

Cerberus™ PRO

## OOH740, OOHC740

Automatic fire detectors



**ASAt<sup>TM</sup>technology** For the automatically addressable detector bus C-NET  
collective / conventional (OOH740 only)

- Signal processing with **ASAt<sup>TM</sup>technology**
- Event-controlled detection behavior
- Evaluation of the criteria heat, warmth for OOH740, and gas for OOHC740
- Quick response to all fires that generate carbon monoxide (CO) for OOHC740
- Separate detection of toxic CO for OOHC740
- Highly developed immunity to deceptive phenomena
- Prepared for future requirements thanks to its programmability
- Address automatically issued during commissioning

### Design

- Resistant to environmental and interfering influences such as dust, fibers, insects, moisture, extreme temperatures, electromagnetic interference, corrosive vapors, vibration, artificial aerosols, and atypical fire phenomena

### Features

- Shock resistant, protection against sabotage
- Signal processing with **ASA** technology (Advanced Signal Analysis)
- Time and process-dependent detection behavior
- High degree of immunity to faults in power electronics
- Protected electronics, high-quality components
- Sophisticated sensors and electronic monitoring
- The integrated line separator that locates the defective part on the detector bus of the control panel and isolates between two detectors
- Integrated alarm indicator (AI), 360° visibility
- Up to two external alarm indicators can be connected per detector
- Address automatically issued during commissioning
- Same detector base can be used for every detector type, for surface-mounted and recess-mounted supply lines
- OOH740 only: Can also be used on a collective detector line or a conventional detector line

### Eco-friendly

- Environmentally friendly processing
- Reusable materials
- Electronic parts and synthetic materials can be easily separated

## Use

### OOH740 multi-sensor fire detector, neural ASA



#### Multi-sensor fire detector consisting of:

- Point detector
- Detector dust cap to protect the point detector during the construction phase

#### Function:

- Functions according to the scattered light principle with two sensors, optical forward and backward scattering
- Opto-electronic measuring chamber that obstructs disruptive extraneous light but provides excellent detection of both light and dark smoke particles
- Two additional heat sensors increase the point detector's immunity to deceptive phenomena
- Can be set as a multi-sensor smoke detector, smoke detector, or heat detector by the software
- Selectable detection behavior thanks to application-specific ASA parameter sets

#### Use:

- For early detection of flaming fires of solid and liquid substances, as well as of smoldering fires
- For early and reliable fire detection in an environment with deceptive phenomena
- Can be used on an addressed detector line, a collective detector line, or a conventional detector line

## OOHC740 fire and CO detector, neural ASA



### Multi-sensor fire detector consisting of:

- Point detector
- Detector dust cap to protect the point detector during the construction phase

### Function:

- Functions according to the scattered light principle with two sensors, optical forward and backward scattering
- Opto-electronic measuring chamber that obstructs disruptive extraneous light but provides excellent detection of both light and dark smoke particles
- Two additional heat sensors and an additional CO sensor increase the point detector's response behavior and immunity to deceptive phenomena
- Technical message, ambient supervision: Technical message if the temperature or CO concentration exceeds/falls below the preset limits
- Functions using an electro-chemical CO cell
- CO concentration alarm is transmitted to an independent technical CO alarm channel
- Independent processing of the CO signal for the CO alarm channel and CO signal for fire detection
- Selectable detection behavior of the CO alarm channel, regardless of ASA parameter sets for fire detection
- Selectable detection behavior thanks to application-specific ASA parameter sets

### Use:

- For early detection of smoldering fires that generate CO (e.g., mattress fires in homes)
- Areas with increased CO exposure, e.g., heating rooms, combustion plants, fermentation plants, garages, automotive workshops, animal stalls, chemical laboratories, or production sites
- For reliable fire detection in an environment with deceptive phenomena
- Can be used addressed

## Detector base DB721



### Function:

- Universal base for all point detectors of the Cerberus™ PRO FD720 series

### Use:

- For recess-mounted supply lines
- For surface-mounted supply lines with cables up to max. Ø 8 mm

The detector base DB721 has a loop contact. When using the DB721, the detector line is also not interrupted when there is no point detector mounted in the detector base.

