#### IEC Appliance Inlet C14 with Filter, Fuseholder 1- or 2-pole, optional Voltage Selector (step switch)



Screw-on mounting from front side Version with ground line choke without voltage selector



Snap-in mounting from front side without voltage selector



Screw-on mounting from rear side without voltage selector Flexible wire AWG18

See below: Approvals and Compliances



# Description

- Panel mount :
- Screw-on version from front or rear side, snap-in version front side 4 Functions :
- Appliance Inlet Protection class I , Fuseholder for fuse-links  $5 \times 20$  mm 1- or 2-pole , with or without voltage selector (step switch) , Line filter
- in standard and medical version
- V-Lock notch standard
- Quick connect terminals / wires

#### **Unique Selling Proposition**

- Reduces noise on the ground wire
- Interrupts ground loops
- High asymmetrical attenuation
- V-Lock cord retaining

# Characteristics - Rear side mounting for efficient costsaving assembly Suitable for assembly in metal plated plastic housings

- All single elements are already wired
- Plug removal necessary for fuse-link replacement
- 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

# - Capacity CX 100 nF

# References

Alternative: version without line filter KEA

#### Weblinks

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

#### **Technical Data**

Ratings IEC	1 - 10A @ Ta 40 °C / 250 VAC; 50 Hz
Ratings UL/CSA	1 - 10A @ Ta 40 °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 > 2.7 kVDC between L/N-PE Test voltage (2 sec)
Allowable Operation Tempe- rature	-25 °C to 85 °C
Climatic Category	25/085/21 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	Quick connect terminals 6.3 x 0.8 mm Flexible wire AWG18, 150 mm
Panel Thickness S	Screw: max 8mm Mounting screw torque max 0.5Nm Snap-in: 0.8mm to 3mm
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, 10A, Protection Class I
Fuseholder	1-/2-pole, Shocksafe category PC2 acc. to IEC 60127-6, for fuse-links 5 x 20mm
Rated Power Acceptance @ Ta 23 °C	5 x 20: 2 W (1 pole)/ 1.6 W (2-pole) per pole
Power Acceptance @ Ta > 23°C	Admissible power acceptance at higher ambient temperature see derating cur- ves
Voltage Selector	optional, step, 3 pos.
Line Filter	Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details
MTBF	> 1'700'000 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: KFA

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40004665 (FKE, FKF, FKV, FKW)
c <b>AU</b> us	UL Approvals	UL	UL File Number: E72928 (FKE, FKF, FKV, FKW)
	CQC Approvals	CQC	CQC Certificate Number: CQC18001188536

#### **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 60127-6	Miniature fuses. Part 6. Fuse-holders for miniature fuse-links
IEC	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
(UL	Designed according to	UL 1283	Electromagnetic interference filters
GE 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	Designed for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
IEC.	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
<u>IEC</u>	Designed for applications acc.	IEC 60335-1	Safety of electrical appliances for household and similar purposes. Meets the requirements for appliances in unattended use. This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 or -12 & -13.

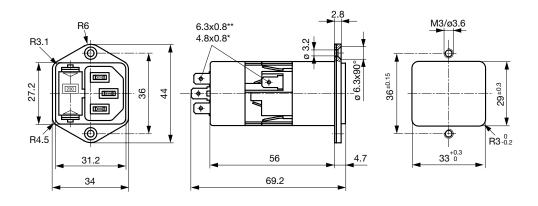
#### Compliances

The product complies with following Guide Lines

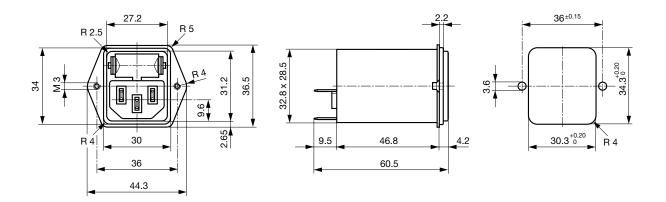
Identification	Details	Initiator	Description
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UK CA	UKCA declaration 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
®	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.
00	White Paper Glow wire test	SCHURTER AG	Meets the requirements of IEC 60335-1 for appliances in unattended use. This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 or -12 &-13.
T	Medical Equipment	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP)

