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





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

See below:

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

This type is Phase-out without alternate type Last order date: 15.12.2018

Weblinks

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

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-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 IP40 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
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

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: 5150

Approval Logo	Certificates	Certification Body	Description
1 0	VDE Approvals	VDE	Certificate Number: 40023426
c SU °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 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
(ŲL)	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
(UL)	Designed according to	UL 1283	Electromagnetic interference filters
GEA Group	Designed according to	CSA C22.2 no. 42	General Use Receptacles, Attachment Plugs, and Similar Wiring Devices
GF 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 technology equipment.
<u>IEC</u>	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

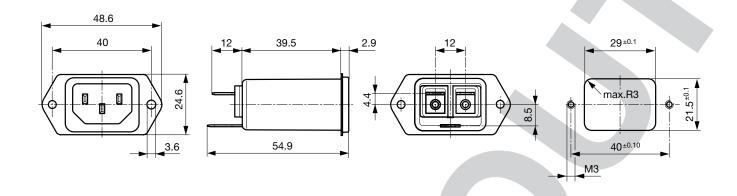
Compliances

The product complies with following Guide Lines

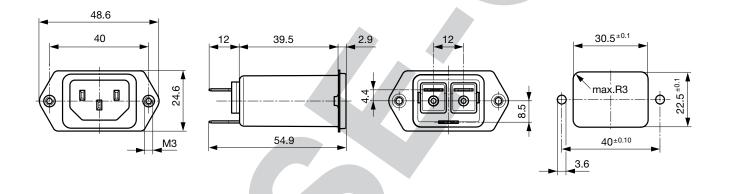
Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/836
©	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.
T	Medical Technology	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)

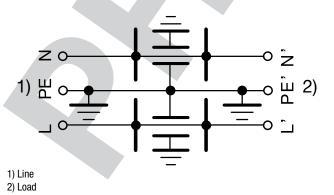


Technical Data of Filter-Components

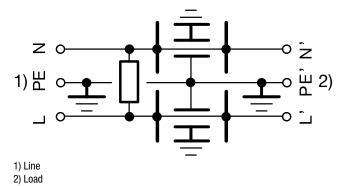
Rated Current [A]	Filter-Type	Capacitance CY [nF]	R [M Ω]
10	Standard Version	2.5	-
10	Standard Version with Bleed Resistor	2.5	1
10	Industrial Version	4.7	-
10	Medical Version (M80)	0.45	1

Diagrams

Standard and industrial version



Medical M80 and standard version with bleed resistor

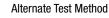


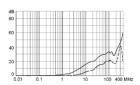
- - - - 50Ω differential mode _____ 50Ω common mode

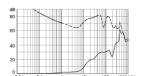
Attenuation Loss

Standard version

CISPR 17 Test Method



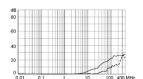


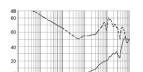


same attenuation loss with bleed resistor

Medical version (M80)

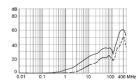
CISPR 17 Test Method





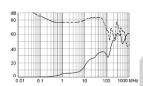
Industrial version

CISPR 17 Test Method



Alternate 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

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





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 terminals or quick connect terminals, 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

Appliance Outlet further types to 5150

Connector Overview complete



4022 Mounting: Power Supply Cord, 3 x 1.5 mm², Screw clamps, Connector: IEC C13	4022
4782 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13	4782
4012 Mounting: Power Supply Cord, 3 x 1 mm², Screw clamps, Connector: IEC C13	4012
4785 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13	4785
4300-06 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13	4300-06
Connector further types to 5150	

Mating Outlets/Connectors shuttered



Power Cord Overview complete

VAC13KS, Overview, V-Lock cord retaining, diverse Connector IEC C13, diverse, black VAC13KS

Power Cord further types to 5150

EMC Products