

# PT 2-TELE


Order No.: 2882828



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Surge protection plug, consisting of plug and base element, for protecting a double conductor of analog telecommunication interfaces.



Commercial data	
GTIN (EAN)	 4 046356 115148
sales group	J432
Pack	10 pcs.
Customs tariff	85363010
Catalog page information	Page 153 (TT-2009)

**Product notes**

WEEE/RoHS-compliant since:  
06/07/2006



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## Product description

Surge protection plug for DIN rail mounting, 2-section pluggable, normal mode voltage coarse and fine protection for 2-conductor analog telecommunication interface as well as common mode voltage coarse protection to ground.

**Technical data****General**

Housing material	PA
Inflammability class acc. to UL 94	V0
Color	black
Standards for air and creepage distances	VDE 0110-1
	IEC 60644-1
Total surge current (8/20) $\mu$ s	20 kA
Ambient temperature (operation)	-40 °C ... 85 °C
Mounting type	DIN rail: 35 mm
Design	DIN rail module, two-section, divisible
Number of positions	2
Degree of protection	IP20
Direction of action	Line-Line & Line-Earth Ground
Width	17.70 mm
Height	65.50 mm
Length	90.00 mm
Pitch unit	1 Div.

**Protective circuit**

IEC category	C1	
	C2	
	C3	
	D1	
	B2	
	VDE requirement class	C1
		C2
		C3
D1		
Maximum continuous operating voltage $U_c$	185 V DC	
	130 V AC	
Maximum continuous voltage $U_C$ (wire-wire)	185 V DC	
	130 V AC	

Maximum continuous voltage $U_c$ (wire-ground)	185 V DC
	130 V AC
Nominal current $I_N$	450 mA (45°C)
Operating effective current $I_c$ at $U_c$	$\leq 10 \mu\text{A}$
Ground conductor current $I_{PE}$	$\leq 10 \mu\text{A}$
Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (Core-Core)	10 kA
Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (Core-Earth)	10 kA
Total surge current (8/20) $\mu\text{s}$	20 kA
Max. discharge surge current $I_{max}$ (8/20) $\mu\text{s}$ maximum (Core-Earth)	18 kA
Nominal pulse current $I_{an}$ (10/700) $\mu\text{s}$ (Core-Core)	100 A
Nominal pulse current $I_{an}$ (10/700) $\mu\text{s}$ (Core-Earth)	100 A
Lightning test current (10/350) $\mu\text{s}$ , peak value $I_{imp}$	1 kA
Output voltage limitation at 1 kV/ $\mu\text{s}$ (Core-Core) static	$\leq 300 \text{ V}$
Output voltage limitation at 1 kV/ $\mu\text{s}$ (Core-Earth) static	$\leq 300 \text{ V}$
Residual voltage at $I_n$ , (conductor-conductor)	$\leq 160 \text{ V}$ (C2 - 10 kV / 5 kA)
Residual voltage at $I_n$ , (conductor-ground)	$\leq 200 \text{ V}$ (C2 - 10 kV / 5 kA)
Protection level $U_p$ (Core-Core)	$\leq 330 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 300 \text{ V}$ (C2 - 2 kV/1 kA)
	$\leq 270 \text{ V}$ (C1 - 1 kV/500 A)
	$\leq 300 \text{ V}$ (B2 - 4 kV/100 A)
Response time $t_A$ (Core-Core)	$\leq 500 \text{ ns}$
Response time $t_A$ (Core-Earth)	$\leq 500 \text{ ns}$
Input attenuation $a_E$ , sym.	Typ. 0.4 dB ( $\leq 5 \text{ MHz}$ )
Cut-off frequency $f_g$ (3 dB), sym. in 100 Ohm system	Typ. 20 MHz
Capacity (Core-Core)	Typ. 30 pF
Capacity (Core-Earth)	Typ. 30 pF
Resistance in series	2.2 $\Omega \pm 10 \%$

Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	B2 (4 kV / 100 A)
	C1 (1 kV / 500 A)
	C2 (10 kV/5 kA)
	C3 (2 kV / 25 A)
	D1 (1 kA)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	B2 (4 kV / 100 A)
	C1 (1 kV / 500 A)
	C2 (10 kV/5 kA)
	C3 (2 kV/25 A)
	D1 (1 kA)

**Connection data**

Type of connection	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
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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**Certificates / Approvals**

Certification

GOST

**Accessories**

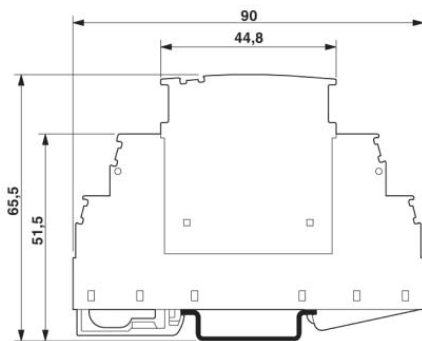
Item	Designation	Description
<b>Marking</b>		
2715212	ZB 5,8,LGS:FORTL.ZAHLEN	Zack marker strip, 10-section, printed horizontally: with consecutive numbers, 1-10, 11-20 etc. up to 991-1000, color: white
1050305	ZB 5,8:SO/CMS	Zack strip, 10-section, divisible, special printing, marking according to customer requirements
2715209	ZB 5,8:UNBEDRUCKT	Zack strip, unprinted, strips with 10 labels for individual labeling with M-PEN or CMS system, for terminal block width: 5.8 mm, color: White
1050017	ZB 5,LGS:FORTL.ZAHLEN	Zack marker strip, 10-section, printed horizontally: with the numbers 1 - 10, 11 - 20 and so on up to 491 - 500, color: white
1050295	ZB 5:SO/CMS	Zack strip, 10-section, divisible, special printing, marking according to customer requirements

**Additional products**

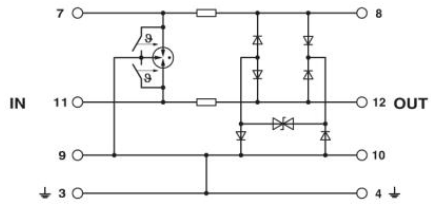
Item	Designation	Description
<b>Assembly</b>		
2839295	SSA 3-6	shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black
2839512	SSA 5-10	Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black

**Diagrams/Drawings**

Dimensioned drawing



Circuit diagram



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