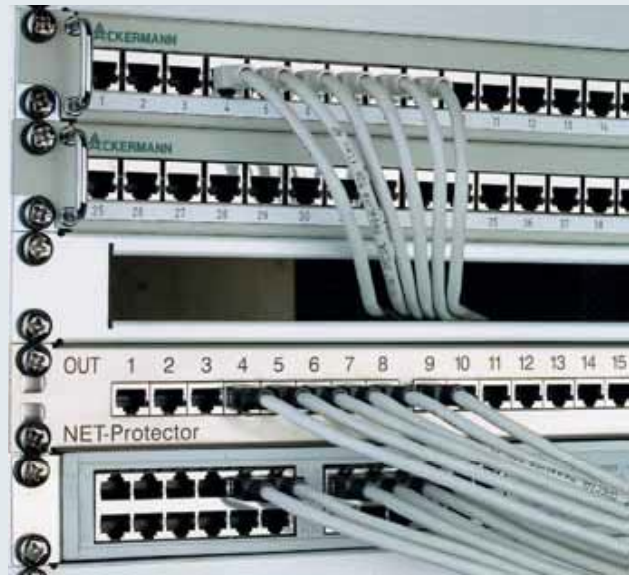


- Protects switches, hubs and telecommunications systems against overvoltage
- Allows for class D according to EN 50173 (Gigabit Ethernet)
- Patch panels can be flexibly equipped
- Retrofit versions with plug-in inputs and outputs



The 482.6 mm (19 inch) enclosure can be equipped with surge protection components for protecting network components (class D) or telecommunications systems.

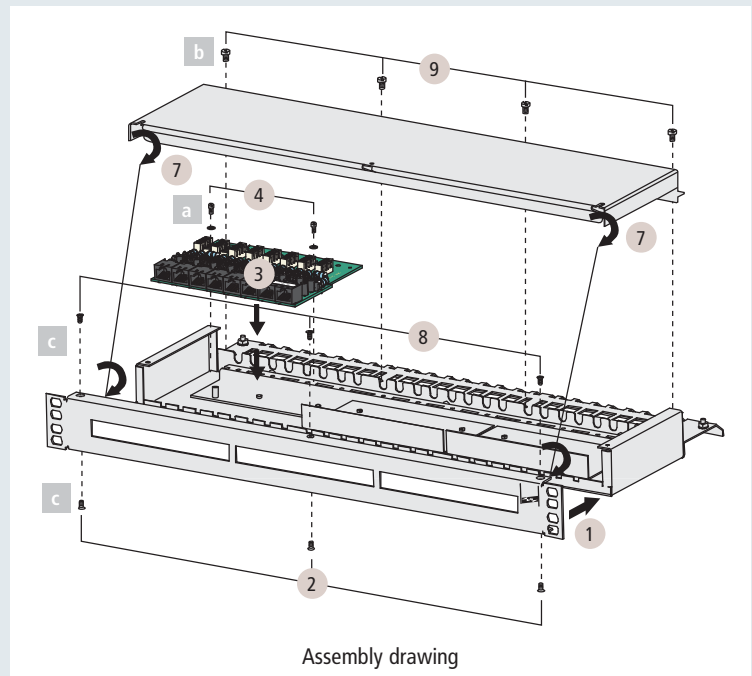
The 482.6 mm (19 inch) enclosure can be equipped with up to 3 surge protection components to protect active network components such as hubs, switches (class D) or telecommunication systems. NET Protector is typically used for Ethernet, Token Ring, E1 and telephone systems.

It only requires the space of one vertical module and is generally installed in terminal boards. It is inserted as a patch panel with surge protection or as a retrofit version for patching between the patch panel and the device to be protected.



GHMT Certificate

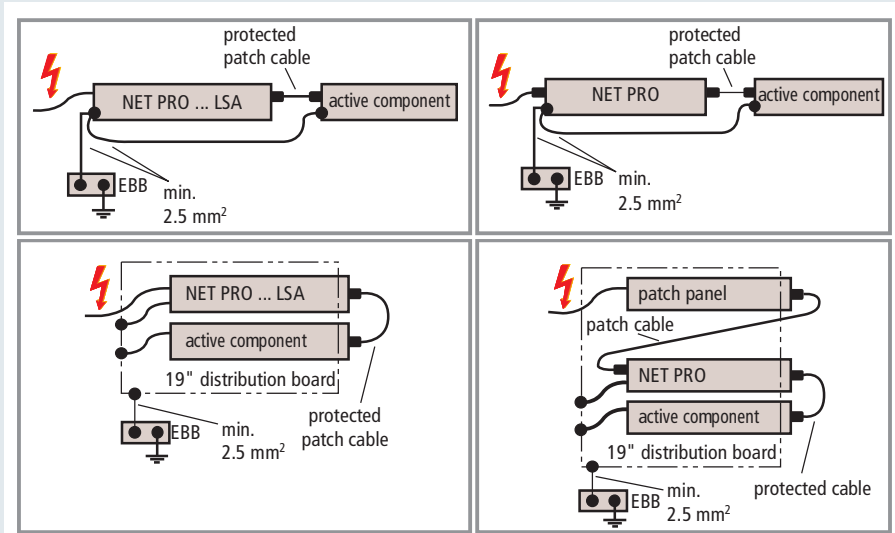
The NET Protector with its fully shielded 482.6 mm (19 inch) enclosure and its 4TP surge protection component allows class D networks to be established. This has been confirmed by the independent GHMT test institute.



