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# **Extract from the online** catalog

# **PT 4X1-12DC-ST**

Order No.: 2838319

The illustration shows version PT 4x1- 5 DC-ST



http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2838319

Protective plug PT with protective circuit for 4 conductors of signal circuits grounded on one side. Nominal voltage: 12 V DC



Commercial data	
GTIN (EAN)	4 017918 182700
sales group	J204
Pack	10 pcs.
Customs tariff	85363010
Catalog page information	Page 87 (TT-2009)



#### Product notes

WEEE/RoHS-compliant since: 08/18/2006



#### http://

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#### **Technical data**

#### General

Housing material	PA 6.6
Inflammability class acc. to UL 94	V0
Color	black

Standards for air and creepage distances	VDE 0110-1
	IEC 60664-1: 1992-10
Total surge current (8/20) µs	20 kA
Ambient temperature (operation)	-40 °C 85 °C
Mounting type	On base element
Design	DIN rail module, two-section, divisible
Degree of protection	IP20
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
Width	17.70 mm
Height	52.00 mm
Length	45.00 mm
Pitch unit	1 Div.
Protective circuit	
IEC category	C1
	C2
	C3
	D1
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage $U_{\scriptscriptstyle N}$	12 V DC
Maximum continuous operating voltage $\ensuremath{\text{U}}_{\ensuremath{\text{c}}}$	13 V DC
	9 V AC
Maximum continuous voltage $U_{\text{\tiny C}}$ (wire-ground)	13 V DC
	9 V AC
Nominal current I <sub>N</sub>	300 mA (45°C)
Operating effective current $I_{\text{\tiny C}}$ at $U_{\text{\tiny C}}$	≤ 5 µA
Ground conductor current I <sub>PE</sub>	≤ 1 µA (BE: 4x1+F)
	≤ 20 µA (Directly grounded)
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Earth)	10 kA
Total surge current (8/20) µs	20 kA

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Max. discharge surge current Imax (8/20) μs maximum (Core-Earth)	10 kA
Nominal pulse current lan (10/1000) μs (Core- Earth)	67 A
Lightning test current (10/350) $\mu$ s, peak value $I_{imp}$	2.5 kA (per path)
Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 23 V
Output voltage limitation at 1 kV/µs (Core-Earth) static	≤ 18 V
Residual voltage at I <sub>n</sub> , (conductor-ground)	≤ 18 V
Protection level U <sub>P</sub> (Core-Earth)	≤ 65 V (C2 (10 kV/5 kA))
Response time tA (Core-Earth)	≤ 1 ns
Input attenuation aE, asym.	0.5 dB (≤ 600 kHz)
Cut-off frequency fg (3 dB), asym. (PE) in 50 Ohm system	Typ. 3 MHz
Capacity (Core-Earth)	3 nF
Resistance in series	4.7 Ω (Path 1-2/5-6)
	4.7 Ω (Path 7-8, 11-12)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (10 kV/5 kA)
	D1 (2.5 kA)
Connection data	
Type of connection	Screw connection (in connection with the base element)
Connection type IN	PLUGTRAB plug-in system
Connection type OUT	PLUGTRAB plug-in system
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm²
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Connection, protective circuit	
Standards/regulations	IEC 61643 21

IEC 61643-21

Standards/regulations

DIN EN 61643-21
UL 497B

# **Certificates / Approvals**





Certification GOST, UL Listed

Certification Ex: CUL-EX LIS, UL-EX LIS

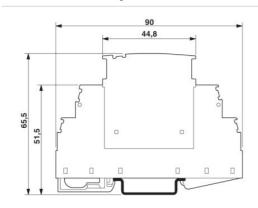
# **Accessories**

Item	Designation	Description
Marking		
0811228	X-PEN 0,35	Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm
0814717	ZBF 15:SO/CMS	Zack strip, flat, 10-section, divisible, special printing, marking according to customer requirements
0808671	ZBF 5,LGS:FORTL.ZAHLEN	Zack marker strip, flat, printed horizontally: 10-section, with the numbers 1 - 10, 11 - 20, and so on up to 491 - 500, color: white
0810821	ZBF 5,LGS:GERADE ZAHLEN	Zack marker strip, flat, printed horizontally: 10-section, with even numbers, printed with the numbers: 2-20, 22-40, etc. up to 82-100
0810863	ZBF 5,LGS:UNGERADE ZAHLEN	Zack strip, flat, printed horizontally: 10-section, with odd numbers, printed with the numbers: 1-19, 21-39 etc. up to 81-99
0808697	ZBF 5,QR:FORTL.ZAHLEN	Zack marker strip, flat, printed vertically: 10-section, with the numbers 1 - 10, 11 - 20, and so on up to 91 - 100, color: white
0808668	ZBF 5/WH-100:UNBEDRUCKT	Zack strip, flat, unprinted: 10-section, for individual labeling with M-PEN or ZBF-T, large batch, sufficient for labeling 1000 terminal blocks, color: white
0808642	ZBF 5:UNBEDRUCKT	Zack strip, flat, unprinted: 10-section, for individual labeling with M-PEN or ZBF-T, sufficient for 100 terminal blocks, color: white
0800763	ZBN 18:SO/CMS	Marker labels, 5-section, special printing, labeled according to customer requirements (Please specify the required marking with order), for terminal width: 17.5 mm, color: White
2809128	ZBN 18:UNBEDRUCKT	Unprinted marker labels, strips with 5 labels for individual labeling with M-PEN or CMS system, for terminal block width: 17.5 mm, color: White

Additional products			
Item	Designation	Description	
Assembly	Assembly		
2839295	SSA 3-6	shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black	
2839512	SSA 5-10	Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black	
General			
2839376	PT 4X1+F-BE	Base element for protective plug PT with protective circuit for 4 signal wires, with gas-filled surge arrester between the connections 3-4 (GND) and 9-10, for mounting on NS 35/7.5 and NS 35/15, housing width: 17.5 mm	
2839363	PT 4X1-BE	Base element for protective plug PT with protective circuit for 4 conductors of signal circuits grounded on one side, with bridge between the connections 3-4 (GND) and 9-10, for mounting on NS 35/7.5 and NS 35/15, housing width: 17.5 mm	

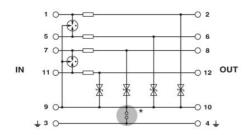
# Diagrams/Drawings

#### Dimensioned drawing



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

# Circuit diagram



# Address

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