

LSN Panels

2

FPA-1200 Fire Panel	82
Accessories - BZ 500 LSN	85
Accessories - UEZ 2000 LSN	98

FPA-1200 Fire Panel



Features

- ▶ **Easy upgrade to 2 loops by second LSN 0300 A module**
- ▶ **Connection of up to 254 elements (127 per loop)**
- ▶ **Remote operation by up to 3 Remote Keypads**
- ▶ **Accommodates up to 6 functional modules for easy adaptation to different local requirements**
- ▶ **Auto-detection of modules**
- ▶ **Plug-in of modules during operation**
- ▶ **Serial interface to Bosch Voice Evacuation System (EVAC)**

Using the well-known LSN bus technology, the FPA-1200 Fire Panel offers efficient protection for small and medium-sized objects and is the ideal solution for 1- and 2-loop applications. It comes as standard with housing, controller, functional modules, power supply and additional accessories according to the country-specific requirements. It is ready-to-go after installation and configuration.

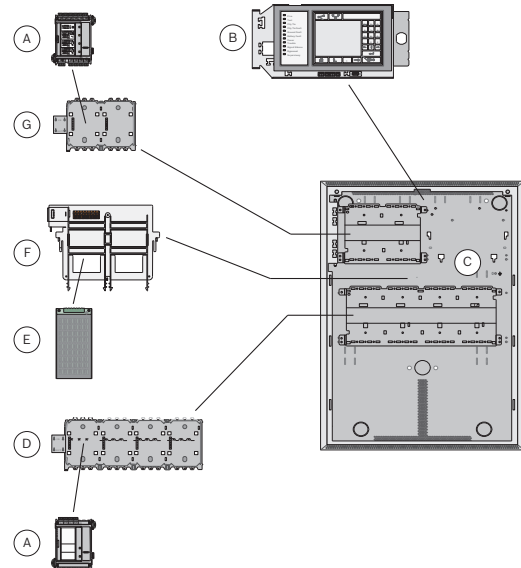
The configuration of the FPA-1200 is set using the FSP-5000-RPS programming software (included in the delivery) on a laptop connected to the panel.

An Ethernet interface allows for the connection to a Building Management System (BIS Bosch Building Integration System) via an OPC server.

Another serial interface provides the option to use the FPA-1200 with the new Bosch Voice Evacuation System (EVAC).

The FPA-1200 can also be connected to the Bosch UGM-2020 Universal Security System (requires an FPE-5000-UGM Interface Module), and thus, be integrated into a large network system.

System Overview



Pos. Description

- | | |
|---|----------------------|
| A | Functional Modules |
| B | Panel Controller |
| C | Panel Housing |
| D | Panel Rail Long |
| E | Power Supply |
| F | Power Supply Bracket |
| G | Panel Rail Short |

Functions

Panel controller

The Panel Controller is the core of the system and shows all messages on the 5.7" touch display. 11 LEDs provide continuous information about the operating status of the control panel and / or system.

The operation of the panel controller and the processing of all messages are performed on the LCD touch display as well. Messages and events are saved internally and can be viewed on the display at any time. A log printer for printing incoming messages can be connected.

The configuration is set and transmitted using the FSP-5000-RPS programming software on a laptop connected to the USB interface of the panel controller.

Modules

The functional modules are autonomous, encapsulated units that can be inserted into any control panel slot using "plug-and-play" technology. Thus, the power supply and the data traffic to the control panel are indicated automatically without any additional settings. The module is automatically identified by the control panel and is run in default operating mode.

The wiring of peripherals is connected by pluggable screw terminals.

After the replacement of a module, only the terminals need to be reinserted; extensive rewiring is no longer required.

The following modules are included in the standard package. Additional modules for special applications can be ordered separately.

Module	Description
BCM-0000-B	Battery Controller Module <ul style="list-style-type: none"> module that controls batteries and power supply
LSN 0300 A	LSN Module 300 mA <ul style="list-style-type: none"> for the connection of an LSN loop with up to 127 elements, maximum line current 300 mA
RML 0008 A (Poland only)	Relay Module <ul style="list-style-type: none"> with 8 relays for low voltage applications

Certifications and Approvals

Region	Certification
Europe	CE FPA-1200
	CPD 0786-CPD-20819 FPA 1200

Installation/Configuration Notes

- Upgrade to 2 loops requires second LSN 0300 A Functional Module
- Max. 2 LSN 0300 A Modules allowed
- Up to 127 LSN elements on each loop
- Max. 6 functional modules in total

Parts Included

Quant.	Component
1	FPA-1200-MPC Panel Controller
1	LSN 0300 A Module 300 mA
1	BCM 0000 B Battery Controller Module
1	PRS 0002 A Panel Rail Short
1	PRD 0004 A Panel Rail Long
1	FPO-5000-PSB-CH Power Supply Bracket
1	UPS 2416 A Universal Power Supply
1	HCP 0006 A Panel Housing
3	FDP 0001 A Dummy Cover Plate
1	RML 0008 A Relay Module (Poland only)
1	CD with FSP-5000-RPS Programming Software

Technical Specifications

Electrical

Operating voltage	20 V DC to 30 V DC
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Mechanics

Display element	5.7" LCD display
Operating element	Touch screen
Interfaces	<ul style="list-style-type: none"> Ethernet USB RS232
Signal inputs	2
Dimensions (H x W x D)	638 mm x 440 mm x 149 mm (25.1 x 17.2 x 5.87 inch)
Weight	Approx. 20 kg (44 lb)

Environmental conditions

Permissible operating temperature	-5 °C to 50 °C
Permissible storage temperature	-20 °C to 60 °C
Protection class as per IEC 60529	IP 30

Ordering Information

FPA-1200 Fire Panel, BE lettering and user documentation in Dutch and French	FPA-1200-BE
FPA-1200 Fire Panel, CZ lettering and user documentation in Czech	FPA-1200-CZ
FPA-1200 Fire Panel, DE lettering and user documentation in German	FPA-1200-DE
FPA-1200 Fire Panel, DK lettering and user documentation in Danish	FPA-1200-DK
FPA-1200 Fire Panel, ES lettering and user documentation in Spanish	FPA-1200-ES
FPA-1200 Fire Panel, GR lettering and user documentation in Greek	FPA-1200-GR
FPA-1200 Fire Panel, HU lettering and user documentation in Hungarian	FPA-1200-HU
FPA-1200 Fire Panel, IT lettering and user documentation in Italian and German	FPA-1200-IT
FPA-1200 Fire Panel, PL lettering and user documentation in Polish	FPA-1200-PL
FPA-1200 Fire Panel, PT lettering and user documentation in Portuguese	FPA-1200-PT
FPA-1200 Fire Panel, NL lettering and user documentation in Dutch	FPA-1200-NL
FPA-1200 Fire Panel, RO lettering and user documentation in Romanian and English	FPA-1200-RO
FPA-1200 Fire Panel, RU lettering and user documentation in Russian	FPA-1200-RU
FPA-1200 Fire Panel, TR lettering and user documentation in Turkish	FPA-1200-TR
FPA-1200 Fire Panel, ZA lettering and user documentation in English	FPA-1200-ZA
FPA-1200 Fire Panel, APR lettering and user documentation in English	FPA-1200-APR
FPA-1200 Fire Panel, Export lettering and user documentation in English	FPA-1200-Export

