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



C14

70° C

See below:
Approvals and Compliances

Description

- Panel mount :
  Screw-on mounting on PCB rear-side
- 3 Functions :
  Appliance Inlet Protection class I , Line Switch 1- or 2-pole , Line filter in standard and medical version
- For PCB mounting

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
- 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

- 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

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	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 < 0.5 mA (250 V / 60 Hz) 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 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	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	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-/2-pole, non-illuminated or illuminated red, acc. to IEC 61058-1 Technical Details
Line Filter	Standard and Medical Version, IEC 60939, UL 60939-3, 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 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: DC22

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	Certificate Number: 40001522
	UL Approvals	UL	UR File Number: E495089

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 60939-3	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

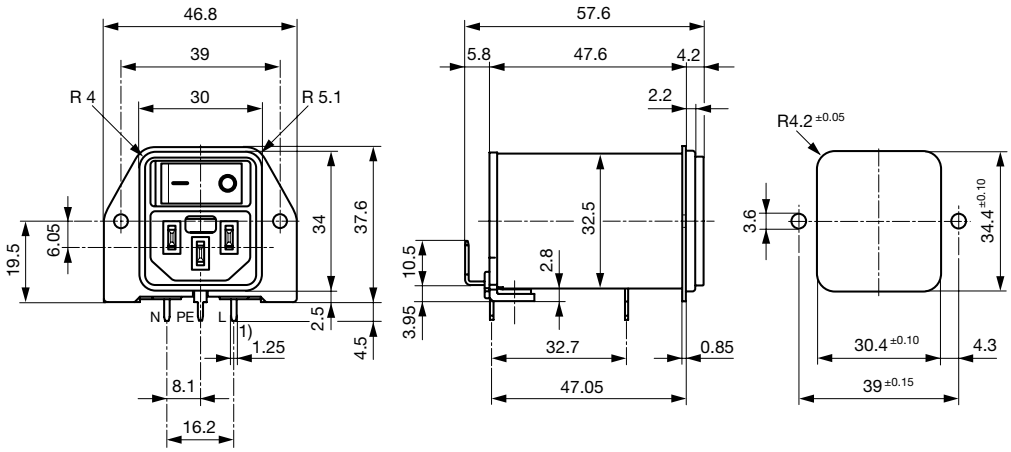
Compliances

The product complies with following Guide Lines

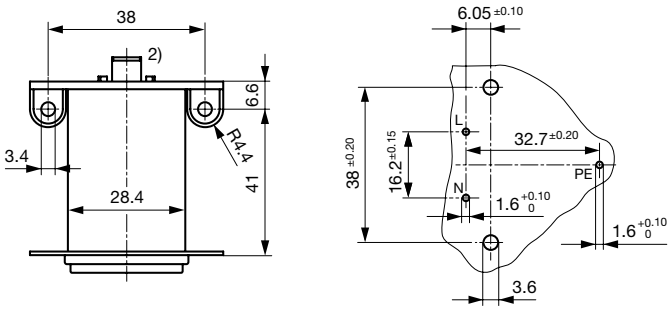
Identification	Details	Initiator	Description
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UKCA	UKCA declaration 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
	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		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]

Screw-on mounting



1) all pins



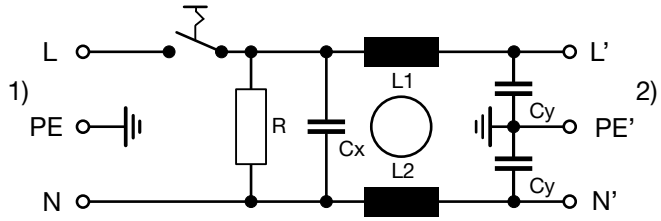
2) PE additionally as quick-connect terminal 6.3 x 0.8

Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
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

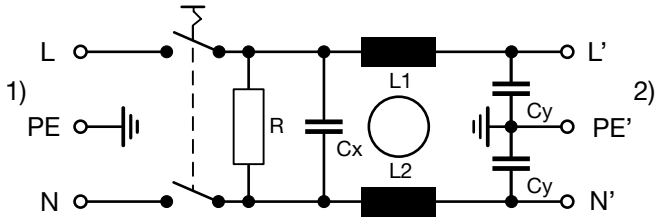
Diagrams

Standard filter 1-pole



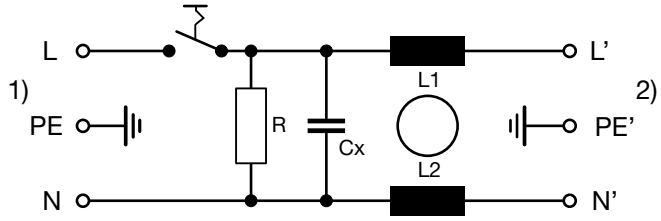
1) Line
2) Load

Standard filter 2-pole



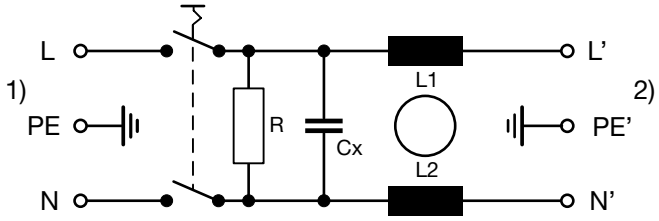
1) Line
2) Load

Medical filter 1-pole (M5)



