

Surge protection device - PT-IQ-2X2+F-5DC-PT - 2801260


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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. Indirect grounding via gas-filled surge arrester.



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 766432
GTIN	4046356766432

Technical data

Dimensions

Height	109.3 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
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

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Technical data

General

Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground
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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	5 V DC
Maximum continuous voltage U_C	6 V DC
	4 V AC
Rated current	700 mA (50 °C)
Operating effective current I_C at U_C	≤ 2 mA (in the signal circuit)
Residual current I_{PE}	≤ 1 μ A
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
Nominal discharge current I_n (8/20) μ s (core-signal ground)	10 kA
Pulse discharge current I_{imp} (10/350) μ s (line-earth)	2.5 kA
Pulse discharge current I_{imp} (10/350) μ s (line-signalground)	2.5 kA
Total discharge current I_{total} (8/20) μ s	20 kA
Voltage protection level U_p (line-line)	≤ 85 V (C1 - 1 kV/500 A)
	≤ 110 V (C2 - 10 kV / 5 kA)
	≤ 25 V (C3 - 25 A)
	≤ 25 V (C3 - 50 A)
Voltage protection level U_p (line-earth)	≤ 900 V (C1 - 1 kV/500 A)
	≤ 1300 V (C2 - 10 kV / 5 kA)
	≤ 1000 V (C3 - 25 A)
	≤ 1300 V (C3 - 100 A)
Voltage protection level U_p (line-signalground)	≤ 600 V (C1 - 1 kV/500 A)
	≤ 750 V (C2 - 10 kV / 5 kA)
	≤ 700 V (C3 - 25 A)
	≤ 800 V (C3 - 100 A)
Voltage protection level U_p static (line-line)	≤ 26 V (C1 - 1 kV/500 A)
	≤ 70 V (C2 - 10 kV / 5 kA)
Response time t_A (line-line)	≤ 1 ns
Response time t_A (line-signalground)	≤ 100 ns
Response time t_A (line-earth)	≤ 100 ns

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Protective circuit

Input attenuation aE, sym.	typ. 0.3 dB (≤ 40 kHz/150 Ω)
Cut-off frequency fg (3 dB), sym. in 150 Ohm system	typ. 300 kHz
Capacity (line-line)	typ. 7.5 nF
Resistance in series	1.2 $\Omega \pm 5\%$
Surge protection fault message	Optical, multi-stage
Max. required back-up fuse	800 mA (FF)
Impulse durability (line-line)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C3 - 50 A
Impulse durability (line-earth)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C3 - 100 A
	D1 - 2.5 kA
Surge current carrying capability (wire-signal ground)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C3 - 100 A
	D1 - 2,5 kA
Pulse reset time (line-line)	≤ 10 ms
Pulse reset time (line-earth)	≤ 10 ms
Pulse reset time (line-signalground)	≤ 10 ms

Connection data

Connection method	Push-in connection
Stripping length	10 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 + A2:2012
	EN 61643-21 2001 + A1:2009
	EN 61000-6-3 2007 + A1:2011
	EN 61000-6-2 2005

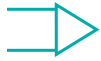
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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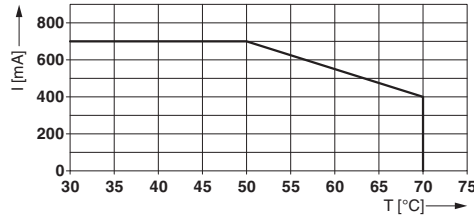
Drawings

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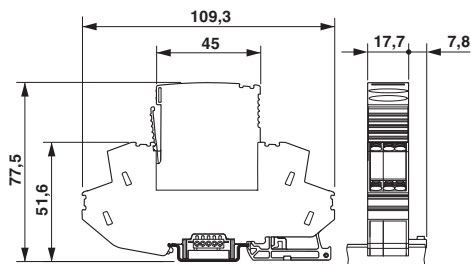
Pictogram



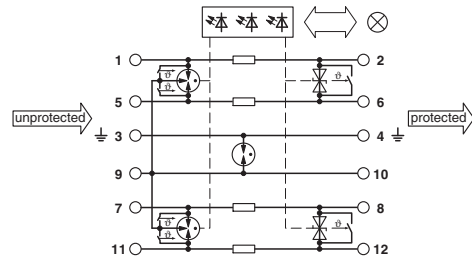
Diagram



Dimensional drawing



Circuit diagram



Approvals

Approvals

Approvals

UL Listed

Ex Approvals

Approval details

UL Listed



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