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Especialistas en Automatización

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Surge protection plug - PT 4-24AC-ST - 2800078

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Protective connector PT with protective circuit for a 4-wire floating signal circuit. Nominal voltage: 24 V AC

The illustration shows the version PT 4-5 DC-ST

Why buy this product

- Plugs can be checked with CHECKMASTER
- 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
- Impedance-neutral disconnection of plug for test and maintenance purposes



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 462211

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

Ambient temperature (operation)	-40 °C ... 85 °C
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Technical data

Ambient conditions

Degree of protection	IP20
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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-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground

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-wire)	40 V DC
	28 V AC
Nominal current I_N	2 A AC (80 °C)
	500 mA DC (80 °C)
Operating effective current I_C at U_C	$\leq 5 \mu A$
Residual current I_{PE}	$\leq 4 \mu A$ (PT 4-BE)
	$\leq 1 \mu A$ (PT 4+F-BE)
Nominal discharge current I_n (8/20) μs (Core-Core)	187 A
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-Core)	187 A
Max. discharge current I_{max} (8/20) μs maximum (Core-Earth)	10 kA
Nominal pulse current I_{an} (10/1000) μs (Core-Core)	36 A
Impulse discharge current (10/350) μs , peak value I_{imp}	2.5 kA (per path)
Output voltage limitation at 1 kV/ μs (Core-Core) spike	$\leq 75 V$
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	$\leq 450 V$ (PT 4-BE)
	$\leq 1 kV$ (PT 4+F-BE)

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Technical data

Protective circuit

Output voltage limitation at 1 kV/μs (Core-Core) static	≤ 75 V
Residual voltage at I _n (conductor-conductor)	≤ 105 V
Residual voltage with I _{an} (10/1000)μs (conductor-conductor)	≤ 80 V
Voltage protection level U _p (core-core)	≤ 85 V (C1 (500 V/250 A))
Voltage protection level U _p (core-ground)	≤ 450 V (C2 (10 kV/5 kA) / PT 4-BE)
	≤ 1 kV (C2 (10 kV/5 kA) / PT 4+F-BE)
Response time t _A (Core-Core)	≤ 1 ns
Response time t _A (Core-Earth)	≤ 100 ns
Input attenuation a _E , sym.	0.1 dB (≤ 2 MHz / 50 Ω)
	0.1 dB (≤ 600 kHz / 150 Ω)
Cut-off frequency f _g (3 dB), sym. in 50 Ohm system	typ. 10 MHz
Cut-off frequency f _g (3 dB), sym. in 150 Ohm system	typ. 3 MHz
Capacity (Core-Core)	typ. 0.7 nF
Capacity (Core-Earth)	typ. 40 pF (PT 4-BE)
Resistance in series	0 Ω
Max. required back-up fuse	2 A
Impulse durability (conductor-conductor)	C1 - 500 V / 250 A
	C3 - 25 A
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

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

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Classifications

ETIM

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

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PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>



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