

## Surge protection device - PT 2X1-VF-230AC - 2805460

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Rail-mountable surge arrester for higher signal voltages. Protective circuit free of leakage current for two floating signals.  
Nominal voltage: 230 V AC

Illustration shows variant PT 2X1-VF-120AC

### Product Features

- ✓ Plugs can be checked with CHECKMASTER
- ✓ Maximum ease of maintenance thanks to the two-piece design
- ✓ Base element remains an integral part of the installation
- ✓ Protective devices for use in telecommunications and signaling networks according to IEC 61643-21
- ✓ Consistent plug-in signal circuit protection
- ✓ Impedance-neutral disconnection of plug for test and maintenance purposes



### Key commercial data

|                                      |          |
|--------------------------------------|----------|
| Packing unit                         | 1 pc     |
| Weight per Piece (excluding packing) | 72.0 GRM |
| Custom tariff number                 | 85363010 |
| Country of origin                    | Germany  |

### Technical data

#### Dimensions

|                        |         |
|------------------------|---------|
| Height                 | 90 mm   |
| Width                  | 17.7 mm |
| Depth                  | 65.5 mm |
| Horizontal pitch       | 1 Div.  |
| Complete module height | 90 mm   |

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### Technical data

#### Dimensions

|                       |         |
|-----------------------|---------|
| Complete module width | 17.7 mm |
| Complete module depth | 65.5 mm |

#### Ambient conditions

|                                 |                  |
|---------------------------------|------------------|
| Ambient temperature (operation) | -40 °C ... 80 °C |
| Degree of protection            | IP20             |

#### General

|   |   |
|---|---|
| Housing material                        | PA 6.6                                  |
| Inflammability class according to UL 94 | V0                                      |
| Color                                   | black                                   |
| Mounting type                           | DIN rail: 35 mm                         |
| Type                                    | DIN rail module, two-section, divisible |
| Number of positions                     | 2                                       |
| Direction of action                     | Line-Line & Line-Earth Ground           |

#### Protective circuit

|  |                            |
|--|----------------------------|
| IEC test classification  | C1                         |
|  | C2                         |
|  | C3                         |
|  | D1                         |
| Nominal voltage $U_N$  | 230 V AC                   |
|  | 250 V AC                   |
| Maximum continuous voltage $U_C$ (wire-ground)                       | 250 V AC                   |
| Nominal current $I_N$  | 6 A                        |
| Operating effective current $I_C$ at $U_C$                           | $\leq 2 \mu A$             |
| Residual current $I_{PE}$  | $\leq 2 \mu A$ (at $U_N$ ) |
| Nominal discharge current $I_n$ (8/20) $\mu s$                       | 3 kA                       |
| Nominal discharge current $I_n$ (8/20) $\mu s$ (Core-Earth)          | 3 kA                       |
| Total surge current (8/20) $\mu s$                                   | 8 kA                       |
| Total surge current (10/350) $\mu s$                                 | 1 kA                       |
| Max. discharge current $I_{max}$ (8/20) $\mu s$                      | 8 kA                       |
| Max. discharge current $I_{max}$ (8/20) $\mu s$ maximum (Core-Earth) | 8 kA                       |
| Nominal pulse current $I_{an}$ (10/1000) $\mu s$ (Core-Earth)        | 100 A                      |
| Impulse discharge current (10/350) $\mu s$ , peak value $I_{imp}$    | 500 A                      |
| Output voltage limitation at 1 kV/ $\mu s$ (Core-Earth) static       | $\leq 1.4$ kV              |
| Residual voltage at $I_n$ , (conductor-conductor)                    | $\leq 2$ kV                |
| Residual voltage at $I_n$ , (conductor-ground)                       | $\leq 1$ kV                |

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#### Protective circuit

|   |                           |
|---|---------------------------|
| Residual voltage with I <sub>an</sub> (10/1000)μs (conductor-conductor) | ≤ 1.4 kV                  |
| Residual voltage with I <sub>an</sub> (10/1000)μs (conductor-ground)    | ≤ 700 V                   |
| Energy absorption   | 150 J                     |
| Voltage protection level U <sub>p</sub> (Core-Core)                     | ≤ 2.5 kV (C2 (4 kV/2 kA)) |
|   | ≤ 1.8 kV (C3 - 100 A)     |
|   | ≤ 2.6 kV (D1 - 500 A)     |
| Voltage protection level U <sub>p</sub> (Core-Earth)                    | ≤ 1.1 kV (C1 - 500 A)     |
|   | ≤ 1.5 kV (C2 (4 kV/2 kA)) |
|   | ≤ 1.6 kV (C3 - 100 A)     |
|   | ≤ 1.8 kV (D1 - 500 A)     |
| Response time t <sub>A</sub>  | ≤ 100 ns                  |
| Capacity (Core-Core)  | typ. 4.5 pF               |
| Capacity (Core-Earth)   | typ. 9 pF                 |
| Resistance in series  | 0 Ω                       |
| Surge protection fault message  | None                      |
| Max. required back-up fuse  | 6 A (gL / gG)             |
| Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)          | C2 (4 kV / 2 kA)          |
|   | C3 (100 A)                |
|   | D1 (500 A)                |

#### Connection data

|  |                       |
|--|-----------------------|
| Connection method                      | Screw connection      |
| Connection type IN                     | Screw terminal blocks |
| Connection type OUT                    | Screw terminal blocks |
| Screw thread                           | M3                    |
| Tightening torque                      | 0.8 Nm                |
| Stripping length                       | 8 mm                  |
| Conductor cross section stranded min.  | 0.2 mm <sup>2</sup>   |
| Conductor cross section stranded max.  | 2.5 mm <sup>2</sup>   |
| 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      | Screw connection |
| Tightening torque, min | 0.8 Nm           |

#### Standards and Regulations

# Surge protection device - PT 2X1-VF-230AC - 2805460

## Technical data

### Standards and Regulations

|                       |                 |
|-----------------------|-----------------|
| Standards/regulations | DIN EN 61643-21 |
|-----------------------|-----------------|

## 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 2.0 | EC000943 |
| 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

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Approvals

GOST

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Ex Approvals

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Approvals submitted

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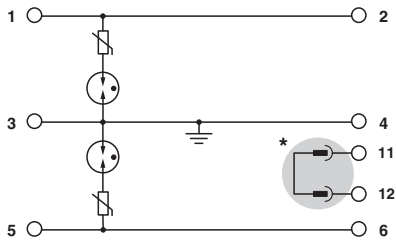
## Approvals

### Approval details



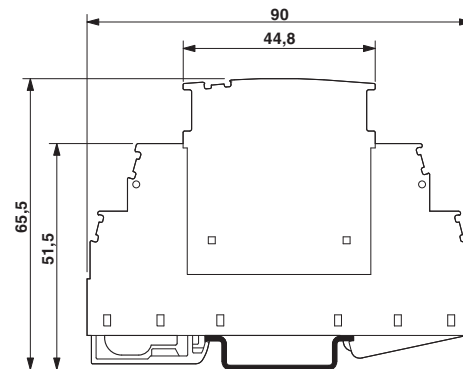
## Drawings

Circuit diagram



\* Circuit only closed when plug is inserted.

Dimensioned drawing





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- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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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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