# Dimension [mm]

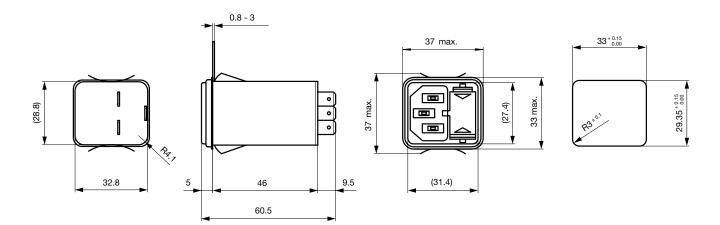
Filter with voltage selector



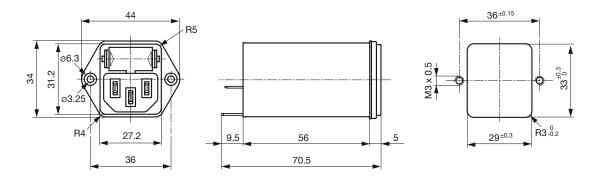
Screw-on mounting from rear side



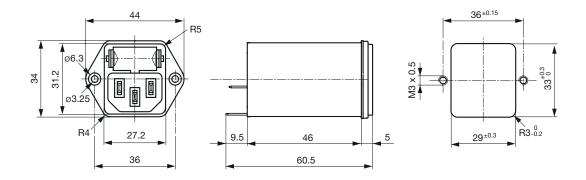
Snap-in mounting



Screw-on mounting from front side with ground line choke



Screw-on mounting from front side



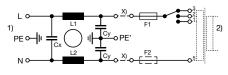
# **Technical Data of Filter-Components**

	•					
Rated Current [A]	Filter-Type	Inductance L1/ L2 [mH]	Inductance L3 [mH]	Capacitance CX [nF]	Capacitance CY [nF]	<b>R [M</b> Ω]
1	Standard version	2 x 10	-	68	2.2	-
2	Standard version	2 x 4	-	68	2.2	-
4	Standard version	2 x 1.5	-	68	2.2	-
6	Standard version	2 x 0.8	-	68	2.2	-
10	Standard version	2 x 0.3	-	68	2.2	-
1	Standard Version with Ground Line Choke	2 x 10	0.6	100	2.2	-
2	Standard Version with Ground Line Choke	2 x 4	0.6	100	2.2	-
4	Standard Version with Ground Line Choke	2 x 1.5	0.6	100	2.2	-
6	Standard Version with Ground Line Choke	2 x 0.8	0.6	100	2.2	-
10	Standard Version with Ground Line Choke	2 x 0.3	0.15	100	2.2	-
1	Medical Version (M5)	2 x 10	-	68	-	1
2	Medical Version (M5)	2 x 4	-	68	-	1
4	Medical Version (M5)	2 x 1.5	-	68	-	1
6	Medical Version (M5)	2 x 0.8	-	68	-	1
10	Medical Version (M5)	2 x 0.3	-	68	-	1
1	Medical Version (M80)	2 x 10	-	68	0.47	1
2	Medical Version (M80)	2 x 4	-	68	0.47	1
4	Medical Version (M80)	2 x 1.5	-	68	0.47	1
6	Medical Version (M80)	2 x 0.8	-	68	0.47	1

Rated Current [A]	Filter-Type	Inductance L1/ L2 [mH]	Inductance L3 [mH]	Capacitance CX [nF]	Capacitance CY [nF]	<b>R [Μ</b> Ω]
10	Medical Version (M80)	2 x 0.3	-	68	0.47	1
1	Medical Version (M5) with Ground Line Choke	2 x 10	0.6	100	-	1
2	Medical Version (M5) with Ground Line Choke	2 x 4	0.6	100	-	1
4	Medical Version (M5) with Ground Line Choke	2 x 1.5	0.6	100	-	1
6	Medical Version (M5) with Ground Line Choke	2 x 0.8	0.6	100	-	1
10	Medical Version (M5) with Ground Line Choke	2 x 0.3	0.15	100	-	1

## Diagrams

Standard version with voltage selector



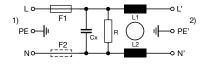
x) external connection to be made by the customer

