



**OH110, OP110, HI110, HI112**

Cerberus™ FIT

## **Automatic fire detectors, 110-series**



For collective and conventional detector lines

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- **Signal processing with detector algorithms**
  - **Selectable parameter sets**
  - **3 color LED indication**
  - **Drift compensation**
  - **Internal fault monitoring**
  - **Fault indication**

## Characteristics

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- **Environmental**

- ecologically processing
- recyclable materials
- electronic and synthetic material simply separable

- **Characteristics**

- resistant to environment and interference factors such as dust, fibers, insects, humidity, extreme temperatures, electro-magnetic interference, corrosive vapors, vibration
- insensitive to impact, tamper protection
- protected electronics, high-quality components
- built-in alarm indicator (AI), visible at 360°
- up to 2 external alarm indicators of type FDAI91/FDAI92/FDAI93 connectable per detector
- signal processing with detection algorithms
- the same detector base type can be used for each detector type, for surface and recess supply wiring

- **Optional accessories**

- Detector locking device LP720 as protection against theft
- Designation plate FDBZ291
- Detector base seal RS720 for higher protection category
- Micro terminal DBZ1190-AA (0.28 ... 0.5 mm<sup>2</sup>)
- Connection terminal DBZ1190-AB (1.0 ... 2.5 mm<sup>2</sup>)

## OH110 Multi-sensor smoke detector

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**Multi-sensor smoke detector consist of:**

- Detector
- Dust cap to cover the detector for protection against dust during construction work

**Function**

- Works according to the scattered light principle with one sensor, optical forward scattering
- Opto-electronic sampling chamber holds off disturbing extraneous light but optimally detects smoke particles
- an additional heat sensor increases the fire detector's immunity to deceptive phenomena
- Selectable detection behavior by 2 parameter sets
  - Parameter set 1: Sensitive
  - Parameter set 2: Robust
- immunity against transient false alarm causes

**Application**

- for the detection of flaming fires caused by the combustion of liquid and solid matters, as well as smoldering fires
- for reliable fire detection in environments with deceptive phenomena

## OP110 Optical smoke detector

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### Optical smoke detector consist of:

- Detector
- Dust cap to cover the detector for protection against dust during construction work

### Function

- Works according to the scattered light principle with one sensor, optical forward scattering
- Opto-electronic sampling chamber holds off disturbing extraneous light but optimally detects smoke particles
- Selectable detection behavior by 2 parameter sets
  - Parameter set 1: Standard
  - Parameter set 2: Sensitive

### Application

- for the detection of smoke-generating flaming and smoldering fires

## HI110 Heat detector (RoR)

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### Heat detector consist of:

- Detector

### Function

- Equipped with one heat sensor
- For high requirements
- Certain response behavior with slow and fast temperature increases, also by depth temperature
- Parameter set: A1R

### Application

- For areas having high levels of dust, dirt or moisture that may lead to false activating with smoke detectors

## HI112 Heat detector (static)

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### Heat detector consist of:

- Detector

### Function

- Equipped with one heat sensor
- Measures the ambient temperature, when the maximum temperature is exceeded the detector sends a danger signal to the fire control panel
- Selectable detection behavior by 2 parameter sets
  - Parameter set 1: A2S
  - Parameter set 2: B

### Application

- For areas having high levels of dirt or temperature fluctuation that may lead to false activating with smoke detectors

### Detector base DB110 (Parameter set 1)

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#### Function

- Standard conventional detector base for all series 110 point detectors
- Selects parameter set 1 within detectors

#### Application

- for recess supply wiring
- for surface supply wiring, cable diameter up to 8 mm

### Detector base DB110D (Parameter set 1) for BS5839 Part 1

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#### Function

- Conventional detector base complete with a continuity diode for all series 110 point detectors
- Selects parameter set 1 within detectors

#### Application

- for recess supply wiring
- for surface supply wiring, cable diameter up to 8 mm