Ordering Information**Accessories**

BCM-0000-B Battery Controller Module **BCM-0000-B**
monitors the power supply of the fire and the charging of the batteries

ANI 0016 A Annunciator Module **ANI 0016 A**
displays the status of 16 individually programmable detection points

LSN 0300 A LSN improved Module 300 mA **LSN 0300 A**
for connecting an LSN loop with up to 254 LSN improved elements or 127 classic LSN elements, with a maximum line current of 300 mA

CZM 0004 A 4 Zone Conventional Module **CZM 0004 A**
for connecting existing conventional peripherals; providing four monitored conventional lines

IOS 0020 A 20 mA Communication Module **IOS 0020 A**
provides one interface each of S20, RS232 and S1

IOS 0232 A RS232 Communication Module **IOS 0232 A**
for connecting two devices, e.g. voice alarm system Plena, a laptop or a printer, via two independent serial interfaces

ENO 0000 B Fire Service Interface Module **ENO 0000 B**
for connecting fire service equipment in compliance with DIN 14675

IOP 0008 A Input/Output Module **IOP 0008 A**
for individual displays, providing eight independent digital inputs and eight open collector outputs

RML 0008 A Relay Module **RML 0008 A**
for low voltage, providing 8 change-over contact relays (type C)

RMH 0002 A Relay Module **RMH 0002 A**
for monitored connection of external elements with feedback, providing 2 change-over contact relays (type C) for high voltage

NZM 0002 A Notification Appliance Zone Module **NZM 0002 A**
for connecting 2 separate notification appliance zonelines, providing 2 monitored primary lines

FPE-5000-UGM Interface Module **FPE-5000-UGM**
for connecting the fire panels FPA-5000 and FPA-1200 to superordinate systems (UGM 2020, FAT 2002/RE, FSM-2000)

PSL 0001 A Labelling Strips, Small **PSL 0001 A**
20 sheets each with 10 strips, printable, for the ANI 0016 A Annunciator Module

PSK 0001 A Labelling Strips, Wide **PSK 0001 A**
20 sheets each with 6 strips, printable, for the functional modules BCM-0000-B, LSN 0300 A, LSN 1500 A, CZM 0004 A, NZM 0002 A, RMH 0002 A, CTM 0002 A and ENO 0000 B

FLM-420-EOL2W-W EOL Module LSN **FLM-420-EOL2W-W**
for EN 54-13 compliant termination of LSN stubs or T-taps

Ordering Information

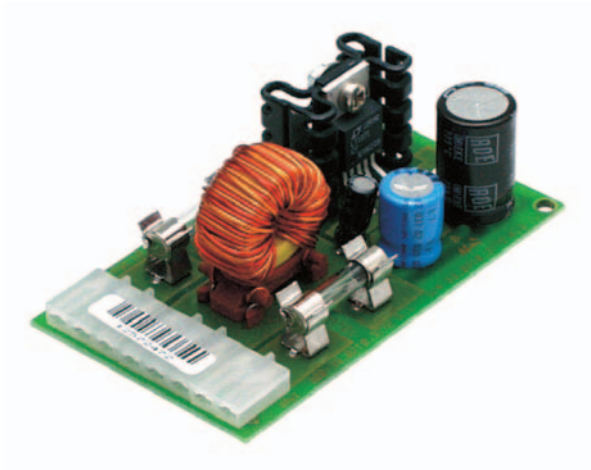
FLM-320-EOL2W Conventional EOL Module 2-Wire **FLM-320-EOL2W**
for EN 54-13 compliant termination of conventional lines

ADC-5000-OPC License Key **ADC-5000-OPC**
enables reliable communication between the BIS software and the fire panels FPA-1200 or FPA-5000 or networks

THP 2020 A Thermal Printer **THP 2020 A**
comes standard with frame-mount housing. Additionally required: FSH 0000 A Mounting Frame Small (surface-mounting) or FRS 0002 A 19" Rack Installation Kit Small.

CPA 0000 A Cable Set AT 2000 **CPA 0000 A**
Used to connect an AT 2000 to the MPC and the ENO 0000 B.

ERWE 10 voltage converter



Generates +28 V at max. 600 mA for the LSN expansion module control outputs.

Required for connecting the following expansion modules:

- NBK 100 LSN
- NTK 100 LSN
- NSB 100 LSN

Can be plugged into the NEV 300 LSN connector board

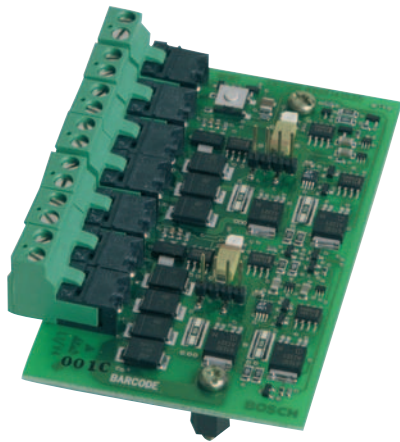
Ordering Information

ERWE 10 voltage converter

ERWE 10

For connecting NBK 100 LSN, NTK 100 LSN, NSB 100 LSN, MSS 401, ERT 100, FK 100 LSN, can be plugged into the NEV 300 LSN connector board

ERT100 Module for Loop System Power Supply



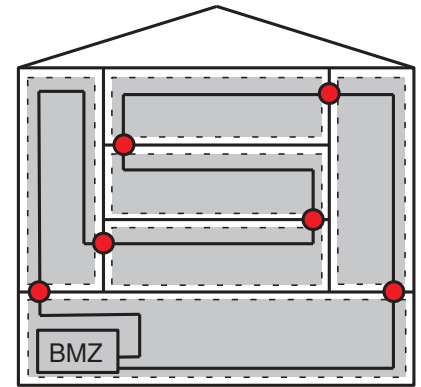
Features

- ▶ Low voltage sensor at 26.2 V (in accordance with VdS 2110) for interruption free power supply of the sounder MSS 401 LSN in case of activation
- ▶ Connection of up to 25 signaling devices of the type MSS 401 LSN per ERT loop, depending upon cable length and cable diameter
- ▶ Alarm signaling in accordance with sample guideline for cable equipment (MLAR) without E30 cable
- ▶ Connection of up to 25 isolators per ERT100 loop
- ▶ Monitoring of two loops per ERT100 Module possible.

