### IEC Appliance Inlet C14 with High Frequency Filter, X2Y Technology, ECO design, Front- or Rear Side Mounting





Screw or rivet fastening from front or rear side

Screw-on mounting from rear side (integrated thread)



#### **Description**

- Panel Mount
- Screw-on version from front or rear side
- 2 Functions:
  - Appliance Inlet, High frequency line filter as standard, industrial and medical version, Protection class I
- Quick connect terminals 6.3 x 0.8 mm

#### **Unique Selling Proposition**

- Filter for highest frequencies
- X2Y® Technology
- Double shielding for best filter performance
- Metal flange for optimal shielding

## **Approvals and Compliances**

#### **Characteristics**

- · Very compact filter for frequencies up to 1 GHz
- Patented X2Y Technologie for broadband high frequency filtering
- Double shielding for best filter performance
- One single filter design for the given current range
- Designed for standard, industrial and medical applications Suitable for assembly in metal plated plastic housings
- Suitable for use in equipment according to IEC 60950/60601 Suitable for use in medical equipment according to IEC/UL 60601-1

#### Other versions on request

- Solder terminals
- Variant with notch for V-Lock mating Cordsets

#### Weblinks

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 10A @ Ta 40 °C / 250 VAC; 50 Hz Ratings UL/CSA 15A @ Ta 40 °C / 250 VAC; 60 Hz Leakage Current standard < 0.5 mA (250 V / 60 Hz) medical < 43/80 μA (250 V / 60 Hz) Dielectric Strength > 1.7 kVDC between L-N > 2.7 kVDC between L/N-PF Test voltage (2 sec) Allowable Operation Tempe--25°C to 85°C rature Climatic Category 25/085/21 acc. to IEC 60068-1 from front side IP 40 acc. to IEC 60529 **IP-Protection** Suitable for appliances with protection Protection Class 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: Housing Themoplast / steel tin-plated, black / metallic, 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 Filter	Standard, medical and industrial version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details
MTBF	> 3'300'000 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: 5150

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40023426
<b>. FU</b>	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 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
(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
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

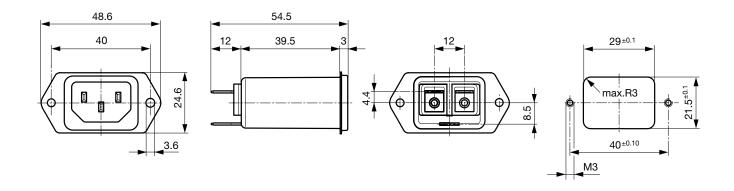
# Compliances

The product complies with following Guide Lines

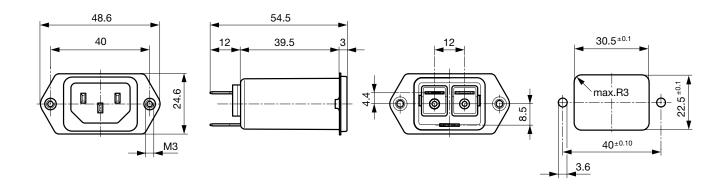
Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
ROHS	RoHS	SCHURTER 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.
	Medical Equipment	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1

## Dimension [mm]

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



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



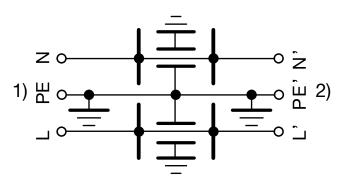
# **Technical Data of Filter-Components**

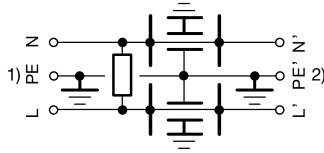
Rated Current [A]	Filter-Type	Capacitance CY [nF]	<b>R [M</b> Ω]
10	Standard Version	2.5	-
10	Standard Version with Bleed Resistor	2.5	1
10	Industrial Version	4.7	-
10	Medical Version (M80)	0.45	1

## **Diagrams**

Standard and industrial version

Medical M80 and standard version with bleed resistor





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

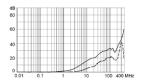
 $50\Omega$  common mode

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

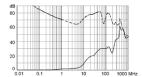
# **Attenuation Loss**

Standard version

# CISPR 17 Test Method



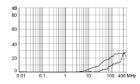
## Alternate Test Method



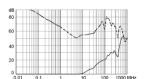
same attenuation loss with bleed resistor

Medical version (M80)

CISPR 17 Test Method

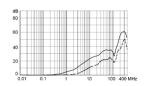


# Alternate Test Method

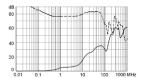


Industrial version

CISPR 17 Test Method



# Alternate Test Method



Comment about alternate test method see table of variants

## **All Variants**

Rated Current IEC [A]	Rated Current UL [A]	Filter-Type	Panel mounting	Mounting side	Order Number
10	15	Standard Version	Screw-on/Rivet	Front-/Rear-Side	5150.0011.0
10	15	Standard Version	Screw	Rear Side	5150.0011.1
10	15	Standard Version with Bleed Resistor	Screw-on/Rivet	Front-/Rear-Side	5150.0021.0
10	15	Standard Version with Bleed Resistor	Screw	Rear Side	5150.0021.1
10	15	Industrial Version	Screw-on/Rivet	Front-/Rear-Side	5150.0041.0
10	15	Industrial Version	Screw	Rear Side	5150.0041.1
10	15	Medical Version (M80)	Screw-on/Rivet	Front-/Rear-Side	5150.0031.0
10	15	Medical Version (M80)	Screw	Rear Side	5150.0031.1

Rated Current	Rated Current	Filter-Type	Panel mounting	Mounting side	Order Number
IEC [A]	UL [A]		· ·	·	

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

The Alternate Test Method allows the measurement in the GHz frequency range whereas the CISPR 17 method does not cover frequencies above 30MHz. The insertion loss is measured in a throughput method (common mode) and a cross coupled method (differential mode). The differential mode measurement of the alternate test method is not directly comparable to the conventional measurement acc. CISPR 17.

Further information on the X2Y filter technology and on the alternate insertion loss measurement method can be found under www. schurter.com/info\_emc

Packaging unit 10 Pcs

## **Accessories**

#### Description



Assorted Covers Rear Cover

0859.0048



Cord retaining kits Cord retaining strain relief

Flat head, E	4700.0005
Flat head. G	4700.0007

# **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 5150

## Connector Overview complete



4782 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 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 <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
4012 Mounting: Power Supply Cord, 3 x 1.5 mm², Screw clamps, Connector: IEC C13	4012
Connector further types to 5150	

## **Mating Outlets/Connectors shuttered**



Power Cord Overview complete

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

VAC13KS

Power Cord further types to 5150