

Surge protection device - TT-ST-M-SFP-24AC - 2858946

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TERMITRAB, spring-cage modular terminal block with integrated surge protection as a filter circuit and disconnect knives, 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

- Combined protective circuit for absorbing transient surge voltages and high-frequency interference voltages
- With spring-cage connection
- Disconnection of signal circuits by disconnect knife



Key Commercial Data

Packing unit	10 pc
GTIN	
GTIN	4017918938161

Technical data

Dimensions

Height	100 mm
Width	6.2 mm
Depth	65.1 mm (incl. DIN rail 7.5 mm)

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Degree of protection	IP20

General

Housing material	PA 6.6
Flammability rating according to UL 94	V-0
Color	jet black RAL 9005
Overvoltage category	III

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Technical data

General

Degree of pollution	2
Mounting type	DIN rail: 35 mm
Type	Double-level terminal block
Direction of action	Line-Earth Ground

Protective circuit

IEC test classification	C1
	C3
Nominal voltage U_N	24 V AC
Maximum continuous voltage U_C	38 V DC
	30 V AC
Rated current	500 mA (55 °C)
Operating effective current I_C at U_C	$\leq 100 \mu\text{A}$ (per path)
Residual current I_{PE}	$\leq 1 \text{ mA}$ (per path)
Nominal discharge current I_n (8/20) μs (line-earth)	350 A (per path)
	700 A (in total)
Total discharge current I_{total} (8/20) μs	700 A
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	1.5 kA (per path)
	3 kA (in total)
Nominal pulse current I_{an} (10/1000) μs (line-earth)	40 A (per path)
	80 A (in total)
Output voltage limitation at 1 kV/ μs (line-earth) spike	$\leq 70 \text{ V}$ (per path)
Output voltage limitation at 1 kV/ μs (line-earth) static	$\leq 70 \text{ V}$ (per path)
Residual voltage at I_n (line-earth)	$\leq 80 \text{ V}$
Residual voltage with I_{an} (10/1000) μs (line-earth)	$\leq 80 \text{ V}$
Voltage protection level U_p (line-earth)	$\leq 80 \text{ V}$ (C1 - 500 V / 250 A)
Response time t_A (line-earth)	$\leq 25 \text{ ns}$
Input attenuation aE, asym.	typ. 40 dB (1 MHz / 150 Ω)
Cut-off frequency f_g (3 dB), asym. (PE) in 50 Ohm system	typ. 60 kHz
Cut-off frequency f_g (3 dB), asym. (PE) in 150 Ohm system	typ. 20 kHz
Capacity (line-earth)	typ. 130 nF
Inductivity in series	typ. 100 μH
Resistance per path	0.5 Ω
Surge protection fault message	none
Max. required back-up fuse	500 mA (T)
Impulse durability (line-earth)	C1 - 500 V / 250 A
	C3 - 40 A

Connection data

Connection method	Spring-cage connection
Connection method IN	Spring-cage

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Technical data

Connection data

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 ... 12

Standards and Regulations

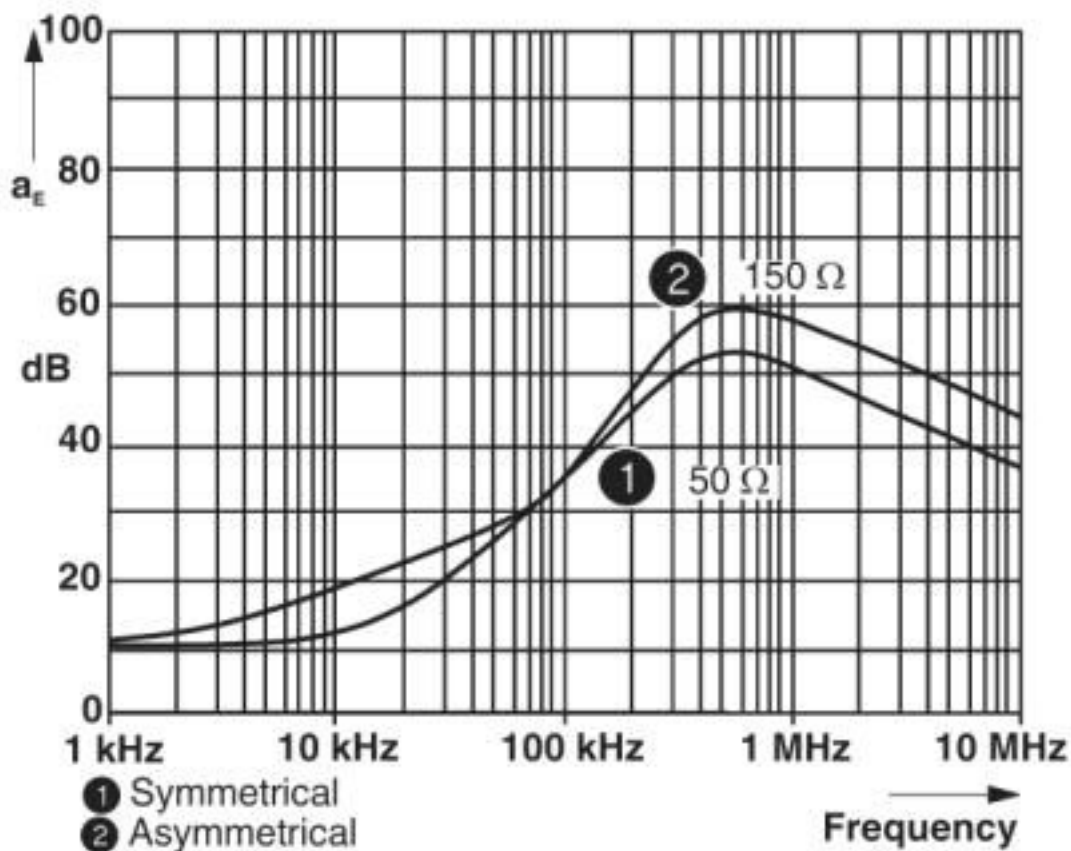
Standards/specifications	IEC 61643-21 2000 + A1:2008
	EN 61643-21 2001 + A1:2009

