

# EMC filter surge protection device - SFP 1-10/120AC - 2920670

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

## Product description

Device protection with interference filter

## Why buy this product

- 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	0
Minimum order quantity	1
Catalog page	Page 230 (TT-2011)
GTIN	 4 046356 158480
Custom tariff number	85363010
Country of origin	GERMANY

## Technical data

### Standards

Housing material	ABS, aluminum
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
Degree of protection	IP20
Design	Rail-mountable module, one-piece
Mounting type	DIN rail: 35 mm
Number of positions	2

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## Technical data

### Standards

Ambient temperature (storage/transport)	-40 °C ... 85 °C
Ambient temperature (operation)	-25 °C ... 60 °C
For country-specific use in	USA, CN, BR
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 UN	120 V AC
Arrester rated voltage UC (L-N)	150 V AC
Arrester rated voltage UC (L-PE)	150 V AC
Nominal frequency fN	50 Hz
Nominal frequency fN	60 Hz
Nominal current IN	10 A (62°C)
Operating effective current IC at UC	≤ 10 mA
Ground conductor current IPE	≤ 0.5 mA
Nominal discharge surge current In (8/20) μs (L-N)	3 kA
Nominal discharge surge current In (8/20) μs (L-PE)	3 kA
Max. discharge surge current I <sub>max</sub> (8/20) μs maximum (L-N)	10 kA
Max. discharge surge current I <sub>max</sub> (8/20) μs maximum (L-PE)	10 kA
Combined surge UOC	6 kV (3 kA)
Energy absorption symmetrical	170 J
Energy absorption, asymmetrical	2x 170 J
Protection level UP (L-N)	≤ 450 V (at 6 kV/3 kA)
Protection level UP (L-PE)	≤ 450 V (at 6 kV/3 kA)
Protection level UP (N-PE)	≤ 450 V (at 6 kV/3 kA)
Residual voltage at In, (L-N)	≤ 450 V
Residual voltage at In, (L-PE)	≤ 450 V
Residual voltage at In, (N-PE)	≤ 450 V
Response time tA (L-N)	≤ 25 ns
Response time tA (L-PE)	≤ 25 ns
Response time tA (N-PE)	≤ 25 ns
Inductivity in series	2x 1 mH ±30 % (with current compensation)
Capacity (L-N)	2 μF ±10 % (X2, FOW X2-250V)
Capacity (L-PE)	2.2 nF ±20 % (Y, FOW X2-250V)
Capacity (L-PEN)	2.2 nF ±20 % (Y, FOW X2-250V)
Max. required back-up fuse	20 A (gL / gG)
Max. required back-up fuse	20 A (MCB, > 125 V, AIC: 14 kA)
Input attenuation aE, sym.	Typ. 40 dB (≥ 500 kHz / 50 Ω)

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### Technical data

#### Protective circuit

Input attenuation aE, asym.	Typ. 30 dB ( $\geq 1$ MHz / 50 $\Omega$ )
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 <sup>2</sup>
Conductor cross section stranded max.	4 mm <sup>2</sup>
Conductor cross section solid min.	4 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
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 contact
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 <sup>2</sup>
Conductor cross section stranded max.	1.5 mm <sup>2</sup>
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	28
Conductor cross section AWG/kcmil max	16
Maximum operating voltage U <sub>max</sub> . AC	250 V AC
Max. operating current I <sub>max</sub>	1 A (250 V AC)
Max. operating current I <sub>max</sub>	0.25 A (250 V DC)
Max. operating current I <sub>max</sub>	1 A (48 V DC)

#### Connection, protective circuit

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

#### Protective circuit, filter

Discharge resistor	$\leq 390$ k $\Omega$
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## Classifications

### eclass

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

### etim

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

### unspsc

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

## Approvals

### Approvals

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#### Approvals

CSA / UL Recognized / cUL Recognized / GOST / CSAus / cULus Recognized

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#### Ex Approvals

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#### Approvals submitted

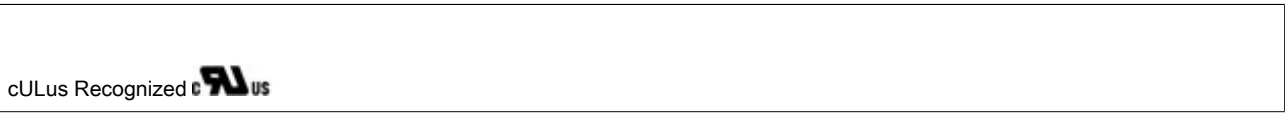
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### Approval details



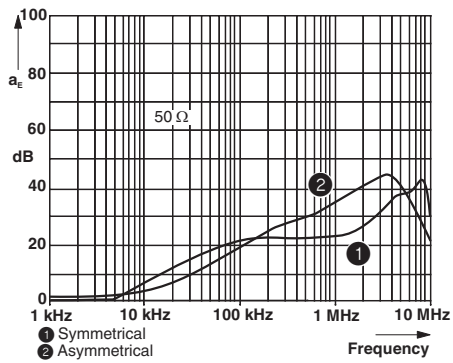
# EMC filter surge protection device - SFP 1-10/120AC - 2920670

## Approvals

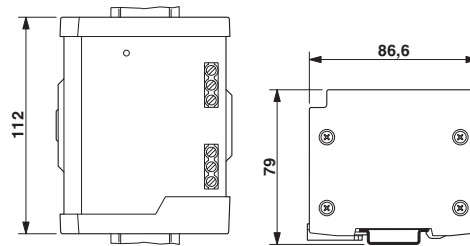


## Drawings

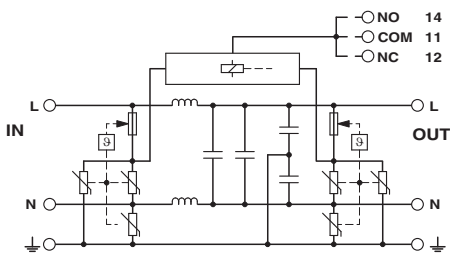
### Diagram



### Dimensioned drawing



### Circuit diagram



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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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