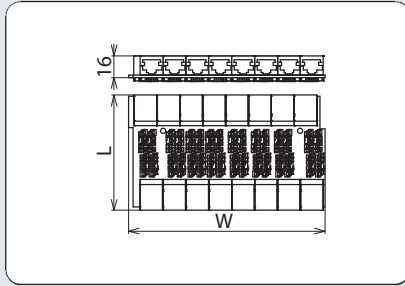
Assembly drawing

NET Protectors are modular in design. The empty enclosure can be optionally equipped with 1, 2 or 3 surge protection components.

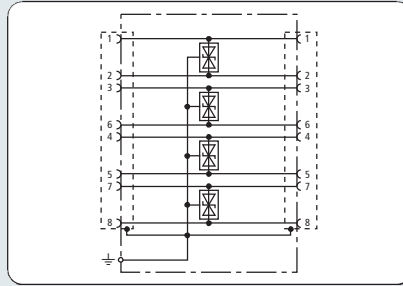
The surge protection components do not only have a different protective circuit, but are also connected differently. While the protected output is always designed as a RJ45 connection system, the input can be designed as insulation displacement or RJ45 system. Insulation displacement terminals are often used to equip a new installation which does not incorporate a patch panel yet. The RJ45 version is a retrofit version for existing systems and is patched easily between the patch panel and the active component.



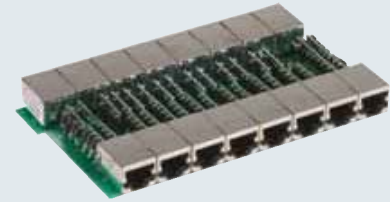
LSA type as patch panel (left) / retrofit version (right)



Dimension drawing NET PRO 4TP



Basic circuit diagram NET PRO 4TP



Surge protection component fitted with eight shielded ports for universal cabling systems (class D). Multi-purpose solution since all four pairs (4 TP) are protected by a low-capacitance diode matrix per pair. To be installed into EG NET PRO 19" into distribution cabinets as a patch panel or retrofit version.

- GHMT certificate for class D channel link
- Low voltage protection level for all lines
- For installation in conformity with the lightning protection zones concept at the boundaries from 1 – 2 and higher

Type	NET PRO 4TP	NET PRO LSA 4TP	NET PRO 4TP 30
Part No.	929 035	929 036	929 037
SPD class	TYPE 3 P1	TYPE 3 P1	TYPE 4 P1
Nominal voltage (U _N)	5 V	5 V	24 V
Max. continuous operating d.c. voltage (U _c)	6 V	6 V	30 V
Max. continuous operating a.c. voltage (U _c)	4.2 V	4.2 V	21.1 V
Nominal current (I _N)	100 mA	100 mA	100 mA
C2 Nominal discharge current (8/20 μs) per port (I _n)	2.4 kA	2.4 kA	0.8 kA
C2 Nominal discharge current (8/20 μs) per line (I _n)	0.3 kA	0.3 kA	0.1 kA
Voltage protection level line-line for I _n C2 (U _p)	≤ 35 V	≤ 35 V	≤ 60 V
Voltage protection level line-PG for I _n C2 (U _p)	≤ 35 V	≤ 35 V	≤ 60 V
Voltage protection level line-line at 1 kV/μs C3 (U _p)	≤ 13 V	≤ 13 V	≤ 40 V
Voltage protection level line-PG at 1 kV/μs C3 (U _p)	≤ 13 V	≤ 13 V	≤ 40 V
Cut-off frequency line-line at 100 ohms (f _c)	165 MHz	170 MHz	300 MHz
Insertion loss at 100 MHz	< 0.4 dB	< 0.3 dB	< 0.4 dB
Capacitance line-line (C)	≤ 35 pF	≤ 35 pF	≤ 16 pF
Capacitance line-PG (C)	≤ 50 pF	≤ 50 pF	≤ 20 pF
Operating temperature range	-40°C...+80°C	-40°C...+80°C	-40°C...+80°C
Degree of protection	IP 00	IP 00	IP 00
For mounting on	enclosure	enclosure	enclosure
Connection (input/output)	RJ45 shielded / RJ45 shielded	LSA / RJ45 shielded	RJ45 shielded / RJ45 shielded
Pinning	1/2, 3/6, 4/5, 7/8	1/2, 3/6, 4/5, 7/8	1/2, 3/6, 4/5, 7/8
Earthing via	enclosure	enclosure	enclosure
Dimensions (W x L)	135 x 77 mm	135 x 107 mm	135 x 77 mm
Test standards	IEC 61643-21 / EN 61643-21	IEC 61643-21 / EN 61643-21	IEC 61643-21 / EN 61643-21
Approvals	GHMT, GOST	GOST	GOST

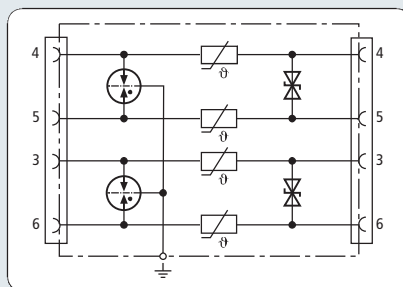
Accessory for NET Protector

482.6 mm (19 inch) Enclosure

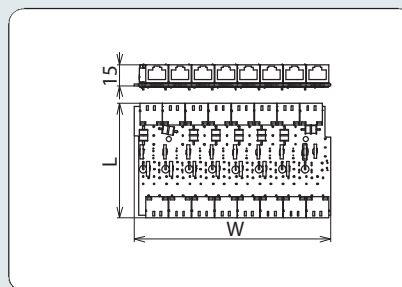
Fully shielded empty enclosure for max. 3 NET Protector protective boards.

