

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

Product Features

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



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	28.43 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
Flammability rating according to UL 94	V-0

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Technical data

General

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
Maximum continuous voltage U_C (wire-wire)	30 V DC
	21 V AC
Nominal current I_N	350 mA (45°C)
Operating effective current I_C at U_C	$\leq 10 \mu\text{A}$
Standby power consumption P_C	$\leq 1.94 \text{ VA}$
Residual current I_{PE}	$\leq 2 \mu\text{A}$
Nominal discharge current I_n (8/20) μs (Core-Core)	5 kA
Nominal discharge current I_n (8/20) μs (Core-Earth)	5 kA
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-Core)	5 kA
Max. discharge current I_{max} (8/20) μs maximum (Core-Earth)	5 kA
Nominal pulse current I_{an} (10/1000) μs (Core-Core)	100 A
Nominal pulse current I_{an} (10/1000) μs (Core-Earth)	200 A (in total)
Impulse discharge current (10/350) μs , peak value I_{imp}	1 kA (per path)

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Protective circuit

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 % (per path)
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 type IN	Spring-cage
Connection type OUT	Spring-cage
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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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

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 / EAC

Ex Approvals

Approvals submitted

Approval details

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Approvals

UL Listed

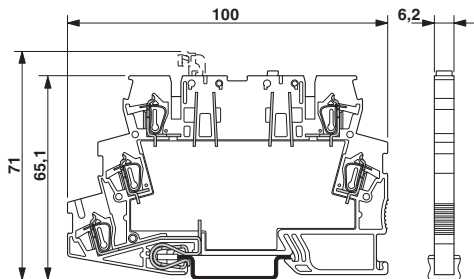
GL

EAC

EAC

Drawings

Dimensional drawing



Circuit diagram

