## 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

- 3 Functions:

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

- For PCB mounting

## **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 datasheet, html-datasheet, General Product Information, Distributor-Stock-Check, Accessories, Detailed request for product, Microsite

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 / 125 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	from front side IP 40 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-illumi-
	nated 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 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: DC22

Approval Logo	Certificates	Certification Body	Description
<b>I</b> 10	VDE Approvals	VDE	Certificate Number: 40001522
c <b>FU</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
(I)	Designed according to	UL 1283	Electromagnetic interference filters
CSA 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 technologyequipment.
<u>IEC</u>	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

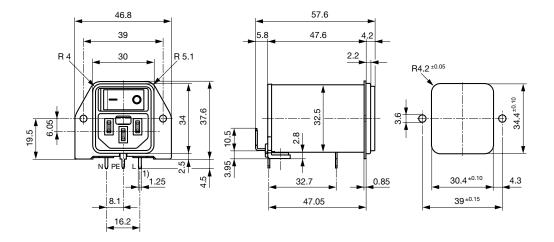
## Compliances

The product complies with following Guide Lines

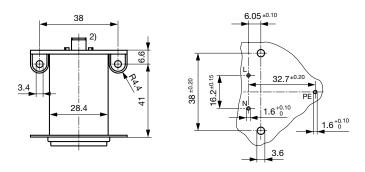
Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
ROHS	RoHS	SCHURTER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

Screw-on mounting



1) all pins



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

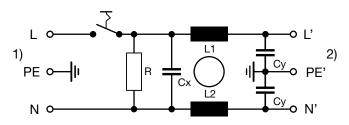
**Technical Data of Filter-Components** 

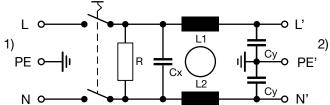
Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	<b>R [M</b> Ω]
1	Standard Version	2 x 10	100	2.2	1
2	Standard Version	2 x 4	100	2.2	1
4	Standard Version	2 x 1.5	100	2.2	1
6	Standard Version	2 x 0.8	100	2.2	1
10	Standard Version	2 x 0.3	100	2.2	1
1	Medical Version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



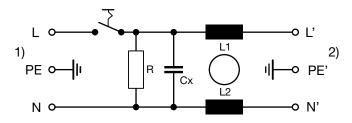


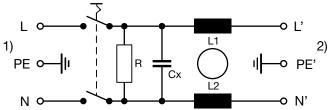
1) Line

1) Line 2) Load 2) Load

Medical filter 1-pole (M5)

Medical filter 2-pole (M5)



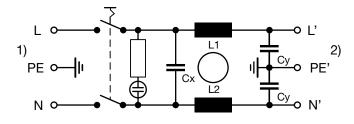


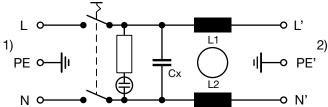
1) Line 2) Load

1) Line 2) Load

Standard filter 2-pole illuminated

Medical Filter 2-pole (M5) illuminated





1) Line 2) Load 1) Line

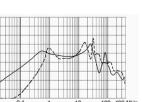
2) Load

# **Attenuation Loss**

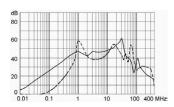
Standard version

1 A

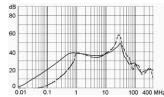
dB 80 60



2 A

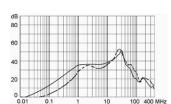


4 A

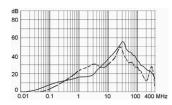


6 A

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

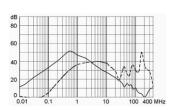


10 A

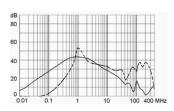


Medical version (M5)

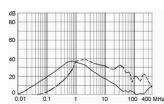
1 A



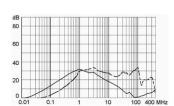
2 A



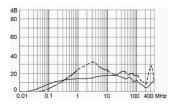
4 A



6 A



10 A



# **All Variants**

Rated current	Filter-Type	Line Switch	Illumination	Color	V-Lock
1	Standard Version	1-pole		-	1
2	Standard Version	1-pole		-	1
4	Standard Version	1-pole		-	1
6	Standard Version	1-pole		-	1
10	Standard Version	1-pole		-	1
1	Standard Version	2-pole		-	1
2	Standard Version	2-pole		-	1
4	Standard Version	2-pole		-	1
6	Standard Version	2-pole		-	1
10	Standard Version	2-pole		-	1
1	Standard Version	2-pole	•	red	1
2	Standard Version	2-pole	•	red	1
4	Standard Version	2-pole	•	red	1
6	Standard Version	2-pole	•	red	1
10	Standard Version	2-pole	•	red	1

Rated current	Filter-Type	Line Switch	Illumination	Color	V-Lock
1	Medical Version (M5)	2-pole		-	1
2	Medical Version (M5)	2-pole		-	1
4	Medical Version (M5)	2-pole		-	1
6	Medical Version (M5)	2-pole		-	1
10	Medical Version (M5)	2-pole		-	1
1	Medical Version (M5)	2-pole	•	red	1
2	Medical Version (M5)	2-pole	•	red	1
4	Medical Version (M5)	2-pole	•	red	1
6	Medical Version (M5)	2-pole	•	red	1
10	Medical Version (M5)	2-pole	•	red	1

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

4700.0008 Flat head, H

# **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 DC22





4782 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13	4782
4022 Mounting: Power Supply Cord, 3 x 1.5 mm², Screw clamps, Connector: IEC C13	4022
4785 Mounting: Power Cord, 3 x 1 mm $^2$ / 3 x 18 AWG, Cable, Connector: IEC C13	4785
$4300\text{-}06$ Mounting: Power Cord, 3 x 1 $mm^2$ / 3 x 18 AWG, Cable, Connector: IEC C13	4300-06
4012 Mounting: Power Supply Cord, 3 x 1.5 mm², Screw clamps, Connector: IEC C13	4012
Connector further types to DC22	

# Mating Outlets/Connectors shuttered



Power Cord Overview complete

VAC13KS, Overview, diverse Connector IEC C13, cord end:

VAC13KS

Power Cord further types to DC22