

For decades, security systems by Labor Strauß have been associated with innovative technology and highest quality, serving safety. All steps of the value-adding process – including market analysis, development, manufacturing, distribution and customer service – are united in one company. The products of the Austrian family business ensure safety – in many parts of Europe and the world.

MEP – the safety specialists. Apart from the development and manufacturing of innovative electromechanical components – such as manual call points, fire brigade control units and sabotage-monitored key safes – the company offers complete solutions around the topic „Fire Protection“.



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LABOR STRAUSS SICHERUNGSANLAGENBAU GMBH
office@lst.at · www.laborstrauss.com

A-1230 WIEN · WIEGELESTRASSE 36
TEL +43 1 521 14-0 · FAX +43 1 521 14-27

A-8055 GRAZ · GMEINSTRASSE 11
TEL +43 316 833 201-0 · FAX +43 316 833 201-27

A-6020 INNSBRUCK · JOSEF-WILBERGER-STRASSE 5
TEL +43 512 390 880-0 · FAX +43 512 390 880-27

LABOR STRAUSS SICHERHEITSSYSTEME GMBH
office@laborstrauss.de · www.laborstrauss.com

D-41066 MÖNCHENGLADBACH · JAKOBSHÖHE 20
TEL +49 2161 567 90-0 · FAX +49 2161 567 90-27

LABOR STRAUSS SICHERHEITSSYSTEME NORD GMBH
office@lst-nord.de · www.laborstrauss.com

D-21079 HAMBURG · HARBURGER SCHLOSSSTRASSE 30
TEL +49 40 307 026-50 · FAX +49 40 307 026-57

Fire Detection System Series 200-Advanced

Intelligent components for effective fire protection:

- Loop Fire Detectors
- RF Fire Detectors
- Special Detectors



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AUTOMATIC FIRE DETECTORS AND MANUAL CALL POINTS

Based on decades of experience, the intelligent fire detectors Series 200-Advanced constitute a product family that represents the leading edge of fire alarm technology. The sophisticated digital loop protocol ensures a quick bi-directional data exchange via the ring-shaped detector loop. That allows the fire detection control panel to always get a quick overview of dangerous situations or possible faults.

Outstanding features

318 addresses can be handled on the loop and, therefore, up to 159 detectors and 159 modules can be connected. As a result, the number of detector loops required for larger systems is minimised and the cabling efforts are kept low.

The two tri-coloured light emitting diodes with 360° visibility optically indicate all system conditions. All Series 200-Advanced detectors are available with an integrated short circuit isolator on request. Thanks to that, malfunctions on the loop are reduced to a minimum.

Optical smoke detector

With its specially designed sensing chamber, the optical smoke detector ensures unhindered air inlet and quick smoke detection for various types of fires. At the same time, dust and insects are prevented from reaching the chamber, thereby keeping the contamination low and reducing the risk of unintended activations.

Optical-thermal detector

Thanks to the combination of an optical sensing chamber with a thermocouple, the optical-thermal detector is suitable for a vast number of applications. The optical measuring unit ensures reliable smoke detection for different types of fires. The thermal unit responds to increased temperatures as a consequence of the growing fire. Reliable fire detection and high immunity to deceptive alarms is achieved through the evaluation of both sensing units by means of the integrated comparison of fire patterns.

Heat detectors

For the thermal fire detection, the Series 200-Advanced offers three different detector types which vary in their activation characteristic:

- a rate-of-rise heat detector - Class A1R, which responds to a rapid rise in temperature or a maximum temperature of 58°C
- a maximum heat detector - Class A1S with an alarm temperature of 58°C
- a maximum heat detector - Class BS with an alarm temperature of 78°C

3-criteria detector »PTIR«

Three independent measuring units for the characteristics of fire

- smoke
- temperature
- infrared radiation

make the 3-criteria detector PTIR a high-grade fire detector for applications which require high reliability. Through the use of complex software algorithms for continuously evaluating the measuring results, and by comparing these results with typical fire patterns, they are distinctly classified as alarm situations or noise variables. As a result, the reliable fire detection and the especially high immunity to deceptive alarms set the 3-criteria detector PTIR apart.

Thanks to its similar response behaviour, the 3-criteria detector is also an environment-friendly first-class substitute for ionisation smoke detectors. Its use avoids the strict applicable radiation protection regulations as well as the high disposal costs that are of concern to ionisation detectors.



Manual call points

In spite of all automation, manual detectors are still very important for immediately alarming the fire brigade or other emergency personnel in the event of danger.

The Manual Call Points Series HME according to EN 54-11/B are activated by breaking the glass and pressing the button. The robust aluminium die-cast housing is form stable and especially durable. The protection class can be upgraded to IP54 or IP65, if necessary.

The manual call point MCP5A with single-action activation according to EN 54-11/A and plastic housing is activated just by pressing in the transparent pane.

The Manual Call Points Series HME in a die-cast aluminium case are available in various versions, different colours and with exchangeable labelling. They are used for activating a variety of fire prevention devices, such as extinguishing systems or fire dampers, as well as for alarming or evacuation.

Certified quality

The fire detectors Series 200-Advanced have been tested and certified by VdS, as required by the Construction Products Regulation CPR, according to the standard EN 54.



SPECIAL DETECTORS AND RADIO FIRE DETECTORS

4-criteria detector »COPTIR«

The unique 4-criteria detector is equipped with 4 independent sensors, which detect the parameters

- **C** – carbon monoxide
- **OP** – optically visible smoke
- **T** – temperature
- **IR** – infrared radiation.

Thanks to the dynamically adapted evaluation of the measuring results and the complex software algorithms, a clear decision is made in case of emergency that safely distinguishes between alarm situations and noise variables. The as yet unequalled performance of the 4-criteria detector COPTIR is reflected in its reliable fire detection and the highest possible immunity to deceptive alarms.

The detector is suitable for all applications which require especially high reliability and leave no room for false alarms. As a result, the risk of an unfounded evacuation, disruption of production or release of an extinguishing system can almost be ruled out.

LASER smoke detector

The highly sensitive LASER smoke detector has up to 100 times the sensitivity of conventional smoke detectors. That is why a fire is detected especially early – countermeasures can be initiated much faster. With its ability to detect fires early, the detector is ideal for monitoring sensitive areas such as operating rooms, computer centres as well as for use in smoke aspiration systems.

The principle of the focused laser beam makes the detector relatively insensitive to contamination. Therefore the LASER smoke detector is also preferred for use in dusty environments.

Beam smoke detector

The beam smoke detector emits an infrared light beam which a mirror reflects back to the detector unit. In the event of fire, the light beam is attenuated by the developing smoke. Even a slight light obscuration is identified by the detector and evaluated as fire alarm. The detector is very well suited for monitoring high rooms and open areas up to a range of 100 metres. Museums, churches, historical buildings, storage rooms and factory buildings are among the typical applications.



Wireless fire detection system 200AP-RF

In some buildings, cabling the fire detectors is not possible due to the architectural, technical or organisational situation, or because it affects the visual appearance or involves high costs and therefore is uneconomical. In this case, a wireless fire detection system is ideally suited for retrofitting without changing the installation of the building.

Historical buildings, churches, museums and modern architecture are among the typical applications. Thanks to the easy linking to the fire detection control panel, it is also possible to equip only individual areas of a system with radio detectors, if necessary.

„Mesh“ network

The wireless fire detection system 200AP-RF combines the latest developments in the field of fire alarm technology, a forward-pointing radio technology and an attractive design. Thanks to the use of the „Mesh“ technology, a failure of the direct radio connection to a wireless element results in automatic switching to an alternative communication path. In this way, a virtual radio network is created which offers especially high reliability and adaptability, and allows use under difficult construction conditions. The use of 2 separate antennas in every wireless device and the possibility to switch between 18 channels during normal operation reduce communication failures to a minimum.

Extensive product family

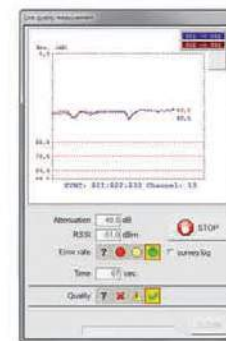
The RF interface is connected to the detector loop and forms a gateway between the fire detection control panel and up to 32 wireless devices. The secure digital RF protocol allows transmission of analog measured values and actuation of wireless devices with the same ease of use as with loop components. If necessary, the radio transmission range can be increased by means of RF expanders. In addition, the Series 200AP-RF includes a range of very advanced wireless devices – smoke and heat detectors, a multi-criteria detector with 3 different sensors, manual call points, a remote indicator and sounders. The long battery life of 4 years ensures long-term operation and keeps the maintenance costs low.

Convenient commissioning

The PC software Agile IQ permits especially easy configuration of the wireless system 200AP-RF. The radio network is arranged by placing the wireless components on a building plan. By simulating critical connections, optimum performance can be achieved. The wireless system can be configured manually or automatically, before or after installation of the components. After that, the configuration is loaded from the PC into the RF system via a special USB radio interface.

Diagnostic functions

The PC software Agile IQ creates a real-time view of the radio network without affecting the operation of the system. Here the software logs the battery condition and the connection quality of all wireless devices and creates an extensive diagnostic report for the risk evaluation. This allows predictive system maintenance and easier troubleshooting..



MODULES, SIGNALLING DEVICES AND HAZARDOUS AREAS

Input and output modules

The Series 200-Advanced modules are available with one or several inputs, with a monitored output or relay output and as a combined version with inputs and outputs.

Thanks to the line-monitoring on the inputs and the monitored outputs, wire breakages and short circuits are detected and evaluated as faults.

For mounting the modules, the extensive product range offers various wall-mount cases as well as mounting accessories which allow installation in switch cabinets or attachment onto DIN rails.

Multi module

The Multi Module MEA244-1 is equipped with 4 monitored inputs and 4 powerful outputs. The patented monitoring of the outputs can detect both line faults as well as changes in the load resistances. During commissioning, the automatic calibration procedure exactly adjusts the module to the connected load.

As a result of the elaborate monitoring functions, the module is very well suited for use in extinguishing systems and all other applications that are especially demanding regarding the monitoring of lines and loads.

Position switch

The position switch with direct loop connection allows easy monitoring of the position of mechanical devices of an extinguishing system, such as slides, valves or dampers. Thanks to the use of optoelectronic components, the module is especially durable and reliable. The high protection class of IP65 allows use under harsh environmental conditions.

Hazardous areas

In areas which involve a greater danger of explosion, the task of fire detection is particularly critical. An explosive atmosphere can form, for example, in fuel depots, paint shops, chemical plants or in mining, but also in mills and sawmills. In such areas, fire detection systems are used which effectively avoid ignition sources through technical protective measures.

For use in hazardous areas, the Series 200-Advanced includes an optical smoke detector which is connected to the detector loop via a safety barrier and a protocol interface. Through the galvanic isolation and special electronic circuits, the safety barrier limits the electrical energy that is stored in the hazardous area.



Sounders and strobes

The Series 200-Advanced signalling devices are used for acoustic or optical alarming. The sounders and strobes are activated and powered via the loop. All types of devices are available with or without integrated short circuit isolator.

For the different applications, environmental conditions or installation methods, a wide variety of models is available:

- wall sounders in red or white
- strobes
- combined wall sounders/strobes
- detector base sounders
- combined detector base sounders/strobes.

All sounders allow individual tone type adjustment. By means of the intelligent loop protocol, the sounders can be activated from the fire detection control panel – depending on the operating condition – with the tone type that is appropriate for the respective application.



Platform Sounder

200/FBRI/SOUW



- Prepared for installation of a Detector Base B501AP
- Actuation through automatic detector Series 200AP or independent operation
- 32 different tone types selectable
- Sound level selectable in three steps
- Low power consumption
- Optional cover plate available



Description

The Sounder 200/FBRI/SOUW is designed for installation underneath a Detector Base B501AP. In this case, the sounder is actuated and powered via the remote indicator output of the installed detector Series 200AP.

If the detector is connected to a Fire Detection Control Panel Series BC600, the remote indicator output of the detector can be individually actuated if necessary. In this case, the sounder can be activated independently of the activation of the detector.

As an alternative to the actuation via a detector output, the sounder can also be used as independent conven-

tional sounder. For this purpose, a white or red cover plate is available.

The tone type of the sounder is set by means of a DIL switch. There is a choice of 32 different tone types, such as:

- DIN tone according to DIN 33404,
- Continuous tone 970Hz,
- Alternating tone 800Hz/1kHz, and many more.

The DIL switch also allows you to select the sound level of the sounder in 3 steps.

Specifications

Operating voltage	18 – 30VDC
Current consumption	typ. 9mA (DIN tone, high sound level)
Sound level	max. 91dB(A) / 1m distance (DIN tone, high sound level)
Ambient temperature	-20°C to +70°C
Protection class	IP21
Dimensions Ø × D	115 × 25 (mm)
Colour	white
Weight	90g
Approvals	LPCB 546a/04 0832-CPD-2088
Order number	355115
Order name	Sounder/FB/200R/white 200/FBRI/SOUW



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Cover white

Order number 359060

Order name Lid for Sounder 200/FBRI 200/FB/COVER/W

Cover red

Order number 359061

Order name Lid for Sounder 200/FBRI 200/FB/COVER/R



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Multicriteria Detector

22051TLE – PTIR



- **Loop technology with System Sensor protocol**
- **Combines optical smoke sensor, heat detector and infrared sensor**
- **Very high immunity to deceptive alarms**
- **Several sensitivity levels and thermal-only mode selectable**
- **Response behaviour similar to that of ionisation smoke detectors**



Description

The Multicriteria Detector 22051TLE incorporates three separate detection units, by means of which the essential characteristics of fire

- **P** – optically visible smoke
- **T** – temperature
- **IR** – infrared radiation

are determined. The typical patterns of fire are recognised by means of intelligent analysis of the measured values of all three detection units. Because of that, the detector shows an especially high insensitiveness to unwanted alarms, and at the same time fires are recognised quickly and safely.

The optical sensing chamber uses the scattered light principle to detect visible smoke particles. The rate-of-rise temperature sensor complies with EN 54-5 Class A1R and responds to a rapid rise in temperature as well as to a maximum temperature of 58°C. The infrared sensor responds to the infrared signature of open flames and supports the detection of fires with low smoke development – such as alcoholic fires.

Thanks to its excellent characteristics, the Multicriteria Detector 22051TLE is an optimum substitute for ionisation smoke detectors. The response behaviour of the detector is similar to that of ionisation smoke detectors, but in contrast to ionisation smoke detectors, the strict radiation protection regulations do not apply and the high disposal costs do not arise in the case of the multicriteria detector.

The influence of contamination on the optical measurement system is compensated for by using intelligent evaluation algorithms. In this way, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The response sensitivity of the optical sensor can be individually adjusted in 5 steps between 2.0%/m and 4.7%/m according to the application. In addition, the detector adjusts the response thresholds of the individual detection units dynamically, depending on their measured values, changes the evaluation of the criteria, or speeds up or delays the alarm activation. This evaluation logic allows the multicriteria detector to reliably distinguish between emerging fire and noise variables. The detector can also operate in a thermal-only mode. In that case the application of the detector is limited to rooms which are not higher than 7.5m.

The proven loop technology with System Sensor protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector.



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The detector address is set in the range 1 to 159 with two decadic rotary switches, thus allowing a change of the detector without additional tools.

The two LEDs with 360° visibility indicate the activated condition of the detector.

A detector function test can be conveniently conducted

using a magnet. The detector can be attached to various bases and it can be protected against theft.

The Multicriteria Detector 22051TLE is available with or without integrated dual-isolator.



Specifications

Operating voltage	Supply through loop voltage
Current consumption at 24V, normal communication	max. 270µA (22051TLEI) max. 220µA (22051TLE)
Alarm temperature	58°C (maximum principle)
Infrared sensor	
Wavelength	800 – 1200nm
Measurement range	0 – 450µW/cm ²
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	15 – 90% (no condensation)
Dimensions Ø × H	102 × 51 (mm)
Colour	white
Weight	100g
Multicriteria detector with isolator	
Approvals	VdS 209013 0786-CPR-20650
Order number	241118
Order name	Multicriteria Detector PTIR/200APISM 22051TLEI
Multicriteria detector without isolator	
Approvals	VdS 209019 0786-CPR-20656
Order number	241119
Order name	Multicriteria Detector PTIR/200AP 22051TLE



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Multicriteria Detector

2251CTLE – COPTIR



- **Loop technology with System Sensor protocol**
- **Combines optical smoke sensor, heat detector, infrared sensor and carbon monoxide sensor**
- **Highest false alarm immunity**
- **Several sensitivity levels and thermal-only mode selectable**
- **Constant response sensitivity**



Description

The Multicriteria Detector 2251CTLE incorporates four separate detection units, allowing to determine the four essential characteristics of fire:

- **C** – carbon monoxide
- **OP** – optically visible smoke
- **T** – temperature
- **IR** – infrared radiation

The typical patterns of fire are recognised by means of intelligent analysis of the measured values of all four detection units. That way on the one hand the detector shows an especially high insensitiveness to unwanted

alarms, on the other hand fires are recognised quickly and safely.

The multicriteria detector can operate in difficult fields of application, for instance

- workshops – e.g., welding shops, paint shops
- hotel rooms with steam formation in the bathroom
- smoking areas in bars or restaurants
- discotheques with fog generators
- garages or loading ramps

and is therefore suitable for virtually universal use.

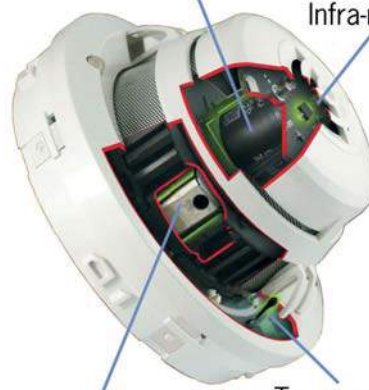
The optical measurement chamber uses the scattered light principle to detect visible smoke particles. The thermal unit responds to temperature changes within defined time intervals (rate-of-rise principle according to class A1R) up to a maximum temperature of 60°C.

Smouldering fires which spread out slowly can also be detected early and safely by using the durable carbon monoxide sensor. The infrared sensor responds to the infrared signature of flames and supports the detection of fires with low smoke development (e.g., alcoholic fires).

The two LEDs with 360° visibility indicate the activated condition of the detector.

Carbon monoxide sensor

Infra-red sensor



Optical smoke sensor

Temperature sensor



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The influence of contamination on the optical measurement system is compensated for by using intelligent evaluation algorithms. With that, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The response sensitivity of the optical sensor can be individually adjusted in 5 steps between 1.6%/m and 6.0%/m according to the application. In addition, the detector adjusts the response thresholds of the individual detection units dynamically, depending on their measured values, changes the evaluation of the criteria, or speeds up respectively delays the alarm activation. This evaluation logic allows the multicriteria detector to reliably distinguish between emerging fire and noise variables.

A thermal-only operation of the detector is also possible. In that case the application of the detector is limited to rooms which are not higher than 7.5m.

The proven loop technology with System Sensor protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector.

The detector address is selected with two decadic rotary switches. Therefore the detector can be changed quickly and without additional tools.

A detector function test can be conveniently conducted using a magnet. The detector can be attached to different types of bases and it can be protected against theft.



Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 300µA (quiescent)
Alarm temperature	60°C (maximum principle)
Infrared sensor	
Optical wavelength	800 – 1200nm
Measurement range	0 – 450µW/cm²
Measurement range CO-sensor	0 – 500ppm
Application temperature	max. +50°C
Ambient temperature	-20°C to +55°C (no condensation or icing)
Relative humidity	15 – 90% (no condensation)
Dimensions Ø × H	102 × 60 (mm)
Colour	white
Weight	130g
Approvals	VdS G207054 0832-CPD-0518
Order number	241120
Order name	Multicriteria Detector COPTIR/200AP 2251CTLE-W



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Optical Smoke Detector 2351E



- **Addressable conventional technology**
- **Sensitivity selectable in 3 steps**
- **Addressing by means of address module or detector parameterisation**
- **Remote readout of detector condition**
- **Extremely flat design**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

The Optical Smoke Detector 2351E uses the scattered light principle, and was developed for the detection of smoke particles in a wide range of fire detection applications. The modern design of the measurement chamber allows to reliably evaluate the characteristics of fire.

An internal drift compensation adjusts the alarm threshold by continually evaluating the contamination of the detector. With that, the sensitivity of the detector is kept constant for a long time.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. The detector addressing can be achieved in 2 ways:

- A detector with an Address Module NG58-1 can be individually identified by the suitable control panel.
- An address, which has been stored in the detector by

means of the Remote Programming and Test Unit, is displayed on the Zonal Display Unit S300ZDU.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. In addition to the test activation of the detector, the Remote Programming and Test Unit S300RPTU can also be used to set and display the following detector parameters:

- the sensitivity in 3 levels,
- the detector address, and
- the date of the previous maintenance.

Furthermore, the degree of drift compensation (detector contamination) and the current condition of the detector can be read out.

The detector can be attached to various detector bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 75µA (quiescent)
Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø x H	102 x 32 (mm)
Colour	cream
Weight	75g
Approvals	VdS G202012 0832-CPD-0059
Order number	241040
Order name	Optical Smoke Detector/300 2351E

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Optical-Thermal Detector 2351TEM



- **Addressable conventional technology**
- **Combination of optical and thermal characteristics of fire**
- **Drift compensation**
- **Sensitivity selectable in 3 steps**
- **Addressing by means of address module or detector parameterisation**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

The Optical-Thermal Detector 2351TEM uses both the scattered light principle as well as a separate thermal detection unit. It was developed to detect the characteristics of fire in a wide range of applications, and to avoid deceptive alarms. The modern design of both measurement systems and the analysis of the parameters by means of a special algorithm allow to reliably evaluate the characteristics of fire. This makes it an all-rounder that is used in virtually all fields of fire detection.

An internal drift compensation adjusts the alarm threshold by continually evaluating the contamination of the detector. With that, the sensitivity of the detector is kept constant for a long time.

The thermal sensor complies with Class A1R according to EN 54-5. The detector can therefore be used in rooms with a maximum height of 7.5m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. The

detector addressing can be achieved in 2 ways:

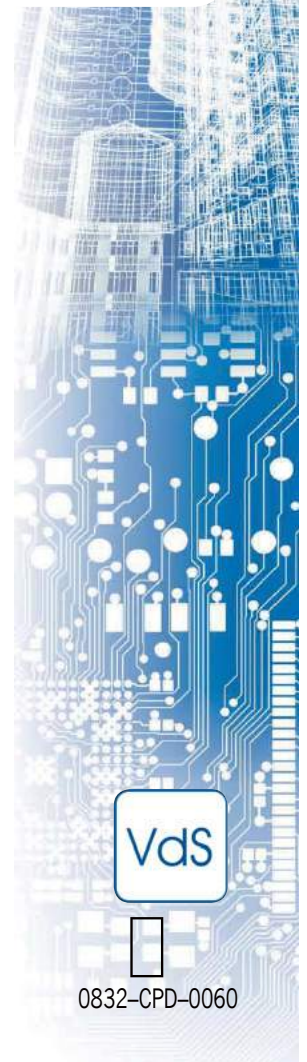
- A detector with an Address Module NG58-1 can be individually identified by the suitable control panel.
- An address, which has been stored in the detector by means of the Remote Programming and Test Unit, is displayed on the Zonal Display Unit S300ZDU.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. In addition to the test activation of the detector, the Remote Programming and Test Unit S300RPTU can also be used to set and display the following detector parameters:

- the sensitivity in 3 levels,
- the detector address, and
- the date of the previous maintenance.

Furthermore, the degree of drift compensation (detector contamination) and the current condition of the detector can be read out.

The detector can be attached to various detector bases and it can be protected against theft.



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Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 85µA (quiescent)
Alarm temperature	58°C (maximum-heat component)
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø x H	102 x 43 (mm)
Colour	cream
Weight	75g
Approvals	VdS G202018 0832-CPD-0060
Order number	241041
Order name	Optical-Thermal Detector/300 2351TEM



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Thermal Max Detector 4351E



- **Addressable conventional technology**
- **Alarm temperature 78°C**
- **Addressing by means of address module or detector parameterisation**
- **Remote readout of detector condition**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

The Thermal Max Detector 4351E recognises a maximum temperature of 78°C as sign of fire. It complies with Class BS and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. The detector addressing can be achieved in 2 ways:

- A detector with an Address Module NG58-1 can be individually identified by the suitable control panel.
- An address, which has been stored in the detector by means of the Remote Programming and Test Unit,

is displayed on the Zonal Display Unit S300ZDU.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. In addition to the test activation of the detector, the Remote Programming and Test Unit S300RPTU can also be used to set and display the following detector parameters:

- the detector address, and
- the date of the previous maintenance.

The detector can be attached to various detector bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 85µA (quiescent)
Alarm temperature	78°C
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C (continuous operation)
Relative humidity	5 – 95% (no condensation)
Dimensions Ø x H	102 x 43 (mm)
Colour	cream
Weight	75g
Approvals	VdS G202016 0832-CPD-0061
Order number	242041
Order name	Thermal Max Detector/300/BS 4351E



0832-CPD-0061

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Detector Base Series 65

45681-200



- Suitable for automatic detectors in conventional technology
- Screw terminals for secure connection of multiple wires
- Terminals for connection of remote indicator
- Mechanical theft protection can be activated



Description

The Detector Base 45681-200 is designed for the easy connection of automatic detectors Series 65 in addressable conventional technology. Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection. The base provides the possibility to easily connect an external remote indicator, and has been designed for

surface mounting in dry rooms. For special applications a range of accessories (for moist room, false ceiling or flush installation) is available.

A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

Ambient temperature	-20°C to +60°C (no condensation or icing)
Relative humidity	10 – 95% (no condensation)
Dimensions Ø x H	100 x 15 (mm)
Colour	white
Weight	50g
Order number	246021
Order name	Detector Base/60/65 45681-200

Detector Base Series XP95

45681-210



- Suitable for automatic detectors in loop technology with Apollo protocol
- Screw terminals for secure connection of multiple wires
- Easy addressing by means of code card
- Mechanical theft protection can be activated



Description

The Detector Base 45681-210 is designed to accommodate intelligent fire detectors Series XP95 and Discovery for use in loops with Apollo protocol. Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection. The base also provides a possibility for the easy connection of remote indicators. The detector address is selected by means of a code card in the detector base. Therefore the detector can

be changed without additional tools.

The base is designed for surface mounting in dry rooms. For special applications a range of accessories (for moist room, false ceiling or flush installation) is available.

A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

Ambient temperature	-20°C to +60°C (no condensation or icing)
Relative humidity	10 – 95% (no condensation)
Dimensions Ø × H	100 × 15 (mm)
Colour	white
Weight	50g
Order number	246025
Order name	Detector Base/XP95 45681-210



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Detector Base XP95/Discovery 45681-242 with Relay Output



- Suitable for automatic detectors in loop technology with Apollo protocol
- Relay output with dry change-over contact
- Screw terminals for secure connection of multiple wires
- Easy addressing by means of code card
- Mechanical theft protection can be activated



Description

The Detector Base 45681-242 accommodates automatic fire detectors Series XP95 and Discovery for use in loops with Apollo protocol. Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection. In addition, a relay output with a dry change-over contact is integrated into the detector base. The relay output is activated through the alarm activation of the inserted detector and remains active until the alarm is reset on the fire detection control panel.

The address is selected by means of a code card in the base. Therefore the detector can be changed without additional tools.

The base has been designed for surface mounting in dry rooms. For special applications a range of accessories (for moist room, false ceiling or flush installation) is available.

A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 1µA (quiescent), 40µA (active)
Contact rating	1A/30VDC
Ambient temperature	-20°C to +70°C
Relative humidity	10 – 95% (no condensation)
Dimensions Ø x H	100 x 24 (mm)
Colour	white
Weight	100g
Approval	0832-CPD-0845
Order number	246037
Order name	Detector Base/XP95/Disc/Relay 45681-242



0832-CPD-0845

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Integrated Base Sounder

45681-276



- Actuated through automatic detector XP95 or Discovery
- Alternating tone 630/990Hz
- Signal sequence 0.5s
- Low power consumption
- Integrated detector base



Description

The integrated base sounder 45681-276 is installed in a round white plastic housing with an integrated base for accommodating automatic fire detectors Series XP95 or Discovery.

The sounder is powered via the Apollo loop and actuated by the remote indicator output of the detector. There-

fore, the current consumption of the sounder must be taken into account when calculating the loop.

The integrated base sounder is designed for indoor mounting. An optional mounting plate is available for surface mounted cabling.

Specifications

Operating voltage	17 – 28VDC
Current consumption	typ. 100µA (sounder off) max. 3mA (sounder on)
Sound level	81dB(A) / 1m distance
Tone	Alternating tone (630Hz for 0.5s/990Hz for 0.5s)
Ambient temperature	-20°C to +60°C
Dimensions Ø x H	115 x 38 (mm)
Colour	white
Weight	140g
Approval	0832-CPD-0530
Order number	355130
Order name	Sounder/WB/XP95RI/white/Alert 45681-276

Mounting plate for surface mounted cabling

Order number	359022
Order name	Mounting Plate for Sounder/WB/XP95 45681-311

0832-CPD-0530

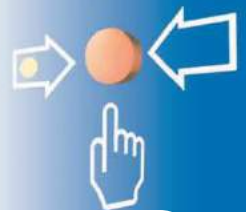


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Integrated Base Sounder

45681-277, 45681-290, 45681-300



- **Loop technology with Apollo protocol**
- **Integrated detector base with dual-isolator**
- **Warning tone 1kHz**
- **Slow whoop tone – NEN 2575**
- **Emergency signal tone – DIN 33404**
- **Sound level selectable in two steps**
- **Integrated acoustical self test**



Description

The Integrated Base Sounders 45681-277, 45681-290 and 45681-300 are fitted into a round, white plastic case with an integrated base for accommodating automatic Fire Detectors or Strobes Series XP95 or Discovery.

The sounders are powered and actuated as modules via the loop with Apollo protocol. They can be used in combination with a detector or strobe, or as stand-alone device. For the latter case an optional white or red plastic lid is available. Furthermore, the sounders are equipped with an integrated dual-isolator module.

Two different tone types, depending on the sounder model, are available, and they can be selected during

parameterisation of the fire detection control panel. If several sounders are actuated in parallel, they are synchronised by the fire detection control panel to generate a uniform warning tone.

In case of activation, the sounder is tested acoustically by means of an integrated microphone.

The address of the sounder as well as the sound level are selected by means of a DIL switch.

The base sounders have been designed for indoor mounting. An optional mounting plate is available for surface mounted cabling.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 200µA (sounder off) max. 5mA (sounder on)
Sound level	50 – 65dB(A) or 65 – 78dB(A)
Ambient temperature	-20°C to +60°C
Dimensions Ø × H	115 × 38 (mm)
Colour	white
Weight	140g



0832-CPR-F2294
0832-CPR-F2304
0832-CPR-F2306

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Loop sounder warning tone (alert tone)

Tone A	Alternating tone (581Hz for 0.5s/870Hz for 0.5s)
Tone B	Pulsed tone 870Hz (1s on, 1s off)
Approval	0832-CPR-F2294
Order number	355133
Order name	Sounder/WB/XP95I/white/Alert 45681-277

Loop sounder slow whoop tone

Tone A	NEN 2575 Slow whoop tone (500 – 1200Hz for 3.5s, 0.5s pause)
Tone B	Continuous tone 870Hz
Approval	0832-CPR-F2304
Order number	355131
Order name	Sounder/WB/XP95I/white/SlowWhoop 45681-290

Loop sounder DIN tone

Tone A	DIN 33 404 Emergency signal (1200 – 500Hz for 1s)
Tone B	Continuous tone 870Hz
Approvals	VdS G207009 0832-CPR-F2306
Order number	355132
Order name	Sounder/WB/XP95I/white/DIN 45681-300

Accessories

Lid for detector base sounder, red

Dimensions Ø x H	100 x 9 (mm)
Order number	359021
Order name	Lid for Detector Base Sounder/red 45681-293

Lid for detector base sounder, white

Dimensions Ø x H	100 x 9 (mm)
Order number	359020
Order name	Lid for Detector Base Sounder/white 45681-292

Mounting plate for surface mounted cabling

Order number	359022
Order name	Mounting Plate for Sounder/WB/XP95 45681-311

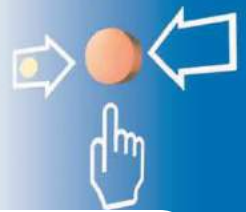


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Isolator Detector Base XP95

45681-284



- Suitable for automatic detectors in loop technology with Apollo protocol
- Dual-isolator unit with status LED
- Screw terminals for secure connection of multiple wires
- Easy addressing by means of code card
- Mechanical theft protection can be activated



Description

The Isolator Detector Base 45681-284 is designed to accommodate intelligent fire detectors Series XP95 and Discovery for use in loops with Apollo protocol.

A dual-isolator unit is integrated into the detector base, which reliably disconnects the loop in case of a short circuit. With the dual design, the input side or the output side isolator – depending on the location of the short circuit – interrupts the connection to the faulty loop segment. Therefore the detector remains in operation. A yellow status LED, which is integrated into the base, shows a steady light in case of a short circuit of the loop.

Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection. The base also provides a possibility for the easy connection of remote indicators.

The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools.

The base is designed for surface mounting in dry rooms. For special applications a range of accessories (for moist room, false ceiling or flush installation) is available.

A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 4.3µA (quiescent)
Ambient temperature	-20°C to +60°C (no condensation or icing)
Relative humidity	10 – 95% (no condensation)
Dimensions Ø × H	100 × 24 (mm)
Colour	white
Weight	100g
Approvals	VdS G210033 0832-CPR-F0089
Order number	246036
Order name	Isolator Detector Base/XP95/Disc 45681-284



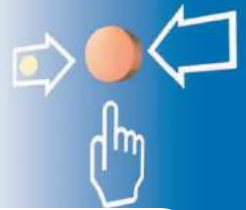
0832-CPR-F0089

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Sounder/Strobe

45681-330, 45681-332, 45681-334



- **Loop technology with Apollo protocol**
- **Integrated detector base with dual-isolator**
- **Warning tone 550/825Hz, Slow Whoop tone according to NEN 2575, emergency signal according to DIN 33404**
- **Sound level selectable in two steps**
- **Integrated acoustic self test**



Description

The combined Sounder-Strobes 45681-330, 45681-332 and 45681-334 are installed in a round white plastic housing with an integrated base for accommodating automatic fire detectors Series XP95 or Discovery. The sounder-strobes are powered and actuated as modules via the loop with Apollo protocol. The strobe consists of bright red light emitting diodes, it is always activated together with the sounder.

The unit can be used in combination with a detector or as stand-alone device. For the latter case, an optional white or red plastic lid is available. Furthermore, the signalling devices are provided with an integrated dual-isolator module.

Two different tone types, depending on the sounder-strobe model, are available, and they can be selected

during parameterisation of the fire detection control panel. If several sounders are actuated in parallel, they are synchronised by the fire detection control panel to generate a uniform warning tone.

In case of activation, the sounder is tested acoustically by means of an integrated microphone.

The address of the signalling device as well as the sound level are set by means of a DIL switch.

The sounder-strobes are designed for indoor mounting. An optional mounting plate is available for surface mounted cabling.

Specifications

Operating voltage	supply through loop voltage
Current consumption	typ. 300µA (quiescent) max. 8mA (sounder and strobe on)
Sound level	50 – 65dB(A), or 65 – 79dB(A)
Flash frequency	1Hz
Ambient temperature	-20°C to +60°C
Dimensions Ø × H	115 × 38 (mm)
Colour	white
Weight	160g



0832-CPR-F1409
0832-CPD-0399
0832-CPD-0401

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Sounder-strobe warning tone (alert tone)

Tone A	Alternating tone (550Hz for 0.5s/825Hz for 0.5s)
Tone B	interrupted tone 825Hz (1s ON, 1s OFF)
Approval	0832-CPR-F1409
Order number	355134
Order name	Sounder-Strobe/WB/XP95I/white/clear/red/Alert/N 45681-330

Sounder-strobe slow whoop tone

Tone A	NEN 2575 Slow Whoop tone (500 – 1200Hz over 3.5s, 0.5s pause)
Tone B	continuous tone 825Hz
Approval	0832-CPD-0399
Order number	355135
Order name	Sounder-Strobe/WB/XP95I/white/clear/red/Slw/N 45681-332

Sounder-strobe DIN tone

Tone A	DIN 33 404 emergency signal (1200 – 500Hz over 1s)
Tone B	continuous tone 825Hz
Approvals	VdS 207103 0832-CPD-0401
Order number	355136
Order name	Sounder-Strobe/WB/XP95I/white/clear/red/DIN/N 45681-334

Accessories

Lid for sounder, red

Dimensions Ø x H	100 x 9 (mm)
Order number	359021
Order name	Lid for Detector Base Sounder/red 45681-293

Lid for sounder, white

Dimensions Ø x H	100 x 9 (mm)
Order number	359020
Order name	Lid for Detector Base Sounder/white 45681-292

Mounting plate for surface mounted cabling

Order number	359022
Order name	Mounting Plate for Sounder/WB/XP95 45681-311



Thermal Detectors

52051RE, 52051E, 52051HTE



- **Loop technology with System Sensor protocol**
- **Thermal RoR detector 58°, A1R**
Thermal Max detector 58°, A1S
Thermal Max detector 78°, BS
- **Available with or without integrated isolator**
- **Function testable with magnet**



Description

The thermal fire detectors 52051RE, 52051E and 52051HTE contain a thermocouple for the detection of heat. The detectors are different in activation characteristic and alarm temperature.

The **Thermal RoR Detector 52051RE** complies with EN 54-5 Class A1R and reacts to a rapid rise in temperature as well as to a maximum temperature of 58°C. The detector can be used up to a room height of 7.5m.

The **Thermal Max Detector 52051E** complies with EN 54-5 Class A1S and reacts to a maximum temperature of 58°C. The detector can be used up to a room height of 7.5m.

The **Thermal Max Detector 52051HTE** complies with EN 54-5 Class BS and reacts to a maximum temperature of 78°C. The detector can be used up to a room height of 6m.

The proven loop technology with System Sensor protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector.

The detector address is set in the range 1 to 159 with two decadic rotary switches, thus allowing a change of the detector without additional tools. The two LEDs with 360° visibility indicate the activated condition of the detector.

A detector function test can be conveniently conducted using a magnet. The detector can be attached to various bases and it can be protected against theft.

The thermal fire detectors 52051RE, 52051E and 52051HTE are available with or without integrated dual-isolator.

Specifications

Operating voltage	Supply through loop voltage
Current consumption at 24V, normal communication	max. 240µA (versions with isolator) max. 190µA (versions without isolator)
Alarm temperature	58°C (52051REx, 52051Ex) 78°C (52051HTEx)
Application temperature	max. +50°C (52051REx, 52051Ex) max. +65°C (52051HTEx)



0786-CPR-20655
0786-CPR-20661
0786-CPR-20653
0786-CPR-20659
0786-CPR-20654
0786-CPR-20660

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Ambient temperature	-30°C to +80°C
Relative humidity	10 – 93% (no condensation)
Dimensions Ø x H	102 x 49 (mm)
Colour	white
Weight	88g

Thermal RoR detector 58°C with isolator

Approvals	VdS G209018 0786-CPR-20655
Order number	242110
Order name	Thermal RoR Detector/200APISM/AIR 52051REI

Thermal RoR detector 58°C without isolator

Approvals	VdS G209024 0786-CPR-20661
Order number	242111
Order name	Thermal RoR Detector/200AP/AIR 52051RE

Thermal Max detector 58°C with isolator

Approvals	VdS G209016 0786-CPR-20653
Order number	242112
Order name	Thermal Max Detector/200APISM/AIS 52051EI

Thermal Max detector 58°C without isolator

Approvals	VdS G209022 0786-CPR-20659
Order number	242113
Order name	Thermal Max Detector/200AP/AIS 52051E

Thermal Max detector 78°C with isolator

Approvals	VdS G209017 0786-CPR-20654
Order number	242114
Order name	Thermal Max Detector/200APISM/BS 52051HTEI

Thermal Max detector 78°C without isolator

Approvals	VdS G209023 0786-CPR-20660
Order number	242115
Order name	Thermal Max Detector/200AP/BS 52051HTE



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Thermal RoR Detector 5351E



- **Addressable conventional technology**
- **Maximum temperature 58°C**
- **Addressing by means of address module or detector parameterisation**
- **Remote readout of detector condition**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

The Thermal RoR Detector 5351E reacts to temperature changes within defined periods of time, up to a maximum temperature of 58°C. The intelligent evaluation of these data allows the early detection of spreading fires. The detector complies with Class A1R and can be used up to a room height of 7.5m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. The detector addressing can be achieved in 2 ways:

- A detector with an Address Module NG58-1 can be individually identified by the suitable control panel.
- An address, which has been stored in the detector

by means of the Remote Programming and Test Unit, is displayed on the Zonal Display Unit S300ZDU.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. In addition to the test activation of the detector, the Remote Programming and Test Unit S300RPTU can also be used to set and display the following detector parameters:

- the detector address, and
- the date of the previous maintenance.

The detector can be attached to various detector bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 80µA (quiescent)
Alarm temperature	58°C (maximum-heat component)
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø x H	102 x 43 (mm)
Colour	cream
Weight	75g
Approvals	VdS G202014 0832-CPD-0062
Order number	242040
Order name	Thermal RoR Detector/300/A1R 5351E

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Thermal Max Detector 5351TE



- **Addressable conventional technology**
- **Alarm temperature 58°C**
- **Addressing by means of address module or detector parameterisation**
- **Remote readout of detector condition**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

The Thermal Max Detector 5351TE recognises a maximum temperature of 58°C as sign of fire. It complies with Class A2S and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. The detector addressing can be achieved in 2 ways:

- A detector with an Address Module NG58-1 can be individually identified by the suitable control panel.
- An address, which has been stored in the detector by means of the Remote Programming and Test Unit,

is displayed on the Zonal Display Unit S300ZDU.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. In addition to the test activation of the detector, the Remote Programming and Test Unit S300RPTU can also be used to set and display the following detector parameters:

- the detector address, and
- the date of the previous maintenance.

The detector can be attached to various types of bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 85µA (quiescent)
Alarm temperature	58°C
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C (continuous operation)
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H	102 × 43 (mm)
Colour	cream
Weight	75g
Approvals	LPCB 199n/14 0832-CPD-0063
Order number	242042
Order name	Thermal Max Detector/300/A2S 5351TE



0832-CPD-0063

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LST

Thermal RoR Detector

55000-122



- **Addressable conventional technology**
- **Maximum temperature 57°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Sealed electronics**



Description

The Thermal RoR Detector 55000-122 reacts to temperature changes within defined periods of time, up to a maximum temperature of 57°C. The intelligent evaluation of these data allows the early detection of spreading fires. The detector complies with Class A1R and can be used up to a room height of 7.5m.

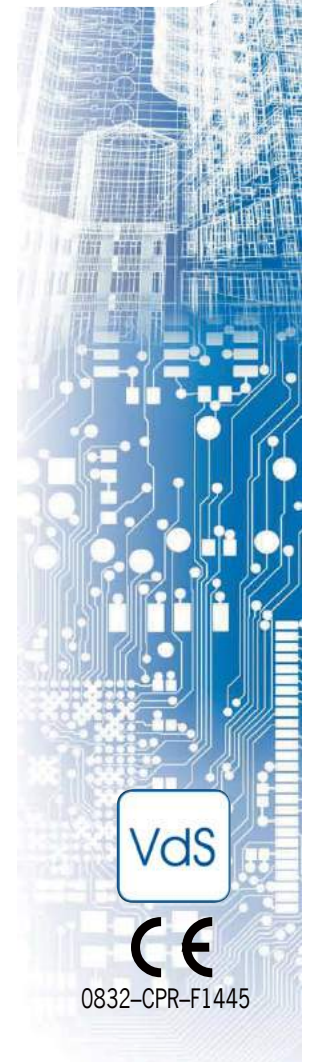
Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

means of the optional Address Module NG60-1, each detector can be addressed individually. With that, the activated detector can also be safely identified directly on the control panel.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 45µA (quiescent)
Alarm temperature	57°C (maximum-heat component)
Application temperature	max. +50°C
Ambient temperature	-20°C to +90°C (no condensation or icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø x H	100 x 42 (mm)
Colour	white
Weight	80g
Approvals	VdS G200059 0832-CPR-F1445
Order number	242024
Order name	Thermal RoR Detector/65/A1R 55000-122



0832-CPR-F1445

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Thermal RoR Detector

55000-127



- **Addressable conventional technology**
- **Maximum temperature 78°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Sealed electronics**



Description

The Thermal RoR Detector 55000-127 reacts to temperature changes within defined periods of time, up to a maximum temperature of 78°C. The intelligent evaluation of these data allows the early detection of spreading fires. The detector complies with Class BR and can be used up to a room height of 6m.

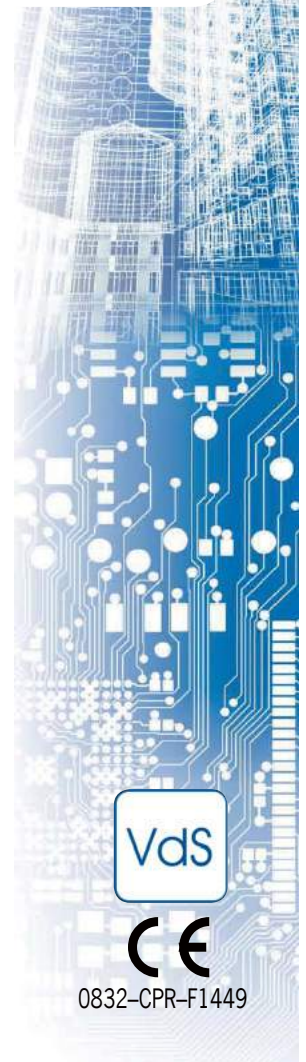
Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

means of the optional Address Module NG60-1, each detector can be addressed individually. With that, the activated detector can also be safely identified directly on the control panel.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 45µA (quiescent)
Alarm temperature	78°C (maximum-heat component)
Application temperature	max. +65°C
Ambient temperature	-20°C to +90°C (no condensation or icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø x H	100 x 42 (mm)
Colour	white
Weight	80g
Approvals	VdS G200060 0832-CPR-F1449
Order number	242025
Order name	Thermal RoR Detector/65/BR 55000-127



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LST

Thermal RoR Detector

55000-132



- **Addressable conventional technology**
- **Maximum temperature 90°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Sealed electronics**



Description

The Thermal RoR Detector 55000-132 reacts to temperature changes within defined periods of time, up to a maximum temperature of 90°C. The intelligent evaluation of these data allows the early detection of spreading fires. The detector complies with Class CR and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

means of the optional Address Module NG60-1, each detector can be addressed individually. With that, the activated detector can also be safely identified directly on the control panel.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 45µA (quiescent)
Alarm temperature	90°C (maximum-heat component)
Application temperature	max. +80°C
Ambient temperature	-20°C to +90°C (no condensation or icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø x H	100 x 42 (mm)
Colour	white
Weight	80g
Approvals	VdS G200061 0832-CPR-F1712
Order number	242026
Order name	Thermal RoR Detector/65/CR 55000-132



0832-CPR-F1712

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Thermal Max Detector

55000-137



- **Addressable conventional technology**
- **Alarm temperature 90°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Sealed electronics**



Description

The Thermal Max Detector 55000-137 recognises a maximum temperature of 90°C as sign of fire. It complies with Class CS and can be used up to a room height of 6m.

means of the optional Address Module NG60-1, each detector can be addressed individually. With that, the activated detector can also be safely identified directly on the control panel.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 45µA (quiescent)
Alarm temperature	typ. 90°C
Application temperature	max. +80°C (continuous operation)
Ambient temperature	-20°C to +90°C (no condensation or icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø × H	100 × 42 (mm)
Colour	white
Weight	80g
Approvals	VdS G200062 0832-CPR-F1720
Order number	242027
Order name	Thermal Max Detector/65/CS 55000-137



0832-CPR-F1720

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Sounder

55000-278, 55000-276



- **Loop technology with Apollo protocol**
- **Can be activated with 2 different tone types**
- **Warning tone 664/984Hz, Slow Whoop tone according to NEN 2575**
- **Adjustable sound level**
- **Low power consumption**



Description

The wall sounders 55000-278 and 55000-276 are powered and actuated as modules via the loop with Apollo protocol.

The sounders can be activated by the fire detection control panel with tone A or tone B, depending on the parameter setup and the system conditions. If several sounders are activated at the same time, they are

synchronised by the control panel in order to generate a uniform warning tone. The sound level can be easily adjusted by means of a potentiometer.

The robust red plastic housing is provided with a deep base and is designed for indoor mounting.

Specifications

Operating voltage	supply through loop voltage
Current consumption from loop	max. 1.2mA (sounder off) max. 5mA (sounder on)
Sound level	94dB(A) / 1m distance
Ambient temperature	-20°C to +60°C
Protection class	IP21
Dimensions W x H x D	108 x 108 x 95 (mm)
Colour	red
Weight	215g

Wall sounder, warning tone (Alert tone)

Tone A	Alternating tone (664Hz for 0.5s, 984Hz for 0.5s)
Tone B	interrupted tone 984Hz (1s ON, 1s OFF)
Approval	0832-CPD-0147
Order number	355124
Order name	Sounder/WM/XP95/red/Alert/100 55000-278



0832-CPD-0147
0832-CPD-0148

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Wall sounder, Slow Whoop tone

Tone A	Slow Whoop tone (500 - 1200Hz over 3.5s, 0.5s pause)
Tone B	continuous tone 970Hz
Approval	0832-CPD-0148
Order number	355125
Order name	Sounder/WM/XP95/red/SlowWhoop/100 55000-276



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Sounder/Strobe

55000-293, 55000-298



- **Loop technology with Apollo protocol**
- **Can be activated with 2 different tone types, 3 combinations selectable**
- **Protection class IP21 or IP66**
- **Adjustable sound level**
- **Low power consumption**



Description

The combined wall sounders/strobes 55000-293 and 55000-298 are powered and actuated as modules via the loop with Apollo protocol.

The sounders can be activated by the fire detection control panel with tone A or tone B, depending on the parameter setup and the system conditions. The tone type of tones A and B is set by means of a DIL switch, for this purpose, 3 combinations are available.

If several sounders are activated at the same time, they are synchronised by the control panel in order to generate a uniform warning tone. The sound level can be easily adjusted by means of a potentiometer.

The integrated strobe consists of bright red light emitting diodes, it is always activated together with the sounder.

An integrated dual-isolator disconnects the loop in the event of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The Sounder-Strobe 55000-293 is installed in a red plastic housing with red cap and is designed for indoor mounting. The base and a special tool for opening the housing are included with the sounder-strobe.

Thanks to its dust and water protected design, the Sounder-Strobe 55000-298 is suitable for use under harsh environmental conditions.

Specifications

Operating voltage	supply through loop voltage
Current consumption from loop	max. 1.2mA (sounder off) max. 9mA (sounder on)
Tone	e.g., continuous tone 900Hz, DIN 33404 tone, Slow Whoop tone
Sound level	92dB(A) / 1m distance
Flash frequency	1Hz
Colour	red



0832-CPD-0590
0832-CPD-0592

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Sounder-strobe standard version

Ambient temperature	-10°C to +55°C
Protection class	IP21
Dimensions W x H x D	108 x 108 x 95 (mm)
Weight	210g
Approvals	VdS G21.0023 0832-CPD-0590
Order number	355137
Order name	Sounder-Strobe/WM/XP95I/red/red/100/N 55000-293

Sounder-strobe IP66

Ambient temperature	-20°C to +70°C
Protection class	IP66
Dimensions W x H x D	110 x 110 x 105 (mm)
Weight	295g
Approvals	VdS G21.0023 0832-CPD-0592
Order number	355138
Order name	Sounder-Strobe/WM66/XP95I/red/red/100/N 55000-298



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Optical Smoke Detector

55000-317



- **Addressable conventional technology**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Sealed electronics**



Description

The Optical Smoke Detector 55000-317 uses the scattered light principle and was developed for the detection of smoke particles in a wide range of fire detection applications. The modern design of the sensing chamber allows to reliably evaluate the characteristics of fire.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

means of the optional Address Module NG60-1, each detector can be addressed individually. With that, the activated detector can also be safely identified directly on the control panel.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 40µA (quiescent)
Ambient temperature	-20°C to +60°C (no condensation or icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø x H	100 x 42 (mm)
Colour	white
Weight	100g
Approvals	VdS G200017 0832-CPR-F1026
Order number	241026
Order name	Optical Smoke Detector/65 55000-317



0832-CPR-F1026

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Thermal Detector

55000-420



- **Loop technology with Apollo protocol**
- **For use as maximum heat or rate-of-rise heat detector**
- **Alarm temperature 55°C**
- **Optional connection of remote indicator**
- **Sealed electronics**



Description

The addressable Thermal Detector 55000-420 is based on the heat principle and was developed for the indoor temperature supervision in a wide range of fire detection applications.

The detector is assigned to class A2S and A2R and can be used up to a room height of 6m. Depending on the parameter setup in the fire detection control panel, the detector can operate either as maximum heat detector with an alarm temperature of 55°C, or as rate-of-rise heat detector with a maximum temperature of 55°C.

