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

2858483

https://www.phoenixcontact.com/us/products/2858483

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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

- Space-saving and cost-saving with a narrow overall width of just 6 mm
- Cost-optimized with tailored product features
- Easy selection for all possible demands in MCR applications with a complete product portfolio

Commercial data

Item number	2858483
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	CL02
Product key	CL2221
GTIN	4017918893156
Weight per piece (including packing)	28.83 g
Weight per piece (excluding packing)	26.47 g
Customs tariff number	85363010
Country of origin	DE

Technical data

Product properties

Product type	Surge protection for MCR technology
IEC test classification	C1
	C2
	C3
	D1
Type	Double-level terminal block with PE foot – separate PE connection
Number of positions	2
Surge protection fault message	none
Wire pairs per module	1

Insulation characteristics

Overvoltage category	II

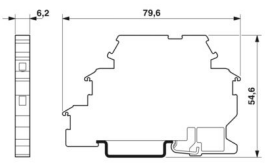
Electrical properties

Nominal voltage U_N	110 V AC

Connection data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.8 Nm
Conductor cross-section flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section rigid	0.2 mm² ... 4 mm²
Conductor cross-section AWG	24 ... 14

Dimensions

Dimensional drawing	
Width	6.2 mm
Height	79.6 mm
Depth	54.6 mm

Material specifications

Flammability rating according to UL 94	V-0
Housing material	PA 6.6

Mechanical properties

Mechanical data

Open side panel	Yes

Protective circuit

Direction of action	Line-Line & Line-Earth Ground
Maximum continuous operating voltage U_C	120 V AC
Rated current	300 mA (30 °C)
Operating effective current I_C at U_C	≤ 5 µA
Protective conductor current I_{PE}	≤ 10 µA
Nominal discharge current I_n (8/20) µs (line-line)	5 kA
Nominal discharge current I_n (8/20) µs (line-ground)	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 Ian (10/1000) µs (line-earth)	100 A
Output voltage limitation at 1 kV/µs (line-line) spike	≤ 250 V
Output voltage limitation at 1 kV/µs (line-earth) spike	≤ 650 V
Voltage protection level U_p (line-line)	≤ 300 V (C2 - 10 kV / 5 kA)
	≤ 250 V (C1 - 1 kV / 500 A)
Voltage protection level U_p (line-earth)	≤ 900 V (C2 - 10 kV / 5 kA)
	≤ 650 V (C1 - 1 kV / 500 A)
	≤ 850 V (C3 - 10 A)
	≤ 900 V (C3 - 100 A)
	≤ 800 V (D1 - 500 A)
Response time t_A (line-line)	≤ 1 ns
Response time t_A (line-earth)	≤ 100 ns
Input attenuation aE, sym.	typ. 1.5 dB (≤ 2 MHz)
	typ. 0.6 dB (≤ 500 kHz / 150 Ω)
Cut-off frequency fg (3 dB), sym. in 50 Ω system	typ. 15 MHz
Cut-off frequency fg (3 dB), sym. in 150 Ω system	typ. 8 MHz
Capacity (Core-Core)	typ. 600 pF
Capacity (Core-Earth)	≤ 2 pF
Resistance per path	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 - 1 s

