

SFP 1-5/120AC - EMC filter surge protection device



2920667

<https://www.phoenixcontact.com/us/products/2920667>

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.

Product description

Device protection with interference filter

Your advantages

- Optimized protective effect with combined protective circuit for absorbing transient overvoltages for attenuating high-frequency interference
- Symmetrical design of the protective circuit with surge protection components on the input and output sides of the filter
- Protection against excessive heating with thermal monitoring of the protective circuit
- Versatile in use with universal circuit design

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 2920667 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | CL06 |
| Product key | CLC131 |
| GTIN | 4046356158558 |
| Weight per piece (including packing) | 610.9 g |
| Weight per piece (excluding packing) | 571.28 g |
| Customs tariff number | 85363010 |
| Country of origin | DE |

SFP 1-5/120AC - EMC filter surge protection device



2920667

<https://www.phoenixcontact.com/us/products/2920667>

Technical data

Notes

General

| | |
|------|---|
| Note | For IT systems: only install the device in 120 V IT systems with common HV/LV grounding system. |
|------|---|

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 |

Insulation characteristics

| | |
|-------------------------|-----|
| Overvoltage category | III |
| Pollution degree | 2 |
| IEC test classification | III |
| | T3 |
| EN type | T3 |
| Number of ports | Two |

Electrical properties

Indicator/remote signaling

| | |
|--------------------|--------------------------------|
| Connection name | Remote fault indicator contact |
| Switching function | Changeover contact |
| Operating voltage | 12 V AC ... 250 V AC |
| | 250 V DC (250 mA DC) |
| Operating current | 100 mA AC ... 1 A AC |
| | 1 A DC (48 V DC) |

Connection data

| | |
|----------------------------------|---|
| Connection method | Screw terminal blocks |
| Screw thread | M3 |
| Tightening torque | 0.5 Nm ... 0.6 Nm |
| | 4.5 lb _F -in. ... 5.5 lb _F -in. |
| Conductor cross-section flexible | 2.5 mm ² ... 4 mm ² |
| Conductor cross-section rigid | 2.5 mm ² ... 6 mm ² |
| Conductor cross-section AWG | 14 ... 10 |

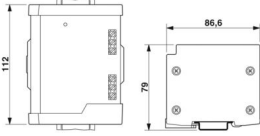
Dimensions

SFP 1-5/120AC - EMC filter surge protection device



2920667

<https://www.phoenixcontact.com/us/products/2920667>

| | |
|---------------------|--|
| Dimensional drawing |  |
| Width | 112 mm |
| Height | 86.6 mm |
| Depth | 79 mm |

Material specifications

| | |
|--|------------------------------------|
| Color | black (RAL 9005) silver-colored |
| Flammability rating according to UL 94 | V-0 |
| Insulating material | ABS |
| Housing material | Aluminum |

Mechanical properties

Mechanical data

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

Protective circuit

| | |
|--|--|
| Mode of protection | L-N L-PE N-PE |
| Direction of action | L-N & L(N)-PE |
| Nominal voltage U_N | 120 V AC (TN) 120 V AC (TT - only in use with RCD) 120 V AC (IT) |
| Nominal frequency f_N | 50 Hz (60 Hz) |
| Maximum continuous operating voltage U_C | 150 V AC |
| Rated load current I_L | 5 A (70 °C) |
| Protective conductor current I_{PE} | ≤ 0.6 mA |
| Standby power consumption P_C | ≤ 7.5 VA (at U_{REF}) ≤ 10 VA (at U_C) |
| Reference test voltage U_{REF} | 132 V AC |
| Nominal discharge current I_n (8/20) μ s | 3 kA |
| Combination wave U_{OC} | 6 kV (3 kA) |
| Voltage protection level U_p | ≤ 0.45 kV |
| TOV behavior at U_T (L-N) | 175 V AC (5 s / withstand mode) 240 V AC (5 s / safe failure mode) 208 V AC (120 min / safe failure mode) 208 V AC (5 s / withstand mode) |

