

Technical data sheet

Combination arrester V50, 1-pole + NPE 280 V

Item number: 5093522



Lightning current combination arrester, type 1+2

- For lightning current equipotential bonding to VDE 0185-305 (IEC 62305)
- Lightning current arresting capacity of 12.5 kA (10/350) per pole and up to 50 kA (10/350) in total
- Modular, plug-in 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 (FS) variants have a potential-free changeover contact for remote signalling

Application: Lightning current equipotential bonding for buildings of class III and IV.

* Complete = Plug-in arrester and base



Master data

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|------------------------------------|-------------------------|
| Item number | 5093522 |
| Type | V50-1+NPE-280 |
| Description 1 | CombiController V50 |
| Description 2 | 1-pole with NPE |
| Manufacturer | OBO |
| Dimension | 280V |
| Smallest sales unit | 1 |
| Unit of quantity | Piece |
| Weight | 32.929 kg |
| Weight unit | kg/100 pc. |
| CO2 Footprint (GWP) Cradle-to-Gate | 1,301 kg CO2e / 1 Piece |

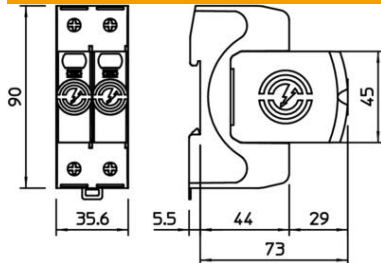
Technical data sheet

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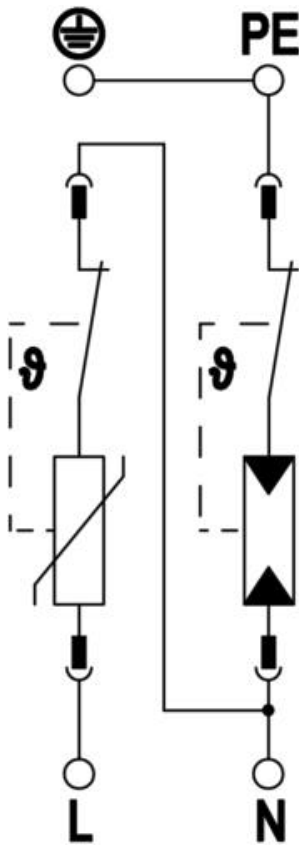
Item number: 5093522



Dimensions



Technical data



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| Arrester surge current (8/20 μ s) [total] | 80 kA |
| Connection cross-section (min.) | 1.5 mm ² |
| Connection cross-section, FM terminals, max. | 16 AWG |
| Connection cross-section, FM terminals, max. | 1.5 mm ² |
| Connection cross-section, FM terminals, min. | 21 AWG |
| Connection cross-section, FM terminals, min. | 0.5 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 |
| Lightning surge current (10/350 μ s) | 12.5 kA |
| Lightning surge current (10/350 μ s) [L-N/PE] | 12.5 kA |
| Lightning surge current (10/350 μ s) [N/PE] | 50 kA |
| Lightning surge current (10/350 μ s) | 25 kA |
| Torque | 35 Lbs |
| Torque | 4 Nm |
| Torque for FM terminal | 1.7 Lbs |
| Torque for FM terminal | 0.2 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] | 2.5 kV |
| Maximum continuous voltage (L-N) | 280 V |

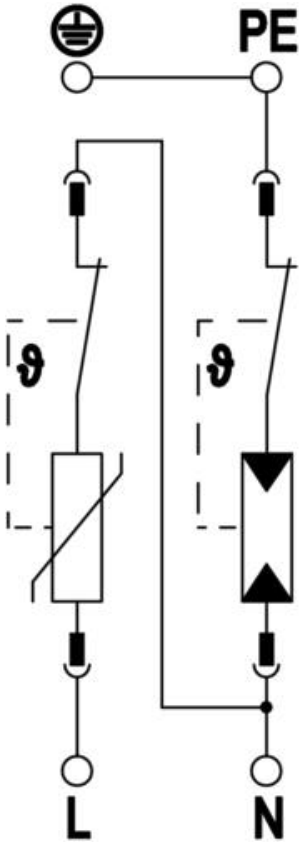
Technical data sheet

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Technical data



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| Maximum continuous voltage (N-PE) | 255 V |
| Maximum continuous voltage AC | 280 V |
| Integrated back-up fuse | no |
| 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 |
| 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) | 50 kA |
| Maximum discharge current (8/20 µs) [L-N] | 50 kA |
| Minimum distance | 1.5 mm |
| Installation type | DIN rail 35 mm |
| Nominal discharge current (8/20 µs) | 30 kA |
| Nominal discharge current (8/20 µs) [L-N] | 30 kA |
| Nominal voltage AC (50/60 Hz) | 230 V |
| Network form | TN-S, TT |
| TN network form | yes |
| TN-C network form | no |
| TN-C-S network form | yes |
| TN-S network form | yes |
| TT network form | yes |
| Pole number | 2 |
| Ports | One-Port SPD |
| Residual voltage [L-N] @ 1 kA | 0.7 kV |
| Residual voltage [L-N] @ 12.5 kA | 1 kV |
| Residual voltage [L-N] @ 5 kA | 0.8 kV |
| Residual voltage [L-N] @ 7 kA | 0.9 kV |
| Protection rating | IP20 |
| Protective conductor current | < 5 µA |
| Protection level | ≤1,3 kV |
| Protection level [L-N] | ≤1,3 |
| Protection level [N-PE] | 1.5 kV |
| Signalling on device | Visual |

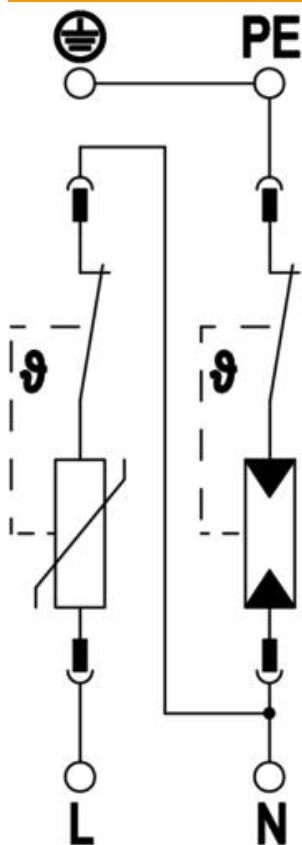
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| SPD to EN 61643-11 | Type 1+2 |
| SPD to IEC 61643-1 | Class I+II |
| SPD to UL 1449 | Type 4 |
| Permitted temperature range, max. | 80 °C |
| Permitted temperature range, min. | -40 °C |
| TOV voltage [L-N] – fail safe mode – 120 min. | 440 V |
| 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 |