

Surge protection device - TT-ST-2-PE-24DC - 2858878

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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

Why buy this product

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



Key Commercial Data

Packing unit	1 STK
GTIN	 4 017918 939120
GTIN	4017918939120
Weight per Piece (excluding packing)	28.430 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	100 mm
Width	6.2 mm
Depth	63.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Altitude	max. 2000 m

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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	black
Standards for clearances and creepage distances	EN 60664-1
	IEC 60664-1
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-Line & Line-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous voltage U_C	30 V DC
	21 V AC
Rated current	350 mA (45°C)
Operating effective current I_C at U_C	$\leq 10 \mu A$
Standby power consumption P_C	$\leq 1.94 VA$
Residual current I_{PE}	$\leq 2 \mu A$
Nominal discharge current I_n (8/20) μs (Core-Core)	5 kA
Nominal discharge current I_n (8/20) μs (core-earth)	5 kA
Pulse discharge current I_{imp} (10/350) μs	1 kA (per path)
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 (Core-Core)	5 kA
Max. discharge current I_{max} (8/20) μs maximum (Core-Earth)	5 kA

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Protective circuit

Nominal pulse current I_{an} (10/1000) μ s (Core-Core)	100 A
Nominal pulse current I_{an} (10/1000) μ s (Core-Earth)	200 A (in total)
Output voltage limitation at 1 kV/ μ s (core-core) spike	≤ 40 V
Output voltage limitation at 1 kV/ μ s (core-earth) spike	≤ 600 V
Output voltage limitation at 1 kV/ μ s (core-core) static	≤ 40 V
Output voltage limitation at 1 kV/ μ s (core-earth) static	≤ 600 V
Residual voltage at I_n (conductor-conductor)	≤ 40 V
Voltage protection level U_p (core-core)	≤ 60 V (C2 - 10 kV / 5 kA)
	≤ 40 V (stat.)
Voltage protection level U_p (core-ground)	≤ 600 V (C2 - 10 kV / 5 kA)
Response time t_A (core-core)	≤ 1 ns
Response time t_A (core-earth)	≤ 100 ns
Input attenuation a_E , sym.	typ. 1 dB (400 kHz/50 Ω)
	typ. 0.4 dB (150 kHz/150 Ω)
	typ. 0.1 dB (30 kHz/600 Ω)
Cut-off frequency f_g (3 dB), sym. in 50 Ohm system	3 MHz
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	1 MHz
Cut-off frequency f_g (3 dB), sym. in 600 Ohm system	typ. 250 kHz
Capacity (core-core)	4 nF
Capacity (core-earth)	2 pF
Resistance in series	6.6 Ω ± 20 %
Surge protection fault message	none
Max. required back-up fuse	370 mA
Impulse durability (conductor-conductor)	C2 - 10 kV/5 kA
	C3 - 100 A
Impulse durability (conductor-ground)	C2 - 10 kV/5 kA
	D1 - 1 kA
	C3 - 100 A

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

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Technical data

Standards and Regulations

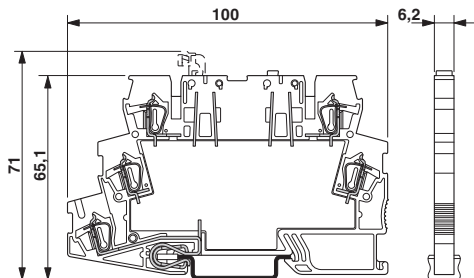
Standards/specifications	IEC 61643-21/A1 2008
	EN 61643-21/A1 2009

Environmental Product Compliance

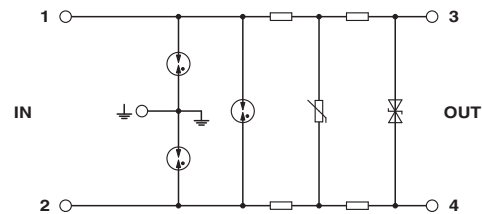
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Dimensional drawing



Circuit diagram



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
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

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Classifications

UNSPSC

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

Approvals

Approvals

Approvals

UL Listed / EAC / EAC / DNV GL

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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EAC		RU C-DE.A*30.B01561
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DNV GL	http://exchange.dnv.com/tari/	TAE00001N7
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Accessories

Accessories

End cover

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Accessories

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

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

Additional products

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



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