

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



2905218

<https://www.phoenixcontact.com/us/products/2905218>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Device protection, according to type 3/class III, with mains interference filter to prevent high-frequency interference voltages, for 1-phase power supply networks with separate N and PE (3-conductor system: L1, N, PE), with remote indication contact. Can be used in potentially explosive areas in zone 2.

## Commercial data

Item number	2905218
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	CL06
Product key	CLC131
GTIN	4046356988452
Weight per piece (including packing)	615 g
Weight per piece (excluding packing)	615 g
Customs tariff number	85363010
Country of origin	DE

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



2905218

<https://www.phoenixcontact.com/us/products/2905218>

## Technical data

### Product properties

Product type	EMC filters
Product family	SFP
Type	DIN rail module, one-piece
Number of positions	2
For country-specific use in	USA, CN, BR
Surge protection fault message	Optical, remote indicator contact
IEC test classification	III
	T3
EN type	T3

### Electrical properties

#### Indicator/remote signaling

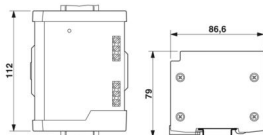
Connection name	Remote fault indicator contact
Switching function	Changeover contact
Maximum operating voltage $U_{max}$ AC	250 V AC
Max. operating current $I_{max}$	1 A (250 V AC)
	0.25 A (250 V DC)
	1 A (48 V DC)

### Connection data

#### Input/output

Connection method	Screw terminal blocks
Screw thread	M3
Tightening torque	0.5 Nm ... 0.6 Nm
	5 lb <sub>F</sub> -in. ... 7 lb <sub>F</sub> -in.
Conductor cross-section flexible min.	2.5 mm <sup>2</sup>
Conductor cross-section flexible max.	4 mm <sup>2</sup>
Conductor cross-section, rigid min.	2.5 mm <sup>2</sup>
Conductor cross-section, rigid max.	6 mm <sup>2</sup>

### Dimensions

Dimensional drawing	
Width	112 mm
Height	93 mm

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



2905218

<https://www.phoenixcontact.com/us/products/2905218>

Depth	79 mm
-------	-------

## Material specifications

Flammability rating according to UL 94	V-0
Insulating material	ABS
Housing material	Aluminum

## Mechanical properties

### Mechanical data

Open side panel	No
-----------------	----

## Protective circuit

Direction of action	L-N & L(N)-PE
Nominal frequency $f_N$	50 Hz
	60 Hz
Maximum continuous operating voltage $U_C$ (L-N)	150 V AC
Maximum continuous operating voltage $U_C$ (L-PE)	150 V AC
Nominal current $I_N$	10 A (62°C)
Rated load current $I_L$	10 A (62°C)
Protective conductor current $I_{PE}$	$\leq 0.5$ mA
Operating effective current $I_C$ at $U_C$	$\leq 10$ mA
Nominal discharge current $I_n$ (8/20) $\mu$ s (L-N)	3 kA
Nominal discharge current $I_n$ (8/20) $\mu$ s (L-PE)	3 kA
Maximum discharge current $I_{max}$ (8/20) $\mu$ s (L-N)	10 kA
Maximum discharge current $I_{max}$ (8/20) $\mu$ s (L-PE)	10 kA
Energy absorption symmetrical	170 J
Energy absorption, asymmetrical	2x 170 J
Voltage protection level $U_p$ (L-N)	$\leq 450$ V (at 6 kV/3 kA)
Voltage protection level $U_p$ (L-PE)	$\leq 450$ V (at 6 kV/3 kA)
Voltage protection level $U_p$ (N-PE)	$\leq 450$ V (at 6 kV/3 kA)
Residual voltage at $I_n$	$\leq 450$ V
	$\leq 450$ V
	$\leq 450$ V
Response time $t_A$ (L-N)	$\leq 25$ ns
Response time $t_A$ (L-PE)	$\leq 25$ ns
Response time $t_A$ (N-PE)	$\leq 25$ ns
Inductivity in series	2x 1 mH $\pm 30$ % (with current compensation)
Capacity (L-N)	2 $\mu$ F $\pm 10$ % (X2, FOW X2-250V)
Capacity (L-PE)	2.2 nF $\pm 20$ % (Y, FOW X2-250V)
Capacitance (N-PE)	2.2 nF $\pm 20$ % (Y, FOW X2-250V)
Max. required back-up fuse	20 A (gL/gG)
	20 A (MCB, > 125 V, AIC: 14 kA)
Input attenuation aE, sym.	typ. 40 dB ( $\geq 500$ kHz/50 $\Omega$ )
Input attenuation aE, asym.	typ. 30 dB ( $\geq 1$ MHz / 50 $\Omega$ )

