

Technical data sheet

LightningController - MCF50-NAR-TT



Item number: 5096975



Combination arrester, type 1+2, for mounting on 40 mm busbars, for TN-S and TT systems

- Protection level ≤ 1.5 kV to protect the terminals
- Lightning protection equipotential bonding according to VDE 0185-305 (IEC 62305)
- Lightning current arresting capacity up to 50 kA (10/350) 3+NPE
- Fulfills the requirements of VDE 0100-534 (IEC 60364-5-53)
- Line follow current quenching up to 50 kA and max. backup fuse up to 160 A gL/gG
- Spark gaps for use in the pre-meter area according to VDE-AR-N 4100

Application: Building with lightning protection or outside cable infeed.



Master data

Item number	5096975
Type	MCF50-NAR-TT
Description 1	LightningController Rail
Description 2	3-pole with NPE
Manufacturer	OBO
Dimension	255V
Smallest sales unit	1
Unit of quantity	Piece
Weight	106.7 kg
Weight unit	kg/100 pc.

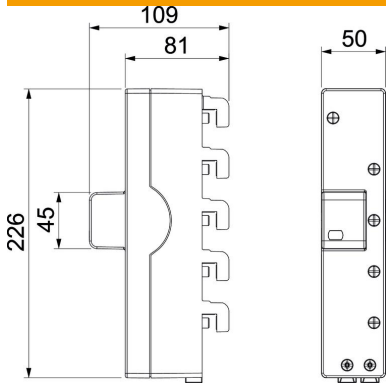
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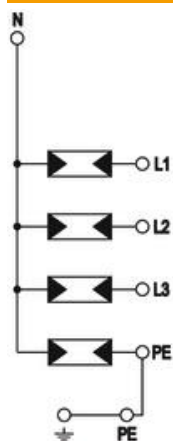
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Dimensions



Length	226 mm
Width	50 mm
Height	109 mm

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Arrester surge current (8/20 μ s) [total]	80 kA
Connection cross-section (min.)	10 mm ²
Response time	<100 ns
Response time [L-N]	<100 ns
Response time [N-PE]	<100 ns
Version for	3+NPE
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
Lightning surge current (10/350 μ s)	12.5 kA
Lightning surge current (10/350 μ s) [L-N/PE]	12.5 kA
Lightning surge current (10/350 μ s) [N/PE]	50 kA
Lightning surge current (10/350)	50 kA
Torque	35 Lbs
Torque	3.5 Nm
Installation location	Interior
Remote signalling	no
Follow current quenching capacity (eff) [N-PE]	0.1 kA
Function/defect display	Visual
Housing material	PA UL 94 V-0
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
Short-circuit resistance for max. mains-side overcurrent protection	50 kA eff
Conductor cross-section, flexible (fine-wire), max.	35 mm ²

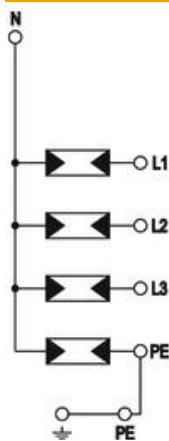
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Conductor cross-section, flexible (fine-wire), max.	2 AWG
Conductor cross-section, flexible (fine-wire), min.	7 AWG
Conductor cross-section, flexible (fine-wire), min.	10 mm ²
Conductor cross-section, rigid (single-wire/multiwire), max.	2 AWG
Conductor cross-section, rigid (single-wire/multiwire), max.	35 mm ²
Conductor cross-section, rigid (single-wire/multiwire), min.	7 AWG
Conductor cross-section, rigid (single-wire/multiwire), min.	10 mm ²
Humidity, max.	95 %
Humidity, min.	5 %
Max. mains-side overcurrent protection	160 A
Maximum back-up fuse	160 A
Maximum discharge current (8/20 µs)	50 kA
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	Bus bar 40 mm
Nominal discharge current (8/20 µs)	20 kA
Nominal discharge current (8/20 µs) [L-N]	20 kA
Nominal discharge current (8/20 µs) [L-PE]	20 kA
Nominal discharge current (8/20 µs) [N-PE]	80 kA
Nominal frequency	50 Hz
Nominal voltage AC (50/60 Hz)	230 V
Network form	TN-S, TT
TN network form	yes
TN-C-S network form	yes
TN-S network form	yes
TT network form	yes
Ports	One-Port SPD
Protection rating	IP20
Protective conductor current	< 5 µA
Protection level	≤ 1,5
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
SPD to IEC 61643-1	Class I+II
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

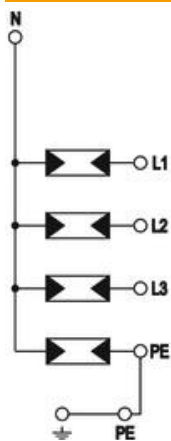
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Approvals
Cable type for surge protection
devices

VDE
Power cable AV