

## 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

### Why buy this product

- 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
Minimum order quantity	1
Catalog page	Page 98 (TT-2011)
GTIN	 4 017918 902452
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) $\mu$ s	40 kA
Ambient temperature (operation)	-40 °C ... 85 °C

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

## Technical data

### General

Mounting type	On base element
Design	DIN rail module, two-section, divisible
Degree of protection	IP20
Direction of action	Line-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10
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	48 V AC
Maximum continuous operating voltage UC	68 V DC
Maximum continuous operating voltage UC	48 V AC
Maximum continuous voltage UC (wire-ground)	68 V DC
Maximum continuous voltage UC (wire-ground)	48 V AC
Nominal current IN	2 A (80 °C)
Operating effective current IC at UC	≤ 2 μA
Ground conductor current IPE	≤ 4 μA
Nominal discharge surge current In (8/20) μs (Core-Earth)	20 kA
Total surge current (8/20) μs	40 kA
Max. discharge surge current Imax (8/20) μs maximum (Core-Earth)	20 kA
Lightning test current (10/350) μs, peak value limp	5 kA (per path)
Output voltage limitation at 1 kV/μs (Core-Earth) spike	≤ 600 V
Output voltage limitation at 1 kV/μs (Core-Earth) static	≤ 25 V
Protection level UP (Core-Earth)	≤ 600 V
Response time tA:	≤ 100 ns
Response time tA (Core-Earth)	≤ 100 ns
Input attenuation aE, asym.	0.1 dB (≤ 1 MHz)
Cut-off frequency fg (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)

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### Technical data

#### Protective circuit

Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C1 (1 kV / 500 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C3 (100 A)
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
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

#### 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	27130809
eCl@ss 7.0	27130809

#### etim

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

#### unspsc

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

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

### Approvals

#### Approvals

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Approvals

GOST

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Ex Approvals

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Approvals submitted

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#### Approval details

GOST 

### 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

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

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### Accessories

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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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#### 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

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### Necessary add-on products

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

## Accessories

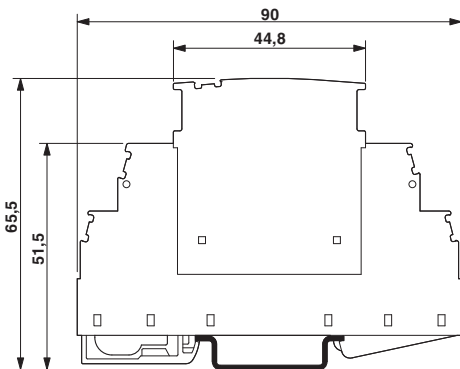
Type 3 surge protection base element - PT-BE/FM - 2839282



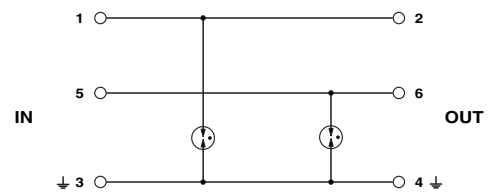
Base element for protective plug PT, for mounting on NS 35/7.5 and NS 35/15, housing width: 17.5 mm

## Drawings

Dimensioned drawing



Circuit diagram



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



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- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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