The ERT100 Module is designed for retrofitting the fire panel with the loop system power supply.

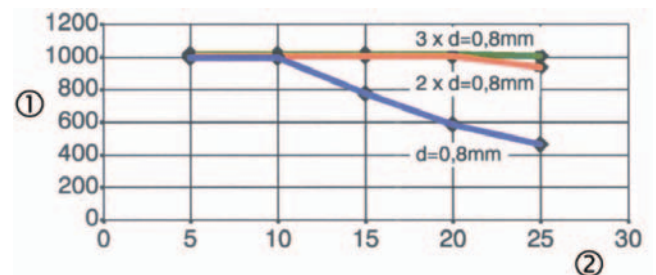
Functions

The ERT100 Module monitors the supply voltage of MSS 401 LSN signaling devices in loop lines, and in combination with isolators (type YBO-R/SCI) makes it possible to maintain the power supply of the unaffected fire sectors in the event of a short-circuit or wire interruption. Two loop lines can be monitored per ERT100 Module. Individual malfunctions are displayed with an LED per loop on the ERT100 Module as well as in the form of clear text on the fire panel. Once the short circuit has been rectified, the elements automatically reestablish contact.



Pos.	Description
1	Fire sector
2	Isolator

Isolators are configured in such a way that the fire sectors or, insofar as these are smaller, alarm sectors are confined. This configuration means that in the event of a short circuit, all elements are kept supplied with voltage before and after the separating isolators. No isolator is used between fire panel and the first or last signaling device. This means that n isolators are required for n fire sectors.



Pos.	Description
1	Range in [m]
2	Number of detector base sounders MSS 401 LSN

A wire gauge of 0.8 mm corresponds to a wire diameter of 0.5 mm².

The range is dependent upon the wire gauge and the number of sounders MSS 401 LSN.

Certifications and Approvals

Region	Certification
Europe	CE ERT 100

Installation/Configuration Notes

- If multi-core cable is used, the additional detector base MSC 420 may be necessary.

BZ 500 LSN:

- For each ERT loop, a fuse of 630 mA (slow-burn) is necessary. It is recommended that a fuse distributor SIV 28 V (article no. F.01U.500.442) be used.
- The BZ 500 LSN can supply a ERT loop with voltage. In the case of two ERT loops or more, a supplementary power supply is required.

UEZ 2000 LSN:

- For each ERT loop, a fuse of 630 mA (slow-burn) is necessary. With more than four ERT loops, a fuse distributor SIV 28 V (item no. F.01U.500.442) must be used.
- The UEZ 2000 B can supply three ERT loops with voltage. In the case of four ERT loops or more, a supplementary power supply is required.

Technical Specifications**Electrical**

Input voltage	+28 V DC
Max. output voltage	+28 V DC
Current consumption in standby mode	20 mA
Current cut-off outputs	< 600 mA
Voltage control	26.2 V
Transmission line malfunction output	Open collector, 100 mA
Transmission line reset input	Internal pull-up, switch after 0 V

Mechanics

Dimensions	56 x 95 mm
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Environmental conditions

Protection class as per EN 60529	IP 30
Permissible operating temperature	-5 °C . . . + 45 °C
Permissible storage temperature	-25 °C . . . + 70 °C

Further characteristics

Malfunction detection/display in accordance with EN 54-2	< 100 s
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Ordering Information

ERT100 Module for Loop System Power Supply	BS ERT 100
Module for retrofitting the fire panel with the loop system power supply	

Isolator Type YBO-R/SCI



Features

- **Positive isolator, recognizes wire interruption and short circuit**
- **Unattended**
- **Isolation displayed through status LED on isolator**

The isolators type YBO-R/SCI are used in combination with an ERT100 Module for the loop system power supply, and enable the power supply to be maintained to the unaffected fire sectors in the event of a short circuit or wire interruption in loops.

Functions

Isolators are configured in such a way that the fire sectors or, insofar as these are smaller, alarm sectors are confined. This configuration means that in the event of a short circuit, all elements are kept supplied with voltage before and after the separating isolators.

During isolation, the LED on the isolator is illuminated.

Once the short circuit has been rectified, the elements return automatically to normal operating condition and restore the connection.

No isolator is used between fire panel and the first or last signaling device. This means that n isolators are required for n fire sectors.

Certifications and Approvals

Complies with EN 54-17:2005

Region	Certification	
Europe	CPD	0832-CPD-0963 YBO-R/SCI
Germany	VdS	G 204049 YBO-R/SCI

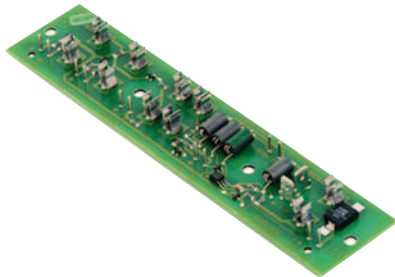
Technical Specifications

Operating voltage	17 - 41 V DC
Current consumption in standby mode	50 µA
Current consumption in the event of short circuit	< 10 mA
Max. current consumption in the event of short circuit	1 A
Max. wire diameter	2.5 mm ² (∅ 1.8 mm)
Permitted operating temperature	-10 °C . . . + 50 °C
Permitted rel. humidity	95% (without condensation)
Housing	Surface-mount, ivory colored
Dimensions (including cover)	∅ 100 mm, 13 mm high
Weight	85 g

Ordering Information

Isolator Type YBO-R/SCI	ERT-Isolator
Positive isolator, recognizes wire interruption and short circuit	

SIV 28 Fuse Distributor 28 V



For monitored fusing of units connected to BZ 500 LSN / UEZ 2000 LSN, max. 5 fuses.

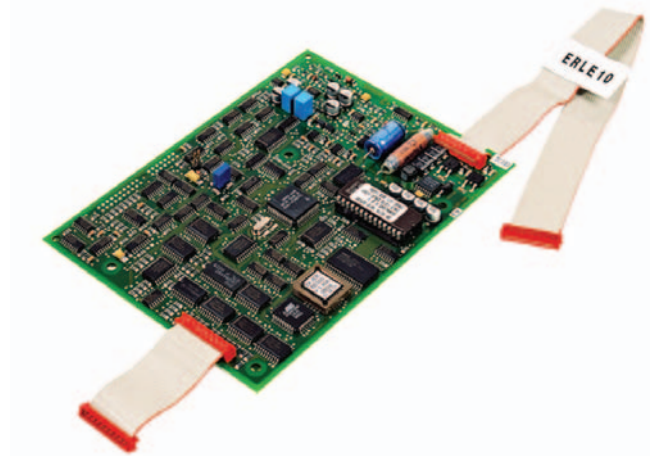
Ordering Information

SIV 28 Fuse Distributor 28 V

Fusing for units connected to BZ 500 LSN / UEZ 2000 LSN, max. 5 fuses

SIV 28

ERLE 10 Line Extension



The kit extends the BZ 500 LSN by one zone (loop) with max. 1000 m cable length.

