

Product catalogue

2025 | 2026



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1 General



Schrack Seconet security systems are developed in Austria, produced in Germany and incorporate both state-of-the-art technology and the latest scientific developments, while meeting all the latest applicable standards (European standards, requirements of European testing and certification bodies etc.). Schrack Seconet frequently cooperates with technical universities and international companies, as well as with testing and certification bodies, fire prevention bodies and fire brigade associations, so that products can be constantly optimized and adapted to meet new demands.



The high quality of Schrack Seconet products is ensured using an ISO 9001 approved Quality Assurance system throughout the company's activities (from development through production and sales processes through installation to customer service).

Considerable attention is paid in the development of products towards the separation of materials used, reusability, disposal and recycling to ensure that materials were processed in an as environmentally sound way as possible.

1.1 About this document

These descriptions and technical specifications correspond to the status as of the date of publication. Schrack Seconet reserves the right to make modifications, in particularly where they are justified as a result of technological progress. In the course of continual development, the products delivered may differ optically from shown products. Information which is not contained in this document can be requested at any time from one of our offices.

The original of this document was written in German. Foreign-language documents are released and modified with the German version. In the case of deviations in the foreign-language document, the German version of this document is the approved reference document.

The design of this document is subject to copyright law. The printing and the copying of contents (e.g. texts, images, photos) including extracts in any type of media (such as print, CD-ROM, internet) is only permitted with Schrack Seconet explicit written consent. For printing errors and obvious errors no liability is accepted. For enquiries and orders, please indicate article numbers.

1.1.1 Explanation of symbols

Important notes in this document are identified by the following symbols. Failure to observe these notes may result in malfunction of the security systems or in property or personal injury.



NOTE

Contains notes to help you use the product or system more effectively and easily. Usage is optional.



ENVIRONMENTAL NOTICE

Electrical/electronic devices and batteries/rechargeable batteries

Electrical and electronic devices as well as batteries or rechargeable batteries may not be disposed of in household rubbish. As the end user, you are legally obliged to return them. Used electrical and electronic devices as well as batteries or rechargeable batteries should be returned free of charge after use to the vendor or to the designated places for returning them (e.g. communal collection points or in shops). Proper disposal of the devices will relieve the burden on the environment. For more detailed information please contact your waste disposal center.

1.1.2 Information about the structure of the catalogue

Product groups

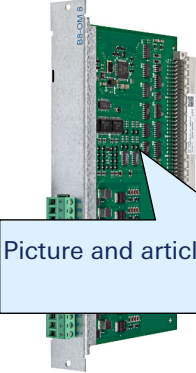
The product groups are divided into chapters. Each chapter begins with a description of the product group and the possible structure of products. The connection options for the system connection are shown in a diagram.

Product overview

The product overview is an overview of the available functions for each product. For each available function it is shown in which product this function is available.

Article description

The articles are described with the information shown:



Label and product type

B8-OM5 module for monitored outputs

For activation and monitoring of eight primary lines (flashlight, sirens etc.) to EN 54-13, each with a maximum current of 1.5 A.

The three load ranges are set as appropriate in the software dependent on the purpose of use.

Power supply:	internally via the system bus
Current consumption:	28 mA typ.
Connection:	8 monitored outputs
Output voltage:	22 – 28 V
Output current:	max. 1.5 A
Short circuit current:	1.75 A typ.
Connection plug:	16 pin screw-type terminal
Interface:	system bus
Ambient temperature:	–5 °C – +50 °C
Relative air humidity:	5 to 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	224 g

Picture and article number

No.: 21-1031502-01

Technical data

Product list and accessories

At the end of a chapter all products and variants as well as the respective accessories and spare parts are listed. The overview table contains descriptions, the product types and the article numbers for ordering products.

1.2 General safety notes

The planning of security systems as well as the installation, commissioning and maintenance of products and the systems which they form required specialist expert knowledge, and therefore may only be undertaken by specially trained experts according to the manufacturer's specifications. The product-specific training of staff members must be carried out by Schrack Seconet or by skilled staff who have been specifically authorised to carry out this duty by Schrack Seconet.

Schrack Seconet explicitly state, that security systems must be periodically maintained by certified and qualified staff in accordance with the relevant standards (such as ÖNORM F 3070, DIN 14675, EN 16763), in order to maintain the functional and protective scope in the long term. For servicing and maintenance work on safety-related systems, the currently valid regulations of the country in which the system is being operated shall apply.

In addition, the respective country-specific regulations and guidelines for the planning, installation, service and maintenance must be adhered to and complied with. Damage and consequential damage caused by interventions or changes to products and their improper handling are excluded from liability. The same is also true for inappropriate storage of items and other detrimental external factors.

2 System overview



Preventive fire protection is no coincidence

An early and reliable fire detection system enables targeted alerts and life-saving fire protection measures that are carried out effectively and automatically.

2.1 Integral EvoxX system family

The Integral EvoxX system family consists of a range of different control panels, equipment, case types and components, which can be perfectly combined and coordinated for every expansion stage and system size.

All devices are compatible with each other and work with the same software and commissioning tools.

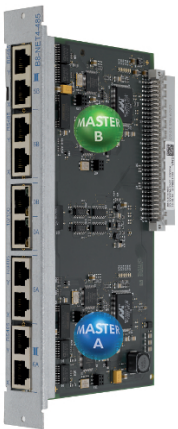
IP technology as a standard

All Integral EvoxX control panels support the Internet protocol. With software applications, the control panels can also be networked independently of their location and accessed using remote access via PC, smart phone or tablet.

Simple and intuitive operation

The operating panel is the same for all Integral EvoxX control panels and Integral EvoxX applications: logical processes and a clear layout of buttons provide the necessary overview in stressful situations. The button labels and display text are available in more than 20 languages.

Full redundancy



An essential part of the Integral EvoxX system is complete, intelligent redundancy. This means that a second, identical system is constantly working in hot stand-by operation, parallel to the operating system.

Not only is the microprocessor structure duplicated, but all system structures, components and electronic components in the fire alarm control panel are also duplicated. A fault in the active system causes an automatic, uninterrupted switchover to the second, parallel-running system and the indication of a system fault.

All functions, such as detectors, alarms, plain text indication and activation of the fire incident control systems, etc., are retained without restriction.

The data lines to the external operating panels and the connections between the control panels are also laid out multiple times to ensure that the system remains fully functional in the event of line interruptions or faults.

Flexible interfaces

Integral EvoxX control panels contain a wide range of different interfaces and standardised protocols. This ensures that they are compatible with other devices, such as building management systems.

Investment security

It is particularly important to Schrack Seconet that our products maintain the highest possible degree of forward and backward compatibility. We ensure that a gradual modernisation of older fire alarm systems can be performed easily and flexibly - so that Schrack Seconet products are always a sound investment for the future.

Easy programming and planning

All Integral EvoxX control panels can be easily and clearly programmed and planned using a single software tool. Logical combinations of inputs and outputs systems can be easily and flexibly configured – even across different loops and multiple control panels.

Modular, decentralised structure

The Integral EvoxX system is a modular, decentralised system, which consists of individual components that can be planned and programmed according to individual installation requirements.

This completely modular system design enables use in almost any application, from very small systems to large-area networked systems, with the ability to be easily and quickly extended and adapted – even retro-spectively. Even pre-installed Schrack Seconet detectors can be easily integrated into an Integral EvoxX system.

Integral LAN and Integral WAN network



Unlike previous designs, the fire alarm control panel is no longer a single device to which all lines must be routed. Up to 16 sub-control units can be connected as desired in a stub, loop or mesh topology, the so called Integral LAN to form a logical fire alarm control panel and can be distributed throughout the building as required. Larger buildings and complexes such as hotels, office buildings, industrial plants etc. are efficiently fitted with this. The connection between the individual sub-control units is achieved using the latest IP technology. According to regulations, an integration of in-house LAN infrastructure into Integral LAN is not standard-compliant.

In the case of very extensive company premises with campus structures such as hospitals or universities, but also in the case of locally distant locations such as supermarket chains or companies with several branches, the so-called Integral WAN is implemented as a superordinate fire alarm network, also across locations. The aim of Integral WAN is to use existing networks (Intranet/Internet) for communication between the fire alarm control panels as an addition to the standard-compliant construction of exclusive networks.

Wiring length

The distance between any two control panels can be up to 1200 metres. Neither repeaters nor other additional devices such as modems etc. are required; the only critical factors are the cable type and ambient conditions. In special cases – if the distance needs to exceed 1200 metres – other communication media such as optical fibres (with a maximum wiring length of 30 km) or modems can be used.

Secure data transmission

Due to an increase in environmental and electromagnetic factors that can affect control panels, detectors, peripheral devices and even transmission systems, a new digital data protocol with fault detection and redundant coding was specifically designed for fire alarm control panels.

This enables permanent, intelligent communication between peripheral elements and subsystems with the highest level of data security (Hamming code distance 4). This ensures that deceptive alarms caused by electromagnetic interference (radio wave radiation, overvoltage, glitches etc.) are filtered out.

Log printer

The serial log printer is included in several Integral EvoxX cabinet variants, and is available in an external case for connection directly next to an external operating panel. In any case, the Integral EvoxX log printer is supplied with emergency power for at least 72 hours in accordance with the requirements of EN 54-4.

All state changes of the fire alarm system (e.g. alarms, faults, disablements, activations, actuations, operating processes, alarm delays, service hints) are stored in the event log memory of the master control unit as plain text with date, time and additional information. The printer has access to this event log memory and can print out its contents in any repetition. All information is presented in unambiguous clear text on both the display and the log printer itself.

The transmission of the printer lists (both internal and external) is encrypted by default.

Overvoltage protection, earthing concept

The Integral EvoxX is equipped with a comprehensive, integrated overvoltage protection concept that protects all peripheral inputs as well as the mains power supply in accordance with EN 50130-4 (EMC) and EN 61000-6-2 (interference in industrial use). The EMC protection concept is achieved via measures such as a zoning concept, transzorb diodes, filters and broadband decoupling of the power supply to protect the electronics. For operation inside buildings with installed high voltage protection (lightning protection, mains-side overvoltage arrester), no further measures (e.g. separate overvoltage arresters) are necessary.

Power supply connection and emergency power supply

The power supply connection must comply with the respective country's applicable regulations (e.g. DIN, ÖNORM, VDE). The emergency power supply batteries ensure proper functioning of the fire alarm system for a defined time period in the event of a power failure. Because the rechargeable batteries must remain fully charged throughout their life, their charging and discharging characteristics are subject to specific requirements, conditions and testing. Furthermore, the charging curves of the rechargeable batteries are exactly matched to the power supply unit being used.

If rechargeable batteries with other charging characteristics are used, proper functioning of the emergency power supply cannot be guaranteed. Furthermore, it is possible that the entire system may be damaged as a result. For these reasons, only rechargeable battery types that are approved by Schrack Seconet and VdS may be used.

2.2 Integral EvoxX fire alarm control panels

	Integral EvoxX MF	Integral EvoxX CF	Integral EvoxX BF
Area of use	large systems e.g. industrial, airports, office buildings, hospitals, shopping centres	medium-sized systems e.g. supermarkets, residential developments, hotels	smaller buildings e.g. unoccupied facilities, catering, parking garages
Modular structure	•	1 connection slot for optional module	—
Hardware redundancy	•	—	—
Software redundancy	•	•	•
Degree of protection	IP 30, IP 54	IP 30	IP 30
Number of loops X-LINE	max. 16	max. 4	max. 1
Devices per control panel	max. 4000	max. 1000	max. 250
Control panel networking			
via LAN	•	•	•
via optical fibre	•	•	—
via RS-485	•	•	—
Wiring length between two control panels			
LAN:	max. 100 m	max. 100 m	max. 100 m
Optical fibre:	max. 30 000 m	max. 30 000 m	—
RS-485:	max. 1200 m	max. 1200 m	—
Modernisation of existing systems	•	—	—
Floor-standing cabinet variant	•	—	—

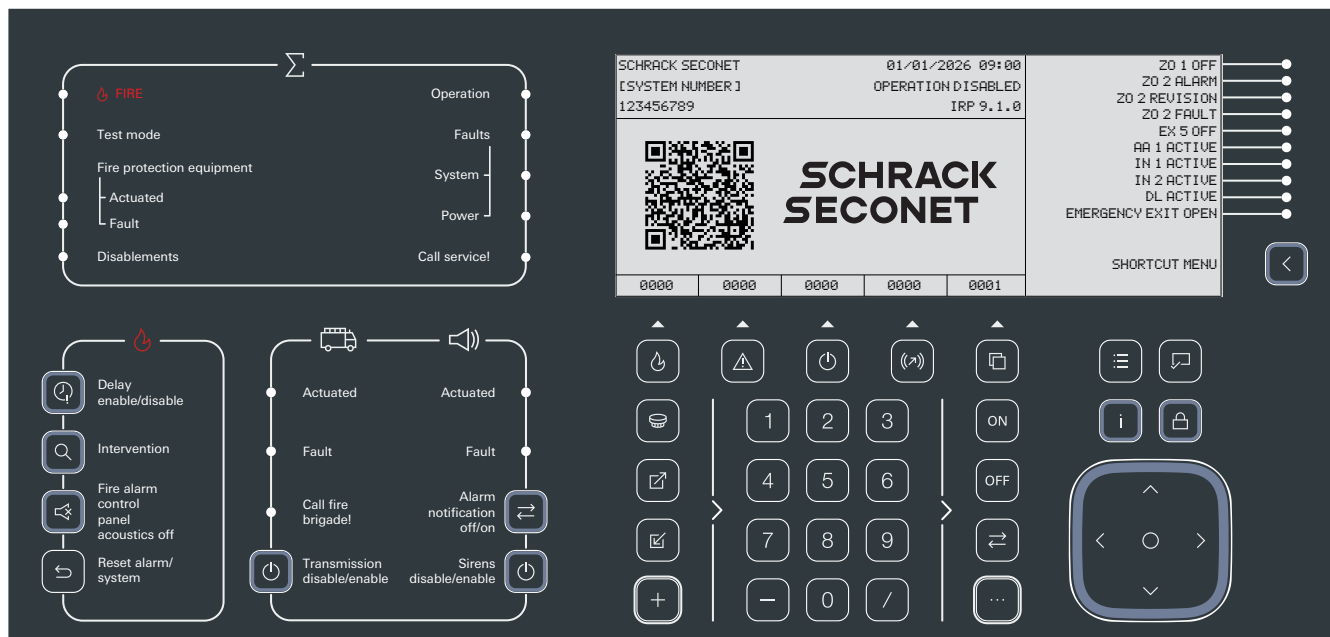
2.3 Integral EvoxX extinguishing control panels

	Integral EvoxX ME	Integral EvoxX CE	Integral EvoxX BE
Area of use	Electronic control and delay unit acc. EN 12094-1 and VdS 2496		
Activation of single-zone extinguishing systems	•	•	•
Activation of multi-zone extinguishing systems	•	—	—
Number of extinguishing zones	32	1	1
Default interface extinguishing	•	•	•
Additional LED parallel indication panels	•	•	•
Optionally as combined fire alarm/ extinguishing control panel	•	•	•

2.4 Operating panel Integral IMAP

The Integral IMAP operating panel is used for indication and operation of Integral EvoxX control panels. From this panel, it is possible to send any command to the system, as well as to indicate the system states of all devices. The operating panel can be installed directly into the fire alarm control panel's case or is available as an external version - installed separately from the fire alarm control panel - in its own case.

Due to the clarity of the indication and operation, Integral IMAP is also used as the initial information point (main access for the fire brigade) in addition to the fire brigade operating panel required by the standard.



- Indication with 14 lines, 60 characters per line, separated into three operational areas:
 - Operational area 9 lines, 40 characters
 - Info area 3 lines, 40 characters
 - Programmable button labelling and LED labelling 14 lines, 20 characters
- Can be deployed as a main operating panel in an Integral WAN
- Available in numerous language versions (both with operating panel and menu navigation on the display)
- Up to four languages can be toggled between in normal operating mode
- Pushbuttons with illuminated ring – action feedback and menu guidance
- A freely programmable button that can be labelled using software
- Ten freely programmable multi-colour LEDs that can be labelled using software
- Five status lists (alarms, faults, shutdowns etc.)
- New list scrolling
- Range operation (e.g. disable range 1 – 10)
- Six programmable pieces of information in the info area of the indication
- Simplified operation of function types
- Group operation (e.g. simultaneously disable all detector zones)
- Individual user management with password and user level
- Every change of user is logged in the event log memory

- Connection for external EPI-Bus devices (display or control units)
- Connection for internal/external log printer

The external serial log printer can also be connected to the external version of the operating panel. The printer is mounted directly next to the operating panel.

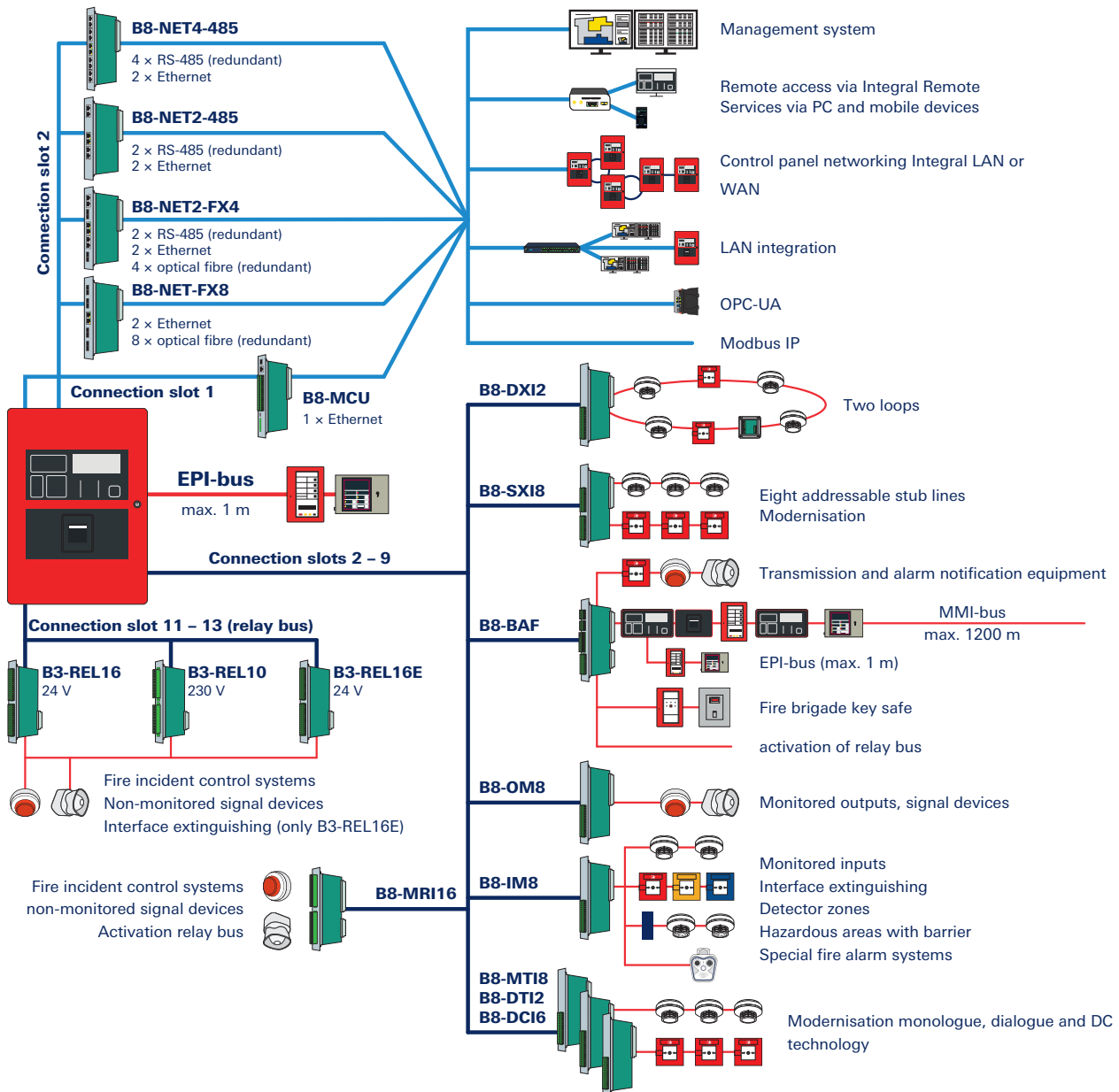


The Integral IMAP operating panel is labelled using an adhesive labelling plate, which is currently available in 27 languages:

German	Italian	Swedish
English	Croatian	Serbian
Bulgarian	Latvian	Slovakian
Danish	North Macedonian	Slovenian
Estonian	Norwegian	Spanish
Finnish	Polish	Czech
Greek	Portuguese	Turkish
Hebrew	Romanian	Ukrainian
Dutch	Russian	Hungarian

3 Integral EvoxX M modular control panel

The Integral EvoxX M system can be used as a Integral EvoxX MF fire alarm control panel, a Integral EvoxX ME multi-zone extinguishing control panel or as a combined Integral EvoxX MF/ME fire alarm/extinguishing control panel.



Connection scheme Integral EvoxX M

3.1 Integral EvoxX MF fire alarm control panel

The Integral EvoxX MF is a modular, fully redundant system consisting of individual components for large installations (up to 16 loops with up to 4000 devices).

The basic structure of the fire alarm control panel is simply a module rack with master control unit and power supply. The required customer-specific modules are inserted into the slots in the module rack. Each fire alarm control panel is planned and programmed according to the area of application and associated requirements.

3.1.1 Features

- Fully redundant hardware configuration to ensure full functionality, even in the event of a fault or a failure of the active half of the system
- Eleven free connection slots for modules (detector zones, inputs/outputs, relays etc.)
- Software redundancy according to TRVB S 123
- Continuous automatic test routines for all system components and software
- 13-line plain text indication of the current system state (alarm, fault etc.)
- Acoustic and visual alarm device for alarms and faults
- Intermediate alarm storage
- Manual testing of control panel functions
- Plain text indication of individual detectors or indication areas
- Operating panel language (labelling and display indication) can be selected, up to 4 languages are switchable on the fly
- Suitable for connection to the fire brigade's public alarm notification system
- Connection for fire brigade operating panel in accordance with DIN 14661
- System configuration can be saved using flexible flash memory technology
- Emergency power supply for a power bridging time of up to 72 hours
- Meets or exceeds the following relevant standards and guidelines: EN 54, DIN, ÖNORM, ÖVE, VDE, and many more
- External device bus for up to 15 indication and operating devices, max. distance 1200 m
- Data serial, emergency powered log printer with access to event log memory and message filter
- Encrypted transmission of the lists to be output to the log printer
- Control panel networking via local mesh network:
 - Up to 16 control panels can be networked to one logical unit without a superordinate operation control system
 - Local mesh network with up to four connections per sub-control unit: in the event of a device or connection fault, it is possible to maintain communication via redirection (routing) of data
 - Flexible topology: Stub connection to loop is possible
 - Ethernet protocol: Use of customers' IT infrastructure
 - Access to the control panel via intranet and internet
 - Use of standardised IT components
 - Data transmission via TCP/IP (Ethernet 10/100Base-TX) at max. 100 Mbit/s
- Up to 20 000 events can be stored in the event log memory; this capacity can be increased via the additional use of an SD memory card to up to 65 000

3.1.2 Options

- Expandable via modules for up to 16 loops with a maximum of 4000 devices
- Control panel networking via local mesh network:
 - Data transmission via TCP/IP (Ethernet 10/100Base-TX) at max. 100 Mbit/s
 - Data transmission via RS-485 (copper) at 625 – 2500 kbit/s
- Possibility to activate different IP protocols enables the connection of:
 - Operation control systems in accordance with ÖNORM (Austrian standard) F 3003
 - Alarm management systems
 - Other building management systems
- Connection for fire brigade operating panels in accordance with ÖNORM F 3031, DIN 14661, SN 054002 and DIN 14662
- Day/night mode, individually programmable for each detector zone and day of the week
- Intervention mode
- Software-controlled free assignment and connection of detectors to the activation criteria
- Software-controlled two-zone dependency or two-detector dependency for alarm notification and output
- Recognition and evaluation of the detector state (contamination)
- Individual detector disablement
- Can be networked with all Schrack fire alarm control panels

3.1.3 Approvals

- VdS device and system approval: G298029, S298029, G204087
- Declaration of Performance: CPR-20-21-001
- Austrian Testing Centre for Fire Prevention Technology: Nr. FT 14/159/06, FT 14/622/06, FT 14/623/06, FT 14/625/06
- VB-Cert Austria: No. 002/BM-PSys/014
- Country-specific approvals in Austria, Germany, Denmark, Italy, Netherlands, Poland, Romania, Russia, Sweden, Switzerland, Slovak Republic, Czech Republic, Turkey, Ukraine, Hungary, and many more.

Integral EvoxX MF cabinet models

All Integral EvoxX MF control panels consist of:

- cabinet made of sheet steel
- Built-in operating panel B8-OB (except variant B8-CP)
- module rack for installing eight freely selectable line or input/output modules as well as three connection slots for relay modules
- master control unit B8-MCU
- B8-PSU power supply unit
- mounting space for rechargeable batteries (max. size 2 × 12 V/45 Ah)
- mains terminal and rechargeable battery cable



No.: 20-1010300-01



No.: 20-1010302-01

Mains voltage:	110 V AC –15 % to 230 V AC +10 %
Power supply frequency:	47 – 63 Hz
Input power:	max. 280 W
Output power:	max. 200 W
Output voltage (complies with PELV):	21.0 – 27.9 V DC
Usable rechargeable batteries:	2 × 12 V/38 – 45 Ah in series Total capacity: max. 88 Ah (2 identical strings with 2 × 12 V/38 – 44 Ah each in series)
Emergency power supply with rechargeable batteries:	72 h normal operation additionally 0.5 h alarm
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Air pressure:	≥ 80 kPa, up to 2000 m above sea level
Case material:	sheet steel
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	624,5 × 445,5 × 229,7 mm (H×W×D)
Weight:	
Basic configuration:	15 kg
Per rechargeable battery:	approx. 15 kg
VdS approval:	G298029
Declaration of Performance:	CPR-20-21-001

Integral EvoxX MF and accessories

	Designation	Type	Article no.
	Integral EvoxX M Control panel without operating panel	B8-CP	20-1010300-01
	Integral EvoxX M Control panel with B8-OB operating panel and cut-out	B8-CP-OB-CO	20-1010302-01
	SD card 8 GB for B8-MCU/B9-BCU ATP SD Card 8GB PSLC NAND	SD-CARD-8GB IND	20-1400208-01
	Integral IMAP built-in operating panel without lettering plate (replacement part)	B8-OB	20-1031001-01
	Lettering plate for Integral IMAP German	OB-TXT DE01	20-1041001-01
	Lettering plate for Integral IMAP English	OB-TXT EN01	20-1041002-01
	Lettering plate for Integral IMAP other languages	OB-TXT	auf Anfrage
	Integral EvoxX M/C front panel without cut-out	CP-FP	20-1400260-01
	Integral EvoxX M/C front panel with printer	CP-PRT	20-1400261-01
	Integral EvoxX M front panel with EAT64	CP-EAT64	20-1400264-01
	Integral EvoxX M/C front panel with EAT32, medium	CP-EAT32	20-1400265-01
	Integral EvoxX M/C front panel without cut-out, small	CP-FP-S	20-1400262-01
	Integral EvoxX M/C front panel with log printer, small	CP-PRT-S	20-1400263-01
	Integral EvoxX M replacement case without cut-out	H-CP-M	20-1400130-01
	Integral EvoxX M replacement case 2 cut-outs	H-CP-M-2CO	20-1400132-01
	B8/B9-CP lock for cabinets	CP-LOCK	20-1400213-01
	B8/B9-CP key for cabinets	CP-KEY	20-1400214-01

3.2 Integral EvoxX ME control panel for multi-zone extinguishing systems

Due to its special redundancy concept and high level of security for a wide variety of applications, the Integral EvoxX M system can also be used as an extinguishing control panel (electronic control and delay unit) Integral EvoxX ME or as an combined fire alarm/extinguishing control panel Integral EvoxX MF/ME. For this purpose, a separate cabinet variant containing an additional LED parallel indication panel is available. With this addition, the Integral EvoxX ME is both suitable and standard-compliant for activation of more than one extinguishing zone and for monitoring the following fire extinguishing systems in accordance with the requirements of the EN 12094-1 and VdS 2496 standards:

- CO₂ high pressure and low pressure extinguishing systems with and without a danger to the safety of people
- Inert gas and argon extinguishing systems with and without a danger to the safety of people
- Water spray and water fog extinguishing system
- Sprinkler systems and pre-action sprinkler systems
- Chemical extinguishing systems

Integral EvoxX ME cabinet

All Integral EvoxX ME control panels consist of:

- cabinet made of sheet steel
- B8-OB built-in operating panel
- module rack for installing eight freely selectable line or input/output modules as well as three connection slots for relay modules
- master control unit B8-MCU
- B8-PSU power supply unit
- mounting space for rechargeable batteries (max. size 2 × 12 V/45 Ah)
- mains terminal and rechargeable battery cable

Optionally:

- CP-IPEL front panel for eight extinguishing zones

or

- CP-IPES front panel for four extinguishing zones and additionally either a CP-PRT-S front panel without log printer, small or CP-FP-S front panel with printer, small

For both variants, an additional B8-BAF module is required for the connection.



No.: 20-1010302-01
No.: 20-1400266-01



No.: 20-1010302-01
No.: 20-1400267-01
No.: 20-1400263-01

Mains voltage:	110 V AC –15 % to 230 V AC +10 %
Power supply frequency:	47 – 63 Hz
Input power:	max. 280 W
Output power:	max. 200 W
Output voltage (complies with PELV):	21.0 – 27.9 V DC
Usable rechargeable batteries:	2 × 12 V/38 – 45 Ah in series Total capacity: max. 88 Ah (2 identical strings with 2 × 12 V/38 – 44 Ah each in series)
Emergency power supply with rechargeable batteries:	72 h normal operation additionally 0.5 h alarm
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Air pressure:	≥ 80 kPa, up to 2000 m above sea level
Case material:	sheet steel
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	624,5 × 445,5 × 229,7 mm (H×W×D)
Weight:	
Basic configuration:	15 kg
Per rechargeable battery:	approx. 15 kg
VdS approval:	G204087
Declaration of Performance:	CPR-20-21-001

Integral EvoxX ME and accessories

	Designation	Type	Article no.
	Integral EvoxX M Control panel with B8-OB operating panel and cut-out	B8-CP-OB-CO	20-1010302-01
	SD card 8 GB for B8-MCU/B9-BCU ATP SD Card 8GB PSLC NAND	SD-CARD-8GB IND	20-1400208-01
	Integral IMAP built-in operating panel without lettering plate (replacement part)	B8-OB	20-1031001-01
	Lettering plate for Integral IMAP German	OB-TXT DE01	20-1041001-01
	Lettering plate for Integral IMAP English	OB-TXT EN01	20-1041002-01
	Lettering plate for Integral IMAP other languages	OB-TXT	auf Anfrage
	Integral EvoxX M front panel with IPEL	CP-IPEL	20-1400266-01
	Integral EvoxX M/C front panel with IPES, medium	CP-IPES	20-1400267-01
	Integral EvoxX M/C front panel without cut-out, small	CP-FP-S	20-1400262-01
	Integral EvoxX M/C front panel with log printer, small	CP-PRT-S	20-1400263-01
	Integral EvoxX M replacement case without cut-out	H-CP-M	20-1400130-01
	Integral EvoxX M replacement case 2 cut-outs	H-CP-M-2CO	20-1400132-01
	MMI connection cable for B8-BAF (replacement)	KAB MMI B8-BAF	20-1400020-01
	B8/B9-CP lock for cabinets	CP-LOCK	20-1400213-01
	B8/B9-CP key for cabinets	CP-KEY	20-1400214-01
	B8-BAF control module	B8-BAF	20-1000011-01
	Lock for keyswitch (replacement) incl. 2 pcs. keys	SCU LOCK-2	20-1400200-01
	Key for keyswitch (replacement)	SCU KEY-2	20-1400201-01

3.3 Components in 19-inch version

For compact accommodation of several Integral fire alarm control panels in one case, separate control panel components are available which can be installed in any 19-inch floor-standing cabinets provided the following requirements are met:



- degree of protection IP 55
- overvoltage protection type 1 (formerly electrical degree of protection B)
- relative air humidity 5 % – 95 %
- control panels and printers must be installed in 19-inch frames
- central earthing point
- access level 1: all mandatory displays must be visible in access level 1 without prior manual intervention (e.g. opening the door). Operating elements in access level 1 must be accessible without restriction.

This variant offers many advantages for various applications, such as the modernisation of old systems, extinguishing controls with several indication panels or if the local conditions do not allow otherwise.

B8-CP-WCAB control panel in wall-mounted cabinet with glass door



No.: 20-1010306-01

Integral EvoxX M in three-part wall-mounted cabinet with increased degree of protection, consisting of:

- cabinet made of sheet steel
- module rack for installing eight freely selectable line or input/output modules as well as three connection slots for relay modules
- master control unit B8-MCU
- B8-PSU power supply unit
- mounting space for rechargeable batteries (max. size 2 × 12 V/45 Ah)
- max. 15 height units for up to 3 floor-standing cabinet front panels

Mains voltage:	110 V AC –15 % to 230 V AC +10 %
Power supply frequency:	47 – 63 Hz
Input power:	max. 280 W
Output power:	max. 200 W
Output voltage (complies with PELV):	21.0 – 27.9 V DC
Usable rechargeable batteries:	2 × 12 V/38 – 45 Ah in series Total capacity: max. 88 Ah (2 identical strings with 2 × 12 V/38 – 44 Ah each in series)
Maximum configuration:	Three front panels with five height units each
Front door:	Single-pane safety glass 3 mm, 3524 E closure, hinged left
Load capacity swivel part:	75 kg
Degree of protection:	IP 55
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Air pressure:	≥ 80 kPa, up to 2000 m above sea level
Case material:	sheet steel, 1.5 mm, powder coated
Case colour:	light grey, RAL 7035
Dimensions:	746 × 600 × 473 mm (H×W×D)
Depth swivel part:	316 mm
Depth wall section:	135 mm
Weight:	
Basic configuration:	approx. 55 kg
Per rechargeable battery:	approx. 15 kg
VdS approval:	G298029, G204087
Declaration of Performance:	CPR-20-21-001

Integral EvoxX M components, 19-inch version

	Designation	Type	Article no.
	Integral EvoxX M Control panel in wall-mounted cabinet with glass door	B8-CP-WCAB	20-1010306-01
	Integral IMAP STS Operating panel without labelling, 5 HU support plate	B8-ST5-OB	20-1060017-01
	Integral IMAP STS DE Operating panel German, 5 HU support plate	B8-ST5-OB-DE-2	20-1060018-01
	Lettering plate for Integral IMAP German	OB-TXT DE01	20-1041001-01
	Lettering plate for Integral IMAP English	OB-TXT EN01	20-1041002-01
	Lettering plate for Integral IMAP other languages	OB-TXT	auf Anfrage
	STS log printer for Integral IMAP, 5 HU support plate	B8-ST5-OB-PRT	20-1060019-01
	19" front panel with EAT64 LED indication panel for 64 detector zones	B5-ST5-EAT64-2	20-1060011-01
	19" front panel with IPEL LED indication panel for eight extinguishing zones	B5-ST5-IPEL-2	20-1060012-01
	19" blanking plate (5 height units)	B5-ST5-BFP-2	20-1060003-01
	19" blanking plate (1 height unit)	B5-ST5-BFP2-2	20-1060008-01
	Module rack Integral EvoxX M incl. B8-PSU, B8-BUS, B8-MCU, B3-BSR5 and rechargeable battery compartment	B8-ST5-BGT	20-1060016-01
	Battery holder for additional battery expansion	B5-ST5-AF	20-1060007-01
	MMI-Bus cable 3.4 m B8-BAF MMI-Bus cable connection with first device	B8-ST5-MM1-BAF	20-1060046-01
	MMI-bus-cable 1.6 m Connection between devices	B5-ST5-MM1	20-1060041-01
	Cat 5 cable 3 m with connector for B8-NETx for connecting sub-control units in a floor-standing cabinet	B5-ST5-CAT5	20-1060043-01
	Terminal block for supply voltage	B5-ST5-KL	20-1060045-01

3.4 Integral EvoxX M modules

All the modules and components of the Integral EvoxX M system are constructed with complete redundancy for reasons of system availability, thereby ensuring seamless information indication, signal processing and control of all connected fire incident control systems even in the event of a fault.

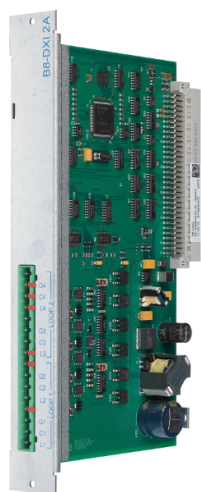
The module rack is mounted on the back plate of each Integral EvoxX M basic unit and comes with the B8-MCU master control unit and B8-PSU power supply unit as standard. Eleven further connection slots can be populated with other flat modules as required. Due to this modular design, different line technologies (loop and stub lines) can be simultaneously connected to one control panel.



3.4.1 Important notes for equipping the module rack

The power supply and data communication between the modules takes place via the bus circuit board on the rear of the module rack via plug and socket connections.

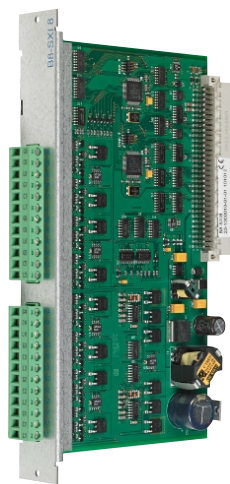
Connection slot 1	exclusively for master control module B8-MCU
Connection slot 2	if a network module is used, it must be installed in connection slot 2, otherwise the connection slot is freely available (except for B3-RELx modules).
Connection slots 3 – 8	freely available for all modules described below (except for B3-RELx)
Connection slot 9	must contain a B8-BAF or B8-MRI16 module if relay modules are to be installed in connection slots 11 – 13, as only these modules are suitable for activating the relay bus.
Connection slot 10	exclusively for B8-PSU power supply unit
Connection slots 11 – 13	exclusively for B3-RELx relay modules

**No.: 20-1000018-01**

X-LINE B8-DXI2A modules

To connect two loops with associated detectors and modules of the Integral X-LINE. Alternatively, a loop and two stub lines, or maximum four stub lines can be connected.

Power supply:	internally via the system bus, with extended redundancy
Connection:	two loops (each maximum 250 devices) or four stub lines (each maximum 64 devices)
Battery voltage VL:	22 – 30 V
Loop voltage VCC:	30 V \pm 3 %
Connection plug:	16-pin screw-type terminal
Interface:	system bus
Connection slot on the module rack:	2 – 9
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 x 27 x 116 mm (HxWxD)
Weight:	235 g

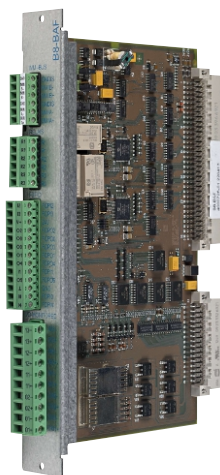
**No.: 20-1000010-01**

B8-SXI8 stub line module for X-LINE

For connecting up to eight stub lines with corresponding detectors and modules of the Integral X-LINE. Up to 32 automatic fire detectors, ten manual call points or ten BX modules can be connected to each of the eight stub lines. The B8-SXI8 is particularly suitable for modernising existing stub lines from older control panel models (CBMZ, Maxima).

Power supply:	internally via the system bus, with extended redundancy
Connection:	eight stub lines (each maximum 32 devices)
Connection plug:	2 x 12-pin screw terminal
Interface:	system bus
Connection slot on the module rack:	2 – 9
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 x 27 x 116 mm (HxWxD)
Weight:	235 g

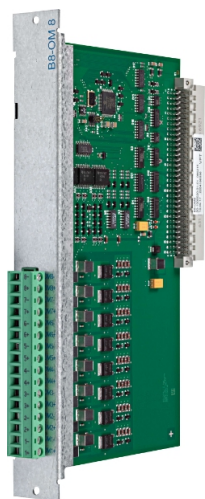
B8-BAF output module



No.: 20-1000011-01

For connecting alarm notification and transmission equipment, monitored inputs for querying galvanically isolated contacts, key safes and release mechanisms and for controlling the relay bus. For the transmission of alarms relays can be controlled. The module also includes an interface to the MMI-bus (bus peripheral devices) to which external operating panels and the Austrian fire brigade operating panel can be connected.

Power supply:	internally via the system bus, with extended redundancy
Fire brigade panel interface (DIN14661):	13-pin screw-type terminal
Transmission type:	parallel, bidirectional
Range:	max. 3 m
Monitored output OM1/2:	three load ranges, alarm notification and transmission equipment or monitored output
Monitored input IM1/2/3:	galvanically isolated contacts, key safe, release mechanisms
MMI-bus:	for low and high speed MMI-bus devices, galvanically isolated RS-485
Relay outputs:	
Quantity:	2 × 8
Switching voltage:	max. 30 V AC/30 V DC
Switching/continuous current:	max. 3 A
Switching capacity:	90 VA/90 W
Interface:	system bus
Connection slot on the module rack:	2 – 9
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	235 g

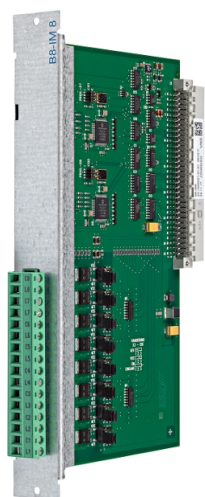
**No.: 20-1000020-01**

B8-OM8 module for monitored outputs

For activation and monitoring eight primary lines (flashlights, sirens etc.) in accordance with EN 54-13, each with a maximum current of 1.5 A. However, the total current across all outputs must not exceed 4 A.

The three load ranges are set as appropriate in the software dependent on the purpose of use.

Power supply:	internally via the system bus, with extended redundancy
Connection:	eight monitored outputs
Output voltage:	22 – 28 V
Output current:	max. 1.5 A
Short circuit current:	1.75 A typ.
Connection plug:	16-pin screw-type terminal
Interface:	system bus
Connection slot on the module rack:	2 – 9
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	224 g

**No.: 20-1000021-01**

B8-IM8 module for monitored inputs

For connection of up to eight stub lines, which can be configured as as monitored inputs (e.g. VdS extinguishing interface, primary inputs, valve monitoring) or as detector zones.

The operating mode of the individual stub lines can be independently selected: Via programming and jumpers on the module.

Power supply:	internally via the system bus, with extended redundancy
Connection:	eight stub lines for monitored inputs or detector zones
Connection plug:	16-pin screw-type terminal
Interface:	system bus
Connection slot on the module rack:	2 – 9
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	221 g

B8-NET2-485 network module



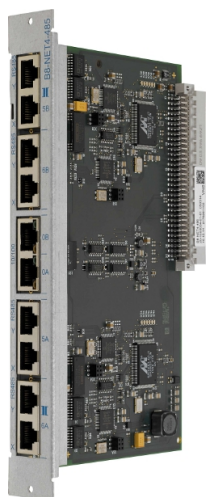
No.: 20-1000033-01

For redundant networking of Integral EvoxX M control panels or for connection of Integral EvoxX applications. The module has two network connections (based on RS-485) and two Ethernet 10/100Base-TX interfaces.

There are six RJ-45 sockets on the front for sub-control unit networks and Ethernet connections.

The module can only be installed in connection slot 2 in the module rack.

Power supply:	internally via the system bus, with extended redundancy
Current consumption:	120 mA
LAN interface:	2 × Ethernet 10/100Base-TX (port-redundancy)
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 100 Mbit/s
Range:	max. 100 m
RS-485 interface:	2 × RS-485 with line redundancy, one galvanically isolated
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 1.25 Mbit/s
Range:	max. 1200 m
Interface:	system bus
Connection slot on the module 2 rack:	
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	208 g

**No.: 20-1000034-01**

B8-NET4-485 network module

For redundant networking of Integral EvoxX M control panels or for connection of Integral EvoxX applications. The module has four network connections (based on RS-485) and two Ethernet 10/100Base-TX interfaces.

There are ten RJ-45 sockets on the front for the sub-control unit networks and Ethernet connections.

The module can only be installed in connection slot 2 in the module rack.

Power supply:	internally via the system bus, with extended redundancy
Current consumption:	127 mA
LAN interface:	2 × Ethernet 10/100Base-TX (port-redundancy)
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 100 Mbit/s
Range:	max. 100 m
RS-485 interface:	4 × RS-485 with line redundancy, two galvanically isolated
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 1.25 Mbit/s
Range:	max. 1200 m
Interface:	system bus
Connection slot on the module 2 rack:	
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	208 g

B8-NET2-FX4 network module

For networking of Integral EvoxX M fire alarm control panels via redundant optical fibre cables and for connection of Integral EvoxX applications.

The module has two RS-485 interfaces with line redundancy, four optical fibre ports for use with pluggable SFP optical modules (multi mode version with 2000 m range or single mode version with up to 10 000 m or 30 000 m range) and two 10/100Base-TX interfaces with port redundancy.

The module can only be installed in connection slot 2 in the module rack.



No.: 20-1000030-01



No.: 20-1400005-01



No.: 20-1400006-01



No.: 20-1400007-01



No.: 20-1400040-01

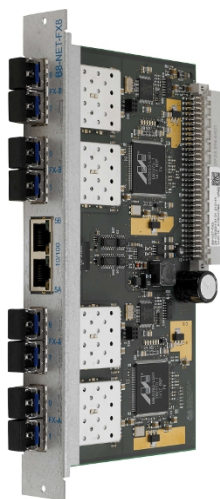
Power supply:	internally via the system bus, with extended redundancy
LAN interface:	2 × Ethernet 10/100Base-TX (port-redundancy)
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 100 Mbit/s
Range:	max. 100 m
RS-485 interface:	2 × RS-485 with line redundancy, one galvanically isolated
Mechanical:	RJ-45 socket, eight pin
Direction:	bidirectional, half-duplex
Speed:	max. 1.25 Mbit/s
Range:	max. 1200 m
FX interface:	4 × SFP module slots, multi mode and/or single mode
Speed:	max. 100 Mbit/s
Range:	
SFP module multi mode:	max. 2000 m
SFP module single mode:	max. 10 000 m or 30 000 m
Optical fibre:	
SFP module multi mode:	62,5/125 µm or 50/125 µm
SFP module single mode:	9/125 µm
Connector type:	LC 2 × 5
Interface:	system bus
Connection slot on the module rack:	2
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	208 g

B8-NET-FX8 network module

For networking of Integral EvoxX M fire alarm control panels via redundant optical fibre cables and for connection of Integral EvoxX applications.

The module has eight optical fibre ports for use with pluggable SFP optical modules (multi mode version with 2000 m range or single mode version with up to 10 000 m or 30 000 m range) and two 10/100Base-TX interfaces with port redundancy.

The module can only be installed in connection slot 2 in the module rack.



No.: 20-1000031-01



No.: 20-1400005-01



No.: 20-1400006-01



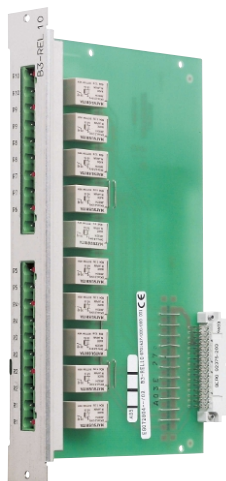
No.: 20-1400007-01



No.: 20-1400040-01

Power supply:	internally via the system bus, with extended redundancy
LAN interface:	2 × Ethernet 10/100Base-TX (port-redundancy)
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 100 Mbit/s
Range:	max. 100 m
FX interface:	8 × SFP module slots, multi mode and/or single mode
Speed:	max. 100 Mbit/s
Range:	
SFP module multi mode:	max. 2000 m
SFP module single mode:	max. 10 000 m or 30 000 m
Optical fibre:	
SFP module multi mode:	62,5/125 µm or 50/125 µm
SFP module single mode:	9/125 µm
Connector type:	LC 2 × 5
Interface:	system bus
Connection slot on the module rack:	2
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	208 g

B3-REL10 relay module



No.: 20-1000003-01

Relay module for modular installation in the fire alarm control panel for connecting loads via ten bistable, freely programmable relay contacts for 250 V AC voltage.

The determination of whether the contact is normally open contact or normally closed contact is made during planning via software. A programmed fail-safe position can define the status of each individual relay in the event of a supply voltage failure or switch-off of the fire alarm control panel.

To activate the relays, connection slot 9 in the module rack must contain either a B8-BAF, B8-MRI16 or B3-LPI module. The relay module can only be installed in connection slots 11 – 13 in the module rack.

Power supply:	internally via the system/relay bus, with extended redundancy
Relay type:	bi-stable
Contact resistance:	max. 30 mΩ
Relay outputs:	
Quantity:	2 × 5
Switching voltage:	max. 250 V AC/30 V DC
Switching/continuous current:	max. 3 A
Switching capacity:	750 VA/90 W
Interface:	System bus and relay bus
Connection slot on the module rack:	11 – 13
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	280 g

B3-REL16 relay module



No.: 20-1000004-01

Relay module for modular installation into the fire alarm control panel for activating sirens, holding magnets, relays etc. via 16 bi-stable freely programmable contacts for 30 V.

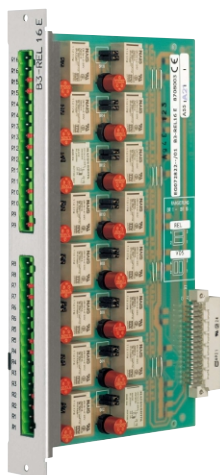
The determination of whether the contact is normally open contact or normally closed contact is made during planning via software. A programmed fail-safe position can define the status of each individual relay in the event of a supply voltage failure or switch-off of the fire alarm control panel.

A relay contact can also be used as a standardised extinguishing interface or fault interface to VdS specifications.

To activate the relays, connection slot 9 in the module rack must contain either a B8-BAF, B8-MRI16 or B3-LPI module. The relay module can only be installed in connection slots 11 – 13 in the module rack.

Power supply:	internally via the system/relay bus, with extended redundancy
Relay type:	bi-stable
Contact resistance:	max. 30 mΩ
Relay outputs:	
Quantity:	2 × 8
Switching voltage:	max. 30 V AC/30 V DC
Switching/continuous current:	max. 3 A
Switching capacity:	90 VA/90 W
Interface:	System bus and relay bus
Connection slot on the module rack:	11 – 13
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	280 g

B3-REL16E relay module



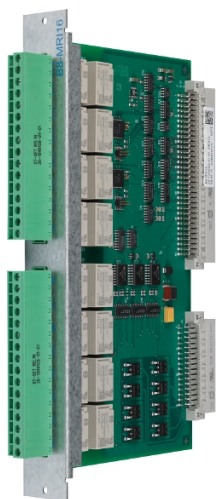
No.: 20-1000005-01

Equivalent in function and technical data to the B3-REL16 module, however all relay contacts can additionally be used as a standardised sprinkler or fault interface in accordance with VdS. The configuration is performed using jumper caps, the relay contacts are fused (the fuses themselves are not monitored).

To activate the relays, connection slot 9 in the module rack must contain either a B8-BAF, B8-MRI16 or B3-LPI module. The relay module can only be installed in connection slots 11 – 13 in the module rack.

Contact protection:	miniature fuse 3.15 A with slow triggering characteristic
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B8-MRI16 relay module



No.: 20-1000022-01

Used for activation of sirens, holding magnets, relays etc. via 16 bi-stable freely programmable 24 V/3 A relay contacts.

B8-MRI16 contains an interface for activation of the internal relay bus. This allows it to be additionally equipped with other relay modules (B3-REL10, B3-REL16, B3-REL16E).

In order to use this function, the module must be installed in connection slot 9.

The determination of whether the contact is normally open contact or normally closed contact is made during planning via software. A programmed fail-safe position can define the status of each individual relay in the event of a supply voltage failure or switch-off of the fire alarm control panel.

The module can be fitted in the connection slots 2 – 9.

In connection slot 9, B8-MRI16 also controls the relay modules B3-REL10, B3-REL16 as well as B3-REL16E.

Power supply:	internally via the system/relay bus, with extended redundancy
Connection:	16 unmonitored outputs
Connection plug:	2 × 16-pin screw-type terminal
Relay type:	bi-stable
Contact resistance:	30 mΩ
Relay outputs:	
Quantity:	2 × 8
Switching voltage:	max. 30 V AC/30 V DC
Switching/continuous current:	max. 3 A
Switching capacity:	90 VA/90 W
Interface:	system bus
Connection slot on the module rack:	2 – 9
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	306 g

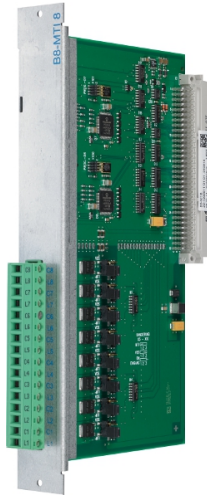
Integral EvoxX M modules and accessories

	Designation	Type	Article no.
	X-LINE B8-DXI2A modules	B8-DXI2A	20-1000018-01
	B5/B8-DXI2/B8-DXI2A replacement connector	ST-DXI2	20-1040105-01
	B8-SXI8 stub line module for X-LINE	B8-SXI8	20-1000010-01
	B8-SXI8 replacement connector	ST-SET SXI8	20-1040102-01
	B8-BAF control module	B8-BAF	20-1000011-01
	B8-BAF replacement connector	ST-SET BAF	20-1040103-01
	B8-OM8 module for monitored outputs	B8-OM8	20-1000020-01
	B3/B5/B8-OM8 replacement connector	ST-OM8	FG74095
	B8-IM8 module for monitored inputs	B8-IM8	20-1000021-01
	B3/B8-MTI8/B3/B8-IM8 connector	ST-MTI8	FG74087
	953R jumper for B3/B8-IM8 Packaging unit 8 pieces	JUMP-IM8-953R	FG74113
	110R jumper for B3/B8-IM8 Packaging unit 8 pieces	JUMP-IM8-110R	FG74114
	B8-NET2-485 network module	B8-NET2-485	20-1000033-01
	B8-NET4-485 network module	B8-NET4-485	20-1000034-01
	RJ-45 connector Cat 5e	RJ45-IP	MM010008
	Crimping pliers for RJ-45	CRIMP-IP	MM010001
	9Sub-D RJ45 coupling With Sub-D blank plug	KUP 9RJ45	20-1400000-01

	Designation	Type	Article no.
	15Sub-D RJ45 coupling With Sub-D blank plug	KUP 15RJ45	20-1400001-01
	B8-NET2-FX4 network module	B8-NET2-FX4	20-1000030-01
	B8-NET-FX8 network module	B8-NET-FX8	20-1000031-01
	B3-REL10 relay module	B3-REL10	20-1000003-01
	B3-REL10 replacement connector	ST-SET REL10	20-1040101-01
	B3-REL16 relay module	B3-REL16	20-1000004-01
	B3-REL16E relay module	B3-REL16E	20-1000005-01
	B8-MRI16 relay module	B8-MRI16	20-1000022-01
	B3-REL16/E replacement connector sets for B3-REL16/E and B8-MIT8	ST-SET REL16	20-1040100-01
	Plug-in module for FX modules single mode up to 10 km	SFP-MODUL SM	20-1400005-01
	Plug-in module for FX modules multi mode up to 2 km	SFP-MODUL MM	20-1400006-01
	Plug-in module for FX modules single mode up to 30 km	SFP-MODUL SM 30	20-1400007-01
	Cable bend protection 90 degree bend	KBKN-90GR-AD10	20-1400040-01

3.5 Modernisation modules

B8-MTI8 module for monologue technology

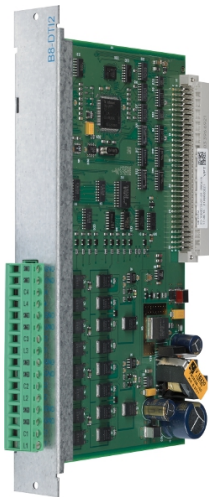


No.: 20-1000014-01

For connection of up to eight stub lines, which can be configured either as detector zones in monologue technology or as monitored inputs (e.g. VdS extinguishing inputs, primary inputs, valve monitoring etc.).