Type	EG NET PRO 19"
Part No.	929 034
Dimensions	1 rack unit
Enclosure material	stainless steel front / galvanised sheet metal





Basic circuit diagram NET PRO TC



Dimension drawing NET PRO TC

- Patch panel or retrofit version
- Integrated protection against power crossing
- For installation in conformity with the lightning protection zones concept at the boundaries from 0_B – 2 and higher

Surge protection component with eight unshielded ports for protecting telecommunications systems with analogue or system transmission from overvoltage and a.c. interference. PTC thermistors decouple the protection stages and thus additionally protect terminal equipment in case of power crossing. To be mounted into EG NET PRO 19" as retrofit or patch panel version (LSA).

Type	NET PRO TC 2	NET PRO TC 2 LSA
Part No.	929 071	929 072
SPD class	TYPE 2 P2	TYPE 2 P2
Nominal voltage (U _N)	130 V	130 V
Max. continuous operating d.c. voltage (U _C)	170 V	170 V
Max. continuous operating a.c. voltage (U _C)	120 V	120 V
Nominal current (I _N)	150 mA	150 mA
C2 Nominal discharge current (8/20 μs) per port (I _n)	10 kA	20 kA
C2 Nominal discharge current (8/20 μs) per line (I _n)	2.5 kA	5 kA
Voltage protection level line-line for I _n C2 (U _p)	≤ 250 V	≤ 275 V
Voltage protection level line-PG for I _n C2 (U _p)	≤ 600 V	≤ 600 V
Voltage protection level line-line at 1 kV/μs C3 (U _p)	≤ 230 V	≤ 230 V
Voltage protection level line-PG at 1 kV/μs C3 (U _p)	≤ 600 V	≤ 600 V
Series impedance per line	10 ohms	10 ohms
Cut-off frequency line-line (f _C)	10 MHz	10 MHz
Capacitance line-line (C)	≤ 300 pF	≤ 300 pF
Capacitance line-PG (C)	≤ 15 pF	≤ 25 pF
Operating temperature range	-40°C...+80°C	-40°C...+80°C
Degree of protection	IP 00	IP 00
For mounting on	enclosure	enclosure
Connection (input/output)	RJ45 / RJ45	LSA / RJ45
Pinning	4/5, 3/6	4/5, 3/6
Earthing via	enclosure	enclosure
Dimensions (W x L)	135 x 77 mm	135 x 107 mm
Test standards	IEC 61643-21 / EN 61643-21	IEC 61643-21 / EN 61643-21
Approvals	GOST	GOST

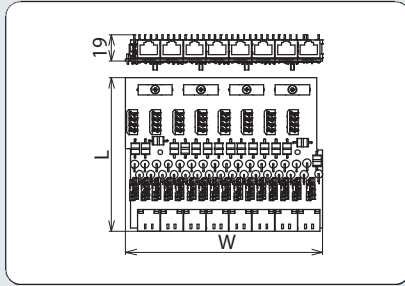
Accessory for NET Protector

482.6 mm (19 inch) Enclosure

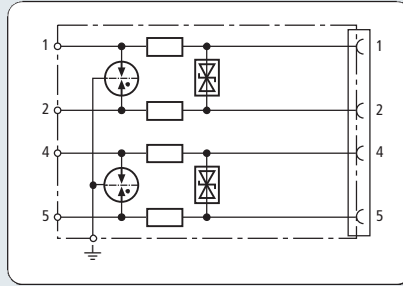
Fully shielded empty enclosure for max. 3 NET Protector protective boards.

Type	EG NET PRO 19"
Part No.	929 034
Dimensions	1 rack unit
Enclosure material	stainless steel front / galvanised sheet metal





Dimension drawing NET PRO E1 LSA



Basic circuit diagram NET PRO E1 LSA



- Patch panel version
- Compliance with G.703 specification
- For installation in conformity with the lightning protection zones concept at the boundaries from $O_B - 2$ and higher

Surge protection component (patch panel version) with energy-coordinated protective circuit for two pairs and eight unshielded ports for E1 interfaces. To be mounted into EG NET PRO 19" and in distribution cabinets upstream of the telecommunications system. For 2 MBit/s transmissions according to G.703.

Type	NET PRO E1 LSA G703
Part No.	929 075
SPD class	TYPE 2 P1
Nominal voltage (U_N)	5 V
Max. continuous operating d.c. voltage (U_C)	6 V
Max. continuous operating a.c. voltage (U_C)	4.2 V
Nominal current (I_n)	200 mA
C2 Nominal discharge current (8/20 μ s) per port (I_n)	20 kA
C2 Nominal discharge current (8/20 μ s) per line (I_n)	5 kA
Voltage protection level line-line for I_n C2 (U_p)	≤ 40 V
Voltage protection level line-PG for I_n C2 (U_p)	≤ 500 V
Voltage protection level line-line at 1 kV/ μ s C3 (U_p)	≤ 15 V
Voltage protection level line-PG at 1 kV/ μ s C3 (U_p)	≤ 450 V
Series impedance per line	1 ohm
Cut-off frequency line-line at 100 ohms (f_c)	210 MHz
Capacitance line-line (C)	≤ 20 pF
Capacitance line-PG (C)	≤ 25 pF
Operating temperature range	-40°C...+80°C
Degree of protection	IP 00
For mounting on	enclosure
Connection (input/output)	LSA / RJ45 socket
Pinning	1/2, 4/5
Earthing via	enclosure
Dimensions (W x L)	135 x 108 mm
Test standards	IEC 61643-21 / EN 61643-21
Approvals	GOST

