## IEC Appliance Inlet C14 or C18 with Filter, high attenuation, ECO design, Front- or Rear Side Mounting

Screw-on mounting





Snap-in mounting from front side

- Compact filter with high asymmetrical attenuation

- Suitable for assembly in metal plated plastic housings

Optimal shielding due to completely closed filter case, unpotted

- Class X1- and Y1-capacitors for enhanced withstand voltage

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

Suitable for use in medical equipment according to IEC/UL 60601-1 (1

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

Screw-on mounting from rear side, integrated thread with wires (stranded)



70° C 70° C

# **Approvals and Compliances**

See below:

**Characteristics** 

with bleed resistor

MOOP, 1 MOPP)

Weblinks

Other versions on request

- flexible wire with various lenghts

- Snap-in for panel thickness >2mm to 3mm

- Variant with plastic flange for front mounting

# Description

- Panel mount :
- Screw-on version from front or rear side, snap-in version from front side, PCB Version from rear side
- 2 Functions :
- Appliance Inlet protection class I or II, Line filter in standard and medical version
- Solder/quick connect/wire (stranded)
- PCB
- Earth Terminal

# **Unique Selling Proposition**

- Very high asymmetrical attenuation
- V-Lock cord retaining
- Metal flange for optimal shielding
- Compact design

## **Technical Data**

# Ratings IEC

1 - 10A @ Ta 40 °C / 250 VAC; 50 Hz 1 - 15A @ Ta 40 °C / 250 VAC; 60 Hz standard < 0.5 mA (250 V / 60 Hz) medical < 5 μA (250 V / 60 Hz) > 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec) -25 °C to 85 °C
standard < 0.5 mA (250V / 60 Hz) medical < 5 μA (250 V / 60 Hz) > 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec) -25 °C to 85 °C
medical < 5 μA (250 V / 60 Hz) > 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec) -25 °C to 85 °C
> 2.7 kVDC between L/N-PE Test voltage (2 sec) -25 °C to 85 °C
25/085/21 acc. to IEC 60068-1
front side IP40 acc. to IEC 60529
Suitable for appliances with protection class I or II acc. to IEC 61140
Quick connect terminals 6.3 x 0.8 mm Solder terminals Flexible wire AWG18 (15A AWG16), 150 mm
Screw: max 8 mm Mounting screw torque max 0.5 Nm Snap-in: 0.8 mm to 2 mm (all steps with one variant)
Themoplast / steel tin-plated, black / metallic, UL 94V-0

Appliance inlet/-outlet	C14 / C18 acc. to IEC 60320-1, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10A, Protection Class I or II
Line Filter	Standard and Medical Version, IEC 60939, UL 60939-3, CSA C22.2 no. 8 Technical Details
MTBF	> 3'000'000 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: 5123

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40016382
c 🕰 us	UL Approvals	UL	UR File Number: E495089

## **Product standards**

Product standards that are referenced

Organization	Design	Standard	Description
IEC	Designed according to	IEC 60320-1	Appliance couplers for household and similar general purposes
IEC	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
IEC.	Designed according to	IEC 61058-1	Switches for appliances. Part 1. General requirements
(h)	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
( <b>h</b> )	Designed according to	UL 60939-3	Electromagnetic interference filters
GED 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
IEC.	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
IEC	Suitable for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

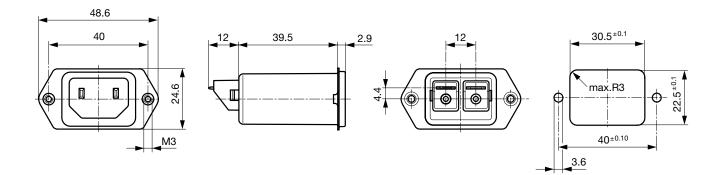
#### Compliances

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.
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.
<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 (1 MOOP, 1 MOPP)

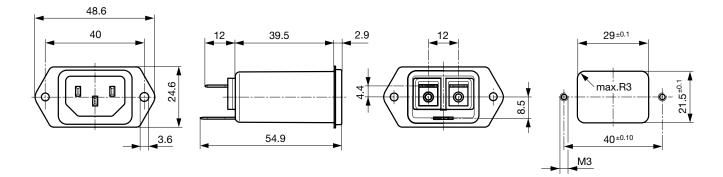
# **Dimension** [mm]

