

- Arrester for telecommunications equipment
- Space-saving flush mounting
- Easy to mount due to plug-in terminals



Surge arrester for protecting telecommunications equipment and installation into flush-type boxes or small-sized distribution boards. Plug-in terminals on the input side.

In a typical installation, DSM surge arresters are integrated into the junction box downstream of the socket outlet of the terminal equipment or into the cable duct, making them independent from the switch or box programme. They protect, invisibly for the user, telecommunications

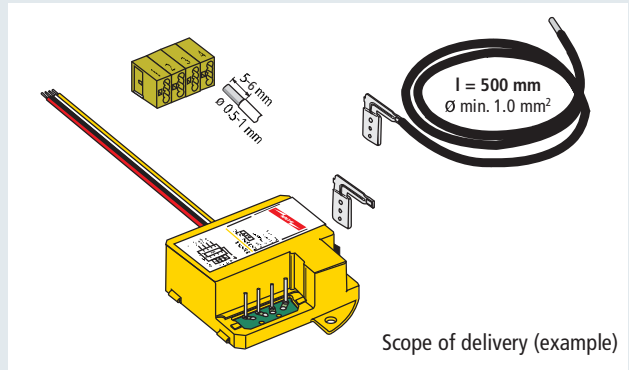
equipment or devices. Of course, the arresters can also be integrated into small-sized distribution boards. The removable plug-in terminals simplify the installation of DSM. Since each plug-in terminal is designed for four lines, through-wiring of an S<sub>0</sub> bus, for example, is possible.



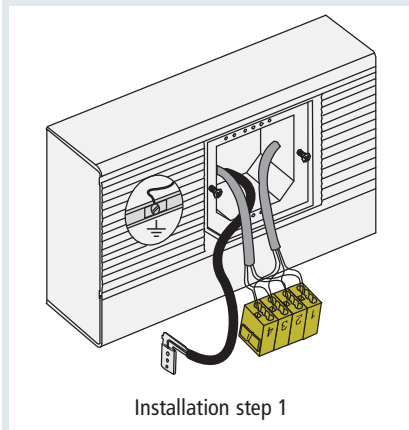
DSM installed in a surface-mounted distribution board

DSM surge arresters are compact enough to be easily installed even into small-sized distribution boards situated in damp rooms.

Apart from the plug-in terminals, delivery also includes a prewired earthing conductor.



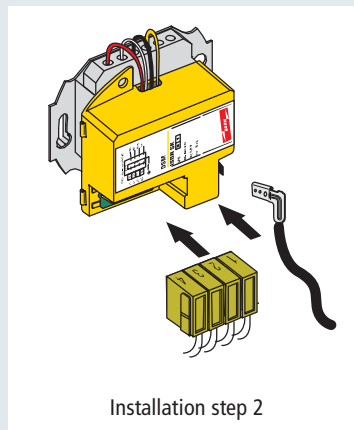
Scope of delivery (example)



Installation step 1

**Prewired cables**

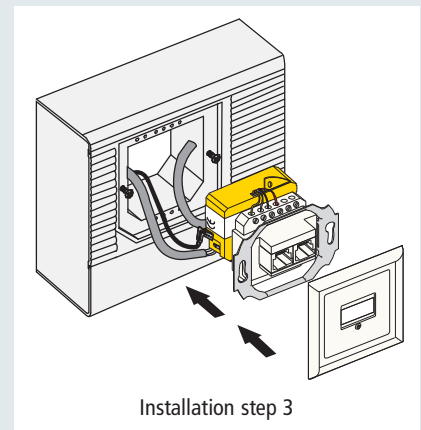
The plug-in terminals are prewired, allowing the ISDN bus to be wired.



Installation step 2

**Connecting DSM ... SK to the telecommunications box**

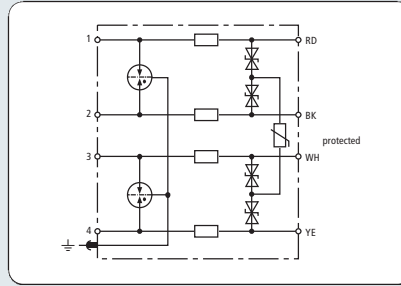
The lines fixed at the DSM surge arrester are connected to the telecommunications box and the DSM surge arrester is placed at the rear panel of the box. Then, the prewired connectors can be plugged in.



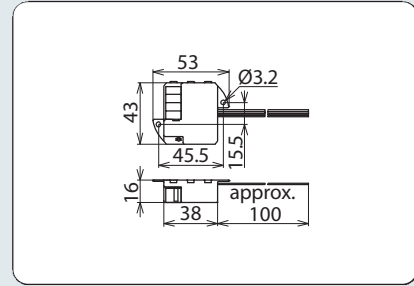
Installation step 3

**Final assembly**

The telecommunications box with the DSM surge arrester is inserted and fixed in the mounting panel. After that, an adequate cover has to be mounted.