The operating mode of the individual stub lines can be independently selected via programming and jumpers on the module.

Power supply:	internally via the system bus, with extended redundancy
Connection:	eight detector zones (up to 62 detectors per zone) or monitored inputs
Connection plug:	16-pin screw-type terminal
Interface:	system bus
Connection slot on the module rack:	2 – 9
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	210 g



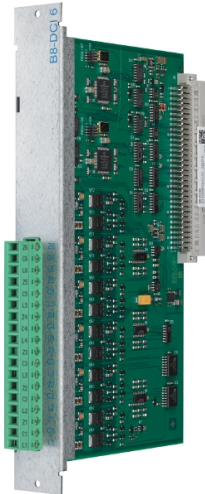
No.: 20-1000015-01

B8-DTI2 module for dialogue technology

For connection of up to two loops or four stub lines using dialogue technology with the corresponding detectors and modules of the fire alarm control panel Maxima.

For reasons of standardisation, the module may be used exclusively for re-furbishments.

Power supply:	internally via the system bus, with extended redundancy
Connection:	two loops (each maximum 128 devices) or four stub lines (each maximum 64 devices)
Connection plug:	16-pin screw-type terminal
Interface:	system bus
Connection slot on the module rack:	2 – 9
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 x 27 x 116 mm (HxWxD)
Weight:	251 g






**No.: 20-1000013-01**

B8-DCI6 module for DC technology

For connection of up to six inputs, which can be configured either as detector zones in DC technology or as monitored inputs (e.g. VdS extinguishing inputs, primary inputs, valve monitoring etc.).

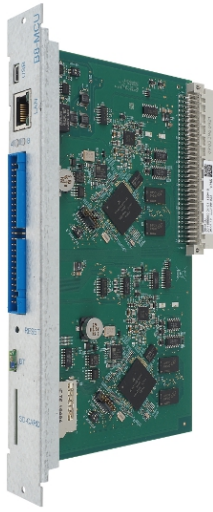
Power supply:	internally via the system bus, with extended redundancy
Connection:	six detector zones (max. 30 detectors per zone) or monitored inputs
Connection plug:	18-pin screw-type terminal
Interface:	system bus
Connection slot on the module rack:	2 – 9
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	215 × 27 × 116 mm (H×W×D)
Weight:	219 g

Modernisation modules and accessories

	Designation	Type	Article no.
	B8-MTI8 module for monologue technology	B8-MTI8	20-1000014-01
	B3/B8-MTI8/B3/B8-IM8 connector	ST-MTI8	FG74087
	B8-DTI2 module for dialogue technology	B8-DTI2	20-1000015-01
	Connection plug for modules	ST-B3 16	YY970138
	B8-DCI6 module for DC technology	B8-DCI6	20-1000013-01
	B3/B8-DCI6 connection plug	ST-DCI6	FG74099

3.6 Accessories and spare parts

B8-MCU master control unit



No.: 20-1000060-01

The B8-MCU communicates with all other modules and the operating panel, manages planning data and system time and manages all processes that are necessary for the logical behaviour of the system.

The module includes a USB 2.0 Mini-B interface to load software and planning data, and an Ethernet 10/100Base-TX interface. Up to 20 000 events can be stored in the internal event log memory; this capacity can be increased via the additional use of an SD memory card.

Power supply:	internally via the system bus, with extended redundancy
Operating panel connection:	50-pin flat ribbon cable connector
Transmission speed:	700 kbit/s
Service interface wired:	
Range:	max. 3 m
Technology:	USB 2.0, connector mini
Service interface wireless:	
Range:	max. 1 m
Technology:	Bluetooth Low Energy
LAN interface:	Ethernet 10/100Base-TX
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 100 Mbit/s
Range:	max. 100 m
SD connection slot:	SD 3.0 (SDHC, SDXC) memory card
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C

B8-PSU power supply unit



No.: 20-1000008-01

The B8-PSU power supply unit has a rated output current of 7 A and is included with every Integral EvoxX M control panel. It delivers the required output voltage and has a terminal to connect five separately electrically fused outputs for external consumers. Up to four rechargeable batteries can be connected to the emergency power supply.

Mains voltage:	110 V AC –15 % to 230 V AC +10 %
Power supply frequency:	47 – 63 Hz
Input power:	max. 280 W
Output power:	max. 200 W
Output voltage (complies with PELV):	26,3 V DC (+50 °C) to 28,3 V DC (0 °C)
Output current:	max. 7.1 A
Outputs for internal consumers:	3.3 V/5 V/27 V*
Outputs for external consumers:	5 × 27 V* fused with resettable fuses
Battery connection:	for 12 V/38 – 44 Ah rechargeable batteries
Usable rechargeable batteries:	2 × 12 V/38 – 45 Ah in series
Ambient temperature:	
Manufacturer’s instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C

* depending on temperature

**No.: 20-1000102-01**

B8-UGK upgrade kit

For upgrading existing Integral (B3 or B5 platform) control panels to Integral EvoxX M control panels (B8 platform).

Consists of a module rack with built-in B8-MCU master control unit, B8-PSU power supply unit, bus circuit board and relay circuit board.

The country-specific regulations for the planning and installation of automatic fire alarm systems apply for planning the system.

**No.: 20-1400133-01**

H-CP-M-CBE Integral EvoxX M battery cabinet

Cabinet in the Integral EvoxX M design with full door, built-in rechargeable battery cup and cable set for rechargeable battery expansion.

Case material:	sheet steel
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	624,5 × 445,5 × 229,7 mm (H×W×D)

**No.: 20-1400134-01**

H-CP-M-CTR Integral EvoxX M top-hat rail cabinet

Cabinet in the Integral EvoxX M design with full door, built-in DIN top-hat rail and cable ducts for use as a distribution cabinet, for installing modules etc.

Case material:	sheet steel
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	624,5 × 445,5 × 229,7 mm (H×W×D)

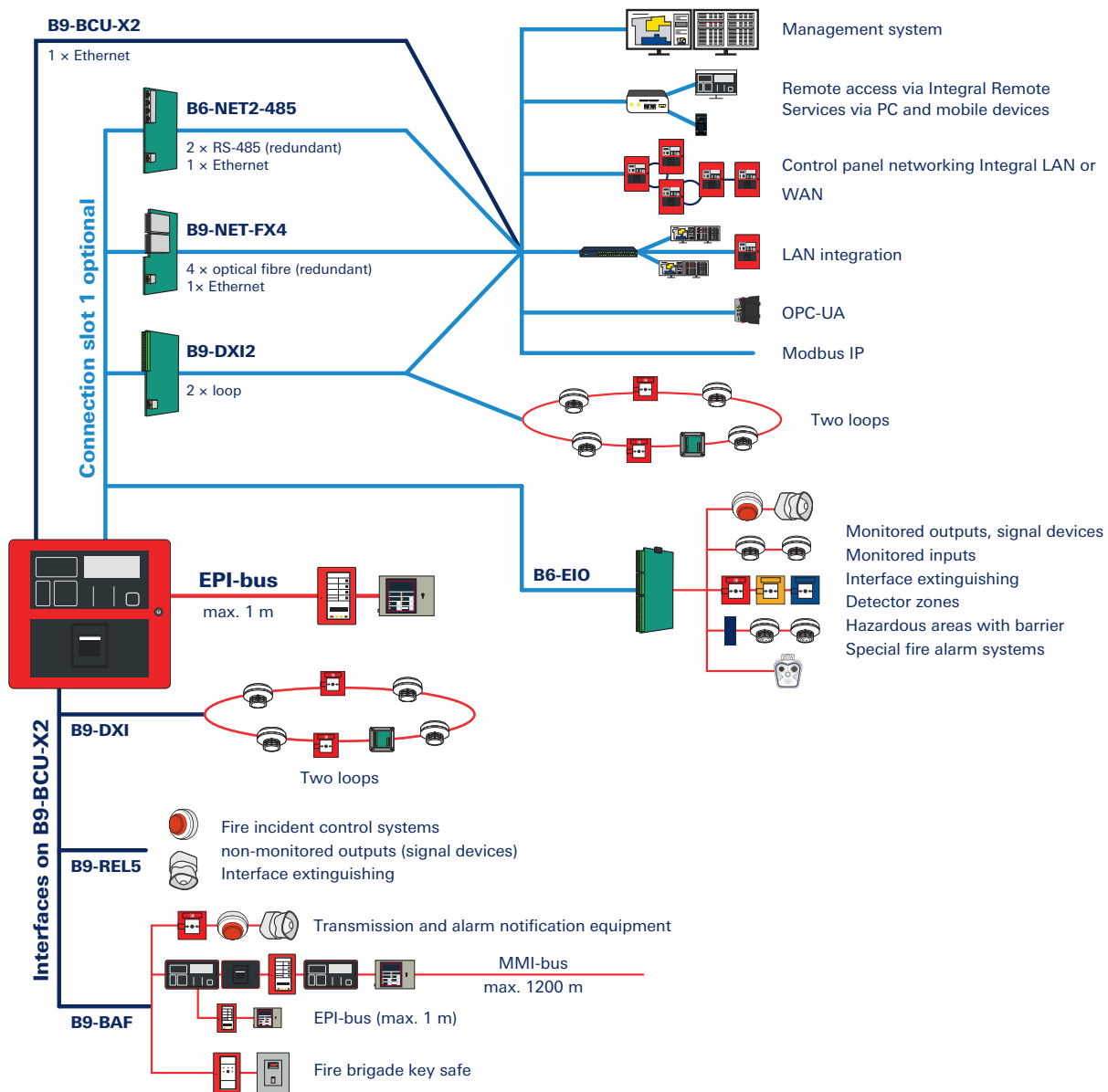
Accessories and replacement parts for Integral EvoxX M control panels

	Designation	Type	Article no.
	B8-MCU master control unit	B8-MCU	20-1000060-01
	B8-PSU power supply unit	B8-PSU	20-1000008-01
	B8-PSU replacement connection plug for external consumers	ST-PSU-FS	20-1040104-01
	SD card 8 GB for B8-MCU/B9-BCU ATP SD Card 8GB PSLC NAND	SD-CARD-8GB IND	20-1400208-01
	B8-UGK upgrade kit	B8-UGK	20-1000102-01
	Integral IMAP built-in operating panel without lettering plate (replacement part)	B8-OB	20-1031001-01
	Rechargeable battery 12 V/24 Ah	AKKU 24	HG691023
	Rechargeable battery 12 V/44 Ah	AKKU 44	HG691017
	Integral EvoxX M battery cabinet	H-CP-M-CBE	20-1400133-01
	Integral EvoxX M top-hat rail cabinet	H-CP-M-CTR	20-1400134-01
	Integral EvoxX M replacement case without cut-out	H-CP-M	20-1400130-01
	Integral EvoxX M replacement case 2 cut-outs	H-CP-M-2CO	20-1400132-01
	B5 replacement door with 2 cut-outs	B5-DOOR-2CO	20-1400160-01
	Log printer cover (replacement)	B8-OB-PRT-CVR	20-1400230-01
	Paper roll for log printer (replacement)	PD PPR	PPF-519057
	Ribbon cartridge for log printer (replacement)	PD FRB	HG694076

	Designation	Type	Article no.
	Log printer interface (electronics)	B8-PPI	20-1400211-01
	Log printer interface external (electronics) for external operating panels	B8-PPIE	20-1400212-01
	B5 Log printer printer unit	B5-PDR-DW	FG030550
	MMI connection cable for B8-BAF (replacement)	KAB MMI B8-BAF	20-1400020-01
	USB-Kabel, Mini 3 m length	KAB USB 3 MINI	20-1400205-01
	B8/B9-CP lock for cabinets	CP-LOCK	20-1400213-01
	B8/B9-CP key for cabinets	CP-KEY	20-1400214-01
	B5 battery holder set	B5-BATH-SET	FG74108
	B5 spacers set	B5-DISTH-SET	FG74110
	B5 blanking plate Integral	B5 BFP	FG06240
	B5 battery cable set Length approx. 50 cm	B5 BATKAB1	FG29910
	B5 battery cable set (long) Length approx. 150 cm	B5 BATKAB2	FG29911
	SI 8A thermal fuse for all Integral battery cable	ZUB SICH8	IS625040
	Top-hat rail 35 mm wide for installation in Integral EvoxX M cabinets	B5-RAIL 35	20-1400003-01
	Connection unit Cat 7/RJ45 for network modules	B5-CAT7-RJ45	20-1400004-01
	Coupling RJ45/RJ45	KUP RJ45	20-1400002-01
	B8-BUS System bus circuit board	B8-BUS	20-1000009-01
	Lock for keyswitch (replacement) incl. 2 pcs. keys	SCU LOCK-2	20-1400200-01
	Key for keyswitch (replacement)	SCU KEY-2	20-1400201-01

4 Integral EvoxX C compact control panel

The Integral EvoxX C system can be used as an Integral EvoxX CF fire alarm control panel, an Integral EvoxX CE single-zone extinguishing control panel or as a combined Integral EvoxX CF/CE fire alarm/extinguishing control panel.



Connection scheme Integral EvoxX C

4.1 Integral EvoxX CF fire alarm control panel

The Integral EvoxX CF is a compact fire alarm control panel to which two loops can be connected with a maximum of 500 elements in the basic configuration. In addition, it has an expansion connection slot, which can optionally hold a network module, a module for two more loops, a universal interface module or an input/output module.

4.1.1 Features

- Two loops with max. 500 devices
- Software redundancy according to TRVB S 123
- Continuous automatic test routines for all system components and software
- 13-line plain text indication of the current system state (alarm, fault etc.)
- Acoustic and visual alarm device for alarms and faults
- Intermediate alarm storage
- Manual testing of control panel functions
- Plain text indication of individual detectors or indication areas
- Operating panel language (labelling and display indication) can be selected, up to 4 languages are switchable on the fly
- Suitable for connection to the fire brigade's public alarm notification system
- Connection for fire brigade operating panel in accordance with DIN 14661
- System configuration can be saved using flexible flash memory technology
- Emergency power supply for a power bridging time of up to 72 hours
- Meets or exceeds the following relevant standards and guidelines: EN 54, DIN, ÖNORM, ÖVE, VDE, and many more
- External device bus for up to 15 indication and operating devices, max. distance 1200 m
- Data serial, emergency powered log printer with access to event log memory and message filter
- Encrypted transmission of the lists to be output to the log printer
- Control panel networking via local mesh network:
 - Up to 16 control panels can be networked to one logical unit without a superordinate operation control system
 - Local mesh network with up to four connections per sub-control unit: in the event of a device or connection fault, it is possible to maintain communication via redirection (routing) of data
 - Flexible topology: Stub connection to loop is possible
 - Ethernet protocol: Use of customers' IT infrastructure
 - Access to the control panel via intranet and internet
 - Use of standardised IT components
 - Data transmission via TCP/IP (Ethernet 10/100Base-TX) at max. 100 Mbit/s
- Up to 20 000 events can be stored in the event log memory; this capacity can be increased via the additional use of an SD memory card to up to 65 000

4.1.2 Options

- Expandable to four loops with a maximum of 1000 devices (only Integral EvoxX CF)
- Control panel networking via local mesh network:
 - Data transmission via TCP/IP (Ethernet 10/100Base-TX) at max. 100 Mbit/s
 - Data transmission via RS-485 (copper) at 625 – 2500 kbit/s
- Possibility to activate different IP protocols enables the connection of:
 - Operation control systems in accordance with ÖNORM (Austrian standard) F 3003
 - Alarm management systems
 - Other building management systems
- Connection for fire brigade operating panels in accordance with ÖNORM F 3031, DIN 14661, SN 054002 and DIN 14662
- Day/night mode, individually programmable for each detector zone and day of the week
- Intervention mode
- Software-controlled free assignment and connection of detectors to the activation criteria
- Software-controlled two-zone dependency or two-detector dependency for alarm notification and output
- Recognition and evaluation of the detector state (contamination)
- Individual detector disablement
- Can be networked with all Schrack fire alarm control panels

4.1.3 Approvals

- VdS device and system approval: G200081, S200081, G206045
- Declaration of Performance: CPR-20-21-002
- Austrian Testing Centre for Fire Prevention Technology: Nr. FT 14/159/06, FT 14/622/06, FT 14/623/06, FT 14/625/06
- VB-Cert Austria: No. 002/BM-PSys/014
- Country-specific approvals in Austria, Germany, Denmark, Italy, Netherlands, Poland, Romania, Russia, Sweden, Switzerland, Slovak Republic, Czech Republic, Turkey, Ukraine, Hungary, and many more.

Integral EvoxX CF cabinet models



No.: 20-1110300-01



No.: 20-1110302-01

All Integral EvoxX CF control panels consist of:

- cabinet made of sheet steel
- Built-in operating panel B9-OB (except variant B9-CP-X2)
- master control unit B9-BCU-X2
- B9-PSU power supply unit
- connection for two loops (max. 500 elements)
- two monitored outputs for transmission and alarm notification equipment
- connection for two monitored inputs
- five relay outputs (230 V/3 A)
- connection for fire brigade operating panel in accordance with DIN 14661
- connection for external operating and indicator panels
- interface for network or extension modules
- mounting space for rechargeable batteries (max. size 2 × 12 V/18 Ah)
- mains terminal and rechargeable battery cable

Mains voltage:	110/230 V AC ±15 %
Power supply frequency:	47 – 63 Hz
Input power:	max. 160 W
Output power:	max. 115 W
Output voltage (complies with PELV):	21.0 – 27.9 V DC
Usable rechargeable batteries:	2 × 12 V/15 – 18 Ah in series Total capacity: max. 34 Ah (2 identical strings with 2 × 12 V/15 – 17 Ah each in series)
Emergency power supply with rechargeable batteries:	72 h normal operation additionally 0.5 h alarm
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Air pressure:	≥ 80 kPa, up to 2000 m above sea level
Case material:	sheet steel
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	424 × 445,5 × 144,5 mm (H×W×D)
Weight:	
Basic configuration:	8 kg
Per rechargeable battery:	approx. 5.5 kg
VdS approval:	G200081
Declaration of Performance:	CPR-20-21-002

Integral EvoxX CF and accessories

	Designation	Type	Article no.
	Integral EvoxX C Control panel without operating panel, 2-loop X-LINE	B9-CP-X2	20-1110300-01
	Integral EvoxX C Control panel with B9-OB operating panel and cut-out, 2-loop X-LINE	B9-CP-X2-OB-CO	20-1110302-01
	SD card 8 GB for B8-MCU/B9-BCU ATP SD Card 8GB PSLC NAND	SD-CARD-8GB IND	20-1400208-01
	Integral IMAP built-in operating panel without lettering plate (replacement part)	B9-OB	20-1131002-01
	Lettering plate for Integral IMAP German	OB-TXT DE01	20-1041001-01
	Lettering plate for Integral IMAP English	OB-TXT EN01	20-1041002-01
	Lettering plate for Integral IMAP other languages	OB-TXT	auf Anfrage
	Integral EvoxX M/C front panel without cut-out	CP-FP	20-1400260-01
	Integral EvoxX M/C front panel with printer	CP-PRT	20-1400261-01
	Integral EvoxX M front panel with EAT64	CP-EAT64	20-1400264-01
	Integral EvoxX M/C front panel with EAT32, medium	CP-EAT32	20-1400265-01
	Integral EvoxX M/C front panel without cut-out, small	CP-FP-S	20-1400262-01
	Integral EvoxX M/C front panel with log printer, small	CP-PRT-S	20-1400263-01
	Integral EvoxX C replacement case without cut-out	H-CP-C	20-1400140-01
	Integral EvoxX C replacement case 2 cut-outs	H-CP-C-2CO	20-1400142-01
	B8/B9-CP lock for cabinets	CP-LOCK	20-1400213-01
	B8/B9-CP key for cabinets	CP-KEY	20-1400214-01

4.2 Integral EvoxX CF modules



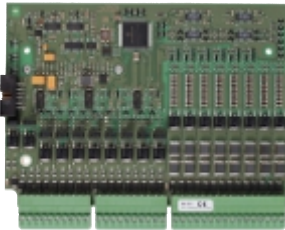
No.: 20-1100010-01

B9-DXI2 extension module

For extending Integral EvoxX CF fire alarm control panels with two additional Integral X-LINE loops. Alternatively, a loop and two stub lines, or maximum four stub lines can be connected.

The module is plugged into the B9-BCU-X2 master control unit.

Power supply:	internally via master control unit
Connection:	two loops (each maximum 250 devices) or four stub (each maximum 64 devices)
Loop length:	max. 3500 m
Connection plug:	16-pin screw-type terminal
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation



No.: 20-1100003-01

B6-EIO input/output module

To connect up to ten stub lines each with max. 30 detectors of the 130 A detector series, primary inputs or VdS extinguishing interfaces and eight monitored outputs each with max. 1.3 A output current. Additionally suitable for connection of intrinsically safe Ex-i detectors of the MMD 130 Ex-i and WCP 1A detector series via an intrinsic safety barrier.

The module is plugged into the B9-BCU-X2 master control unit. Connection plugs are included.

Power supply:	internally via master control unit
Number of inputs:	max. 10
Number of outputs:	max. 8
Loop length:	max. 1000 m
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation

B6-NET2-485 network module



No.: EG072934

For redundant networking of Integral EvoxX CF fire alarm control panels or for connection of PC applications. The module has two network connections (RS-485) and one Ethernet 10/100Base-TX interface. The module is plugged into the B9-BCU-X2 master control unit.

Power supply:	internally via master control unit
LAN interface:	Ethernet 10/100Base-TX
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 100 Mbit/s
Range:	max. 100 m
RS-485 interface:	2 × RS-485 with line redundancy, one galvanically isolated
Mechanical:	RJ-45 socket, eight pin
Direction:	bidirectional, half-duplex
Speed:	max. 1.25 Mbit/s
Range:	max. 1200 m
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation

**No.: 20-1100030-01****No.: 20-1400005-01****No.: 20-1400006-01****No.: 20-1400007-01****No.: 20-1400040-01**

B9-NET-FX4 network module

For networking of Integral EvoxX C fire alarm control panels or for connection of PC applications. The module has four optical fibre ports for use with pluggable SFP optical modules (multi mode version with 2 km range or single mode version with up to 10 km or 30 km range) and a 10/100Base-TX interface.

The module is plugged onto the master control unit B9-BCU-X2, and is supplied with a connection plug. The single mode/multi mode SFP modules and an optional cable bend protection must be ordered separately.

Power supply:	internally via master module
LAN interface:	Ethernet 10/100Base-TX
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 100 Mbit/s
Range:	max. 100 m
FX interface:	4 × SFP module slots, multi mode and/or single mode
Speed:	max. 100 Mbit/s
Range:	
SFP module multi mode:	max. 2000 m
SFP module single mode:	max. 10 000 m or 30 000 m
Optical fibre:	
SFP module multi mode:	62,5/125 µm or 50/125 µm
SFP module single mode:	9/125 µm
Connector type:	LC 2 × 5
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation

**No.: 20-1100000-01****No.: 20-1100001-01****No.: 20-1400040-01**

B6-NET2-FXM/FXS network module

For redundant networking of Integral EvoxX C fire alarm control panels or for connection of PC applications. The modules contain a RS-485 network connection, two optical network connections (multimode version FXM with a range of 2000 m or singlemode FXS with a range of up to 10 000 m) and a 10/100Base-TX interface. The module is plugged into the B9-BCU-X2 master control unit.

Power supply:	internally via master control unit
LAN interface:	Ethernet 10/100Base-TX
Transmission type:	TCP/IP
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 100 Mbit/s
Range:	max. 100 m
RS-485 interface:	RS-485 with line redundancy, galvanically isolated
Mechanical:	RJ-45 socket, eight pin
Direction:	bidirectional, half-duplex
Speed:	max. 1.25 Mbit/s
Range:	max. 1200 m
FX interface:	2 x multi mode or single mode
Range:	max. 100 m
Range:	
B6-NET2-FXM:	max. 2000 m
B6-NET2-FXS:	max. 10 000 m
Optical fibre:	
B6-NET2-FXM:	62,5/125 µm or 50/125 µm
B6-NET2-FXS:	9/125 µm
Connector type:	
B6-NET2-FXM:	MTRJ
B6-NET2-FXS:	LC 2 x 5
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation

Integral EvoxX CF modules and accessories

	Designation	Type	Article no.
	B9-DXI2 extension module	B9-DXI2	20-1100010-01
	16-pin replacement plug for B9-BCU, B6-LXI2 and B6-EIO	ST-LOOP/DAI	YK130295
	B6-EIO input/output module	B6-EIO	20-1100003-01
	B6-EIO replacement connection plug	ST-SET-EIO	FG74109
	B6-NET2-485 network module	B6-NET2-485	EG072934
	B9-NET-FX4 network module	B9-NET-FX4	20-1100030-01
	B6-NET2-FXS network module	B6-NET2-FXS	20-1100000-01
	B6-NET2-FXM network module	B6-NET2-FXM	20-1100001-01
	RJ-45 connector Cat 5e	RJ45-IP	MM010008
	Crimping pliers for RJ-45	CRIMP-IP	MM010001
	9Sub-D RJ45 coupling With Sub-D blank plug	KUP 9RJ45	20-1400000-01
	15Sub-D RJ45 coupling With Sub-D blank plug	KUP 15RJ45	20-1400001-01
	Plug-in module for FX modules single mode up to 10 km	SFP-MODUL SM	20-1400005-01
	Plug-in module for FX modules multi mode up to 2 km	SFP-MODUL MM	20-1400006-01
	Plug-in module for FX modules single mode up to 30 km	SFP-MODUL SM 30	20-1400007-01
	Cable bend protection 90 degree bend	KBKN-90GR-AD10	20-1400040-01

4.3 Integral EvoxX CF 1-loop fire alarm control panel

The Integral EvoxX CF fire alarm control panel is a cost-optimized single loop fire alarm control panel for the smallest sized systems, suitable for connecting a single loop with a maximum of 250 elements.

The master control unit contains all necessary interfaces for wiring to the fire brigade (transmission and alarm systems, interface for connecting various types of fire brigade operating panels), as well as five 230 V/3 A relay outputs and a connection for the external device bus (MMI-bus).



No.: 20-1110311-01

Integral EvoxX CF 1 loop fire alarm control panel

All Integral EvoxX CF control panels consist of:

- cabinet made of sheet steel
- B9-OB built-in operating panel
- master control unit B9-BCU-X1F
- B9-PSU power supply unit
- connection for one loop (max. 250 elements)
- one main detector output (transmission equipment)
- one monitored output (alarm notification equipment)
- five relay outputs (230 V/3 A)
- connection for fire brigade operating panel in accordance with DIN 14661
- connection for external operating and indicator panels
- mounting space for rechargeable batteries (max. size 2 × 12 V/18 Ah)
- mains terminal and rechargeable battery cable

Mains voltage:	110/230 V AC $\pm 15\%$
Power supply frequency:	47 – 63 Hz
Input power:	max. 160 W
Output power:	max. 115 W
Output voltage (complies with PELV):	21.0 – 27.9 V DC
Usable rechargeable batteries:	2 x 12 V/15 – 18 Ah in series Total capacity: max. 34 Ah (2 identical strings with 2 x 12 V/15 – 17 Ah each in series)
Emergency power supply with rechargeable batteries:	72 h normal operation additionally 0.5 h alarm
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Air pressure:	≥ 80 kPa, up to 2000 m above sea level
Case material:	sheet steel
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	424 x 445,5 x 144,5 mm (HxWxD)
Weight:	
Basic configuration:	8 kg
Per rechargeable battery:	approx. 5.5 kg
VdS approval:	G200081
Declaration of Performance:	CPR-20-21-002

Integral EvoxX CF 1-loop and accessories

	Designation	Type	Article no.
	Integral EvoxX C Control panel with B9-OB operating panel and cut-out, 1-loop X-LINE	B9-CP-X1-OB-CO	20-1110311-01
	B9-BCU-X1F master control unit 1-Loop and fire brigade interface, 1 x 10/100Base-TX	B9-BCU-X1F	20-1100008-01
	SD card 8 GB for B8-MCU/B9-BCU ATP SD Card 8GB PSLC NAND	SD-CARD-8GB IND	20-1400208-01
	Integral IMAP built-in operating panel without lettering plate (replacement part)	B9-OB	20-1131002-01
	Lettering plate for Integral IMAP German	OB-TXT DE01	20-1041001-01
	Lettering plate for Integral IMAP English	OB-TXT EN01	20-1041002-01
	Lettering plate for Integral IMAP other languages	OB-TXT	auf Anfrage
	Integral EvoxX M/C front panel without cut-out	CP-FP	20-1400260-01
	Integral EvoxX M/C front panel with printer	CP-PRT	20-1400261-01
	Integral EvoxX M front panel with EAT64	CP-EAT64	20-1400264-01
	Integral EvoxX M/C front panel with EAT32, medium	CP-EAT32	20-1400265-01
	Integral EvoxX M/C front panel without cut-out, small	CP-FP-S	20-1400262-01
	Integral EvoxX M/C front panel with log printer, small	CP-PRT-S	20-1400263-01
	Integral EvoxX C replacement case without cut-out	H-CP-C	20-1400140-01
	Integral EvoxX C replacement case 2 cut-outs	H-CP-C-2CO	20-1400142-01
	B8/B9-CP lock for cabinets	CP-LOCK	20-1400213-01
	B8/B9-CP key for cabinets	CP-KEY	20-1400214-01

4.4 Integral EvoxX CE control panel for single-zone extinguishing systems

The Integral EvoxX C system can be used as an extinguishing control panel Integral EvoxX CE (electronic control and delay unit) or as a combined fire alarm/extinguishing control panel Integral EvoxX CF/CE.

The Integral EvoxX CE and the Integral EvoxX CF/CE are suitable and approved with an internal or external operating panel Integral IMAP with freely programmable LEDs as an extinguishing zone indicator in accordance with the requirements of the standards and guidelines EN 12094-1 and VdS 2496 for activation and monitoring of a maximum of one extinguishing zone for the following fire extinguishing systems:

- CO₂ high pressure and low pressure extinguishing systems with and without a danger to the safety of people
- Inert gas and argon extinguishing systems with and without a danger to the safety of people
- Water spray and water fog extinguishing system
- Sprinkler systems and pre-action sprinkler systems
- Chemical extinguishing systems

Integral EvoxX CE single-zone extinguishing control panel



No.: 20-1110302-01

All Integral EvoxX CE control panels consist of:

- cabinet made of sheet steel
- B8-OB built-in operating panel
- B6-EIO input/output module
- master control unit B9-BCU-X2
- B9-PSU power supply unit
- connection for two loops (max. 500 elements)
- two monitored outputs for transmission and alarm notification equipment
- connection for two monitored inputs
- five relay outputs (230 V/3 A)
- connection for fire brigade operating panel in accordance with DIN 14661
- connection for external operating and indicator panels
- mounting space for rechargeable batteries (max. size 2 × 12 V/18 Ah)
- mains terminal and rechargeable battery cable

Optionally:

- CP-FP front panel without cut-out or CP-PRT front panel with log printer, if the ten freely programmable multicolour LEDs on the Integral IMAP operating panel are used for the one extinguishing zone


or

- CP-IPES front panel for four extinguishing zones and additionally either a CP-PRT-S front panel without log printer, small or a CP-PRT-S front panel without log printer, small, if the ten freely programmable multicolour LEDs on the Integral IMAP operating panel are used for other purposes

Mains voltage:	110/230 V AC $\pm 15\%$
Power supply frequency:	47 – 63 Hz
Input power:	max. 160 W
Output power:	max. 113 W
Output voltage (complies with PELV):	21.0 – 27.9 V DC
Usable rechargeable batteries:	2 x 12 V/15 – 18 Ah in series Total capacity: max. 34 Ah (2 identical strings with 2 x 12 V/15 – 17 Ah each in series)
Emergency power supply with rechargeable batteries:	72 h normal operation additionally 0.5 h alarm
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	-5 °C to +50 °C
Approved by VdS:	-5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Air pressure:	≥ 80 kPa, up to 2000 m above sea level
Case material:	sheet steel
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	424 x 445,5 x 144,5 mm (HxWxD)
Weight:	
Basic configuration:	8 kg
Per rechargeable battery:	approx. 5.5 kg
VdS approval:	G206045
Declaration of Performance:	CPR-20-21-002

Integral EvoxX CE and accessories

	Designation	Type	Article no.
	Integral EvoxX C Control panel with B9-OB operating panel and cut-out, 2-loop X-LINE	B9-CP-X2-OB-CO	20-1110302-01
	SD card 8 GB for B8-MCU/B9-BCU ATP SD Card 8GB PSLC NAND	SD-CARD-8GB IND	20-1400208-01
	Integral IMAP built-in operating panel without lettering plate (replacement part)	B9-OB	20-1131002-01
	Lettering plate for Integral IMAP German	OB-TXT DE01	20-1041001-01
	Lettering plate for Integral IMAP English	OB-TXT EN01	20-1041002-01
	Lettering plate for Integral IMAP other languages	OB-TXT	auf Anfrage
	Integral EvoxX M/C front panel with IPES, medium	CP-IPES	20-1400267-01
	Integral EvoxX M/C front panel without cut-out	CP-FP	20-1400260-01
	Integral EvoxX M/C front panel with printer	CP-PRT	20-1400261-01
	Integral EvoxX M/C front panel without cut-out, small	CP-FP-S	20-1400262-01
	Integral EvoxX M/C front panel with log printer, small	CP-PRT-S	20-1400263-01
	Resistors for single-zone extinguishing control panel 8 × R3k, 2 × R1k, 2 × R220, 10 × R680	EIO-EXT-RES	20-1140001-01
	B6-EIO input/output module	B6-EIO	20-1100003-01
	B6-EIO replacement connection plug	ST-SET-EIO	FG74109
	Integral EvoxX C replacement case without cut-out	H-CP-C	20-1400140-01
	Integral EvoxX C replacement case 2 cut-outs	H-CP-C-2CO	20-1400142-01
	B8/B9-CP lock for cabinets	CP-LOCK	20-1400213-01
	B8/B9-CP key for cabinets	CP-KEY	20-1400214-01
	Lock for keyswitch (replacement) incl. 2 pcs. keys	SCU LOCK-2	20-1400200-01

	Designation	Type	Article no.
	Key for keyswitch (replacement)	SCU KEY-2	20-1400201-01

4.5 Accessories and spare parts



No.: 20-1100007-01

B9-BCU-X2 master control unit

The B9-BCU-X2 is part of every Integral EvoX C fire alarm control panel and includes all interfaces for connecting operating panel, peripherals, relay contacts, MMI-bus, monitored outputs and the service PC, as well as a connection slot for an additional module.

Furthermore, the module includes a USB 2.0 Mini-B interface to load software and planning data and a 10/100Base-TX interface. Up to 20 000 events can be stored in the internal event log memory; this capacity can be increased via the additional use of an SD memory card.

All required connectors are included, the SD memory card must be ordered separately.

Power supply:	via power supply unit B9-PSU
Operating panel connection:	34-pin flat ribbon cable connector
Transmission speed:	700 kbit/s
Service interface wired:	
Range:	max. 3 m
Technology:	USB 2.0, connector mini
Service interface wireless:	
Range:	max. 1 m
Technology:	Bluetooth Low Energy
LAN interface:	Ethernet 10/100Base-TX
Mechanical:	RJ-45 socket, eight pin
Speed:	max. 100 Mbit/s
Range:	max. 100 m
SD connection slot:	SD 3.0 (SDHC, SDXC) memory card
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C

B9-PSU power supply unit



No.: 20-1100006-01

The 4 A power supply unit provides the 3.3 V, 5 V and 27 V output voltages required by every Integral EvoxX C fire alarm control panel and is always installed to the right of the master control unit. On the underside is a terminal for connecting the rechargeable batteries and five separately fused outputs for connecting external consumers. The B9-PSU power supply unit has a rechargeable battery monitoring, which is controlled and evaluated by the fire alarm control panel's master control unit. The connector for the power supply connection and external consumers are included.

Mains voltage:	110 V AC –15 % to 230 V AC +10 %
Power supply frequency:	47 – 63 Hz
Input power:	max. 160 W
Output power:	max. 115 W
Output voltage (complies with PELV):	26,3 V DC (+50 °C) to 28,3 V DC (0 °C)
Output current:	max. 4 A
Outputs for internal consumers:	3.3 V/3 A, 5 V/1 A, 27 V/4 A
Outputs for external consumers:	5 × 27 V/2.5 A FF
Charging output for rechargeable battery connection:	27 V/3.2 A
Mains fuse:	with 10 A surge energy capacity
Mains fuse in power supply unit:	4.0 A T
Usable rechargeable batteries:	2 × 12 V/15 – 18 Ah in series
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C

**No.: 20-1100102-01**

B9-UGK-X2 upgrade kit

For upgrading existing Integral (B4 or B6 platform) control panels to Integral EvoxX C control panels (B9 platform). Consists of a B9-BCU-X2 master control unit incl. cover, B9-PSU power supply unit and distance bolts.

The country-specific regulations for the planning and installation of automatic fire alarm systems apply for planning the system.

**No.: 20-1400143-01**

H-CP-C-CBE Integral EvoxX C battery cabinet

Cabinet in the Integral EvoxX C design with full door, built-in rechargeable battery cup and cable set for rechargeable battery expansion.

Case material:	sheet steel
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	424 × 445,5 × 144,5 mm (H×W×D)

**No.: 20-1400144-01**

H-CP-C-CTR Integral EvoxX C top-hat rail cabinet

Cabinet in the Integral EvoxX C design with full door, built-in DIN top-hat rail and cable ducts for use as a distribution cabinet, for installing modules etc.

Case material:	sheet steel
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	424 × 445,5 × 144,5 mm (H×W×D)

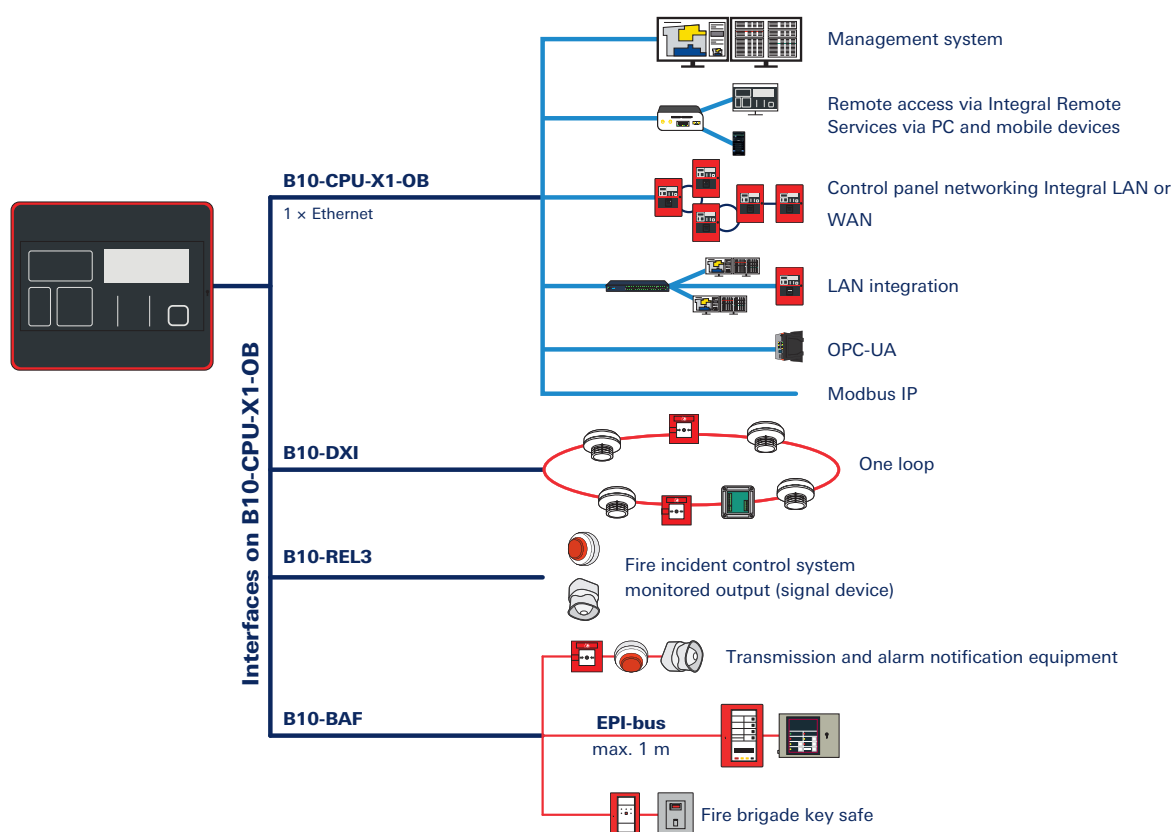
Accessories and replacement parts for Integral EvoxX C control panels

	Designation	Type	Article no.
	B9-BCU-X2 master control unit	B9-BCU-X2	20-1100007-01
	B9 Cover master control unit needed when changing from B6 to B9 BCU	B9-BC-CVR	20-1140100-01
	B9-PSU power supply unit	B9-PSU	20-1100006-01
	Upgrade kit B9-UGK-X2 for upgrading to Integral EvoxX C	B9-UGK-X2	20-1100102-01
	SD card 8 GB for B8-MCU/B9-BCU ATP SD Card 8GB PSLC NAND	SD-CARD-8GB IND	20-1400208-01
	16-pin replacement plug for B9-BCU, B6-LXI2 and B6-EIO	ST-LOOP/DAI	YK130295
	B6-OM connector	ST-B6-OM	FG74116
	Connection plug for fire brigade operating panel	ST-FBD	YK130459
	B6-REL connector	ST-B6-REL	FG74115
	Integral IMAP built-in operating panel without lettering plate (replacement part)	B9-OB	20-1131002-01
	Connector for external consumers 10-pin replacement plug	ST-PSU EV	FG74090
	Power plug for B4/B6 3-pin replacement plug	ST-PSU NS	YK130302
	Rechargeable battery 12 V/17 Ah	AKKU 17	HG691013
	B6 replacement door with 2 cut-outs	B6-DOOR-2CO	20-1400162-01
	Integral EvoxX C battery cabinet	H-CP-C-CBE	20-1400143-01
	Integral EvoxX C top-hat rail cabinet	H-CP-C-CTR	20-1400144-01
	Integral EvoxX C replacement case without cut-out	H-CP-C	20-1400140-01

	Designation	Type	Article no.
	Integral EvoxX C replacement case 2 cut-outs	H-CP-C-2CO	20-1400142-01
	Log printer cover (replacement)	B8-OB-PRT-CVR	20-1400230-01
	Paper roll for log printer (replacement)	PD PPR	PPF-519057
	Ribbon cartridge for log printer (replacement)	PD FRB	HG694076
	Log printer interface (electronics)	B8-PPI	20-1400211-01
	Log printer interface external (electronics) for external operating panels	B8-PPIE	20-1400212-01
	B5 Log printer printer unit	B5-PDR-DW	FG030550
	USB-Kabel, Mini 3 m length	KAB USB 3 MINI	20-1400205-01
	B8/B9-CP lock for cabinets	CP-LOCK	20-1400213-01
	B8/B9-CP key for cabinets	CP-KEY	20-1400214-01
	B6 battery cable set Length approx. 35 cm	B6 BATKAB	EI29940
	B6 battery holder set	B6-BATH-SET	FG74112
	B6 spacer set	B6-DISTH-SET	FG74111
	SI 8A thermal fuse for all Integral battery cable	ZUB SICH8	IS625040
	Lock for keyswitch (replacement) incl. 2 pcs. keys	SCU LOCK-2	20-1400200-01
	Key for keyswitch (replacement)	SCU KEY-2	20-1400201-01

5 Basic control panel Integral EvoxX B

The Integral EvoxX B system can be used as an Integral EvoxX BF fire alarm control panel, an Integral EvoxX BE single-zone extinguishing control panel or as a combined Integral EvoxX BF/BE fire alarm/extinguishing control panel.



Connection scheme Integral EvoxX B

5.1 Integral EvoxX BF fire alarm control panel

Basic control panel consisting of a plastic case with Integral IMAP operating panel and suitable for connecting a single loop. The labelling of the control panel (language) is achieved with a stick-on plate. The master control unit with integrated power supply unit includes all interfaces for connecting peripherals. The lower area of the case can accommodate the installation of two 7.2 Ah rechargeable batteries, a 100 Mbit-TX LAN interface can be used for remote access to the control panel.

5.1.1 Features

- One loop with up to max. 250 devices
- Microprocessor-controlled and monitored system topology
- Software redundancy according to TRVB S 123
- Continuous automatic test routines for all system components and software
- 13-line plain text indication of the current system state (alarm, fault etc.)
- Acoustic and visual alarm device for alarms and faults
- Intermediate alarm storage
- Manual testing of control panel functions
- Plain text indication of individual detectors or indication areas
- Operating panel language (labelling and display indication) can be selected, up to 4 languages are switchable on the fly
- Suitable for connection to the fire brigade's public alarm notification system
- Connection for fire brigade operating panel in accordance with DIN 14661
- System configuration can be saved using flexible flash memory technology
- Emergency power supply for a power bridging time of up to 72 hours
- Meets or exceeds the following relevant standards and guidelines: EN 54, DIN, ÖNORM, ÖVE, VDE, and many more
- External device bus (EPI-bus) for up to 3 indication and operating devices, max. distance 1 m
- Up to 16 control panels can be networked to one logical unit without a superordinate operation control system
- Access to the control panel via intranet and internet
- Event log memory with capacity for up to 20 000 events

5.1.2 Approvals

- VdS device and system approval: G212110, S212004
- Declaration of Performance (DoP): CPR-20-21-004
- Austrian Testing Centre for Fire Prevention Technology: Nr. FT 14/159/06, FT 14/622/06, FT 14/623/06, FT 14/625/06
- VB-Cert Austria: No. 002/BM-PSys/014
- Country-specific approvals in Austria, Germany, Denmark, Italy, Netherlands, Poland, Romania, Russia, Sweden, Switzerland, Slovak Republic, Czech Republic, Turkey, Ukraine, Hungary, and many more.



No.: 20-1110340-01







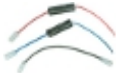

Integral EvoxX BF

The Integral EvoxX BF fire alarm control panel consists of:

- B10-CPU-X1-OB master control unit with integrated power supply unit
- Built-in operating panel Integral IMAP (language-neutral), stick-on labelling in more than 25 languages
- Connection for one Integral X-LINE (max. 250 elements, max. 3500 m)
- Two monitored outputs for transmission and alarm notification equipment
- Two monitored inputs
- LAN (100 Mbit-TX)
- EPI-bus (wiring fire brigade operating panels)
- USB device service interface
- mounting space for rechargeable batteries (max. size 2 × 12 V/7.2 Ah)

Mains voltage:	110/230 V AC ±15 %
Power supply frequency:	47 – 63 Hz
Input power:	max. 90 W
Output power:	max. 63 W
Output voltage (complies with PELV):	20.4 – 27.9 V DC
Usable rechargeable batteries:	2 × 12 V/7.2 Ah in series
Emergency power supply with rechargeable batteries:	72 h normal operation additionally 0.5 h alarm
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Air pressure:	≥ 80 kPa, up to 2000 m above sea level
Case material:	ABS plastic
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	300 × 360 × 88 mm (H×W×D)
Weight:	
with rechargeable batteries:	7.5 kg
without batteries:	2.2 kg
VdS approval:	G212110
Declaration of Performance:	CPR-20-21-004

Integral EvoxX BF and accessories

	Designation	Type	Article no.
	Integral EvoxX B Control panel with operating panel, 1-loop X-LINE	B10-CP-X1-OB	20-1110340-01
	B10-CPU-X1-OB master control unit (replacement) incl. power supply, for IMAP operating panel	B10-CPU-X1-OB	20-1101002-01
	Lettering plate for Integral IMAP German	OB-TXT DE01	20-1041001-01
	Lettering plate for Integral IMAP English	OB-TXT EN01	20-1041002-01
	Lettering plate for Integral IMAP other languages	OB-TXT	auf Anfrage
	Rechargeable battery 12 V/7 Ah	AKKU 7	HG691021
	B7 battery cable set	B7 BATKAB	20-1140000-01
	Metal key (replacement) for Integral EvoxX B, fire brigade operating panel, MCP 535X	DKM SCHL	FG020015

5.2 Integral EvoxX BE control panel for single-zone extinguishing systems

The Integral EvoxX B system can be used as an extinguishing control panel Integral EvoxX BE (electronic control and delay unit) or as a combined fire alarm/extinguishing control panel Integral EvoxX BF/BE.

The Integral EvoxX BE and the Integral EvoxX BF/BE are suitable and approved with an internal or external Integral IMAP operating panel with freely programmable LEDs as an extinguishing zone indicator in accordance with the requirements of the standards and guidelines EN 12094-1 and VdS 2496 for activation and monitoring of a maximum of one extinguishing zone for the following fire extinguishing systems:

- CO₂ high pressure and low pressure extinguishing systems with and without a danger to the safety of people
- Inert gas and argon extinguishing systems with and without a danger to the safety of people
- Water spray and water fog extinguishing system
- Sprinkler systems and pre-action sprinkler systems
- Chemical extinguishing systems

Integral EvoxX BE









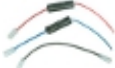

No.: 20-1110340-01

The Integral EvoxX BE fire alarm control panel consists of:

- B10-CPU-X1-OB master control unit with integrated power supply unit
- Built-in operating panel Integral IMAP (language-neutral), stick-on labelling in more than 25 languages
- Connection for one Integral X-LINE (max. 250 elements, max. 3500 m)
- Two monitored outputs for transmission and alarm notification equipment
- Two monitored inputs
- LAN (100 Mbit-TX)
- EPI-bus (wiring fire brigade operating panels)
- USB device service interface
- mounting space for rechargeable batteries (max. size 2 × 12 V/7.2 Ah)
- the ten freely programmable multicolour LEDs on the Integral IMAP operating panel are used for the one extinguishing zone

Mains voltage:	110/230 V AC \pm 15 %
Power supply frequency:	47 – 63 Hz
Input power:	max. 90 W
Output power:	max. 63 W
Output voltage (complies with PELV):	20.4 – 27.9 V DC
Usable rechargeable batteries:	2 \times 12 V/7.2 Ah in series
Emergency power supply with rechargeable batteries:	72 h normal operation additionally 0.5 h alarm
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Relative air humidity:	5 – 95 % without condensation
Air pressure:	\geq 80 kPa, up to 2000 m above sea level
Case material:	ABS plastic
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	300 \times 360 \times 88 mm (H \times W \times D)
Weight:	
with rechargeable batteries:	7.5 kg
without batteries:	2.2 kg
VdS approval:	applied for
Declaration of Performance:	CPR-20-21-004

Integral EvoxX BE and accessories

	Designation	Type	Article no.
	Integral EvoxX B Control panel with operating panel, 1-loop X-LINE	B10-CP-X1-OB	20-1110340-01
	B10-CPU-X1-OB master control unit (replacement) incl. power supply, for IMAP operating panel	B10-CPU-X1-OB	20-1101002-01
	Lettering plate for Integral IMAP German	OB-TXT DE01	20-1041001-01
	Lettering plate for Integral IMAP English	OB-TXT EN01	20-1041002-01
	Lettering plate for Integral IMAP other languages	OB-TXT	auf Anfrage
	Rechargeable battery 12 V/7 Ah	AKKU 7	HG691021
	B7 battery cable set	B7 BATKAB	20-1140000-01
	Metal key (replacement) for Integral EvoxX B, fire brigade operating panel, MCP 535X	DKM SCHL	FG020015

6 External operating and indicator devices

External operating panels and devices are connected via the Integral MMI and the EPI system bus to the Integral control panel family.

6.1 MMI-bus devices

The MMI-bus is a serial data bus for connecting external operating panels and devices whose type designation has the suffix MMI. In the Integral EvoxX M control panels, the interface for connecting the MMI-bus is located on the B8-BAF module; in the Integral EvoxX C control panels, it can be found on the B9-BCU-X2 master control unit.



NOTE

A maximum of 15 devices can be connected to one MMI-Bus and can be located up to 1200 meters away from a control panel.

B8-MMI-OB Integral IMAP external operating panel



No.: 20-1210103-01

Integral IMAP external operating panel in language-neutral version for remote operation of Integral EvoxX M and Integral EvoxX C fire alarm control panels. The lettering plate is affixed in the desired language, further indication and operating devices as well as a log printer can be connected via integrated interfaces.

- Indication with 14 lines, 60 characters per line, separated into three operational areas:
 - Operational area 9 lines, 40 characters
 - Info area 3 lines, 40 characters
 - Programmable button labelling and LED labelling 14 lines, 20 characters
- Can be deployed as a main operating panel in an Integral WAN
- Pushbuttons with illuminated ring – action feedback and menu guidance
- A freely programmable button that can be labelled using software
- Ten freely programmable multi-colour LEDs that can be labelled using software
- Five status lists (alarms, faults, shutdowns etc.)
- New list scrolling
- Range operation (e.g. disable range 1 – 10)
- Six programmable pieces of information in the info area of the indication
- Simplified operation of function types
- Group operation (e.g. simultaneously disable all detector zones)

Operating voltage range:	10 – 30 V DC
Current consumption:	49 mA typ., max. 55 mA with 24 V DC
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	ABS plastic
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	192 × 361 × 49 mm (H×W×D)
Weight:	approx. 880 g



No.: 20-1400250-01

B8-OB-PRT log printer

The external, data-serial log printer B8-OB-PRT is used for logging all externally important data and events concerning the system, such as alarms, faults, disablements, actuations, activations, operating procedures, alarm delays, service instructions, etc.

Power supply:	internally over the B8-MMI-OB
Quiescent current:	approx. 2 mA
Active current:	35 mA (average value during a printing process)
Current peaks:	1.3 A motor start-up 0.5 A per active printer needle (stop)
Printing speed:	2.7 lines per second
Character size:	2.6 × 1.7 mm (H×W)
Paper roll:	57.5 × 50 mm (W×D)
Range:	max. 1 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	ABS plastic
Case colour:	red, RAL 3000, anthracite grey, RAL 7016
Dimensions:	192 × 260 × 49 mm (H×W×D)
Weight:	approx. 830 g

**No.: 20-1210000-01**

B5-MMI-PIP external indicator panel

For parallel indication of the fire alarm control panel's operating states. The device can be programmed so that it only displays information that is relevant to the surrounding area, for example for use as a floor repeater terminal. The labelling of the keys and the information on the display are available in more than 20 languages.

- Connection for external EPI-Bus devices (display or control units)
- Display with six lines, 40 characters per line
- Two freely programmable and inscribable keys
- Two freely programmable and inscribable three-colour LED
- Three status lists (alarms, faults, shutdowns etc.)
- Acoustic alarm and fault signals
- Acoustic signals for pressing a button

Operating voltage range:	10 – 30 V DC
Current consumption:	49 mA typ., max. 55 mA with 24 V DC
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 42
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	ABS plastic
Case colour:	red, RAL 3000
Dimensions:	170 × 227 × 40 mm (H×W×D)
Weight:	approx. 500 g
VdS approval:	G222036

**No.: 20-1210121-01**

B3-MMI-IPEL external LED indicator panel

External LED indication panel for eight extinguishing zones (twelve LEDs per extinguishing zone and group display with nine LEDs), incl. operating system case, keyswitch, key and output module

The labelling is achieved with push-in strips (not included). The device is also available without a case for installation in control cabinets.

