

## PT 2-PE/S-230AC/FM

Order No.: 2858357



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2858357>

Pluggable type 3 arrester (device protection) for 1-phase power supply networks with separate N and PE (3-conductor system: L1, N, PE), with remote indication contact. Overall width: 17.5 mm.



| Commercial data          |                   |
|--------------------------|-------------------|
| GTIN (EAN)               | 4017918878955     |
| sales group              | J030              |
| Pack                     | 1 pcs.            |
| Customs tariff           | 85363090          |
| Weight/Piece             | 0.07976 KG        |
| Catalog page information | Page 46 (TT-2009) |

### Product notes

WEEE/RoHS-compliant since:  
05/12/2006



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| Technical data                     |       |
|------------------------------------|-------|
| Standards                          |       |
| Housing material                   | PA    |
| Inflammability class acc. to UL 94 | V0    |
| Color                              | black |

|                                                                |                                         |
|----------------------------------------------------------------|-----------------------------------------|
| Standards for air and creepage distances                       | DIN VDE 0110-1                          |
|                                                                | IEC 60664-1: 1992-10                    |
|                                                                | DIN VDE 0675-6                          |
|                                                                | IEC 61643-1                             |
| Surge voltage category                                         | III                                     |
| Pollution degree                                               | 2                                       |
| Degree of protection                                           | IP20                                    |
| Design                                                         | DIN rail module, two-section, divisible |
| Mounting type                                                  | DIN rail 35 mm                          |
| Number of positions                                            | 2                                       |
| Ambient temperature (operation)                                | -40 °C ... 85 °C                        |
| Arrester can be tested with CHECKMASTER from software version: | From SW rev. 1.00                       |
| Direction of action                                            | 1L-N & N-PE                             |
| Width                                                          | 17.70 mm                                |
| Height                                                         | 65.50 mm                                |
| Length                                                         | 90.00 mm                                |
| Pitch unit                                                     | 1 Div.                                  |

#### Protective circuit

|                                                                    |                                  |
|--------------------------------------------------------------------|----------------------------------|
| IEC category                                                       | III                              |
|                                                                    | T3                               |
| EN type                                                            | T3                               |
| Nominal voltage $U_N$                                              | 230 V AC                         |
| Arrester rated voltage $U_C$                                       | 253 V AC                         |
| Nominal frequency $f_N$                                            | 50 Hz                            |
|                                                                    | 60 Hz                            |
| Nominal current $I_N$                                              | 26 A ( $\leq 30^\circ\text{C}$ ) |
| Operating effective current $I_C$ at $U_C$                         | $\leq 1.5$ mA                    |
| Discharge current to PE at $U_C$                                   | $\leq 1.5$ $\mu\text{A}$         |
| Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$         | 3 kA                             |
| Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (L-N)   | 3 kA                             |
| Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (L-PE)  | 3 kA                             |
| Max. discharge surge current $I_{\text{max}}$ (8/20) $\mu\text{s}$ | 10 kA                            |
| 100% lightning impulse sparkover voltage (1.2/50) $\mu\text{s}$    | $\leq 1.1$ kV                    |

|                                  |                                         |
|----------------------------------|-----------------------------------------|
| Combined surge $U_{oc}$          | 6 kV                                    |
| Energy absorption symmetrical    | 170 J                                   |
| Energy absorption, asymmetrical  | 85 J                                    |
| Protection level $U_p$ (L-N)     | $\leq 1.1$ kV                           |
| Protection level $U_p$ (L-PE)    | $\leq 1.5$ kV                           |
|                                  | $\leq 600$ V (asymmetrical (PE) static) |
| Protection level $U_p$ (N-PE)    | $\leq 1.5$ kV                           |
|                                  | $\leq 600$ V (asymmetrical (PE) static) |
| Residual voltage at $I_n$ (L-N)  | $\leq 1.1$ kV                           |
| Residual voltage at $I_n$ (L-PE) | $\leq 600$ V                            |
| Response time $t_A$ (L-N)        | $\leq 25$ ns                            |
| Response time $t_A$ (L-PE)       | $\leq 100$ ns                           |
| Max. required back-up fuse       | 25 A (gL/C)                             |
| Message surge protection faulty  | Optical, remote indicator contact       |

#### Non-heating apparatus connection, power supply

|                                        |                       |
|----------------------------------------|-----------------------|
| Type of connection                     | 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                    |