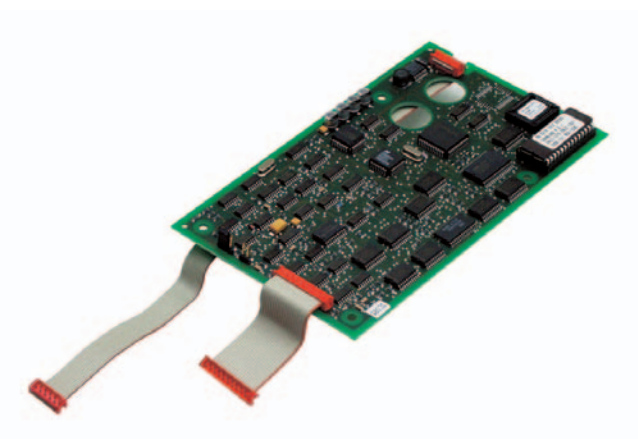
Ordering Information

ERLE 10 Line Extension

for the BZ 500 LSN, zone (loop) with max. 1000 m cable length

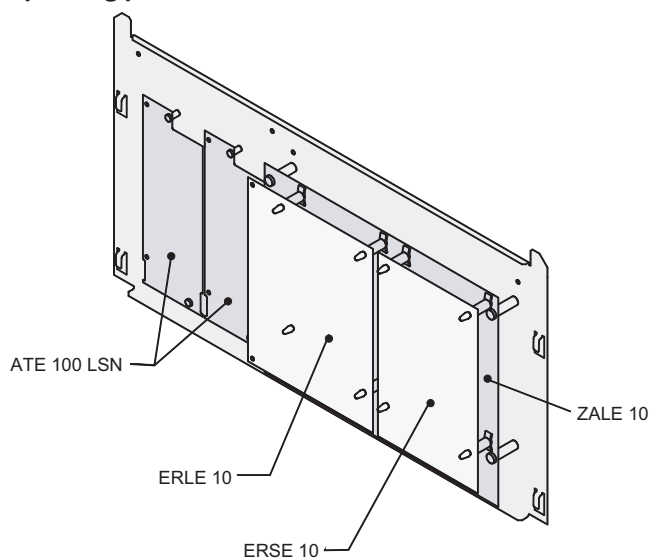
ERLE 10

ERSE 10 Interface Extension



The kit extends the BZ 500 LSN by two serial interfaces.

Configuration of extensions on the reverse side of the operating panel



Ordering Information

ERSE 10 Interface Extension
(2 x serial)

ERSE 10

SM 20 Interface Module



- 20 mA interface
- Maximum range of 1000 m

The SM 20 is required for connection of DR 500 T/AV, BE 500, UGM 2020 or RUBIN.

The ANNE 10 has three slots for the SM 20 or SM 24.

The UEZ 2000 LSN can be extended with up to five SM 20s.

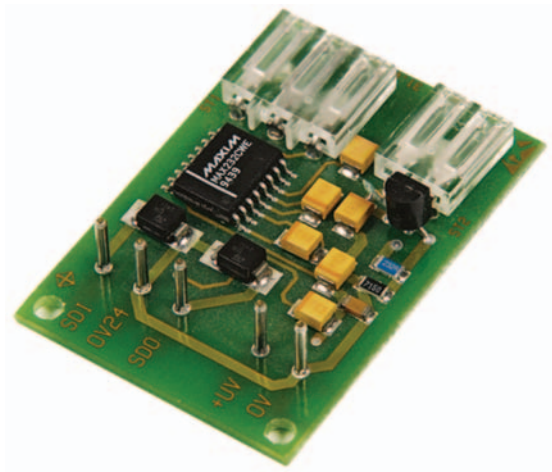
Ordering Information

SM 20 Interface Module

For connecting DR 500 T/AV, BE 500, UGM 2020 or RUBIN

SM 20

SM 24 Interface Module



V24 interface for control panel networking in SRT network in combination with fiber optic cable (LWL), connection of peripheral equipment or a modem.

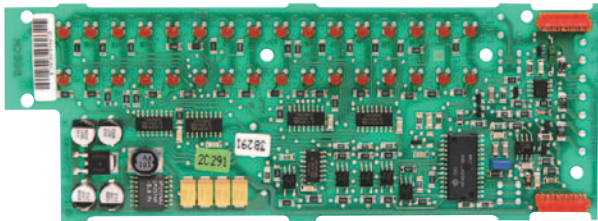
Ordering Information

SM 24 Interface Module

V24 interface for control panel networking in SRT network, for connecting peripheral equipment or a modem

SM 24

BS ATE 100 LSN Primary Extension Kit, Red



Kit with 32 red LEDs **for primary expansion of a foreign-language BZ 500 LSN** (or the German-language BZ 500 LSN without alarm display, item no. 3.002.102.560) for the alarm display (alarm indication) of up to 32 detector zones.

Certifications and Approvals

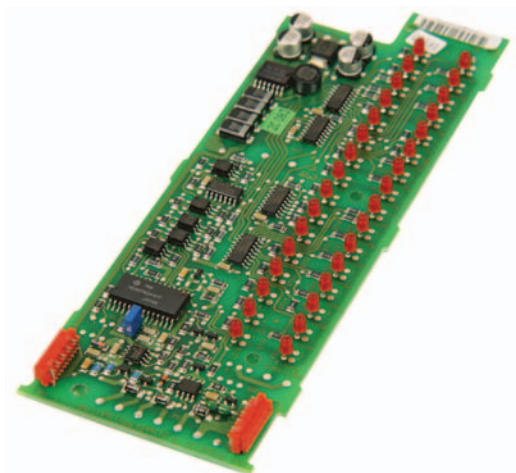
Region	Certification	
Europe	CE	BS ATE / ATG / ATB 100 LSN

Ordering Information

BS ATE 100 LSN Primary Extension Kit, Red
with 32 red LEDs for primary expansion of a foreign-language BZ 500 LSN

BS ATE 100 LSN

ATE 100 LSN red Extension Kit, Red



Kit with 32 red LEDs for extension of an existing alarm display (alarm indication).

This means the alarm indication can comprise a total of 64 detector zones.