Operating voltage range:	10 – 30 V DC
Quiescent current:	2 mA per lit LED
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	sheet steel
Case colour:	red, RAL 3000
Dimensions:	225.5 × 442.4 × 48 mm (H×W×D)
Weight:	3.5 kg

**No.: 20-1210120-01**

B3-MMI-EAT64 external LED indication panel

External LED indication panel for indicating up to 64 detector zones with one red and one yellow LED each for indicating the alarm, fault and disablement state per detector zone, in a sturdy sheet steel housing.

The labelling is achieved with push-in strips (not included). The device is also available without a case for installation in control cabinets.

Operating voltage range:	10 – 30 V DC
Quiescent current:	2 mA per lit LED
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	sheet steel
Case colour:	red, RAL 3000
Dimensions:	225.5 × 442.4 × 48 mm (H×W×D)
Weight:	3.5 kg

**No.: 20-1210020-01**

B8-MMI-FPA fire brigade operating panel, Austria

Fire brigade operating panel with LC-display in accordance with ÖNORM F 3031 variant C for indication of the most important operating states and simple and uniform operation of the fire alarm system by the fire brigade.

It has an extremely robust metal case with degree of protection IP 30. Operation and indication are via buttons, LED and an LC display.

The lock in the door can be opened with a fire brigade key.

Operating voltage range:	10 – 30 V DC
Quiescent current:	14 mA typ.
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	sheet steel
Case colour:	red, RAL 3000
Dimensions:	300 × 200 × 55 mm (H×W×D)
Weight:	1.9 kg
Test number:	FT 14/447/24 (ÖNORM F 3031)

B3-MMI-FAT fire brigade indicator tableau



No.: 20-1240202-01

Fire brigade indicator tableau with LC-display to DIN 14662 for display of the most important operating conditions and simple and uniform operation of the fire alarm system by the fire brigade.

A fire brigade operating panel in accordance with DIN 14661 can be connected to the B3-MMI-FAT.

Operating voltage range:	10 – 30 V DC
Quiescent current:	14 mA typ.
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	sheet steel
Case colour:	grey, RAL 7032
Dimensions:	185 × 255 × 65 mm (H×W×D)
Weight:	1.85 kg
VdS approval:	G206116

B5-MMI-FPD fire brigade operating panel, Germany



No.: 20-1240200-01

Fire brigade operating panel in accordance with DIN 14661 for indication of the most important operating states as well as simple and uniform operation of the fire alarm system by the fire brigade. It has an extremely robust metal case with degree of protection IP 30. Operation and indication via buttons and LED.

Operating voltage range:	10 – 30 V DC
Quiescent current:	30 mA typ.
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	sheet steel
Case colour:	grey, RAL 7032
Dimensions:	185 x 255 x 65 mm (HxWxD)
Weight:	2 kg
VdS approval:	G213076

**No.: 20-1210010-01**

B5-MMI-FPS fire brigade operating panel, Sweden

Fire brigade operating panel with LC display in accordance with SS 3654, with four-line indication, six LEDs for state indication, three function keys, one of which has two associated LEDs, a Piezo sound generator for acoustic signalling, as well as a keyswitch.

Operation is possible with a fire brigade key after activation. The fire brigade operating panel has a robust ABS plastic case with degree of protection IP 42.

Operating voltage range:	10 – 30 V DC
Quiescent current:	47 mA typ.
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 42
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	ABS plastic
Case colour:	red, RAL 3000
Dimensions:	170 × 227 × 40 mm (H×W×D)
Weight:	approx. 500 g
SBSC approval:	13-360

**No.: 20-1210011-01**

B5-MMI-IPS intervention panel Sweden

Sub-panel in a plastic case with Swedish labelling for actuation of a (programmed) intervention mode and display of the most important operating states of the fire alarm control panel. It can be programmed in such a way, that only the information that is relevant for the surrounding area is displayed on it, e.g. for use as a floor repeater terminal.

Operating voltage range:	10 – 30 V DC
Quiescent current:	47 mA typ.
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 42
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	ABS plastic
Case colour:	red, RAL 3000
Dimensions:	170 × 227 × 40 mm (H×W×D)
Weight:	approx. 500 g

**No.: 20-1210012-01**

B5-MMI-FPF fire brigade operating panel, Finland

Fire brigade operating panel with LC display in accordance with SS 3654, with four-line indication, six LEDs for state indication, three function keys, one of which has two associated LEDs, a Piezo sound generator for acoustic signalling, as well as a keyswitch.

Operation is possible with a fire brigade key after activation. The fire brigade operating panel has a robust ABS plastic case with degree of protection IP 42.

Operating voltage range:	10 – 30 V DC
Quiescent current:	47 mA typ.
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 42
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	ABS plastic
Case colour:	red, RAL 3000
Dimensions:	170 × 227 × 40 mm (H×W×D)
Weight:	approx. 500 g
SBSC approval:	13-360

**No.: 20-1210013-01**

B5-MMI-FPN fire brigade operating panel, Norway

Fire brigade operating panel with LC display in accordance with SS 3654, with four-line indication, six LEDs for state indication, three function keys, one of which has two associated LEDs, a Piezo sound generator for acoustic signalling, as well as a keyswitch.

Operation is possible with a fire brigade key after activation. The fire brigade operating panel has a robust ABS plastic case with degree of protection IP 42.

Operating voltage range:	10 – 30 V DC
Quiescent current:	47 mA typ.
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Degree of protection:	IP 42
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	ABS plastic
Case colour:	red, RAL 3000
Dimensions:	170 × 227 × 40 mm (H×W×D)
Weight:	approx. 500 g
SBSC approval:	13-360

**No.: 20-1211001-01**

B3-MMI-UIO universal input/output module

For control of floor plan and parallel indication panels or as a remote input/output module for querying potential-free contacts (sprinkler systems), and also for the control of non-monitored horns, lamps, relays etc. The module can be incorporated either directly into the corresponding tableaus or in junction boxes.

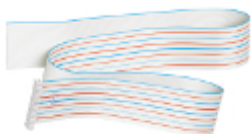
Operating voltage range:	10 – 30 V DC
Quiescent current:	14 mA typ.
Data transmission:	MMI-bus
Electrical:	RS-485, galvanically isolated
Protocol:	serial, DIN 19244-3
Distance to sub-control unit:	max. 1200 m
Connection:	Floor plan panels, parallel panels, flash-lights, sirens, horns, sprinkler systems etc.
Connection data:	64 LED outputs 2 mA max. 256 LED outputs/control panel 8 open collector outputs up to max. 100 mA Output voltage max. +30 V 8 inputs can be interconnected with 8 outputs as an 8 × 8 matrix input voltage +5 V input current max. 3.3 mA
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Dimensions:	160 × 105 × 20 mm (H×W×D)
VdS approval:	G200116
Declaration of Performance:	CPR-20-13-016

**No.: FG69041**

Plastic case and steel mounting board for B3-MMI-UIO

For installation of the B3-MMI-UIO module. The UIO STP steel mounting board consists of galvanized sheet steel with five insertion pins and is used to mount the B3-MMI-UIO module inside the plastic case.

Degree of protection:	IP 66 (flame-retardant)
Ambient temperature:	up to +70 °C
Case material:	Plastic/polystyrene
Dimensions:	
Case:	182 × 180 × 90 mm (H×W×D)
Steel mounting board	150 × 173 × 1.5 mm (H×W×D)

**No.: FG81725**

Flat ribbon cable 34-pin for B3-MMI-UIO

One-metre ribbon cable (34- or 40-pin) with a connection plug and an open end for connection to the B3-MMI-UIO module. The cables must be adjusted in length in conjunction with the respective suitable second connection plug (must be ordered separately).

MMI-Bus devices and accessories

	Designation	Type	Article no.
	Integral IMAP external without labelling plate	B8-MMI-OB	20-1210103-01
	Lettering plate for Integral IMAP German	OB-TXT DE01	20-1041001-01
	Lettering plate for Integral IMAP English	OB-TXT EN01	20-1041002-01
	Lettering plate for Integral IMAP other languages	OB-TXT	auf Anfrage
	log printer for IMAP operating panel	B8-OB-PRT	20-1400250-01
	Indicator panel PIP German	B5-MMI-PIP-DE	20-1210000-01
	Indicator panel PIP English	B5-MMI-PIP-EN	20-1210000-02
	Indicator panel PIP other languages	B5-MMI-PIP-xx	Upon request
	External LED indication panel for eight extinguishing zones	B3-MMI-IPEL	20-1210121-01
	Integral EvoxX M front panel with IPEL	CP-IPEL	20-1400266-01
	Log printer cover (replacement)	B8-OB-PRT-CVR	20-1400230-01
	Paper roll for log printer (replacement)	PD PPR	PPF-519057
	Ribbon cartridge for log printer (replacement)	PD FRB	HG694076
	External LED indicator panel for 64 detector zones	B3-MMI-EAT64	20-1210120-01
	Integral EvoxX M front panel with EAT64	CP-EAT64	20-1400264-01
	Metal key (replacement) for Integral EvoxX B, fire brigade operating panel, MCP 535X	DKM SCHL	FG020015
	B8 Fire brigade operating panel A in accordance with ÖNORM F 3031, variant C, MMI-bus	B8-MMI-FPA	20-1210020-01
	Fire brigade indicator tableau	B3-MMI-FAT	20-1240202-01

	Designation	Type	Article no.
	Fire brigade indicator tableau without case	B3-MMI-FAT-E	20-1240203-01
	Fire brigade operating panel Germany	B5-MMI-FPD	20-1240200-01
	Fire brigade operating panel Sweden	B5-MMI-FPS	20-1210010-01
	Intervention panel Sweden	B5-MMI-IPS	20-1210011-01
	Fire brigade operating panel Finland	B5-MMI-FPF	20-1210012-01
	Fire brigade operating panel Norway	B5-MMI-FPN	20-1210013-01
	Universal input/output module	B3-MMI-UIO	20-1211001-01
	Plastic case for B3-MMI-UIO	UIO GEH	FG69041
	Steel mounting board for B3-MMI-UIO	UIO STP	FG05203
	34-pin flat ribbon cable 1 m for B3-MMI-UIO	UIO KAB 34	FG81725
	40-pin flat ribbon cable 1 m for B3-MMI-UIO	UIO KAB 40	FG81726
	40-pin connector plug for B3-MMI-UIO	UIO KAB 40 ST	HG566170
	Diode terminal block for DIN rail for B3-MMI-UIO	DK 20	FG020980
	Connection module 34-pin for X4 connector	UM 45-FLK 34	FG020981
	Connection module 40-pin for X3 connector	UM 45-FLK 40	FG020982
	LC-Display CSM 6789 incl. connection cable (spare part)	CSM 6789	20-1400210-01
	Earthing Set for external operating panels	EARTH-SET	20-1400030-01
	Lock for keyswitch (replacement) incl. 2 pcs. keys	SCU LOCK-2	20-1400200-01
	Key for keyswitch (replacement)	SCU KEY-2	20-1400201-01

6.2 EPI-bus devices

The EPI-bus is a serial data bus for devices whose type designation has the suffix EPI. The external operating panels and devices must either be connected to MMI-bus devices with an additional EPI-bus master interface or directly to an Integral EvoxX control panel.



NOTE

A maximum of three devices can be connected to one MMI-Bus and can be located up to 1 meters away from a control panel or an MMI-Bus device.



No.: 20-1210021-01

B8-EPI-FPA fire brigade operating panel, Austria

Fire brigade operating panel with LC-display in accordance with ÖNORM F 3031 variant C for indication of the most important operating states and simple and uniform operation of the fire alarm system by the fire brigade.

It has an extremely robust metal case with degree of protection IP 30. Operation and indication are via buttons, LED and an LC display.

The lock in the door can be opened with a fire brigade key.

Includes 1-metre Cat 5e patch cable.

Operating voltage:	3.3 V DC $\pm 5\%$
Quiescent current:	5 mA typ.
Data transmission:	EPI-bus
Electrical:	RS-485
Protocol:	asynchronous serial
Distance to sub-control unit:	max. 1 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	$-5\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$
Approved by VdS:	$-5\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$
Case material:	sheet steel
Case colour:	red, RAL 3000
Dimensions:	300 × 200 × 55 mm (H×W×D)
Weight:	1.9 kg
Test number:	FT 14/447/24 (ÖNORM F 3031)

**No.: 20-1210050-01**

B5-EPI-PIC parallel LED and keypad

For extended indication and operation of Integral EvoxX fire alarm control panels with 32 programmable LEDs (colour red/yellow, output behaviour static/flashing), one permanently assigned operation LED (colour green), 16 programmable buttons, internal acoustics and a connection option for an external keyswitch. Labelling of the LEDs and buttons is done with push-in strips.

Includes 1-metre Cat 5e patch cable.

Operating voltage:	3.3 V DC $\pm 5\%$
Quiescent current:	6 mA typ.
Data transmission:	EPI-bus
Electrical:	RS-485
Protocol:	asynchronous serial
Distance to sub-control unit:	max. 1 m
Degree of protection:	IP 42
Ambient temperature:	
Manufacturer's instruction:	-5 °C to +50 °C
Approved by VdS:	-5 °C to +40 °C
Case material:	ABS plastic
Case colour:	red, RAL 3000
Dimensions:	170 x 227 x 40 mm (HxWxD)
Weight:	approx. 500 g

**No.: 20-1240118-01**

B5-EPI-FPS fire brigade operating panel, Sweden

Fire brigade operating panel with LC display in accordance with SS 3654, with four-line indication, six LEDs for state indication, three function keys, one of which has two associated LEDs, a Piezo sound generator for acoustic signalling, as well as a keyswitch.

Operation is possible with a fire brigade key after activation. The fire brigade operating panel has a robust ABS plastic case with degree of protection IP 42.

Includes 1-metre Cat 5e patch cable.

Operating voltage:	3.3 V DC $\pm 5\%$
Quiescent current:	11 mA typ.
Data transmission:	EPI-bus
Electrical:	RS-485
Protocol:	asynchronous serial
Distance to sub-control unit:	max. 1 m
Degree of protection:	IP 42
Ambient temperature:	
Manufacturer's instruction:	$-5\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$
Approved by VdS:	$-5\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$
Case material:	ABS plastic
Case colour:	red, RAL 3000
Dimensions:	170 × 227 × 40 mm (H×W×D)
Weight:	approx. 500 g
SBSC approval:	13-360



No.: 20-1240122-01

B5-EPI-FPN fire brigade operating panel, Norway

Fire brigade operating panel with LC display in accordance with SS 3654, with four-line indication, six LEDs for state indication, three function keys, one of which has two associated LEDs, a Piezo sound generator for acoustic signalling, as well as a keyswitch.

Operation is possible with a fire brigade key after activation. The fire brigade operating panel has a robust ABS plastic case with degree of protection IP 42.

Includes 1-metre Cat 5e patch cable.

Operating voltage:	3.3 V DC ±5 %
Quiescent current:	11 mA typ.
Data transmission:	EPI-bus
Electrical:	RS-485
Protocol:	asynchronous serial
Distance to sub-control unit:	max. 1 m
Degree of protection:	IP 42
Ambient temperature:	
Manufacturer's instruction:	–5 °C to +50 °C
Approved by VdS:	–5 °C to +40 °C
Case material:	ABS plastic
Case colour:	red, RAL 3000
Dimensions:	170 x 227 x 40 mm (HxWxD)
Weight:	approx. 500 g
SBSC approval:	13-360

**No.: 20-1240123-01**

B5-EPI-FAT fire brigade indicator tableau

Fire brigade indicator tableau with LC-display to DIN 14662 for display of the most important operating conditions and simple and uniform operation of the fire alarm system by the fire brigade.

Includes 1-metre Cat 5e patch cable.

Operating voltage:	3.3 V DC $\pm 5\%$
Quiescent current:	12 mA typ.
Data transmission:	EPI-bus
Electrical:	RS-485
Protocol:	asynchronous serial
Distance to sub-control unit:	max. 1 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	$-5\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$
Approved by VdS:	$-5\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$
Case material:	sheet steel
Case colour:	grey, RAL 7032
Dimensions:	185 × 255 × 65 mm (H×W×D)
Weight:	1.85 kg
VdS approval:	G211102

B5-EPI-FPD fire brigade operating panel, Germany



No.: 20-1240116-01

Fire brigade operating panel in accordance with DIN 14661 for indication of the most important operating states as well as simple and uniform operation of the fire alarm system by the fire brigade. It has an extremely robust metal case with degree of protection IP 30. Operation and indication via buttons and LED.

Includes 1-metre Cat 5e patch cable.

Operating voltage:	3.3 V DC $\pm 5\%$
Quiescent current:	6 mA typ.
Data transmission:	EPI-bus
Electrical:	RS-485
Protocol:	asynchronous serial
Distance to sub-control unit:	max. 1 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	$-5\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$
Approved by VdS:	$-5\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$
Case material:	sheet steel
Case colour:	grey, RAL 7032
Dimensions:	185 x 255 x 65 mm (HxWxD)
Weight:	2 kg
VdS approval:	G211101

B5-EPI-FPCZ fire brigade operating panel, Czech Republic



No.: 20-1240121-01

Fire brigade operating panel with Czech labelling to DIN 14661 for display of the most important operating conditions and simple and uniform operation of the fire alarm system by the fire brigade.

The control panel has seven LEDs to indicate the system status and five buttons for operation.

Includes 1-metre Cat 5e patch cable.

Operating voltage:	3.3 V DC $\pm 5\%$
Quiescent current:	6 mA typ.
Data transmission:	EPI-bus
Electrical:	RS-485
Protocol:	asynchronous serial
Distance to sub-control unit:	max. 1 m
Degree of protection:	IP 30
Ambient temperature:	
Manufacturer's instruction:	$-5\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$
Approved by VdS:	$-5\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$
Case material:	sheet steel
Case colour:	grey, RAL 7032
Dimensions:	185 × 255 × 65 mm (H×W×D)
Weight:	2 kg

EPI-Bus devices and accessories

	Designation	Type	Article no.
	B8 Fire brigade operating panel A in accordance with ÖNORM F 3031, variant C, EPI-bus	B8-EPI-FPA	20-1210021-01
	Parallel LED and keypad	B5-EPI-PIC	20-1210050-01
	Fire brigade operating panel Sweden	B5-EPI-FPS	20-1240118-01
	Fire brigade operating panel Norway	B5-EPI-FPN	20-1240122-01
	Fire brigade indicator tableau	B5-EPI-FAT	20-1240123-01
	Fire brigade indicator tableau without case	B5-EPI-FAT-E	20-1240124-01
	Fire brigade operating panel Germany	B5-EPI-FPD	20-1240116-01
	Fire brigade operating panel Czech Republic	B5-EPI-FPCZ	20-1240121-01
	Metal key (replacement) for Integral EvoX B, fire brigade operating panel, MCP 535X	DKM SCHL	FG020015
	LC-Display CSM 6789 incl. connection cable (spare part)	CSM 6789	20-1400210-01

7 Software and digital applications

7.1 Software for fire alarm control panels

Integral Application Center IAC



No.: 20-1300113-01

Integral software for programming the entire Integral EvoxX system family and the provision of service tools on a PC or laptop. The software works exclusively using a dongle and can be downloaded for free from our website.

System prerequisites:

Hardware:	4 GB RAM Intel processor min. 2 GHz 2 USB ports 1 network interface RJ-45 1 serial interface RS-232 (only for configuration of SecoNET) 1.5 GB free hard disk space Activated ULM dongle
Software:	Windows 8 (32 bit or 64 bit) Windows 10 (32 bit or 64 bit) Adobe Acrobat Reader

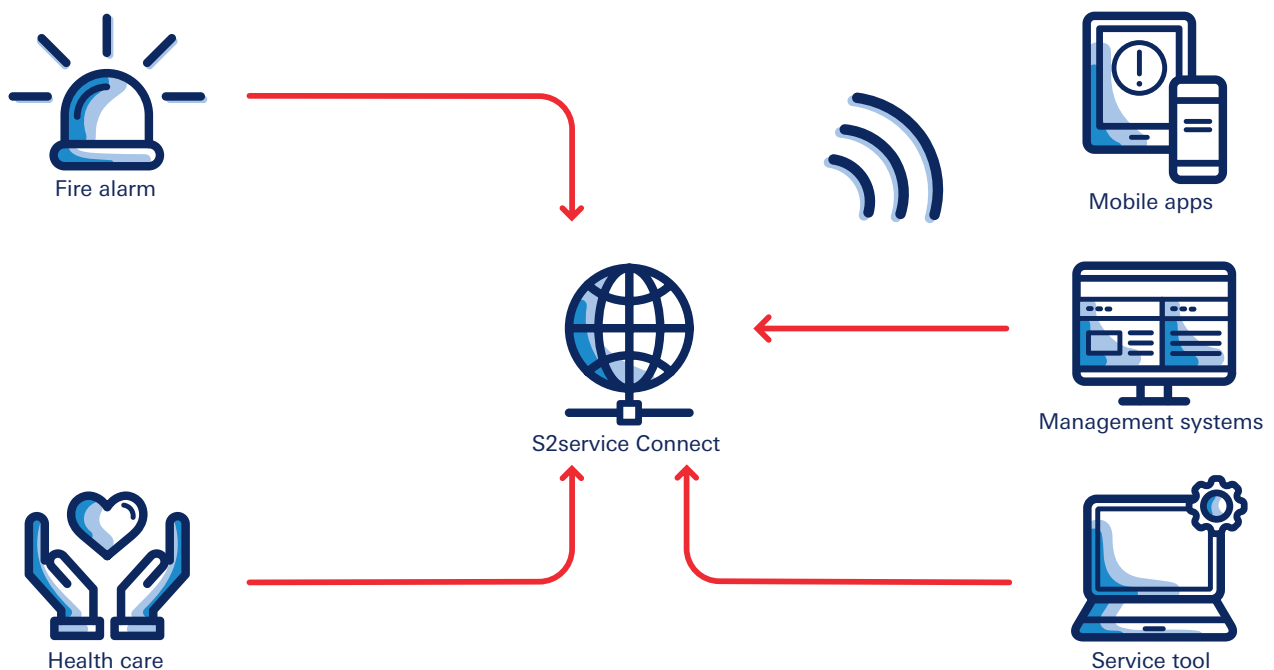
	Designation	Type	Article no.
	Dongle for Integral software	DONGLE USB	20-1300113-01

7.2 Integral Remote

The remote access solutions provided by Schrack Seconet allow the retrieval of information and the operation of security systems with mobile devices.

These applications are exclusively provided for services that are not intended for alarm notification purposes. Due to power failures (e.g. telecommunications networks, power networks or the internet), a lack of network availability (e.g. failure of a transmission device) or failures/faults in the mobile device, timely operation of the control panel cannot always be guaranteed.

The web-based service S2service Connect offers all the necessary components so that a connection to a security system (staff call profile e.g. fire alarm system) can be established worldwide via PC or mobile devices. This allows various applications to exchange data with a security system. The connection to the VPN network of S2service Connect is made using routers. PCs are connected to S2service Connect via software (e.g. Open VPN) and a valid VPN certificate. Mobile devices establish a connection via access data (user name, password) via an encrypted connection.



7.2.1 Features

- Provision of secure VPN connections
- Providing apps for mobile access to various trades (e.g. Integral EvoxX)
- E-mail service (e.g. to send e-mails from an fire alarm control panel)
- Providing a configuration interface for managing VPN connections and users
- Indication of scheduled maintenance on the web-based maintenance platform
- Central event list (event log memory of a fire alarm system) and reports



NOTE

When using remote access solutions, the standards and guidelines (e.g. TRVB) that apply to the respective system must be observed.

Remote access is only possible via secure data connections (e.g. VPN tunnel) and only in encrypted form. The IT systems must be protected by security programs (e.g. firewalls) in such a way that minimises damage (e.g. by viruses) as far as possible.

For all transmission types, the quality of the bandwidth is crucial for the smooth functioning of the applications.

Information retrieval and operation must only be carried out by qualified staff (e.g. fire protection officers).

The operation and configuration of the control panel via remote access may only be carried out with explicit permission/clearance from the operator.

**No.: 23-2010500-01**

VPN router LAN

The VPN router LAN is used for the simple connection of security systems (e.g. fire alarm control panel) to the SecureOnlinePlatform (SOP) via an existing Internet connection.

The router has two Ethernet interfaces and is therefore able to ensure a secure and simple connection of LAN networks via OpenVPN tunnel. In addition to the integrated firewall, the encrypted data transmission is also one of the most important security features. Integrated services such as network address translation (NAT) offer a high degree of flexibility.

The router is shipped fully pre-configured for using remote access over the SOP. The integrated web interface can be used to alter settings on site in accordance with customer-preferences. The configuration and updating of the firmware can be carried out using LAN or an auto update function.

Thanks to its compact footprint and the possibility to fit it on a on a top-hat rail in various ways.

Power can be supplied using the supplied power supply unit or using the power supply unit of the security system. Only the interfaces and indicators are described overleaf, which are required for operation in combination with the SOP.

Operating voltage range:	9 – 48 V DC
Nominal power uptake:	5.3 W
Connection:	plug-in power supply unit 230 V AC/ 12 V DC
Interfaces:	2 × Ethernet (10/100 Mbit/s)
Installation:	DIN top-hat rail, 35 mm
Degree of protection:	IP 30
Ambient temperature:	–40 °C to +75 °C
Case material:	Plastic
Case colour:	graphite black RAL 9011, platinum grey RAL 7036
Dimensions:	52 × 117 × 93 mm (H×W×D)
Weight:	approx. 170 g

**No.: 23-2010700-01**

VPN router LTE/LAN

The VPN router LTE/LAN is used for the redundant connection of security systems (e.g. fire alarm control panel) to the SecureOnlinePlatform (SOP) via LTE and LAN.

The router has two Ethernet interfaces and is therefore able to ensure a secure and simple connection of LAN networks via OpenVPN tunnel. In addition to the integrated firewall, the encrypted data transmission is also one of the most important security features. Integrated services such as network address translation (NAT) offer a high degree of flexibility.

The router is shipped fully pre-configured for using remote access over the SOP. The integrated web interface can be used to alter settings on site in accordance with customer-preferences. The configuration and updating of the firmware can be carried out using LAN or an auto update function.

Thanks to its compact footprint and the possibility to fit it on a on a top-hat rail in various ways.

Power can be supplied using the supplied power supply unit or using the power supply unit of the security system. Only the interfaces and indicators are described overleaf, which are required for operation in combination with the SOP.

Operating voltage range:	9 – 48 V DC
Nominal power uptake:	6.2 W
Connection:	plug-in power supply unit 230 V AC/ 12 V DC
Interfaces:	2 × Ethernet (10/100 Mbit/s) 2 × SIM card slots
Mobile communication standards:	GPRS/EDGE, UMTS, LTE
Accessories:	external LTE aerial
Ambient temperature:	–40 °C to +75 °C
Installation:	DIN top-hat rail, 35 mm
Case material:	Plastic
Case colour:	graphite black RAL 9011, platinum grey RAL 7036
Dimensions:	52 × 116 × 99 mm (H×W×D)
Weight:	approx. 200 g



No.: 20-1300201-01

Integral Message

Multi-user capable central event logging (e.g. alarms, faults) with active event indication and management of one or more fire alarm control panels. Events that have occurred are displayed on the monitor with pop-ups. With the Integral Desktop operating panel, the current status of the fire alarm system can be displayed and operating processes can be performed remotely.

Different authorisations can be defined via the user management. Integral Message supports three central areas: Documentation, information and interaction.

- Central indication of messages such as faults or alarms
- Indication and operation of Integral EvoxX fire alarm control panels
- Supports multi-server concept: up to 256 systems per server are possible, a maximum of 1000 systems per system
- Single- and multi-user capability (up to 32 clients possible)
- Interface available in German and English – other languages upon request
- Server and Client PC with Intel-compatible processor and at least 2 GB RAM (4 GB RAM recommended)
- 15 GB free hard disk space for server PC
- 100 MB free hard disk space for Client PC
- Operating system Microsoft Windows 10
- Microsoft SQL Server 2012 or higher (Express) with management tools



NOTE

The prerequisite for communication via the Internet is a connection between the fire alarm control panel and S2service Connect via S2service-VPN router.



No.: Upon request

Integral Mail

Automatic e-mail delivery from one or more fire alarm control panels when an event occurs (e.g. alarms, faults) to one or more recipients on PC, laptop, or mobile devices. Events and receivers can be planned in order to provide information in a targeted manner.

Any e-mail server that meets the requirements can be used. If no mail server is available, this function can also be realised via web service platform.

When used locally, Integral Mail can be connected to an e-mail server via the internal network. Alternatively, Integral Mail can also be operated via a direct connection of the fire alarm control panel with a DSL modem, if the function is desired without further remote access.

- Sending e-mails from the Integral EvoxX fire alarm control panel per event
- Different events are sent specific various receivers
- Transmission of all available information such as standardised and customer text
- E-mail server or free mail service with unencrypted transmission or mail server provided with the web service platform (S2service router with certificate required)
- Programming of the Integral EvoxX fire alarm control panel (server data and E-mail addresses)



NOTE

The prerequisite for communication via the Internet is a connection between the fire alarm control panel and S2service Connect via S2service-VPN router.



No.: 23-2010902-01

Integral Mobile

Integral Mobile enables location-independent, secure access to the Schrack Seconet fire alarm system in real-time via mobile devices (app) for indication and operation in the approved geodata area.

More detailed information on alarms and other events is transmitted in real-time via push notification or call, enabling a quick response and targeted handling of events. This shortens distances and saves important time in the event of a fire. The use of Integral Mobile minimises the number of fire brigade call-outs triggered by false alarms.

Another advantage is that it ensures normal operations, for example by reducing downtime. In addition, centralised, cross-location property management is guaranteed, enabling comprehensive and efficient management of different locations.

- Push, e-mail and VoIP notifications with all desired detailed information (alarm, fault, contamination, etc.)
- Geodata check for optional restriction of operation to the plant location
- Clear indication of the system's event log memory
- System list for clear visualisation of all connected systems
- Multi-level security concept for authorised staff
- Up to eight users per sub-control unit simultaneously



NOTE

The prerequisite for communication via the Internet is a connection between the fire alarm control panel and S2service Connect via S2service-VPN router.





No.: 20-1300200-01

Integral Desktop

Enables indication and operation of a Integral EvoxX fire alarm control panel from a Windows PC.

Calling up information on the current status of the system and having all necessary alarm and status messages sent automatically is just as possible as switching detector zones on and off or starting the intervention period. It is ensured that no unauthorized access to the fire alarm system can occur. The communication between the software and the fire alarm system is encrypted.

All incoming messages are delivered with e-mail. Advantage: It is possible to react at a point in time when a danger has already arisen but no damage has been done. This offers a decisive information advantage, especially when technical facilities are unmanned, in garages or warehouses. The reaction time of fire protection officers is reduced considerably.

To access Integral Desktop with a Windows PC, the application must be installed and a valid dongle must be available.

There are two options in order to use Integral Desktop: The PC application must be connected to S2service Connect via VPN or it is operated via customer network.

- Indication and operation of Integral EvoxX fire alarm control panels
- E-mail for notification of an event (e.g. fault) in combination with an Integral Remote Notification service (Integral Message or Integral Mail)
- Supports many language variants
- Up to eight users per sub-control unit simultaneously
- Choice between the Integral IMAP and Integral MAP operating panel



NOTE

The prerequisite for communication via the Internet is a connection between the fire alarm control panel and S2service Connect via S2service-VPN router.

Integral Remote accessories and installation materials

	Designation	Type	Article no.
	Integral Message – ULM dongle Software for Schrack Seconet Update	DONGLE IM	20-1300201-01
	Integral Mobile Basic 1 For 1 connection	IMOB BASIC 1	23-2010902-01
	Integral Mobile Basic 2 for 2 concurrent connections	IMOB BASIC 2	23-2010903-01
	Integral Mobile extension for 2 additional connections	IMOB EXT 2	23-2010904-01
	Integral Desktop – ULM dongle Software via Schrack Seconet Update	DONGLE IDT	20-1300200-01
	VPN certificate PC for Windows PC	VPN-Z-PC	23-2010800-01
	VPN router LAN-FAS VPN connection fire alarm control panel	VPN LAN FAS	23-2010500-01
	VPN router LTE/LAN-FAS VPN connection fire alarm control panel	VPN LTE-LAN FAS	23-2010700-01
	Router case IP 65 with top-hat rail, wiring, terminals	BMZ IP-BOX	23-2010010-01
	5-port network switch is required if a service interface (e.g. access for a technician's PC) is to be provided in parallel with an S2Service router.	EIBA5-100T/R	23-2010300-01
	Integral CX top-hat rail cabinet Cabinet made of sheet steel (red RAL 3000) with built-in top-hat rail and ducts, dimensions: 400 × 445 × 140 mm (H×W×D)	B6-CTR	20-1400115-01
	USB cable 3 m length	KAB USB 3	23-1020021-01
	USB cable 4.5 m length	KAB USB 45	23-1020022-01
	Panel omnidirect LTE antenna	A-XPOL-0001-V2-21	23-2010008-01

7.3 Secolog IP fire alarm operation control system



Multi-user graphical operation control system in accordance with ÖNORM F 3003 for simple, uncluttered and central indication and operation of fire alarm systems using the latest IP technology.

All messages and system states of the connected fire alarm control panels are collected and displayed clearly on one or multiple PC workstations.

7.3.1 Features

- Simple, standardised operation in alarm and command mode (e.g. control of fire alarm systems)
- System-wide short cuts, configurable work flows and control processes can be automatically or manually triggered
- Notification via SMS or e-mail (optional)
- Hierarchical password system with individual authorisation and password assignment with role and group function
- Powerful application graphics with dynamic zoom function
- Individual design of the user interface for each user and workstation
- Alarm printout, location and reaction text is individually configurable
- Automatic data back-up (optional)
- Monitoring of all connected systems and cables
- Complete logging with notes and report functions
- Configurable customer-specific reports and evaluations
- Event indication and operation either via symbol or text box display in the location
- Import tool for data detectors for automatic positioning and assigning of levels
- Different levels (layers) on the use of location graphics (e.g. only indication of all fire detectors)
- Convenient full-text search
- Application graphics can be imported from all common graphics and CAD systems
- Tested and certified in accordance with ÖNORM F 3003 (Austrian standard, fire alarm operation control systems)

7.3.2 Software license packages

	Designation	Type	Article no.
	Secolog IP Fire Basic 1000 Single workstation system fire up to 1000 data points	SECOLOG IP LIFB 1000	23-1000001-01
	Secolog IP Fire Basic 2500 Single workstation system fire up to 2500 data points	SECOLOG IP LIFB 2500	23-1000002-01
	Secolog IP Fire Basic 4500 Single workstation system fire up to 4500 data points	SECOLOG IP LIFB 4500	23-1000003-01
	Secolog IP Brand Basic 20 000 Single workstation system fire up to 20 000 data points	SECOLOG IP LIFB 20K	23-1000004-01
	Secolog IP Fire Basic driver Licence for an additional fire alarm system	SECOLOG IP LIFB DR	23-1000005-01
	Secolog IP fire extension 2500 from Fire Basic 1000 to 2500 data points	SECOLOG IP LIFU 2500	23-1000020-01
	Secolog IP fire extension 4500 from Fire Basic 2500 to 4500 data points	SECOLOG IP LIFU 4500	23-1000021-01
	Secolog IP fire extension 20 000 from Fire Basic 4500 to 20 000 data points	SECOLOG IP LIFU 20K	23-1000022-01
	Secolog IP Client one additional workstation	SECOLOG IP LIWS	23-1000200-01
	Secolog IP Mail for sending e-mails	SECOLOG IP LIMAIL	23-1000210-01
	Secolog IP Software update License for update from V 1.x to V 2.x	SECOLOG IP LI12 UPD	23-1000300-01
	Secolog IP Demo Demo licence for single user system FAS	SECOLOG IP DEMO	23-1000150-01

7.3.3 Components and accessories

	Designation	Type	Article no.
	Secolog IP Standard PC4 incl. operating system, for up to four monitors	SECOLOG IP PC4	23-1010002-01
	Secolog IP Client PC incl. operating system, for up to two monitors	SECOLOG IP PC CL2	23-1010003-01
	Secolog IP monitor 24" E241i 1920 x 1200; DVI/VGA/DP/IPS	SECOLOG IP BS 24	23-1010051-01
	Secolog IP location printer A4	SECOLOG IP EDR	23-1010100-01
	Secolog IP location printer A3	SECOLOG IP EDR A3	23-1010101-01
	Secolog IP emergency power supply for Secolog IP PCs	SECOLOG IP EPS	23-1020001-01
	VPN certificate PC for Windows PC	VPN-Z-PC	23-2010800-01
	VPN router LAN-FAS VPN connection fire alarm control panel	VPN LAN FAS	23-2010500-01
	VPN router LTE/LAN-FAS VPN connection fire alarm control panel	VPN LTE-LAN FAS	23-2010700-01
	RS232/USI PC cable	SECOLOG IP PC KAB	23-1020020-01
	USB cable 3 m length	KAB USB 3	23-1020021-01
	USB cable 4.5 m length	KAB USB 45	23-1020022-01

7.4 Interfaces and protocols

With the increase in electronic security systems, the demand for their networking is growing. The universal interfaces of the Integral EvoxX fire alarm control panel ensure that the systems speak the same language, thus enabling economical building automation to be implemented.

- Maximizing economy, flexibility, transparency and energy efficiency in building automation
- The Integral EvoxX fire alarm control panel becomes a universal security control panel
- Modular and flexible: The connection to various subsystems is possible
- Synergy effects through networking with security systems

The Integral EvoxX fire alarm control panel supports the interfaces OPC UA, ISP-IP, ESPA 4.4.4 and Modbus-TCP. The subsystems can be connected and networked with each other.

FAS converter basic



No.: 20-1301000-01

Interface converter for connecting an Integral EvoxX fire alarm control panel to a superordinate management system e.g. building technology via LAN. The converter has two LAN interfaces via which the fire alarm control panel is connected and a protocol can be output.

It contains all licences required to provide the OPC UA default interface up to a maximum of 10000 data points or BacNET up to a maximum of 5400 elements.

The fanless FAS converter has status LEDs to indicate the operating states and can be easily installed in control cabinets with the mounting plate attached to the rear wall.

Operating voltage range:	22 – 30 V DC (24 V DC power supply unit)
Power consumption:	max. 14 W with basic equipment
Interfaces:	2 × RJ-45 Ethernet 100/1000BASE-T 1 × display port 1 × USB 2.0 1 × USB 3.0
Data points:	max. 10000
Degree of protection:	IP 20
Ambient temperature:	0 °C to +55 °C
Relative air humidity:	95 % without condensation
Case material:	Aluminium-zinc die-casting
Dimensions:	
with mounting plate:	82 × 82 × 40.6 mm (H×W×D)
without mounting plate:	96 × 91 × 40.6 mm (H×W×D)
Weight:	
with mounting plate:	450 g
without mounting plate:	400 g



No.: 20-1301002-01

FAS converter OPC UA unlimited

Interface converter for connecting an Integral EvoxX fire alarm control panel to a superordinate management system e.g. building technology via LAN. The converter has four LAN interfaces via which the fire alarm control panel is connected and up to three different protocols can be output simultaneously.

All licences required to provide the default interface OPC UA with more than 10 000 data points are included.

The FAS converter is equipped with a controllable, double ball-bearing fan, which is replaceable. It also has status LEDs on the front to indicate the operating states and can be easily installed in control cabinets with the mounting plate attached to the rear wall.

The country-specific regulations for the planning and installation of automatic fire alarm systems apply for planning the system.

Operating voltage range:	22 – 30 V DC (24 V DC power supply unit)
Power consumption:	max. 60 W with basic equipment
Interfaces:	4 × RJ-45 Ethernet 100/1000BASE-T 2 × display port 4 × USB 3.0
Data points:	more than 10 000
Degree of protection:	IP 20
Ambient temperature:	0 °C to +55 °C
Relative air humidity:	95 % without condensation
Case material:	Aluminium-zinc die-casting
Dimensions:	
with mounting plate:	150 × 145 × 78.6 mm (H×W×D)
without mounting plate:	133 × 129 × 78.6 mm (H×W×D)
Weight:	
with mounting plate:	1700 g
without mounting plate:	1460 g

Dongle for implementing a protocol



When ordering the dongle, the requested protocols must be mentioned. For each protocol a protocol description, a test tool and a tool description are provided.

No.: 20-1300202-01

ISP-IP interface



No.: Upon request

Protocol for connecting Integral EvoxX fire alarm control panels to a super-ordinate management system. Further details, hardware and software requirements upon request.

ESPA 4.4.4 interface



No.: Upon request

Protocol for connecting Integral EvoxX fire alarm control panels to a super-ordinate management system. Further details, hardware and software requirements upon request.

Modbus-TCP interface



No.: Upon request

Protocol for connecting Integral EvoxX fire alarm control panels to a super-ordinate management system. Further details, hardware and software requirements upon request.

ISP-IP licence for FAS converter










No.: 20-1301004-01

Licence for connecting Integral EvoxX fire alarm control panels to a super-ordinate management system.

Only in connection with a hardware PC from Beckhoff.

Interfaces and protocols

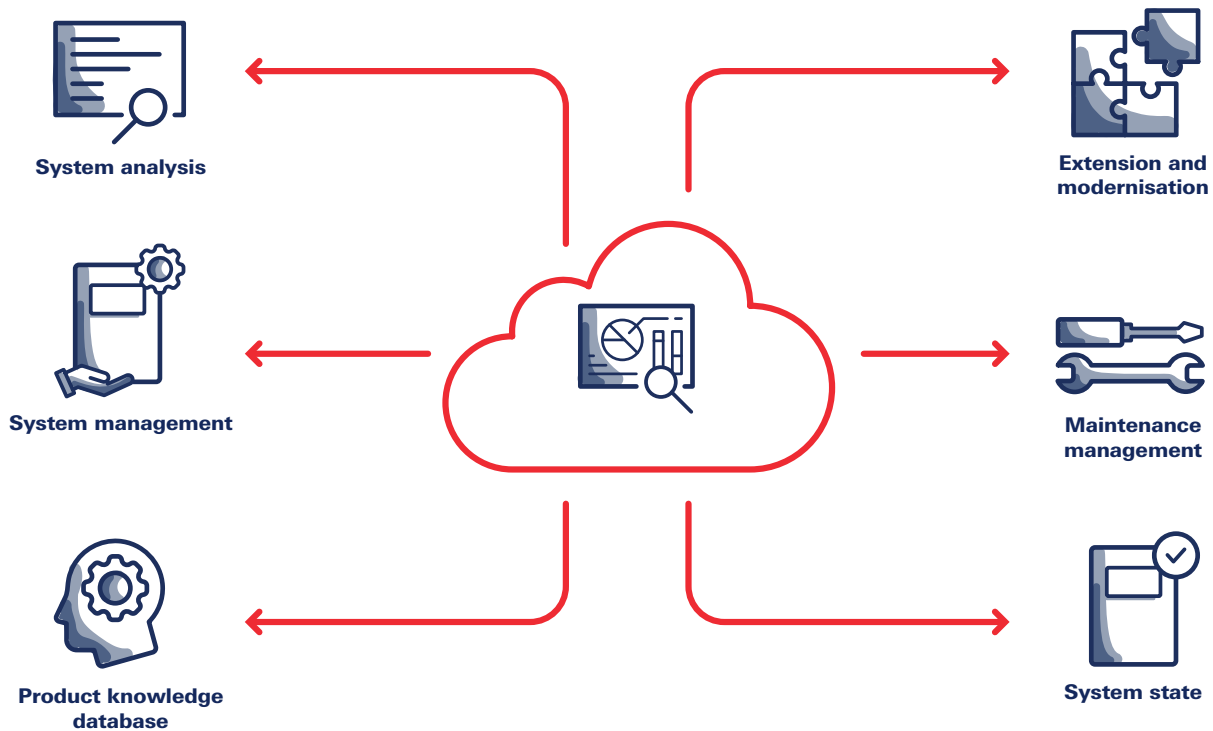
	Designation	Type	Article no.
	FAS converter OPC UA basic PC incl. operating SW and licenses	FAS OPC UA BASIC	20-1301000-01
	FAS converter OPC UA unlimited PC incl. operating SW and licenses	FAS OPC UA UNLTD	20-1301002-01
	Support tools for protocols ULM dongle	DONGLE USB PROT	20-1300202-01
	ISP-IP interface	ISP-IP	Upon request
	ESPA 4.4.4 interface	ESPA 4.4.4	Upon request
	Modbus-TCP interface	Modbus-TCP	Upon request
	ISP-IP licence for FAS converter Standalone licence for Beckhoff PC-HW	FAS ISP IP LIC	20-1301004-01

7.5 Service Platform

7.5.1 Overview

The Schrack Seconet Service Platform is an intelligent, highly secure web application that integrates services for users and supports the commissioning, maintenance, troubleshooting and inspection of fire alarm systems.

The Service Platform is operated as a private cloud in our highly secure data centre, and all systems and locations can be efficiently managed via a clear dashboard.



The most important features

- Reliable product and knowledge management through always up-to-date content
- Location-independent system data management
- Digitally supported maintenance
- Permanent and automated system analysis
- Intelligent support for extension and modernisation
- Transparent and detailed system event management

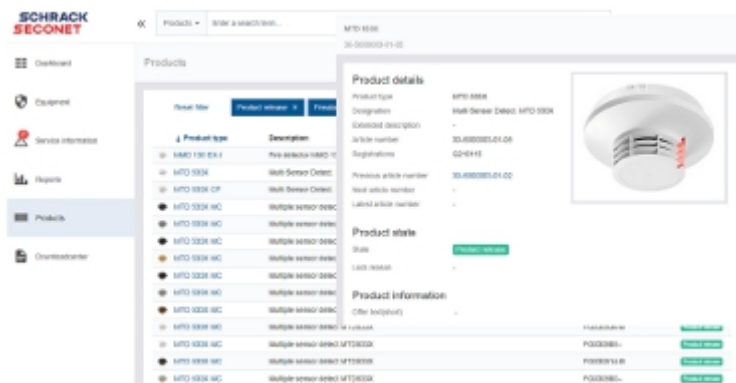
7.5.2 Functions

Our partners can choose from different packages, each containing different functions. The entry-level package Free is free of charge and already offers everything needed to manage a certain number of systems; the packages Basic and Premium offer different levels of expansion and increase the number of systems that can be managed.

Basic functions

- Access to the Service Platform via standard internet browser
- User interface in German and English
- Global full text search function with different categories

Product knowledge database



The Service Platform is a reliable and central source of information: it contains extensive information such as data sheets, installation manuals, planning tools, certificates and much more. All contents of this knowledge base are always up to date to support with the appropriate information in every situation of the entire system life cycle.

- Indication of products approved by Schrack Seconet
- View and download product documentation approved by Schrack Seconet
- Retrieve details of each product and associated product documentation

System management

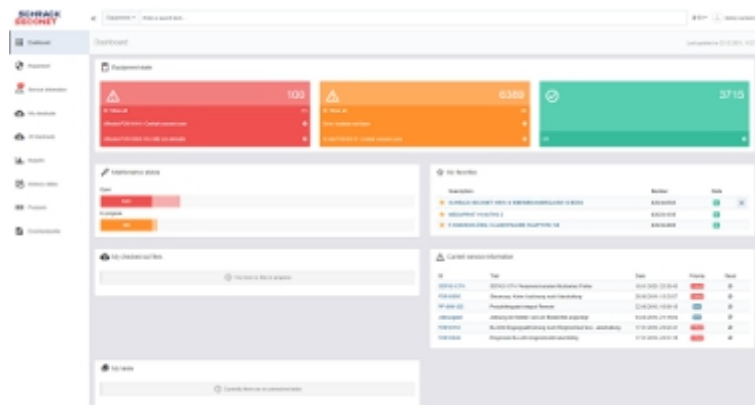


The system management provides a precise overview of the systems under management: All project information, programming, building plans, etc. are centrally organised here.

- Management of site master data and programming files for the sites
- Checking out and checking in programming files
- Automatic versioning of programming files
- Listing of installed device types and quantities for each location

- Indication of the structure of each location in detail incl. the installed hardware and all logical elements
- Listing of all tasks assigned to a location

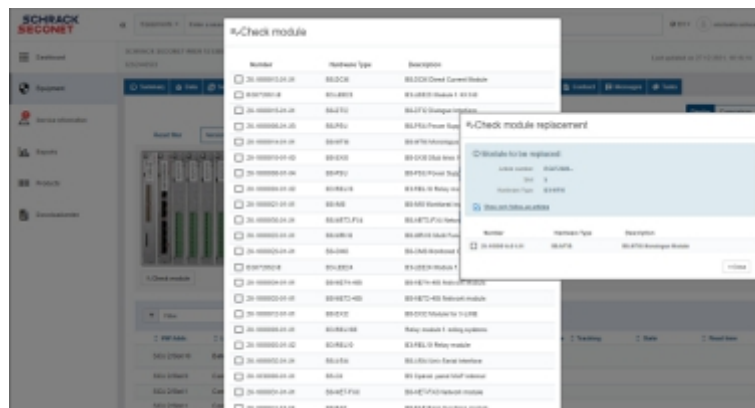
System analysis



The system analysis takes over the permanent check of all systems. A clear dashboard shows all the results of the analysis and assigns them to the three traffic light colours. Situations requiring action are thus identified at an early stage, and measures can be planned in advance. The Service Platform also provides all the information needed for system improvements.

- Analysis of the location status based on the uploaded programming files
- Indication of the analysis result and the required measures for each site

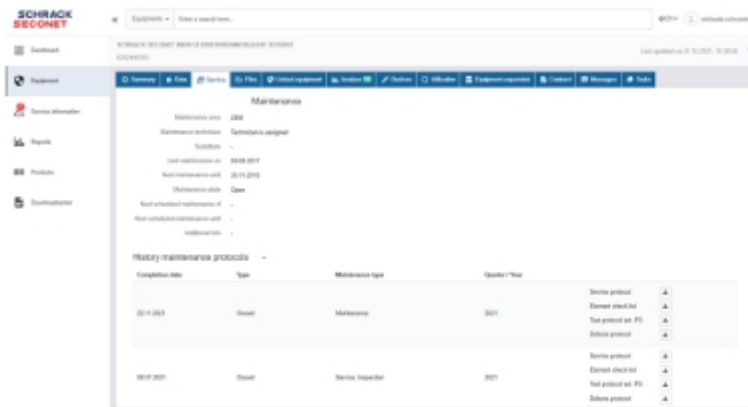
Extension and modernisation



The extension and modernisation system checks the compatibility of the currently stored system programming with the manufacturer's information. Complex changes can thus be planned correctly from a distance and without time-consuming detailed research with little effort.

- Indication of the current software version, with a recommendation for an upgrade to a newer software version, if applicable
- Compatibility assistant to easily check whether a selected hardware is suitable for a location
- Indication of the products that are no longer available and the successor products suitable for the system
- Replacement recommendation for fire detectors

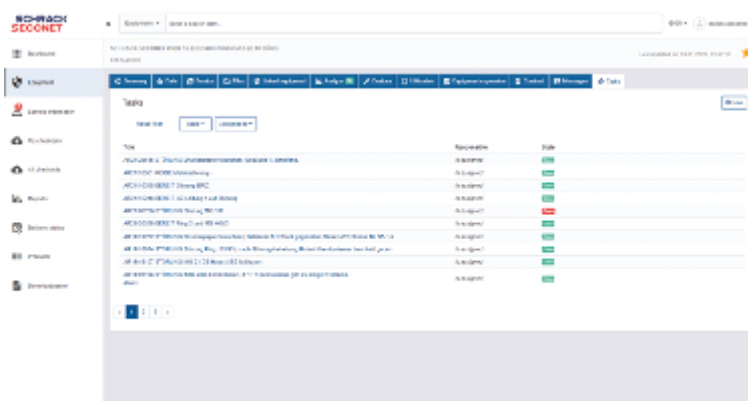
Maintenance management



Maintenance management digitally supports all maintenance work. When testing each individual element of a system, the test report is created automatically (only in combination with a service router). Defects can be recorded even better via photo documentation, and integrated scheduling enables targeted planning and processing of future maintenance measures:

- Assistant for creating a digital maintenance report
- Documentation of defects with text and picture
- Maintenance report history
- Automatic logging of maintenance work (only in connection with Integral Remote)

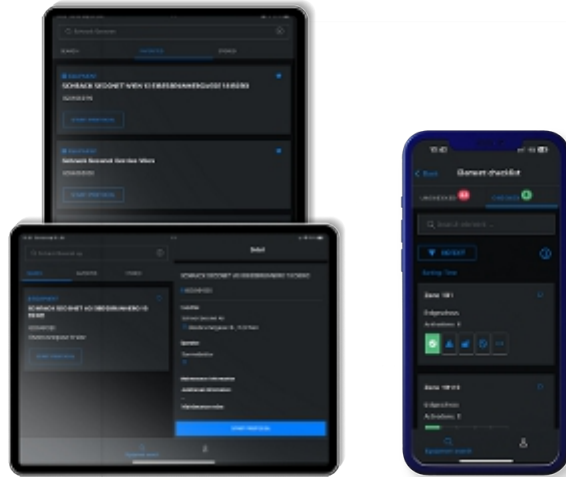
System state (only in connection with Integral Remote)



The detailed event management provides a constant real-time overview of the messages of all systems. Building on the information of the system management, a compact overview status or fault messages of all systems. In the sense of predictive maintenance, it is possible to react immediately or plan in a timely manner. The integrated team organisation functions offer further advantages: Tasks can be issued digitally and collaboration can be planned efficiently.

- Listing of messages from the fire alarm control panels
- Creation and management of tasks for site-related messages

Integral Service App



The Integral Service App, included in the premium package of the Service Platform, facilitates the maintenance of Schrack Seconet fire alarm systems. The app offers a variety of functions that make the maintenance process efficient and structured.

Thanks to the checklist-based maintenance, the app guides you through all relevant maintenance steps one by one. A special function is the live view of tested elements in online systems, which makes testing much easier.

Defects can be documented, photographed and marked directly in the app. Inaccessible or defective elements can also be labelled, which increases the accuracy of maintenance work.

The app works both online and offline and synchronises logs and information directly with the Service Platform. This ensures that data is always up-to-date and supports digital logging.

Maintenance results can be exported in various languages, signed directly on mobile devices and sent by email. The system list provides a clear indication of all systems with important information such as contact information, location, contract data and past logs.

- Checklist-based maintenance
- Live view of checked elements for online systems
- Documentation and marking of defects
- Online and offline functionality
- Synchronisation with the Service Platform
- Export maintenance results to various languages and log types
- Sign on mobile devices and send via email
- Clear system list with systems and customer information

7.5.3 Licence packages for partners

	FREE	BASIC	PREMIUM
Product knowledge management	•	•	•
System management	•	•	•
System analysis	for 1 site	for 10 sites	for 50 sites
Extension and modernisation	for 1 site	for 10 sites	for 50 sites
Maintenance management	–	for 1 site	for 50 sites
Event management (only in connection with Integral Remote)	–	for 1 site	for 50 sites
Available storage space	250 MB	500 MB	2 GB
Integral Service App	–	–	•



NOTE

Integral Remote router including activation are NOT included in the scope of services!

A site corresponds to a project file in the Service Platform.

