Technical data sheet

Combination arrester, 3-pole + NPE

Item number: 5096879

Combination arrester, type 1+2, 4-pole, for use in TT and TN-S networks.

Completely pre-terminated and ready for connection, consisting of:

3x MCD 50-B: Coordinated lightning current arrester, type 1+2 to EN 61643-11 and

1x MCD 125-B/NPE: Coordinated N-PE spark gap, type 1+2 to EN 61643-11. For interface 0 to 2 (LPZ) in accordance with lightning protection zone concept to IEC 62305 and/or VDE 0185-305.

- Lightning protection equipotential bonding to VDE 0185-305 (IEC 62305)
- Lightning current arresting capacity to 50 kA (10/350) per pole and up to 125 kA (10/350) in total
- Protection level < 1.7 kV allows device protection
- Short-circuit resistance 10 kA, arrester backup fuse to 500 A gL/gG
- Encapsulated, non-extinguishing spark gaps

Application: Industrial systems and buildings with external lightning protection of the classes I to IV.

Type 1+2 | LPZ 0→2 | 230/400 V System

Master data

Item number	5096879
Type	MCD 50-B 3+1
Description 1	CoordinatedLightningController
Description 2	set for TT and TNS networks
Manufacturer	OBO
Dimension	255V
Smallest sales unit	1
Unit of quantity	Piece
Weight	150.2 kg
Weight unit	kg/100 pc.
CO2 Footprint (GWP) Cradle-to-Gate	8,7435 kg CO2e / 1 Piece

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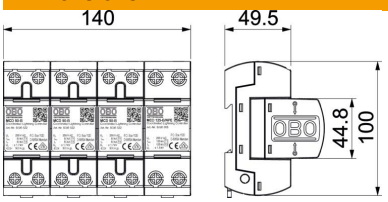
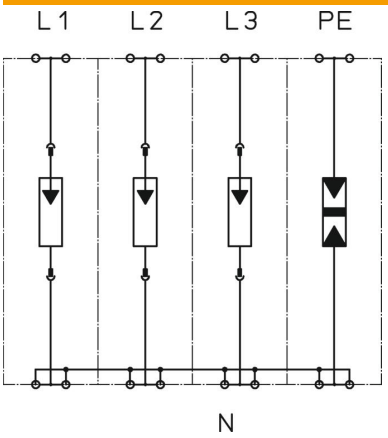
Dimensions



Length	100 mm
Width	140 mm
Height	69 mm

Technical data



Arrester surge current (8/20 µs) [total]	125 kA
Response time	<100 ns
Blow-out	no
Version for	3+NPE
Pole version	3+N/PE
Structural width in division units (division unit, 17.5 mm)	8
Operating temperature, max.	85 °C
Operating temperature, min.	-40 °C
Lightning surge current (10/350 µs)	50 kA
Lightning surge current (10/350 µs) [N/PE]	125 kA
Lightning surge current (10/350)	125 kA
Remote signalling	no
Follow current quenching capacity (eff) [N-PE]	0.1 kA
Follow current quenching capacity leff	10 kA
Maximum continuous voltage (L-N)	255 V
Maximum continuous voltage (N-PE)	255 V
Maximum continuous voltage AC	255 V
Short-circuit resistance	10 kA
Short-circuit resistance for max. mains-side overcurrent protection	10 kA
Conductor cross-section, rigid (single-wire/multiwire), max.	50 mm²
Conductor cross-section, rigid (single-wire/multiwire), min.	10 mm²
Lightning protection zone LPZ	0→2
Humidity, min.	5 %
Humidity, max.	95 %
Max. mains-side overcurrent protection	500
Maximum back-up fuse	500 A
Installation type	DIN rail 35 mm
Nominal discharge current (8/20 µs)	50 kA
Nominal discharge current (8/20 µs) [L-N]	50 kA
Nominal discharge current (8/20 µs) [N-PE]	125 kA
Nominal voltage AC (50/60 Hz)	230 V

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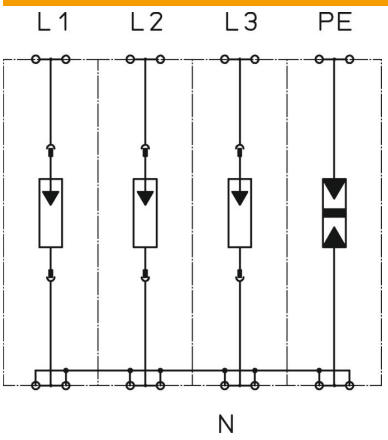

Network form	TN-S, TT
DC network form	no
IT network form	no
Other network form	no
TN network form	yes
TN-C network form	no
TN-C-S network form	yes
TN-S network form	yes
TT network form	yes
OBO_Nominal load current (input/output terminal)	125 A
Pole number	1
Test class, type 1	yes
Test class, type 2	yes
ROHS-conformant	yes
Protection rating	IP20
Protection level	≤1,7 kV
Protection level [L-N]	≤1,7
Protection level [N-PE]	1.5 kV
Signalling on device	None
SPD to EN 61643-11	Type 1+2
SPD to IEC 61643-11	Class I+II
Permitted temperature range, max.	85 °C
Permitted temperature range, min.	-40 °C
Approvals	VDE