Environmental Product Compliance

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

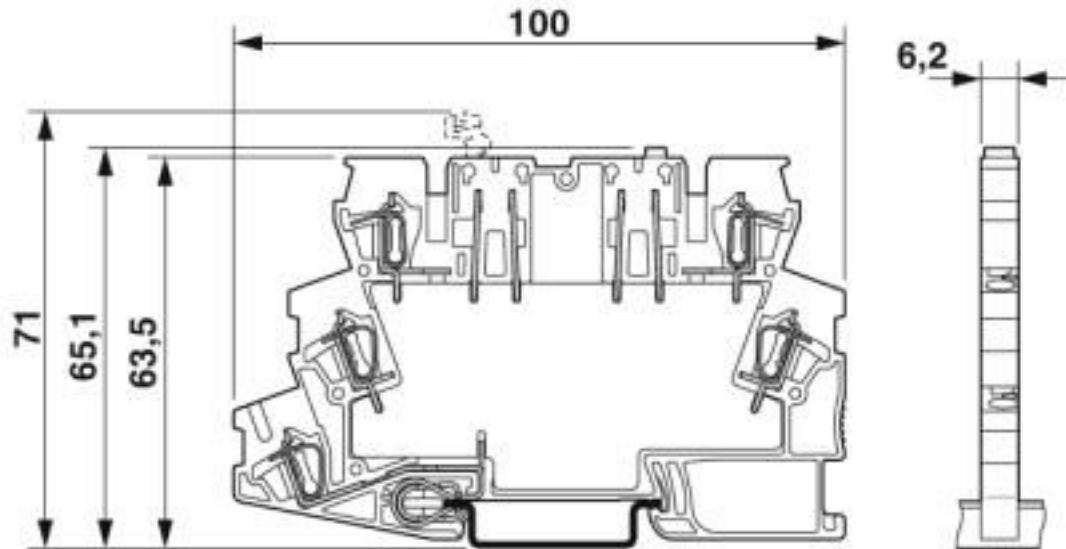
Drawings

Diagram

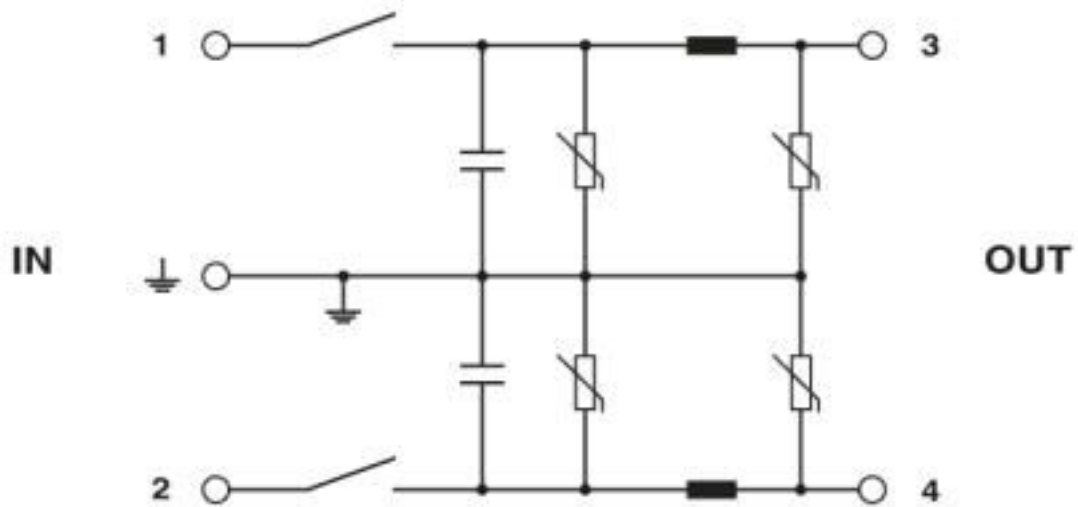


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Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27130807
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

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Classifications

eCl@ss

eCl@ss 9.0	27130807
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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
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

Approvals

Approvals

Approvals

UL Listed / EAC / EAC

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 138168
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EAC		EAC-Zulassung
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Approvals

EAC		RU C- DE.*09.B.00169
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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

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

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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: 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

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

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