### Detector base DB110R (Parameter set 2)

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#### Function

- Conventional detector base complete with a resistor for parameter setting for all series 110 point detectors
- Selects parameter set 2 within detectors

#### Application

- for recess supply wiring
- for surface supply wiring, cable diameter up to 8 mm

### Detector base DB110RD (Parameter set 2) for BS5839 Part 1

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#### Function

- Conventional detector base complete with a resistor for parameter setting and continuity diode for all series 110 point detectors
- Selects parameter set 2 within detectors

#### Application

- for recess supply wiring
- for surface supply wiring, cable diameter up to 8 mm

### Base attachment BA720

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#### Application

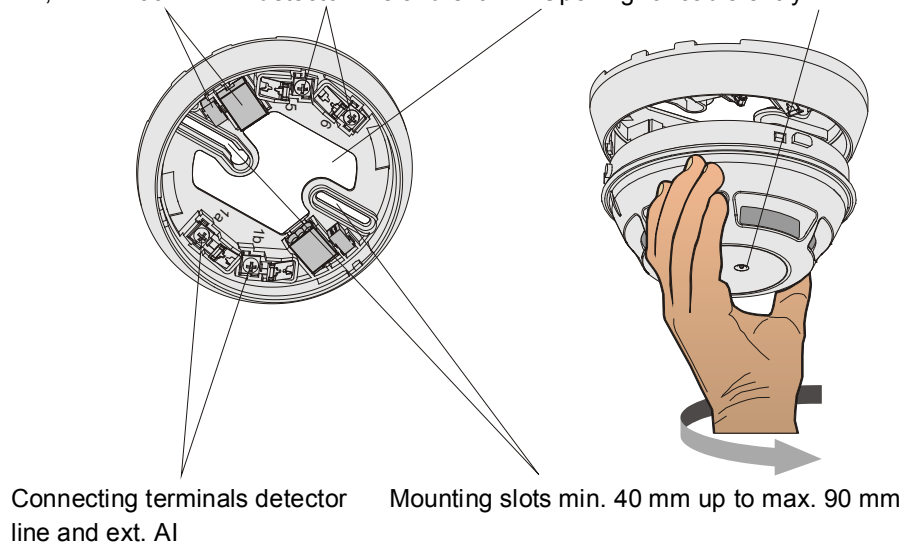
- For the supply of surface-mounted tubes (max. 20 mm) and trunking (max. 25 mm x 15 mm)
- The detector is fixed with a spring-loaded catch.

## Installation

- **Simple installation**

- Universal base with
  - 2 break outs on the side for surface supply wiring at max. Ø8 mm
  - extra large rear opening for easy recess supply wiring
- extra-large mounting slots facilitate a re-use of existing drill holes resulting from other systems
- connecting terminals for cable diameter at 2.5 mm<sup>2</sup>
- place for auxiliary terminals 2x DBZ1190-AA and 2x DBZ1190-AB

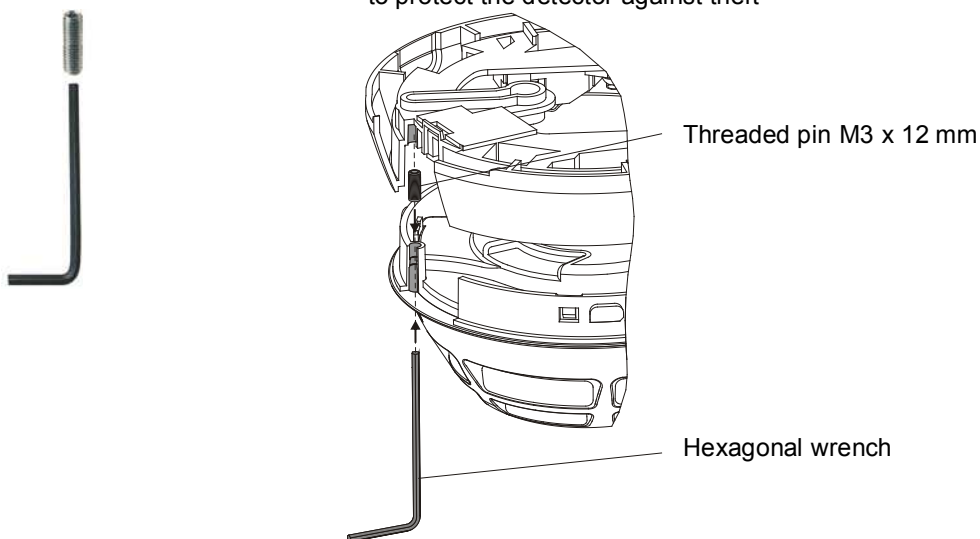
Place for auxiliary terminals DBZ1190-AA, DBZ1190-AB    Connecting terminals detector line and ext. AI    Opening for cable entry AI



