IEC Appliance Inlet C14 or C18 with Filter, high attenuation, ECO design, Front- or Rear Side Mounting







Screw-on mounting

Snap-in mounting Quick connect terminals 6.3 x 0.8 mm Protection class II

Screw-on mounting with wires (stranded)





See below:

Approvals and Compliances

Description

- Panel mount :

Screw-on version from front or rear side, snap-in version from front side, PCB Version from rear side

- 2 Functions:

Appliance Inlet protection class I or II , Line filter in standard and medical version $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

- Solder, quick connect or wire (stranded)
- PCB Mounting
- Earth Terminal

Unique Selling Proposition

- Very high asymmetrical attenuation
- Various variants
- Metal flange for optimal shielding
- Compact design

Characteristics

- Compact filter with high asymmetrical attenuation
 Optimal shielding due to completely closed filter case, unpotted
- Suitable for assembly in metal plated plastic housings
- Suitable for use in equipment according to IEC/UL 60950
 Suitable for use in medical equipment according to IEC/UL 60601-1

Other versions on request

- Snap-in for panel thickness >2mm to 3mm
- flexible wire with various lenghts
- Class X1- and Y1-capacitors for enhanced withstand voltage
- Variant with notch for V-Lock mating Cordsets
- Variant with plastic flange for front mounting

Weblinks

pdf datasheet, html-datasheet, General Product Information, Distributor-Stock-Check, Accessories, Detailed request for product, Microsite

Newly available variants corresponding to V-Lock mating cordset. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset.

Technical Data 1 - 10 A @ Ta 40 °C / 250 VAC; 50 Hz Ratings IEC Ratings UL/CSA 1 - 15 A @ Ta 40 °C / 250 VAC; 60 Hz standard < 0.5 mA (250 V / 60 Hz) Leakage Current medical < 5 μA (250 V / 60 Hz) Dielectric Strength > 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec) Allowable Operation Tempe--25 °C to 85 °C rature Climatic Category 25/085/21 acc. to IEC 60068-1 from front side IP 40 acc. to IEC 60529 **IP-Protection** Suitable for appliances with protection Protection Class class I or II acc. to IEC 61140 Terminal Quick connect terminals 6.3 x 0.8 mm Solder terminals Flexible wire AWG18 (15A AWG16), 150 mm Panel Thickness S Screw: max 8 mm Mounting screw torque max 0.5 Nm Snap-in: 0.8 mm to 2 mm (all steps with one variant) Material: Housing Themoplast / steel tin-plated, black / metallic, UL 94V-0

| appliance inlet/-outlet | C14 / C18 acc. to IEC 60320-1, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10 A, Protection Class I or II |
|-------------------------|--|
| Line Filter | Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details |
| MTBF | > 3'000'000 h acc. to MIL-HB-217 F |
| · | · |

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products. Approval Reference Type: 5123

| Approval Logo | Certificates | Certification Body | Description |
|-----------------|---------------|--------------------|------------------------------|
| 1 0 | VDE Approvals | VDE | Certificate Number: 40016382 |
| c FL °us | UL Approvals | UL | UL File Number: E72928 |

Product standards

Product standards that are referenced

| Organization | Design | Standard | Description |
|--------------|-----------------------|------------------|---|
| <u>IEC</u> | Designed according to | IEC 60320-1 | Appliance couplers for household and similar general purposes |
| <u>IEC</u> | Designed according to | IEC 60939 | Passive filters for suppressing electromagnetic interference |
| <u>IEC</u> | Designed according to | IEC 61058-1 | Switches for appliances. Part 1. General requirements |
| (UL) | Designed according to | UL 498 | Standard for Attachment Plugs and Receptacles |
| (UL) | Designed according to | UL 1283 | Electromagnetic interference filters |
| CSA Group | Designed according to | CSA C22.2 no. 42 | General Use Receptacles, Attachment Plugs, and Similar Wiring Devices |
| GE Group | Designed according to | CSA C22.2 no. 8 | Electromagnetic interference (EMI) filters |

