IEC Appliance Inlet C14 with Filter, Line Switch 1- or 2-pole, PCB Mounting





Description

- Panel mount :

Screw-on mounting on PCB from rear-side

Appliance Inlet Protection class I , Line Switch 1- or 2-pole , Line filter in standard and medical version

- For PCB mounting

See below:

Approvals and Compliances

Characteristics

- Ultra-compact design
- All single elements are already wired
- Line switch non-illuminated or illuminated
- With EMC-shield
- Especially suitable for use in switching power supplies Ideal for application with high transient loads
- 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

- Fixing on PCB with self-tapping screws 3 mm or pre-inserted nuts M3
- Other rocker marking
- Illuminated green
- Medical Version (M80)
- Capacitance CX1

References

Alternative: version without line filter DC21 Alternative: Standard version DC21

pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Accessories, Detailed request for product, Landing Page

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 1 - 10 A @ Ta 40 °C / 250 VAC; 50 Hz 1 - 10 A @ Ta 40 °C / 250 VAC; 60 Hz Ratings UL/CSA Leakage Current standard < 0.5 mA (250 V / 60 Hz) medical $< 5 \mu A (250 V / 60 Hz)$ 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 <u>ratur</u>e Climatic Category 25/085/21 acc. to IEC 60068-1 **IP-Protection** from front side IP40 acc. to IEC 60529 Protection Class Suitable for appliances with protection class I acc. to IEC 61140 Terminal For PCB mounting: Ground terminal: Quick connect terminals 6.3 x 0.8 mm angled to pin axis Panel Thickness S Screw: max 4 mm Mounting screw torque max 0.5 Nm Material: Housing Thermoplastic, black, UL 94V-0

| appliance inlet/-outlet | C14 acc. to IEC 60320-1, UL 498 CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10 A, Protection Class I |
|-------------------------|---|
| Line Switch | Rocker switch 1 or 2 pole, non-illuminated or illuminated red, acc. to IEC 61058-1 Technical Details |
| Line Filter | Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details |
| MTBF | > 2'100'000 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

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: DC22

| Approval Logo | Certificates | Certification Body | Description |
|-----------------|---------------|--------------------|------------------------------|
| 1 0 | VDE Approvals | VDE | Certificate Number: 40001522 |
| 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 |
| (I) | Designed according to | UL 498 | Standard for Attachment Plugs and Receptacles |
| (I) | Designed according to | UL 1283 | Electromagnetic interference filters |
| GF Group | Designed according to | CSA C22.2 no. 42 | General Use Receptacles, Attachment Plugs, and Similar Wiring Devices |
| GFA 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 |

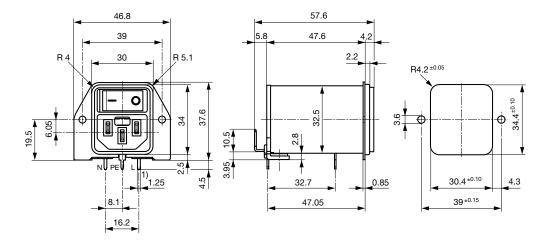
Compliances

The product complies with following Guide Lines

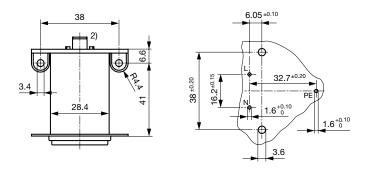
| Identification | Details | Initiator | Description |
|----------------|------------------------------|-------------|--|
| C€ | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| RoHS | RoHS | SCHURTER AG | 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 | 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 | Landing Page V-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. |
| T | Medical Technology | SCHURTER AG | Suitable for use in medical equipment according to IEC/UL 60601-1 |

Dimension [mm]

Screw-on mounting



1) all pins



2) PE additionally as quick-connect terminal 6.3 x 0.8

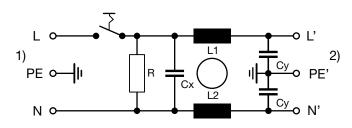
Technical Data of Filter-Components

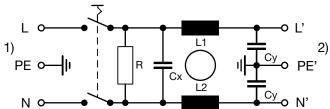
| Rated Current [A] | Filter-Type | Inductances L [mH] | Capacitance CX [nF] | Capacitance CY [nF] | R [M Ω] |
|-------------------|----------------------|-----------------------|------------------------|------------------------|----------------|
| 1 | Standard version | 2 x 10 | 100 | 2.2 | 1 |
| 2 | Standard version | 2 x 4 | 100 | 2.2 | 1 |
| 4 | Standard version | 2 x 1.5 | 100 | 2.2 | 1 |
| 6 | Standard version | 2 x 0.8 | 100 | 2.2 | 1 |
| 10 | Standard version | 2 x 0.3 | 100 | 2.2 | 1 |
| 1 | Medical Version (M5) | 2 x 10 | 100 | - | 1 |
| 2 | Medical Version (M5) | 2 x 4 | 100 | - | 1 |
| 4 | Medical Version (M5) | 2 x 1.5 | 100 | - | 1 |
| 6 | Medical Version (M5) | 2 x 0.8 | 100 | - | 1 |
| 10 | Medical Version (M5) | 2 x 0.3 | 100 | - | 1 |

Diagrams

Standard filter 1-pole

Standard filter 2-pole



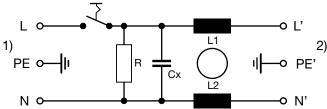


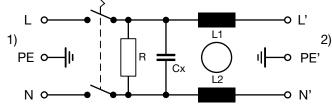
- 1) Line
- 2) Load

Medical filter 1-pole (M5)

