Technical data sheet

LightningController Compact - MCF75

Item number: 5096981

Combination arrester, lightning current and surge arrester, type 1+2

- Protection level ≤ 1.5 kV
- For lightning protection equipotential bonding to VDE 0185-305 (IEC 62305)
- Lightning current arresting capacity to 75 kA (10/350), 3-pole
- Follow current quenching rating Ifi 50 kA, arrester backup fuse to 315 A gL/gG
- Fulfils the requirements of VDE-AR-N 4100 for use in pre-meter area
- Encapsulated, non-extinguishing spark gap arrester for use in distributor housings

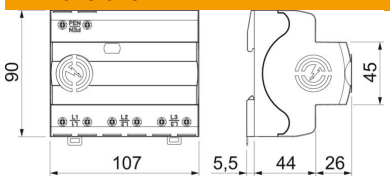
Application: Industrial systems and buildings with external lightning protection of the highest class I to IV.
Compact protection device

230/ 400 V System | Type 1+2 | LPZ 0→2 | FS | HALOGEN FREE

Master data

Item number	5096981
Type	MCF75-3+FS
Description 1	LightningController Compact
Description 2	3-pole with RS
Manufacturer	OBO
Dimension	255V
Smallest sales unit	1
Unit of quantity	Piece
Weight	75 kg
Weight unit	kg/100 pc.
CO2 Footprint (GWP) Cradle-to-Gate	3,7009 kg CO2e / 1 Piece

Dimensions



Length	90 mm
Width	107 mm
Height	70 mm

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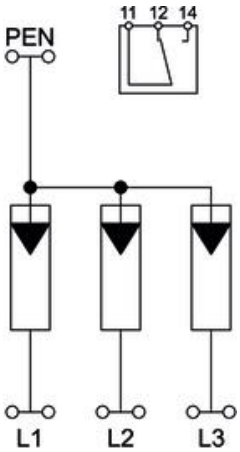

Arrester surge current (8/20 µs) [total]	75 kA
Connection cross-section (min.)	1.5 mm²
Connection cross-section, FM terminals, max.	16 AWG
Connection cross-section, FM terminals, max.	1.5 mm²
Connection cross-section, FM terminals, min.	28 AWG
Connection cross-section, FM terminals, min.	0.5 mm²
Response time	<100 ns
Pole version	3
Structural width in division units (division unit, 17.5 mm)	6
Operating temperature, max.	80 °C
Operating temperature, min.	-40 °C
Lightning surge current (10/350 µs)	25 kA
Lightning surge current (10/350)	75 kA
Torque	44 Lbs
Torque	5 Nm
Torque for FM terminal	1.7 Lbs
Torque for FM terminal	0.2 Nm
Installation location	Interior
Remote signalling	yes
FM contacts	Changeover
Function/defect display	Visual
Housing material surge protection components	PA UL 94 V-0
Combined voltage protection level [L-PEN]	1.5 kV
Maximum continuous voltage AC	255 V
Short-circuit resistance for max. mains-side overcurrent protection	50 kA eff
Conductor cross-section, flexible (fine-wire), max.	25 mm²
Conductor cross-section, flexible (fine-wire), max.	3 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, min.	5 %
Humidity, max.	95 %
Max. mains-side overcurrent protection	315 A
Maximum back-up fuse	315 A

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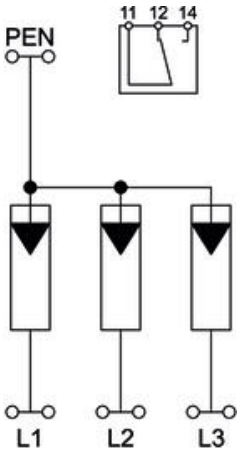

Maximum discharge current (8/20 µs)	50 kA
Minimum distance	0 mm
Installation type	DIN rail 35 mm
Nominal discharge current (8/20 µs)	35 kA
Nominal frequency	50 Hz
Nominal voltage AC (50/60 Hz)	230 V
Network form	TN-C
TN network form	yes
TN-C network form	yes
Pole number	3
Ports	One-Port SPD
ROHS-conformant	Exempt
Switching power AC	250V/ 1,5A
Switching power DC	250V/ 0,1A
Protection rating	IP20
Protective conductor current	< 5 µA
Protection level	≤1,5 kV
Signalling on device	Visual
SPD to EN 61643-11	Type 1+2
SPD to IEC 61643-11	Class I+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.	442 V
TOV voltage [L-N] – withstand mode – 5 s	440 V
Approvals	VDE UL