Application standards

Application standards where the product can be used

| Organization | Design | Standard | Description |
|--------------|--------------------------------|--------------|--|
| <u>IEC</u> | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. $ \\$ |
| <u>IEC</u> | Designed for applications acc. | IEC 60601-1 | Medical electrical equipment - Part 1: General requirements for basic safety and essential performance |

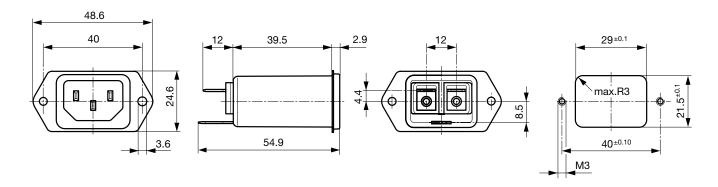
Compliances

The product complies with following Guide Lines

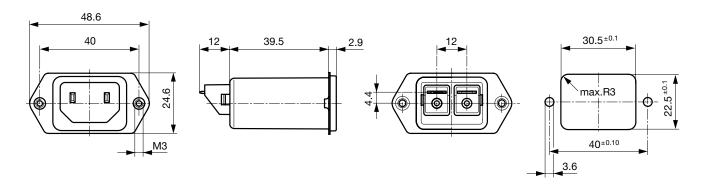
| Identification | Details | Initiator | Description |
|----------------|------------------------------|-------------|--|
| C€ | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| ROHS | RoHS | SCHURTER AG | EU Directive RoHS 2011/65/EU |
| © | China RoHS | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS. |
| REACH | REACH | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force. |
| V -Lock | MicrositeV-Lock | SCHURTER AG | V-Lock system are based on a matching plug-dose combination. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset. |
| | Medical Equipment | SCHURTER AG | Suitable for use in medical equipment according to IEC/UL 60601-1 |

Dimensions [mm]

Front or rear side mounting for screws with nuts or blind rivets (panel cutout for frontside mounting)

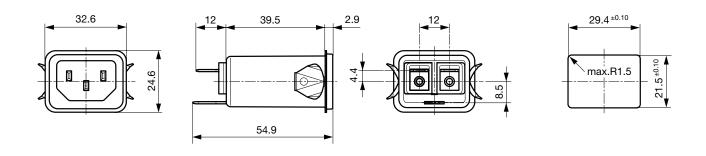


Rear side mounting with pre-formed, threaded holes for M3 screws (panel cutout for rear side mounting)



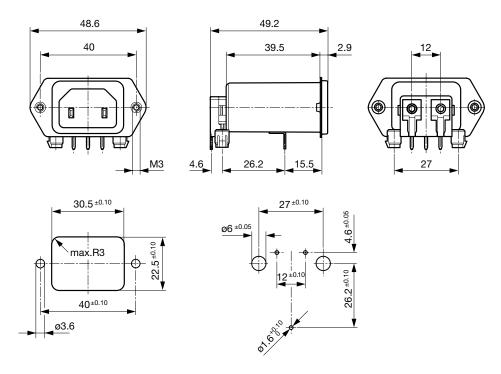
Dimensions for class II version also apply to class I

