

# **PT 4X1-5DC-ST**

Order No.: 2838306



Protective plug PT with protective circuit for 4 conductors of signal circuits grounded on one side. Nominal voltage: 5 V DC



Commercial data		
EAN	4017918182694	
Pack	10 pcs.	
Customs tariff	85363010	
Weight/Piece	0.02506 KG	
Catalog page information	Page 69 (TT-2007)	



### **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

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 <sub>N</sub>	5 V DC
Max. operating voltage U <sub>max</sub>	5.25 V DC
Arrester rated voltage U <sub>c</sub>	6 V DC
	4 V AC
Arrester rated voltage U <sub>c</sub> (Core-Earth)	6 V DC
	4 V AC
Nominal current I <sub>N</sub>	300 mA (45°C)
Operating effective current I <sub>c</sub> at U <sub>c</sub>	$\leq$ 1 mA
Discharge current to PE at U <sub>c</sub>	≤ 1 µA (BE: 4x1+F)
	≤ 4 mA (Directly grounded)
Nominal discharge surge current I <sub>n</sub> (8/20) µs (Core-Earth)	10 kA
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Max. discharge surge current Imax (8/20) μs maximum (Core-Earth)	10 kA	
Nominal pulse current Ian (10/1000) $\mu s$ (Core-Earth)	125 A	
Lightning test current (10/350) $\mu s$ , peak value $l_{imp}$	2.5 kA (per path)	
Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 14 V	
Output voltage limitation at 1 kV/µs (Core-Earth) static	≤ 10 V	
Residual voltage at In, (conductor-ground)	≤ 10 V	
Protection level U <sub>P</sub> (Core-Earth)	≤ 50 V (C2 (10 kV/5 kA))	
Response time tA (Core-Earth)	≤ 1 ns	
Input attenuation aE, asym.	0.5 dB (≤ 200 kHz)	
Cut-off frequency fg (3 dB), asym. (PE) in 50 Ohm system	Typ. 1 MHz	
Capacity (Core-Earth)	6 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, min	0.8 Nm	
Stripping length	8 mm	
Conductor cross section stranded min.	0.2 mm²	
Conductor cross section stranded max.	2.5 mm²	
Conductor cross section solid min.	0.2 mm²	
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	

### **Certificates / Approvals**





Certification GOST, UL Listed

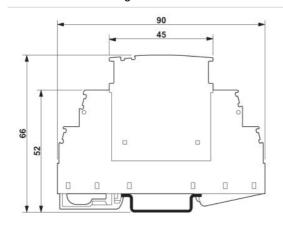
Certification Ex: CUL-EX LIS, UL-EX LIS

#### **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 0811228 X-PEN 0.35 Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm 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 strip, flat, printed horizontally: 10-section, with the numbers, 1-10, 11-20 etc. up to 991-1000, 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** Zack strip, flat, printed horizontally: 10-section, with odd numbers, **ZAHLEN** printed with the numbers: 1-19, 21-39 etc. up to 81-99 0808697 ZBF 5,QR:FORTL.ZAHLEN Flat Zack marker strip, printed vertically: 10-section, with the numbers 1-10, 11-20, etc. up to 151-160, 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 0808707 ZBF 5:SO/CMS Zack strip, flat, 10-section, divisible, special printing, marking according to customer requirements 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 Unprinted marker labels, strips with 5 labels for individual labeling **ZBN 18:UNBEDRUCKT** 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			

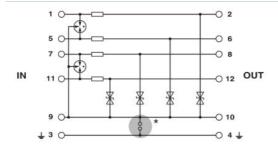
# **Drawings**

# Dimensioned drawing



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

# Circuit diagram



Approval logo (Ex area)



