

Surge protection plug - 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	10 STK
GTIN	 4 017918 902452

Technical data

Dimensions

Height	45 mm
Width	17.7 mm
Depth	52 mm
Horizontal pitch	1 Div.
Complete module height	90 mm
Complete module width	17.7 mm
Complete module depth	65.5 mm

Ambient conditions

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Technical data

Ambient conditions

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

General

Housing material	PA 6.6
Flammability rating according to UL 94	V0
Color	black
Standards for clearances and creepage distances	VDE 0110-1
	IEC 60664-1
Mounting type	On base element
Type	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 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
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	$\leq 600 V$
Output voltage limitation at 1 kV/ μs (Core-Earth) static	$\leq 25 V$
Voltage protection level U_p (core-ground)	$\leq 600 V$
Response time t_A	$\leq 100 ns$
Response time t_A (Core-Earth)	$\leq 100 ns$
Input attenuation aE, asym.	0.1 dB ($\leq 1 MHz$)

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Technical data

Protective circuit

Cut-off frequency fg (3 dB), asym. (GND) in 50 Ohm system	typ. 100 MHz
Capacity (Core-Earth)	2 pF
Surge protection fault message	None
Max. required back-up fuse	2 A
Impulse durability (conductor-ground)	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 flexible min.	0.2 mm ²
Conductor cross section flexible 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 min.	24
Conductor cross section AWG max.	12

Standards and Regulations

Standards/regulations	IEC 61643-21
	DIN EN 61643-21
	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	27130807
eCl@ss 9.0	27130807

ETIM

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

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Classifications

UNSPSC

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

Approvals

Approvals

Approvals

EAC / EAC

Ex Approvals

Approvals submitted

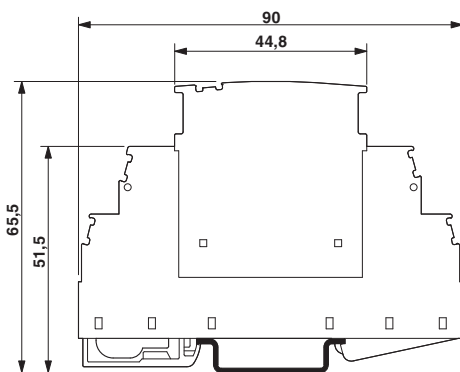
Approval details

EAC

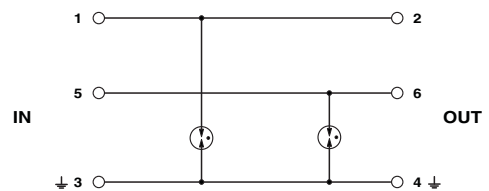
EAC

Drawings

Dimensional drawing



Circuit diagram



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

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