1) Line 2) Load

Medical Version (M5) 2-pole



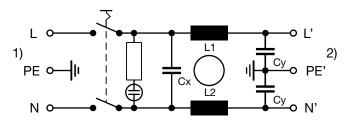


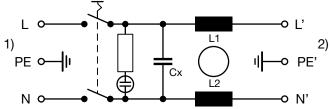
- 1) Line 2) Load

Standard filter 2-pole illuminated

1) Line 2) Load

Medical Filter 2-pole (M5) illuminated





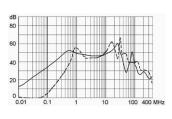
- - - - 50Ω differential mode

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

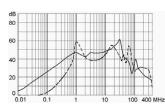
Attenuation Loss

Standard version

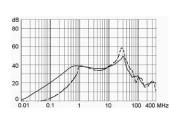
1 A



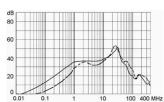
2 A



4 A

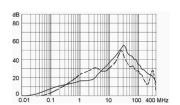


6 A



 50Ω common mode

10 A



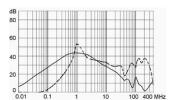
Medical version (M5)

1 A

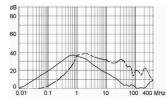
dB 80



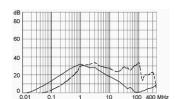
2 A



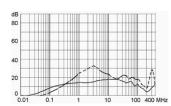
4 A



6 A



10 A



All Variants

| Rated current | Filter-Type | Line Switch | Illumination | Color | Weight [g] | V-Lock | Order Number |
|---------------|----------------------|-------------|--------------|-------|------------|--------|---------------|
| | | | | | | | |
| 1 | Standard version | 1-pole | | - | 67 g | • | DC22.1111.111 |
| 2 | Standard version | 1-pole | | - | 67 g | • | DC22.2111.111 |
| 4 | Standard version | 1-pole | | - | 67 g | • | DC22.4111.111 |
| 6 | Standard version | 1-pole | | - | 67 g | • | DC22.6111.111 |
| 10 | Standard version | 1-pole | | - | 67 g | • | DC22.9111.111 |
| 1 | Standard version | 2-pole | | - | 67 g | • | DC22.1121.111 |
| 2 | Standard version | 2-pole | | - | 67 g | • | DC22.2121.111 |
| 4 | Standard version | 2-pole | | - | 67 g | • | DC22.4121.111 |
| 6 | Standard version | 2-pole | | - | 67 g | • | DC22.6121.111 |
| 10 | Standard version | 2-pole | | - | 67 g | • | DC22.9121.111 |
| 1 | Standard version | 2-pole | • | red | 67 g | • | DC22.1123.111 |
| 2 | Standard version | 2-pole | • | red | 67 g | • | DC22.2123.111 |
| 4 | Standard version | 2-pole | • | red | 67 g | • | DC22.4123.111 |
| 6 | Standard version | 2-pole | • | red | 67 g | • | DC22.6123.111 |
| 10 | Standard version | 2-pole | • | red | 67 g | • | DC22.9123.111 |
| 1 | Medical Version (M5) | 2-pole | | - | 67 g | • | DC22.1221.111 |
| 2 | Medical Version (M5) | 2-pole | | - | 67 g | • | DC22.2221.111 |
| 4 | Medical Version (M5) | 2-pole | | - | 67 g | • | DC22.4221.111 |
| 6 | Medical Version (M5) | 2-pole | | - | 67 g | • | DC22.6221.111 |
| 10 | Medical Version (M5) | 2-pole | | - | 67 g | • | DC22.9221.111 |
| 1 | Medical Version (M5) | 2-pole | • | red | 67 g | • | DC22.1223.111 |
| 2 | Medical Version (M5) | 2-pole | • | red | 67 g | • | DC22.2223.111 |
| 4 | Medical Version (M5) | 2-pole | • | red | 67 g | • | DC22.4223.111 |
| 6 | Medical Version (M5) | 2-pole | • | red | 67 g | • | DC22.6223.111 |
| 10 | Medical Version (M5) | 2-pole | • | red | 67 g | • | DC22.9223.111 |

Availability for all products can be searched real-time:https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

Packaging unit

10 Pcs

Accessories

Description



Cord retaining kits Cord retaining strain relief

Flat head, H 4700.0008

Mating Outlets/Connectors

Category / Description

Appliance Outlet Overview complete



| 4787, Mounting: Screw-on mounting, Appliance Outlet: IEC Solder terminals, 10 A, Suitable for appliances with protection class I | 4787 |
|---|-----------|
| 4788, Mounting: Snap-in version, Appliance Outlet: IEC Solder terminals or quick connect terminals, 10 A, Suitable for appliances with protection class I | r 4788 |
| IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal | 5091 |

Appliance Outlet further types to DC22

Connector Overview complete



| 4022 Mounting: Power Supply Cord, 3 x 1.5 mm², Screw clamps, Connector: IEC C13 | 4022 |
|---|---------|
| 4782 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4782 |
| 4012 Mounting: Power Supply Cord, 3 x 1 mm², Screw clamps, Connector: IEC C13 | 4012 |
| 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 mm² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4300-06 |
| Connector further types to DC22 | |

Mating Outlets/Connectors shuttered



Power Cord Overview complete

VAC13KS, Overview, V-Lock cord retaining, diverse Connector IEC C13, diverse, black

VAC13KS

Power Cord further types to DC22