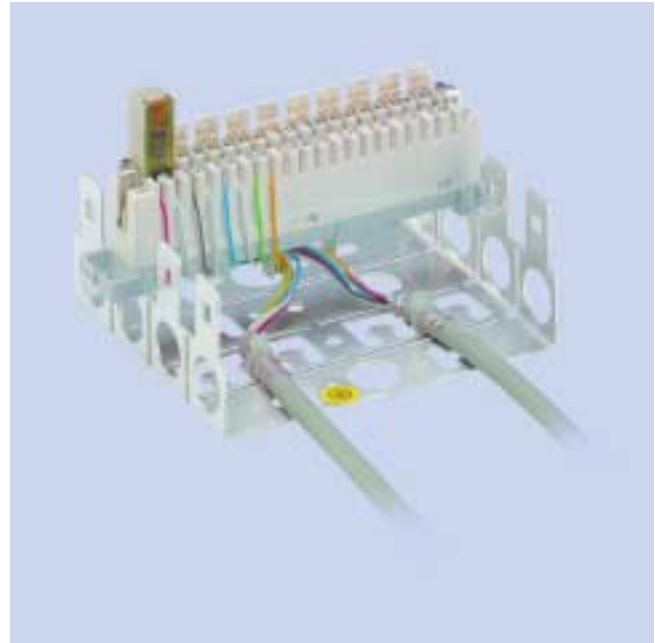
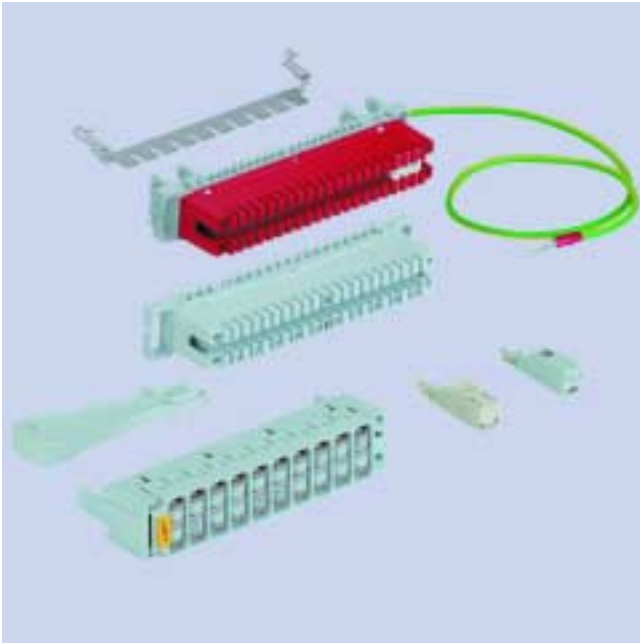


LSA-Plus technology



Operation and fields of application

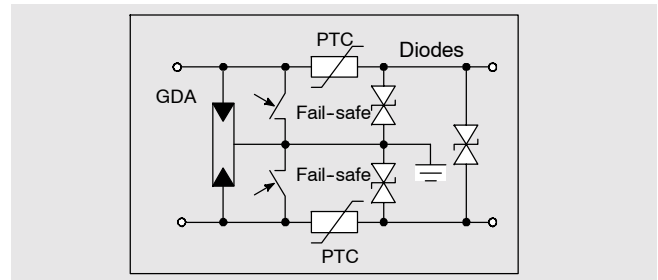
LSA-Plus surge protection from OBO is used especially with multi-wire systems such as those to be found, for example, in measurement and control engineering and in telephone exchanges. For example, ten two-wire (TC) systems can be protected with only one surge protection (basic protection) magazine LSA-B-MAG. Modules LSA-BF provide one twin-core protection of two lines.

The basic and precision protection devices of type LSA-BF 180 (180 V version) are intended for use in telephone exchanges in analog and ISDN networks. OBO basic and precision protection devices LSA-BF-24 (24 V version) are used especially in computer systems and measurement and control engineering.

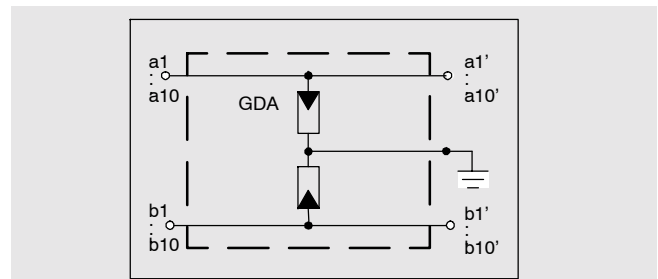
The protection circuit of the LSA-Plus devices consists of powerful triple-pole gas discharge arresters. Basic and precision protection are based on fail-safe technology, ensuring that, in the event of a thermal overload, the arrester is bridged and therefore protected.

