

# PT 4X1-12AC-ST

Order No.: 2838348


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



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



Commercial data	
GTIN (EAN)	 4 017918 182724
sales group	J204
Pack	10 pcs.
Customs tariff	85363010
Catalog page information	Page 87 (TT-2009)

## Product notes

WEEE/RoHS-compliant since:  
08/16/2006



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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) $\mu$ s	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.
<b>Protective circuit</b>	
IEC category	C1
	C2
	C3
	D1
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage $U_N$	12 V AC
Maximum continuous operating voltage $U_C$	18 V DC
	13 V AC
Maximum continuous voltage $U_C$ (wire-ground)	18 V DC
	13 V AC
Nominal current $I_N$	300 mA (45°C)
Operating effective current $I_C$ at $U_C$	$\leq 5 \mu$ A
Ground conductor current $I_{PE}$	$\leq 1 \mu$ A (BE: 4x1+F)
	$\leq 20 \mu$ A (Directly grounded)
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Earth)	10 kA
Total surge current (8/20) $\mu$ s	20 kA

Max. discharge surge current $I_{max}$ (8/20) $\mu s$ maximum (Core-Earth)	10 kA
Nominal pulse current $I_{an}$ (10/1000) $\mu s$ (Core-Earth)	49 A
Lightning test current (10/350) $\mu s$ , peak value $I_{imp}$	2.5 kA (per path)
Output voltage limitation at 1 kV/ $\mu s$ (Core-Earth) spike	$\leq 30$ V
Output voltage limitation at 1 kV/ $\mu s$ (Core-Earth) static	$\leq 25$ V
Residual voltage at $I_n$ , (conductor-ground)	$\leq 31$ V
Protection level $U_p$ (Core-Earth)	$\leq 70$ V (C2 (10 kV/5 kA))
Response time $t_A$ (Core-Earth)	$\leq 1$ ns
Input attenuation aE, asym.	0.5 dB ( $\leq 700$ kHz)
Cut-off frequency $f_g$ (3 dB), asym. (PE) in 50 Ohm system	Typ. 4 MHz
Capacity (Core-Earth)	2.5 nF
Resistance in series	4.7 $\Omega$ 10 % (Path 1-2/5-6) 4.7 $\Omega$ 10 % (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 mm <sup>2</sup>
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

#### Connection, protective circuit

Standards/regulations	IEC 61643-21
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	DIN EN 61643-21
	UL 497B

**Certificates / Approvals**



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

**Accessories**

Item	Designation	Description
<b>Marking</b>		
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

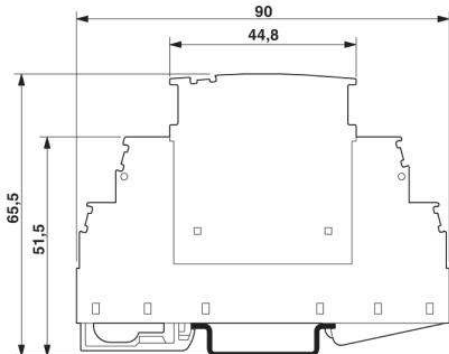
**Additional products**

Item	Designation	Description
<b>Assembly</b>		
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

<b>General</b>		
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

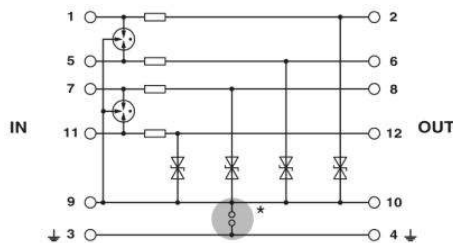
**Diagrams/Drawings**

Dimensioned drawing



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

Circuit diagram



**Address**

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