### Detector base DB721D

**Function:**

- Collective mode
  - Universal base for the point detector OOH740 in collective mode (with BS 5839-1)
- Addressed mode
  - Universal base for the point detector OOH740 of the Cerberus™ PRO FD720 series
  - When used in the addressed mode, the diode must be removed

**Use:**

- For recess-mounted supply lines
- For surface-mounted supply lines with cables up to max. Ø 8 mm

The detector base DB721D has a loop contact. When using the DB721D, the detector line is also not interrupted when there is no point detector mounted in the detector base.

### Detector base DB722

**Function:**

- Universal base with base seal for point detectors OH720 and OP720 of the Cerberus™ PRO FD720 series

**Use:**

- For recess-mounted supply lines
- For surface-mounted supply lines with cables up to max. Ø 8 mm

The detector base DB722 has a loop contact. When using the DB722, the detector line is also not interrupted when there is no point detector mounted in the detector base.

### Detector base DB110 (parameter set 1)

**Function:**

- Universal base for all point detectors of the 110 and OOH740 series
- Selects parameter set 1 within the point detector

**Use:**

- For recess-mounted supply lines
- For surface-mounted supply lines with cables up to max. Ø 8 mm

### Sounder base DBS720

**Function:**

- Addressable sounder base for the acoustic alarm
- Compatible with all point detectors from the Cerberus™ PRO FD720 series

You will find more information on the sounder base DBS720 in document A6V10218037.

### Intended use

The automatic fire detectors OOH740 and OOH740C may only be used on a C-NET detector line in a fire detection system FS720 or FC360.

The automatic fire detector OOH740 may also be used on a collective detector line or a conventional detector line.

## Type Overview

| Type               | Designation                                    | Order number   | Weight [kg] |
|--------------------|------------------------------------------------|----------------|-------------|
| OOH740             | Multi-sensor fire detector, ASA                | S54320-F7-A3   | 0.124       |
| OOHC740            | Fire and CO detector, ASA                      | S54320-F8-A3   | 0.128       |
| DB721              | Detector base with loop contact                | S54319-F11-A1  | 0.052       |
| DB721D             | Detector base with loop contact                | S54319-F15-A1  | 0.054       |
| DB722              | Detector base                                  | S54319-F19-A1  | 0.052       |
| DB110              | Detector base (collective)                     | S54372-F5-A1   | 0.052       |
| DBS720             | Sounder base                                   | S54319-F5-A1   | 0.090       |
| <b>Accessories</b> |                                                |                |             |
| BA720              | Base attachment                                | S54319-F20-A1  | 0.051       |
| BA721              | Base attachment wet                            | S54319-F29-A1  | 0.272       |
| FDBZ291            | Designation plate                              | A5Q00002621    | 0.002       |
| DBZ1193A           | Designation plate                              | BPZ:4864330001 | 0.076       |
| RS720              | Detector base seal                             | S54319-F8-A1   | 0.012       |
| LP720              | Detector locking device                        | S54319-F9-A1   | 0.001       |
| FDBH291            | Detector heating unit                          | A5Q00004439    | 0.015       |
| DBZ1194            | Protective cage                                | BPZ:4677110001 | 0.138       |
| DBZ1190-AA         | Micro terminal 0.28...0.5 mm <sup>2</sup>      | BPZ:4677080001 | 0.001       |
| DBZ1190-AB         | Connection terminals 0.5...2.5 mm <sup>2</sup> | BPZ:4942340001 | 0.001       |
| PSR720-1           | Parameter set resistor 33k                     | S54319-F16-A1  | 0.001       |
| PSR720-2           | Parameter set resistor 68k                     | S54319-F17-A1  | 0.001       |

## Accessories

### Base attachment BA720



#### Function:

- For routing surface-mounted ducts (max. 20 mm) and cable ducts (max. 25 x 15 mm)
- Detector base mounted quickly: The detector base clicks into place in base attachment BA720.

