

EMC filter surge protection device - SFP 1-20/230AC - 2859987

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Device surge protection filter to limit powerful surge voltages, mounting on NS 35.

Product description

Device protection with interference filter

Product Features

- ✓ Can be installed in industrial environments
- ✓ Combined protective circuit for absorbing transient surge voltages and high-frequency interference voltages
- ✓ Thermal monitoring of the protective circuit
- ✓ Disconnection status signaled via floating remote indication contact



Key commercial data

Packing unit	1 PCE
GTIN	
Custom tariff number	85363010
Country of origin	GERMANY

Technical data

Standards

Housing material	ABS, V0(UL-94)
Inflammability class according to UL 94	V0
Color	aluminum
Standards for air and creepage distances	DIN VDE 0110-1
Standards for air and creepage distances	IEC 60664-1
Standards for air and creepage distances	IEC 61643-1

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Technical data

Standards

Degree of protection	IP20
Design	Rail-mountable module, one-piece
Mounting type	DIN rail: 35 mm
Number of positions	2
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Ambient temperature (operation)	-40 °C ... 70 °C
For country-specific use in	D, A, I, NL, S, E, FIN, P
Direction of action	L-N & L(N)-PE
Width	112 mm
Height	93 mm
Depth	79 mm

Protective circuit

IEC category	III
IEC category	T3
EN type	T3
Nominal voltage U_N	230 V AC
Arrester rated voltage U_C (L-N)	264 V AC
Nominal frequency f_N	50 Hz
Nominal frequency f_N	60 Hz
Nominal current I_N	20 A (40°C)
Residual current I_{PE}	≤ 0.57 mA
Nominal discharge surge current I_n (8/20) μ s (L-N)	5 kA
Nominal discharge surge current I_n (8/20) μ s (L-PE)	5 kA
Max. discharge surge current I_{max} (8/20) μ s maximum (L-N)	10 kA
Max. discharge surge current I_{max} (8/20) μ s maximum (L-PE)	10 kA
Combined surge U_{OC}	10 kV
Voltage protection level U_P (L-N)	≤ 1 kV
Voltage protection level U_P (L-PE)	≤ 1 kV
Voltage protection level U_P (N-PE)	≤ 1 kV
Response time t_A (L-N)	≤ 25 ns
Response time t_A (L-PE)	≤ 25 ns
Response time t_A (N-PE)	≤ 25 ns
Inductivity in series	2x 1 mH ± 30 % (with current compensation)
Capacity (L-N)	1 μ F ± 10 % (X2-275 V)
Capacity (L-PE)	2.2 nF ± 20 % (Y2-250 V)
Capacity (L-PEN)	2.2 nF ± 20 % (Y2-250 V)

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Protective circuit

Max. required back-up fuse	20 A (gL / gG)
Input attenuation aE, sym.	20 dB (≥ 100 kHz / 50 Ω)
Input attenuation aE, asym.	30 dB (≥ 1 MHz / 50 Ω)
Message: Surge protection fault	Remote indicator contact

Non-heating apparatus connection, power supply

Connection name	Input/output
Connection method	Screw terminal blocks
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Connection method	3-conductor (shielded)
Screw thread	M3
Stripping length	8 mm
Conductor cross section stranded min.	4 mm ²
Conductor cross section stranded max.	4 mm ²
Conductor cross section solid min.	4 mm ²
Conductor cross section solid max.	6 mm ²
Conductor cross section AWG/kcmil min.	12
Conductor cross section AWG/kcmil max	10

Remote indicator contact

Connection name	Remote fault indicator contact
Switching function	PDT, 1-pos.
Connection method	Pluggable screw connection
Screw thread	M2
Tightening torque	0.25 Nm
Stripping length	7 mm
Conductor cross section stranded min.	0.14 mm ²
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	28
Conductor cross section AWG/kcmil max	16
Maximum operating voltage U_{max} AC	250 V AC
Max. operating current I_{max}	1 A (250 V AC)
Max. operating current I_{max}	0.25 A (250 V DC)
Max. operating current I_{max}	1 A (48 V DC)

Connection, protective circuit

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Connection, protective circuit

Standards/regulations	IEC 61643-1
Standards/regulations	EN 61643-11/A11

Protective circuit, filter

Discharge resistor	≤ 680 kΩ
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Classifications

ETIM

ETIM 2.0	EC000942
ETIM 3.0	EC000942
ETIM 4.0	EC000942
ETIM 5.0	EC000942

UNSPSC

UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620
UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130806
eCl@ss 7.0	27130806

Approvals

Approvals

Approvals

GOST

Ex Approvals

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Approvals

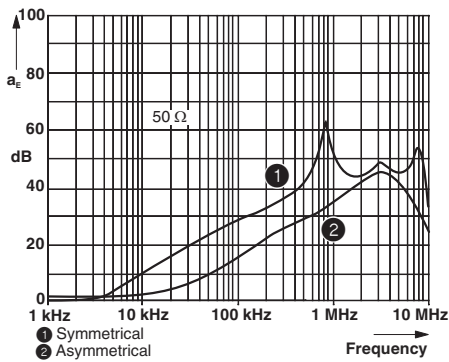
Approvals submitted

Approval details

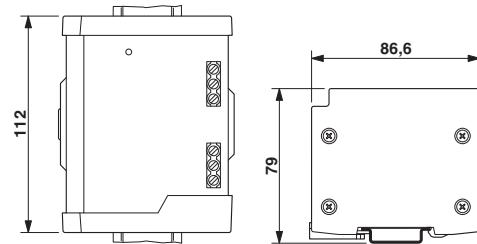


Drawings

Diagram



Dimensioned drawing



Circuit diagram

