

Technical data sheet

Lightning current arrester MCF-P, 3+NPE with RS

Item number: 5096948



Lightning current arrester, type 1+2+3

- Lightning current discharge capacity of 35 kA (10/350) per pole
- Lightning current discharge capacity of 100 kA (10/350) total
- Protection level < 1.5 kV
- Lightning protection equipotential bonding according to VDE 0185-305 (IEC 62305)
- Follow current quenching I_{fi} 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.

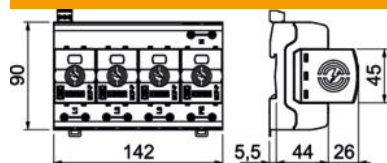
* Complete = Plug-in arrester and base



Master data

Item number	5096948
Type	MCF-P-3+NPE+FS
Description 1	Lightning current arrester
Description 2	pluggable, 3-pole with NPE+RS
Manufacturer	OBO
Dimension	255V
Smallest sales unit	1
Unit of quantity	Piece
Weight	158.846 kg
Weight unit	kg/100 pc.
CO2 Footprint (GWP) Cradle-to-Gate	3,2313 kg CO2e / 1 Piece

Dimensions



Length	70 mm
Width	144 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 ²
Connection cross-section, FM terminals, min.	26 AWG
Connection cross-section, FM terminals, min.	0.14 mm ²
Response time [L-N]	<100 ns
Response time [N-PE]	<100 ns
Blow-out	no
Pole version	3+N/PE
Structural width in division units (division unit, 17.5 mm)	8
Lightning surge current (10/350 µs)	35 kA
Lightning surge current (10/350 µs) [L-N/PE]	35 kA
Lightning surge current (10/350 µs) [N/PE]	100 kA
Lightning surge current (10/350)	100 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
Follow current quenching capacity (eff) [N-PE]	0.1 kA
Function/defect display	Visual
Suitable for outdoor use	no
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
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

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Conductor cross-section, rigid (single-wire/multiwire), min.	1.5 mm ²
Humidity, min.	5 %
Humidity, max.	95 %
Max. mains-side overcurrent protection	315 A gL/gG
Maximum back-up fuse	315 A
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	DIN rail 35 mm
Nominal discharge current (8/20 µs)	35 kA
Nominal discharge current (8/20 µs) [L-N]	35 kA
Nominal discharge current (8/20 µs) [L-PE]	35 kA
Nominal discharge current (8/20 µs) [N-PE]	100 kA
Nominal frequency	50 Hz
Nominal voltage AC (50/60 Hz)	230 V
Network form	TN-S, TT
DC network form	no
IT network form	no
Other network form	no
TN network form	no
TN-C network form	no
TN-C-S network form	yes
TN-S network form	yes
TT network form	yes
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
Protection level [N-PE]	1.5 kV
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
TOV voltage [N-PE] – withstand mode – 200 ms	1200 V

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Number of conductors (without earth)	4
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