The proven loop technology with Apollo protocol esta-

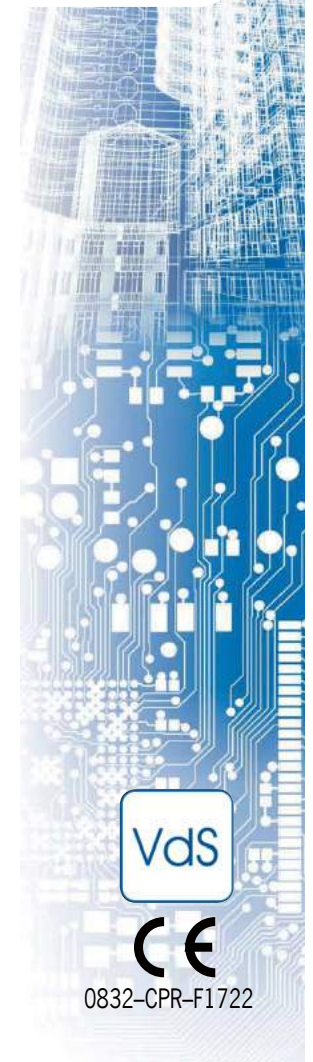
lishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector. Fires are safely detected in the control panel by continuously analysing the measured values.

The activated condition of the detector is indicated by a red LED. The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 250µA (quiescent)
Application temperature	max. +50°C
Ambient temperature	-20°C to +70°C
Relative humidity	0 – 95% (no condensation)
Dimensions Ø × H	100 × 42 (mm)
Colour	white
Weight	105g
Approvals	VdS G294029 0832-CPR-F1722
Order number	242023
Order name	Thermal Detector/XP95 55000-420



0832-CPR-F1722

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Triple Input/Output Module

55000-588



- **Loop technology with Apollo protocol**
- **3 line-monitored inputs and 3 dry relay outputs**
- **Setting of module address by means of address switch**
- **Integrated dual-isolator**
- **Status LED for each input and output**



Description

The addressable Module 55000-588 serves for the line-monitored integration of three contact detectors, such as manual call points, sprinkler system contacts or supervising contacts, into the bi-directional communication on the loop with Apollo protocol. Furthermore, it can be used to actuate external devices by means of

three relay outputs, each with a single-pole dry change-over contact, via the loop.

The address is easily selected by means of a built-in DIL switch. Individual status LEDs indicate the condition of every input and output. The module has an integrated dual-isolator and is fitted into a plastic case.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 3mA (quiescent)
Contact rating	1A/30VDC or AC
Ambient temperature	-20°C to +70°C
Dimensions L x W x H	250 x 175 x 75 (mm)
Colour	white
Weight	620g
Approvals	VdS G202052 0832-CPD-0864
Order number	249077
Order name	Module 3xIn 3xRel.Out/XP95 55000-588



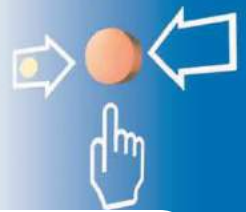
0832-CPD-0864

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Optical Smoke Detector

55000-620



- **Loop technology with Apollo protocol**
- **Optional connection of remote indicator**
- **Constant response sensitivity**
- **Sealed electronics**



Description

The addressable Optical Smoke Detector 55000-620 uses the scattered light principle, and was developed for the detection of smoke particles in a wide range of fire detection applications. The modern design of the sensing chamber allows to reliably evaluate the characteristics of fire.

The proven loop technology with Apollo protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector. In the control panel all types of fires are detected by continuously comparing fire patterns.

The influence of contamination of the optical measurement system is compensated for by using intelligent evaluation algorithms. With that, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The activated condition of the detector is indicated by a red LED. The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	typ. 340µA (quiescent)
Ambient temperature	-20°C to +60°C
Relative humidity	0 – 95% (no condensation)
Dimensions Ø × H	100 × 42 (mm)
Colour	white
Weight	105g
Approvals	VdS G294028 0832-CPD-0164
Order number	241023
Order name	Optical Smoke Detector/XP95 55000-620



0832-CPD-0164

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Monitor Module

55000-841



- **Loop technology with Apollo protocol**
- **One line-monitored input**
- **Integration of special detectors into the loop**
- **Output for resetting of detector**
- **Optional alarm delay**
- **Integrated dual-isolator**



Description

The addressable Monitor Module 55000-841 serves for the line-monitored integration of special detectors, such as beam smoke detectors, into the bi-directional communication on the loop with Apollo protocol. The module provides an output for resetting the connected detectors. Status LEDs indicate the condition of the monitored line and the built-in dual-isolator. The connected detectors must be supplied through an

external power unit.

The module is fitted into a plastic case. The address is easily selected by means of an integrated DIL switch. An optional 30 second alarm delay can be enabled via a further switch.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	1.2mA (quiescent)
Ambient temperature	-20°C to +70°C
Protection class	IP54
Dimensions L x W x H	150 x 90 x 48 (mm)
Colour	white
Weight	240g
Approvals	VdS G201033 0832-CPD-0866
Order number	249072
Order name	Monitor Module/XP95/Special 55000-841



0832-CPD-0866

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Conventional Zone Module

55000-845



- **Loop technology with Apollo protocol**
- **Integration of conventional detectors into the loop**
- **Setting of module address by means of address switch**
- **Integrated dual-isolator**



Description

The addressable Conventional Zone Module 55000-845 serves for the integration of conventional detectors into the bi-directional communication on the loop with Apollo protocol.

The address is easily selected by means of a built-in DIL switch. The module has an integrated dual-isolator and is fitted into a plastic case.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	4mA (quiescent)
Ambient temperature	-20°C to +70°C
Dimensions L x W x H	150 x 90 x 48 (mm)
Colour	white
Weight	230g
Approvals	VdS G201094 0832-CPD-0868
Order number	249075
Order name	Conventional Zone Module/XP95 55000-845



0832-CPD-0868

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Input/Output Module

55000-847



- **Loop technology with Apollo protocol**
- **One line-monitored input and one relay output with two dry contacts**
- **Setting of module address by means of address switch**
- **Integrated dual-isolator**
- **Status LEDs for input and output**



Description

The addressable Module 55000-847 serves for the line-monitored integration of contact detectors, such as manual call points, sprinkler system contacts or supervising contacts, into the bi-directional communication on the loop with Apollo protocol. Furthermore, it can be used to actuate external devices by means of a relay output with two dry change-over contacts, via the loop.

In addition to the monitored input and the relay output, the module has an opto-coupled input for monitoring an external voltage.

The address is easily selected by means of a built-in DIL switch. Status LEDs indicate the condition of input and output. The module has an integrated dual-isolator and is fitted into a plastic case.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 1.5mA (quiescent)
Contact rating	1A/30VDC or AC
Ambient temperature	-20°C to +70°C
Dimensions L x W x H	150 x 90 x 48 (mm)
Colour	white
Weight	240g
Approvals	VdS G201032 0832-CPR-F0092
Order number	249076
Order name	Module 1xIn 1xRel.Out/XP95 55000-847



0832-CPR-F0092

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Control Module, voltage-free

55000-849



- **Loop technology with Apollo protocol**
- **One relay output with two dry change-over contacts**
- **Setting of module address by means of address switch**
- **Integrated dual-isolator**



Description

The addressable Control Module 55000-849 serves for the actuation of external devices, such as fire controls and acoustical or optical signalling devices, via the bi-directional communication on the loop with Apollo protocol. The external devices are actuated by means of a relay output with two dry change-over contacts.

The address is easily selected by means of a built-in DIL switch. The module has an integrated dual-isolator and is fitted into a plastic case. Status LEDs indicate the condition of the relay and the dual-isolator.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	720µA (quiescent)
Contact rating	1A/30VDC (resistive or inductive load)
Ambient temperature	-20°C to +70°C
Dimensions L × W × H	150 × 90 × 48 (mm)
Colour	white
Weight	240g
Approvals	VdS G201032 0832-CPD-0870
Order number	249074
Order name	Control Module/XP95/Relay 55000-849



0832-CPD-0870

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Control Module, monitored 55000-852



- **Loop technology with Apollo protocol**
- **One line-monitored output**
- **Output line monitored for wire breakage and short circuit**
- **Setting of module address by means of address switch**
- **Integrated dual-isolator**



Description

The addressable Control Module 55000-852 serves for the line-monitored actuation of external devices, such as fire controls and acoustical or optical signalling devices, via the bi-directional communication on the loop with Apollo protocol. The external devices are actuated by means of a monitored output.

An external supply voltage is required for powering the external devices.

The address is easily selected by means of a built-in DIL switch. The module has an integrated dual-isolator and is fitted into a plastic case. Status LEDs indicate the condition of the output and the dual-isolator.

Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	1.9mA (quiescent)
External supply voltage	max. 32VDC
Output current	max. 1A (resistive or inductive load)
Monitoring voltage	-10VDC
End-of-line resistor	10k Ω
Ambient temperature	-20°C to +70°C
Dimensions L x W x H	150 x 90 x 48 (mm)
Colour	white
Weight	240g
Approvals	VdS G201095 0832-CPD-0871
Order number	249073
Order name	Control Module/XP95 55000-852



0832-CPD-0871

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Input/Output Module

55000-875



- **Loop technology with Apollo protocol**
- **One line-monitored input and one dry relay output 230VAC**
- **Setting of module address by means of address switch**
- **Integrated dual-isolator**
- **Status LEDs for input and output**



Description

The addressable Module 55000-875 serves for the line-monitored integration of a contact detector, such as a manual call point, a sprinkler system contact or a supervising contact, into the bi-directional communication on the loop with Apollo protocol. Furthermore, it can be used to actuate external devices by means of a relay

output with a dry change-over contact, via the loop.

The address is easily selected by means of a built-in DIL switch. Status LEDs indicate the condition of input and output. The module has an integrated dual-isolator and is fitted into a plastic case.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 1.25mA (quiescent)
Contact rating	2A/48VDC or 5A/230VAC
Ambient temperature	-20°C to +70°C
Dimensions L x W x H	150 x 90 x 48 (mm)
Colour	white
Weight	240g
Approvals	LPCB 010ag/16 0832-CPD-0860
Order number	249078
Order name	Module 1xIn 1xRel.Out/230/XP95 55000-875



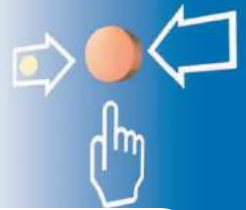
0832-CPD-0860

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Strobes

55000-877, 55000-878, 55000-879



- **Loop technology with Apollo protocol**
- **Suitable for surface mounting in the detector base**
- **Low power consumption due to the use of LEDs**
- **Protective housing IP67 available as accessory**



Description

The addressable, loop-powered Strobes

- 55000-877 with red cap
- 55000-878 with colourless cap and red LEDs
- 55000-879 with orange cap

are accommodated in a round, white plastic case and are fitted into a Standard or Isolator Detector Base Se-

ries XP95. They are powered and actuated as modules via the loop with Apollo protocol, and they are designed for indoor use. Due to the use of LEDs a very low power consumption distinguishes the strobes.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	typ. 150µA (quiescent), 3mA (active)
Ambient temperature	-10°C to +60°C
Protection class	IP42
Dimensions Ø × H	100 × 52 (mm)
Weight	85g
Red cap	
Order number	356020
Order name	Strobe/XP95/white/red/N 55000-877
Colourless cap, red LEDs	
Order number	356022
Order name	Strobe/XP95/white/clear/red/N 55000-878
Orange cap	
Order number	356023
Order name	Strobe/XP95/white/amber/N 55000-879



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Protective Housing 29600-318

The Protective Housing 29600-318 consists of a grey plastic bottom part and a transparent cover. The housing protects a Strobe 55000-877, 55000-878 or 55000-879 from dust or humidity.



Specifications

Ambient temperature	-40°C to +80°C
Protection class	IP67
Dimensions W x H x D	125 x 125 x 100 (mm)
Weight	292g
Order number	359023
Order name	Housing IP67 for Strobe/XP95 29600-318



Manual Call Point

55200-908



- **Loop technology with Apollo protocol**
- **Activation by pressing in the pane of plastic**
- **Two-coloured LED indicates activation and isolator operation**
- **Integrated dual-isolator**
- **Operating instructions by means of standardised symbols**



Description

The Manual Call Point 55200-908 is certified according to the standard EN 54-11 / type A and is designed for use on loops with Apollo protocol.

The call point is activated by pressing in the pane of plastic. By means of a special key, the pane can be put back to the idle position, thereby resetting the call point.

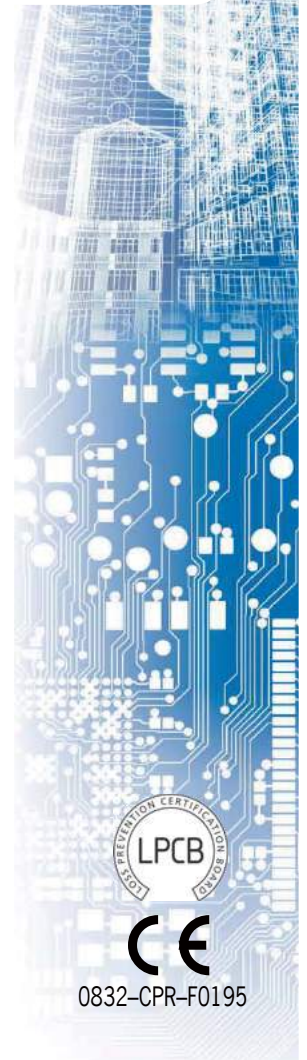
The two-coloured status LED indicates the activation of the call point in red colour and the operation of the isolator in yellow colour. The loop address is selected

by means of a DIL switch. The integrated dual-isolator disconnects the loop fast and safely in case of a short circuit.

The manual call point is fitted into a plastic case and is designed for surface wall mounting by means of the supplied case. Alternatively, the call point can be flush mounted on a 60mm installation box. The use of plug-gable screw terminals makes the installation of the call point very easy.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	100µA (quiescent)
Ambient temperature	-25°C to +70°C (no icing)
Relative humidity	max. 95% (no condensation)
Protection class	IP45
Dimensions W × H × D	
with surface mount box	88 × 88 × 59 (mm)
installation on flush-mount installation box	88 × 88 × 28 (mm)
Colour	flame red, RAL 3000
Weight (with surface mount box)	160g
Approvals	LPCB 010av/01 0832-CPR-F0195
Order number	245015
Order name	Manual Call Point/Red/XP95/Flexi 55200-908

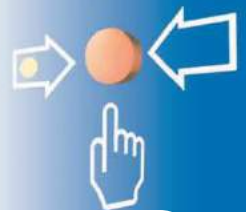


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Carbon Monoxide Detector

58000-300



- **Loop technology with Apollo protocol**
- **Ideal supplement to common smoke detectors**
- **Sensitivity selectable in 5 steps**
- **Optional connection of remote indicator**
- **Sealed electronics**



Description

The Carbon Monoxide Detector 58000-300 uses a durable electrochemical CO sensor. It is an ideal supplement to common smoke detectors because it is insensitive to the usual vapors and household products, in low concentrations. The carbon monoxide detector does not respond to smoke particles and heat, and therefore it shall only be used in addition to smoke or heat detectors. Besides, the size of the fire area shall not exceed 50m².

The proven loop technology with Apollo protocol establishes a permanent communication between the fire

detection control panel and the detector. That ensures a periodical function testing of the detector.

The two LEDs with 360° visibility indicate the activated condition of the detector. The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools.

The detector can be attached to different types of bases, and it can be protected against theft.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	typ. 400µA (quiescent)
Ambient temperature	0°C to +40°C (no condensation)
Relative humidity	15 – 90% (no condensation)
Dimensions Ø × H	100 × 42 (mm)
Colour	white
Weight	105g
Order number	243100
Order name	Carbon Monoxide Detector/Disc 58000-300



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Thermal Detector

58000-400



- **Loop technology with Apollo protocol**
- **For use as maximum heat or rate-of-rise heat detector**
- **5 different operating modes selectable**
- **Optional connection of remote indicator**
- **Sealed electronics**



Description

The addressable Thermal Detector 58000-400 is based on the heat principle and was developed for the indoor temperature supervision in a wide range of fire detection applications.

Depending on the parameter setup in the fire detection control panel, the detector operates either as maximum heat detector with an alarm temperature of 61°C (EN 54-5 Class A2S) or 90°C (EN 54-5 Class CS), or as rate-of-rise heat detector with a maximum temperature of 58°C (EN 54-5 Class A1R), 61°C (EN 54-5 Class A2) or 90°C (EN 54-5 Class CR). In Class A1R the detector can be used up to a room height of 7.5m, in the other operating modes a room height of 6m is permissible.

The proven loop technology with Apollo protocol esta-

lishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector. Fires are safely detected in the control panel by continuously analysing the measured values.

The two LEDs with 360° visibility indicate the activated condition of the detector. The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools.

The detector can be attached to various bases and it can be protected against theft.



0832-CPR-F1706

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Specifications

Operating voltage	Supply through loop voltage
Current consumption	typ. 500µA (quiescent)
Alarm temperature	typ. 58°C (Class A1R, max. room height 7.5m) typ. 61°C (Class A2/A2S, max. room height 6m) typ. 90°C (Class CR/CS, max. room height 6m)
Application temperature	max. +50°C (Class A1R, A2 and A2S) max. +80°C (Class CR and CS)
Ambient temperature	-20°C to +80°C (continuous operation, no condensation or icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø x H	100 x 42 (mm)
Colour	white
Weight	105g
Approvals	VdS G299039 0832-CPR-F1706
Order number	242028
Order name	Thermal Detector/Disc 58000-400



Optical Smoke Detector

58000-600



- **Loop technology with Apollo protocol**
- **Sensitivity selectable in 5 steps**
- **Optional connection of remote indicator**
- **Constant response sensitivity**
- **Sealed electronics**



Description

The addressable Optical Smoke Detector 58000-600 uses the scattered light principle and was developed for the detection of smoke particles in a wide range of fire detection applications. The modern design of the sensing chamber allows to reliably evaluate the characteristics of fire.

The response sensitivity of the detector can be adjusted in 5 steps between 1.4%/m and 2.8%/m, via the fire detection control panel.

The proven loop technology with Apollo protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector. In the control panel all types of fires are detected by continuously comparing fire patterns.

The influence of contamination of the optical measurement system is compensated for by using intelligent evaluation algorithms. With that, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The two LEDs with 360° visibility indicate the activated condition of the detector. The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	typ. 400µA (quiescent)
Ambient temperature	-20°C to +60°C (no condensation or icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø × H	100 × 42 (mm)
Colour	white
Weight	105g
Approvals	VdS G299037 0832-CPR-F1031
Order number	241027
Order name	Optical Smoke Detector/Disc 58000-600

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Optical-Thermal Detector

58000-700



- **Loop technology with Apollo protocol**
- **Combination of optical and thermal characteristics of fire**
- **Alarm temperature 58°C**
- **Several sensitivity levels as well as thermal-only and optical-only operation selectable**
- **Constant response sensitivity**
- **Sealed electronics**



Description

The addressable Optical-Thermal Detector 58000-700 uses the scattered light principle as well as a separate thermal detection unit according to EN 54-5 class A1R. It was developed to detect the characteristics of fire in a wide range of applications, and to avoid deceptive alarms. The modern design of both measurement systems and the analysis of the parameters by means of a defined algorithm allow to reliably evaluate the characteristics of fire.

The response sensitivity and the operating mode of the detector can be selected in 5 steps (optical-only operation, thermal-only operation as well as three multisensor levels), via the fire detection control panel.

The proven loop technology with Apollo protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures

a periodical function testing of the detector.

The influence of contamination of the optical measurement system is compensated for by using intelligent evaluation algorithms. With that, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The two LEDs with 360° visibility indicate the activated condition of the detector. The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools.

The detector can be attached to various bases and it can be protected against theft.



0832-CPR-F1032

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Specifications

Operating voltage	Supply through loop voltage
Current consumption	typ. 500µA (quiescent)
Alarm temperature	58°C (maximum-heat component)
Application temperature	max. +50°C
Ambient temperature	-20°C to +60°C (no condensation or icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø x H	100 x 50 (mm)
Colour	white
Weight	105g
Approvals	VdS G299038 0832-CPR-F1032
Order number	241022
Order name	Optical-Thermal Detector/Disc 58000-700



Maximum Heat Detector

6295, 6296, 6297, 6298



- **Conventional technology**
- **Alarm temperature**
57°, 72°, 87° or 117°C
- **Protection class IP67**
- **Types 6295 and 6296:**
use in intrinsically safe areas,
ATEX certified



Description

The Thermal Detectors 6295, 6296, 6297 and 6298 have been developed for thermal fire detection under extreme operational conditions. For different applications, the four detector types have an alarm temperature of 57°, 72°, 87° or 117°C.

The detectors contain an exact bimetal sensor and work on the maximum principle – the detectors activate when the alarm temperature is exceeded. An activation will be stored until the detector is reset by the fire detection control panel.

With the exception of the type 6298, the detectors have an integrated alarm LED which will indicate that

the alarm threshold has been exceeded. The detectors are connected to a conventional line or are linked to the fire detection control panel via a loop – by means of a conventional zone module.

The detector types 6295 and 6296 have been approved for use in intrinsically safe areas. In this case, they are connected via a safety barrier.

The heat detectors are integrated into a grey plastic housing and come with 3 threaded cable glands. The robust, dust and water protected design allows use under harsh environmental conditions.

Specifications

Operating voltage	supply through the detector line voltage
Quiescent current	0
Permissible alarm current (types 6295, 6296, 6297) (type 6298)	max. 40mA max. 30mA
Alarm resistance (types 6295, 6296, 6297) (type 6298)	400Ω 680Ω
Protection class	IP67
Dimensions Ø × H	100 × 75 (mm, without cable glands)
Colour	light grey
Weight	215g



0845-CPD-232.1192
0845-CPD-232.1193
0845-CPD-232.1194
0845-CPD-232.1195

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Heat detector 57°C, class A2S

Ignition protection	intrinsically safe
Ex classification	Ex II 3 G Ex ic IIC T5 Gc Ex II 3 D Ex ic IIC T100°C Dc
Alarm temperature	typ. 57°C
Ambient temperature	-40°C to +50°C
Approval	0845-CPD-0232.1192
Order number	242150
Order name	Thermal Detector/IP67/Conv/MAX/A2S 6295

Heat detector 72°C, class BS

Ignition protection	intrinsically safe
Ex classification	Ex II 3 G Ex ic IIC T5 Gc Ex II 3 D Ex ic IIC T100°C Dc
Alarm temperature	typ. 72°C
Ambient temperature	-40°C to +65°C
Approval	0845-CPD-0232.1193
Order number	242151
Order name	Thermal Detector/IP67/Conv/MAX/BS 6296

Heat detector 87°C, class CS

Alarm temperature	typ. 87°C
Ambient temperature	-40°C to +80°C
Approval	0845-CPD-0232.1194
Order number	242152
Order name	Thermal Detector/IP67/Conv/MAX/CS 6297

Heat detector 117°C, class ES

Alarm temperature	typ. 117°C
Ambient temperature	-40°C to +110°C
Approval	0845-CPD-0232.1195
Order number	242153
Order name	Thermal Detector/IP67/Conv/MAX/ES 6298



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Beam Smoke Detector 6500/6500S



- **Loop technology with System Sensor protocol**
- **Transmitter and receiver unit integrated into one housing**
- **Detection of clear and dark smoke**
- **6 sensitivity levels selectable**
- **Test filter for optimum commissioning**
- **Automatic drift compensation**



Description

With a range of 5m to 70m the Beam Smoke Detector 6500 serves for the monitoring of open spaces. The transmitter/receiver unit projects a pulsed infrared light beam through the area to be protected towards a reflector, which returns the light beam. The smoke detection is based on the attenuation of the light beam by means of smoke.

The detector uses intelligent evaluation algorithms to compensate for the influence of contamination of the optical measurement system. With that, the response sensitivity of the detector is kept constant for a long time – an effective step to avoid false alarms.

The Beam Smoke Detector 6500 does not need an external power supply and can be connected directly to the loop with System Sensor protocol. An integrated dual-isolator can be activated by removing two jumpers. The response sensitivity of the detector can be set

to one of six levels. Four levels have a fixed response threshold, whereas two further levels with variable response sensitivity allow to adjust the detector to changing environmental conditions.

The detector is delivered with a reflector, which can be used for ranges from 5m to 70m. A three-part reflector set, which extends the range of the detector to 100m, is available as accessory.

The Beam Smoke Detector 6500S corresponds to the Beam Smoke Detector 6500 in design and function. In addition, the 6500S can be remotely activated from the fire detection control panel, allowing easy function testing during maintenance. This test simulates light obscuration by means of a motor-driven test filter. An external power supply is needed for the test unit, which can not be powered by the loop.



0832-CPD-0326

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Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	2mA (quiescent), 8mA (active)
Ambient temperature	-30°C to +55°C
Relative humidity	max. 95% (no condensation)
Dimensions W x H x D	190 x 254 x 84 (mm), Smoke Detector 6500 200 x 230 x 10 (mm), Reflector (5m to 70m)
Protection class	IP54
Colour	cream
Weight	1.8kg
Approvals	VdS G205033 0832-CPD-0326

Beam Smoke Detector 6500

Order number	244020
Order name	Beam Smoke Detector/200 6500

Beam Smoke Detector 6500S with test activation

Operating voltage test unit	15 – 32VDC
Current consumption test unit	500mA
Order number	244021
Order name	Beam Smoke Detector+Test/200 6500S



Beam Smoke Detector 6500R/6500RS



- **Conventional technology**
- **Transmitter and receiver unit integrated into one housing**
- **Detection of clear and dark smoke**
- **6 sensitivity levels selectable**
- **Test filter for optimum commissioning**
- **Automatic drift compensation**



Description

With a range of 5m to 70m the Beam Smoke Detector 6500R serves for the monitoring of open spaces. The transmitter/receiver unit projects a pulsed infrared light beam through the area to be protected towards a reflector, which returns the light beam. The smoke detection is based on the attenuation of the light beam by means of smoke.

The detector uses intelligent evaluation algorithms to compensate for the influence of contamination of the optical measurement system. With that, the response sensitivity of the detector is kept constant for a long time – an effective step to avoid false alarms.

Conventional technology is used for alarm transmission to the fire detection control panel. The response sensitivity of the detector can be set to one of six levels.

Four levels have a fixed response threshold, whereas two further levels with variable response sensitivity allow to adjust the detector to changing environmental conditions.

The detector is delivered with a reflector, which can be used for ranges from 5m to 70m. A three-part reflector set, which extends the range of the detector to 100m, is available as accessory.

The Beam Smoke Detector 6500RS corresponds to the Beam Smoke Detector 6500R in design and function. In addition, the 6500RS can be remotely activated, allowing easy function testing during maintenance. This test simulates light obscuration by means of a motor-driven test filter.



0832-CPR-F0308

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Specifications

Ambient temperature	-30°C to +55°C
Relative humidity	max. 95% (no condensation)
Dimensions W x H x D	190 x 254 x 84 (mm), Smoke Detector 6500R 200 x 230 x 10 (mm), Reflector (5m to 70m)
Protection class	IP54
Colour	cream
Weight	1.8kg
Approvals	VdS G205034 0832-CPR-F0308

Beam Smoke Detector 6500R

Operating voltage	10.2 – 32VDC
Current consumption at 24V	17mA (quiescent), 38.5mA (active)
Order number	244022
Order name	Beam Smoke Detector/Conv 6500R

Beam Smoke Detector 6500RS with test activation

Operating voltage	15 – 32VDC
Current consumption at 24V	17mA (quiescent), 38.5mA (active)
Current consumption test unit	500mA
Order number	244023
Order name	Beam Smoke Detector+Test/Conv 6500RS



Optical Laser Smoke Detector 7251



- **Loop technology with System Sensor protocol**
- **Up to 100 times more sensitive than common optical smoke detectors**
- **Sensitivity selectable in 9 steps**
- **Optional pre-alarm function**
- **Automatic drift compensation**
- **Highly insensitive to contamination**
- **Function testable with magnet**



Description

The addressable Optical Laser Smoke Detector 7251 uses the scattered light principle, and was developed for the precise detection of smoke particles in a wide range of applications. The modern design of the sensing chamber allows to reliably evaluate the characteristics of fire.

Due to the high sensitivity of the laser detection chamber, the detector is ideal for applications where an early fire detection is crucial:

- Computer rooms
- Clean room manufacturing
- Hospitals
- Aspiration smoke detection systems

Depending on the application, the high sensitivity of the detector is individually adjustable in 9 steps between 0.03%/m and 3.3%/m and provides a number of special applications, which can not be covered using standard optical smoke detectors.

An optional pre-alarm can be activated two sensitivity levels before reaching the alarm level.

The proven loop technology with System Sensor protocol establishes a permanent communication between

the fire detection control panel and the detector. That ensures a periodical function testing of the detector. In the control panel all types of fires are detected by continuously comparing fire patterns.

The influence of contamination on the optical measurement system is reduced with the help of the laser principle and furthermore compensated for by using intelligent evaluation algorithms. With that, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The two LEDs with 360° visibility indicate the activated condition of the detector. The detector address is selected with two decadic rotary switches, thus allowing to quickly change the detector without additional tools.

A detector function test can be conveniently conducted using a magnet. The detector can be attached to various bases and it can be protected against theft.

If the laser smoke detector is required in white colour, the cream-coloured cover of the detector housing can be replaced with the separately available white cover.



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0832-CPR-F1617

Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 330µA (quiescent)
Ambient temperature	-10°C to +50°C
Relative humidity	10 – 93% (no condensation)
Dimensions Ø × H	103 × 42 (mm)
Colour	cream
Weight	159g
Approvals	VdS G202051 0832-CPR-F1617
Order number	241050
Order name	Optical Laser Smoke Detector/200 7251
White cover of detector housing	
Order number	241121
Order name	Cover Kit White for Laser Smoke Detector 7251 WCK-PINNACLE



Automatic Purging Unit Series AFE70



- Fully integrated compact system
- Use in smoke aspiration systems and with fire detection control panels by any manufacturer
- Patented design without air resistance as defined by EN 54-20
- Selectable purging program – preventive or event-triggered
- Several systems can be coupled in master-slave mode



Description

Smoke aspiration systems continuously sample air from the monitored room through a sensor pipe network with aspiration holes. In the evaluation unit the samples are examined for typical characteristics of fire.

Over the operating time, the continuous aspiration of air from the room causes contamination of the pipe system and the small aspiration holes, which can disturb the measuring process. In order to prevent this contamination, pipe systems and filters must be regularly „purged“ with compressed air.

In contrast to conventional systems, the Automatic Purging Units Series AFE70 by Labor Strauss only has one built-in solenoid valve. Through this valve, the evaluation unit is isolated from the pipe system in order to protect the evaluation unit against damage caused by the compressed air. At the same time the valve is also used to introduce the compressed air into the pipe system.

With their thoughtful and patented design, the Automatic Purging Units Series AFE70 ensure completely unhindered air flow from the sensor pipe network through the purging unit to the evaluation unit of the smoke aspiration system. The solenoid valve is actuated through a control board that is integrated into the housing.

Thanks to the compact structure of the Automatic Purging Units Series AFE70 and the integration of all components in a housing, the extensive mechanical installations and electrical control devices required for conventional purging systems as well as the piping and cabling needed for this can be saved.

The unit is available in 4 versions:

- The Automatic Purging Unit **AFE70-2** for a pressure of up to 7 bar and an air flow rate of up to 3500 l/min (at standard pressure) is designed for small as well as for larger pipe networks.
- The Purging Unit **AFE70-3** for a pressure of up to 10 bar and an air flow rate of up to 5000 l/min is ideally suited for very large or far-flung pipe systems and, in addition, for refrigeration areas.
- Thanks to the sealed construction, the Purging Units **AFE70-2/IP54** and **AFE70-3/IP54** additionally have protection class IP54. They are designed especially for areas with rough ambient conditions.

The following features distinguish the Automatic Purging Units Series AFE70:

- 6 purging programs, each with short or long purging cycle
- manual control by means of an external push-button
- internal clock for up to 6 daily timed, preventive purging processes
- automatic start if fault message is received from smoke aspiration system
- if there are several AFE70's, a time delay between the purging processes of the individual units can be used to avoid rapid consumption of large compressed-air volumes
- master-slave mode with actuation of one or more „slaves“
- functional over a wide pressure range
- prepared for connection to all usual fire detection control panels and smoke aspiration systems
- easy commissioning without software tools
- multicoloured LED indicates the system conditions.



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Operating principle

If the smoke aspiration system that is connected to the purging unit detects a fault – for example, due to the contamination of aspiration holes of the sensor pipe network – it reports this to the purging unit as fault. The purging unit delays the forwarding of the fault to the fire detection control panel and starts an automatic purging process.

If the clogging has been removed by the purging process, the smoke aspiration system resets the air flow fault within the observation period. The purging unit and the smoke aspiration system are in normal operation again.

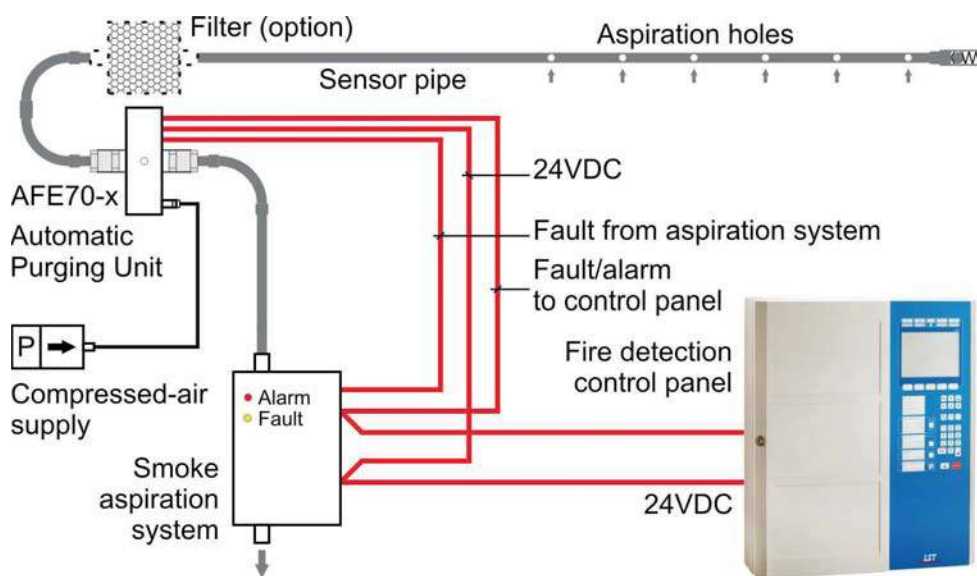
If the clogging could not be removed by the purging process, the smoke aspiration system remains in the fault condition. After expiry of the observation period, the purging unit forwards the fault to the fire detection control panel.

All conditions are indicated by the multicoloured status LED on the purging unit.

With the appropriate setting, the integrated clock of the purging unit can start timed automatic purging processes daily at determined times. These purging processes are carried out independently of the fault message of the smoke aspiration system and serve to preventively remove contaminations from the sensor pipe network and the aspiration holes.

External devices – such as a push-button or a central timer – can be connected to an input in order to allow initiation of additional manual or automatic activations of the purging process.

Schematic view



Specifications

Supply voltage	21.6 – 30VDC
Protection class	IP20D (installed)
Dimensions W x H x D (excluding push-in-fittings)	204 x 68 x 160 (mm)
Dimensions W x H x D (including push-in-fittings)	204 x 201 x 160 (mm)
Colour of cover of housing	grey white, RAL 9002
Weight	approx. 3.2kg
Patent number	AT 514912

Automatic Purging Unit AFE70-2

Current consumption at 24V	8mA (normal condition) 300mA (solenoid valve energised)
Compressed air connection maximum permissible overpressure recommended minimum pressure	0.7MPa (7.0 bar) 0.2MPa (2.0 bar)
Flow rate solenoid valve	0.2MPa: typ. 1,300 l/min 0.4MPa: typ. 2,300 l/min 0.6MPa: typ. 3,200 l/min 0.7MPa: typ. 3,700 l/min
Ambient temperature	+5°C to +50°C
Order number	222051
Order name	Automatic Purging Unit/3500L AFE70-2

Automatic Purging Unit AFE70-2/IP54 (for further specifications, see AFE70-2)

Protection class (control electronics)	IP54
Order number	222053
Order name	Automatic Purging Unit/3500L/IP54 AFE70-2/IP54

Automatic Purging Unit AFE70-3

Current consumption at 24V	8mA (normal condition) 370mA (solenoid valve energised)
Compressed air connection maximum permissible overpressure recommended minimum pressure	1.0MPa (10.0 bar) 0.2MPa (2.0 bar)
Flow rate solenoid valve	0.2MPa: typ. 1,500 l/min 0.4MPa: typ. 3,000 l/min 0.6MPa: typ. 4,500 l/min 0.8MPa: typ. 6,000 l/min 1.0MPa: typ. 7,500 l/min
Ambient temperature	-20°C to +40°C
Order number	222052
Order name	Automatic Purging Unit/5000L/DF AFE70-3

Automatic Purging Unit AFE70-3/IP54 (for further specifications, see AFE70-3)

Protection class (control electronics)	IP54
Order number	222054
Order name	Automatic Purging Unit/5000L/DF/IP54 AFE70-3/IP54



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Alarm Monitoring Software

ALVIS



- **Monitoring and operation of danger detection systems**
- **Clear presentation using building plans and event windows**
- **Easy creation of the application by means of templates**
- **Supports use of 2 screens**
- **Interfaces to several outside systems available**



Description

The control center software ALVIS is used to run an operation control system for danger detection systems, such as

- fire detection systems,
- extinguishing systems,
- burglar alarm systems,
- access control systems,
- closed-circuit TV systems

or any combination thereof.

By means of the user interface of the Windows software, ground plans as well as detailed views of the building can be shown in a clear way. The elements of the danger detection system are depicted by means of graphic symbols. Depending on the design of the user interface, overview pictures and photos of the facility can be displayed at any time, thus providing an optimum and quick overview in any situation.

In freely definable detail windows, all important operating conditions of the system can be clearly displayed, and events can be listed chronologically and by type. If an event occurs, the system part in question can be quickly and reliably located on the respective building

plan with a mouse click. In addition, every change in the condition of a system part is indicated by a change in the colour of the symbol in question.

Additional functions such as the event-dependent indication of screens and packages of measures, or event-driven time programs can also be determined.

The bi-directional communication between the PC and the danger detection system permits remote operation and control of system parts. Depending on the authorization level, every data point allows changes in the status of the system, for example disablement of detectors or activation of actuations.

A user-defined configuration allows the operation control system to be adjusted to any compatible danger detection system. By using templates, similar functions can be parameterised quickly and uniformly, both in new systems as well as when expanding or modifying existing systems.

By freely arranging the building plans and event windows, the user interface can be individually configured. The use of two screens is also supported.



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Clear presentation

Thanks to the graphic presentation of the danger detection system, the control center software ALVIS offers a safe and quick overview in every situation. Depending on the requirement of the system, overview plans and detailed plans of the monitored object, video images and photos of selected areas, as well as overview windows with current events or operating conditions can be shown.

The object plans show an image of the danger detection system by symbolically depicting the system parts.

In the event windows, all current operating conditions, for example activated or disabled system parts, are indicated.

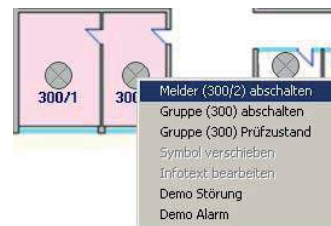
In the protocol window, all occurring events are listed in chronological order, with detailed description as well as the time of the occurrence. At the same time, the protocol is stored on the hard disk of the PC and, in addition, it can be printed out on a printer.

If an event occurs, for example a detector is activated, the detector symbol in question is marked in colour, depending on the condition. For example, a detector in the alarm condition can be shown in red, a disabled detector can be shown in yellow. With a mouse click on the detector event, the plan with the detector in question is displayed.

Nachricht	ID	Typ	Nachrichtzeit	Ereigniszeit	ALVIS Benutzer
Störung - Melder (300/1)	2682	Störung	10:20:47 08.01.2008		lsc
Feuersalarm Melder (300/3) - bestätigt	2681	SYSTEM	10:19:36 08.01.2008		lsc
Feuersalarm - Melder (300/3)	2680	Feuer	10:19:33 08.01.2008		lsc
OK - Melder (300/3)	2679	OK	10:18:37 08.01.2008		lsc

Remote control of the system

With the appropriate parameter setup, every data point of the danger detection system can be operated directly with a mouse click. The desired element is selected in the building plan and the desired action is clicked in the context menu. By means of a control command, the operation is carried out on the system. Afterwards the events triggered as a result of this will be logged by the control center software ALVIS.



Secure access

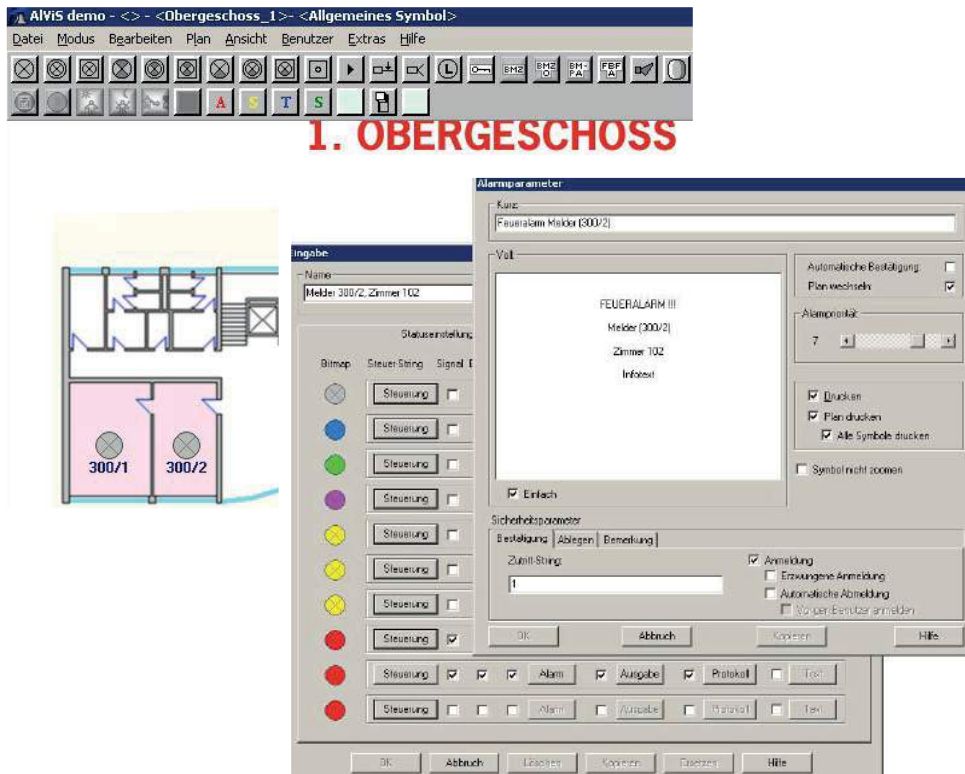
As a protection against unauthorized access to the operation control system and the danger detection system, a list of authorized users can be created. This list contains the passwords and the detailed access rights of each user.

Different authorization levels can be determined which unblock, for example, only the event query or also the operation of the system. The change in the system configuration is additionally protected by a password.

Easy configuration

In the development mode, the operation control system can be individually adjusted to the danger detection system. The control center software ALVIS allows importing of building plans, illustrations or photos in different formats. For the definition of the individual devices, an extensive symbol library is available. This library can

be easily expanded by the user. In addition, frequently used elements, such as optical fire detectors or motion detectors, can be defined with predefined parameters in the form of templates.



During the configuration of the operation control system, extensive user-defined actions can be assigned to each element of the danger detection system. For example, in the event of alarm activation of a detector, a warning tone can be played back and a status window with an alarm message and instruction texts for the user can be opened.

Therefore, in the development mode of the control center software ALVIS, the following parameters are set for every data point:

- Symbol diagram for every operating condition
- Acoustic signalling and blink function

- Alarm priority
- Access rights for the alarm confirmation
- Automatic indication of the building plan with the activated detector
- Alarm messages and optional instructions for the public safety personnel
- Automatic printing of plans or operation maps and of detailed information
- Control commands for further devices – they allow, for example, activation of a video camera if a motion detector is activated
- Logging of the occurring events on the screen or printer

Interfaces and licences

The PC with the control center software ALVIS and the danger detection system communicate with each other via a serial data connection, or alternatively, via an Ethernet connection.

On a Fire Detection Control Panel Series BC216, a serial interface is parameterised as „Control interface“ for the connection to the operation control system.

To run the control center software ALVIS on the PC, an ALVIS/F licence, or in Austria an ALVIS/F3003 licence

according to ÖNORM F 3003 is needed.

In addition, the PC must be provided with an interface licence for the operation of the DDE server. This server controls the event-driven communication between the PC and the fire detection control panel. The interface licence is available for Fire Detection Control Panels Series BC600 and Series BC216.

Further interfaces are available on request.

Specifications

ALVIS licence

Order number	218041
Order name	Alarm-Monitoring-Software-Licence ALVIS/F

ALVIS interface licence for Fire Detection Control Panels Series BC600

Order number	218048
Order name	Alarm-Monitoring-Interface-Licence ALVIS-BC600

ALVIS interface licence for Fire Detection Control Panels Series BC216

Order number	218044
Order name	Alarm-Monitoring-Interface-Licence ALVIS-BC216

Serial interface for Fire Detection Control Panels Series BC600

Order number	211126
Order name	Serial Interface SIF601-3/ZLT

ZLT interface licence for Fire Detection Control Panels Series BC216

Order number	218022
Order name	ZLT Interface Licence ZLT-SS

Programming cable for Fire Detection Control Panels Series BC216

Order number	219010
Order name	Programming Cable BC216/RS232 PK216-1



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Detector Base Series 300

B401RM1000



- **Suitable for automatic detectors in conventional technology**
- **Screw terminals for secure connection of multiple wires**
- **Terminals for connection of remote indicator**
- **Test contact for examining the detector line without detectors**
- **Mechanical theft protection can be activated**



Description

The Detector Base B401RM1000 is designed for the easy connection of automatic detectors Series 100, 300 and 400 in conventional technology. Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection.

The base provides the possibility to easily connect an external remote indicator, and has been designed for surface mounting in dry rooms. For special applications a range of accessories (for moist room, false ceiling or flush installation) is available.

During construction work (or when the detector has been removed) the detector line can be connected through via an auxiliary contact, which is integrated into the base. With that, the whole wiring of the detector line can be examined without risking contamination of the detectors. The contact is automatically opened by installing the detector.

A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

Ambient temperature	-20°C to +70°C
Relative humidity	10 – 93% (no condensation)
Dimensions Ø x H	102 x 20 (mm)
Colour	cream
Weight	55g
Order number	246008
Order name	Detector Base/400/300/100 B401RM1000



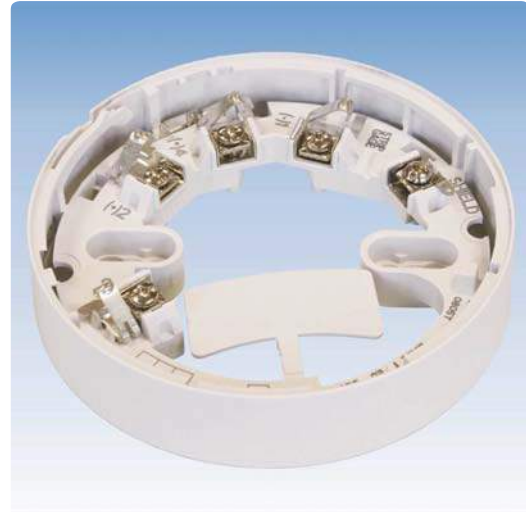
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Detector Base Series 200AP B501AP



- Suitable for automatic detectors Series 200-Advanced, 200 and 500
- Large opening for cable entry
- Terminal for connection of remote indicator
- Mechanical theft protection can be activated
- Label plate can be broken off
- Available in white or cream



Description

The Detector Base B501AP is designed to accommodate intelligent fire detectors Series 200-Advanced, 200 and 500. The sophisticated design of the base permits easy mounting, and the large cable entry allows unhindered cabling.

Due to its robust multi-wire screw terminals, the detector base can be wired with ease, thus achieving a secure and durable connection. The reliable contact with the detector is ensured by particularly high-quality contact springs.

Thanks to an additional terminal, the base is compatible with Detectors Series 200-Advanced with integrated isolator. Furthermore, a terminal for connection of a remote indicator is provided.

The mechanical theft protection of the detector can optionally be activated. An integrated plastic plate allows easy labelling of the detector without additional accessory. For this purpose, the label plate is broken off from the base and is attached to the base from below.

The Detector Base B501AP is designed for surface mounting in dry rooms. In case of surface mounted cabling, cables with a diameter of up to 8mm can be inserted. For flush mounting as well as for use in moist rooms or false ceilings, a range of accessories is available.

White and cream-coloured versions of the Detector Base B501AP are available.

Specifications

Ambient temperature	-30°C to +70°C
Relative humidity	0 – 95% (no condensation)
Dimensions Ø x H	102 x 22 (mm)
Weight	39g
Detector Base B501AP white	
Order number	246039
Order name	Detector Base/500/200AP B501AP
Detector Base B501AP cream-coloured	
Order number	246038
Order name	Detector Base/500/200AP/Ivory B501AP-IV



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Detector Base Accessories

Series 200AP



- **Surface mounting kit**
- **Recessed mounting kit for flush mounting in false ceilings**
- **Conduit adapter**
- **Wet base shroud**
- **Available in white or cream**



Surface mounting kit

The Surface Mounting Kit SMK400EAP is used for surface mounting of a Detector Base B501AP, B524HTR or B524RTE. It allows easy insertion of cable conduits

or thick cables and it is prepared for use of cable glands M20. The surface mounting kit is available in white or cream.

Specifications

Dimensions Ø × H	103 × 34 (mm)
Weight	90g
Surface mounting kit white	
Colour	white
Order number	246161
Order name	Surface Mounting Kit/200AP/AP SMK400EAP
Surface mounting kit cream	
Colour	cream
Order number	246166
Order name	Surface Mounting Kit/200AP/AP SMK400EAP-IV

Conduit adapter for detector base

The Conduit Adapter BA1AP facilitates surface cabling of a Detector Base B501AP when using cable conduits with an outer diameter of 20mm.

The conduit adapter is attached to the detector base prior to installation.

Specifications

Order number	249120
Order name	Conduit Adapter for Detector Base BA1AP

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Recessed mounting kit for flush mounting

The Recessed Mounting Kit RMK400AP is used for flush mounting a Detector Base B501AP, B524HTR or B524RTE in false ceilings. This results in a noticeable reduction of the visible height of the detector.

The recessed mounting kit is available in white or cream.



Specifications

Dimensions Ø × H	144 × 40 (mm)
Weight	90g
Recessed mounting kit white	
Colour	white
Order number	246167
Order name	Recessed Mounting Kit/200AP RMK400AP
Recessed mounting kit cream	
Colour	cream
Order number	246168
Order name	Recessed Mounting Kit/200AP RMK400AP-IV

Wet base shroud

The supplement base WB-1AP is used for installation in damp areas and accommodates a Detector Base B501AP, B524HTR or B524RTE. The supplement base is prepared for use of cable glands PG11 or M16. The base is available in white or cream.

Specifications

Dimensions Ø × H	105 × 70 (mm)
Weight	100g
Wet base shroud white	
Colour	white
Order number	246160
Order name	Wet Base Shroud/200AP WB-1AP
Wet base shroud cream	
Colour	cream
Order number	246165
Order name	Wet Base Shroud/200AP WB-1AP-IV

Isolator Detector Base B524IEFT-1



- Suitable for automatic detectors in loop technology with System Sensor protocol
- Dual-isolator unit
- Screw terminals for secure connection of multiple wires
- Terminals for connection of remote indicator
- Mechanical theft protection can be activated



Description

The Isolator Detector Base B524IEFT-1 is designed to accommodate intelligent fire detectors Series 200 and 500 for use in loops with System Sensor protocol. A dual-isolator unit is integrated into the detector base, which reliably disconnects the loop in case of a short circuit. With the dual design, the input side or the output side isolator – depending on the location of the short circuit – interrupts the connection to the faulty loop segment. Therefore the detector remains in operation. Due to its robust multi-wire screw terminals, the detec-

tors can be wired with ease, thus achieving a secure and durable connection. The base also provides a possibility for the easy connection of remote indicators.

The base is designed for surface mounting in dry rooms. For special applications a range of accessories (for moist room, false ceiling or flush installation) is available.

A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

Current consumption	max. 100µA (quiescent)
Ambient temperature	-30°C to +70°C
Relative humidity	0 – 93% (no condensation)
Dimensions Ø x H	102 x 26 (mm)
Colour	cream
Weight	70g
Approval	VdS G200100
Order number	246013
Order name	Isolator Detector Base/500/200 B524IEFT-1



VdS



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For decades, security systems by Labor Strauß have been associated with innovative technology and highest quality, serving safety. All steps of the value-adding process – including market analysis, development, manufacturing, distribution and customer service – are united in one company. The products of the Austrian family business ensure safety – in many parts of Europe and the world.

