Surge protection device - TTC-6P-2X1-F-24DC-PT-I - 1065320

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Surge protection, consisting of protective plug and base element, with integrated status indicator for two signal wires with common reference potential, e.g., Digital IN/OUT. Indirect grounding via gas-filled surge arrester.

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 727066
GTIN	4055626727066
Weight per Piece (excluding packing)	37.400 g
Custom tariff number	85363010
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Dimensions

Height	105.8 mm
Width	6.2 mm +0.1 mm
Depth	100 mm (incl. DIN rail 7.5 mm)

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 4000 m (amsl (above mean sea level))
Degree of protection	IP20

General

Housing material	PBT
Flammability rating according to UL 94	V-0
Color	traffic grey A RAL 7042
	light grey RAL 7035

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Technical data

General

Mounting type	DIN rail: TH 35 - 7.5 mm
Type	DIN rail module, two-section, divisible
Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous voltage U_C	30 V DC
	21 V AC
Rated current	600 mA (56 °C)
Operating effective current I_C at U_C	≤ 5 µA
Residual current I_{PE}	≤ 1 µA
Nominal discharge current I_n (8/20) µs (line-earth)	5 kA
Nominal discharge current I_n (8/20) µs (core-signal ground)	5 kA
Pulse discharge current I_{imp} (10/350) µs (line-earth)	0.5 kA
Pulse discharge current I_{imp} (10/350) µs (line-signalground)	0.5 kA
Total discharge current I_{total} (8/20) µs	10 kA
Voltage protection level U_p (line-earth)	≤ 750 V (C1 - 1 kV/500 A)
	≤ 800 V (C2 - 10 kV / 5 kA)
	≤ 1.1 kV (C3 - 25 A)
	≤ 1.15 kV (C3 - 100 A)
Voltage protection level U_p (line-signalground)	≤ 140 V (C1 - 1 kV/500 A)
	≤ 190 V (C2 - 10 kV / 5 kA)
	≤ 45 V (C3 - 25 A)
	≤ 50 V (C3 - 100 A)
Voltage protection level U_p static (line-earth)	≤ 750 V (C1 - 1 kV/500 A)
	≤ 800 V (C2 - 10 kV / 5 kA)
Voltage protection level U_p static (line-signalground)	≤ 55 V (C1 - 1 kV/500 A)
	≤ 120 V (C2 - 10 kV / 5 kA)
Response time tA (line-signalground)	≤ 1 ns
Response time t_A (line-earth)	≤ 100 ns
Input attenuation aE, asym.	typ. 0.3 dB (≤ 270 kHz/150 Ω)
Cut-off frequency fg (3 dB), asym. (GND) in 150 Ohm system	typ. 960 kHz
Capacity (line-signalground)	typ. 2.2 nF
Resistance in series	1.65 Ω ±20 %
Max. required back-up fuse	630 mA (FF)
Impulse durability (line-earth)	C1 - 1 kV / 500 A

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Technical data

Protective circuit

	C2 - 10 kV / 5 kA
	C3 - 100 A
	D1 - 500 A
Impulse durability (line-signalground)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C3 - 100 A
	D1 - 500 A
Pulse reset time (line-earth)	≤ 30 ms
Pulse reset time (line-signalground)	≤ 300 ms

Additional technical data

Max. total discharge current $I_{total\ max}$ (8/20) µs	20 kA (1x)

Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section solid	0.2 mm² ... 4 mm²
Conductor cross section AWG	24 ... 12

Standards and Regulations

Standards/specifications	IEC 61643-21 2000 + corrigendum 2001 + A1:2008, modified + A2:2012
	EN 61643-21 2001 + A1:2009 + A2:2013

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Classifications

eCl@ss

eCl@ss 6.0	27130800
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807
eCl@ss 9.0	27130807

ETIM

ETIM 5.0	EC000943
ETIM 6.0	EC000943
ETIM 7.0	EC000943

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Approvals

Approvals

Approvals

UL Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 138168

Accessories

Accessories

End block

End clamp - CLIPFIX 35-5 - 3022276

Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

Labeled terminal marker

Zack Marker strip, flat - ZBF 6 CUS - 0825027

Zack Marker strip, flat, Strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm

Zack Marker strip, flat - ZBF 6,QR:FORTL.ZAHLEN - 0808765

Zack Marker strip, flat, Strip, white, labeled, Printed vertically: 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 size: 5.15 x 6.15 mm

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Accessories

Marker pen

Marker pen - X-PEN 0,35 - 0811228

Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

Terminal marking

Zack Marker strip, flat - ZBF 6:UNBEDRUCKT - 0808710

Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 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: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm

Additional products

Remote signaling set - TTC-6-FMRS-PT - 2907811

Module set for the optical monitoring and floating remote signaling of neighboring surge protective devices of the TERMITRAB complete product range.

Shield connection - SSA 3-6 - 2839295

Shield fast connection for 3 ... 6 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black

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Accessories

Shield connection - SSA 5-10 - 2839512

Shield fast connection for 5 ... 10 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black

Spare parts

Surge protection plug - TTC-6P-2X1-24DC-I-P - 2907843

Surge protection plug with integrated status indicator on the module for two signal wires with a common reference potential. Nominal voltage: 24 V DC