Certifications and Approvals

Region	Certification
Europe	CE BS ATE / ATG / ATB 100 LSN

Ordering Information

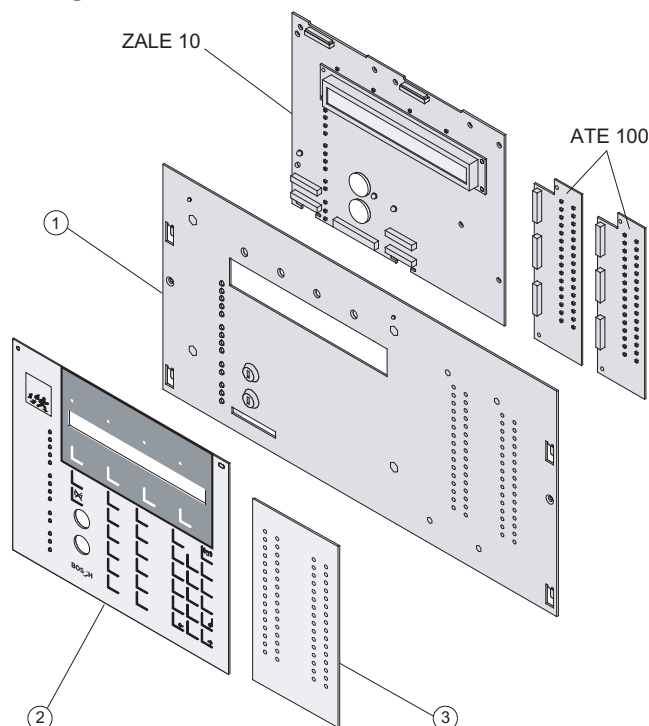
ATE 100 LSN red Extension Kit, Red **ATE 100 LSN red**
with 32 LEDs (red) for extension of an available
alarm display

ATE 100 LSN ye Extension Kit, Yellow

Kit with 32 yellow LEDs for extension of an existing alarm display (alarm indication).

The kit enables faults in up to 32 detector groups to be indicated.

Configuration of extensions



Pos.	Description
1	Mounting plate for the operating panel
2	Plastic membrane keypad
3	Membrane for the parallel display

Certifications and Approvals

Region	Certification
Europe	CE BS ATE / ATG / ATB 100 LSN

Ordering Information

ATE 100 LSN ye Extension Kit, Yellow **ATE 100 LSN ye**
with 32 LEDs (yellow) for extension of an ex-
isting alarm display

Key Switch



Up to two key switches can be deployed on the operating panel of the fire panel.

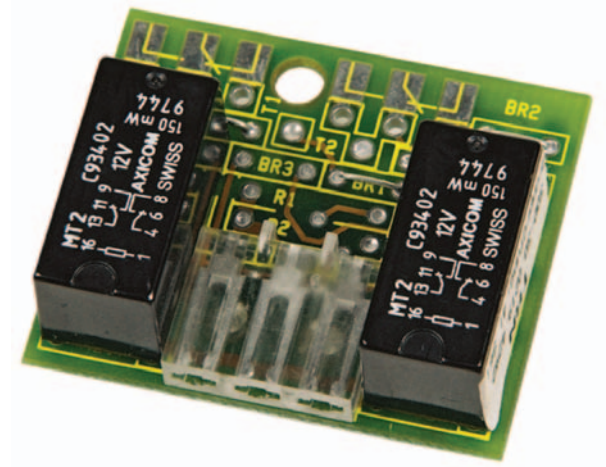
The function is freely programmable, e. g. day/night operation.

Ordering Information

Key Switch
for the BZ 500 LSN operating panel

BZ500-KEY-SWITCH

TRN Panel Relay Module



Panel Relay Module TRN with two relays, each relay with a double-throw contact for potential-free outputs.

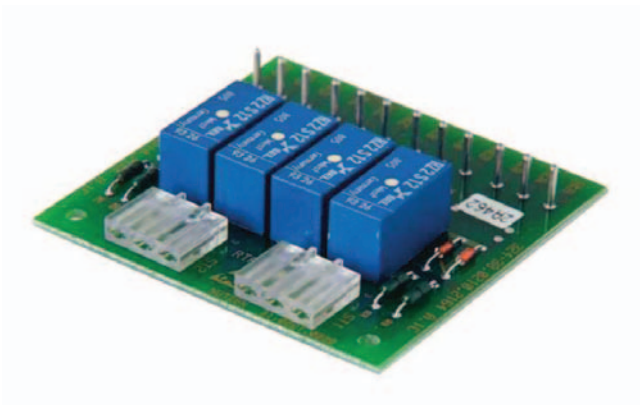
The AVM 100 can be extended with up to six TRNs.

Ordering Information

TRN Panel Relay Module
two relays, each relay with a double-throw contact for potential-free outputs

TRN

RTP Panel Relay Module



Panel Relay Module RTP with four relays, each relay with a double-throw contact for potential-free outputs, up to six RTPs can be plugged into AVM.

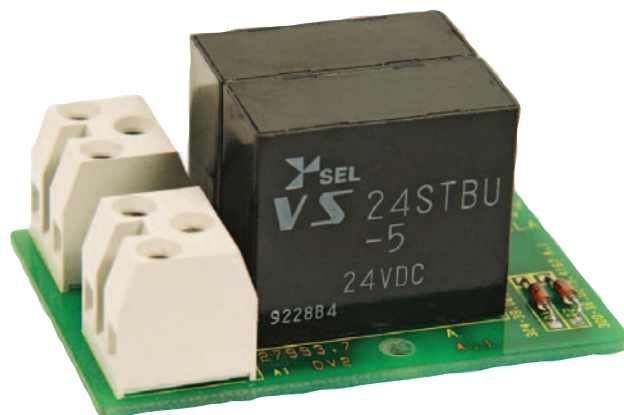
Ordering Information

RTP Panel Relay Module

four relays, each relay with a double-throw contact for potential-free outputs

RTP

BS NRK-N Network Relay Card



Two relays for potential-free outputs, each relay with a double-throw contact 220 V AC

Ordering Information

BS NRK-N Network Relay Card

two relays for potential-free outputs, each relay with a double-throw contact 220 V AC

BS NRK-N

MOD 300 Modem

For connecting control panels to the UGM 2020, modem incl. serial interface for data transmission in telephone networks.

The modem is approved for operation in post office networks. For this purpose an interface module SM 24 is required.

