

Surge protection plug - PT 4X1-48AC-ST - 2804856

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://phoenixcontact.com/download>)



Protective plug PT with protective circuit for 4 conductors of signal circuits grounded on one side. Nominal voltage: 48 V AC

The figure shows the PT 4x1- 24 DC-ST version

Product Features

- ✓ Plugs can be checked with CHECKMASTER
- ✓ Installed in conjunction with the PT 4x1...-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 four conductors with common reference potential
- ✓ Impedance-neutral disconnection of plug for test and maintenance purposes
- ✓



Key commercial data

Packing unit	1 pc
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.

Surge protection plug - PT 4X1-48AC-ST - 2804856

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
Inflammability class 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-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 3.17

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	77 V DC
	55 V AC
Maximum continuous voltage U_C (wire-ground)	77 V DC (BE: 4x1)
	55 V AC (BE: 4x1)
Nominal current I_N	300 mA (45°C)
Operating effective current I_C at U_C	$\leq 5 \mu A$
Residual current I_{PE}	$\leq 1 \mu A$ (BE: 4x1+F)
	$\leq 20 \mu A$ (BE: 4x1)
Nominal discharge current I_n (8/20) μs (Core-Earth)	10 kA

Surge protection plug - PT 4X1-48AC-ST - 2804856

Technical data

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)	12 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) static	≤ 110 V (BE: 4x1)
Residual voltage at I_n , (conductor-ground)	≤ 110 V (BE: 4x1)
Residual voltage at I_n , (conductor-GND)	≤ 110 V
Residual voltage with I_{an} (10/1000) μ s (conductor-ground)	≤ 125 V (BE: 4x1)
Residual voltage with I_{an} (10/1000) μ s (conductor-GND)	≤ 125 V
Voltage protection level U_p (core-ground)	≤ 150 V (C2 - 10 kV/5 kA - BE: 4x1)
Voltage protection level U_p (core-GND)	≤ 150 V (C2 - 10 kV/5 kA)
Response time t_A (Core-Earth)	≤ 1 ns
	≤ 1 ns (BE: 4x1)
Input attenuation a_E , asym.	0.5 dB (≤ 2.5 MHz / 50 Ω)
	0.2 dB (≤ 0.5 MHz / 150 Ω)
	0.1 dB (≤ 0.1 MHz / 600 Ω)
Cut-off frequency f_g (3 dB), asym. (PE) in 50 Ohm system	typ. 10 MHz
Cut-off frequency f_g (3 dB), asym. (PE) in 150 Ohm system	typ. 3.5 MHz
Cut-off frequency f_g (3 dB), asym. (PE) in 600 Ohm system	typ. 900 kHz
Capacity (Core-Earth)	typ. 400 pF (BE: 4x1)
Resistance in series	4.7 Ω 10 % (Path 1-2/5-6)
	4.7 Ω 10 % (Path 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

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

Standards and Regulations

Standards/regulations	IEC 61643-21
	DIN EN 61643-21

Surge protection plug - PT 4X1-48AC-ST - 2804856

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

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
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

EAC

Ex Approvals

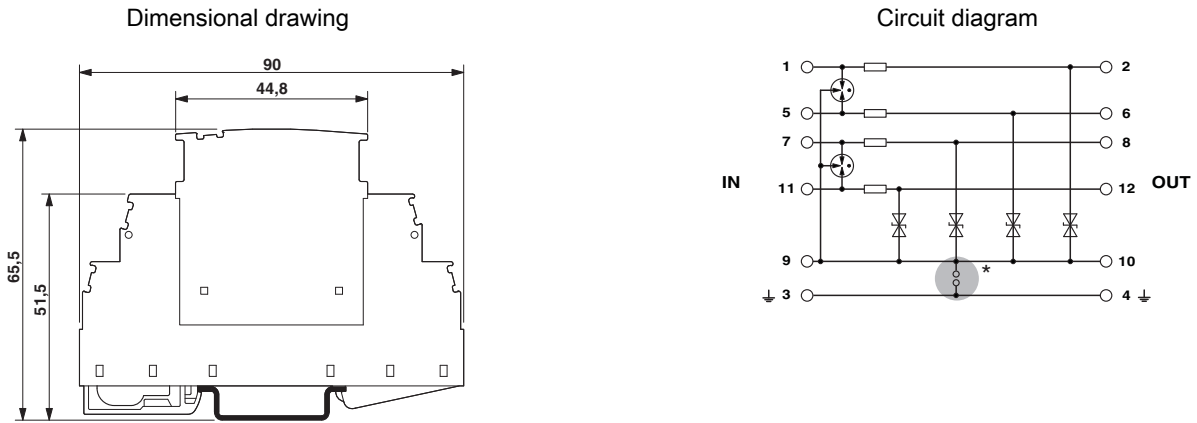
Approvals submitted

Approval details

EAC

Surge protection plug - PT 4X1-48AC-ST - 2804856

Drawings



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