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

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	10 pc
GTIN	4 017918 939137
Weight per Piece (excluding packing)	27.42 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
Degree of protection	IP20

General

Housing material	PA 6.6
Inflammability class according to UL 94	V-0
Color	black

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Technical data

General

Standards for air and creepage distances	EN 60664-1
	IEC 60664-1
Surge voltage category	III
Pollution degree	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
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous operating voltage U_C	30 V DC
	21 V AC
Maximum continuous voltage U_C (wire-ground)	30 V DC
	21 V AC
Nominal current I_N	300 mA (45°C)
Operating effective current I_C at U_C	≤ 10 µA (per path)
Standby power consumption P_C	≤ 1.86 VA
Residual current I_{PE}	≤ 20 µA
Nominal discharge current I_n (8/20) µs (Core-Earth)	5 kA
Total surge current (8/20) µs	10 kA
Total surge current (10/350) µs	2 kA
Max. discharge current I_{max} (8/20) µs maximum (Core-Earth)	5 kA
Nominal pulse current Ian (10/1000) µs (Core-Earth)	100 A
	200 A (in total)
Impulse discharge current (10/350)#µs, peak value I_{imp}	1 kA (per path)
Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 40 V
Output voltage limitation at 1 kV/µs (Core-Earth) static	≤ 40 V
Residual voltage at I_n, (conductor-ground)	≤ 40 V
Residual voltage with Ian (10/1000)µs (conductor-ground)	≤ 45 V
Voltage protection level U_p (core-ground)	≤ 80 V (C2 - 10 kV/5 kA)
	≤ 40 V (static)
Response time tA (Core-Earth)	≤ 1 ns

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Technical data

Protective circuit

Input attenuation aE, asym.	typ. 0.6 dB (500 kHz/50 Ω system)
	typ. 0.1 dB (170 kHz/150 Ω system)
	typ. 0.1 dB (40 kHz/600 Ω system)
Cut-off frequency fg (3 dB), asym. (PE) in 50 Ohm system	typ. 3 MHz
Cut-off frequency fg (3 dB), asym. (PE) in 150 Ohm system	typ. 1 MHz
Cut-off frequency fg (3 dB), asym. (PE) in 600 Ohm system	typ. 250 kHz
Capacity (Core-Earth)	2 nF
Resistance in series	9.4 Ω ±10 % (per path)
	9.4 Ω
Surge protection fault message	None
Max. required back-up fuse	315 mA
Impulse durability (conductor-ground)	C2 - 10 kV/5 kA
	D1 - 1 kA
	C3 - 100 A

Connection data

Connection method	Spring-cage connection
Connection type IN	Spring-cage
Connection type OUT	Spring-cage
Conductor cross section stranded min.	0.2 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	4 mm²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

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

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943

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Classifications

ETIM

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

UL Listed / GL / EAC

Ex Approvals

Approvals submitted

Approval details

UL Listed

GL

EAC

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: 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

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

Additional products

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Accessories

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

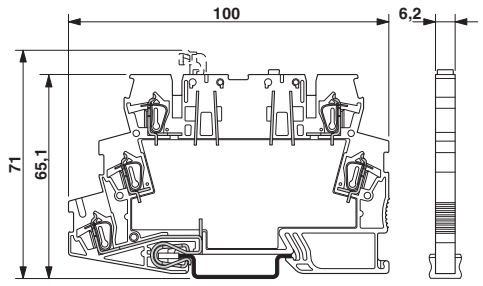
shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black

Shield connection - SSA 5-10 - 2839512

Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black

Drawings

Dimensioned drawing



Circuit diagram