

# Technical data sheet

## Lightning current arrester MCF-P, 3-pole with RS

Item number: 5096946



Lightning current arrester, type 1+2+3

- Lightning current discharge capacity of 35 kA (10/350) per pole
- Protection level < 1.5 kV
- Lightning protection equipotential bonding according to VDE 0185-305 (IEC 62305)
- Follow current quenching Ifi 50 kA
- Complies with the requirements for the use in the pre-meter area according to VDE-AR-N 4100
- Including potential-free changeover contact for remote signalling

Application: industrial plants and buildings with external lightning protection of the classes I to IV.

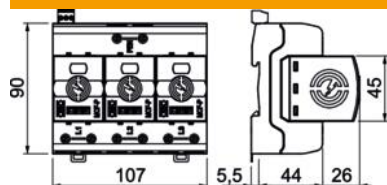
\* Complete = Plug-in arrester and base



### Master data

|                                    |                            |
|------------------------------------|----------------------------|
| Item number                        | 5096946                    |
| Type                               | MCF-P-3+FS                 |
| Description 1                      | Lightning current arrester |
| Description 2                      | pluggable, 3-pole with RS  |
| Manufacturer                       | OBO                        |
| Dimension                          | 255V                       |
| Smallest sales unit                | 1                          |
| Unit of quantity                   | Piece                      |
| Weight                             | 118.257 kg                 |
| Weight unit                        | kg/100 pc.                 |
| CO2 Footprint (GWP) Cradle-to-Gate | 2,6577 kg CO2e / 1 Piece   |

### Dimensions



|        |        |
|--------|--------|
| Length | 70 mm  |
| Width  | 108 mm |
| Height | 90 mm  |

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|                                                                     |                      |
|---------------------------------------------------------------------|----------------------|
| Connection cross-section, FM terminals, max.                        | 16 AWG               |
| Connection cross-section, FM terminals, max.                        | 1.5 mm <sup>2</sup>  |
| Connection cross-section, FM terminals, min.                        | 26 AWG               |
| Connection cross-section, FM terminals, min.                        | 0.14 mm <sup>2</sup> |
| Response time [L-N]                                                 | <100 ns              |
| Blow-out                                                            | no                   |
| Pole version                                                        | 3                    |
| Structural width in division units (division unit, 17.5 mm)         | 6                    |
| Lightning surge current (10/350 µs)                                 | 35 kA                |
| Lightning surge current (10/350 µs) [L-N/PE]                        | 35 kA                |
| Lightning surge current (10/350)                                    | 105 kA               |
| Torque                                                              | 44 Lbs               |
| Torque                                                              | 5 Nm                 |
| Torque for FM terminal                                              | 2.2 Lbs              |
| Torque for FM terminal                                              | 0.25 Nm              |
| Installation location                                               | Interior             |
| Remote signalling                                                   | yes                  |
| FM contacts                                                         | Changeover           |
| Function/defect display                                             | Visual               |
| Suitable for outdoor use                                            | no                   |
| Combined voltage protection level [L-PEN]                           | 1.5 kV               |
| Maximum continuous voltage (L-N)                                    | 255 V                |
| Maximum continuous voltage AC                                       | 255 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 <sup>2</sup>   |
| 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 <sup>2</sup>  |
| Conductor cross-section, rigid (single-wire/multiwire), max.        | 2 AWG                |
| Conductor cross-section, rigid (single-wire/multiwire), max.        | 35 mm <sup>2</sup>   |
| Conductor cross-section, rigid (single-wire/multiwire), min.        | 16 AWG               |
| Conductor cross-section, rigid (single-wire/multiwire), min.        | 1.5 mm <sup>2</sup>  |
| Humidity, min.                                                      | 5 %                  |
| Humidity, max.                                                      | 95 %                 |
| Max. mains-side overcurrent protection                              | 315 A gL/gG          |
| Maximum back-up fuse                                                | 315 A                |

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|                                                  |                |
|--------------------------------------------------|----------------|
| Maximum discharge current (8/20 µs) [L-N]        | 50 kA          |
| Minimum distance                                 | 0 mm           |
| Installation type                                | DIN rail 35 mm |
| Nominal discharge current (8/20 µs)              | 35 kA          |
| Nominal discharge current (8/20 µs) [L-N]        | 35 kA          |
| Nominal frequency                                | 50 Hz          |
| Nominal voltage AC (50/60 Hz)                    | 230 V          |
| Network form                                     | TN-C           |
| DC network form                                  | no             |
| IT network form                                  | no             |
| Other network form                               | no             |
| TN network form                                  | no             |
| TN-C network form                                | yes            |
| TN-C-S network form                              | no             |
| TN-S network form                                | no             |
| TT network form                                  | no             |
| OBO_Nominal load current (input/output terminal) | 125 A          |
| Ports                                            | One-Port SPD   |
| Test class, type 1                               | yes            |
| Switching power AC                               | 250 V / 2 A    |
| Switching power DC                               | 250 V / 0,1 A  |
| Protection rating                                | IP20           |
| Protection level                                 | ≤1,5 kV        |
| Protection level [L-N]                           | ≤1,5           |
| Signalling on device                             | Visual         |
| SPD to EN 61643-11                               | Type 1+2+3     |
| SPD to IEC 61643-1                               | Class I+II+III |
| Permitted temperature range, max.                | 80 °C          |
| Permitted temperature range, min.                | -40 °C         |
| TOV voltage [L-N] – fail safe mode – 120 min.    | 442 V          |
| TOV voltage [L-N] – withstand mode – 5 s         | 440 V          |
| Number of conductors (without earth)             | 3              |