

Type 2 surge protection device - VAL-MS 350/20/3+0 - 2803522

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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.

Product Features

- With or without floating remote indication contact
- Solutions for the low performance class
- Mechanical coding of all slots
- Disconnect device on each individual plug
- Multi-channel type 2 arresters
- Optical, mechanical status indication for the individual arresters
- Type 2 consistent plug-in surge arresters



Key commercial data

| | |
|--------------------------------------|-----------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 320.0 GRM |
| Custom tariff number | 85363010 |
| Country of origin | Germany |

Technical data

Dimensions

| | |
|------------------|---------|
| Height | 90 mm |
| Width | 53.4 mm |
| Depth | 65.5 mm |
| Horizontal pitch | 3 Div. |

Ambient conditions

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

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Technical data

General

| | |
|--|---|
| Housing material | PBT / PA |
| Inflammability class according to UL 94 | V0 |
| Color | black |
| Standards for air and creepage distances | EN 60664-1 |
| | EN 61643-11 |
| Mounting type | DIN rail: 35 mm |
| Type | DIN rail module, two-section, divisible |
| Number of positions | 3 |
| Surge protection fault message | Optical |
| Direction of action | 3L-PEN |

Protective circuit

| | |
|---|------------------------------------|
| IEC test classification | II |
| | T2 |
| EN type | T2 |
| Nominal voltage U_N | 230 V AC (400 V AC) |
| | 230 V AC (400 V AC) |
| Maximum continuous operating voltage U_C | 350 V AC |
| Maximum continuous operating voltage U_C (L-PEN) | 350 V AC |
| U_T (TOV-proof) | 415 V AC (5 s) |
| Nominal frequency f_N | 50 Hz (60 Hz) |
| Residual current I_{PE} | $\leq 340 \mu\text{A}$ (per phase) |
| Standby power consumption P_C | $\leq 360 \text{ mVA}$ |
| Max. discharge current I_{max} (8/20) μs | 20 kA (per channel L-PEN) |
| Max. discharge current I_{max} (8/20) μs maximum (L-PEN) | 60 kA (all channels) |
| | 20 kA (per channel) |
| Nominal discharge current I_n (8/20) μs (L-PEN) | 30 kA (all channels) |
| | 10 kA (per channel) |
| Voltage protection level U_p (L-PEN) | $\leq 1.4 \text{ kV}$ |
| Residual voltage (L-PEN) | $\leq 1.4 \text{ kV}$ |
| | $\leq 1.2 \text{ kV}$ (at 5 kA) |
| | $\leq 1.1 \text{ kV}$ (at 3 kA) |
| Response time (L-PEN) | $\leq 25 \text{ ns}$ |
| Max. backup fuse with branch wiring | 125 A (gL/gG) |
| Short-circuit resistance I_p with max. backup fuse (effective) | 25 kA |

Connection, protective circuit

| | |
|-------------------|------------------|
| Connection method | Screw connection |
|-------------------|------------------|

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Connection, protective circuit

| | |
|--|--------------------------------|
| 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 and Regulations

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

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 | 27130805 |
| eCl@ss 7.0 | 27130805 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000941 |
| ETIM 3.0 | EC000941 |
| ETIM 4.0 | EC000941 |
| ETIM 5.0 | EC000941 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30212010 |
| UNSPSC 7.0901 | 39121610 |
| UNSPSC 11 | 39121610 |
| UNSPSC 12.01 | 39121610 |
| UNSPSC 13.2 | 39121620 |

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Approvals

Approvals

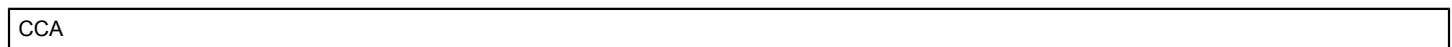
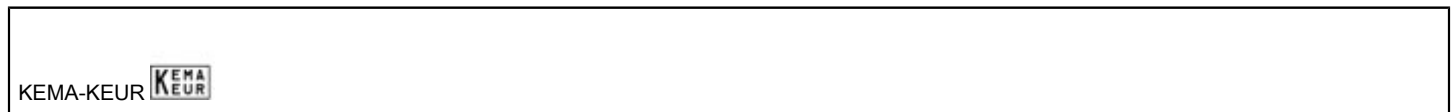
Approvals

KEMA-KEUR / ÖVE / GOST / CCA / IECEx CB Scheme

Ex Approvals

Approvals submitted

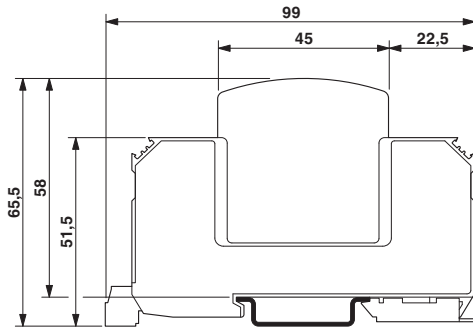
Approval details



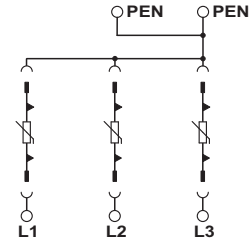
Drawings

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Dimensioned drawing



Circuit diagram



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