

Surge protection device - TT-ST-2/2-24DC - 2858881

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Spring cage modular terminal block with integrated surge protection, for assembly on NS 35/7.5, voltage U_N 24 V DC, terminal width: 6.2 mm, cover width: 2.2 mm

Your advantages

- ✓ Multi-stage modular terminal blocks with spring-cage connection
- ✓ Disconnection of signal circuits by disconnect knife



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 939137
GTIN	4017918939137
Weight per Piece (excluding packing)	27.420 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	100 mm
Width	6.2 mm
Depth	63.5 mm (incl. DIN rail 7.5 mm)

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Altitude	≤ 2000 m (amsl (above mean sea level))

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Technical data

Ambient conditions

Degree of protection	IP20
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General

Housing material	PA 6.6
Flammability rating according to UL 94	V-0
Color	jet black RAL 9005
Overvoltage category	III
Degree of pollution	2
Mounting type	DIN rail: 35 mm
Type	Double-level terminal block
Number of positions	2
Direction of action	Line-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous voltage U_C	30 V DC
	21 V AC
Rated current	300 mA (45 °C)
Operating effective current I_C at U_C	$\leq 10 \mu\text{A}$ (per path)
Residual current I_{PE}	$\leq 20 \mu\text{A}$
Nominal discharge current I_n (8/20) μs (line-earth)	5 kA (per path)
	10 kA (in total)
Pulse discharge current I_{imp} (10/350) μs (line-earth)	1 kA (per path)
	2 kA (in total)
Total discharge current I_{total} (8/20) μs	10 kA
Total discharge current I_{total} (10/350) μs	2 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	5 kA (per path)
	10 kA (in total)
Nominal pulse current I_{an} (10/1000) μs (line-earth)	100 A (per path)
	200 A (in total)
Output voltage limitation at 1 kV/ μs (line-earth) spike	≤ 40 V
Output voltage limitation at 1 kV/ μs (line-earth) static	≤ 40 V
Residual voltage at I_n (line-earth)	≤ 40 V
Residual voltage with I_{an} (10/1000) μs (line-earth)	≤ 45 V

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Protective circuit

Voltage protection level U_p (line-earth)	≤ 80 V (C2 - 10 kV / 5 kA)
Voltage protection level U_p static (line-earth)	≤ 40 V (C2 - 10 kV / 5 kA)
Response time t_A (line-earth)	≤ 1 ns
Input attenuation aE, asym.	typ. 0.6 dB (500 kHz/50 Ω)
	typ. 0.1 dB (170 kHz/150 Ω)
	typ. 0.1 dB (40 kHz / 600 Ω)
Cut-off frequency f_g (3 dB), asym. (PE) in 50 Ohm system	typ. 3 MHz
Cut-off frequency f_g (3 dB), asym. (PE) in 150 Ohm system	typ. 1 MHz
Cut-off frequency f_g (3 dB), asym. (PE) in 600 Ohm system	typ. 250 kHz
Capacity (line-earth)	typ. 2 nF
Resistance per path	9.4 Ω \pm 20 %
Surge protection fault message	none
Max. required back-up fuse	315 mA (T)
Impulse durability (line-earth)	C2 - 10 kV / 5 kA
	C3 - 100 A
	D1 - 1 kA

Connection data

Connection method	Spring-cage connection
Connection method IN	Spring-cage
Connection method OUT	Spring-cage
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/specifications	IEC 61643-21 2000 + A1:2008, modified
	EN 61643-21 2001 + A1:2009

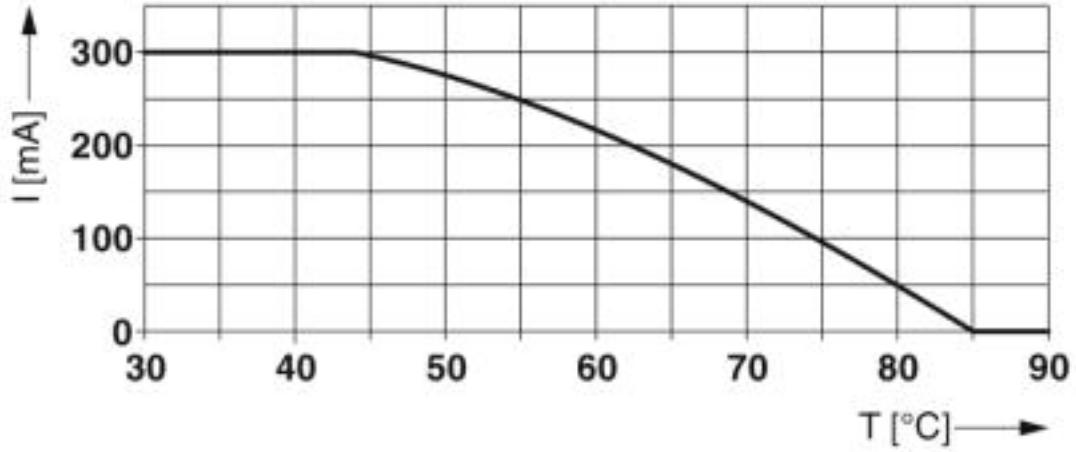
Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