Licences for Service Platform

	Designation	Type	Article no.
	Service Platform licence FREE	SP-PA-FREE	23-2001000-01
	Service Platform licence BASIC	SP-PA-BASIC	23-2001001-01
	Service Platform Licence PREMIUM	SP-PA-PREMIUM	23-2001002-01

8 Peripheral

Peripheral devices (detectors, modules and alarm devices) are connected to the fire alarm control panels via stub line or loop circuit. They are responsible for the reliable detection (automatic and/or manual) and rapid alarming (acoustic and/or visual) of a fire and offer the possibility of controlling monitored consumers, integrating special detectors etc.

8.1 Point detectors and detector base

Point detectors are fire detectors that are placed on the ceiling and automatically detect a fire.

8.1.1 Integral X-LINE

The following point fire detectors are devices on the Integral X-LINE loop and can be individually addressed.

Settings according to EN 54

Standard	Typical applications	MTD 533X	MTD 533X-S	MTD 533X-SP MTD 533X-SP EE	CMD 533X
EN 54-3	Acoustic signal devices to warn staff in the event of a fire (e.g. hotel rooms, public buildings)	—	•	•	—
EN 54-5	Heat detectors in areas where smoke is expected to be a deceptive quantity (e.g. smoking areas)	•	•	•	•
EN 54-7	Smoke detectors in standard applications for rapid detection in the event of a fire with formation of smoke (e.g. office buildings)	•	•	•	•
EN 54-26	CO detectors in the event of a fire with carbon monoxide development for purely technical alarms without forwarding to the fire brigade	—	—	—	•
EN 54-29	Combined smoke and heat detectors where short-term sources of interference such as smoke, dust, insects and steam can occur (e.g. warehouses)	•	•	•	•
EN 54-30	Combined CO and heat detectors in areas where smoke and heat are expected to be a source of deceptive alarms (e.g. industrial kitchens)	—	—	—	•

MTD 533X multiple sensor detector



No.: 30-5000003-01

The multiple sensor detector MTD 533X is a combined smoke and heat detector and is used to detect a fire in buildings.

The detector provides early detection of smouldering and open fires by detecting and evaluating both fire characteristics smoke and heat. The CUBUS levelling automatically adjusts to the ambient conditions.

The Tyndall principle (scattered light) is used for smoke detection and for heat detection the NTC sensor principle is used. If the signal values specified in the detector are exceeded, the corresponding message is sent to the fire alarm control panel.

The type MTD 533X CP is available for difficult ambient conditions with improved protection against increased air humidity and resistance to corrosion.

The MTD 533X PG variant is provided with an additional protective grille fitted and is intended for environments with heavy insect loads.

Fitting a detector heater (not approved by VdS) enables the operation at low temperature to prevent icing or condensation.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.15 mA, 0.12 mA typ.
Alarm output:	programmable:
Output current:	0.1 mA/1 mA/5 mA
Current consumption:	0.7 mA/2.1 mA/7.5 mA
Alarm LED active:	max. 2.5 mA
Output voltage:	5 V or 6.8 V DC
Detector base:	USB 501-x or USB 502-x
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Response behaviour:	in accordance with EN 54-5 (category A1, A2, B, Index S and R), EN 54-7, EN 54-29
Degree of protection with USB 502:	IP 44
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Air speed:	max. 20 m/s
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	118.8 × 58.1 mm (D×H)
Weight:	125 g
VdS approval:	G210115
Declaration of Performance:	CPR-30-21-014



No.: 30-5000007-01

MTD 533X-S multiple sensor detector

The multiple sensor detector MTD 533X-S is a combined smoke and heat detector with integrated audio output and is used to detect a fire in buildings.

The detector provides early detection of smouldering and open fires by detecting and evaluating both fire characteristics smoke and heat. The CUBUS levelling automatically adjusts to the ambient conditions.

The Tyndall principle (scattered light) is used for smoke detection and for heat detection the NTC sensor principle is used. If the signal values specified in the detector are exceeded, the corresponding message is sent to the fire alarm control panel.

The detector has four adjustable tone types (DIN tone, Slow Whoop, Sweden tone and continuous tone) at three adjustable volume levels for different ambient conditions.

From version -03, an additional protective grille PG 533 PU11 can be attached for environments with heavy insect loads.

Fitting a detector heater (not approved by VdS) enables the operation at low temperature to prevent icing or condensation.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.15 mA, 0.12 mA typ.
Alarm output:	programmable:
Output current:	0.1 mA/1 mA/5 mA
Current consumption:	0.7 mA/2.1 mA/7.5 mA
Alarm LED active:	max. 2.5 mA
Output voltage:	5 V or 6.8 V DC
Detector base:	USB 501-x or USB 502-x
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Response behaviour:	in accordance with EN 54-5 (category A1, A2, B, Index S and R), EN 54-7, EN 54-29
Tone types:	
DIN tone:	1200 ~ 500 Hz
Slow Whoop:	500 ~ 1200 Hz
Sweden tone:	660 Hz (150 ms on, 150 ms off)
Continuous tone:	990 Hz
Volume (DIN tone):	92 dB/81 dB/69 dB
Degree of protection with USB 502:	IP 22
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Air speed:	max. 20 m/s
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	118.8 × 58.1 mm (D×H)
Weight:	135 g
VdS approval:	G213051
Declaration of Performance:	CPR-30-21-016



No.: 30-5000010-01
No.: 30-5000010-03

MTD 533X-SP/-SP EE multiple sensor detector

The multiple sensor detector MTD 533X-SP/-SP EE is a combined smoke and heat detector with integrated audio and speech output and is used to detect and signal a fire alarm in buildings.

The detector provides early detection of smouldering and open fires by detecting and evaluating both fire characteristics smoke and heat. The CUBUS levelling automatically adjusts to the ambient conditions.

The Tyndall principle (scattered light) is used for smoke detection and for heat detection the NTC sensor principle is used. If the signal values specified in the detector are exceeded, the corresponding message is sent to the fire alarm control panel.

The detector has four adjustable tone types (DIN tone, Slow Whoop, Sweden tone and continuous tone) at three adjustable volume levels for different ambient conditions.

The speech output is done with three possible text messages in two adjustable volumes.

MTD 533X-SP: German, English, French, Italian, Polish, Romanian, Russian

MTD 533X-SP EE: German, English, Dutch, Czech, Hungarian, Swedish, Croatian, Turkish, Hebrew, Slovak.

From version -04, an additional protective grille PG 533 PU11 can be attached for environments with heavy insect loads.

Fitting a detector heater (not approved by VdS) enables the operation at low temperature to prevent icing or condensation.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.15 mA, 0.12 mA typ.
Alarm output:	programmable:
Output current:	0.1 mA/1 mA/5 mA
Current consumption:	0.7 mA/2.1 mA/7.5 mA
Alarm LED active:	max. 2.5 mA
Output voltage:	5 V or 6.8 V DC
Detector base:	USB 501-x or USB 502-x
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Response behaviour:	in accordance with EN 54-5 (category A1, A2, B, Index S and R), EN 54-7, EN 54-29
Tone types:	
DIN tone:	1200 ~ 500 Hz
Slow Whoop:	500 ~ 1200 Hz
Sweden tone:	660 Hz (150 ms on, 150 ms off)
Continuous tone:	990 Hz
Volume (DIN tone):	92 dB/81 dB/69 dB
Speech output:	three text messages selectable
Volume:	70 – 78 dB/66 – 74 dB
Degree of protection with USB 502:	IP 22
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Air speed:	max. 20 m/s
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	118.8 × 58.1 mm (D×H)
Weight:	135 g
VdS approval:	G213051
Declaration of Performance:	CPR-30-13-023

CMD 533X multiple sensor detector



No.: 30-5000006-01

The CMD 533X multiple sensor detector is a combined smoke, heat and carbon monoxide detector and is used to detect a fire in buildings.

The detector provides early detection of smouldering and open fires by detecting and evaluating both fire characteristics smoke and heat. The CUBUS levelling automatically adjusts to the ambient conditions.

The Tyndall principle (scattered light) is used for smoke detection and for heat detection the NTC sensor principle is used. If the signal values specified in the detector are exceeded, the corresponding message is sent to the fire alarm control panel.

Integrated alarm filter to reduce deceptive alarms and permanent monitoring of all integrated sensors that enable multi-standard use on three parallel channels (smoke, heat, CO).

Fitting a detector heater (not approved by VdS) enables the operation at low temperature to prevent icing or condensation.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.19 mA, 0.15 mA typ.
Alarm output:	programmable:
Output current:	0.1 mA/1 mA/5 mA
Current consumption:	0.7 mA/2.1 mA/7.5 mA
Alarm LED active:	max. 2.5 mA
Output voltage:	5 V or 6.8 V DC
Detector base:	USB 501-x or USB 502-x
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Response behaviour:	in accordance with EN 54-5 (category A1, A2, B, Index S and R), EN 54-7, EN 54-29, EN 54-30
CO gas sensitivity:	40 ppm
Degree of protection with USB 502:	IP 40
Ambient temperature:	–20 °C to +50 °C
Storage temperature:	0 °C to +20 °C
Relative air humidity:	10 – 95 %
Air speed:	max. 20 m/s
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	118.8 × 58.1 mm (D×H)
Weight:	125 g
VdS approval:	G212156
Declaration of Performance:	CPR-30-21-001

**No.: 30-5500005-01**

LKM-SET duct smoke detector case

The duct smoke detector is used for detecting smoke from fires in ventilation ducts and consists of a plastic case with a built-in USB 502-1 detector base, an inlet pipe and a system detector LKM 593X.

The LKM 593X is designed for use in ventilation ducts from 150 mm to 3 m wide, or in circular ducts with a diameter of 200 mm to 3 m.

The detector base and all necessary plugs and seals are included; the duct smoke detector LKM 593X must be ordered separately.

Area for use:	ventilation ducts
Operating voltage range:	12 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.15 mA, 0.12 mA typ.
Ventilation duct rectangular:	side lengths 150 mm to 3 m
Ventilation duct round:	diameter 200 mm to 3 m
Ventilation pipe length:	140 – 345 mm
Apertures for fittings:	
for inlet/outlet pipe:	2 × Ø 28 – 30 mm, 150 mm distance
fastening the case:	2 × max. Ø 6 mm, 206 mm distance
Cable inlet:	4 × Ø 6 – 10 mm
Suitable for detector type:	LKM 593X
Air speed:	max. 20 m/s
Degree of protection on duct surface:	IP 54
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Case material:	PC/anodised aluminium pipe
Case colour:	blue/transparent
Dimensions without pipe:	95.3 × 247 × 135 mm (H×W×D)
Weight:	
with pipe:	approx. 485 g
without pipe:	approx. 392 g
VdS approval:	G214124
Declaration of Performance:	CPR-30-13-025



No.: 30-5500001-01

LKM 593X duct smoke detector

Exclusively for use in the LKM-SET.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	0.15 mA typ.
Alarm current:	2.65 mA typ.
Protection class in the LKM-SET:	IP 54
Ambient temperature:	–25 °C to +60 °C
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	118.8 × 58.1 mm (D×H)
Weight:	125 g
VdS approval:	G214124
Declaration of Performance:	CPR-30-13-025

USB 502-1 detector base



No.: 30-4100005-01

Detector base for surface mounting in dry and damp rooms.

A four pin terminal block can be fitted in the designated snap-fit holder to form additional isolation points.

The detector base contains a green terminal block with a ring contact, the loop circuit is closed even without the detector being inserted.

Area for use:	dry and damp rooms
Mounting:	Surface mounting
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	depending on the used detector
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	118.5 × 28 mm (D×H)
Weight:	approx. 70 g
VdS approval:	part of detector approvals
Declaration of Performance:	part of detector approvals



No.: 30-4100005-06

USB 502-6 detector base without base contact

Detector base for surface mounting in dry and damp rooms.

A four pin terminal block can be fitted in the designated snap-fit holder to form additional isolation points.

The detector base contains a black terminal block without a ring contact, the loop circuit is only closed when the detector is inserted.

Area for use:	dry and damp rooms
Mounting:	Surface mounting
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	depending on the used detector
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	118.5 × 28 mm (D×H)
Weight:	approx. 70 g
VdS approval:	part of detector approvals
Declaration of Performance:	part of detector approvals

**No.: 30-4100005-02**

USB 502-2 detector base for cavity ceiling

Detector base for flush mounting in each standard cavity ceiling consisting of the standard base USB 502-1, an installation ring with fastening clips, a collar and a bezel ring.

Area for use:	dry rooms, cavity ceiling installation
Mounting:	Flush-mounted
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	depending on the used detector
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	158 × 54.5 mm (D×H)
Weight:	approx. 180 g
VdS approval:	part of detector approvals
Declaration of Performance:	part of detector approvals

**No.: 30-4100005-03**

USB 502-3 detector base for damp rooms

Detector base for surface mounting in damp rooms. Use in environments with damp ceilings consisting of a installation box with four cable inlets, the USB 502-1 standard base and a sealing ring made of closed cell rubber.

Area for use:	damp rooms
Mounting:	Surface mounting
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	depending on the used detector
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	123.5 × 53 mm (D×H)
Weight:	approx. 150 g
VdS approval:	part of detector approvals
Declaration of Performance:	part of detector approvals

**No.: 30-4100005-04**

USB 502-4 detector base for concrete installation

Detector base for flush mounting in concrete. Is mounted on the formwork, poured into concrete and consists of the standard base USB 502-1, a concrete box, mounting ring with sleeve and gasket insert and a blind ring. The installation cable can be feed in via the concrete box.

Area for use:	damp rooms
Mounting:	Flush-mounted
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	depending on the used detector
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	158 × 96.5 mm (D×H)
Weight:	approx. 220 g
VdS approval:	part of detector approvals
Declaration of Performance:	part of detector approvals

**No.: 30-4100005-05**

USB 502-5 detector base for intermediate floors

Detector base for installation in cable ducts and intermediate floors. Consists of a pipe clamp which can be used for attaching the base to pipes, braces or the like. The base can be rotated in order to align the detector.

Area for use:	intermediate floors and cable ducts
Mounting:	Surface mounting
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	depending on the used detector
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	206 × 73 mm (D×H)
Weight:	approx. 220 g
VdS approval:	part of detector approvals
Declaration of Performance:	part of detector approvals

**No.: 20-2100019-01**

USB 502-20 detector base with illuminated ring

Detector base for surface mounting with integrated illuminated ring. The optical light pipe is integrated in the lower area of the base and provides an additional individual controllable visual indication to the alarm LED of the inserted detector.

The detector base contains a black terminal block without a ring contact, the loop circuit is only closed when the detector is inserted.

Area for use:	dry and damp rooms
Mounting:	Surface mounting
Current consumption:	0.9 mA typ.
Signal transmission:	serial, two-wire technology
Illuminated ring (not approved by VdS):	
Colour:	red (alarm)
Visibility:	360°
Flash frequency:	1.2 – 3 Hz
Luminous intensity:	approx. 1 cd
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	depending on the used detector
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	118 × 28 mm (D×H)
Weight:	approx. 90 g
VdS approval:	part of detector approvals
Declaration of Performance:	part of detector approvals



No.: Upon request

Coloured detectors

All multiple sensor detectors and detector bases are also available in coloured versions, the minimum order quantity is 15 pieces each. When ordering, please specify the type designation of the detector (respectively the detector base) with addition MC and the desired colour from the RAL Classic colour system (four-digit RAL number).

Example: MTD 533X-S MC – RAL 3001



NOTE

All metal-containing and all fluorescent paints in this colour system are unavailable:

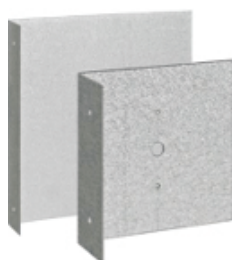
- RAL 1013 (pearl white)
- RAL 1035 (pearl beige)
- RAL 1036 (pearl gold)
- RAL 2013 (pearl orange)
- RAL 3032 (pearl ruby red)
- RAL 3033 (pearl pink)
- RAL 4011 (pearl violet)
- RAL 4012 (pearl blackberry)
- RAL 5025 (pearl gentian)
- RAL 5026 (pearl midnight blue)
- RAL 6035 (pearl green)
- RAL 6036 (pearl opal green)
- RAL 7048 (pearl mouse grey)
- RAL 8029 (pearl copper)
- RAL 9006 (pearl white aluminium)
- RAL 9007 (grey aluminium)
- RAL 9022 (pearl light grey)
- RAL 9023 (pearl dark grey)
- RAL 1026 (luminous yellow)
- RAL 2005 (luminous orange)
- RAL 2007 (luminous bright orange)
- RAL 3024 (luminous red)
- RAL 3026 (luminous bright red)

**No.: FG020480**

Detector heater for USB

The detector heater allows the operation of multiple sensor detectors in critical ambient conditions, such as icing or moisture condensation in cold stores, collectors, cheese cellars, power stations, loading ramps. The temperature of the detector is increased by approximately 2 °C above the ambient temperature, which significantly reduces the risk of condensation. An external power supply unit is required for the detector heater's power supply, as this cannot be powered directly from the loop. The wiring is done via the base terminal block and attached to the detector base using cable tie mounts. As an alternative to the base terminal block, other terminals can also be used.

Operating voltage range:	20 – 30 V DC
Residual ripple:	max. 2 V
Operating current:	35 – 55 mA
Wattage:	1.2 W
Resistance:	580 Ω
Wire cross section/terminal:	2 × 0.5 – 2.5 mm ²
Ambient temperature:	–30 °C to +40 °C

**No.: FG020205**

Baffle plate for riser ducts

Hot-dip galvanized sheet steel plate for improving detection properties of smoke detectors in riser ducts, including drill holes for fitting and cable inlet for installation.

Material:	sheet steel, 1.2 mm, hot-dip galvanised
Dimensions:	
FG020205:	130 × 130 mm (H×W)
FG020206:	300 × 300 mm (H×W)

**No.: FG020520**


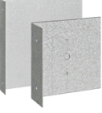





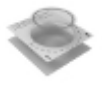

Mounting bracket for detector base




The bracket is hinged with an angle of tilt of 0 – 90 degrees, and height adjustable between 200 – 350 millimetre. The detector base is attached using two M4 screws. Detector not included.

Height adjustment:	200 – 350 mm with inbus 4 mm
Angle of tilt:	0 – 90° with inbus 3 mm
Material:	sheet steel, powder coated
Colour:	grey RAL 7035
Dimensions:	175 × 105 × 200 – 350 (L×W×H)

X-LINE point detectors and detector bases

	Designation	Type	Article no.
	MTD 533X multiple sensor detector	MTD 533X	30-5000003-01
	MTD 533X CP multiple sensor detector	MTD 533X CP	30-5000003-51
	MTD 533X-S multiple sensor detector	MTD 533X-S	30-5000007-01
	MTD 533X-SP multiple sensor detector	MTD 533X-SP	30-5000010-01
	MTD 533X-SP EE multiple sensor detector	MTD 533X-SP EE	30-5000010-03
	Multiple sensor detector with increased insect protection	MTD 533X PG	30-5000025-01
	CMD 533X multiple sensor detector	CMD 533X	30-5000006-01
	LKM case (without detector)	LKM-SET	30-5500005-01
	LKM 593X duct smoke detector	LKM 593X	30-5500001-01
	Detector base USB 502-1	USB 502-1	30-4100005-01
	Detector base USB 502-6 without base contact	USB 502-6	30-4100005-06
	Detector base USB 502-2 for cavity ceiling	USB 502-2	30-4100005-02
	Detector base USB 502-3 for damp rooms	USB 502-3	30-4100005-03
	Detector base USB 502-4 for concrete installation	USB 502-4	30-4100005-04
	Detector base USB 502-5 for intermediate floors	USB 502-5	30-4100005-05
	Detector base USB 502-20 with illuminated ring	USB 502-20	20-2100019-01

	Designation	Type	Article no.
	Detector heater for detector base USB	FDBH291	FG020480
	Adhesive cable tie mounts for detector heater	MM KBH KL	MM000047
	Baffle plate for riser ducts 130 × 130 mm	STBLECH	FG020205
	Baffle plate for riser ducts 300 × 300 mm	STBLECH G	FG020206
	Mounting bracket for detector base	MMK 200/350	FG020520
	Support point clamp for USB 502-x detector base	USB 502 STK	31-3100002-01
	Connection strip black 10 pcs. without loop contact	STE 01-BK PU10	30-4100002-01
	Rubber cap made of transparent silicon to protect USB detector base against moisture.	G KAPPE 501	FG020189
	Mounting set for rubber cap 1 mounting bracket, 2 spacers and 2 M4 × 16 cylinder screws for mounting detector bases in damp rooms	MON SET GK	MM000250
	Dust cover for MTD 533X and CMD 533X	DDC 533	FG030398
	Protective cage for detector to prevent mechanical damage to the detector. Dimensions: 160 × 110 mm (W×H)	SKORB	FG020026
	Protective grille for MTD 533X-S/-SP/-SP EE	PG 533 PU11	30-4100003-01
	Inscription label for detector base USB 50x-x for labels up to 47 × 75 mm, white similar RAL 9003	DNP 521/531	FG030138
	Labelling ring grey for heat detectors 1 PU = 1 package á 50 sticker, Ø 53 mm	DILH-VE50	30-6800115-01
	Labelling strip for detector base USB white, similar to RAL 9003, adhesive surface: 44 × 75 mm	DNP 502	31-3100001-01
	Label "Brandmelder" ZWD/ZWB (100 × 23 mm) red/white, detector labelling in false ceilings	S ZWBD	20-4900031-01

	Designation	Type	Article no.
	Detector label for large room heights with imprint (120 × 175 mm)	S MBK GRH	FG28399
	Detector label for large room heights without imprint (120 × 175 mm)	S MBK GRH2	FG28398
	Detector labelling card 80 × 50 mm	S BKKL	20-4900032-01

8.1.2 Fire detectors for hazardous areas

The following conventional point detectors cannot be directly addressed.

MMD 130 Ex-i multiple sensor detector



No.: 30-5000005-01

The multiple sensor detector MMD 130 Ex-i is used in conjunction with the detector bases USB 502-7 Ex-i or USB 502-8 Ex-i to signal a fire alarm in hazardous areas of zones 1, 2 and 22 (IIB). The connection is made with the interposition of an intrinsic safety barrier to a stub line (zone addressing).

Operating voltage range:	10 – 28 V DC
Quiescent current:	0.15 mA typ.
Alarm current:	27 mA typ.
Signal transmission:	Two-wire stub line, current increase
Response behaviour:	in accordance with EN 54-5 (category A1, A2, B, Index S and R), EN 54-7
Degree of protection:	IP 44
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Dimensions:	
with USB 502-7 Ex-i base:	175 × 95.5 mm (D×H)
with USB 502-8 Ex-i base:	118.5 × 68 mm (D×H)
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Weight:	
MMD 130 Ex-i:	approx. 120 g
USB 502-7 Ex-i:	approx. 170 g
USB 502-8 Ex-i:	approx. 70 g
Ex classification:	II 2G Ex ib op is IIC T4 Gb II 3D Ex ib op is IIIB T130 °C Dc
ATEX approval:	EPS 11 ATEX 1346 X
VdS approval:	G211094
Declaration of Performance:	CPR-30-21-019



No.: 30-4100005-07

USB 502-7 detector base for hazardous areas

Detector base for surface mounting in damp rooms. In conjunction with the multiple sensor detector MMD 130 Ex-i to signal a fire alarm in hazardous areas of zones 1, 2 and 22 (IIIB). The connection is made with the interposition of an intrinsic safety barrier to a stub line (zone addressing). Consisting of a installation box with four cable inlets (two closing plugs M20 and two blue cable glands M16), the USB 502-6 standard base and a sealing ring made of closed cell rubber.

The detector base contains a black terminal block without a ring contact, the loop circuit is only closed when the detector is inserted.

Area for use:	damp rooms
Mounting:	Surface mounting
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	depending on the used detector
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	175 × 52 mm (D×H)
Weight:	approx. 170 g
VdS approval:	part of detector approvals
Declaration of Performance:	part of detector approvals

**No.: 30-4100005-08**

USB 502-8 detector base for hazardous areas

Detector base equipped for surface mounting in dry rooms. In conjunction with the multiple sensor detector MMD 130 Ex-i to signal a fire alarm in hazardous areas of zones 1, 2 and 22 (IIIB). The connection is made with the interposition of an intrinsic safety barrier to a stub line (zone addressing).

The detector base contains a black terminal block without a ring contact, the loop circuit is only closed when the detector is inserted.

Area for use:	dry rooms
Mounting:	Surface mounting
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	depending on the used detector
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Relative air humidity:	10 – 95 % without condensation
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	118.5 × 28 mm (D×H)
Weight:	approx. 70 g
VdS approval:	part of detector approvals
Declaration of Performance:	part of detector approvals

Conventional point detectors and detector bases

	Designation	Type	Article no.
	MMD 130 Ex-i multiple sensor detector for hazardous areas	MMD 130 Ex-i	30-5000005-01
	Detector base USB 502-7 for hazardous areas for MMD 130Ex-i	USB 502-7 EX-i	30-4100005-07
	Ex-e screw cap M16 for USB 502-7	GHG9601952R0111	20-2400030-01
	Detector base USB 502-8 for hazardous areas for MMD 130Ex-i	USB 502-8 EX-i	30-4100005-08

8.2 Manual call points

Manual call points must be placed in a clearly visible position along escape and rescue routes, e.g. in corridors, stairwells, entrance halls and are designed for manual actuation of a fire alarm.

8.2.1 Integral X-LINE

The following manual call points are devices on the loop circuit X-LINE and can be individually addressed.

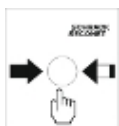
MCP 535X-1 and MCP 535X-3 manual call point



No.: 30-5700007-01



No.: 30-5700007-03



No.: FG030230

Manual call point in accordance with EN 54-11 (type B) for manually triggering a fire alarm in a red plastic case, suitable for connection to the loop. The alarm is triggered by smashing the glass panel and pressing the button. The push button remains locked. The built-in LED indicates the detector's triggered state. The detector can be installed on the same loop as point fire detectors thanks to the short circuit isolator that is integrated as standard. The degree of protection of the detector can be increased to IP 54 by incorporating a rubber seal.

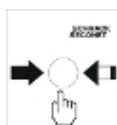
The insert sheet (hand symbol), outer label and the key to open the door must be ordered separately.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.12 mA
Alarm current:	max. 2.5 mA
Functional principle:	manual call point type B (indirect actuation) in accordance with EN 54-11
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection:	IP 52 (optional IP 54)
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Case material:	Plastic
Case colour:	red, RAL 3001 blue, RAL 5005
Dimensions:	134 x 134 x 36 mm (HxWxD)
Weight:	approx. 230 g
VdS approval:	G210095
Declaration of Performance:	CPR-30-13-007

MCP 535X-5 manual triggering device



No.: 30-5700007-05



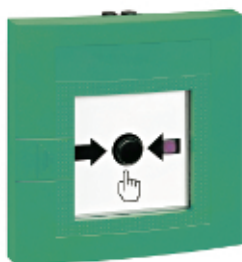
No.: FG030230

Manual triggering device for manual actuation of an extinguishing process with gaseous extinguishing agents as corresponding to EN 12094-3 for connection to the loop. In yellow plastic case with glass pane and freely selectable labelling. The gas extinguishing system is triggered by smashing the glass panel and pressing the button. The push button remains locked, and the actuated state is indicated with the built-in LED. The detector can be installed on the same loop as point fire detectors thanks to the short circuit isolator that is integrated as standard. Labelling is carried out with stickers.

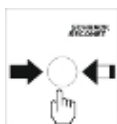
The insert sheet (hand symbol), outer label and the key to open the door must be ordered separately.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.12 mA
Alarm current:	max. 2.5 mA
Functional principle:	manual triggering device in accordance with EN 12094-3
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection:	IP 52 (optional IP 54)
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Case material:	Plastic
Case colour:	yellow, RAL 1003
Dimensions:	134 × 134 × 36 mm (H×W×D)
Weight:	approx. 230 g
VdS approval:	G210096
Declaration of Performance:	CPR-30-13-008

MCP 535X-15 actuation button



No.: 30-5700007-15



No.: FG030230

Green push button for triggering fire incident control systems or as an secondary flooding device to release additional extinguishing agents after a gas extinguishing system has just been flooded. After breaking the glass panel, the push button can be pushed and thereby locked into the engaged position. Labelling is carried out with stickers.

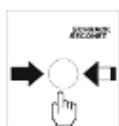
The insert sheet (hand symbol), outer label and the key to open the door must be ordered separately.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.12 mA
Alarm current:	max. 2.5 mA
Functional principle:	Actuation of fire incident control systems or secondary flooding device
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection:	IP 52 (optional IP 54)
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Case material:	Plastic
Case colour:	green, RAL 6002
Dimensions:	134 × 134 × 36 mm (H×W×D)
Weight:	approx. 230 g
VdS approval:	G210097
Declaration of Performance:	CPR-30-13-024

MCP 535X-7 stop device



No.: 30-5700007-07



No.: FG030230

Stop device for manual interruption of the triggering of an extinguishing process with gaseous extinguishing agents during the pre-warning period for connection to the loop. In blue plastic case with glass pane and freely selectable labelling. By smashing the glass panel and pressing the button, the extinguishing process is interrupted, and the control element does not lock. The detector can be installed on the same loop as point fire detectors thanks to the short circuit isolator that is integrated as standard. Labelling is carried out with stickers.

The insert sheet (hand symbol), outer label and the key to open the door must be ordered separately.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.12 mA
Alarm current:	max. 2.5 mA
Functional principle:	Stop device
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection:	IP 54
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Case material:	Plastic
Case colour:	blue, RAL 5005
Dimensions:	134 × 134 × 36 mm (H×W×D)
Weight:	approx. 230 g
VdS approval:	G210097
Declaration of Performance:	CPR-30-13-022

Weather-resistant case for MCP 535X



No.: FG030235

Provides additional protection against the ingress of water on the top or back of MCP 535X series manual call points in case used in demanding ambient conditions (outdoors). The weather-resistant case contains four holes and can be screwed in place together with the manual call point.

Case material:	sheet steel, 1 mm
Case colour:	red, RAL 3001 blue, RAL 5005
Dimensions:	160 × 184 × 100 mm (H×W×D)

MCP 545X manual call point



No.: 20-2302000-01



No.: 20-2302002-01



No.: 20-2302202-01






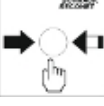

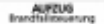






The MCP 545X manual call point is used to manually trigger a fire alarm, complies with EN 54-11 (type B) and EN 54-17, and is suitable for connection to the Integral X-LINE.

The alarm is triggered by pressing in the plastic plate. The triggered state is indicated by the built-in LED as well as the now visible yellow line. It remains until reset.

Delivery includes reset key and fitting materials.

Operating voltage range:	12.6 – 31 V DC (without modulation deviation)
Quiescent current:	max. 0.12 mA
Alarm current:	2.5 mA typ.
Functional principle:	manual call point type A (direct actuation) in accordance with EN 54-11
Area for use:	
MCP 545X-1:	indoor use and surface mounting
MCP 545X-3:	outdoor use and surface mounting incl. M 20 junctions, blanking stopper and mounting screws
Connection:	screw-type terminals, max. 2.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection:	
MCP 545X-1:	IP 24
MCP 545X-3:	IP 67
Ambient temperature:	
Manufacturer's instruction:	–25 °C to +65 °C
Approved by VdS:	–10 °C to +65 °C
Case material:	plastic, glass-fibre reinforced
Case colour:	red, RAL 3001 yellow, RAL 1006 blue, RAL 5002
Dimensions:	
MCP 545X-1:	93 × 89 × 59.5 mm (H×W×D)
MCP 545X-3:	93 × 97.5 × 71 mm (H×W×D)
Weight:	
MCP 545X-1:	160 g
MCP 545X-3:	240 g
VdS approval:	G210092 (red)
Declaration of Performance:	CPR-20-13-300 (red)

X-LINE manual call points and accessories

	Designation	Type	Article no.
	MCP 535X-1 manual call point	MCP 535X-1	30-5700007-01
	MCP 535X-3 manual call point	MCP 535X-3	30-5700007-03
	MCP 535X-5 manual triggering device	MCP 535X-5	30-5700007-05
	MCP 535X-15 actuation button	MCP 535X-15	30-5700007-15
	MCP 535 X-7 stop button	MCP 535X-7	30-5700007-07
	Sticker hand symbol for MCP 535X 70 x 70 mm	MCP 535 AK	FG030230
	Sticker "Hausalarm" for MCP 535X 90 x 21 mm (24 pcs.)	S HA	20-4900001-01
	Sticker "AUFZUG Brandfallsteuerung" for MCP 535X 90 x 21 mm	S AZBFS	20-4900005-01
	Labelling sheets for MCP 535X (Auslösung alle Steuerungen, Building alarm, Fire Brigade, Prüfmelder, CO2-STOPP, STOPP-TASTER Gaslöschanlage, NACHFLUTEN Feuerlöschanlage, HANDAUSLÖSUNG Feuerlöschanlage, Close door, AMOK-ALARM, Roter Punkt (für Feststellanlagen))	MCP 525/535D	30-3700002-01
	Weather-resistant case, red, for MCP 535X	MCP WSG	FG030235
	Replacement circuit board for MCP 535X	MCP 535X LP	30-5700007-90
	Replacement glass panel for MCP 535X	MCP 535 GLAS	30-6800091-01
	Rubber seal for MCP 535X for indoor use	MCP 535 DG	30-4100001-01
	Metal key (replacement) for Integral EvoxX B, fire brigade operating panel, MCP 535X	DKM SCHL	FG020015

	Designation	Type	Article no.
	MCP 545X-1 manual call point red, IP 24 with surface-mounted base	MCP 545X-1R	20-2302000-01
	MCP 545X-1 manual call point yellow, IP 24 with surface-mounted base	MCP 545X-1Y	20-2302000-02
	MCP 545X-1 manual call point blue, IP 24 with surface-mounted base	MCP 545X-1B	20-2302000-03
	MCP 545X-3 manual call point red, IP 67 (waterproof)	MCP 545X-3R	20-2302002-01
	MCP 545X-3 manual call point yellow, IP 67 (waterproof)	MCP 545X-3Y	20-2302002-02
	MCP 545X-3 manual call point blue, IP 67 (waterproof)	MCP 545X-3B	20-2302002-03
	Replacement glass panel for MCP 545X for MCP 545X, MCP 1A and WCP 1A	DKM K GLAS	20-2302200-01
	Plastic release element for MCP 545X, MCP 1A and WCP 1A	PS210	20-2302201-01
	Base for surface mounting of MCP for MCP 545X-1/-2, and MCP 1A	MUS041W	20-2302206-01
	Transparent cover for MCP 545X, MCP 1A and WCP 1A	PS200	20-2302202-01
	Cover seal 50 pieces	SC083	20-2302203-01
	Test key for MCP (10 pcs.) for MCP 545X, MCP 1A and WCP 1A	SC070	20-2302204-01

8.2.2 Conventional manual call points

The following conventional manual call points cannot be addressed.



No.: FG020060

MCP 525-7 manual call point

For manual actuation of a fire alarm in accordance with EN 54-11 (type B), suitable for connection to Integral DC technology.

The detector can be used as an external manual call point (main detector) for a TUS/Intranet connection.

By breaking the glass panel and pressing the button, the alarm is triggered and forwarded to the fire alarm control panel or directly to the emergency services. The activated state of the detector is indicated by the built-in LED. After pressing the alarm button, it must then be unlocked to enable an electrical reset on the fire alarm control panel.

Operating voltage range:	19.6 – 30 V DC
Current consumption:	defined by the line technology
Functional principle:	manual call point type B (indirect actuation) in accordance with EN 54-11
Mounting:	Surface mounting
Degree of protection:	IP 52 (optional IP 54)
Ambient temperature:	–10 °C to +55 °C
Case material:	plastic/ASA
Case colour:	red, RAL 3001
Dimensions:	134 × 134 × 36 mm (H×W×D)
Weight:	approx. 230 g
VdS approval:	G207007
Declaration of Performance:	CPR-30-13-026

**No.: FG020061**

MCP 525-9 manual call point

For manual actuation of a fire alarm in accordance with EN 54-11 (type B), suitable for connection to Integral DC technology.

By breaking the glass panel and pressing the button, the alarm is triggered and forwarded to the fire alarm control panel or directly to the emergency services. The activated state of the detector is indicated by the built-in LED. After pressing the alarm button, it must then be unlocked to enable an electrical reset on the fire alarm control panel.

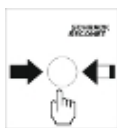
Operating voltage range:	19.6 – 30 V DC
Current consumption:	defined by the line technology
Functional principle:	manual call point type B (indirect actuation) in accordance with EN 54-11
Mounting:	Surface mounting
Degree of protection:	IP 52 (optional IP 54)
Ambient temperature:	–10 °C to +55 °C
Case material:	plastic/ASA
Case colour:	blue, RAL 5005
Dimensions:	134 × 134 × 36 mm (H×W×D)
Weight:	approx. 230 g

**No.: 20-2302250-01**

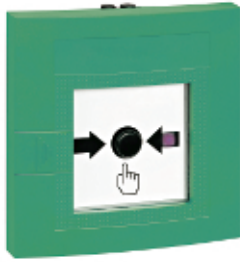
MCP 525-11 manual triggering device

Manual triggering device for manual triggering of an extinguishing process with gaseous extinguishing agents as corresponding to EN 12094-3, suitable for connection to the Integral DC technology. The gas extinguishing system is triggered by smashing the glass panel and pressing the button. The actuator button remains engaged; the activated state is indicated via a built-in LED. The degree of protection of the detector can be increased to IP 54 by incorporating a rubber seal. Labelling is carried out with stickers.

The insert sheet (hand symbol), outer label and the key to open the door must be ordered separately.

**No.: FG030230**

Operating voltage range:	19.6 – 30 V DC
Current consumption:	defined by the line technology
Functional principle:	manual triggering device in accordance with EN 12094-3
Mounting:	Surface mounting
Degree of protection:	IP 52 (optional IP 54)
Ambient temperature:	–10 °C to +55 °C
Case material:	plastic/ASA
Case colour:	yellow, RAL 1003
Dimensions:	134 × 134 × 36 mm (H×W×D)
Weight:	approx. 230 g
VdS approval:	G208106
Declaration of Performance (DoP):	CPR-30-13-027

**No.: 30-5700014-01**

MCP 525-15 actuation button

For manual triggering fire incident control systems or as a secondary flooding device to release additional extinguishing agents after a gas extinguishing system has just been flooded. Suitable for wiring to Integral DC technology.

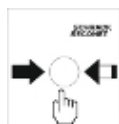
After breaking the glass panel, the push button can be pushed. Labelling is carried out with stickers.

Operating voltage range:	19.6 – 30 V DC
Current consumption:	defined by the line technology
Functional principle:	Actuation of fire incident control systems or secondary flooding device
Mounting:	Surface mounting
Degree of protection:	IP 52 (optional IP 54)
Ambient temperature:	–10 °C to +55 °C
Case material:	plastic/ASA
Case colour:	green, RAL 6002
Dimensions:	134 × 134 × 36 mm (H×W×D)
Weight:	approx. 230 g
VdS approval:	G208107

MCP 525-14 stop device



No.: 20-2302251-01



No.: FG030230

For manual interruption of the triggering of an extinguishing process with gaseous extinguishing agents during the pre-warning period in accordance with EN 12094-3, suitable for wiring to the Integral DC technology. By smashing the glass panel and pressing the button, the extinguishing process is interrupted, and the control element does not lock. Labelling is carried out with stickers.

The insert sheet (hand symbol), outer label and the key to open the door must be ordered separately.

Operating voltage range:	19.6 – 30 V DC
Current consumption:	defined by the line technology
Functional principle:	Stop device according to EN 12094-3
Mounting:	Surface mounting
Degree of protection:	IP 52 (optional IP 54)
Ambient temperature:	–10 °C to +55 °C
Case material:	plastic/ASA
Case colour:	blue, RAL 5005
Dimensions:	134 × 134 × 36 mm (H×W×D)
Weight:	approx. 230 g
VdS approval:	G208106
Declaration of Performance (DoP):	CPR-30-13-027

**No.: FG020285**

C31 manual call point with IP 66 degree of protection

Manual call point for use outdoors or in damp rooms (type B in accordance with EN 54-11). By default, the detector comes with a built-in 560 Ohm resistor. The two 19k1 terminal resistors for connection to the BX-AIM loop module, or 11k8 terminal resistors for connection to the B8-DCI are not included. Enclosed in a robust dust and water-protected plastic case, suitable for both surface and flush mounting. The detector is available both with and without an LED alarm indication.

Operating voltage:	max. 31 V DC
Contact rating:	0.5 – 30 V/0.1 A
Functional principle:	manual call point type B (indirect actuation) in accordance with EN 54-11
Connection:	screw terminal 0.08 – 2.5 mm ²
Cable inlet:	2 × M20 × 1.5 Ø 6 – 12 mm
Degree of protection:	IP 66
Ambient temperature:	–35 °C to +60 °C
Case material:	Polycarbonate
Dimensions:	135 × 135 × 61 mm (H×W×D)
Weight:	475 g
VdS approval:	G206113
Declaration of Performance:	0786-CPD-20309

**No.: 20-2302300-01**

C31 stop device with IP 66 degree of protection

Stop device for manual interruption of the triggering of an extinguishing process with gaseous extinguishing agents during the pre-warning period.

Operating voltage:	max. 31 V DC
Contact rating:	0.5 – 30 V/0.1 A
Functional principle:	Stop device type B
Connection:	screw terminal 0.08 – 2.5 mm ²
Cable inlet:	2 × M20 × 1.5 Ø 6 – 12 mm
Degree of protection:	IP 66
Ambient temperature:	–35 °C to +60 °C
Case material:	Polycarbonate
Case colour:	blue, RAL 5005
Dimensions:	135 × 135 × 61 mm (H×W×D)
Weight:	475 g
VdS approval:	G207099
Declaration of Performance:	0786-CPD-20311

**No.: FG020460**

dC31 manual call point for hazardous areas

Manual call point for use in hazardous areas of Group II, Category 2GD (zone 1, 2, 21 and 22), corresponds to type B in accordance with EN 54-11. Three different versions are available for connection to the various line technologies, which can each be used as both series and terminal detectors. Junctions and blanking stoppers are included.

Operating voltage:	30 V DC
Series detector current consumption:	0 mA
Terminal detector current consumption:	2 mA
with B8-DCI6:	1.5 mA
with BX-AIM:	
Power loss:	max. 1.3 W
Connection:	screw terminal 0.08 – 2.5 mm ²
Cable inlet:	2 x M20 x 1.5 Ø 6 – 12 mm
Degree of protection:	IP 66
Ambient temperature:	–20 °C to +60 °C
Case material:	Polycarbonate
Case colour:	red, RAL 3000
Dimensions:	135 x 135 x 61 mm (HxWxD)
Weight:	500 g
Ex classification:	EX II2G Ex emb IIC T6 EX II2D Ex tD A21 IP 6x T80 °C
ATEX approval:	BVS 09 ATEX E 016 X
VdS approval:	G206113, G207079, G207099
Declaration of Performance:	0786-CPD-20309, 0786-CPD-20310, 0786-CPD-20311

Protective hood with depth extension frame for manual call points



No.: 30-6200002-02

To secure the detector against accidental triggering (e.g. ball protection) or if a glass panel cannot be used (e.g. in the food industry). Suitable for all MCP, C31 and dC31 manual call points. A sealing ring for IP 54 protection and a base plate for mounting on uneven surfaces are optionally available. Detector not included.

Degree of protection:	IP 44
Ambient temperature:	–40 °C to +50 °C
Case material:	PC
Case colour:	transparent
Dimensions:	190 × 140 × 132 mm (H×W×D)
Weight:	800 g

Sealing ring for protective hood



No.: 30-6200004-01

Increases the protective hood's degree of protection from IP 44 to IP 54. The set includes one seal for a depth extension frame and 3 seals in different hole sizes for the cable inlets.

Mounting plate for protective hood



No.: 30-6200005-01

For mounting of the protective hood on uneven surfaces.

Dimensions:	240 × 182 × 5 mm (H×W×D)
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MCP/WCP 1A Ex-manual call point call point for hazardous areas



No.: 20-2302100-01



No.: 20-2302102-01



No.: 20-2302202-01

The intrinsically safe Ex-manual call points MCP/WCP 1A comply with both EN 54-11 (type A) and ATEX 100a and are connected to the BX-AIM input module via an interconnected intrinsic safety barrier. The different versions differ only in their case shape and IP degree of protection - the electronics, wiring and functions are identical for all models.

the MCP 1A is suitable for indoor application and surface or flush-mounting. the surface box being fastened to the wall using two screws. cable inlets required for surface mounting must be drilled into the case as required. for flush-mounting the manual call point is fitted straight into a standard size 1 (round or square) flush-mounted box.

the WCP 1A is also suitable for outdoor application and is surface mounted. The detector is rated to degree of protection IP 67 (waterproof); cable is let in from below or above via a M20 connection joints. two M20 junctions, two dummy junctions as well as mounting screws included.

Operating voltage range:	15 – 30 V DC
Quiescent current:	0.9 mA typ.
Resistance:	580 Ω
Wiring:	via BX-AIM/B3-IM8 and Z787
Connection:	screw-type terminals, max. 2.5 mm ²
Degree of protection:	
MCP 1A:	IP 24
WCP 1A:	IP 67
Ambient temperature:	–30 °C to +70 °C
Case material:	plastic, glass-fibre reinforced
Case colour:	red, RAL 3001
Dimensions:	
MCP 1A:	93 × 89 × 60 mm (H×W×D)
WCP 1A:	93 × 97.5 × 71 mm (H×W×D)
Weight:	
MCP 1A:	160 g
WCP 1A:	240 g
Ex classification:	
MCP 1A:	II 1G Ex ia IIC T4 Ga Ta = -10 °C to +55 °C
WCP 1A:	II 1GD Ex ia IIC T4 Ga
ATEX approval:	
MCP 1A:	SIRA 04 ATEX 2350X
WCP 1A:	SIRA 06 ATEX 2131X

Conventional manual call points and accessories

	Designation	Type	Article no.
	MCP 525-7 manual call point, red	MCP 525-7	FG020060
	MCP 525-9 manual call point, blue	MCP 525-9	FG020061
	MCP 525-11 manual triggering device yellow, IP 52	MCP 525-11	20-2302250-01
	MCP 525-14 stop device blue, IP 54	MCP 525-14	20-2302251-01
	MCP 525-15 actuation button green	MCP525-15	30-5700014-01
	C31 manual call point with IP 66 protection class	C31	FG020285
	C31 manual call point with LED	C31 LED	FG020286
	C31 emergency hold device with IP 66 protection class	C31 BST	20-2302300-01
	dC31 manual call point for hazardous areas red 560R/11k8 for connection to B8-DCI	DC31	FG020460
	dC31 manual call point for hazardous areas red 560R/19k1 for connection to BX-AIM	DC31	FG020461
	dC31 manual call point for hazardous areas red 1k5/3k for connection to B3-IM8, B8-MTI8, B6-EIO	DC31	FG020462
	dC31 manual call point for hazardous areas yellow 1k5/3k for connection to B3-IM8, B8-MTI8, B6-EIO	DC31	FG020465
	dC31 manual call point for hazardous areas blue 1k5/3k for connection to B3-IM8, B8-MTI8, B6-EIO	DC31	FG020466

	Designation	Type	Article no.
	Replacement glass panel for C31 and dC31 manual call points	C31 GV	FG020464
	Metal key for C31 and dC31 manual call points	DKM SV	FG020463
	Protective hood for manual call points with depth extension frame	STI 1230/GM/UB	30-6200002-02
	Sealing ring for protective hood Hood for C31 and dC31 manual call points	STI 3002	30-6200004-01
	Mounting plate for protective hood Hood for C31 and dC31 manual call points	STI 1280	30-6200005-01
	MCP 1A Ex-manual call point red, IP 24 (indoor), with surface-mounted base	MCP 1A	20-2302100-01
	WCP 1A Ex-manual call point red, IP 67 (waterproof)	WCP 1A	20-2302102-01
	Plastic release element for MCP 545X, MCP 1A and WCP 1A	PS210	20-2302201-01
	Transparent cover for MCP 545X, MCP 1A and WCP 1A	PS200	20-2302202-01
	Cover seal 50 pieces	SC083	20-2302203-01
	Test key for MCP (10 pcs.) for MCP 545X, MCP 1A and WCP 1A	SC070	20-2302204-01

8.3 Input and output modules

Depending on the type, input and output modules serve as monitored inputs for querying potential-free contacts, as a collectively addressable detector zone in DC technology, for indicating and monitoring various types of feedbacks, e.g. door contacts, for controlling monitored consumers, e.g. sirens, for integrating special detectors, e.g. flame and linear detectors, aspirating smoke detectors and for outputting switching pulses.

8.3.1 Integral X-LINE

The following Input and output modules are devices on the loop circuit X-LINE and can be individually addressed.

BX-OI3 input/output module



No.: 20-2100001-01

The input/output module BX-OI3 contains one potential-free bi-stable relay output with a programmable fail-safe position, two monitored inputs for querying potential-free contacts and an optocoupler input for monitoring external voltages.

It is particularly suitable for the integration of special detectors (flame and linear detectors, aspirating smoke detectors, etc.) in the Integral X-LINE.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.55 mA typ.
Query current:	10 mA
Function:	one relay output, two primary inputs, one optocoupler input
Monitored inputs:	for potential-free contacts
Optocoupler input:	querying potential-loaded signals or external voltages of 0 – 30 V DC
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection with case:	IP 66
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
With case:	94 × 94 × 57 mm (H×W×D)
Without case:	67 × 67 × 20 mm (H×W×D)
VdS approval:	G210133
Declaration of Performance:	CPR-20-13-005

**No.: 20-2100014-01**

BX-02I4 input/output module

The input/output module BX-02I4 contains two potential-free bistable relay outputs for switching of loads of up to 2 A. In the event that loop voltage is lost, a fail-safe-position can be individually programmed for each output.

In addition the module contains four monitored primary inputs for the query of potential-free contacts. Every input can be configured with/without circuit monitoring, and moreover the element type input or detector zone can be assigned for each input.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.63 mA typ.
Query current:	10 mA
Function:	two relay outputs, four monitored primary inputs
Relay output:	bi-stable change-over contact 230 V/2 A (max. 60 W)
Monitored inputs:	for potential-free contacts
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection with case:	IP 66
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
with case:	130 × 94 × 57 mm (H×W×D)
without case:	100 × 67 × 20 mm (H×W×D)
VdS approval:	G211050
Declaration of Performance:	CPR-20-20-012



No.: 20-2100023-01

BX-02I4-HP input/output module HighPower

The input/output module BX-02I4-HP contains two potential-free bistable relay outputs for switching of loads of up to 8 A. In the event that loop voltage is lost, a fail-safe-position can be individually programmed for each output.

In addition the module contains four monitored primary inputs for the query of potential-free contacts. Every input can be configured with/without circuit monitoring, and moreover the element type input or detector zone can be assigned for each input.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.63 mA typ.
Query current:	9 mA
Function:	two relay outputs, four monitored primary inputs
Switching capacity:	max. 240 W (30 V DC, 8 A), 2000 VA (250 V AC, 8 A)
Monitored inputs:	for potential-free contacts
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection with case:	IP 66
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
with case:	130 × 130 × 57 mm (H×W×D)
Circuit board with side parts:	103 × 103 × 20 mm (H×W×D)
Circuit board without side parts:	103 × 72 × 20 mm (H×W×D)
VdS approval:	G211050
Declaration of Performance:	CPR-20-20-012

**No.: 20-2100002-01**

Input/Output module BX-IOM

The BX-IOM input/output module has a short circuit resistant monitored primary output that is galvanically isolated from the X-LINE and a short circuit resistant monitored primary input for connecting potential-free signals. The module is intended for monitoring potential-free contacts and for activating consumers (X-LINE devices) that are supplied by an external current source. BX-IOM requires an external power supply for operation.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.43 mA typ.
Monitoring current:	3.1 mA
Function:	one short circuit resistant monitored output, one monitored primary input
Monitored output:	
Loads:	20 Ω to 1 k Ω , three load ranges
Output current:	max. 1.3 A, short circuit resistant
Output current according to VdS 2543:	max. 110 mA with max. 30 m wiring length
Load range 1:	max. 250 mA with max. 30 m wiring length
Load range 2:	max. 800 mA with max. 10 m wiring length
Load range 3:	
Quiescent current:	1 – 15 mA can be set via software
Monitored primary input:	
IM1+:	20 – 30 V
VEXT:	20 – 30 V
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection with case:	IP 66
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
With case:	94 × 94 × 57 mm (H×W×D)
Without case:	67 × 67 × 20 mm (H×W×D)
VdS approval:	G210132
Declaration of Performance:	CPR-20-13-006

**No.: 20-2100005-01**

Input module BX-AIM

The input module BX-AIM can either be programmed as a monitored input for querying potential-free contacts or as a collectively addressable detector zone using DC technology.

The monitored input can, if required, be programmed as a standard extinguishing interface (in accordance with VdS directives). The primary input now contains a feature for comparing fault thresholds with the quiescent current levels (in accordance with standards EN 54-13 and VdS 2489).

By interconnecting an intrinsic safety barrier and by using intrinsically safe detectors (DC technology) it is also possible to monitor hazardous areas.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
Quiescent current:	
with DC branch:	1,8 mA typ.
without DC branch:	0.46 mA typ.
Alarm current:	
with DC branch:	8.6 mA
without DC branch:	6.7 mA
Function:	DC branch module, monitored input
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection with case:	IP 66
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
With case:	94 × 94 × 57 mm (H×W×D)
Without case:	67 × 67 × 20 mm (H×W×D)
VdS approval:	G208138
Declaration of Performance:	CPR-20-13-009

**No.: 20-2100017-01**

BX-MDI8 input module

For connection of up to eight stub lines, which can be configured either as non-addressable detector zones in threshold technology or as monitored inputs (e.g. VdS extinguishing interface, primary inputs, valve monitoring).

The operating mode of the individual stub lines can be independently selected via programming and jumpers on the module. The monitoring of the primary lines complies with EN 54-13 (interruption and short circuit of the transmission path).

A maximum of 32 automatic threshold detectors (MSD 523), or a maximum of 10 manual call points (MCP 525) may be connected per fire alarm line. Up to 32 BX-MDI8 can be configured per loop.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
External supply voltage:	13 – 30 V DC
Current consumption:	max. 1 A, depending on connected consumers
Detector zones/inputs:	
Connectable detectors:	max. 32 automatic threshold detectors or a 10 manual call points per stub line
Range:	max. 400 m (cable diameter 0.6 mm) max. 720 m (cable diameter 0.8 mm) max. 1100 m (cable diameter 1.0 mm)
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection with case:	IP 65
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
with case:	180 × 94 × 57 mm (H×W×D)
without case:	151 × 80 × 20 mm (H×W×D)
VdS approval:	G215099
Declaration of Performance:	CPR-20-13-015

**No.: 20-2100003-01**

BX-IM4 input module

The BX-IM4 input module is used, among other things, to indicate and monitor various types of feedbacks, e.g. door contacts, fire dampers, extinguishing systems, sprinkler acknowledgements.

