

Technical data sheet

Combination arrester V50, 1-pole + NPE 280 V

Item number: 5093594



Lightning current combination arrester, type 1+2 to DIN EN 61643-11

- For lightning protection equipotential bonding to VDE 0185-305 (IEC 62305)
- Complete unit, pre-mounted and ready for connection in polycarbonate housing (IP66)
- Lightning current arresting capacity 12.5 kA (10/350) per pole and up to 50 kA (10/350) in total

Application: Lightning protection equipotential bonding for buildings of Class III and IV.

If there is a danger of condensation forming through wind, ice, temperature or sunlight, further measures may be necessary!

* Complete = upper part and base



Master data

Item number	5093594
Description 1	CombiController V50
Description 2	1+1 in housing
Manufacturer	OBO
Dimension	280V
Smallest sales unit	1
Unit of quantity	Piece
Weight	81 kg
Weight unit	kg/100 pc.
CO Footprint (GWP) Cradle-to-Gate	3,7179 kg COe / 1 Piece

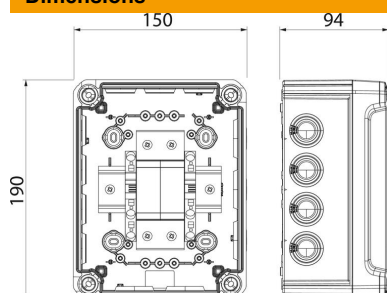
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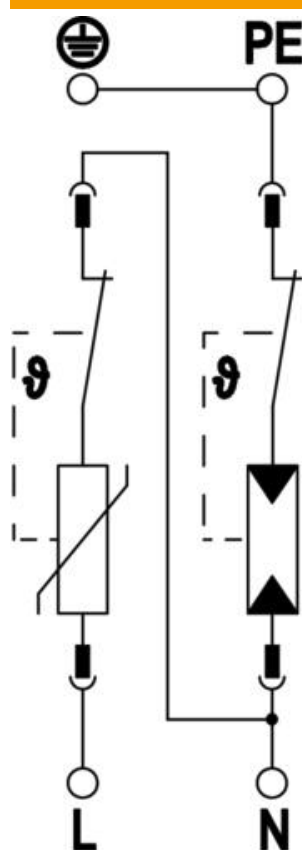
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Dimensions



Technical data



Arrester surge current (8/20 μ s) [total]	50 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
Blow-out	no
Pole version	1+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]	50 kA
Lightning surge current (10/350 μ s) [N/PE]	50 kA
Lightning surge current (10/350)	25 kA
Torque	35 Lbs
Torque	4 Nm
Torque for FM terminal	1.7 Lbs
Torque for FM terminal	0.2 Nm
Remote signalling	no
Follow current quenching capacity (eff) [N-PE]	0.1 kA
Function/defect display	Visual
Maximum continuous voltage (L-N)	280 V
Maximum continuous voltage (N-PE)	255 V
Maximum continuous voltage AC	280 V
Maximum continuous voltage DC	350 V
Integrated back-up fuse	no

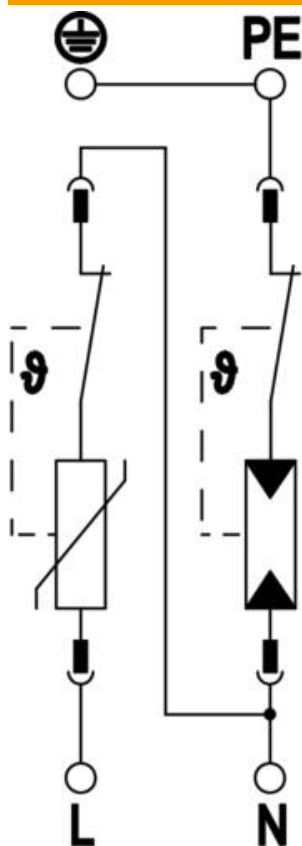
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Short-circuit resistance for max. mains-side overcurrent protection

50 kA eff

Conductor cross-section, flexible (fine-wire), max.

35 mm²

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 mm²

Conductor cross-section, rigid (single-wire/multiwire), max.

2 AWG

Conductor cross-section, rigid (single-wire/multiwire), max.

35 mm²

Conductor cross-section, rigid (single-wire/multiwire), min.

16 AWG

Conductor cross-section, rigid (single-wire/multiwire), min.

1.5 mm²

Humidity, max.

95 %

Humidity, min.

5 %

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

Pre-mounted in the housing

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

Other

TN network form

yes

TN-C-S network form

yes

TN-S network form

yes

TT network form

yes

Pole number

1

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

IP66

Protective conductor current

< 2 µA

Protection level

≤ 1,3

Protection level [L-N]

≤ 1,3

Protection level [N-PE]

1.3 kV

Signalling on device

Visual

SPD to EN 61643-11

Type 1+2

SPD to IEC 61643-1

Class I+II

SPD to UL 1449

Type 4

TOV voltage [L-N] – fail safe mode – 120 min.

440 V

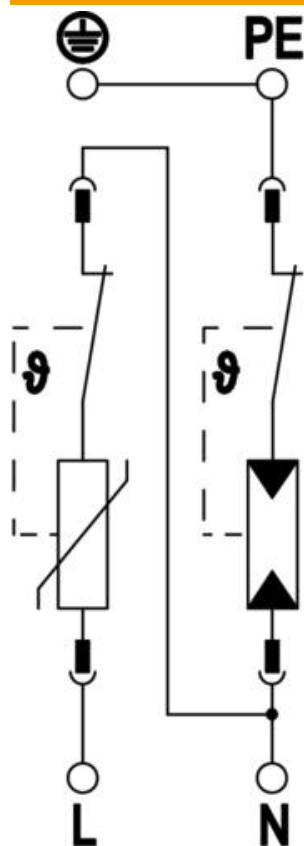
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TOV voltage [L-N] – withstand mode – 5 s	335 V
TOV voltage [N-PE] – withstand mode – 200 ms	1200 V
Approvals	VDE UL ÖVE