

Technical data sheet

LightningController - MCF50-NAR-TT

Item number: 5096975



Combination arrester, type 1+2, for mounting on 40 mm busbars, for TN-S and TT systems

- Protection level ≤ 1.5 kV to protect the terminals
- Lightning protection equipotential bonding according to VDE 0185-305 (IEC 62305)
- Lightning current arresting capacity up to 50 kA (10/350) 3+NPE
- Fulfills the requirements of VDE 0100-534 (IEC 60364-5-53)
- Line follow current quenching up to 50 kA and max. backup fuse up to 160 A gL/gG
- Spark gaps for use in the pre-meter area according to VDE-AR-N 4100

Application: Building with lightning protection or outside cable infeed.



Master data

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|------------------------------------|--------------------------|
| Item number | 5096975 |
| Type | MCF50-NAR-TT |
| Description 1 | LightningController Rail |
| Description 2 | 3-pole with NPE |
| Manufacturer | OBO |
| Dimension | 255V |
| Smallest sales unit | 1 |
| Unit of quantity | Piece |
| Weight | 106.7 kg |
| Weight unit | kg/100 pc. |
| CO2 Footprint (GWP) Cradle-to-Gate | 5,7332 kg CO2e / 1 Piece |

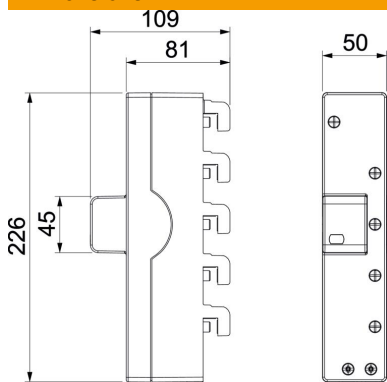
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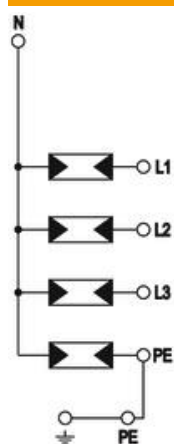
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Dimensions



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| Length | 226 mm |
| Width | 50 mm |
| Height | 109 mm |

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| Arrester surge current (8/20 μ s) [total] | 80 kA |
| Connection cross-section (min.) | 10 mm ² |
| Response time | <100 ns |
| Response time [L-N] | <100 ns |
| Response time [N-PE] | <100 ns |
| Version for | 3+NPE |
| Pole version | 3+N/PE |
| Structural width in division units (division unit, 17.5 mm) | Miscellaneous |
| 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) | 50 kA |
| Torque | 35 Lbs |
| Torque | 3.5 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) | 255 V |
| Maximum continuous voltage (N-PE) | 255 V |
| Maximum continuous voltage AC | 255 V |
| Short-circuit resistance for max. mains-side overcurrent protection | 50 kA eff |

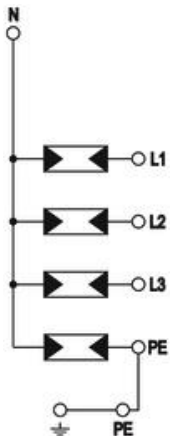
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| Conductor cross-section, flexible (fine-wire), max. | 35 mm ² |
| Conductor cross-section, flexible (fine-wire), max. | 2 AWG |
| Conductor cross-section, flexible (fine-wire), min. | 7 AWG |
| Conductor cross-section, flexible (fine-wire), min. | 10 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. | 7 AWG |
| Conductor cross-section, rigid (single-wire/multiwire), min. | 10 mm ² |
| Humidity, min. | 5 % |
| Humidity, max. | 95 % |
| Max. mains-side overcurrent protection | 160 A |
| Maximum back-up fuse | 160 A |
| Maximum discharge current (8/20 µs) | 50 kA |
| Maximum discharge current (8/20 µs) [L-N] | 50 kA |
| Maximum discharge current (8/20 µs) [N-PE] | 100 kA |
| Minimum distance | 0 mm |
| Installation type | Bus bar 40 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) [L-PE] | 20 kA |
| Nominal discharge current (8/20 µs) [N-PE] | 80 kA |
| Nominal frequency | 50 Hz |
| Nominal voltage AC (50/60 Hz) | 230 V |
| Network form | TN-S, TT |
| TN network form | yes |
| TN-C-S network form | yes |
| TN-S network form | yes |
| TT network form | yes |
| Ports | One-Port SPD |
| Protection rating | IP20 |
| Protective conductor current | < 5 µA |
| Protection level | ≤1,5 kV |
| Protection level [L-N] | ≤1,5 |
| Protection level [N-PE] | 1.5 kV |
| Signalling on device | Visual |
| SPD to EN 61643-11 | Type 1+2 |
| SPD to IEC 61643-1 | Class I+II |
| Permitted temperature range, max. | 80 °C |
| Permitted temperature range, min. | -40 °C |

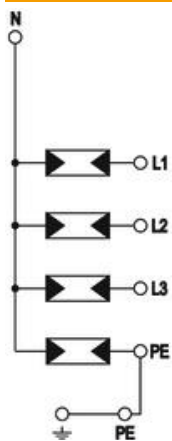
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| TOV voltage [L-N] – fail safe mode – 120 min. | 442 V |
| TOV voltage [L-N] – withstand mode – 5 s | 440 V |
| TOV voltage [N-PE] – withstand mode – 200 ms | 1200 V |
| Approvals | VDE |