

Technical data sheet

Combination protection for two-core systems with HF applications 5 V

Item number: 5098571



Surge protection for use in measuring, control and regulation systems.

- Basic, medium and fine protection
- Two-stage protection circuit with high lightning current carrying capacity
- High transmission frequency up to 100 MHz
- Suitable for all bus systems (e.g. Profibus)
- With installation-friendly, screwless connection terminals
- In space-saving 17.5 mm grid

Application: Multipurpose use on any 35 mm DIN profile rail in every commercially available distribution housing.



Master data

Item number	5098571
Type	FRD 5 HF
Description 1	Lightning barrier
Description 2	with HF applications
Manufacturer	OBO
Dimension	5V AC
Smallest sales unit	1
Unit of quantity	Piece
Weight	4.4 kg
Weight unit	kg/100 pc.
CO2 Footprint (GWP) Cradle-to-Gate	0,1623 kg CO2e / 1 Piece

Dimensions



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Arrestor monitoring	no
Connection cross-section, flexible, max.	2.5 mm ²
Connection cross-section, flexible, min.	0.14 mm ²
Connection cross-section, multi-wire, max.	2.5 mm ²
Connection cross-section, multi-wire, min.	0.14 mm ²
Connection cross-section, rigid, max.	2.5 mm ²
Connection cross-section, rigid, min.	0.14 mm ²
Number of poles	2
Insertion loss	≤3 dB
Earthing via:	Terminal
Explosion-tested version	no
Telecommunications contact	no
Total discharge current (10/350)	D1: 6 kA
Total discharge current (8/20)	18 kA
Cut-off frequency	100 MHz
Maximum continuous voltage AC	4 V
Maximum continuous voltage DC	6 V
Lightning impulse current	3 kA
Insulation resistance	>10 MΩ
Capacity (wire-wire)	<40 pF
Capacity (wire-earth)	<40 pF
Kategorie	Type 1+2+3 / D1+C2+C1
Lightning protection zone LPZ	0→3
Mounting type	DIN rail 35 mm
Nominal discharge current (8/20 μs)	9 kA
Nominal load current AC	0.32 A
Nominal load current DC	0.45 A
Nominal voltage	5 V
Testing standard	IEC 61643-21
Shielding connection available	no
Protection rating	IP20
Protection level wire-wire	<90 V
Protection level wire-earth	<650 V
Series resistance per wire	2,2 Ω ± 10 %
SPD to IEC 61643-21	Class I+II+III / D1+C2+C1
Plug-in system	Terminal
Impulse durability wire-wire	C2: 18 kV / 9 kA (8/20μs)
Impulse durability wire-earth	C2: 18 kV / 9 kA (8/20μs)
Division unit TE (17.5 mm)	1
Permitted temperature range, max.	80 °C
Permitted temperature range, min.	-40 °C
Approvals	UL