#### Remote indicator contact

|                    |                                |
|--------------------|--------------------------------|
| Connection name    | Remote fault indicator contact |
| Switching function | N/C contact                    |
| Type of connection | Screw connection               |
| 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                  |
| Maximum operating voltage U <sub>max.</sub> AC | 250 V               |
| Maximum operating voltage U <sub>max.</sub> DC | 50 V                |
| Max. operating current I <sub>max</sub>        | 3 A AC/DC           |

#### Connection, protective circuit

|                       |                     |
|-----------------------|---------------------|
| Standards/regulations | IEC 61643-1         |
|                       | DIN EN 61643-11/A11 |
|                       | E DIN VDE 0675-6/A1 |
|                       | E DIN VDE 0675-6/A2 |
|                       | UL 1449             |
|                       | NF C61-740          |

#### Certificates / Approvals



Certification

CB, CCA, CSA, CUL, GOST, KEMA, OEVE, UL

#### CUL

|                                |       |
|--------------------------------|-------|
| Nominal voltage U <sub>N</sub> | 230 V |
| Nominal current I <sub>N</sub> | 20 A  |

#### UL

|                                |       |
|--------------------------------|-------|
| Nominal voltage U <sub>N</sub> | 230 V |
| Nominal current I <sub>N</sub> | 20 A  |

#### Accessories

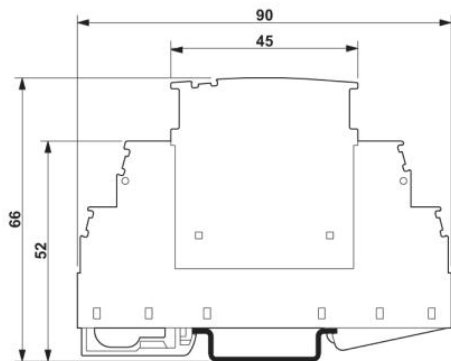
| Item           | Designation             | Description                                                                                                                                                                         |
|----------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Marking</b> |                         |                                                                                                                                                                                     |
| 1050004        | ZB 5 :UNBEDRUCKT        | Zack strip, unprinted, 10-section, for individual labeling with M-PEN, ZB-T or CMS system, pack is sufficient for 100 terminal blocks, for a terminal width of 5.2 mm, color: White |
| 2715212        | ZB 5,8,LGS:FORTL.ZAHLEN | Zack marker strip, 10-section, printed horizontally: with consecutive numbers, 1-10, 11-20 etc. up to 991-1000, color: white                                                        |
| 1050305        | ZB 5,8:SO/CMS           | Zack strip, 10-section, divisible, special printing, marking according to customer requirements                                                                                     |
| 2715209        | ZB 5,8:UNBEDRUCKT       | Zack strip, unprinted, strips with 10 labels for individual labeling with M-PEN or CMS system, for terminal block width: 5.8 mm, color: White                                       |
| 1050017        | ZB 5,LGS:FORTL.ZAHLEN   | Zack strip, 10-section, printed horizontally: with the numbers, 1-10, 11-20 etc. up to 991-1000, color: white                                                                       |
| 1050415        | ZB 5,LGS:L1-N,PE        | Zack strip, printed horizontally, strips with 10 labels, L1, L2, L3, N, PE, L1, L2, L3, N, PE, color: white                                                                         |
| 1050295        | ZB 5:SO/CMS             | Zack strip, 10-section, divisible, special printing, marking according to customer requirements                                                                                     |

#### Additional products

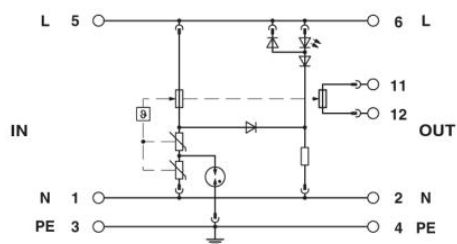
| Item            | Designation | Description                                                                                         |
|-----------------|-------------|-----------------------------------------------------------------------------------------------------|
| <b>Assembly</b> |             |                                                                                                     |
| 2839295         | SSA 3-6     | shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black  |
| 2839512         | SSA 5-10    | Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black |

## Diagrams/Drawings

### Dimensioned drawing



### Circuit diagram



**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



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