

Surge protection device - TT-ST-M-2/2-24DC - 2858917

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TERMITRAB, spring-cage modular terminal block with integrated surge protection 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

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



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	31.39 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
Standards for air and creepage distances	EN 60664-1

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Technical data

General

	IEC 60664-1
Surge voltage category	III
Pollution degree	2
Mounting type	DIN rail: 35 mm
Type	Double-level terminal block with disconnect knife
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	$\leq 10 \mu A$ (per path)
Residual current I_{PE}	$\leq 20 \mu A$
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 I_{an} (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	$\leq 40 V$
Output voltage limitation at 1 kV/ μs (Core-Earth) static	$\leq 40 V$
Residual voltage at I_n , (conductor-ground)	$\leq 40 V$
Residual voltage with I_{an} (10/1000) μs (conductor-ground)	$\leq 45 V$
Voltage protection level U_p (Core-Earth)	$\leq 80 V$ (C2 - 10 kV / 5 kA)

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Protective circuit

	≤ 40 V (static)
Response time t_A (Core-Earth)	≤ 1 ns
Input attenuation a_E , 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 f_g (3 dB), asym. (PE) in 50 Ohm system	typ. 3 MHz
Cut-off frequency f_g (3 dB), asym. (PE) in 150 Ohm system	typ. 1 MHz
Cut-off frequency f_g (3 dB), asym. (PE) in 600 Ohm system	typ. 250 kHz
Capacity (Core-Earth)	2 nF
Resistance in series	9.4 $\Omega \pm 10$ % (per path)
	9.4 Ω
Surge protection fault message	None
Max. required back-up fuse	315 mA
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	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 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.	4 mm ²
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

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Classifications

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
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

GOST / GOST / UL Listed / GL

Ex Approvals

Approvals submitted

Approval details

GOST 

GOST 

UL Listed 

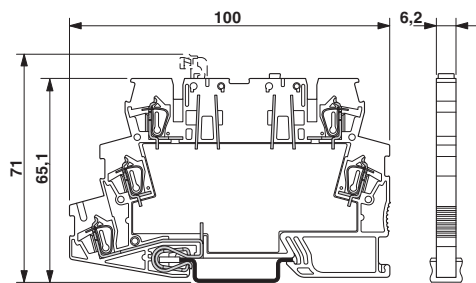
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Approvals

GL

Drawings

Dimensioned drawing



Circuit diagram