Basic circuit diagram DSM ISDN



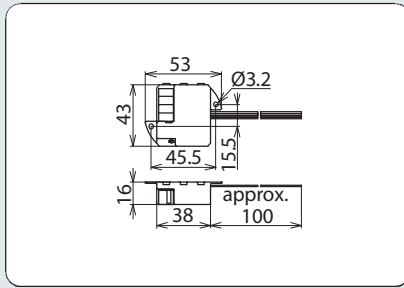
Dimension drawing DSM ISDN

- Optional through-wiring of the ISDN bus via plug-in terminals
- Integrated protection for the remote supply
- For installation in conformity with the lightning protection zones concept at the boundaries from  $0_B - 2$  and higher

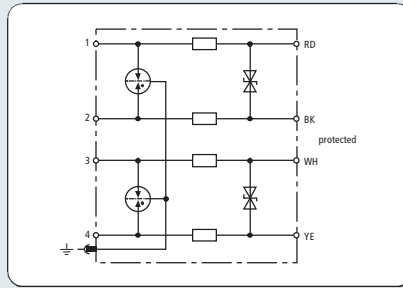
Energy-coordinated two-stage arrester for ISDN  $S_0$  buses with additional protection of the remote supply. Four-pole terminal allows through-wiring of the ISDN bus.

Type	DSM ISDN SK
Part No.	924 270
SPD class	TYPE 2 P1
Nominal voltage ( $U_N$ )	5 V
Nominal voltage pair-pair ( $U_N$ )	40 V
Max. continuous operating d.c. voltage ( $U_C$ )	7.5 V
Max. continuous operating d.c. voltage pair-pair ( $U_C$ )	45 V
Nominal current ( $I_L$ )	200 mA
C2 Total nominal discharge current (8/20 $\mu$ s) ( $I_n$ )	20 kA
C2 Nominal discharge current (8/20 $\mu$ s) per line ( $I_n$ )	5 kA
Voltage protection level line-line for $I_n$ C2 ( $U_p$ )	$\leq 30$ V
Voltage protection level line-PG for $I_n$ C2 ( $U_p$ )	$\leq 600$ V
Voltage protection level pair-pair for $I_n$ C2 ( $U_p$ )	$\leq 180$ V
Voltage protection level line-line at 1 kV/ $\mu$ s C3 ( $U_p$ )	$\leq 17$ V
Voltage protection level line-PG at 1 kV/ $\mu$ s C3 ( $U_p$ )	$\leq 600$ V
Voltage protection level pair-pair at 1 kV/ $\mu$ s C3 ( $U_p$ )	$\leq 100$ V
Series impedance per line	4.7 ohms
Cut-off frequency ( $f_c$ )	4 MHz
Capacitance line-line (C)	$\leq 1.5$ nF
Capacitance line-PG (C)	$\leq 15$ pF
Operating temperature range	-40°C...+80°C
Degree of protection	IP 20
Connection (input/output)	terminal with four clamping points / stranded conductors 0.25 mm <sup>2</sup>
Pinning	2 pairs
Connection diameter, solid	0.5 - 1.0 mm
Earthing via	flat connector (2.8 mm)
Enclosure material	polyamide PA 6.6
Colour	yellow
Test standards	IEC 61643-21 / EN 61643-21
Approvals	GOST
Accessories	flat connector, 500 mm earthing conductor





Dimension drawing DSM TC



Basic circuit diagram DSM TC



Energy-coordinated two-stage surge arrester, no leakage currents to earth, for (system) telephones,  $U_{k0}$ , ADSL, for two pairs.

- Excellent transmission performance
- Also suitable for installation into distribution boards
- For installation in conformity with the lightning protection zones concept at the boundaries from  $0_B - 2$  and higher

Type	DSM TC 2 SK
Part No.	924 272
SPD class	TYPE 2P2
Nominal voltage ( $U_N$ )	110 V
Max. continuous operating d.c. voltage ( $U_C$ )	170 V
Nominal current ( $I_N$ )	200 mA
C2 Total nominal discharge current (8/20 $\mu$ s) ( $I_n$ )	20 kA
C2 Nominal discharge current (8/20 $\mu$ s) per line ( $I_n$ )	5 kA
Voltage protection level line-line for $I_n$ C2 ( $U_p$ )	$\leq 275$ V
Voltage protection level line-PG for $I_n$ C2 ( $U_p$ )	$\leq 600$ V
Voltage protection level line-line at 1 kV/ $\mu$ s C3 ( $U_p$ )	$\leq 220$ V
Voltage protection level line-PG at 1 kV/ $\mu$ s C3 ( $U_p$ )	$\leq 600$ V
Series impedance per line	4.7 ohms
Cut-off frequency ( $f_c$ )	17 MHz
Capacitance line-line (C)	$\leq 300$ pF
Capacitance line-PG (C)	$\leq 10$ pF
Operating temperature range	-40°C...+80°C
Degree of protection	IP 20
Connection (input/output)	terminal with four clamping points / stranded conductors 0.25 mm <sup>2</sup>
Pinning	2 pairs
Connection diameter, solid	0.5 - 1.0 mm
Earthing via	flat connector (2.8 mm)
Enclosure material	polyamide PA 6.6
Colour	yellow
Test standards	IEC 61643-21 / EN 61643-21
Approvals	GOST
Accessories	flat connector, 500 mm earthing conductor



