

Surge protection device - TT-2-PE-12DC - 2805017

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Modular terminal block with three-stage surge protection for a floating double conductor, separate ground connection, nominal voltage: 12 V DC, mounting on NS 35/7.5, terminal width: 6.2 mm, terminal height: 54.6 mm



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	26.0 GRM
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	79.6 mm
Width	6.2 mm
Depth	54.6 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Degree of protection	IP20

General

Housing material	PA 6.6
Inflammability class according to UL 94	V2
Color	black
Standards for air and creepage distances	IEC 60664-1
Mounting type	DIN rail: 35 mm
Type	Double-level terminal block with PE foot – separate PE connection

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Technical data

General

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	12 V DC
Maximum continuous operating voltage U_C	18 V DC
Maximum continuous voltage U_C (wire-wire)	18 V DC
Nominal current I_N	300 mA (40°C)
Operating effective current I_C at U_C	$\leq 10 \mu\text{A}$
Residual current I_{PE}	$\leq 1 \mu\text{A}$
Nominal discharge current I_n (8/20) μs (Core-Core)	5 kA
Nominal discharge current I_n (8/20) μs (Core-Earth)	5 kA
Nominal pulse current I_{an} (10/1000) μs (Core-Core)	100 A
Nominal pulse current I_{an} (10/1000) μs (Core-Earth)	100 A
Impulse discharge current (10/350) μs , peak value I_{imp}	500 A
Output voltage limitation at 1 kV/ μs (Core-Core) spike	$\leq 30 \text{ V}$
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	$\leq 650 \text{ V}$
Voltage protection level U_p (Core-Core)	$\leq 55 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 40 \text{ V}$ (C1 - 1 kV/500 A)
	$\leq 30 \text{ V}$ (C3 - 10 A)
	$\leq 30 \text{ V}$ (C3 - 100 A)
Voltage protection level U_p (Core-Earth)	$\leq 850 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 650 \text{ V}$ (C1 - 1 kV/500 A)
	$\leq 800 \text{ V}$ (C3 - 10 A)
	$\leq 850 \text{ V}$ (C3 - 100 A)
	$\leq 800 \text{ V}$ (D1 - 500 A)
Response time t_A (Core-Core)	$\leq 1 \text{ ns}$
Response time t_A (Core-Earth)	$\leq 100 \text{ ns}$
Input attenuation a_E , sym.	typ. 0.6 dB ($\leq 400 \text{ kHz}/50 \Omega$)
	typ. 0.2 dB ($\leq 40 \text{ kHz}/150 \Omega$)
Cut-off frequency f_g (3 dB), sym. in 50 Ohm system	typ. 2.5 MHz
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 800 kHz
Capacity (Core-Core)	$\leq 2.5 \text{ nF}$

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Protective circuit

Resistance in series	3.7 Ω 5 % (per path)
	3.7 Ω
Surge protection fault message	None
Max. required back-up fuse	315 mA (T/IEC 60127-2/3)
Surge current resistance (conductor-conductor)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C3 - 100 A
Surge current resistance (conductor-ground)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C3 - 100 A
	D1 - 500 A
Alternating current carrying capacity (conductor-conductor)	0.5 A/1s
Alternating current carrying capacity (conductor-ground)	1 A/1s

Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.6 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	14

Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130807
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807

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Classifications

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Approvals

Approvals


Approvals

GOST

Ex Approvals

Approvals submitted

Approval details

GOST 
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Accessories

Accessories

End cover

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Accessories

End cover - D-DEK 1,5 BK - 2838995



Cover for setting the end of a TERMITRAB TT-2-PE... and TT-2/2 row of terminal blocks, color: black

Labeled terminal marker

Zack Marker strip, flat - ZBF 6,LGS:FORTL.ZAHLEN - 0808749



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 6.2 mm, Lettering field: 5.15 x 6.15 mm

Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Terminal marking

Zack Marker strip, flat - ZBF 6:UNBEDRUCKT - 0808710



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 6.2 mm, Lettering field: 5.15 x 6.15 mm

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Accessories

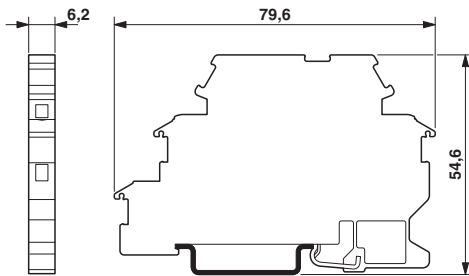
Zack Marker strip, flat - ZBF 6/WH-100:UNBEDRUCKT - 0808736



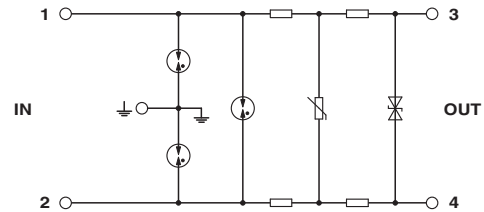
Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 6.2 mm, Lettering field: 5.15 x 6.15 mm

Drawings

Dimensioned drawing



Circuit diagram



Schematic diagram