Snap-in mounting from front side

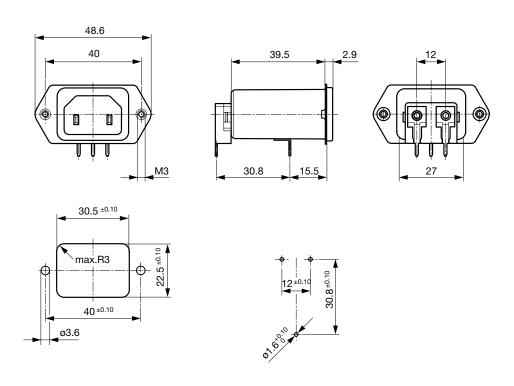


Dimensions for class I version also apply class II

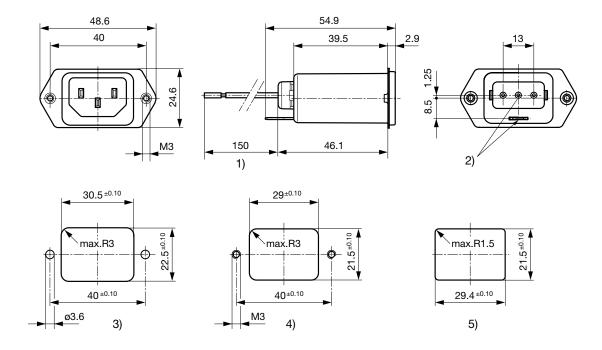
PCB snap-in rear side mounting, protection class II



PCB rear side mounting, protection class II



Screw and snap-in mounting with flexible wire



- 1) Flexible wire, standard length 150 mm or special length on request 2) Nonexistent for protection class ${\sf II}$

- 3) Panel cut-out screw-on version, back-side mounting
 4) Panel cut-out screw-on version, front- or back-side mounting
- 5) Panel cut-out snap-in version, front-side mounting

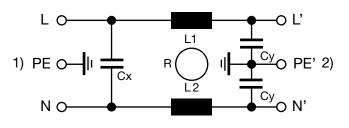
Technical Data of Filter-Components

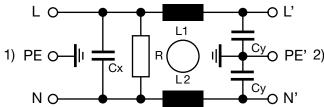
| Rated Current [A] | Filter-Type | Inductances L [mH] | Capacitance CX [nF] | Capacitance CY [nF] | R [M Ω] |
|----------------------|-----------------------|-----------------------|------------------------|------------------------|----------------|
| 1 | Standard Version | 2 x 20 | 100 | 2.2 | - |
| 2 | Standard Version | 2 x 9 | 100 | 2.2 | - |
| 4 | Standard Version | 2 x 3.4 | 100 | 2.2 | - |
| 6 | Standard Version | 2 x 1.6 | 100 | 2.2 | - |
| 10 | Standard Version | 2 x 0.65 | 100 | 2.2 | - |
| 15 | Standard Version | 2 x 0.2 | 100 | 2.2 | - |
| 1 | Medical Version (M5) | 2 x 20 | 100 | - | 1 |
| 2 | Medical Version (M5) | 2 x 9 | 100 | - | 1 |
| 4 | Medical Version (M5) | 2 x 3.4 | 100 | - | 1 |
| 6 | Medical Version (M5) | 2 x 1.6 | 100 | - | 1 |
| 10 | Medical Version (M5) | 2 x 0.65 | 100 | - | 1 |
| 15 | Medical Version (M5) | 2 x 0.2 | 100 | - | 1 |
| 6 | Medical Version (M80) | 2 x 1.6 | 100 | 0.47 | 1 |

Diagrams

Standard version

Bleed resistor version / medical version M80

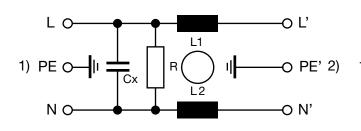


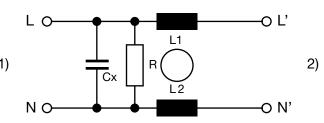


1) Line 2) Load 1) Line 2) Load

Medical version M5

Medical version M5, prot. class II





1) Line 2) Load

1) Line 2) Load

Attenuation Loss

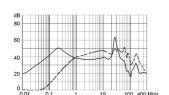
Standard version

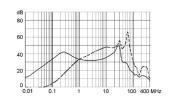
2 A

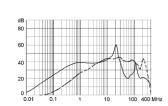
15 A

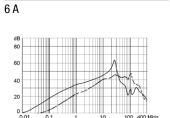
4 A

- - - 50Ω differential mode 50Ω common mode



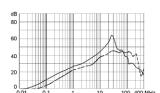






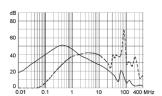
10 A

1 A

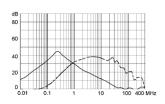


Medical version (M5)

