

PT 4X1-24DC-ST

Order No.: 2838322

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



Protective plug PT with protective circuit for 4 conductors of signal circuits grounded on one side. Nominal voltage: 24 V DC



Commercial data		
EAN	4017918182717	
Pack	10 pcs.	
Customs tariff	85363010	
Weight/Piece	0.02585 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	

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 $U_{\scriptscriptstyle N}$	24 V DC
Arrester rated voltage $U_{\text{\tiny C}}$	28 V DC
	20 V AC
Arrester rated voltage $U_{\text{\tiny C}}$ (Core-Earth)	28 V DC
	20 V AC
Nominal current I _N	300 mA (45°C)
Operating effective current $I_{\text{\tiny C}}$ at $U_{\text{\tiny C}}$	≤ 5 µA
Discharge current to PE at U _c	≤ 1 µA (BE: 4x1+F)
	≤ 20 µA (Directly grounded)
Nominal discharge surge current $I_{\scriptscriptstyle n}$ (8/20) μs (Core-Earth)	10 kA
Total surge current (8/20) μs	20 kA
Max. discharge surge current Imax (8/20) μ s maximum (Core-Earth)	10 kA

Nominal pulse current lan (10/1000) µs (Core- Earth)	30 A
Lightning test current (10/350) μs , peak value l_{imp}	2.5 kA (per path)
Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 45 V
Output voltage limitation at 1 kV/µs (Core-Earth) static	≤ 40 V
Residual voltage at In, (conductor-ground)	≤ 40 V
Protection level U _P (Core-Earth)	≤ 80 V (C2 (10 kV/5 kA))
Response time tA (Core-Earth)	≤ 1 ns
Input attenuation aE, asym.	0.5 dB (≤ 1 MHz)
Cut-off frequency fg (3 dB), asym. (PE) in 50 Ohm system	Typ. 6 MHz
Capacity (Core-Earth)	1.4 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 OLIT	
Connection type OUT	PLUGTRAB plug-in system
Screw thread	PLUGTRAB plug-in system M3
Screw thread Tightening torque, min	PLUGTRAB plug-in system M3 0.8 Nm
Screw thread Tightening torque, min Stripping length	PLUGTRAB plug-in system M3 0.8 Nm 8 mm
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min.	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm²
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min. Conductor cross section stranded max.	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm² 2.5 mm²
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min. Conductor cross section stranded max. Conductor cross section solid min.	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm² 2.5 mm² 0.2 mm²
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min. Conductor cross section stranded max. Conductor cross section solid min. Conductor cross section solid max.	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm² 2.5 mm² 0.2 mm² 4 mm²
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min. Conductor cross section stranded max. Conductor cross section solid min. Conductor cross section solid max. Conductor cross section AWG/kcmil min.	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm² 2.5 mm² 0.2 mm² 4 mm² 24
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min. Conductor cross section stranded max. Conductor cross section solid min. Conductor cross section solid max.	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm² 2.5 mm² 0.2 mm² 4 mm²
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min. Conductor cross section stranded max. Conductor cross section solid min. Conductor cross section solid max. Conductor cross section AWG/kcmil min.	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm² 2.5 mm² 0.2 mm² 4 mm² 24
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min. Conductor cross section stranded max. Conductor cross section solid min. Conductor cross section solid max. Conductor cross section AWG/kcmil min. Conductor cross section AWG/kcmil max	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm² 2.5 mm² 0.2 mm² 4 mm² 24
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min. Conductor cross section stranded max. Conductor cross section solid min. Conductor cross section solid max. Conductor cross section AWG/kcmil min. Conductor cross section AWG/kcmil max Connection, protective circuit	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm² 2.5 mm² 0.2 mm² 4 mm² 24 12
Screw thread Tightening torque, min Stripping length Conductor cross section stranded min. Conductor cross section stranded max. Conductor cross section solid min. Conductor cross section solid max. Conductor cross section AWG/kcmil min. Conductor cross section AWG/kcmil max Connection, protective circuit	PLUGTRAB plug-in system M3 0.8 Nm 8 mm 0.2 mm² 2.5 mm² 0.2 mm² 4 mm² 24 12

Certificates / Approvals





Certification GOST, UL Listed

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

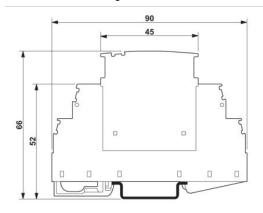
Accessories

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
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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 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	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	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			
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	

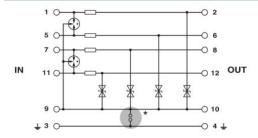
Drawings

Dimensioned drawing



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

Circuit diagram



Approval logo (Ex area)



