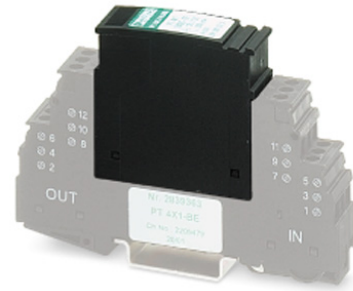


# PT 4X1-24AC-ST

Order No.: 2838351

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 AC



Commercial data	
EAN	4017918182731
Pack	10 pcs.
Customs tariff	85363010
Weight/Piece	0.02596 KG
Catalog page information	Page 69 (TT-2007)

**Product notes**

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



## 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 $U_N$	24 V AC
Arrester rated voltage $U_C$	40 V DC
	28 V AC
Arrester rated voltage $U_C$ (Core-Earth)	40 V DC
	28 V AC
Nominal current $I_N$	300 mA (45°C)
Operating effective current $I_C$ at $U_C$	$\leq 5 \mu$ A
Discharge current to PE at $U_C$	$\leq 1 \mu$ 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)	23 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	$\leq 60$ V
Output voltage limitation at 1 kV/ $\mu$ s (Core-Earth) static	$\leq 55$ V
Residual voltage at $I_n$ , (conductor-ground)	$\leq 55$ V
Protection level $U_p$ (Core-Earth)	$\leq 100$ V (C2 (10 kV/5 kA))
Response time $t_A$ (Core-Earth)	$\leq 1$ ns
Input attenuation aE, asym.	0.5 dB ( $\leq 1.5$ MHz)
Cut-off frequency $f_g$ (3 dB), asym. (PE) in 50 Ohm system	Typ. 8 MHz
Cut-off frequency $f_g$ (3 dB), asym. (PE) in 150 Ohm system	Typ. 3 MHz
Cut-off frequency $f_g$ (3 dB), asym. (PE) in 600 Ohm system	Typ. 800 kHz
Capacity (Core-Earth)	1.1 nF
Resistance in series	4.7 $\Omega$ (Path 1-2/5-6)
	4.7 $\Omega$ (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

**Connection, protective circuit**

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

**Certificates / Approvals**



Certification

GOST, UL Listed

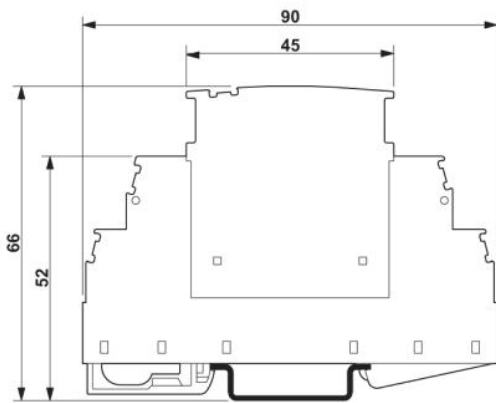
2839512	SSA 5-10	Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black
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**General**

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

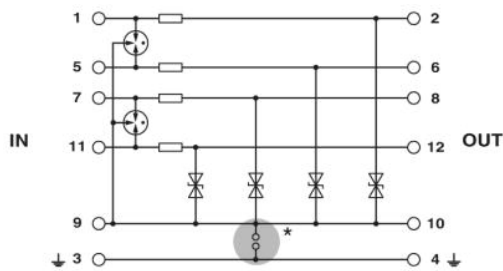
**Drawings**

Dimensioned drawing



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

Circuit diagram



Approval logo (Ex area)

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