


VAL-MS 580/3+0

Order No.: 2920450

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Surge arrester for 4-conductor power supply systems (L1, L2, L3, PEN), consisting of a base element and protective connectors, for mounting on NS 35.



| Commercial data | |
|--------------------------|--|
| GTIN (EAN) |  4 046356 163675 |
| Note | Made-to-order |
| sales group | J022 |
| Pack | 1 pcs. |
| Customs tariff | 85363030 |
| Catalog page information | Page 31 (TT-2009) |

Product notes

WEEE/RoHS-compliant since:
01/01/2008

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Technical data

Standards

| | |
|------------------------------------|----------|
| Housing material | PBT / PA |
| Inflammability class acc. to UL 94 | V0 |
| Color | black |

| | |
|--|---|
| Standards for air and creepage distances | EN 60664-1 |
| | EN 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 fault | Optical |
| Direction of action | 3L-PEN |
| Width | 53.40 mm |
| Height | 65.50 mm |
| Length | 90.00 mm |
| Pitch unit | 3 Div. |

Protective circuit

| | |
|---|--------------------------------|
| IEC category | II |
| | T2 |
| EN type | T2 |
| Nominal voltage U_N | 400 V AC (400/690 V AC TN-C) |
| | ≤ 500 V AC (IT) |
| Arrester rated voltage U_C | 580 V AC |
| Arrester rated voltage U_C (L-PEN) | 580 V AC |
| U_T (TOV-proof) | 690 V AC (5 s/L-PEN) |
| Nominal frequency f_N | 50 Hz (60 Hz) |
| Ground conductor current I_{PE} | ≤ 250 μ A |
| Standby power consumption P_C | ≤ 0.45 VA (≤ 20 mW) |
| Max. discharge surge current I_{max} (8/20) μ s | 30 kA |
| Max. discharge surge current I_{max} (8/20) μ s maximum (L-PEN) | 90 kA (all channels) |
| | 30 kA |
| Nominal discharge surge current I_n (8/20) μ s (L-PEN) | 45 kA (all channels) |
| | 15 kA |
| Protection level U_p | ≤ 2.5 kV |
| Protection level U_p (L-PEN) | ≤ 2.5 kV |

| | |
|---|---------------------|
| Residual voltage | ≤ 2.5 kV |
| | ≤ 2.3 kV (at 10 kA) |
| | ≤ 2.1 kV (at 5 kA) |
| | ≤ 1.9 kV (at 3 kA) |
| Residual voltage (L-PEN) | ≤ 2.5 kV |
| | ≤ 2.3 kV (at 10 kA) |
| | ≤ 2.1 kV (at 5 kA) |
| | ≤ 1.9 kV (at 3 kA) |
| Response time | ≤ 25 ns |
| Response time (L-N) | ≤ 25 ns |
| Max. required backup fuse with branch wiring | 125 A (gL / gG) |
| Short-circuit resistance I _p with max. backup fuse (effective) | 25 kA |

Connection, protective circuit

| | |
|--|--------------------------------|
| Type of connection | Screw connection |
| Connection type IN | Biconnect screw terminal block |
| Connection type OUT | Biconnect screw terminal block |
| Screw thread | M5 |
| Tightening torque | 4.5 Nm |
| Stripping length | 16 mm |
| Conductor cross section stranded min. | 1.5 mm ² |
| Conductor cross section stranded max. | 25 mm ² |
| Conductor cross section solid min. | 1.5 mm ² |
| Conductor cross section solid max. | 35 mm ² |
| Conductor cross section AWG/kcmil min. | 15 |
| Conductor cross section AWG/kcmil max | 2 |

Standards

| | |
|-----------------------|----------------------|
| Standards/regulations | IEC 61643-1 2005 |
| | EN 61643-11/A11 2007 |

Certificates / Approvals



Certification

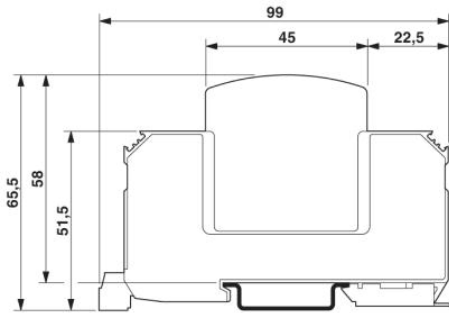
CB, CCA, CUL, GOST, KEMA, OEVE, UL

Accessories

| Item | Designation | Description |
|----------------|----------------------|--|
| Bridges | | |
| 2809241 | MPB 18/3- 6 | Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 6-pos. |
| 2809254 | MPB 18/3- 9 | Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 9-pos. |
| 2818339 | MPB F200X16/ 1GS | Wiring bridge flexible, diameter 16 mm ² , with a fork-type cable lug on one side, length: 200 mm |
| 2818342 | MPB F400X16/ 1GS | Wiring bridge flexible, diameter 16 mm ² , with a fork-type cable lug on one side, length: 400 mm |
| 2818355 | MPB F600X16/ 1GS | Wiring bridge flexible, diameter: 16 mm ² , with a fork-type cable lug on one side, length: 600 mm |
| General | | |
| 2749880 | DK-BIC-35 | Feed-through terminal block for VAL and FLT applications |
| Marking | | |
| 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 |

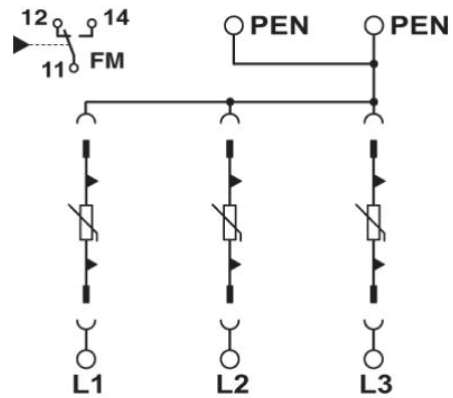
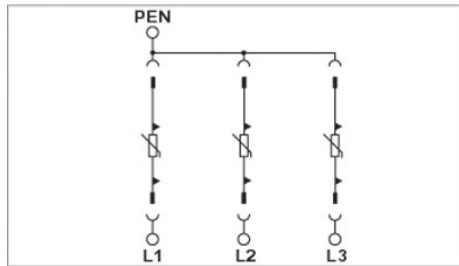
Diagrams/Drawings

Dimensioned drawing



The illustration shows the dimensional drawing for a version with remote indicator contact

Circuit diagram



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