

# FLT-CP-PLUS-2S-350

Order No.: 2882666



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2882666>

Pluggable lighting current arrester, in acc. with type 1/class I/B for 2-phase power supply networks with combined PE and N (L1, L2, PE, N).



| Commercial data          |                   |
|--------------------------|-------------------|
| GTIN (EAN)               | 4046356098229     |
| Note                     | Made-to-order     |
| sales group              | J010              |
| Pack                     | 1 pcs.            |
| Customs tariff           | 85363010          |
| Weight/Piece             | 1.2368 KG         |
| Catalog page information | Page 15 (TT-2009) |

#### Product notes

WEEE/RoHS-compliant since:  
06/07/2006



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## Technical data

### Standards

|                                    |      |
|------------------------------------|------|
| Housing material                   | PBT  |
| Inflammability class acc. to UL 94 | V0   |
| Color                              | gray |

|  |   |
|--|---|
| Standards for air and creepage distances | EN 60664-1                              |
|  | IEC 60664-1: 1992-10                    |
|  | IEC 61643-11                            |
| Degree of protection                     | IP20                                    |
| Mounting type                            | DIN rail 35 mm                          |
| Design                                   | DIN rail module, two-section, divisible |
| Number of positions                      | 3                                       |
| Ambient temperature (operation)          | -40 °C ... 80 °C                        |
| Message surge protection faulty          | Optical, remote indicator contact       |
| Direction of action                      | 2L-N & N-PE                             |
| Width                                    | 106.90 mm                               |
| Height                                   | 70.00 mm                                |
| Length                                   | 95.80 mm                                |
| Pitch unit                               | 6 Div.                                  |

#### Protective circuit

|   |  |
|---|--|
| IEC category  | I  |
|   | T1                                       |
| EN type   | T1                                       |
| Lightning protection class  | II /75 kA (TT, TN-C-S)                   |
| Nominal voltage $U_N$   | 240 V AC (230/400 V AC ... 240/415 V AC) |
| Arrester rated voltage $U_C$ (L-N)  | 350 V AC                                 |
| Arrester rated voltage $U_C$ (N-PE)   | 350 V AC                                 |
| $U_T$ (TOV-proof)   | 415 V (5 s)                              |
|   | 1200 V AC (200 ms / N-PE)                |
| Nominal frequency $f_N$   | 50 Hz (60 Hz)                            |
| Rated load current  | 125 A ( $\leq 55^\circ\text{C}$ )        |
| Discharge current to PE at $U_C$  | $\leq 5 \mu\text{A}$                     |
| Standby power consumption $P_c$   | $\leq 4 \text{ mVA}$                     |
| Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (L-N)            | 25 kA                                    |
| Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (N-PE)           | 100 kA                                   |
| Lightning test current (10/350) $\mu\text{s}$ , charge                      | 37.5 As                                  |
| Lightning test current (10/350) $\mu\text{s}$ , specific energy             | 1.40 MJ/ $\Omega$                        |
| Lightning test current (10/350) $\mu\text{s}$ , peak value $I_{\text{imp}}$ | 75 kA                                    |
| Lightning test current (10/350) $\mu\text{s}$ , charge                      | 12.5 As                                  |

|   |   |
|---|---|
| Lightning test current (10/350) $\mu$ s, specific energy            | 160.00 kJ/ $\Omega$ (L-N)                       |
| Lightning test current (10/350) $\mu$ s, peak value $I_{imp}$       | 25 kA (per channel L-N)                         |
| Impulse operate voltage at 6 kV (1.2/50) $\mu$ s (N-PE)             | $\leq$ 1.5 kV                                   |
| Protection level $U_p$ (L-N)  | $\leq$ 1.5 kV                                   |
| Protection level $U_p$ (L-PE)                                       | $\leq$ 2.5 kV                                   |
| Protection level $U_p$ (N-PE)                                       | $\leq$ 1.5 kV                                   |
| Response time (L-N)   | $\leq$ 100 ns                                   |
| Response time (L-PE)  | $\leq$ 100 ns                                   |
| Response time (N-PE)  | $\leq$ 100 ns                                   |
| Max. required backup fuse with branch wiring                        | 315 A (gL/gG)                                   |
| Max. required backup fuse with V-type through wiring                | 125 A (gL/gG)                                   |
| Recommended backup fuse maximum                                     | 160 A (gL/gG, 125 A with serial through wiring) |
| Short circuit resistance $I_{CC}$ with max. backup fuse (effective) | 50 kA   |
| Short circuit current self-quenching                                | 100 A (effective (N-PE))                        |
| Follow current quenching capacity $I_f$ (L-N)                       | 50 kA (264 V AC)                                |
|   | 25 kA (350 V AC)                                |
| Follow current quenching capacity $I_f$ (N-PE)                      | 100 A   |

