

IEC Appliance Inlet C20 with Filter, Line Switch 2-pole



See below:  
[Approvals and Compliances](#)

**Description**

- Panel mount :  
 Snap-in or screw-on mounting front side
- 3 Functions :  
 Appliance Inlet Protection class I , Line Switch 2-pole , Line filter in standard and medical version
- Quick connect terminals 6.3 x 0.8 mm

**Unique Selling Proposition**

- Compact size
- Switch for highest inrush current
- Optional with enhanced surge withstand voltage
- V-Lock cord retaining

**Characteristics**

- All single elements are already wired
- Line switch non-illuminated
- With EMC-shield
- Ideal for application with high transient loads
- For applications according IEC/UL 62368-1 we recommend variants with bleed resistor  
 Suitable for use in medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP)

**Other versions on request**

- Line switch, illuminated
- Line switch with other rocker marking
- Variant with notch for V-Lock mating Cordsets

**References**

Alternative: version without line filter [EC11](#)  
 Alternative: Standard version

**Weblinks**

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Approvals](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#)

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**

|                                 |                                                                           |                         |                                                                                                                        |
|---------------------------------|---------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------|
| Ratings IEC                     | 12 - 16A @ Ta 40 °C / 250VAC; 50Hz                                        | Appliance inlet/-outlet | C20 acc. to IEC 60320-1, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 16A, Protection Class I |
| Ratings UL/CSA                  | 12 - 20A @ Ta 40 °C / 250VAC; 60Hz                                        | Line Switch             | Rocker switch 2-pole, non-illuminated, acc. to IEC 61058-1<br><a href="#">Technical Details</a>                        |
| Leakage Current                 | standard < 0.5mA (250V / 60Hz)<br>medical < 5 µA (250 V / 60 Hz)          | Line Filter             | Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8<br><a href="#">Technical Details</a>                 |
| Dielectric Strength             | > 1.7kVDC between L-N<br>> 2.7kVDC between L/N-PE<br>Test voltage (2 sec) | MTBF                    | > 1'700'000h acc. to MIL-HB-217 F                                                                                      |
| Allowable Operation Temperature | -25 °C to 85 °C                                                           |                         |                                                                                                                        |
| Climatic Category               | 25/085/21 acc. to IEC 60068-1                                             |                         |                                                                                                                        |
| IP-Protection                   | front side IP40 acc. to IEC 60529                                         |                         |                                                                                                                        |
| Protection Class                | Suitable for appliances with protection class I acc. to IEC 61140         |                         |                                                                                                                        |
| Terminal                        | Quick connect terminals 6.3 x 0.8 mm                                      |                         |                                                                                                                        |
| Panel Thickness S               | Screw: max 8 mm<br>Mounting screw torque max 0.5Nm                        |                         |                                                                                                                        |
| Material                        | Thermoplastic, black, UL 94V-0                                            |                         |                                                                                                                        |

**Approvals and Compliances**




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

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

## Approvals








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

Approval Reference Type: EC12

| Approval Logo                                                                    | Certificates                  | Certification Body | Description                            |
|----------------------------------------------------------------------------------|-------------------------------|--------------------|----------------------------------------|
|  | <a href="#">VDE Approvals</a> | VDE                | Certificate Number: 40001522           |
|  | <a href="#">UL Approvals</a>  | UL                 | UR File Number: E72928                 |
|  | <a href="#">CQC Approvals</a> | CQC                | CQC Certificate Number: CQC21001327399 |



## Product standards

Product standards that are referenced

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








## Application standards

Application standards where the product can be used

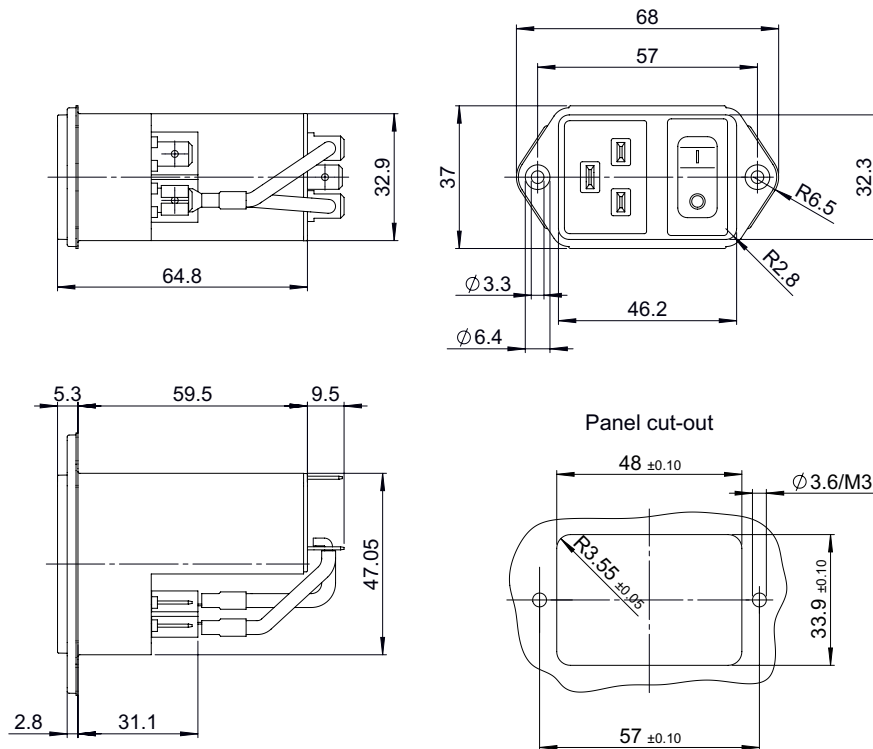
| Organization                                                                       | Design                         | Standard       | Description                                                                                            |
|------------------------------------------------------------------------------------|--------------------------------|----------------|--------------------------------------------------------------------------------------------------------|
|  | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements          |
|  | Suitable for applications acc. | IEC 60601-1    | Medical electrical equipment - Part 1: General requirements for basic safety and essential performance |