1) Line

2) Load

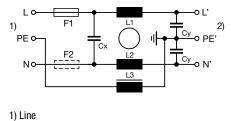
Medical Version (M5)

without voltage selector



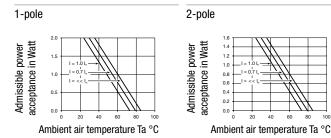
1) Line 2) Load

Standard version with ground line choke

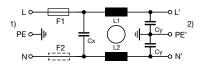




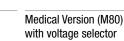
#### **Derating Curves**

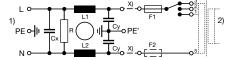


Standard version without voltage selector



1) Line 2) Load



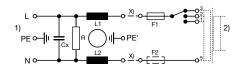


x) external connection to be made by the customer

1) Line 2) Load

Medical Version (M5) with ground line choke

Medical Version (M5) with voltage selector

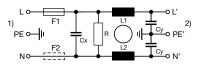


x) external connection to be made by the customer

1) Line

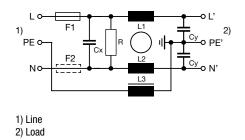
2) Load

Medical Version (M80) without voltage selector



1) Line 2) Load

Medical Version (M80) with ground line choke



# Attenuation Loss

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

6 A

dB 80

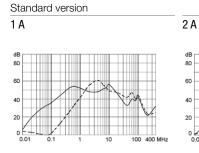
60

40

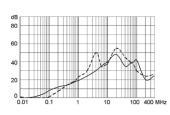
20 0 \_\_\_\_\_ 0.0

6 A

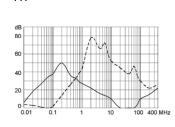
6 A

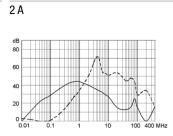


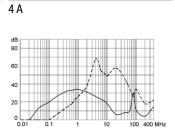




Medical version (M5)







4 A

dB

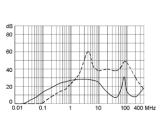
80

60

40

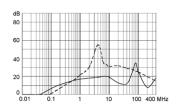
20

٥



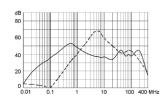
100 MHz

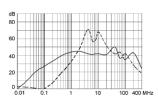
10 A



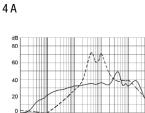
#### Medical version (M80)

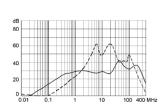




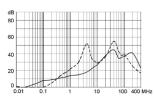


2 A



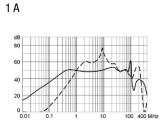


10 A

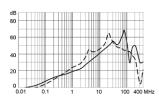


2 A

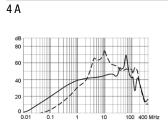
Standard with Earth Line Choke

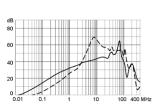






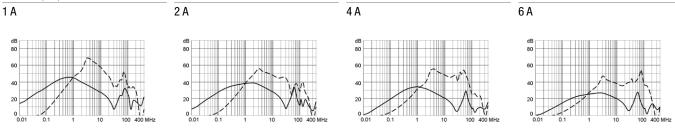
# 



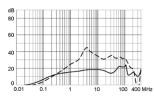


6 A

Medical (M5) with Earth Line Choke



10 A



# All Variants

Rated Current [A]	Filter-Type	Panel mounting	Mounting side	Fuseholder	Terminal	Voltage Selector	Order Number
1	Standard version	Snap-in	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6011
1	Standard version	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6001
2	Standard version	Snap-in	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6012
2	Standard version	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6002
4	Standard version	Snap-in	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6013
4	Standard version	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6003
6	Standard version	Snap-in	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6014
6	Standard version	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6004
10	Standard version	Snap-in	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6015
10	Standard version	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6005

Rated Current [A]	Filter-Type	Panel mounting	Mounting side	Fuseholder	Terminal	Voltage Selector	Order Number
1	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5011
1	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5051
1	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5001
1	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5041
1	Standard version	Screw	Rear Side	1-pole	Flexible wire AWG18	-	4301.7311
1	Standard version	Screw	Rear Side	2-pole	Flexible wire AWG18	-	4301.7301
1	Standard version	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7001
2	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5012
2	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5052
2	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5002
2	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5042
2	Standard version	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7002
4	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5013
4	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5053
4	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5003
4	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5043
4	Standard version	Screw	Rear Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7013
4	Standard version	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7003
6	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5014
6	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5054
6	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5004
6	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5044
6	Standard version	Screw	Rear Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7014
6	Standard version	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7004
10	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5015
10	Standard version	Screw	Front Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5055
10	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5005
10	Standard version	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5045
10	Standard version	Screw	Rear Side	1-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7015
10	Standard version	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7005
1	Standard Version with Ground Line Choke	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.8050
2	Standard Version with Ground	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.8051
	Standard Version with Ground	Screw	Front Side	2-pole	Quick connect terminals 6.3 x	-	4301.8052
4	Line Choke				0.8 mm		

