

Surge protection connector - PT 4-F-ST - 2858441

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://download.phoenixcontact.com>)



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

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

package_quantity	10
GTIN	4017918892364

Technical data

Dimensions

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

Surge protection connector - PT 4-F-ST - 2858441

Technical data

General

Color	black
Standards for air and creepage distances	VDE 0110-1
Standards for air and creepage distances	IEC 60664-1
Mounting type	On base element
Design	DIN rail module, two-section, divisible
Direction of action	Line-Line & Line-Signal Ground/Shield & Signal Ground/Shield-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10

Protective circuit

IEC test classification	C1
IEC test classification	C2
IEC test classification	C3
IEC test classification	D1
VDE requirement class	C1
VDE requirement class	C2
VDE requirement class	C3
VDE requirement class	D1
Nominal voltage U_N	110 V AC
Maximum continuous operating voltage U_C	170 V DC
Maximum continuous operating voltage U_C	120 V AC
Maximum continuous voltage U_C (wire-ground)	170 V DC
Maximum continuous voltage U_C (wire-ground)	120 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}	$\leq 8 \mu A$ (Directly grounded)
Nominal discharge current I_n (8/20) μs (Core-Core)	10 kA
Nominal discharge current I_n (8/20) μs (Core-Earth)	10 kA
Total surge current (8/20) μs	20 kA
Max. discharge current I_{max} (8/20) μs maximum (Core-Earth)	20 kA
Impulse discharge current (10/350) μs , peak value I_{imp}	2.5 kA (per path)
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	$\leq 450 V$
Output voltage limitation at 1 kV/ μs (Core-Earth) static	$\leq 25 V$
Voltage protection level U_P (Core-Earth)	$\leq 450 V$
Response time t_A (Core-Core)	$\leq 100 ns$
Response time t_A (Core-Earth)	$\leq 100 ns$
Input attenuation a_E , asym.	0.1 dB ($\leq 1 MHz$)
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 protection connector - PT 4-F-ST - 2858441

Technical data

Protective circuit

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

classifications

eCl@ss

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
eCl@ss 8.0	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 4-F-ST - 2858441

approvals

GOST /

Approval details



accessories

Marker pen

X-PEN 0,35 - 0811228



Terminal marking

ZBF 5:UNBEDRUCKT - 0808642



ZBF 5/WH-100:UNBEDRUCKT - 0808668



Labeled terminal marker

Surge protection connector - PT 4-F-ST - 2858441

accessories

ZBF 5,LGS:FORTL.ZAHLEN - 0808671



ZBF 5,LGS:GERADE ZAHLEN - 0810821



ZBF 5,LGS:UNGERADE ZAHLEN - 0810863



ZBF 5,QR:FORTL.ZAHLEN - 0808697



Device marking

ZBN 18:UNBEDRUCKT - 2809128



Surge protection connector - PT 4-F-ST - 2858441

accessories

ZBF 15:SO/CMS - 0814717



ZBF 5:SO/CMS - 0808707



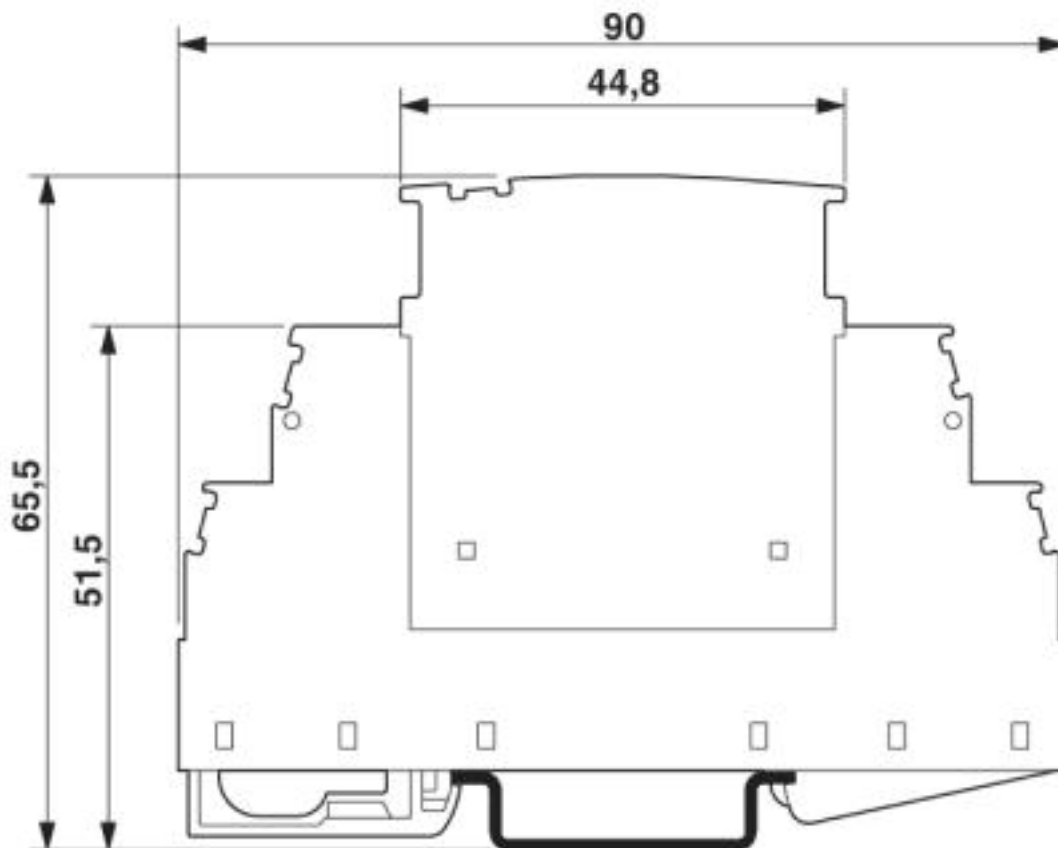
ZBN 18:SO/CMS - 0800763



Drawings

Surge protection connector - PT 4-F-ST - 2858441

Dimensioned drawing



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

Circuit diagram