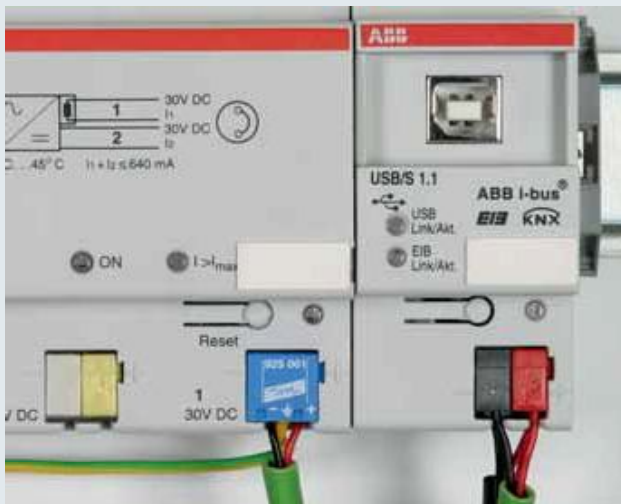


Surge arrester for KNX / EIB buses with connecting leads

- Surge arrester for KNX / EIB buses
- Extremely space-saving due to KNX / EIB bus terminal design
- System-tested with EIBA certification

The discharge capacity, protective effect and mechanical design of BUSector surge arresters are adapted to the installation environment of KNX / EIB buses. Like a bus terminal they can be plugged onto the bus terminal pins of a terminal device and can be connected to the existing

connecting cables. BUSector surge arresters can also be connected to a bus terminal on the terminal device. They particularly protect line and area couplers as well as gateways and sensors installed at the outer walls of buildings.



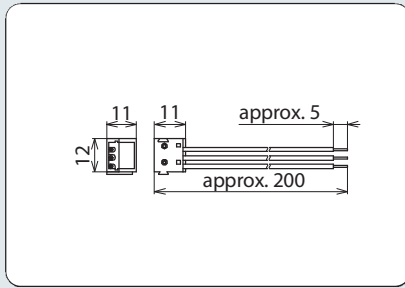
Protection of a KNX power supply unit by means of a BUSector surge arrester mounted in the bus terminal slot.



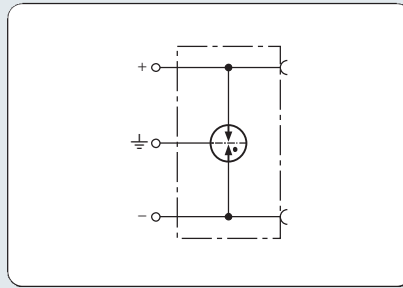
Protection of a KNX bus coupling unit by means of a BUSector surge arrester mounted on a bus terminal in the mounting area of a cable duct.



SPDs for Terminal Connection



Dimension drawing BT



Basic circuit diagram BT



Surge arrester with bus terminal design, adapted to the immunity of KNX / EIB systems. EIBA-certified.

- Suitable for KNX / EIB systems
- Minimum space requirements
- For installation in conformity with the lightning protection zones concept at the boundaries from  $O_B - 1$  and higher

Type	BT 24
Part No.	925 001
SPD class	TYPE 2
Nominal voltage ( $U_n$ )	24 V
Max. continuous operating d.c. voltage ( $U_c$ )	45 V
Nominal current ( $I_n$ )	6 A
C2 Nominal discharge current per line ( $I_n$ )	5 kA
Voltage protection level line-line for $I_n$ C2	$\leq 1200$ V
Voltage protection level line-PG for $I_n$ C2	$\leq 650$ V
Voltage protection level line-line at 1 kV/ $\mu$ s C3	$\leq 750$ V
Voltage protection level line-PG at 1 kV/ $\mu$ s C3	$\leq 500$ V
Cut-off frequency line-line	70 MHz
Capacitance line-line	$\leq 10$ pF
Capacitance line-PG	$\leq 10$ pF
Operating temperature range	-40°C...+80°C
Degree of protection	IP 20
Connection (input/output)	spring contacts ( $\varnothing 1$ mm) / connecting leads ( $\varnothing 0.8$ mm)
Earthing via	lead ( $0.75$ mm <sup>2</sup> ), 200 mm long
Enclosure material	thermoplastic
Colour	blue
Test standards	IEC 61643-21
Approvals	EIBA certification No. Z 32/1399/95



