

# PT-IQ-1X2-24DC-UT

Order No.: 2800976



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



Commercial data	
EAN	 4 046356 665186
Note	Made-to-order
Pack	1
Customs tariff	85363010
Country of Origin	DE

### Product notes

WEEE/RoHS-compliant since:  
10/05/2011



Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation at <http://www.download.phoenixcontact.com>. The General Terms and Conditions of Use apply to Internet downloads.

## Technical data

General	
Housing material	PA 6.6
Inflammability class according to UL 94	V0
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Mounting type	DIN rail mounting
Design	DIN rail module, two-section, divisible
Degree of protection	IP20
Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/ Shield-Earth Ground
Width	17.70 mm
Height	91.10 mm
Pitch unit	1 Div.

### Protective circuit

IEC category	C1
	C2
	C3
	D1
Nominal voltage $U_N$	24 V
Maximum continuous operating voltage $U_C$	30 V DC
	21 V AC
Nominal current $I_N$	1000 mA (Up to 45°C)
Operating effective current $I_C$ at $U_C$	$\leq 2$ mA (per system)
Ground conductor current $I_{PE}$	$\leq 2$ $\mu$ A (per system)
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Core)	10 kA
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Earth)	10 kA
Lightning test current (10/350) $\mu$ s, peak value $I_{imp}$	2.5 kA
Protection level $U_P$ (Core-Core)	$\leq 80$ V (C1 - 1 kV/500 A)
	$\leq 130$ V (C2 - 10 kV / 5 kA)
	$\leq 140$ V (C2 - 10 kA)
	$\leq 55$ V (C3 - 25 A)
	$\leq 60$ V (C3 - 100 A)
Protection level $U_P$ (Core-Earth)	$\leq 600$ V (C1 - 1 kV/500 A)
	$\leq 750$ V (C2 - 10 kV / 5 kA)
	$\leq 800$ V (C2 - 10 kA)
	$\leq 700$ V (C3 - 25 A)
	$\leq 800$ V (C3 - 100 A)
Protection level $U_P$ static (core-core)	$\leq 64$ V (C1 - 1 kV/500 A)
Response time $t_A$ (Core-Core)	$\leq 1$ ns

Response time $t_A$ (Core-Earth)	$\leq 100$ ns
Input attenuation aE, sym.	Typ. 0.3 dB ( $\leq 270$ kHz)
Cut-off frequency $f_g$ (3 dB), sym. in 150 Ohm system	Typ. 1.1 MHz
Capacity (Core-Earth)	2 nF
Resistance in series	1.2 $\Omega$ $\pm 5\%$
Message: Surge protection fault	Optical, multi-stage
Max. required back-up fuse	1 A (FF)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C1 (1 kV/500 A)
	C2 (10 kV/5 kA)
	C2 (10 kA)
	C3 (25 A)
	C3 (50 A)
	C3 (100 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C1 (1 kV / 500 A)
	C2 (10 kV / 5 kA)
	C2 (10 kA)
	C3 (25 A)
	C3 (50 A)
	C3 (100 A)
	D1 (2.5 kA)
Pulse reset time $t_r$ in acc. with IEC 61643-21 (Core-Core)	$\leq 4000$ ms
Pulse reset time $t_r$ in acc. with IEC 61643-21 (Core-Earth)	$\leq 2600$ ms
Overload failure mode as per IEC 61643-21 (plug)	Mode 2

#### Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Tightening torque	0.5 Nm
Stripping length	8 mm
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24

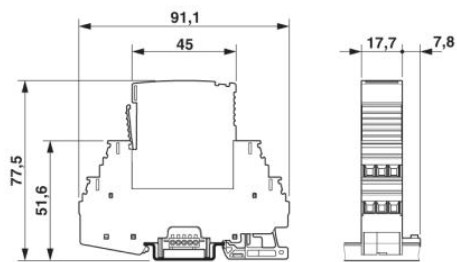
Conductor cross section AWG/kcmil max	12
---------------------------------------	----

**Connection, equipotential bonding**

Connection method	NS 35 DIN rail or connection terminal block
-------------------	---

**Drawings**

Dimensioned drawing



Circuit diagram

