Technical data sheet

System solution, surge arrester V20 in housing, 3-pole + NPE, 280 V
Item number: 5095383



Surge arrester, type 2, according to DIN EN 61643-11

• Ideal for protecting charging stations and any vehicles connected to them
• For surge voltage protection equipotential bonding to VDE 0100-443 (IEC 60364-4-44)
• Complete unit, pre-mounted and ready for connection in polycarbonate housing (IP66)
• Arresting capacity to 40 kA (8/20) per pole through high-performance varistors

Application: AC charging device up to 22 kW, equipotential bonding in main and sub-distributors.

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

Type 2 | LPZ 1→2 | HALOGEN FREE

Master data

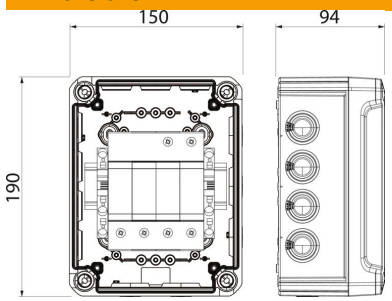
Item number	5095383
Type	VG-V20-3+NPE-280
Description 1	SurgeController V20
Description 2	3+1 in housing
Manufacturer	OBO
Dimension	280V
Smallest sales unit	1
Unit of quantity	Piece
Weight	96 kg
Weight unit	kg/100 pc.
CO2 Footprint (GWP) Cradle-to-Gate	3,9281 kg CO2e / 1 Piece

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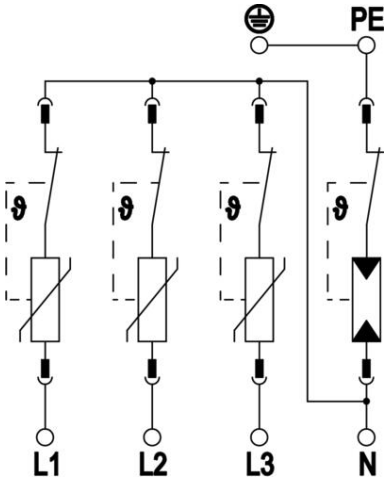
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Dimensions



Technical data



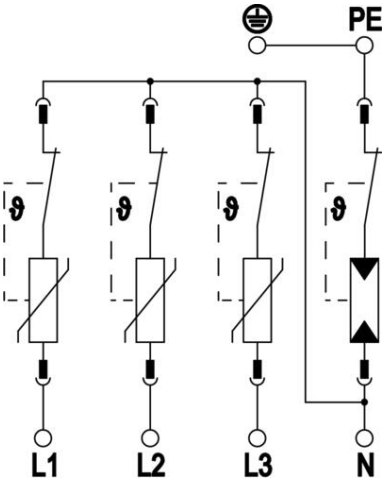
Arrester surge current (8/20 µs) [total]	60 kA
Connection cross-section (min.)	1.5 mm²
Connection cross-section, FM terminals, max.	16 AWG
Connection cross-section, FM terminals, max.	1.5 mm²
Connection cross-section, FM terminals, min.	21 AWG
Connection cross-section, FM terminals, min.	0.5 mm²
Response time	<25 ns
Response time [L-N]	25 ns
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
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
Short-circuit resistant	yes
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

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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, min.	5 %
Humidity, max.	95 %
Max. mains-side overcurrent protection	160 A gL/gG
Maximum back-up fuse	160 A
Maximum discharge current (8/20 µs)	40 kA
Maximum discharge current (8/20 µs) [L-N]	40 kA
Minimum distance	1.5 mm
Installation type	Pre-mounted in the housing
Nominal discharge current (8/20 µs)	20 kA
Nominal discharge current (8/20 µs) [L-N]	20 kA
Nominal discharge current (8/20 µs) [N-PE]	40 kA
Nominal voltage AC (50/60 Hz)	230 V
Network form	Other
Ports	One-Port SPD
Test class, type 2	yes
Residual voltage [L-N] @ 1 kA	0.7 kV
Residual voltage [L-N] @ 5 kA	0.9 kV
ROHS-conformant	yes
Protection rating	IP66
Protective conductor current	< 2 µA
Protection level	≤1,3 kV
Protection level [L-N]	≤1,3
Protection level [N-PE]	1.3 kV
Signalling on device	Visual
SPD to EN 61643-11	Type 2
SPD to IEC 61643-11	Class II
SPD to UL 1449	Type 4
Permitted temperature range, max.	80 °C
Permitted temperature range, min.	-40 °C
TOV voltage [L-N] – fail safe mode – 120 min.	440 V
TOV voltage [L-N] – withstand mode – 5 s	335 V
TOV voltage [N-PE] – withstand mode – 200 ms	1200 V
Approvals	UL ÖVE