

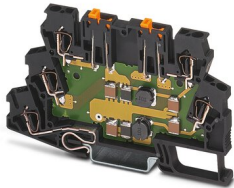
TT-ST-M-SFP-24AC - Surge protection device



2858946

<https://www.phoenixcontact.com/in/products/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

- Effective high-frequency interference attenuation with coils and X and Y capacitors
- Space-saving and cost-saving with a narrow overall width
- Disconnection of signal circuits by disconnect knife

Commercial Data

Item number	2858946
Packing unit	10 pc
Minimum order quantity	1 pc
Sales Key	CLC
Product Key	CLC141
Catalog Page	Page 210 (C-4-2019)
GTIN	4017918938161
Weight per Piece (including packing)	30.15 g
Weight per Piece (excluding packing)	27.55 g
Customs tariff number	85363030
Country of origin	DE

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Technical Data

Product properties

IEC test classification	C1
	C3
Type	Double-level terminal block
Product type	Interference filters
Product family	SFP
Surge protection fault message	none

Insulation characteristics

Overvoltage category	III
Pollution degree	2

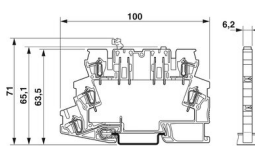
Electrical properties

Nominal voltage U_N	24 V AC
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Connection data

Connection method	Spring-cage connection
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section rigid	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	24 ... 12

Dimensions

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

Material specifications

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

Mechanical properties

Mechanical data

Open side panel	Yes
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Protective circuit

Direction of action	Line-Earth Ground
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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 surge current I_n (8/20) μs (Core-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 (conductor-ground)	$\leq 80 \text{ V}$
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 Ω system	typ. 60 kHz
Cut-off frequency f_g (3 dB), asym. (PE) in 150 Ω system	typ. 20 kHz
Capacity (Core-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

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 85 °C
Altitude	$\leq 2000 \text{ m}$ (amsl (above mean sea level))

Standards and regulations

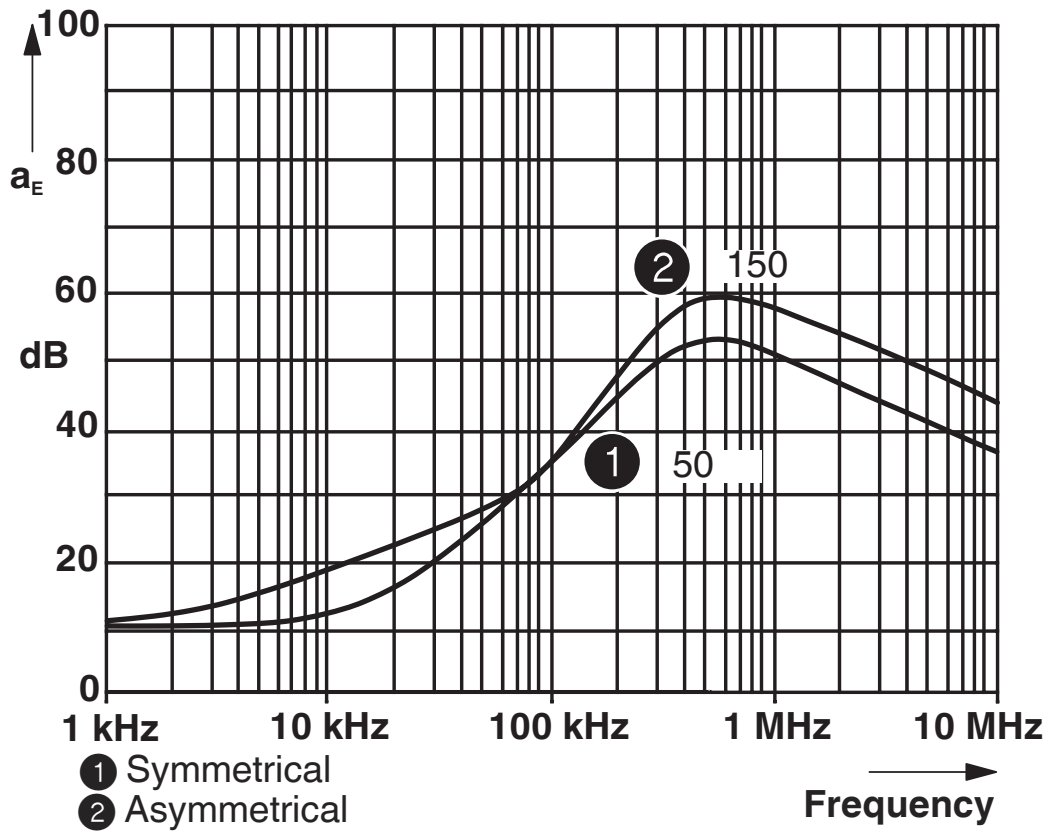
Standards/specifications	IEC 61643-21
Standards/specifications	EN 61643-21