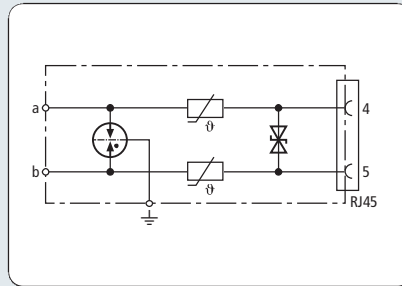
Accessory for NET Protector

482.6 mm (19 inch) Enclosure

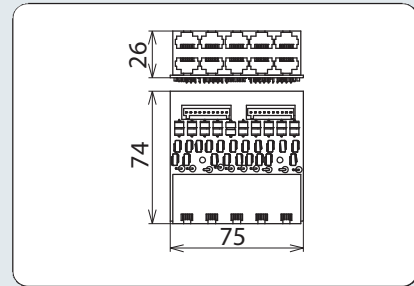
Fully shielded empty enclosure for max. 3 NET Protector protective boards.

Type	EG NET PRO 19"
Part No.	929 034
Dimensions	1 rack unit
Enclosure material	stainless steel front / galvanised sheet metal





Basic circuit diagram NET PRO 10X TC1 RST



Dimension drawing NET PRO 10X TC1 RST

- Extremely compact design
- Integrated protection against power crossing
- Installation in conformity with the lightning protection zones concept at the boundaries from $0_B - 2$ and higher

Surge protection component with ten ports for protecting telecommunications systems with analogue or system transmission from overvoltage and a.c. interference. Cage spring terminals which can be removed from the PCB as a block are situated on the input side, thus allowing to test the lines. For installation into EG NET PRO 10X 19" or EG NET PRO 10X 3HE enclosures.

Type	NET PRO 10X TC1 RST
Part No.	929 230
SPD class	TYPE 2 P2
Nominal voltage (U_N)	180 V
Max. continuous operating d.c. voltage (U_C)	180 V
Max. continuous operating a.c. voltage (U_C)	120 V
Nominal current at 20°C / 50°C / 70°C (I_n)	120 mA / 100 mA / 60 mA
C2 Nominal discharge current (8/20 μ s) per port (I_n)	10 kA
C2 Nominal discharge current (8/20 μ s) per line (I_n)	5 kA
Voltage protection level line-line for I_n C2 (U_p)	≤ 275 V
Voltage protection level line-PG for I_n C2 (U_p)	≤ 800 V
Voltage protection level line-line at 1 kV/ μ s C3 (U_p)	≤ 250 V
Voltage protection level line-PG at 1 kV/ μ s C3 (U_p)	≤ 600 V
A2 a.c. durability per line	5 A
Series impedance per line	3 ohms to 12 ohms
Cut-off frequency at 100 ohms (f_G)	55 MHz
Capacitance line-line (C)	≤ 50 pF
Capacitance line-PG (C)	≤ 25 pF
Operating temperature range	-40°C...+70°C
Degree of protection	IP 00
For mounting on	enclosure
Connection (input/output)	plug-in spring terminal / RJ45
Pinning	4/5
Earthing via	enclosure
Dimensions (W x L)	75 x 73 mm
Test standards	IEC 61643-21 / EN 61643-21

Accessory for NET Protector

482.6 mm (19 inch) Enclosure, unshielded

Unshielded 19 inch enclosure (one rack unit) with a max. capacity of five NET PRO 10X modules, two earth terminals and cable anchoring rail.

Accessories: two nuts, two flat washers and two toothed lock washers for installing the earth terminal.



Type	EG NET PRO 10X 19"
Part No.	929 234
Dimensions	1 rack unit
Enclosure material	StSt (V2A)

Accessory for NET Protector

482.6 mm (19 inch) Enclosure, (three Rack Units)

Unshielded 19 inch enclosure for vertical installation (three rack units) with a capacity of one NET PRO 10X, with earth connection.

Accessories: nut, flat washer and toothed lock washer for installing the earth terminal.



Type	EG NET PRO 10X 3HE
Part No.	929 235
Dimensions	3 rack units
Enclosure material	StSt (V2A)

- Patch cable with built-in surge protection
- Cat. 6 according to ISO/IEC 11801
- CAT 6A in the channel according to ANSI/TIA/EIA-568
- Power over Ethernet (PoE+ according to IEEE 802.3at)
- Easy to retrofit



DEHNpatch is the first Cat. 6A certified patch cable with built-in surge protection that can be used according to IEEE 802.3at for voltages up to 57 V.

Designed as a patch cable, DEHNpatch is easy to install. It is equally suited for use in new installations or retrofitting into existing installations with little effort.

DEHNpatch is simply plugged in between the patch panel and the active component (a switch for example) instead of the conventional patch cable. The snap-in mechanism of the supporting foot allows the device to be safely earthed via the DIN rail. For single applications, delivery includes a piece of DIN rail and fixing material. For multiple applications in 19" distribution boards, the DEHNpatch mounting set should be used which is available as accessory.

DEHNpatch fulfils the requirements of Category 6 and can be universally used for all data services up to nominal voltages of 57 V. It is well suited for existing services in offices and industrial environments such as Gigabit Ethernet, ATM or ISDN as well as future services such as Voice over IP and Power over Ethernet.

Due to its fully shielded design, DEHNpatch can be used in shielded and unshielded networks. Its width is similar to that of an RJ45 socket, allowing up to 24 devices to be installed next to one another in one series and to be integrated into a 19" rack.