- alarm indicator (AI) centered in the detector; no alignment required

## LP720 Detector locking device

- to protect the detector against theft

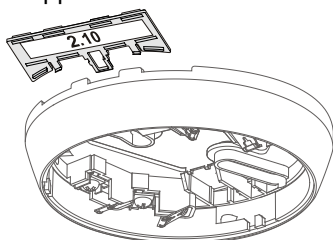


## FDBZ291 Designation plate

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- to identify the location address
- application without detector base seal RS720 only

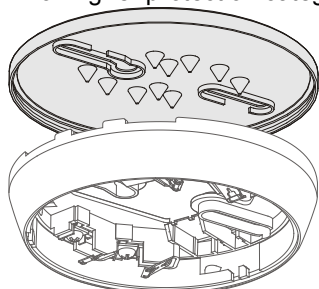


## RS720 Detector base seal

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- for higher protection category



## DBZ1190-AA Micro terminal, DBZ1190-AB Connection terminal

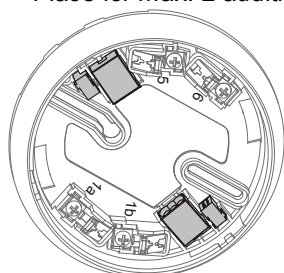
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- For conductors of max. 0.5 mm<sup>2</sup>



- For conductors of max. 2.5 mm<sup>2</sup>
- Support point for T-branching connection, extern alarm indicators (AI) or cable shielding
- Place for max. 2 additional terminals each







## Dimensions of detector with base



## Technical data

	OH110	OP110	HI110 / HI112
Operating voltage	DC 16 ... 28 V	DC 16 ... 28 V	DC 16 ... 28 V
Operating current (quiescent)	Max. 100µA	Max. 100µA	Max. 100µA
Ext. alarm indicator without sounder base AI connectable	2	2	2
Operating temperature	-10 ... +50 °C	-10 ... +55 °C	-10 ... +50 °C (HI110) -10 ... +50 °C (HI112, A2S) -10 ... +65 °C (HI112, B)
Storage temperature	-30 ... +70 °C	-30 ... +70 °C	-30 ... +70 °C
Humidity (short-term moisture condensation permitted)	≤96 % rel.	≤96 % rel.	≤96 % rel.
Communication protocol	Collective/conventional	Collective/conventional	Collective/conventional
Color	white, ~RAL 9010	white, ~RAL 9010	white, ~RAL 9010
Protection category EN60529 / IEC529 – with detector base seal RS720	IP40 IP42	IP40 IP42	IP40 IP42
Standards	CEA4021, EN 54-7	EN 54-7	EN 54-5
Approvals – VdS – LPCB	G212059 request	G212033 request	G212004 / 212015 request
QS standards	Siemens Standard SN 36350		



