

Surge protection device - TT-2-PE-110AC - 2858483

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Modular terminal block with two-stage surge protection for a floating double conductor, separate PE connection, nominal voltage: 110 V AC, for mounting on NS 35/7.5, terminal block width 6.2 mm, terminal block height: 54.6 mm

Your advantages

- Versions with and without disconnect knife
- Protection of a floating double wire
- Protection of two signal wires with common reference potential
- Multi-stage modular terminal blocks with screw connection technology
- Disconnection of signal circuits by disconnect knife



Key Commercial Data

Packing unit	10 pc
GTIN	 4 017918 893156
GTIN	4017918893156

Technical data

Dimensions

Height	79.6 mm
Width	6.2 mm
Depth	54.6 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Altitude	≤ 2000 m
Degree of protection	IP20

General

Housing material	PA 6.6
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Technical data

General

Flammability rating according to UL 94	V-0
Color	black
Standards for clearances and creepage distances	IEC 60664-1
Mounting type	DIN rail: 35 mm
Type	Double-level terminal block with PE foot – separate PE connection
Number of positions	2
Direction of action	Line-Line & Line-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	110 V AC
Maximum continuous voltage U_C	120 V AC
Rated current	300 mA (30 °C)
Operating effective current I_C at U_C	$\leq 5 \mu A$
Residual current I_{PE}	$\leq 10 \mu A$
Nominal discharge current I_n (8/20) μs (line-line)	5 kA
Nominal discharge current I_n (8/20) μs (line-earth)	5 kA
Pulse discharge current I_{imp} (10/350) μs	500 A
Total discharge current I_{total} (8/20) μs	10 kA
Max. discharge current I_{max} (8/20) μs maximum (line-line)	5 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	5 kA
Nominal pulse current I_{an} (10/1000) μs (line-earth)	100 A
Output voltage limitation at 1 kV/ μs (line-line) spike	$\leq 250 V$
Output voltage limitation at 1 kV/ μs (line-earth) spike	$\leq 650 V$
Voltage protection level U_p (line-line)	$\leq 300 V$ (C2 - 10 kV / 5 kA)
	$\leq 250 V$ (C1 - 1 kV/500 A)
Voltage protection level U_p (line-earth)	$\leq 900 V$ (C2 - 10 kV / 5 kA)
	$\leq 650 V$ (C1 - 1 kV/500 A)
	$\leq 850 V$ (C3 - 10 A)
	$\leq 900 V$ (C3 - 100 A)
	$\leq 800 V$ (D1 - 500 A)
Response time t_A (line-line)	$\leq 1 ns$
Response time t_A (line-earth)	$\leq 100 ns$
Input attenuation aE, sym.	typ. 1.5 dB ($\leq 2 MHz$)
	typ. 0.6 dB ($\leq 500 kHz / 150 \Omega$)
Cut-off frequency f_g (3 dB), sym. in 50 Ohm system	typ. 15 MHz
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 8 MHz

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Protective circuit

Capacity (line-line)	typ. 600 pF
Capacity (line-earth)	≤ 2 pF
Resistance in series	9.4 Ω 10 %
Surge protection fault message	none
Max. required back-up fuse	315 mA (T/IEC 60127-2/3)
Impulse durability (line-line)	C1 - 1 kV/500 A C2 - 10 kV/5 kA
Impulse durability (line-earth)	C1 - 1 kV/500 A C2 - 10 kV/5 kA C3 - 100 A D1 - 500 A
Alternating current carrying capacity (line-line)	0.1 A/1 s
Alternating current carrying capacity (line-earth)	1 A/1s

Connection data

Connection method	Screw connection
Connection method IN	Screw terminal blocks
Connection method OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section solid	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	24 ... 14

Standards and Regulations

Standards/regulations	IEC 61643-21 EN 61643-21
Standards/specifications	IEC 61643-21/A1 2008 EN 61643-21/A1 2009

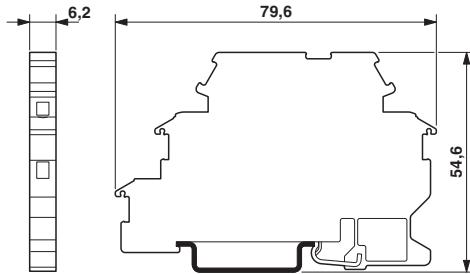
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

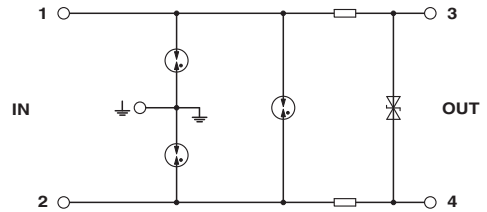
Drawings

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Dimensional drawing



Circuit diagram



Approvals

Approvals

Approvals

EAC / EAC

Ex Approvals

Approval details

EAC		RU C- DE.A*30.B01561
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EAC		EAC-Zulassung
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