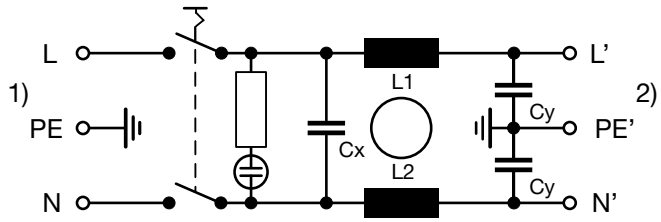
1) Line
2) Load

Medical Version (M5)
2-pole



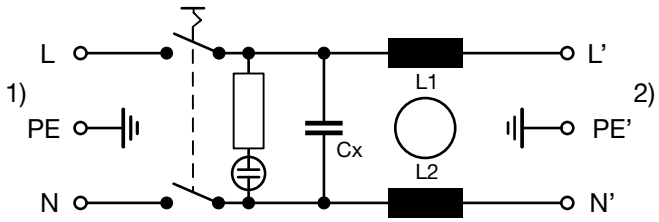
1) Line
2) Load

Standard filter 2-pole
illuminated



1) Line
2) Load

Medical Filter 2-pole (M5)
illuminated



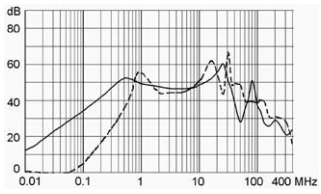
1) Line
2) Load

Attenuation Loss

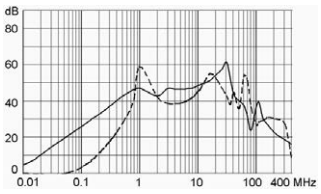
- - - - 50Ω differential mode _____ 50Ω common mode

Standard version

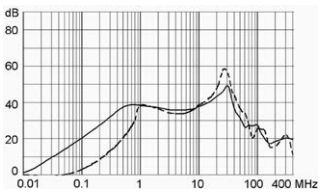
1 A



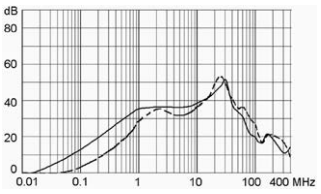
2 A



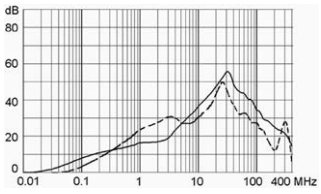
4 A



6 A

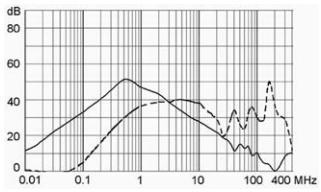


10 A

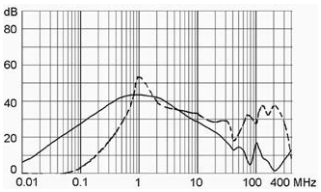


Medical version (M5)

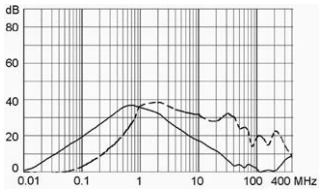
1 A



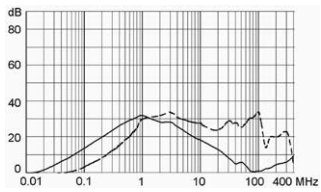
2 A



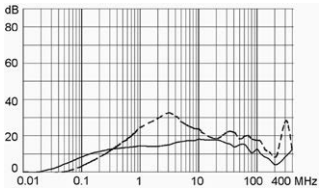
4 A



6 A



10 A



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 / Quick Connect, 10 A, Suitable for appliances with protection class I	4788
	IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal	5091
	Connector Overview complete	
	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 mm² / 3 x 18 AWG, Cable, Connector: IEC C15	4784

Mating Outlets/Connectors shuttered

	Connector Overview complete	
	4783 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13	4783
	Power Cord Overview complete	
	VAC13KS, Overview, V-Lock cord retaining, diverse Connector IEC C13, diverse, black	VAC13KS

19.12.2023

The specifications, descriptions and illustrations indicated in this document are based on current 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.