

- Optical type smoke detector
- Protection against RFI influence (radio interference)
- Operates within the temperature range -10...+50°C

SSDC50-OE-GA4 and SSDC65-OE are optical smoke detectors for mounting in all types of premises. They react to visible smoke particles (products of combustion).

The detector consists of a detector head and a base.

#### **Models**

The smoke detector is available in two models. The basic model, SSDC65-OE, has all the necessary functions for fire supervision.

The detector SSDC50-OE-GA4 has a service alarm, and is used to alert the need for cleaning and to prevent the risk of false alarms due to a dirty detector.

# Working principle

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

# Alarm indication

In normal operating conditions the alarm LED in SSDC50-OE-GA4 and SSDC65-OE is not lit. When the smoke alarm is given the LED gives off a red light.

### Service alarm

The SSDC50-OE-GA4 smoke detector with service alarm has a built-in function for sensing the pollution which inevitably occurs over time. When the degree of pollution has reached the level at which there is the risk of false alarms, a service alarm is given indicating that cleaning is required. This is indicated by a red LED on the detector and by a yellow LED on the connected control unit, type CABV24-300/D or CABV24-S-300/D.

# SSDC50-OE-GA4/ SSDC65-OE

Optical smoke detector for ceiling mounting

Used to detect smoke in all types of buildings. Constructed to meet the rigorous standards required for smoke detector installations.

- Compact plastic casing and base with bayonette grip simplifies service and maintenance
- Multiple detectors can be connected to a single control unit
- Model SS50-OE-GA4 also offers service alarm

#### Testing

The detector function can easily be tested, for instance by using testing smoke (available from AB Industrietechnik).

#### **Mounting**

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

The detector is connected to the control unit with a two-wire loop. The last detector in the loop is connected to the end resistor supplied together with the control unit to provide a closed signal loop.

The bases SSDC-BPR-SS50 and SSDC-BPR-S65 make it possible for the unit to independently give an alarm via the built-in relay.

# Maintenance

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

### **Approval**

The detectors are approved according to the EN-54 standard.



# Models

SSDC50-OE Basic model (without base)
SSDC50-OE-GA4 With service alarm (without base)

SSDC-BP Base for ceiling mounting

SSDC-BPR-SS50

Base for ceiling mounting with built-in relay (with service alarm)

SSDC-BPR-S65

Base for ceiling mounting with built-in relay (without service alarm)

## Technical data

Supply voltage

15...30 V DC (via control unit)

Power consumption

normal operation 0.14 mA at 24 V DC at smoke alarm 50 mA at 24 V DC at service alarm 20 mA at 24 V DC

Operating temperature -10...+50°C (non condensing)

Humidity Max 95% RH
Max. air velocity Non-wind sensitive

Detection principle Photoelectric, reflecting type

Protection class IP43

#### **Material**

Housing and base White polycarbonate, V-0

Base plate contacts Stainless steel Base plate type Bayonet base

#### Indication

smoke alarm Red light

service alarm Red light (yellow light at the control unit)

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

The products have been tested and approved to the following standards:

EN54-7:2000 - Optical and ionizing smoke detectors

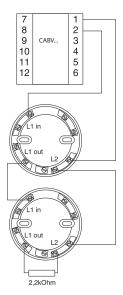
EN54-5:2000 - Heat detectors BS-EN 61000-6-3:2001

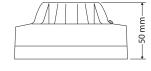
RoHS: This product conforms with the Directive 2011/65/EU of the European Parliament

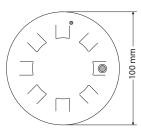
and of the Council.

# Dimensions and wiring

# Control unit







**NB:** The end resistor must be connected to the last detector in the loop.