

Surge protection device - PT-IQ-4X1+F-48DC-UT - 2801220

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Surge protection, consisting of protective plug and base element, with integrated multi-stage status indicator on the module for four signal wires with common reference potential. Indirect grounding via gas-filled surge arrester.

The figure shows the PT-IQ-2x2-24DC-UT version



Key Commercial Data

Packing unit	1 pc
GTIN	
Weight per Piece (excluding packing)	146.6 g
Custom tariff number	85363010
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Dimensions

Height	91 mm
Width	17.7 mm
Depth	77.5 mm
Horizontal pitch	1 Div.

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	IP20

General

Housing material	PA 6.6
Inflammability class according to UL 94	V-0

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Technical data

General

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

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
Operating effective current I_C at U_C	$\leq 6 \mu\text{A}$ (per path)
Residual current I_{PE}	$\leq 1 \mu\text{A}$
Nominal discharge current I_n (8/20) μs (Core-Earth)	10 kA
Nominal discharge current I_n (8/20) μs (Core-GND)	10 kA
Pulse discharge current I_{imp} (10/350) μs (core-ground)	2.5 kA
Pulse discharge current I_{imp} (10/350) μs (core-GND)	2.5 kA
Impulse discharge current (10/350) μs , peak value I_{imp}	2.5 kA
Voltage protection level U_p (core-ground)	$\leq 750 \text{ V}$ (C1 - 1 kV/500 A)
	$\leq 950 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 850 \text{ V}$ (C3 - 25 A)
Voltage protection level U_p (core-GND)	$\leq 105 \text{ V}$ (C1 - 1 kV/500 A)
	$\leq 160 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 90 \text{ V}$ (C3 - 25 A)
Voltage protection level U_p static (core-ground)	$\leq 200 \text{ V}$ (C2 - 10 kV)
Response time t_A (Core-Earth)	$\leq 1 \text{ ns}$
	$\leq 100 \text{ ns}$
Input attenuation a_E , asym.	typ. 0.3 dB ($\leq 530 \text{ kHz}/150 \Omega$)
Cut-off frequency f_g (3 dB), asym. (GND) in 150 Ohm system	typ. 1.9 MHz
Capacity (Core-GND)	typ. 1.5 nF
Resistance in series	1.2 $\Omega \pm 5 \%$
Max. required back-up fuse	315 mA (FF)
Impulse durability (conductor-ground)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C2 - 10 kA
	C3 - 25 A
	D1 - 2,5 kA

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Protective circuit

Impulse durability (conductor-GND)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C2 - 10 kA
	C3 - 25 A
	D1 - 2.5 kA
Pulse reset time (conductor-ground)	≤ 250 ms
Pulse reset time (conductor-GND)	≤ 1500 ms

Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.5 Nm
Stripping length	8 mm
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12

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	27141116

ETIM

ETIM 3.0	EC000943
ETIM 4.0	EC000899
ETIM 5.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610

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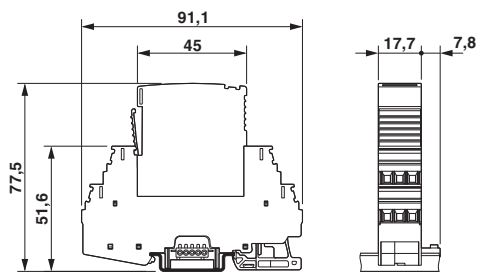
Classifications

UNSPSC

UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Drawings

Dimensional drawing



Circuit diagram

