Surge protection device - PT-IQ-1X2-TELE-PT - 2801290

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The figure shows the PT-IQ-1x2-24DC-PT version

Surge protective device, consisting of connector and base element, with integrated multi-stage status indicator on the module, for protecting a double wire for analog and digital telecommunications interfaces (VDSL up to 50 Mbps).

Key Commercial Data

Packing unit	1 pc
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	109.3 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
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-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
	B2
VDE requirement class	C1
	C2
	C3
	D1
	B2
Nominal voltage U_N	180 V DC
Maximum continuous voltage U_C	180 V DC
Nominal current I_N	150 mA (25 °C)
Operating effective current I_C at U_C	≤ 1 µA
Residual current I_{PE}	≤ 1 µA
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)	≤ 290 V (B2 - 100 A)
	≤ 290 V (C1 - 1 kV)
	≤ 290 V (C2 - 10 kV)
	≤ 300 V (C2 - 10 kA)
	≤ 290 V (C3 - 50 A)
Voltage protection level U_p (core-ground)	≤ 500 V (B2 - 100 A)
	≤ 600 V (C1 - 1 kV)
	≤ 600 V (C2 - 10 kV)
	≤ 650 V (C2 - 10 kA)
	≤ 700 V (C3 - 50 A)
Response time tA (Core-Core)	≤ 1 ns
Response time tA (Core-Earth)	≤ 100 ns
Input attenuation aE, sym.	typ. 0.3 dB (≤ 5 MHz / 150 Ω)
Cut-off frequency fg (3 dB), sym. in 150 Ohm system	typ. 25 MHz

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Technical data

Protective circuit

Capacity (Core-Core)	typ. 60 pF
Resistance in series	1.2 Ω ±5 %
Max. required back-up fuse	150 mA (slow-blow)
Impulse durability (conductor-conductor)	C1 - 500 A
	C2 - 10 kA
	C3 - 50 A
	B2 - 100 A
Impulse durability (conductor-ground)	C1 - 500 A
	C2 - 10 kA
	C3 - 50 A
	B2 - 100 A
	D1 - 2,5 kA
Pulse reset time (conductor-conductor)	≤ 30 ms

Connection data

Connection method	Push-in connection
Connection type IN	Push-in connection
Connection type OUT	Push-in connection
Stripping length	10 mm
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section solid	0.2 mm² ... 4 mm²
Conductor cross section AWG	24 ... 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	27130807
eCl@ss 9.0	27130807

ETIM

ETIM 3.0	EC000943
ETIM 4.0	EC000943

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Classifications

ETIM

ETIM 5.0	EC000943

UNSPSC

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

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approvals submitted

Approval details

UL Listed

cUL Listed

cULus Listed

Accessories

Accessories

Device marking

Surge protection device - PT-IQ-1X2-TELE-PT - 2801290

Accessories

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128

Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

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Labeled terminal marker

Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671

Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821

Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 2 - 20, 22 - 40, etc. up to 82 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863

Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697

Zack Marker strip, flat, Strip, white, labeled, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Accessories

Marker pen

Marker pen - X-PEN 0,35 - 0811228

Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

Mounting material

Electronic housing - E/ME TBUS NS35 GY - 2713780

End clamp, stable construction for DIN rail bus connector

PCB plug

Printed-circuit board connector - FK-MC 0,5/ 5-ST-2,5 - 1881354

Plug component, Nominal current: 4 A, Rated voltage (III/2): 160 V, Number of positions: 5, Pitch: 2.5 mm, Connection method: Push-in spring connection, Color: green, Contact surface: Tin

Terminal marking

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642

Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm

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Accessories

Zack Marker strip, flat - ZBF 5/WH-100:UNBEDRUCKT - 0808668

Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

Required add-on products

Surge protection controller - PT-IQ-PTB-PT - 2801296

Controller for power supply and multi-stage, floating remote signaling of connected surge protection modules.

Additional products

Shield connection - SSA 3-6 - 2839295

shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black

Shield connection - SSA 5-10 - 2839512

Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black

Spare parts

Surge protection device - PT-IQ-1X2-TELE-PT - 2801290

Accessories

Surge protection plug - PT-IQ-1X2-TELE-P - 2800782

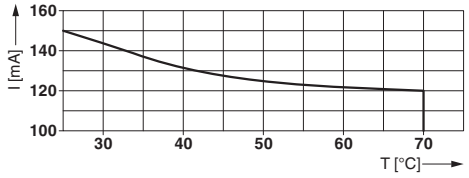
Surge protection plug with integrated multi-stage status indicator on the module, for protecting a double wire from analog and digital telecommunications interfaces (up to 16 Mbps).

DIN rail connector - PT-IQ-17,5-TBUS-5-2.0 - 2906878

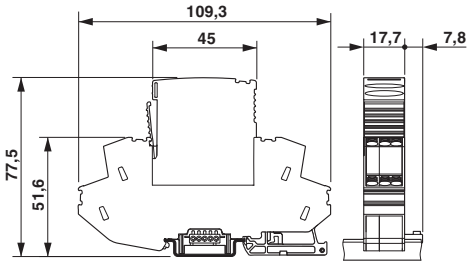
DIN rail connector for PT-IQ system for establishing remote signaling and the power supply when a surge protection module is snapped on.

Drawings

Diagram



Dimensional drawing



Circuit diagram