detector is so contaminated that the service alarm is triggered. The detector must then be cleaned. The service alarm is reset when the detector is cleaned and re-installed.

#### Installation

The detector is to be mounted in a representative ceiling position to give a good room supervision.

The smoke detector consists of a detector head and a base. The base is mounted on the ceiling and the detector head is mounted on the base with a bayonet grip.

The detector is connected to the control unit with a two-wire loop. Multiple detectors can be connected to the same control unit. An end resistor should be connected to the last detector to end the loop.

There is a choice between two bases, S-BP which is used with a control unit, and S-BPR-S65 which has a built-in relay which makes it possible for the unit to independently give an alarm (without contol unit).

#### Technical data

Supply voltage	933 V DC (via ABV control unit)	
Current consumption, normal	10 mA	
Current consumption during alarm	50 mA	
Current consumption during service alarm	20 mA	
Temperature range	-20+60 °C	
Ambient humidity	umidity Max. 95% RH	
Mounting	Ceiling	
Dimensions	Ø 100 x h 50 mm	
Protection class	IP23	
Smoke alarm	Red LED	
Service alarm	Red LED on detector. Yellow LED on control unit.	

#### Material

Housing and base	White polycarbonate, V-0 Nickel plated stainless steel	
Terminals		

#### Models

Article	Description	Detection principle	Wind speed	Radioactivity
S65-OE	Optical detector with service alarm	Photoelectric, reflecting type	-	-
S65	Ionisation detector with service alarm	Ionisation, two chamber	Max. 10 m/s	Americium 241; 0.9 μCi; 33.3 kBq

#### Accessories

Article	Description
S-BP	Base for detectors
S-BPR-S65	Base for detectors with built-in change-over relay (24 V AC)

#### CF

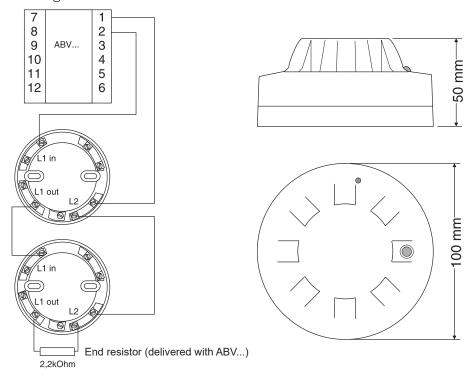
#### EMC emissions & immunity standards

This product conforms to the requirements of the EMC Directive 2014/30/EU through product standards EN 61000-6-1 and EN 61000-6-3.

RoHS: This product conforms to the Directive 2011/65/EU of the European Parliament and of the Council.



## Wiring and Dimensions



Note: An end resistor must be connected to the last detector in the loop.

### Product documentation

Article	Description
Instruction S65 and S65-OE	Instruction for installation and maintenance of S65 and S65-OE

The product documentation can be downloaded from www. regincontrols.com