MEP – the safety specialists. Apart from the development and manufacturing of innovative electromechanical components – such as manual call points, fire brigade control units and sabotage-monitored key safes – the company offers complete solutions around the topic „Fire Protection“.



LST

MEP

MEP ist ein Tochterunternehmen der LST. Die LST ist ein Unternehmen der LST-Gruppe.
Office: office@lstr.at oder office@lstr.at

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Fire Detection and Evacuation Panels Series BC016

The versatile control panels in conventional technology



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FIRE DETECTION AND EVACUATION PANELS

Fire is a permanent threat to life and property. Therefore, immediate response to a fire alarm is imperative. The main objective of the Fire Detection Control Panels Series BC016 is to alarm and to react in time and, consequently, save lives and protect property.

The Fire Detection Control Panels Series BC016 have been designed as control equipment for small and medium-sized fire detection systems in conventional technology. With their powerful processor system, numerous integrated functions as well as various programming options, the control panels ensure highest efficiency and speed – the prerequisites for effective fire protection.

Proven technology

With up to 16 detector lines, a monitored siren output as well as freely definable inputs and outputs, even demanding monitoring and control tasks can be realised easily. The addressable conventional technology allows unambiguous identification of the activated fire detector. The monitored power unit ensures optimum battery charging and fail-safe operation of the system.

Clear indication and operation

The LCD clear text display immediately gives an overview in every situation and allows a specific reaction in the event of danger. Individual light emitting diodes indicate the condition of each detector line, the monitored outputs and the most important system conditions.

Through the menu-driven operation, system parts can be disabled, activated or reset by pressing only a few buttons. The clear, self-explanatory menu structure keeps the training effort at a minimum. The menu texts are available in several languages for use in different markets.



Easy parameterisation and commissioning

Thanks to the thoughtful factory setting, the Fire Detection Control Panels Series BC016 can be commissioned very quickly and without additional tools. This allows quick and efficient application of the product. The parameters are individually adapted to the system configuration, either through the menu operation of the control panel or – clearly and conveniently – by means of the PC software PARSOFT.

For the customer-friendly remote parameterisation and maintenance of the control panel, modules for connection to an IP network, to a telephone line or to GSM networks can be supplied.

Versatile interfaces

The serial interface of the control panel facilitates event recording using a printer or data logger, parameter setup on a PC, or signalling on remote operation panels or graphic remote tableaus. There are also interfaces to country-specific fire brigade control units, key safes and alarm transmitting devices.

Fire Detection Control Panel BC016-1

The standard version of the Series BC016 has been designed for use in small and medium-sized fire detection systems. 8 detector lines in conventional technology, expandable to 16 lines, allow connection of fire detectors, special detectors or fault detection contacts.

The free parameterisation of the detector lines for activating the outputs provides a high degree of flexibility. As a result, there is no need to use external relays or circuits.

Combined Fire Detection and Evacuation Panel BC016-2

In addition to the features of the Fire Detection Control Panel BC016-1, the combi control panel with expanded functionality also has an integrated evacuation function. For the manual operation of the 8 siren circuits, special buttons are provided. They allow the user to activate or terminate an evacuation alarm without requiring a fire alarm.

With the evacuation function, different country-specific regulations such as the Dutch standard NEN 2575 are fulfilled.

Certified according to EN 54-2 and EN 54-4

The VdS-approved Fire Detection Control Panels Series BC016 have been tested and certified by VdS according to the mandatory standards EN 54-2 and EN 54-4.



Manual call points



Automatic fire detectors



Strobe



Alarming devices



Fire brigade control unit



Remote tableau



Fire brigade key safe



Printer



Parameter setup



Smoke escape

For decades, security systems by Labor Strauß have been associated with innovative technology and highest quality, serving safety. All steps of the value-adding process – including market analysis, development, manufacturing, distribution and customer service – are united in one company. The products of the Austrian family business ensure safety – in many parts of Europe and the world.

MEP – the safety specialists. Apart from the development and manufacturing of innovative electromechanical components – such as manual call points, fire brigade control units and sabotage-monitored key safes – the company offers complete solutions around the topic „Fire Protection“.



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Fire Detection and Extinguishing Control Panels Series BC06

The powerful compact panels for small fire detection systems and extinguishing systems



MEP

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FIRE DETECTION AND EXTINGUISHING CONTROL PANELS

Fire is a permanent threat to life and property. Therefore, immediate response to a fire alarm is imperative. The main objective of the Fire Detection Control Panels Series BC06 is to alarm and to react in time and, consequently, save lives and protect property. The Fire Detection Control Panel Series BC06 is available in 2 versions: as a compact control panel for small fire detection systems or as a combined fire/extinguishing control panel for single-zone extinguishing systems according to EN 12094-1. Thanks to the numerous integrated functions, the compact construction and the attractive design, the product can be used in a variety of applications.

Proven technology

In the basic version, the control panels are equipped with 4 conventional detector lines and two independent, monitored siren outputs. Via status outputs and freely definable inputs, varied control tasks can be realised easily. The monitored power unit ensures optimum battery charging and fail-safe operation.

Status indication and operation on the front panel

The condition of the detector lines and siren outputs is indicated by individual light emitting diodes. Further LED displays and a buzzer are available for signalling the most important system conditions. The detector lines and the sirens can be operated directly by means of 8 function buttons. The clear arrangement of the light emitting diodes and buttons keeps the operation of the control panel easy.

For printing an event protocol, a printer can be connected to the control panel. The alarm activations that have been recorded so far are indicated in compliance with the relevant standards, by an optional 4-digit alarm counter.

With the integrated evacuation functions, the siren outputs can be activated manually with buttons – independent of the alarm situation. That fulfils different country-specific regulations such as the Dutch standard NEN 2575.



Easy parameter setup and commissioning

Thanks to the thoughtful factory setting, the Fire Detection/Extinguishing Control Panels Series BC06 can be commissioned very quickly and without additional tools. This allows quick and efficient use of the product.

For individual applications, the settings can be changed through easy menu operation on the control panel, thereby adapting them flexibly to the system configuration.

Fire Detection Control Panels BC06-1, BC06-2

The standard version of the Fire Detection Control Panels Series BC06 has been designed for use in small fire detection systems. Up to 6 detector lines in conventional technology allow connection of fire detectors, special detectors or fault detection contacts.

The free parameterisation of the detector lines for activating the outputs offers a high degree of flexibility. As a result, there is no need to use external relays or circuits.

Combined Fire Detection and Extinguishing Control Panels BC06-1EXT, BC06-2EXT

The extended version of the Fire Detection Control Panels Series BC06 provides the complete functionality for monitoring and actuating a flooding zone. The extinguishing control fulfils all mandatory functions and many options of the standard EN 12094-1.

Numerous inputs and outputs of the control panel are prepared for direct connection of manual call points, fault detector and disable devices, flooding switches, solenoid valves and signalling devices. The operating field is equipped with LED displays which indicate the system conditions, and buttons which allow manual intervention into the extinguishing system. Parameters which can be individually set allow the control panel to be optimally adapted to the system and the extinguishing medium.

In this way, the Fire Detection Control Panel Series BC06 can be used to create a complete and cost-effective extinguishing control system with little effort and only a few additional components.

Certified according to EN 54-2, EN 54-4 and EN 12094-1

The Fire Detection Control Panels Series BC06 have been tested and certified by VdS according to the mandatory standards EN 54-2 and EN 54-4. In addition, the combined fire/extinguishing control panel has been tested in accordance with EN 12094-1 and has been approved by VdS.



Manual call point



Manual call points for a wide range of applications



Automatic fire detectors



Strobe



Alarming devices



Ventilation



Printer

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Fire Detection Control Panels Series BC600

Modular. Flexible. Trendsetting.



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THE PROTECTION OF PEOPLE AND PROPERTY IS THE GOAL

Today, just like in the past, safety is the most basic need of people. A fire involves a considerable potential danger, as it threatens the safety of people and the integrity of material goods. Therefore, if a fire breaks out, an immediate and targeted reaction is required.

A fire detection system's contribution to the protection of people and property can be crucial. Here the fire detection control panel has the main task: to process the data of the connected fire detectors and to react to dangerous events. Depending on the system configuration, signalling devices or actions are activated, extinguishing systems are released or alarm messages are forwarded to a designated alarm respondent.

However, a high-quality fire detection control panel has many more tasks than fulfilling the standard-compliant basic functions. A thoughtful control panel structure is crucial for time-saving commissioning and easy maintenance. Functions that conform to

the market and which go far beyond the applicable standards, play an important role in the successful implementation of the requirements. By integrating numerous additional functions into the hardware and software of the control panel, the need of external devices is reduced, which constitutes an essential factor for trimming costs.

The ease-of-use that is achieved through self-explanatory menu navigation as well as the clearly arranged, comprehensible event indication facilitate the handling of the entire fire detection system in dangerous situations just as easy as in the normal condition.

Because of the wealth of functions and system components, the control panel can be used in systems of any size and complexity. The very easy operation and application provide the prerequisites for the successful usage in order to protect people and preserve property.



Cutting-edge microelectronics

The development of the new Fire Detection Control Panel Series BC600 is based on more than 50 years of experience in building safety technology. Electronics based on state-of-the-art technologies, powerful microprocessors and a thoughtful mechanical design provide completely new possibilities and at the same time offer a high degree of reliability. Well-tried software routines and integrated self tests additionally guarantee a high operational safety. The control panel is manufactured completely by Labor Strauss. Highly skilled employees, stringent test methods and a mature quality management system form the basis for high-grade products – 100% quality from Austria.

Flexibility and expandability thanks to modular structure

The structure of the fire detection control panel follows a modular concept, and therefore it can be flexibly adapted to the requirements of the application. The componentries – from the central processor to the loop interface as well as the serial interface – are designed as plug-in units and are connected via a powerful bus system. The central processor can serve a total of 54 function modules – including up to 20 loop interfaces.

Therefore, up to 20 detector loops can be connected to a Fire Detection Control Panel Series BC600, which considerably reduces the investment cost per loop. Apart from loop interfaces, the control panel can be equipped with conventional detector interfaces, modules with monitored inputs and outputs, interfaces and a variety of additional devices.

A redundant design ensures highest safety

The redundant structure of the Fire Detection Control Panel Series BC600 ensures a high degree of failure safety. A basic principle of the software architecture is its redundancy – in the event of a malfunction of a software component, the alarm processing of the control panel is still ensured. Thanks to the freely scalable hardware redundancy, all essential control panel components can be implemented redundantly if requested. As a result, the control panel meets even the highest demands of especially critical applications.

Certified quality

The Fire Detection Control Panels Series BC600 have been tested and certified by VdS, as required by the Construction Products Directive CPD, according to the standard EN 54 and according to the VdS guidelines.



Successfully protected by LST building safety systems for years:



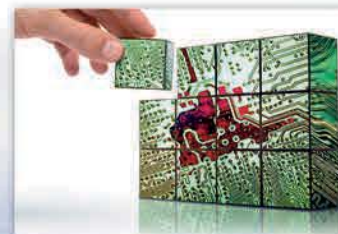
Klosterneuburg Monastery, Lower Austria



Industriepark Höchst, Frankfurt, Germany



Oosterschelde Storm Surge Barrier, The Netherlands



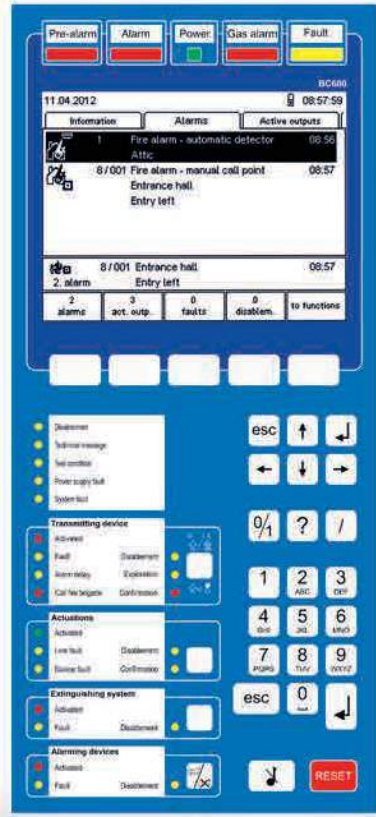
A GOOD OVERVIEW IN EVERY SITUATION

The large 5.7" 1/4 VGA graphics display provides comprehensive information on all conditions of the fire detection system. The incoming events are sorted according to the type of message and are listed in 6 main menu windows. Depending on the length of the message, up to 10 entries can be shown on the display at the same time. Graphic symbols next to each message and the switching between overview and detailed indication improve the comprehensibility. By parameterising optional additional information, danger messages can be supplemented with further help texts. These additional texts can also be entered or edited directly on the control panel without using a PC.

The most important operating conditions of the control panel, such as alarm, fault or disablement, are indicated by means of status displays. For the system-specific individual lettering of all light emitting diodes, labelling strips are used.

Easy operation through intuitive navigation
The self-explanatory user guidance allows easy operation of the control panel. In this way the safe operation in case of danger is ensured and the training costs are reduced. For the worldwide use of the control panel, the menu texts are included in several languages. The desired language can be conveniently changed during operation.

Via 5 function keys with situation-dependent function, important menus and frequent functions can be selected directly. The 4 buttons of the functional groups are freely parameterisable and therefore allow system-specific adaptation.



- Status displays
- 5,7" graphics display
- 5 function keys
- Navigation keys
- Status displays
- Functional groups
 - Transmission
 - Actuation
 - Auxiliary
 - Alarming
- Alphanumeric keypad

Specific access rights for different users

For the selective enablement of operations and parameterisation, the Fire Detection Control Panel Series BC600 is provided with an extensive user rights management. In this way, specific access rights of up to 256 different users, which can be combined in 32 user groups, are managed.

Parameterisable logic

The thoughtful combination logic makes the parameterisation of outputs easier, and as a result, external logic components are not needed. Not only detectors and detector zones, but any events can be combined with each other in order to activate, reset or disable actuations or alarming devices. With the optional definition of flags, several outputs can be provided with the same logic function in an easy way. Therefore, the repeated parameterisation of similar combinations is not necessary.

Programmable timers with daily or weekly program and public holiday logic facilitate the automatic control of time-dependent functions. Thanks to definable sectors, different system parts can be jointly operated in an easy way, using a single switching command. As a result, the time-consuming selection of the individual system components used for operation is avoided.

Convenient commissioning

By means of the graphic PC software PARSOFT, the Fire Detection Control Panel Series BC600 can be configured in an easy way – even if the PC is not connected to the control panel. The intuitive user interface of PARSOFT keeps the required setup time as well as the training costs low.

To upload the setup or an update of the control panel firmware, the PC is simply connected to the integrated USB interface of the control panel and the transfer is started. For maintenance purposes, the event memory as well as the current parameterisation of the control panel can be read out with PARSOFT.

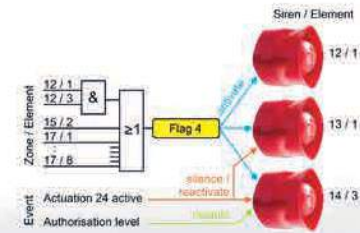
Using the AUTO-setup function, the components that are installed in the control panel are configured and all connected loop components are automatically parameterised and addressed.

The control panel firmware, parameter data and application-specific clear texts can also be read from or stored on a USB stick. For this purpose, the USB stick is connected to the control panel instead of the PC. Therefore, the PC is not absolutely necessary for the service on site.

User friendly service and maintenance

The maintenance of the BC600 is especially convenient. The „hot plug & play“ function allows insertion and removal of componentries without switching off the power supply. Since this does not interrupt the ongoing operation of the system, outages are avoided. There is no need for fire watches and the automatic closing of the fire doors is omitted.

The central processor automatically detects a newly installed componentry and puts it into operation immediately. Thanks to the use of pluggable screw terminals, the exchange of componentries is made much easier and wiring faults are avoided.



THE PRODUCT FAMILY SERIES BC600

The product range of the Fire Detection Control Panels Series BC600 comprises a vast number of control panel versions, function modules, expansions and mechanical accessories. For each application and task, very well matched products are available. The high integration of the individual components allows the especially compact design of the control panel. At the same time, the modular concept of the control panel and the generous extension possibilities ensure future-proof use if additions and changes are desired later.

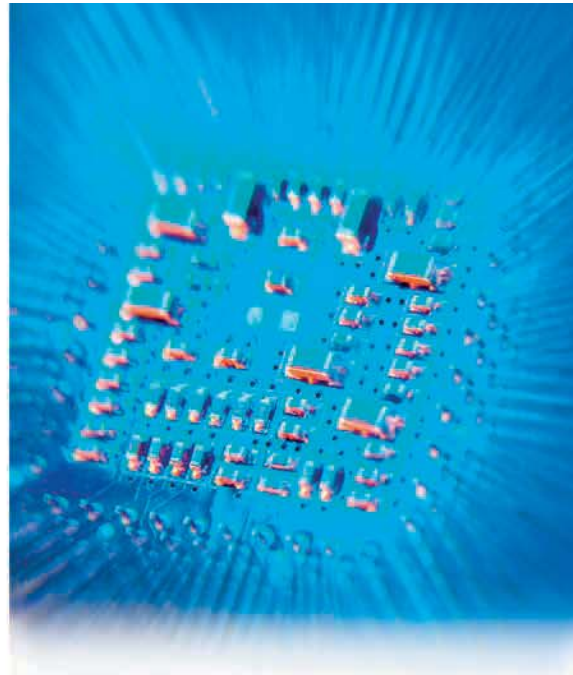
Various housing versions

The Fire Detection Control Panel Series BC600 is offered in different mechanical versions. The wall-mount cabinet is available in 2 different sizes and has been designed for standard applications. The 19" version in low profile design is intended for installation in a rack or in a pivoting frame. For especially extensive applications there is a modular

version for integration into a switch cabinet. Up to 4 power units with an output current of 2A, 4A or 8A each can be installed in a fire detection control panel. Together with the stand-by batteries they provide an uninterrupted power supply of the control panel and of optional additional devices and special detectors.

Extensions at the front of the housing

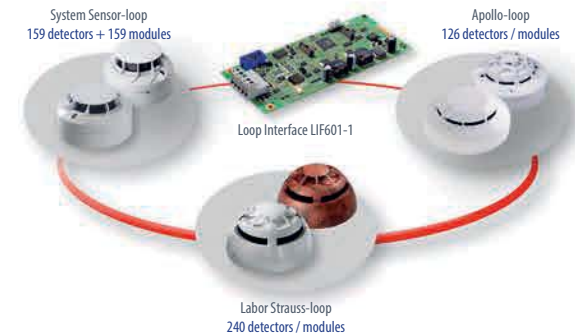
The use of additional devices on the BC600, such as LED tableaux, button fields, a fire brigade control unit or an event printer is especially easy. Up to 4 mounting spaces for expansions are available at the front of the housing, allowing direct integration of the additional devices into the control panel. In this way, space is saved and a tidy arrangement is ensured. At the same time the costs for an auxiliary case, mounting and cabling are reduced. The extensions are parameterised together with the control panel by means of PARISOFT.



3 loop protocols – one interface

Every loop interface can be operated with either the Labor Strauss-protocol, the System Sensor-protocol or the Apollo-protocol. In this way, even fire detection systems with different detector brands can be easily realised. The maximum loop current of

500mA allows connection of numerous components with increased current demand. The integrated loop analysis functions of the BC600 make commissioning and maintenance of the loop easier and facilitate troubleshooting.



System components

For expanding the Fire Detection Control Panels Series BC600, a huge selection of function modules is available, for example

- a loop interface for connection of intelligent loop components,

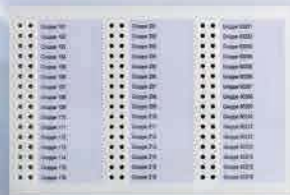
- a conventional detector interface with 8 conventional lines,
- a fire brigade interface for connection of standardised fire brigade control units or
- different serial interfaces for connection of event printers or transmission equipment.



Power units



Install printer



LED display field



Function modules

Fire Detection Control Panel BC600-8 for 8 function modules



Fire Detection Control Panel BC600-16 for 16 function modules

Fire Detection Control Panel BC600-CE8 installation in 19" rack

Extension Housing GEHZ600-16

FIRE DETECTION CONTROL PANEL NETWORK

The Fire Detection Control Panel BCnet600 is composed of individual control panels which are connected with each other via the redundant high-security network net600. The control panel network opens up manifold possibilities for the realisation of specific requests of fire detection, especially in spacious constructions, high-rise buildings or wide-stretched areas.

The individual control panels are normally installed on the spot – adapted to the object and distributed across the building. The decentralised arrangement reduces the total expenses due to a lower cabling volume for connecting the fire detectors. At the same time, the operational reliability of the entire system is significantly improved compared to conventionally designed fire detection control panels.

For the BCnet600, the same control panel components and the same software tools are used as for a stand-alone control panel Series BC600. This guarantees a minimum of training and maintenance costs and thus ensures the optimal use of resources during the usable life of the building.

Reliable networking of control panels

The network technology used warrants top failure safety and exceeds the redundancy requirements of the European Standard EN 54-2. The consistent ring-shaped cabling guarantees communication between the network members even in the event of a single fault on the network line.

Normally a shielded network cable is used as transmission medium in the net600. Longer distances can be bridged by means of long distance modem connections or optical fibre connections. In order to meet the requirements of ÖNORM F 3000, a second, redundant network can be created in addition.

Operation and parameterisation

The indication of events and the operation of the entire fire detection system can be carried out on any control panel with display and operating field. However, if necessary, it can also be limited to certain control panels. The system-specific parameter setup of the entire control panel network is created in a convenient and clear way, by means of the Windows Parameter Setup Software PARSOF. In order to transfer the data of the parameter setup or of a new device firmware, the PC only has to be connected to one control panel, which distributes the data to all other network members.



Remote Display And Operation Panel ABF600-1

As a remote tableau, the Remote Display And Operation Panel ABF600-1 can be integrated into the network net600. It offers the same ease of use and, using LED displays and a graphics display, indicates the same information as a sectional control panel that can be operated. The small dimensions of the flat housing allow easy mounting in virtually any place of the building.

Almost unlimited expandability

A „virtual“ Fire Detection Control Panel BCnet600 can be formed of up to 127 network members. For this purpose, different control panel types and designs can be combined in any way. By integrating additional members into the network, expanding the fire detection system in the future will be especially easy.

Altogether, the networked Fire Detection Control Panel BCnet600 allows connection of:

- 2,540 loops with Labor Strauss/700, System Sensor/200AP or Apollo/Discovery protocol,
- 20,000 detector zones in loop technology or addressable conventional technology,
- 9,700 actuations or alarming devices as well as
- 99 transmitting devices.

Remote access with mobile devices

By means of the remote access system REACT, the operation of the fire detection system or the query of the system events can be conveniently carried out from afar through a PC, a tablet or a smartphone. For the connection to the REACT server, the fire detection control panel only needs an internet connection. A data connection that is protected by state-of-the-art methods offers an effective protection against unauthorized access.

With the remote access, the work of the user, of a service, of the maintenance staff, or of the public safety personnel is definitely made easier. Since the travel or walk to the fire detection control panel is not necessary, early and location-independent reaction to system events is possible. As a result, valuable time is saved and at the same time the costs for an operation are also reduced.

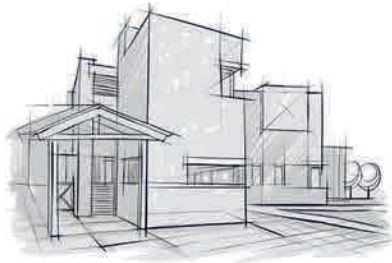
There is a choice of different license models for the remote access system REACT – including the basic version with a simple common indication of important conditions, the detailed view of all system events in the form of a list, and the depiction on a ground plan. With the product versions that allow operation, system parts can be disabled and enabled, activated or reset remotely.



COMPACT FIRE DETECTION CONTROL PANELS BC600-1

The compact Fire Detection Control Panels BC600-1 are intended for use in small fire detection systems with a single intelligent detector loop. The basic version of the BC600-1 already includes all functional units that are needed for the operation. At the same time, the control panels offer high flexibility and a large number of combination options that are not taken for granted even with larger fire detection control panels. The easy parameterisation by means of the PC software PARSOFT allows you to optimally adapt the control panels to your individual requirements in a time-saving way.

The integrated loop interface with selectable loop protocol offers ringbus technology with bi-directional digital data traffic. On the loop, up to 318 components (detectors, modules or signalling devices) can be addressed. A built-in power unit with an output current of 2.3A supplies the system components and charges the optional stand-by batteries. The integrated IP interface allows remote access to the control panels in order to indicate events and operate the control panels via an electronic data processing network. In addition, the control panels can be expanded with a fire brigade interface, a conventional detector interface or a serial interface. For this purpose, function modules and expansion modules Series BC600 are used.



Compact Fire Detection Control Panel BC600-1L with 1/4 VGA display



Compact Fire Detection Control Panel BC600-1D with LED button field



The compact control panel is available in three different versions:

- The Fire Detection Control Panel BC600-1L with 1/4 VGA graphics display and operating field offers a high degree of control comfort as well as a clear indication of all events and system conditions. The menu navigation and parameterisation of the control panel is virtually identical to that of the „large“ Fire Detection Control Panels Series BC600.
- The Fire Detection Control Panel BC600-1L/LTF with additional LED button field is ideally suited for small extinguishing systems.
- The Fire Detection Control Panel BC600-1D with LED button field clearly indicates the system conditions, and its operation is almost self-explanatory. The LED button field has 32 freely parameterisable keys for direct operation of the zones, actuations or further system parts. For the indication of the events, 2 light emitting diodes are assigned to each key. The optional preset of the keys and LEDs makes handling the control panel especially easy and keeps the training costs low.

Compact Fire Detection Control Panel BC600-1L/LTF with additional LED button field



EXTINGUISHING CONTROL PANEL SERIES LC600

An Extinguishing Control Panel Series LC600 is an extensively upgraded Fire Detection Control Panel Series BC600 with a huge number of additional functions for controlling extinguishing systems. It fulfils all mandatory requirements as well as all options of EN 12094-1. Depending on the application and the requirement, the unit can be implemented

- as pure Extinguishing Control Panel LC600-x – with a connection to an external fire detection control panel – or
- as combined Fire/Extinguishing Control Panel BC600-x/EXT. Both control panel versions have been certified by VdS according to EN 12094-1 and EN 54.

The following control panel types are available for building an extinguishing control according to EN 12094-1:

- The compact Fire Detection Control Panels BC600-1L/LTF and BC600-1D for an extinguishing system with one flooding zone.
- The Fire Detection Control Panels BC600-8 and BC600-CE8 for up to 32 flooding zones.
- The Fire Detection Control Panel BC600-16 for up to 64 flooding zones.
- The Fire Detection Control Panel BC600-E in the switch cabinet for up to 128 flooding zones.

Up to 127 fire detection control panels, combined fire/extinguishing control panels or pure extinguishing control panels can be connected to each other by means of the redundant high-security network net600 so that they form a decentralised fire detection and extinguishing control system. This control panel network opens up manifold possibilities for the realisation of specific requirements of fire detection and fire fighting, especially in spacious buildings, high-rise buildings or wide-stretched areas.



Beam Detector Accessories

BEAMLRK, 6500-MMK, 6500-SMK



- Suitable for Beam Smoke Detectors Series 6500
- Three-part reflector set increases the detection range to 100m
- Multi-mount kit with three-dimensional angle adaptation
- Surface-mount kit



Reflector BEAMLRK

The Reflector BEAMLRK increases the maximum range of the Beam Smoke Detector Series 6500 to 100m. The package contains 3 parts. These three parts and

the reflector included with the detector are put together, thus resulting in one large reflector.

Specifications

Material	Plastic
Dimensions W x H x D	200 x 230 x 10 (mm), one piece
Dimensions W x H	400 x 460 (mm), entire reflector area
Order number	244024
Order name	Reflector For 6500/75-100m BEAMLRK

Mounting Bracket 6500-MMK

The Mounting Bracket 6500-MMK is used for attaching the Beam Smoke Detector Series 6500 or the reflector under difficult conditions – e.g., if the ceiling is sloped. If the Beam Smoke Detector 6500 is mounted on the

Mounting Bracket, the Surface Mounting Box 6500-SMK is additionally required.

If the reflector is installed by means of the mounting bracket, the range of the detector is limited to 70m.

Specifications

Order number	244025
Order name	Mounting Bracket/Swivel 6500-MMK



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Surface Mounting Box 6500-SMK

The Surface Mounting Box 6500-SMK is used for surface mounting of the Beam Smoke Detector Series 6500 or for the mounting of the detector in combination with the Mounting Bracket 6500-MMK.

Specifications

Material	Plastic
Dimensions W x H x D	178 x 230 x 51 (mm)
Order number	244026
Order name	Surface Mounting Box 6500-SMK

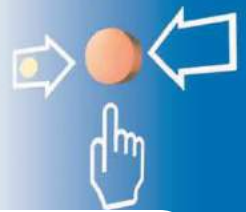


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Integrated Base Sounder

BSO-PP-x, BSO-DD-x



- **Loop technology with System Sensor protocol**
- **Can be activated with up to 32 different tone types**
- **3 sound levels – up to 86dB(A)**
- **Available in white or cream, with or without integrated dual-isolator**
- **Fits onto Detector Base B501AP, optional surface-mount base**



Description

The loop-powered base sounder consists of a robust white plastic housing. It is powered and actuated as a module through the loop with System Sensor protocol. Automatic fire detectors Series 200 or 200-Advanced can be fitted into the integrated base.

The sounder is available in white or cream and in two versions: With or without integrated dual-isolator.

Depending on the parameter setup of the control panel and the system condition, a compatible fire detection control panel can activate the sounder with up to 32 different tone types and selectable sound level.

The following tone types can be selected, for example:

- DIN tone according to DIN 33404,
- Slow Whoop tone according to NEN 2575,
- Continuous tone 800Hz,
- Intermittent tone 630Hz, and many more.

If several sounders are actuated in parallel, they are synchronised by the control panel to generate a uniform warning tone.

The address of the sounder is selected with two decade rotary switches located at the bottom of the device.

Base and accessories

The base sounder is designed for indoor ceiling mounting. In case of wall mounting, the integrated detector base can be covered with a plastic lid.

A standard detector base B501AP is required to accommodate the sounder. The predetermined breakouts in the skirt of the sounder allow surface mounted cabling of the base.

For insertion of thicker cables or for use of cable conduits, the supplement base BPW is available. The supplement base is delivered with a standard base B501AP.



0832-CPD-1821
0832-CPD-1825

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Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	max. 450µA (sounder off) max. 1.6mA (low sound level, DIN tone) max. 3.2mA (medium sound level, DIN tone) max. 4.3mA (high sound level, DIN tone)
Sound level (detector installed)	max. 86dB(A) at 1m distance (high, DIN tone)
Ambient temperature	-25°C to +70°C
Dimensions Ø × H	121 × 57 (mm, without detector, incl. base B501AP)
Weight	200g

Loop sounder without isolator, white

Approvals	VdS G212157 0832-CPD-1821
Order number	355262
Order name	Sounder/WB/200AP/white BSO-PP-N

Loop sounder with isolator, white

Approvals	VdS G212158 0832-CPD-1825
Order number	355263
Order name	Sounder/WB/200API/white BSO-PP-I

Loop sounder without isolator, cream

Approvals	VdS G212157 0832-CPD-1821
Order number	355254
Order name	Sounder/WB/200AP/ivory BSO-DD-N

Loop sounder with isolator, cream

Approvals	VdS G212158 0832-CPD-1825
Order number	355255
Order name	Sounder/WB/200API/ivory BSO-DD-I

Standard base

Order number	246039
Order name	Detector Base/500/200AP B501AP

Base IP44, white

Order number	359053
Order name	Base Sounder/Strobe/IP44/white BPW

Lid, white, 10 pieces

Order number	359045
Order name	Lid for Sounder/200/10pcs. IBS-LIDPW-10X

Lid, cream, 10 pieces

Order number	359046
Order name	Lid for Sounder/200/10pcs. IBS-LIDDW-10X



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Sounder/Strobe

BSS-PC-x



- **Loop technology with System Sensor protocol**
- **Can be activated with up to 32 different tone types**
- **3 sound levels – up to 86dB(A)**
- **Versions with or without integrated dual-isolator available**
- **Fits onto Detector Base B501AP, optional surface-mount base**



Description

The loop-powered sounder with strobe consists of a robust white plastic housing with a clear cap. It is powered and actuated as a module via the loop with System Sensor protocol. Automatic fire detectors Series 200 or 200-Advanced can be fitted into the integrated base.

The sounder/strobe is available with or without integrated dual-isolator.

Depending on the parameter setup of the control panel and the system condition, a compatible fire detection control panel can activate the sounder with up to 32 different tone types and selectable sound level.

The following tone types can be selected, for example:

- DIN tone according to DIN 33404,
- Slow Whoop tone according to NEN 2575,
- Continuous tone 800Hz,
- Intermittent tone 630Hz, and many more.

If several sounder-strobes are actuated in parallel, they are synchronised by the control panel to generate a uniform warning tone and light pulse. The strobe is always activated together with the sounder.

The address of the sounder/strobe is selected with two decadic rotary switches located at the bottom of the device.

Base and accessories

The sounder/strobe is designed for indoor ceiling mounting. In case of wall mounting, the integrated detector base can be covered with a plastic lid.

A standard detector base B501AP is required to accommodate the sounder/strobe. The pre-determined breakouts in the skirt of the sounder/strobe allow surface mounted cabling of the base.

For insertion of thicker cables or for use of cable conduits, the supplement base BPW is available. The supplement base is delivered with a standard base B501AP.



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0832-CPD-1822
0832-CPD-1826



Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	max. 450µA (sounder and strobe off) max. 5.5mA (low sound level, DIN tone) max. 7.1mA (medium sound level, DIN tone) max. 8.2mA (high sound level, DIN tone)
Sound level (detector installed)	max. 86dB(A) at 1m distance (high, DIN tone)
Flash frequency	1Hz
Ambient temperature	-25°C to +70°C
Dimensions Ø × H	121 × 57 (mm, without detector, incl. base B501AP)
Weight	200g
Colour housing / cap	white / clear
Light colour	red
Loop sounder/strobe without isolator	
Approvals (according to EN 54-3)	VdS G212157 0832-CPD-1822
Order number	355267
Order name	Sounder-Strobe/WB/200AP/white/clear/red/N BSS-PC-N
Loop sounder/strobe with isolator	
Approvals (according to EN 54-3)	VdS G212158 0832-CPD-1826
Order number	355268
Order name	Sounder-Strobe/WB/200AP/white/clear/red/N BSS-PC-I
Standard base	
Order number	246039
Order name	Detector Base/500/200AP B501AP
Base IP44, white	
Order number	359053
Order name	Base Sounder/Strobe/IP44/white BPW
Lid, white, 10 pieces	
Order number	359045
Order name	Lid for Sounder/200/10pcs. IBS-LIDPW-10X



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LST

Sounder/Strobe

BSS-PR-x, BSS-DR-x



- **Loop technology with System Sensor protocol**
- **Can be activated with up to 32 different tone types**
- **3 sound levels – up to 86dB(A)**
- **Available in white or cream, with or without integrated dual-isolator**
- **Fits onto Detector Base B501AP, optional surface-mount base**



Description

The loop-powered sounder with strobe consists of a robust white plastic housing with a red cap. It is powered and actuated as a module via the loop with System Sensor protocol. Automatic fire detectors Series 200 or 200-Advanced can be fitted into the integrated base.

The sounder/strobe is available in white or cream and in two versions: With or without integrated dual-isolator.

Depending on the parameter setup of the control panel and the system condition, a compatible fire detection control panel can activate the sounder with up to 32 different tone types and selectable sound level.

The following tone types can be selected, for example:

- DIN tone according to DIN 33404,
- Slow Whoop tone according to NEN 2575,
- Continuous tone 800Hz,
- Intermittent tone 630Hz, and many more.

If several sounder-strobes are actuated in parallel, they are synchronised by the control panel to generate a uniform warning tone and light pulse. The strobe is always activated together with the sounder.

The address of the sounder/strobe is selected with two decadic rotary switches located at the bottom of the device.

Base and accessories

The sounder/strobe is designed for indoor ceiling mounting. In case of wall mounting, the integrated detector base can be covered with a plastic lid.

A standard detector base B501AP is required to accommodate the sounder/strobe. The pre-determined breakouts in the skirt of the sounder/strobe allow surface mounted cabling of the base.

For insertion of thicker cables or for use of cable conduits, the supplement base BPW is available. The supplement base is delivered with a standard base B501AP.



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0832-CPD-1822
0832-CPD-1826



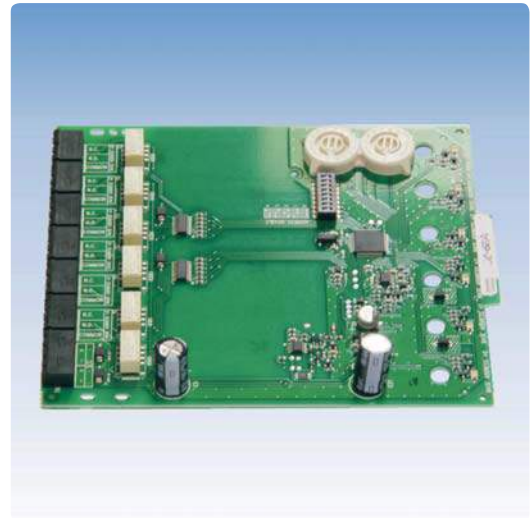
Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	max. 450µA (sounder and strobe off) max. 5.5mA (low sound level, DIN tone) max. 7.1mA (medium sound level, DIN tone) max. 8.2mA (high sound level, DIN tone)
Sound level (detector installed)	max. 86dB(A) at 1m distance (high, DIN tone)
Flash frequency	1Hz
Ambient temperature	-25°C to +70°C
Dimensions Ø × H	121 × 57 (mm, without detector, incl. base B501AP)
Weight	200g
Loop sounder/strobe without isolator, white	
Approvals (according to EN 54-3)	VdS G212157 0832-CPD-1822
Order number	355264
Order name	Sounder-Strobe/WB/200AP/white/red/N BSS-PR-N
Loop sounder/strobe with isolator, white	
Approvals (according to EN 54-3)	VdS G212158 0832-CPD-1826
Order number	355265
Order name	Sounder-Strobe/WB/200API/white/red/N BSS-PR-I
Loop sounder/strobe without isolator, cream	
Approvals (according to EN 54-3)	VdS G212157 0832-CPD-1822
Order number	355256
Order name	Sounder-Strobe/WB/200AP/ivory/red/N BSS-DR-N
Loop sounder/strobe with isolator, cream	
Approvals (according to EN 54-3)	VdS G212158 0832-CPD-1826
Order number	355257
Order name	Sounder-Strobe/WB/200API/ivory/red/N BSS-DR-I
Standard base	
Order number	246039
Order name	Detector Base/500/200AP B501AP
Base IP44, white	
Order number	359053
Order name	Base Sounder/Strobe/IP44/white BPW
Lid, white, 10 pieces	
Order number	359045
Order name	Lid for Sounder/200/10pcs. IBS-LIDPW-10X
Lid, cream, 10 pieces	
Order number	359046
Order name	Lid for Sounder/200/10pcs. IBS-LIDDW-10X

Control Module CR-6EA



- **Loop technology with System Sensor protocol**
- **6 independent, dry relay outputs**
- **Status LED for each output**
- **Setting of module address via decadic rotary switches**
- **Integrated dual-isolator**
- **Mounting in surface mounting box**



Description

The addressable Control Module CR-6EA includes 6 independent dry relay outputs and serves for the actuation of external devices – for example door magnets or smoke escapes. The module is designed for connection to a loop and is actuated by means of the bi-directional System Sensor protocol. The Control Module CR-6EA occupies 6 consecutive addresses on the loop. The base address can

be set in the range 1 to 159 by means of decadic rotary switches. The module has an integrated dual-isolator.

The optional Surface Mounting Box M200-SMB-MM, made of steel sheet, and the plastic Surface Mounting Box SMB6-VO accommodate one Monitor Module IM-10EA or Control Module CR-6EA.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 1.5mA (quiescent)
Contact rating	3A/30VDC
Ambient temperature	-10°C to +55°C
Dimensions L x W x H	172 x 147 x 25 (mm)
Weight	170g
Approval	0843-CPD-0123
Order number	249116
Order name	Control Module 6xRel.Out/200AP CR-6EA
Surface Mounting Box – Steel Sheet	
Dimensions L x W x H	285 x 225 x 62 (mm)
Weight	2kg
Order number	249117
Order name	Surface Mounting Box/Multi Modules M200-SMB-MM
Surface Mounting Box – Plastics	
Dimensions L x W x H	245 x 180 x 100 (mm)
Order number	249118
Order name	Surface Mounting Box SMB6-VO

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Wall Sounders

Series CWSO



- **32 different tone types selectable**
- **Alternative tone for multi-stage alarming**
- **High sound level, more than 100dB**
- **Wide operating voltage range**
- **Low power consumption**
- **Versions with protection class IP21 or IP65, available in red or white**



Description

The wall sounder Series CWSO has 32 different tones, all of which have been tested according to EN 54-3. They include, for example,

- Continuous tone 800Hz,
- Slow Whoop tone according to NEN 2575,
- DIN 33404 tone.

The tone is selected via DIL switches. If the sounder is actuated via 2 control panel outputs, it can be operated with an alternative tone. In this way, multi-stage alarming with 2 different tones can be implemented.

The sound level is adjusted in 2 steps, by means of a DIL switch. If multiple sounders are used, the tones of all signalling devices on a line are synchronised in order to generate a uniform warning tone.

The current consumption of the sounder depends on the tone and the operating voltage.

The wall sounder Series CWSO is available in the following versions:

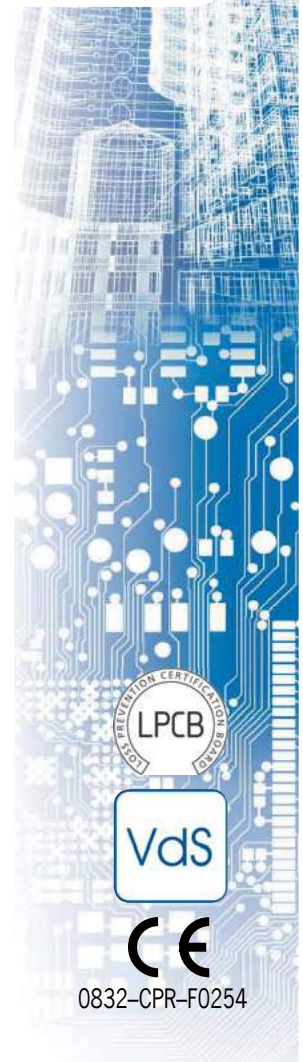
- CWSO-RR-S1 – red, standard base IP21
- CWSO-RR-W1 – red, deep base IP65
- CWSO-WW-S1 – white, standard base IP21
- CWSO-WW-W1 – white, deep base IP65

The base is included with the sounders. The cables can be entered from the side or from the back. On the two flattened sides of the deep base version, 3 openings can be broken out for cable glands. There is a screw for the optional theft protection.

Thanks to the robust design, the sounders are suitable for use under harsh environmental conditions.

Specifications

Operating voltage tested according to EN 54-3	9 – 29VDC 9 – 14VDC or 18 – 29VDC
Current consumption at 24V	typ. 25mA (DIN tone)
Sound level	typ. 102dB(A) / 1m distance (DIN tone)
Ambient temperature	-25°C to +70°C
Approvals	VdS G215015 LPCB 166h/05 (red housing) LPCB 166h/06 (white housing) 0832-CPR-F0254



0832-CPR-F0254

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Multitone sounder red, with base IP21

Protection class	IP21
Dimensions Ø × D	100 × 77 (mm)
Colour	flame red, RAL 3000
Weight	190g
Order number	355280
Order name	Sounder/WM/DC/red/107 CWSO-RR-S1

Multitone sounder red, with base IP65

Protection class	IP65
Dimensions Ø × D	100 × 102 (mm)
Colour	flame red, RAL 3000
Weight	200g
Order number	355281
Order name	Sounder/WM65/DC/red/107 CWSO-RR-W1

Multitone sounder white, with base IP21

Protection class	IP21
Dimensions Ø × D	100 × 77 (mm)
Colour	signal white, RAL 9003
Weight	190g
Order number	355282
Order name	Sounder/WM/DC/white/107 CWSO-WW-S1

Multitone sounder white, with base IP65

Protection class	IP65
Dimensions Ø × D	100 × 102 (mm)
Colour	signal white, RAL 9003
Weight	200g
Order number	355283
Order name	Sounder/WM65/DC/white/107 CWSO-WW-W1



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Sounder-Strobes

Series CWSS



- **32 different tone types selectable, alternative tone for multi-stage alarming**
- **High sound level, more than 100dB**
- **Red high-performance LEDs**
- **EN 54-23 Classes C+W – combined in a single device**
- **EN 54-23 Class O**
- **Versions with protection class IP21 or IP65, available in red or white**



Description

The combined Sounder-Strobe Series CWSS has 32 different tones, all of which have been tested according to EN 54-3. They include, for example,

- Continuous tone 800Hz,
- Slow Whoop tone according to NEN 2575,
- DIN 33404 tone.

The tone is selected via DIL switches. If the sounder is actuated via 2 control panel outputs, it can be operated with an alternative tone. In this way, multi-stage alarming with 2 different tones can be implemented. The sound level is adjusted in 2 steps, by means of a DIL switch.

Thanks to the use of LEDs, the strobe with clear cap and red light has a low power consumption. Depending on the type of the device, the strobe has been tested according to EN 54-23 **Class C+W** (ceiling+wall) or according to **Class O** („open class“).

The signalling devices according to Class C+W allow ceiling or wall mounting with the same device type. They are used if optical alarming according to EN 54-23 is required. Thanks to the optimised design of the cap, the strobe evenly emits light in all directions, and therefore the signalling devices can be mounted in any orientation.

The design of the signalling devices according to Class O is identical to that of the devices according to Class C+W. However, due to the lower light intensity, they are not suitable for two sense evacuation. They are used in applications where additional optical alarming is desired.

If multiple sounder-strobes are used, the tones as well as the flash period of all signalling devices on a line are synchronised in order to generate a uniform warning tone and light pulse.

The current consumption of the combi signalling device depends on the tone of the sounder and the operating voltage.

The Sounder-Strobe Series CWSS according to EN 54-23 Classes C+W is available in the following versions:

- CWSS-RR-S5 – red, standard base IP21
- CWSS-RR-W5 – red, deep base IP65
- CWSS-WR-S5 – white, standard base IP21
- CWSS-WR-W5 – white, deep base IP65

The Sounder-Strobe Series CWSS according to EN 54-23 Class O is available in the following versions:

- CWSS-RR-S3 – red, standard base IP21
- CWSS-RR-W3 – red, deep base IP65
- CWSS-WR-S3 – white, standard base IP21
- CWSS-WR-W3 – white, deep base IP65

The base is included with the sounder-strobes. The cables can be entered from the side or from the back. On the two flattened sides of the deep base version, 3 openings can be broken out for cable glands. There is a screw for the optional theft protection.

Thanks to the robust design, the sounder-strobes are suitable for use under harsh environmental conditions.



0832-CPR-F0262
0832-CPR-F0259

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Signalling devices, EN 54-23 Classes C+W

Specifications

Operating voltage	12 – 29VDC
tested according to EN 54-3	12 – 14VDC or 18 – 29VDC
tested according to EN 54-23	12 – 29VDC
Current consumption at 24V	typ. 60mA (DIN tone)
Sound level	typ. 102dB(A) / 1m distance (DIN tone)
Flash frequency	0.5Hz
EN 54-23 Category W-2.4-6.0 – wall mounting	
Mounting height	max. 2.4m
Room size	max. 6m × 6m
EN 54-23 Category C-3-8.9 – ceiling mounting	
Mounting height	max. 3m
Room size	max. Ø 8.9m, equals max. 6.3m × 6.3m
EN 54-23 Category C-6-8.2 – ceiling mounting	
Mounting height	max. 6m
Room size	max. Ø 8.2m, equals max. 5.8m × 5.8m
Ambient temperature	-25°C to +70°C
Colour cap / light colour	clear / red
Approvals	VdS G215013 LPCB 166p/03 (red housing) LPCB 166p/04 (white housing) 0832-CPR-F0262

Multitone sounder-strobe red, with base IP21

Protection class	IP21
Dimensions Ø × D	100 × 98 (mm)
Colour housing	flame red, RAL 3000
Weight	250g
Order number	355286
Order name	Sounder-Strobe/WM/DC/red/clear/red/107/WC CWSS-RR-S5

Multitone sounder-strobe red, with base IP65

Protection class	IP65
Dimensions Ø × D	100 × 122 (mm)
Colour housing	flame red, RAL 3000
Weight	260g
Order number	355287
Order name	Sounder-Strobe/WM65/DC/red/clear/red/107/WC CWSS-RR-W5

Multitone sounder-strobe white, with base IP21

Protection class	IP21
Dimensions Ø × D	100 × 98 (mm)
Colour housing	signal white, RAL 9003
Weight	250g
Order number	355294
Order name	Sounder-Strobe/WM/DC/white/clear/red/107/WC CWSS-WR-S5

Multitone sounder-strobe white, with base IP65

Protection class	IP65
Dimensions Ø × D	100 × 122 (mm)
Colour housing	signal white, RAL 9003
Weight	260g
Order number	355295
Order name	Sounder-Strobe/WM65/DC/white/clear/red/107/WC CWSS-WR-W5

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Signalling devices, EN 54-23 Class 0

Specifications

Operating voltage	12 – 29VDC
tested according to EN 54-3	12 – 14VDC or 18 – 29VDC
tested according to EN 54-23	24 – 29VDC
Current consumption at 24V	typ. 28mA (DIN tone)
Sound level	typ. 102dB(A) / 1m distance (DIN tone)
Flash frequency	0.5Hz
EN 54-23 Category O-Wall – wall mounting	
Mounting height	max. 2.4m
EN 54-23 Category O-Ceiling – ceiling mounting	
Mounting height	max. 3m
Ambient temperature	-25°C to +70°C
Colour cap / light colour	clear / red
Approvals	VdS G215014 LPCB 166p/07 (red housing) LPCB 166p/06 (white housing) 0832-CPR-F0259

Multitone sounder-strobe red, with base IP21

Protection class	IP21
Dimensions Ø × D	100 × 98 (mm)
Colour housing	flame red, RAL 3000
Weight	250g
Order number	355284
Order name	Sounder-Strobe/WM/DC/red/clear/red/107/O CWSS-RR-S3

Multitone sounder-strobe red, with base IP65

Protection class	IP65
Dimensions Ø × D	100 × 122 (mm)
Colour housing	flame red, RAL 3000
Weight	260g
Order number	355285
Order name	Sounder-Strobe/WM65/DC/red/clear/red/107/O CWSS-RR-W3

Multitone sounder-strobe white, with base IP21

Protection class	IP21
Dimensions Ø × D	100 × 98 (mm)
Colour housing	signal white, RAL 9003
Weight	250g
Order number	355292
Order name	Sounder-Strobe/WM/DC/white/clear/red/107/O CWSS-WR-S3

Multitone sounder-strobe white, with base IP65

Protection class	IP65
Dimensions Ø × D	100 × 122 (mm)
Colour housing	signal white, RAL 9003
Weight	260g
Order number	355293
Order name	Sounder-Strobe/WM65/DC/white/clear/red/107/O CWSS-WR-W3



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Sounder

CWS/SOUR, CWS/SOUW



- **Optional modules for integration in**
 - loop with Labor Strauss protocol
 - RF fire detection system FI7x0/RF
- **32 different tone types selectable, alternative tone for multi-stage alarming**
- **Adjustable sound level up to 100dB**
- **Low power consumption**
- **Protection class IP65**



Description

The wall sounder has 32 different tones, of which the following four tones have been tested according to EN 54-3:

- Alternating tone 800Hz/1000Hz,
- Continuous tone 970Hz,
- Slow Whoop tone NEN 2575,
- DIN 33404 tone.

The tone is selected via DIL switches. If the sounder is actuated via 2 control panel outputs, it can also be operated with an alternative tone. In this way, multi-stage alarming with 2 different tones can be implemented. The sound level is adjusted in 4 steps, by means of DIL switches.

If multiple signalling devices are used, the tones of all sounders on a line are synchronised in order to generate a uniform warning tone.

The sounder is available with a red or white plastic housing, and thanks to its robust, dust and water protected design with protection class IP65, it is suitable for use under harsh environmental conditions.

By installing the optional loop control module **FI750/M/SST**, the sounder can be actuated and powered via the loop with Labor Strauss protocol. The module is to be installed in the bottom part of the sounder housing and is to be connected to the sounder through plug contacts. Depending on the parameter setup and the system conditions, the loop sounder that is created in this way can be activated by the fire detection control panel with two tones, according to the set tone type combination.

A dual-isolator that is integrated into the module disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The address of the module is set by means of the hand-held Programming Unit FI750/PU within the range 1 to 240. Alternatively, the module can be addressed automatically if it is connected to a compatible fire detection control panel.