Mounting

The LSA connection or isolating strips are fixed simply by snap-fitting to a mounting tray. This means that they can be mounted on almost any wall.



Block diagram of LSA-BF..



Block diagram of LSA-B-MAG

Using the LSA-Plus tool, the wires can be connected without cutting, and without solder, screws and stripping.

LSA-Plus features at a glance	Advantages in use
LSA-Plus technology	▶ Simple solderless, screwless connections with no need to strip the insulation
Compact design	▶ Space-saving protection of multi-wire systems
Fail-safe technology	▶ Protection from thermal overloading
Individual surge protection	▶ The modules allow certain wiring branches to be protected
Modular design	▶ Allows simple, professional mounting

Technical data

Type	LSA-B-MAG	LSA-BF-24	LSA-BF-180
Protected double lines/wires	10 TC/20	1 TC/2	
Max. continuous operating voltage U_c	180 V	24 V	180 V
Voltage protection level U_p	<700 V	<50 V	<300 V
LPZ	0→2	0→3	
Nominal discharge current (8/20) I_n	5 kA	2.5 kA	2.5 kA
Max. discharge current (8/20) I_{max}	10 kA	5 kA	5 kA
Impulse current (10/350) I_{imp}	1 kA	0.5 kA	0.5 kA
Cut-off frequency (-3 dB) MHz	30 MHz/100-600 Ω	3 MHz/100 Ω	3.5 MHz/600 Ω
Temperature range ϑ	-20 °C to +60 °C		
Storage temperature	-40 °C to +80 °C		

Type	LSA-A-LEI
Connection strip for twin cores/wires	10 TC/20
Use with protection component	LSA-B-MAG
Colour	Grey
Dimensions	Height Width Depth
	31 mm 126 mm 20 mm

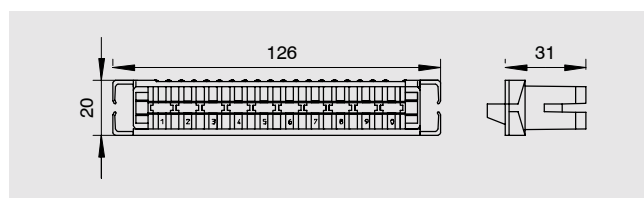
Type	LSA-T-LEI
Isolating strip for twin cores/wires	10 TC/20
Use with protection component	LSA-B-MAG; LSA-BF-24; LSA-BF-180
Colour	White
Dimensions	Height Width Depth
	31 mm 126 mm 20 mm

Type	LSA-E-LEI
Earth wire strip to connect earth wires	34
Colour	Red
Dimensions	Height Width Depth
	31 mm 126 mm 20 mm

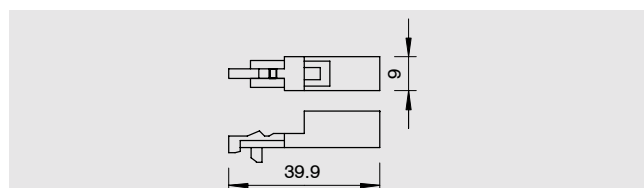
Subject to technical alterations

Ordering data

Type	Description	Order no.
LSA-A-LEI	Connection strip for ten twin-cores	5084 00 8
LSA-T-LEI	Isolating strip for ten twin-cores	5084 01 2
LSA-E-LEI	Earth wire strip, 34-way	5084 01 6
LSA-B-MAG	Basic protection magazine, with 20 arresters	5084 02 0
LSA-BF-180	Basic and precision protection (1 TC) 180 V	5084 02 4
LSA-BF-24	Basic and precision protection (1 TC) 24 V	5084 02 8
LSA-E	Earthing bar for LSA modules	5084 03 2
LSA-M	Mounting tray for four connection/isolating strips	5084 03 6
LSA-TOOL	Wiring tool	5084 04 0



Dimension drawing of LSA-A-LEI; LSA-T-LEI



Dimension drawing of LSA-BF-180; LSA-BF-24