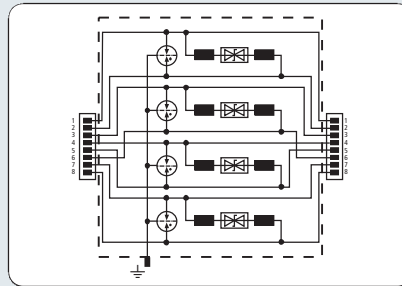
DEHNpatch with a total patch cable length of 3 m and 5 m is supplied as standard (other lengths available on request).



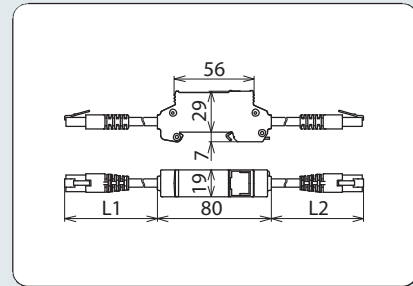
GHMT certificate DPA M CAT6 RJ45S 48



GHMT certificate DPA M CAT6 RJ45H 48



Basic circuit diagram DPA M CAT6 RJ45



Dimension drawing DPA M CAT6 RJ45

- Ideally suited for retrofitting, protection of all lines
- CAT 6A in the channel according to ANSI/TIA/EIA-568
- Power over Ethernet (PoE+ according to IEEE 802.3at)
- For installation in conformity with the lightning protection zones concept at the boundaries from $O_B - 2$ and higher

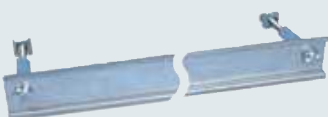
Universal arrester for Industrial Ethernet, Power over Ethernet (PoE+ according to IEEE 802.3at up to 57 V) and similar applications in structured cabling systems according to Cat. 6 and class E_A up to 500 MHz. Fully shielded type for DIN rail mounting.

Accessories: Earthing bracket with flat connector sleeve

Type	DPA M CAT6 RJ45S 48	DPA M CAT6 RJ45H 48
Part No.	929 100	929 110
SPD class	TYPE 2 P1	TYPE 2 P1
Nominal voltage (U _N)	48 V	48 V
Max. continuous operating d.c. voltage (U _c)	48 V	48 V
Max. continuous operating a.c. voltage (U _e)	34 V	34 V
Max. continuous d.c. voltage pair-pair (PoE) (U _c)	57 V	57 V
Nominal current (I _N)	1 A	1 A
C2 Nominal discharge current (8/20 μs) line-line (I _{nn})	150 A	150 A
C2 Nominal discharge current (8/20 μs) line-PG (I _{ln})	2.5 kA	2.5 kA
C2 Total nominal discharge current (8/20 μs) line-PG (I _{ln})	10 kA	10 kA
C2 Nominal discharge current (8/20 μs) pair-pair (PoE) (I _{nn})	150 A	150 A
Voltage protection level line-line for I _n C2 (U _p)	≤ 190 V	≤ 190 V
Voltage protection level line-PG for I _n C2 (U _p)	≤ 600 V	≤ 600 V
Voltage protection level line-line for I _n C2 (PoE) (U _p)	≤ 600 V	≤ 600 V
Voltage protection level line-line at 1 kV/μs C3 (U _p)	≤ 145 V	≤ 145 V
Voltage protection level line-PG at 1 kV/μs C3 (U _p)	≤ 500 V	≤ 500 V
Voltage protection level pair-pair at 1 kV/μs C3 (PoE) (U _p)	≤ 600 V	≤ 600 V
Insertion loss at 250 MHz	≤ 2 dB	≤ 3 dB
Capacitance line-line (C)	≤ 165 pF	≤ 250 pF
Capacitance line-PG (C)	≤ 255 pF	≤ 400 pF
Operating temperature range	-20°C ...+60°C	-20°C ...+60°C
Degree of protection	IP 20	IP 20
For mounting on	35 mm DIN rails acc. to EN 60715	35 mm DINs rail acc. to EN 60715
Connection (input/output)	RJ45 connecting lead / RJ45 connecting lead	RJ45 connecting lead / RJ45 connecting lead
Pinning	1/2, 3/6, 4/5, 7/8	1/2, 3/6, 4/5, 7/8
Connecting lead	A = approx. 0.5 m, G = approx. 3 m *)	A = approx. 1 m, G = approx. 5 m *)
Connector	Stewart 39 series	Hirose TM 21P
Earthing via	35 mm DIN rail acc. to EN 60715	35 mm DIN rail acc. to EN 60715
Enclosure material	zinc die casting	zinc die casting
Colour	bare surface	bare surface
Test standards	IEC 61643-21 / EN 61643-21	IEC 61643-21 / EN 61643-21
Transmission class according to ISO/IEC 11801	Cat. 6	Cat. 6
Transmission class according to EN 50173-1	Class E _A	Class E _A
Transmission class according to ANSI/TIA/EIA-568	Cat. 6A in the channel	Cat. 6A in the channel
Approvals	GHMT, GOST	GHMT, GOST
Accessories	fixing material	fixing material