By installing the optional wireless control module **FI720/RF/M/SST**, the sounder can be actuated in a wireless fire detection system FI720/RF or FI700/RF. The RF module communicates with a fire detection control panel in loop technology (Labor Strauss protocol) via the Loop RF Interface FI7x0/RF/W2W. Alternatively, the Conventional RF Expander FI7x0/RF/CWE serves as gateway in a conventional fire detection system. The tone and the sound level are set on the signalling device by means of a DIL switch.

In the housing of the module, two batteries are accommodated which reliably power the module and the siren over a long time. The two-coloured LED indicator displays the system conditions of the module.

During the learning phase, the address is set in the range 2 to 240 by means of the configuration software WireEx.



0832-CPR-F1426
0832-CPR-F1428
0051-CPR-0617



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Specifications

Operating voltage	15 – 40VDC
Current consumption at 24V	max. 5mA (high sound level)
Sound level	100dB(A) / 1m distance (high sound level)
Ambient temperature	-10°C to +55°C
Protection class	IP65
Dimensions Ø x D	130 x 90 (mm)
Weight	270g
Approvals (only sounder)	LPCB 928w/07 0832-CPR-F1426
Approvals (sounder with control module FI750/M/SST)	LPCB 928ah/01 0832-CPR-F1428
Approvals (sounder with RF control module FI720/RF/M/SST)	LPCB pending 0051-CPR-0617

Sounder in red housing

Order number	355208
Order name	Sounder/WM65/DC/red/100 CWS/SOUR

Sounder in white housing

Order number	355210
Order name	Sounder/WM65/DC/white/100 CWS/SOUW

Loop control module

Operating voltage	supplied through loop voltage
Current consumption from loop	typ. 30µA (signalling device off) max. 8mA (signalling device on, high sound level)
Dimensions L x W x H	82 x 53 x 25 (mm)
Weight	26g
Order number	249307
Order name	Module FI750-Sounder-Strobe FI750/M/SST

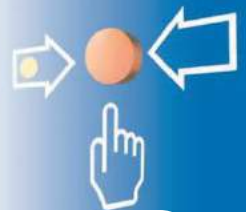
RF control module

Operating voltage	2 lithium batteries 3V, type CR123
Battery life	typ. 3 years
Range of radio transmission (free air)	max. 200m max. 3km with expanders
Frequency band	868MHz
Dimensions L x W x H	82 x 76 x 35 (mm)
Weight	55g (without batteries)
Order number	249310
Order name	Module/RF/720-Sounder-Strobe FI720/RF/M/SST



Sounder-Strobe

CWS/SOUR/STRC, CWS/SOUW/STRC



- **Optional modules for integration in**
 - loop with Labor Strauss protocol
 - RF fire detection system FI7x0/RF
- **32 different tone types selectable, alternative tone for multi-stage alarming**
- **Adjustable sound level up to 100dB**
- **White high-performance LEDs**
- **EN 54-23 Class W**
- **Protection class IP65**



Description

The wall sounder-strobe is used if in addition to the sounder tone, optical alarming according to EN 54-23 is required. The sounder has 32 different tones, of which the following four tones have been tested according to EN 54-3:

- Alternating tone 800Hz/1000Hz,
- Continuous tone 970Hz,
- Slow Whoop tone NEN 2575,
- DIN 33404 tone.

The tone is selected via DIL switches. If the sounder is actuated via 2 control panel outputs, it can also be operated with an alternative tone. In this way, multi-stage alarming with 2 different tones can be implemented. The sound level is adjusted in 4 steps, by means of DIL switches.

Thanks to the use of light emitting diodes, the strobe with clear cap and white light has a low power consumption. The strobe has been tested according to EN 54-23 **Class W** (wall). Due to the optimised design of the lens, very high illumination of the room is achieved.

If multiple sounder-strobes are used, the tones as well as the flash period of all signalling devices on a line are synchronised in order to generate a uniform warning tone and light pulse.

The signalling device is available with a red or white plastic housing, and thanks to its robust, dust and water protected design with protection class IP65, it is suitable for use under harsh environmental conditions.

By installing the optional loop control module **FI750/M/SST**, the sounder-strobe can be actuated and powered via the loop with Labor Strauss protocol. The module is to be installed in the bottom part of the signalling device housing and is to be connected to the signalling device

through plug contacts. Depending on the parameter setup and the system conditions, the loop sounder-strobe that is created in this way can be activated by the fire detection control panel with two tones, according to the set tone type combination.

A dual-isolator that is integrated into the module disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The address of the module is set by means of the hand-held Programming Unit FI750/PU within the range 1 to 240. Alternatively, the module can be addressed automatically if it is connected to a compatible fire detection control panel.

By installing the optional wireless control module **FI720/RF/M/SST**, the sounder-strobe can be actuated in a wireless fire detection system FI720/RF or FI700/RF. The RF module communicates with a fire detection control panel in loop technology (Labor Strauss protocol) via the Loop RF Interface FI7x0/RF/W2W. Alternatively, the Conventional RF Expander FI7x0/RF/CWE serves as gateway in a conventional fire detection system. The tone and the sound level are set on the signalling device by means of a DIL switch.

In the housing of the module, two batteries are accommodated which reliably power the module and the sounder-strobe over a long time. The two-coloured LED indicator displays the system conditions of the module.

During the learning phase, the address is set in the range 2 to 240 by means of the configuration software WireEx.



0832-CPR-F1427
0832-CPR-F1429
0051-CPR-0618



Specifications

Operating voltage	15 – 40VDC
Current consumption at 24V	max. 1.7mA (high sound level)
Sound level	100dB(A) / 1m distance (high sound level)
Flash frequency	0.5Hz
EN 54-23 Category W-2.5-7 – wall mounting	
Mounting height	max. 2.5m
Room size	max. 7m × 7m
Ambient temperature	-10°C to +55°C
Protection class	IP65
Dimensions Ø × D	130 × 92 (mm)
Lens colour / light colour	clear / white
Weight	290g
Approvals (only sounder-strobe)	LPCB 928y/01 0832-CPR-F1427
Approvals (sounder-strobe with control module FI750/M/SST)	LPCB 928z/01 0832-CPR-F1429
Approvals (sounder-strobe with RF control module FI720/RF/M/SST)	LPCB pending 0051-CPR-0617

Sounder-strobe in red housing

Order number	355209
Order name	Sounder-Str/WM65/DC/re/cl/wh/100/W CWS/SOUR/STRC

Sounder-strobe in white housing

Order number	355211
Order name	Sounder-Str/WM65/DC/wh/cl/wh/100/W CWS/SOUW/STRC

Loop control module

Operating voltage	supplied through loop voltage
Current consumption from loop	typ. 30µA (signalling device off) max. 8mA (signalling device on, high sound level)
Dimensions L × W × H	82 × 53 × 25 (mm)
Weight	26g
Order number	249307
Order name	Module FI750-Sounder-Strobe FI750/M/SST

RF control module

Operating voltage	2 lithium batteries 3V, type CR123
Battery life	typ. 3 years
Range of radio transmission (free air)	max. 200m max. 3km with expanders
Frequency band	868MHz
Dimensions L × W × H	82 × 76 × 35 (mm)
Weight	55g (without batteries)
Order number	249310
Order name	Module/RF/720-Sounder-Strobe FI720/RF/M/SST



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Strobes

Series CWST



- Red very high-performance LEDs
- EN 54-23 Classes C+W – combined in a single device
- Wide operating voltage range
- Low power consumption
- Versions with protection class IP21 or IP65
- Available with red or white housing



Description

Thanks to the use of LEDs, the Strobe Series CWST with clear cap and red light has a low power consumption. The strobe has been tested according to EN 54-23 **Class C+W** (ceiling and wall). Therefore the signalling devices allow ceiling mounting or wall mounting with the same device type. They are used if optical alarming according to EN 54-23 is required. Thanks to the optimised design of the cap, the strobe evenly emits light in all directions, and therefore the signalling devices can be mounted in any orientation.

If multiple strobes are used, the flash period of all signalling devices on a line is synchronised in order to generate a uniform light pulse. The current consumption of the signalling device depends on the operating voltage.

The Strobe Series CWST is available in the following versions:

- CWST-RR-S5 – red, standard base IP21
- CWST-RR-W5 – red, deep base IP65
- CWST-WR-S5 – white, standard base IP21
- CWST-WR-W5 – white, deep base IP65

The base is included with the strobes. The cables can be entered from the side or from the back. On the two flattened sides of the deep base version, 3 openings can be broken out for cable glands. There is a screw for the optional theft protection.

Thanks to the robust design, the strobes are suitable for use under harsh environmental conditions.

Specifications

Operating voltage	12 – 29VDC
Current consumption at 24V	typ. 25mA
Flash frequency	0.5Hz
EN 54-23 Category W-2.4-6.2 – wall mounting	
Mounting height	max. 2.4m
Room size	max. 6.2m × 6.2m
EN 54-23 Category C-3-9.4 – ceiling mounting	
Mounting height	max. 3m
Room size	max. Ø 9.4m, equals max. 6.6m × 6.6m
EN 54-23 Category C-6-8.2 – ceiling mounting	
Mounting height	max. 6m
Room size	max. Ø 8.2m, equals max. 5.8m × 5.8m



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0832-CPR-F0258

Ambient temperature	-25°C to +70°C
Colour cap / light colour	clear / red
Approvals	VdS G215016 LPCB 166n/03 (red housing) LPCB 166n/04 (white housing) 0832-CPR-F0258

Strobe red, with base IP21

Protection class	IP21
Dimensions Ø × D	100 × 72 (mm)
Colour housing	flame red, RAL 3000
Weight	160g
Order number	356080
Order name	Strobe/WM/DC/red/clear/red/WC CWST-RR-S5

Strobe red, with base IP65

Protection class	IP65
Dimensions Ø × D	100 × 97 (mm)
Colour housing	flame red, RAL 3000
Weight	170g
Order number	356081
Order name	Strobe/WM65/DC/red/clear/red/WC CWST-RR-W5

Strobe white, with base IP21

Protection class	IP21
Dimensions Ø × D	100 × 72 (mm)
Colour housing	signal white, RAL 9003
Weight	160g
Order number	356082
Order name	Strobe/WM/DC/white/clear/red/WC CWST-WR-S5

Strobe white, with base IP65

Protection class	IP65
Dimensions Ø × D	100 × 97 (mm)
Colour housing	signal white, RAL 9003
Weight	170g
Order number	356083
Order name	Strobe/WM65/DC/white/clear/red/WC CWST-WR-W5



Detector Base Sounder

DBS1224B4W-D



- **3 different tone types selectable**
- **Sound level adjustable**
- **Wide operating voltage range**
- **Low power consumption**
- **Installation below detector base or wall mounting**



Description

The Multitone Sounder DBS1224B4 offers three different tone types, that can be easily selected with a DIL switch, together with the sound level. The round plastic housing without cover is suitable for the installation underneath a detector base or for wall mounting. In this

case, a red or white front lid is available for covering the sounder.

Thanks to the integrated serial diode, the sounder can be connected directly to a line-monitored output with negative monitoring voltage.

Specifications

Operating voltage	12VDC (10 – 14VDC) 24VDC (19.5 – 28VDC)
Current consumption at 24V	typ. 8mA
Sound level	86 – 93dB(A) at 1m distance
Tone types	800Hz, Slow Whoop, DIN 33404 tone
Ambient temperature	-30°C to +70°C
Dimensions Ø x H	117 x 30 (mm)
Colour	white
Weight	150g
Approvals	VdS G211048 0832-CPD-0393
Order number	355114
Order name	Sounder/FB/DC/white DBS1224B4W-D
Lid for sounder, red	
Dimensions Ø x H	103 x 2 (mm)
Order number	359005
Order name	Lid for Detector Base Sounder/red DBSLDR
Lid for sounder, white	
Dimensions Ø x H	103 x 2 (mm)
Order number	359006
Order name	Lid for Detector Base Sounder/white DBSLDW



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0832-CPD-0393



Manual Call Point

dC31 for hazardous areas



- **Conventional technology**
- **Ignition protection by sealed enclosure and encapsulation**
- **Dust-proof and water-proof plastic housing**
- **Protection class IP66**
- **Operating instructions by means of standardised symbols**



Description

The Manual Call Point dC31 according to EN 54-11 / type B is used for application in hazardous areas. The ignition protection is achieved by means of the sealed housing and circuit. Thanks to the encapsulated design, a safety barrier is not required if the detector is cabled in compliance with the relevant regulations.

The connection to the fire detection control panel is carried out in conventional technology. The device can also be connected to a loop by using a conventional zone module.

The plastic housing of the manual call point is UV resistant and hardly inflammable. The door with an aperture

angle of more than 160° contains an easily replaceable glass plate. The latched push button of the activated call point can be reset via a locking lever in the interior of the housing.

The values of the alarm resistor and – when connected to the end of the detection line – of the end-of-line resistor must be specified when ordering, because the entire inner circuitry is sealed.

Special versions in other colours are available on request.

Specifications

Ignition protection	Protection by enclosure, encapsulation, increased safety
Ex classification	Ex II 2G Ex emb IIC T6 Ex II 2D Ex tD A21 IP6X T80°C
Operating voltage	max. 30V
Operating current	max. 100mA
Ambient temperature	-20°C to +60°C
Protection class	IP66
Dimensions W x H x D (without cable glands)	135 x 135 x 61 (mm)
Colour	flame red, RAL 3000
Weight	500g
Approvals	VdS G206113 0786-CPD-20309 BVS 09 ATEX E 016 X
Order number	245683
Order name	Manual Call Point/red/Conv/Ex dC31

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0786-CPD-20309

Protocol Printer DPU414



- **Thermal printer with 80 characters per line**
- **Printout of event data, analogue values of detectors, and system configuration**
- **Optional stand-by battery can be installed**
- **Installation into 19" rack possible**



Description

The Protocol Printer DPU414 is connected to a fire detection control panel via a serial interface module. Depending on the fire detection control panel, the logging includes the element text of the activated detector, the detector zone number, the detector number, date and time as well as any change in the operating condition of the control panel at the beginning and at the end of the event. The data is printed as text in clear, with 80 characters per line. Furthermore, in conjunction with Fire Detection Control Panels Series BC600, Series BC216 and Series BC016, the whole event memory and the parameterised system configuration can be printed.

If loop technology is used, the current analogue values of the detectors, the analogue values of the previous 6 months, as well as a maintenance recommendation for every single detector can be printed once or periodically as well.

The protocol printer can be mounted into a 19" cabinet by means of the 19" Kit DPU2-1E. The printer is supplied through the optional external AC-Adapter PA1024. In addition, an optional stand-by battery can be installed into the printer.

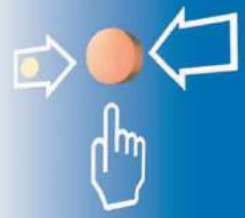
Specifications

Power supply	optional external AC-Adapter PA1024
Ambient temperature	0°C to +40°C
Relative humidity	30 – 80% (no condensation)
Dimensions W x H x D	160 x 170 x 66.5 (mm)
Weight	580g
Order number	227003
Order name	Protocol Printer/Thermal DPU414-50B



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Power unit for the supply of the protocol printer

Mains voltage	230VAC, 50Hz
Output voltage	6.5VDC
Output current	2A
Dimensions W x H x D	114 x 75 x 61 (mm)
Cable length	1.8m
Weight	approx. 1kg
Order number	227004
Order name	AC Adapter for DPU414 PA1024

Stand-by battery for installation into the protocol printer

Type	Ni-MH
Voltage	4.8VDC
Weight	approx. 120g
Order number	227005
Order name	Battery For DPU414 BT4005

Spare paper

Order number	227006
Order name	Spare Paper for DPU414/1-Roll MM112-402-N

Printer cable

Cable length	1.8m
Order number	227007
Order name	Printer Cable for DPU414/1.8m 9POL.D-SUB-VERL.

Kit 19"/3HU

Dimensions W x H x D	478 x 133 x 200 (mm)
Colour (front view)	grey white, RAL 9002
Weight	2kg
Order number	227009
Order name	Kit 19"/3HU for Printer DPU414 DPU2-1E



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Optical-Thermal Detector

DV22051TE



- **Loop technology with System Sensor protocol**
- **Combines the optical and thermal characteristics of fire**
- **5 sensitivity levels and thermal-only mode**
- **Available with or without integrated isolator**
- **Function testable with magnet**



Description

The Optical-Thermal Detector DV22051TE combines an optical sensing chamber based on the principle of scattered light with a thermocouple for the detection of heat. It was developed to detect the characteristics of fire in a wide range of applications, and to avoid deceptive alarms.

The new design of the sensing chamber ensures reliable smoke detection and at the same time makes it more difficult for dust and insects to reach the chamber. The rate-of-rise temperature sensor complies with EN 54-5 Class A1R and responds to a rapid rise in temperature as well as to a maximum temperature of 58°C. The analysis of both parameters and the integrated comparison of characteristics of fire allow safe fire detection.

The influence of contamination on the optical measurement system is compensated for by using intelligent evaluation algorithms. In this way, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The response sensitivity of the optical sensor can be individually adjusted in 5 steps between 2.2%/m and 5.8%/m according to the application. Three levels show

a fixed sensitivity, whereas two levels provide an automatic sensitivity adjustment. This enables the detector to ideally adapt to the environment. The detector can also operate in a thermal-only mode. In that case the application of the detector is limited to rooms which are not higher than 7.5m.

The proven loop technology with System Sensor protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector.

The detector address is set in the range 1 to 159 with two decadic rotary switches, thus allowing a change of the detector without additional tools.

The two LEDs with 360° visibility indicate the activated condition of the detector.

A detector function test can be conveniently conducted using a magnet. The detector can be attached to various bases and it can be protected against theft.

The Optical-Thermal Detector DV22051TE is available with or without integrated dual-isolator.



0786-CPD-20651
0786-CPR-20657

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Specifications

Operating voltage	Supply through loop voltage
Current consumption at 24V, normal communication	max. 270µA (DV22051TEI) max. 220µA (DV22051TE)
Alarm temperature	58°C (maximum principle)
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C
Relative humidity	10 – 93% (no condensation)
Dimensions Ø × H	102 × 49 (mm)
Colour	white
Weight	99g

Optical-thermal detector with isolator

Approvals	VdS G209014 0786-CPD-20651
Order number	241116
Order name	Optical-Thermal Detector/200APISM DV22051TEI

Optical-thermal detector without isolator

Approvals	VdS G209020 0786-CPR-20657
Order number	241117
Order name	Optical-Thermal Detector/200AP DV22051TE



Detector Base Series ECO1000

ECO1000BR1000



- Suitable for automatic detectors in conventional technology
- Screw terminals for secure connection of multiple wires
- Terminals for connection of remote indicator
- Test contact for examining the detector line without detectors
- Mechanical theft protection can be activated



Description

The Detector Base ECO1000BR1000 is designed for the easy connection of automatic detectors Series ECO1000 in addressable conventional technology. Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection.

The base provides the possibility to easily connect an external remote indicator, and has been designed for surface mounting in dry rooms. For special applications a range of accessories (for moist room, false ceiling or flush installation) is available.

During construction work (or when the detector has been removed) the detector line can be connected through via an auxiliary contact, which is integrated into the base. With that, the whole wiring of the detector line can be examined without risking contamination of the detectors. The contact is automatically opened by installing the detector.

A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø x H	102 x 21 (mm)
Colour	white
Weight	44g
Order number	246140
Order name	Detector Base/1000 ECO1000BR1000



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Detector Relay Base

ECO1000BREL24L



- Suitable for automatic detectors in conventional technology
- Relay output with dry change-over contact
- Screw terminals for secure connection of multiple wires
- Test contact for examining the detector line without detectors
- Mechanical theft protection can be activated



Description

The Detector Base ECO1000BREL24L with integrated relay output is designed for the easy connection of automatic detectors Series ECO1000. Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection.

The relay output is activated through the alarm activation of the inserted detector and remains active until the alarm is reset on the fire detection control panel. The application has to comply with the guidelines in the LST Connection of Detectors.

During construction work (or when the detector has been removed) the detector line can be connected through via an auxiliary contact, which is integrated into the base. With that, the whole wiring of the detector line can be examined without risking contamination of the detectors. The contact is automatically opened by installing the detector.

The base is designed for surface mounting in dry rooms. A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

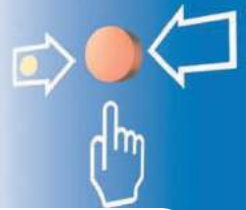
Operating voltage	Supply through the detector line voltage
Current consumption	1µA (quiescent), 30mA (active)
Contact rating	1A at 30VDC
Ambient temperature	-30°C to +70°C
Relative humidity	5 – 93% (no condensation)
Dimensions Ø × H	102 × 33 (mm)
Colour	white
Weight	70g
Order number	246141
Order name	Detector Base/1000/Relay/Latching ECO1000BREL24L



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Optical-Thermal Detector ECO1002



- **Addressable conventional technology**
- **Combination of optical and thermal characteristics of fire**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

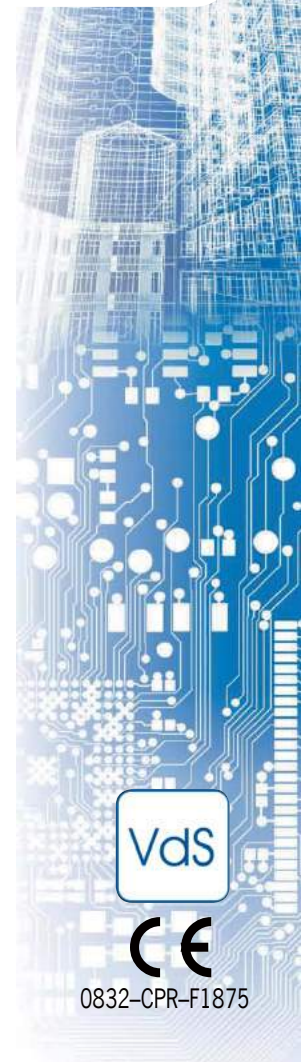
The Optical-Thermal Detector ECO1002 uses both the scattered light principle as well as a separate thermal detection unit according to EN 54-5 class A1R. It was developed to detect the characteristics of fire in a wide range of applications, and to avoid deceptive alarms. The modern design of both measurement systems and the analysis of the parameters by means of a special algorithm allow to reliably evaluate the characteristics of fire. This makes it an all-rounder that is used in virtually all fields of fire detection.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By means of the Address Module NG58-1, each detector can be addressed individually.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. The detector can be attached to various detector bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 80µA (quiescent)
Alarm temperature	58°C (maximum-heat component)
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø x H	102 x 40.5 (mm)
Colour	white
Weight	75g
Approvals	VdS G201067 0832-CPR-F1875
Order number	241046
Order name	Optical-Thermal Detector/1000 ECO1002



0832-CPR-F1875

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Optical Smoke Detector ECO1003



- **Addressable conventional technology**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Extremely flat design**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

The Optical Smoke Detector ECO1003 uses the scattered light principle and was developed for the detection of smoke particles in a wide range of fire detection applications. The modern design of the sensing chamber allows to reliably evaluate the characteristics of fire. Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

means of the Address Module NG58-1, each detector can be addressed individually.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 65µA (quiescent)
Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H	102 × 32.5 (mm)
Colour	white
Weight	75g
Approvals	VdS G201060 0832-CPR-F1876
Order number	241045
Order name	Optical Smoke Detector/1000 ECO1003



0832-CPR-F1876

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Thermal Max Detector

ECO1004T



- **Addressable conventional technology**
- **Alarm temperature 78°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

The Thermal Max Detector ECO1004T recognises a maximum temperature of 78°C as sign of fire. It complies with Class BS and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

means of the Address Module NG58-1, each detector can be addressed individually.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. The detector can be attached to various detector bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 75µA (quiescent)
Alarm temperature	typ. 78°C
Application temperature	max. +65°C
Ambient temperature	-30°C to +70°C (continuous operation)
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H	102 × 40.5 (mm)
Colour	white
Weight	70g
Approvals	VdS G204042 0832-CPR-F1877
Order number	242047
Order name	Thermal Max Detector/1000/BS ECO1004T



0832-CPR-F1877

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Thermal RoR Detector ECO1005



- **Addressable conventional technology**
- **Maximum temperature 58°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

The Thermal RoR Detector ECO1005 reacts to temperature changes within defined periods of time, up to a maximum temperature of 58°C. The intelligent evaluation of these data allows the early detection of spreading fires.

The detector complies with Class A1R and can be used up to a room height of 7.5m.

Addressable conventional technology is used for alarm

transmission to the fire detection control panel. By means of the Address Module NG58-1, each detector can be addressed individually.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. The detector can be attached to various detector bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 75µA (quiescent)
Alarm temperature	58°C (maximum-heat component)
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H	102 × 40.5 (mm)
Colour	white
Weight	70g
Approvals	VdS G201016 0832-CPR-F1878
Order number	242045
Order name	Thermal RoR Detector/1000/A1R ECO1005



0832-CPR-F1878

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Thermal Max Detector

ECO1005T



- **Addressable conventional technology**
- **Alarm temperature 58°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Function testable with Remote Test Unit ECO1000RTU**



Description

The Thermal Max Detector ECO1005T recognises a maximum temperature of 58°C as sign of fire. It complies with Class A2S and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

means of the Address Module NG58-1, each detector can be addressed individually.

A test activation of the detector can be carried out using the Remote Test Unit ECO1000RTU. The detector can be attached to various detector bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 75µA (quiescent)
Alarm temperature	typ. 58°C
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H	102 × 40.5 (mm)
Colour	white
Weight	70g
Approvals	VdS G201073 0832-CPR-F1879
Order number	242046
Order name	Thermal Max Detector/1000/A2S ECO1005T



0832-CPR-F1879

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Monitor Modules

EDS200AP-1, ÜMB200AP-1



- Loop technology with System Sensor protocol
- Monitoring of the position of valves or slides in extinguishing systems
- Monitoring of contact detectors
- Status LED
- Address setting by means of push button
- Compact design



Position Switch EDS200AP-1

The Position Switch EDS200AP-1 is an addressable module for connection to the loop with System Sensor protocol. The position switch serves for the monitoring of the position of mechanical devices, such as slides or valves in extinguishing systems. The module is fitted into a plastic case. Due to the use

of optoelectronic components the module is especially durable and fail-safe. The mounting terminals are designed according to DIN 912 M5.

The module address is entered using a push button in the range 1 to 159 and can be verified by means of an LED.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 300µA (quiescent)
Ambient temperature	-20°C to +60°C
Dimensions L x W x H	59 x 32 x 63 (mm)
Cable gland	M16 x 1.5
Colour	red/black
Protection class	IP65
Weight	90g
Position switch, normal condition when actuation element is pressed	
Order number	249121
Order name	Position Switch/200AP/Pressed Idle EDS200AP-1/GR
Position switch, alarm condition when actuation element is pressed	
Order number	249122
Order name	Position Switch/200AP/Pressed Alarm EDS200AP-1/GA



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Monitor Module ÜMB200AP-1

The Monitor Module ÜMB200AP-1 is an addressable module for connection to the loop with System Sensor protocol. The module serves for the monitoring of a contact detector, such as a pressure switch or a temperature monitor.

The module is fitted into a round, transparent plastic case and is connected to the detector and the loop by

means of 4 flying leads. The module address is entered using a push button in the range 1 to 159 and can be verified by means of an LED.

Since the module has no mounting mechanism of its own, it must be mounted in the housing of the contact detector.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 300µA (quiescent)
Ambient temperature	-20°C to +60°C
Dimensions Ø x H	45 x 16 (mm)
Colour	transparent
Weight	16g
Order number	249123
Order name	Monitor Module/Box/200AP ÜMB200AP-1



Ethernet Module

ENM2-1



- **Remote setup and maintenance of Fire Detection Control Panels Series BC216 and BC016**
- **Module setup via configuration software ConfigENM2**
- **Power supply through fire detection control panel possible**
- **Serial data cable included**



Description

The Ethernet Module ENM2-1 is connected to the Serial Interface Module SIM216-1 of a Fire Detection Control Panel Series BC216 or BC016 and converts the communication between the control panel and a PC into the IP protocol. That allows the parameterisation software PARSOFT to establish an easy remote access to the Fire Detection Control Panels Series BC216 and BC016 for the purpose of setup and maintenance. The system administrator of the customer LAN integrates the Ethernet Module ENM2-1 into the customer LAN

like any other device, e.g., PC or network printer.

The Ethernet Module ENM2-1 is set via the configuration software ConfigENM2, which can be found on the CD-ROM containing the parameterisation software PARSOFT.

The remote PARSOFT PC contacts the ethernet module via the set IP address. The operation of PARSOFT is the same for local access and for remote access.

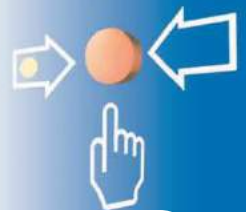
Specifications

Operating voltage	21 – 30VDC
Current consumption at 24V	45mA
Ambient temperature	+5°C to +50°C
Relative humidity	max. 95% (no condensation)
Dimensions W x H x D	90 x 64 x 25 (mm, without mounting straps)
Weight	150g
Order number	223025
Order name	Ethernet Module ENM2-1



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Safety Barrier ES58-2



- Allows to create intrinsically safe circuits
- Galvanic isolation of the detector line voltage
- Connection of intrinsically safe detectors
- Industrial plastic surface-mount case
- ATEX certified



Description

The Safety Barrier ES58-2 for the galvanic isolation of the detectors in the hazardous area serves for the design of an intrinsically safe electric circuit. The plastic surface-mount housing allows to mount the safety barrier near the hazardous area.

The built-in zener barrier limits the current and the voltage of the detector line, as well as the electric energy stored in the intrinsically safe circuit. The maximum

number of detectors depends on the country-specific regulations and can be found in the Connection of Detectors.

Due to the galvanic isolation, the earth leakage monitoring can remain activated in the fire detection control panel. Thus, the installation can also be monitored in the hazardous area.

Specifications

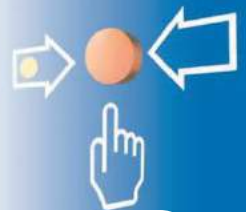
Ignition protection	intrinsically safe
Ex classification	Ex II (1) G D [EEx ia] IIC
Operating voltage	Supply through the detector line voltage
Quiescent current	approx. 5mA
Ambient temperature	-20°C to +60°C
Dimensions W x H x D	120 x 160 x 90 (mm)
Colour	light grey, similar to RAL 7035
Weight	515g
Approval	BAS98ATEX7343
Order number	228003
Order name	Safety Barrier ES58-2



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Devices for Hazardous Areas for the Apollo Loop



- Loop technology with Apollo protocol
- Optical smoke detector
- Thermal detector
- Safety barrier with galvanic isolation
- Protocol interface for communication with the fire detection control panel
- ATEX certified



IS Optical Smoke Detector 55000-640

The addressable intrinsically safe optical smoke detector 55000-640 (fig. A) uses the scattered light principle and was developed for the detection of smoke particles in hazardous areas. The smoke detector must always be connected via a safety barrier, which has been approved for this detector, and a protocol interface. Furthermore, the relevant country specific regulations always have to be observed.

The proven loop technology with Apollo protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector. In the control panel all types of fires are detected by continuously comparing fire patterns. Intelligent evaluation algorithms use the current condi-

tion of the sensing chamber to predict the likely time of the next maintenance. Thus the alarm threshold is automatically adjusted within the permissible range, depending on the contamination. With that, the constant response sensitivity of the detector is ensured for a long time.

The two LEDs with 360° visibility indicate the activated condition of the detector. The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools.

The detector is inserted into the IS Detector Base 45681-215 (not illustrated) and it can be protected against theft.

Specifications

Ignition protection	intrinsically safe
Ex classification	Ex II 1 G Ex ia IIC T5 Ga (T4 Ga)
Operating voltage	Supply through loop voltage
Current consumption	typ. 340µA (quiescent)
Ambient temperature	-20°C to +40°C (class T5, no icing) -20°C to +60°C (class T4, no icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø x H	100 x 42 (mm)
Colour	white
Weight	100g

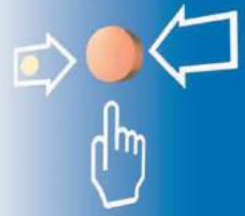


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0832-CPR-F1726

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Approvals	BAS02ATEX1289 LPCB 010q/22 0832-CPR-F1028
Order number	241024
Order name	Optical Smoke Detector/XP95/Ex 55000-640



IS Thermal Detector 55000-440

The addressable intrinsically safe thermal detector 55000-440 (fig. B) uses the heat principle and was developed for the fire detection in hazardous areas. The heat detector must always be connected via a safety barrier, which has been approved for this detector, and a protocol interface. Furthermore, the relevant country specific regulations always have to be observed.

The detector is assigned to Class A2S and can be used up to a room height of 6m. Depending on the parameter setup in the fire detection control panel, the detector can operate either as maximum heat detector with an alarm temperature of 55°C, or as rate-of-rise heat detector with a maximum temperature of 55°C. The proven loop technology with Apollo protocol esta-

lishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector. Fires are safely detected in the control panel by continuously analysing the measured values.

The two LEDs with 360° visibility indicate the activated condition of the detector. The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools.

The detector is inserted into the IS Detector Base 45681-215 (not illustrated) and it can be protected against theft.

Specifications

Ignition protection	intrinsically safe
Ex classification	Ex II 1 G Ex ia IIC T5 Ga (T4 Ga)
Operating voltage	Supply through loop voltage
Current consumption	typ. 300µA (quiescent)
Application temperature	max. +50°C
Ambient temperature	-20°C to +40°C (class T5, no icing) -20°C to +60°C (class T4, no icing)
Relative humidity	0 – 95% (no condensation)
Dimensions Ø × H	100 × 42 (mm)
Colour	white
Weight	100g
Approvals	BAS02ATEX1289 VdS G216018 LPCB 010p/23 0832-CPR-F1726
Order number	242036
Order name	Thermal Detector/XP95/Ex 55000-440

IS Detector Base 45681-215

The IS Detector Base 45681-215 is designed to accommodate intrinsically safe intelligent fire detectors Series XP95 for use in loops with Apollo protocol. Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection. The detector address is selected by means of a code

card in the detector base. Therefore the detector can be changed without additional tools. The base is designed for surface mounting in hazardous areas. A mechanical theft protection of the detector can optionally be activated at the detector base.



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Specifications

Ambient temperature	-20°C to +60°C (no condensation or icing)
Relative humidity	10 – 95% (no condensation)
Dimensions Ø × H	100 × 15 (mm)
Colour	white
Weight	50g
Order number	246027
Order name	Detector Base/XP95/Ex 45681-215

Safety Barrier 29600-098

The Safety Barrier 29600-098 (fig. C) is used for intrinsically safe fire detectors in hazardous areas. Due to the galvanic isolation, the earth leakage monitoring can remain activated and the safe galvanic isolation allow the connection of

fire detectors in hazardous areas. Due to the galvanic isolation, the earth leakage monitoring can remain activated in the fire detection control panel.

Specifications

Ignition protection	intrinsically safe
Ex classification	Ex II (1) G D [Ex ia] IIC
Operating voltage	Supply through loop voltage
Ambient temperature	-10°C to +60°C
Dimensions W × H × D	20 × 107.5 × 110 (mm)
Weight	100g
Approval	BAS00ATEX7087
Order number	228004
Order name	Safety Barrier/XP95 29600-098

Protocol Interface 55000-855

The Protocol Interface 55000-855 (fig. D) serves for the design of an intrinsically safe electric circuit in loop technology. It allows the bi-directional data traffic between fire detection control panel and detectors in

hazardous areas, via a loop with Apollo protocol. The interface is always used together with the Safety Barrier 29600-098.

Specifications

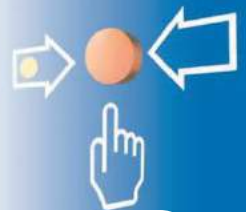
Operating voltage	Supply through loop voltage
Current consumption at 24V	1mA
Ambient temperature	-10°C to +60°C
Relative humidity	10 – 95% (no condensation)
Dimensions W × H × D	20 × 107.5 × 110 (mm)
Weight	100g
Order number	228005
Order name	Protocol Interface/XP95 55000-855



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Devices for Hazardous Areas for the System Sensor Loop



- Loop technology with System Sensor protocol
- Optical smoke detector
- Protocol interface for the translation of the loop communication
- Safety barrier with galvanic isolation
- ATEX certified



IS Optical Smoke Detector 22051EISE

The addressable Intrinsically Safe Optical Smoke Detector 22051EISE uses the scattered light principle and was developed for the detection of smoke particles in hazardous areas. The modern design of the sensing chamber allows to reliably evaluate the characteristics of fire.

The proven loop technology with System Sensor protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector. In the control panel all types of fires are detected by continuously comparing fire patterns.

The influence of contamination on the optical measurement system is compensated for by using intelligent

evaluation algorithms. In this way, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The two LEDs with 360° visibility indicate the activated condition of the detector. The detector address is selected with two decadic rotary switches in the range 01 to 99, thus allowing to change the detector without additional tools.

A detector function test can be conveniently conducted using a magnet or test gas. The detector can be protected against theft.

The Optical Smoke Detector 22051EISE is available in a white and a cream-coloured housing.

Specifications

Ignition protection	intrinsically safe
Ex classification	Ex II 1 G Ex ia IIC T5 / T4 Ga
Operating voltage	Supply through loop voltage
Current consumption at 24V	330µA
Ambient temperature	-10°C to +60°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H	102 × 35 (mm)
Weight	110g
Approvals	Baseefa08ATEX0278X VdS G209129 LPCB 199m/07 0832-CPD-0199



0832-CPD-0199

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Optical Smoke Detector, white

Order number	241102
Order name	Optical Smoke Detector/200/IS 22051EISE

Optical Smoke Detector, cream-coloured

Order number	241101
Order name	Optical Smoke Detector/200/IS/Ivory 22051EISE-IV

Safety Barrier Y2

The Safety Barrier Y2 is used for the build-up of intrinsically safe electric circuits. The built-in zener barrier and the safe galvanic isolation allow the connection of fire detectors in hazardous areas. Due to the galvanic isolation, the earth leakage monitoring can remain activated in the fire detection control panel.

Specifications

Ignition protection	intrinsically safe
Ex classification	Ex II (1) G [Ex ia Ga] IIC Ex II (1) D [Ex ia Da] IIIC Ex I (M1) [Ex ia Ma] I
Operating voltage	Supply through the loop voltage
Ambient temperature	-20°C to +60°C
Dimensions W × H × D	20 × 107.5 × 110 (mm)
Mounting	TS35 DIN rail
Colour	green
Weight	100g
Approval	BAS00ATEX7087
Order number	228006
Order name	Safety Barrier/200 Y2

Protocol Interface IST200

The Protocol Interface IST200 is applied on a loop with System Sensor protocol and serves for the translation of the bi-directional data traffic between fire detection control panel and fire detectors in hazardous areas. The interface is always used together with the Safety Barrier Y2. The Surface Mounting Box SMB500 is required for mounting the protocol interface.

Specifications

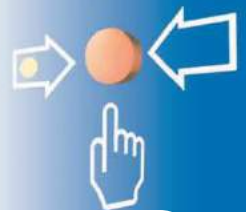
Ignition protection	intrinsically safe
Operating voltage	Supply through loop voltage
Current consumption at 24V	14mA
Ambient temperature	0°C to +60°C
Relative humidity	5 – 95% (no condensation)
Dimensions W × H × D (without attaching sheet)	70 × 70 × 32 (mm)
Weight	155g
Order number	228007
Order name	Protocol Interface/200 IST200



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Smoke Aspiration System FAAST



- **Highest sensitivity thanks to DualVision laser detector module**
- **8 relay outputs for 5 alarm thresholds and faults**
- **LED displays for air flow, light obscuration, fault and alarm**
- **Integrated web server and parameterisable sending of emails**
- **Parameterisation and system design by means of PC software PipelQ™**



Description

The Smoke Aspiration System FAAST has been certified according to EN 54-20 for Classes A, B and C. Thanks to the very high sensitivity and the excellent detection characteristics, the system is intended in particular for early fire detection in especially critical areas according to Class A. But the smoke aspiration system is also very well suited for large systems according to Class B or C.

Via the pipe network, air is sampled from the monitored area and directed to the highly sensitive laser detector module in DualVision technology. By means of modern evaluation algorithms, a fire can already be reliably detected at an early stage. At the same time, noise variables are filtered out by the patented particle filter and complex analysis techniques. In addition, the system can be very well adjusted to the environmental conditions by means of the optional Acclimate™ mode. As a result, the smoke aspiration system has a very high immunity to deceptive alarms.

For the alarm evaluation, there are 5 graded alarm thresholds – 2x fire, 2x action, and alert – which can be optically indicated on the device and which can be forwarded to the fire detection control panel via relay outputs. For the evaluation of faults, 3 additional relay outputs are available.

At the front of the device, two ten-segment LED displays indicate the air opacity and the relative air flow. Furthermore, there are light emitting diodes for the 5 alarm levels, different faults as well as system conditions.

By means of a modern ultrasonic technique, a precise and temperature-independent monitoring of the air flow is achieved. The failure of the fan, a blockage of the aspiration holes or a pipe rupture are detected, visually indicated on the device and output as fault message.

For the communication with the PC software PipelQ™, an Ethernet interface has been integrated into the device. The integrated web server allows the visualisation of the system condition and of all settings – even from a distance. Emails with events and system information can be sent automatically to up to 6 email addresses.



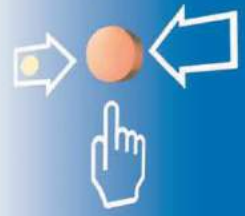
0786-CPD-21130



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The integrated event memory contains 18,000 entries and facilitates the evaluation of fire events and fault causes. For maintenance purposes, the integrated air filter can be easily removed and cleaned or replaced.

The smoke aspiration system is delivered with the wall bracket, the terminals, a user manual and a front foil for the labelling of the display and operating elements in English. Front foils in further languages are separately available.



Fields of application

The smoke aspiration system can be used for a huge number of applications. It is especially suitable for critical areas, where standard fire detectors reach their limits or can not be used. Examples of such areas are:

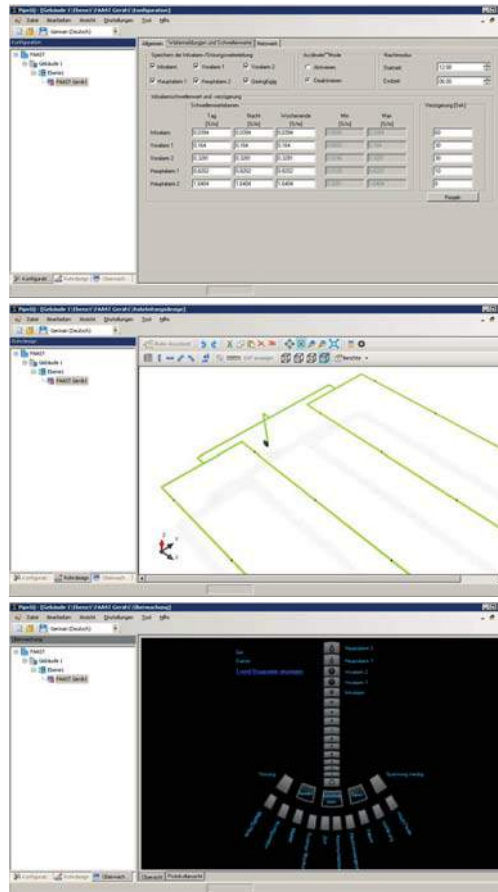
- Halls, airports, shopping centres, warehouses and other rooms in which access to the detectors for maintenance purposes is impeded,
- prisons and public institutions with increased risk of vandalism,
- refrigerated warehouses, industrial plants and areas with high air flow or dusty environment,
- historical buildings or modern architecture, which require „invisible“ fire detection,
- server rooms, telecommunication facilities, power plants and power distribution facilities, which require increased reliability.

PC software PipelQ™

By means of the graphical PC software PipelQ™ you can parameterise the smoke aspiration system and design the pipe network in an easy way.

The graphical PC software PipelQ™ offers valuable support for project planning, commissioning and maintenance of a smoke aspiration system. The software provides the following functions:

- **Parameterisation:** the parameters of the smoke aspiration system – for example, the sensitivity or the fan monitoring – are determined by means of a graphical user interface.
- **Pipe network design:** the layout of the piping is assembled by means of prefabricated elements and the position of the aspiration holes is determined. As final result, a detailed material list as well as a 3D graphic with the calculated values for sensitivity and transport time are output.
- **Monitoring:** the essential parameters of the smoke aspiration system, such as smoke density or flow rate, are shown in the form of a diagram. In addition, the event memory can be read out and indicated, and operations and test activations of the system can be carried out.



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Specifications

Supply voltage	18 – 30VDC
Current consumption at 24V	typ. 500mA
Contact rating of relay outputs	3A/30VDC, 0.5A/125VAC
Pipe length (unbranched)	max. 120m
Monitored area	max. 2000m ²
Response sensitivity	0.0015 – 20.5%/m
Connection for Ethernet interface	RJ45 (8P8C)
Ambient temperature	0°C to +38°C
Protection class	IP30
Dimensions W × H × D	330 × 337 × 127 (mm)
Approvals	VdS G212002 0786-CPD-21130
Weight	approx. 3.8kg
Order number	244380
Order name	Smoke Aspiration System 8100E
Front foils German / Italian / French / Danish	
Order number	244388
Order name	Front Foils FAAST It-Fr-De-Da F-ALC-A
Front foils Italian / French / Spanish / Portuguese	
Order number	244389
Order name	Front Foils FAAST It-Fr-Es-Pt F-ALC-B
Front foils German / Italian / Russian / Hungarian	
Order number	244390
Order name	Front Foils FAAST It-Ru-De-Hu F-ALC-C
Front foils Finnish / Swedish / Norwegian / Russian	
Order number	244391
Order name	Front Foils FAAST Fi-Sv-No-Ru F-ALC-D



Smoke Aspiration System FAAST-LT



- **Highest sensitivity thanks to laser smoke detectors**
- **Versions for one or two independent pipe networks**
- **Versions for direct loop connection with System Sensor protocol or for conventional technology**
- **LED displays for air flow, light obscuration, fault and alarm**
- **Parameterisation and system design by means of PC software PipeIQ™ LT**



Description

The Smoke Aspiration System FAAST-LT serves for the monitoring of one or two independent areas. Thanks to the high response sensitivity of the integrated laser smoke detectors, the system can be used for early fire detection in critical areas.

Via the pipe network, air is sampled from the monitored room and directed to a highly sensitive laser smoke detector, which analyses the air samples. The integrated evaluation logic evaluates the smoke concentration and already activates an alarm at an early stage of a fire. This alarm is visually indicated on the device and transmitted to the fire detection control panel.

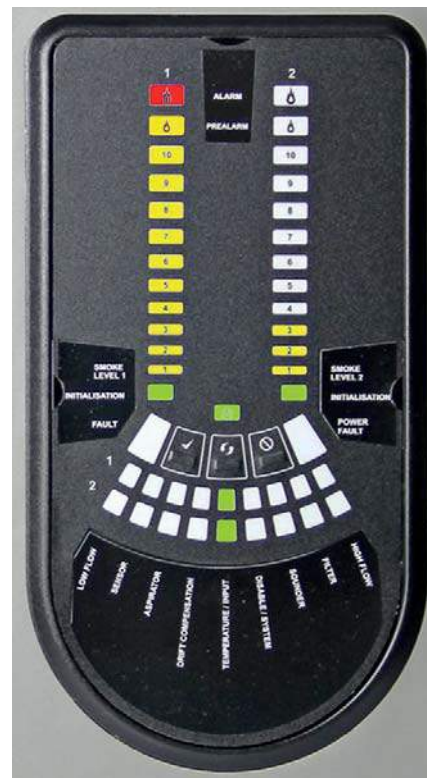
The Smoke Aspiration System FAAST-LT is available in several versions:

- for one pipe network – with one laser detector
- for one pipe network – with two laser detectors in interdependence of two detectors, for highest demands on the evaluation reliability
- for two pipe networks – with one laser detector each per channel.

Each of these three versions is available either for direct loop connection with System Sensor protocol or with relay outputs for connection in conventional technology.

The smoke aspiration system has been certified according to the EN 54-20 Classes A, B and C and is especially intended for Class C applications. However, the system is also very well suited for medium-sized systems according to Class B and small systems according to Class A.

At the front of the device, light emitting diodes indicate the conditions operation, alarm, pre-alarm and various faults. In addition, multi-segment LED displays indicate the relative air flow separately for each channel.



0832-CPR-F1050
0832-CPR-F1051
0832-CPR-F1052
0832-CPR-F1053
0832-CPR-F1054
0832-CPR-F1055



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The air flow of the fan, that is integrated into the smoke aspiration system, can be set to one of 10 steps. By means of a modern ultrasonic technique, a precise and temperature-independent monitoring of the air flow is achieved. The failure of the fan, a blockage of the aspiration holes or a pipe rupture are detected, visually indicated on the device and output as fault message. The version for 2 pipe networks contains 2 separate sensing chambers, each with its own fan and filter and separate monitoring.

The integrated event memory contains 2244 entries and facilitates the evaluation of fire events and fault causes.

For the communication with the PC software PipeIQ™ LT, a USB interface has been integrated into the device.

The smoke aspiration system occupies 1 detector address per installed laser detector as well as 1 module address per channel for monitoring.

For maintenance purposes, the installed air filters can be easily removed and cleaned or replaced. The laser detectors can be removed just as easily.

Depending on the type, the smoke aspiration system is delivered with 1 or 2 installed laser smoke detector(s), with the wall bracket, the terminals and the labelling strips for the LED display elements.

Fields of application

The smoke aspiration system can be used for a huge number of applications. It is especially suitable for critical areas, where standard fire detectors reach their limits or can not be used. Examples of such areas are:

- Halls, airports, shopping centres, warehouses and other rooms in which access to the detectors for maintenance purposes is impeded,
- prisons and public institutions with increased risk of vandalism,
- refrigerated warehouses, industrial plants and areas with high air flow or dusty environment,
- historical buildings or modern architecture, which require „invisible“ fire detection,
- server rooms, telecommunication facilities, power plants and power distribution facilities, which require increased reliability.

PC software PipeIQ™ LT

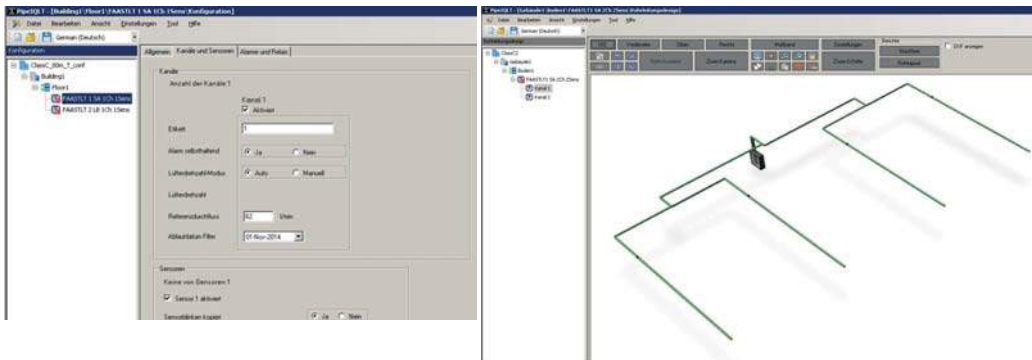
By means of the graphical PC software PipeIQ™ LT you can parameterise the smoke aspiration system and design the pipe network in an easy way.

The graphical PC software PipeIQ™ LT offers valuable support for project planning, commissioning and maintenance of a smoke aspiration system. The software provides the following functions:

- **Parameterisation:** the parameters of the smoke aspiration system – for example, the sensitivity or the fan monitoring – are determined by means of a graphical user interface.
- **Pipe network design:** the layout of the piping is assembled by means of prefabricated elements and the

position of the aspiration holes is determined. As final result, a detailed material list as well as a 3D graphic with the calculated values for sensitivity and transport time are output.

- **Monitoring:** the essential parameters of the smoke aspiration system, such as smoke density or flow rate, are shown in the form of a diagram. In addition, the event memory can be read out and indicated, and operations and test activations of the system can be carried out.