Rear side mounting with pre-formed, threaded holes for M3 screws (panel cutout for rear side mounting)

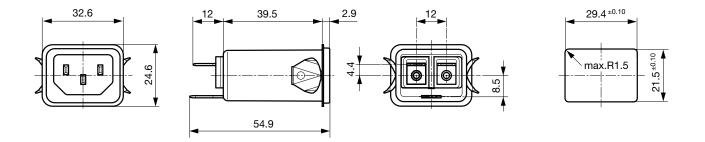


Dimensions for class II version also apply to class I

Front or rear side mounting for screws with nuts or blind rivets (panel cutout for frontside mounting)

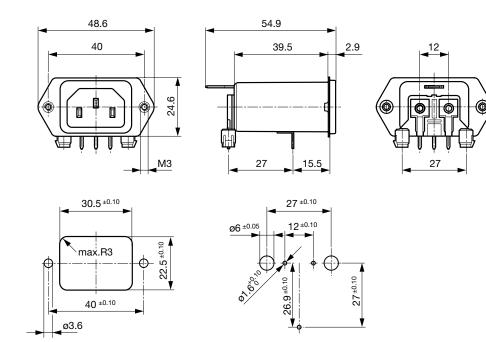


Snap-in mounting from front side

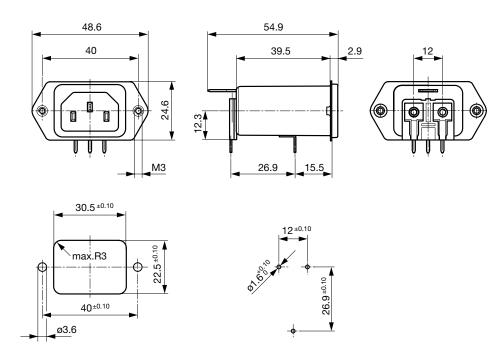


Dimensions for class I version also apply class II

# PCB snap-in rear side mounting, protection class I

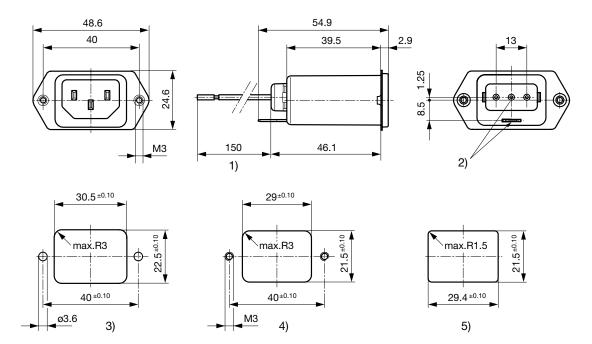


PCB rear side mounting, protection class I



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# Screw and snap-in mounting with flexible wire

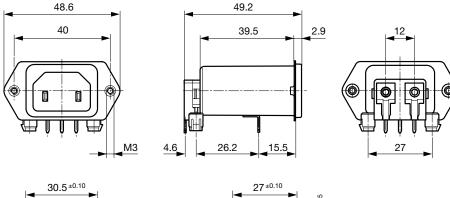


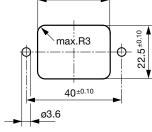
1) Flexible wire, standard length 150 mm or special length on request 2) Nonexistent for protection class II

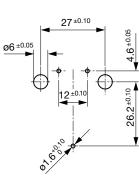
a) Panel cut-out screw-on version, back-side mounting
b) Panel cut-out screw-on version, front- or back-side mounting

5) Panel cut-out snap-in version, front-side mounting

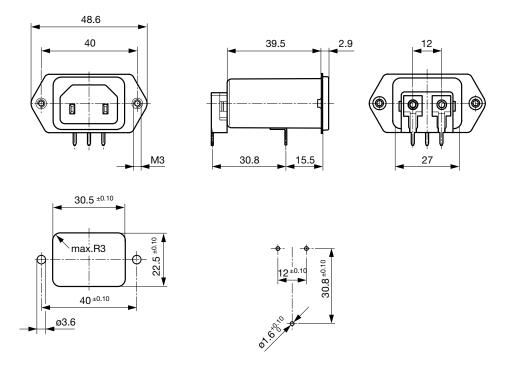
PCB snap-in rear side mounting, protection class II







