

Surge protection connector - PT 2X2-24AC-ST - 2838283

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PT protective connector with protective circuit for two 2-wire floating signal circuits. 24 V AC nominal voltage. HART-compatible.

The illustration shows version PT 2x2- 5DC-ST

Why buy this product

- Plugs can be checked with CHECKMASTER
- Installed in conjunction with the PT 2x2...-BE base element
- Maximum ease of maintenance thanks to the two-piece design
- Base element remains an integral part of the installation
- Consistent plug-in signal circuit protection
- Protection for two separate floating signal circuits
- Impedance-neutral disconnection of plug for test and maintenance purposes



Key commercial data

| | |
|------------------------|---|
| Packing unit | 1 |
| Minimum order quantity | 1 |
| Catalog page | Page 93 (TT-2011) |
| GTIN |  4 017918 182687 |
| Custom tariff number | 85363010 |
| Country of origin | GERMANY |

Technical data

General

| | |
|--|------------------|
| Housing material | PA 6.6 |
| Inflammability class according to UL 94 | V0 |
| Color | black |
| Standards for air and creepage distances | VDE 0110-1 |
| Standards for air and creepage distances | IEC 60664-1 |
| Total surge current (8/20) μ s | 20 kA |
| Ambient temperature (operation) | -40 °C ... 85 °C |

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Technical data

General

| | |
|--|---|
| Mounting type | On base element |
| 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 |
| Arrester can be tested with CHECKMASTER from software version: | From SW rev. 1.00 |
| Width | 17.7 mm |
| Height | 45 mm |
| Depth | 52 mm |
| Pitch unit | 1 Div. |

Protective circuit

| | |
|--|--------------------|
| IEC category | C1 |
| IEC category | C2 |
| IEC category | C3 |
| IEC category | D1 |
| VDE requirement class | D1 |
| Nominal voltage UN | 24 V AC |
| Maximum continuous operating voltage UC | 40 V DC |
| Maximum continuous operating voltage UC | 28 V AC |
| Maximum continuous voltage UC (wire-wire) | 40 V DC |
| Maximum continuous voltage UC (wire-wire) | 28 V AC |
| Maximum continuous voltage UC (wire-ground) | 40 V DC |
| Maximum continuous voltage UC (wire-ground) | 28 V AC |
| Nominal current IN | 450 mA (45°C) |
| Operating effective current IC at UC | ≤ 5 μA |
| Ground conductor current IPE | ≤ 1 μA (BE: 2x2-F) |
| Ground conductor current IPE | ≤ 4 μA |
| Nominal discharge surge current In (8/20) μs (Core-Core) | 10 kA |
| Nominal discharge surge current In (8/20) μs (Core-Earth) | 10 kA |
| Total surge current (8/20) μs | 20 kA |
| Max. discharge surge current Imax (8/20) μs maximum (Core-Core) | 10 kA |
| Max. discharge surge current Imax (8/20) μs maximum (Core-Earth) | 10 kA |
| Nominal pulse current Ian (10/1000) μs (Core-Core) | 23 A |
| Lightning test current (10/350) μs, peak value limp | 2.5 kA (per path) |
| Output voltage limitation at 1 kV/μs (Core-Core) spike | ≤ 55 V |
| Output voltage limitation at 1 kV/μs (Core-Earth) spike | ≤ 450 V |
| Output voltage limitation at 1 kV/μs (Core-Core) static | ≤ 55 V |
| Residual voltage at In, (conductor-conductor) | ≤ 55 V |
| Protection level UP (Core-Core) | ≤ 80 V |
| Protection level UP (Core-Earth) | ≤ 450 V |

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Technical data

Protective circuit

| | |
|--|----------------------------------|
| Response time tA (Core-Core) | ≤ 1 ns |
| Response time tA (Core-Earth) | ≤ 100 ns |
| Input attenuation aE, sym. | Typ. 0.5 dB (≤ 1.5 MHz) |
| Cut-off frequency fg (3 dB), sym. in 50 Ohm system | Typ. 8 MHz |
| Capacity (Core-Core) | Typ. 1.1 nF |
| Resistance in series | 2.2 Ω (Path 1-2/5-6) |
| Resistance in series | 2.2 Ω (Path 7-8, 11-12) |
| Message: Surge protection fault | None |
| Max. required back-up fuse | 500 mA (e.g. T (IEC 127-2/III)) |
| Surge carrying capacity in acc. with IEC 61643-21 (Core-Core) | C2 (10 kV/5 kA) |
| Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth) | C2 (10 kV/5 kA) |
| Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth) | D1 (2.5 kA) |

Connection data

| | |
|---------------------|--|
| Connection method | Screw connection (in connection with the base element) |
| Connection type IN | PLUGTRAB plug-in system |
| Connection type OUT | PLUGTRAB plug-in system |

Connection, protective circuit

| | |
|-----------------------|-----------------|
| Standards/regulations | IEC 61643-21 |
| Standards/regulations | DIN EN 61643-21 |
| Standards/regulations | UL 497B |

Classifications

eclass

| | |
|------------|----------|
| 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 |

etim

| | |
|----------|----------|
| ETIM 2.0 | EC000943 |
| ETIM 3.0 | EC000943 |
| ETIM 4.0 | 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 / GOST / GL

Ex Approvals

UL Listed / cUL Listed / ATEX / cULus Recognized

Approvals submitted

Approval details

| | |
|--|--------|
| UL Listed  | |
| Nominal current I _N | 0.45 A |
| Nominal voltage U _N | 34 V |

| |
|--|
| GOST  |
|--|

| |
|----|
| GL |
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Accessories

Accessories

Marking

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

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Accessories

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

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

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

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

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

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

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

Necessary add-on products

Surge protection base element - PT 2X2-BE - 2839208



Base element for protective plug PT with protective circuit for two 2-wire floating signal circuit, bridge between the connections 3-4 (GND) and 9-10, for mounting on NS 35/7.5 and NS 35/15, housing width: 17.5 mm

Surge protection base element - PT 2X2+F-BE - 2839224



Base element for protective plug PT with protective circuit for two 2-wire floating signal circuit, gas-filled surge arrester between the connections 3-4 (GND) and 9-10, for mounting on NS 35/7.5 and NS 35/15, housing width: 17.5 mm

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 3-6 - 2839295

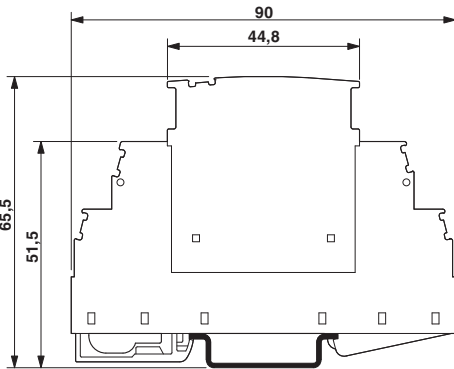


shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black

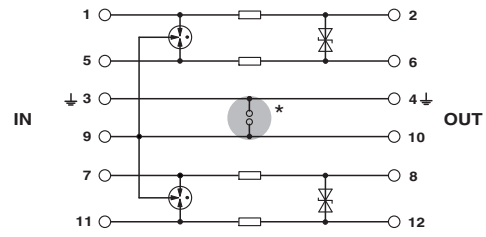
Drawings

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Dimensioned drawing



Circuit diagram



The figure shows the complete module consisting of a base element and connector