SFP 1-5/120AC - EMC filter surge protection device



2920667

<https://www.phoenixcontact.com/us/products/2920667>

| | |
|---|--|
| TOV behavior at U_T (L-PE) | 175 V AC (120 min / withstand mode) |
| | 1332 V AC (200 ms / safe failure mode) |
| TOV behavior at U_T (N-PE) | 1200 V AC (200 ms / safe failure mode) |
| Response time t_A | ≤ 25 ns |
| Capacity (L-N) | 1 μ F ± 10 % |
| | 10 nF ± 10 % (X2-275 V) |
| Capacity (L-PE) | 2.2 nF ± 20 % (Y2-250 V) |
| Capacitance (N-PE) | 2.2 nF ± 20 % (Y2-250 V) |
| Max. required back-up fuse | 20 A (MCB B/general purpose) |
| | 16 A (IT - MCB B/general purpose) |
| Input attenuation aE, sym. | 20 dB (≥ 100 kHz / 50 Ω) |
| Input attenuation aE, asym. | 30 dB (≥ 1 MHz / 50 Ω) |
| Short-circuit current rating I_{SCCR} | 5 kA AC (TN/TT) |
| | 1 kA AC (IT) |

Filter data

| | |
|----------------------|----------------|
| Discharge resistance | 820 k Ω |
|----------------------|----------------|

Environmental and real-life conditions

Ambient conditions

| | |
|---|------------------|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -25 °C ... 70 °C |
| Ambient temperature (storage/transport) | -25 °C ... 70 °C |
| Permissible humidity (operation) | 5 % ... 95 % |

Approvals

UL specifications

| | |
|---|--------------|
| Maximum continuous operating voltage MCOV (L-N) | 150 V AC |
| Maximum continuous operating voltage MCOV (L-G) | 150 V AC |
| Maximum continuous operating voltage MCOV (N-G) | 150 V AC |
| Short-circuit current rating (SCCR) | 5 kA |
| Voltage protection rating VPR (L-N) | 500 V |
| Voltage protection rating VPR (L-G) | 500 V |
| Voltage protection rating VPR (N-G) | 500 V |
| Nominal discharge current I_n | 3 kA |
| Mode of protection | L-N |
| | L-G |
| | N-G |
| Power distribution system | Single phase |
| Nominal frequency | 50/60 Hz |
| SPD Type | 2CA |

UL indicator/remote signaling

| | |
|-------------------|----------------------|
| Operating voltage | 12 V AC ... 250 V AC |
|-------------------|----------------------|

SFP 1-5/120AC - EMC filter surge protection device



2920667

<https://www.phoenixcontact.com/us/products/2920667>

| | |
|----------------------|----------------------|
| DC operating voltage | 250 V DC (250 mA DC) |
| AC operating current | 100 mA AC ... 1 A AC |
| DC operating current | 1 A DC (48 V DC) |

UL connection data

| | |
|-----------------------------|---|
| Tightening torque | 5 lb _F -in. ... 7 lb _F -in. |
| Conductor cross-section AWG | 12 ... 10 |

Standards and regulations

Air clearances and creepage distances

| | |
|--------------------------|--|
| Standards/regulations | DIN VDE 0110-1 / IEC 60664-1 / IEC 61643-1 |
| Standards/specifications | IEC 61643-11 |
| Note | 2011 |
| Standards/specifications | EN 61643-11 |
| Note | 2012 |

