

FLT-CP-1S-350


Order No.: 2859738



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2859738>

Pluggable lightning current and surge arrester combination, in acc. with typ 1+2 / Class I+II / B+C arresters. Arresters coordinated following the AEC principle, for 1-phase power supply networks with separately installed PE and N (L1, PE, N).



| Commercial data | |
|--------------------------|---|
| GTIN (EAN) |  4 017918 956455 |
| sales group | J000 |
| Pack | 1 pcs. |
| Customs tariff | 85363030 |
| Catalog page information | Page 23 (TT-2009) |

Product notes

WEEE/RoHS-compliant since:
05/10/2006



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Technical data

Standards

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

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| Standards for air and creepage distances | DIN VDE 0110-1 |
| | IEC 60664-1: 1992-10 |
| | IEC 61643-1 |
| Surge voltage category | III |
| Pollution degree | 2 |
| Degree of protection | IP20 |
| Mounting type | DIN rail: 35 mm |
| Design | DIN rail module, two-section, divisible |
| Number of positions | 2 |
| Ambient temperature (operation) | -40 °C ... 80 °C |
| Arrester can be tested with CHECKMASTER from software version: | From SW rev. 3.00 |
| Message: Surge protection fault | Optical, remote indicator contact |
| Direction of action | 1L-N & N-PE |
| Width | 71.60 mm |
| Height | 70.00 mm |
| Length | 95.80 mm |
| Pitch unit | 4 Div. |

Protective circuit

| | |
|---|-----------------------------------|
| IEC category | I + II |
| | T1 + T2 |
| EN type | T1 + T2 |
| Lightning protection class | III-IV /50 kA (TT, TN-C-S) |
| Nominal voltage U_N | 240 V AC (230 V AC ... 240 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 AC (5 s / L-N) |
| U_T (TOV-safe) | ≤ 1200 V AC (200 ms / N-PE) |
| Nominal frequency f_N | 50 Hz (60 Hz) |
| Nominal load current I_L | 125 A ($\leq 55^\circ\text{C}$) |
| Ground conductor current I_{PE} | ≤ 5 μA |
| Standby power consumption P_C | ≤ 3.5 mW |
| Nominal discharge surge current I_n (8/20) μs (L-N) | 25 kA |
| Nominal discharge surge current I_n (8/20) μs (N-PE) | 100 kA |

| | |
|--|---|
| Lightning test current (10/350) μ s, charge | 25 As |
| Lightning test current (10/350) μ s, specific energy | 625.00 kJ/ Ω |
| Lightning test current (10/350) μ s, peak value I_{imp} | 50 kA |
| Lightning test current (10/350) μ s, charge | 50 As |
| Lightning test current (10/350) μ s, specific energy | 2.50 MJ/ Ω |
| Lightning test current (10/350) μ s, peak value I_{imp} | 100 kA (N-PE) |
| Impulse operate voltage at 6 kV (1.2/50) μ s (N-PE) | ≤ 1.5 kV |
| Protection level U_p (L-N) | ≤ 1.5 kV |
| Protection level U_p (N-PE) | ≤ 1.5 kV |
| Residual voltage (L-N) | ≤ 1.3 kV (at I_n) |
| | ≤ 1.1 kV (at 10 kA) |
| | ≤ 1 kV (at 5 kA) |
| | ≤ 1 kV (at 3 kA) |
| Residual voltage (L-PE) | ≤ 2.2 kV (at I_n) |
| | ≤ 2 kV (at 10 kA) |
| | ≤ 1.8 kV (at 5 kA) |
| | ≤ 1.6 kV (at 3 kA) |
| Residual voltage (N-PE) | ≤ 1.5 kV (at I_n) |
| | ≤ 1 kV (at 10 kA) |
| | ≤ 0.9 kV (at 5 kA) |
| | ≤ 0.8 kV (at 3 kA) |
| Clamping voltage SVR (L-N) | ≤ 0.9 kV |
| Clamping voltage SVR (L-PE) | ≤ 1.5 kV |
| Clamping voltage SVR (N-PE) | ≤ 1.5 kV |
| Response time (L-N) | ≤ 25 ns |
| Response time (L-PE) | ≤ 100 ns |
| Response time (N-PE) | ≤ 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_p with max. backup fuse (effective) | 25 kA |
| Short-circuit current self-quenching | 100 A (effective (N-PE)) |
| Follow current quenching capacity I_f | 100 A (350 V AC (N-PE)) |