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



2905218

<https://www.phoenixcontact.com/us/products/2905218>

## Filter data

Discharge resistance	≤ 390 kΩ
----------------------	----------

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Standards and regulations

### Standards

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

### Air clearances and creepage distances

Standards/regulations	DIN VDE 0110-1 / IEC 60664-1 / IEC 61643-1
Standards/specifications	IEC 61643-1
Note	2005
Standards/specifications	EN 61643-11/A11
Note	2007
Standards/specifications	UL 1449
Note	ed. 3: 2006 T4 for type 2
Standards/specifications	UL 1283
Note	ed. 5: 2005

## Mounting

Mounting type	DIN rail: 35 mm
---------------	-----------------

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

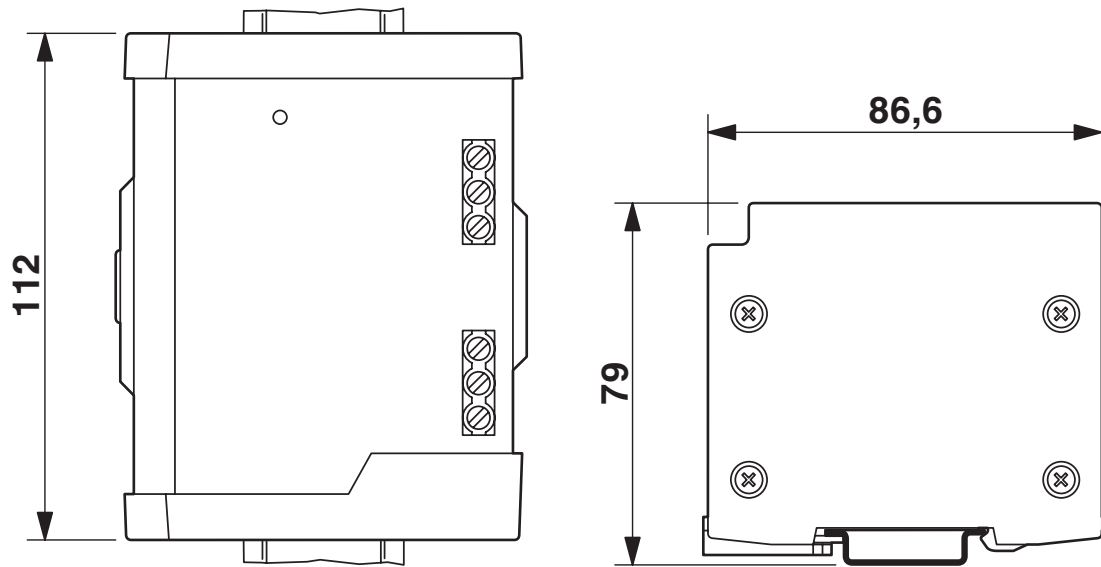


2905218

<https://www.phoenixcontact.com/us/products/2905218>

## Drawings

Dimensional drawing



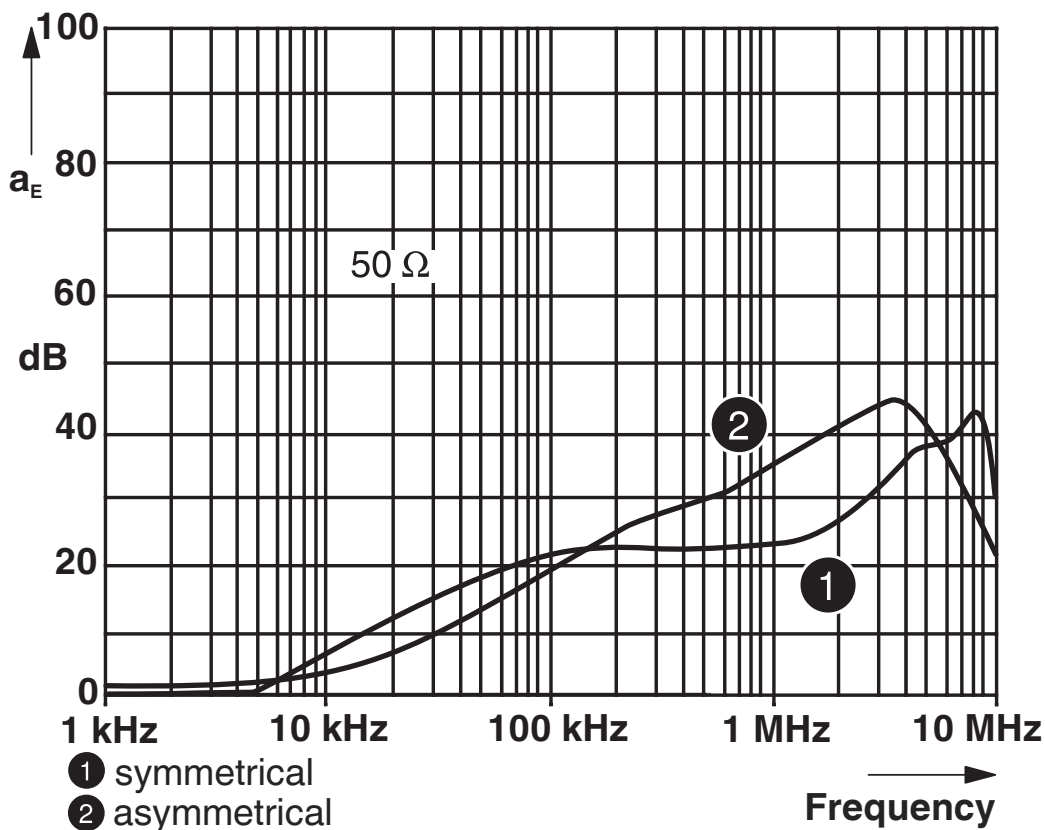
# SFP 1-10/120AC/EX - EMC filter surge protection device



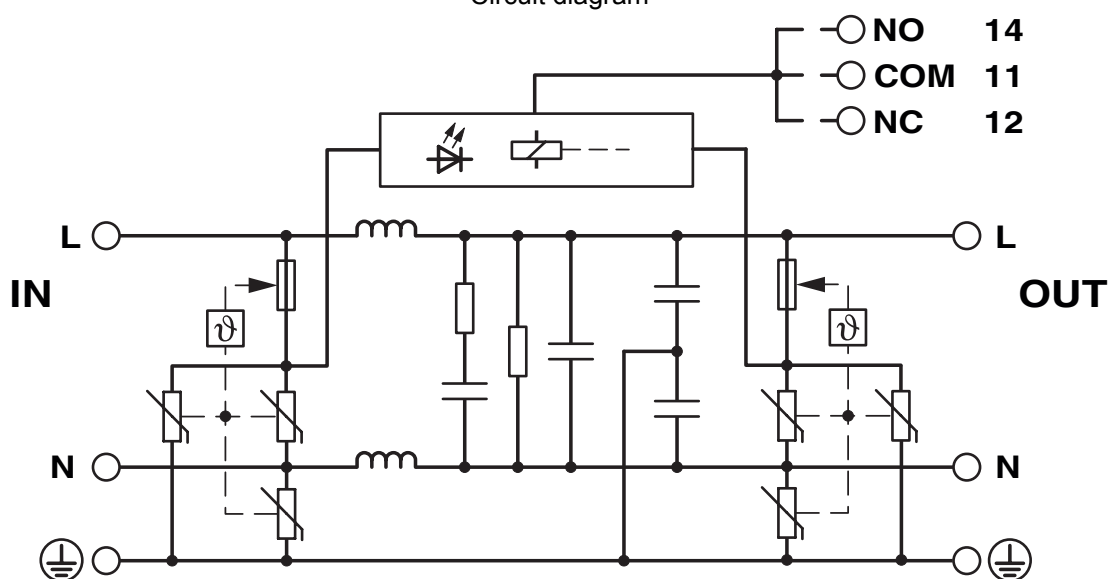
2905218

<https://www.phoenixcontact.com/us/products/2905218>

Diagram



Circuit diagram



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



2905218

<https://www.phoenixcontact.com/us/products/2905218>

## Environmental product compliance

EU REACH SVHC

REACH candidate substance (CAS No.)	
-------------------------------------	--

	No substance above 0.1 wt%
--	----------------------------

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)