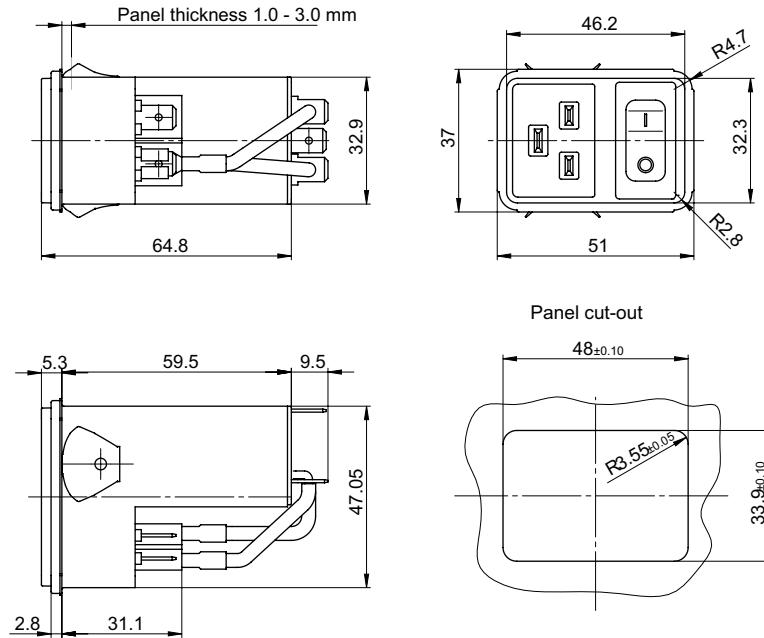
**Compliances**

The product complies with following Guide Lines

| Identification                                                                    | Details                                        | Initiator   | Description                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------|------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <a href="#">CE declaration of conformity</a>   | 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.                        |
|  | <a href="#">UKCA declaration of conformity</a> | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.                                                                         |
|  | RoHS                                           | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863                                                                                                                                                                           |
|  | 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                                          | 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.                                                      |
|  |                                                | 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 (1 MOOP, 1 MOPP)                                                                                                                                           |

**Dimension [mm]**  
 EC12



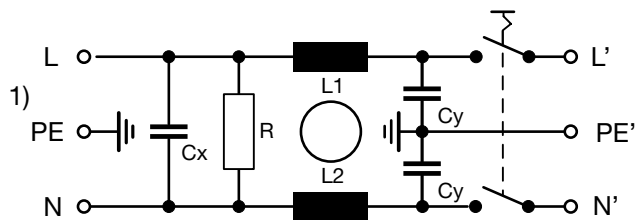


**Technical Data of Filter-Components**

| Rated Current [A] | Filter-Type          | Inductances L [mH] | Capacitance CX [nF] | Capacitance CY [nF] | R [MΩ] |
|-------------------|----------------------|--------------------|---------------------|---------------------|--------|
| 12                | Standard version     | 2 x 0.8            | 100                 | 2.2                 | 1      |
| 16                | Standard version     | 2 x 0.6            | 100                 | 2.2                 | 1      |
| 20                | Standard version     | 2 x 0.3            | 100                 | 2.2                 | 1      |
| 12                | Medical Version (M5) | 2 x 0.8            | 100                 | -                   | 1      |
| 16                | Medical Version (M5) | 2 x 0.6            | 100                 | -                   | 1      |
| 20                | Medical Version (M5) | 2 x 0.3            | 100                 | -                   | 1      |

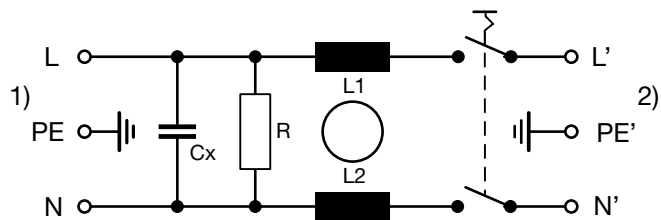
**Diagrams**

Standard version



1) Line  
 2) Load

Medical Version (M5)



