

Cerberus™ PRO

# OOH740, OOHC740

Automatic fire detectors



### ASAtechnology™ For the automatically addressable detector bus C-NET collective / conventional (OOH740 only)

- Signal processing with **ASA***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 ASAtechnology (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



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.

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
- 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 DB721D	
	<ul> <li>Function:</li> <li>Collective mode <ul> <li>Universal base for the point detector OOH740 in collective mode (with BS 5839-1)</li> </ul> </li> </ul>
	<ul> <li>Addressed mode         <ul> <li>Universal base for the point detector OOH740 of the Cerberus™ PRO FD720 series</li> <li>When used in the addressed mode, the diode must be removed</li> </ul> </li> </ul>
	<ul> <li>Use:</li> <li>For recess-mounted supply lines</li> <li>For surface-mounted supply lines with cables up to max. Ø 8 mm</li> <li>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.</li> </ul>

Detector base DB722		
	<ul> <li>Function:</li> <li>Universal base with base seal for point detectors OH720 and OP720 of the Cerberus<sup>™</sup> PRO FD720 series</li> <li>Use:</li> <li>For recess-mounted supply lines</li> <li>For surface-mounted supply lines with cables up to max. Ø 8 mm</li> <li>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.</li> </ul>	

Detector base DB110 (parameter set 1)		
	<ul> <li>Function:</li> <li>Universal base for all point detectors of the 110 and OOH740 series</li> <li>Selects parameter set 1 within the point detector</li> <li>Use:</li> </ul>	
	<ul> <li>For recess-mounted supply lines</li> <li>For surface-mounted supply lines with cables up to max. Ø 8 mm</li> </ul>	

Sounder base DBS720	
DE E	Function:
Charles -	<ul> <li>Addressable sounder base for the acoustic alarm</li> </ul>
	• 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 OOHC740 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			
Туре	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
Accessories			
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 0.280.5 mm <sup>2</sup>	BPZ:4677080001	0,001
DBZ1190-AB	Connection terminals 0.52.5 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	
F	<ul> <li>Function:</li> <li>For routing surface-mounted ducts (max. 20 mm) and cable ducts (max. 25 x 15 mm)</li> <li>Detector base mounted quickly: The detector base clicks into place in base attachment BA720.</li> </ul>

# Base attachment wet BA721

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e e	

- 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.	
	<ul> <li>The point detector temperature increases by approximately 2 °C over the operating temperature and thus avoids moisture condensation on the detector.</li> <li>Mounted quickly: The detector heating unit clicks into place in the detector base.</li> </ul>	

Designation plate FDBZ291		
	<ul><li>For labeling with the location address</li><li>Can only be used without detector base seal FDBZ295</li></ul>	

Designation plate DBZ1193A		
	<ul> <li>For labeling with the location address</li> <li>Can only be used with base attachment wet BA721</li> </ul>	

Detector base seal RS720	
Contract.	<ul> <li>For achieving a higher IP protection category</li> <li>Mounted between detector base and ceiling</li> </ul>

Detector locking device LP	2720
	<ul> <li>For protection against theft of the point detector</li> <li>Set screw M3 x 12 mm prevents the point detector being unscrewed from the detector base</li> <li>Point detector can only be removed with the appropriate Allen key</li> </ul>

<ul> <li>Function:</li> <li>Prefabricated resistor with flat plugs for use in DB110 and DB721D. Brings the OOH740 in parameter set 1.</li> </ul>	Э

Parameter set resistor 68k PSR720-2		
	<ul> <li>Function:</li> <li>Prefabricated resistor with flat plugs for use in DB110 and DB721D. Brings the OOH740 in parameter set 2.</li> </ul>	

DBZ1190-AA	micro termin	al and DBZ1 <sup>4</sup>	190-AB conr	nection terminal
DDL1100701			1007 (D 00111	

	Micro terminal DBZ1190-AA
	<ul> <li>Cable cross section up to max. 0.5 mm<sup>2</sup></li> </ul>
120mm	Connection terminal DBZ1190-AB
	<ul> <li>Cable cross section up to max. 2.5 mm<sup>2</sup></li> </ul>
223	<ul> <li>For connecting two external alarm indicators or the cable shielding</li> </ul>

## 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 mm<sup>2</sup>
- 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

<b>X</b>	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 1233 V	DC 1233 V
Operating current (quiescent)	~170250 µA	~300380 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		
• VdS	G211070	G211047
• LPCB	126bh/05	126bh/06
• FM	3051081	-
• DNV GL (marine)	45 246 – 16 HH	-
Permissible wind speed	Max. 5 m/s	Max. 5 m/s
C-NET system compatibility	FC720,	FC360
Collective system compatibility	FC10/FC120	-

11 <b>C E</b> 0786	OOH740	Siemens Switzerland Ltd; Gubelstrasse 22 CH-6301 Zug Technical data: see doc. <b>A6V10305793</b>
OOH740 - Smoke/heat detector inc	cl. short-circuit isolator for use in fire detection and fir	e 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 6	1000-6-3 ; 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 http://siemens.com/bt/download		
	DoP No.: 0786-CPR-21094; DoC No.: CED-OOH74	40

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	DOP No.: 0786-CPR-21067; DoC No.: CED-OOHC7	740





# 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 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)

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