It contains four inputs for the monitored and non-monitored querying of potential-free contacts, which are suitable for detecting switching states of longer than 330 ms. The wiring length can be up to 30 m.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.45 mA typ.
Query current:	10 mA
Function:	four inputs for monitored or non-monitored querying of potential-free contacts
Wiring length:	max. 30 m
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection with case:	IP 66
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
With case:	94 × 94 × 57 mm (H×W×D)
Without case:	67 × 67 × 20 mm (H×W×D)
VdS approval:	G210131
Declaration of Performance:	CPR-20-13-007



No.: 20-2100016-01

BX-I2 input module

The input module contains a primary input for querying a potential-free contact. This can be inverted and parametrized with/without circuit monitoring. Furthermore, the element type input or the detector zone can be defined. The module also contains an optocoupler input for monitoring a potential-loaded signal or an external power supply (0 – 30 V DC). This can be parameterized inverted.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.46 mA typ.
Query current:	10 mA
Function:	one primary input, one optocoupler input
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection with case:	IP 66
Ambient temperature:	
Manufacturer’s instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
With case:	94 × 94 × 57 mm (H×W×D)
Without case:	67 × 67 × 20 mm (H×W×D)
VdS approval:	G212023
Declaration of Performance:	CPR-20-13-014



No.: 20-2100015-01

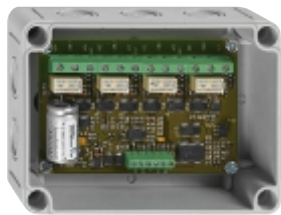
BX-01 output module

The output module BX-01 contains a potential-free, bi-stable relay output for switching of loads from up to 2 A and up to 230 V (max. 60 W). In case of loss of the loop voltage, a fail-safe position can be programmed for the output.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.48 mA typ.
Switching current:	max. 2 A
Function:	one potential-free, bi-stable relay output
Connection:	screw-type terminals, max. 1.5 mm ²
Signal transmission:	serial, two-wire technology
Short circuit isolator:	integrated
Degree of protection with case:	IP 66
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
With case:	94 × 94 × 57 mm (H×W×D)
Without case:	67 × 67 × 20 mm (H×W×D)
VdS approval:	G212024
Declaration of Performance:	CPR-20-13-013

BX-REL4 relay module



No.: 20-2100004-01

The relay module BX-REL4 contains four relays each containing a potential-free double-throw contact with a switching capacity of up to 2 A and 230 V. The BX-REL4 is also suitable for outputting switching pulses.

The relay outputs can be switched to a fail-safe position if the voltage on the loop is lost, with the power supply also being internally monitored on the loop for undervoltage.

The case must be ordered separately.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.51 mA typ.
Switching current:	max. 2 A
Signal transmission:	serial, two-wire technology
Function:	four potential-free relay outputs
Relay output:	bistable change-over contact 230 V/2 A
Switching capacity:	60 W (230 V/0.25 A)
Switching frequency:	max. 3125 Hz
Pulse emission:	200 ms to 25 s in 100 ms intervals (resolution +100 ms)
Wiring length:	max. 100 m
Relay output connection:	screw-type terminals, max. 2.5 mm ²
Connection:	screw-type terminals, max. 1.5 mm ²
Short circuit isolator:	integrated
Degree of protection with case:	IP 66
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	
Indoor applications:	Polystyrene
Outdoor applications:	Polycarbonate, glass-fibre reinforced
Case colour:	light grey, RAL 7035
Dimensions:	
with case:	130 × 94 × 57 mm (H×W×D)
without case:	100 × 67 × 20 mm (H×W×D)
VdS approval:	G210134
Declaration of Performance:	CPR-20-13-008

Box for loop module – indoor use



No.: FG020234



No.: FG020235



No.: 20-4000550-01



No.: 20-2101013-01

Plastic case (heavy metal, PVC and silicone-free) for installation of X-LINE modules indoors.

Cable entries:	M 16 and M 20
Shock resistance:	IK08 acc. DIN EN 5012/VDE 0470
Degree of protection:	IP 66
Ambient temperature:	–25 °C to +35 °C
Relative air humidity:	max. 50 % at 40 °C
Case material:	Polystyrene
Case colour:	grey RAL 7035
Dimensions:	
GEH MOD IP66:	94 × 94 × 57 mm (H×W×D)
GEH MOD2 IP66:	94 × 130 × 57 mm (H×W×D)
GEH MOD3 IP66:	94 × 180 × 57 mm (H×W×D)
TK PS 1313-7-M:	130 × 130 × 75 mm (H×W×D)

Box for loop module – outdoor use



No.: 20-2101000-01



No.: 20-2101001-01



No.: 20-2101002-01



No.: 20-2101003-01

Weatherproof plastic case (heavy metal, PVC and silicone-free) for installation of X-LINE modules outdoors.

Cable entries:	M 16 and M 20
Shock resistance:	IK07 acc. DIN EN 5012/VDE 0470
Degree of protection:	IP 66
Ambient temperature:	–35 °C to +60 °C
Relative air humidity:	max. 50 % at 40 °C
Case material:	Polycarbonate, reinforced polycarbonate
Case colour:	grey RAL 7035
Dimensions:	
TK PC 99-6-M:	94 × 94 × 57 mm (H×W×D)
TK PC 1309-6-M:	94 × 130 × 57 mm (H×W×D)
TK PC 1809-6-M:	94 × 180 × 57 mm (H×W×D)
TK PC 1313-7-M:	130 × 130 × 75 mm (H×W×D)



No.: 20-2100007-01

BX-ESL end-position switch

The BX-ESL limit switch module is used for sprinkler monitoring and disable devices.

It contains an photoelectric sensor, which measures the movement of an actuation plunger. Thus the function as a limit switch is realized.

The module is installed in a plastic case with degree of protection IP 65.

Operating voltage range:	12 – 30 V DC
Current consumption:	
with lit LED:	1.3 mA typ.
without lit LED:	0.4 mA typ.
Signal transmission:	serial, two-wire technology
Function:	one optical photoelectric sensor
Reaction time:	500 ms
Connection:	screw-type terminals, max. 1.5 mm ²
Short circuit isolator:	integrated
Degree of protection with case:	IP 65
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	PA-Taromid (thermoplastic)
Case colour:	red, RAL 3016
Cover colour:	black, RAL 9005
Dimensions with case:	58 x 58 x 34 mm (HxWxD)
Weight:	95 g
VdS approval:	G210130
Declaration of Performance:	CPR-20-13-011

X-LINE modules and accessories

	Designation	Type	Article no.
	BX-OI3 input/output module	BX-OI3	20-2100001-01
	BX-O2I4 input/output module	BX-O2I4	20-2100014-01
	BX-O2I4-HP input/output module	BX-O2I4-HP	20-2100023-01
	BX-IOM input/output module	BX-IOM	20-2100002-01
	BX-AIM input module	BX-AIM	20-2100005-01
	BX-MDI8 input module 8 monitored inputs	BX-MDI8	20-2100017-01
	BX-IM4 input module	BX-IM4	20-2100003-01
	BX-I2 input module	BX-I2	20-2100016-01
	BX-O1 output module	BX-O1	20-2100015-01
	BX-REL4 relay module	BX-REL4	20-2100004-01
	Resistor module 182R/182R (50 pcs.) Alarm resistor 182R 0.5W/EOL-Wid 182R 0.5W	RES-182R-182R	20-2400051-01
	Resistor module 220R/220R (50 pcs.) Alarm resistor 220R 0.5W/EOL-Wid 220R 0.5W	RES-220R-220R	20-2400051-02
	Resistor module 1K5/3K (10 Stk.) Alarm resistor 1K5 0.5W/EOL-Wid 3K 0.5W	RES-1K5-3K	20-2400051-03
	Resistor module 18K2/26K7 (10 Stk.) Alarm resistor 18K2 0.5W/EOL-Wid 26K7 0.5W	RES-18K2-26K7	20-2400051-04
	182R/182R resistor module 2 pcs. alarm/EOL-res. 182R 0.5W	RES-182R-182R	20-2400051-05
	220R/220R resistor module 2 pcs. alarm/EOL-res. 220R 0.5W	RES-220R-220R	20-2400051-06

	Designation	Type	Article no.
	Box for loop module – indoor use 94 × 94 × 57 mm, for BX-OI3/BX-AIM etc.	GEH MOD IP66	FG020234
	Box for loop module – indoor use 94 × 130 × 57 mm, for BX-REL4/BX-O2I4	GEH MOD2 IP66	FG020235
	Box for BX-MDI8 – indoor use 94 × 180 × 57 mm	GEH MOD3 IP66	20-4000550-01
	Box for BX-O2I4-HP – indoor use 130 × 130 × 75 mm	TK PS 1313-7-M	20-2101013-01
	Box for loop module – outdoor use 94 × 94 × 57 mm, for BX-OI3/BX-AIM etc.	TK PC 99-6-M	20-2101000-01
	Box for loop module – outdoor use 94 × 130 × 57 mm, for BX-REL4/BX-O2I4	TK PC 1309-6-M	20-2101001-01
	Box for BX-MDI8 – outdoor use 94 × 180 × 57 mm	TK PC 1809-6-M	20-2101002-01
	Box for BX-O2I4-HP – outdoor use 130 × 130 × 75 mm, for BX-OI3/BX-AIM etc.	TK PC 1313-7-M	20-2101003-01
	BX-ESL end position switch	BX-ESL	20-2100007-01
	Connection joint M16 (metric)	MM ANB M16	MM000185
	Lock nut M16	MM GM M16	MM000186
	Step nipple M 20 (metric) 1 PU = 100 pcs.	MM SN M20	MM000181
	Air vent M20	BST M20	MM000201
	Pressure compensation element M12	DAE M12	MM000202
	Fastening clamp for IP 66 case	BKL M5	FG020238

8.4 Visual and acoustic signal devices

The purpose of alarming is to warn people of danger. Visual, acoustic or combined signal devices can be used for the alarm.

8.4.1 Integral X-LINE

The following visual and acoustic signal devices are devices of the loop circuit X-LINE and can be individually addressed.



No.: 20-2100009-01



No.: 20-2100009-04

BX-FOL flashlight

Addressable flashlight for optical signalling of a fire alarm in indoor areas, suitable for direct connection to the Integral X-LINE. The BX-FOL is available in red or white, the flash rate is set via software.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.5 mA typ.
Alarm current:	max. 3.7 mA with 24 V DC
Signal transmission:	Integral X-LINE
Flash frequency:	0.5 Hz (slow) or 1 Hz (fast)
Luminous intensity:	1 cd
Short circuit isolator:	integrated
Degree of protection:	IP 21 C
Ambient temperature:	–10 °C to +50 °C
Case material:	ABS
Case colour:	white, RAL 9003 or red, RAL 3001
Dome colour:	red or orange
Dimensions:	93 × 54 mm (D×H)
Weight:	110 g
VdS approval:	G210085
Declaration of Performance (DoP):	CPR-20-15-102

**No.: 10-2300007-01****No.: 20-2100030-01**

BX-UPI universal parallel indicator

For visual individual/collective indication of fire detectors in the event of an alarm, in addition to the LED integrated in the detector or detector base. The BX-UPI can be used with different line technologies; it is activated and powered directly via the alarm output of the fire detector or a suitable loop module. The white plastic case with red illuminated surface and the electronics can be ordered separately.

Operating voltage range:	4.5 – 30 V DC
Current consumption:	0.9 mA typ.
Flash frequency:	1.2 – 3.0 Hz
Luminous intensity:	1 cd
Connection:	screw terminals, max. 2 × 1.5 mm ²
Degree of protection:	IP 42
Ambient temperature:	–20 °C to +60 °C
Relative air humidity:	5 – 95 % without condensation
Dimensions:	85 × 85 × 30 mm (H×W×D)
Weight:	50 g
VdS approval:	G224023

**No.: 20-2100008-01****No.: 20-2100008-02**

BX-SOL siren

Addressable signal device for acoustic notification of a fire alarm in interior areas, suitable for direct connection to the Integral X-LINE. The siren is available in red or white, four different tones and the volume can be set via the Integral Software.

Operating voltage range:	12 – 30 V DC
Current consumption:	
Low:	max. 2.3 mA with 24 V DC
High:	max. 4.7 mA with 24 V DC
Quiescent current:	0.5 mA typ.
Volume:	89 dB (99 dB) ±3 dB(A)/m with 24 V DC
Tone types:	
DIN tone:	1200 ~ 500 Hz
Slow Whoop:	500 ~ 1200 Hz
Sweden tone:	660 Hz (150 ms on, 150 ms off)
Continuous tone:	990 Hz (pulse can be set)
Short circuit isolator:	integrated
Degree of protection:	IP 21 C
Ambient temperature:	–10 °C to +55 °C
Case material:	ABS
Case colour:	white, RAL 9003 or red, RAL 3001
Dimensions:	108 × 91 mm (D×H)
Weight:	230 g
VdS approval:	G210086
Declaration of Performance (DoP):	CPR-20-13-100



No.: 20-2100011-02

BX-SBL501 base siren

For acoustic alarm notification of a fire in interior areas (EN 54-3/type A), it is installed as a unit with a USB 502 detector base and connected directly to the Integral X-LINE. The four different tones and the volume can be set in the Integral Application Center. The cable inlet is from above; for side cable inlet the BX-SBL501-WDB model with a taller base is available.

Operating voltage range:	12 – 30 V DC
Quiescent current:	max. 0.5 mA
Current consumption:	
Low:	max. 1.5 mA with 24 V DC
High:	max. 4.0 mA with 24 V DC
Volume:	
Low:	80 dB(A) ±3 dB(A) with 24 V DC
High:	90 dB(A) ±3 dB(A) with 24 V DC
Tone types:	
DIN tone:	1200 ~ 500 Hz
Slow Whoop:	500 ~ 1200 Hz
Sweden tone:	660 Hz (150 ms on, 150 ms off)
Continuous tone:	990 Hz
Connection:	screw-type terminals, max. 2.5 mm ²
Short circuit isolator:	integrated
Degree of protection:	IP 31 D
Ambient temperature:	–10 °C to +55 °C
Case material:	ABS/PC
Case colour:	white, similar to RAL 9003
Dimensions:	
with standard base:	117 × 41 mm (D×H)
with tall base:	117 × 45 mm (D×H)
Weight:	170 g
VdS approval:	G211029
Declaration of Performance (DoP):	CPR-20-13-101

BX-SBL502 platform siren



No.: 20-2100012-04



No.: 20-2100012-01

For acoustic alarm notification of a fire in interior areas (EN 54-3/type A), suitable for direct connection to the Integral X-LINE. The siren is available in red or white, four different tones and the volume can be set in the Integral Application Center. The cable inlet is from above; for side cable inlet the BX-SBL502-WDB or BX-SBL502-RDB model with a taller base is available.

Operating voltage range:	12 – 30 V DC
Quiescent current:	max. 0.5 mA
Current consumption:	
Low:	max. 1.5 mA with 24 V DC
High:	max. 4.0 mA with 24 V DC
Volume:	
Low:	80 dB(A) ±3 dB(A) with 24 V DC
High:	90 dB(A) ±3 dB(A) with 24 V DC
Tone types:	
DIN tone:	1200 ~ 500 Hz
Slow Whoop:	500 ~ 1200 Hz
Sweden tone:	660 Hz (150 ms on, 150 ms off)
Continuous tone:	990 Hz
Connection:	screw-type terminals, max. 2.5 mm ²
Short circuit isolator:	integrated
Degree of protection:	IP 31 D
Ambient temperature:	–10 °C to +55 °C
Case material:	ABS/PC
Case colour:	white, RAL 9003 or red, RAL 3001
Dimensions:	
with standard base:	114 × 35 mm (D×H)
with tall base:	114 × 43 mm (D×H)
Weight:	165 g
VdS approval:	G211029
Declaration of Performance (DoP):	CPR-20-13-101

X-LINE alarm devices and accessories

	Designation	Type	Article no.
	BX-FOL loop flashlight red, red lens	BX-FOL-RR	20-2100009-01
	BX-FOL loop flashlight white, red lens	BX-FOL-WR	20-2100009-02
	BX-FOL loop flashlight red, orange lens	BX-FOL-RO	20-2100009-03
	BX-FOL loop flashlight white, orange lens	BX-FOL-WO	20-2100009-04
	BX-UIP parallel indicator case	RAL 730RHE	10-2300007-01
	BX-UIP parallel indicator electronics	BX-UIP	20-2100030-01
	BX-SOL-R loop siren red	BX-SOL-R	20-2100008-01
	BX-SOL-W loop siren white	BX-SOL-W	20-2100008-02
	BX-SBL501 base siren white	BX-SBL501-W	20-2100011-02
	BX-SBL501 base sounder, white tall	BX-SBL501-WDB	20-2100011-01
	BX-SBL502 platform sounder, white	BX-SBL502-W	20-2100012-04
	BX-SBL502 platform sounder, white tall	BX-SBL502-WDB	20-2100012-02
	BX-SBL502 platform sounder, red tall	BX-SBL502-RDB	20-2100012-01
	Cover plate for SBL white	SBL-AP	20-2100018-01

	Designation	Type	Article no.
	Design ring for SBL white	SBL-DR	20-2100013-01

8.4.2 Conventional signal devices

The following conventional visual and acoustic signal devices cannot be addressed.

Solex 10 flashlight



No.: 20-4200003-02

The Solex 10 flashlight is used for optical signalling of a fire alarm in the area of the fire brigade key safe (fire brigade attack route) in outdoor areas.

The compact and robust IP 65 flashlight ensures high reliability and a long lifespan, even in the presence of unfavourable ambient conditions in outdoor areas.

Suitable for wiring to monitored and unmonitored outputs of an Integral EvoxX fire alarm control panel.



No.: 20-4200003-01

The Solex 10 flashlight is surface-mounted. The cables are fed through the side of the base of the flashlight (M20).

Operating voltage range:	9 – 60 V DC
Current consumption:	93 mA typ. with 24 V DC
Flash frequency:	1 Hz
Degree of protection:	IP 65
Ambient temperature:	–25 °C to +70 °C
Case material:	ABS
Case colour:	red, RAL 3001, white, RAL 9003
Dome material:	Polycarbonate
Dome colour:	red or orange
Dimensions:	93 × 93 mm (D×H)
Weight:	180 g
VdS approval:	G207018

Sonos flashlight



No.: 30-6300007-01



No.: 30-6300007-04



No.: 30-6300008-08



No.: 30-6300008-05

Flashlight for wall or ceiling mounting, for visual indication of a fire alarm in interior areas in accordance with EN 54-23.

The signal devices are available with a base socket for degree of protection IP 21c and IP 65, each with a red or white dome colour and a red or white case.

The flashing frequency can be set using the DIP switches.

Operating voltage range:	17 – 60 V DC
Alarm current:	20 mA typ./0.5 Hz, 40 mA typ./1 Hz
Flash frequency:	0.5 Hz or 1 Hz (can be set)
Degree of protection:	IP 21 C/IP 65
Case material:	Polycarbonate
Case colour:	red or white
Dome colour:	red or white LED
Dimensions:	
Wall-mounting/IP 21 C:	100 × 100 mm (D×H)
Wall-mounting/IP 65:	97.5 × 122 mm (D×H)
Ceiling mounting/IP 21 C:	100 × 100 mm (D×H)
Ceiling mounting/IP 65:	97.5 × 117 mm (D×H)
Ambient temperature:	–25 °C to +70 °C
Weight:	
IP 21 C:	170 g
IP 65:	220 g
VdS approval:	G214105, G214107
Declaration of Performance (DoP):	2831-CPR-F0009 (white LED)
Wall-mounting:	2831-CPR-F0150 (red LED) 2831-CPR-F0007 (white LED)
Ceiling mounting:	2831-CPR-F0148 (red LED)

Sonos S siren



No.: 30-6300014-01



No.: 30-6300014-04

The siren Sonos S is for acoustic signalling of a fire alarm and is available with red or white coloured case. It is available with bases for degrees of protection IP 21 C or IP 65. The compact and robust siren ensures high reliability and a long lifespan, even in the presence of unfavourable ambient conditions in outdoor areas.

The integrated electronic tone oscillator offers 32 different alarm tones, which can be set via a five-way DIP switch. The volume can be adjusted using a potentiometer.

Operating voltage range:	9 – 60 V DC
Current consumption:	13 mA typ. with 24 V DC
Volume:	94 – 106 dB, distance 1 m
Possible types of tones:	32
Connection:	screw-type terminals, max. 1.5 mm ²
Degree of protection:	IP 21 C/IP 65
Ambient temperature:	–25 °C to +70 °C
Case material:	Polycarbonate
Case colour:	red, RAL 3001, white, RAL 9003
Dimensions:	
IP 21 C:	97.5 × 80 mm (D×H)
IP 65:	97.5 × 105 mm (D×H)
Weight:	
IP 21 C:	220 g
IP 65:	250 g
VdS approval:	G210098
Declaration of Performance (DoP):	2831-CPR-F1923

AC siren for flush mounting



No.: FG020661



No.: FG020660

For acoustic indication of a fire alarm, suitable for mounting in a standard wall box. The siren has 32 selectable types of tones, which can be set via a five-way DIP switch. The volume is adjusted via a rotary switch.

The flush-mounted siren is suitable for connection to monitored and non-monitored outputs of the Integral IP fire alarm control panel.

Operating voltage range:	9 – 28 V DC
Current consumption:	max. 35 mA
Signal level:	68 – 106 dB(A), distance 1 m
Possible types of tones:	32
Degree of protection with flush-mounted box:	IP 54
Ambient temperature:	–25 °C to +70 °C
Case material:	ABS
Case colour:	red or white
Dimensions:	86 × 86 × 42 mm (H×W×D)

Weight:	approx. 100 g
VdS approval:	G206025
Declaration of Performance (DoP):	0832-CPD-1653

Sonos combined siren/flashlight



No.: 30-6300009-08



No.: 30-6300009-05



No.: 30-6300010-01



No.: 30-6300010-04

Combined siren/flashlight for ceiling or wall-mounting, for visual-acoustic indication of a fire alarm in interior areas in accordance with EN 54-3 and EN 54-23.

The signal devices are available with a base socket for degree of protection IP 21c and IP 65, each with a red or white dome colour and a red or white case.

The flashing frequency, volume and tones can be set using the DIP switches.

Operating voltage range:	17 – 60 V DC
Flash frequency:	0.5 Hz or 1 Hz (can be set)
Degree of protection:	IP 21 C/IP 65
Case material:	Polycarbonate
Case colour:	red or white
Dome colour:	red or white LED
Dimensions:	
Wall-mounting/IP 21 C:	100 × 100 mm (D×H)
Wall-mounting/IP 65:	97.5 × 122 mm (D×H)
Ceiling mounting/IP 21 C:	100 × 100 mm (D×H)
Ceiling mounting/IP 65:	97.5 × 117 mm (D×H)
Alarm current:	25 mA typ./0.5 Hz, 45 mA typ./1 Hz
Possible types of tones:	32
Volume:	97 dB(A) or attenuation by –8 dB(A) can be set
Ambient temperature:	
visual variant:	–20 °C to +70 °C
optical/acoustic variant:	–10 °C to +55 °C
Weight:	
IP 21 C:	220 g
IP 65:	270 g
VdS approval:	G214106, G214108
Declaration of Performance (DoP):	2831-CPR-F0010 (white LED)
Wall-mounting:	2831-CPR-F0149 (red LED) 2831-CPR-F0008 (white LED)
Ceiling mounting:	2831-CPR-F0147 (red LED)

**No.: FG020342****No.: FG020344**

VTB-32E combined siren/flashlight

Combined siren with integrated orange flashlight, suitable for indoor and outdoor installation. The tone type and volume can be adjusted via DIP switches. The device is available in red or white, and optionally with degree of protection IP 43 or IP 65.

Operating voltage range:	18 – 35 V DC
Alarm current:	max. 41 mA depending on the tone
Signal level:	78 – 98 dB, distance 1 m with 90° (depending on the tone)
Signal frequency:	440 – 2900 Hz
Possible types of tones:	32
Degree of protection:	IP 43, IP 65, IP 55
Ambient temperature:	–20 °C to +70 °C
Case colour:	red or white
Dome colour:	orange
Dimensions:	
IP 43:	93.6 × 89.6 mm (D×H)
IP 65:	93.6 × 106.9 mm (D×H)
Weight:	
IP 43:	233 g
IP 65:	258 g
Declaration of Performance (DoP):	0905-CPR-00060



No.: 20-4200045-01

Alarm bell

Robust, motor-driven alarm bell with a sonorous tone and high output power, suitable for indoor installation.

Operating voltage:	24 V DC
Alarm current:	25 – 28 mA typ.
Signal level:	94 – 97 dB
Degree of protection:	IP 21 C
Ambient temperature:	–10 °C to +55 °C
Case material:	steel
Case colour:	red
Base material:	Polycarbonate
Base colour:	black
Dimensions:	203 × 67 mm (D×H)



No.: 20-4200040-01

COHP582GT24 signal horn 24 V DC

Electronic mini-horn with horn, suitable for indoor and outdoor installation.

Operating voltage range:	9 – 30 V DC
Current consumption:	25 mA typ. with 24 V DC
Volume:	98 dB(A)
Tone types:	continuous tone/pulse tone (400 Hz)
Degree of protection:	IP 65
Ambient temperature:	–25 °C to +70 °C
Case material:	Polycarbonate/ABS, shock resistant
Case colour:	light grey, RAL 7035
Dimensions:	74 × 180 mm (D×H)

**No.: 20-4200041-01**

COHP582GT230 signal horn 230 V AC

Electronic mini-horn with horn, suitable for indoor and outdoor installation.

Operating voltage:	230 V AC
Current consumption:	30 mA typ.
Volume:	98 dB(A)
Tone types:	continuous tone/pulse tone (400 Hz)
Degree of protection:	IP 65
Ambient temperature:	−25 °C to +70 °C
Case material:	Polycarbonate/ABS, shock resistant
Case colour:	light grey, RAL 7035
Dimensions:	74 x 180 mm (D×H)

**No.: 20-4200030-01**

Revolving mirror light orange

Visual alarm device with screw drive and good visibility thanks to halogen lamps.

**No.: 20-4200031-01**

Operating voltage:	230 V AC
Current consumption:	max. 230 mA
Wattage:	55 W
Degree of protection:	IP 54
Ambient temperature:	−30 °C to +50 °C
Case material:	Polycarbonate
Case colour:	black
Dome colour:	orange
Dimensions:	160 x 220 mm (D×H)

CWB ATEX Ex-flashlight



No.: FG020380



No.: 20-4200061-01

Flashlight with aluminium case, made of an explosion-proof construction and are used to visibly announcement a source of danger in category 2G, 2D, 3G and 3D in hazardous areas. The case is made of aluminium and is suitable for use in all chemical, petrochemical and offshore installations. Its high degree of protection and solid mechanical construction permit use in harsh ambient conditions.

Operating voltage range:	12 – 48 V ± 10 %
Current consumption:	230 mA typ.
Wattage:	5.6 W
Flash frequency:	1 Hz
Connection:	screw-type terminals max. 2 \times 4 mm ² , single wire max. 2 \times 2.5 mm ² , fine-stranded
Cable entry:	1 \times stuffing junctions M20 \times 1.5 Clamping range 6 – 13 mm 1 \times closing plugs, M20 \times 1.5
Degree of protection:	IP 66
Ambient temperature:	–20 °C to +50 °C
Relative air humidity:	90 % without condensation
Case material:	aluminium alloy
Case colour:	black base, yellow case
Dome material:	Polycarbonate
Dome colour:	red or clear
Weight:	approx. 1.3 kg
Dimensions:	70 \times 260 mm (D \times H)
Ex classification:	II 2 G Ex d e IIC T6 Gb II 2 G Ex d e IIC T5 Gb II 2 D Ex tb IIIC T85 °C Db IP 66 (T6) II 2 D Ex tb IIIC T100 °C Db IP 66 (T5)
ATEX approval:	LCIE 02 ATEX 6113

**No.: 20-4200052-01**

FL60 Ex-flashlight

Robust, pressure-capsulated flashlight, designed and approved for use in hazardous areas.

Operating voltage:	24 V DC
Current consumption:	350 mA typ.
Flash frequency:	1 Hz
Degree of protection:	IP 66
Ambient temperature:	–40 °C to +60 °C
Case colour:	red, similar to RAL 3020
Dome colour:	orange
Dimensions:	317 × 128 × 176 mm (H×W×D)
Weight:	5.5 kg
Ex classification:	II 2 G Ex db eb IIC T4 Gb II 2 D Ex tb IIIC T100 °C Db

**No.: 20-4200051-02**

Ex-sounder YA60

Robust, pressure-capsulated siren incl. operating system mounting bracket for use in hazardous zones 1, 2, 21 and 22.

Operating voltage range:	12 – 27.2 V DC
Volume:	114 dB, distance 1 m
Possible types of tones:	4 tone channels and 64 preconfigured tones
Degree of protection:	IP 66
Ambient temperature:	–40 °C to +70 °C
Case material:	aluminium with stainless steel fastenings
Case colour:	red, similar to RAL 3020
Dimensions:	319 × 176 × 128 mm (H×W×D)
Weight:	6.2 kg
Ex classification:	EX II 2 G Ex db eb IIC T6 / T4 Gb EX II 2 D Ex tb IIIC T80 °C / T100 °C Db

Ex-siren IS-S-02



No.: 20-4200004-01

The compact and robust IP 66 Ex-siren is used for acoustic signalling of a fire alarm. It ensures high reliability and a long lifespan, even in the presence of unfavourable ambient conditions in outdoor areas. In addition, the Ex-siren is suitable and approved for use in hazardous areas (zone 1 and 2).

The integrated electronic tone oscillator offers 32 different types of tones, which can be set with a five-way DIP switch.

Suitable for wiring to monitored and unmonitored outputs of an Integral EvoxX fire alarm control panel.

The cable inlet (M20) can be on the bottom or at the side of the base.

Operating voltage range:	16 – 28 V DC via intrinsic safety barrier
Current consumption:	33 mA typ. with 24 V DC
Volume:	105 dB, distance 1 m
Connection:	screw-type terminals, max. 1.5 mm ²
Possible types of tones:	32
Degree of protection:	IP 66
Ambient temperature:	–40 °C to +55 °C
Case material:	Polycarbonate
Case colour:	red, RAL 3001
Dimensions:	97.5 × 105 mm (D×H)
Weight:	280 g
Ex classification:	Ex ia I MA Ex ia IIC T6 Ga Ex ia IIIC T85C Da
ATEX approval:	EMT 17 ATEX 0011X
LPCB-Approval:	1448a
Declaration of Performance (DoP):	2831-CPR-F2313

YL60 combined Ex-siren and flashlight



No.: 20-4200050-02

Robust, pressure-capsulated combined siren/flashlight, designed and approved for use in hazardous areas. The acoustic and optical signals can be operated independently or in combination.

Operating voltage:	24 V DC
Current consumption:	570 mA typ.
Flash frequency:	1 Hz
Volume:	114 dB, distance 1 m
Degree of protection:	IP 66
Ambient temperature:	–40 °C to +70 °C
Case material:	Aluminium, powder-coated
Case colour:	red, similar to RAL 3020
Dome material:	Polycarbonate
Dome colour:	red
Dimensions:	422 x 128 x 176 mm (HxWxD)
Weight:	6.6 kg
Ex classification:	II 2 G Ex db eb IIC T4 Gb II 2 D Ex tb IIIC T100 °C Db

Conventional signal devices and accessories

	Designation	Type	Article no.
	Solex 10 flashlight Case red, dome red	SOLEX 10	20-4200003-02
	Solex 10 flashlight Case white, dome orange	SOLEX 10	20-4200003-01
	Optical signal devices – wall mounting Red case, IP 21C, low base, red dome	SONOS-BW ESDA1000RRS	30-6300007-01
	Optical signal devices – wall mounting Red case, IP 65, tall base, red dome	SONOS-BW ESDA1000RRD	30-6300007-02
	Optical signal devices – wall mounting Red case, IP 21C, low base, white dome	SONOS-BW ES- BA4000RWS	30-6300007-07
	Optical signal devices – wall mounting Red case, IP 65, tall base, white dome	SONOS-BW ES- BA4000RWD	30-6300007-08
	Optical signal devices – wall mounting White case, IP 21C, low base, white dome	SONOS-BW ES- BA4000WWS	30-6300007-03
	Optical signal devices – wall mounting White case, IP 65, tall base, white dome	SONOS-BW ES- BA4000WWD	30-6300007-04
	Optical signal devices – wall mounting White case, IP 21C, low base, red dome	SONOS-BW ESDA1000WRS	30-6300007-05
	Optical signal devices – wall mounting Red case, IP 65, tall base, red dome	SONOS-BW ESDA1000WRD	30-6300007-06
	Optical signal devices – ceiling mounting Red case, IP 21C, low base, red dome	SONOS-BC ESDA2000RRS	30-6300008-01
	Optical signal devices – ceiling mounting Red case, IP 65, tall base, red dome	SONOS-BC ESDA2000RRD	30-6300008-02
	Optical signal devices – ceiling mounting Red case, IP 21C, low base, white dome	SONOS-BC ES- BA3000RWS	30-6300008-07
	Optical signal devices – ceiling mounting Red case, IP 65, tall base, white dome	SONOS-BC ES- BA3000RWD	30-6300008-08
	Optical signal devices – ceiling mounting White case, IP 21C, low base, white dome	SONOS-BC ES- BA3000WWS	30-6300008-03

	Designation	Type	Article no.
	Optical signal devices – ceiling mounting White case, IP 65, tall base, white dome	SONOS-BC ES-BA3000WWD	30-6300008-04
	Optical signal devices – ceiling mounting White case, IP 21C, low base, red dome	SONOS-BC ESDA2000WRS	30-6300008-05
	Optical signal devices – ceiling mounting Red case, IP 65, tall base, red dome	SONOS-BC ESDA2000WRD	30-6300008-06
	Sonos S siren case red, IP 21 flat base	PSS-0153/PSS-0084	30-6300014-01
	Sonos S siren case red, IP 65 high base	PSS-0154/PSS-0084	30-6300014-02
	Sonos S siren case white, IP 21 flat base	PSS-0155/PSS-0089	30-6300014-03
	Sonos S siren case white, IP 65 high base	PSS-0156/PSS-0089	30-6300014-04
	Siren for flush mounting, red	ACR	FG020661
	Siren for flush mounting, white	ACW	FG020660
	Optical signal devices/sounders – wall mounting Red case, IP 21C, low base, red dome	SONOSSBW ESFA1000RRS	30-6300009-01
	Optical signal devices/sounders – wall mounting Red case, IP 65, tall base, red dome	SONOSSBW ESFA1000RRD	30-6300009-02
	Optical signal devices/sounders – wall mounting Red case, IP 21C, low base, white dome	SONOSSBW ESCA4000RWS	30-6300009-07
	Optical signal devices/sounders – wall mounting Red case, IP 65, tall base, white dome	SONOSSBW ESCA4000RWD	30-6300009-08
	Optical signal devices/sounders – wall mounting White case, IP 21C, low base, white dome	SONOSSBW ESCA4000WWS	30-6300009-03
	Optical signal devices/sounders – wall mounting White case, IP 65, tall base, white dome	SONOSSBW ESCA4000WWD	30-6300009-04

	Designation	Type	Article no.
	Optical signal devices/sounders – wall mounting White case, IP 21C, low base, red dome	SONOSSBW ESFA1000WRS	30-6300009-05
	Optical signal devices/sounders – wall mounting Red case, IP 65, tall base, red dome	SONOSSBW ESFA1000WRD	30-6300009-06
	Optical signal devices/sounders – ceiling mounting Red case, IP 21C, low base, red dome	SONOSSBC ESFA2000RRS	30-6300010-01
	Optical signal devices/sounders – ceiling mounting Red case, IP 65, tall base, red dome	SONOSSBC ESFA2000RRD	30-6300010-02
	Optical signal devices/sounders – ceiling mounting Red case, IP 21C, low base, white dome	SONOSSBC ESCA3000RWS	30-6300010-07
	Optical signal devices/sounders – ceiling mounting Red case, IP 65, tall base, white dome	SONOSSBC ESCA3000RWD	30-6300010-08
	Optical signal devices/sounders – ceiling mounting White case, IP 21C, low base, white dome	SONOSSBC ESCA3000WWS	30-6300010-03
	Optical signal devices/sounders – ceiling mounting White case, IP 65, tall base, white dome	SONOSSBC ESCA3000WWD	30-6300010-04
	Optical signal devices/sounders – ceiling mounting White case, IP 21C, low base, red dome	SONOSSBC ESFA2000WRS	30-6300010-05
	Optical signal devices/sounders – ceiling mounting Red case, IP 65, tall base, red dome	SONOSSBC ESFA2000WRD	30-6300010-06
	Combined siren/flashlight, case red, IP 43	VTB-32E-SB-RB/AL	FG020342
	Combined siren/flashlight, case red, IP 65	VTB-32E-DB-RB/AL	FG020343
	Combined siren/flashlight, case white, IP 43	VTB-32E-SB-WB/AL	FG020344
	Combined siren/flashlight, case white, IP 65	VTB-32E-DB-WB/AL	FG020345
	Alarm bell 24 V DC/35 mA	CFB6D24	20-4200045-01

	Designation	Type	Article no.
	Signal horn 24 V DC/25 mA Protection class IP 65	COHP582GT24	20-4200040-01
	Signal horn 230 V AC/30 mA Protection class IP 65	COHP582GT230	20-4200041-01
	Revolving mirror light orange Protection class IP 54, 230 V AC	COBL595H1RTH230AL	20-4200030-01
	Wall mount for revolving mirror light for COBL595H1RTH230AL	COBL595H1RTHWM	20-4200031-01
	CWB ATEX Ex-flashlight, red incl. connection joint	CWB EX RT	FG020380
	CWB ATEX Ex-flashlight, clear incl. connection joint	CWB EX KL	20-4200061-01
	Mounting bracket for CWB ATEX for wall-mounting	CWB EX WW	FG020382
	EX-flashlight FL60, orange	FL60/324- D0111-00RW3	20-4200052-01
	Ex-siren YA60 Ex zones 1, 2, 21, 22, EN 54, max. 120 dB	YA60/326- DS001-00003	20-4200051-02
	Ex-siren IS-S-02 Case red, IP 66	IS-S-02	20-4200004-01
	YL60 Ex combination signal	YL60/324- DS101-00RW3	20-4200050-02
	Exd cable entry M20 for V6 EX, YL60, YA60	CAP806674V1	20-3002112-01
	Exd dummy junction M20	CYA1200YXN	20-3002114-01
	Exd cable entry M25	CAP806774V1	20-3002111-01
	Exd dummy junction M25	CYA1300YXN	20-3002110-01

	Designation	Type	Article no.
	Reduction M25 × M20	BBA1312YXN	20-3002113-01

8.5 Holding magnets and anchoring plates

8.5.1 Integral X-LINE

BX-MDH holding magnet



No.: 20-2100050-01



No.: FG030173

The BX-MDH magnetic door holder is used to hold doors open in idle mode and to close them in the case of an event.



Traditional magnets must be continuously supplied with current to keep the doors open, whereas for the BX-MDH doors are held open by the integrated permanent magnets - completely energy consumption-free. The triggering is done by a short current pulse: with the help of an integrated battery in the BX-MDH an inverted magnetic field is created, temporarily neutralising the permanent magnet's holding strength, thereby initiating the closing process for the door.

An integrated limit switch in the BX-MDH as well as is optionally additional limit switch in the door frame can continuously monitor the door position, and in the event of a fault occurring (e.g. door obstructed) can trigger the appropriate message. This is an important safety aspect when closing doors in critical sections in case of an event.

The BX-MDH is operated in conjunction with automatic detectors, alarm devices and output modules on the same loop; due to the built-in short circuit isolator a high level of availability is provided in case of wire break or short circuit. Each magnet can be individually addressed and configured; this allows selective activation of each individual door, thereby being tailored according the individual requirements of the customer.

Operating voltage range:	12 – 30 V DC
Quiescent current:	0.55 mA typ.
Fault current:	
Door open:	0.34 mA typ.
Door closed:	0.12 mA typ.
Signal transmission:	serial, two-wire technology
Monitored inputs:	two input for potential-free contacts
Wattage:	2.1 W
Magnetic contact area:	diameter 48 mm
Release processes:	approx. 100 000
Back-up battery:	9 V lithium
System connection:	max. 32 per loop
Connection:	screw-type terminals, max. 1.5 mm ²
Short circuit isolator:	integrated
Degree of protection:	IP 42
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case colour:	light grey, RAL 7035
Dimensions:	142 × 85 × 53 mm (H×W×D)

X-LINE holding magnets and accessories

	Designation	Type	Article no.
	Surface-mounted holding magnet for X-LINE incl. anchoring plate	BX-MDH	20-2100050-01
	Lithium battery 9 V for BX-MDH	U9VL-J-P	FG030173

8.5.2 Conventional (non-addressable)

The following conventional holding magnets cannot be addressed.



No.: 20-4001003-01

Holding magnet with mounting plate

Electric holding magnet on a plastic mounting plate with concealed connection terminal. A swivelling anchoring plate is included.

Operating voltage:	24 V DC
Wattage:	1.6 W
Magnetic contact area:	diameter 48 mm
Max. holding strength:	400 N
Degree of protection:	IP 42
Dimensions:	55 × 55 × 35 mm (H×W×D)



No.: 20-4001001-01

Holding magnet with breaker button

Electric holding magnet with circuit breaker button for bridging larger distances between door and wall. A swivelling anchoring plate is included.

Operating voltage:	24 V DC
Wattage:	1.6 W
Magnetic contact area:	diameter 48 mm
Max. holding strength:	400 N
Degree of protection:	IP 42
Dimensions:	70 × 70 × 65 mm (H×W×D)



No.: 20-4001000-01

Holding magnet for surface mounting 400 N

Electric holding magnet with circuit breaker button in a plastic case for surface mounting. Includes swivelling anchoring plate and blanking stopper.

Operating voltage:	24 V DC
Wattage:	1.6 W
Magnetic contact area:	diameter 48 mm
Max. holding strength:	400 N
Degree of protection:	IP 42
Dimensions:	120 × 85 × 38 mm (H×W×D)

**No.: 20-4001004-01**

Holding magnet for flush mounting

Electric holding magnet without a circuit breaker button for flush mounting. A swivelling anchoring plate is included.

Operating voltage:	24 V DC
Wattage:	1.6 W
Magnetic contact area:	diameter 48 mm
Max. holding strength:	400 N
Degree of protection:	IP 42
Dimensions:	85 × 85 × 15 mm (H×W×D)

**No.: 20-4001011-01**

Floor-mounted holding magnet

Electric holding magnet for floor mounting in a die-cast aluminium case with circuit breaker button. The electrical connection is made prior to installation via a two-pin terminal.

Operating voltage:	24 V DC
Wattage:	1.5 W
Magnetic contact area:	diameter 50 mm (63 mm upon request)
Max. holding strength:	490 N
Degree of protection:	IP 65
Dimensions:	109 × 120 × 86 mm (H×W×D)

**No.: 20-4001002-01**

Holding magnet for floor or wall mounting

Electric holding magnet with circuit breaker button with swivelling magnetic head for floor or wall-mounting. Three base lengths for different wall distances. A swivelling anchoring plate is included.

Operating voltage:	24 V DC
Wattage:	1.6 W
Magnetic contact area:	diameter 48 mm
Max. holding strength:	400 N
Degree of protection:	IP 42
Dimensions:	85 × 90 mm (W×D), L: 175, 325, 475 mm

**No.: 20-4001030-01**

Ex-Holding magnet for surface mounting

The electric holding magnet in an explosion-proof version in cast case is intended for use in hazardous areas and is surface-mounted. It is ATEX approved and has ignition protection type e (increased safety).

Operating voltage:	24 V DC
Wattage:	3 W
Magnetic contact area:	diameter 50 mm
Max. holding strength:	588 N
Dimensions:	130 × 117 × 106 mm (H×W×D)
Ex classification:	EX II 2 G EEx m e II T6
ATEX approval:	TÜV 01 ATEX 1778X

**No.: 20-4001006-01**

Flexible anchoring plate

Flexible anchoring plate for holding magnets on a plastic mounting plate. It is mounted using four countersunk screws.

Anchoring plate:	Diameter 55 or 65 mm
Dimensions mounting plate:	
Anchor plate 55 mm:	55 × 55 × 18 mm (H×W×D)
Anchor plate 65 mm:	75 × 75 × 23 mm (H×W×D)

**No.: 20-4001031-01**

Flexible anchoring plate for Ex-holding magnet

Flexible nickel-plated anchor on a plastic mounting plate for Ex-holding magnets. It is mounted using four countersunk screws.

Anchoring plate:	diameter 55 mm
Dimensions:	55 × 55 × 18 mm (H×W×D)

**No.: 20-4001007-01**

Swivelling anchoring plate

Swivelling anchoring plate for holding magnets on a plastic mounting plate. It is mounted using four countersunk screws.

Anchoring plate:	diameter 55 mm (others on request)
Slewing range:	2 × 60°
Dimensions:	55 × 55 × 50 mm (H×W×D)

**No.: 20-4001008-01**

Telescopic anchor

Moveable anchoring plate with telescopic guide. It is mounted using four countersunk screws.

Anchoring plate:	diameter 55 mm
Travel:	20 mm
Dimensions:	55 × 55 × 79 mm (H×W×D)

**No.: 20-4001009-01**

Wall-mounted bracket for holding magnet

Suitable for BX-MDH and GTR0480008 holding magnets, available in 150 mm or 300 mm version.

Dimensions:	140 × 300 × 100 mm (H×W×D) bzw. 140 × 150 × 100 mm (H×W×D)
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**No.: 20-4001009-02**

Floor bracket for holding magnet



Suitable for BX-MDH and GTR0480008 holding magnets.

Dimensions:	128 × 95 × 80 mm (H×W×D)
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**No.: 20-4001010-01**

Holding magnets, anchoring plates, and accessories

	Designation	Type	Article no.
	Holding magnet with mounting plate	GTR0480002	20-4001003-01
	Holding magnet with breaker button	GTR0480007	20-4001001-01
	Surface-mounted holding magnet with breaker button	GTR0480008	20-4001000-01
	Flush-mounted holding magnet	GTR0480004	20-4001004-01
	Floor-mounted holding magnet	GTR050.500002	20-4001011-01
	Holding magnet floor/wall (150/175 mm)	GTR0480011	20-4001002-01
	Holding magnet floor/wall (300/325 mm)	GTR0480014	20-4001002-02
	Holding magnet floor/wall (450/475 mm)	GTR0480015	20-4001002-03
	Mounting base for 20-4001002-xx	SZB000.257500	20-4001005-01
	Ex-Holding magnet for surface mounting	GT50R050	20-4001030-01
	Flexible anchoring plate 55 mm on mounting plate, 55 mm	GTX050.000101	20-4001006-01
	Flexible anchoring plate 65 mm on mounting plate, 75 mm	GTX063.000001	20-4001006-02
	Flexible anchoring plate for Ex-holding magnet	GT50R105	20-4001031-01
	Swivelling anchoring plate, 55 mm	GTX050.000203	20-4001007-01
	Telescopic anchor	GTX050.000310	20-4001008-01
	Wall-mounted bracket for holding magnet, 150 mm	GTR048000A07800	20-4001009-01

	Designation	Type	Article no.
	Wall-mounted bracket for holding magnet, 300 mm	GTR048000A07900	20-4001009-02
	Floor bracket for holding magnet	GTR048000A12006	20-4001010-01

8.6 Testing devices



No.: FG030200

UTP universal telescopic bar

Locking telescopic bar, available in three or four-metre lengths; the telescopic bar's range can be extended by 1.5 m to 6 m or 7 m respectively with the 1.3 m extender. Fits all Schrack detector removers and testing devices.

Transport length:	
UTP3:	1.7 m for installation heights up to 4.5 m
UTP4:	2.2 m for installation heights up to 5.5 m
Weight:	
UTP3:	1 kg
UTP4:	1.2 kg



No.: FG030209

UTP 30 kV universal telescopic bar

Telescopic bar with dielectric strength up to 30 kV for mounting heights up to 4.5 meter or 11 meter. Fits all Schrack detector removers and testing devices.

Transport length:	
UTP3 30KV:	1.7 m for installation heights up to 4.5 m
UTP10 30KV:	1.7 m for installation heights up to 11 m
Weight:	
UTP3 30KV:	2.2 kg
UTP4 30KV:	3.9 kg

FDT 533 testing devices and FDT 533 CO-set



No.: FG030202

The FDT 533 testing device is used to test the smoke and heat functionality of fire detectors. With the optional expansion FDT 533 CO Set, the CO functionality of a fire detector can also be tested.

The FDT 533 testing device consists of a holder for the test gas bottle (smoke/heat), a trigger lever with sliding mechanism and an adapter for mounting on a suitable testing bar.

The expansion FDT 533 CO Set consists of a holder for the test gas bottle (CO), a trigger lever and a clamp mount for attaching to the FDT 533.



No.: FG030202
No.: 30-5600001-01

FDT 533

Case material:	PPE/PS
Dimensions:	356 x 123 x 73 mm (HxWxD)
Weight without testing gas:	approx. 360 g

FDT 533 CO kit

Case material:	
Clamp mount:	PA 6 GF 30
CO holder:	polycarbonate/ABS
Dimensions:	185 x 210 x 85 mm (HxWxD)
Weight without testing gas:	approx. 302 g

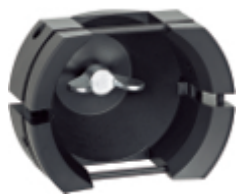


No.: FG030117



No.: FG030990

UDR 533 detector remover



No.: FG030240



No.: FG030241



No.: FG030242

To install or to remove the CUBUS multiple sensor detector into/from the detector base.

The UDR 533S and UDR 533K detector remover tools can be mounted on the UTP series telescopic bars, whereby the UDR 533K detector remover tool is also suitable for offset insertion or removal of the detector due to the cardan joint.

The UDR 533A interchangeable insert can be used in the UDR 531K detector remover tool (for series 531 detectors).

UDR 533 A

Dimensions: 98 × 71 × 62 mm (H×W×D)

Weight: approx. 150 g

UDR 533S

Dimensions: 98 × 71 × 232 mm (H×W×D)

Weight: approx. 200 g

UDR 533K

Dimensions: 170 × 160 × 232 mm (H×W×D)

Weight: approx. 530 g

STB 01X testing device for loop



No.: 50-1000004-01



No.: 20-1400320-01

Portable device for easy testing of an installed Integral loop or Integral X-LINE without a connected fire alarm control panel. Up to 1000 loops can be stored using the integrated SD memory card and provided in XML format using a converter.

Delivery includes the SD memory card, USB cable for firmware updates and power supply unit; the carrying case must be ordered separately.

Mains voltage:	230 V AC
Operating voltage range:	20 – 30 V DC
Loop operating voltage:	12 V DC or 24 V DC
Quiescent current:	110 mA (without external consumers)
Connection:	plug-in terminals, 1.5 mm ²
Degree of protection:	IP 20
Ambient temperature:	+5 °C to +40 °C
Case material:	polyamide
Case colour:	black-grey, similar to RAL 7021
Dimensions:	
STB 01X:	220 × 116 × 60 mm (H×W×D)
Carrying case:	400 × 300 × 183 mm (H×W×D)
Weight without power supply unit:	480 g

Testing devices and accessories

	Designation	Type	Article no.
	Universal telescopic bar 3 m	UTP3	FG030200
	Universal telescopic bar 4 m	UTP4	FG030201
	1.3 m extender for UTP 3 and 4	UTP V	FG030208
	Universal telescopic bar 3 m 30 kV	UTP3 30KV	FG030209
	Universal telescopic bar 11 m 30 kV	UTP10 30KV	FG030210
	Testing device for smoke detectors	FDT 533	FG030202
	Testing gas 918/5 for smoke detectors	PRUEFGAS	FG030117
	Testing device for CO detectors	FDT 533 CO-SET	30-5600001-01
	Testing gas for CO detectors	SOLO C3	FG030990
	UDR 533A detector remover	UDR 533A	FG030240
	UDR 533S detector remover	UDR 533S	FG030241
	UDR 533K detector remover	UDR 533K	FG030242
	Replacement rubber for UDR 533	UDR 533 G	FG030243
	Testing device for X-LINE German labelling	STB 01X-D	50-1000004-01
	Testing device for X-LINE English labelling	STB 01X-E	50-1000004-02
	Case for STB 01X	STB01X CASE	20-1400320-01

9 Special fire alarm systems

9.1 Aspirating smoke detectors

Aspirating smoke detectors continuously take air samples from an area to be monitored via sampling pipe networks with sampling points. The air samples are examined for smoke particles with the aid of highly sensitive smoke sensors. The smoke sensors are available in different sensitivity classes and can also be adapted in their sensitivity to the conditions.

A high-performance fan is integrated into the evaluation unit. The fan continuously transports air from the monitoring area via the sampling pipe into the evaluation unit. With the airflow monitoring the sampling pipe is monitored for pipe breakage and contamination of the sampling points.

The sampling pipe is constructed symmetrically and can be designed in an I, U, T, H or E-shape. Asymmetrical sampling pipe networks can also be realised using the ASD PipeFlow calculation software. If the sampling points and evaluation unit are located in different climate zones, the sampled air must be returned to the climate zone of the sampled air. The maximum length of the pipework for air recirculation must not exceed 20 metres.

Thanks to this type of detection and the good properties against extreme ambient conditions, aspirating smoke detectors are used where difficult conditions are to be expected during operation. These can be difficult-to-access monitoring areas or latent sources of interference. Conventional point fire detectors are not able to guarantee optimal protection in such cases. Aspirating smoke detectors are used especially in listed buildings or in aesthetically demanding interiors where point fire detectors on the ceiling would disturb the impression of the room.

9.1.1 Compatibility list

Type	ASD 531	ASD 532	ASD 535
Applications	Small monitoring areas and facility monitoring	Small and medium-sized monitoring areas	Large monitoring areas
Number of channels	1	1	1 or 2
Smoke sensor	SSD 31	SSD 532-1 SSD 532-2 SSD 532-3	SSD 535-1 SSD 535-2 SSD 535-3
Max. monitoring area	720m ²	1280m ²	5760m ²
Max. sampling pipe length	75 m	120 m	2 × 300 m
Max. length to the most remote sampling point	40 m	70 m	110 m
Max. number of sampling points			
Class A	6	8	18
Class B	8	12	56
Class C	12	16	120
Max. number of sampling points per sampling branch			
Class A	6	8	18
Class B	8	12	50
Class C	12	16	50
Integration fire alarm system	via module XLM 35		
Smoke level indication	No	Yes	Yes (version 3 and 4)
Programming (PC tool)	No	ASD Config	ASD Config
Interfaces	SD card	SD card, ethernet	SD card, USB
Configuration	BasiConfig	EasyConfig	EasyConfig
Sampling pipe calculation	ASD PipeFlow	ASD PipeFlow	ASD PipeFlow
Max. number of optional module	2	2	4
Possible optional modules	XLM 35 (1 ×) RIM 36 (2 ×)	XLM 35 (1 ×) RIM 36 (2 ×) SIM 35 (1 ×)	XLM 35 (1 ×) RIM 35 (2 ×) SIM 35 (1 ×) MCM 35 (1 ×)

9.1.2 Basic extensions and smoke sensors

ASD 531 aspirating smoke detector



No.: 11-2000002-01

Universal aspirating smoke detector without smoke level indication and with a built-in smoke sensor SSD 31 for monitoring small areas and facility monitoring (e.g. individual IT racks, lift shafts, clean rooms, ventilation ducts, cavity ceilings).

The SSD 31 smoke sensor is included in the ASD 531. This has an alarm sensitivity range of 0.02 %/m to 10 %/m.