Rated Current	Filter-Type	Panel mounting	Mounting	Fuseholder	Terminal	Voltage Selector	Order Number
<b>[A]</b> 10	Standard Version with Ground	Screw	side Front Side	2-pole	Quick connect terminals 6.3 x	-	4301.8054
	Line Choke				0.8 mm		
1	Medical Version (M5)	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6201
2	Medical Version (M5)	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6203
4	Medical Version (M5)	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6205
6	Medical Version (M5)	Snap-in	Front Side	2-pole	Flexible wire AWG18	-	4301.6307
6	Medical Version (M5)	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6207
1	Medical Version (M5)	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5241
1	Medical Version (M5)	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7201
2	Medical Version (M5)	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5203
2	Medical Version (M5)	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5243
2	Medical Version (M5)	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7203
4	Medical Version (M5)	Screw	Front Side	2-pole	Quick connect terminals 6.3 x	-	4301.5205
4	Medical Version (M5)	Screw	Front Side	2-pole	0.8 mm Quick connect terminals 6.3 x	3 pos.	4301.5245
4	Medical Version (M5)	Screw	Rear Side	2-pole	0.8 mm Quick connect terminals 6.3 x	-	4301.7205
6	Medical Version (M5)	Screw	Front Side	1-pole	0.8 mm Quick connect terminals 6.3 x	-	4301.5217
6	Medical Version (M5)	Screw	Front Side	2-pole	0.8 mm Quick connect terminals 6.3 x	-	4301.5207
6	Medical Version (M5)	Screw	Front Side	2-pole	0.8 mm Quick connect terminals 6.3 x	3 pos.	4301.5247
					0.8 mm	5 pus.	
6	Medical Version (M5)	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7207
10	Medical Version (M5)	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5209
10	Medical Version (M5)	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7209
4	Medical Version (M80)	Snap-in	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.6206
1	Medical Version (M80)	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7202
2	Medical Version (M80)	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.5204
2	Medical Version (M80)	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	3 pos.	4301.5244
2	Medical Version (M80)	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x	-	4301.7204
4	Medical Version (M80)	Screw	Front Side	2-pole	0.8 mm Quick connect terminals 6.3 x	-	4301.5206
4	Medical Version (M80)	Screw	Rear Side	2-pole	0.8 mm Quick connect terminals 6.3 x	-	4301.7206
6	Medical Version (M80)	Screw	Front Side	2-pole	0.8 mm Quick connect terminals 6.3 x	-	4301.5208
6	Medical Version (M80)	Screw	Rear Side	2-pole	0.8 mm Quick connect terminals 6.3 x	-	4301.7208
10	Medical Version (M80)	Screw	Front Side	2-pole	0.8 mm Quick connect terminals 6.3 x	-	4301.5200
	. ,				0.8 mm		
10	Medical Version (M80)	Screw	Rear Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.7200
1	Medical Version (M5) with Ground Line Choke	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.8055
2	Medical Version (M5) with Ground Line Choke	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.8056
4	Medical Version (M5) with Ground Line Choke	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.8057

Rated Current [A]	Filter-Type	Panel mounting	Mounting side	Fuseholder	Terminal	Voltage Selector	Order Number
6	Medical Version (M5) with Ground Line Choke	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.8058
10	Medical Version (M5) with Ground Line Choke	Screw	Front Side	2-pole	Quick connect terminals 6.3 x 0.8 mm	-	4301.8059

Most Popular.

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

Wire length: 150 mm

The fuse drawer is not included and must be ordered separately (see required accessory).

Packaging unit	10 Pcs
----------------	--------

#### **Required Accessory**

Description



Fusedrawer 2 Fusedrawer for Fuse Links 5x20 mm, with or without Voltage Selector Insert

Fingergrip-Safe, 2-pole	3-104-672
Fingergrip, 2-pole, Voltage Selector, 110, 150, 220	4301.1014.01
Fingergrip, 2-pole, Voltage Selector, 120, 240	4301.1014.02
Fingergrip, 2-pole, Voltage Selector, 110, 220	4301.1014.03

#### Accessories



Wire Harness Wire harness for SCHURTER products



Assorted Covers Rear Cover

0859.0072



RC320 Rear Cover for Power Entry Module