

Surge protection device - TTC-6P-2X1-24DC-UT-I - 2906810

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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.

Your advantages

- ✓ Space-saving and inexpensive with a narrow overall width of just 6.2 mm
- ✓ Signaling without additional auxiliary power, thanks to the mechanical status indicator
- ✓ Optional remote signaling module monitors up to 40 items, without additional wiring
- ✓ The signal is not influenced during maintenance work, thanks to the impedance-neutral insertion and removal of protective plugs
- ✓ Error-free replacement of protective plugs, thanks to coding
- ✓ Safe behavior in the event of overload, thanks to the integrated disconnect device
- ✓ Simple testing and documentation with CHECKMASTER 2, thanks to pluggable protective modules



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 135748
GTIN	4055626135748
Weight per Piece (excluding packing)	40.000 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

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

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Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 %
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
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}	≤ 10 μA
Nominal discharge current I_n (8/20) μs (line-earth)	5 kA
Pulse discharge current I_{imp} (10/350) μs (line-earth)	0.5 kA
Total discharge current I_{total} (8/20) μs	10 kA
Voltage protection level U_p (line-earth)	≤ 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)	≤ 55 V (C1 - 1 kV/500 A)
	≤ 120 V (C2 - 10 kV / 5 kA)
Response time t_A (line-earth)	≤ 1 ns
Input attenuation aE, asym.	typ. 0.3 dB (≤ 270 kHz/150 Ω)

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Protective circuit

Cut-off frequency f_g (3 dB), asym. (PE) in 150 Ohm system	typ. 960 kHz
Capacity (line-earth)	typ. 2.2 nF
Resistance per path	1.65 Ω $\pm$ 20 %
Max. required back-up fuse	630 mA (FF)
Impulse durability (line-earth)	C1 - 1 kV / 500 A
	C2 - 10 kV / 5 kA
	C3 - 100 A
	D1 - 500 A
Pulse reset time (line-earth)	$\leq$ 300 ms

Additional technical data

Max. total discharge current $I_{total\ max}$ (8/20) μ s	20 kA (1x)
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Connection data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 Nm ... 0.6 Nm
Stripping length	8 mm
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 ... 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 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"