Operating voltage range:	14 – 30 V DC
Quiescent current:	75 mA typ. with 24 V DC
Alarm current:	80 mA typ with 24 V DC
Relay outputs:	Two potential-free contacts
Optional module:	Max. two pieces ((XLM 35, RIM 36)
Sensitivity range:	0.02 – 10 %/m
Cable inlet:	3 × M20, 1 × M25
Monitoring area:	720 m ²
Pipe length (EN 54-20):	75 m
Pipe diameter:	20/25 mm (inner/outer)
Tubing deformation stability:	up to +60 °C
Fan:	One speed
Sound pressure level:	25 dB (A) at 1 m
Degree of protection:	IP 54
Ambient temperature:	–10 °C to +55 °C
Case material:	ABS, UL 94-V0
Case colour:	light grey, RAL 280 70 05 anthracite, RAL 300 20 05
Dimensions:	333 × 195 × 140 mm (H×W×D)
Weight:	1950 g
VdS approval:	G215100
Declaration of Performance (DoP):	CPR-11-16-106

ASD 532 aspirating smoke detector



No.: 11-2000003-01

Universal aspirating smoke detector without smoke level indication and with a built-in smoke sensor SSD 532 for monitoring small and medium-sized areas and facility monitoring (e.g. lift shafts, prison cells, clean rooms, laboratories, IT racks, telecommunication facilities).

The aspirating smoke detector has two installation slots for fitting the following optional modules:

- XLM 35 loop module X-LINE
- RIM 36 relay interface module with five relays
- SIM 35 serial interface module



NOTE

The smoke sensor SSD 532 of type 1, 2 or 3 must be ordered separately depending on the required sensitivity.

Operating voltage range:	14 – 30 V DC
Quiescent current:	100 mA typ. with 24 V DC
Alarm current:	115 mA typ with 24 V DC
Relay outputs:	Two potential-free contacts
Optional module:	Max. two pieces (XLM 35, RIM 36, SIM 35)
Sensitivity range:	
SSD 532-1:	0.5 – 10 %/m
SSD 532-2:	0.1 – 10 %/m
SSD 532-3:	0.02 – 10 %/m
Cable inlet:	3 × M20, 1 × M25
Monitoring area:	1280 m ²
Pipe length (EN 54-20):	120 m
Pipe diameter:	20/25 mm (inner/outer)
Tubing deformation stability:	up to +60 °C
Fan:	Three speed levels
Sound pressure level at fan speed 1/2/3::	25/31/39 dB(A) at 1 m
Degree of protection:	IP 54
Ambient temperature:	–20 °C to +60 °C
Case material:	ABS, UL 94-V0
Case colour:	light grey, RAL 280 70 05 anthracite, RAL 300 20 05
Dimensions:	333 × 195 × 140 mm (H×W×D)
Weight:	2 kg
VdS approval:	G215101
Declaration of Performance (DoP):	CPR-11-16-107

SSD 532 smoke sensor for ASD 532



No.: 11-2000004-01



No.: 11-2000004-02



No.: 11-2000004-03

High-sensitivity HD sensor based on the scattered light principle for use in the various versions of the ASD 532. The sensor is designed for optimal smoke detection in connection with an aspirating smoke detector. The sensitivity of each smoke sensor is infinitely adjustable within the specified range.

- High-power LED with minimal air resistance and maximum resistance to contamination
- Fire characteristic sample comparison
- Intelligent intermediate alarm storage
- Alarm threshold adjustment with two-stage contamination indicator
- Dynamic particle suppression for detection and ignoring of dust particles
- Auto-learning function for critical ambient conditions

Operating voltage:	5 V DC
Degree of protection:	IP 44
Sensitivity range:	
SSD 532-1:	0.5 – 10 %/m
SSD 532-2:	0.1 – 10 %/m
SSD 532-3:	0.02 – 10 %/m
Ambient temperature:	–20 °C to +60 °C
Dimensions:	127 × 120 × 95 mm (H×W×D)
Case colour:	grey
VdS approval:	G215101
Declaration of Performance:	CPR-11-16-107

ASD 535 aspirating smoke detector



No.: 11-2000015-01

Universal aspirating smoke detector with or without smoke level indication and with one or two built-in smoke sensors SSD 535 for monitoring large areas and facility monitoring (e.g. high-bay warehouse, frozen storage, large data centres, historic buildings, high halls). The application in frozen storages and hazardous areas as well as the installation of the sampling pipes in concrete is possible in compliance with the application guideline.

An additional case (must be ordered separately) provides protection against mechanical damage (e.g. lift truck operations) resp. personal protection while monitoring hazardous areas.

The aspirating smoke detector has four installation slots for fitting the following optional modules:

- XLM 35 loop module X-LINE (no SLM 35 fitted)
- SLM 35 loop module (no XLM 35 fitted)
- RIM 35 relay interface module with five relays; enables the availability of all three pre-alarm signal stages as well as the states of the smoke sensor and the sampling pipe as relay contacts
- MCM 35 memory card module
- SIM 35 serial interface module



No.: 11-2000016-01



No.: 11-2000017-01



No.: 11-2000018-01



NOTE

The smoke sensor SSD 535 of type 1, 2 or 3 must be ordered separately depending on the required sensitivity.

Operating voltage range:	10.5 – 30 V DC
Quiescent current:	260 – 290 mA typ. with 24 V DC
Alarm current:	295 – 385 mA typ. with 24 V DC
Relay outputs:	three potential-free contacts
Optional module:	max. four modules (XLM 35, MCM 35, RIM 35, SIM 35)
Sensitivity range:	
SSD 535-1:	0.5 – 10 %/m
SSD 535-2:	0.1 – 10 %/m
SSD 535-3:	0.02 – 10 %/m
Pre-alarm signal sensitivity range:	0.002 – 10 %/m
Cable inlet:	4 × M20, 1 × M25
Monitoring area:	5760 m ²
Pipe length (EN 54-20):	max. 2 × 240 m max. 2 × 300 m
Pipe diameter:	20/25 mm (inner/outer)
Tubing deformation stability:	up to +60 °C
Fan:	radial, five selectable speeds
Sound pressure level at fan speed 1/2/3/4/5:	34/36/39/40/41 dB(A) at 1 m
Degree of protection:	IP 54
Ambient temperature:	–30 °C to +60 °C
Case material:	ABS, UL 94-V0
Case colour:	light grey, RAL 280 70 05 anthracite, RAL 300 20 05
Dimensions:	397 × 263 × 146 mm (H×W×D)
Weight:	3.8 kg
VdS approval:	G208154
Declaration of Performance (DoP):	CPR-11-13-101

SSD 535 smoke sensor for ASD 535



No.: 11-2000008-01



No.: 11-2000009-01



No.: 11-2000010-01

High-sensitivity HD sensor based on the scattered light principle for use in the various versions of the ASD 535. The sensor is designed for optimal smoke detection in connection with an aspirating smoke detector. The sensitivity of each smoke sensor is infinitely adjustable within the specified range.

- High-power LED with minimal air resistance and maximum resistance to contamination
- Fire characteristic sample comparison
- Intelligent intermediate alarm storage
- Alarm threshold adjustment with two-stage contamination indicator
- Dynamic particle suppression for detection and ignoring of dust particles
- Auto-learning function for critical ambient conditions

Operating voltage:	5 V DC
Sensitivity range:	
SSD 532-1:	0.5 – 10 %/m
SSD 532-2:	0.1 – 10 %/m
SSD 532-3:	0.02 – 10 %/m
Degree of protection:	IP 44
Ambient temperature:	–30 °C to +60 °C
Case colour:	grey
Dimensions:	145 × 120 × 95 mm (H×W×D)
VdS approval:	G208154
Declaration of Performance (DoP):	CPR-11-13-101

**No.: 11-2300147-01**

REK 511 detector box

The REK 511 detector box is an additional device for the ASD 531 and ASD 535 aspirating smoke detectors. It is used wherever high demands are placed on the response sensitivity or fire location detection of an aspirating smoke detector. It is installed in individual pipe branches of the sampling pipe.

The SSD 515-1S and SSD 515-3S smoke detector must be ordered separately.

Operating voltage range:	18 – 28 V DC
Degree of protection:	IP 53
Ambient temperature:	–20 °C to +60 °C
Case colour:	light grey, RAL 7035
Dimensions:	195 × 122 × 85 mm (H×W×D)
Weight:	500 g

**No.: FG030379****No.: FG030381**

SSD 515 smoke detector for REK 511

The SSD 515 scattered light smoke detector is suitable for installation in the REK 511 single detector identification and is designed to optimally meet the special requirements of smoke detection in connection with an aspirating smoke detector. The detector has alarm threshold adjustment and is available in different sensitivities.

Operating voltage:	18 – 28 V DC
Sensitivity:	
SSD 515-1S:	1.2 %/m
SSD 515-3S:	0.3 %/m
Degree of protection:	IP 44
Ambient temperature:	–20 °C to +60 °C
Case material:	PC
Case colour:	white
Dimensions:	80 × 56 mm (D×H)
Weight:	74 g
VdS approval:	G208154

Aspirating smoke detectors and accessories

	Designation	Type	Article no.
	ASD 531 aspirating smoke detector	ASD 531	11-2000002-01
	SSD 31 smoke sensor for ASD 531 Sensitivity 0.02 – 10 %/m (replacement)	SSD 31	11-2200009-01
	Motherboard for ASD 531	AMB 31	11-2200012-01
	Ventilator for ASD 531	AFU 32	11-2200008-01
	Airflow sensor for ASD 531	AFS 32	11-2200007-01
	Lithium battery CR 2032	CR 2032	5-BC112032
	ASD 532 aspirating smoke detector	ASD 532	11-2000003-01
	Smoke sensor SSD 532-1 for ASD 532 Sensitivity 0.5 – 10 %/m	SSD 532-1	11-2000004-01
	Smoke sensor SSD 532-2 for ASD 532 Sensitivity 0.1 – 10 %/m	SSD 532-2	11-2000004-02
	Smoke sensor SSD 532-3 for ASD 532 Sensitivity 0.02 – 10 %/m	SSD 532-3	11-2000004-03
	Motherboard for ASD 532	AMB 32	11-2200013-01
	ASD 535-1 aspirating smoke detector 1 sampling pipe, 1 detector without base	ASD 535-1	11-2000015-01
	ASD 535-2 aspirating smoke detector 2 sampling pipes, 2 detectors without base	ASD 535-2	11-2000016-01
	ASD 535-3 aspirating smoke detector 1 sampling pipe, 1 detector without base, with smoke level indicator	ASD 535-3	11-2000017-01
	ASD 535-4 aspirating smoke detector 2 sampling pipes, 2 detectors without base, with smoke level indicator	ASD 535-4	11-2000018-01
	SSD 535-1 smoke detector for ASD 535 Sensitivity 0.5 – 10 %/m	SSD 535-1	11-2000008-01

	Designation	Type	Article no.
	SSD 535-2 smoke detector for ASD 535 Sensitivity 0.1 – 10 %/m	SSD 535-2	11-2000009-01
	Smoke sensor SSD 535-3 for ASD 535 Sensitivity 0.02 – 10 %/m	SSD 535-3	11-2000010-01
	Motherboard for ASD 535-1 and ASD 535-3	AMB 35-1	11-2200016-01
	Motherboard for ASD 535-2 and ASD 535-4	AMB 35-2	11-2200017-01
	Airflow sensor incl. connection cable	AFS 35	11-2200051-01
	O-ring for AFS 35 Spare part for AFS; 1 PU = 50 pcs	O-RING VE 50	11-2300036-01
	Fan unit for ASD 535	AFU 35	11-2200052-01
	Standard indication panel for ASD 535-1 and -3	BCB 35	11-2200053-01
	Extended indication panel for ASD 535-2 and ASD 535-4	ACB 35	11-2200050-01
	Cover plate for ASD 535 1 PU = 50 pcs.	ASD 535 VERSCHL	11-2300009-01
	Detector box	REK 511	11-2300147-01
	SSD 515-1S smoke detector Sensitivity 1.2 %	SSD 515-1S	FG030379
	SSD-515-3S smoke detector Sensitivity 0.3 %	SSD 515-3S	FG030381
	Insect screen for ASD (2 pcs.)	IPS 35	11-2300012-01
	Turn-snap lock et for ASD 535/1 Set = 4 seals with spring	RSL 35	11-2200062-01
	ASD earthing clamp	GC 25 EX	50-0500215-02
	Cable gland M20 for ASD/ADW, 10 pcs. pack	M20 VE10	11-4000003-01

	Designation	Type	Article no.
	Cable gland M25 for ASD/ADW, 10 pcs. pack	M25 VE10	11-4000004-01

9.1.3 Optional modules and software

XLM 35 interface module



No.: 11-2200003-01

Optional module for connection of special detectors to the Integral X-LINE. The operation, configuration and retrieval of the special detector's data can be performed directly from the fire alarm control panel. Installation set included.

Operating voltage:	5 V DC
Current consumption:	max. 0.3 mA
Degree of protection:	IP 54
Ambient temperature:	
Manufacturer's instruction:	–30 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Dimensions:	58 × 95 × 17 mm (H×W×D)
Weight:	62 g

RIM 35 relay interface module



No.: 11-2200031-01

Optional module for installation into the ASD 535 with five relays (potential-free change-over contacts). Depending on the device variant, the relays are assigned predefined criteria or are freely programmable via the ASD Config configuration software. Up to two RIM 35 can be used per ASD 535. Installation set included.

Operating voltage:	5 V DC
Current consumption:	
All operation modes:	5 mA typ.
Fast alignment mode:	33 mA typ.
Relay contact load capacity:	max. 50 V DC/1 A/30 W
Ambient temperature:	–30 °C to +60 °C
Dimensions:	58 × 97 × 17 mm (H×W×D)
Weight:	85 g

**No.: 11-2200005-01**

RIM 36 relay interface module

Up to two RIM 36 can be installed in special fire detectors such as ASD aspirating smoke detectors or ADW line-type heat detectors. Depending on the device variant, the relays are assigned predefined criteria or are freely programmable via the ASD Config and ADW Config configuration software.

Operating voltage:	5 V DC
Current consumption:	
All operation modes:	5 mA typ.
Fast alignment mode:	33 mA typ.
Relay contact load capacity:	max. 50 V DC/1 A/30 W
Ambient temperature:	–30 °C to +70 °C
Dimensions:	58 × 95 × 17 mm (H×W×D)
Weight:	85 g

**No.: 11-2200057-01**

MCM 35 memory card module

Optional module for installation in the ASD 535 for recording of operating data. The module enables long-term recordings of smoke concentrations and airflows (sensor 1 and 2), as well as the event log memory at one-second intervals. Max. 251 log files each with 28 800 entries or 251 event files each with 64 000 events can be stored. One SD memory card and an installation set are included.

**No.: 11-4000007-01**

Operating voltage:	5 V DC
Current consumption:	max. 25 mA
Ambient temperature:	–30 °C to +60 °C
Dimensions:	58 × 99 × 17 mm (H×W×D)
Weight:	43 g

**No.: 11-2200000-01**

SIM 35 serial interface module

For networking of multiple ASD 535 via RS-485-bus. Via the ASD Config configuration software, all ASD 535 in the network can be visualised and operated from a PC. The SIM 35 provides a galvanic isolation between the RS-485 interface and the ASD 535. An activation with a dongle is required to visualise all ASDs simultaneously in the ASD Config.

Operating voltage:	5 V DC
Current consumption:	max. 20 mA
Ambient temperature:	–30 °C to +60 °C
Dimensions:	58 × 95 × 17 mm (H×W×D)
Weight:	56 g



No.: 11-2200001-01

SMM 535 serial master module

Master module for networking several ASD 535 via RS-485 bus. The SMM 535 is connected to a PC via USB cable and provides the access point for ASD networking. The ASD Config configuration software is used as the user interface on the PC. The SMM 535 provides a galvanic isolation between the RS-485 interface and the USB interface. An activation with a dongle is required to visualise all ASD simultaneously in the ASD Config.

Operating voltage:	5 V DC
Current consumption:	max. 100 mA
Ambient temperature:	−30 °C to +60 °C
Dimensions:	89 × 82 × 55 mm (H×W×D)
Weight:	165 g
Operating voltage:	5 V DC
Current consumption:	max. 100 mA
Ambient temperature:	−30 °C to +60 °C
Dimensions:	89 × 82 × 55 mm (H×W×D)
Weight:	165 g



No.: Upon request

ASD PipeFlow calculation software

For planning and calculation of symmetrical and asymmetrical sampling pipe networks in accordance with EN 54-20.

- Makes planning faster and easier
- Allows extended system limits
- Includes all types of tubes and accessories

Required Hard- and Software:

- Windows 7, Windows 10 operating system
- CPU with clockspeed min. 1 GHz
- 256 MB RAM
- 300 MB free hard disk space
- USB interface
- Administrator rights



No.: Upon request

ASD Config configuration software

For commissioning and configuring the ASD 535.

- Visualisation of interconnection of aspirating smoke detectors
- Controlling the heating elements in frozen application
- Adjusting the smoke sensor alarm thresholds
- Adjustment of airflow monitoring
- Definition of pre-alarm signal assignment and the Auto Learning criteria
- Definition of day/night function and allocation of the relays
- Adjusting the fan speed
- Setting/readout of time and firmware update

Required Hard- and Software:

- Windows 7, Windows 10 operating system
- CPU with clockspeed min. 1 GHz
- 256 MB RAM
- 300 MB free hard disk space
- USB interface
- Administrator rights

Optional modules and software

	Designation	Type	Article no.
	SD memory card industrial	SD-INDUSTRIAL	11-4000007-01
	XLM 35 interface module	XLM 35	11-2200003-01
	RIM 35 relay interface module	RIM 35	11-2200031-01
	RIM 36 relay interface module	RIM 36	11-2200005-01
	MCM 35 memory card module incl. SD card	MCM 35	11-2200057-01
	SIM 35 serial interface module	SIM 35	11-2200000-01
	SMM 535 serial master module	SMM 535	11-2200001-01
	ASD PipeFlow calculation software	ASD PIPEFLOW	Upon request
	ASD Config configuration software	ASD CONFIG	Upon request
	UMS 35 module adapter	UMS 35	FG030826
	USB cable 4.5 m length	KAB USB 45	23-1020022-01

9.1.4 Sound and explosion protection

DFA 22-x detonation flame arrester



No.: 50-0500674-01



No.: 50-0500675-01



No.: 50-0500676-01

Functions as an accessory for the ASD 535 aspirating smoke detector in category 2G (zone 1) and category 3G (zone 2) hazardous areas in accordance with Directive 2014/34/EU (ATEX 100a) to prevent flame breakouts in stable detonations and deflagrations. BAM and TÜV tested and approved for products of explosion group IIA up to a permissible standard gap width according to DIN ISO 16852 of 0.9 mm, for products of explosion group IIB up to a permissible standard gap width according to DIN ISO 16852 of 0.65 mm and for products of explosion group IIC up to a permissible standard gap width according to DIN ISO 16852 of 0.5 mm. Includes two junctions.



NOTE

The detonation flame arrester is used exclusively in connection with the ASD 535 aspirating smoke detector. The aspirating smoke detector must be installed outside the hazardous area!

Area for use:	
DFA 22-1 RB:	for explosion group IIA
DFA 22-2 RB:	for explosion group IIB
DFA 22-3 RB:	for explosion group IIC
Cable inlet:	two changeovers to metal pipe (d22)
Case material:	Stainless steel
Sealing material:	PTFE
Flame filter material:	stainless steel, material: 1.4571
Bolting material:	Red brass, brass
Ambient temperature:	–30 °C to +60 °C
Weight:	approx. 8 kg
ATEX approval:	
DFA 22-1 RB:	IBExU10 ATEX 2147X
DFA 22-2 RB:	IBExU10 ATEX 2148X
DFA 22-3 RB:	IBExU10 ATEX 2149X
VdS approval:	G208154
Declaration of Performance:	0768-CPR-20600

Sound and explosion protection

	Designation	Type	Article no.
	NIH ASD sound-insulating case IP 54; 500 × 500 × 300 mm	NIH ASD 532/535	50-0500073-01
	AHO ASD extra case for ASD 532 or ASD 535	AHO ASD	50-1200001-01
	AHO-L EX ASD 535 extra case Sampling pipes and air recirculations on the left	AHO-L EX ASD 535	50-1200016-01
	AHO-R EX ASD 535 extra case Sampling pipes and air recirculations on the right	AHO-R EX ASD 535	50-1200016-02
	AHO-U EX ASD 535 extra case Sampling pipes and air recirculations on the bottom	AHO-U EX ASD 535	50-1200016-03
	Detonation flame arrester for explosion group IIA	DFA 22-1 RB (IIA)	50-0500674-01
	Detonation flame arrester for explosion group IIB	DFA 22-2 RB (IIB)	50-0500675-01
	Detonation flame arrester for explosion group IIC	DFA 22-3 RB (IIC)	50-0500676-01
	FBL 22 AL filter box	FBL 22 AL	50-0500044-04
	MV 22 ST three-way ball valve	MV 22 ST	50-0500678-01
	Flange for DF 22 CU ventilation duct	DF 22 CU	50-0500690-01
	Flange for DF 22 ST ventilation duct	DF 22 ST	50-0500691-01
	ASD RE 25-22 transition adapter	RE 25-22	50-0500806-01
	USB cable, angled - 5 m	CAB AN 5M	50-0500681-01

9.1.5 Filter, cleaning and accessories

DFU 911 dust filter



No.: 11-2300030-01

A dust filter unit can be used in the sampling pipe tube network of an aspirating smoke detector in applications with dust or dirt. This significantly increases the service life of the smoke sensors used and greatly reduces the likelihood of false alarms.

A filter monitoring function in the aspirating smoke detector can be activated to indicate when the defined application-specific service life of a filter expires so that you can replace the filter element at the optimal time.

The dust filter unit consists of a two-part case that can be opened by releasing the lock clamps to replace the replacement filter element. The two holes in the case base are for fastening the dust filter unit.

Ambient temperature:	0 °C to +60 °C
Relative air humidity:	70 % without condensation
short-term without condensation:	95 %
Case material:	ABS blend, UL 94-V0
Case colour:	light grey, RAL 280 70 05 anthracite, RAL 300 20 05
Dimensions:	210 × 111 × 137 mm (H×W×D)
Weight:	490 g
VdS approval:	included in aspirating smoke detectors

**No.: 50-0500143-01**

FBS 25 PC filter box small

The filter box small is used as an accessory for aspirating smoke detectors in areas with low temperatures (below 0 °C) and high dust levels to prevent deceptive alarms or to significantly increase the service life of the smoke sensors.

For deep-freeze or outdoor use and for areas with high air humidity.

The filter insert is designed for the separation of particles and foreign matters larger than 15 µm. Due to their particle size, smoke particles can pass through this filtration unhindered. This ensures reliable and fast fire detection.

Pipe connection:	diameter 25 mm
Ambient temperature:	–30 °C to +60 °C
Case material:	Polycarbonate
Case colour:	light grey, RAL 7035
Dimensions:	
with junctions:	150 × 82 × 85 mm (H×W×D)
without junctions:	80 × 82 × 85 mm (H×W×D)
Weight:	279 g

**No.: 50-0500044-03**

FBL 25 PC filter box large

The filter box large is used as an accessory for aspirating smoke detectors in areas with normal temperatures (above 0 °C) and high dust levels to prevent deceptive alarms or to significantly increase the service life of the smoke sensors.

The filter insert is designed for the separation of particles and foreign matters larger than 15 µm. Due to their particle size, smoke particles can pass through this filtration unhindered. This ensures reliable and fast fire detection.

Pipe connection:	diameter 25 mm
Ambient temperature:	0 °C to +60 °C
Case material:	Polycarbonate
Case colour:	light grey, RAL 7035
Dimensions:	120 × 122 × 85 mm (H×W×D)
Weight:	400 g

FBX 25 PC filter box extra large



No.: 50-0500184-01

The filter box is used as an accessory for aspirating smoke detectors in areas with normal temperatures (above 0 °C) and high dust levels to prevent deceptive alarms or to significantly increase the service life of the smoke sensors.

The filter insert is designed for the separation of particles and foreign matters larger than 15 µm. Due to their particle size, smoke particles can pass through this filtration unhindered. This ensures reliable and fast fire detection.

Pipe connection:	diameter 25 mm
Cable entries:	2 × M32 incl. seal
Ambient temperature:	0 °C to +60 °C
Case material:	Polycarbonate
Case colour:	light grey, RAL 7035
Dimensions:	250 × 160 × 90 mm (H×W×D)
Weight:	760 g
VdS approval:	G208154
Declaration of Performance:	0768-CPR-20600

MFS 25 magnetic filter system



No.: 11-2300104-01

To supplement the dust filter unit with the range of metal-containing dusts. Extends the service life of the smoke sensors used in the aspirating smoke detector. Prevents false alarms caused by metal-containing dust.

Pipe connection:	Diameter 25 or 40 mm
High energy magnetic filter element:	RS-22/250
Magnetic energy product:	385 KJ/m ³
Ambient temperature:	–30 °C to +60 °C
Case material:	Polycarbonate
Case colour:	grey, RAL 7016
Dimensions:	315 × 125 × 100 mm (H×W×D)

**No.: 50-0500198-01**

DTB 25 PC dust trap

Dirt trap box for use in rooms with high dust content. Is used in combination with the various dust filters and is installed in front of them.

Pipe connection:	diameter 25 mm
Ambient temperature:	0 °C to +60 °C
Case material:	Polycarbonate
Case colour:	light grey, RAL 7035
Dimensions:	160 × 250 × 90 mm (H×W×D)

**No.: 50-0500199-01**

Water separator default WRB 25

For separating moisture in front of the dust filter unit, for use in rooms with high air humidity. The transition piece to the PVC or ABS sampling pipe is included in the scope of delivery.

Pipe connection:	diameter 25 mm
Ambient temperature:	0 °C to +60 °C
Case material:	Polycarbonate
Case colour:	grey, RAL 7035
Dimensions:	335 × 250 × 90 mm (H×W×D)
Weight:	950 g

**No.: 50-0500122-01**

Air cooler and water separator LK 35

The air cooler and water separator has the task of preventing moisture from entering the aspirating smoke detector or, when used in very warm areas, of cooling the aspirated hot air before it enters the evaluation unit.

The air cooler and water separator are made of copper pipe. PVC or ABS transition sleeves with a diameter of 25 mm are provided at the inlet and outlet for connection to the sampling pipe.

Pipe connection:	diameter 25 mm
Ambient temperature:	0 °C to +60 °C
Case material:	Copper
Dimensions:	1000 × 730 × 80 mm (H×W×D)
Weight:	8 kg

**No.: 50-0500635-01**

DRB 25 dust and cyclone separator

The dust separator (cyclone principle) is used as an accessory for aspirating smoke detectors in areas with very high dust and humidity to prevent deceptive alarms or to significantly increase the service life of the smoke sensors. It must be placed in the sampling pipe before the evaluation unit and the dust filter unit. The sampled air enters the funnel via the cyclone's inlet opening and has to move faster and faster until it reaches the outlet opening. At this point, a 180° rotation separates the air from most of the dust particles, which fall into the designated dust compartment.

Pipe connection:	diameter 25 mm
Ambient temperature:	0 °C to +50 °C
Case material:	PVC
Case colour:	graphite black RAL 9011, platinum grey RAL 7036
Dimensions:	420 × 195 × 120 mm (H×W×D)
Weight:	400 g

**No.: 50-0500571-01****No.: 50-0500571-02**

ADB 500 automatic blow-through system

For automatic blowing and cleaning of one sampling pipe with compressed air in areas with very high dust pollution.

Operating voltage range:	15 – 30 V DC
Current consumption:	
Quiescent:	18 mA typ.
Fault:	6.9 mA typ.
Blowing cycle:	460 mA typ.
Relay contact:	50 V DC/1 A/30 W
Compressed air pressure:	min. 4 bar
Blowing duration:	10 s
Adjustable blowing cycle:	1, 4, 8 and 24 h
Compressed air connection:	coupling connector NG 8 (G ¼) coupling socket NG 8 (for 7-8 hose)
Pipe connection:	diameter 25 mm
Degree of protection:	IP 65
Ambient temperature:	0 °C to +50 °C
Case material:	aluminium
Case colour:	black
Connection material:	
ADB 500 PVC:	PVC
ADB 500 ABS:	ABS
Dimensions:	235 × 205 × 90 mm (H×W×D)
Weight:	3.6 kg

**No.: 50-0500520-01**

ADB 1000 automatic blow-through system

For automatic blowing and cleaning of one sampling pipe with compressed air in areas with very high dust pollution.

Operating voltage range:	15 – 30 V DC
Current consumption:	
Quiescent:	50 mA typ.
Fault:	55 mA typ.
Blowing cycle:	900 mA typ.
Relay contact:	50 V DC/1 A/30 W
Compressed air pressure:	4 – 10 bar
Blowing duration:	30 s
Adjustable blowing cycle:	1, 4, 8 and 24 h
Compressed air connection:	coupling connector NG 8 (G ¼) coupling socket NG 8 (for 7-8 hose)
Pipe connection:	diameter 25 mm
Degree of protection:	IP 54
Ambient temperature:	0 °C to +50 °C
Dimensions:	380 × 315 × 165 mm (H×W×D)
Weight:	7 kg

**No.: 50-0500523-01**

ADB 2000 automatic blow-through system

For automatic blowing and cleaning of two sampling pipes with compressed air in areas with very high dust pollution.

Operating voltage range:	15 – 30 V DC
Current consumption:	
Quiescent:	50 mA typ.
Fault:	45 mA typ.
Blowing cycle:	910 mA typ.
Relay contact:	50 V DC/1 A/30 W
Compressed air pressure:	4 – 10 bar
Blowing duration:	10 s or 30 s
Adjustable blowing cycle:	1, 4, 8 and 24 h
Compressed air connection:	coupling connector NG 8 (G ¼) coupling socket NG 8 (for 7-8 hose)
Pipe connection:	diameter 25 mm
Degree of protection:	IP 54
Ambient temperature:	0 °C to +50 °C
Dimensions:	560 × 364 × 225 mm (H×W×D)
Weight:	15.2 kg



No.: 50-0500062-01

Cleaning kit for ASD

Electric compressor with very high performance for cleaning the sampling lines of aspirating smoke detectors. Cleaning can be carried out by blowing out and suction.

Including retaining strap and all accessories for adaptation to the sampling line or a three-way ball valve.

Operating voltage:	230 V AC
Wattage:	1100 W
Air volume:	1500 l/min
Operating pressure:	230 mbar
Weight:	3.4 kg



No.: 50-0500095-01

Transport case for cleaning kit for ASD

For handy transport and safe storage of cleaning kit for ASD

Case material:	aluminium
Dimensions:	317 × 457 × 262 mm (H×W×D)
Weight:	2.9 kg

Filter, cleaning and accessories

















	Designation	Type	Article no.
	DFU 911 dust filter incl. filter	DFU 911	11-2300030-01
	RFC 911 replacement filter for dust filter DFU 911	RFC 911	11-2300031-01
	RFC 911 20 replacement filter for dust filter DFU 911	RFC 911VE20	11-2300031-02
	Filter box small d25 80 × 82 × 85 mm incl. filter	FBS 25 PC	50-0500143-01
	Replacement filter mat for filter box small (5 pcs.)	FBS 25 EFM	50-0500112-02
	Dust filter unit large d25 incl. filter, 120 × 122 × 85 mm	FBL 25 PC	50-0500044-03
	Replacement filter for dust filter unit large	FBL 25 EFM	50-0500410-02
	Filter box extra large d25 250 × 160 × 90 mm incl. filter	FBX 25 PC	50-0500184-01
	Spare filter mat block for FBX 25	FBX 25 EFM	50-0500530-01
	MFS 25 magnetic filter system for metal-containing dust	MFS 25	11-2300104-01
	Replacement cartridge for MFS 25	MFS EP	FG030391
	Dust trap d25 160 × 250 × 90 mm	DTB 25 PC	50-0500198-01
	Water separator standard d25 PVC	WRB 25 PVC	50-0500199-01
	Water separator standard d25 ABS/PC	WRB 25 ABS	50-0500057-01
	Sealing plate for water separator WRB 25 Foam rubber, black (H×W×D): 40 × 85 × 4 mm	WRB 25 SL	50-0500569-01
	Air cooler and water separator PVC	LK 35 PVC	50-0500122-01

	Designation	Type	Article no.
	Air cooler and water separator ABS	LK 35 ABS	50-0500123-01
	Dust and cyclone separator	DRB 25	50-0500635-01
	ADB 500 PVC automatic blow-through system	ADB 500 PVC	50-0500571-01
	ADB 500 ABS automatic blow-through system	ADB 500 ABS	50-0500571-02
	ADB 1000 automatic blow-through system	ADB 1000	50-0500520-01
	Circuit board BMB 1000 Spare part for ADB 1000	BMB 1000	50-0500521-01
	ADB 2000 automatic blow-through system	ADB 2000	50-0500523-01
	Circuit board BMB 2000 Spare part for ADB 2000	BMB 2000	50-0500524-01
	Cleaning kit for ASD	ASD RK	50-0500062-01
	Transport case for cleaning kit for ASD	ASD RK - KOFFER	50-0500095-01
	Cable connection box for ASD 535 for inserting the silicone wire into the pipe system	WCU 535 PC	11-2300046-01

9.1.6 PVC materials for standard sampling pipes

The sampling pipes are part of the VdS device approval (EN 54-20). For this reason, only the following material tested with the unit may be used.

	Designation	Type	Article no.
	PVC pipe d25 Three-metre rod	TU 25 PVC 3M	FG020816
	PVC pipe d25 Five-metre rod	TU 25 PVC	FG020805
	PVC elbow 90° d25	BE 25 PVC	FG020806
	PVC angle piece 45° d25	AN 25-45 PVC	FG020808
	PVC angle 90° d25	AN 25-90 PVC	FG020807
	PVC T-piece d25	TP 25 PVC	FG020809
	PVC crosspiece d25	CR 25 PVC	FG020810
	PVC sleeve d25	SO 25 PVC	FG020811
	PVC end cap d25	EC 25 PVC	FG020812
	PVC end cap with thread d25 with 3/4" internal thread	ECS 25 PVC	FG020832
	PVC connection coupling d25 with external thread d=25/32x3/4"	AD ECS 25 PVC	FG020833
	PVC transition screw connection	SJ 25 PVC	FG020829
	PVC sampling point fitting set with heater, red Sampling point 5.7 mm, corresponds to 3 mm	HEAT 3.0 PVC	50-0500423-02
	PVC sampling point fitting set with heater, blue Sampling point 6.1 mm, corresponds to 3.5 mm	HEAT 3.5 PVC	50-0500424-02
	PVC sampling point fitting set with heater, green Sampling point 6.3 mm, corresponds to 4.0 mm	HEAT 4.0 PVC	50-0500425-02

	Designation	Type	Article no.
	PVC sampling point fitting set with heater, black Sampling point 6.7 mm, corresponds to 4.5 mm	HEAT 4.5 PVC	50-0500426-02
	PVC sampling point fitting set with heater, brown Sampling point 7.1 mm, corresponds to 5 mm	HEAT 5.0 PVC	50-0500427-02
	Sampling point clip 2.0 PA, red 2.0 mm sampling point	CLIP 2.0 PA	50-0500833-01
	Sampling point clip 2.5 PA, red 2.5 mm sampling point	CLIP 2.5 PA	50-0500834-01
	Sampling point clip 3.0 PA, red 3.0 mm sampling point	CLIP 3.0 PA	50-0500835-01
	Sampling point clip 3.5 PA, red 3.5 mm sampling point	CLIP 3.5 PA	50-0500836-01
	Sampling point clip 4.0 PA, red 4.0 mm sampling point	CLIP 4.0 PA	50-0500837-01
	Sampling point clip 4.5 PA, red 4.5 mm sampling point	CLIP 4.5 PA	50-0500838-01
	Sampling point clip 5.0 PA, red 5.0 mm sampling point	CLIP 5.0 PA	50-0500839-01
	Sampling point clip 5.5 PA, red 5.5 mm sampling point	CLIP 5.5 PA	50-0500840-01
	Sampling point clip 6.0 PA, red 6.0 mm sampling point	CLIP 6.0 PA	50-0500841-01
	Sampling point clip 6.5 PA, red 6.5 mm sampling point	CLIP 6.5 PA	50-0500842-01
	Sampling point clip 7.0 PA, red 7.0 mm sampling point	CLIP 7.0 PA	50-0500843-01
	Sampling point clip 2.0 PA, yellow 2.0 mm sampling point	CLIP 2.0 PA YE	50-0500845-01
	Samplin point clip 2.5 PA, grey 2.5 mm sampling point	CLIP 2.5 PA GY	50-0500846-01
	Sampling point clip 3.0 PA, ruby 3.0 mm sampling point	CLIP 3.0 PA RU	50-0500847-01

	Designation	Type	Article no.
	Sampling point clip 3.5 PA, blue 3.5 mm sampling point	CLIP 3.5 PA BL	50-0500848-01
	Sampling point clip 4.0 PA, green 4.0 mm sampling point	CLIP 4.0 PA GN	50-0500849-01
	Sampling point clip 4.5 PA, black 4.5 mm sampling point	CLIP 4.5 PA BK	50-0500850-01
	Sampling point clip 5.0 PA, brown 5.0 mm sampling point	CLIP 5.0 PA BN	50-0500851-01
	Sampling point clip 5.5 PA, white 5.5 mm sampling point	CLIP 5.5 PA WH	50-0500852-01
	Sampling point clip 6.0 PA, orange 6.0 mm sampling point	CLIP 6.0 PA OG	50-0500853-01
	Sampling point clip 6.5 PA, mint 6.5 mm sampling point	CLIP 6.5 PA MT	50-0500854-01
	Sampling point clip 7.0 PA, violet 7.0 mm sampling point	CLIP 7.0 PA PU	50-0500855-01
	Sampling point clip REV PA, red without hole	CLIP REV PA	50-0500844-01
	PVC cable connector set for branching of silicone wires with T, U and H-shaped pipes	CCF 25 PVC	50-0500428-01
	PVC sampling point set sampling point for ceiling lead-through, threaded ring, two quick acting closures, T-piece, polywell hose (1.5 m)	SP M20 PVC-SET	11-2300146-01
	PVC ceiling lead-through M20 three parts	SP M20 PVC	11-2300145-01
	PVC compressed air connection d25	CC 25 PVC	11-2300066-01
	PVC capillary pipe 6 mm (5 m)	TU 6 PVC	50-0500401-01
	Reducing piece 25 to 6 mm for capillary pipe TU 6 PVC	RE 25-6-PVC	11-2300137-01
	PVC capillary pipe set D=6 mm, for installation in PVC sampling pipes of aspirating smoke detectors, incl. PVC T-piece d25 and reducing piece d25/6, length 1.5 m	CT 6/4 PVC-SET	11-2300131-01
	Flexible PVC hose d25	FH 25 PVC	50-0500111-01

	Designation	Type	Article no.
	Flexible pipe PA flexible, outside d=21.2 mm	FT 21 PA	11-2300074-01
	M20 VE10 quick locking adapter Connecting part for poly corrugated hose 21,2 mm	SC 20ST PA	11-2300085-01
	PVC threaded ring M20 (10 pcs.) Junction M20 to PVC pipe d25	AD 20 PVC	11-2300059-01
	Aspiration rosette PVC grey for PVC pipe d25	SP 30 PVC	11-2300043-01
	PVC sampling rosette 36 for PVC pipe d25	SP 36 PVC	11-2300142-01
	PVC three-way ball valve d25	MV 25 PVC	FG020867
	Automatic PVC non-return valve	NV 25 PVC	11-2300134-01
	Mounting clamp 25 PVC VE100 For sampling pipe r d=25 mm, PVC, dark grey; 1 PU = 100 pcs., price per PU	PC 25 PVC	11-2300083-01
	PVC flange for ventilation duct d25	DF 25 PVC	50-0500187-01
	PVC changeover 25 x 3/4" d=25-3/4" female thread (metal ring), fitting for PVC-pipe, d=25	AD 25-3/4 PVC	11-2300129-01

9.1.7 ABS material red

	Designation	Type	Article no.
	Sampling pipe d25 ABS red 3 m	TU 25 ABSRED	11-2300049-01
	Elbow 90° d25 ABS red 1 PU = 10 pcs.	BE 25 ABSRED	11-2300050-01
	Angle piece 45° d25 ABS red 1 PU = 10 pcs.	AN 25-45 ABSRED	11-2300052-01
	Angle piece 90° d25 ABS red 1 PU = 10 pcs.	AN 25-90 ABSRED	11-2300057-01
	T-piece d25 ABS red 1 PU = 10 pcs.	TP 25 ABSRED	11-2300053-01
	Sleeve d25 ABS red 1 PU = 10 pcs.	SO 25 ABSRED	11-2300051-01
	End cap d25 ABS red 1 PU = 10 pcs.	EC 25 ABSRED	11-2300054-01
	Junction d25 ABS red	SJ 25 ABSRED	11-2300055-01
	Fastening clamp d25 ABS red 1 PU = 20 pcs.	PC 25 ABSRED	11-2300056-01
	Capillary tube red 2 m	CT 10/7 ABS-SPC-SET	11-2300117-01
	Capillary tube red 2 m	CT 10/7 ABS-SPF-SET	11-2300118-01
	Capillary tube red 30 m	CT 10/7 PA 30	11-2300119-01
	Flexible hose PVC 1 m red	FH 25 ABSRED SET1	11-2300120-01
	Flexible hose PVC 30 cm red	FH 25 ABSRED SET03	11-2300121-01
	Sticker sampling points 100 pcs	SP STICKER	11-2300122-01
	Sampling point conical grey	SPC 10 PA	11-2300123-01
	Sampling point flat grey	SPF 10 PA	11-2300124-01
	T-piece TP 25-10 red	TP 25-10 ABSRED	11-2300125-01
	Water separator pipe WRT 25	WRT 25 ABSRED	11-2300126-01

9.1.8 ABS materials for deep-freeze applications










The ASD can be used to monitor frozen storage facilities down to minus 30 °C with response classes B and C in accordance with EN 54-20. Here, the use of halogen-free ABS plastic pipes is recommended due to their superior temperature resistance. In frozen storage facilities, special sampling points with heating elements must be used to prevent icing of the sampling points. When setting the parameters of the ASD in frozen storage facilities, the ASD Config configuration software is required, since it used to activate the heating elements.

	Designation	Type	Article no.
	ABS pipe d25 Five-metre rod	TU 25 ABS	FG020789
	ABS elbow 90° d25	BE 25 ABS	FG020790
	ABS angle piece 45° d25	AN 25-45 ABS	FG020791
	ABS T-piece d25	TP 25 ABS	FG020792
	ABS sleeve d25	SO 25 ABS	FG020794
	ABS end cap d25	EC 25 ABS	FG020795
	ABS transition junction d25	SJ 25 ABS	FG020793
	ABS sampling point fitting set with heater, red Sampling point 5.7 mm, corresponds to 3 mm	HEAT 3.0 ABS	50-0500451-02
	ABS sampling point fitting set with heater, blue Sampling point 6.1 mm, corresponds to 3.5 mm	HEAT 3.5 ABS	50-0500452-02
	ABS sampling point fitting set with heater, green Sampling point 6.3 mm, corresponds to 4.0 mm	HEAT 4.0 ABS	50-0500453-02
	ABS sampling point fitting set with heater, black Sampling point 6.7 mm, corresponds to 4.5 mm	HEAT 4.5 ABS	50-0500454-02
	ABS sampling point fitting set with heater, brown Sampling point 7.1 mm, corresponds to 5 mm	HEAT 5.0 ABS	50-0500455-02
	ABS cable connector set for branching of silicone wires with T, U and H-shaped pipes	CCF 25 ABS	50-0500456-01
	ABS threaded ring M20 (10 pcs.) Junction M20 to ABS pipe d25	AD 20 ABS	11-2300058-01

	Designation	Type	Article no.
	Sampling funnel d25	SF 25 ABS	11-2300140-01
	ABS sampling rosette 36 for PVC pipe d25	SP 36 ABS	11-2300141-01
	ABS compressed air connection d25	CC 25 ABS	11-2300065-01
	ABS three-way ball valve d25	MV 25 ABS	FG020890
	ABS flange for ventilation duct d25	DF 25 ABS	50-0500186-01
	ABS sampling point set M20/d36 mm, grey	SP M20 ABS-SET	11-2300144-01
	ABS ceiling lead-through M20 three parts	SP M20 ABS	11-2300143-01
	Automatic ABS non-return valve	NV 25 ABS	11-2300133-01
	ABS connection 25 x 3/4" d=25-3/4" female thread (metal ring)	AD 25-3/4 ABS	11-2300128-01
	Mounting clamp 25 PVC VE100 For sampling pipe r d=25 mm, PVC, dark grey; 1 PU = 100 pcs., price per PU	PC 25 PVC	11-2300083-01
	Mounting clamp 25 PP grey VE20 suitable for PVC-/ABS pipes, d=25; 1 PU = 20 pcs., price per PU	PC 25 PP	11-2300096-01
	Silicone stranded wire, white	SLW 0.5 WT	50-0500483-01
	Silicone stranded wire, black	SLW 0.5 BK	50-0500482-01

9.1.9 Stainless steel materials for standard sampling pipes

The sampling pipes are part of the VdS device approval (EN 54-20). For this reason, only the following material tested with the unit may be used.

	Designation	Type	Article no.
	Stainless steel sampling pipe d22 Six-metre rod	TU 22 ST	50-0500638-01
	Stainless steel bend 90° d22 suitable for stainless steel pipe d22	BE 22 ST	50-0500489-01
	Stainless steel end cap d22 suitable for stainless steel pipe d22	EC 22 ST	50-0500490-01
	Stainless steel sleeve d22 suitable for stainless steel pipe d22	SO 22 ST	50-0500491-01
	Stainless steel T-piece d22 suitable for stainless steel pipe d22	TP 22 ST	50-0500492-01
	Stainless steel changeover 22 x 3/4" suitable for stainless steel pipe d22	AD 22-25 ST	50-0500493-01
	Fastening clamp d22 for stainless steel and copper pipe d22	PC 22 CU/ST	50-0500552-01
	Hanger bolt for stainless steel and copper pipe d22	FS 22 CU/ST	50-0500634-01
	V2A ceiling lead-through three-piece, incl. quick acting closure and locknut	V2A	50-0500082-01
	PVC changeover 25 x 3/4" d=25-3/4" female thread (metal ring), fitting for PVC-pipe, d=25	AD 25-3/4 PVC	11-2300129-01

9.1.10 Material for mounting in concrete

For visual reasons, especially in historic buildings, museums etc. the installation of aspirating smoke detectors should occur in such a manner that sampling pipes are not visible. With suitable electric tubes the installation can be flush-mounted or mounted in concrete.

	Designation	Type	Article no.
	Tube for concrete installation Electric pipe KRF, diameter 32 mm, orange	KRF32M	FG020780
	T-branch 32 mm	TP 32C	11-2300116-01
	Sampling point T-piece 32 mm	SP 32CT	11-2300115-01
	Sampling point end-piece 32 mm	SP 32CL	11-2300114-01
	PVC-U transition sleeve d25×20×1/2" junction for concrete laying	KIFV025020012	FG020785
	PVC-U pipe d20×1,5 Five-metre rod, transition for concrete laying	PIPEV16020L	FG020786

9.1.11 Adhesive and cleaner

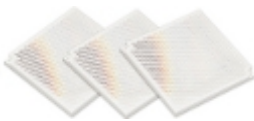
	Designation	Type	Article no.
	ABS adhesive, 1 kg	GLUE 1000 ABS	FG020796
	ABS cleaner, 500 g	CLEANER 500 ABS	FG020797
	PVC/U adhesive, 1 kg	GLUE 1000 PVC	FG020801
	PVC/U adhesive, 500 g	GLUE 500 PVC	FG020800
	PVC-U adhesive, 250 g, can	GLUE 250 PVC	FG020813
	PVC-U adhesive, 125 g, tube	GLUE 125 PVC	FG020804
	PVC/U-/PVC/C cleaner, 1 litre	CLEANER 1000	FG020802
	PVC cleaner, 125 ml	CLEANER 125	FG020814
	Round brush 8 mm	RAS RP8	FG020803

9.2 Line-type smoke detectors

Line-type smoke detector Fireray One



No.: 20-3000609-01



No.: 20-3000610-01

The Fireray One is a standalone line-type smoke detector and consists of a combined transmitter/receiver unit and a reflector. The monitoring length can be configured between 5 to 50 metres and can be extended up to 120 metres with the Fireray Long Range Kit.

It can be installed in places that could be exposed to sunlight such as skylights and glass atriums thanks to the patented Light Cancellation Technology™. No special tools or prior knowledge is required for its installation.

An integrated automatic alignment motor keeps the infrared beam in the optimal position, even if the building moves, e.g. through to seasonal changes. The optics are fully enclosed in an IP-rated casing with a flat surface for easy cleaning without affecting alignment.

The user interface at the front of the detector allows realignment and programming without having to dismount the detector and a special auto-alignment feature not only saves time during installation, the quality of alignment is also guaranteed by the automation protocol.

Operating voltage range:	14 – 36 V DC
Current consumption:	
All operation modes:	5 mA typ.
Fast alignment mode:	33 mA typ.
Monitoring length:	5 – 50 m
	50 – 120 m with Long Range Kit
Degree of protection:	IP 55
Ambient temperature:	–20 °C to +55 °C
Relative air humidity:	93 % without condensation
Case material:	polycarbonate/ABS
Case colour:	white, RAL 1013
Dimensions:	
Control unit:	181 × 130 × 134 mm (H×W×D)
Prism:	100 × 100 × 10 mm (H×W×D)
Weight:	
Control unit:	675 g
Prism:	50 g
VdS approval:	G218070
Declaration of Performance:	0832-CPR-F2237

Line-type smoke detector Fireray 3000



No.: 20-3000607-01



No.: 20-3000608-01

The Fireray 3000 is a line-type optical smoke detector for the detection of light and dark smoke over a distance of 5 – 120 metres.

Preferred areas of application are very large and high halls, e.g. aircraft hangars, factory buildings and similar areas where the use of point fire detectors is not possible. In addition, the detector is ideal for applications where the line of sight for the infrared beam is narrow and where the building structure includes reflective surfaces.

The transmitter unit sends an infrared beam, bundled by a lens, to the receiver unit. As soon as smoke appears and obscures the infrared beam, the signal strength at the receiver unit drops below a preset value, triggering an alarm state.

Both detector heads (transmitter/receiver unit) have integrated adjustment wheels for easy alignment. The receiver unit is connected to the control unit. Up to two receiver units can be connected to one control unit.

Operating voltage range:	12 – 36 V DC
Current consumption:	
1 – 2 receiver units:	14 mA
Transmitter unit:	9 mA
Monitoring length:	5 – 120 m
Degree of protection:	IP 54
Ambient temperature:	–10 °C to +55 °C
Relative air humidity:	93 % without condensation
Case material:	UL94 V2 PC
Dimensions:	
Control unit:	124 × 203 × 71.5 mm (H×W×D)
Transmitter/receiver unit:	77 × 78 × 161 mm (H×W×D)
Weight:	
Control unit:	606 g
Transmitter/receiver unit:	207 g
VdS approval:	G212034
Declaration of Performance:	CPR-DOP-301

Line-type smoke detector Fireray 5000



No.: 20-3000600-01



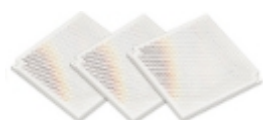
No.: 20-3000601-01



No.: 20-3000602-01



No.: 20-3000603-01



No.: 20-3000604-01

The Fireray 5000 is a line-type optical smoke detector with auto-alignment and can be mounted with up to two detector heads per system.

Preferred applications are large and high halls, e.g. aircraft hangars, factory buildings and similar areas where the use of point fire detectors is not possible.

The system combines infrared transmitter and receiver unit in one device. The smoke detector works by projecting a clearly defined light beam onto a reflective prism which reflects the light beam back to a receiver unit for analysis. Smoke in the light beam causes a drop in output, which triggers an alarm signal as soon as the light beam falls below a preset value.

A built-in laser is activated during installation, allowing the reflective prism to be positioned quickly and safely. After the light beam has been roughly aligned with the laser, the auto-alignment function takes over and automatically steers the light beam into the optimum position.

Operating voltage range:	14 – 36 V DC
Current consumption:	
With one detector:	5.5 mA
With two detectors:	8.5 mA
Monitoring length:	8 – 100 m
Degree of protection:	IP 54
Ambient temperature:	–10 °C to +55 °C
Relative air humidity:	93 % without condensation
Dimensions:	
Control unit:	230 × 202 × 87 mm (H×W×D)
Transmitter/receiver unit:	131 × 134 × 134 mm (H×W×D)
Prism:	100 × 100 × 10 mm (H×W×D)
Weight:	
Control unit:	1000 g
Transmitter/receiver unit:	500 g
Prism:	100 g
VdS approval:	G208017
Declaration of Performance:	CPR-DOP-501

ILIA line-type smoke detector



No.: 11-3000007-01



No.: 11-3000009-01



No.: 11-3000016-01

For fire detection in areas where point fire detectors cannot be used due to the room height (e.g. production halls, churches, warehouses, railway stations). The system is available in two versions: as transmitter/receiver unit ILIA S/E and as combined transmitter/receiver unit with reflector ILIA S/R.

The devices are connected to the fire alarm control panel via a control unit on which all settings can be adjusted and testing/maintenance work carried out. In the basic version, the connection of two systems is possible. Using an extension board, a total of eight systems can be interconnected.

All ILIA systems have an integrated infinitely variable pinhole, which in difficult optical conditions can be used e.g. with direct parallel solar radiation, strong reflections or extraneous light). For use in challenging ambient conditions (e.g. with elevated dust concentrations). The type ILIA PRO is available. This is exceptionally non-sensitive against faults caused by dust and steam. Contamination is compensated for to a certain extent.

Operating voltage range:	12 – 24 V DC
Quiescent current:	
One detector:	48 – 98 mA
Eight detectors:	261 – 502 mA
Alarm current:	
One detector:	50 – 100 mA
Eight detectors:	270 – 512 mA
Monitoring length:	
Transmitter/receiver unit:	10 – 200 m
Transmitter unit/reflector:	10 – 150 m
Monitoring area:	max. 1600 m ² per detector
Monitoring width:	max. 15 m
Misalignment tolerance:	up to ±1° for transmitter unit (TX) and receiver unit (RX)
Cable length:	0.5 mm ² with four wires
Cable length:	max. 1200 m
Degree of protection:	IP 65
Ambient temperature:	–20 °C to +65 °C
Case colour:	black-blue, RAL 5004 pearl white, RAL 1013
Dimensions:	
Transmitter/receiver unit:	162 × 145 × 19/+3 mm (H×W×D)
Control unit:	145 × 177 × 68 mm (H×W×D)
Weight:	
Transmitter/receiver unit:	approx. 780 g
Control unit:	approx. 375 g
VdS approval:	G209195
Declaration of Performance:	0786-CPD-20925

**No.: 20-3000611-01****No.: 20-3000612-01**

Fireray 3000 Exd Line-type smoke detector

The line-type smoke detector Fireray 3000 Exd is ideal for protection against fires with formation of smoke in large areas with potentially explosive atmospheres, e.g. for oil platforms, refineries, ammunition depots and similar facilities. The system provides an early warning of smouldering or strongly smoke-generative fires, which may not be picked up by conventional fire detectors. The monitoring length can be configured between 10 and 80 metres.

The system consists of an infrared transmitter unit and a receiver unit, both of which are ATEX-certified for use in group 2 hazardous areas. The ATEX approval certifies the device category 2G and thus the use in zone 1.

The transmitter unit sends an infrared beam, bundled by a lens, to the receiver unit. As soon as smoke appears and obscures the infrared beam, the signal strength at the receiver unit drops below a preset value, triggering an alarm state.







The separate control unit has an LC display with an easy-to-use user interface and enables simple commissioning, testing and maintenance of the system. It is connected to receiver unit's power supply unit and must be mounted outside the hazardous area.