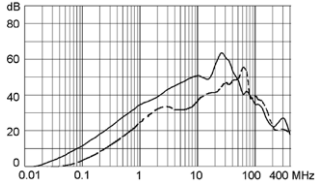
1) Line  
 2) Load

**Attenuation Loss**

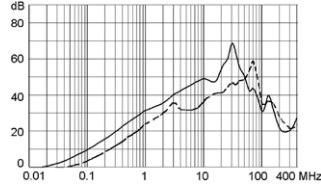
--- 50Ω differential mode    \_\_\_\_ 50Ω common mode

Standard version

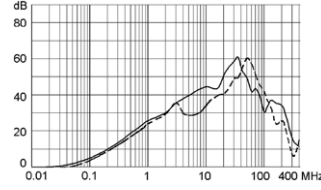
12 A



16 A

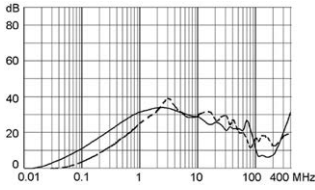


20 A

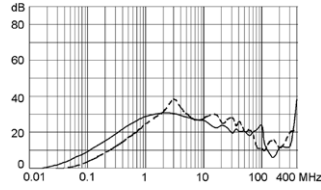


Medical version (M5)

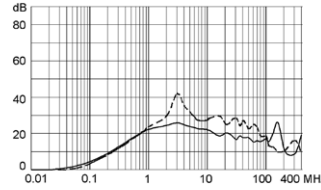
12 A



16 A



20 A



**All Variants**

| Rated Current [A] | Filter-Type          | Panel mounting | Internally wired | Line Switch | V-Lock | Order Number     |
|-------------------|----------------------|----------------|------------------|-------------|--------|------------------|
| 16                | Standard version     | Snap-in        | ●                | 2-pole      |        | 3-136-814        |
| 20                | Standard version     | Snap-in        | ●                | 2-pole      |        | 3-136-812        |
| 12                | Standard version     | Screw          | ●                | 2-pole      |        | EC12.3101.001    |
| 12                | Standard version     | Screw          | ●                | 2-pole      | ●      | EC12.3101.001.21 |
| 16                | Standard version     | Screw          | ●                | 2-pole      |        | EC12.2101.001    |
| 20                | Standard version     | Screw          | ●                | 2-pole      |        | EC12.1101.001    |
| 12                | Standard version     | Screw          |                  | 2-pole      |        | EC12.3101.002    |
| 16                | Standard version     | Screw          |                  | 2-pole      |        | EC12.2101.002    |
| 20                | Standard version     | Screw          |                  | 2-pole      |        | EC12.1101.002    |
| 16                | Medical Version (M5) | Snap-in        | ●                | 2-pole      |        | 3-136-815        |
| 20                | Medical Version (M5) | Snap-in        | ●                | 2-pole      |        | 3-136-813        |
| 12                | Medical Version (M5) | Screw          | ●                | 2-pole      |        | EC12.3201.001    |
| 16                | Medical Version (M5) | Screw          | ●                | 2-pole      |        | EC12.2201.001    |
| 16                | Medical Version (M5) | Screw          | ●                | 2-pole      | ●      | EC12.2201.001.21 |
| 20                | Medical Version (M5) | Screw          | ●                | 2-pole      |        | EC12.1201.001    |
| 12                | Medical Version (M5) | Screw          |                  | 2-pole      |        | EC12.3201.002    |
| 16                | Medical Version (M5) | Screw          |                  | 2-pole      |        | EC12.2201.002    |
| 20                | Medical Version (M5) | Screw          |                  | 2-pole      |        | EC12.1201.002    |

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>

**Packaging unit**

20 Pcs

Accessories

Description



[Wire\\_Harness](#)  
 Wire harness for SCHURTER products



[Cord\\_retaining\\_kits](#)  
 Cord retaining strain relief

|              |           |
|--------------|-----------|
| Flat head, H | 4700.0008 |
|--------------|-----------|

Mating Outlets/Connectors

Category / Description



[Connector Overview complete](#)

|                                                                     |       |
|---------------------------------------------------------------------|-------|
| 4795, Mounting: Power Cord, Cable Connector: IEC C19                | 4795  |
| 4790, Mounting: Power Cord, Screw Connector: IEC C19                | 4790  |
| 0104U, Mounting: Power Supply Cord, Screw clamps Connector: IEC C19 | 0104U |

Mating Outlets/Connectors shuttered



[Power Cord Overview complete](#)

|                                                                                     |         |
|-------------------------------------------------------------------------------------|---------|
| VAC19KS, Overview, V-Lock cord retaining, diverse Connector IEC C19, diverse, black | VAC19KS |
|-------------------------------------------------------------------------------------|---------|