#### IEC Appliance Inlet C22 for hot Conditions, with Filter for high Temperatures, front side Mounting





155° C

# **Description**

- Panel mount :

Screw-on from front side

- 2 Functions:

Appliance Inlet Protection class I, Line filter in standard and medical version

- Solder / quick connect / wires (stranded)

## **Unique Selling Proposition**

- For higher temperatures
- Attractive flat front design
- Highly resistant since fully potted
- Various filter variants

#### See below:

#### **Approvals and Compliances**

#### **Characteristics**

- Compact design with optimal shielding
- Suitable for high ambient temperatures up to 75°C
- Version with class X1 and X2 (standard version) capacitors
- Universal line filter for standard applications
- Suitable for use in medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP)

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

# Other versions on request

- flexible wire with various lenghts

#### References

Alternative: version without line filter 1681

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

Technical Data	
Ratings IEC	16A @ Ta 75 °C / 250 VAC; 50 Hz
Ratings UL/CSA	20 A @ Ta 65 °C / 250 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 (Cy2) > 2.7 kVDC between L/N-PE (Cy2) Test voltage (2 sec)
Impulse Withstand Voltage	> 2.5 kV between L-N (CX2) > 4 kV between L-N (CX1) > 5 kV between L/N-PE (Cy2) voltage (1.2/50 µs)
Allowable Operation Temperature	-25°C to 100°C
Climatic Category	25/100/21 acc. to IEC 60068-1
IP-Protection	front side IP40 acc. to IEC 60529
Protection Class	Suitable for appliances with protection class I acc. to IEC 61140
Terminal	Solder / quick connect / wires (stranded)
Panel Thickness S	Screw: max 8 mm Mounting screw torque max 0.5 Nm
Material	Thermoplastic, black, UL 94V-0

Appliance inlet/-outlet	C22 acc. to IEC 60320-1, UL 498, CSA C22.2 no. 42 (for hot conditions) pin-temperature 155 °C, 16A,
	Protection Class I
Line Filter	Standard and Medical Version, IEC
	60939, UL 1283, CSA C22.2 no. 8
	Technical Details
MTBF	> 1'400'000 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: C22F

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 104884
c <b>FL</b> °us	UL Approvals	UL	UR 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
<b>U</b> L	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
<b>U</b> L	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
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
<u>IEC</u>	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
<u>IEC</u>	Suitable for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

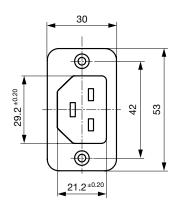
# Compliances

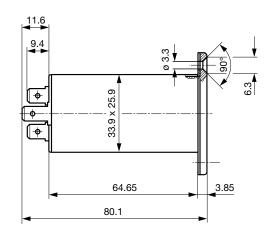
The product complies with following Guide Lines

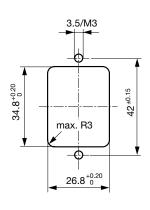
Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UK CA	UKCA declaration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

# Dimensions [mm]

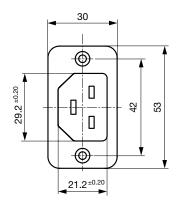
Screw-on mounting with quick connect terminals

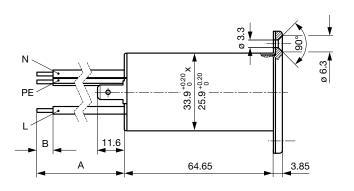


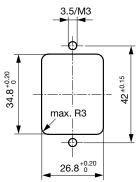




Screw-on mounting with wire leads







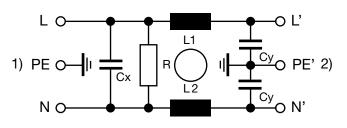
# **Technical Data of Filter-Components**

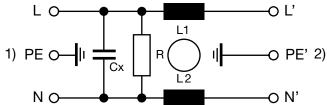
Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	<b>R</b> [ <b>M</b> Ω]
16	Standard version	2 x 0.6	100	2.2	1
16	Standard version	2 x 0.6	330	2.2	1
20	Standard version	2 x 0.3	100	2.2	1
20	Standard version	2 x 0.3	330	2.2	1
16	Medical Version (M5)	2 x 0.6	100	-	1
20	Medical Version (M5)	2 x 0.3	100	-	1
20	Medical Version (M5)	2 x 0.3	330	-	1
16	Medical Version (M80)	2 x 0.6	100	0.47	1
20	Medical Version (M80)	2 x 0.3	100	0.47	1

# **Diagrams**

Standard version

Medical Version (M5)





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

 $50\Omega$  common mode

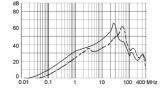
1) Line 2) Load 1) Line 2) Load

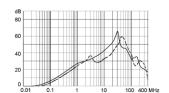
# **Attenuation Loss**

Standard version

16 A

20 A

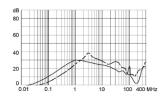


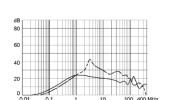


Medical version (M5)

16 A

20 A

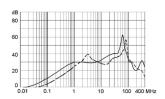


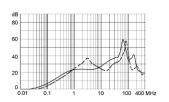


Medical version (M80)

16 A

20 A





#### **All Variants**

Rated Current IEC [A]	Rated Current UL [A]	Filter-Type	Panel mounting	Mounting side	Terminal	Capacitor	V-Lock	Order Number
16	16	Standard version	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 330nF		C22F.1107
16	20	Standard version	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C22F.0101
16	16	Standard version	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C22F.1101
16	20	Standard version	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X1 100nF		C22F.0103
16	20	Standard version	Screw	Front Side	Solder terminal	X2 330nF		C22F.0007
16	20	Standard version	Screw	Front Side	Solder terminal	X2 100nF		C22F.0001

Rated Current IEC [A]	Rated Current UL [A]	Filter-Type	Panel mounting	Mounting side	Terminal	Capacitor	V-Lock	Order Number
16	16	Standard version	Screw	Front Side	Solder terminal	X2 100nF		C22F.1001
16	20	Standard version	Screw	Front Side	Solder terminal	X1 100nF		C22F.0003
16	20	Medical Version (M5)	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C22F.0102
16	16	Medical Version (M5)	Screw	Front Side	Quick connect terminals 6.3 x 0.8 mm	X2 100nF		C22F.1102
16	20	Medical Version (M5)	Screw	Front Side	Solder terminal	X2 330nF		C22F.0008
16	20	Medical Version (M5)	Screw	Front Side	Solder terminal	X2 100nF		C22F.0002
16	16	Medical Version (M5)	Screw	Front Side	Solder terminal	X2 100nF		C22F.1002
16	16	Medical Version (M80)	Screw	Front Side	Solder terminal	X2 100nF		C22F.1005

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



RC320 Rear Cover for Power Entry Module

# **Mating Outlets/Connectors**

Category / Description



Connector Overview complete

1658, Mounting: Power Cord, Screw clamps Connector: IEC C21

1658.0000



Power Supply Cord Overview complete

Cord Sets 16 A, Europlug, 2.5 m, Connector IEC C21, H05VV-F3G1.5, black

6051.5001