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Specifications

Supply voltage	18.5 – 31.5VDC
Current consumption at 24V	typ. 165mA (1 channel) typ. 265mA (2 channels)
Pipe length	max. 100m
Monitored area	max. 2000m ²
Response sensitivity	0.06 – 6.0%/m, 9 levels
Connection for USB interface	type B
Ambient temperature	-10°C to +55°C
Protection class	IP65
Dimensions W x H x D (incl. connections for piping)	356 x 403 x 135 (mm)
Weight	approx. 4.2kg

System Sensor loop, 1 channel, 1 laser detector

Approvals	VdS G215093 0832-CPR-F1053
Order number	244370
Order name	Smoke Aspiration System FL2011EI

System Sensor loop, 1 channel, 2 laser detectors

Approvals	VdS G215093 0832-CPR-F1054
Order number	244371
Order name	Smoke Aspiration System FL2012EI

System Sensor loop, 2 channels, 2 laser detectors

Approvals	VdS G215093 0832-CPR-F1055
Order number	244372
Order name	Smoke Aspiration System FL2022EI

Relay outputs, 1 channel, 1 laser detector

Approvals	VdS G214079 0832-CPR-F1050
Order number	244373
Order name	Smoke Aspiration System FL0111E

Relay outputs, 1 channel, 2 laser detectors

Approvals	VdS G214079 0832-CPR-F1051
Order number	244374
Order name	Smoke Aspiration System FL0112E

Relay outputs, 2 channels, 2 laser detectors

Approvals	VdS G214079 0832-CPR-1052
Order number	244375
Order name	Smoke Aspiration System FL0122E



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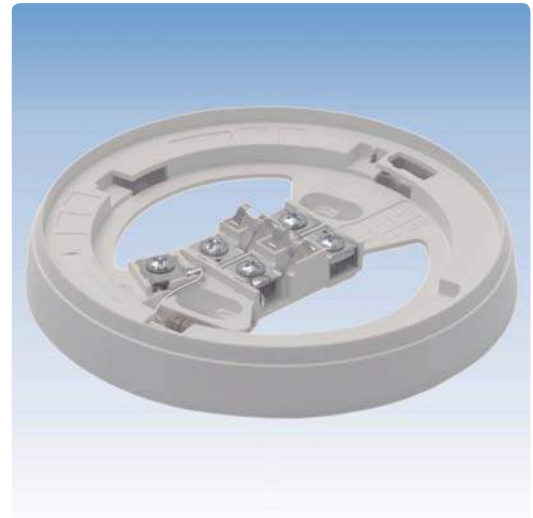


Detector Base Series FC600

FC600/BR



- Suitable for automatic detectors in conventional technology
- Designed for indoor surface mounting
- Terminals for connection of external remote indicator
- Anti-tamper locking feature



Description

The Detector Base FC600/BR is designed for the easy connection of automatic detectors of Series FC600 and FC650 in conventional technology. Thanks to its robust sharable connection terminals, the detectors can be durably wired in secure screw joints with virtually no effort.

The base provides an easy connection option for an external remote indicator and is designed for surface mounting in dry rooms. By breaking out a plastic bolt in the base, the detector that has been inserted can be secured against unauthorized removal.

Specifications

Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H	110 × 16 (mm)
Colour	white
Weight	32g
Order number	246070
Order name	Detector Base/600 FC600/BR



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Diode Base Series FC600

FC600/BRD



- Suitable for automatic detectors in conventional technology
- Integrated Schottky diode ensures access to detectors following a base with missing detector
- Designed for indoor surface mounting
- Terminals for connection of external remote indicator
- Anti-tamper locking feature



Description

The Detector Base FC600/BRD is designed for the easy connection of automatic detectors of Series FC600 and FC650 in conventional technology. Thanks to its robust sharable connection terminals, the detectors can be durably wired in secure screw joints with virtually no effort. The base provides an easy connection option for an external remote indicator and is designed for surface mounting in dry rooms.

The integrated Schottky diode guarantees access to detectors that follow a base where the detector is missing. In fire detection systems with both automatic detectors and manual call points connected to the same detector line – provided that this feature is allowed by

local regulations, the diode ensures alarm detection from detectors following the base.

By breaking out a plastic bolt in the base, the detector that has been inserted can be secured against unauthorized removal.

Note: A capacitor must be used as line termination. The Detector Base FC600/BRD may only be connected to Fire Detection Control Panels Series BC600 and Series BC06.

Specifications

Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H	110 × 16 (mm)
Colour	white
Weight	36g
Order number	246071
Order name	Detector Base/600/Diode FC600/BRD



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Relay Base Series FC600

FC600/BREL



- Suitable for automatic detectors in conventional technology
- Relay output with dry changeover contact
- Designed for indoor surface mounting
- Terminals for connection of external remote indicator
- Anti-tamper locking feature



Description

The Detector Base FC600/BREL is designed for the easy connection of automatic detectors of Series FC600 and FC650 in conventional technology. Thanks to its robust sharable connection terminals, the detectors can be durably wired in secure screw joints with virtually no effort. The base provides an easy connection option for an

external remote indicator and is designed for surface mounting in dry rooms. The integrated relay output with a dry changeover contact is active when the detector is in the alarm condition. By breaking out a plastic bolt in the base, the detector that has been inserted can be secured against unauthorized removal.

Specifications

Operating voltage	10 – 28VDC
Current consumption	max. 3µA (normal condition), 17mA (active)
Contact rating	1A at 30VDC
Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H	110 × 27 (mm)
Colour	white
Weight	58g
Order number	246072
Order name	Detector Base/600/Relay FC600/BREL



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Design Detectors DECORLINE

Series FC650, FI750, FI700, FI7x0/RF

- Discreet integration of modern fire detectors into historical or contemporary architecture
- Various styles such as wood grain, marble decoration or metal surface
- Available for conventional detectors FC650, loop detectors FI750 and FI700 as well as radio detectors FI720/RF and FI700/RF



The combination of the latest fire alarm technology and the architectural requirements of historical or contemporary buildings often interferes with the interior design or calls for the use of expensive special fire detectors. The design fire detectors **DECORLINE**, which are available in 16 different designs, offer an effective and optically attractive solution. So the detectors can be optimally matched to the material of which the ceiling is made – no matter whether it is a wooden ceiling, a metal construction or a historical vault.

The special version DECORLINE is available for automatic fire detectors – optical smoke detectors, optical-thermal detectors and heat detectors – of Series

- **FC650** in conventional technology,
- **FI750** with Labor Strauss loop protocol,
- **FI700** with Labor Strauss loop protocol,
- **FI720/RF** with radio communication and
- **FI700/RF** with radio communication.

The matching standard detector bases are delivered with the detectors in the same design.

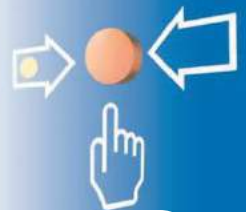
Black • Pink • Briar Root • Durmast Oak • Alder • Ash • Cherry • Carrara Marble • Green Alps • Green Marble • Obirho • Black Marble • Aluminium • Gold • Carbon Fibre • Gold Fibre



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Optical Smoke Detector FC650/O



- **Addressable conventional technology**
- **Configuration and status request with Programming Unit FI700/PU**
- **Optional connection of remote indicator**
- **Double dust trap and insect screen**
- **Function testable with magnet or test gas**



Description

The Optical Smoke Detector FC650/O is based on the scattered light principle and was developed for the detection of smoke particles in a wide range of fire detection applications. A symmetrical sensing chamber allows for optimal smoke sensitivity from all directions. Conventional technology is used for alarm transmission to the fire detection control panel. The optional Address Module NG58-1 allows individual detector identification.

An LED with 360° visibility indicates the activated condition of the detector. In addition, a remote indicator can also be connected.

By means of the Programming Unit FI700/PU, the function of the detector LED in normal condition can be determined and detector-specific parameters such as

the contamination of the optical sensing chamber or the production date can be read out.

An automatic drift compensation keeps the response sensitivity of the detector constant for a long period. The double dust trap effectively protects the detector FC650/O against false alarms resulting from dust contamination and ambient light. An insect screen prevents insects from interfering with the sensing chamber.

Several types of detector bases are available to facilitate quick and easy installation. All bases are equipped with a mechanical theft protection. A detector function test can be conveniently conducted using a magnet or test gas.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 90µA (quiescent)
Ambient temperature	-30°C to +70°C
Relative humidity	max. 95% (no condensation)
Dimensions Ø × H (without base)	106 × 46 (mm)
Colour	white
Weight	80g
Approvals	VdS G210145 LPCB 928e/02 0832-CPD-1455
Order number	241072
Order name	Optical Smoke Detector/650 FC650/O

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Thermal Detector FC650/T



- **Addressable conventional technology**
- **Operation as
57°C rate-of-rise detector or
78°C maximum heat detector**
- **Configuration and status request with
Programming Unit FI700/PU**
- **Optional connection of remote
indicator**
- **Function testable with magnet**



Description

The Thermal Detector FC650/T can be set to the Classes A1R and BS according to EN 54-5, using the Programming Unit FI700/PU. Prior to delivery, the detector has already been preset as

- Thermal Rate-of-rise Detector **FC650/TDIFF/57**
– it responds to a sudden rise in temperature as well as to a maximum temperature of 57°C – or
- Thermal Max Detector **FC650/TMAX/78** with an alarm temperature of 78°C.

Conventional technology is used for alarm transmission to the fire detection control panel. The optional Address Module NG58-1 allows individual detector identification.

An LED with 360° visibility indicates the activated condition of the detector. In addition, a remote indicator can also be connected.

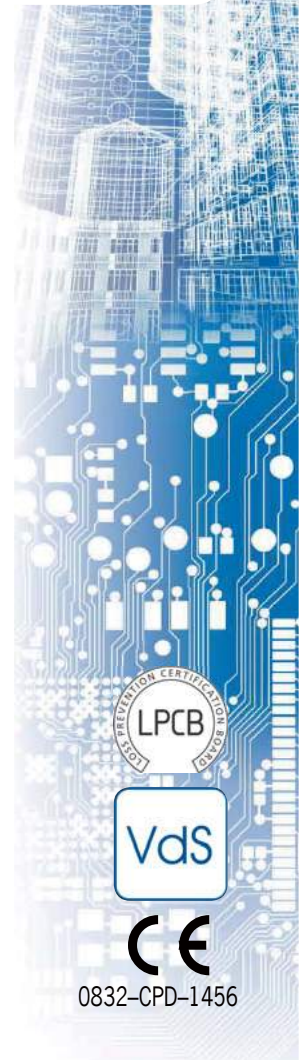
By means of the Programming Unit FI700/PU, the function of the detector LED in normal condition can be determined and detector-specific parameters such as the production date can be read out.

When set to Class A1R, the detector can be used up to a room height of 7.5m, with the Class BS setting it can be used up to a room height of 6m. Several types of detector bases are available to facilitate quick and easy installation. All bases are equipped with a mechanical theft protection.

A detector function test can be conveniently conducted using a magnet.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 90µA (quiescent)
Ambient temperature	-30°C to +70°C
Relative humidity	max. 95% (no condensation)
Dimensions Ø x H (without base)	106 x 46 (mm)
Colour	white
Weight	80g
Approvals	VdS G210151 LPCB 928d/02 0832-CPD-1456



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Thermal rate-of-rise detector 57°C

Alarm temperature	57°C (maximum-heat component)
Application temperature	max. +50°C
Order number	242072
Order name	Thermal RoR Detector/650/A1R FC650/TDIFF/57

Thermal max detector 78°C

Alarm temperature	78°C
Application temperature	max. +65°C
Order number	242073
Order name	Thermal Max Detector/650/BS FC650/TMAX/78



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Battery Smoke Detector

FH20/0/9, FH20/0/9/230



- **Designed for home use**
- **Sounder 85dB**
- **Up to 38 detectors networkable**
- **Test button for battery test**
- **Versions for battery and mains operation**



Description

The Battery Smoke Detector Series FH20 uses an optical sensing chamber that is based on the scattered light principle. If smoke particles enter the sensing chamber, the integrated signalling device will be activated, thereby warning early of the fire danger. The detector which can be easily mounted and handled and which has a pleasing design, is ideally suited for use in private living areas.

Up to 38 detectors of the same brand can be networked with each other. In the event of an alarm, the acoustic signalling devices of all detectors are activated together. In this way, the affected area is alarmed

selectively and a timely escape from the endangered area is made possible.

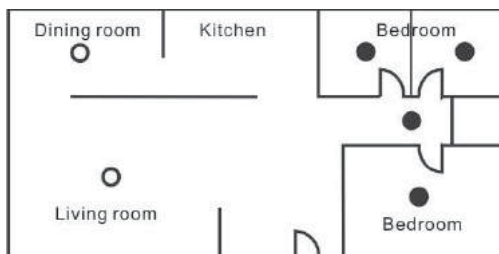
A red status-LED indicates the periodical function check and the alarm activation. On the mains voltage model a green LED additionally indicates the proper mains voltage supply.

By means of the test button, a battery test can be carried out at any time. The „Battery empty“ message will be acoustically indicated for 30 days. During that time the detector is fully functional.

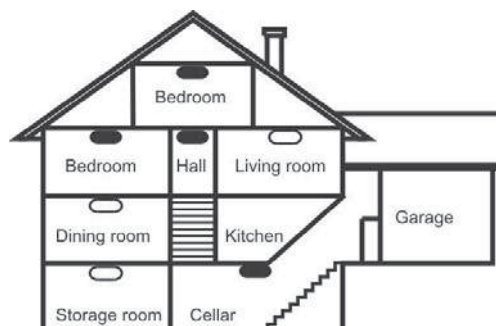
Arrangement of smoke detectors

In order to ensure complete protection in an apartment or single-family home, a Battery Smoke Detector Series FH20 must be installed in every living room or side room, in the hall, in the basement and in the attic. As

minimum configuration, one detector per floor – for monitoring the escape route – and additionally one smoke detector per bed room must be installed.



- Smoke detectors for minimal security
- Smoke detectors for more security



- Smoke detectors for minimal security
- Smoke detectors for more security

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Surface mounting box

The Surface Mounting Box FH20/AP-1 is needed if a Battery Smoke Detector Series FH20 is networked with further detectors or if it is mains powered, and for surface mounted cabling of the detector or – in case of flush cabling – if there is no flush-mount installation box that can accommodate the terminals.



Specifications

Operating voltage	9V block battery
Recommended batteries	GP #1604G Duracell #MN1604
Warning signal – Replace battery	min. 30 days
Sound level	min. 85dB(A) / 3m distance
Ambient temperature	0°C to +50°C
Relative humidity	10 – 85% (no condensation)
Dimensions Ø x H	100 x 35 (mm)
Colour	white
Weight	125g (incl. battery)
Approval	0786-CPD-21036

FH20/O/9 – battery operation

Battery life	typ. 3 years
Order number	241150
Order name	Optical Battery Smoke Detector/9V FH20/O/9

FH20/O/9/230 – mains and battery operation

Mains voltage	100 – 240VAC, 50 – 60Hz
Battery life (mains voltage constantly available)	typ. 5 years
Order number	241151
Order name	Optical Battery Smoke Detector/9/230V FH20/O/9/230

Surface mounting box

Dimensions Ø x H	92 x 26 (mm)
Weight	30g
Order number	246169
Order name	Surface Mounting Box FH20/AP-1

Programming Units

FI700/PU, FI750/PU



- **Programming of the address of detectors and modules Series FI700 and FI750**
- **Setting of the thermal class of a thermal detector Series FC650**
- **Read-out of device type, default value or production date**
- **Indication of contamination level of optical smoke detectors**
- **Long battery life**



Description

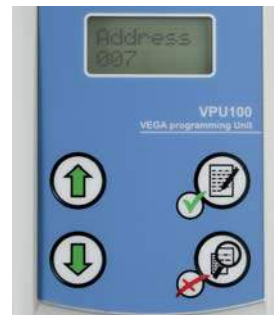
The Programming Unit FI700/PU serves for the programming of the device address of detectors and modules Series FI700. The Programming Unit FI750/PU is used for the programming of the device address of detectors Series FI750 and modules Series FI700. In addition, significant parameters of a detector or a module can be read-out and indicated at the LC display of both devices. These parameters include:

- currently saved device address
- device type
- default analogue value of the detector or module
- production date and test date
- level of contamination of optical smoke chamber

In connection with conventional detectors Series FC650, the thermal class of a Thermal Detector FC650/T or the function of the status LED can be set with both devices.

The programming units have an integrated detector base for the accommodation of automatic fire detectors of the respective detector series as well as a cable for the connection of manual call points and modules. For the read-out and programming, the detector is inserted into the integrated base, or the cable is connected to the module.

The device parameters can be displayed consecutively by means of the menu-driven operation. The desired address is selected with two arrow keys and saved into the device by pressing the confirmation button.



Specifications

Power supply	9V battery
Battery life	approx. 30 hours (unit switched on permanently)
Dimensions L x W x H	210 x 115 x 68 (mm)
Weight (incl. battery)	310g
Programming Unit Series FI700	
Order number	249272
Order name	Programming Unit FI700 FI700/PU
Programming Unit Series FI750	
Order number	249275
Order name	Programming Unit FI750 FI750/PU

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Conventional Zone Module FI700/M1CZ



- **Loop technology with Labor Strauss protocol**
- **One detection line for conventional detectors**
- **Dry relay contact output for resetting detectors**
- **Bi-colour status LED**
- **Up to 240 modules or detectors on a loop**
- **Integrated dual-isolator**



Description

The Conventional Zone Module FI700/M1CZ serves for the line-monitored connection of conventional detectors to a loop with Labor Strauss protocol. In this way manual call points and automatic detectors in conventional technology can be easily integrated into loop-based fire detection systems.

The bi-directional communication on the loop allows for an accurate and fast evaluation of the status of the module and the conventional zone.

For resetting special detectors, the module provides a dry relay output. The module can be either loop-supplied, or it can be connected to an external power supply. A capacitive termination of the conventional detection line ensures a low power consumption of the module and facilitates the detection of wire breakage. Alternatively, a resistive line termination can be set.

A bi-colour status LED indicates the alarm condition in red colour, the fault condition in yellow and – optionally – the polling of the module in green.

An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The module address can be set by means of the Programming Unit FI750/PU within the range 1 to 240. In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date. Alternatively, the module can be addressed automatically if it is connected to a compatible fire detection control panel.

The module is integrated in a plastic housing that is suitable for wall mounting.

Specifications

Operating voltage	15 – 40VDC
Current consumption at 24VDC	typ. 500µA (loop supply)
Current consumption module LED	typ. 6mA
Contact rating relay output	2A at 30VDC
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Protection class	IP54



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Dimensions L x W x H	135 x 95 x 57 (mm)
Colour	light grey, RAL 7035
Weight	210g
Approval	0051-CPR-1584
Order number	249255
Order name	Conventional Zone Module/700 FI700/M1CZ



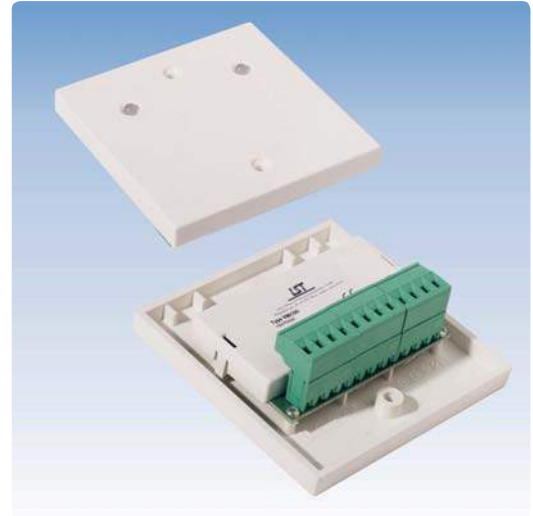
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Monitor Module FI700/M1IN



- **Loop technology with Labor Strauss protocol**
- **One input with line-monitoring for wire breakage and short circuit**
- **Bi-colour status LED**
- **Up to 240 modules or detectors on a loop**
- **Integrated dual-isolator**
- **Different module boxes for wall mounting available**



Description

The addressable Monitor Module FI700/M1IN serves for the line-monitored connection of contact detectors to a loop with Labor Strauss protocol. In this way manual call points, sprinkler system contacts or supervising contacts can be easily integrated into loop-based fire detection systems.

The bi-directional communication on the loop allows for an accurate and fast evaluation of the status of the module and the connected detector. An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The module is equipped with a bi-colour status LED that indicates the alarm condition in red colour, the fault condition in yellow and – optionally – the polling of the module in green.

The module address can be set by means of the Programming Unit FI750/PU within the range 1 to 240. In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date. Alternatively, the module can be addressed automatically if it is connected to a compatible fire detection control panel.

The Module Box FI700/MBD/KO has two knock-outs and is delivered with two grommets. The box allows for an easy wiring especially with surface mounted cabling.

The Module Box FI700/MB serves for the indoor surface-mounting of the module.

The Deep Module Box FI700/MBD is a deeper version of the FI700/MB and offers more space for an easy wiring of the module. The box is provided with an auxiliary terminal at the bottom.



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Specifications

Operating voltage	supply through loop voltage
Current consumption at 24VDC	typ. 120µA (normal communication)
Current consumption module LED	typ. 6mA
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Protection class (in combination with module box)	IP42
Dimensions L x W x H	87 x 87 x 32 (mm)
Colour	white
Weight	80g
Approvals	VdS G212054 2797-CPR-697215
Order number	249250
Order name	Monitor Module 1xIn/700 FI700/M1IN

Module Box FI700/MBD/KO

Dimensions L x W x H	87 x 87 x 41 (mm)
Weight	78g
Order number	249274
Order name	Module Box 41mm/700/Knock-out FI700/MBD/KO

Module Box FI700/MB

Dimensions L x W x H	87 x 87 x 30 (mm)
Weight	72g
Order number	249270
Order name	Module Box 30mm/700 FI700/MB

Module Box FI700/MBD

Dimensions L x W x H	87 x 87 x 52 (mm)
Weight	130g
Order number	249271
Order name	Module Box 52mm/700 FI700/MBD

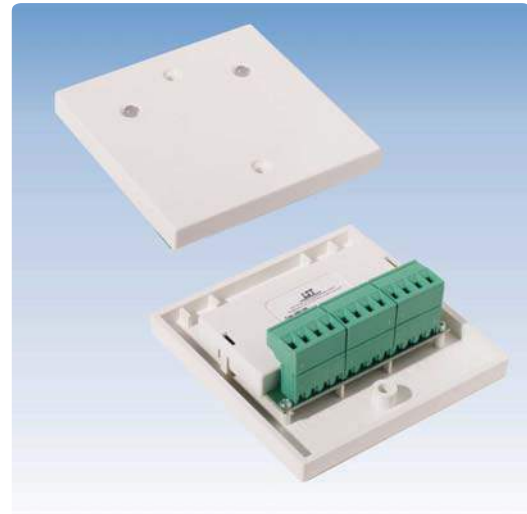


Input/Output Modules

FI700/M1IN1OUT, FI700/M1IN1REL



- **Loop technology with Labor Strauss protocol**
- **One input with line-monitoring and one output with line-monitoring or with dry relay contact**
- **Bi-colour status LEDs**
- **Up to 240 modules or detectors on a loop**
- **Integrated dual-isolator**
- **Different module boxes for wall mounting available**



Description

The addressable Input/Output Modules FI700/M1IN1OUT and FI700/M1IN1REL serve for the line-monitored connection of contact detectors to a loop and for the actuation of external devices via the loop with Labor Strauss protocol. In this way manifold devices such as manual call points, supervising contacts, fire doors, sirens or solenoid valves can be easily integrated into loop-based fire detection systems.

The bi-directional communication on the loop allows for a fast actuation of the output and an accurate evaluation of the status of the module and the connected detector. An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The Module Box FI700/MBD/KO has two knock-outs and is delivered with two grommets. The box allows for an easy wiring especially with surface mounted cabling.

The Module Box FI700/MB serves for the indoor surface-mounting of the module.

The Deep Module Box FI700/MBD is a deeper version of the FI700/MB and offers more space for an easy wiring of the module. The box is provided with an auxiliary terminal at the bottom.

The Input/Output Module FI700/M1IN1OUT provides one input and one output, each with line-monitoring for wire breakage and short circuit and a maximum load current of 2A. An external power supply is required for the supply of the connected load device.

The Input/Output Module FI700/M1IN1REL comprises one input with line-monitoring and one output with a dual dry change-over contact. The potential-free contacts can be used to activate ancillary devices without monitoring of the cabling.



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The modules are equipped with two bi-colour status LEDs that indicate the alarm condition of the input in red colour, the activated condition of the output in green and the fault condition in yellow.

The module address can be set by means of the Programming Unit FI750/PU within the range 1 to 240.

In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date.

Alternatively, the module can be addressed automatically if it is connected to a compatible fire detection control panel.



Specifications

Operating voltage	supply through loop voltage
Current consumption at 24VDC	typ. 120µA (normal communication)
Current consumption module LED	typ. 6mA
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Protection class (in combination with module box)	IP42
Dimensions L × W × H	87 × 87 × 32 (mm)
Colour	white
Weight	80g

Input/Output Module FI700/M1IN1OUT

External supply voltage	max. 30VDC
Output load current	max. 2A
Output supervision current	typ. -240µA
End-of-line resistor	27kΩ
Approvals	VdS G212053 2797-CPR-697215
Order number	249253
Order name	Module 1xIn 1xOut/700 FI700/M1IN1OUT

Input/Output FI700/M1IN1REL

Contact rating relay output	2A at 30VDC 0.5A at 125VAC
Approvals	VdS G212016 2797-CPR-697215
Order number	249254
Order name	Module 1xIn 1xRel/700 FI700/M1IN1REL

Module Box FI700/MBD/KO

Dimensions L × W × H	87 × 87 × 41 (mm)
Weight	78g
Order number	249274
Order name	Module Box 41mm/700/Knock-out FI700/MBD/KO

Module Box FI700/MB

Dimensions L × W × H	87 × 87 × 30 (mm)
Weight	80g
Order number	249270
Order name	Module Box 30mm/700 FI700/MB

Module Box FI700/MBD

Dimensions L × W × H	87 × 87 × 52 (mm)
Weight	130g
Order number	249271
Order name	Module Box 52mm/700 FI700/MBD



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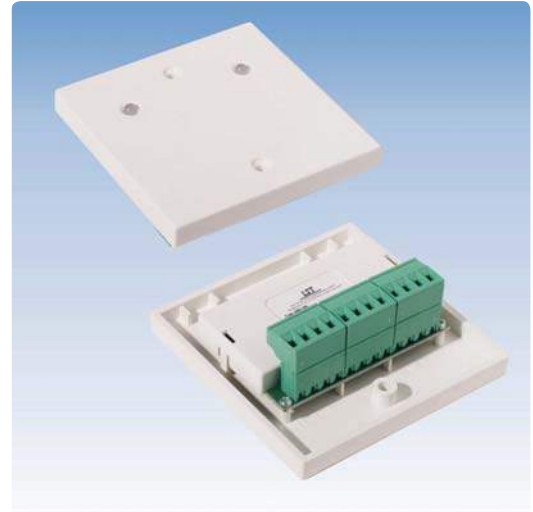


Control Modules

FI700/M1OUT, FI700/M1REL



- **Loop technology with Labor Strauss protocol**
- **One output with line-monitoring or with dry relay contact**
- **Bi-colour status LED**
- **Up to 240 modules or detectors on a loop**
- **Integrated dual-isolator**
- **Different module boxes for wall mounting available**



Description

The addressable Control Modules FI700/M1OUT and FI700/M1REL serve for the actuation of external devices via a loop with Labor Strauss protocol. In this way fire doors, sirens or solenoid valves can be easily integrated into loop-based fire detection systems.

The bi-directional communication on the loop allows for a fast actuation of the output and an accurate evaluation of the status of the module. An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured. The Control Module FI700/M1OUT provides one output

with line-monitoring for wire breakage and short circuit and a maximum load current of 2A. An external power supply is required for the supply of the connected load device.

The Control Module FI700/M1REL comprises a dual dry change-over contact. The potential-free contacts can be used to activate ancillary devices without monitoring of the cabling.

The Module Box FI700/MBD/KO has two knock-outs and is delivered with two grommets. The box allows for an easy wiring especially with surface mounted cabling.

The Module Box FI700/MB serves for the indoor surface-mounting of the module.

The Deep Module Box FI700/MBD is a deeper version of the FI700/MB and offers more space for an easy wiring of the module. The box is provided with an auxiliary terminal at the bottom.



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The modules are equipped with a bi-colour status LED that indicates the activated condition in green colour and the fault condition in yellow.

The module address can be set by means of the Programming Unit FI750/PU within the range 1 to 240.

In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date.

Alternatively, the module can be addressed automatically if it is connected to a compatible fire detection control panel.



Specifications

Operating voltage	supply through loop voltage
Current consumption at 24VDC	typ. 120µA (normal communication)
Current consumption module LED	typ. 6mA
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Protection class (in combination with module box)	IP42
Dimensions L × W × H	87 × 87 × 32 (mm)
Colour	white
Weight	80g

Control Module FI700/M1OUT

External supply voltage	max. 30VDC
Load current	max. 2A
Supervision current	typ. -240µA
End-of-line resistor	27kΩ
Approvals	VdS G212055 2797-CPR-697215
Order number	249251
Order name	Control Module 1xOut/700 FI700/M1OUT

Control Module FI700/M1REL

Contact rating	2A at 30VDC 0.5A at 125VAC
Approvals	VdS G212056 2797-CPR-697215
Order number	249252
Order name	Control Module 1xRel/700 FI700/M1REL

Module Box FI700/MBD/KO

Dimensions L × W × H	87 × 87 × 41 (mm)
Weight	78g
Order number	249274
Order name	Module Box 41mm/700/Knock-out FI700/MBD/KO

Module Box FI700/MB

Dimensions L × W × H	87 × 87 × 30 (mm)
Weight	80g
Order number	249270
Order name	Module Box 30mm/700 FI700/MB

Module Box FI700/MBD

Dimensions L × W × H	87 × 87 × 52 (mm)
Weight	130g
Order number	249271
Order name	Module Box 52mm/700 FI700/MBD



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Manual Call Point FI700/MCP



- **Loop technology with Labor Strauss protocol**
- **Single-action activation by pressing the plastic pane**
- **Bi-colour status LED**
- **Up to 240 detectors or modules on a loop**
- **Integrated dual-isolator**
- **Designed for surface mounting or flush mounting**



Description

The Manual Call Point FI700/MCP complies with the standard EN 54-11 / type A and is designed for use in loops with Labor Strauss protocol.

The call point is activated by pressing the non-breakable plastic pane. By means of a special key, the pane can be put back to the idle position, thereby resetting the call point.

The loop technology with Labor Strauss protocol establishes a permanent communication between the fire detection control panel and the call point. That ensures a periodical function testing of the device.

Up to 240 loop elements can be addressed on a Labor Strauss loop. In this way, extensive fire detection systems can be designed with a minimum expense in cabling.

The call point is equipped with a bi-colour status LED that indicates the alarm condition in red colour, the fault condition in yellow and – optionally – the polling of the device in green.

An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The address of the call point is set by means of the hand-held Programming Unit FI700/PU within the range 1 to 240. In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date.

Alternatively, the call point can be addressed automatically if it is connected to a compatible fire detection control panel.

The mounting box for surface mounting as well as the mounting frame for flush mounting on a 60mm flush-mount installation box are included in delivery.

Specifications

Operating voltage	supply through loop voltage
Current consumption at 24VDC	typ. 70µA (normal communication)
Current consumption status LED	typ. 6mA (alarm condition)
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Protection class	IP21



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Dimensions W x H x D	87 x 87 x 58 (mm, surface-mount) 87 x 87 x 23 (mm, flush-mount)
Colour	flame red, RAL 3000
Weight	165g (incl. surface-mount box)
Approvals	LPCB 928h/01 0832-CPD-1353
Order number	245080
Order name	Manual Call Point/Red/700/Flexi F1700/MCP



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Manual Call Point

FI700/MCP67



- **Loop technology with Labor Strauss protocol**
- **Single-action activation by pressing the plastic pane**
- **Bi-colour status LED**
- **Up to 240 detectors or modules on a loop**
- **Integrated dual-isolator**
- **Protection class IP67**



Description

The Manual Call Point FI700/MCP67 complies with the standard EN 54-11 / type A and is designed for use on loops with Labor Strauss protocol. Thanks to its dust and water protected design with protection class IP67, the manual call point is suitable for use under harsh environmental conditions. The call point is activated by pressing the non-breakable plastic pane. By means of a special key, the pane can be put back to the idle position, thereby resetting the call point.

The loop technology with Labor Strauss protocol establishes a permanent communication between the fire detection control panel and the call point. That ensures a periodical function testing of the device.

Up to 240 loop elements can be addressed on a Labor Strauss loop. In this way, extensive fire detection systems can be designed with a minimum expense in cabling.

The call point is equipped with a bi-colour status LED that indicates the alarm condition in red colour, the fault condition in yellow and – optionally – the polling of the device in green.

An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The address of the call point is set by means of the hand-held Programming Unit FI700/PU within the range 1 to 240. In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date.

Alternatively, the call point can be addressed automatically if it is connected to a compatible fire detection control panel.

Specifications

Operating voltage	supply through loop voltage
Current consumption at 24VDC	typ. 70µA (normal communication)
Current consumption status LED	typ. 6mA (alarm condition)
Ambient temperature	-20°C to +65°C (no icing)
Relative humidity	5 – 95% (no condensation)
Protection class	IP67
Dimensions W x H x D	119 x 128 x 62 (mm)
Colour	flame red, RAL 3000
Weight	250g
Order number	245081
Order name	Manual Call Point IP67/Red/700 FI700/MCP67

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Mini Monitor Module

FI700/MM1IN



- **Loop technology with Labor Strauss protocol**
- **One input with line-monitoring for wire breakage and short circuit**
- **Bi-colour status LED**
- **Up to 240 modules or detectors on a loop**
- **Integrated dual-isolator**
- **Mounting in a switch cabinet or on a mounting plate**



Description

The addressable Monitor Module FI700/MM1IN serves for the line-monitored connection of contact detectors to a loop with Labor Strauss protocol. In this way manual call points, sprinkler system contacts or supervising contacts can be easily integrated into loop-based fire detection systems.

The bi-directional communication on the loop allows for an accurate and fast evaluation of the status of the module and the connected detectors. An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The module is equipped with a bi-colour status LED that indicates the alarm condition in red colour, the

fault condition in yellow and – optionally – the polling of the module in green.

The module address can be set by means of the Programming Unit FI750/PU within the range 1 to 240.

In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date.

Alternatively, the module can be addressed automatically if it is connected to a compatible fire detection control panel.

The module is designed for mounting in a switch cabinet, on a mounting plate or inside a detector housing.

Specifications

Operating voltage	supply through loop voltage
Current consumption at 24VDC	typ. 120µA (normal communication)
Current consumption module LED	typ. 6mA
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Protection class	IP30
Dimensions L × W × H	75 × 52 × 30 (mm)
Colour	white
Weight	70g
Approvals	VdS G212118 2797-CPR-697215
Order number	249256
Order name	Monitor Module Mini 1xIn/700 FI700/MM1IN

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Mini Input/Output Modules

FI700/MM1IN1OUT, FI700/MM1IN1REL

- **Loop technology with Labor Strauss protocol**
- **One input with line-monitoring and one output with line-monitoring or with dry relay contact**
- **Bi-colour status LEDs**
- **Up to 240 modules or detectors on a loop**
- **Integrated dual-isolator**
- **Mounting in a switch cabinet or on a mounting plate**



Description

The addressable Input/Output Modules FI700/MM1IN1OUT and FI700/MM1IN1REL serve for the line-monitored connection of contact detectors to a loop and for the actuation of external devices via the loop with Labor Strauss protocol. In this way manifold devices such as manual call points, supervising contacts, fire doors, sirens or solenoid valves can be easily integrated into loop-based fire detection systems.

The bi-directional communication on the loop allows for a fast actuation of the output and an accurate evaluation of the status of the module and the connected detector. An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The Input/Output Module FI700/MM1IN1OUT provides one input and one output, each with line-monitoring for wire breakage and short circuit and a maximum load current of 2A. An external power supply is required for the supply of the connected load device.

The Input/Output Module FI700/MM1IN1REL compri-

ses one input with line-monitoring and one output with a dual dry change-over contact. The potential-free contacts can be used to activate ancillary devices without monitoring of the cabling.

The modules are equipped with two bi-colour status LEDs that indicate the alarm condition of the input in red colour, the activated condition of the output in green and the fault condition in yellow.

The module address can be set by means of the Programming Unit FI750/PU within the range 1 to 240.

In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date.

Alternatively, the module can be addressed automatically if it is connected to a compatible fire detection control panel.

The modules are designed for mounting in a switch cabinet, on a mounting plate or inside the housing of the ancillary device.



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Specifications

Operating voltage	supply through loop voltage
Current consumption at 24VDC	typ. 120µA (normal communication)
Current consumption module LED	typ. 6mA
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Protection class	IP30
Dimensions L x W x H	75 x 52 x 30 (mm)
Colour	white
Weight	70g

Input/Output Module FI700/MM1IN1OUT

External supply voltage	max. 30VDC
Output load current	max. 2A
Output supervision current	typ. -240µA
End-of-line resistor	27kΩ
Approvals	VdS G212121 2797-CPR-697215
Order number	249259
Order name	Module Mini 1xIn 1xOut/700 FI700/MM1IN1OUT

Input/Output Module FI700/MM1IN1REL

Contact rating relay output	2A at 30VDC 0.5A at 125VAC
Approvals	VdS G212122 2797-CPR-697215
Order number	249260
Order name	Module Mini 1xIn 1xRel/700 FI700/MM1IN1REL



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Mini Control Modules

FI700/MM1OUT, FI700/MM1REL



- **Loop technology with Labor Strauss protocol**
- **One output with line-monitoring or with dry relay contact**
- **Bi-colour status LED**
- **Up to 240 modules or detectors on a loop**
- **Integrated dual-isolator**
- **Mounting in a switch cabinet or on a mounting plate**



Description

The addressable Control Modules FI700/MM1OUT and FI700/MM1REL serve for the actuation of external devices via a loop with Labor Strauss protocol. In this way fire doors, sirens or solenoid valves can be easily integrated into loop-based fire detection systems.

The bi-directional communication on the loop allows for a fast actuation of the output and an accurate evaluation of the status of the module. An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The Control Module FI700/MM1OUT provides one output with line-monitoring for wire breakage and short circuit and a maximum load current of 2A. An external power supply is required for the supply of the connected load device.

The Control Module FI700/MM1REL comprises a dual dry change-over contact. The potential-free contacts can be used to activate ancillary devices without moni-

toring of the cabling.

The modules are equipped with a bi-colour status LED that indicates the activated condition of the output in green colour and the fault condition in yellow.

The module address can be set by means of the Programming Unit FI750/PU within the range 1 to 240. In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date.

Alternatively, the module can be addressed automatically if it is connected to a compatible fire detection control panel.

The modules are designed for mounting in a switch cabinet, on a mounting plate or inside the housing of the ancillary device.

Specifications

Operating voltage	supply through loop voltage
Current consumption at 24VDC	typ. 120µA (normal communication)
Current consumption module LED	typ. 6mA
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Protection class	IP30



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Dimensions L × W × H	75 × 52 × 30 (mm)
Colour	white
Weight	70g
Control Module FI700/MM1OUT	
External supply voltage	max. 30VDC
Load current	max. 2A
Supervision current	typ. -240µA
End-of-line resistor	27kΩ
Approvals	VdS G212119 2797-CPR-697215
Order number	249257
Order name	Control Module Mini 1xOut/700 FI700/MM1OUT
Control Module FI700/MM1REL	
Contact rating relay output	2A at 30VDC 0.5A at 125VAC
Approvals	VdS G212120 2797-CPR-697215
Order number	249258
Order name	Control Module Mini 1xRel/700 FI700/MM1REL



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Remote Indicator FI700/PA



- **Loop technology with Labor Strauss protocol**
- **Remote indication of the activation of one or multiple loop detectors**
- **Freely parameterisable activation requirement**
- **Bright, power-saving LED**
- **Integrated dual-isolator**



Description

The intelligent Remote Indicator FI700/PA serves for the remote display of the alarm activation of a fire detector. As a result, an activated detector can be located quickly if the status LED on the detector is not visible or if the indicator is placed at a remote site. That is necessary if, for example, the detector is installed in a false ceiling or false floor, or if the activation of a detector has to be indicated in another room.

Since the activation requirement can be freely parameterised, the remote indicator can indicate the activation of any detector. Alternatively, several detectors – for example those belonging to a detection area – can be combined for a common display.

An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed commu-

nication with the loop elements outside the faulty loop section is ensured.

By means of the Programming Unit FI750/PU, the loop address can be set within the range 1 to 240. Alternatively, the indicator can be addressed automatically if it is connected to a compatible fire detection control panel. Thanks to the use of a bright LED, the indicator is especially power-saving.

The remote indicator is designed for surface mounting on the wall or on a flush-mount installation box with a diameter of 55 or 60mm. The cable can be entered from behind or via the cable entry for surface mounting.

Specifications

Operating voltage	Supply through loop voltage
Current consumption at 24VDC	typ. 120µA (normal communication) typ. 5mA (active)
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 85% (no condensation)
Protection class	IP42
Dimensions L x W x H	80 x 80 x 27 (mm)
Colour	white
Weight	46g
Order number	251010
Order name	Remote Indicator/700 FI700/PA

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Monitor Module RF

FI700/RF/M1IN



- **Bi-directional digital communication with RF Interface FI7x0/RF/W2W**
- **Line-monitored input**
- **High range of radio transmission – up to 3km**
- **Long battery life – up to 5 years**
- **Batteries included**



Description

The Monitor Module FI700/RF/M1IN serves for the connection of line-monitored contact detectors to an RF fire detection system FI720/RF or FI700/RF. That allows easy integration of various devices, such as manual call points or supervising contacts, into a fire detection system with RF transmission.

The module communicates with the fire detection control panel via a loop RF Interface FI7x0/RF/W2W or a conventional RF Interface FI7x0/RF/CWE. The radio module is especially suitable for areas where cabling is impossible or uneconomical.

The input for the contact detector is monitored for wire breakage and short circuit. The two-coloured LED display indicates the alarm and fault condition of the module.

For the bi-directional data transfer, 7 data channels in the 868MHz frequency band are available. During the learning phase, the module address is set in the range 2 to 240 by means of a PC software.

Two batteries which serve as power supply, are inserted into the module. Normally, the module is powered by the main battery. However, if the main battery fails, the secondary battery powers the module. Both batteries are included.

The Monitor Module FI700/RF/M1IN is integrated in a white module box and is designed for indoor surface mounting.

Specifications

Power supply	lithium battery 3V, type CR123 as main battery lithium battery 3V, type CR2032 as secondary battery
Battery life	max. 5 years (main battery) approx. 2 months (secondary battery, after failure of main battery)
Range of radio transmission (free air)	max. 200m max. 3km with expanders
Frequency band	868MHz
Ambient temperature	-30°C to +55°C
Protection class (in combination with module box)	IP65
Dimensions L x W x H	135 x 95 x 57 (mm)
Colour	grey



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Weight (without batteries)	210g
Order number	249267
Order name	Monitor Module 1xIn/700/RF FI700/RF/M1IN

Lithium Battery CR123

Order number	249215
Order name	Lithium Battery 3V CR123

Lithium Battery CR2032

Order number	249218
Order name	Lithium Battery 3V CR2032

RF monitor module with outer housing

The Monitor Module FI700/RF/M1IN/BOX/MINI is available as version with a different housing design. The module is integrated into a compact white housing, which is additionally installed in a robust grey plastic outer housing. This housing with protection class IP65 is protected against ingress by dust or water and offers plenty of room for connecting the monitored contact.

In applications with less space or with higher aesthetic demands, the white module housing can be taken out and installed without the outer housing.



Specifications

Power supply	lithium battery 3V, type CR123 as main battery lithium battery 3V, type CR2032 as secondary battery
Battery life	max. 5 years (main battery) approx. 2 months (secondary battery, after failure of main battery)
Range of radio transmission (free air)	max. 200m max. 3km with expanders
Frequency band	868MHz
Ambient temperature	-30°C to +55°C
Protection class (outer housing)	IP65
Dimensions L x W x H	
inner housing white	109 x 37 x 29 (mm)
outer housing grey	135 x 95 x 57 (mm)
Weight (without batteries)	
inner housing white	45g
with outer housing grey	210g
Order number	249262
Order name	Monitor Module 1xIn/700/RF FI700/RF/M1IN/BOX/MINI



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Manual Radio Call Point FI700/RF/MCP



- **Bi-directional digital communication with RF Interface FI7x0/RF/W2W**
- **Single-action activation by pressing the plastic pane**
- **Easy resetting of plastic pane**
- **Operating instructions by means of standardised symbols**
- **High range of radio transmission – up to 3km**
- **Long battery life – up to 5 years**



Description

The Manual Radio Call Point FI700/RF/MCP is integrated in a red plastic housing and communicates with the fire detection control panel via a loop RF Interface FI7x0/RF/W2W or a conventional RF Interface FI7x0/RF/CWE. The radio call point is especially suitable for areas where cabling is impossible or uneconomical. The detector is activated by pressing the non-breakable plastic pane. By means of a special key, the pane can be put back to the idle position, thereby resetting the detector. The bi-colour LED indicates the activated condition of the detector as well as further operating conditions.

The RF system is configured by means of the PC software WireEx. During the configuration process, the address of the manual call point is set in the range 2 to 240.

Two batteries are accommodated in the detector. Normally, the detector is powered by the main battery. However, if the main battery fails, the secondary battery powers the detector.

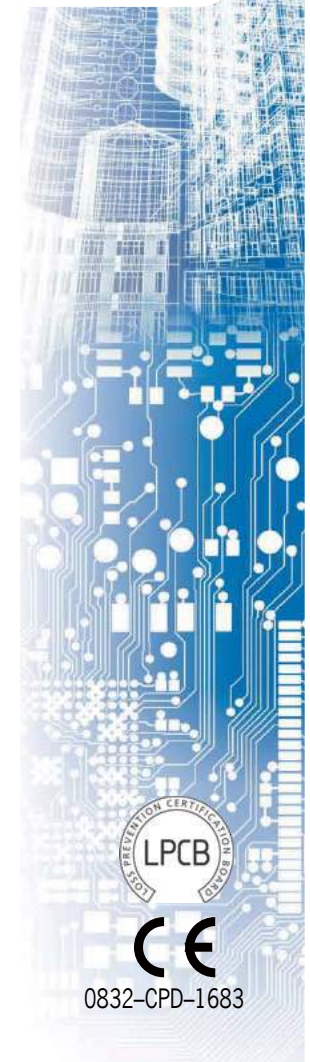
The mounting box, both batteries and the special key are included in the package contents.

Specifications

Operating voltage	lithium battery 3V, type CR123 (main battery) lithium battery 3V, type CR2032 (secondary battery)
Battery life	max. 5 years (main battery) approx. 2 months (secondary battery, after failure of main battery)
Range of radio transmission (free air)	max. 200m max. 3km with expanders
Frequency band	868MHz
Ambient temperature	-30°C to +55°C
Protection class	IP21
Dimensions W x H x D	87 x 87 x 58 (mm, with mounting box)
Colour	flame red, RAL 3000
Weight	200g (without batteries, with mounting box)
Approvals	LPCB 928p/01 0832-CPD-1683
Order number	245082
Order name	Manual Call Point/Red/700/RF/Flexi FI700/RF/MCP

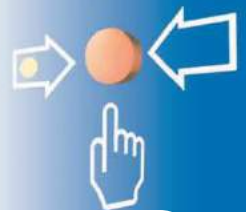


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RF Remote Indicator

FI700/RF/PA-2



- **Bi-directional digital communication with RF Interface FI7x0/RF/W2W**
- **Bright, power-saving LED**
- **High range of radio transmission – up to 3km**
- **Long battery life – up to 5 years**
- **Batteries included**



Description

The RF Remote Indicator FI700/RF/PA-2 serves for the remote display of the alarm activation of a detector in the RF fire detection system FI720/RF or FI700/RF. With that, an activated detector can be located quickly if the status LED on the detector is not visible or if the indicator is placed at a remote site. That is necessary if, for example, the detector is installed in a false ceiling or false floor, or if the activation of a detector is to be indicated in another room.

The RF remote indicator communicates with the fire detection control panel via a loop RF Interface FI7x0/RF/W2W or a conventional RF Interface FI7x0/RF/CWE. The RF remote indicator is especially suitable for areas where cabling is impossible or uneconomical.

For the bi-directional data transfer, 7 data channels in the 868MHz frequency band are available. During the learning phase, the address is set in the range 2 to 240 by means of a PC software.

Two batteries which serve as power supply, are inserted into the remote indicator. Normally, the indicator is powered by the main battery. However, if the main battery fails, the secondary battery powers the indicator. Both batteries are included.

The RF Remote Indicator FI700/RF/PA-2 is integrated into a white plastic case and is designed for indoor installation.

Specifications

Power supply	lithium battery 3V, type CR123 as main battery lithium battery 3V, type CR2032 as secondary battery
Battery life	max. 5 years (main battery) approx. 2 months (secondary battery, after failure of main battery)
Range of radio transmission (free air)	max. 200m max. 3km with expanders
Frequency band	868MHz
Ambient temperature	-10°C to +55°C
Dimensions L × W × H	80 × 80 × 32 (mm)
Weight (without batteries)	60g
Order number	251021
Order name	Remote Indicator/700/RF FI700/RF/PA-2

Conventional RF-Expander

FI720/RF/CWE



- **Connection via conventional detector line or independent operation**
- **Up to 32 detectors, modules or signalling devices can be controlled**
- **Configuration through PC software**
- **Range of RF transmission max. 200m, more than 3km with RF Expanders**
- **Two orthogonal antennas for safe radio communication**



Description

The RF interface FI720/RF/CWE serves as a gateway between radio devices Series FI720/RF or Series FI700/RF and a fire detection control panel. The integrated relay is intended for transmitting the alarm via a conventional detector line. This allows connection to control panels of any manufacturer. Alternatively, an independent RF fire detection system without a link to a fire detection control panel can also be realised.

The RF interface can communicate with up to 32 automatic detectors Series FI720/RF or manual call points, modules, sounders or strobes Series FI700/RF. The device addresses are set by means of the PC software

WireEx. In addition to the parameterisation of the RF system, this program also allows the analysis and graphical depiction of signal strength and transmission quality.

The range of up to 200m can be increased to more than 3km by using RF expanders. The RF interface can be linked with a maximum of 15 RF expanders. In this way, a hierarchical RF system with up to 6 levels can be created.

A fault of an RF component is indicated by a flashing light emitting diode.

Specifications

Operating voltage	9 - 29VDC
Current consumption at 24V	typ. 30mA (quiescent)
Range of radio transmission (in free air)	max. 200m (to detectors/modules) max. 600m (to RF expanders)
Frequency band	868MHz
Ambient temperature	-30°C to +50°C
Protection class	IP51
Dimensions W x H x D	120 x 160 x 50 (mm, without antennas)
Colour	white
Weight	350g
Approvals	LPCB 928r/01 0832-CPR-F2533
Order number	249311
Order name	RF-Expander Conventional/720 FI720/RF/CWE



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0832-CPR-F2533

Automatic RF Detectors

Series FI720/RF



- **Bi-directional digital communication with RF Interface FI720/RF/W2W**
- **Optical Smoke Detector
Optical-Thermal Detector
Thermal Detector**
- **High range of radio transmission – up to 3km**
- **Long battery life of 8 years**
- **Base and batteries included**



Description

The automatic RF detectors Series FI720/RF communicate with the fire detection control panel via a loop RF Interface FI720/RF/W2W or a conventional RF Interface FI720/RF/CWE. The radio detectors are especially suitable for areas where cabling is impossible or uneconomical.

The **Optical Radio Detector FI720/RF/O** uses an optical sensing chamber, based on the light scattering principle, and offers superior wide-spectrum detection of smoke aerosols generated by the majority of fires.

The **Optical-Thermal Radio Detector FI720/RF/OT** includes both an optical sensing chamber for smoke detection as well as a thermal rate-of-rise detection unit according to EN 54-5 Class A1R. The combination of both sensors ensures a high immunity to false alarms.

The **Thermal Radio Detector FI720/RF/T** can be parameterised as thermal detector according to EN 54-5 Class A1R or Class BS. Therefore, the detector reacts to a quick rise in temperature as well as to a maximum temperature of 58°C or to a maximum temperature of 78°C.

7 data channels in the frequency band 868MHz are available for the bi-directional data transmission. The

RF system is configured by means of the PC software WireEx. During the configuration process, the detector address is set in the range 2 to 240. In addition, the sensitivity of the optical sensor of each Optical Radio Detector and Optical-Thermal Radio Detector can be selected out of 3 levels.

For the power supply of the detectors, two batteries have to be installed into the detector housing, which reliably power the detector over a long time. The two multicoloured LED indicators with 360° visibility indicate the activated condition of the detector as well as further operating conditions.

The automatic RF detectors Series FI720/RF are integrated in a white housing and are designed for indoor mounting. The detectors are delivered with a mounting base and both batteries.

If desired, the detectors and bases are also available in special designs – with wood grain, marble design or metal surface.

The base is equipped with an anti-tamper locking feature. Furthermore, the removal of the detector is transmitted to the RF interface.



0832-CPR-F1937
0832-CPR-F1938
0832-CPR-F1936

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Specifications

Operating voltage	2 lithium batteries 3V, type CR123
Battery life	typ. 8 years
Range of radio transmission (free air)	max. 200m max. 3km with expanders
Frequency band	868MHz
Data channels	7
Ambient temperature	-10°C to +55°C
Dimensions Ø x H	110 x 65 (mm, incl. base)
Colour	white
Weight	190g (with batteries and base)

Optical Radio Detector

Sensitivity	
Level 1	3.1%/m
Level 2	3.8%/m
Level 3	4.4%/m
Approvals	LPCB 928k/02 0832-CPR-F1937
Order number	241192
Order name	Optical Detector/720/RF/Complete FI720/RF/0

Optical-Thermal Radio Detector

Sensitivity optical sensing chamber	
Level 1	3.1%/m
Level 2	3.8%/m
Level 3	4.4%/m
Alarm temperature	58°C (Class A1R)
Application temperature	max. +50°C
Approvals	LPCB 928m/02 0832-CPR-F1938
Order number	241193
Order name	Optical-Thermal Detector/720/RF/Compl. FI720/RF/OT

Thermal Radio Detector

Alarm temperature	58°C (Class A1R) 78°C (Class BS)
Application temperature	max. +50°C (Class A1R) max. +65°C (Class BS)
Approvals	LPCB 928j/02 0832-CPR-F1936
Order number	242087
Order name	Thermal Detector/720/RF/Complete FI720/RF/T

Lithium battery CR123

Order number	249215
Order name	Lithium Battery 3V CR123



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RF Interface

FI720/RF/W2W



- **Loop technology with Labor Strauss protocol**
- **Up to 32 detectors, modules or signalling devices can be controlled**
- **Configuration through menu or PC software**
- **Range of RF transmission max. 200m, more than 3km with RF Expanders**
- **Two orthogonal antennas for safe radio communication**



Description

The RF Interface FI720/RF/W2W serves as a gateway between radio devices Series FI720/RF or FI700/RF and a Fire Detection Control Panel Series BC600 or Series BC216. The communication with the control panel is established via the loop with Labor Strauss protocol.