### Base attachment wet BA721



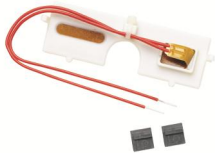
- Base attachment wet with additional integrated rubber seal for mounting in wet or humid environments
- For achieving a higher protection category
- For mounting in wet or humid environments
- Required when using detector heating unit FDBH291
- Required when using protective cage DBZ1194
- Mounted between detector base and ceiling
- Detector base mounted quickly: The detector base simply clicks into place in base attachment wet BA721.

#### Protective cage DBZ1194



- To protect the point detector from damage
- Can only be mounted in combination with base attachment wet BA721

#### Detector heating unit FDBH291



- For operating point detectors in critical ambient conditions during icy conditions or when there is a danger of moisture condensation. Examples of application: Cold stores, attics, loading ramps, cheese cellars
- Optimum function is only guaranteed in conjunction with base attachment wet BA721.
- The point detector temperature increases by approximately 2 °C over the operating temperature and thus avoids moisture condensation on the detector.
- Mounted quickly: The detector heating unit clicks into place in the detector base.

#### Designation plate FDBZ291



- For labeling with the location address
- Can only be used without detector base seal FDBZ295

#### Designation plate DBZ1193A



- For labeling with the location address
- Can only be used with base attachment wet BA721

#### Detector base seal RS720

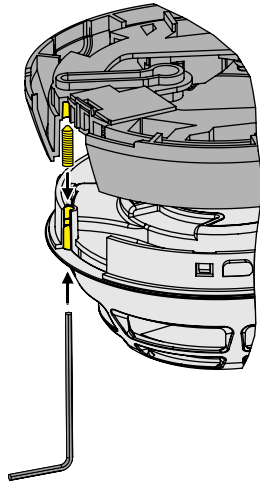


- For achieving a higher IP protection category
- Mounted between detector base and ceiling

### Detector locking device LP720



- For protection against theft of the point detector
- Set screw M3 x 12 mm prevents the point detector being unscrewed from the detector base
- Point detector can only be removed with the appropriate Allen key



### Parameter set resistor 33k PSR720-1



#### Function:

- Prefabricated resistor with flat plugs for use in DB110 and DB721D. Brings the OOH740 in parameter set 1.

### Parameter set resistor 68k PSR720-2



#### Function:

- Prefabricated resistor with flat plugs for use in DB110 and DB721D. Brings the OOH740 in parameter set 2.

### DBZ1190-AA micro terminal and DBZ1190-AB connection terminal



- Micro terminal DBZ1190-AA
  - Cable cross section up to max. 0.5 mm<sup>2</sup>
- Connection terminal DBZ1190-AB
  - Cable cross section up to max. 2.5 mm<sup>2</sup>
  - For connecting two external alarm indicators or the cable shielding