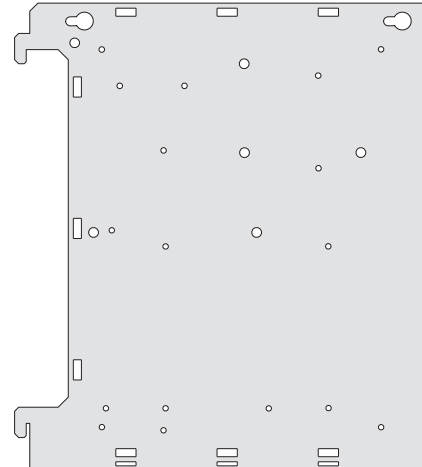
Ordering Information

MOD 300 Modem

for connecting control panels to the UGM 2020, incl. serial interface for data transmission in telephone networks

MOD 300

Options Plate



2

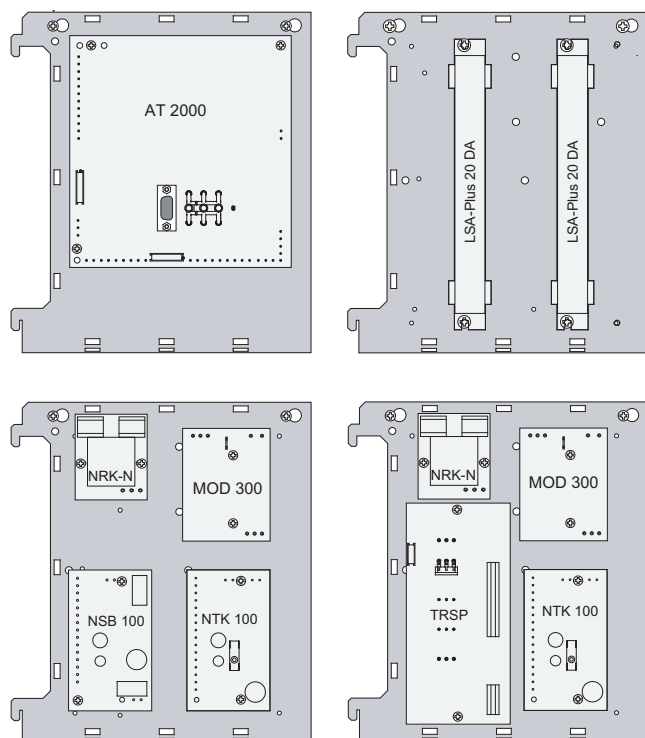
Essential requirements for the installation of an AT 2000!

If all mounting plates on the ANNE 10 are occupied, the following extensions can be used with the Options Plate:

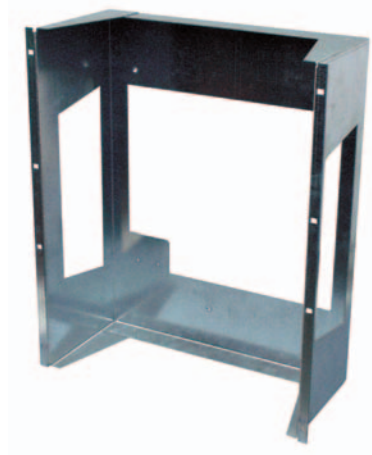
- ICP-BS-TRSP
- BS NRK-N
- MOD 300
- BS NTK 100/BZ500, to realize switching addresses in the BZ 500 LSN
- BS NSB 100/BZ500, for monitored activation of signaling devices or extinguishing systems from the fire panel
- BS NBK 100/BZ500, each for connecting two GLT primary lines
- ICP-LSA-20 Connection Strip

Up to four interface kits are deployable.

2

Configuration of extensions on option plate**Ordering Information****Options Plate**

required for the installation of an AT 2000

BZ-500-PLATE**Mounting Kit 19" for BZ 500 LSN**

For installing the BZ 500 LSN in a 19" frame

Installation/Configuration Notes

The Mounting Kit 19" requires 13 height units = 578 mm.

Ordering Information**Mounting Kit 19" for BZ 500 LSN****BZ-500-19"-KIT**

DR 500 T/AV Tabletop Printer



Thermal paper printer with roll-up equipment, can be used as tabletop model or for wall mounting
An interface module SM 20 is required for connection to the BZ 500 LSN.

Certifications and Approvals

Region	Certification	
Europe	CE	DR 2020 / 2000 / 500 T

Ordering Information

DR 500 T/AV Tabletop Printer	DR 500 T/AV
Thermal paper printer with roll-up equipment, for BZ 500 LSN, interface module SM 20 is required	

Service Switch for Extinguishing Systems

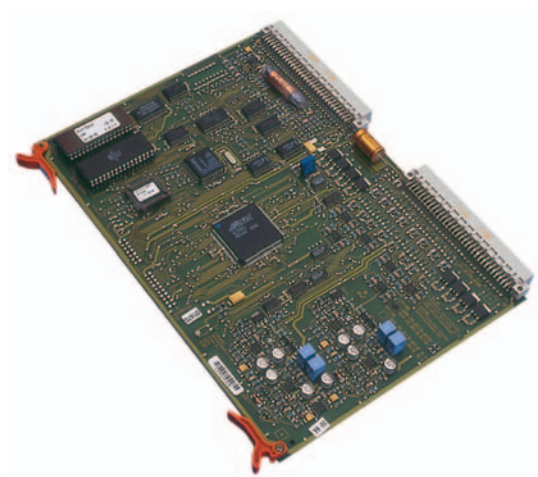


Key switch for deactivating extinguishing systems for maintenance purposes

Ordering Information

Service Switch for Extinguishing Systems for deactivating extinguishing systems for maintenance purposes	FME-KL-EXT
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LVM 100 Line Extension Module



For additional connection of up to 4 loop or 8 stub lines

UEZ 2000 LSN: Can be expanded with 1 LVM

UEZ 2000/6 LSN: Can be expanded with 1 LVM

UEZ 2000/1 LSN: Cannot be expanded.

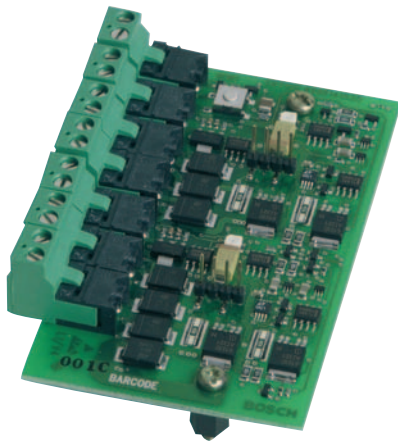
Ordering Information

LVM 100 Line Extension Module

LVM 100

Additional connection of max. 4 loop or 8 stub lines, UEZ 2000 LSN and UEZ 2000/6 LSN can be expanded with 1 LVM

ERT100 Module for Loop System Power Supply



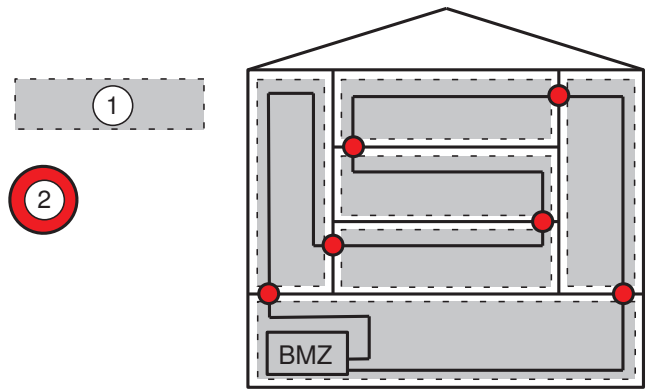
Features

- ▶ **Low voltage sensor at 26.2 V (in accordance with VdS 2110) for interruption free power supply of the sounder MSS 401 LSN in case of activation**
- ▶ **Connection of up to 25 signaling devices of the type MSS 401 LSN per ERT loop, depending upon cable length and cable diameter**
- ▶ **Alarm signaling in accordance with sample guideline for cable equipment (MLAR) without E30 cable**
- ▶ **Connection of up to 25 isolators per ERT100 loop**
- ▶ **Monitoring of two loops per ERT100 Module possible.**

The ERT100 Module is designed for retrofitting the fire panel with the loop system power supply.