The RF interface can communicate with up to 32 automatic detectors Series FI720/RF or manual call points, modules, sounders or strobes Series FI700/RF. The device addresses are set either through the operation menu of the RF interface or through the PC software WireEx. In addition to the parameterisation of the RF

system, this program also allows the analysis and graphical depiction of signal strength and transmission quality.

The range of up to 200m can be increased to more than 3km by using RF expanders. The RF interface can be linked with a maximum of 7 RF expanders.

Three LEDs indicate the interface conditions 'communication', 'fault' and 'battery replacement'.

The RF interface is equipped with a dual-isolator, which disconnects the loop in case of a short circuit.

Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	max. 25mA
Range of radio transmission (in free air)	max. 200m (to detectors/modules) max. 600m (to RF expanders)
Frequency band	868MHz
Ambient temperature	-30°C to +50°C
Protection class	IP51
Dimensions W x H x D	120 x 160 x 50 (mm, without antennas)
Colour	white
Weight	310g
Approvals	LPCB 928n/01 2831-CPR-F1939
Order number	249308
Order name	RF Interface/720 FI720/RF/W2W

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RF Expander FI720/RF/WE

The RF Expander FI720/RF/WE is used to increase the transmission range of a loop RF Interface FI720/RF/W2W or a conventional RF Interface FI720/RF/CWE to more than 3km. The expander serves as a gateway between the RF interface and the radio devices Series FI720/RF or Series FI700/RF.

The RF expander can communicate with up to 32 automatic detectors Series FI720/RF or manual call points, modules, sounders or strobes Series FI700/RF as well as 3 additional expanders. In this way, a hierarchical RF system with up to 6 levels can be created.

The configuration of the RF expander and the hierarchical RF system is carried out by means of the PC software WireEx. The expander itself does not occupy an address.



Specifications

Supply voltage	9 - 29VDC
Current consumption at 24V	typ. 50mA
Range of radio transmission (in free air)	max. 200m (to detectors/modules) max. 600m (to RF interface or RF expander)
Frequency band	868MHz
Ambient temperature	-30°C to +50°C
Protection class	IP51
Dimensions W x H x D	120 x 160 x 50 (mm, without antennas)
Colour	white
Weight	330g
Approvals	LPCB 928r/02 2831-CPR-F2012
Order number	249309
Order name	RF Expander/720 FI720/RF/WE

Wireless Signalling Devices

FI720/RF/WB/SOUW ../STRC



- **Bi-directional digital communication with RF Interface FI7x0/RF/W2W**
- **Integrated base for wireless detector**
- **32 tone types selectable**
- **Sound level adjustable**
- **High range of radio transmission – up to 3km**
- **Long battery life – up to 5 years**



Description

The wireless sounder **FI720/RF/WB/SOUW** and the wireless sounder-strobe **FI720/RF/WB/SOUW/STRC** communicate with the fire detection control panel via a loop RF Interface FI7x0/RF/W2W or a conventional RF Interface FI7x0/RF/CWE. The integrated detector base is designed to accommodate an automatic wireless fire detector Series FI720/RF. The wireless signalling devices are especially suitable for areas where cabling is impossible or uneconomical.

The tone type of the sounders can be selected with a DIL switch. 32 different tones are available, for example:

- Slow whoop tone according to NEN 2575,
- DIN tone according to DIN 33404,
- Continuous tone 970Hz,
- Alternating tone 800/1000Hz.

The sound level of the sounders can be set in 2 steps. The red strobe of the combi signalling device

FI720/RF/WB/SOUW/STRC is always activated together with the sounder. Thanks to the use of light emitting diodes, the strobe is especially power-saving.

In the course of the learning process, the device address is set in the range 2 to 240 by means of the PC software WireEx.

The wireless signalling devices are integrated in a plastic case and are suitable for indoor mounting. The devices can also be operated without a detector attached to them. For this case, a red plastic cover is available as accessory.

To power the signalling devices, two batteries are inserted into the case which reliably power the units over a long time. Both batteries are included in the delivery.

Specifications

Power supply	2 lithium batteries 3V, type CR123
Battery life	max. 5 years
Range of radio transmission (free air)	max. 200m max. 3km with expanders
Frequency band	868MHz
Ambient temperature	-10°C to +55°C
Protection class	IP21C



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Wireless sounder	
Sound level	91dB(A) at 1m distance
Dimensions Ø × D	116 × 51 (mm)
Weight	150g (without batteries)
Approvals	LPCB pending
Order number	355218
Order name	Sounder/WB/720RF/white FI720/RF/WB/SOUW

Wireless sounder-strobe	
Sound level	92dB(A) at 1m distance
Flash frequency	1Hz
Dimensions Ø × D	142 × 66 (mm)
Colour housing / cap / light colour	white / clear / red
Weight	260g (without batteries)
Approvals	LPCB pending
Order number	355219
Order name	Sounder-Strobe/WB/720RF/wh/cl/re/N FI720/RF/WB/SOUW/STRC

Accessories

Lid for wireless signalling device, white	
Dimensions Ø × H	106 × 10 (mm)
Order number	359074
Order name	Lid for Sounder FI7x0/WB FI720/750/COVER/W

Lid for wireless signalling device, red	
Dimensions Ø × H	106 × 10 (mm)
Order number	359075
Order name	Lid for Sounder FI7x0/WB FI720/750/COVER/R



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Detector Base Series FI750

FI750/B



- Suitable for automatic detectors Series FI750
- Large opening for cable entry
- Secure multi-wire screw terminals and high-quality contacts
- Optional theft protection for the detector
- Label plate can be broken off



Description

The Detector Base FI750/B is designed to accommodate intelligent fire detectors Series FI750 for use in loops with Labor Strauss protocol. Its large cable entry opening allows especially easy and time-saving installation.

Thanks to the robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection. An integrated contact spring ensures the continuous loop connection when the detector is removed.

The base provides the possibility to easily connect an external remote indicator and has been designed for surface mounting in dry rooms. A mechanical theft protection of the detector can be activated at the detector base.

An integrated plastic plate allows easy labelling of the detector without additional accessory. For this purpose, the label plate is broken off from the base and is attached to the base from below. Two snap-in noses allow for the attachment of optional Wago terminals, that can be used, for example, for the through-connection of the shield wire.

Specifications

Ambient temperature	-30°C to +70°C
Relative humidity	5 – 95% (no condensation)
Colour	white
Dimensions Ø × H	110 × 16 (mm)
Weight	50g
Order number	246086
Order name	Detector Base/FI750 FI750/B



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For decades, security systems by Labor Strauß have been associated with innovative technology and highest quality, serving safety. All steps of the value-adding process – including market analysis, development, manufacturing, distribution and customer service – are united in one company. The products of the Austrian family business ensure safety – in many parts of Europe and the world.

MEP – the safety specialists. Apart from the development and manufacturing of innovative electromechanical components – such as manual call points, fire brigade control units and sabotage-monitored key safes – the company offers complete solutions around the topic „Fire Protection“.



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LABOR STRAUSS SICHERUNGSANLAGENBAU GMBH
office@lst.at · www.laborstrauss.com

A-1230 WIEN · WIEGELESTRASSE 36
TEL +43 1 521 14-0 · FAX +43 1 521 14-27

A-8055 GRAZ · GMEINSTRASSE 11
TEL +43 316 833 201-0 · FAX +43 316 833 201-27

A-6020 INNSBRUCK · JOSEF-WILBERGER-STRASSE 5
TEL +43 512 390 880-0 · FAX +43 512 390 880-27

LABOR STRAUSS SICHERHEITSSYSTEME GMBH
office@laborstrauss.de · www.laborstrauss.com

D-41066 MÖNCHENGLADBACH · JAKOBSHÖHE 20
TEL +49 2161 567 90-0 · FAX +49 2161 567 90-27

LABOR STRAUSS SICHERHEITSSYSTEME NORD GMBH
office@lst-nord.de · www.laborstrauss.com

D-21079 HAMBURG · HARBURGER SCHLOSSSTRASSE 30
TEL +49 40 307 026-50 · FAX +49 40 307 026-57

Fire Detection System Series FI750 / FI700

Intelligent fire detection for manifold applications:

- Loop Fire Detectors
- RF Fire Detectors
- Design Detectors DECORLINE



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INTELLIGENT LOOP TECHNOLOGY

State-of-the-art fire alarm technology

The product family FI750 / FI700 comprises a vast number of intelligent loop components that represent the state-of-the-art of fire alarm technology. The Series FI750 / FI700 product lines include automatic fire detectors, manual call points, input and output modules, sounders and strobes as well as a complete RF fire detection system. For each task, very well matched products are available.

Outstanding features

For the bi-directional loop communication, the digital Labor Strauss protocol is used, whose innovative functions and manifold possibilities go far beyond fire detection. The efficient data exchange with the fire detection control panel ensures permanent verification of all components and quick detection of alarm situations or faults.

240 devices can be addressed on the loop. Thus, even large systems are realised with minimum cabling efforts. The addresses of the detectors, modules and signalling devices can be programmed manually or they can be assigned automatically by the AUTO-addressing function of the fire detection control panel. In addition, the order of the components on the loop is detected by means of the AUTO-mapping function.

All Series FI750 and FI700 devices are equipped with a bi-directional short circuit isolator. Thanks to that, malfunctions on the loop are reduced to a minimum.

Automatic fire detectors

Three different detector types are available for automatic fire detection:

- The optical smoke detector has a new type of sensing chamber that responds to different kinds of smoke and makes it more difficult for dust and insects to ingress. Several sensitivity levels allow flexible adjustment to the ambient conditions.
- The optical-thermal detector combines a smoke sensor and a heat sensor, which makes it a universally suitable detector for a variety of applications. Reliable fire detection and high immunity to deceptive alarms is achieved through the evaluation of both measured values by means of the integrated comparison of characteristics of fire.
- The heat detector can be used either
 - as rate-of-rise detector with 58°C alarm temperature or
 - as maximum heat detector with an alarm temperature of 78°Cwhich allows it to be optimally adjusted to the application.



Manual call points

By means of the manual call points in the two versions according to EN 54-11/A and EN 54-11/B, the fire brigade or the emergency personnel can be immediately alarmed in case of danger.

Manual call points are also available with different colours and labellings. They can be used, for example, to actuate extinguishing systems, to open fire dampers or to raise in-house alarms. The manual call points for extinguishing systems have been tested and certified according to EN 12094-3.

Modules for various functions

A wide range of input and output modules facilitates the monitoring of system parts or the actuation of external equipment. As a result, a variety of devices can be integrated into the fire detection system. For more complex tasks, combi modules with several inputs and outputs are available.

Different mechanical versions of the modules can be supplied for wall mounting, for integration in external devices or for DIN rail mounting.

Sounders and strobes

Once that the dangerous situation has been detected, sounders and strobes acoustically or optically warn of the dangerous situation or make sure that the area in question is evacuated.

The Series FI750 and FI700 comprise sounders with several tone types, strobes and combined signalling devices. For use under harsh environmental conditions, sounders with protection class IP66 can be supplied.

When activating the sounders, the fire detection control panel can also select the tone – depending on the alarm situation. In this way it is possible to acoustically distinguish, for example, between alarming and evacuation.

The automatic synchronisation function ensures that the warning tone is uniform if several sounders are active within one area.

Certified quality

The fire detectors, modules and signalling devices of Series FI700 and FI750 have been tested and certified by LPCB, BSI or VdS, as required by the Construction Products Directive CPD or the Construction Products Regulation CPR, according to the standard EN 54.



RF FIRE DETECTION SYSTEM FI720/RF

In some fire detection systems, cabling the detectors is not possible because of the architectural, technical or organisational situation, it affects the visual appearance or it involves high costs and therefore is uneconomical. A fire detection system based on the RF fire detection system FI720/RF can very well be installed later without changing the installation of the building.

Historical buildings, churches, museums and modern architecture are among the typical applications. Thanks to the easy linking to the fire detection control panel, it is also possible to equip only individual areas of a system with radio detectors, if necessary. The RF fire detection system FI720/RF combines the latest developments in the field of fire alarm technology with safe radio transmission technology and an attractive design. Thanks to pioneering technologies, completely new possibilities in the field of fire detection present itself, and, as a result, an effective combination between architectural requirements and modern fire alarm technology is created.

Extensive product family

The bi-directional communication between the fire detection control panel and the RF components is converted by an RF interface. The loop RF interface is integrated into the detector loop and can handle up to 32 RF components. The secure digital RF protocol allows transmission of analog measured values and controlling functions of the RF components. For systems in conventional technology, there is also an RF interface with relay outputs.

The radio transmission range can be increased by means of RF expanders. By cascading expanders, a multi-stage RF system can be created which can cover distances of more than 3 kilometres.

The extensive portfolio of RF components includes automatic detectors and manual call points, input and output modules, a remote indicator as well as sounders and strobes. The long battery life of 8 years ensures long-term operation and keeps the maintenance costs low.

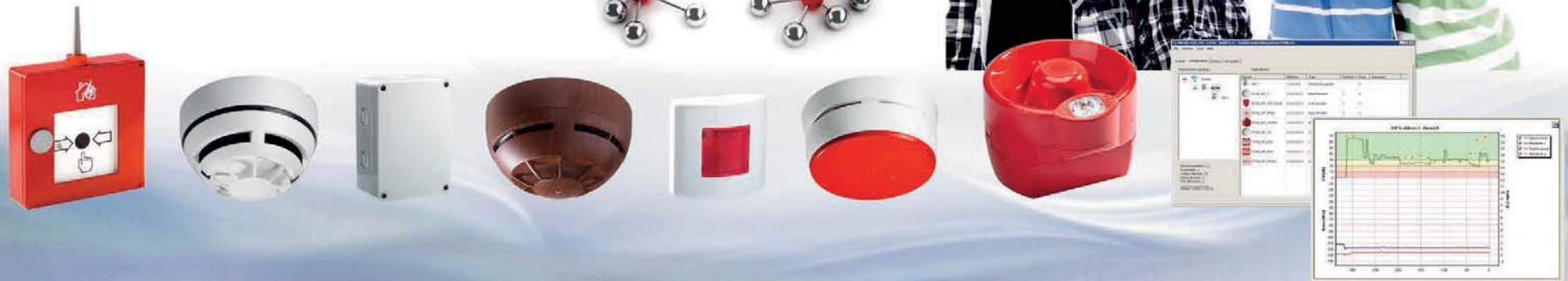


Convenient commissioning

With the supplied PC software, configuring the RF system FI720/RF becomes child's play. Through a graphic menu, all detectors, modules or signalling devices are selected and provided with device addresses. In addition, detector-specific settings such as the response sensitivity of the optical smoke sensor can be parameterised.

Test and analysis functions

The transmission behaviour of all RF components is continuously verified by the RF interface. By means of the PC software, electrical parameters such as signal strength and noise are analysed and graphically represented on the PC. In this way, the radio transmission quality can be evaluated easily and conveniently. As a result, possible error sources can be detected and ruled out during commissioning or maintenance.



AESTHETICS AND SAFETY

Modern fire protection often contradicts architectural requirements and aesthetic demands. A fire detector is supposed to effectively detect a fire, but at the same time its appearance has to be discreet – especially in historical or modern buildings a white detector may seem irritating.

The design fire detectors DECORLINE are available in several attractive decor versions. So the detector can be optimally matched to the architecture and the material of which the ceiling is made – no matter whether it is a wooden ceiling, a metal construction or a historical vault.

Different detector technologies

The special version in DECORLINE design is available for the automatic fire detectors of the following series:

- fire detectors in conventional technology – Series FC650
- intelligent loop fire detectors – Series FI700 / FI750
- RF fire detectors – Series FI720/RF

The design fire detectors in loop technology are intended for connection to compatible LST fire detection control panels. With the appropriate connection, the fire detectors in conventional technology as well as the RF fire detectors can also be used together with systems of other manufacturers.

Various designs

The design fire detectors DECORLINE are available in 16 different designs. There are various kinds of wood, marble and stone decors, metal surfaces, patterns and special colours to choose from. The matching detector bases are delivered with the detector in the same design.

Ash | Durmast | Oak | Cherry | Alder | Briar Root | Carrara Marble | Obirho | Green Alps | Green Marble | Black Marble | Gold | Black | Carbon Fibre | Gold Fibre | Aluminium | Pink



Optical Smoke Detector FI750/O



- **Loop technology with Labor Strauss protocol**
- **Application-specific setting of the response behaviour**
- **Double dust trap and insect screen**
- **Up to 240 devices per loop**
- **Output for remote indicator**
- **Function check by means of test magnet or test gas**



Description

The addressable Optical Smoke Detector FI750/O uses the light scattering principle and was developed for the detection of smoke particles in a wide range of fire detection applications. A symmetrical sensing chamber allows for optimal smoke sensitivity from all directions.

In order to avoid false alarms, a fine-meshed protective grid effectively keeps dust, ambient light and insects from entering the detector. In addition, the special design of the case makes it more difficult for dust to settle inside the sensing chamber.

The influence of contamination of the optical measurement system is additionally compensated for by using intelligent evaluation algorithms. As a result, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The loop technology with Labor Strauss protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures periodical function testing of the detector.

Up to 240 loop elements can be addressed on a Labor Strauss loop. In this way, extensive fire detection systems can be designed with a minimum expense in cabling.

By parameterising the control panel accordingly, the response behaviour of the detector can be set to one of four levels and, as a result, the detector can be specifically adapted for the respective application.

The two multicoloured LED displays on the detector are visible from all directions, thus facilitating the identification of the activated detector. The alarm condition is indicated in red and the test condition in green. Furthermore, an output is available for the connection of an optional remote indicator. The output can be freely parameterised on a compatible fire detection control panel.

An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The detector address is set by means of the hand-held Programming Unit FI750/PU within the range 1 to 240. In addition, the programming unit allows several parameters, such as the level of contamination of the optical chamber, the default analogue value or the production date to be read out. Alternatively, the detector can be addressed automatically if it is connected to a compatible fire detection control panel.

A detector function test can be conveniently conducted by using a test magnet or an aerosol spray.



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Specifications

Operating voltage	Supply through loop voltage
Current consumption at 24V	typ. 160µA (normal communication)
Current consumption LEDs (alarm condition)	typ. 6mA
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Dimensions Ø x H (without base)	106 x 50 (mm)
Colour	white
Weight	86g
Approvals	VdS G213043 LPCB 928b/02 0832-CPD-2120
Order number	241086
Order name	Optical Smoke Detector/750 FI750/O



Optical-Thermal Detector FI750/OT



- **Loop technology with Labor Strauss protocol**
- **Combines optical smoke sensor and thermal rate-of-rise sensor**
- **Application-specific setting of the response behaviour**
- **Double dust trap and insect screen**
- **Up to 240 devices per loop**
- **Output for remote indicator**



Description

The addressable Optical-Thermal Detector FI750/OT uses both an optical sensing chamber based on the scattered light principle as well as a rate-of-rise temperature sensor according to EN 54-5 Class A1R. The modern design of both measurement systems and the analysis of the parameters through special algorithms allow reliable evaluation of the characteristics of fire and improvement of the false alarm immunity. The detector is therefore suitable for a wide range of fire detection applications.

In order to avoid false alarms, a fine-meshed protective grid effectively keeps dust, ambient light and insects from entering the detector. In addition, the special design of the case makes it more difficult for dust to settle inside the sensing chamber.

The influence of contamination of the optical measurement system is additionally compensated for by using an intelligent evaluation logic. As a result, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The loop technology with Labor Strauss protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures periodical function testing of the detector.

Up to 240 loop elements can be addressed on a Labor Strauss loop. In this way, extensive fire detection systems can be designed with a minimum expense in cabling.

By parameterising the control panel accordingly, the response behaviour of the detector can be set to one of four levels and, as a result, the detector can be specifically adapted for the respective application. A thermal-only mode is also possible.

The two multicoloured LED displays on the detector are visible from all directions, thus facilitating the identification of the activated detector. The alarm condition is indicated in red and the test condition in green. Furthermore, an output is available for the connection of an optional remote indicator. The output can be freely parameterised on a compatible fire detection control panel.

An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The detector address is set by means of the hand-held Programming Unit FI750/PU within the range 1 to 240. In addition, the programming unit allows several parameters, such as the level of contamination of the optical chamber, the default analogue value or the production date to be read out. Alternatively, the detector can be addressed automatically if it is connected to a compatible fire detection control panel.

A detector function test can be conveniently conducted by using either a test magnet, an aerosol spray or a thermal detector test device.



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0832-CPD-2121

Specifications

Operating voltage	Supply through loop voltage
Current consumption at 24V	typ. 160µA (normal communication)
Current consumption LEDs (alarm condition)	typ. 6mA
Alarm temperature	+58°C (Class A1R)
Application temperature	max. +50°C
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Dimensions Ø × H (without base)	106 × 50 (mm)
Colour	white
Weight	86g
Approvals	VdS G213045 LPCB 928c/02 0832-CPD-2121
Order number	241087
Order name	Optical-Thermal Detector/750 FI750/OT



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Thermal Detector

FI750/T



- **Loop technology with Labor Strauss protocol**
- **For use as rate-of-rise heat detector 58°C or maximum heat detector 78°C**
- **Up to 240 devices per loop**
- **Output for remote indicator**
- **Function check by means of magnet or thermal test device**



Description

The addressable Thermal Detector FI750/T was developed for the indoor temperature supervision in a wide range of fire detection applications.

Depending on the parameter setup in the fire detection control panel, the detector operates either as rate-of-rise heat detector with a maximum alarm temperature of 58°C (EN 54-5 Class A1R), or as maximum heat detector with an alarm temperature of 78°C (EN 54-5 Class BS). In Class A1R the detector can be used up to a room height of 7.5m, in the Class BS mode a room height of 6m is permissible.

The loop technology with Labor Strauss protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures periodical function testing of the detector.

Up to 240 loop elements can be addressed on a Labor Strauss loop. In this way, extensive fire detection systems can be designed with a minimum expense in cabling.

The two multicoloured LED displays on the detector are visible from all directions, thus facilitating the iden-

tification of the activated detector. The alarm condition is indicated in red and the test condition in green. In addition, an output is available for the connection of an optional remote indicator.

An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The detector address is set by means of the hand-held Programming Unit FI750/PU within the range 1 to 240. In addition, the programming unit allows several parameters, such as the default analogue value or the production date to be read out. Alternatively, the detector can be addressed automatically if it is connected to a compatible fire detection control panel.

A detector function test can be conveniently conducted by using a test magnet or a thermal detector test device.



0832-CPD-2122

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Specifications

Operating voltage	Supply through loop voltage
Current consumption at 24V	typ. 160µA (normal communication)
Current consumption LEDs (alarm condition)	typ. 6mA
Alarm temperature	
Class A1R	+58°C
Class BS	+78°C
Application temperature	
Class A1R	max. +50°C
Class BS	max. +65°C
Ambient temperature	-30°C to +70°C (no icing)
Relative humidity	5 – 95% (no condensation)
Dimensions Ø x H (without base)	106 x 50 (mm)
Colour	white
Weight	86g
Approvals	VdS G213044 LPCB 928a/02 0832-CPD-2122
Order number	242086
Order name	Thermal Detector/750 FI750/T



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LST

Sounder

FI750/WB/MT/SOUW



- **Loop technology with Labor Strauss protocol**
- **Integrated detector base Series FI750**
- **Can be activated with 32 different tone types**
- **4 sound levels – up to 93dB(A)**
- **Low power consumption**
- **Integrated dual-isolator**



Description

The Loop Sounder FI750/WB/MT/SOUW is powered and actuated via the loop with Labor Strauss protocol. The integrated Detector Base Series FI750 is designed to accommodate an automatic fire detector Series FI750. The sounder has a built-in dual-isolator module. Depending on the parameter setup of the control panel and the system condition, a compatible fire detection control panel can activate the sounder with up to 32 different tone types and selectable sound level. The following tone types can be selected, for example:

- Slow Whoop tone according to NEN 2575,
- DIN tone according to DIN 33404,
- Continuous tone 1kHz.

If several sounders are activated at the same time, they

are synchronised by the control panel, in order to generate a uniform warning tone.

The module address of the sounder is set in the range 1 to 240 by means of the hand-held Programming Unit FI750/PU. Alternatively, the sounder can be addressed automatically if it is connected to a compatible fire detection control panel.

The loop sounder can also be operated without a detector attached to it. For this case, a white or red plastic cover is available as accessory. The sounder is designed for indoor mounting.

Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	typ. 70µA (sounder off) max. 5mA (sounder on, high sound level)
Sound level	max. 93dB(A) / 1m distance
Ambient temperature	-30°C to +70°C
Protection class	IP21
Dimensions Ø × D	116 × 50 (mm)
Colour	white
Weight	180g
Approvals	VdS G217050 0832-CPR-F2540
Order number	355202
Order name	Sounder/WB/750I/white FI750/WB/MT/SOUW

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Accessories

Lid for sounder, red

Dimensions Ø x H	106 x 10 (mm)
Order number	359073
Order name	Lid for Sounder FI750/WB FI750/COVER/R

Lid for sounder, white

Dimensions Ø x H	106 x 10 (mm)
Order number	359072
Order name	Lid for Sounder FI750/WB FI750/COVER/W

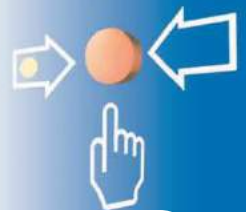


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Sounder-Strobe

FI750/WB/MT/SOUW/STRC



- **Loop technology with Labor Strauss protocol**
- **Integrated detector base Series FI750**
- **Can be activated with 32 different tone types**
- **4 sound levels – up to 93dB(A)**
- **Low power consumption**
- **Integrated dual-isolator**



Description

The Sounder-Strobe FI750/WB/MT/SOUW/STRC is powered and actuated via the loop with Labor Strauss protocol. The integrated Detector Base Series FI750 is designed to accommodate an automatic fire detector Series FI750. The device has a built-in dual-isolator module.

Depending on the parameter setup of the control panel and the system condition, a compatible fire detection control panel can activate the sounder with up to 32 different tone types and selectable sound level. The following tone types can be selected, for example:

- Slow Whoop tone according to NEN 2575,
- DIN tone according to DIN 33404,
- Continuous tone 1kHz.

If several sounder-strobes are activated at the same time, they are synchronised by the control panel, in or-

der to generate a uniform warning tone and light pulse. The red strobe is always activated together with the sounder. Thanks to the use of light emitting diodes, the strobe has a low power consumption.

The module address of the sounder-strobe is set in the range 1 to 240 by means of the hand-held Programming Unit FI750/PU. Alternatively, the device can be addressed automatically if it is connected to a compatible fire detection control panel.

The loop sounder-strobe can also be operated without a detector attached to it. For this case, a white or red plastic cover is available as accessory. The sounder-strobe is designed for indoor mounting.

Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	typ. 70µA (sounder/strobe off) max. 8mA (sounder/strobe activated, maximum sound level)
Sound level	max. 93dB(A) / 1m distance
Flash frequency	1Hz
Ambient temperature	-30°C to +70°C
Protection class	IP21
Dimensions Ø × D	142 × 64 (mm)
Colour housing / cap / light colour	white / clear / red
Weight	275g

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Approvals	VdS G217049 0832-CPRF2541
Order number	355204
Order name	Sounder-Strobe/WB/750I/wh/cl/re/N FI750/WB/MT/SOUW/STRC



Accessories

Lid for sounder, red

Dimensions Ø × H	106 × 10 (mm)
Order number	359073
Order name	Lid for Sounder FI750/WB FI750/COVER/R

Lid for sounder, white

Dimensions Ø × H	106 × 10 (mm)
Order number	359072
Order name	Lid for Sounder FI750/WB FI750/COVER/W



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Integrated Base Sounder FI750/WBRI/MT/SOUW



- Actuated through automatic detector Series FI750
- Integrated detector base
- 32 different tone types selectable
- Sound level selectable in three steps
- Low power consumption



Description

The Sounder FI750/WBRI/MT/SOUW has an integrated detector base for accommodating an automatic fire detector Series FI750. The sounder is actuated and powered via the remote indicator output of the inserted detector.

The tone type of the sounder is set by means of a DIL switch. There is a choice of 32 different tone types, such as:

- Slow Whoop tone according to NEN 2575,
 - DIN tone according to DIN 33404,
 - Continuous tone 970Hz,
 - Alternating tone 800Hz/1kHz, and many more.
- The DIL switch also allows you to select the sound level of the sounder in 3 steps.

The sounder is designed for indoor ceiling mounting.

Specifications

Operating voltage	Supply through the inserted detector Series FI750
Current consumption	max. 9mA (sounder on, high sound level)
Sound level	max. 94dB(A) / 1m distance
Ambient temperature	-20°C to +70°C
Protection class	IP21
Dimensions Ø x D	116 x 41 (mm)
Colour	white
Weight	140g
Approvals	LPCB 546a/04 0832-CPR-F0619
Order number	355201
Order name	Sounder/WB/750RI/white FI750/WBRI/MT/SOUW



0832-CPR-F0619

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Cabinet 19"

GEH19/15/IP55/SIT



- **Wall mounting of the 19" version of a fire detection or extinguishing control panel**
- **15 rack units high**
- **Robust sheet steel version**
- **Glazed door in modern design**
- **Integrated mounting plate and cable gland plates**



Description

The 19" switch cabinet with a height of 15 rack units consists of a wall part and a swivel part, both in robust sheet steel design, as well as a designer glazed door with safety glass.

The wall cabinet is used for installing equipment in 19" design, for example, a Fire Detection Control Panel Series BC600 or Series BC216, or an Extinguishing Control Panel Series LC216 in slide-in technology.

In the wall part, there is one installed cable gland plate at the top and one at the bottom. PG screw connections are used for the protected entry of cables. Furthermore, the wall part is provided with a mounting plate with the LST standard grid, on which auxiliary modules – such as

relay modules or Modules MEA244-1 – can be mounted and wired in an easy and time-saving way.

The internals are screwed onto the mounting profiles of the swivel part. When the switch cabinet is open, cabling can be conveniently carried out from the rear.

The glazed door with two-step latching is opened with the comfort handle and can be locked up by means of the built-in lock.

Specifications

Material	
Switch cabinet	sheet steel 1.5mm
Mounting plate	sheet steel, galvanised 2.5mm
Viewing window	safety glass ESG 3mm
Protection class	IP55
Dimensions W x H x D	600 x 746 x 473 (mm)
Max. installation depth	420mm
Colour	light grey, RAL 7035
Weight	approx. 49kg (without installations)
Order number	212046
Order name	Cabinet 19"/15HU GEH19/15/IP55/SIT



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Manual Call Point 200AP

HFM/3/25/02



- **Loop technology with System Sensor protocol**
- **Robust die-cast aluminium case**
- **LED indicates device status**
- **Integrated dual-isolator**
- **Operating instructions by means of standardised symbols**
- **Increase of protection class to IP54 by using optional protection kit**



Description

The manual call point according to EN 54-11 / type B is designed for use on loops with System Sensor protocol and is accommodated in a robust die-cast aluminium case. In comparison with plastic cases, the aluminium case proves to be of advantage even after years of use, thanks to its resistance to environmental impact: It is virtually unbreakable, form stable and hardly changes its colour in sunlight.

A built-in LED optically indicates the operating condition of the manual call point. The detector address can be set by means of a push-button in the range 1 – 159 and

the entered address is displayed by an LED. The detector is provided with a dual-isolator, which disconnects the loop fast and safely in case of a short circuit.

The hinged door can be opened up to an angle of 180° and it is provided with a replaceable pane of glass. If the detector has been activated, an integrated locking device prevents the closing of the door.

Custom versions with different colours, designs, functions and internal wirings are available on inquiry. By means of the optional Protection Kit HFM/HM-ZS-IP54, the protection class can be increased to IP54.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	110µA (quiescent)
Ambient temperature	-20°C to +60°C (continuous operation) -25°C to +70°C (max. 12 hours)
Protection class	IP43
Dimensions W x H x D	125 x 125 x 34 (mm)
Colour	flame red, RAL 3000
Weight	400g
Approvals	VdS G202035 0786-CPD-20361
Order number	245792
Order name	Manual Call Point/Red/200AP HFM/3/25/02



0786-CPD-20361

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Manual Call Point

HFM/3/72/02



- **Loop technology with Labor Strauss protocol**
- **Bi-colour status LED**
- **Integrated dual-isolator**
- **Operating instructions by means of standardised symbols**
- **Robust die-cast aluminium case**
- **Increase of protection class to IP54 by using optional protection kit**



Description

The manual call point according to EN 54-11 / type B is designed for use on loops with Labor Strauss protocol and is accommodated in a robust die-cast aluminium case. In comparison with plastic cases, the aluminium case proves to be of advantage even after years of use, thanks to its resistance to environmental impact: It is virtually unbreakable, form stable and hardly changes its colour in sunlight.

The loop technology with Labor Strauss protocol establishes a permanent communication between the fire detection control panel and the call point. That ensures a periodical function testing of the device.

Up to 240 loop elements can be addressed on a Labor Strauss loop. In this way, extensive fire detection systems can be designed with a minimum expense in cabling.

The call point is equipped with a bi-colour status LED that indicates the alarm condition in red colour, the fault condition in yellow and – optionally – the polling of the device in green.

An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured.

The address of the call point is set by means of the hand-held Programming Unit F1700/PU within the range 1 to 240. In addition, the programming unit allows for the reading-out of several parameters, such as the default analogue value or the production date.

Alternatively, the call point can be addressed automatically if it is connected to a compatible fire detection control panel.

The hinged door can be opened up to an angle of 180° and it is provided with a replaceable pane of glass. If the detector has been activated, an integrated locking device prevents the closing of the door.

Custom versions with different colours, designs, functions and internal wirings are available on inquiry. By means of the optional Protection Kit HFM/HM-ZS-IP54, the protection class can be increased to IP54.



0786-CPD-20932

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LST

Specifications

Operating voltage	Supply through loop voltage
Current consumption	typ. 90µA (normal communication)
Current consumption status LED	typ. 6mA (alarm condition)
Ambient temperature	-20°C to +60°C (continuous operation) -25°C to +70°C (max. 12 hours)
Protection class	IP43
Dimensions W x H x D	125 x 125 x 34 (mm)
Colour	flame red, RAL 3000
Weight	400g
Approvals	VdS G210012 0786-CPD-20932
Order number	245771
Order name	Manual Call Point/Red/700 HFM/3/72/02



Manual Call Point

HFM/3/11/02



- **Addressable conventional technology**
- **Robust die-cast aluminium case**
- **LED indicates activation**
- **Optional address module allows individual detector identification**
- **Operating instructions by means of standardised symbols**
- **Increase of protection class to IP54 by using optional protection kit**



Description

The manual call point according to EN 54-11 / type B is designed for application in addressable conventional technology and is accommodated in a robust die-cast aluminium case. In comparison with plastic cases, the aluminium case proves to be of advantage even after years of use, thanks to its resistance to environmental impact: It is virtually unbreakable, form stable and hardly changes its colour in sunlight.

A built-in LED optically indicates the activated condition

of the manual call point. Individual detector addressing is achieved by connecting an optional address module. The hinged door can be opened up to an angle of 180° and it is provided with a replaceable pane of glass. If the detector has been activated, an integrated locking device prevents the closing of the door.

Custom versions with different colours, designs, functions and internal wirings are available on inquiry. By means of the optional Protection Kit HFM/HM-ZS-IP54, the protection class can be increased to IP54.

Specifications

Operating voltage	Supply through the detector line voltage
Ambient temperature	-20°C to +60°C (continuous operation) -25°C to +70°C (max. 12 hours)
Protection class	IP43
Dimensions W x H x D	125 x 125 x 34 (mm)
Colour	flame red, RAL 3000
Weight	400g
Approvals	VdS G202034 0786-CPD-20350
Order number	245302
Order name	Manual Call Point/Red/Conv HFM/3/11/02



0786-CPD-20350

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Manual Call Point

HFM/3/32/02



- Loop technology with Apollo protocol
- Robust die-cast aluminium case
- LED indicates activation
- Integrated dual-isolator
- Operating instructions by means of standardised symbols
- Increase of protection class to IP54 by using optional protection kit



Description

The manual call point according to EN 54-11 / type B is designed for use on loops with Apollo protocol and is accommodated in a robust die-cast aluminium case. In comparison with plastic cases, the aluminium case proves to be of advantage even after years of use, thanks to its resistance to environmental impact: It is virtually unbreakable, form stable and hardly changes its colour in sunlight.

A built-in LED optically indicates the activated condition of the manual call point. The detector address can be set by means of a push-button and the entered address

is displayed by an LED. The detector is provided with a dual-isolator, which disconnects the loop fast and safely in case of a short circuit.

The hinged door can be opened up to an angle of 180° and it is provided with a replaceable pane of glass. If the detector has been activated, an integrated locking device prevents the closing of the door.

Custom versions with different colours, designs, functions and internal wirings are available on inquiry. By means of the optional Protection Kit HFM/HM-ZS-IP54, the protection class can be increased to IP54.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	180µA (quiescent)
Ambient temperature	-20°C to +60°C (continuous operation) -25°C to +70°C (max. 12 hours)
Protection class	IP43
Dimensions W x H x D	125 x 125 x 34 (mm)
Colour	flame red, RAL 3000
Weight	400g
Approvals	VdS G204003 0786-CPD-20356
Order number	245402
Order name	Manual Call Point/Red/XP95 HFM/3/32/02



0786-CPD-20356

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Manual Call Point

Series 200AP – Blue



- **Loop technology with System Sensor protocol**
- **Robust die-cast aluminium housing**
- **LED indicates device status**
- **Integrated dual-isolator**
- **Large lettering area**
- **Increase of protection class to IP54 by using optional protection kit**



Description

The manual call point is designed for use on loops with System Sensor protocol and is accommodated in a robust die-cast aluminium case. In comparison with plastic cases, the aluminium case proves to be of advantage even after years of use, thanks to its resistance to environmental impact: It is virtually unbreakable, form stable and hardly changes its colour in sunlight.

A built-in LED optically indicates the operating condition of the manual call point. The detector address can be set in the range 1 – 159 by means of a push-button and the entered address is displayed by an LED. The detec-

tor is provided with a dual-isolator, which disconnects the loop fast and safely in case of a short circuit.

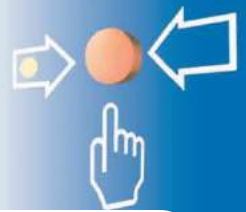
The hinged door can be opened up to an angle of 180° and it is provided with a replaceable pane of glass. If the detector has been activated, an integrated locking device prevents the closing of the door.

Custom versions with different colours, designs, functions and internal wirings are available on inquiry. By means of the optional Protection Kit HFM/HM-ZS-IP54, the protection class can be increased to IP54.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	110µA (quiescent)
Ambient temperature	-20°C to +60°C (continuous operation) -25°C to +70°C (max. 12 hours)
Protection class	IP43
Dimensions W x H x D	125 x 125 x 34 (mm)
Colour	blue, RAL 5015
Lettering	HAUSALARM (interchangeable)
Weight	400g
Order number	245796
Order name	Manual Call Point/Blue/200AP/Hausalarm HM/5/25/02/02

Manual Call Points 200AP for gas extinguishing systems



- **Loop technology with System Sensor protocol**
- **Tested to EN 12094-3**
- **Robust die-cast aluminium housing**
- **LED indicates device status**
- **Integrated dual-isolator**
- **Increase of protection class to IP54 by using optional protection kit**



Description

The manual call points, implemented on loop technology with System Sensor protocol, are designed for application in extinguishing systems. Both devices are tested according to EN 12094-3 and EN 54-17.

The yellow manual call point HM/1/25/17/02 serves as activation device in gas extinguishing systems and water spray extinguishing systems. The blue manual call point HM/5/25/18/02, designed with a non-latching button, operates as an emergency hold device for gas extinguishing systems.

A built-in LED optically indicates the operating condition of the manual call point. The detector address can be set in the range 1 – 159 by means of a push-button and the entered address is displayed by an LED. The detector is provided with a dual-isolator, which disconnects the loop fast and safely in case of a short circuit. The manual call points are accommodated in a robust

die-cast aluminium case. In comparison with plastic cases, the aluminium case proves to be of advantage even after years of use: It is virtually unbreakable, form stable and hardly changes its colour in sunlight.

The hinged door can be opened up to an angle of 180° and it is provided with a replaceable pane of glass. If the detector has been activated, an integrated locking device prevents the closing of the door.

Custom versions with different colours, designs, functions and internal wirings are available on inquiry. By means of the optional Protection Kit HFM/HM-ZS-IP54, the protection class can be increased to IP54.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	110µA (quiescent)
Ambient temperature	-20°C to +60°C (continuous operation) -25°C to +70°C (max. 12 hours)
Protection class	IP43
Dimensions W × H × D	125 × 125 × 34 (mm)
Weight	400g



0786-CPD-20253
0786-CPD-20254

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Manual call point – yellow

Colour	yellow, RAL 1021
Lettering	HANDAUSLÖSUNG-Gaslöschanlage (interchangeable)
Approvals	VdS G206129 0786-CPD-20253
Order number	245785
Order name	Manual Call Point/Yellow/200AP/Handausl. HM/1/25/17/02

Manual call point – blue

Colour	blue, RAL 5015
Lettering	STOPP-TASTER-Gaslöschanlage (interchangeable)
Approvals	VdS G206130 0786-CPD-20254
Order number	245788
Order name	Manual Call Point/Blue/200AP/Stopp HM/5/25/18/02



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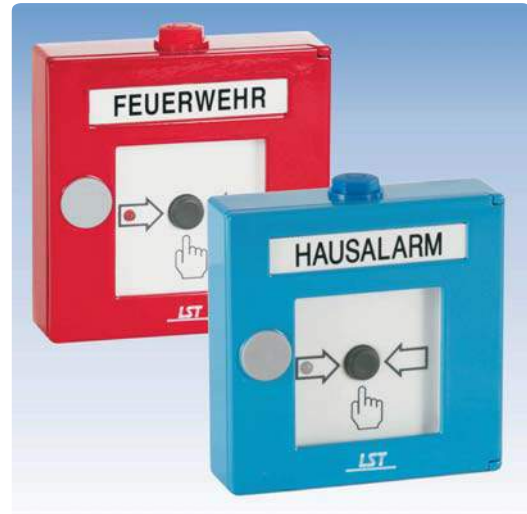


Manual Call Points

Red/Blue



- **Conventional technology**
- **Robust die-cast aluminium housing**
- **LED indicates activation**
- **Optional address module allows individual detector identification**
- **Large lettering area**
- **Increase of protection class to IP54 by using optional protection kit**



Description

The manual call point according to EN 54-11 / type B is designed for application in addressable conventional technology and is accommodated in a robust die-cast aluminium case. In comparison with plastic cases, the aluminium case proves to be of advantage even after years of use, thanks to its resistance to environmental impact: It is virtually unbreakable, form stable and hardly changes its colour in sunlight.

A built-in LED optically indicates the activated condition of the manual call point. Individual detector addressing

is achieved by means of an optional address module.

The hinged door can be opened up to an angle of 180° and it is provided with a replaceable pane of glass. If the detector has been activated, an integrated locking device prevents the closing of the door.

Custom versions with different colours, designs, functions and internal wirings are available on inquiry. By means of the optional Protection Kit HFM/HM-ZS-IP54, the protection class can be increased to IP54.

Specifications

Operating voltage	Supply through the detector line voltage
Ambient temperature	-20°C to +60°C (continuous operation) -25°C to +70°C (max. 12 hours)
Protection class	IP43
Dimensions W x H x D	125 x 125 x 34 (mm)
Weight	400g

Manual call point - red

Colour	flame red, RAL 3000
Lettering	FEUERWEHR (interchangeable)
Approvals	VdS G202034 0786-CPD-20350
Order number	245356
Order name	Manual Call Point/Red/Conv/Feuerwehr HM/3/11/01/02



0786-CPD-20350

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Manual call point – blue

Colour	blue, RAL 5015
Lettering	HAUSALARM (interchangeable)
Order number	245352
Order name	Manual Call Point/Blue/Conv/Hausalarm HM/5/11/02/02



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Manual Call Points for gas extinguishing systems



- **Conventional technology**
- **Tested to EN 12094-3**
- **Robust die-cast aluminium housing**
- **LED indicates activation**
- **Optional address module allows individual detector identification**
- **Increase of protection class to IP54 by using optional protection kit**



Description

The manual call points, implemented in addressable conventional technology, are designed for application in extinguishing systems. Both devices are tested according to EN 12094-3.

The yellow manual call point HM/1/11/17/02 serves as activation device in gas extinguishing systems and water spray extinguishing systems. The blue manual call point HM/5/11/18/02, designed with a non-latching button, operates as an emergency hold device for gas extinguishing systems.

A built-in LED optically indicates the activated condition of the manual call point. Individual detector addressing is achieved by means of an optional address module.

The manual call points are accommodated in a robust die-cast aluminium case. In comparison with plastic cases, the aluminium case proves to be of advantage even after years of use: It is virtually unbreakable, form stable and hardly changes its colour in sunlight.

The hinged door can be opened up to an angle of 180° and it is provided with a replaceable pane of glass. If the detector has been activated, an integrated locking device prevents the closing of the door.

Custom versions with different colours, designs, functions and internal wirings are available on inquiry. By means of the optional Protection Kit HFM/HM-ZS-IP54, the protection class can be increased to IP54.

Specifications

Operating voltage	Supply through the detector line voltage
Ambient temperature	-20°C to +60°C (continuous operation) -25°C to +70°C (max. 12 hours)
Protection class	IP43
Dimensions W x H x D	125 x 125 x 34 (mm)
Weight	400g



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0786-CPD-20363

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Manual call point yellow

Colour	yellow, RAL 1021
Lettering	HANDAUSLÖSUNG-Gaslöschanlage (interchangeable)
Approvals	VdS G205018 0786-CPD-20251
Order number	245416
Order name	Manual Call Point/Yellow/Conv/Handausl. HM/1/11/17/02

Manual call point blue

Colour	blue, RAL 5015
Lettering	STOPP-Taster-Gaslöschanlage (interchangeable)
Approvals	VdS G207160 0786-CPD-20363
Order number	245417
Order name	Manual Call Point/Blue/Conv/Stopp HM/5/11/18/02



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Thermal ROR Detector HT-11001



- **Addressable conventional technology**
- **Maximum temperature 57°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Extremely flat design**
- **Sealed electronics**



Description

The Thermal ROR Detector HT-11001 reacts to temperature changes within defined periods of time, up to a maximum temperature of 57°C. The intelligent evaluation of these data allows the early detection of spreading fires. The detector complies with Class A1R and can be used up to a room height of 7.5m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

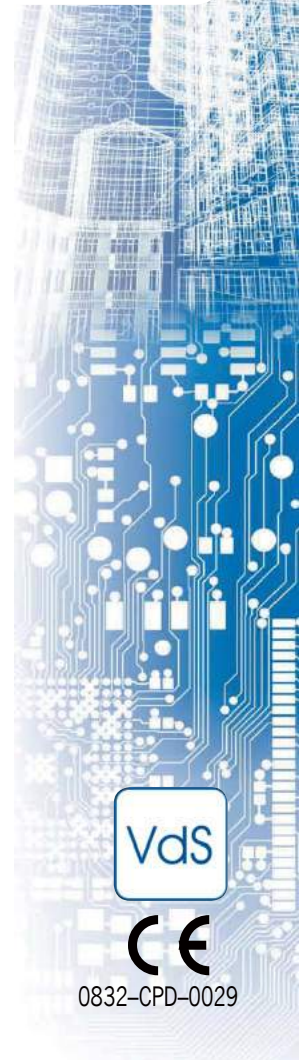
means of the optional Address Module NG60-1, each detector can be addressed individually, thus allowing to display the detector address, as well as an assigned element text, on a suitable fire detection control panel.

A detector fault is indicated by a yellow flashing of the multicoloured status LED.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 65µA (quiescent)
Alarm temperature	57°C (maximum-heat component)
Application temperature	max. +50°C
Ambient temperature	-40°C to +70°C (no condensation or icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 36 (mm)
Colour	white
Weight	70g
Approvals	VdS G204033 0832-CPD-0029
Order number	242030
Order name	Thermal ROR Detector/Conv./ORBIS/Apo HT-11001



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LST

Thermal Max Detector HT-11002



- **Addressable conventional technology**
- **Alarm temperature 61°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Extremely flat design**
- **Sealed electronics**



Description

The Thermal Max Detector HT-11002 recognises a maximum temperature of 61°C as sign of fire. It complies with Class A2S and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By means of the optional Address Module NG60-1, each

detector can be addressed individually, thus allowing to display the detector address, as well as an assigned element text, on a suitable fire detection control panel.

A detector fault is indicated by a yellow flashing of the multicoloured status LED.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 65µA (quiescent)
Alarm temperature	typ. 61°C
Application temperature	max. +50°C
Ambient temperature	-40°C to +70°C (no condensation or icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 36 (mm)
Colour	white
Weight	70g
Approvals	VdS G204034 0832-CPD-0030
Order number	242031
Order name	Thermal Max Detector/Conv./ORBIS/Apo HT-11002



0832-CPD-0030

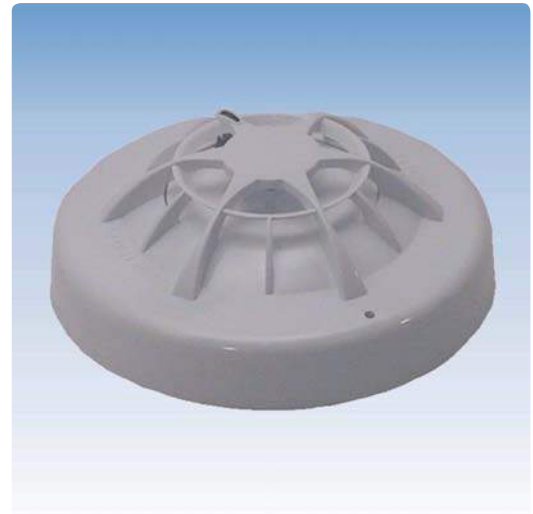
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Thermal ROR Detector HT-11003



- **Addressable conventional technology**
- **Maximum temperature 75°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Extremely flat design**
- **Sealed electronics**



Description

The Thermal ROR Detector HT-11003 reacts to temperature changes within defined periods of time, up to a maximum temperature of 75°C. The intelligent evaluation of these data allows the early detection of spreading fires. The detector complies with Class BR and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

means of the optional Address Module NG60-1, each detector can be addressed individually, thus allowing to display the detector address, as well as an assigned element text, on a suitable fire detection control panel.

A detector fault is indicated by a yellow flashing of the multicoloured status LED.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 65µA (quiescent)
Alarm temperature	75°C (maximum-heat component)
Application temperature	max. +65°C
Ambient temperature	-40°C to +70°C (continuous operation, no condensation or icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 36 (mm)
Colour	white
Weight	70g
Approvals	VdS G204035 0832-CPD-0031
Order number	242032
Order name	Thermal ROR Detector/Conv./ORBIS/Apo HT-11003



0832-CPD-0031

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Thermal Max Detector

HT-11004



- **Addressable conventional technology**
- **Alarm temperature 75°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Extremely flat design**
- **Sealed electronics**



Description

The Thermal Max Detector HT-11004 recognises a maximum temperature of 75°C as sign of fire. It complies with Class BS and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By means of the optional Address Module NG60-1, each

detector can be addressed individually, thus allowing to display the detector address, as well as an assigned element text, on a suitable fire detection control panel.

A detector fault is indicated by a yellow flashing of the multicoloured status LED.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 65µA (quiescent)
Alarm temperature	typ. 75°C
Application temperature	max. +65°C
Ambient temperature	-40°C to +70°C (continuous operation, no condensation or icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 36 (mm)
Colour	white
Weight	70g
Approvals	VdS G204036 0832-CPD-0032
Order number	242033
Order name	Thermal Max Detector/Conv./ORBIS/Apo HT-11004



0832-CPD-0032

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Thermal ROR Detector HT-11005



- **Addressable conventional technology**
- **Maximum temperature 90°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Extremely flat design**
- **Sealed electronics**



Description

The Thermal ROR Detector HT-11005 reacts to temperature changes within defined periods of time, up to a maximum temperature of 90°C. The intelligent evaluation of these data allows the early detection of spreading fires. The detector complies with Class CR and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By

means of the optional Address Module NG60-1, each detector can be addressed individually, thus allowing to display the detector address, as well as an assigned element text, on a suitable fire detection control panel.