*) Special lengths on request

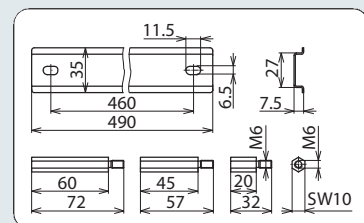
Accessory for DEHNpatch

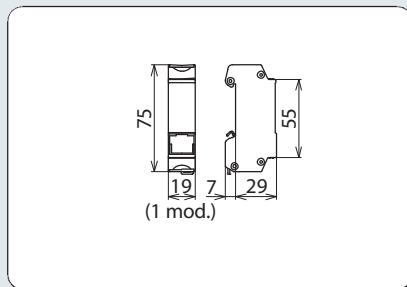


Mounting Set for DEHNpatch

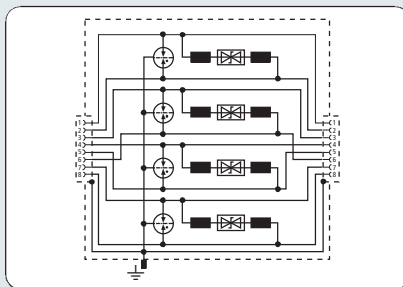
The set comprises a DIN rail for up to 24 DEHNpatch devices and different distance bolts with sliding nuts for installation into data distributors. To save space, the DIN rail can be mounted at the distributor panel or even upstream of the mounting sections in a 19" grid dimension.

Type	MS DPA
Part No.	929 199
Mounting in	19" cabinets





Dimension drawing DPA CLE



Basic circuit diagram DPA CLE



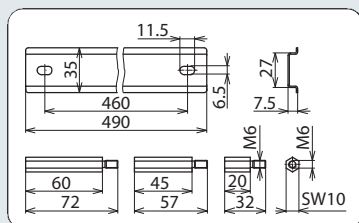
Universal arrester ideally suited for Industrial Ethernet, Power over Ethernet (PoE+ acc. to IEEE 802.3at up to 57 V) and similar applications in structured cabling systems according to class E up to 250 MHz. Protection of all pairs by means of powerful gas discharge tubes and one adapter filter matrix per pair. Fully shielded adapter with sockets for DIN rail mounting.

Accessories: Earthing bracket with flat connector sleeve

- Ideally suited for retrofitting, protection of all lines
- Cat. 6 in the channel (class E)
- Power over Ethernet (PoE+ according to IEEE 802.3at)
- For installation in conformity with the lightning protection zones concept at the boundaries from $0_B - 2$ and higher

Type	DPA M CLE RJ45B 48
Part No.	929 121
SPD class	TYPE 2 P1
Nominal voltage (U_N)	48 V
Max. continuous operating d.c. voltage (U_C)	48 V
Max. continuous operating a.c. voltage (U_C)	34 V
Max. continuous d.c. voltage pair-pair (PoE) (U_C)	57 V
Nominal current (I_N)	1 A
C2 Nominal discharge current (8/20 μ s) line-line (I_{n1})	150 A
C2 Nominal discharge current (8/20 μ s) line-PG (I_{n1})	2.5 kA
C2 Total nominal discharge current (8/20 μ s) line-PG (I_{n1})	10 kA
C2 Nominal discharge current (8/20 μ s) pair-pair (PoE) (I_{n1})	150 A
Voltage protection level line-line for I_{n1} C2 (U_P)	≤ 190 V
Voltage protection level line-PG for I_{n1} C2 (U_P)	≤ 600 V
Voltage protection level line-line for I_{n1} C2 (PoE) (U_P)	≤ 600 V
Voltage protection level line-line at 1 kV/ μ s C3 (U_P)	≤ 180 V
Voltage protection level line-PG at 1 kV/ μ s C3 (U_P)	≤ 500 V
Voltage protection level pair-pair at 1 kV/ μ s C3 (PoE) (U_P)	≤ 600 V
Insertion loss at 250 MHz	≤ 3 dB
Capacitance line-line (C)	≤ 30 pF
Capacitance line-PG (C)	≤ 25 pF
Operating temperature range	-40°C ... +80°C
Degree of protection	IP 10
For mounting on	35 mm DIN rails acc. to EN 60715
Connection (input/output)	RJ45 socket / RJ45 socket
Pinning	1/2, 3/6, 4/5, 7/8
Earthing via	35 mm DIN rail acc. to EN 60715
Enclosure material	zinc die casting
Colour	bare surface
Test standards	IEC 61643-21 / EN 61643-21
Approvals	CSA, UL, GOST
Accessories	fixing material

Accessory for DEHNpatch

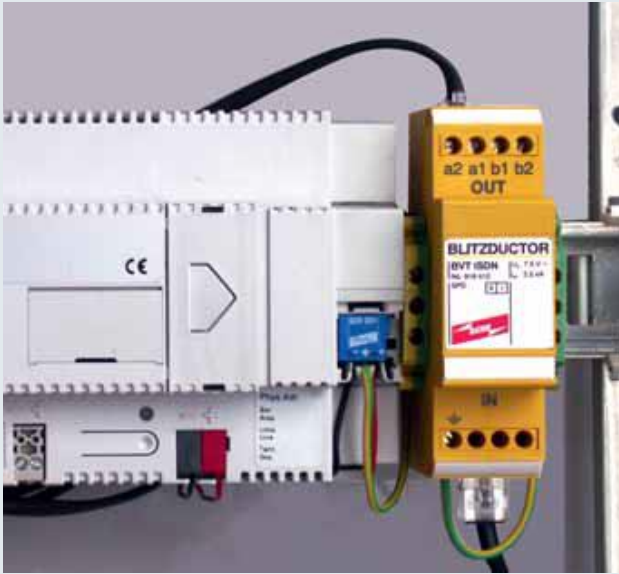


Mounting Set for DEHNpatch

The set comprises a DIN rail for up to 24 DEHNpatch devices and different distance bolts with sliding nuts for installation into data distributors. To save space, the DIN rail can be mounted at the distributor panel or even upstream of the mounting sections in a 19" grid dimension.