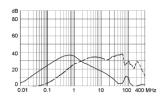
1 A



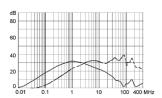
2 A



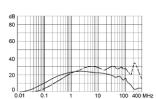
4 A



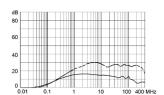
6 A



10 A

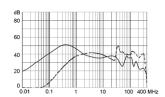


15 A

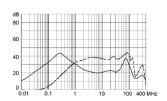


Medical version (M80)

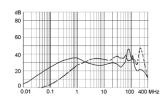
1 A



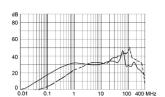
2 A



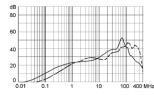
4 A



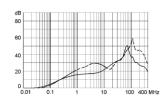
6 A



10 A



15 A



All Variants

| Rated Cur- rent [A] | Filter-Type | Mounting | Mounting side | Terminal | Protection Class | V-Lock | Order Number |
|------------------------|------------------|-----------|------------------|--------------------|------------------|--------|----------------|
| | 0 | | 5 | | | | 5400 0000 0 |
| 1 | Standard Version | Snap-in | Front Side | Quick connect | l | | 5123.2000.0 |
| 1 | Standard Version | Snap-in | Front Side | Quick connect | ı | • | 5123.2000.0.21 |
| 2 | Standard Version | Snap-in | Front Side | Quick connect | I | | 5123.2001.0 |
| 4 | Standard Version | Snap-in | Front Side | Quick connect | 1 | | 5123.2003.0 |
| 6 | Standard Version | Snap-in | Front Side | Quick connect | 1 | | 5123.2004.0 |
| 10 | Standard Version | Snap-in | Front Side | Quick connect | I | | 5123.2006.0 |
| 15 | Standard Version | Snap-in | Front Side | Quick connect | I | | 5123.2007.0 |
| 6 | Standard Version | Screw/PCB | Rear Side | PCB pin and earth | I | | 5123.4074.0 |
| 1 | Standard Version | Screw | Rear Side | Quick connect | I | • | 5123.1000.0.21 |
| 2 | Standard Version | Screw | Rear Side | Quick connect | I | • | 5123.1001.0.21 |
| 4 | Standard Version | Screw | Rear Side | Quick connect | I | • | 5123.1003.0.21 |
| 6 | Standard Version | Screw | Rear Side | Quick connect | I | • | 5123.1004.0.21 |
| 10 | Standard Version | Screw | Rear Side | Quick connect | I | • | 5123.1006.0.21 |
| 10 | Standard Version | Screw | Rear Side | Flexible wire con- | I | | 5123.1046.0 |
| 15 | Standard Version | Screw | Rear Side | Quick connect | I | • | 5123.1007.0.21 |
| 1 | Standard Version | Screw | Front-/Rear-Side | Quick connect | 1 | | 5123.0000.0 |
| | | | | | | | |