PCB rear side mounting, protection class II



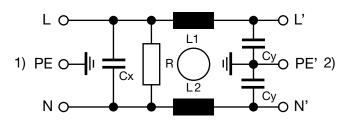
# **Technical Data of Filter-Components**

<b>R [Μ</b> Ω]	Capacitance CY [nF]	Capacitance CX [nF]	Inductances L [mH]	Filter-Type	Rated Current [A]
	2.2	100	2 x 20	Standard version	1
	2.2	100	2 x 9	Standard version	2
	2.2	100	2 x 3.4	Standard version	4
	2.2	100	2 x 1.6	Standard version	6
	2.2	100	2 x 0.65	Standard version	10
	2.2	100	2 x 0.2	Standard version	15
1	-	100	2 x 20	Medical Version (M5)	1
1	-	100	2 x 9	Medical Version (M5)	2
1	-	100	2 x 3.4	Medical Version (M5)	4
1	-	100	2 x 1.6	Medical Version (M5)	6
1	-	100	2 x 0.65	Medical Version (M5)	10
1	-	100	2 x 0.2	Medical Version (M5)	15
1	0.47	100	2 x 3.4	Medical Version (M80)	4
1	0.47	100	2 x 1.6	Medical Version (M80)	6

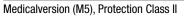
# Diagrams

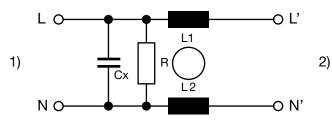
Standard version / Medical version M80

Medical Version (M5)



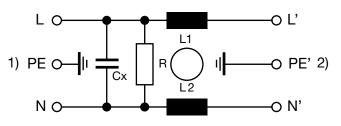
1) Line		
2) Load		





10 A

1 A

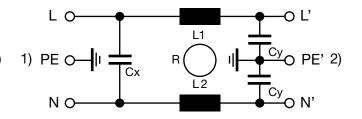


1) Line 2) Load

1) Line 2) Load

6 A

Standard version



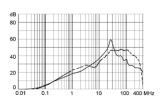
- - - - 50 $\Omega$  differential mode

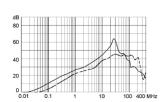
1) Line 2) Load

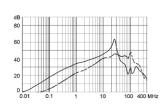
# **Attenuation Loss**

Standard version

15 A



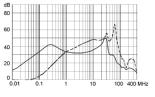




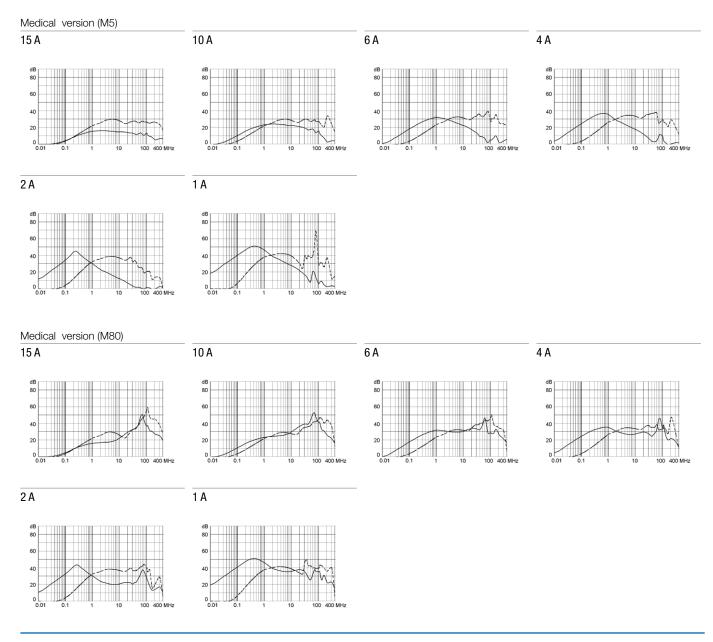
4 A				
dB 80				
60			٨	
40		<u> </u>		M.
20	$\nearrow$			VY
0.01	0.1	1	10	100 400 MHz