Operating voltage range:	12 – 36 V DC
Current consumption:	14 mA typ.
Monitoring length:	10 – 80 m
Degree of protection:	
Control unit:	IP 54
Transmitter/receiver unit:	IP 66
Ambient temperature:	–10 °C to +55 °C
Relative air humidity:	93 % without condensation
Case material:	
Control unit:	UL94 V2 PC
Transmitter/receiver unit:	Aluminium Alloy LM25
Case colour:	
Control unit:	white
Transmitter/receiver unit:	red
Dimensions:	
Control unit:	124 × 203 × 73.5 mm (H×W×D)
Transmitter/receiver unit:	172 × 149 × 190 mm (H×W×D)
Weight:	
Control unit:	606 g
Transmitter/receiver unit:	3.7 kg
Ex classification:	II 2 GD Ex db op is IIC T6 Gb Ex tb IIIC T85 °C Db Ta = –20 °C bis +55 °C

Line-type smoke detectors and accessories

	Designation	Type	Article no.
	Fireray One Line-type smoke detector 5 – 50 m	6010-100	20-3000609-01
	Fireray One Long Range Kit three reflectors to increase the monitoring length to 50 – 120 m	1010-000	20-3000610-01
	Fireray One detector heater	1060-000	20-3000642-01
	Fireray 3000 System	EN=3000-101	20-3000607-01
	Fireray 3000 detectors	EN=3000-015	20-3000608-01
	Fireray 3000 detector heater	3000-204	20-3000639-01
	Fireray 3000 detector flush mounting plate	3000-202	20-3000621-01
	Fireray 5000 System 50 m	EN=5000-101	20-3000600-01
	Fireray 5000 System 100 m	EN=5000-102	20-3000601-01
	Fireray 5000 detector 50 metres incl. one prism	EN=5000-002	20-3000602-01
	Fireray 5000 detector 100 metres incl. four prisms	EN=5000-039	20-3000603-01
	Fireray 5000 detector heater	5000-204	20-3000638-01
	Fireray 5000 universal bracket for Fireray 5000 or prisms	5000-005	20-3000623-01
	Fireray 5000 protective cage	1000-018	20-3000631-01
	Protective cage for Fireray 5000 controller	1000-019	20-3000630-01
	Bracket for four prisms	5000-007	20-3000624-01

	Designation	Type	Article no.
	Bracket for one prism	5000-008	20-3000625-01
	Prism mounting plate	5000-006	20-3000626-01
	Reflecting prism	23901.01	20-3000627-01
	Prism heater, black for one or four Fireray prisms	5000-205	20-3000641-01
	Prism heater, white for one or four Fireray prisms	1090-000	20-3000641-02
	Universal ceiling mount	5000-014	20-3000628-01
	Adjustment bracket 360° for Fireray One/3000/5000	1170-000	20-3000643-01
	Fireray test filter	209	20-3000634-01
	ILIA S/E line-type smoke detector Transmitter/receiver unit RAL 5004 (black-blue)	ERHS0712	11-3000007-01
	ILIA S/E line-type smoke detector Transmitter/receiver unit RAL 1013 (pearl white)	ERHS0712-1013	11-3000008-01
	ILIA S/R line-type smoke detector Transmitter unit/reflector RAL 5004 (black-blue)	ERRHS0712	11-3000009-01
	ILIA S/Rw line-type smoke detector Transmitter unit/reflector RAL 1013 (pearl white)	ERRHS0712-1013	11-3000010-01
	ILIA PRO S/E line-type smoke detector Transmitter/receiver unit RAL 5004 (black-blue)	ERHS0712-PRO	11-3000016-01
	CSRLS-2 controller for ILIA for connection of 2 pcs. ILIA systems	CSRLS-2	11-3000011-01
	CSRLS,6 ILIA extension module for connection of 6 pcs. additional ILIA systems	SMLS	11-3000012-01
	ILIA PRO control unit 2 for connection of 2 pcs. ILIA PRO systems	CSRLS-PRO	11-3000017-01
	Control unit for 8 ILIA XLM, CLI	CLI	11-3000013-01
	Control unit for 8 ILIA-PRO XLM, CLI-PRO	CLI-PRO	11-3000018-01
	Adjustable wall-mounted bracket for ILIA	SACA-G	11-3000025-01

	Designation	Type	Article no.
	Protective case for ILIA	SOHI	11-3000026-01
	Glass panel for protective case for ILIA	FAPO-G	11-3000063-01
	Purging air ring for ILIA SOHI for 1 transmitter or 1 receiver	ASIS	11-3000049-01
	Protective cage for ILIA	GDP	11-3000028-01
	Fireray 3000 Exd Line-type smoke detector for hazardous areas	FIRERAY 3000 EXD	20-3000611-01
	Fireray 3000 Exd detectors for extension of the Fireray 3000 Exd system	FIRERAY 3000 EXD S/E	20-3000612-01

9.3 Line-type heat detectors

Line-type heat detectors are used for fire detection in areas where conventional fire detectors cannot be used due to more aggressive and critical ambient conditions (e.g. high air humidity, extreme temperatures, outdoor areas, corrosive gases, dust pollution etc.). Or where multiple heat detectors would be necessary due to huge monitoring areas/distances. Possible areas for deployment include cable ducts, car parks, parking garages, cold stores, industrial property protection, e.g. in conveyor belt systems, production lines, loading ramps, refineries, incineration plants, saw works, agricultural areas.

9.3.1 ADW line-type heat detectors

ADW 535 line-type heat detector



No.: 11-1000000-01



No.: 11-1000000-02

The ADW 535 is an integrating line-type heat detector with a heat differential and/or heat maximum response. The ADW 535 consists of an evaluation unit for the connection of one (ADW 535-1) or two (ADW 535-2) sensing tube(s). Depending on the ambient conditions, different materials are used for the sensing tubes (copper, stainless steel or Teflon). The ADW 535 contains four connection slots on which optional modules can be inserted.

The mode of operation is based on the volume expansion of the air due to heating in a pneumatically sealed sensing tube leads to an increase in pressure. This pressure is constantly monitored by a fully electronic pressure sensor and evaluated by a microprocessor, which compares it to pre-set alarm scenarios.

Due to its self-monitoring and the cyclical automatic checking process, the ADW 535 is particularly well suited for use in areas where the existing conditions make it impossible or difficult to carry out the legally prescribed function and maintenance checks.

- Adjustable response behaviour in accordance with EN 54-22 (heat detector class A1I, A2I, BI ... GI) and UL/FM with pre-alarm signal, main alarm and fault analysis
- Dynamic monitoring of the response threshold value (Dynamic Heat Watch) to avoid unwanted alarms
- Automatic testing of the air-tightness of the sensing tube in accordance with EN 54-22
- Ethernet interface for networking or PC connection
- Data logging via SD card for evidence after a fire and fine tuning of the system
- Calculation of the response behaviour with software
- Serial interface for PC connection for detailed analysis and individual adjustment in situ

Operating voltage range:	9 – 30 V DC
Quiescent current:	
ADW 535-1:	35 mA typ. with 24 V DC
ADW 535-2:	43 mA typ. with 24 V DC
Alarm current:	
ADW 535-1:	42 mA typ. with 24 V DC
ADW 535-2:	57 mA typ. with 24 V DC
Optional module:	max. four pieces
Connection lengths:	
Copper/stainless steel:	max. 140 m per sensing tube
Teflon	max. 125 m per sensing tube
Monitoring width:	max. 7 m
Connection:	plug-in terminals, 2.5 mm ²
Cable inlet:	M20 and M25
Degree of protection:	IP 65
Ambient temperature:	
Evaluation unit:	–30 °C to +70 °C
Sensing tube copper/stainless steel:	–40 °C to +300 °C
	–40 °C to +85 °C
Sensing tube Teflon:	–40 °C to +100 °C
Flexible hose:	
Case material:	ABS blend, UL 94-V0
Case colour:	light grey, RAL 280 70 05 anthracite, RAL 300 20 05
Dimensions:	212 × 250.5 × 134 mm (H×W×D)
Weight:	
ADW 535-1:	1500 g
ADW 535-2:	1970 g
VdS approval:	G214076

ADW 535 HDx line-type heat detector



No.: 11-1000001-01



No.: 11-1000001-02

The ADW 535HDx is suitable as equipment for use in zone 2 and 22 hazardous areas in accordance with VDE 0165 and IEC 60079-10. There are two variants:

- ADW 535-1HDx for one sensing tube, two relay/open collector outputs
- ADW 535-2HDx for two sensing tubes, four relay/open collector outputs

Operating voltage range:	9 – 30 V DC
Quiescent current:	
ADW 535-1HDx:	35 mA typ. with 24 V DC
ADW 535-2 HDx:	43 mA typ. with 24 V DC
Alarm current:	
ADW 535-1HDx:	42 mA typ. with 24 V DC
ADW 535-2 HDx:	57 mA typ. with 24 V DC
Optional module:	max. four pieces
Connection lengths:	
Copper/stainless steel:	max. 140 m per sensing tube
Teflon	max. 125 m per sensing tube
Monitoring width:	max. 7 m
Connection:	plug-in terminals, 2.5 mm ²
Cable inlet:	M20 and M25
Degree of protection:	IP 66
Ambient temperature:	
Evaluation unit:	–30 °C to +70 °C (ATEX –20 °C to +55 °C)
Sensing tube copper/stainless steel:	–40 °C to +300 °C –40 °C to +85 °C
Sensing tube Teflon:	–40 °C to +100 °C
Flexible hose:	
Case material:	glass-fibre reinforced, thermosetting polyester, UL 94-V0
Case colour:	graphite black RAL 9011, platinum grey RAL 7036
Dimensions:	203 × 260 × 134 mm (H×W×D)
Weight:	
ADW 535-1HDx:	3050 g
ADW 535-2 HDx:	3420 g
Ex classification:	EX II 3G Ex nA nC IIC T4 Gc EX II 3D Ex tc IIIC T135° Dc
ATEX approval:	SEV 15 ATEX 0125
VdS approval:	G214076

ADW 535-1 ATEX line-type heat detector



No.: 50-0500259-01

The ADW 535-1 ATEX is designed for intended use in hazardous areas of zone 1 (category 2G) in accordance with directive 2014/34/EU (ATEX).

The control and evaluation electronics are accommodated in a special case with ignition protection type II2G Ex d e IIC T6, which allows the complete evaluation unit to be mounted directly in hazardous zone 1 (category 2G). The response behaviour is adjustable, tested and approved according to EN 54-22, heat detector response class A1I – GI.

Operating voltage range:	9 – 30 V DC
Quiescent current:	35 mA typ. with 24 V DC
Alarm current:	42 mA typ with 24 V DC
Optional module:	max. four pieces
Connection lengths:	
Copper/stainless steel:	max. 140 m per sensing tube
Teflon	max. 125 m per sensing tube
Monitoring area:	800 m ²
Cable inlet:	M20 and M25
Degree of protection:	IP 65
Ambient temperature:	
Evaluation unit:	–20 °C to +55 °C
Sensing tube copper/stainless steel:	–40 °C to +300 °C
Sensing tube Teflon:	–40 °C to +85 °C
Flexible hose:	–40 °C to +100 °C
Case material:	sheet steel
Case colour:	grey, RAL 7032
Dimensions:	679 × 325 × 190 mm (H×W×D)
Weight:	27 kg
Ex classification:	II G 2 Ex d e IIC T6
ATEX approval:	
Case:	PTB 99 ATEX 1057
Detonation flame arrester:	IBExU 06 ATEX 2003 X
VdS approval:	G214076

**No.: 11-2200003-01**

XLM 35 interface module

Optional module for connection of special detectors to the Integral X-LINE. The operation, configuration and retrieval of the special detector's data can be performed directly from the fire alarm control panel. Installation set included.

Operating voltage:	5 V DC
Current consumption:	max. 0.3 mA
Degree of protection:	IP 54
Ambient temperature:	
Manufacturer's instruction:	–30 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Dimensions:	58 x 95 x 17 mm (HxWxD)
Weight:	62 g

**No.: 11-2200005-01**

RIM 36 relay interface module

Up to two RIM 36 can be installed in special fire detectors such as ASD aspirating smoke detectors or ADW line-type heat detectors. Depending on the device variant, the relays are assigned predefined criteria or are freely programmable via the ASD Config and ADW Config configuration software.

Operating voltage:	5 V DC
Current consumption:	
All operation modes:	5 mA typ.
Fast alignment mode:	33 mA typ.
Relay contact load capacity:	max. 50 V DC/1 A/30 W
Ambient temperature:	–30 °C to +70 °C
Dimensions:	58 x 95 x 17 mm (HxWxD)
Weight:	85 g



No.: Upon request

ADW HeatCalc calculation software

For drawing and planning of an ADW pipeline system. The calculation software indicates the parameters necessary for actuation in accordance with EN 54-22, which are subsequently programmed into the ADW 535.

- Calculation of symmetrical and asymmetrical sensor tube networks
- Makes planning faster and easier
- Allows extended system limits
- Includes all types of tubes and accessories

Required Hard- and Software:

- operating system Windows 7, Windows 10
- CPU with clockspeed min. 2 GHz
- 1 GB RAM
- 200 MB free hard disk space
- Ethernet interface



No.: Upon request

ADW Config configuration software

For adjustment of the parameters for the differential and maximum alarm thresholds, as well as the delay times in accordance with the relevant standards and ambient conditions.

- Import the project file into the device
- Easy commissioning directly on the device
- Device settings and analysis function
- Visualization of interconnection of line-type heat detectors
- Adjustment of the sensor tube alarm thresholds
- Definition of pre-alarm signal assignment and the Auto Learning criteria
- Definition of day/night function and allocation of the relays
- Setting/readout of time and firmware update

Required Hard- and Software:











- operating system Windows 7, Windows 10
- CPU with clockspeed min. 2 GHz
- 1 GB RAM
- 200 MB free hard disk space
- Ethernet interface

ADW line-type heat detectors, accessories and spare parts

	Designation	Type	Article no.
	Line-type heat detector – 1 sensing tube	ADW 535-1	11-1000000-01
	Line-type heat detector – 2 sensing tubes	ADW 535-2	11-1000000-02
	Line-type heat detector Ex – 1 sensing tube	ADW 535-1HDX	11-1000001-01
	Line-type heat detector Ex – 2 sensing tubes	ADW 535-2HDX	11-1000001-02
	ADW 535-1 ATEX line-type heat detector for hazardous areas zone 1/one sensing tube	ADW 535-1 ATEX	50-0500259-01
	ADW reference temperature sensor	ART 535-10	11-1000002-10
	Temperature sensor 400 °C 10 m for ADW 535-x	ART 535-10 400	11-1300059-01
	Temperature sensor 60 °C 30 m Ex 1 for ADW 535-x for hazardous areas zone 1	ART 535-30 60 EX 1	11-1300060-01
	Temperature sensor 60 °C 30 m Ex 21 for ADW 535-x for hazardous areas zone 21	ART 535-30 60 EX 21	11-1300061-01
	Temperature sensor 400 °C 30 m Ex 1 for ADW 535-x for hazardous areas zone 1	ART 535-30 400 EX 1	11-1300062-01
	Temperature sensor 400 °C 30 m Ex 21 for ADW 535-x for hazardous areas zone 21	ART 535-30 400 EX 21	11-1300063-01
	LMB 35 main circuit board Spare part	LMB 35	11-1200001-01
	Lithium battery CR 2032	CR 2032	5-BC112032
	LEB 35 extension board Spare part	LEB 35	11-1200002-01
	Pressure measuring and monitoring device Spare part	LSU 35	11-1200003-01
	SD memory card industrial	SD-INDUSTRIAL	11-4000007-01
	XLM 35 interface module	XLM 35	11-2200003-01

	Designation	Type	Article no.
	RIM 36 relay interface module	RIM 36	11-2200005-01
	UMS 35 module adapter	UMS 35	FG030826
	ADW HeatCalc calculation software	ADW HEATCALC	Upon request
	ADW Config configuration software	ADW CONFIG	Upon request
	Earthing clamp GC5-6-EX	GC 5/6 EX	11-1300042-01
	Cable gland M20 for ASD/ADW, 10 pcs. pack	M20 VE10	11-4000003-01
	Cable gland M25 for ASD/ADW, 10 pcs. pack	M25 VE10	11-4000004-01
	Cable gland M20 for ADW 535-HDx, 10 pcs. pack	M20 ATEX VE10	11-4000006-01
	Cable gland M25 for ADW 535-HDx, 10 pcs. pack	M25 ATEX VE10	11-4000005-01

9.3.2 ADW 535 sensing tube, copper

	Designation	Type	Article no.
	Sensing tube 5/4 3 m copper Rod 3 m	TU 5/4 CU 3M	11-1300034-01
	Sensing tube 5/4 5.5 m copper Rod 5.5 m	TU 5/4 CU	11-1300008-01
	Sensing tube 5/4 50 m copper Roll 50 m	TU 5/4 CU 50	11-1300009-01
	Junction, brass for TU 5/4 VE10 1 PU = 10 pcs., price per PU	SJ 5/4 CUZN	11-1300010-01
	SJ 5/4 CuZn VE5 end plug 1 PU = 5 pcs., price per PU	EP 5/4 CUZN	11-1300011-01
	T-junction, brass for TU 5/4 Brass	TJ 5/4 CUZN	11-1300012-01
	Detection coil TU 5/4 5 m	SC 5/4 CU 5	11-1300013-01
	Testing coil TU 5/4 10 m	TC 5/4 CU 10	11-1300014-01
	Compression ferrule for copper pipe, d=5/4 Brass	CF 5/4 CUZN	11-1300040-01
	Terminal nut for TU 5/4 Cu Replacement part, included in ADW	CN 5/4 CUZN	11-1300041-01







9.3.3 ADW 535 sensing tube, stainless steel

	Designation	Type	Article no.
	Sensing tube 5/4 3 m stainless steel Rod 3 m	TU 5/4 ST 3M	11-1300035-01
	Sensing tube 5/4 6 m stainless steel Rod 6 m	TU 5/4 ST	11-1300015-01
	Junction for TU 5/4 St VE5 1 PU = 5 pcs., price per PU	SJ 5/4 ST	11-1300016-01
	SJ 5/4 St VE5 end plug 1 PU = 5 pcs., price per PU	EP 5/4 ST	11-1300017-01
	T-junction, stainless steel for TU 5/4 St	TJ 5/4 ST	11-1300018-01
	Detection coil 5/4 stainless steel 5 m	SC 5/4 ST 5	11-1300044-01
	Test coil set 5/4 stainless steel 10 m	TC 5/4 ST 10 SET	11-1300050-01
	Supporting sleeve d=5 mm Stainless steel, 1 PU= 10 pcs., price per PU	SS 5/3 ST 10ER	11-1300031-01
	Compression ferrule stainless steel d=5/4	RE 5-4 ST	50-0500224-01
	Protective connection joint for sensing tube TU 5/4 St	PS TU 5/4 ST	11-1300043-01

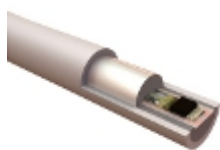
9.3.4 ADW 535 sensing tube, Teflon

	Designation	Type	Article no.
	Sensing tube 6/4 50 m Teflon Roll 50 m	TU 6/4 PTFE 50	11-1300019-01
	Sensing tube 6/4 100 m Teflon Roll 100 m	TU 6/4 PTFE 100	11-1300020-01
	Sensing tube, Teflon 6/4 mm Ex, roll 100 m	TU 6/4 PTFE/EX	11-1300055-01
	Sensing tube 6/4 PTFE 25 m Ex	TU 6/4 PTFE/EX25	11-1300069-01
	Sensing tube 6/4 PTFE 50 m Ex	TU 6/4 PTFE/EX50	11-1300070-01
	Junction, for TU 6/4 PTFE Set for Teflon tube, d=6/4 – ATEX incl. 2 support sleeve	SJ 6/4 CUZN	11-1300025-01
	End plug brass d=6/4 for SJ 6/4 CuZn	EP 6/4 CUZN	50-0500233-01
	SJ6/4CuZn-FH5/3PA reducing pieces for reduction from brass to SJ 6/4 CuZn-FH 5/3 PA	RE 6-5 CUZN	11-1300026-01
	Teflon T-junction, brass Set for Teflon tube, d=6/4 - ATEX, incl. 3 support sleeve	TJ 6/4 CUZN-SET	11-1300051-01
	Junction, for TU 6/4 PTFE Teflon	SJ 6/4 PVDF	11-1300022-01
	End plug for TU 6/4 PTFE	EP 6/4 PVDF	11-1300023-01
	T-junction for TU 6/4 PTFE Teflon	TJ 6/4 PVDF	11-1300024-01
	Changeover, ADW, TU 6/4 PTFE	AD TU 6/4 CUZN	11-1300021-01
	Supporting sleeve 6/4 CuZn for TU 6/4 PTFE	SS 4 CUZN	11-1300047-01
	Compression ferrule Teflon d=6/4	RE 6-5 CUZN	50-0500236-01
	Supporting sleeve for FH 5/3 PA VE10 1 PU = 10 pcs., price per PU	SS 3 CUZN	11-1300029-01

9.3.5 ASD 535 hoses and accessories

	Designation	Type	Article no.
	Flexible connection hose 5/3 PA 25 m Polyamide, roll = 25 m	FH 5/3 PA 25	11-1300028-01
	Mounting clamp 5/6 PA VE100 1 PU = 100 pcs., price per PU	PC 5/6 PA	11-1300032-01
	Mounting clamp 5/6 St VE10 1 PU = 10 pcs., price per PU	PC 5/6 ST	11-1300033-01
	Mounting clamp 5/6 PC d=5/4, incl. 1 supporting sleeve brass 10/8	PC 5/6 STG	11-1300056-01
	Mounting clamp plastic d=5/4 for ADW 535 (1 PU = 100 pcs.)	PC 5/6 PP	50-0500211-03
	Cleaning/maintenance set for ADW 535	ACMS 535	50-0500239-01

9.3.6 d-LIST-system



No.: 62-2000360-00

Sensor cable SEC 15

Line-type heat detector with integrated temperature measuring points for monitoring potential sources of danger in buildings (industrial application) and outdoor areas.

Inside the sensor cable there are temperature measuring points at freely selectable intervals, which are electrically connected by means of a flat ribbon conductor.

The sensor cable is connected to the evaluation unit either directly or via a connection cable and junction box and is terminated with a heat shrinkable cap.

The measuring points have fixed addresses, ensuring that their physical location is precisely determined. A completely closed aluminium shield protects the cable from electromagnetic influences, the cable mantle being made of a flame retardant material and is halogen-free.

- Selectable sensor distance
- Cable bundles can be branched
- Simple cabling and fitting
- Complete protection against environmental influences
- Not sensitive to contamination
- Certified as a class A1 detector
- Halogen-free and flame retardant outer core

Measuring points interval:	0.25 – 10 m (default: 1, 2, 3, 4, 5, 8, 10 m)
Measuring range:	–40 °C to +120 °C
Resolution:	0.1 °C
Cable diameter:	15 mm
Minimum bending radius:	250 mm
Length of sensor cable:	2 × 320 m
Number of sensors:	2 × 100
Sheath colour:	grey
Weight:	350 g/m
Ambient temperature:	–40 °C to +85 °C, briefly to +120 °C
Installation temperature:	higher than +10 °C
VdS approval:	G221004

**No.: 62-2001001-04**

Evaluation unit SCU 835

Central control unit with two alarm and two fault relays for connecting up to two d-LIST sensor cables with a length of up to 350 m (incl. supply cable) and a total of 200 sensors.

- LED collective display
- Two potential-free change-over contacts for alarm I and alarm II
- Two potential-free change-over contacts for sum fault I and II
- Reset input
- Aluminium case

Operating voltage range:	10.5 – 30 V DC
Power consumption:	
SCU 835:	max. 4,4 W with 10,5 V DC
SCU 835 with REL 835:	max. 5.5 W with 10.5 V DC
Outputs:	one alarm/fault relay per connection 16 Section relays with REL 835
Input:	one reset input, galvanically isolated
Response behaviour:	to EN 54-22
as non-integrating heat detector:	A1N, A2N, BN, CN A1I, A2I, BI, CI
as integrating heat detector:	
Connections:	
RS-232:	for connection to external systems
RS-485:	Parameterisation, networking, connection to external systems
USB:	Parameterisation, firmware upgrade
LAN:	100Mb/s Ethernet interface for network communication, commissioning and maintenance
Degree of protection:	IP 65
Ambient temperature:	–25 °C to +70 °C
Case material:	aluminium
Case colour:	light grey, RAL 7035
Dimensions:	177,5 × 289,5 × 91 mm (H×W×D)
Weight:	
SCU 835:	1950 g
SCU 835 with REL 835:	2100 g



No.: 62-2000353-00

LISTcontroller Master









Central evaluation unit without measuring function for use as a central, informal access point in extensive d-LIST systems.

Operating voltage:	24 V DC
Power consumption:	5 W
Current consumption:	175 mA with 24 V DC
Alarm current:	212 mA typ with 24 V DC
Switching voltage:	max. 48 V DC/32 V DC
Switching current:	max. 250 mA (resistive load)
Ambient temperature:	–5 °C to +70 °C
Case material:	aluminium
Dimensions:	19" plug-in panels of 1 height unit 43.6 × 482.6 × 315.5 mm (H×W×D)
Weight:	2.6 kg

d-LIST system, accessories and spare parts

	Designation	Type	Article no.
	Sensor cable SEC 15 with 1 m distance between sensors	SEC 15/01	62-2000360-00
	Sensor cable SEC 15 with 2 m distance between sensors	SEC 15/02	62-2000367-00
	Sensor cable SEC 15 grey with 3 m distance between sensors	SEC 15/03	62-2000372-00
	Sensor cable SEC 15 with 4 m distance between sensors	SEC 15/04	62-2000374-00
	Sensor cable SEC 15 with 5 m distance between sensors	SEC 15/05	62-2000376-00
	Sensor cable SEC 15/08 with 8 m sensor interval	SEC 15/08	62-2000458-01
	Sensor cable SEC 15/10 with 10 m sensor interval	SEC 15/10	62-2001014-01
	Sensor cable SEC 15 with other sensor intervals min. 0.25 m to max. 10 m	SEC 15/..	Upon request
	Evaluation unit SCU 835	SCU 835	62-2001001-04
	Mainboard MB for SCU 835	MB SCU 835	62-4001003-02
	Junctions for SCU 835 Spare part	AG1 DLCON/SCU835	62-4001011-01
	Connector set for SCU 835 Spare part	AP1 DLCON/SCU835	62-4001022-01
	Connector set for SCU 835 option	AP2 DLCON/SCU835	62-4001023-01
	LISTcontroller Master	LCON MASTER	62-2000353-00
	REL 835 relay module	REL 835	62-4001004-01
	Accessory set for REL 835 required for relay module REL 835	ACCS-AP REL 835	62-4001009-01
	Adapter plate for BX-OI3	AP BX-OI3	62-4001001-01
	Accessory pack adapter plate BX-OI3	ACCS-AP BX-OI3	62-4001002-01
	Adapter plate for XLM 35	AP XLM 35	62-4001001-04

	Designation	Type	Article no.
	Accessory pack adapter plate XLM 35	ACCS-AP XLM 35	62-4001002-04
	CBO 15-SEC connection box	CBO 15-SEC	62-2001004-01
	CBO 15-SEC accessories	AG1 CBO 15-SEC	62-4001008-01
	UCM 15-SEC connection module	UCM 15-SEC	62-4001005-01
	CBO 15-ESD connection box	CBO 15-ESD	62-2001004-02
	CBO 15-ESD accessories	AG1 CBO 15-ESD	62-4001008-02
	UCM 15-ESD connection module	UCM 15-ESD	62-4001005-02
	SEC 15 simulator CSM 30	CSM 30	62-2000435-01
	ESD-A5-EL-01 individual sensor Temperature sensor in stainless steel sleeve 8 mm square, with temperature-resistant connection cable 1 m, ambient temperature: – 40 °C to +85 °C, measuring range: –40 °C to +120 °C	ESD-A5-EL-01	62-2000343-00
	ESD-A5-EL-05 individual sensor Temperature sensor in stainless steel sleeve 8 mm square, with temperature-resistant connection cable 5 m, ambient temperature: – 40 °C to +85 °C, measuring range: –40 °C to +120 °C	ESD-A5-EL-05	62-2000346-00
	ESD-A5-EL-10 individual sensor Temperature sensor in stainless steel sleeve 8 mm square, with temperature-resistant connection cable 10 m, ambient temperature: – 40 °C to +85 °C, measuring range: –40 °C to +120 °C	ESD-A5-EL-10	62-2000499-00
	ESD-A5-RL-01 individual sensor Temperature sensor in stainless steel sleeve 8 mm round, with temperature-resistant connection cable 1 m, ambient temperature: – 40 °C to +85 °C, measuring range: –40 °C to +120 °C	ESD-A5-RL-01	62-2000347-00
	ESD-A5-RL-05 individual sensor Temperature sensor in stainless steel sleeve 8 mm round, with temperature-resistant	ESD-A5-RL-05	62-2000350-00

	Designation	Type	Article no.
	connection cable 5 m, ambient temperature: – 40 °C to +85 °C, measuring range: –40 °C to +120 °C		
	ESD-A5-RL-10 individual sensor Temperature sensor in stainless steel sleeve 8 mm round, with temperature-resistant connection cable 10 m, ambient temperature: – 40 °C to +85 °C, measuring range: –40 °C to +120 °C	ESD-A5-RL-10	62-2000498-00
	Shield connector for sensor cable SEC 15 for connection to the SCU circuit board	SCON 15/0	62-4000315-00
	Shield connector for sensor cable SEC 15 for connection in UCM or CCM 150-A	SCON 15/1	62-4000316-00
	CLS 2 Clincher connector (100 pcs.) Ribbon cable crimp terminal, 2-core, connector	CLS 2	62-8000316-00
	CLB 2 clincher socket (100 pcs.) Ribbon cable crimp terminal, 2-core, socket	CLB 2	62-8000315-00
	Repair set N15 for connection of SEC 15 cables	N15 REPAIR	62-2000396-00
	TOP 15 cable clamp (100 pcs.) for SEC 15, polyamide, halogen-free, RAL7035	CLIC 15	62-8000304-00
	CLIC TOP 15 cable clamp	CLIC TOP 15	62-8000395-00
	Sliding nut M6/A4 (100 pcs.) for CLIC cable clamps, M6 Stainless steel, 1 PU = 100 pcs.	SCHIEBER M6/A4	62-8000306-00
	MDP 25 cable attachment for LIST Sensor cable SEC 15; 1 PU=100 pcs.	MDP 25	62-4000325-00
	MDC cable clamp Stainless steel sleeve for SEC 15 with locking clip	MDC	62-8000344-00
	MDJ cable clamp Stainless steel clamp for LIST sensor cables, metal thickness 1.5 mm, height 40 mm	MDJ	62-8000349-00
	J cable clamp 1.4529	J-SHELLE 1.4529	62-8000374-00
	MDP 20 cable attachment	MDP 20	62-4000319-00
	MDJ 40 cable attachment	MDJ 40	62-4000329-00
	SDS 3L drill bit	SDS 3L	62-8000354-00

	Designation	Type	Article no.
	Cable tie for catenary mounting Length: 315 mm; material: polyamide (HIR)	FEMC	62-8000384-00
	Stainless steel cable tie FECT 201-A4 Backup for MDJ clamp, length: 201 mm	FECT 201-A4	62-8000360-00
	Connection cable for sensor cable SEC 15 1 x 2 x 0,8 shielded, red, JE-H(ST)H E30,	CC 15	62-8000345-00
	Clincher locking plate (100 pcs.) to lock a clincher CLB with a pin header	CLVP	62-8000320-00
	End cap Heat-shrinkable cap to terminate the SEC 15 sensor cable	END	62-8000503-00
	SWM-SM 50 setting tool	SWM-SM 50	62-8000412-00
	SWM-H setting tool	SWM-H	62-8000413-00
	GECKO Ethernet rail switch Main device – requires MM SFP (Multi) SM (Single)	ETH RS GECKO	62-2001023-01
	Preparation cable SECcon15-1 with connector, 3-pin and end cap	SECCON 15-1	62-3000351-00
	SECCON 15-2 pre-fitting	SECCON 15-2	62-3000352-00
	CBO 15 pre-fitting	PA-CBO 15	62-3001001-01
	SECcon 15-C/f plug and socket connection Coupling with socket (3-pin)	SECCON 15-CF	62-8000403-00
	SECcon 15-C/m plug and socket connection Coupling with connector, 3-pin	SECCON 15-CM	62-8000404-00
	USB-RS-485 converter for PC's	USB-RS485	62-0000312-00
	PC/SCU 800 connection cable for PC to d-LIST evaluation unit SCU 800, 9-/9- female connector ; length: 3 m	VK232-S8-PC-03	62-4000172-00
	CLCT crimping tool for ribbon cable clincher	CLCT	62-8000347-00
	LIST cable cutters for sensor cable SEC 15 and SEC 20	CUTTER SEC	62-0000427-00
	SC 15/20 service case Basic equipment for commissioning and repair, incl. crimping pliers, tools, connection and repair material	SC 15/20	62-2000432-00

9.3.7 LIST-system



No.: 62-2000385-00

Sensor cable SEC 20

Line-type heat detector with integrated temperature measuring points for monitoring potential sources of danger in tunnels and large areas.

Inside the sensor cable there are temperature measuring points at freely selectable intervals, which are electrically connected by means of a flat ribbon conductor.

The measuring points have fixed addresses, ensuring that their physical location is precisely determined. A completely closed aluminium shield protects the cable from electromagnetic influences, the cable mantle being made of a flame retardant material and is halogen-free.

- Selectable sensor distance
- Cable bundles can be branched
- Simple cabling and fitting
- Complete protection against environmental influences
- Not sensitive to contamination
- Certified as a class A1 detector
- Halogen-free and flame retardant outer core

Measuring points interval:	0.5 – 10 m (default: 1, 2, 3, 4, 5, 8, 10 m)
Measuring range:	–40 °C to +200 °C
Resolution:	0.1 °C
Cable diameter:	18 mm
Minimum bending radius:	300 mm
Cable length:	max. 3200 m (incl. CC)
Number of sensors:	max. 500 (VdS approved 320)
Sheath colour:	grey
Weight:	450 g/m
Ambient temperature:	–40 °C to +85 °C, briefly to +200 °C
Installation temperature:	higher than +10 °C
VdS approval:	G213072



No.: 62-2000354-00

LISTcontroller SEC

Control and evaluation units for sensor cable SEC 20 with alphanumeric LC-display and control keys, one potential-free change-over contact for group fault/alarm, in a 19" module rack design for cabinet installation.

The LISTcontroller is the central evaluation unit which records and evaluates up to 3200 m of sensor cable or 350 individual sensor points every ten seconds with reference to various criteria.

A fire alarm is actuated if either the temperature at a measuring point exceeds a threshold value or a defined temperature increase is registered over a period of time (differential behaviour).

Both alarm thresholds can be freely programmed for up to 254 configurable fire zones.

Operating voltage:	24 V DC
Power consumption:	5 W
Current consumption:	175 mA with 24 V DC
Alarm current:	212 mA typ with 24 V DC
Relay outputs:	one relay each for alarm, pre-alarm and frost alarm one relay for fault (active when without power)
Switching voltage:	max. 48 V DC/32 V DC
Switching current:	max. 250 mA (resistive load)
Input:	an external reset input (5 – 36 V DC)
Ambient temperature:	–5 °C to +70 °C
Case material:	aluminium
Dimensions:	19" plug-in panels of 1 height unit 43.6 × 482.6 × 315.5 mm (H×W×D)
Weight:	2.6 kg



No.: 62-2000355-00

LISTcontroller LB

Control and evaluation units for sensor cable SEC 20 with a second sensor cable connection for loop-back or RDT operation, with alphanumeric LC-display and control keys, one potential-free change-over contact per cable for group fault/alarm, in 19" module rack design for cabinet installation.

The LISTcontroller is the central evaluation unit which records and evaluates up to 3200 m of sensor cable or 350 individual sensor points every ten seconds with reference to various criteria.

A fire alarm is actuated if either the temperature at a measuring point exceeds a threshold value or a defined temperature increase is registered over a period of time (differential behaviour).

Both alarm thresholds can be freely programmed for up to 254 configurable fire zones.

Operating voltage:	24 V DC
Power consumption:	5 W
Current consumption:	175 mA with 24 V DC
Alarm current:	212 mA typ with 24 V DC
Relay outputs:	one relay each for alarm, pre-alarm and frost alarm one relay for fault (active when without power)
Switching voltage:	max. 48 V DC/32 V DC
Switching current:	max. 250 mA (resistive load)
Input:	an external reset input (5 – 36 V DC)
Ambient temperature:	–5 °C to +70 °C
Case material:	aluminium
Dimensions:	19" plug-in panels of 1 height unit 43.6 × 482.6 × 315.5 mm (H×W×D)
Weight:	2.6 kg

LIST system, accessories and spare parts

	Designation	Type	Article no.
	Sensor cable SEC 20 with 2 m distance between sensors	SEC 20/02	62-2000385-00
	Sensor cable SEC 20 with 1 m sensor interval	SEC 20/01	62-2000382-00
	Sensor cable SEC 20 with 3 m sensor interval	SEC 20/03	62-2000387-00
	Sensor cable SEC 20 with 4 m distance between sensors	SEC 20/04	62-2000388-00
	Sensor cable SEC 20 with 5 m distance between sensors	SEC 20/05	62-2000389-00
	Sensor cable SEC 20 with 8 m distance between sensors	SEC 20/08	62-2000393-00
	Sensor cable SEC 20 with 10 m distance between sensors	SEC 20/10	62-2000394-00
	Sensor cable SEC 20 with other sensor intervals min. 0.5 m to max. 10 m	SEC 20/..	Upon request
	LISTcontroller SEC	LCON SEC	62-2000354-00
	LISTcontroller LB	LCON LB	62-2000355-00
	RDT function for LISTcontroller for paired redundancy	LCON RDT	62-4000306-00
	IP interface and protocol MODBUS software function, MODBUS TCP to LISTcontroller	LCON I/P MODBUS	62-4000314-00
	IP interface and protocol IEC 60870-5-104 software function to LISTcontroller	LCON I/P IEC	62-4000314-01
	IEC protocol LIST controller LIST controller I/P IEC 60870-5-104	LIST IEC	62-4000454-00
	CBO 20/0 connection box between two sensor cables	CBO 20/0	62-2001011-01
	CBO 20/1 connection box for one sensor cable with connection module	CBO 20/1	62-2001011-02
	CBO 20/3 connection box for two or three sensor cables	CBO 20/3	62-2001011-03
	VKSEC-S4-KL-03 connection cable 3 m	VKSEC-S4-KL-03	62-4000239-00
	VK485-S4-MS-03 connection cable 3 m, RS-485 connection	VK485-S4-MS-03	62-4000240-00

	Designation	Type	Article no.
	VK232-S4-KL-03 connection cable 3 m, RS-232 connection	VK232-S4-KL-03	62-4000241-00
	VKI/O-S4-KL-03 connection cable 3 m IO-connection	VKI/O-S4-KL-03	62-4000242-00
	VK24-S4-KL-03 connection cable 3 m, 24 V connection	VK24-S4-KL-03	62-4000243-00
	CSM 200 cable simulator	CSM 200	62-2000264-00
	N20 repair set for connection of SEC 20 cables	N20 REPAIR	62-2000397-00
	RELMOD relay module	RELMOD	62-2000413-00
	19" wall-mounted cabinet Twelve height units, fully wired	CAB 19/12	62-2000415-00
	LCT 20 LIST cable tester	LCT 20	62-2000417-00
	Loop resistance board	RELMOD-R	62-4000143-00
	CAB 19 accessory bag	CAB 19 ACC	62-4000418-00
	CBO 20/0 accessory bag	CBO 20/0 ACC	62-4000431-00
	CBO 20/1 accessory bag	CBO 20/1 ACC	62-4000432-00
	CBO 20/3 accessory bag	CBO 20/3 ACC	62-4000436-00
	CBO 20/3 accessory bag, CCM jumper	CBO 20/3 ACC CCM	62-4000437-00
	Miniature fuse, fast-acting, 1.0 A	RELMOD-F	62-6000377-00
	CBO 20 slotted screw	CBO 20 SCREW	62-6000653-00
	Wall holder for CAB 19/x	CAB WALLHOLD	62-6000666-00
	CLIC TOP 17 cable clamp polyamide, halogen-free, light grey, RAL 7035	CLIC TOP 17	62-8000300-00
	Sliding nut M6/A4 (100 pcs.) for CLIC cable clamps, M6 Stainless steel, 1 PU = 100 pcs.	SCHIEBER M6/A4	62-8000306-00
	MDJ cable clamp Stainless steel clamp for LIST sensor cables, metal thickness 1.5 mm, height 40 mm	MDJ	62-8000349-00

	Designation	Type	Article no.
	MDP 20 cable attachment	MDP 20	62-4000319-00
	MDJ 40 cable attachment	MDJ 40	62-4000329-00
	Cable tie for catenary mounting Length: 315 mm; material: polyamide (HIR)	FEMC	62-8000384-00
	Stainless steel cable tie FECT 201-A4 Backup for MDJ clamp, length: 201 mm	FECT 201-A4	62-8000360-00
	CLB 4 clincher socket	CLB 4	62-8000317-00
	CLS 4 clincher connector	CLS 4	62-8000318-00
	Clincher locking plate (100 pcs.) to lock a clincher CLB with a pin header	CLVP	62-8000320-00
	End cap Heat-shrinkable cap to terminate the SEC 15 sensor cable	END	62-8000503-00
	CC 20 connection cable	CC 20	62-8000341-00
	VKLAN-S4-PC-03 connection cable 3 m, LAN/Ethernet	VKLAN-S4-PC-03	62-8000367-00
	SWM-SM 50 setting tool	SWM-SM 50	62-8000412-00
	SWM-H setting tool	SWM-H	62-8000413-00
	SDS 3L drill bit	SDS 3L	62-8000354-00
	GECKO Ethernet rail switch Main device – requires MM SFP (Multi) SM (Single)	ETH RS GECKO	62-2001023-01
	MM SFP fibre optics Gbit Ethernet Multi mode adapter for ETH RS GECKO	MM SFP	62-2001024-01
	SM SFP fibre optics Gbit Ethernet Single mode adapter for ETH RS GECKO	SM SFP	62-2001024-02
	SCON 20/1 shield connector	SCON 20/1	62-4000317-00
	SCON 20/2 shield connector	SCON 20/2	62-8000382-00
	CLCT crimping tool for ribbon cable clincher	CLCT	62-8000347-00
	LIST cable cutters for sensor cable SEC 15 and SEC 20	CUTTER SEC	62-0000427-00
	SC 15/20 service case Basic equipment for commissioning and repair, incl. crimping pliers, tools, connection and repair material	SC 15/20	62-2000432-00

9.4 Flame detectors

FMX5000 IR SET flame detector



No.: 11-0000009-01



No.: im Set enthalten



No.: im Set enthalten



No.: im Set enthalten

The FMX5000 IR three-channel infrared flame detector measures infrared beams and can therefore quickly and reliably detect open flames caused by the combustion of carbon-containing substances such as methane, oil products, plastics or wood. The detector is designed for use in harsh industrial environments. It is equipped with three infrared sensors and uses specially developed algorithms to intelligently evaluate deceptive alarms (e.g. blanking out hot surfaces of machines, or solar radiation).

An integrated optics test ensures that all three sensors and the detector's optical window are always ready for detection.

The scope of delivery includes the FMX5000 IR flame detector, the MX5000 MX base, the Bracket MX5000 mounting bracket and the KMX5000 RK relay module.

Detection principle:	3 IR sensors
Sensitivity class:	Adjustable x (50 m) 1,2,3
Viewing angle:	90°
Operating voltage range:	7.6 - 30 V DC
Quiescent current:	2.3 mA
Alarm current:	approx. 15 mA
Alarm indication:	1 LED red
Operation indication:	1 LED flashing green
Current fault indication:	approx. 15 mA
Fault indication:	1 LED yellow
Operating temperature:	-40 °C to +80 °C
Degree of protection (EN 60529):	IP 66/IP 67
Case material:	die-cast aluminium
Relative air humidity:	0 – 95 % without condensation
Weight:	820 g
Dimensions:	100 × 50 mm (D×H)
Cable gland:	2 × M16 × 1.5
VdS approval:	G209141

FMX5000 IR EX SET flame detector



No.: 11-0000013-01



No.: im Set enthalten



No.: im Set enthalten



No.: im Set enthalten

The FMX5000 IR EX three-channel infrared flame detector measures infrared beams and can therefore quickly and reliably detect open flames caused by the combustion of carbon-containing substances such as methane, oil products, plastics or wood. It features detection with three infrared sensors and uses specially developed algorithms for intelligent evaluation of deceptive alarms (e.g. blanking of hot surfaces of machines, or solar radiation). The FMX5000 IR EX three-channel infrared flame detector is intended for use in hazardous areas in zones 1, 2, 20, 21 and 22.

The integrated optical test ensures that all three sensors and the detector's optical window are always ready for detection.

The scope of delivery includes the FMX5000 IR EX flame detector, the MX5000 EX MX base, the Bracket MX5000 mounting bracket and the MTL5561 safety barrier.

Detection principle:	3 IR sensors
Sensitivity class:	Adjustable × (50 m) 1,2,3
Viewing angle:	90°
Operating voltage range:	7.6 - 28 V DC
Quiescent current:	4.5 mA
Alarm current:	approx. 15 mA
Alarm indication:	1 LED red
Current fault indication:	approx. 15 mA
Fault indication:	1 LED yellow
Operating temperature:	–40 °C to +80 °C
Degree of protection (EN 60529):	IP 66/IP 67
Case material:	die-cast aluminium
Relative air humidity:	0 – 95 % without condensation
Weight:	820 g
Dimensions:	100 × 50 mm (D×H)
Cable gland:	2 × M16 × 1.5
VdS approval:	G209141

FMX5000 UV SET flame detector



No.: 11-0000015-01



No.: im Set enthalten



No.: im Set enthalten



No.: im Set enthalten

The FMX5000 UV flame detector measures optical radiation in the ultra-violet range and can therefore quickly and reliably detect open flames caused by the combustion of gaseous, solid or liquid substances such as gases, alcohols or metal dusts. The detector is designed for use in harsh industrial environments and offers a high level of immunity against false alarms; thanks to intelligent evaluation algorithms, deceptive alarms (e.g. due to the suppression of lightning or solar radiation) are avoided.

The scope of delivery includes the FMX5000 UV flame detector, the MX5000 MX base, the Bracket MX5000 mounting bracket and the KM5000 RK relay module.

Detection principle:	UV sensor
Sensitivity class:	1
Viewing angle:	90°
Operating voltage range:	7.6 - 30 V DC
Quiescent current:	approx. 0.25 mA
Alarm current:	approx. 15 mA
Alarm indication:	1 LED red
Operation indication:	1 LED flashing green
Current fault indication:	approx. 15 mA
Fault indication:	1 LED yellow
Operating temperature:	-40 °C to +80 °C
Degree of protection (EN 60529):	IP 66/IP 67
Case material:	die-cast aluminium
Relative air humidity:	0 – 95 % without condensation
Weight:	820 g
Dimensions:	100 × 50 mm (D×H)
Cable gland:	2 × M16 × 1.5



No.: 20-3003000-01

FLS-IR3 infrared flame detector for hazardous areas

The FLS-IR3 triple infrared flame detector offers ultra-fast response, high performance and reliable detection of all types of hydrocarbon fires (visible and non-visible). The detector reacts to both slow- and fast-growing fires with improved triple infrared (IR3) technology. It is ideal for use in transformers, aerosol filling machines, shipping, turbine housings, paint mixing plants, storage, areas for IR drying ovens, engine test stands and test chambers.

Operating voltage range:	typ. 18 – 32 V DC, 24 V DC
Current consumption with win- dow heating:	max. 150 mA
Quiescent current:	120 mA typ.
Signal transmission:	Three potential-free relay outputs 30 V DC with 2 A
Sensitivity:	can be set to five levels: Extreme, High, Medium, Low, Very Low
Field of view:	90° horizontal, 75° vertical
Delay time:	0 – 30 s
Self-test function:	automatic, manually triggerable
Connection:	screw terminals, 0.35 – 2.5 mm ²
Response behaviour:	in accordance with EN 54-10 (class 1)
Degree of protection:	IP 66
Ambient temperature:	–55 °C to +85 °C
Relative air humidity:	99 % without condensation
Dimensions:	140 × 90 × 90 mm (H×W×D)
Case material:	Stainless steel 316
Weight:	
Detector:	3.0 kg
Mounting plate:	1.5 kg
Ex classification:	II 2 G D Ex db IIC T5 Gb or Ex db eb IIC T5 Gb Ex tb IIIC T95°C Db Ta = –55 °C bis +75 °C Ex db IIC T4 Gb oder Ex db eb IIC T4 Gb Ex tb IIIC T105°C Db Ta = –55 °C bis +85 °C
ATEX approval:	ICQC 19 ATEX 0424X
VdS approval:	applied for

FLS-UV-IR infrared flame detector for hazardous areas




No.: 20-3003001-01

The FLS-UV-IR ultraviolet/infrared flame detector offers ultra-fast response, high performance and reliable detection of a wide range of fires, including hydrocarbon fires (visible and non-visible) as well as hydrogen and methane/hydrogen mix fires. The detector reacts to both slow- and fast-growing fires with improved ultraviolet infrared technology. It is ideal for use in turbine cases, battery rooms, metal processing, sulphur (UV only), and transformers.

Operating voltage range:	typ. 18 – 32 V DC, 24 V DC
Current consumption with win- dow heating:	max. 150 mA
Quiescent current:	120 mA typ.
Signal transmission:	Three potential-free relay outputs 30 V DC with 2 A
Sensitivity:	can be set to four levels: Extreme, High, Medium, Low
Field of view:	90° horizontal, 80° vertical
Delay time:	0 – 30 s
Self-test function:	automatic, manually triggerable
Connection:	screw terminals, 0.35 – 2.5 mm ²
Response behaviour:	in accordance with EN 54-10 (class 1)
Degree of protection:	IP 66
Ambient temperature:	–55 °C to +85 °C
Relative air humidity:	99 % without condensation
Dimensions:	140 × 90 × 90 mm (H×W×D)
Case material:	Stainless steel 316
Weight:	
Detector:	3.0 kg
Mounting plate:	1.5 kg
Ex classification:	II 2 G D Ex db IIC T5 Gb or Ex db eb IIC T5 Gb Ex tb IIIC T95°C Db Ta = –55 °C bis +75 °C Ex db IIC T4 Gb oder Ex db eb IIC T4 Gb Ex tb IIIC T105°C Db Ta = –55 °C bis +85 °C
ATEX approval:	ICQC 19 ATEX 0424X
VdS approval:	applied for

Flame detectors and accessories

	Designation	Type	Article no.
	MX IR flame detector set FMX5000 IR, base, bracket, KMX5000	FMX5000 IR SET	11-0000009-01
	Flame detector MX IR Ex Set FMX5000 IR Ex, base, bracket, MTL 5561	FMX5000 IR EX SET	11-0000013-01
	MX UV flame detector set FMX5000 UV, base, bracket, KMX5000	FMX5000 UV SET	11-0000015-01
	Air purge for FMX5000	AIR SHIELD MX5000	11-0000018-01
	Weather protection for FMX5000	WP MX5000	11-0000019-01
	UV tester for FMX5000 UV	UVG 93	11-0000027-01
	FlameSpec IR3 flame detector Cable inputs with M25 thread	FLS-IR3	20-3003000-01
	FlameSpec UV-IR flame detector Cable inputs with M25 thread	FLS-UV-IR	20-3003001-01
	FlameSpec mounting bracket for FlameSpec flame detectors	FLS-TMO-S01	20-3003002-01
	FlameSpec weather protection hood for FlameSpec flame detectors	FLS-WCO-S01	20-3003003-01
	FlameSpec air purge for FlameSpec flame detectors	FLS-ASD-S01	20-3003004-01
	FlameSpec pole mount 2-3" for masts with 2 – 3 inch diameter	FLS-PMA-S23	20-3003005-01
	FlameSpec pole mount 6" for masts with 6 inch diameter	FLS-PMA-S06	20-3003006-01
	FlameSpec USB adapter incl. SW for the configuration of FlameSpec flame detectors	FLS-USB	20-3003007-01
	FlameSpec test lamp IR3 for testing FlameSpec IR3 flame detectors	FLS-FSIM-IR3-KIT	20-3003008-01

	Designation	Type	Article no.
	FlameSpec test lamp UV-IR for testing FlameSpec UV-IR flame detectors	FLS-FSIM-UV-IR-KIT	20-3003009-01

9.5 Radio fire detectors

FDOOT271-O radio fire detector



No.: 20-3001000-01
No.: 20-3001003-01



No.: 20-3001002-01

Wireless multiple sensor detector for the extension of fire alarm systems in areas where structural aspects or specific operations do not permit cable routing (e.g. in historic buildings, hotels, museums).

The system consists of one or more radio fire detectors FDOOT271-O and a radio gateway BX-WGW (receiver unit), which is integrated directly into the Integral X-LINE. Up to 31 radio fire detectors can communicate with one gateway.

The information transmission between radio fire detectors and the receiver unit is bidirectional and takes place in the frequency range 868 – 870 MHz, respectively 433 – 435 MHz whereby the highest operational reliability is ensured. The detector's power supply is provided by a battery pack. The receiver unit's power supply is provided via the loop circuit.

The detector base and the battery pack BAT3.6-10 must be ordered separately.

Power supply:	Battery pack BAT3.6-10
Battery life-time:	min. three years (depending on the ambient conditions)
Frequency bands:	868 – 870 MHz in band 48, 49, 50, 54 and 56b 433.05 – 434.79 MHz in band 44b
Channel spacing:	50 kHz
Number of channels:	27 in the 868-MHz band 20 in the 433-MHz band
Transmission power:	≤ 10 mW ERP in band 44b, 49 10 mW ERP typ. (max. ≤ 25) in band 48, 50, 54 and 56b
Radio link:	max. 30 m
Transmitting/receiving aerial:	dual-band antenna
Degree of protection:	IP 44
Ambient temperature:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	ABS
Case colour:	white, similar to RAL 9010
Dimensions:	117 × 64 mm (D×H)
Weight:	
Detector:	approx. 130 g
Base:	approx. 40 g
Battery pack:	approx. 93 g
VdS approval:	G216094



No.: Upon request

Coloured detectors

The radio fire detectors and the detector base are also available in colour on request. When ordering, please specify the type designation of the detector (respectively the detector base) and the desired colour from the RAL Classic colour system (four-digit RAL number).

FDM273-O radio manual call point



No.: 20-3001051-01
No.: 20-3001050-01



No.: 20-3001002-01

For manual actuation of a fire alarm in areas where architectural aspects or particular operating procedures do not permit the laying of wiring circuits. The alarm is triggered by smashing the glass panel and pressing the button.

The system consists of one or more radio manual call points and a radio gateway BX-WGW (receiver unit), which is integrated directly into the Integral X-LINE. Up to 31 radio manual call points can communicate with one gateway.

The information transmission between radio manual call points and the receiver unit is bidirectional and takes place in the frequency range 868 – 870 MHz, respectively 433 – 435 MHz whereby the highest operational reliability is ensured. The detector's power supply is provided by a battery pack, the receiver unit's power supply is provided via the loop circuit.

The case, the switching unit and the battery pack BAT3.6-10 must be ordered separately.

