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







70° C

## **Description**

- Panel Mount

Screw-on mounting from 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

# **Approvals and Compliances**

#### **Characteristics**

- All single elements are already wired
- Line switch non-illuminated
- With EMC-shield
- 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

- 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 datasheet, html-datasheet, General Product Information, 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 / 250 VAC; 50 Hz 12 - 20 A @ Ta 40 °C / 125/250 VAC; Ratings UL/CSA 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 Tempe--25°C to 85°C rature 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 Thermoplastic, black, UL 94V-0 Material: Housing

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		
Line Switch	Rocker switch 2-pole, non-illuminated,		
	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 > 1'700'000 h acc. to MIL-HB			

# **Approvals and Compliances**

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about **Approvals** 

# **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
10	VDE Approvals	VDE	Certificate Number: 40001522
c <b>AU</b> 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
(UL)	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
(UL)	Designed according to	UL 1283	Electromagnetic interference filters
GSA Group	Designed according to	CSA C22.2 no. 42	General Use Receptacles, Attachment Plugs, and Similar Wiring Devices
GEA Group	Designed according to	CSA C22.2 no. 8	Electromagnetic interference (EMI) filters

# **Application standards**

Application standards where the product can be used

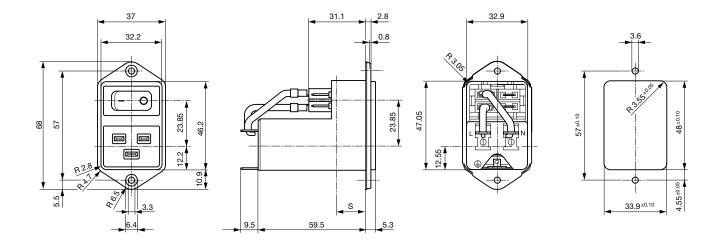
Organization	Design	Standard	Description
<u>IEC</u>	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technologyequipment.
<u>IEC</u>	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements 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	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, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.
<b>V</b> -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 Equipment	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1

# Dimension [mm]



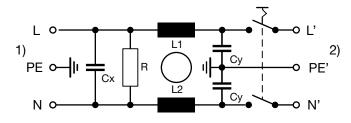
# **Technical Data of Filter-Components**

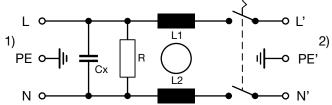
Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	<b>R [M</b> Ω]
12	Standard Version	2 x 0.8	100	2.2	1
16	Standard Version	2 x 0.6	100	2.2	1
20	Standard Version	2 x 0.3	100	2.2	1
12	Medical Version (M5)	2 x 0.8	100	-	1
16	Medical Version (M5)	2 x 0.6	100	-	1
20	Medical Version (M5)	2 x 0.3	100	-	1

# **Diagrams**

Standard version

Medical version (M5)





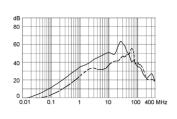
1) Line 1) Line 2) Load 2) Load

# **Attenuation Loss**

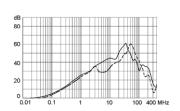
Standard version

12 A

16 A



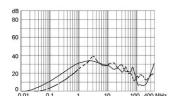
- - - -  $50\Omega$  differential mode \_\_\_\_  $50\Omega$  common mode



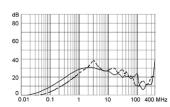
20 A

Medical version (M5)

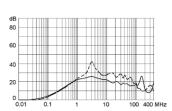








# 20 A



# **All Variants**

Rated Current [A]	Filter-Type	Internally wired	Line Switch	V-Lock	Order Number
12	Standard Version	•	2-pole		EC12.3101.001
12	Standard Version	•	2-pole	•	EC12.3101.001.21
16	Standard Version	•	2-pole		EC12.2101.001
20	Standard Version	•	2-pole		EC12.1101.001
12	Standard Version		2-pole		EC12.3101.002
16	Standard Version		2-pole		EC12.2101.002
20	Standard Version		2-pole		EC12.1101.002
12	Medical Version (M5)	•	2-pole		EC12.3201.001
16	Medical Version (M5)	•	2-pole		EC12.2201.001
16	Medical Version (M5)	•	2-pole	•	EC12.2201.001.21
20	Medical Version (M5)	•	2-pole		EC12.1201.001
12	Medical Version (M5)		2-pole		EC12.3201.002
16	Medical Version (M5)		2-pole		EC12.2201.002
20	Medical Version (M5)		2-pole		EC12.1201.002

Most Popular.

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

Packaging unit

20 Pcs

# **Accessories**

Description



Wire Harness Wire harness for SCHURTER products



Assorted Covers Rear Cover

0859.0108



Cord retaining kits Cord retaining strain relief

Flat head, H 4700.0008

# **Mating Outlets/Connectors**

## Category / Description



## Connector Overview complete

IEC Connector C19, Rewireable, Straight	4795
IEC Connector C19, Rewireable, Angled	4790
IEC Connector C19, Rewireable, Straight	0104U

Connector further types to EC12

# **Mating Outlets/Connectors shuttered**



Power Cord Overview complete

Overview Power Cord with IEC Appliance Connector C19, V-Lock, straight VAC19KS

Power Cord further types to EC12