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

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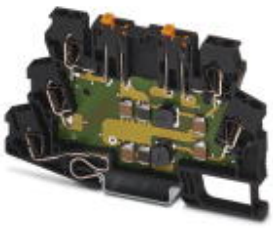

TERMITRAB, spring-cage modular terminal block with integrated surge protection as a filter circuit and disconnect knives, for assembly on NS 35/7.5, voltage U_N 24 V DC, terminal width: 6.2 mm, cover width: 2.2 mm

Product Features

- 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	1 pc
Weight per Piece (excluding packing)	30.15 GRM
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	V2
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
Direction of action	Line-Earth Ground

Protective circuit

IEC test classification	C1
	C3
VDE requirement class	C1
	C3
Nominal voltage U_N	24 V AC
Maximum continuous operating voltage U_C	38 V DC
	30 V AC
Maximum continuous voltage U_C (wire-ground)	38 V DC
	30 V AC
Nominal current I_N	0.5 A (55°C)
Operating effective current I_C at U_C	≤ 100 µA (per path)
Residual current I_{PE}	≤ 1 mA (per path)
Nominal discharge current I_n (8/20) µs (Core-Earth)	350 A
Total surge current (8/20) µs	700 A
Max. discharge current I_{max} (8/20) µs maximum (Core-Earth)	1.5 kA (per path)
	3 kA (in total)
Nominal pulse current Ian (10/1000) µs (Core-Earth)	60 A (per path)
	120 A (in total)
Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 70 V
Output voltage limitation at 1 kV/µs (Core-Earth) static	≤ 70 V
Residual voltage at I_n, (conductor-ground)	≤ 80 V
Residual voltage with Ian (10/1000)µs (conductor-ground)	≤ 80 V
Voltage protection level U_P (Core-Earth)	≤ 80 V (C1 (500 V/250 A))
Response time tA (Core-Earth)	≤ 25 ns
Input attenuation aE, asym.	typ. 40 dB (1 MHz / 50 Ω)
Cut-off frequency fg (3 dB), asym. (PE) in 50 Ohm system	typ. 60 kHz
Cut-off frequency fg (3 dB), asym. (PE) in 150 Ohm system	typ. 20 kHz
Capacity (Core-Earth)	130 nF

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Technical data

Protective circuit

Inductivity in series	100 µH (per path)
Resistance in series	0.5 Ω (per path)
Max. required back-up fuse	500 mA (e.g. T in acc. with IEC 127-2/III)
Surge current resistance (conductor-ground)	C1 (500 A/250 A)
	C3 (25 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

Standards and Regulations

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

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
ETIM 5.0	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

GOST / GOST / UL Listed

Ex Approvals

Approvals submitted

Approval details

GOST

GOST

UL Listed

Drawings

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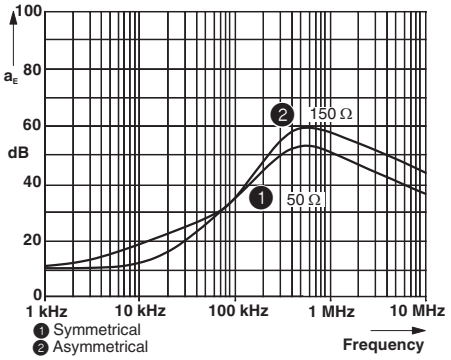
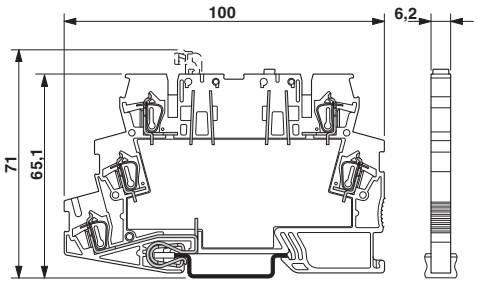
Diagram



Dimensioned drawing



Circuit diagram