

Surge protection connector - PT 2-F-ST - 2859000

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Surge protection plug for the base element, surge voltage coarse protection for two signal lines grounded on one side.

The illustration shows the version PT 4-F-ST

Product Features

- ✓ Plugs can be checked with CHECKMASTER
- ✓ For systems with high dielectric strength or fine protection installed
- ✓ Maximum ease of maintenance thanks to the two-piece design
- ✓ Installation location - directly where meas. and control cable enters building
- ✓ 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 1
Weight per Piece (excluding packing)	19.79 GRM
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	45 mm
Width	17.7 mm
Depth	52 mm
Pitch unit	1 Div.

Surge protection connector - PT 2-F-ST - 2859000

Technical data

Dimensions

Height	90 mm
Width	17.7 mm
Depth	65.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Degree of protection	IP20

General

Housing material	PA 6.6
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	VDE 0110-1
	IEC 60664-1
Mounting type	On base element
Design	DIN rail module, two-section, divisible
Direction of action	Line-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage U_N	48 V AC
Maximum continuous operating voltage U_C	68 V DC
	48 V AC
Maximum continuous voltage U_C (wire-ground)	68 V DC
	48 V AC
Nominal current I_N	2 A (80 °C)
Operating effective current I_C at U_C	$\leq 2 \mu A$
Residual current I_{PE}	$\leq 4 \mu A$
Nominal discharge current I_n (8/20) μs (Core-Earth)	20 kA
Total surge current (8/20) μs	40 kA

Surge protection connector - PT 2-F-ST - 2859000

Technical data

Protective circuit

Max. discharge current I_{\max} (8/20) μs maximum (Core-Earth)	20 kA
Impulse discharge current (10/350) μs , peak value I_{imp}	5 kA (per path)
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	$\leq 600 \text{ V}$
Output voltage limitation at 1 kV/ μs (Core-Earth) static	$\leq 25 \text{ V}$
Voltage protection level U_p (Core-Earth)	$\leq 600 \text{ V}$
Response time t_A	$\leq 100 \text{ ns}$
Response time t_A (Core-Earth)	$\leq 100 \text{ ns}$
Input attenuation aE, asym.	0.1 dB ($\leq 1 \text{ MHz}$)
Cut-off frequency f_g (3 dB), asym. (GND) in 50 Ohm system	typ. 100 MHz
Capacity (Core-Earth)	2 pF
Message: Surge protection fault	None
Max. required back-up fuse	2 A
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (10 kV/5 kA)
	C1 (1 kV / 500 A)
	C3 (100 A)
	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
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

Standards and Regulations

Standards/regulations	IEC 61643-21
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Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801

Surge protection connector - PT 2-F-ST - 2859000

Classifications

eCl@ss

eCl@ss 6.0	27130809
eCl@ss 7.0	27130809
eCl@ss 8.0	27130809

ETIM

ETIM 2.0	EC001466
ETIM 3.0	EC001466
ETIM 4.0	EC000943
ETIM 5.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Approvals

Approvals


Approvals

GOST

Ex Approvals

Approvals submitted

Approval details

GOST 
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Accessories

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Surge protection connector - PT 2-F-ST - 2859000

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

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

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

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

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

Surge protection connector - PT 2-F-ST - 2859000

Accessories

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

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

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

Required add-on products

Type 3 surge protection base element - PT-BE/FM - 2839282

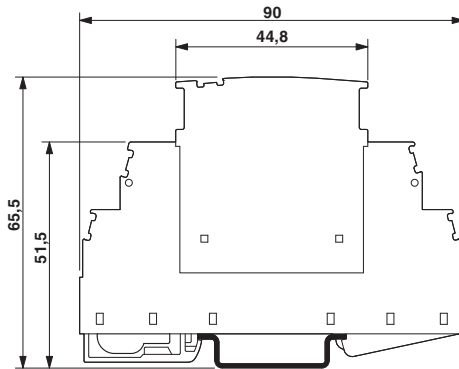


Base element for protective plug PT, for mounting on NS 35/7.5 and NS 35/15, housing width: 17.5 mm

Drawings

Surge protection connector - PT 2-F-ST - 2859000

Dimensioned drawing



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

Circuit diagram