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|---|------------------|
| Follow current quenching capacity If (L-N) | 25 kA (264 V AC) |
| | 3 kA (350 V AC) |
| Follow current quenching capacity If (N-PE) | 100 A |

Connection, protective circuit

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| 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 ² |
| Conductor cross section stranded max. | 25 mm ² |
| Conductor cross section solid min. | 2.5 mm ² |
| Conductor cross section solid max. | 35 mm ² |
| Conductor cross section AWG/kcmil min. | 13 |
| Conductor cross section AWG/kcmil max | 2 |

Remote indicator contact

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|---|---------------------------------------|
| 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 ² |
| Conductor cross section stranded max. | 1.5 mm ² |
| Conductor cross section solid min. | 0.14 mm ² |
| Conductor cross section solid max. | 1.5 mm ² |
| Conductor cross section AWG/kcmil min. | 28 |
| Conductor cross section AWG/kcmil max | 16 |
| Maximum operating voltage U _{max} AC | 250 V AC |
| Maximum operating voltage U _{max} DC | 125 V DC |

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| Max. operating current I_{max} | 1 A AC (inductive) |
| | 1 A AC (ohmic) |
| | 30 mA DC (inductive) |
| | 200 mA DC (ohmic) |

Environmental conditions

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|-----------------------|-------------|
| Standards/regulations | IEC 61643-1 |
| | EN 61643-11 |
| | UL 1449 |

Certificates / Approvals



Certification

CB, CCA, CUL, GOST, KEMA, UL

Accessories

| Item | Designation | Description |
|----------------|--------------------|---|
| General | | |
| 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. |
| 2859602 | VAL-CP-350-ST | Type 2 arrester replacement plug (surge arrester) with high-capacity varistor with low leakage current. |

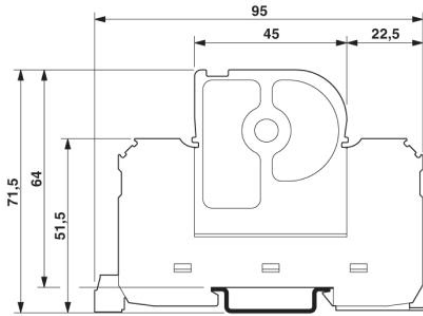
Marking

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|---------|----------------------|---|
| 1051993 | B-STIFT | Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm |
| 0803595 | ZBFM 5/WH:UNBEDRUCKT | Zack marker sheet, flat, unprinted: 120-section, 10 strips à 12 markers, sufficient for 120 terminal blocks, for all terminal blocks, pitch 5.2 mm, labeling with M-PEN or CMS system, color: white |
| 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 |

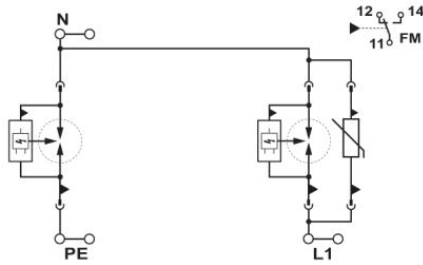
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|---------|-------------------|---|
| 2809128 | ZBN 18:UNBEDRUCKT | Unprinted marker labels, strips with 5 labels for individual labeling with M-PEN or CMS system, for terminal block width: 17.5 mm, color: White |
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Diagrams/Drawings

Dimensioned drawing



Circuit diagram



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