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

Air clearances and creepage distances

Standards/regulations	IEC 60664-1

Standards Information technology specification

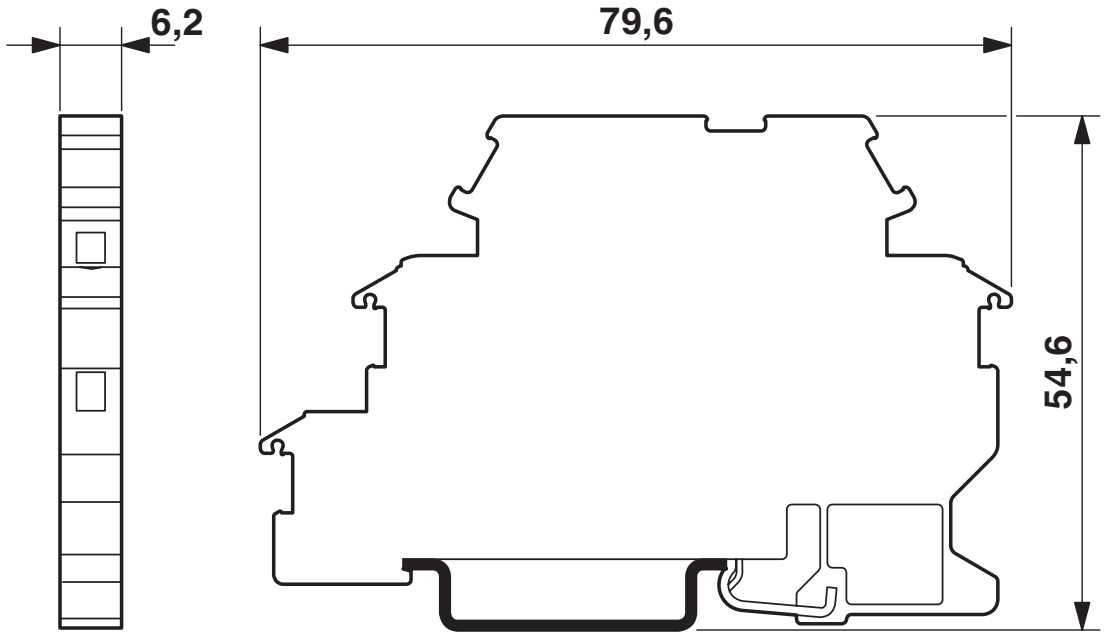
Standards/regulations	IEC 61643-21
	EN 61643-21
	IEC 61643-21
	EN 61643-21
Standards/specifications	IEC 61643-21/A1
Note	2008
Standards/specifications	EN 61643-21/A1
Note	2009

Mounting

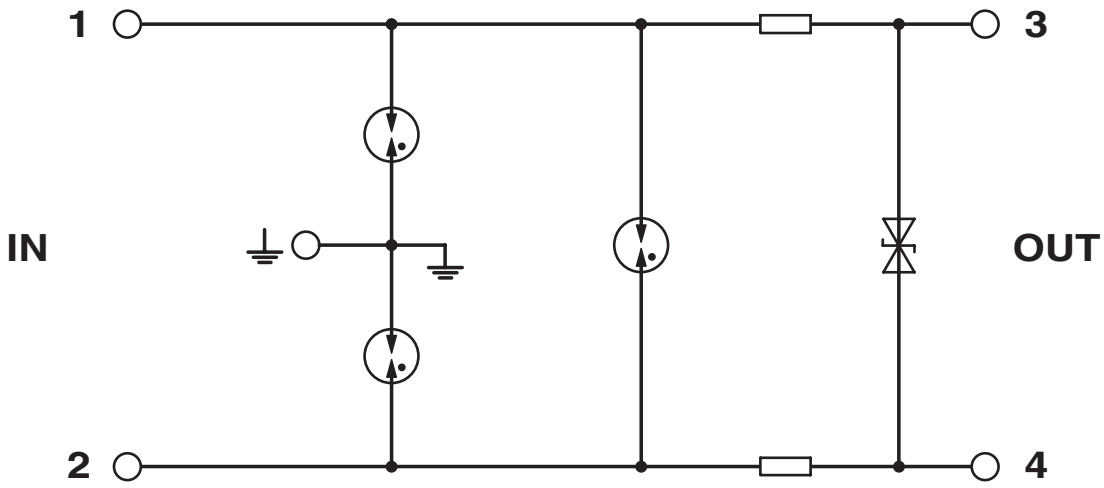
Mounting type	DIN rail: 35 mm

Drawings

Dimensional drawing



Circuit diagram



Classifications

UNSPSC

UNSPSC 21.0	39121620

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)

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