Type	MS DPA
Part No.	929 199
Mounting in	19" cabinets





- Ideally suited for DIN rail mounted modems or gateways
- Ease of installation due to RJ sockets
- Adaptable to suit the installation environment with additional screw terminals

DIN rail mounted surge arrester for terminal equipment of telecommunications systems as well as telephone systems with RJ plug.

DIN rail mounted surge arrester for telecommunications terminal equipment and telephone systems with RJ plug. They are often used in instal-

lations upstream of residential gateways (TC/EIB interface) or for protecting DIN rail mounted industrial modems.



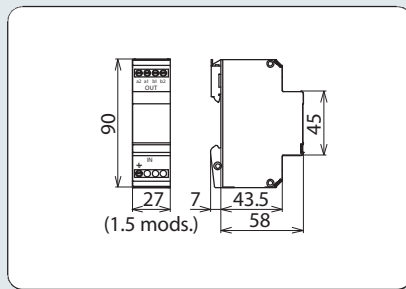
BLITZDUCTOR VT TC1

RJ sockets and screw terminals at the input and output of BVT TC 1 surge arresters allow for universal use, e.g. for installation upstream of NTBAs by means of screw wiring or upstream of modems and telecommunications systems by means of screw/plug-in connection.

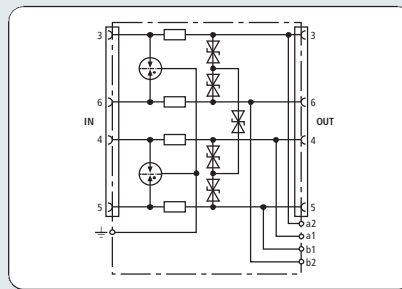


BLITZDUCTOR VT ISDN

The DIN rail mounted surge arresters were developed for installation-friendly protection of the S₀ input of residential gateways. The integrated connection system at the protected output allows wiring of two protected outgoing ISDN bus circuits.



Dimension drawing BVT ISDN



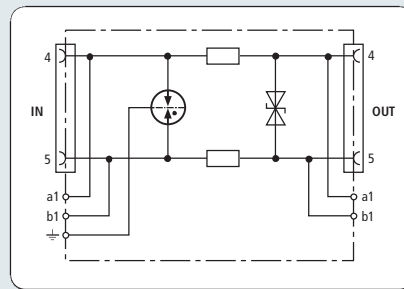
Basic circuit diagram BVT ISDN



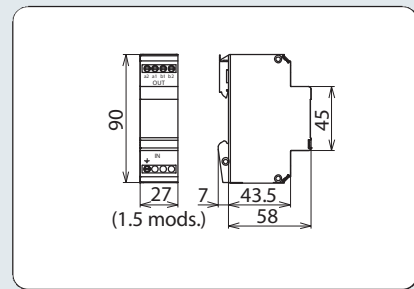
Energy-coordinated surge arrester for ISDN S_0 buses with RJ45 plugs and additional protection of the remote power supply. The additional screw terminals at the protected output allows double wiring of the S_0 bus.

- RJ45 sockets
- Additional screw terminals at the output for the ISDN lines
- For installation in conformity with the lightning protection zones concept at the boundaries from $0_B - 2$ and higher

Type	BVT ISDN
Part No.	918 410
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)	60 V
Nominal current (I_N)	200 mA
C2 Total nominal discharge current (8/20 μ s) (I_N)	10 kA
C2 Nominal discharge current (8/20 μ s) per line (I_n)	2.5 kA
Voltage protection level line-line for I_n C2 (U_p)	≤ 30 V
Voltage protection level line-PG for I_n C2 (U_p)	≤ 600 V
Voltage protection level pair-pair for I_n C2 (U_p)	≤ 130 V
Voltage protection level line-line at 1 kV/ μ s C3 (U_p)	≤ 17 V
Voltage protection level line-PG at 1 kV/ μ s C3 (U_p)	≤ 600 V
Voltage protection level pair-pair at 1 kV/ μ s C3 (U_p)	≤ 100 V
Series impedance per line	1.0 ohm
Cut-off frequency line-line (f_c)	1.7 MHz
Capacitance line-line (C)	≤ 3.3 nF
Capacitance line-PG (C)	≤ 15 pF
Capacitance pair-pair (C)	≤ 600 pF
Operating temperature range	-40°C...+80°C
Degree of protection	IP 10
For mounting on	35 mm DIN rails acc. to EN 60715
Connection (input/output)	RJ45 / RJ45 or terminals
Pinning	3/6, 4/5
Cross-sectional area, solid	0.08 - 2.5 mm ²
Cross-sectional area, flexible	0.08 - 2.5 mm ²
Earthing via	terminal
Enclosure material	thermoplastic, UL 94 V-0
Colour	yellow
Test standards	IEC 61643-21 / EN 61643-21
Approvals	GOST



Basic circuit diagram BVT TC



Dimension drawing BVT TC

- Pins of RJ sockets compatible with RJ12
- Additional screw terminals for a/b lines
- For installation in conformity with the lightning protection zones concept at the boundaries from 0_B – 2 and higher

Energy-coordinated leakage-current-free surge arrester for a/b lines, ISDN U_{k0} or ADSL with RJ45 plugs and additional screw terminals. Pinning of the RJ45 sockets is compatible with RJ11/12. The parallel screw terminals are more robust than the RJ45 sockets and increase the total nominal discharge current to 10 kA.

