

Surge protection device - PT-IQ-2X2-EX-24DC-UT - 2801513


Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 801232
GTIN	4046356801232

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
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 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	black
Mounting type	DIN rail: 35 mm
Type	DIN rail module, two-section, divisible

Surge protection device - PT-IQ-2X2-EX-24DC-UT - 2801513

Technical data

General

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	24 V DC
Maximum continuous voltage U_C	30 V DC
	21 V AC
Rated current	350 mA
Operating effective current I_C at U_C	$\leq 5 \mu\text{A}$ (per system)
Residual current I_{PE}	$\leq 100 \text{ nA}$ (per system)
Nominal discharge current I_n (8/20) μs (line-line)	10 kA
Nominal discharge current I_n (8/20) μs (line-earth)	10 kA
Pulse discharge current I_{imp} (10/350) μs (core-ground)	2 kA
Total discharge current I_{total} (8/20) μs	20 kA
Voltage protection level U_p (core-core)	$\leq 60 \text{ V}$ (C1 - 1 kV/500 A)
	$\leq 110 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 140 \text{ V}$ (C2 - 10 kA)
	$\leq 50 \text{ V}$ (C3 - 25 A)
	$\leq 55 \text{ V}$ (C3 - 100 A)
Voltage protection level U_p (core-ground)	$\leq 1.3 \text{ kV}$ (C2 - 10 kV / 5 kA)
	$\leq 1.5 \text{ kV}$ (C2 - 10 kA)
	$\leq 1.3 \text{ kV}$ (C3 - 100 A)
Response time t_A (line-line)	$\leq 1 \text{ ns}$
Response time t_A (line-earth)	$\leq 100 \text{ ns}$
Input attenuation a_E , sym.	typ. 0.3 dB ($\leq 300 \text{ kHz} / 150 \Omega$)
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 1.1 MHz
Capacity (core-earth)	typ. 2 nF
Resistance in series	1.2 $\Omega \pm 5 \%$
Surge protection fault message	Optical, multi-stage
Max. required back-up fuse	350 mA (F)
Impulse durability (conductor-conductor)	C1 - 1 kV/500 A
	C2 - 10 kA
	C3 - 100 A
Impulse durability (conductor-ground)	C2 - 10 kA
	D1 - 2 kA
Pulse reset time (conductor-conductor)	$\leq 30 \text{ ms}$
Pulse reset time (conductor-ground)	$\leq 30 \text{ ms}$

Surge protection device - PT-IQ-2X2-EX-24DC-UT - 2801513

Technical data

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
-------------------	---------------

Remote indication contact

Switching function	via DIN rail connector
--------------------	------------------------

Standards and Regulations

Standards/specifications	EN 61643-21 A2:2013
	IEC 61643-21 A2:2012
	EN 61000-6-2 2005
	EN 61000-6-3/A1 2011

General

Maximum inner capacitance C_i	negligible
Max. internal inductance L_i	negligible
Max. input current I_i	350 mA
max. input voltage U_i	30 V DC
max. input power P_i	1.2 W
Insulation voltage to ground	> 500 V AC
Standards/specifications	EN 60079-0 2012
	EN 60079-11 2012
	EN 60079-15 2010
	IEC 60079-0 2012
	IEC 60079-11 2012
	IEC 60079-15 2010
Ambient temperature (operation)	-40 °C ... 50 °C (T6)
	-40 °C ... 70 °C (T4)

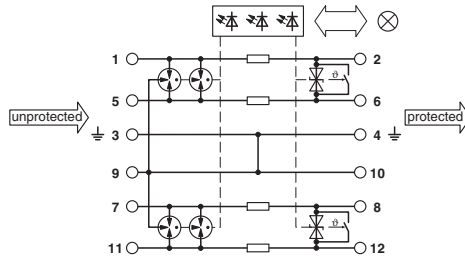
Drawings

Surge protection device - PT-IQ-2X2-EX-24DC-UT - 2801513

Pictogram



Circuit diagram



Approvals

Approvals

Approvals

UL Listed

Ex Approvals

IECEEx / ATEX / UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed



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

FILE E 138168

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>