

Surge protection device - PT-IQ-2X2-48DC-UT - 2800986

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Surge protection, consisting of protective plug and base element, with integrated multi-stage status indicator on the module for two 2-wire floating signal circuits.

Your advantages

- ✓ Surge protection system
- ✓ Multi-level state monitoring
- ✓ Collective message about supply and remote module
- ✓ System supplied via DIN rail bus
- ✓ Up to 28 protection modules per supply module
- ✓ Maximum ease of maintenance thanks to the two-piece design
- ✓ Codable plug
- ✓ Impedance-neutral disconnection of plug for maintenance purposes
- ✓ Base element remains an integral part of the installation

Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 665742
GTIN	4046356665742

Technical data

Dimensions

Height	91.1 mm
Width	17.7 mm
Depth	77.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	1 Div.

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
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Technical data

Ambient conditions

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

General

Housing material	PA 6.6
Flammability rating according to UL 94	V-0
Color	jet black RAL 9005
Mounting type	DIN rail: 35 mm
Type	DIN rail module, two-section, divisible
Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground

Additional descriptions

Note	Remote signaling as well as the power supply of the DIN rail connector are established by snapping the module into place on the DIN rail connector.
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Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	48 V DC
Maximum continuous voltage U_C	53 V DC
	37 V AC
Nominal current I_N	300 mA
Rated current	300 mA
Operating effective current I_C at U_C	≤ 5 μ A (in the signal circuit)
Residual current I_{PE}	≤ 2 μ A (per signal circuit)
Nominal discharge current I_n (8/20) μ s (line-line)	10 kA
Nominal discharge current I_n (8/20) μ s (line-earth)	10 kA
Pulse discharge current I_{imp} (10/350) μ s (line-earth)	2.5 kA
Total discharge current I_{total} (8/20) μ s	20 kA
Voltage protection level U_p (line-line)	≤ 100 V (C1 - 1 kV/500 A)
	≤ 150 V (C2 - 10 kV / 5 kA)
	≤ 170 V (C2 - 10 kA)
	≤ 90 V (C3 - 25 A)
	≤ 95 V (C3 - 100 A)
Voltage protection level U_p (line-earth)	≤ 600 V (C1 - 1 kV/500 A)
	≤ 750 V (C2 - 10 kV / 5 kA)
	≤ 800 V (C2 - 10 kA)
	≤ 700 V (C3 - 25 A)

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Protective circuit

	$\leq 800 \text{ V}$ (C3 - 100 A)
Voltage protection level U_p static (line-line)	$\leq 85 \text{ V}$ (C2 - 10 kA)
Response time t_A (line-line)	$\leq 1 \text{ ns}$
Response time t_A (line-earth)	$\leq 100 \text{ ns}$
Input attenuation aE, sym.	typ. 0.3 dB ($\leq 450 \text{ kHz}/150 \Omega$)
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 1.9 MHz
Capacity (line-earth)	typ. 1.5 nF
Resistance in series	$1.2 \Omega \pm 5 \%$
Surge protection fault message	Optical, multi-stage
Max. required back-up fuse	315 mA (FF)
Impulse durability (line-line)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C2 - 10 kA
	C3 - 100 A
Impulse durability (line-earth)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C2 - 10 kA
	C3 - 100 A
	D1 - 2.5 kA
Pulse reset time (line-line)	$\leq 300 \text{ ms}$
Pulse reset time (line-earth)	$\leq 4000 \text{ ms}$

Connection data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 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

Connection, equipotential bonding

Connection method	DIN rail NS35
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Standards and Regulations

Standards/specifications	IEC 61643-21 2000 + A1:2008, modified
	EN 61643-21 2001 + A1:2009 + A2:2013
	EN 61000-6-3 2007 + A1:2011
	EN 61000-6-2 2005

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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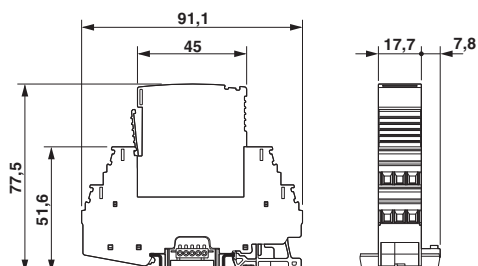
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Drawings

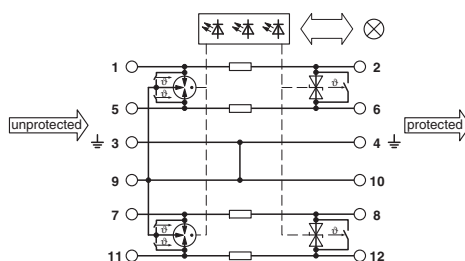
Pictogram



Dimensional drawing



Circuit diagram



Approvals

Approvals

Approvals

UL Listed / EAC / CSA / CSAus / cCSAus

Ex Approvals

Approval details

UL Listed



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

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EAC



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CSA



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