

Surge protection plug - PT 2X1-24AC-ST - 2856100

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Surge protection plug for the base element, coarse and fine protection for two signal wires with common reference potential, common mode voltage coarse protection to ground. Design: 24 V AC

The illustration shows the version PT
2x1- 5 DC-ST

Product Features

- Plugs can be checked with CHECKMASTER
- Installed in conjunction with the PT 2x1...BE base element
- 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
- Protection for two conductors with common reference potential
- Impedance-neutral disconnection of plug for test and maintenance purposes



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	20.74 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	45 mm
Width	17.7 mm
Depth	52 mm
Horizontal pitch	1 Div.

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Technical data

Dimensions

Complete module height	90 mm
Complete module width	17.7 mm
Complete module depth	65.5 mm

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	V-0
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-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

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V AC
Maximum continuous voltage U_C	40 V DC
	28 V AC
Maximum continuous voltage U_C (wire-ground)	40 V DC
	28 V AC
Nominal current I_N	300 mA (45°C)
Operating effective current I_C at U_C	$\leq 5 \mu\text{A}$
Residual current I_{PE}	$\leq 1 \mu\text{A}$ (BE: 2x1+F)
	$\leq 10 \mu\text{A}$ (Directly grounded)
Nominal discharge current I_n (8/20) μs (Core-Earth)	10 kA

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Protective circuit

Total surge current (8/20) μ s	20 kA
Max. discharge current I_{max} (8/20) μ s maximum (Core-Earth)	10 kA
Nominal pulse current I_{an} (10/1000) μ s (Core-Earth)	23 A
Impulse discharge current (10/350) μ s, peak value I_{imp}	2.5 kA (per path)
Output voltage limitation at 1 kV/ μ s (Core-Earth) spike	\leq 60 V
Output voltage limitation at 1 kV/ μ s (Core-Earth) static	\leq 55 V
Residual voltage at I_n (conductor-ground)	\leq 55 V
Residual voltage with I_{an} (10/1000) μ s (conductor-ground)	\leq 65 V (Directly grounded)
Voltage protection level U_p (core-ground)	\leq 100 V (C2 - 10 kV/5 kA)
Response time t_A (Core-Earth)	\leq 1 ns
Input attenuation a_E , asym.	0.5 dB (\leq 1.5 MHz)
Cut-off frequency f_g (3 dB), asym. (PE) in 50 Ohm system	typ. 8 MHz
Capacity (Core-Earth)	1.1 nF
Resistance in series	4.7 Ω (1-2/5-6/7-8/11-12)
Surge protection fault message	None
Max. required back-up fuse	315 mA (e.g. T (IEC 127-2/III))
Impulse durability (conductor-ground)	C2 - 10 kV/5 kA
	D1 - 2,5 kA

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
eCl@ss 6.0	27130807
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807
eCl@ss 9.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943

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Classifications

ETIM

ETIM 5.0	EC000943
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UNSPSC

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

Approvals

Approvals

Approvals

UL Listed / EAC

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approvals submitted

Approval details

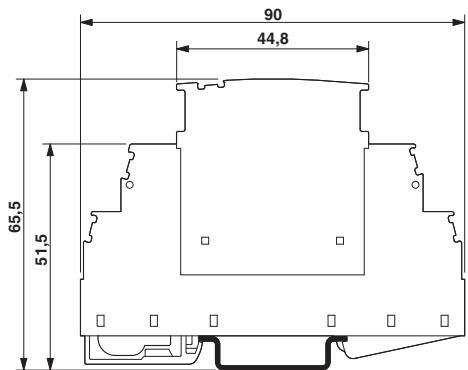
UL Listed 	
Nominal current IN	0.3 A
Nominal voltage UN	34 V

EAC

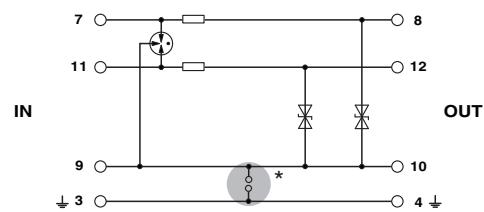
Drawings

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Dimensional drawing



Circuit diagram



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