#### IEC Appliance Inlet C14 with Filter, Fuseholder 1-pole, Line Switch 2-pole



Screw-on mounting from front side Aluminum



Screw-on mounting from front side Nickel plated steel



70° C

#### See below:

#### **Approvals and Compliances**

## **Description**

- Panel mount :
- Screw-on mounting front side
- 4 Functions:
- Appliance Inlet Protection class I , Line Switch 2-pole , Fuseholder for fuse-links 5 x 20 mm 1-pole , Line-filter in standard version
- Quick connect terminals 6.3 x 0.8 mm

#### **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 medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP)

For applications according IEC/UL 62368-1 we recommend variants with bleed resistor

### Other versions on request

- Medical Version (M80)

#### References

Alternative: version with 2-stage filter FKHD We recommend for new applications the type DD12

#### Weblinks

pdf data sheet, html datasheet, General Product Information, Approvals, 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 / 250 VAC; 60 Hz
Leakage Current	standard < 0.25 mA (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 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 Mounting screw torque max 0.5 Nm
Material	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
Fuseholder	1-pole, Shocksafe category PC2 acc. to IEC 60127-6, for fuse-links 5 x 20mm
Rated Power Acceptance @ Ta 23 °C	5 x 20: 1.6W (1 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 61058-1 Technical Details
Line Filter	Standard version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details
MTBF	> 1'700'000 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

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: FKH

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40004665
c <b>AL</b> °us	UL Approvals	UL	UR 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
(I)	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
(I)	Designed according to	UL 1283	Passive filters for suppressing electromagnetic interference
CSA Group	Designed according to	CSA C22.2 no. 42	General Use Receptacles, Attachment Plugs, and Similar Wiring Devices
CSA 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>	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
<u>IEC</u>	Suitable for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
<u>IEC</u>	Suitable 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 60695-2-11 or -12 & -13.

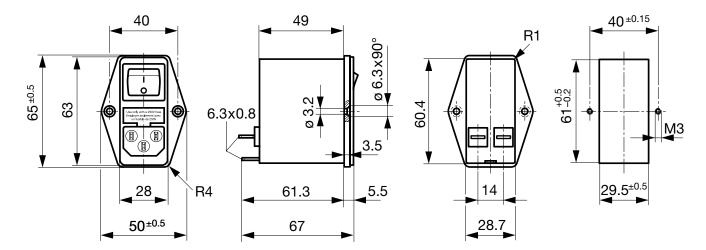
### Compliances

The product complies with following Guide Lines

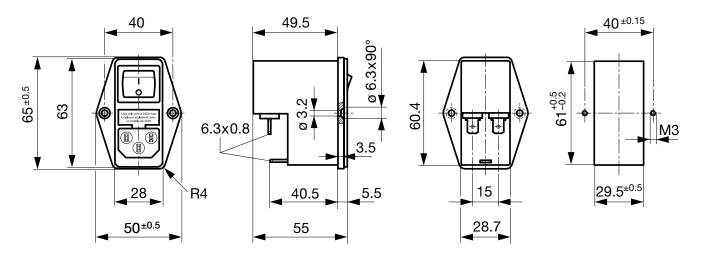
The product complies with following datase lines						
Identification	Details	Initiator	Description			
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.			
UK CA	UKCA declaration of conformity	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	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863			
<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, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "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 60695-2-11 or -12 &-13.			
T	Medical Equipment	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP)			

## Dimension [mm]

Case 45



Case 50



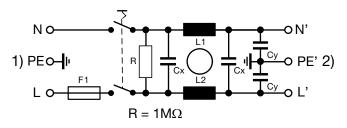
# **Technical Data of Filter-Components**

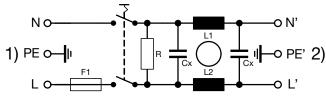
Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	<b>R</b> [MΩ]
1	Standard version	2 x 10	68	2.2	1
2	Standard version	2 x 4	68	2.2	1
4	Standard version	2 x 1.5	68	2.2	1
6	Standard version	2 x 0.8	68	2.2	1
10	Standard version	2 x 0.3	68	2.2	1
1	Medical Version (M5)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

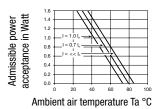




1) Line 2) Load 1) Line 2) Load

## **Derating Curves**

1-pole

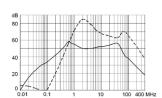


### **Attenuation Loss**

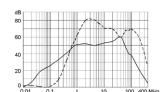
- - - -  $50\Omega$  differential mode \_\_\_\_\_  $50\Omega$  common mode

Standard version

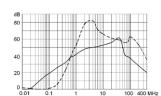
1 A



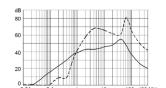
2 A



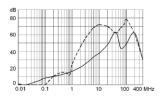
4 A



6 A



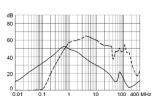
10 A



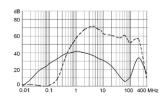


## Medical version (M5)

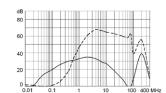
1 A



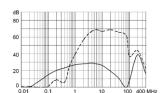
2 A



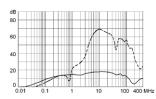
4 A



6 A



10 A



### **Variants**

Туре	Rated Current [A]	Filter-Type	Fuseholder	Line Switch	Housing	Material: Housing	Order Number
FKH	1	Standard version	1-pole	2-pole	45	Aluminum	4304.4041
FKH	2	Standard version	1-pole	2-pole	45	Aluminum	4304.4042
FKH	4	Standard version	1-pole	2-pole	45	Aluminum	4304.4043
FKH	6	Standard version	1-pole	2-pole	45	Aluminum	4304.4044
FKH	10	Standard version	1-pole	2-pole	45	Aluminum	4304.4045
FKH	1	Medical Version (M5)	1-pole	2-pole	45	Aluminum	4304.4046
FKH	2	Medical Version (M5)	1-pole	2-pole	45	Aluminum	4304.4047
FKH	4	Medical Version (M5)	1-pole	2-pole	45	Aluminum	4304.4048
FKH	6	Medical Version (M5)	1-pole	2-pole	45	Aluminum	4304.4049
FKH	10	Medical Version (M5)	1-pole	2-pole	45	Aluminum	4304.4050
FKH	1	Standard version	1-pole	2-pole	50	Nickel plated steel	4304.4001
FKH	2	Standard version	1-pole	2-pole	50	Nickel plated steel	4304.4002
FKH	4	Standard version	1-pole	2-pole	50	Nickel plated steel	4304.4003
FKH	6	Standard version	1-pole	2-pole	50	Nickel plated steel	4304.4004
FKH	10	Standard version	1-pole	2-pole	50	Nickel plated steel	4304.4005

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

Packaging unit

10 Pcs

#### **Accessories**

Description



RC320 Rear Cover for Power Entry Module

### **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
IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal	5091





4782 Mounting: Power Cord, 3 x 1 mm² / 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 mm² / 3 x 18 AWG, Cable, Connector: IEC C13	4300-06
4781 Mounting: Power Cord, Cable, Connector: IEC C15	4781
4784 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C15	4784

information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each

product selected for their own applications.