

Technical data sheet

Surge arrester V20, 1-pole + NPE, 280 V

Item number: 5095251



Surge arrester, type 2

- For surge voltage protection equipotential bonding to VDE 0100-443 (IEC 60364-4-44)
- Discharge capacity to 40 kA (8/20) per pole through high-performance varistors
- Modular connectable arrester with cut-off unit and visual status display
- Locking mechanism with vibration protection and voltage keying
- Plastic to UL 94 V-0
- The remote signalling variants (FS) have a potential-free changeover contact for remote signalling

Application: Equipotential bonding in main and sub-distributions.



Master data

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|------------------------------------|--------------------------|
| Item number | 5095251 |
| Type | V20-1+NPE-280 |
| Description 1 | SurgeController V20 |
| Description 2 | 1-pole with NPE |
| Manufacturer | OBO |
| Dimension | 280V |
| Smallest sales unit | 1 |
| Unit of quantity | Piece |
| Weight | 24.3 kg |
| Weight unit | kg/100 pc. |
| CO2 Footprint (GWP) Cradle-to-Gate | 1,0823 kg CO2e / 1 Piece |

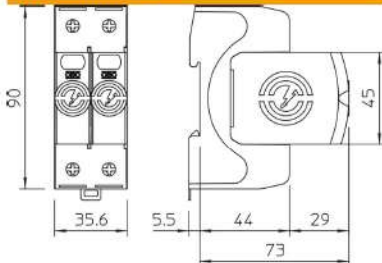
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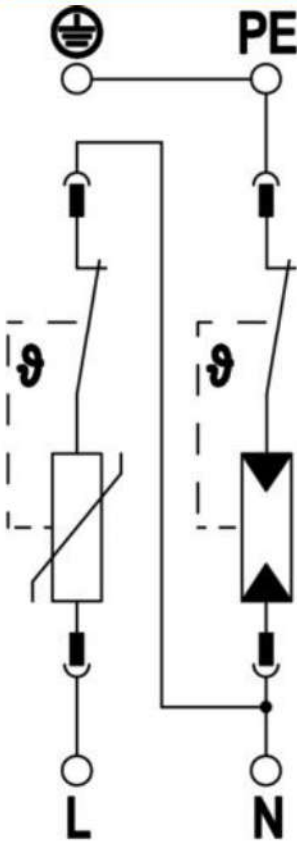
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Dimensions



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| Arrester surge current (8/20 μ s) [total] | 60 kA |
| Connection cross-section (min.) | 1.5 mm ² |
| Response time | <25 ns |
| Response time [L-N] | 25 ns |
| Response time [N-PE] | 100 ns |
| Blow-out | no |
| Pole version | 1+N/PE |
| Structural width in division units (division unit, 17.5 mm) | 2 |
| Operating temperature, max. | 80 °C |
| Operating temperature, min. | -40 °C |
| Torque | 35 Lbs |
| Torque | 4 Nm |
| Installation location | Interior |
| Remote signalling | no |
| Follow current quenching capacity (eff) [N-PE] | 0.1 kA |
| Function/defect display | Visual |
| Housing material surge protection components | PA UL 94 V-0 |
| Combined voltage protection level [L-PE] | 1.5 kV |
| Maximum continuous voltage (L-N) | 280 V |
| Maximum continuous voltage (N-PE) | 255 V |
| Maximum continuous voltage AC | 280 V |
| Integrated back-up fuse | no |
| Short-circuit resistant | yes |
| Short-circuit resistance for max. mains-side overcurrent protection | 50 kA eff |
| Conductor cross-section, flexible (fine-wire), max. | 35 mm ² |
| Conductor cross-section, flexible (fine-wire), max. | 2 AWG |
| Conductor cross-section, flexible (fine-wire), min. | 16 AWG |
| Conductor cross-section, flexible (fine-wire), min. | 1.5 mm ² |
| Conductor cross-section, rigid (single-wire/multiwire), max. | 2 AWG |

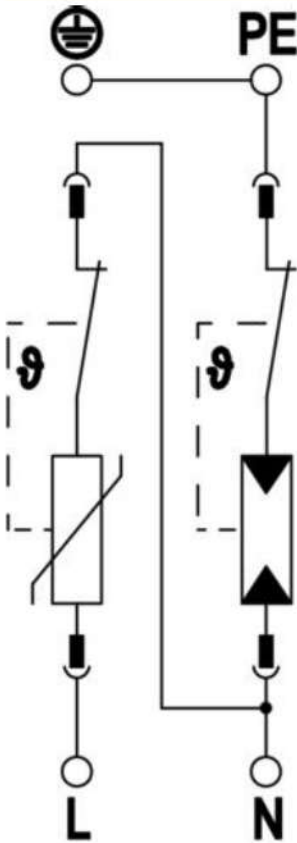
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| Conductor cross-section, rigid (single-wire/multiwire), max. | 35 mm ² |
| Conductor cross-section, rigid (single-wire/multiwire), min. | 16 AWG |
| Conductor cross-section, rigid (single-wire/multiwire), min. | 1.5 mm ² |
| Humidity, min. | 5 % |
| Humidity, max. | 95 % |
| Max. mains-side overcurrent protection | 160 A gL/gG |
| Maximum back-up fuse | 160 A |
| Maximum discharge current (8/20 µs) | 40 kA |
| Maximum discharge current (8/20 µs) [L-N] | 40 kA |
| Maximum discharge current (8/20 µs) [N-PE] | 60 kA |
| Minimum distance | 1.5 mm |
| Installation type | DIN rail 35 mm |
| Nominal discharge current (8/20 µs) | 20 kA |
| Nominal discharge current (8/20 µs) [L-N] | 20 kA |
| Nominal discharge current (8/20 µs) [N-PE] | 40 kA |
| Nominal voltage AC (50/60 Hz) | 230 V |
| Network form | Other |
| TN network form | yes |
| TN-C-S network form | yes |
| TN-S network form | yes |
| TT network form | yes |
| Pole number | 2 |
| Ports | One-Port SPD |
| Test class, type 2 | yes |
| Residual voltage [L-N] @ 1 kA | 0.8 kV |
| Residual voltage [L-N] @ 5 kA | 1 kV |
| Protection rating | IP20 |
| Protective conductor current | < 2 µA |
| Protection level | ≤1,3 kV |
| Protection level [L-N] | ≤1,3 |
| Protection level [N-PE] | 1.3 kV |
| Signalling on device | Visual |
| SPD to EN 61643-11 | Type 2 |
| SPD to IEC 61643-1 | Class II |
| SPD to UL 1449 | Type 4 |
| Permitted temperature range, max. | 80 °C |
| Permitted temperature range, min. | -40 °C |
| TOV voltage [L-N] – fail safe mode – 120 min. | 440 V |
| TOV voltage [L-N] – withstand mode – 5 s | 335 V |
| TOV voltage [N-PE] – withstand mode – 200 ms | 1200 V |
| Approvals | VDE KEMA UL ÖVE |