 $50\Omega$  common mode

2 A



dB 80				
60			ſ	
40	$\nearrow$	$\succ$	Ň	
20				V.
0.01	0.1	1	10	100 400 MHz



# All Variants

Rated Cur- rent [A]	Filter-Type	Mounting	Mounting side	Terminal	Protection Class	V-Lock	Order Number
1	Standard version	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2000.0
2	Standard version	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2001.0
4	Standard version	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2003.0
6	Standard version	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2004.0
10	Standard version	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2006.0
15	Standard version	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2007.0
6	Standard version	Screw/PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	I	•	5123.4074.0
1	Standard version	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.0000.0

# 5123

Rated Cur- rent [A]	Filter-Type	Mounting	Mounting side	Terminal	Protection Class	V-Lock	Order Number
2	Standard version	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.0001.0
4	Standard version	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.0003.0
4	Standard version	Screw	Front-/Rear-Side	Flexible wire AWG18	I	•	5123.0233.0
6	Standard version	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.0004.0
10	Standard version	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.0006.0
15	Standard version	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.0007.0
1	Standard version	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.1000.0
2	Standard version	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.1001.0
4	Standard version	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.1003.0
6	Standard version	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.1004.0
10	Standard version	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.1006.0
10	Standard version	Screw	Rear Side	Flexible wire and Earth pin 6.3 x 0.8	I	٠	5123.1046.0
15	Standard version	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.1007.0
1	Medical Version (M5)	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2300.0
2	Medical Version (M5)	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2301.0
4	Medical Version (M5)	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2303.0
6	Medical Version (M5)	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	1	•	5123.2304.0
10	Medical Version (M5)	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2306.0
15	Medical Version (M5)	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.2307.0
1	Medical Version (M5)	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.0300.0
2	Medical Version (M5)	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.0301.0
4	Medical Version (M5)	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.0303.0
6	Medical Version (M5)	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.0304.0
10	Medical Version (M5)	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.0306.0
15	Medical Version (M5)	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	1	•	5123.0307.0
1	Medical Version (M5)	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	٠	5123.1300.0
2	Medical Version (M5)	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.1301.0

Rated Cur- rent [A]	Filter-Type	Mounting	Mounting side	Terminal	Protection Class	V-Lock	Order Number
4	Medical Version (M5)	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.1303.0
6	Medical Version (M5)	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.1304.0
10	Medical Version (M5)	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.1306.0
15	Medical Version (M5)	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.1307.0
2	Medical Version (M5)	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	II	•	3-128-163
4	Medical Version (M80)	Screw	Front-/Rear-Side	Flexible wire and Earth pin 6.3 x 0.8	L	•	3-119-595
6	Medical Version (M80)	Screw	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	I	•	5123.0504.0
4	Medical Version (M80)	Screw	Rear Side	Flexible wire and Earth pin 6.3 x 0.8	L	•	3-119-787

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

- 15 A version only according UL/CSA

- Type for screw-on mounting from rear side has pre-threaded holes for M3 screws

Packaging unit
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#### Accessories

Description



Wire\_Harness Wire harness for SCHURTER products



Assorted\_Covers Rear Cover



RC320 Rear Cover for Power Entry Module

# Power Entry Modules with Line Filter https://www.schurter.com /PG06

Description



Cord\_retaining\_kits Cord retaining strain relief

# Mating Outlets/Connectors

Category / Description

4

#### Appliance Outlet Overview complete



4787, Mounting: Screw-on mounting, Appliance Outlet: IEC Solder terminals, 10 A, Suitable for appliances with pro- tection 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 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4782
4785 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 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

# Mating Outlets/Connectors shuttered



### Connector Overview complete

4783 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13 478	83
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## Power Cord Overview complete

VAC13KS, Overview, V-Lock cord retaining, diverse Connector IEC C13, diverse, black	VAC13KS
VAC17KS, V-Lock cord retaining, diverse m, Connector IEC C17, diverse, black / grey / white	VAC17KS

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