## IEC Appliance Inlet C14 with Filter, Fuseholder 2-pole, Line Switch 2-pole





Aluminum

C14

# 70° C **Description**

- Panel mount :

Screw-on mounting from front side

- 4 Functions:

Appliance Inlet Protection class I , Line Switch 2-pole , Fuseholder for fuse-links 5 x 20 mm 2-pole, Line filter in standard and medical ver-

- Quick connect terminals 6.3 x 0.8 mm

#### See below:

## **Approvals and Compliances**

## **Characteristics**

- Compact design with optimal shielding
- All single elements are already wired
- Plug removal necessary for fuse-link replacement
- With EMC-shield
- 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

- Medical version M80

#### References

Alternative: version with 2-stage filter FKID

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

| Technical Data                  |   |
|---------------------------------|---|
| Ratings IEC                     | 1 - 10 A @ Ta 40 °C / 250 VAC; 50 Hz  |
| Ratings UL/CSA                  | 1 - 10 A @ Ta 40 °C / 125 VAC; 60 Hz  |
| Leakage Current                 | standard < 0.25 mA (250 V / 60 Hz)<br>medical < 5 µA (250 V / 60 Hz)        |
| Dielectric Strength             | > 1.7 kVDC between L-N<br>> 2.7 kVDC between L/N-PE<br>Test voltage (2 sec) |
| Allowable Operation Temperature | -25 °C to 85 °C   |
| Climatic Category               | 25/085/21 acc. to IEC 60068-1   |
| IP-Protection                   | from front side IP 40 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 Mounting screw torque max 0.5 Nm                            |
| Material: Housing               | Thermoplastic, black, UL 94V-0  |
|                                 |   |

| appliance inlet/-outlet           | C14 acc. to IEC 60320-1,<br>UL 498, CSA C22.2 no. 42 (for cold<br>conditions) pin-temperature 70 °C, 10 A,<br>Protection Class I |
|-----------------------------------|--|
| Fuseholder                        | 2-pole, Shocksafe category PC2 acc. to IEC 60127-6, for fuse-links 5 x 20 mm   |
| Rated Power Acceptance @ Ta 23 °C | 5 x 20: 1.6W (2-pole)  |
| Power Acceptance @ Ta > 23°C      | Admissible power acceptance at higher ambient temperature see derating curves  |
| Line Switch                       | 2-pole, non-illuminated, acc. to IEC<br>61058-1<br>Technical Details   |
| Line Filter                       | Standard and Medical Version, IEC<br>60939, UL 1283, CSA C22.2 no. 8<br>Technical Details  |
| MTBF                              | > 1'700'000h 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

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 134485 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: FKI

| Approval Logo   | Certificates  | Certification Body | Description                  |
|-----------------|---------------|--------------------|------------------------------|
| <b>1</b> 0      | VDE Approvals | VDE                | Certificate Number: 40004665 |
| <b>. FU</b> iis | 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 60127-6      | Miniature fuses. Part 6. Fuse-holders for miniature fuse-links        |
| <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<br>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  |
| <u>IEC</u>   | Designed for applications acc. | IEC 60335-1  | Safety of electrical appliances for household and similar purposes. Meets the requirements for appliances in unattended use. This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-12 and -13. |

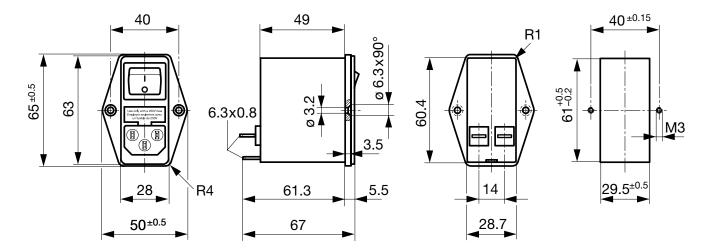
# Compliances

The product complies with following Guide Lines

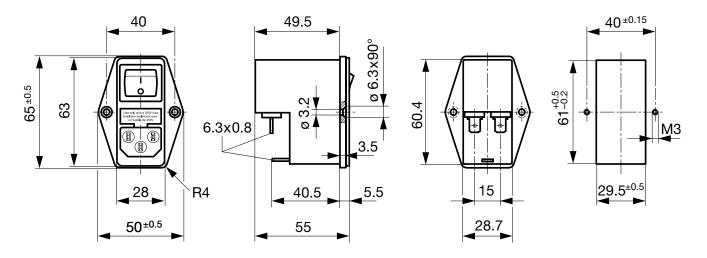
| Identification | Details                      | Initiator   | Description   |
|----------------|------------------------------|-------------|---|
| C€             | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down 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  |
| <b>©</b>       | 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,<br>Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as<br>"REACH") entered into force.                         |
| 00             | White paper Glow wire test   | SCHURTER AG | Meets the requirements of IEC 60335-1 for appliances in unattended use. This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-12 and -13.                                    |
| 2000           | Medical Equipment            | SCHURTER AG | Suitable for use in medical equipment according to IEC/UL 60601-1   |