Mounting

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

SFP 1-5/120AC - EMC filter surge protection device

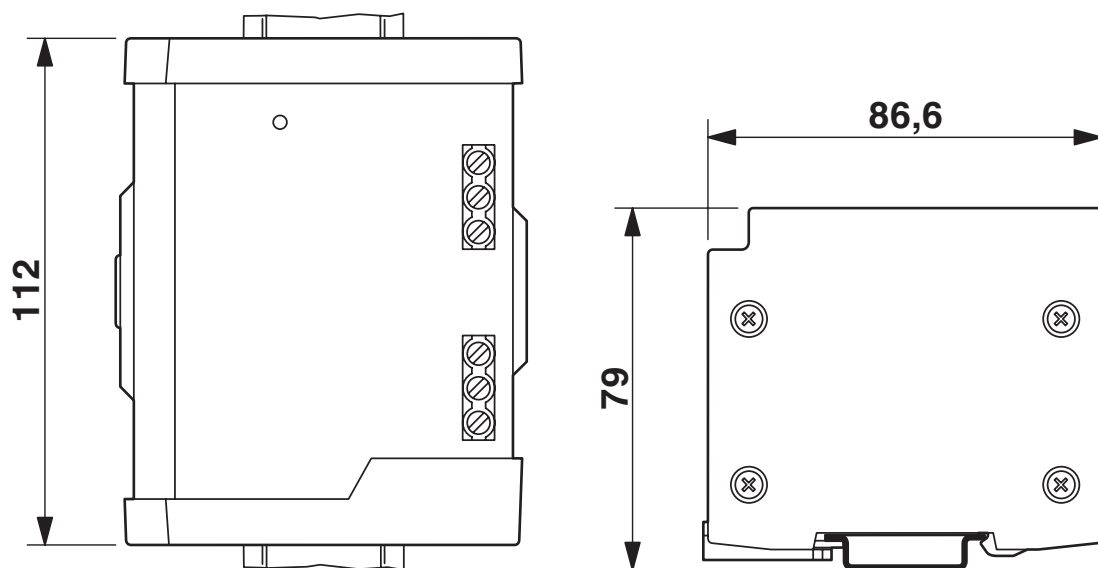


2920667

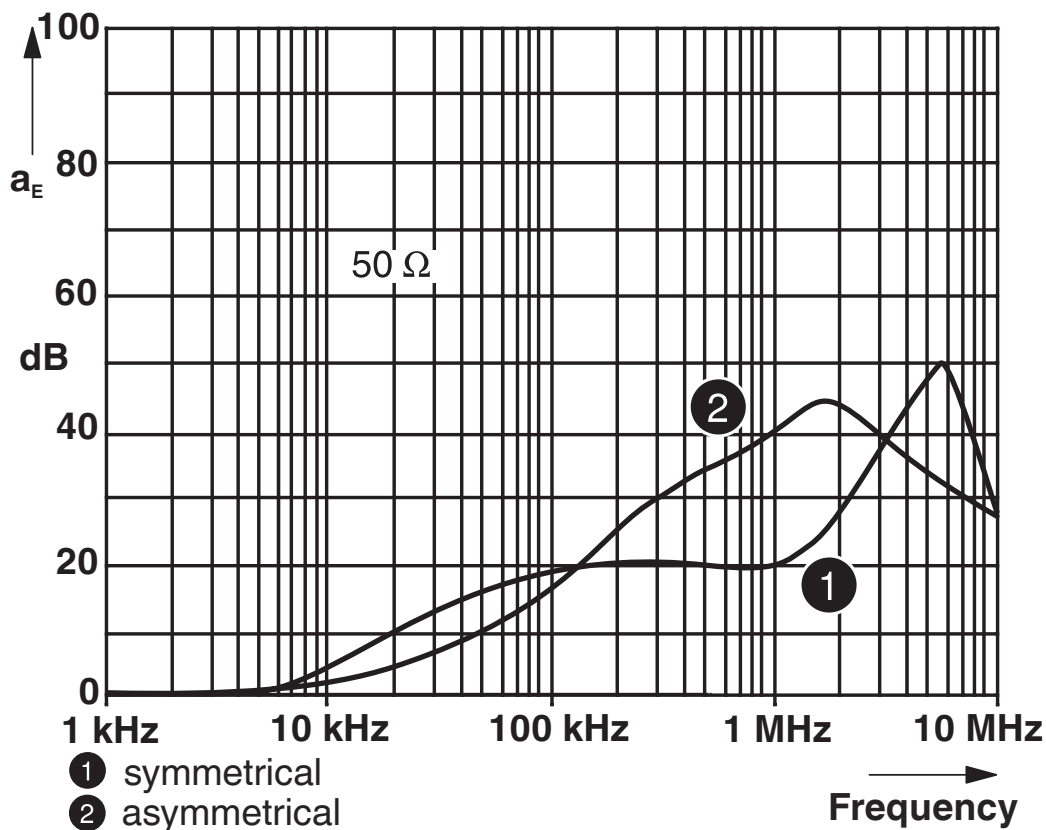
<https://www.phoenixcontact.com/us/products/2920667>