Functions

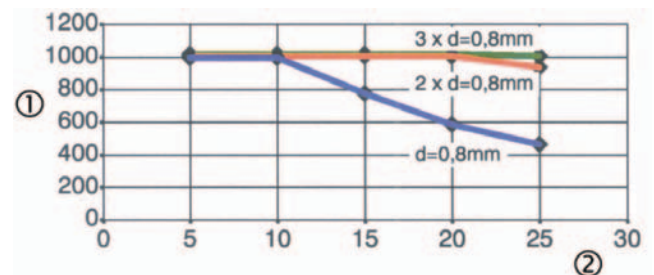
The ERT100 Module monitors the supply voltage of MSS 401 LSN signaling devices in loop lines, and in combination with isolators (type YBO-R/SCI) makes it possible to maintain the power supply of the unaffected fire sectors in the event of a short-circuit or wire interruption. Two loop lines can be monitored per ERT100 Module. Individual malfunctions are displayed with an LED per loop on the ERT100 Module as well as in the form of clear text on the fire panel. Once the short circuit has been rectified, the elements automatically reestablish contact.



Pos. Description

- | | |
|---|-------------|
| 1 | Fire sector |
| 2 | Isolator |

Isolators are configured in such a way that the fire sectors or, insofar as these are smaller, alarm sectors are confined. This configuration means that in the event of a short circuit, all elements are kept supplied with voltage before and after the separating isolators. No isolator is used between fire panel and the first or last signaling device. This means that n isolators are required for n fire sectors.



Pos. Description

- | | |
|---|--|
| 1 | Range in [m] |
| 2 | Number of detector base sounders MSS 401 LSN |

A wire gauge of 0.8 mm corresponds to a wire diameter of 0.5 mm².

The range is dependent upon the wire gauge and the number of sounders MSS 401 LSN.

Certifications and Approvals

Region	Certification
Europe	CE ERT 100

Installation/Configuration Notes

- If multi-core cable is used, the additional detector base MSC 420 may be necessary.

BZ 500 LSN:

- For each ERT loop, a fuse of 630 mA (slow-burn) is necessary. It is recommended that a fuse distributor SIV 28 V (article no. F.01U.500.442) be used.
- The BZ 500 LSN can supply a ERT loop with voltage. In the case of two ERT loops or more, a supplementary power supply is required.

UEZ 2000 LSN:

- For each ERT loop, a fuse of 630 mA (slow-burn) is necessary. With more than four ERT loops, a fuse distributor SIV 28 V (item no. F.01U.500.442) must be used.
- The UEZ 2000 B can supply three ERT loops with voltage. In the case of four ERT loops or more, a supplementary power supply is required.

Technical Specifications**Electrical**

Input voltage	+28 V DC
Max. output voltage	+28 V DC
Current consumption in standby mode	20 mA
Current cut-off outputs	< 600 mA
Voltage control	26.2 V
Transmission line malfunction output	Open collector, 100 mA
Transmission line reset input	Internal pull-up, switch after 0 V

Mechanics

Dimensions	56 x 95 mm
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Environmental conditions

Protection class as per EN 60529	IP 30
Permissible operating temperature	-5 °C . . . + 45 °C
Permissible storage temperature	-25 °C . . . + 70 °C

Further characteristics

Malfunction detection/display in accordance with EN 54-2	< 100 s
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Ordering Information

ERT100 Module for Loop System Power Supply	BS ERT 100
Module for retrofitting the fire panel with the loop system power supply	

SM 20 Interface Module



- 20 mA interface
- Maximum range of 1000 m

The SM 20 is required for connection of DR 500 T/AV, BE 500, UGM 2020 or RUBIN.

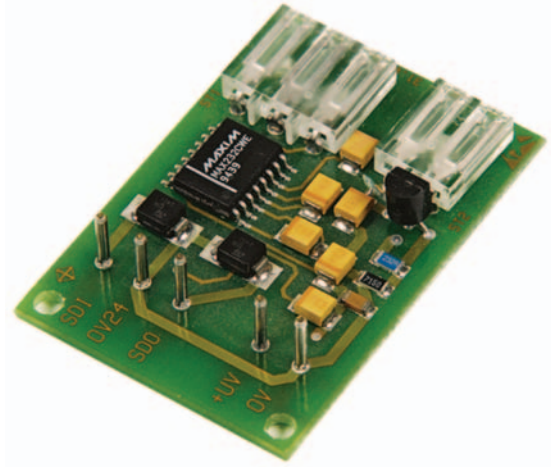
The ANNE 10 has three slots for the SM 20 or SM 24.

The UEZ 2000 LSN can be extended with up to five SM 20s.

Ordering Information

SM 20 Interface Module	SM 20
For connecting DR 500 T/AV, BE 500, UGM 2020 or RUBIN	

SM 24 Interface Module



V24 interface for control panel networking in SRT network in combination with fiber optic cable (LWL), connection of peripheral equipment or a modem.

Ordering Information

SM 24 Interface Module

SM 24

V24 interface for control panel networking in SRT network, for connecting peripheral equipment or a modem

MOD 300 Modem

For connecting control panels to the UGM 2020, modem incl. serial interface for data transmission in telephone networks.

The modem is approved for operation in post office networks. For this purpose an interface module SM 24 is required.

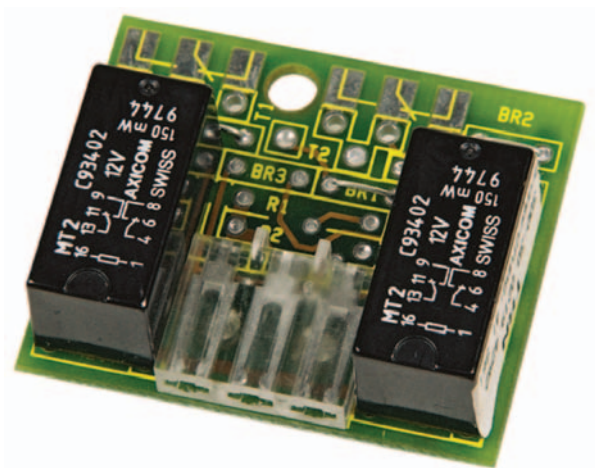
Ordering Information

MOD 300 Modem

MOD 300

for connecting control panels to the UGM 2020, incl. serial interface for data transmission in telephone networks

TRN Panel Relay Module



Panel Relay Module TRN with two relays, each relay with a double-throw contact for potential-free outputs.