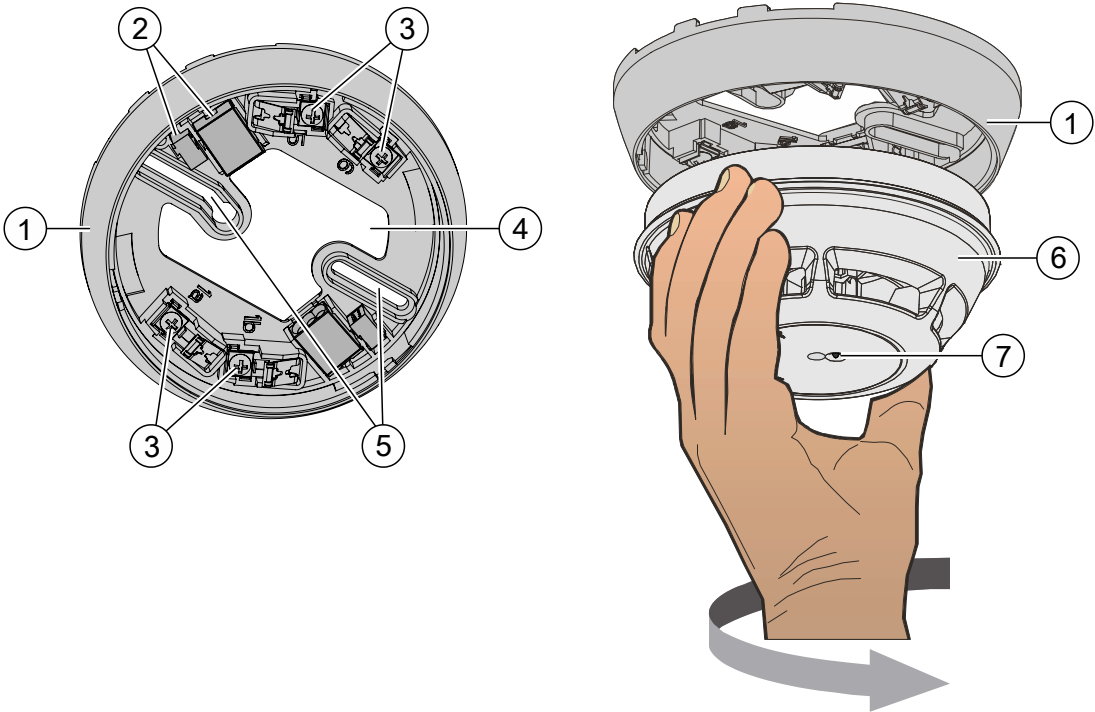
Installation

Easy mounting

- Universal detector base
  - Two break-out points for surface-mounted cable entry at the side.  
Max. cable diameter: 8 mm.
  - Extra-large opening for single recess-mounted cable entry.
- Extra-long mounting slits allow existing drill holes from other systems to be reused.
- Screw terminals for conductors up to max. 1.6 mm²
- Space for auxiliary terminals:
  - 2x micro terminals DBZ1190-AA and
  - 2x connection terminals DBZ1190-AB

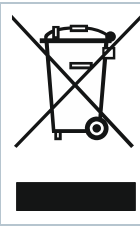
The detector can be screwed into the base easily either manually or using the detector exchanger DX791 and the corresponding adapter FDUD491.

The internal alarm indicator is centered in the detector, which makes alignment of the point detector superfluous.



|   |                                                                |   |                          |
|---|----------------------------------------------------------------|---|--------------------------|
| 1 | Detector base                                                  | 5 | Mounting slits           |
| 2 | Auxiliary terminals DBZ1190-AA, DBZ1190-AB                     | 6 | Point detector           |
| 3 | Screw terminals for detector line and external alarm indicator | 7 | Internal alarm indicator |
| 4 | Opening for cable entry                                        |   |                          |

Disposal



The device is considered an electronic device for disposal in accordance with the European Guidelines and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.
- Dispose of empty batteries in designated collection points.