Drawings

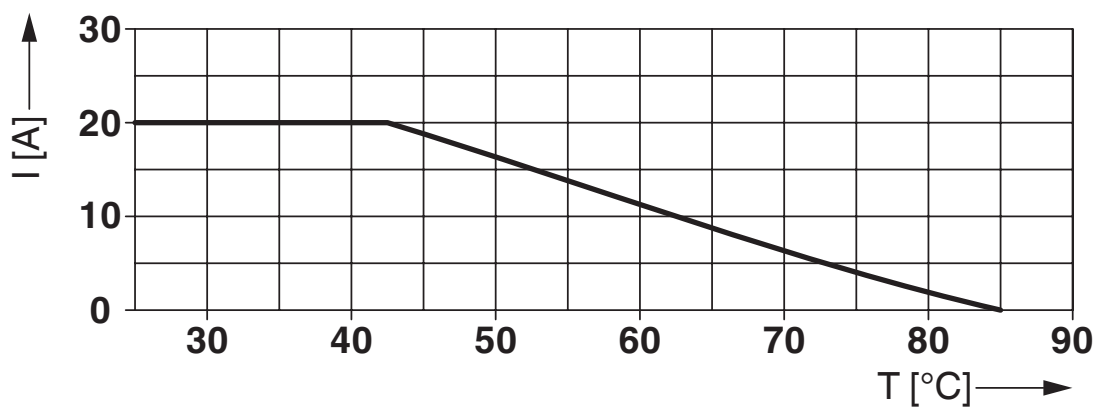
Dimensional drawing



Diagram



Diagram



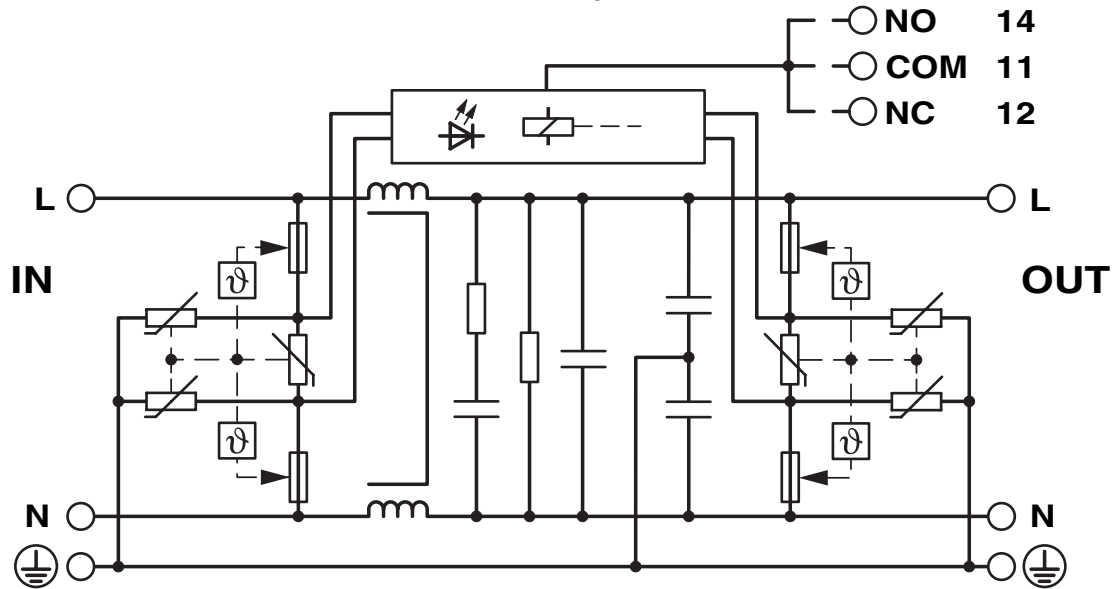
SFP 1-5/120AC - EMC filter surge protection device



2920667

<https://www.phoenixcontact.com/us/products/2920667>

Circuit diagram



SFP 1-5/120AC - EMC filter surge protection device



2920667

<https://www.phoenixcontact.com/us/products/2920667>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2920667>



cUL Recognized
Approval ID: FILE E 330181



UL Recognized
Approval ID: FILE E 330181



CSA
Approval ID: 13631



CSAus
Approval ID: 13631

UAE-RoHS

Approval ID: 23-10-88892

SFP 1-5/120AC - EMC filter surge protection device



2920667

<https://www.phoenixcontact.com/us/products/2920667>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27171203 |
| ECLASS-15.0 | 27171203 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC000942 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121600 |
|-------------|----------|

SFP 1-5/120AC - EMC filter surge protection device



2920667

<https://www.phoenixcontact.com/us/products/2920667>

Environmental product compliance

EU RoHS

| | |
|---|------|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 7(a) |

China RoHS

| | |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|-------------------------------------|---|
| REACH candidate substance (CAS No.) | Hexahydromethylphthalic anhydride(CAS: n/a) |
| | Lead(CAS: 7439-92-1) |
| | 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol(CAS: 119-47-1) |
| SCIP | cf18555d-34e1-4e8f-bb4a-090db367a2c6 |

EF3.1 Climate Change

| | |
|---------|----------------|
| CO2e kg | 10.965 kg CO2e |
|---------|----------------|

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