# Dimension [mm]

Case 45



Case 50



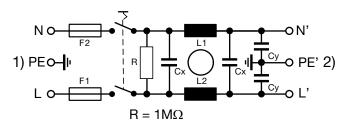
# **Technical Data of Filter-Components**

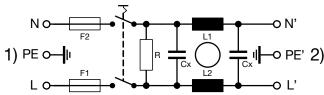
| Rated Current<br>[A] | Filter-Type          | Inductances<br>L [mH] | Capacitance<br>CX [nF] | Capacitance<br>CY [nF] | <b>R</b> [MΩ] |
|----------------------|----------------------|-----------------------|------------------------|------------------------|---------------|
| 1                    | Standard Version     | 2 x 10                | 68                     | 2.2                    | 1             |
| 2                    | Standard Version     | 2 x 4                 | 68                     | 2.2                    | 1             |
| 4                    | Standard Version     | 2 x 1.5               | 68                     | 2.2                    | 1             |
| 6                    | Standard Version     | 2 x 0.8               | 68                     | 2.2                    | 1             |
| 10                   | Standard Version     | 2 x 0.3               | 68                     | 2.2                    | 1             |
| 1                    | Medical Version (M5) | 2 x 10                | 68                     | -                      | 1             |
| 2                    | Medical Version (M5) | 2 x 4                 | 68                     | -                      | 1             |
| 4                    | Medical Version (M5) | 2 x 1.5               | 68                     | -                      | 1             |
| 6                    | Medical Version (M5) | 2 x 0.8               | 68                     | -                      | 1             |
| 10                   | Medical Version (M5) | 2 x 0.3               | 68                     | _                      | 1             |

# **Diagrams**

Standard version

Medical version (M5)



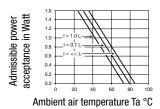


1) Line 2) Load 1) Line

2) Load

# **Derating Curves**

# 2-pole

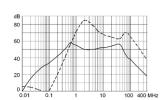


## **Attenuation Loss**

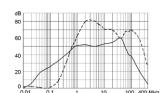
- - - -  $50\Omega$  differential mode \_\_\_\_\_  $50\Omega$  common mode

Standard version

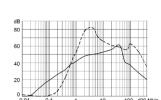
1 A



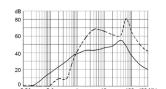
2 A



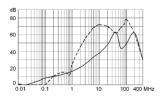
4 A



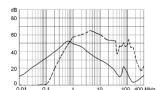
6 A



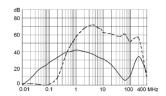
10 A



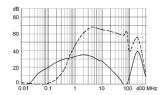
Medical version (M5)



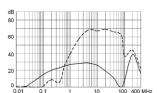
2 A



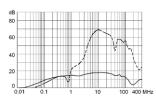
4 A



6 A



10 A



# **All Variants**

| Туре | Rated Current<br>[A] | Filter-Type          | Fuseholder | Line Switch | Housings | Material: Housing   | Order Number |  |
|------|----------------------|----------------------|------------|-------------|----------|---------------------|--------------|--|
| FKI  | 1                    | Standard Version     | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4061    |  |
| FKI  | 2                    | Standard Version     | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4062    |  |
| FKI  | 4                    | Standard Version     | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4063    |  |
| FKI  | 6                    | Standard Version     | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4064    |  |
| FKI  | 10                   | Standard Version     | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4065    |  |
| FKI  | 1                    | Medical Version (M5) | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4091    |  |
| FKI  | 2                    | Medical Version (M5) | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4092    |  |
| FKI  | 4                    | Medical Version (M5) | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4093    |  |
| FKI  | 6                    | Medical Version (M5) | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4094    |  |
| FKI  | 10                   | Medical Version (M5) | 2-pole     | 2-pole      | 45       | Aluminum            | 4304.4095    |  |
| FKI  | 1                    | Standard Version     | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4021    |  |
| FKI  | 2                    | Standard Version     | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4022    |  |
| FKI  | 4                    | Standard Version     | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4023    |  |
| FKI  | 6                    | Standard Version     | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4024    |  |
| FKI  | 10                   | Standard Version     | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4025    |  |
| FKI  | 1                    | Medical Version (M5) | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4066    |  |
| FKI  | 2                    | Medical Version (M5) | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4067    |  |
| FKI  | 4                    | Medical Version (M5) | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4068    |  |
| FKI  | 6                    | Medical Version (M5) | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4069    |  |
| FKI  | 10                   | Medical Version (M5) | 2-pole     | 2-pole      | 50       | Nickel plated steel | 4304.4070    |  |

Most Popular.

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



**Assorted Covers** Rear Cover

0859.0074

# **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 FKI



## 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 <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13 | 4300-06 |
| IEC Connector C15 for hot conditions 120°C, Rewireable, Straight                            | 4781    |
| IEC Connector C15 for hot conditions 120°C, Rewireable, Angled                              | 4784    |
| Connector further types to FKI  |         |