A detector fault is indicated by a yellow flashing of the multicoloured status LED.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 65µA (quiescent)
Alarm temperature	90°C (maximum-heat component)
Application temperature	max. +80°C
Ambient temperature	-40°C to +70°C (continuous operation, no condensation or icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 36 (mm)
Colour	white
Weight	70g
Approvals	VdS G204037 0832-CPD-0033
Order number	242034
Order name	Thermal ROR Detector/Conv./ORBIS/Apo HT-11005



0832-CPD-0033

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Thermal Max Detector

HT-11006



- **Addressable conventional technology**
- **Alarm temperature 90°C**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Extremely flat design**
- **Sealed electronics**



Description

The Thermal Max Detector HT-11006 recognises a maximum temperature of 90°C as sign of fire. It complies with Class CS and can be used up to a room height of 6m.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By means of the optional Address Module NG60-1, each

detector can be addressed individually, thus allowing to display the detector address, as well as an assigned element text, on a suitable fire detection control panel.

A detector fault is indicated by a yellow flashing of the multicoloured status LED.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 65µA (quiescent)
Alarm temperature	typ. 90°C
Application temperature	max. +80°C
Ambient temperature	-40°C to +70°C (continuous operation, no condensation or icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 36 (mm)
Colour	white
Weight	70g
Approvals	VdS G204038 0832-CPD-0034
Order number	242035
Order name	Thermal Max Detector/Conv./ORBIS/Apo HT-11006

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0832-CPD-0034

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LST

Monitor Module IM-10EA



- **Loop technology with System Sensor protocol**
- **10 independent inputs with monitoring for wire breakage and short circuit**
- **Status LED for each input**
- **Setting of module address via decadic rotary switches**
- **Integrated dual-isolator**
- **Mounting in surface mounting box**



Description

The addressable Monitor Module IM-10EA includes 10 independent line-monitored inputs and serves for the integration of contact detectors – for example fault detectors or sprinkler system contacts.

The module is designed for connection to a loop and is actuated by means of the bi-directional System Sensor protocol. The Monitor Module IM-10EA occupies 10 consecutive addresses on the loop. The base address

can be set in the range 1 to 159 by means of decadic rotary switches. The module has an integrated dual-isolator.

The optional Surface Mounting Box M200-SMB-MM, made of steel sheet, and the plastic Surface Mounting Box SMB6-VO accommodate one Monitor Module IM-10EA or Control Module CR-6EA.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 3.5mA (quiescent)
Ambient temperature	-10°C to +55°C
Dimensions L x W x H	172 x 147 x 25 (mm)
Weight	170g
Approval	0843-CPD-0124
Order number	249115
Order name	Monitor Module 10xSurv.In/200AP IM-10EA
Surface Mounting Box – Steel Sheet	
Dimensions L x W x H	285 x 225 x 62 (mm)
Weight	2kg
Order number	249117
Order name	Surface Mounting Box/Multi Modules M200-SMB-MM
Surface Mounting Box – Plastics	
Dimensions L x W x H	245 x 180 x 100 (mm)
Order number	249118
Order name	Surface Mounting Box SMB6-VO



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Flame Detector IR² 16581



- **Dual infrared sensor according to EN 54-10, Class 1**
- **Detection of open flames through flickering infrared radiation**
- **High immunity to deceptive alarms**
- **Selectable response delay**
- **Relay contacts for alarm and fault**
- **Integrated optical test function**



Description

The Flame Detector 16581 responds to the flickering infrared radiation of open flames. Therefore, it is extremely well suitable for the detection of fires which are difficult to detect with common smoke detectors – for example, alcoholic fires or gas flames.

The detector is ideal for the following applications:

- Aviation and automotive industry
- Paint shops
- Warehouses
- Textile industry
- Waste treatment

With two independent infrared sensors for different wavelengths and with an intelligent evaluation logic, the detector can safely distinguish between alarm situations and deceptive alarms. Therefore, it is very insensitive to disturbance sources such as sunlight, fluorescent lamps or electric arcs.

The detector complies with EN 54-10, Class 1, which means it is suitable to detect flames up to a distance of 25m.

The response delay of the detector can be selected in 4 steps between 1 and 8s. An alarm and a fault condition is signalled via two dry relay contacts. Conventional technology is used for alarm transmission to the fire detection control panel. The detector can be integrated into a loop by means of a conventional zone module.

A simple test of the detector can be carried out by means of the integrated optical self test function, which does not require additional tools. During this self test, a built-in infrared source simulates a fire situation which activates the detector.

The detector has been designed for indoor use. The optional Mounting Bracket 7127 allows stepless horizontal and vertical adjustment for the easy adaptation of the detector to the required monitoring area.

For use in explosion-hazardous areas, an Ex version of the flame detector is available on request.



0832-CPR-F0582

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Specifications

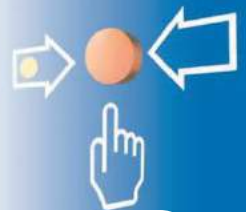
Operating voltage	14 – 28VDC
Current consumption at 24VDC	max. 8mA (quiescent), 14mA (alarm)
Monitored angle	90°
Range	max. 25m
Spectral sensitivity	0.75 – 2.7µm
Contact rating of relay outputs	max. 1A at 50VDC
Ambient temperature	-10°C to +55°C
Dimensions W x H x D	108 x 142 x 82 (mm)
Colour	sky blue, RAL 5015
Weight	2kg
Protection class	IP65
Approvals	LPCB 1204a/10 0832-CPR-F0582
Order number	243010
Order name	Flame Detector/IR2 16581

Detector Mounting Bracket

Material	stainless steel
Adjustment range vertical	0 to -45°
Adjustment range horizontal	±45°
Dimensions W x H x D	82 x 98 x 90 (mm)
Weight	650g
Order number	249141
Order name	Mounting Bracket/Flame Detector 7127



Flame Detector IR³ 16589



- **Triple infrared sensor according to EN 54-10, Class 1**
- **Detection of open flames through flickering infrared radiation**
- **Very high immunity to deceptive alarms**
- **Selectable response delay**
- **Relay contacts for alarm and fault**
- **Integrated optical test function**



Description

The Flame Detector 16589 responds to the flickering infrared radiation of open flames. Therefore, it is extremely well suitable for the detection of fires which are difficult to detect with common smoke detectors – for example, alcoholic fires or gas flames.

The detector is ideal for the following applications:

- Pharmaceutical industry
- Paint shops
- Warehouses
- Nuclear facilities
- Tunnels

With three independent infrared sensors for different wavelengths and with an intelligent evaluation logic, the detector can safely distinguish between alarm situations and deceptive alarms. Therefore, it is particularly insensitive to disturbance sources such as sunlight, fluorescent lamps or electric arcs.

The detector complies with EN 54-10, Class 1, which means it is suitable to detect flames up to a distance of 25m.

The response delay of the detector can be selected in 4 steps between 1 and 8s. An alarm and a fault condition is signalled via two dry relay contacts. Conventional technology is used for alarm transmission to the fire detection control panel. The detector can be integrated into a loop by means of a conventional zone module.

A simple test of the detector can be carried out by means of the integrated optical self test function, which does not require additional tools. During this self test, a built-in infrared source simulates a fire situation which activates the detector.

The detector has been designed for indoor and outdoor use. The optional Mounting Bracket 7127 allows stepless horizontal and vertical adjustment for the easy adaptation of the detector to the required monitoring area.

For use in explosion-hazardous areas, an Ex version of the flame detector is available on request.



0832-CPR-F0583

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Specifications

Operating voltage	14 – 30VDC
Current consumption at 24VDC	max. 8mA (quiescent), 14mA (alarm)
Monitored angle	90°
Range	max. 25m
Spectral sensitivity	0.75 – 2.7µm
Contact rating of relay outputs	max. 1A at 50VDC
Ambient temperature	-10°C to +55°C
Dimensions W x H x D	108 x 142 x 82 (mm)
Colour	sky blue, RAL 5015
Weight	2kg
Protection class	IP65
Approvals	VdS G212189 LPCB 1204a/11 0832-CPR-F0583
Order number	243011
Order name	Flame Detector/IR3 16589

Detector Mounting Bracket

Material	stainless steel
Adjustment range vertical	0 to -45°
Adjustment range horizontal	±45°
Dimensions W x H x D	82 x 98 x 90 (mm)
Weight	650g
Order number	249141
Order name	Mounting Bracket/Flame Detector 7127



Isolator Module

ISM1-2



- **Safe disconnection of a faulty loop section**
- **For use on a System Sensor loop**
- **Installation in commercial installation boxes or in the LST standard grid**
- **Small design**



Description

The Isolator Module ISM1-2 is used on the loop with System Sensor protocol and disconnects the loop in the event of a short circuit of the loop connection. Thereby only the loop elements located between two isolator modules are affected by the short circuit.

The Fire Detection Control Panels Series BC600 and BC216 report the affected loop elements as faulty and operate the remaining loop sections, which are not faulty, from both ends of the loop, until the fault is removed.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 0.2mA
Ambient temperature	-5°C to +50°C
Dimensions L x W x H	70 x 24 x 15 (mm)
Weight	20g
Approvals	VdS G296011 0786-CPD-21029
Order number	249003
Order name	Isolator Module/500/200 ISM1-2



0786-CPD-21029

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Isolator Module

ISM1-3



- **Safe disconnection of a faulty loop section**
- **For use in an Apollo loop**
- **Installation in commercial installation boxes or in the LST standard grid**
- **Small design**



Description

The Isolator Module ISM1-3 is used on the loop with Apollo protocol and disconnects the loop in the event of a short circuit of the loop connection. Thereby only the loop elements located between two isolator modules are affected by the short circuit.

The Fire Detection Control Panels Series BC600 and Series BC216 report the affected loop elements as faulty and operate the remaining loop sections, which are not faulty, from both ends of the loop, until the fault is removed.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	max. 0.2mA
Ambient temperature	-5°C to +50°C
Dimensions L x W x H	70 x 24 x 15 (mm)
Weight	20g
Approvals	VdS G296012 0786-CPD-21030
Order number	249029
Order name	Isolator Module/XP95/Disc ISM1-3



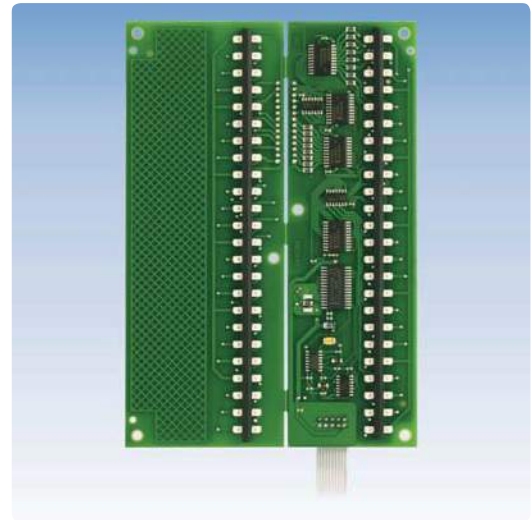
0786-CPD-21030

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LED Display Field LAB48



- **48 freely programmable LED pairs**
- **Indication of events and conditions of Fire Detection Control Panels Series BC216 or BC016**
- **Installation in control panels Series BC216 or LED Display Tableau LAT288**
- **Different LED colors available**
- **Individual labeling by means of inserted text labeling strips**



Description

The LED Display Field LAB48 serves for the indication of the events of detectors, detector zones, actuations, transmitting devices, or alarming devices on Fire Detection Control Panels Series BC216 or BC016 as well as the events of flooding zones or extinguishing systems on Extinguishing Control Panels Series LC216.

The LED display field is designed to be installed into Fire Detection Control Panels Series BC216 or into the LED Display Tableau LAT288:

- The LAB48 can be mounted into a Fire Detection Control Panel Series BC216 with display and operating field, to which it is directly connected.
- The LED Display Tableau LAT288 can accommodate up to 3 LED Display Fields LAB48 and the Remote Tableau Drive Unit PTU288-1. Due to the actuation via the INFO bus, the LED Display Tableau is a universal remote tableau for all Fire Detection Control Panels Series BC216 and BC016 as well as the Extinguishing Control Panel Series LC216.

48 LED pairs are arranged in two rows on the component. Each LED pair can be freely assigned to the individual events. The left LEDs are intended for displaying the alarm or the activation, or for displaying a system condition, respectively. The right LEDs indicate the disablement or the fault condition of the assigned system component.

The LED display field is available in multiple versions with different LED colors for varying applications.

Each LED pair can be individually labeled by means of labeling strips which are inserted into the front foil of the case cover.

The component is shipped with the necessary accessory for trouble-free mounting on the case cover of the fire detection control panel or in the LED display tableau.

Specifications

Current consumption at 24V	typ. 2mA no active LED, +0.25mA per LED
Ambient temperature	-20°C to +60°C
Dimensions L x W x H	176 x 120 x 15 (mm)
Weight	60g



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LAB48-1

48 LEDs alarm/release/activation	red
48 LEDs disablement/fault	yellow
Order number	214024
Order name	LED Display Field LAB48-1

LAB48-2

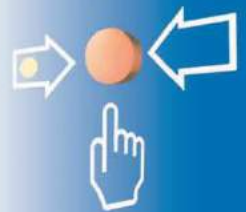
48 LEDs alarm/release/activation	yellow
48 LEDs disablement/fault	yellow
Order number	214030
Order name	LED Display Field LAB48-2

LAB48-3

24 LEDs alarm/release/activation (left side)	red
24 LEDs alarm/release/activation (right side)	yellow
48 LEDs disablement/fault	yellow
Order number	214032
Order name	LED Display Field LAB48-3

LAB48-4

24 LEDs alarm/release (left side)	red
24 LEDs activation (right side)	green
24 LEDs disablement/fault (left side)	yellow
24 LEDs disablement/fault (right side)	yellow
Order number	214036
Order name	LED Display Field LAB48-4



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Loop Tester LTG30-1



- **Measurement of the resistance of both loop lines**
- **Loop line checked for insulation faults**
- **Can be used for the detector brands Labor Strauss – Series FI750, FI700 System Sensor – Series 200AP, 200 Apollo – Series Soteria, Discovery, XP95**
- **Makes commissioning and maintenance of the loop easier**



Description

The Loop Tester LTG30-1 helps in commissioning and maintenance of fire detection systems in loop technology. By means of the loop tester, a completed loop can already be checked for possible line faults and wiring faults before the loop is connected to the fire detection control panel.

After the start of the test process, a series of measurements is carried out and the essential loop parameters are determined:

- the resistance of the positive and negative loop line – including the isolators,
- the loop lines' insulation resistance to earth potential and shield,
- the current consumption of the loop and
- the loop voltage at the end of the loop.

Three green light emitting diodes indicate the proper connection of the loop lines and of the shield. Possible insulation faults are indicated by 5 yellow LEDs. The resistance values of the loop lines and any error messages are shown on the liquid crystal display.



The delivery scope includes the necessary measuring lines with alligator clips as well as a plug-in power adaptor as power supply.

Specifications

Operating voltage	11 – 30VDC
Current consumption at 24V	max. 1A
Measuring range of loop resistance	0 – 120Ω
Ambient temperature	-5°C to +50°C
Dimensions L x W x H	210 x 110 x 35 (mm)
Weight	400g
Order number	219017
Order name	Loop Tester LTG30-1



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Control Module M201E



- **Loop technology with System Sensor protocol**
- **One monitored output or dry relay contact**
- **Output line monitored for wire breakage and short circuit**
- **Setting of module address via decadic rotary switches**
- **Mounting in module box or by means of mounting base**



Description

The addressable Control Module M201E serves for the actuation of an external device via the bi-directional communication on the loop with System Sensor protocol. The control module provides two modes for actuation of the external device: In the monitored mode an external power supply can be switched to the line-monitored output. In the unmonitored mode a dry change-over relay contact can actuate the external device.

The way of actuation and the monitoring mode can be selected by means of DIL-switches.

A status LED indicates the condition of the control module. Separate terminals enable the operation of the module with or without the integrated dual-isolator.

Accessories for mounting on a wall, on a plate or on a DIN rail are available.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 510µA (quiescent)
Contact rating	2A/30VDC or 0.5A/30VAC
Ambient temperature	-20°C to +60°C
Dimensions L x W x H	93 x 94 x 23 (mm)
Colour	cream
Weight	110g
Approvals	VdS G202141 0786-CPD-20341
Order number	249103
Order name	Control Module 1xSurv.Out/200 M201E



0786-CPD-20341

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Surface Mounting Box

Dimensions L x W x H	132 x 137 x 48 (mm)
Order number	249108
Order name	Surface Mounting Box M200E-SMB

Base for Mounting Plate

Order number	249109
Order name	Base for Mounting Plate/M200 M200E-PMB

Base for Carrier Rail

Order number	249110
Order name	Base for Carrier Rail/M200 M200E-DIN



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Control Module M201E-240



- **Loop technology with System Sensor protocol**
- **One output with dry relay contacts 230VAC**
- **Status LED**
- **Setting of module address via decadic rotary switches**
- **Supplied with module box (wall-mount case)**



Description

The Control Module M201E-240 serves to actuate external devices by means of one normally open and a separate normally closed relay contact, suitable for switching 230VAC. Communication to the fire detection control panel is established via the loop using System Sensor protocol.

A status LED indicates the condition of the module. The addressable control module is supplied in a module box for easy wall mounting. Separate terminals enable the operation of the module with or without the integrated dual-isolator.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 510µA (quiescent)
Contacts	1 × NO, 1 × NC
Contact rating	5A/30VDC or 5A/250VAC
Ambient temperature	-20°C to +60°C
Dimensions L × W × H	132 × 137 × 40 (mm)
Colour	cream/transparent smoke-coloured
Weight	195g
Approvals	VdS G202141 0786-CPD-20341
Order number	249105
Order name	Control Module 1xRel.Out/200 M201E-240



0786-CPD-20341

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Control Module M201E-240-DIN



- **Loop technology with System Sensor protocol**
- **One output with dry relay contacts 230VAC**
- **Status LED**
- **Setting of module address via decadic rotary switches**
- **Prepared for mounting on a DIN rail**



Description

The Control Module M201E-240-DIN serves to actuate external devices by means of one normally open and a separate normally closed relay contact, suitable for switching 230VAC. Communication to the fire detection control panel is established via the loop using System Sensor protocol.

A status LED indicates the condition of the control module.

The case is prepared for mounting on a 35mm DIN rail. Separate terminals enable the operation of the module with or without the integrated dual-isolator.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 510µA (quiescent)
Contacts	1 × NO, 1 × NC
Contact rating	5A/30VDC or 5A/250VAC
Ambient temperature	-20°C to +60°C
Dimensions W × H × D	76 × 125 × 48 (mm)
Colour	cream
Weight	140g
Approvals	VdS G202141 0786-CPD-20341
Order number	249106
Order name	Control Module 1xRel.Out-DIN/200 M201E-240-DIN



0786-CPD-20341

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Monitor Module M210E



- **Loop technology with System Sensor protocol**
- **One input with line-monitoring for wire breakage and short circuit**
- **Status LED**
- **Setting of module address via decadic rotary switches**
- **Mounting in module box or by means of mounting base**



Description

The addressable Monitor Module M210E serves for the line-monitored integration of contact detectors, such as manual call points, sprinkler system contacts or supervising contacts, into the bi-directional communication on the loop with System Sensor protocol. A status LED

indicates the condition of the monitor module. Separate terminals enable the operation of the module with or without the integrated dual-isolator. Accessories for mounting on a wall, on a plate or on a DIN rail are available.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 510µA (quiescent)
Ambient temperature	-20°C to +60°C
Dimensions L x W x H	93 x 94 x 23 (mm)
Colour	cream
Weight	110g
Approvals	VdS G202140 0786-CPD-20342
Order number	249100
Order name	Monitor Module 1xSurv.In/200 M210E



0786-CPD-20342

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Surface Mounting Box

Dimensions L x W x H	132 x 137 x 48 (mm)
Order number	249108
Order name	Surface Mounting Box M200E-SMB

Base for Mounting Plate

Order number	249109
Order name	Base for Mounting Plate/M200 M200E-PMB

Base for Carrier Rail

Order number	249110
Order name	Base for Carrier Rail/M200 M200E-DIN



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Conventional Zone Module

M210E-CZ, M210E-CZR



- **Loop technology with System Sensor protocol**
- **Integration of conventional and special detectors into the loop**
- **Output for resetting of detectors**
- **M210E-CZR: optional connection of intrinsically safe detector circuits**
- **Mounting in module box or by means of mounting base**



Description

The addressable Conventional Zone Modules M210E-CZ and M210E-CZR serve for the integration of conventional detectors and special detectors into a loop with System Sensor protocol.

- The module M210E-CZ is designed for a capacitive line termination. As a result, the current consumption of the module is kept very low.
- The module M210E-CZR is used with an ohmic end-of-line resistor. Combined with a safety barrier, this also allows the connection of detectors in intrinsically safe areas.

The conventional zone modules provide an output for resetting special detectors. A multicoloured status LED indicates the present condition of the module.

An integrated dual-isolator disconnects the loop in case of a short circuit. In this way, the undisturbed communication with the loop elements outside the faulty loop section is ensured. The isolator can also be bypassed via an additional terminal.

The module address is easily set in the range 1 to 159 with two decadic rotary switches. The module can be powered either by an external power supply or through the loop.

Accessories for mounting on a wall, on a plate or on a DIN rail are available.

Specifications

Operating voltage	18 – 30VDC (external power supply) or supply through the loop voltage
Current consumption from the loop at 24VDC (external supply)	typ. 500µA (quiescent)
Ambient temperature	-20°C to +60°C
Dimensions L x W x H	93 x 94 x 23 (mm)
Colour	cream
Weight	110g



0832-CPD-0799
0832-CPD-1390

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Conventional Zone Module M210E-CZ

Current consumption from loop at 24VDC (supply via loop)	typ. 1.5mA (quiescent, end-of-line element 47µF, no detector)
Approvals	VdS G205144 LPCB 199v/07 0832-CPD-0799
Order number	249104
Order name	Conventional Zone Module/200 M210E-CZ

Conventional Zone Module M210E-CZR

Current consumption from loop at 24VDC (supply via loop)	typ. 6.7mA (quiescent, end-of-line element 3.9kOhm, no detector)
Approvals	VdS G210088 LPCB 199v/08 0832-CPD-1390
Order number	249107
Order name	Conventional Zone Module/200 M210E-CZR

Mounting accessories

The Surface Mounting Box M200E-SMB allows easy and safe wall mounting of a Series M200 module. For the protected cable entry, the Surface Mounting Box M200E-SMB-KO additionally includes 5 grommets.

The Surface Mounting Box SMB6-V0 (not illustrated) can accommodate up to 6 modules. Thanks to the transparent cover, the status LEDs and the address switches are visible from the outside.

By means of the base M200E-PMB, a module can be mounted on mounting plates or on any even surface.

With the base M200E-DIN, a module can be snapped onto a 35mm DIN rail.



Specifications

Surface mounting box IP50

Dimensions L x W x H	132 x 137 x 48 (mm)
Order number	249108
Order name	Surface Mounting Box M200E-SMB

Surface mounting box IP50, version with 5 grommets

Order number	249111
Order name	Surface Mounting Box For M200 M200E-SMB-KO

Surface mounting box for 6 modules

Dimensions L x W x H	245 x 170 x 100 (mm)
Order number	249118
Order name	Surface Mounting Box SMB6-V0

Base for mounting plate

Order number	249109
Order name	Base for Mounting Plate/M200 M200E-PMB

Base for carrier rail

Order number	249110
Order name	Base for Carrier Rail/M200 M200E-DIN

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Monitor Module M220E



- **Loop technology with System Sensor protocol**
- **Two inputs with lines monitored for wire breakage and short circuit**
- **Status LEDs**
- **Setting of module address via decadic rotary switches**
- **Mounting in module box or by means of mounting base**



Description

The addressable Monitor Module M220E serves for the line-monitored integration of two contact detectors, such as manual call points, sprinkler system contacts or supervising contacts, into the bi-directional communication on the loop with System Sensor protocol.

Each input has an individual status LED. Separate terminals enable the operation of the module with or without the integrated dual-isolator. Accessories for mounting on a wall, on a plate or on a DIN rail are available.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 600µA (quiescent)
Ambient temperature	-20°C to +60°C
Dimensions L x W x H	93 x 94 x 23 (mm)
Colour	cream
Weight	110g
Approvals	VdS G202140 0786-CPD-20342
Order number	249101
Order name	Monitor Module 2xSurv.In/200 M220E



0786-CPD-20342

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Surface Mounting Box

Dimensions L x W x H	132 x 137 x 48 (mm)
Order number	249108
Order name	Surface Mounting Box M200E-SMB

Base for Mounting Plate

Order number	249109
Order name	Base for Mounting Plate/M200 M200E-PMB

Base for Carrier Rail

Order number	249110
Order name	Base for Carrier Rail/M200 M200E-DIN



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Module M221E

- Loop technology with System Sensor protocol
- Two input lines monitored for wire breakage and short circuit
- One dry relay output
- Setting of module address via decadic rotary switches
- Mounting in module box or by means of mounting base



Description

The addressable Module M221E serves for the line-monitored integration of 2 contact detectors, such as manual call points, sprinkler system contacts or supervising contacts, into the bi-directional communication on the loop with System Sensor protocol. Furthermore, it can be used to actuate external devices by means of a relay output with a dry change-over contact, via the

loop. Each input as well as the output have individual status LEDs. Separate terminals enable the operation of the module with or without the integrated dual-isolator.

Accessories for mounting on a wall, on a plate or on a DIN rail are available.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	approx. 660µA (quiescent)
Contact rating	2A/30VDC or 0.5A/30VAC
Ambient temperature	-20°C to +60°C
Dimensions L x W x H	93 x 94 x 23 (mm)
Colour	cream
Weight	110g
Approvals	VdS G202139 0786-CPD-20343
Order number	249102
Order name	Module 2xSurv.In 1xRel.Out/200 M221E



0786-CPD-20343

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Surface Mounting Box

Dimensions L x W x H	132 x 137 x 48 (mm)
Order number	249108
Order name	Surface Mounting Box M200E-SMB

Base for Mounting Plate

Order number	249109
Order name	Base for Mounting Plate/M200 M200E-PMB

Base for Carrier Rail

Order number	249110
Order name	Base for Carrier Rail/M200 M200E-DIN



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Micro Monitor Module M501MEA



- **Loop technology with System Sensor protocol**
- **One line-monitored input**
- **Integration of contact detectors into the loop**
- **Setting of module address via decadic rotary switches**
- **Small design**



Description

The addressable Monitor Module M501MEA serves for the line-monitored integration of contact detectors, such as manual call points, sprinkler system contacts or supervising contacts, into the bi-directional communication on the loop with System Sensor protocol.

The address of the module is easily selected in the range 1 to 159 by means of two integrated decadic rotary switches. Due to the compact design, the module can be easily installed in the monitored device.

Specifications

Operating voltage	Supply through loop voltage
Current consumption	400µA (quiescent)
Ambient temperature	0°C to +49°C
Dimensions L x W x H	71 x 33 x 15 (mm)
Colour	cream
Weight	57g
Approval	0359-CPD-0176
Order number	249126
Order name	Monitor Module/200AP M501MEA



CE
0359-CPD-0176

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LST

Detector Base Series ORBIS MB-00001



- Suitable for automatic detectors in conventional technology
- Screw terminals for secure connection of multiple wires
- Terminals for connection of remote indicator
- Mechanical theft protection can be activated



Description

The Detector Base MB-00001 is designed for the easy connection of automatic detectors Series ORBIS in conventional technology. Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection. The base provides the possibility to easily connect an

external remote indicator, and has been designed for surface mounting in dry rooms. For special applications a range of accessories (for moist room, false ceiling or flush installation) is available. A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

Ambient temperature	-40°C to +70°C
Relative humidity	10 – 98% (no condensation)
Dimensions Ø × H	100 × 23 (mm)
Colour	white
Weight	60g
Order number	246042
Order name	Detector Base/Conv./ORBIS/Apo MB-00001



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Manual Call Point

Series MCP5A



- **Loop technology with System Sensor protocol**
- **Available with pane of glass or plastic**
- **LED indicates activation**
- **Versions with or without dual-isolator**
- **Operating instructions by means of standardised symbols**



Description

The Manual Call Points Series MCP5A are certified to the standard EN 54-11 / type A and are designed for use on loops with System Sensor protocol.

Two mechanical versions of the detector are available:

- **With pane of glass:** The detector is activated by pressing in the pane of glass, which breaks into two pieces at a predetermined breaking point. By means of a special key, the detector case can be opened and the pane of glass can be replaced.
- **With pane of plastic:** The detector is activated by pressing in the pane of plastic without breaking it. By means of a special key, the pane can be put back to the idle position, thereby resetting the detector.

Each of these two mechanical versions is available with or without dual-isolator. The integrated dual-isolator disconnects the loop fast and safely in case of a short circuit.

The activated condition of the manual call point is optically indicated by an LED. The detector address is selected with two decadic rotary switches.

The detector is fitted into a plastic case and can be mounted on a 60mm flush-mount installation box. An optional case for surface mounting on a wall can be supplied.

Specifications

Operating voltage	Supply through loop voltage
Ambient temperature	-10°C to +55°C (no condensation or icing)
Relative humidity	max. 95% (no condensation)
Protection class	IP24
Dimensions W x H x D	89 x 93 x 28 (mm)
Colour	flame red, RAL 3000
Weight	110g
Manual call point with pane of glass, without isolator	
Current consumption	260µA (quiescent)
Approvals	LPCB 166b/45 0832-CPD-0829
Order number	245040
Order name	Manual Call Point/Red/200AP/Glass MCP5A-RP07FG



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0832-CPD-0829
0832-CPD-0831

Manual call point with pane of glass, with isolator	
Current consumption	360µA (quiescent)
Approvals	LPCB 166e/01 0832-CPD-0831
Order number	245041
Order name	Manual Call Point/Red/200AP/ISM/Glass MCP5A-RP08FG
Manual call point with pane of plastic, without isolator	
Current consumption	260µA (quiescent)
Approvals	LPCB 166b/45 0832-CPD-0829
Order number	245042
Order name	Manual Call Point/Red/200AP/Flexi MCP5A-RP07FF
Manual call point with pane of plastic, with isolator	
Current consumption	360µA (quiescent)
Approvals	LPCB 166e/01 0832-CPD-0831
Order number	245043
Order name	Manual Call Point/Red/200AP/ISM/Flexi MCP5A-RP08FF

Accessories and replacement panes

The Surface Mount Boxes SR and SR3T allow the surface mounting of the Manual Call Points Series MCP5A. The Surface Mount Box SR3T is provided with 3 auxiliary terminals for easy wiring. The Plexiglas cover PS200 can be optionally installed on Manual Call Points Series MCP5A. In order to activate the manual call point, the cover must be lifted first.

In this way, an unintentional activation is prevented.

The printed replacement panes of glass are needed for resetting an activated Manual Call Point MCP5A-RP07FG or MCP5A-RP08FG. One package contains 10 pieces.

Specifications

Surface Mount Box SR	
Protection class	IP24
Dimensions W × H × D	87 × 87 × 32 (mm)
Colour	flame red, RAL 3000
Weight	52g
Order number	245019
Order name	Surface Mount Box/MCP5A SR
Surface Mount Box SR3T	
Protection class	IP24
Dimensions W × H × D	87 × 87 × 32 (mm)
Colour	flame red, RAL 3000
Weight	60g
Order number	245012
Order name	Surface Mount Box/MCP5A SR3T
Replacement panes 10 pieces	
Order number	249213
Order name	Glass Pane for MCP Series/10pcs. G21140
Plexiglas cover	
Order number	245024
Order name	Hinged Cover for MCP/WCP PS200

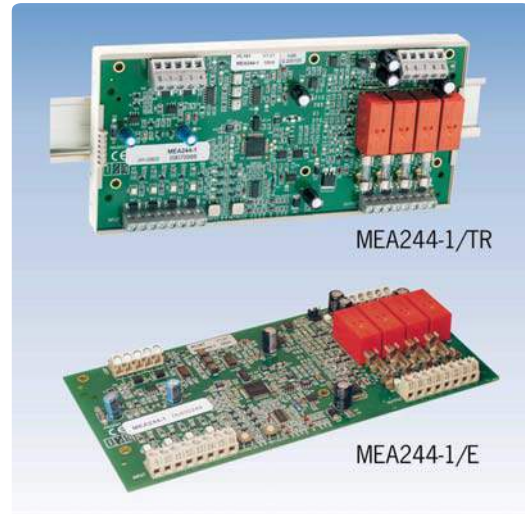
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Multi Module MEA244-1



- **Loop technology with System Sensor protocol**
- **4 independent line-monitored inputs**
- **4 independent outputs with patented monitoring of line resistance and load resistance**
- **Optimized for use in extinguishing systems**
- **Supply supervised for undervoltage**



Description

The multi module MEA244-1 has been designed especially for use in extinguishing systems. It has 4 independent inputs for connection of contact detectors, and 4 independent, powerful outputs for actuation of external control devices.

The inputs are monitored to detect wire breakages and short circuits of the connection leads. On the outputs the internal resistances of the control devices and the line resistances are monitored separately. An automatic calibration procedure, which gets started by pressing a key during commissioning, determines the reference values of both resistances. The patented method of multiple monitoring makes the reliable detection of line or load faults as well as contact corrosion possible.

The multi module is operated on the loop with System Sensor protocol and has an integrated dual-isolator. The module occupies 8 consecutive addresses on the loop.

During commissioning, the base address, which is assigned to input 1, gets entered using a key, all further addresses are automatically assigned by the module.

The MEA244-1 and the connected control devices are supplied through an external 24V power supply. The supply voltage gets supervised for undervoltages. If the voltage drops below the threshold of the undervoltage detection, then this event is automatically signalled to the control panel, via the loop, as fault of all four outputs. Each input and each output has a status LED.

The multi module is available in two versions:

- The MEA244-1/TR has been designed for mounting on a DIN rail,
- the MEA244-1/E can be mounted in a control panel using the supplied mounting spacers.



0786-CPD-20978

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Specifications

Supply voltage	20 – 30VDC
Threshold of undervoltage detection	21.7V (can be increased to 25.3V by using a jumper)
Current consumption at 24V	35mA (quiescent), max. 160mA (without load)
Current consumption on the loop	500µA
Number of inputs / outputs	4 / 4
Load current per output	max. 1.5A
Ambient temperature MEA244-1	-5°C to +60°C
Ambient temperature external control equipment	+5°C to +50°C (to ensure the functioning of the fault detection)
Patent number	AT 501 215 B1
Approvals	VdS G205120 0786-CPD-20978

Multi module for mounting on rail

Dimensions L × W × H	196 × 97 × 56 (mm)
Weight	310g
Order number	249092
Order name	Module 4xSurv.In 4xSurv.Out/Rail MEA244-1/TR

Multi module for mounting in control panel

Dimensions L × W × H	194 × 93 × 20 (mm)
Weight	150g
Order number	249095
Order name	Module 4xSurv.In 4xSurv.Out/Panel MEA244-1/E



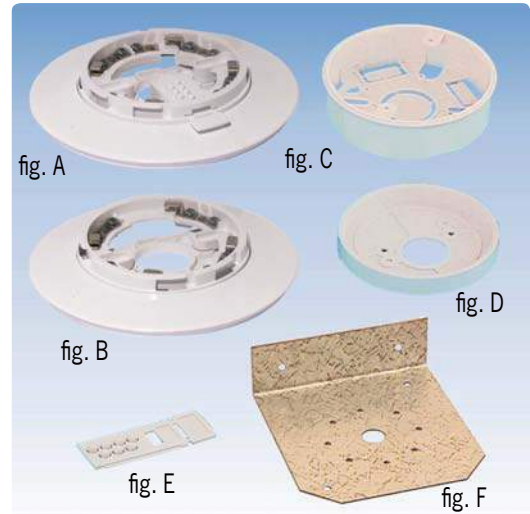
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Detector Base Accessories

Series 65/XP95



- **Detector base for flush mounting in false ceilings**
- **Conduit box for surface mounting**
- **Detector base backplate**
- **Code cards for selection of the detector address**
- **Detector mounting bracket**



Detector base for flush mounting (loop technology)

The detector base in flush mounting design (fig. A) accommodates automatic fire detectors Series XP95 and Discovery for use in loops with Apollo protocol. It is specially designed for mounting in false ceilings made of mineral fibre.

The detector address is selected by means of a code card in the detector base. Therefore the detector can be changed without additional tools. The package contents includes a cover plate.

Specifications

Dimensions Ø × H	150 × 15 (mm)
Colour	white
Weight	70g
Order number	246034
Order name	Detector Base/XP95/Disc 45681-250

Detector base for flush mounting (conventional technology)

The detector base in flush mounting design (fig. B) accommodates automatic fire detectors in addressable conventional technology. It is specially designed for mounting in false ceilings made of mineral fibre.

Individual detector addressing can be achieved by connecting the optional Address Module NG60-1. The package contents includes a cover plate.

Specifications

Dimensions Ø × H	150 × 15 (mm)
Colour	white
Weight	70g
Order number	246035
Order name	Detector Base/Conv./60/65 45681-251

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Conduit box for surface mounting

The Conduit Box 45681-204 (fig. C) is a supplement to the detector bases Series 65, Orbis, XP95, Discovery and Soteria for surface mounting and serves to easily insert cable conduits or thick cables. The conduit box is prepared for cable glands M16 or M20.

Specifications

Dimensions Ø × H	100 × 30 (mm)
Colour	white
Weight	60g
Order number	246029
Order name	Conduit Box/Apo 45681-204

Detector base backplate

The plastic plate (fig. D) is a supplement to the detector bases Series 65, Orbis, XP95, Discovery and Soteria and protects the mounting area from dust and dirt.

Specifications

Dimensions Ø × H	112 × 15 (mm)
Colour	white
Weight	40g
Order number	246030
Order name	Backplate/Apo 45681-233

Address cards

The code card (fig. E) serves to assign the physical address of an automatic fire detector Series XP95 or Discovery, or a loop-powered strobe Series XP95, in the detector base. The address can be set as a binary number between 1 and 126 by removing some of the pips. One package contains 100 address cards in uncoded condition.

Specifications

Dimensions L × W × H	55 × 20 × 4 (mm)
Colour	white
Weight per card	2g
Order number	249039
Order name	Address Cards/100pcs./XP95/Disc 38531-771



Detector mounting bracket

The Detector Mounting Bracket MMW1-1 (fig. F) is made of galvanised steel sheet and serves for the lateral mounting of an automatic fire detector, e.g., in false floors, elevator shafts or shelves. The bracket provides two threaded holes for easy mounting of a detector base.

Specifications

Dimensions L x W x H	120 x 120 x 40 (mm)
Weight	300g
Order number	249044
Order name	Detector Mounting Bracket MMW1-1



Optical Smoke Detector ND22051E



- **Loop technology with System Sensor protocol**
- **Optional connection of remote indicator**
- **3 sensitivity levels with constant response sensitivity**
- **Available with or without integrated isolator**
- **Function testable with magnet**



Description

The addressable Optical Smoke Detector ND22051E uses the scattered light principle, and was developed for the detection of smoke particles in a wide range of fire detection applications. The new design of the sensing chamber ensures reliable smoke detection and at the same time makes it more difficult for dust and insects to reach the chamber.

The proven loop technology with System Sensor protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector.

The influence of contamination on the optical measurement system is compensated for by using intelligent evaluation algorithms. In this way, the response sensitivity of the detector is kept constant for a long time – a

further effective step to avoid false alarms. In the parameter settings of the control panel, one of 3 sensitivity levels is selected, to adapt the detector to the respective application.

The detector address is set in the range 1 to 159 with two decadic rotary switches, thus allowing a change of the detector without additional tools.

The two LEDs with 360° visibility indicate the activated condition of the detector.

A detector function test can be conveniently conducted using a magnet. The detector can be attached to various bases and it can be protected against theft.

The Optical Smoke Detector ND22051E is available with or without integrated dual-isolator.

Specifications

Operating voltage	Supply through loop voltage
Current consumption at 24V, normal communication	max. 270µA (ND22051EI) max. 220µA (ND22051E)
Sensitivity	
Level 1	3.0%/m
Level 2	3.3%/m
Level 3	3.7%/m
Ambient temperature	-30°C to +70°C
Relative humidity	10 – 93% (no condensation)
Dimensions Ø x H	102 x 40 (mm)



0786-CPR-20652
0786-CPR-20658

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Colour	white
Weight	97g
Optical smoke detector with isolator	
Approvals	VdS G209015 0786-CPR-20652
Order number	241110
Order name	Optical Smoke Detector/200APISM ND22051E1
Optical smoke detector without isolator	
Approvals	VdS G209021 0786-CPR-20658
Order number	241111
Order name	Optical Smoke Detector/200AP ND22051E



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Address Module NG58-1



- **Allows to address conventional detectors Series FC600, FC650, 100, 300 and ECO1000**
- **Indication of detector number and assigned element text on suitable fire detection control panels**
- **Output for optional remote indicator**
- **Extremely small design**
- **Installation in the detector base**



Description

The Address Module NG58-1 is an addressable electronic component, which allows to individually identify automatic fire detectors Series FC600, FC650, 100, 300 and ECO1000 as well as manual call points or contact detectors in conventional technology.

The address module is installed in the detector base and is preset with the detector address (within the number range 0 – 63) by cutting wire jumpers. In case of alarm, the unique identification of the activated conventional detector is achieved by transmitting the address

to the fire detection control panel.

Apart from the detector address, a possibly parameterised element text – for example with the name of the room or floor – can also be displayed on compatible fire detection control panels.

In addition to individual addressing, the address module can as well be used for addressing a group of several detectors. Thus, in case of alarm activation, the address module achieves a summary indication of this detector group.

Specifications

Current consumption at 24 V	18mA (active)
Ambient temperature	-5°C to +50°C
Dimensions L x W x H	32 x 19 x 5 (mm)
Weight	10g
Order number	249020
Order name	Address Module Conventional NG58-1



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Address Module

NG60-1 for Series 65/ORBIS



- **Allows to address conventional detectors Series 65 and ORBIS**
- **Indication of detector number and assigned element text on suitable fire detection control panels**
- **Output for optional remote indicator**
- **Extremely small design**
- **Installation in the detector base**



Description

The Address Module NG60-1 is an addressable electronic component, which allows to individually identify automatic fire detectors Series 65 and ORBIS as well as manual call points or contact detectors in conventional technology.

The address module is installed in the detector base and is preset with the detector address (within the number range 0 – 63) by cutting wire jumpers. In case of alarm, the unique identification of the activated conventional detector is achieved by transmitting the address to the fire detection control panel.

Apart from the detector address, a possibly parameterised element text – for example with the name of the room or floor – can also be displayed on a compatible fire detection control panel.

In addition to individual addressing, the address module can as well be used for addressing a group of several detectors. Thus, in case of alarm activation, the address module achieves a summary indication of this detector group.

Specifications

Current consumption at 24V	18mA (active)
Ambient temperature	-5°C to +50°C
Dimensions L x W x H	38 x 19 x 5 (mm) without flying wires
Weight	10g
Order number	249028
Order name	Address Module Conventional/60/65 NG60-1



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Power Supply Units

Series NT624



- **Uninterrupted power supply for devices with 24VDC**
- **Power supplies with 2.3A, 4.3A or 8.5A output current**
- **Monitoring of battery charging and internal resistance of the batteries**
- **3 wall-mount cabinet versions and 19" front panel**
- **Certified according to EN 54-4:2006**



Description

The Power Supply Units Series NT624 serve to safely power devices which need a nominal voltage of 24VDC. The typical fields of application include fire detection systems and extinguishing controls or any other applications requiring a safe power supply.

cludes the periodical measurement of the battery voltage under load and of the internal resistance of the battery. The integrated earth leakage monitoring of the power supplies can be deactivated for special applications.

The integrated switched-mode power supply is available in three different versions:

- Power Supply **NT602-2** with maximum output current of 2.3A and battery capacity of up to 55Ah,
- Power Supply **NT604-2** with maximum output current of 4.3A and battery capacity of up to 110Ah,
- Power Supply **NT608-2** with maximum output current of 8.5A and battery capacity of up to 220Ah.

The power supplies are designed for installation into a power supply housing. For that purpose, four different housings are available. At the front of the housing, seven light emitting diodes indicate the operation as well as possible causes of faults. An optional relay module can be used to transmit the faults to the fire detection control panel.

The output voltage of the power supply is current-limited and short-circuit-protected.

By means of the integrated test function, a functional check can be performed and the present value of the internal resistance of the battery can be read out. All settings on the power supply can be made without software tools, using DIP switches. Therefore the commissioning and maintenance of power supply and batteries is especially easy and timesaving.

The optional stand-by batteries guarantee an uninterrupted power supply in the event of a mains power fault. The integrated protection against total discharge and the temperature compensated battery charging are the basis for a long battery life.

The battery monitoring according to EN 54-4:2006 in-

Specifications

Operating voltage	230V +10/-20%, 47 to 63Hz
Output voltage	typ. 27.6VDC
Ambient temperature	-20°C to +60°C
Relative humidity	max. 95% (no condensation)
Approvals	VdS G218064 0786-CPR-21608

VdS



0786-CPR-21608



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Power Supply NT602-2

Connection power	75VA
Output current	max. 2.3A
Battery capacity (charging time typ. 24h)	max. 55Ah
Dimensions W x H x D	158 x 131 x 70 (mm)
Weight	450g
Order number	317040
Order name	Power Supply NT602-2

Power Supply NT604-2

Connection power	140VA
Output current	max. 4.3A
Battery capacity (charging time typ. 24h)	max. 110Ah
Dimensions W x H x D	158 x 197 x 70 (mm)
Weight	900g
Order number	317041
Order name	Power Supply NT604-2

Power Supply NT608-2

Connection power	260VA
Output current	max. 8.5A
Battery capacity (charging time typ. 24h)	max. 220Ah
Dimensions W x H x D	158 x 197 x 80 (mm)
Weight	1.3kg
Order number	317042
Order name	Power Supply NT608-2

Power supply housings and accessories

All power supply housings are made of powder coated sheet steel. At the front of the housing, the built-in display and operating board allows the signalling of the most important operating conditions as well as the re-setting of the internal buzzer. The display and operating elements can be labelled in the respective national

language by means of the supplied insertable labelling strips.

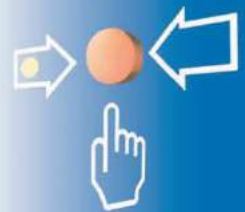
For the connection between the power supply and the display and operating board in the front of the housing, a system bus cable has been installed in the housing.

The wall-mount cabinet **NTG624-1** provides space for the Power Supply Series NT624 as well as for two stand-by batteries with 12V/max. 22Ah. In addition, a Module Carrier BGT600-1 for installation of Relay Modules RL58-1 or Siren Connection Modules SZ58-3 can be mounted in the housing. If required, additional modules can be mounted on the sidewall or in the cabinet door.

The wall-mount cabinet **NTG624-2** can accommodate the power supply as well as two stand-by batteries with 12V/max. 45Ah. In addition, two Module Carriers BGT600-1 can be installed in the housing. At the sidewall or in the cabinet door there is plenty of space for installation of additional modules such as a Multi Module MEA244-1.



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Thanks to the sophisticated design of the **Power Supply Front Panel NTG624-1CE**, it can be mounted either on a 19" pivoting frame or on the mounting plate of a switch cabinet. In both cases, the optional stand-by batteries are accommodated in the interior of the switch cabinet.

In addition to the power supply, the Power Supply Front Panel NTG624-1CE can also accommodate a Module Carrier BGT600-1 as well as a Relay Module RL58-1.

The **Power Supply Housing NTG624-3** provides space for the power supply and for the installation of up to 4 stand-by batteries with 12V/max. 90Ah or up to 8 stand-by batteries with 12V/max. 45Ah as well as for numerous optional auxiliary modules.

The delivery scope of the housing includes two Battery Brackets BK24-1, one Power Supply Carrier NTT600-1, one Module Carrier MPL17/3 and one gland plate with knock-out openings.

The **Battery Bracket BK24-1** is used for installing stand-by batteries in the Power Supply Housing NTG624-3 or in a switch cabinet. The solid sheet steel console can accommodate either one battery with 12V/max. 85Ah or two batteries with 12V/max. 45Ah.

By means of the **Conversion Kit UBS-NT24xx-NT6xx**, a Power Supply Series NT624 can be installed in a Power Supply Housing Series NT24. Therefore, if a Power Supply Series NT24 is replaced with a Power Supply Series NT624, the existing power supply housing can still be used.



NTG624-1CE



NTG624-3

Specifications

Power Supply Housing NTG624-1

Protection class	IP30
Dimensions W x H x D	384 x 384 x 107 (mm)
Colour	grey white, RAL 9002
Weight without installations	approx. 3.7kg
Order number	317050
Order name	Power Supply Housing NTG624-1

Power Supply Housing NTG624-2

Protection class	IP30
Dimensions W x H x D	442 x 460 x 203 (mm)
Colour	grey white, RAL 9002
Weight without installations	approx. 7kg
Order number	317052
Order name	Power Supply Housing NTG624-2



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Power Supply Front Panel NTG624-1CE

Dimensions W x H x D	478 x 266 (6 HU) x 20 (mm) (without power supply)
Colour	grey white, RAL 9002
Weight without installations	1.4kg
Order number	317051
Order name	Power Supply Front Panel NTG624-1CE

Power Supply Housing NTG624-3

Protection class	IP30
Dimensions W x H x D	800 x 1000 x 300 (mm)
Colour	light grey, RAL 7035
Weight without installations	approx. 65kg
Order number	317053
Order name	Power Supply Housing NTG624-3

Module Carrier BGT600-1

Dimensions W x H	187 x 131 (mm)
Material	steel sheet 1mm, zinc coated
Weight	160g
Order number	211162
Order name	Module Carrier BGT600-1

Battery Bracket BK24-1

Dimensions W x H x D	371 x 186 x 210 (mm)
Material	steel sheet 1.5mm, zinc coated
Weight	2kg
Order number	317033
Order name	Battery Bracket BK24-1

Conversion Kit UBS-NT24xx-NT6xx

Order number	317055
Order name	Conversion Kit NT24xx to NT6xx UBS-NT24xx-NT6xx



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For decades, security systems by Labor Strauß have been associated with innovative technology and highest quality, serving safety. All steps of the value-adding process – including market analysis, development, manufacturing, distribution and customer service – are united in one company. The products of the Austrian family business ensure safety – in many parts of Europe and the world.

MEP – the safety specialists. Apart from the development and manufacturing of innovative electromechanical components – such as manual call points, fire brigade control units and sabotage-monitored key safes – the company offers complete solutions around the topic „Fire Protection“.



LST

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Power supply units - certified to EN 54-4 Series NT624

Uninterruptible power supply for
 fire detection systems and extinguishing systems



MEP

LST

UNINTERRUPTIBLE POWER SUPPLY

Modern fire detection systems and extinguishing systems often use control equipment or peripheral devices whose energy demand can not be met by the fire detection or extinguishing control panel. The universal Power Supply Units Series NTG24 are designed as supplementary power supplies of these systems. By means of the power supply units, a variety of devices such as smoke aspiration systems, sounders, special detectors, solenoid valves or any other devices which require a reliable power supply with a nominal voltage of 24V, can be powered.

Uninterruptible supply with 24VDC

In the event of a mains failure, the optional stand-by batteries guarantee the uninterruptible power supply of the connected devices. The integrated protection against total discharge and the gentle, temperature compensated battery charging form the basis of the long battery life and hence the low maintenance costs.

Intelligent battery monitoring

The battery monitoring complies with the standard EN 54-4 and comprises the periodical measurement of the battery voltage under load and of the internal resist-

ance of the battery. As a result, battery aging because of an increase in the internal resistance can be detected early and the reliability of the power supply can be ensured by changing the batteries in time.

With the integrated test function, a performance check is carried out and the current internal resistance of the battery is read out. That is why maintenance of the power unit and of the batteries is especially easy and time-saving.

Output current 2.3A, 4.3A or 8.5A

The heart of the power supply units, the power supply module, is available in three versions – with an output current of 2.3A, 4.3A or 8.5A. The output voltage of the integrated switched-mode power supply is current-limited and short-circuit-protected. The built-in earth fault monitoring adds to verifying the correctness of the installation. The high efficiency of the energy-saving power units also sets them apart and ensures low heat generation.

The power supply module has been designed for installation in a power supply housing. Four different housing versions are available for this purpose.



Installation in wall-mount cabinet or in 19" switch cabinet

Various housing models are available for installing the power supply modules and the system-specifically dimensioned batteries.

The wall-mount cabinets NTG624-1, NTG624-2 and NTG624-3 provide plenty of space for installing stand-by batteries and optional auxiliary modules, in addition to the power supply module.

The Power Supply Front Panel NTG624-1CE with its thoughtful design can be installed in 19" switch cabinets. In this case the stand-by batteries are accommodated inside the switch cabinet.

Status indication on the front panel

At the front of the housing, seven light emitting diodes indicate the operating condition as well as possible causes of faults. An integrated buzzer acoustically signals occurring faults and can be reset with a push-button.

Via the fault output, fault messages can be transmitted to the fire detection control panel for further processing.

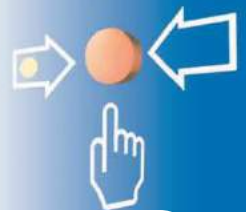
Certified quality

The VdS-approved power supply units have been tested and certified by VdS according to the mandatory standard EN 54-4:2006.