Mounting

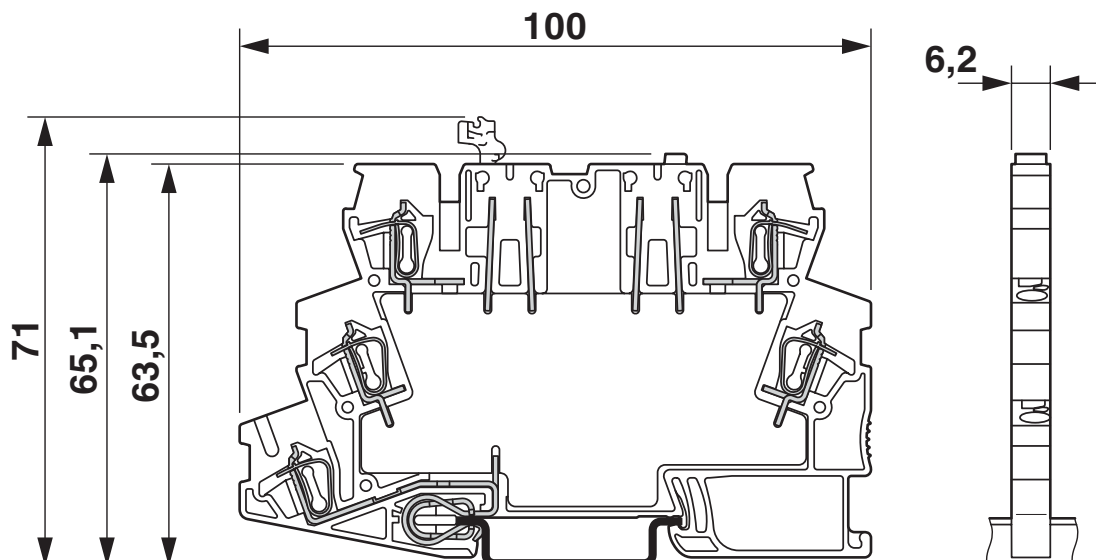
Mounting type	DIN rail: 35 mm
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Drawings

Diagram



Dimensional drawing



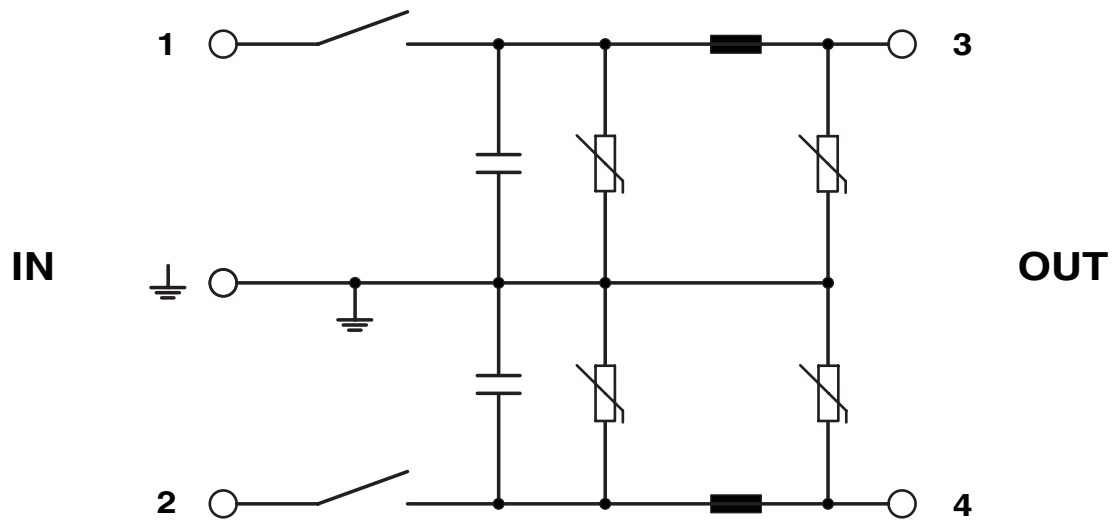
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Circuit diagram



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Approvals



EAC

Approval ID: EAC-Zulassung



EAC

Approval ID: RU C-DE.*09.B.00169



UL Listed

Approval ID: FILE E 138168

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Classifications

ECLASS

ECLASS-11.0

27130807

ETIM

ETIM 8.0

EC000943

UNSPSC

UNSPSC 21.0

39121600

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Environmental Product Compliance

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

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Accessories

TT-D-STTCO-BK - End cover

2858894

<https://www.phoenixcontact.com/in/products/2858894>

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



B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/in/products/1051993>

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



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ZBF 6:UNBEDRUCKT - Zack Marker strip, flat

0808710

<https://www.phoenixcontact.com/in/products/0808710>



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

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

0808736

<https://www.phoenixcontact.com/in/products/0808736>



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 1000

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

0808749

<https://www.phoenixcontact.com/in/products/0808749>



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

TT-D-STTCO-BK - End cover

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



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SSA 3-6 - Shield connection

2839295

<https://www.phoenixcontact.com/in/products/2839295>

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



SSA 5-10 - Shield connection

2839512

<https://www.phoenixcontact.com/in/products/2839512>

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



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PHOENIX CONTACT (I) Pvt. Ltd.
A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420
info@phoenixcontact.co.in