#### Connection, protective circuit

|  |                                |
|--|--------------------------------|
| Type of connection                     | Screw terminal blocks          |
| Connection type IN                     | Biconnect screw terminal block |
| Connection type OUT                    | Biconnect screw terminal block |
| Connection method                      | Biconnect terminal block       |
| Screw thread                           | M5                             |
| Tightening torque                      | 4.5 Nm                         |
| Stripping length                       | 18 mm                          |
| Conductor cross section stranded min.  | 2.5 mm <sup>2</sup>            |
| Conductor cross section stranded max.  | 25 mm <sup>2</sup>             |
| Conductor cross section solid min.     | 2.5 mm <sup>2</sup>            |
| Conductor cross section solid max.     | 35 mm <sup>2</sup>             |
| Conductor cross section AWG/kcmil min. | 13                             |
| Conductor cross section AWG/kcmil max  | 2                              |

#### Remote indicator contact

|                 |                                |
|-----------------|--------------------------------|
| Connection name | Remote fault indicator contact |
|-----------------|--------------------------------|

|   |                                       |
|---|---------------------------------------|
| Switching function                            | PDT contact                           |
| Type of connection                            | Plug-in/screw connection via COMBICON |
| Screw thread                                  | M2                                    |
| Tightening torque                             | 0.25 Nm                               |
| Stripping length                              | 7 mm                                  |
| Conductor cross section stranded min.         | 0.14 mm <sup>2</sup>                  |
| Conductor cross section stranded max.         | 1.5 mm <sup>2</sup>                   |
| Conductor cross section solid min.            | 0.14 mm <sup>2</sup>                  |
| Conductor cross section solid max.            | 1.5 mm <sup>2</sup>                   |
| Conductor cross section AWG/kcmil min.        | 28                                    |
| Conductor cross section AWG/kcmil max         | 16                                    |
| Maximum operating voltage U <sub>max</sub> AC | 250 V AC                              |
| Maximum operating voltage U <sub>max</sub> DC | 125 V DC                              |
| Max. operating current I <sub>max</sub>       | 1 A AC (inductive)                    |
|   | 1 A AC (ohmic)                        |
|   | 30 mA DC (inductive)                  |
|   | 200 mA DC (ohmic)                     |
| Min. permissible switching capacity           | 0.12 VA (12 V, 10 mA)                 |
| <b>Environmental conditions</b>               |                                       |
| Standards/regulations                         | IEC 61643-1                           |
|   | EN 61643-11                           |
|   | UL 1449                               |
|   | EN 61643-11/A11                       |

### Certificates / Approvals



Certification

CUL, GOST, UL

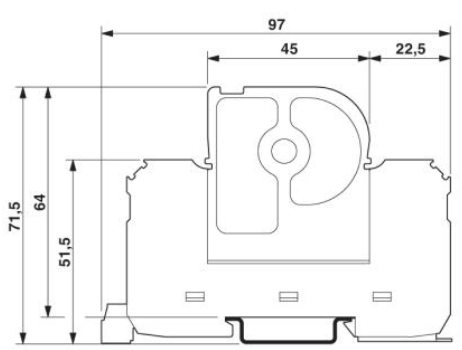
**Accessories**

| Item           | Designation        | Description   |
|----------------|--------------------|---|
| <b>General</b> |                    |   |
| 2859686        | FLT-CP-N/PE-350-ST | Type 1 / Class I / B arrester (lightning arrester) replacement plug for path N-PE, can be combined with FLASHTRAB compact series of products.           |
| 2859913        | FLT-CP-PLUS-350-ST | Type 1 / Class I / B arrester (lightning arrester) replacement plug for paths L-N and L-PEN, can be combined with FLASHTRAB compact series of products. |

| <b>Marking</b> |                      |  |
|----------------|----------------------|--|
| 1051993        | B-STIFT              | Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm  |
| 2749589        | ZBN 18,LGS:ERDE      | Marking labels, printed horizontally, strips with 5 labels, GND (grounding symbol), color: White   |
| 2749576        | ZBN 18,LGS:L1-N,ERDE | Marker labels, printed horizontally, strips with 5 labels, L1, L2, L3, N, GND, color: white  |
| 0800763        | ZBN 18:SO/CMS        | Marker labels, 5-section, special printing, labeled according to customer requirements (Please specify the required marking with order), for terminal width: 17.5 mm, color: White |
| 2809128        | ZBN 18:UNBEDRUCKT    | Unprinted marker labels, strips with 5 labels for individual labeling with M-PEN or CMS system, for terminal block width: 17.5 mm, color: White                                    |

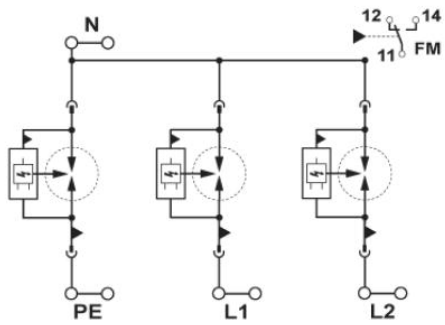
**Diagrams/Drawings**

Dimensioned drawing



Circuit diagram

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**Address**

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