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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Surge protection device - TT-2-PE-M-24DC - 2920641

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Modular terminal block with two-stage surge protection for one operated floating double conductor, disconnect knife on both signal paths, separate ground connection, nominal voltage: 24 V DC.

Why buy this product

- Versions with and without disconnect knife
- Protection of a floating double wire
- Protection of two signal wires with common reference potential
- Multi-stage modular terminal blocks with screw connection technology
- Disconnection of signal circuits by disconnect knife



Key commercial data

Packing unit	0
Minimum order quantity	1
Catalog page	Page 106 (TT-2011)
GTIN	 4 046356 160193
Custom tariff number	85363010
Country of origin	GERMANY

Technical data

General

Housing material	PA 6.6
Inflammability class according to UL 94	V2
Color	black
Total surge current (8/20) μ s	10 kA
Total surge current (10/350) μ s	1 kA
Ambient temperature (operation)	-40 °C ... 80 °C
Mounting type	DIN rail: 35 mm
Design	Double-level terminal block with PE foot – separate PE connection
Number of positions	2
Degree of protection	IP20
Direction of action	Line-Line & Line-Earth Ground

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Technical data

General

Width	6.2 mm
Height	92 mm
Depth	66.45 mm

Protective circuit

IEC category	C1
IEC category	C2
IEC category	C3
IEC category	D1
Nominal voltage UN	24 V DC
Nominal voltage UN	17 V AC
Maximum continuous operating voltage UC	30 V DC
Maximum continuous operating voltage UC	21 V AC
Maximum continuous voltage UC (wire-wire)	30 V DC
Maximum continuous voltage UC (wire-wire)	21 V AC
Nominal current IN	300 mA (40°C)
Operating effective current IC at UC	≤ 5 µA
Ground conductor current IPE	≤ 2 µA
Nominal discharge surge current In (8/20) µs (Core-Core)	5 kA
Nominal discharge surge current In (8/20) µs (Core-Earth)	5 kA
Total surge current (8/20) µs	10 kA
Max. discharge surge current I _{max} (8/20) µs maximum (Core-Core)	5 kA
Max. discharge surge current I _{max} (8/20) µs maximum (Core-Earth)	5 kA (per path)
Nominal pulse current I _{an} (10/1000) µs (Core-Core)	30 A
Nominal pulse current I _{an} (10/1000) µs (Core-Earth)	100 A (per path)
Lightning test current (10/350) µs, peak value I _{imp}	500 A (per path)
Output voltage limitation at 1 kV/µs (Core-Core) spike	≤ 45 V
Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 650 V
Output voltage limitation at 1 kV/µs (Core-Core) static	≤ 45 V
Output voltage limitation at 1 kV/µs (Core-Earth) static	≤ 650 V
Residual voltage at I _n , (conductor-conductor)	≤ 45 V
Residual voltage with I _{an} (10/1000)µs (conductor-conductor)	≤ 50 V
Protection level UP (Core-Core)	≤ 55 V (C2 (10 kV/5 kA))
Protection level UP (Core-Core)	≤ 53 V (C1 (500 V/250 A))
Response time t _A (Core-Core)	≤ 1 ns
Response time t _A (Core-Earth)	≤ 100 ns
Input attenuation a _E , sym.	0.6 dB (≤ 500 kHz / 50 Ω)
Input attenuation a _E , sym.	0.2 dB (≤ 200 kHz / 150 Ω)
Cut-off frequency f _g (3 dB), sym. in 50 Ohm system	Typ. 6 MHz
Cut-off frequency f _g (3 dB), sym. in 150 Ohm system	Typ. 2 MHz
Capacity (Core-Core)	Typ. 2.5 nF
Resistance in series	3.3 Ω 20 %

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Technical data

Protective circuit

Resistance in series	3.3 Ω
Max. required back-up fuse	315 mA (e.g. T in acc. with IEC 127-2/III)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C2 (10 kV/5 kA)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (10 kV/5 kA)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	D1 (500 A)
Alternating current carrying capacity in acc. with IEC 61643-21 (Core-Earth)	5 A - 1 s

Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14

Connection, protective circuit

Standards/regulations	IEC 61643-21
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Classifications

eclass

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

etim

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943

unspsc

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610

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Classifications

unspsc

UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Approvals

Approvals

Approvals

GOST

Ex Approvals

Approvals submitted

Approval details



Accessories

Accessories

Marking

Marker pen - B-STIFT - 1051993



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

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

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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: 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,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

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Zack marker strip - ZB 6,LGS:U-N - 1051430



Zack marker strip, Strip, white, Labeled, Can be labeled with: Plotter, Printed horizontally: U, V, W, N, GND, U, V, W, N, GND, Mounting type: Snap into tall marker groove, For terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016



Zack marker strip, Strip, white, Labeled, Can be labeled with: Plotter, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, For terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Surge protection device - TT-2-PE-M-24DC - 2920641

Accessories

End cover - TT-D-2-PE-M-BK - 2920654



End cover for TERMITRAB TT-2-PE-M-... and TT-2/2-M-...

Additional products

End cover - TT-D-2-PE-M-BK - 2920654



End cover for TERMITRAB TT-2-PE-M-... and TT-2/2-M-...

Shield connection - SSA 3-6 - 2839295



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

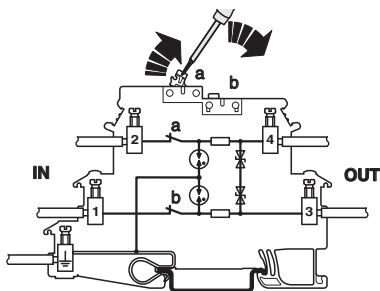
Shield connection - SSA 5-10 - 2839512



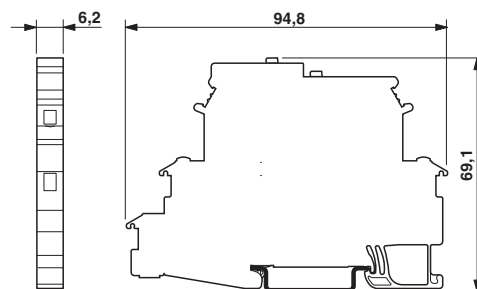
Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black

Drawings

Connection diagram

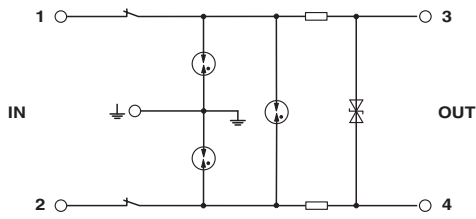


Dimensioned drawing



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Circuit diagram



Schematic diagram