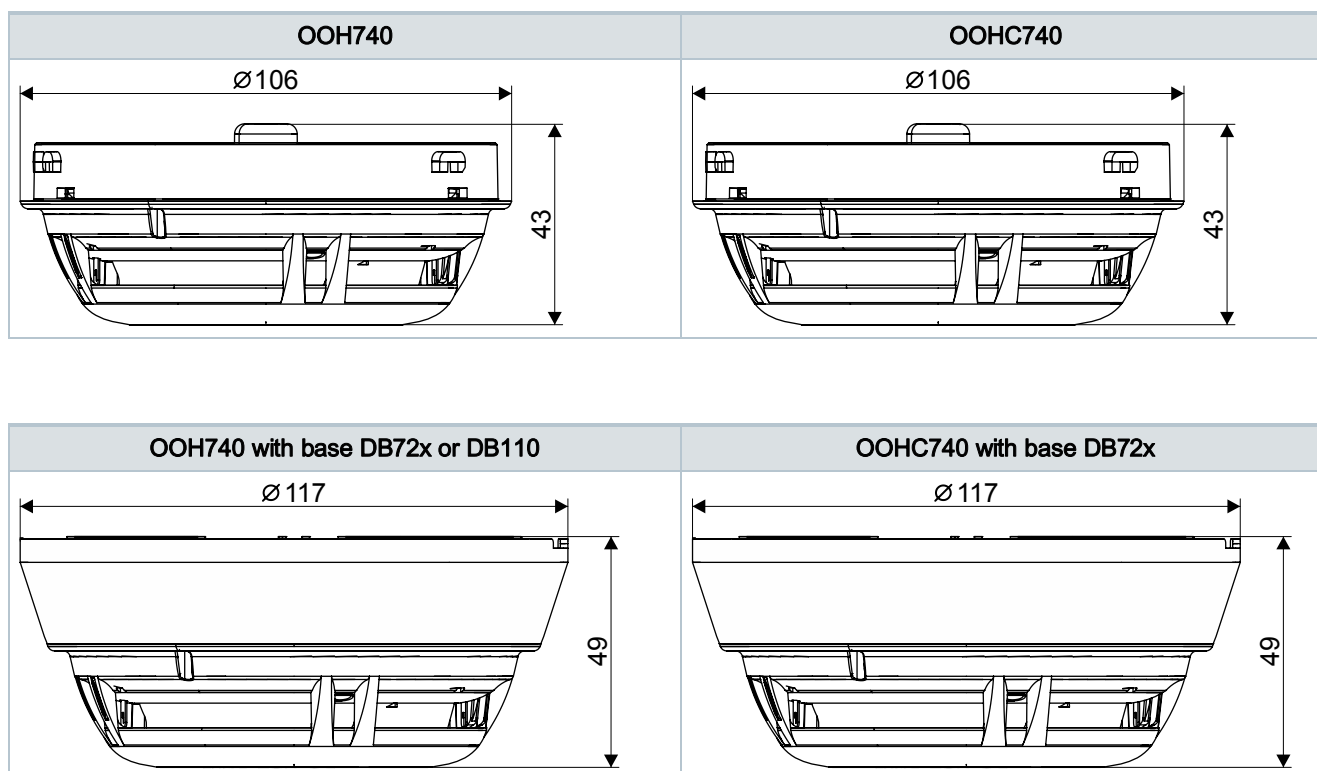
## Technical data

|                                                                                                                            | OOH740                                        | OOHC740                              |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------|
| Operating voltage (modulated)                                                                                              | DC 12...33 V                                  | DC 12...33 V                         |
| Operating current (quiescent)                                                                                              | ~170...250 µA                                 | ~300...380 µA                        |
| Max. number of external alarm indicators that can be connected                                                             | 2                                             | 2                                    |
| Operating temperature                                                                                                      | -25...+55 °C                                  | -10...+50 °C                         |
| Storage temperature                                                                                                        | -30...+70 °C                                  | -20...+55 °C                         |
| Air humidity (short-term moisture condensation permitted)                                                                  | ≤95 % rel.                                    | ≤95 % rel.                           |
| Communication protocol                                                                                                     | C-NET, collective, or conventional            | C-NET                                |
| Color                                                                                                                      | ~RAL 9010 pure white                          | ~RAL 9010 pure white                 |
| Weight                                                                                                                     | 0.100 kg                                      | 0.100 kg                             |
| Protection category (IEC 60529)                                                                                            | IP40                                          | IP40                                 |
| Protection category (IEC 60529) with detector base seal RS720/BA721                                                        | IP44                                          | IP44                                 |
| Standards                                                                                                                  | CEA 4021, EN 54-5, EN 54-7, EN 54-17          | CEA 4021, EN 54-5, EN 54-7, EN 54-17 |
| Approvals <ul style="list-style-type: none"> <li>• VdS</li> <li>• LPCB</li> <li>• FM</li> <li>• DNV GL (marine)</li> </ul> | G211070<br>126bh/05<br>3051081<br>MEDB00003UK | G211047<br>126bh/06<br>-<br>-        |
| Permissible wind speed                                                                                                     | Max. 5 m/s                                    | Max. 5 m/s                           |
| C-NET system compatibility                                                                                                 | FC720, FC360                                  |                                      |
| Collective system compatibility                                                                                            | FC10/FC120                                    | -                                    |