| Rated Cur- rent [A] | Filter-Type | Mounting | Mounting side | Terminal | Protection Class | V-Lock | Order Number |
|------------------------|-----------------------|----------|------------------|---------------|------------------|--------|----------------|
| 2 | Standard Version | Screw | Front-/Rear-Side | Quick connect | 1 | | 5123.0001.0 |
| 4 | Standard Version | Screw | Front-/Rear-Side | Quick connect | I | | 5123.0003.0 |
| 4 | Standard Version | Screw | Front-/Rear-Side | Flexible wire | I | | 5123.0233.0 |
| 6 | Standard Version | Screw | Front-/Rear-Side | Quick connect | I | | 5123.0004.0 |
| 10 | Standard Version | Screw | Front-/Rear-Side | Quick connect | I | | 5123.0006.0 |
| 15 | Standard Version | Screw | Front-/Rear-Side | Quick connect | I | | 5123.0007.0 |
| 1 | Medical Version (M5) | Snap-in | Front Side | Quick connect | I | | 5123.2300.0 |
| 2 | Medical Version (M5) | Snap-in | Front Side | Quick connect | I | | 5123.2301.0 |
| 4 | Medical Version (M5) | Snap-in | Front Side | Quick connect | I | | 5123.2303.0 |
| 6 | Medical Version (M5) | Snap-in | Front Side | Quick connect | I | | 5123.2304.0 |
| 10 | Medical Version (M5) | Snap-in | Front Side | Quick connect | I | | 5123.2306.0 |
| 15 | Medical Version (M5) | Snap-in | Front Side | Quick connect | I | | 5123.2307.0 |
| 1 | Medical Version (M5) | Screw | Rear Side | Quick connect | I | • | 5123.1300.0.21 |
| 2 | Medical Version (M5) | Screw | Rear Side | Quick connect | I | • | 5123.1301.0.21 |
| 4 | Medical Version (M5) | Screw | Rear Side | Quick connect | I | • | 5123.1303.0.21 |
| 6 | Medical Version (M5) | Screw | Rear Side | Quick connect | I | • | 5123.1304.0.21 |
| 10 | Medical Version (M5) | Screw | Rear Side | Quick connect | I | • | 5123.1306.0.21 |
| 15 | Medical Version (M5) | Screw | Rear Side | Quick connect | 1 | • | 5123.1307.0.21 |
| 1 | Medical Version (M5) | Screw | Front-/Rear-Side | Quick connect | 1 | | 5123.0300.0 |
| 2 | Medical Version (M5) | Screw | Front-/Rear-Side | Quick connect | 1 | | 5123.0301.0 |
| 4 | Medical Version (M5) | Screw | Front-/Rear-Side | Quick connect | I | | 5123.0303.0 |
| 6 | Medical Version (M5) | Screw | Front-/Rear-Side | Quick connect | I | | 5123.0304.0 |
| 10 | Medical Version (M5) | Screw | Front-/Rear-Side | Quick connect | I | | 5123.0306.0 |
| 15 | Medical Version (M5) | Screw | Front-/Rear-Side | Quick connect | I | | 5123.0307.0 |
| 6 | Medical Version (M80) | Screw | Front-/Rear-Side | Quick connect | I | | 5123.0504.0 |

 $\label{products} \mbox{Availability for all products can be searched real-time: https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER.} \label{products}$

- 15 A version only according UL/CSA
- Type for screw-on mounting from rear side has pre-threaded holes for M3 screws

Packaging unit

10 Pcs

Accessories

Description



Wire Harness Wire harness for SCHURTER products





Mating Outlets/Connectors

Category / Description



Appliance Outlet Overview complete

| IEC Appliance Outlet F, Screw-on Mounting, Front Side, Solder Terminal | 4787 | |
|---|------|--|
| IEC Appliance Outlet F, Snap-in Mounting, Front Side, Solder or Quick-connect Terminal | 4788 | |
| IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal | 5091 | |

Appliance Outlet further types to 5123



Connector Overview complete

| 4782 Mounting: Power Cord, 3 x 1 mm 2 / 3 x 18 AWG, Cable, Connector: IEC C13 | 4782 |
|---|---------|
| 4785 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4785 |
| 4300-06 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4300-06 |

Connector further types to 5123

Mating Outlets/Connectors shuttered



Power Cord Overview complete

| VAC13KS, Overview, diverse Connector IEC C13, cord end: | VAC13KS |
|---|---------|
| Power cord with IEC connector C17, V-Lock, straight | VAC17KS |
| Power Cord further types to 5123 | |

EMC Products