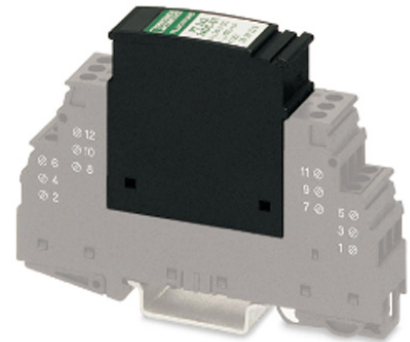


PT 2X2-12DC-ST

Order No.: 2838254

The illustration shows version PT 2x2- 5DC-ST



Protective plug PT with protective circuit for two 2-core floating signal circuits. Nominal voltage: 12 V DC



Commercial data

EAN	4017918182663
Pack	10 pcs.
Customs tariff	85363010
Weight/Piece	0.02493 KG
Catalog page information	Page 68 (TT-2007)

Product notes

WEEE/RoHS-compliant since:
06/23/2006



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) μ 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.
Protective circuit	
IEC category	C1
	C2
	C3
	D1
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage U_N	12 V DC
Max. operating voltage U_{max}	13 V DC
Arrester rated voltage U_C	13 V DC
	9 V AC
Arrester rated voltage U_C (Core-Earth)	13 V DC
	9 V AC
Nominal current I_N	450 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: 2x2+F)
	$\leq 4 \mu A$
Nominal discharge surge current I_n (8/20) μ s (Core-Core)	10 kA

Nominal discharge surge current I_n (8/20) μs (Core-Earth)	10 kA
Total surge current (8/20) μs	20 kA
Max. discharge surge current I_{max} (8/20) μs maximum (Core-Core)	10 kA
Max. discharge surge current I_{max} (8/20) μs maximum (Core-Earth)	10 kA
Lightning test current (10/350) μs , peak value I_{imp}	2.5 kA (per path)
Output voltage limitation at 1 kV/ μs (Core-Core) spike	$\leq 20 \text{ V}$
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	$\leq 450 \text{ V}$
Output voltage limitation at 1 kV/ μs (Core-Core) static	$\leq 18 \text{ V}$
Output voltage limitation at 1 kV/ μs (Core-Earth) static	$\leq 450 \text{ V}$
Output voltage limitation (10/700) μs (Core-Earth)	$\leq 450 \text{ V}$
Output voltage limitation (10/700) μs (Core-GND)	$\leq 18 \text{ V}$
Residual voltage at I_n , (conductor-conductor)	$\leq 18 \text{ V}$
Residual voltage at I_n , (conductor-GND)	$\leq 450 \text{ V}$
Residual voltage with I_{an} (10/1000) μs (conductor-conductor)	$\leq 23 \text{ V}$
Response time t_A (Core-Core)	$\leq 1 \text{ ns}$
Response time t_A (Core-Earth)	$\leq 100 \text{ ns}$
Input attenuation aE, sym.	0.5 dB ($\leq 600 \text{ kHz}$)
Cut-off frequency f_g (3 dB), sym. in 50 Ohm system	Typ. 3 MHz
Capacity (Core-Core)	3 nF
Resistance in series	2.2 Ω (Path 1-2/5-6) 2.2 Ω (Path 7-8, 11-12)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C2 (10 kV/5 kA)
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 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

Connection, protective circuit

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

Certificates / Approvals

Certification GOST, UL Listed

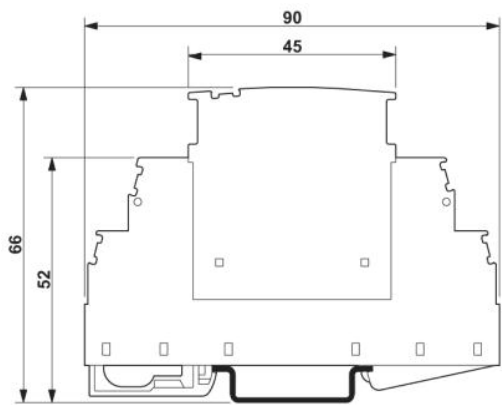
Certification Ex: CUL-EX LIS, UL-EX LIS

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
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

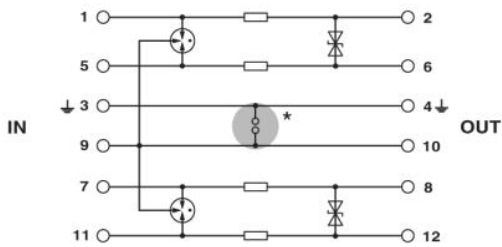
Drawings

Dimensioned drawing



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

Circuit diagram



Approval logo (Ex area)

