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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Surge protection device - PT-IQ-2X2+F-48DC-UT - 2800987

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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.

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

Product Features

- ✓ 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
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	91.1 mm
Width	17.7 mm
Depth	77.5 mm

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Technical data

Dimensions

Horizontal pitch	1 Div.
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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
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	$\leq 5 \mu A$ (in the signal circuit)
Residual current I_{PE}	$\leq 1 \mu A$
Nominal discharge current I_n (8/20) μs (Core-Core)	10 kA
Nominal discharge current I_n (8/20) μs (Core-Earth)	10 kA
Pulse discharge current I_{imp} (10/350) μs (core-ground)	2.5 kA
Total surge current (8/20) μs	20 kA
Impulse discharge current (10/350) μs , peak value I_{imp}	2.5 kA
Voltage protection level U_p (core-core)	$\leq 100 V$ (C1 - 1 kV/500 A)
	$\leq 150 V$ (C2 - 10 kV / 5 kA)
	$\leq 170 V$ (C2 - 10 kA)
	$\leq 90 V$ (C3 - 25 A)
	$\leq 95 V$ (C3 - 100 A)
Voltage protection level U_p (core-ground)	$\leq 900 V$ (C1 - 1 kV/500 A)
	$\leq 1300 V$ (C2 - 10 kV / 5 kA)

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Technical data

Protective circuit

	$\leq 1200 \text{ V (C2 - 10 kA)}$
	$\leq 1000 \text{ V (C3 - 25 A)}$
	$\leq 1300 \text{ V (C3 - 100 A)}$
Voltage protection level U_p (core-GND)	$\leq 600 \text{ V (C1 - 1 kV/500 A)}$
	$\leq 750 \text{ V (C2 - 10 kV / 5 kA)}$
	$\leq 800 \text{ V (C2 - 10 kA)}$
	$\leq 700 \text{ V (C3 - 25 A)}$
	$\leq 800 \text{ V (C3 - 100 A)}$
Voltage protection level U_p static (core-core)	$\leq 85 \text{ V (C2 - 10 kA)}$
Response time t_A (Core-Core)	$\leq 1 \text{ ns}$
Response time t_A (Core-Earth)	$\leq 100 \text{ ns}$
	$\leq 100 \text{ ns}$
Input attenuation a_E , sym.	typ. $0.3 \text{ dB } (\leq 450 \text{ kHz})$
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 1.9 MHz
Capacity (Core-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 (conductor-conductor)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C2 - 10 kA
	C3 - 100 A
Impulse durability (conductor-ground)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C2 - 10 kA
	C3 - 100 A
	D1 - 2.5 kA
Impulse durability (conductor-GND)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C2 - 10 kA
	C3 - 100 A
	D1 - 2.5 kA
Pulse reset time (conductor-conductor)	$\leq 300 \text{ ms}$
Pulse reset time (conductor-ground)	$\leq 30 \text{ ms}$
Pulse reset time (conductor-GND)	$\leq 4000 \text{ ms}$

Connection data

Connection method	Screw connection
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Technical data

Connection data

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

Connection, equipotential bonding

Connection method	NS 35 DIN rail or connection terminal block
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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	27130807

ETIM

ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

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Approvals

Approvals

Approvals

UL Listed / EAC / CSA / CSAus / cCSAus

Ex Approvals

Approvals submitted

Approval details

UL Listed 

EAC

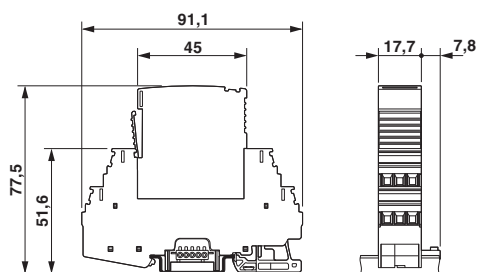
CSA 

CSAus

cCSAus

Drawings

Dimensional drawing



Circuit diagram