Thanks to the use of high-quality components, careful manufacturing and stringent test methods, the power supply units meet even the highest quality requirements.



Optical-Thermal Detector OH-13001



- **Addressable conventional technology**
- **Combination of optical and thermal characteristics of fire**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Sealed electronics**



Description

The Optical-Thermal Detector OH-13001 uses both the scattered light principle as well as a separate thermal detection unit. It was developed to detect the characteristics of fire in a wide range of applications, and to avoid deceptive alarms. The modern design of both measurement systems and the analysis of the parameters by means of a special algorithm allow to reliably evaluate the characteristics of fire. This makes it an all-rounder that is used in virtually all fields of fire detection.

Intelligent evaluation algorithms compensate for the contamination of the optical measurement system, thus keeping the response sensitivity of the detector constant for a long time. In this way, false alarms can

be avoided to a great extent. If the contamination can not be compensated any further, or if a fault occurs in the measurement system, this is indicated by a yellow flashing of the multicoloured status LED.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By means of the optional Address Module NG60-1, each detector can be addressed individually, thus allowing to display the detector address, as well as an assigned element text, on a suitable fire detection control panel.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 65µA (quiescent)
Ambient temperature	-40°C to +70°C (no condensation or icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 42 (mm)
Colour	white
Weight	80g
Approvals	VdS G204040 0832-CPD-0036
Order number	241061
Order name	Optical-Thermal Detector/Conv./ORBIS/Apo OH-13001



0832-CPD-0036

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Optical Smoke Detector

OP-12001



- **Addressable conventional technology**
- **Individual detector addressing by means of optional address module**
- **Optional connection of remote indicator**
- **Extremely flat design**
- **Sealed electronics**



Description

The Optical Smoke Detector OP-12001 uses the scattered light principle and was developed for the detection of smoke particles in a wide range of fire detection applications. The modern design of the sensing chamber allows to reliably evaluate the characteristics of fire.

Intelligent evaluation algorithms compensate for the contamination of the optical measurement system, thus keeping the response sensitivity of the detector constant for a long time. In this way, false alarms can be avoided to a great extent. If the contamination can not be compensated any further, or if a fault occurs in

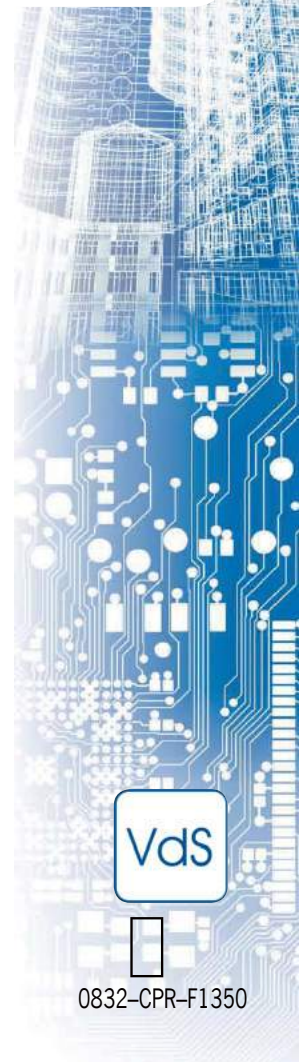
the measurement system, this is indicated by a yellow flashing of the multicoloured status LED.

Addressable conventional technology is used for alarm transmission to the fire detection control panel. By means of the optional Address Module NG60-1, each detector can be addressed individually, thus allowing to display the detector address, as well as an assigned element text, on a suitable fire detection control panel.

The detector can be attached to various bases and it can be protected against theft.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	typ. 65µA (quiescent)
Ambient temperature	-40°C to +70°C (no condensation or icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 31 (mm)
Colour	white
Weight	75g
Approvals	VdS G204039 0832-CPR-F1350
Order number	241060
Order name	Optical Smoke Detector/Conv./ORBIS/Apo OP-12001



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Detectors for Hazardous Areas

Series ORBIS



- Conventional technology
- Optical smoke detector
- Optical-thermal detector
- Thermal fire detectors classes A1R and A1S
- ATEX certified



Optical Smoke Detector OP-52027

The smoke detector OP-52027 in conventional technology is designed for use in hazardous areas. It contains an optical sensing chamber based on the scattered light principle and has been developed for the detection of different kinds of smoke particles.

The multicoloured status LED indicates the activated condition of the detector in red. If the contamination of the optical measurement system is too high or if the detector experiences a fault, this will be indicated by a yellow blinking of the LED.

Intelligent evaluation algorithms compensate for the contamination of the optical measurement system and keep the response sensitivity of the detector constant for a long time. In this way, false alarms can be avoided to a great extent.

For the connection to the conventional line, a compatible safety barrier (e.g., ES58-2, Art. No. 228003) is required. The relevant country-specific regulations have to be observed.

Specifications

Operating voltage	Supply through the detector line voltage
Ignition protection	intrinsically safe
Ex classification	Ex II 1 G Ex ia IIC
Current consumption	typ. 85µA (quiescent)
Ambient temperature	-40°C to +40°C (class T5, no icing) -40°C to +60°C (class T4, no icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 31 (mm)
Colour	white
Weight	75g
Approvals	Baseefa 06 ATEX 0007X VdS G207027 0832-CPD-0476
Order number	241062
Order name	Optical Smoke Detector/Orbis/IS OP-52027



0832-CPD-0476
0832-CPD-0468
0832-CPD-0469
0832-CPD-0475



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Optical-Thermal Detector OH-53027

The Optical-Thermal Detector OH-53027 in conventional technology is designed for use in hazardous areas. It contains both an optical sensing chamber based on the scattered light principle as well as a temperature sensor. The evaluation of the measured values of both detection units and the integrated comparison of characteristics of fire ensure safe fire detection.

Intelligent evaluation algorithms compensate for the contamination of the optical measurement system and keep the response sensitivity of the detector constant for a long time. In this way, false alarms can be avoided

to a great extent.

The multicoloured status LED indicates the activated condition of the detector in red. If the contamination of the optical measurement system is too high or if the detector experiences a fault, this will be indicated by a yellow blinking of the LED.

For the connection to the conventional line, a compatible safety barrier (e.g., ES58-2, Art. No. 228003) is required. The relevant country-specific regulations have to be observed.

Specifications

Operating voltage	Supply through the detector line voltage
Ignition protection	intrinsically safe
Ex classification	Ex II 1 G Ex ia IIC
Current consumption	typ. 85µA (quiescent)
Ambient temperature	-40°C to +40°C (class T5, no icing) -40°C to +60°C (class T4, no icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 42 (mm)
Colour	white
Weight	80g
Approvals	Baseefa 06 ATEX 0007X VdS G207028 0832-CPD-0468
Order number	241063
Order name	Optical-Thermal Detector/Orbis/IS OH-53027

Thermal fire detectors HT-51145 / HT-51157

The thermal fire detectors HT-51145 and HT-51157 in conventional technology are designed for use in hazardous areas.

- The **Thermal RoR Detector HT-51145** according to EN 54-5 Class A1R reacts to temperature changes within defined periods of time as well as a maximum temperature of 57°C.
- The **Thermal Max Detector HT-51157** according to EN 54-5 Class A1S reacts to a maximum temperature of 57°C.

The multicoloured status LED indicates the activated condition of the detector in red. A fault of the detector is indicated by a yellow blinking of the LED.

For the connection to the conventional line, a compatible safety barrier (e.g., ES58-2, Art. No. 228003) is required. The relevant country-specific regulations have to be observed.

Both detectors are suitable for a maximum room height of 7.5m.

Specifications

Operating voltage	Supply through the detector line voltage
Ignition protection	intrinsically safe
Ex classification	Ex II 1 G Ex ia IIC

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Current consumption	typ. 85µA (quiescent)
Alarm temperature	57°C (maximum temperature)
Application temperature	max. +50°C
Ambient temperature	-40°C to +40°C (class T5, no icing) -40°C to +60°C (class T4, no icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 42 (mm)
Colour	white
Weight	70g

Thermal RoR Detector HT-51145

Approvals	Baseefa 06 ATEX 0007X VdS G207020 0832-CPD-0469
Order number	242037
Order name	Thermal RoR Detector/Orbis/A1R/IS HT-51145

Thermal Max Detector HT-51157

Approvals	Baseefa 06 ATEX 0007X VdS G207026 0832-CPD-0475
Order number	242038
Order name	Thermal Max Detector/Orbis/A1S/IS HT-51157

Detector Base MB-50018

The Detector Base MB-50018 is designed to accommodate an intrinsically safe fire detector Series Orbis in hazardous areas.

Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection.

The base is designed for indoor surface mounting. A mechanical theft protection of the detector can optionally be activated in the detector base.



Specifications

Ambient temperature	-40°C to +70°C (no icing)
Relative humidity	0 – 98% (no condensation)
Dimensions Ø × H	100 × 23 (mm)
Colour	white
Weight	60g
Order number	246043
Order name	Detector Base/Orbis/IS MB-50018



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Remote Indicator PA58-3



- **Remote indication of the activation of a conventional or loop detector**
- **Connection of up to 3 remote indicators to one detector**
- **Display for individual detectors or for a group of detectors**
- **Bright, power-saving LED**
- **Supply through the detector line or loop**



Description

The Remote Indicator PA58-3 serves for the remote display of the alarm activation of a fire detector. With that, the activated detector can be located quickly if the status LED on the detector is not visible or if the indicator is placed at a remote site.

That is necessary if, for example, the detector is installed in a false ceiling or false floor, or if the activation of a detector in a hotel room has to be indicated in the corridor.

Depending on the connection, the remote indicator can display the activation of a single detector or of several detectors – e.g., the detectors in a detector zone

– which are combined for a common display.

Furthermore, due to the low current consumption of the Remote Indicator PA58-3, up to 3 indicators can be connected to one detector. These multiple indicators make it easier for the public safety personnel to locate the detector, if, for example, the way to the activated detector leads through several rooms.

The remote indicator is designed for surface mounting on a wall or on a flush-mount installation box with a diameter of 55 or 60mm. The cable can be entered either from behind (via the flush-mount cable entry in the wall piece) or via the cable entry for surface mounting.

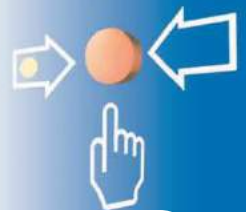
Specifications

Operating voltage	Supply through the detector line voltage or loop voltage
Ambient temperature	-30°C to +70°C (no condensation)
Protection class	IP42
Dimensions W x H x D	80 x 80 x 27 (mm)
Colour	white
Weight	42g
Order number	251003
Order name	Remote Indicator PA58-3

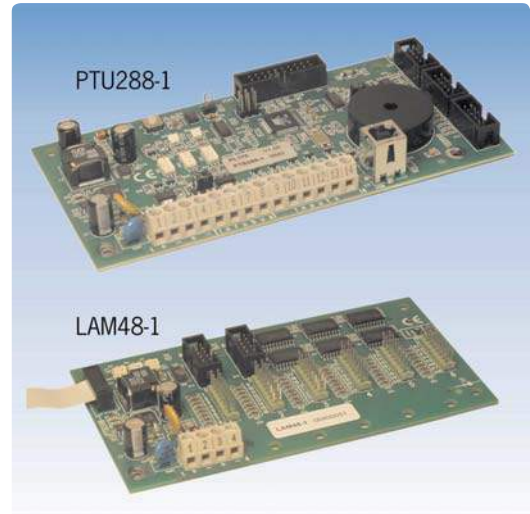


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Remote Tableau Drive Unit PTU288-1 and Accessories



- **Optically and acoustically signals the events of a fire detection or extinguishing control panel**
- **Actuation of up to 144 LED pairs, single LEDs or relays**
- **Single or summary indication parameterisable**
- **Connection to the INFO bus**
- **Easy parameterisation by means of PC software PARSOFT**



Description

The Remote Tableau Drive Unit PTU288-1 allows to optically signal events of a Fire Detection Control Panel Series BC600, Series BC216 or BC016, or of an Extinguishing Control Panel Series LC216, on an LED display tableau or a synoptic remote tableau. In addition, a built-in buzzer signals the alarm or fault condition of the control panel.

Up to 3 LED Display Fields LAB48 or LED Connection Modules LAM48-1 can be connected to the remote tableau drive unit in any combination.

In accordance to the parameterisation, the LEDs can be used to display the conditions of detectors, detector zones, actuations, actuation elements, alarming devices, transmitting devices, extinguishing systems or flooding zones as well as the most important system conditions of the fire detection control panel (e.g., summary alarm, fault condition or disablement condition). If needed, it is also possible to combine several events

into a summary display. Furthermore, the PTU288 has 5 freely parameterisable control inputs.

The remote tableau drive unit is connected to the fire detection control panel via the INFO bus. Auxiliary modules are not needed for connection to Control Panels Series BC600 or Series BC216. A Serial Interface Module SIM016-3 is necessary for connecting the PTU288 to a Fire Detection Control Panel Series BC016.

With a Fire Detection Control Panel Series BC600, the SG70-1 can also be connected via the extended INFO bus EP.

The PC software PARSOFT is used to parameterise the remote tableau drive unit via the USB interface.

The componentry is prepared for direct installation into the LED Display Tableau LAT288-1 or LAT288-1CE. The componentry can also be mounted in any housing in the LST standard grid, using the supplied mounting parts.

Specifications

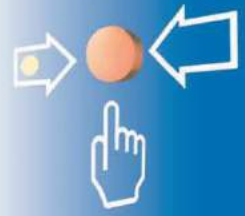
Operating voltage	15 – 31VDC
Current consumption at 24V	typ. 15mA (without LED modules)
Baud rate INFO bus	600, 1200, 2400, 4800 baud
Baud rate INFO bus EP	1200, 2400, 4800, 9600, 14400 baud
Interface for parameter setup	USB socket type B



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Ambient temperature	-20°C to +60°C
Dimensions L x W x H	150 x 75 x 20 (mm)
Weight	76g
Order number	252012
Order name	Remote Tableau Drive Unit PTU288-1



LED Connection Module LAM48-1

The LED Connection Module LAM48-1 serves, as auxiliary module of a Remote Tableau Drive Unit PTU288-1, to actuate up to 48 single LEDs, or relay outputs of a Relay Module RL58-1 or RL58-2, in any combination. In this way graphical orientation tableaus for signalling the events of a fire detection or extinguishing control panel can be easily designed.

The events are assigned to the individual LEDs or relay outputs by parameterising the remote tableau drive unit by means of PARSOFT.

The signals are available on pin connectors, which are prepared for connecting assembled LED cords. The first 16 outputs are routed in parallel to two flat cable connectors. Relay Modules RL58-1 or RL58-2 can be directly connected to each of these two flat cable connectors. If more relay outputs are needed, 2-wire connection cords can be used to actuate 2 further relays each.

The componentry is delivered with the material needed for mounting in the LST standard grid.

Specifications

Operating voltage	15 – 31VDC (supply through PTU288-1)
Current consumption at 24V	typ. 3mA (quiescent) max. 80mA (lamp test, 48 LEDs connected)
Ambient temperature	-20°C to +60°C
Dimensions L x W x H	135 x 75 x 15 (mm)
Weight	62g
Order number	252013
Order name	LED Connection Module LAM48-1

LEDs Assembled Green/Red/Amber

The package contains 10 light emitting diodes with assembled connection cords, which serve to easily connect and mount the LEDs on a synoptic remote tableau in a time-saving way. There is a luminous LED at one end of the cord. The

2-pin connector at the other end of the cord is connected to the pin connector of the LED Connection Module LAM48-1.

The LED can be easily mounted by means of the supplied black plastic clip.

Specifications

Operating voltage	Supply through LED Connection Module LAM48-1
Length of LED cable	2m
LED Ø	5mm
Drilled hole for LED clip Ø	6.3 – 6.5mm
Thickness of front panel	max. 2mm

LEDs Assembled Green

Order number	259011
Order name	LED Assembled Green/10pcs. LED-GN/10



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LEDs Assembled Red

Order number	259010
Order name	LED Assembled Red/10pcs. LED-RT/10

LEDs Assembled Yellow

Order number	259012
Order name	LED Assembled Yellow/10pcs. LED-GE/10

LED Connection Cord

The 2-wire connection cord serves to connect light emitting diodes or relays to the LED Connection Module LAM48-1.

The cord is needed if other than the pre-assembled LEDs are used, or if more than two Relay Modules RL58-1 or RL58-2 – which can be directly connected to the LED connection module via flat cable – have to be actuated.

At one end of the cord there is a connector which fits to the pin connector of the LED Connection Module LAM48-1, and the other end of the cord is open.

Specifications

Line length	2m
Order number	259013
Order name	Cord 2 Wire for LED Connection/10pcs. LED-LEITUNG/10

LED Display Tableaus LAT288-1 and LAT288-1CE

The LED Display Tableau Housing LAT288 allows for the design of a display for optically signalling the events of a Fire Detection Control Panel Series BC600, Series BC216 or Series BC016, or of an Extinguishing Control Panel Series LC216, by using freely parameterisable LED pairs.

The LED pairs are actuated through the Remote Tableau Drive Unit PTU288-1, which is connected to the control panel via the INFO bus. The buzzer of the drive unit signals the alarm or fault condition of the control panel.

The LED display tableau housing is available in two different versions:

- the LAT288-1 wall housing and
- the LAT288-1CE for mounting in 19" racks.



The tableau housings can accommodate the Remote Tableau Drive Unit PTU288-1 and up to 3 LED Display Fields LAB48. In the LED Display Tableau Housing LAT288-1, further optional componentry, e.g., relay modules, as well as up to 2 stand-by batteries 12V/max. 22Ah can be installed.

The frontal area of the LED display tableau housing is covered with a light grey plastic foil with six integrated windows. These windows allow to comfortably insert labeling strips, which identify the LED pairs.

Specifications

Colour housing	grey white, RAL 9002
Colour front foil	light grey, RAL 7035

LED Display Tableau LAT288-1

Dimensions W x H x D	420 x 520 x 130 (mm)
Weight	6.2kg (without optional componentry)
Order number	252010
Order name	LED Display Tableau LAT288-1

LED Display Tableau LAT288-1CE

Dimensions W x H x D	478 x 266 (6 rack units) x 55 (mm) (incl. PTU288-1 and LAB48)
Weight	approx. 1.6kg (without optional componentry)
Order number	252011
Order name	LED Display Tableau LAT288-1CE



Detector Base Series ORBIS

RB-10004 with Relay Output



- Suitable for automatic detectors in conventional technology
- Relay output with dry change-over contact
- Screw terminals for secure connection of multiple wires
- Mechanical theft protection can be activated



Description

The Detector Relay Base RB-10004 with integrated relay output is designed for the easy connection of automatic detectors Series ORBIS. Due to its robust multi-wire screw terminals, the detectors can be wired with ease, thus achieving a secure and durable connection.

In addition, a relay output with a dry change-over contact is integrated into the detector base. The relay output is activated through the alarm activation of the inserted

detector and remains active until the alarm is reset on the fire detection control panel.

The base has been designed for surface mounting in dry rooms. For special applications a range of accessories (for moist room, false ceiling or flush installation) is available.

A mechanical theft protection of the detector can optionally be activated at the detector base.

Specifications

Operating voltage	Supply through the detector line voltage
Current consumption	7mA (active)
Contact rating	1A at 30VDC
Ambient temperature	-40°C to +70°C
Relative humidity	10 – 98% (no condensation)
Dimensions Ø x H	100 x 31 (mm)
Colour	white
Weight	80g
Order number	246041
Order name	Detector Relay Base/Conv./ORBIS/Apo RB-10004



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Relay Modules

RL58-1/RL58-2



- **8 or 4 relay outputs, respectively, with one dry changeover contact each**
- **Actuation display by LED for each output**
- **Switch contacts on terminals**
- **Easy mounting on componentry carrier**
- **Connection with control panel via flat cable**



Description

The Fire Detection Control Panels Series BC600, Series BC216 and BC016, provide freely programmable open-collector control outputs. The open-collector outputs are connected to flat cable connectors, each with 8 outputs.

The Relay Modules RL58-1 and RL58-2 allow for the easy conversion of these control outputs to dry changeover contacts. The componentry is connected to the fire detection control panel via a flat cable.

The RL58-1 provides eight relay outputs with a maximum contact rating of 1A/60VDC/30W.

The RL58-2 offers four relay outputs with a maximum of 5A/230VAC. The terminal of the RL58-2 are designed for mains voltage. Two relay modules RL58-2 are each cascadable via pin connectors.

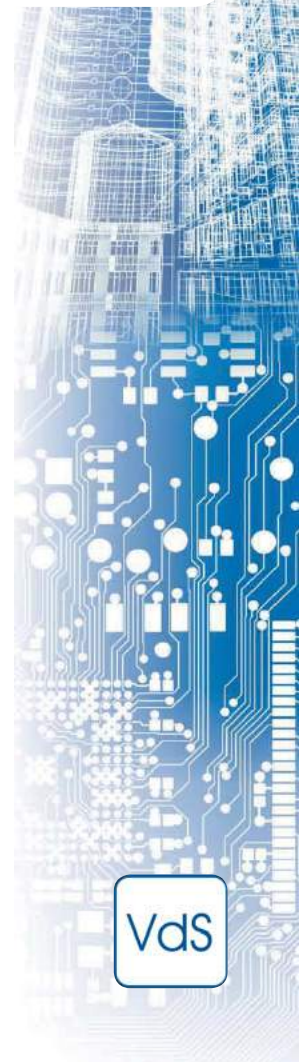
The relay module is delivered with flat cable and mounting accessories for easy installation.

Specifications

Operating voltage	20 – 31VDC
Current consumption at 24V	typ. 22mA per activated circuit
Control current	typ. 1.2mA per input
Ambient temperature	-5°C to +50°C

RL58-1

Switching power per contact	1A/60VDC/30W
Contact life	approx. 5 mill. switching cycles (unloaded) approx. 300,000 switching cycles (at 24VDC/1A)
Dimensions L x W x H	98 x 74 x 37 (mm)
Weight	330g
Order number	222004
Order name	Relay Module 8-Fold/60VDC RL58-1



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RL58-2

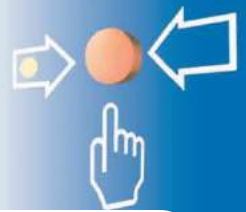
Maximum switching power per contact	3A/30VDC or 5A/230VAC
Contact life	approx. 20 mill. switching cycles (unloaded) approx. 400,000 switching cycles (at 230VAC/3A)
Dimensions L x W x H	98 x 74 x 28 (mm)
Weight	120g
Order number	222010
Order name	Relay Module 4-Fold/230VAC RL58-2



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Wall Sounders

Series Roshni



- **32 different tone types selectable**
- **Adjustable sound level**
- **Wide operating voltage range**
- **Low power consumption**
- **Versions with protection class IP54 or IP65**
- **Available in red or white**



Description

The Wall Sounder Series Roshni has 32 different tone types, such as

- Continuous tone 800Hz,
- Slow Whoop tone NEN 2575,
- DIN 33404 tone.

The tone type is selected by means of a DIL switch, the sound level can be adjusted with a potentiometer. The current consumption of the sounder depends on the tone type and the operating voltage.

The Wall Sounder Series Roshni is available in the following versions:

- ROLP/SV/R/S/8 – red, standard base IP54
- ROLP/SV/R/D/3 – red, deep base IP65
- ROLP/SV/W1/S/3 – white, standard base IP54
- ROLP/SV/W1/D – white, deep base IP65

Thanks to their robust design, the sounders are suitable for use under harsh environmental conditions.

The base is included with the sounders. In the case of the sounders with standard base, the cable is entered from behind or from the side. The sounders with deep base version additionally allow the cable to be entered through PG screw connections at the side.

For applications with 230VAC mains voltage, a base with integrated voltage transformer is available.

Specifications

Operating voltage	9 – 28VDC
Current consumption at 24V	typ. 15mA (DIN tone)
Sound level	64 – 111dB(A) / 1m distance
Ambient temperature	-25°C to +70°C
Approvals	VdS G206019 0832-CPD-1651



0832-CPD-1651

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Multitone sounder red, with base IP54

Protection class	IP54
Dimensions Ø × D	93 × 63 (mm)
Colour	flame red, RAL 3000
Weight	230g
Order number	355676
Order name	Sounder/WM/DC/red/103 ROLP/SV/R/S/8

Multitone sounder red, with base IP65

Protection class	IP65
Dimensions Ø × D	93 × 93 (mm)
Colour	flame red, RAL 3000
Weight	260g
Order number	355677
Order name	Sounder/WM65/DC/red/103 ROLP/SV/R/D/3

Multitone sounder white, with base IP54

Protection class	IP54
Dimensions Ø × D	93 × 63 (mm)
Colour	signal white, RAL 9003
Weight	230g
Order number	355678
Order name	Sounder/WM/DC/white/103 ROLP/SV/W1/S/3

Multitone sounder white, with base IP65

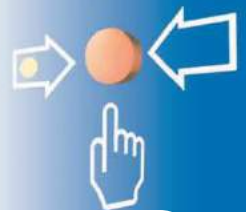
Protection class	IP65
Dimensions Ø × D	93 × 93 (mm)
Colour	signal white, RAL 9003
Weight	260g
Order number	355679
Order name	Sounder/WM65/DC/white/103 ROLP/SV/W1/D



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Remote Tableau SG70-1



- **Intelligent remote tableau for Fire Detection Control Panels Series BC600, BC216 and BC016**
- **Indication of the events and operating conditions of a fire detection system**
- **Remote operation of important system functions**
- **Optional key switch for authorization**
- **Connection to the INFO bus**



Description

The Remote Tableau SG70-1 is designed for the indication of the events and operating conditions of Fire Detection Control Panels Series BC600, Series BC216 and BC016 at a remote site. Furthermore, important operations of the fire detection system can be carried out on the remote tableau.

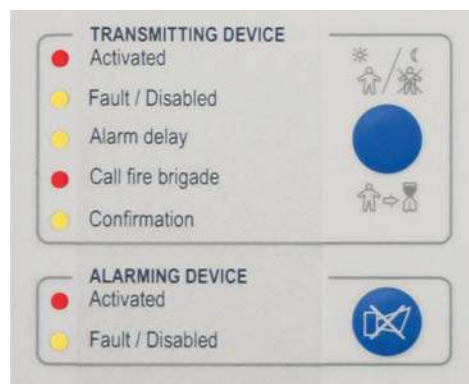
On the integrated 4-line LC display, the events of the fire detection system are indicated as clear texts and they can be displayed one after the other by means of the scroll buttons. Important operating conditions of the fire detection system are indicated by LED displays. In addition, alarms and faults are signalled by the integrated buzzer.

By parameterising the appropriate filters and combinations in the PC software PARISOFT, all events or only selected events of the system can be indicated and thus be adapted to the requirements of the user. For example, filters can be set in such a way that one remote tableau only indicates alarms and technical messages, while faults are indicated on a further remote tableau.

In the same way, an area tableau for one floor or for one building can be implemented by parameterising combinations in order to restrict the indication of events to certain zones or actuations.

The fields „TRANSMITTING DEVICE“ and „ALARMING DEVICE“ offer the same function as the fields of the Fire Detection Control Panel Series BC600, Series BC216 or BC016 to which the remote tableau is connected. They serve for the remote indication and operation of the primary transmitting device and of the alarming device that is parameterised on the control panel.

The button in the „TRANSMITTING DEVICE“ field is used for toggling between day and night operation of the transmitting device and for starting the alarm delay. By means of the button in the „ALARMING DEVICE“ field, the activated alarming device can be silenced or reactivated.



The remote tableau is equipped with a USB interface through which the system-specific parameterisation and current firmware versions are loaded by means of the Parameter Setup Software PARSOFT. Various user-specific parameters – such as the menu language or the LCD contrast – can be set directly through the menu on the remote tableau.

The LED indicators are lettered by means of labelling strips and are thus easily adapted to the respective language and application.

In applications where the authorization level for the operation shall be reached by means of a key, the optional Key Switch SCH70-1 can be installed into the Remote Tableau SG70-1.

The installation of the authorization key switch can also be carried out at a later stage.

Furthermore, the remote tableau is equipped with 2 auxiliary inputs and an additional button with parameterisable function. With that, special operations of the fire detection system can be carried out – such as „Silence buzzer“ or „Panel reset“.

The Remote Tableau SG70-1 is connected to the Fire Detection Control Panel Series BC600, Series BC216 or Series BC016 via the INFO bus. With a Fire Detection Control Panel Series BC600, the SG70-1 can also be connected via the extended INFO bus EP.



Specifications

Remote Tableau SG70-1

Operating voltage	15 – 31VDC
Current consumption at 24V without display illumination during display test	typ. 20mA max. 90mA
Baud rate INFO bus	600, 1200, 2400, 4800 baud
Baud rate INFO bus EP	1200, 2400, 4800, 9600, 14400 baud
Interface for parameter setup	USB socket type B
Ambient temperature	-20°C to +60°C
Relative humidity	max. 95% (no condensation)
Protection class	IP30
Colour housing	grey white, RAL 9002
Colour front foil	light grey, RAL 7035
Dimensions W x H x D	174 x 250 x 28.5 (mm)
Weight	1.2kg
Order number	250020
Order name	Remote Tableau SG70-1

Key Switch SCH70-1

Order number	250021
Order name	Key Switch Set Complete SCH70-1



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IS Optical Smoke Detector SLR-E-IS for Hazardous Areas



- **Conventional technology**
- **Optional connection of remote indicator**
- **Extremely flat design**
- **Function testable with test gas**
- **ATEX certified**



Description

The intrinsically safe optical smoke detector SLR-E-IS uses the scattered light principle and was developed for the detection of smoke particles in explosion-prone rooms. The modern design of the sensing chamber allows to reliably evaluate the characteristics of fire.

Conventional technology is used for alarm transmission to the fire detection control panel. In conjunction with the Safety Barrier ES58-2, the detector reaches the

given Ex classification. The two LEDs with 360° visibility indicate the activated condition of the detector. By means of an auxiliary module, the connection to a loop is possible.

A detector function test can be conducted by using test gas. The detector is attached to the IS Detector Base YBN-R/4IS.

Specifications

Ignition protection	intrinsically safe
Ex classification	Ex II 1 G EEx ia IIC T5
Current consumption at 24V	typ. 50µA (quiescent)
Ambient temperature	-10°C to +50°C
Relative humidity	10 – 95% (no condensation)
Dimensions Ø × H (incl. base)	100 × 46 (mm)
Colour	cream
Weight	115g
Approvals	BAS01ATEX1281 LPCB 164g/02 0832-CPD-0113
Order number	241090
Order name	Optical Smoke Detector/Conv/Ex SLR-E-IS



0832-CPD-0113

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Detector Base

Ambient temperature	-10°C to +55°C (no condensation or icing)
Relative humidity	10 – 95% (no condensation)
Dimensions Ø x H	100 x 15 (mm)
Colour	cream
Weight	45g
Order number	246090
Order name	Detector Base/Conv/Ex YBN-R/4IS



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Siren Connection Module SZ58-3



- **Four independent, individually fused siren outputs**
- **500mA load current per output**
- **Monitoring of the siren circuits**
- **LEDs indicate activation and faults of siren circuits**
- **Activation by means of actuation outputs or external switches**



Description

The Siren Connection Module SZ58-3 is installed in Fire Detection Control Panels Series BC600, Series BC216, Series BC016 and Series BC06 for connecting acoustical or optical signalling devices (e.g., sirens) to four independently actuatable circuits with line-monitoring. The siren circuits are individually protected by means of self-healing electronic fuses. The activation of the siren circuits is carried out by the control panel or manually by means of switches.

The signalling devices can be supplied either directly by the fire detection control panel, or, in case of in-

creased current demand, through an external power supply. The supply of the siren circuits is automatically monitored for undervoltages.

The componentry is equipped with four fault detection outputs which report the fault condition of power supply and siren lines to the control panel. For each output there are separate LEDs for indication of fault and activation.

The siren connection module is mounted on a bracket inside the housing of the fire detection control panel.

Specifications

Operating voltage	21 – 30VDC
External supply voltage for signalling devices	21 – 30VDC
Current consumption at 24V	15mA (quiescent, outputs terminated)
Load current per output	max. 500mA
Output voltage, siren circuit quiescent	-1.2VDC
Output voltage, siren circuit active	external supply voltage minus typ. 1V
End-of-line resistor	5.6k Ω
Monitoring current, quiescent state	typ. 240 μ A
Ambient temperature	-5°C to +50°C
Relative humidity	max. 95% (no condensation)
Dimensions L x W x H	98 x 74 x 18 (mm)
Weight	60g
Order number	223026
Order name	Siren Connection Module SZ58-3

Smoke Aspiration System TP-1/A



- **Monitoring of one or two independent areas**
- **Four sensitivity levels selectable**
- **Adjustable air flow monitoring**
- **Serial interface for the communication with the PC software**
- **LEDs for the indication of operation, fault and alarm**
- **Detector modules with different sensitivities can be used**



Description

The Smoke Aspiration System TP-1/A serves for the monitoring of one or two independent areas. The housing is prepared for the connection of one pipe network. By breaking out the second aspiration hole, the housing is upgraded to a two-channel smoke aspiration system. Thanks to the high response sensitivity of the detector modules, the system can be used for early fire detection in rooms as well as for monitoring technical equipment, such as switch cabinets or computer systems.

Via the pipe network, air is sampled from the monitored room and directed to a detector module, which analyses the air samples. If the smoke concentration exceeds the permissible value, an alarm is activated, which is optically indicated on the unit and transmitted to the fire detection control panel.

The continuous air flow, which is generated by a ventilator in the smoke aspiration system housing, is permanently monitored. A failure of the ventilator, a blockage of the aspiration holes or a pipe burst are detected and

optically indicated on the unit and transmitted to the fire detection control panel as fault message.

Depending on whether the device is used as single channel or two-channel smoke aspiration system, the Front Foil FW-TP-1 or FW-TP-2 is stucked on the front of the housing. The front foil is used for labelling the display elements.

The smoke aspiration system housing is provided with the entire evaluation electronics. However, the detector module, the front foil and the sensor pipe network are not included. A serial interface for communication with a PC software is installed in the unit. Light emitting diodes on the front of the unit indicate operation, fault and alarm/area 1 and alarm/area 2.

To minimise the risk of false alarms, it is possible to connect a single pipe network to both sensing chambers and to operate the detectors in interdependence of two detectors.

Specifications

Supply voltage	14 – 30VDC
Current consumption at 24V	
one detector module	max. 200mA (quiescent), 210mA (alarm)
two detector modules	max. 220mA (quiescent), 240mA (alarm)
Pipe length	2 × max. 280m
Number of aspiration holes	2 × max. 32



0786-CPD-20685

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Ambient temperature	-20°C to +60°C
Dimensions W × H × D	200 × 292 × 113 (mm)
Colour	papyrus white, RAL 9018
Weight	1.35kg
Approvals	VdS G202064 0786-CPD-20685
Order number	244181
Order name	Smoke Aspiration System Housing TP-1/A



Detector modules

The Detector Modules DM-TP are used as detection and analysis unit in a Smoke Aspiration System Housing TP-1/A. They analyse the air that the smoke aspiration system samples from the area that is to be monitored. The detector module measures both the light obscuration and the air flow.

The response thresholds for both parameters can be set separately. Dry contacts in the evaluation electronics of the smoke aspiration system housing signal the exceeding of alarm and fault thresholds.

Specifications

Detector Module DM-TP-01-L

Response thresholds	
Light obscuration	0.12 – 0.06 – 0.03 – 0.015%/m (fire alarm)
Air flow monitoring	4 levels
Order number	244322
Order name	Detector Module DM-TP-01-L

Detector Module DM-TP-10-L

Response thresholds	
Light obscuration	0.8 – 0.4 – 0.2 – 0.1%/m (fire alarm)
Air flow monitoring	4 levels
Order number	244321
Order name	Detector Module DM-TP-10-L

Detector Module DM-TP-50-L

Response thresholds	
Light obscuration	1.0 – 0.5%/m (fire alarm)
Air flow monitoring	4 levels
Order number	244320
Order name	Detector Module DM-TP-50-L

Front foil for 1 detector module

Order number	244184
Order name	Front Foil/1 Detector Module FW-TP-1

Front foil for 2 detector modules

Order number	244185
Order name	Front Foil/2 Detector Modules FW-TP-2



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Flame Detector UVIR² 16591



- **UV sensor combined with dual IR sensor, according to EN 54-10, Class 1**
- **Detection of open flames through flickering IR and UV radiation**
- **Highest immunity to deceptive alarms**
- **Selectable response delay**
- **Relay contacts for alarm and fault**
- **Integrated optical test function**



Description

The Flame Detector 16591 responds to the flickering infrared and ultraviolet radiation of open flames. Therefore, it is extremely well suitable for the detection of fires which are difficult to detect with common smoke detectors – for example, alcoholic fires or gas flames. The detector is ideal for the following applications:

- Aircraft hangars
- Power stations and turbine plants
- Military bases
- Nuclear facilities
- Fuel depots

Thanks to the combination of two independent infrared sensors for different wavelengths and an UV sensor as well as an intelligent evaluation logic, the detector can distinguish particularly safely between alarm situations and deceptive alarms. Therefore, it is very insensitive to disturbance sources such as sunlight, fluorescent lamps or electric arcs.

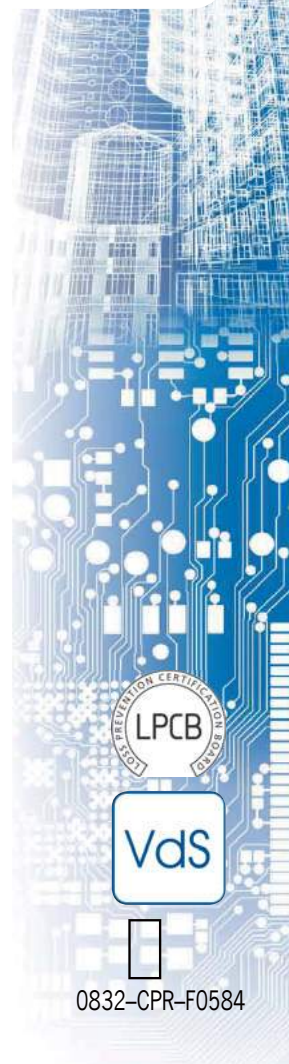
The detector complies with EN 54-10, Class 1, which means it is suitable to detect flames up to a distance of 25m.

The response delay of the detector can be selected in 4 steps between 1 and 8s. An alarm and a fault condition is signalled via two dry relay contacts. Conventional technology is used for alarm transmission to the fire detection control panel. The detector can be integrated into a loop by means of a conventional zone module.

A simple test of the detector can be carried out by means of the integrated optical self test function, which does not require additional tools. During this self test, built-in infrared and ultraviolet light sources simulate a fire situation which activates the detector.

The detector has been designed for indoor and outdoor use. The optional Mounting Bracket 7127 allows stepless horizontal and vertical adjustment for the easy adaptation of the detector to the required monitoring area.

For use in explosion-hazardous areas, an Ex version of the flame detector is available on request.



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Specifications

Operating voltage	14 – 30VDC
Current consumption at 24VDC	max. 8mA (quiescent), 14mA (alarm)
Monitored angle	90°
Range	max. 25m
Spectral sensitivity	0.75 – 2.7µm (infrared) 185 – 260nm (UV)
Contact rating of relay outputs	max. 1A at 50VDC
Ambient temperature	-10°C to +55°C
Dimensions W x H x D	108 x 142 x 82 (mm)
Colour	sky blue, RAL 5015
Weight	2kg
Protection class	IP65
Approvals	VdS G212190 LPCB 1204a/12 0832-CPR-F0584
Order number	243012
Order name	Flame Detector/UVIR2 16591

Detector Mounting Bracket

Material	stainless steel
Adjustment range vertical	0 to -45°
Adjustment range horizontal	±45°
Dimensions W x H x D	82 x 98 x 90 (mm)
Weight	650g
Order number	249141
Order name	Mounting Bracket/Flame Detector 7127



Sounder

WSO-PR-x, WSO-PP-x



- **Loop technology with System Sensor protocol**
- **Can be activated with up to 32 different tone types**
- **3 sound levels – up to 100dB(A)**
- **Available in red or white, with or without integrated dual-isolator**
- **Fits onto Detector Base B501AP, optional bases IP44, IP65**



Description

The loop-powered multitone sounder consists of a robust round plastic housing. It is powered and actuated as a module via the loop with System Sensor protocol. The sounder is available in red or white as well as with or without integrated dual-isolator.

Depending on the parameter setup of the control panel and the system condition, a compatible fire detection control panel can activate the sounder with up to 32 different tone types and selectable sound level.

The following tone types can be selected, for example:

- DIN tone according to DIN 33404,
- Slow Whoop tone according to NEN 2575,
- Continuous tone 800Hz,
- Intermittent tone 630Hz, and many more.

If several sounders are actuated in parallel, they are synchronised by the control panel to generate a uniform warning tone.

The address of the sounder is selected with two decadic rotary switches located at the bottom of the device.

Base and accessories

The sounder is designed for indoor and outdoor wall mounting. A standard detector base B501AP is required to accommodate the sounder. The predetermined breakouts in the skirt of the sounder allow surface mounted cabling of the base.

For use under harsh environmental conditions, for insertion of thicker cables or for use of cable conduits, supplement bases are available in red or white, each with protection class IP44 or IP65. All supplement bases are delivered with a standard base B501AP.



0832-CPD-1819
0832-CPD-1823



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Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	max. 450µA (sounder off) max. 1.8mA (low sound level, DIN tone) max. 2.6mA (medium sound level, DIN tone) max. 5.1mA (high sound level, DIN tone)
Sound level	max. 99dB(A) at 1m distance (high, DIN tone)
Ambient temperature	-25°C to +70°C
Dimensions Ø × D	121 × 65 (mm, incl. base B501AP)
Weight	240g

Loop sounder without isolator, red

Approvals	VdS G212157 0832-CPD-1819
Order number	355250
Order name	Sounder/WM/200AP/red/100 WSO-PR-N

Loop sounder with isolator, red

Approvals	VdS G212158 0832-CPD-1823
Order number	355251
Order name	Sounder/WM/200API/red/100 WSO-PR-I

Loop sounder without isolator, white

Approvals	VdS G212157 0832-CPD-1819
Order number	355258
Order name	Sounder/WM/200AP/white/100 WSO-PP-N

Loop sounder with isolator, white

Approvals	VdS G212158 0832-CPD-1823
Order number	355259
Order name	Sounder/WM/200API/white/100 WSO-PP-I

Standard base

Order number	246039
Order name	Detector Base/500/200AP B501AP

Base IP44, red

Order number	359051
Order name	Base Sounder/Strobe/IP44/red BRR

Base IP65, red

Order number	359052
Order name	Base Sounder/Strobe/IP65/red WRR

Base IP44, white

Order number	359053
Order name	Base Sounder/Strobe/IP44/white BPW

Base IP65, white

Order number	359054
Order name	Base Sounder/Strobe/IP65/white WPW



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Sounder/Strobe WSS-PC-x



- **Loop technology with System Sensor protocol**
- **Can be activated with up to 32 different tone types**
- **3 sound levels – up to 100dB(A)**
- **EN 54-23 Class O**
- **Versions with or without integrated dual-isolator available**
- **Fits onto Detector Base B501AP, optional bases IP44, IP65**



Description

The loop-powered multitone sounder with strobe consists of a robust plastic housing with a clear cap. It is powered and actuated as a module via the loop with System Sensor protocol. The strobe has been tested according to EN 54-23 **Class O** („open class“).

The sounder/strobe is available in two versions: with or without integrated dual-isolator.

Depending on the parameter setup of the control panel and the system condition, a compatible fire detection control panel can activate the sounder with up to 32 different tone types and selectable sound level.

The following tone types can be selected, for example:

- DIN tone according to DIN 33404,
- Slow Whoop tone according to NEN 2575,
- Continuous tone 800Hz,
- Intermittent tone 630Hz, and many more.

If several sounder-strobes are actuated in parallel, they are synchronised by the control panel to generate a uniform warning tone and light pulse. The strobe is always activated together with the sounder.

The address of the sounder/strobe is selected with two decadic rotary switches located at the bottom of the device.

Base and accessories

The sounder/strobe is designed for indoor and outdoor wall mounting. A standard detector base B501AP is required to accommodate the sounder/strobe. The predetermined breakouts in the skirt of the sounder/strobe allow surface mounted cabling of the base.

For use under harsh environmental conditions, for insertion of thicker cables or for use of cable conduits, supplement bases with protection class IP44 or IP65 are available. Both supplement bases are delivered with a standard base B501AP.



VdS

0832-CPR-F0267
0832-CPR-F0268

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LST

Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	max. 450µA (sounder and strobe off) max. 5.8mA (low sound level, DIN tone) max. 6.6mA (medium sound level, DIN tone) max. 9.0mA (high sound level, DIN tone)
Sound level	max. 99dB(A) at 1m distance (high, DIN tone)
Flash frequency	1Hz
EN 54-23 Category O-2.4-2 – wall mounting Mounting height	max. 2.4m
Ambient temperature	-25°C to +70°C
Dimensions Ø x D	121 x 65 (mm, incl. base B501AP)
Weight	240g
Colour housing / cap	white / clear
Light colour	red
Loop sounder/strobe without isolator	
Approvals	VdS G216050 0832-CPR-F0267
Order number	355269
Order name	Sounder-Strobe/WM/200AP/white/clear/red/100/O WSS-PC-N
Loop sounder/strobe with isolator	
Approvals	VdS G216051 0832-CPR-F0268
Order number	355270
Order name	Sounder-Strobe/WM/200API/white/clear/red/100/O WSS-PC-I
Standard base	
Order number	246039
Order name	Detector Base/500/200AP B501AP
Base IP44, white	
Order number	359053
Order name	Base Sounder/Strobe/IP44/white BPW
Base IP65, white	
Order number	359054
Order name	Base Sounder/Strobe/IP65/white WPW

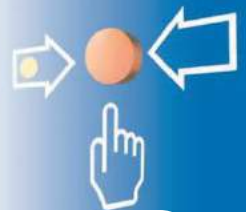


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LST

Sounder/Strobe

WSS-PR-x



- **Loop technology with System Sensor protocol**
- **Can be activated with up to 32 different tone types**
- **3 sound levels – up to 100dB(A)**
- **Versions with or without integrated dual-isolator available**
- **Fits onto Detector Base B501AP, optional bases IP44, IP65**



Description

The loop-powered multitone sounder with strobe consists of a robust plastic housing with a red cap. It is powered and actuated as a module via the loop with System Sensor protocol.

The sounder/strobe is available in two versions: with or without integrated dual-isolator.

Depending on the parameter setup of the control panel and the system condition, a compatible fire detection control panel can activate the sounder with up to 32 different tone types and selectable sound level.

The following tone types can be selected, for example:

- DIN tone according to DIN 33404,
- Slow Whoop tone according to NEN 2575,
- Continuous tone 800Hz,
- Intermittent tone 630Hz, and many more.

If several sounder-strobes are actuated in parallel, they are synchronised by the control panel to generate a uniform warning tone and light pulse. The strobe is always activated together with the sounder.

The address of the sounder/strobe is selected with two decadic rotary switches located at the bottom of the device.

Base and accessories

The sounder/strobe is designed for indoor and outdoor wall mounting. A standard detector base B501AP is required to accommodate the sounder/strobe. The predetermined breakouts in the skirt of the sounder/strobe allow surface mounted cabling of the base.

For use under harsh environmental conditions, for insertion of thicker cables or for use of cable conduits, supplement bases with protection class IP44 or IP65 are available. Both supplement bases are delivered with a standard base B501AP.



0832-CPD-1820
0832-CPD-1824



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Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	max. 450µA (sounder and strobe off) max. 5.8mA (low sound level, DIN tone) max. 6.6mA (medium sound level, DIN tone) max. 9.0mA (high sound level, DIN tone)
Sound level	max. 99dB(A) at 1m distance (high, DIN tone)
Flash frequency	1Hz
Ambient temperature	-25°C to +70°C
Dimensions Ø × D	121 × 65 (mm, incl. base B501AP)
Weight	240g
Colour cap	red

Loop sounder/strobe without isolator

Approvals	LPCB 166h/02 0832-CPD-1820
Order number	355252
Order name	Sounder-Strobe/WM/200AP/white/red/100/N WSS-PR-N

Loop sounder/strobe with isolator

Approvals	LPCB 166j/02 0832-CPD-1824
Order number	355253
Order name	Sounder-Strobe/WM/200AP/white/red/100/N WSS-PR-I

Standard base

Order number	246039
Order name	Detector Base/500/200AP B501AP

Base IP44, red

Order number	359051
Order name	Base Sounder/Strobe/IP44/red BRR

Base IP65, red

Order number	359052
Order name	Base Sounder/Strobe/IP65/red WRR

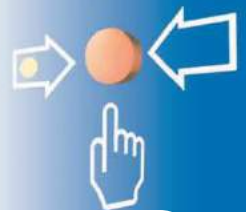


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Strobe

WST-PC-x



- **Loop technology with System Sensor protocol**
- **Low power consumption due to the use of LEDs**
- **EN 54-23 Class 0**
- **Versions with or without integrated dual-isolator available**
- **Fits onto Detector Base B501AP, optional bases IP44, IP65**



Description

The loop-powered strobe consists of a robust plastic housing with a clear cap. It is powered and actuated as a module via the loop with System Sensor protocol. The strobe is available in two versions: with or without integrated dual-isolator.

If several strobes are actuated in parallel, they are synchronised by a compatible control panel to generate a uniform light pulse.

The address of the strobe is selected with two decadic rotary switches located at the bottom of the device.

Base and accessories

The strobe is designed for indoor or outdoor wall mounting. A standard detector base B501AP is required to accommodate the strobe. The pre-determined breakouts in the skirt of the strobe allow surface mounted cabling of the base.

For use under harsh environmental conditions, for insertion of thicker cables or for use of cable conduits, supplement bases with protection class IP44 or IP65 are available. Both supplement bases are delivered with a standard base B501AP.



VdS

0832-CPR-F0266
0832-CPR-F0265

Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	max. 450µA (strobe off) max. 4.1mA (strobe active)
Flash frequency	1Hz
EN 54-23 Category O-2.4-2 – wall mounting Mounting height	max. 2.4m
Ambient temperature	-25°C to +70°C
Dimensions Ø × D	121 × 51 (mm, incl. base B501AP)
Weight	170g
Colour housing / cap	white / clear
Light colour	red

Loop strobe, without isolator

Approvals	VdS G216052 0832-CPR-F0266
Order number	356155
Order name	Strobe/WM/200AP/white/clear/red/O WST-PC-N

Loop strobe, with isolator

Approvals	VdS G216053 0832-CPR-F0265
Order number	356156
Order name	Strobe/WM/200API/white/clear/red/O WST-PC-I

Standard base

Order number	246039
Order name	Detector Base/500/200AP B501AP

Base IP44, white

Order number	359053
Order name	Base Sounder/Strobe/IP44/white BPW

Base IP65, white

Order number	359054
Order name	Base Sounder/Strobe/IP65/white WPW



Strobe

WST-PA-I, WST-PR-x



- **Loop technology with System Sensor protocol**
- **Low power consumption due to the use of LEDs**
- **Available in orange or red, with or without integrated dual-isolator**
- **Fits onto Detector Base B501AP, optional bases IP44, IP65**



Description

The loop-powered strobe is available in three different versions:

- with orange cap, with integrated dual-isolator,
- with red cap, with integrated dual-isolator,
- with red cap, without integrated dual-isolator.

The strobe is powered and actuated as a module via the loop with System Sensor protocol.

If several strobes are actuated in parallel, they are synchronised by a compatible control panel to generate a uniform light pulse.

The address of the strobe is selected with two decadic rotary switches located at the bottom of the device.

Base and accessories

The strobe is designed for indoor or outdoor wall mounting. A standard detector base B501AP is required to accommodate the strobe. The pre-determined breakouts in the skirt of the strobe allow surface mounted cabling of the base.

For use under harsh environmental conditions, for insertion of thicker cables or for use of cable conduits, supplement bases are available in red or white, each with protection class IP44 or IP65. All supplement bases are delivered with a standard base B501AP.



Specifications

Operating voltage	Supply through loop voltage
Current consumption from loop	max. 450µA (strobe off) max. 4.1mA (strobe active)
Flash frequency	1Hz
Ambient temperature	-25°C to +70°C
Dimensions Ø × D	121 × 51 (mm, incl. base B501AP)
Weight	170g
Loop strobe orange, with isolator	
Order number	356154
Order name	Strobe/WM/200API/white/amber/N WST-PAI
Loop strobe red, without isolator	
Order number	356152
Order name	Strobe/WM/200AP/white/red/N WST-PR-N
Loop strobe red, with isolator	
Order number	356153
Order name	Strobe/WM/200API/white/red,N WST-PR-I
Standard base	
Order number	246039
Order name	Detector Base/500/200AP B501AP
Base IP44, red	
Order number	359051
Order name	Base Sounder/Strobe/IP44/red BRR
Base IP65, red	
Order number	359052
Order name	Base Sounder/Strobe/IP65/red WRR
Base IP44, white	
Order number	359053
Order name	Base Sounder/Strobe/IP44/white BPW
Base IP65, white	
Order number	359054
Order name	Base Sounder/Strobe/IP65/white WPW