Type	BVT TC 1
Part No.	918 411
SPD class	TYPE 2 P2
Nominal voltage (U _N)	130 V
Max. continuous operating d.c. voltage (U _C)	170 V
Nominal current (I _N)	200 mA
C2 Total nominal discharge current (8/20 μs) (I _N)	5 kA
C2 Nominal discharge current (8/20 μs) per line (I _N)	2.5 kA
Voltage protection level line-line for I _N C2 (U _p)	≤ 275 V
Voltage protection level line-PG for I _N C2 (U _p)	≤ 600 V
Voltage protection level line-line at 1 kV/μs C3 (U _p)	≤ 240 V
Voltage protection level line-PG at 1 kV/μs C3 (U _p)	≤ 600 V
Series impedance per line	4.7 ohms
Cut-off frequency line-line (f _C)	17 MHz
Capacitance line-line (C)	≤ 300 pF
Capacitance line-PG (C)	≤ 15 pF
Operating temperature range	-40°C...+80°C
Degree of protection	IP 10
For mounting on	35 mm DIN rails acc. to EN 60715
Connection (input/output)	RJ45 or terminals / RJ45 or terminals
Pinning	4/5
Cross-sectional area, solid	0.08 - 2.5 mm ²
Cross-sectional area, flexible	0.08 - 2.5 mm ²
Earthing via	screw terminal
Enclosure material	thermoplastic, UL 94 V-0
Colour	yellow
Test standards	IEC 61643-21 / EN 61643-21
Approvals	GOST

- Surge arrester for ISDN or Ethernet applications
- Minimum space required for flush mounting
- Ideally suited for Touch Manager wave (residential gateway)



Flush-mounted surge arrester used in LAN interfaces

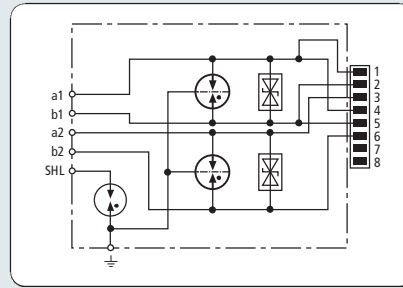
DSM TM surge arresters are installed close to terminal equipment and are designed for Touch Manager wave (Siemens). The surge arresters are integrated in flush-mounted or small distribution boards and connected to the local equipotential bonding of the terminal equipment. Because of

the universal pin assignment options of the pluggable RJ45 output, it can be used for protecting both ISDN S₀ and Ethernet 10 BT (class C cabling) applications. The screw terminals at the input can be connected to both rigid and flexible conductors or shields.

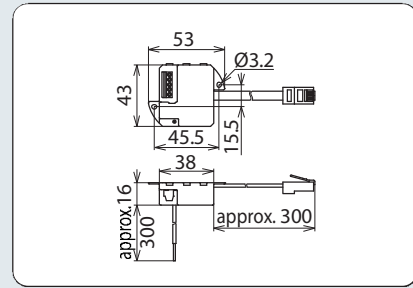
A self-adhesive fixing strip and a four-pole plug-in distribution terminal are included in delivery.



Scope of delivery of DSM TM



Basic circuit diagram DSM TM



Dimension drawing DSM TM

- Indirect shield earthing
- Installation accessories included
- For installation in conformity with the lightning protection zones concept at the boundaries from 0_B – 2 and higher

Low-capacitance surge arrester with high discharge capacity and low protection level between the signal lines. For IT installations of class C or services such as Ethernet 10 BT or ISDN S₀ interfaces. With screw terminal on the input side and RJ45 plug on the output side. No leakage pickups due to indirect shield earthing.

Type	DSM TM
Part No.	924 274
SPD class	TYPE 2 P1
Nominal voltage (U _N)	5 V
Max. continuous operating d.c. voltage (U _C)	6 V
Max. continuous operating a.c. voltage (U _D)	4.2 V
Nominal current (I _N)	200 mA
C1 Nominal discharge current (8/20 μs) line-line (I _N)	500 A
C2 Nominal discharge current (8/20 μs) line-PG (I _N)	5 kA
C2 Total nominal discharge current (8/20 μs) line-PG (I _N)	10 kA
Voltage protection level line-line for I _N C1 (U _p)	≤ 28 V
Voltage protection level line-PG for I _N C2 (U _p)	≤ 600 V
Voltage protection level shield-PG for I _N C2 (U _p)	≤ 600 V
Voltage protection level line-line at 1 kV/μs C3 (U _p)	≤ 11 V
Voltage protection level line-PG at 1 kV/μs C3 (U _p)	≤ 380 V
Voltage protection level shield-PG at 1 kV/μs C3 (U _p)	≤ 600 V
Cut-off frequency (f _c)	55 MHz
Capacitance line-line (C)	≤ 75 pF
Capacitance line-PG (C)	≤ 20 pF
Operating temperature range	-40°C...+80°C
Degree of protection	IP 20
Connection (input/output)	screw terminal / RJ45 connecting lead
Pinning	Ethernet 1/2, 3/6 or ISDN 4/5, 3/6
Cross-sectional area, solid	0 - 1.0 mm ²
Cross-sectional area, flexible	0 - 1.0 mm ²
Tightening torque (terminal)	0.3 Nm
Earthing via	lead 1.0 mm ²
Enclosure material	polyamide PA 6.6
Colour	yellow
Test standards	IEC 61643-21 / EN 61643-21
Approvals	GOST
Accessories	adhesive pad, socket terminal