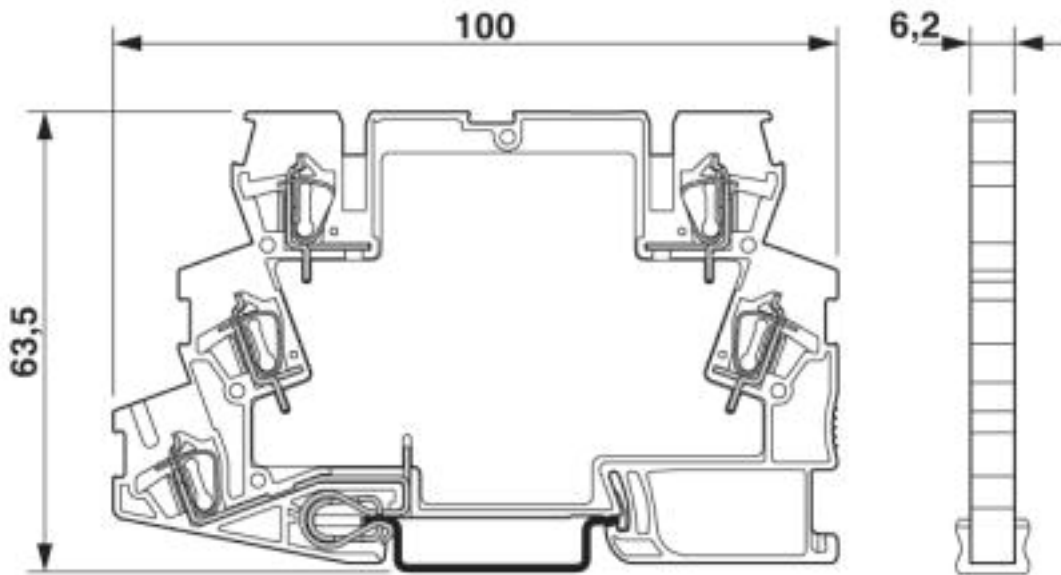
Drawings

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Diagram

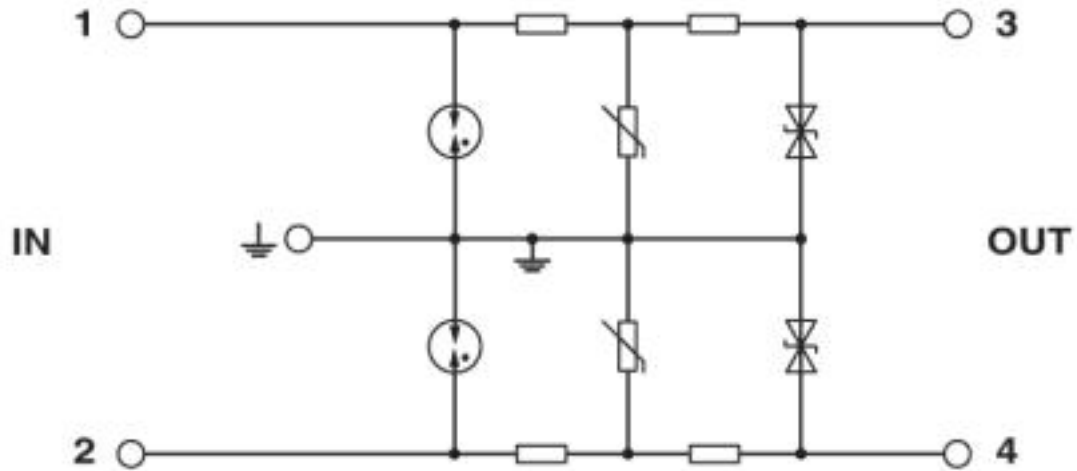


Dimensional drawing



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Circuit diagram



Classifications

eCl@ss

eCl@ss 4.0	27130800
eCl@ss 4.1	27130800
eCl@ss 5.0	27130800
eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807
eCl@ss 9.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943
ETIM 6.0	EC000943
ETIM 7.0	EC000943

UNSPSC

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

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Approvals

Approvals

Approvals

DNV GL / UL Listed

Ex Approvals

Approval details

DNV GL		https://approvalfinder.dnvgl.com/	TAE00001N7
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UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 138168
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Accessories

Accessories

End cover

End cover - TT-D-STTCO-BK - 2858894



End cover for TERMITRAB TT-ST-..., width: 2.2 mm, 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 size: 5.15 x 6.15 mm, Number of individual labels: 10

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Accessories

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: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

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



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

Additional products

End cover - TT-D-STTCO-BK - 2858894



End cover for TERMITRAB TT-ST-..., width: 2.2 mm, color: Black

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Accessories

Shield connection - SSA 3-6 - 2839295



Shield fast connection for 3 ... 6 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black

Shield connection - SSA 5-10 - 2839512



Shield fast connection for 5 ... 10 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black