12  0786	<b>OH110</b>	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. <b>A6V10316298</b>
Point multi-sensor smoke detector for use in fire detection and fire alarm systems installed in buildings		
305/2011/EU (CPR): EN 54-7; 2004/108/EC (EMC): EN65030-4 / EN61000-6-3		
Declared performance and conformity can be seen in the Declaration of Performance and the EC Declaration of Conformity, which is obtainable via the Customer Support center: Tel. +49 89 9221-8000 or <a href="http://siemens.com/bt/download">http://siemens.com/bt/download</a>		
DoP No.: 0786-CPR-21165; DoC No.: CED-OH110		
12  0786	<b>OP110</b>	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. <b>A6V10316298</b>
Point smoke detector for use in fire detection and fire alarm systems installed in building detection system		
305/2011/EU (CPR): EN 54-7; 2004/108/EC (EMC): EN65030-4 / EN61000-6-3		
Declared performance and conformity can be seen in the Declaration of Performance and the EC Declaration of Conformity, which is obtainable via the Customer Support center: Tel. +49 89 9221-8000 or <a href="http://siemens.com/bt/download">http://siemens.com/bt/download</a>		
DoP No.: 0786-CPR-21161; DoC No.: CED-OP110		
12  0786	<b>HI110</b>	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. <b>A6V10316298</b>
Point heat detector for use in fire detection and fire alarm systems installed in buildings		
305/2011/EU (CPR): EN 54-5; 2004/108/EC (EMC): EN65030-4 / EN61000-6-3		
Declared performance and conformity can be seen in the Declaration of Performance and the EC Declaration of Conformity, which is obtainable via the Customer Support center: Tel. +49 89 9221-8000 or <a href="http://siemens.com/bt/download">http://siemens.com/bt/download</a>		
DoP No.: 0786-CPR-21141; DoC No.: CED-HI110		
12  0786	<b>HI112</b>	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical Data: see doc. <b>A6V10316298</b>
Point heat detector for use in fire detection and fire alarm systems installed in buildings		
305/2011/EU (CPR): EN 54-5; 2004/108/EC (EMC): EN65030-4 / EN61000-6-3		
Declared performance and conformity can be seen in the Declaration of Performance and the EC Declaration of Conformity, which is obtainable via the Customer Support center: Tel. +49 89 9221-8000 or <a href="http://siemens.com/bt/download">http://siemens.com/bt/download</a>		
DoP No.: 0786-CPR-21142; DoC No.: CED-HI112		

## Details for ordering

	Type	Part no	Designation	Weight
	OH110	S54372-F11-A1	Multi sensor fire detector (collective)	0.144 kg
	OP110	S54372-F4-A1	Optical smoke detector (collective)	0.138 kg
	HI110	S54372-F9-A1	Heat detector (collective, differential)	0.130 kg
	HI112	S54372-F10-A1	Heat detector (collective, static)	0.130 kg
	DB110	S54372-F5-A1	Detector base (collective)	0.052 kg
	DB110D	S54372-F6-A1	Detector base (For BS5839, Part 1)	0.052 kg
	DB110R	S54372-F7-A1	Detector base (collective)	0.052 kg
	DB110RD	S54372-F8-A1	Detector base (For BS5839, Part 1)	0.052 kg
Accessories	LP720	S54319-F9-A1	Detector locking device (2 hexagonal key, 100 hexagonal socket pins)	0.040 kg
	FDAI91	S54370-F9-A1	Alarm indicator, door frame version	0.020 kg
	FDAI92	S54370-F3-A1	Alarm indicator, surface version	0.050 kg
	FDAI93	S54370-F5-A1	Alarm indicator, flush version	0.010 kg
	BA720	S54319-F20-A1	Base attachment	0.100 kg
	FDBZ291	A5Q00002621	Designation plate (10x)	0.034 kg
	RS720	S54319-F8-A1	Detector base seal (10x)	0.014 kg
	DBZ1190-AA	BPZ:4677080001	Micro terminal 0.28 ... 0.5 mm <sup>2</sup>	0.001 kg
	DBZ1190-AB	BPZ:4942340001	Connection terminal 1.0 ... 2.5 mm <sup>2</sup>	0.007 kg

Details see equipment overview A6V10225323

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