

Surge protection device - PT-IQ-3-HF-12DC-PT - 2801288

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Surge protection, consisting of protective plug and base element, with integrated multi-stage status indicator on the module for three signal wires with common reference potential. For HF applications and telecommunications interfaces without supply voltage (up to 90 Mbps).

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



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 |
| Inflammability class according to UL 94 | V0 |
| Color | black |
| Standards for clearances and creepage distances | IEC 60664-1 |
| Mounting type | DIN rail: 35 mm |

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Technical data

General

| | |
|---------------------|--|
| Type | DIN rail module, two-section, divisible |
| Direction of action | Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground |
| Transmission speed | 90 MBit/s |

Protective circuit

| | |
|---|--|
| IEC test classification | C1 |
| | C2 |
| | C3 |
| | D1 |
| Nominal voltage U_N | 12 V DC |
| Maximum continuous voltage U_C | 15 V DC |
| | 10 V AC |
| Nominal current I_N | 600 mA (40°C) |
| Operating effective current I_C at U_C | $\leq 100 \mu\text{A}$ (per system) |
| Residual current I_{PE} | $\leq 100 \mu\text{A}$ (per system) |
| 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) | $\leq 90 \text{ V}$ (C1 - 1 kV/500 A) |
| | $\leq 40 \text{ V}$ (C3 - 25 A) |
| | $\leq 40 \text{ V}$ (C3 - 50 A) |
| | $\leq 145 \text{ V}$ (C2 - 10 kV / 5 kA) |
| Voltage protection level U_p (core-ground) | $\leq 90 \text{ V}$ (C1 - 1 kV/500 A) |
| | $\leq 145 \text{ V}$ (C2 - 10 kV / 5 kA) |
| | $\leq 40 \text{ V}$ (C3 - 25 A) |
| | $\leq 40 \text{ V}$ (C3 - 50 A) |
| Voltage protection level U_p static (core-core) | $\leq 55 \text{ V}$ (C1 - 1 kV/500 A) |
| Voltage protection level U_p static (core-ground) | $\leq 55 \text{ V}$ (C1 - 1 kV/500 A) |
| Response time t_A (Core-Core) | $\leq 1 \text{ ns}$ |
| Response time t_A (Core-Earth) | $\leq 1 \text{ ns}$ |
| Input attenuation aE, sym. | typ. 0.3 dB ($\leq 10 \text{ MHz}/150 \Omega$) |
| Cut-off frequency f_g (3 dB), sym. in 150 Ohm system | $> 60 \text{ MHz}$ |
| Capacity (Core-Core) | typ. 30 pF |
| Capacity (Core-GND) | typ. 30 pF |

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Technical data

Protective circuit

| | |
|--|------------------------|
| Resistance in series | 1.2 Ω \pm 5 % |
| Surge protection fault message | Optical, multi-stage |
| Max. required back-up fuse | 0.6 A (FF) |
| Impulse durability (conductor-conductor) | C1 (1 kV/500 A) |
| | C2 (10 kV/5 kA) |
| | C2 (10 kA) |
| | C3 (25 A) |
| | C3 (50 A) |
| | |
| Impulse durability (conductor-ground) | C1 (1 kV / 500 A) |
| | C2 (10 kV / 5 kA) |
| | C2 (10 kA) |
| | C3 (25 A) |
| | C3 (50 A) |
| | |
| Impulse durability (conductor-GND) | C1 - 1 kV/500 A |
| | C2 - 10 kV/5 kA |
| | C2 - 10 kA |
| | C3 - 25 A |
| | C3 - 50 A |
| | |
| Pulse reset time (conductor-conductor) | \leq 15 ms |
| Pulse reset time (conductor-GND) | \leq 15 ms |
| Overload failure mode (connector) | Mode 2 |

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 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 |

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approvals submitted

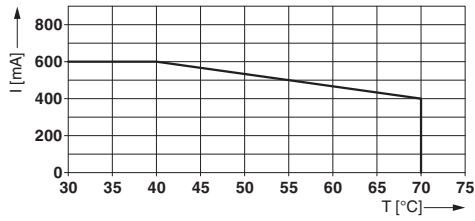
Approval details

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|-----|
| EAC |
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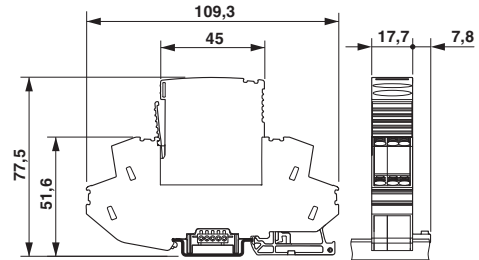
Drawings

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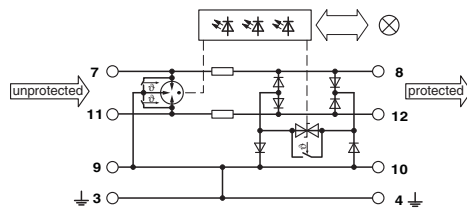
Diagram



Dimensional drawing



Circuit diagram





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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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