The AVM 100 can be extended with up to six TRNs.

Ordering Information

TRN Panel Relay Module

two relays, each relay with a double-throw contact for potential-free outputs

TRN

RTP Panel Relay Module



Panel Relay Module RTP with four relays, each relay with a double-throw contact for potential-free outputs, up to six RTPs can be plugged into AVM.

Ordering Information

RTP Panel Relay Module

four relays, each relay with a double-throw contact for potential-free outputs

RTP

Isolator Type YBO-R/SCI



Features

- **Positive isolator, recognizes wire interruption and short circuit**
- **Unattended**
- **Isolation displayed through status LED on isolator**

The isolators type YBO-R/SCI are used in combination with an ERT100 Module for the loop system power supply, and enable the power supply to be maintained to the unaffected fire sectors in the event of a short circuit or wire interruption in loops.

Functions

Isolators are configured in such a way that the fire sectors or, insofar as these are smaller, alarm sectors are confined. This configuration means that in the event of a short circuit, all elements are kept supplied with voltage before and after the separating isolators.

During isolation, the LED on the isolator is illuminated.

Once the short circuit has been rectified, the elements return automatically to normal operating condition and restore the connection.

No isolator is used between fire panel and the first or last signaling device. This means that n isolators are required for n fire sectors.

Certifications and Approvals

Complies with EN 54-17:2005

Region	Certification	
Europe	CPD	0832-CPD-0963 YBO-R/SCI
Germany	VdS	G 204049 YBO-R/SCI

Technical Specifications

Operating voltage	17 - 41 V DC
Current consumption in standby mode	50 µA
Current consumption in the event of short circuit	< 10 mA
Max. current consumption in the event of short circuit	1 A
Max. wire diameter	2.5 mm ² (Ø 1.8 mm)
Permitted operating temperature	-10 °C ... + 50 °C
Permitted rel. humidity	95% (without condensation)
Housing	Surface-mount, ivory colored
Dimensions (including cover)	Ø 100 mm, 13 mm high
Weight	85 g

Ordering Information

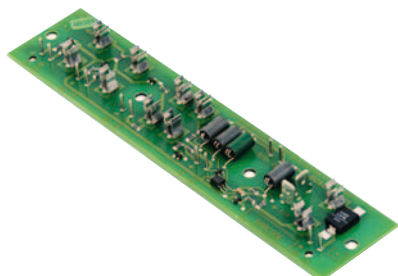
Isolator Type YBO-R/SCI

Positive isolator, recognizes wire interruption and short circuit

ERT-Isolator

SIV 28 Fuse Distributor 28 V

2



For monitored fusing of units connected to BZ 500 LSN /
UEZ 2000 LSN, max. 5 fuses.

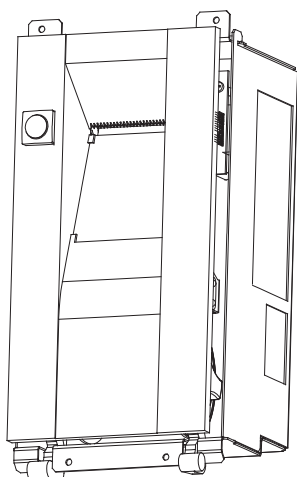
Ordering Information

SIV 28 Fuse Distributor 28 V

Fusing for units connected to BZ 500 LSN /
UEZ 2000 LSN, max. 5 fuses

SIV 28

DR 2020 T/AV Log Printer with Roll-up Equipment



For installation in the display carrier

Note The Log Printer must already be taken into account when ordering. Installation of the printer can only occur in the factory, subsequent installation on location not possible.

Certifications and Approvals

Region	Certification	
Europe	CE	DR 2020 / 2000 / 500 T

Technical Specifications

Electrical

Operating voltage	10.5 V DC . . . 29 V DC
Current consumption	600 mA at 12 V
Power supply	From the control panel
Fuse	T1A

Mechanics

Dimensions (H x W x D)	130 x 160 x 230 mm
Color	Anthracite, RAL 7016
Weight	Approx. 2 kg

Environmental conditions

Permitted operating temperature	0 °C. . . 50 °C
Permitted relative humidity	93 %, at + 40°C
Classes of equipment as per EN 60950	Class II equipment
Protection class as per EN 60529	IP 30
Contamination level	2 (as per EN 60950)
Environmental class as per VdS 2110	II

Special features

Construction type	Thermal printer
Printout	Alphanumeric
Character height	2.7 mm ± 0.2 mm
Number of lines per printout	Max. 3 lines, of these <ul style="list-style-type: none"> • 1 line standard output • 2 lines additional information
Number of characters / lines	Max. 40 characters
Print speed	At least 5 lines/sec
Paper type	Thermoprint paper rolls
Paper width	58 mm +0/-1 mm
Interface	Parallel
Baud rate	2400 bit/sec, 9600 bit/sec (standard)
Data format	8 bits, 1 start bit, 1 stop bit, no parity bit, ASCII characters
Monitoring	<ul style="list-style-type: none"> • Paper end (signaling of at least 500 print lines before the end) • Cover tamper contact
EMC interference immunity	EN 50130-4
EMC emitted interference	EN 61000-6-3

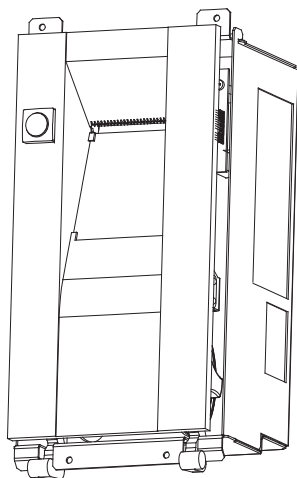
Ordering Information

DR 2020 T/AV Log Printer with Roll-up Equipment

Installation of the printer can only occur in the factory, subsequent installation on location not possible

DR 2020 T/AV

DR 2020 T Log Printer without Roll-up Equipment



Like product ID 4.998.105.681, however without roll-up equipment.

Certifications and Approvals

Region	Certification	
Europe	CE	DR 2020 / 2000 / 500 T

Technical Specifications

See model with roll-up equipment

Ordering Information

DR 2020 T Log Printer without Roll-up Equipment	DR 2020 T
like product ID 4.998.105.681, however without roll-up equipment	