|                                                                                                                                                                                                                                                                                                     |               |                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------|
| 11  0786                                                                                                                                                                                                         | <b>OOH740</b> | Siemens Schweiz AG; Theilerstrasse 1a<br>CH-6300 Zug<br>Technical data: see doc. <b>A6V10305793</b> |
| OOH740 - Smoke/heat detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.                                                                                                                                                                  |               |                                                                                                     |
| 305/2011/EU (CPR): EN 54-5 / EN 54-7 / EN 54-17 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581                                                                                                                                                                         |               |                                                                                                     |
| The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or <a href="https://siemens.com/bt/download">https://siemens.com/bt/download</a> |               |                                                                                                     |
| DoP No.: 0786-CPR-21094; DoC No.: CED-OOH740                                                                                                                                                                                                                                                        |               |                                                                                                     |

|                                                                                                                                                                                                                                                                                                     |                |                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------|
| 11  0786                                                                                                                                                                                                         | <b>OOHC740</b> | Siemens Schweiz AG; Theilerstrasse 1a<br>CH-6300 Zug<br>Technical data: see doc. <b>A6V10305793</b> |
| OOHC740 - Smoke/heat detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.                                                                                                                                                                 |                |                                                                                                     |
| 305/2011/EU (CPR): EN 54-5 / EN 54-7 / EN 54-17 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581                                                                                                                                                                         |                |                                                                                                     |
| The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or <a href="https://siemens.com/bt/download">https://siemens.com/bt/download</a> |                |                                                                                                     |
| DoP No.: 0786-CPR-21067; DoC No.: CED-OOHC740                                                                                                                                                                                                                                                       |                |                                                                                                     |

## Dimensional drawings



## Product documentation

| Document ID | Title                                                                                                                                                                               |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 008115      | Installation Detector heating FDBH291                                                                                                                                               |
| A6V10200373 | Installation Detector base with loop contact DB721, DB722, detector base DB720, sounder base DBS720, detector base seal RS720, detector locking device LP720, base attachment BA720 |
| A6V10203222 | Data Sheet Testequipment and accessories<br>FDUL221, DX791, RE6, RE7T, RE8ST, RE8STCO, FDUM29x, LE3, StabexHF                                                                       |
| A6V10218037 | Technical Manual Sounder base DBS720                                                                                                                                                |
| A6V10229261 | List of compatibility (for 'Cerberus™ PRO' product line)                                                                                                                            |
| A6V10305793 | Technical Manual Automatic fire detectors OOH740, OOHC740                                                                                                                           |
| A6V10393192 | List of compatibility (for 'Cerberus™ FIT' product line)                                                                                                                            |
| A6V10406006 | Installation Base attachment wet BA721, Detector designation plate DBZ1193A, Protective cage DBZ1194, EMC-protective cage FDBZ294                                                   |
| A6V10882301 | List of compatibility (for 'FC360' product line)                                                                                                                                    |

Issued by  
Siemens Switzerland Ltd  
Building Technologies Division  
International Headquarters  
Theilerstrasse 1a  
CH-6300 Zug  
Tel. +41 58 724 2424  
[www.siemens.com/buildingtechnologies](http://www.siemens.com/buildingtechnologies)

© Siemens Switzerland Ltd, 2011  
Technical specifications and availability subject to change without notice.