Surge protection connector - PT 4-24DC-ST - 2839240

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The illustration shows the version PT 4-5 DC-ST

Protective plug PT with protective circuit for a 4-core floating signal circuit. Nominal voltage: 24 V DC

Why buy this product

- Plugs can be checked with CHECKMASTER
- Maximum ease of maintenance thanks to the two-piece design
- Base element remains an integral part of the installation
- Consistent plug-in signal circuit protection
- Impedance-neutral disconnection of plug for test and maintenance purposes

Key commercial data

Packing unit	1
Minimum order quantity	1
Catalog page	Page 96 (TT-2011)
GTIN	4 017918 182786
Custom tariff number	85363010
Country of origin	GERMANY

Technical data

General

Housing material	PA 6.6
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	VDE 0110-1
Standards for air and creepage distances	IEC 60664-1
Total surge current (8/20) µs	20 kA
Ambient temperature (operation)	-40 °C ... 85 °C
Mounting type	On base element
Design	DIN rail module, two-section, divisible

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Technical data

General

Degree of protection	IP20
Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/ Shield-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.00
Width	17.7 mm
Height	45 mm
Depth	52 mm
Pitch unit	1 Div.

Protective circuit

IEC category	C1
IEC category	C2
IEC category	C3
IEC category	D1
VDE requirement class	C1
VDE requirement class	C2
VDE requirement class	C3
VDE requirement class	D1
Nominal voltage UN	24 V DC
Maximum continuous operating voltage UC	27 V DC
Maximum continuous operating voltage UC	19 V AC
Maximum continuous voltage UC (wire-wire)	27 V DC
Maximum continuous voltage UC (wire-wire)	19 V AC
Nominal current IN	2 A (80 °C)
Operating effective current IC at UC	≤ 5 µA
Ground conductor current IPE	≤ 4 µA (PT 4-BE)
Ground conductor current IPE	≤ 1 µA (PT 4+F-BE)
Nominal discharge surge current In (8/20) µs (Core-Core)	365 A
Nominal discharge surge current In (8/20) µs (Core-Earth)	10 kA
Total surge current (8/20) µs	20 kA
Max. discharge surge current Imax (8/20) µs maximum (Core-Core)	365 A
Max. discharge surge current Imax (8/20) µs maximum (Core-Earth)	10 kA
Nominal pulse current Ian (10/1000) µs (Core-Core)	67 A
Lightning test current (10/350) µs, peak value limp	2.5 kA (per path)
Output voltage limitation at 1 kV/µs (Core-Core) spike	≤ 40 V
Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 450 V (PT 4-BE)
Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 1 kV (PT 4+F-BE)
Output voltage limitation at 1 kV/µs (Core-Core) static	≤ 40 V
Residual voltage at In, (conductor-conductor)	≤ 60 V
Residual voltage with Ian (10/1000)µs (conductor-conductor)	≤ 45 V
Protection level UP (Core-Core)	≤ 50 V (C1 (500 V/250 A))

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Technical data

Protective circuit

Protection level UP (Core-Earth)	≤ 450 V (C2 (10 kV/5 kA) / PT 4-BE)
Protection level UP (Core-Earth)	≤ 1 kV (C2 (10 kV/5 kA) / PT 4+F-BE)
Response time tA (Core-Core)	≤ 1 ns
Response time tA (Core-Earth)	≤ 1 ns
Response time tA (Core-Earth)	≤ 100 ns
Input attenuation aE, sym.	0.1 dB (≤ 1 MHz)
Cut-off frequency fg (3 dB), sym. in 50 Ohm system	Typ. 6 MHz
Resistance in series	0 Ω (1-2/5-6/7-8/11-12)
Message: Surge protection fault	None
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C1 (500 V / 250 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C3 (25 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (10 kV/5 kA)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	D1 (2.5 kA)

Connection data

Connection method	Screw connection (in connection with the base element)
Connection type IN	PLUGTRAB plug-in system
Connection type OUT	PLUGTRAB plug-in system

Connection, protective circuit

Standards/regulations	IEC 61643-21
Standards/regulations	DIN EN 61643-21
Standards/regulations	UL 497B

Classifications

eclass

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130807
eCl@ss 7.0	27130807

etim

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943

unspsc

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610

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Classifications

unspsc

UNSPSC 13.2	39121620

Approvals

Approvals

Approvals

UL Listed / GOST / GL

Ex Approvals

UL Listed / cUL Listed / cULus Recognized

Approvals submitted

Approval details

UL Listed

Nominal current IN	2 A
Nominal voltage UN	24 V

GOST

GL

Accessories

Accessories

Marking

Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

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Accessories

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm

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Zack Marker strip, flat - ZBF 5/WH-100:UNBEDRUCKT - 0808668



Zack Marker strip, flat, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671



Zack Marker strip, flat, Strip, white, Labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821



Zack Marker strip, flat, Strip, white, Labeled, Printed horizontally: Consecutive numbers 2 - 20, 22 - 40, etc. up to 82 - 100, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863



Zack Marker strip, flat, Strip, white, Labeled, Printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697



Zack Marker strip, flat, Strip, white, Labeled, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Accessories

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 18 mm, Lettering field: 18 x 5 mm

Necessary add-on products

Surge protection base element - PT 4-BE - 2839402



Base element for protective plug PT with protective circuit for a 4-wire floating signal circuit, bridge between the connections 3-4 (GND) and 9-10, for mounting on NS 35/7.5 and NS 35/15, housing width: 17.5 mm

Additional products

Shield connection - SSA 3-6 - 2839295



shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black

Shield connection - SSA 5-10 - 2839512

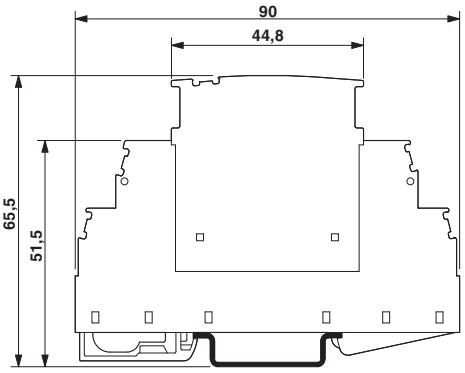


Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black

Drawings

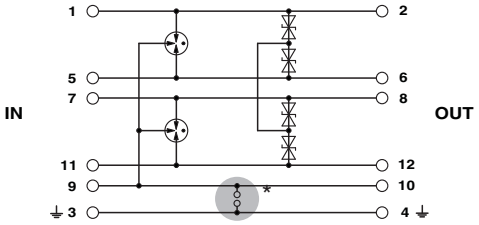
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Dimensioned drawing



The figure shows the complete module consisting of a base element and connector

Circuit diagram



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