Power supply:	Battery pack BAT3.6-10
Battery life-time:	min. three years (depending on the ambient conditions)
Functional principle:	Manual call point type B (indirect actuation)
Frequency bands:	868 – 870 MHz in band 48, 49, 50, 54 and 56b 433.05 – 434.79 MHz in band 44b
Channel spacing:	50 kHz
Number of channels:	27 in the 868-MHz band 20 in the 433-MHz band
Transmission power:	≤ 10 mW ERP in band 44b, 49 10 mW ERP typ. (max. ≤ 25) in band 48, 50, 54 and 56b
Radio link:	max. 30 m
Transmitting/receiving aerial:	dual-band antenna
Degree of protection:	IP 44
Ambient temperature:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	Polycarbonate
Case colour:	red, RAL 3000
Dimensions:	135 × 135 × 58 mm (H×W×D)
Weight:	
Detector:	Approx. 377 g
Battery pack:	Approx. 93 g
VdS approval:	G216095
Declaration of Performance:	0786-CPR-21528

FDM275-O radio manual call point



No.: 20-3001100-01



No.: 20-3001002-01

For manual actuation of a fire alarm in areas where architectural aspects or particular operating procedures do not permit the laying of cable. The alarm is triggered by pushing the plastic element or the glass panel.

The system consists of one or more radio manual call points and a radio gateway BX-WGW (receiver unit), which is integrated directly into the Integral X-LINE. Up to 31 radio manual call points can communicate with one gateway.

The information transmission between radio manual call points and the receiver unit is bidirectional and takes place in the frequency range 868 – 870 MHz, respectively 433 – 435 MHz whereby the highest operational reliability is ensured. The detector's power supply is provided by a battery pack, the receiver unit's power supply is provided via the loop circuit.

The battery pack BAT3.6-10 must be ordered separately.

Power supply:	Battery pack BAT3.6-10
Battery life-time:	min. three years (depending on the ambient conditions)
Functional principle:	manual call point type A (direct actuation)
Frequency bands:	868 – 870 MHz in band 48, 49, 50, 54 and 56b 433.05 – 434.79 MHz in band 44b
Channel spacing:	50 kHz
Number of channels:	27 in the 868-MHz band 20 in the 433-MHz band
Transmission power:	≤ 10 mW ERP in band 44b, 49 10 mW ERP typ. (max. ≤ 25) in band 48, 50, 54 and 56b
Radio link:	max. 30 m
Transmitting/receiving aerial:	dual-band antenna
Degree of protection:	IP 24 D
Ambient temperature:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	Polycarbonate
Case colour:	red, RAL 3000
Dimensions:	87 × 87 × 63 mm (H×W×D)
Weight:	
Detector:	approx. 216 g
Battery pack:	approx. 93 g
VdS approval:	G216096
Declaration of Performance:	0786-CPR-21529

BX-WGW radio gateway



No.: 20-2100021-01



No.: 20-3001002-01

Communication interface between the fire alarm control panel and the radio fire detectors or the radio manual call points. The battery pack is used for commissioning, or to maintain the power supply in case of revision.

The battery pack BAT3.6-10 must be ordered separately.

Operating voltage range:	16 – 33 V DC
Current consumption:	7.5 mA typ.
Back-up battery:	Battery pack BAT3.6-10
Battery life-time:	max. 6 years (with default supply via Integral X-LINE, depending on the ambient conditions)
Frequency bands:	868 – 870 MHz in band 48, 49, 50, 54 and 56b 433.05 – 434.79 MHz in band 44b
Channel spacing:	50 kHz
Number of channels:	27 in the 868-MHz band 20 in the 433-MHz band
Connectable detectors:	max. 31
Numbers of gateways:	max. 14 per Integral X-LINE
Range in buildings:	up to 60 m (each direction 30 m, with direct intervisibility, without walls)
Antenna:	integrated
Degree of protection with case:	IP 40
Ambient temperature:	
Manufacturer's instruction:	–20 °C to +60 °C
Approved by VdS:	–10 °C to +55 °C
Relative air humidity:	5 – 95 % without condensation
Case material:	ABS
Case colour:	white, similar to RAL 9010
Dimensions:	
With case:	167 × 89 × 28 mm (H×W×D)
Without case:	110 × 80 × 14 mm (H×W×D)
Weight:	
Gateway:	approx. 157 g
Battery pack:	approx. 93 g
VdS approval:	G217001
Declaration of Performance:	CPR-20-17-021



No.: 20-3001002-01




Battery pack for radio devices

3.6 V lithium battery pack for the power supply of the radio devices and the radio gateway during commissioning and to maintain the configuration in case of revision. Battery pack with cable and reverse polarity plug.

System:	Lithium thionyl chloride battery
Label:	BAT3.6-10 LI-SOCI2
Rated voltage:	3.6 V
Wattage:	10 Ah
Ambient temperature:	up to 100 °C
Weight:	approx. 93 g

Radio detectors and accessories

	Designation	Type	Article no.
	Radio fire detectors	FDOOT271-O	20-3001000-01
	Base for radio fire detectors for FDOOT271-O	FDB271	20-3001003-01
	Case for radio manual call points for radio manual call points Type B	FDMH273-R	20-3001051-01
	Switching unit for radio manual call points for radio manual call points Type B	FDME273-O	20-3001050-01
	Radio manual call point Type A, incl. plastic release element	FDM275-O	20-3001100-01
	BX-WGW radio gateway	BX-WGW	20-2100021-01
	Battery pack for radio devices 3.6 V, 10 Ah	BAT3.6-10	20-3001002-01
	MCL radio USB adapter USB service device, incl. cinch/USB cable	FDUZ227	20-3001150-01
	Lock pin for radio detector for FDOOT271-O	FDBZ293	20-3001001-01
	Designation plate for FDOOT271-O Push-in strips 60 x 18 mm or adhesive label 60 x 16 mm	FDBZ291	20-3001004-01
	Protective cover for radio manual call points for radio manual call points Type B	DMZ1197-AC	20-3001052-01
	Replacement glass panel for radio manual call points for radio manual call points Type B	DMZ1196-AC	20-3001053-01
	Key for radio manual call points for radio manual call points Type B	DMZ1195	20-3001054-01
	Protective cover for radio manual call points for radio manual call points Type A	FDMC295	20-3001101-01
	Key for radio manual call points for radio manual call points Type A	FDMK295	20-3001102-01
	Replacement glass panel for radio manual call points for radio manual call points Type A	FDMG295	20-3001103-01

	Designation	Type	Article no.
	Plastic release element for radio manual call points Type A	FDMP295	20-3001104-01
	Detector removers for radio detectors for FDOOT271-O	FDUD291	20-3001151-01
	Adapter for radio detector remover	UTP 918	20-3001152-01

9.6 Fire detection units

27121 fire detection unit



No.: 20-3000400-01

The fire detection element is used in areas with higher ambient temperatures (e.g. in saunas, near boilers). The high degree of protection ensures good function under ambient conditions, such as dust or humidity, in which the trigger temperature of other heat detectors is exceeded.

The element works according to the differential expansion principle. The contact system in the end faces of the sensing tube results in different linear expansion when heated, which causes the contacts to close. The contact point (nominal value) is pre-set at the factory.

The fire detection element detects slowly rising temperatures (e.g. smouldering fires) as well as rapidly rising temperatures (e.g. propellant-based fires). Temporary harmless sources that influence the temperature (e.g. warm air when oven doors are opened) do not trigger an alarm.

The fire detection element is mounted on the wall, which is possible both horizontally and vertically (depending on the application and installation instruction).

Switching capacity:	max. 2 A/24 V DC
Actuation temperature:	107 °C, 135 °C, 162 °C, 182 °C
Contact:	NO (normally open)
Installation:	horizontal or vertical
Rod heat sensor:	
Monitoring area:	max. 30 m ²
Monitoring height:	max. 6 m
Degree of protection:	IP 67
Material:	stainless steel, brass head
Dimensions:	25.4 × 125.4 mm (D×H)
Weight:	200 g
Case material:	die-cast aluminium
Degree of protection:	IP 64
Dimensions:	80 × 57 × 59 mm (H×W×D)
Weight:	300 g



No.: 20-3000420-01

27021 fire detection unit

The fire detection element is used in areas with higher ambient temperatures (e.g. in saunas, near boilers). The high degree of protection ensures good function under ambient conditions, such as dust or humidity, in which the trigger temperature of other heat detectors is exceeded.


The element works according to the differential expansion principle. The contact system in the end faces of the sensing tube results in different linear expansion when heated, which causes the contacts to close. The contact point (nominal value) is pre-set at the factory.

The fire detection element detects slowly rising temperatures (e.g. smouldering fires) as well as rapidly rising temperatures (e.g. propellant-based fires). Temporary harmless sources that influence the temperature (e.g. warm air when oven doors are opened) do not trigger an alarm.

The fire detection element is mounted on the ceiling. **This fire detection unit may only be used outside the scope of the construction products regulation (CPR).**

Switching capacity:	max. 2 A/24 V DC
Actuation temperature:	87 °C, 107 °C, 135 °C, 162 °C
Contact:	NO (normally open)
Installation:	horizontal (ceiling installation)
Degree of protection:	IP 65
Sensor material:	stainless steel
Case material:	sheet steel
Dimensions:	115 × 50 mm (D×H)
Weight:	260 g

Fire detection units and accessories

	Designation	Type	Article no.
	27121 fire detection unit – 107 °C	27121-0-225	20-3000400-01
	27121 fire detection unit – 135 °C	27121-0-275	20-3000401-01
	27121 fire detection unit – 162 °C	27121-0-325	20-3000402-01
	27121 fire detection unit – 162 °C Ambient temperature over 140°	27121-0-325	20-3000402-02
	27121 fire detection unit – 182 °C	27121-0-360	20-3000403-01
	27121 fire detection unit – 182 °C Ambient temperature over 140°	27121-0-360	20-3000403-02
	27021 fire detection unit – 87 °C	27021-1-190	20-3000420-01
	27021 fire detection unit – 107 °C	27021-1-225	20-3000421-01
	27021 fire detection unit – 135 °C	27021-1-275	20-3000422-01
	27021 fire detection unit – 162 °C	27021-1-325	20-3000423-01

10 Accessories

10.1 Fire brigade peripherals

Fire brigade key safe FSS 850



No.: 20-4201010-01



No.: 20-4201011-01

The fire brigade key safe is used for the theft-protected and copy-protected storage of an object key (e.g. the master key) outside the building. The object key enables the fire brigade to access the building quickly and without violence in the event of a fire.

In the event of a fire, the key safe is released for the fire brigade by the fire alarm control panel. The illuminated field in the cover flap flashes to indicate unlocking directly on the fire brigade key safe. The fire brigade can open the lock behind it (with the key exclusively in their possession) and the monitored object key can be removed.

Operating voltage:	24 V DC +20 %/-10 %
Current consumption:	30 mA typ. (idle), max. 800 mA
Cable inlet:	rear of case
Connection:	screw-type terminals, max. 2.5 mm ²
Lock cylinder:	integrated half cylinder, l = 40 mm
Degree of protection:	IP 44
Ambient temperature:	-25 °C to +60 °C
Case material:	stainless steel, 5 mm
Dimensions:	350 x 280 x 110 mm (HxWxD)
Weight:	10.2 kg
Test number:	FT 14/851/06/15 (ÖNORM F 3032)

EZ 850-1 built-in frame

Installation frame for flush mounting for fire brigade key safe



No.: 20-4201016-01

Case material:	sheet steel, 2 mm, hot-dip galvanised
Dimensions:	300 x 250 x 120 mm (HxWxD)
Weight:	2.6 kg



No.: 20-4201015-01

AG 850-1 surface-mounted housing

Surface-mounted case for fire brigade key safe

Case material:	stainless steel, 3 mm
Dimensions:	358 × 287 × 115 mm (H×W×D)
Weight:	6.2 kg



No.: 20-4201020-01

SZG 850-1 control device

The control device is built into a red sheet steel case and is used to monitor and control the fire brigade key safe.

Operating voltage:	24 V DC +20 %/–10 %
Current consumption:	25 mA typ. (idle), max. 50 mA
Degree of protection:	IP 30
Ambient temperature:	–5 °C to +50 °C
Case material:	sheet steel
Case colour:	red, RAL 3000
Dimensions:	300 × 200 × 50 mm (H×W×D)
Weight:	2 kg
Test number:	FT 14/851/06/15 (ÖNORM F 3032)



No.: FG020513

FSS FASB fire brigade key box

The fire brigade key box is an addition to the fire brigade key safe without electrical unlocking. Particularly suitable for the storage of gate and engine room keys for fire brigade access, lift companies, power stations and rescue services. The plate installation cylinder is not included and must be ordered separately.

Dimensions:	150 × 150 × 57 mm (H×W×D)
Case colour:	grey, RAL 7032



No.: FG020511

MHZ52NI fire brigade plan case

Metal cabinet for storing the fire protection plans required by the fire brigade. The plan case is equipped with the fire brigade lock, which is also be used for fire brigade operating panels and manual call points. One key and three mounting screws are included with the box.

Case material:	sheet steel, 1 mm
Case colour:	red, RAL 3000
Dimensions:	400 × 350 × 110 mm (H×W×D)
Weight:	approx. 4.2 kg



No.: 20-4201000-01

FWP-3 fire brigade plan case with folding table

Metal cabinet for storing the fire protection plans required by the fire brigade. The interior of the plan case provides ample space for an DIN A4 folder with a 7.5 cm spine.





The door is opened downwards and can be used as a writing desk or simply for storing the plans. Thus, the fire brigade plan case fulfills the requirements of TRVB S 123 for a place to store the guide means.







The coated metal cabinet is intended for wall-mounting and must be placed to the fire brigade's main attack route in accordance with TRVB O 119.

The plan case is equipped with the fire brigade lock, which is also be used for fire brigade operating panels and manual call points. Alternatively, a plate installation cylinder can be fitted. Key included.

Case material:	sheet steel, 1.5 mm
Case colour:	red, RAL 3000
Dimensions:	440 × 350 × 110 mm (H×W×D)
Weight:	approx. 4.5 kg

Fire brigade peripherals and accessories

	Designation	Type	Article no.
	FSS 850-1 fire brigade key safe	FSS 850-1	20-4201010-01
	FSS 850-2 fire brigade key safe with integrated release element	FSS 850-2	20-4201011-01
	FSS 850-1 fire brigade key safe RAL 7032 pebble grey, matt	FSS 850-1	20-4201010-02
	FSS 850-1 fire brigade key safe RAL 9005 black, matt	FSS 850-1	20-4201010-03
	FSS 850-1 fire brigade key safe RAL 7021 black grey, matt	FSS 850-1	20-4201010-04
	FSS 850-1 fire brigade key safe RAL 9001 cream white matt	FSS 850-1	20-4201010-05
	Built-in frame for fire brigade key safe	EZ 850-1	20-4201016-01
	Surface-mounted housing for fire brigade key safe	AG 850-1	20-4201015-01
	Control unit for fire brigade key safe	SZG 850-1	20-4201020-01
	Locking pin for fire brigade key safe (replacement)	ZN 60323	20-4201030-01
	Sealed key-ring for fire brigade key safe	SCHLÜSSELPLOMBE K1	20-4201040-01
	Mounting set for EZ 800-1 for installation of FSS 850 in installation frame EZ 800-1	MS 850-1	20-4201032-01
	FASB fire brigade key box	FSS FASB	FG020513
	MHZ52NI fire brigade cylinder, Austria	FSS ZYL A	FG020510
	MHZ52NI Fire brigade sheet metal mounting cylinder for fire brigade key safe FASB	FSS ZYL B	FG020514

	Designation	Type	Article no.
	Temporary customer cylinder for fire brigade key safe FASB	FSS ZYL K	FG020516
	Fire brigade plan case	FWPK AP	FG020511
	Fire brigade plan case with folding table	FWP-3	20-4201000-01
	Sticker "Feuerwehr" (replacement)	FSS AK	20-4201031-01
	Sticker "Feuerwehrpläne" (replacement) 297 × 105 mm	S FWP	20-4900020-01
	Schrack Seconet logo sticker, resin coated 40 × 10 mm	S FSS LOGO1	20-4900028-01

10.2 External power supply units

BE-PSE01/BE-PSE01-IOM power supply unit cabinet



No.: 20-4000121-01

The power supply equipment serves in the first instance for battery-backed DC power supply for peripheral devices, which cannot be supplied by the fire alarm control panel's power supply unit for current consumption reasons (e.g. special detector, sirens or holding magnets).

The device is optionally available with a built-in BX-IOM input/output module.

The mains voltage and the battery circuit are constantly monitored, with the loading current of the batteries being temperature-monitored.

In the event of an overload, the maximum output current is limited accordingly, and in the event of the voltage falling below the cut-off voltage, total discharge protection ensures that automatic load shedding occurs.

The power supply equipment is fitted with potential-free contacts, to allow the battery status to be queried and forwarded onto a superordinated system.

Mains voltage:	100 – 240 V AC ± 10 %
Approved by VdS:	230 V AC $+10$ %/ -15 %
Power supply frequency:	47 – 63 Hz
Power consumption:	60 VA
Inrush current:	max. 35 A/2 ms
Output voltage (complies with PELV/SELV):	24 V DC
Output nominal current:	max. 1.6 A
End-of-charge voltage:	27.4 V DC ± 0.4 % (25 °C)
Signal contact load:	max. 30 V DC/10 mA
Rechargeable battery type:	lead rechargeable battery, maintenance-free, 2.3 Ah
Total discharge protection and load shedding:	20,4 V DC without BX-IOM 20,1 V DC with BX-IOM
Efficiency:	78 %
Mains fuse:	4 A (slow), 250 V
Rechargeable battery fuse:	3 A, FK2/FKS
Consumer fuse:	2 \times 1 A, FK2/FKS 1 \times 2 A, FK2/FKS
Degree of protection with case:	IP 30
Ambient temperature:	-5 °C to $+40$ °C (observe rechargeable battery life)
Storage temperature:	-5 °C to $+50$ °C
Relative air humidity:	5 – 95 % without condensation
Case colour:	light grey, RAL 7035
Dimensions:	204 \times 200 \times 80 mm (H \times W \times D)
Weight with rechargeable batteries:	3.2 kg

VdS approval:	G220002
Declaration of Performance:	CPR-20-20-205

BE-PSE02/BE-PSE02-IOM power supply unit cabinet



No.: 20-4000125-01

The power supply equipment is used for the battery-backed DC power supply of peripheral devices that cannot be supplied by the power supply unit of the fire alarm control panel due to their current consumption (e.g. special detectors, sirens or holding magnets).

The device is optionally available with a built-in BX-IOM input/output module.

The mains voltage and the battery circuit are constantly monitored, with the loading current of the batteries being temperature-monitored.

In the event of an overload, the maximum output current is limited accordingly, and in the event of the voltage falling below the cut-off voltage, total discharge protection ensures that automatic load shedding occurs.

The power supply equipment is fitted with potential-free contacts, to allow the battery status to be queried and forwarded onto a superordinated system.

Mains voltage:	100 – 240 V AC ± 10 %
Approved by VdS:	230 V AC +10 %/–15 %
Power supply frequency:	47 – 63 Hz
Power consumption:	60 VA
Inrush current:	max. 35 A/2 ms
Output voltage (complies with PELV/SELV):	24 V DC
Output nominal current:	max. 1.6 A
End-of-charge voltage:	27.4 V DC ± 0.4 % (25 °C)
Signal contact load:	max. 30 V DC/10 mA
Rechargeable battery type:	excl. lead rechargeable battery, maintenance-free, 7 Ah/12 Ah
Total discharge protection and load shedding:	20,4 V DC without BX-IOM 20,1 V DC with BX-IOM
Efficiency:	78 %
Mains fuse:	4 A (slow), 250 V
Rechargeable battery fuse:	3 A, FK2/FKS
Consumer fuse:	2 \times 1 A, FK2/FKS 1 \times 2 A, FK2/FKS
Degree of protection with case:	IP 30
Ambient temperature:	–5 °C to +40 °C (observe rechargeable battery life)
Storage temperature:	–5 °C to +50 °C
Relative air humidity:	5 – 95 % without condensation
Case colour:	light grey, RAL 7035
Dimensions:	289 \times 253 \times 129 mm (H \times W \times D)
Weight without rechargeable batteries:	approx. 2.8 kg
VdS approval:	G220002
Declaration of Performance:	CPR-20-20-205

BE-PSU03-CF/BE-PSU03-OF power supply unit



No.: 20-4000112-01



No.: 20-4000111-01

The power supply equipment serves in the first instance for battery backed DC power supply for peripheral devices, which cannot be supplied by the fire alarm control panel's power supply unit for power consumption reasons (e.g. aspirating or special smoke detectors with a high quiescent current consumption).

The BE-PSU03 power supply unit provides an output voltage of 24 V and an output current of 3 A, and is available in two different designs. The CF version is designed for installation in an IP 54 cabinet; the OF version is suitable for installation in an IP 30 case.

The mains voltage and the battery circuit are constantly monitored, with the loading current of the batteries being temperature-monitored.

In the event of an overload, the maximum output current is limited accordingly, and in the event of the voltage falling below the cut-off voltage, total discharge protection ensures that automatic load shedding occurs.

Both devices have potential-free contacts, through which the operational status can be queried and forwarded to a superordinate system.

Rated input voltage:	230 V AC (+10 /-15 %)
Power supply frequency:	47 – 63 Hz
Power consumption:	max. 90 VA
Rated output voltage:	24 V DC
Output nominal current:	3 A
End-of-charge voltage:	27.4 V DC ± 0.4 % (25 °C)
Total discharge protection and load shedding:	20.4 V DC ± 0.4 %
Rechargeable battery type:	Lead-acid battery, maintenance-free
Mains fuse:	2 A, slow
Fuse protection DC output circuit:	5 A, FK2/FKS
Consumer fuse:	5 x 1 A FK2/FKS
Degree of protection:	IP 20
Ambient temperature:	-5 °C to +40 °C
Dimensions:	
CF version:	155 x 75 x 128 mm (HxWxD)
OF version:	185 x 126 x 120 mm (HxWxD)
Weight:	1 kg
VdS approval:	G209170, G209172
Declaration of Performance:	CPR-20-13-202, CPR-20-13-203

**No.: 20-4000109-01**

BE-PSE03-C power supply unit case

With built-in BE-PSU03-OF power supply unit, five monitored and optionally five additional output fuses. The cabinet provides space for the installation of two rechargeable batteries (max. 26 Ah). One input/output module can be mounted on the top-hat rail (for connection to the fire alarm control panel). The four LEDs on the front panel are used for status indication.

Degree of protection:	IP 30
Ambient temperature:	–5 °C to +40 °C
Case colour:	light grey, RAL 7035
Dimensions:	361.6 × 464 × 145 mm (H×W×D)
Weight without rechargeable batteries:	approx. 7.5 kg
VdS approval:	G209170
Declaration of Performance:	CPR-20-13-202

**No.: 20-4000110-01**

BE-PSE03-P power supply unit cabinet

With a built-in BE-PSU03-CF power supply unit, five monitored and optionally five additional output fuses, includes all necessary terminals and cables for connection of peripherals and the rechargeable batteries. The cabinet provides space for the installation of two rechargeable batteries (max. 45 Ah). One input/output module can be mounted next to the power supply unit (the fire alarm control panel). The package includes eight pieces M16 connection joints and four pieces M25/M16 reducing pieces.

Degree of protection:	IP 54
Ambient temperature:	–5 °C to +40 °C
Case colour:	light grey, RAL 7035
Dimensions:	500 × 500 × 300 mm (H×W×D)
Weight without rechargeable batteries:	approx. 25.5 kg
VdS approval:	G209172
Declaration of Performance:	CPR-20-13-203

**No.: 20-4000106-01****No.: 20-4000105-01**

BE-PSU12-CF/BE-PSU12-OF power supply unit

The power supply equipment serves in the first instance for battery backed DC power supply for peripheral devices, which cannot be supplied by the fire alarm control panel's power supply unit for power consumption reasons (e.g. aspirating or special smoke detectors with a high quiescent current consumption).

The BE-PSU12 power supply unit provides an output voltage of 24 V and an output current of 12 A, and is available in two different designs. The CF version is designed for installation in an IP 54 cabinet; the OF version is suitable for installation in an IP 30 case.

The mains voltage and the battery circuit are constantly monitored, with the loading current of the batteries being temperature-monitored.

In the event of an overload, the maximum output current is limited accordingly, and in the event of the voltage falling below the cut-off voltage, total discharge protection ensures that automatic load shedding occurs.

Both devices have potential-free contacts, through which the operational status can be queried and forwarded to a superordinate system.

Rated input voltage:	230 V AC (+10 /-15 %)
Power supply frequency:	47 – 63 Hz
Power consumption:	max. 380 VA
Rated output voltage:	24 V DC
Output nominal current:	12 A
End-of-charge voltage:	27.4 V DC ± 0.4 % (25 °C)
Total discharge protection and load shedding:	20.4 V DC ± 0.4 %
Rechargeable battery type:	Lead-acid battery, maintenance-free
Mains fuse:	2 A, slow
Fuse protection DC output circuit:	15 A, FK2/FKS
Consumer fuse:	10 \times 1 A, FK2/FKS
Degree of protection:	IP 20
Ambient temperature:	-5 °C to +40 °C
Dimensions:	
CF version:	155 \times 95 \times 183 mm (H \times W \times D)
OF version:	185 \times 176 \times 122 mm (H \times W \times D)
Weight:	1.6 kg
VdS approval:	G209171, G209173
Declaration of Performance:	CPR-20-13-200, CPR-20-13-201

**No.: 20-4000100-01**

BE-PSE12-C power supply unit case

Wall-mounted cabinet with built-in BE-PSU12-OF power supply unit, ten monitored and optionally ten additional output fuses. The cabinet provides space for the installation of two rechargeable batteries (max. 65 Ah). One input/output module can be mounted on the top-hat rail or directly on the power supply unit (for connection to the fire alarm control panel). The four LEDs on the front panel are used for status indication.

Degree of protection:	IP 30
Ambient temperature:	–5 °C to +40 °C
Dimensions:	608 × 464 × 213 mm (H×W×D)
Case colour:	light grey, RAL 7035
Weight without rechargeable batteries:	approx. 12.5 kg
VdS approval:	G209171
Declaration of Performance:	CPR-20-13-200

**No.: 20-4000104-01**

BE-CBE12-C empty case

For expansion of the rechargeable batteries capacity; provides space for the installation of two rechargeable batteries (max. 65 Ah).

Degree of protection:	IP 30
Case colour:	light grey, RAL 7035
Dimensions:	608 × 464 × 213 mm (H×W×D)
Weight without rechargeable batteries:	approx. 11 kg

BE-PSE12-P45 power supply unit cabinet



No.: 20-4000101-01

With a built-in BE-PSU12-CF power supply unit, ten monitored and optionally ten additional output fuses, Includes all necessary terminals and cables for connection of peripheral devices and the rechargeable batteries.

The cabinet provides space for the installation of two rechargeable batteries (max. 45 Ah). One input/output module can be mounted next to the power supply unit (the fire alarm control panel). The package includes twelve pieces M16 connection joints and eight pieces M25/M16 reducing pieces.

Degree of protection:	IP 54
Ambient temperature:	–5 °C to +40 °C
Case colour:	light grey, RAL 7035
Dimensions:	500 × 500 × 300 mm (H×W×D)
Weight without rechargeable batteries:	approx. 27.5 kg
VdS approval:	G209173
Declaration of Performance:	CPR-20-13-201

BE-PSE12-P170 power supply unit cabinet



No.: 20-4000102-01

With a built-in BE-PSU12-CF power supply unit, ten monitored and optionally ten additional output fuses, Includes all necessary terminals and cables for connection of peripheral devices and the rechargeable batteries.

The cabinet provides space for the installation of four rechargeable batteries (max. 85 Ah). One input/output module can be mounted above the power supply unit (for connection to the fire alarm control panel). The package includes twelve pieces M16 connection joints and eight pieces M25/M16 reducing pieces.

Degree of protection:	IP 54
Ambient temperature:	–5 °C to +40 °C
Case colour:	light grey, RAL 7035
Dimensions:	1000 × 800 × 300 mm (H×W×D)
Weight without rechargeable batteries:	approx. 64.5 kg
VdS approval:	G209173
Declaration of Performance:	CPR-20-13-201

BE-PSE24-P170 power supply unit cabinet



No.: 20-4000103-01

With two built-in BE-PSU12-CF power supply units (2× 12 A), ten monitored and optionally up to 3 × 10 additional output fuses Includes all necessary terminals and cables for connection of peripherals and the rechargeable batteries.

The cabinet provides space for the installation of up to four rechargeable batteries (max. 85 Ah). One input/output module can be mounted above the power supply units (for connection to the fire alarm control panel). The package includes twelve pieces M16 connection joints and eight pieces M25/M16 reducing pieces.

Degree of protection:	IP 54
Ambient temperature:	–5 °C to +40 °C
Case colour:	light grey, RAL 7035
Dimensions:	1000 × 800 × 300 mm (H×W×D)
Weight without rechargeable batteries:	approx. 64.5 kg
VdS approval:	G209173
Declaration of Performance:	CPR-20-13-201

External power supply units and accessories

	Designation	Type	Article no.
	Power supply unit 24 V/1 A in IP 30 cabinet incl. two rechargeable batteries	BE-PSE01	20-4000121-01
	Power supply unit 24 V/1 A in IP 30 cabinet incl. two rechargeable batteries and BX-IOM	BE-PSE01-IOM	20-4000121-02
	Top rail hat holder for BE-PSE01	BE-THRH	20-4000122-01
	Power supply unit 24 V/1 A in IP 30 cabinet	BE-PSE02	20-4000125-01
	Power supply unit 24 V/1 A in IP 30 cabinet incl. BX-IOM	BE-PSE02-IOM	20-4000125-02
	Box for loop module – indoor use 94 × 94 × 57 mm, for BX-OI3/BX-AIM etc.	GEH MOD IP66	FG020234
	Power supply unit 24 V/3 A for IP 54 wall-mounted cabinet	BE-PSU03-CF	20-4000112-01
	Power supply unit 24 V/3 A for IP 30 compact case	BE-PSU03-OF	20-4000111-01
	Power supply unit 24 V/3 A in IP 30 cabinet	BE-PSE03-C	20-4000109-01
	Fuse board (replacement) for BE-PSE03-C	BE-FIB05-C	20-4000113-01
	Power supply unit 24 V/3 A in IP 54 cabinet	BE-PSE03-P	20-4000110-01
	Fuse board (replacement) for BE-PSE03-P	BE-FIB05-P	20-4000117-01
	Power supply unit 24 V/12 A in IP 54 cabinet	BE-PSU12-CF	20-4000106-01
	Power supply unit 24 V/12 A for IP 30 compact case	BE-PSU12-OF	20-4000105-01
	Power supply unit 24 V/12 A in IP 30 cabinet	BE-PSE12-C	20-4000100-01

	Designation	Type	Article no.
	Fuse board (replacement) for BE-PSE12-C	BE-FIB10	20-4000107-01
	Empty case for rechargeable batteries IP 30	BE-CBE12-C	20-4000104-01
	Power supply unit 24 V/12 A in IP 54 cabinet	BE-PSE12-P45	20-4000101-01
	Power supply unit 24 V/12 A in IP 54 cabinet	BE-PSE12-P170	20-4000102-01
	Power supply unit 2 x 24 V/12 A in IP 54 cabinet	BE-PSE24-P170	20-4000103-01
	Fuse board (replacement) for BE-PSE12-P	BE-FIB10-P	20-4000115-01
	Temperature sensor for BE-PSE (replacement)	BE-TSENS	20-4000119-01
	BX-OI3 input/output module	BX-OI3	20-2100001-01
	BX-IM4 input module	BX-IM4	20-2100003-01
	Fastening clamp for IP 66 case	BKL M5	FG020238
	Cylinder head screws M5 x 10 for mounting clamp 1 PU = 2000 pcs.	MS ZKS M5-10	MS00845010
	FKS 1A flat fuse	FKS 1A	MM000499
	FKS 2A flat fuse	FKS 2A	MM000496
	FKS 3A flat fuse	FKS 3A	MM000497
	FKS 4A flat fuse	FKS 4A	MM000498
	FKS 5A flat fuse	FKS 5A	MM000500

	Designation	Type	Article no.
	FKS 10A flat fuse	FKS 10A	MM000502
	FKS 15A flat fuse	FKS 15A	MM000501

10.3 Rechargeable batteries for power supply unit cabinets

	Designation	Type	Article no.
	Rechargeable battery 12 V/1.2 Ah	AKKU 1,2	HG691014
	Rechargeable battery 12 V/2.1 Ah	AKKU 2,1	HG691020
	Rechargeable battery 12 V/7 Ah	AKKU 7	HG691021
	Rechargeable battery 12 V/12 Ah	AKKU 12	HG691022
	Rechargeable battery 12 V/17 Ah	AKKU 17	HG691013
	Rechargeable battery 12 V/24 Ah	AKKU 24	HG691023
	Rechargeable battery 12 V/44 Ah	AKKU 44	HG691017
	Rechargeable battery 12 V/65 Ah	AKKU 65	HG691018
	Rechargeable battery 12 V/85 Ah	AKKU 85	HG691019

10.4 Overvoltage protection

The protection modules are used to supplement the overvoltage protection concept if peripheral devices (outputs or detectors) cannot be installed within the protected zone 1 (in accordance with VdS guideline 2833). The use of these components requires a proper overvoltage and earthing concept for the entire building.



No.: 20-4000500-01

Base for protection module

Four pin terminal universal feed-through terminal to hold an arrester module without signal interruption. Safe earthing of the arrester module is provided via the top-hat rail support foot with a snap-on mounting.

Installation:	DIN top-hat rail, 35 mm, in accordance with EN 60715
Connection:	screw terminal 0.08 – 4 mm ²
Tightening torque:	0.4 Nm (connection terminals)
Earthing:	via 35 mm top-hat rail in accordance with EN 60715
Degree of protection:	IP 20
Ambient temperature:	–40 °C to +80 °C
Case material:	polyamide/PA 6.6
Case colour:	yellow
Dimensions:	90 × 50 × 12 mm (H×W×D)
Ex classification:	DEKRA 11ATEX0089 X: II 3 G Ex nA IIC T4 Gc IECEX DEK 11.0032X: Ex nA II T4 Gc
Approvals:	CSA, UL, GOST



No.: 20-4000501-01

Protection module 24 V

Combined arrester module for connection to the BXT BAS base unit to protect four single lines with common reference potential as well as asymmetric interfaces. For use in accordance with the lightning protection zones concept at boundaries 0 – 2 A.

Area for use:	Integral loop technology (B3/B4-DAI), conventional stub lines (DCI/MTI) and (monitored) outputs with a nominal current of up to 0.75 A
Arrester class:	type 1/P1
Rated voltage:	24 V DC
Highest continuous voltage:	33 V DC/23.3 V AC
Nominal current:	0.75 A (with +45 °C)
Lightning impulse current:	2.5 kA per wire
Nominal discharge current:	10 kA per wire
Series impedance per wire:	1.8 Ω
Wire-to-wire capacitance:	≤ 0,5 nF
Wire-to-PG capacitance:	≤ 1,0 nF
Earthing:	via base unit
Degree of protection:	IP 20 (plugged)
Ambient temperature:	–40 °C to +80 °C
Case material:	polyamide/PA 6.6
Case colour:	yellow
Dimensions:	45 × 51 × 12 mm (H×W×D)
Testing standards:	IEC 61643-21, UL 497B
Ex classification:	DEKRA 11ATEX0089 X: II 3 G Ex nA IIC T4 Gc IECEX DEK 11.0032X: Ex nA II T4 Gc
Approvals:	CSA, UL, GOST



No.: 20-4000502-01

Protection module 36 V/four cores

Combined arrester module for connection to the BXT BAS base unit to protect four single lines with common reference potential as well as asymmetric interfaces. For use in accordance with the lightning protection zones concept at boundaries 0 – 2 A.

Area for use:	Integral X-LINE
Arrester class:	type 1/P1
Rated voltage:	36 V DC
Highest continuous voltage:	45 V DC/31 V AC
Nominal current:	1.8 A (with +45 °C)
Lightning impulse current:	2.5 kA per wire
Nominal discharge current:	10 kA per wire
Series impedance per wire:	0.43 Ω
Wire-to-wire capacitance:	≤ 0,8 nF
Wire-to-PG capacitance:	≤ 1,6 nF
Earthing:	via base unit
Degree of protection:	IP 20 (plugged)
Ambient temperature:	–40 °C to +80 °C
Case material:	polyamide/PA 6.6
Case colour:	yellow
Dimensions:	45 × 51 × 12 mm (H×W×D)
Testing standard:	IEC 61643-21
Ex classification:	DEKRA 11ATEX0089 X: II 3 G Ex nA IIC T4 Gc IECEx DEK 11.0032X: Ex nA II T4 Gc
Approval:	GOST





**No.: 20-4000503-01**

Protection module 36 V/two cores

Combination arrester module for plugging into the BXT BAS base unit, for protection of two single cores, optionally indirect or direct shield earthing. With integrated LifeCheck for non-contact arrester testing.

Area for use:	Integral X-LINE
Arrester class:	type 1/P1
Rated voltage:	36 V DC
Highest continuous voltage:	45 V DC/31 V AC
Nominal current:	1.8 A (with +45 °C)
Lightning impulse current:	2.5 kA per wire
Nominal discharge current:	10 kA per wire
Series impedance per wire:	0.43 Ω
Wire-to-wire capacitance:	≤ 0,8 nF
Wire-to-PG capacitance:	≤ 1,6 nF
Earthing:	via base unit
Degree of protection:	IP 20 (plugged)
Ambient temperature:	–40 °C to +80 °C
Case material:	polyamide/PA 6.6
Case colour:	yellow
Dimensions:	45 × 51 × 12 mm (H×W×D)
Testing standards:	IEC 61643-21/EN 61643-21

Overvoltage protection and accessories

	Designation	Type	Article no.
	Base for protection module	BXT BAS	20-4000500-01
	Protection module 24 V	BXT ML4 BE 24	20-4000501-01
	Protection module 36 V for the protection of four single cores	BXT ML4 BE 36	20-4000502-01
	Protection module 36V for the protection of two single cores	BXT ML2 BE S 36	20-4000503-01

10.5 Ex-barriers



No.: FG020121

Z787 safety barrier

This safety barrier for intrinsically safe detector zones prevents excessive energy from entering a hazardous area and generating ignition spark by discharging there. The safety barrier is connected in series in the detector zone wiring and is tested and approved for use in hazardous areas in compliance with the requirements of ATEX 100a.

Operating voltage:	max. 28 V DC
Operating current:	35 mA
Short circuit current:	max. 93 mA
Maximum external capacitance:	0.083 µF/0.65 µF (IIC/IIB)
Maximum external inductance:	4.11 mH/16.44 mH (IIC/IIB)
End-to-end resistance:	300 Ω, max. 327 Ω
Wiring length:	max. 700 m
Ambient temperature:	–20 °C to +60 °C
Dimensions:	115 × 110 × 12.5 mm (H×W×D)
Ex classification:	EX II 3 G EEx n A IIC T4
ATEX approval:	TÜV 99 ATEX 1484 X BAS 01 ATEX 7005



No.: FG020430

Z787F safety barrier

Equivalent in function and structure to the Z787 safety barrier, but with integrated pre-fuse holders in the safe area. The safety barrier is intended for use in exposed locations where overvoltage, lightning strikes, potential shifts etc. can result in destruction of the safety barrier. The selective pre-fuses prevent the destruction of the internal fuses and can be replaced.

Operating voltage:	max. 28 V DC
Operating current:	35 mA
Short circuit current:	max. 93 mA
Maximum external capacitance:	0.083 µF/0.65 µF (IIC/IIB)
Maximum external inductance:	4.11 mH/16.44 mH (IIC/IIB)
End-to-end resistance:	300 Ω, max. 341 Ω
Wiring length:	max. 350 m
Ambient temperature:	–20 °C to +60 °C
Dimensions:	115 × 110 × 12.5 mm (H×W×D)
Ex classification:	EX II 3 G EEx n A IIC T4
ATEX approval:	TÜV 99 ATEX 1484 X BAS 00 ATEX 7096

Case for Ex-barriers IP 66



No.: 30-6800070-01

Case with integrated 35 mm mounting bracket for installation of up to three Z787 or Z787F safety barriers. When installing only one safety barrier, the required protective earthing conductor can also be placed directly in the case. The case features 14 M12/20 cable inlets and four M16/25 cable inlets.

Mounting:	Surface mounting
Sealable:	yes
Cable inlet:	4 × M12/20, 4 × M16/25, 10 × M12/20
Degree of protection:	IP 66
Ambient temperature:	–40 °C to +80 °C
Case material:	Polycarbonate, glass-fibre reinforced
Cover material:	Polycarbonate
Case colour:	light grey, RAL 7035
Dimensions:	175 × 175 × 100 mm (H×W×D)

Ex-barriers and accessories

	Designation	Type	Article no.
	Z787 safety barrier	Z787	FG020121
	Z787F safety barrier	Z787F	FG020430
	G-fuse 50 mA F 5 x 20 for Z787.F (replacement)	Z787F SI	FG020431
	Case with top-hat rail for Ex-barriers IP 66	GEH HS TP	30-6800070-01
	Connection joint M12 (metric)	MM ANB M12	MM000191
	Lock nut M12	MM GM M12	MM000195
	Connection joint M16 (metric)	MM ANB M16	MM000185
	Lock nut M16	MM GM M16	MM000186
	Step nipple M 20 (metric) 1 PU = 100 pcs.	MM SN M20	MM000181

10.6 Hold-open systems



No.: FG030600



No.: FG030602

ORS 142 optical smoke switch

For detection of smouldering and open fires with formation of smoke, and the control of locking systems on doors and gates. An additional temperature sensor is activated at an ambient temperature of 70 °C. The alarm threshold adjustment ensures a permanent monitoring of contamination levels and automatically adjusts the alarm threshold accordingly. The operating states are indicated visually via LED.

Operating voltage range:	18 – 28 V DC
Quiescent current:	22 mA typ. with 28 V DC
Alarm current:	11 mA typ with 28 V DC
Fault current:	16 mA with 28 V DC
Sensitivity:	
Smoke:	in accordance with EN 54-7
Heat:	+70 °C
Relay contact:	break contact
Switching voltage:	30 V DC
Switching current:	1 A
Switching capacity:	30 W
Degree of protection:	IP 42
Ambient temperature:	–20 °C to +60 °C
Case colour:	white, similar to RAL 9010
Dimensions incl. base:	80 × 65 mm (D×H)
Weight:	120 g
DIBt approval:	Z-6.5-1725, Z-6.5-1891

**No.: FG030605**

ORS 142 EX optical smoke switch

For the detection of smouldering fires and open fires with smoke formation. An additional temperature sensor is activated at an ambient temperature of 70 °C. This means that it can also be used in Ex zones 1, 2 and 22 for the activation of a hold-open system. The alarm threshold adjustment ensures a permanent monitoring of contamination levels and automatically adjusts the alarm threshold accordingly. The operating states are indicated visually via LED.

Operating voltage range:	20 – 28 V DC
Quiescent current:	max. 10.5 mA with 24 V DC
Alarm current:	max. 1.7 mA with 24 V DC
Fault current:	max. 2.3 mA with 24 V DC
Sensitivity:	
Smoke:	in accordance with EN 54-7
Heat:	+75 °C ±5 °C
Relay contact:	break contact
Switching voltage:	30 V DC
Switching current:	1 A
Switching capacity:	30 W
Degree of protection:	
Connection box:	IP 54
Optical smoke switch:	IP 42
Ambient temperature:	–20 °C to +70 °C
Dimensions:	
Connection box:	75.5 × 190 × 55.5 mm (H×W×D)
Optical smoke switch:	80 × 66 mm (D×H)
Weight:	1052 g
DIBt approval:	Z-6.5-1725 Z-6.500-2359 Z-6.500-2393 Z-6.500-2394
Ex classification:	EX II 2G Ex eb mb [ib Gb] IIC T4 Gb EX II 3D Ex tc [ic Dc] IIIB T130°C Dc

**No.: FG030601****No.: FG030602**

TDS 247 thermal switch

Thermal differential switch with maximum threshold to detect open fires with or without smoke. Ideal for areas in which sources of interference such as dust, smoke or steam are produced during normal operations. Both the high rate of increase of temperature and the exceeding of the set threshold value are detected. The operating states are indicated visually via LED.

Operating voltage range:	18 – 28 V DC
Quiescent current:	22 mA typ. with 28 V DC
Alarm current:	11 mA typ with 28 V DC
Fault current:	16 mA with 28 V DC
Sensitivity:	
Heat:	category A1 (in accordance with EN 54-5)
Maximum threshold:	+54 °C to +65 °C
Relay contact:	break contact
Switching voltage:	30 V DC
Switching current:	1 A
Switching capacity:	30 W
Degree of protection:	IP 42
Ambient temperature:	–20 °C to +80 °C
Case colour:	white, similar to RAL 9010
Dimensions incl. base:	80 × 65 mm (D×H)
DIBt approval:	Z-6.5-1725, Z-6.5-1891

**No.: 31-5000006-01**

LRS 04 Ex duct smoke switch system

The duct smoke switch system is used for smoke monitoring in ventilation ducts with explosive atmospheres in buildings and consists of the duct smoke base LKS 02, the optical smoke switch ORS 221 Ex and the ORS 142 Ex interface (connection box). These components are mounted on the mounting plate and are pre-wired.

The LRS 04 Ex system is mounted on the ventilation duct from the outside and is designed for use in rectangular ventilation ducts from 150 mm to 1 m. In circular ventilation ducts, the use of diameter of 200 mm to 1 m is possible (for monitoring larger ducts, it is necessary to use several devices).

The LRS 04 Ex system is ATEX approved and can be used in explosion zones 1 and 2. The connection to the fire alarm control panel is made via input modules.

Operating voltage range:	20 – 28 V DC
Quiescent current:	12 mA typ.
Alarm current:	1.8 mA typ.
Fault current:	2.7 mA
Relay contact:	
Switching voltage:	30 V DC/30 V AC
Switching current:	1 A
Switching capacity:	30 W
Ventilation duct rectangular:	side lengths 150 mm to 1 m
Ventilation duct round:	diameter 200 mm to 1 m
Ventilation pipe length:	130 – 336 mm
Openings:	2 × diameter 28 – 30 mm/150 mm distance for mounting in the case 3 × max. 6 mm or three pairs of openings for the passage of three tension bands
Cable inlet:	M16 × 1.5 Ø 4 – 8 mm
Air speed:	max. 20 m/s
Degree of protection:	IP 54
Ambient temperature:	–20 °C to +70 °C
Case material:	polycarbonate, polyester, aluminium tube
Case colour:	blue, black/white, transparent
Dimensions without pipe:	105 × 520 × 135 mm (H×W×D)
Weight:	
LRS 04 Ex:	2395 g
ORS 221 Ex:	80 g
Inlet tube:	110 g
Ex classification:	
Optical smoke switch:	Ex II 2G Ex ib IIC T4
Connection box:	Ex II 2G Ex e mb [ib] IIC T4



No.: 31-5400002-01

FSZ Base hold-open system control panel

The FSZ Base is a power supply unit, manual release button, alarm memory and reset button in a single device. Together with approved smoke switches and door holding magnets, it forms a hold-open system for the activation of fire and smoke control doors and gates.

- Short circuit resistant, primary switched switch-mode power supply
- Stabilised output voltage, rated value 24 V DC
- Tested in accordance with DIN EN 14637
- Relay with potential-free changeover contact freely available
- 24 V door-holding magnet-output with free-wheeling diode and function monitoring
- Integrated reset button
- Integrated, standard-compliant manual release button
- Variable labelling of the manual release button
- Connection for external manual release button
- Connection for external reset button
- Selectable alarm memory
- Selectable circuit monitoring of the smoke switch and external manual release button wiring
- With activated circuit monitoring, connection of two smoke detector stub lines is possible
- The fault cause can be determined via the LED flash code on the operating panel

Rated input voltage:	230 V AC
Rated output voltage:	24 V DC
Output nominal current:	max. 400 mA
Switched solenoid output:	24 V DC
Potential-free changeover contact:	250 V AC/5 A 30 V DC/3 A
Mounting:	Surface-mounted, optionally top-hat rail
Cable inlet:	
top/bottom:	6 × M16, 2 × M20
at the back:	2 slots
Ambient temperature:	−10 °C to +50 °C
Storage temperature:	−10 °C to +60 °C
Dimensions:	146 × 146 × 60.5 mm (H×W×D)
DIBt approval:	Z-6.5-1725
VdS approval:	G213091



No.: FG030640

HAT 02 manual release button

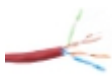













Manual actuation switch for installation in dry areas, for manual actuation of hold-open devices in accordance with DIBt guidelines.

Relay contact:	break contact
Switching voltage:	30 V DC
Switching current:	1 A
Mounting:	Surface or flush-mounted
Labelling:	Close door
Degree of protection:	IP 20
Case colour:	white, red rocker switch

Hold-open systems and accessories

	Designation	Type	Article no.
	ORS 142 optical smoke switch	ORS 142	FG030600
	ORS 142 EX optical smoke switch ATEX approved, for hazardous areas 1, 2 and 22	ORS 142 EX	FG030605
	TDS 247 thermal switch	TDS 247	FG030601
	143A mounting base	143A	FG030602
	LRS 02 duct smoke switch system	LRS 02	FG030610
	LRS 03 duct smoke switch system	LRS 03	FG030611
	Ex duct smoke switch system incl. ORS 221 EX	LRS 04 EX	31-5000006-01
	Optical smoke switch Ex Replacement smoke switch for LRS 04 EX	ORS 221 EX	31-5000005-01
	FSZ Base hold-open system control panel	FSZ BASIS	31-5400002-01
	Accessory set for Base hold-open system control panel	ZUBEHÖRSET FSZ	31-4100010-02
	AM 142 final module for Base hold-open system control panel	AM 142	31-5700002-01
	HAT 02 manual release button	HAT 02	FG030640

10.7 Cables

	Designation	Type	Article no.
	Integral LAN data cable Cat 5e UTP (AWG24), halogen-free, red	UTP 100 FRH	20-4100000-01
	Ground cable Cat 7 4 × 2 × AWG23 sw for Integral LAN/WAN/MMI-bus	STP-C(L)2Y-100 KAT.7	20-4300001-01
	Fire alarm cable, red, shielded 1 × 2 × 0.8 for loop technology	JB-Y(ST)Y 1X2X0,8RT	L198200804
	Fire alarm cable, red, shielded 1 × 2 × 0.8 for loop technology, halogen-free	KAB 1*2*0,8 S HF	L198200803
	Fire alarm cable, blue, shielded 1 × 2 × 0.8 for hazardous areas -20 °C to +105 °C	JB-Y(ST)Y 1X2X0,8BL	L198200805
	Cable for high temperature detector, orange, 2 × 0.75 -50 °C to +180 °C	SIHF-O 2X0,75	L198275800
	Fire alarm cable, red, 4 × 0.8	BM-YY 4X0,8 RT	20-4300010-01
	Fire alarm cable, red, 5 × 2 × 0.6	F-YAY 5X2X0,6 RT	20-4300011-01
	Fire alarm cable, red, 20 × 2 × 0.6	F-YAY 20X2X0,6 RT	20-4300012-01
	Cable YMM, grey, 2 × 2.5	KAB 2*2,5	MM000110
	Kabel YYSCH, grey, 3 × 0.6, 100 m	KAB 3*0,6 GR	MM000111
	Kabel YYSCH, grey, 5 × 0.6, 100 m	KAB 5*0,6 GR	MM000112
	Kabel YMM-O without inscription, red, 3 × 1.5	KAB 3*1,5	MM000113
	Kabel YMM-O without inscription, red, 3 × 2.5	KAB 3*2,5	MM000114

10.8 Inscription label and stickers

	Designation	Type	Article no.
	Sticker "Brandmelderzentrale" 161 × 33 mm	S BMZ MINI	20-4900025-01
	Sticker "Brandmelderzentrale" 173 × 51 mm	S BMZKL	20-4900023-01
	Sticker "Brandmelderzentrale" 297 × 105 mm	S BMZGR	FG28405
	Sticker "Brandmeldesystem Teilzentrale/Blackbox" 173 × 51 mm	S BMSTZ	20-4900021-01
	Sticker "Externes Anzeigefeld" 161 × 33 mm	S EXT ANZ	20-4900024-01
	Sticker "Externes Anzeigefeld" 110 × 22 mm	S EXT ANZ 2	20-4900034-01
	Sticker "Externe Energieversorgungseinrichtung für Brandmeldeanlage" 252 × 54 mm	S EXT NG	FG27811
	Sticker "Externe Energieversorgungseinrichtung für Brandmeldeanlage" 180 × 38 mm	S EXT NG2	20-4900000-01
	Sticker "Feuerwehr" (replacement)	FSS AK	20-4201031-01
	Sticker "Feuerwehrpläne" (replacement) 297 × 105 mm	S FWP	20-4900020-01
	Sticker "Feuerwehrbedienfeld" 297 × 110 mm	S FWB	20-4900026-01
	Arrow sticker 294 × 103 mm	S PFL	20-4900022-01
	Sign "Brandmelder" ZWD/ZWB Foil sticker white/red 100 × 23 mm	S ZWBD	20-4900031-01
	Schrack Seconet logo sticker, resin coated 40 × 10 mm	S FSS LOGO1	20-4900028-01
	Labelling card for detector base USB 502-1 and USB 502-6 for labels up to 44 × 75 mm, white, similar RAL 9003, 1 PU = 10 labelling cards	DNP 502 VE 10	31-3100001-01
	Labelling panel for FDOOT271-O 62 × 34 mm, push-in strips 60 × 18 mm or adhesive label 60 × 16 mm	FDBZ291	20-3001004-01
	Detector label for large room heights with imprint: 120 × 175 mm	S MBK GRH	FG28399
	Detector label for large room heights without imprint: 120 × 175 mm	S MBK GRH2	FG28398

	Designation	Type	Article no.
	Detector labelling card 80 x 50 mm	S BKKL	20-4900032-01
	Sticker "Alarmzähler" for Integral MAP (28 pcs.) 38 x 12 mm	S AZ	FG28423
	Sticker "Anzeigetest" for Integral MAP (28 pcs.) 38 x 12 mm	S AT	FG28424
	Sticker "Erkundung" and "Auslösungen" for Integral PIP operating panels (2 pcs.) 38 x 30 mm	S PIP EA	FG28425
	Warning information sticker "Achtung Brandfallsteuerungen" (6 pcs.) 172 x 15 mm	S BFST1	20-4900029-01
	Warning information stickers without imprint (6 pcs.) 172 x 15 mm	S BFST2	20-4900030-01
	Security seal (20 pcs.) 50 x 20 mm	S SEAL	20-4900033-01
	Sticker hand symbol for MCP 535X 70 x 70 mm	MCP 535 AK	FG030230
	Sticker "Hausalarm" for MCP 535X 90 x 21 mm (24 pcs.)	S HA	20-4900001-01
	Inscription label for detector base USB 50x-x for labels up to 47 x 75 mm, white similar RAL 9003	DNP 521/531	FG030138
	Sticker "AUFZUG Brandfallsteuerung" for MCP 535X 90 x 21 mm	S AZBFS	20-4900005-01
	Labelling ring grey for heat detectors 1 PU = 1 package á 50 sticker, Ø 53 mm	DILH-VE50	30-6800115-01
	Labelling sheets for MCP 535X (Auslösung alle Steuerungen, Building alarm, Fire Brigade, Prüfmelder, CO2-STOPP, STOPP-TASTER Gaslöschanlage, NACHFLUTEN Feuerlöschanlage, HANDAUSLÖSUNG Feuerlöschanlage, Close door, AMOK-ALARM, Roter Punkt (für Feststellanlagen)	MCP 525/535D	30-3700002-01

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