1-stage filter for 3-phase systems with neutral conductor



See below:

# **Approvals and Compliances**

### **Description**

- Line filter as standard, industrial and medical version
- 1 stage
- Filter with standard or high attenuation (HP)

### **Unique Selling Proposition**

- Compact single-stage filter
- Various filter variants
- Light weight design
- Wide temperature range

### **Applications**

- Voltage rating 520 VAC for world wide acceptance
- For low power 3 phase energy inverter such as photovoltaic or battery storage systems
- Suitable for use in equipment according to IEC/UL 62368-1

#### Weblinks

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

#### **Technical Data**

Rated Current	3 - 20 A
Rated voltage	300/520 VAC, 50/60 Hz
Approval for	3 - 20 A @ 50 °C / 300/520 VAC; 50/60 Hz
Overload Current	1.5 x Ir for 1 minute, per hour
Dielectric Strength	> 2.25 kVDC between L-L > 1.3 kVDC between L-N 2.75 kVDC between L-PE
Number of Filter Stages	Test voltage 2 sec 1-stage
Weight	0.2
Material: Housing	Metal
Sealing Compound	UL 94V-0

Screw-on mounting on chassis	
Quick connect terminal 6.3 x 0.8 mm	
-40°C to 100°C	
40/100/21 acc. to IEC 60068-1	
IP20 acc. to IEC 60529	
Suitable for appliances with protection	
class I acc. to IEC 61140	
> 200'000h 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: FMAD CP

Approval Logo	Certificates	Certification Body	Description
<b>1</b> 0	VDE Approvals	VDE	Certificate Number: 40050745
c <b>Al</b> us	UL Approvals	UL	UR File Number: E495089

# **Product standards**

Product standards that are referenced

Organization	Design	Standard	Description
<u>IEC</u>	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
$(\hat{U_{L}})$	Designed according to	UL 60939-3	Passive filters for suppressing electromagnetic interference

### **Application standards**

Application standards where the product can be used

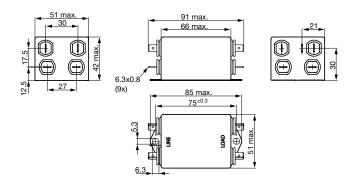
Organization	Design	Standard	Description
<u>IEC</u>	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

### Compliances

The product complies with following Guide Lines

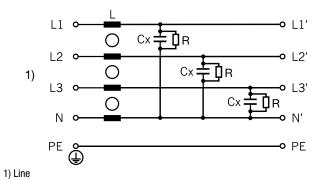
Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UK CA	UKCA declaration 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.

## Dimension [mm]

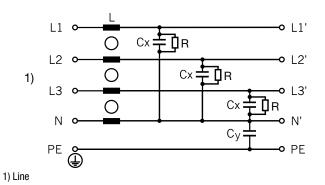


# **Diagrams**

Medical Version (M5)



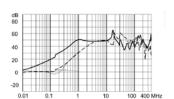
# Standard, Industrial version



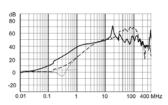
## **Attenuation Loss**

Standard version

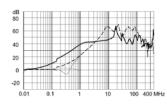
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6A

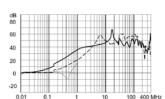


10A

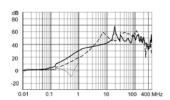


16A

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

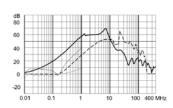


20A

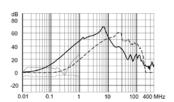


### Industrial version

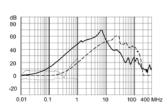
3A



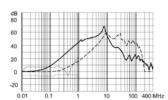
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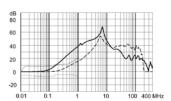
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16A

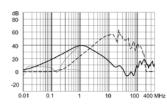


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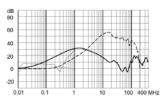


# Medical version (M5)

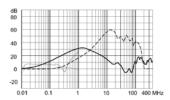
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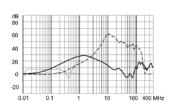
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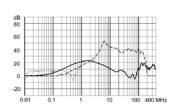
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16A

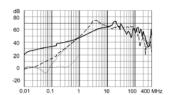


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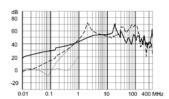


### Standard HP

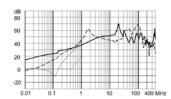
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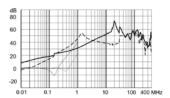
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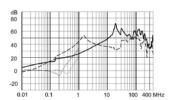
10A



16A

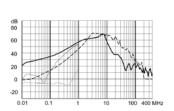


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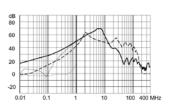


### Industry HP

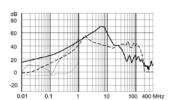
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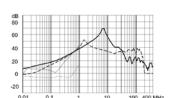
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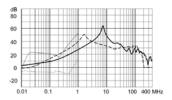
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16A

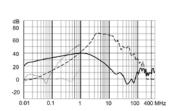


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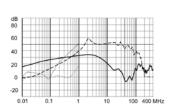


## Medical (M5) HP

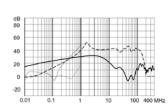
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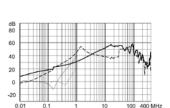
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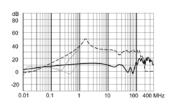
10A



16A



20A



## **Variants**

Rated Current @ Ta 50°C [A]	Filter Type	Power Dissipation [W]	Contact Resistance [m $\Omega$ ]	Leakage Current [mA] @ 440V, 60Hz 1)	Order Number
3	Industrial version	2.8	78.9	3	3-110-821
6	Industrial version	1.9	13	3	3-110-832
10	Industrial version	2.8	6.9	3	3-110-833
16	Industrial version	3.6	3.5	3	3-111-516
20	Industrial version	3.5	2.2	3	3-110-834
3	Industrial version HP	2.3	63.6	3	3-110-843
6	Industrial version HP	2.2	15.3	3	3-110-844
10	Industrial version HP	2.5	6.2	3	3-110-845
16	Industrial version HP	2.8	2.7	3	3-111-519
20	Industrial version HP	2.5	1.5	3	3-110-846
3	Medical Version (M5)	2.8	78.9	0.005	3-110-817
6	Medical Version (M5)	1.9	13	0.005	3-110-818
10	Medical Version (M5)	2.8	6.9	0.005	3-110-819
16	Medical Version (M5)	3.6	3.5	0.005	3-111-515
20	Medical Version (M5)	3.5	2.2	0.005	3-110-820
3	Medical Version (M5) HP	2.3	63.6	0.005	3-110-839
6	Medical Version (M5) HP	2.2	15.3	0.005	3-110-840
10	Medical Version (M5) HP	2.5	6.2	0.005	3-110-841
16	Medical Version (M5) HP	2.8	2.7	0.005	3-111-518
20	Medical Version (M5) HP	2.5	1.5	0.005	3-110-842
3	Standard version	2.8	78.9	0.5	3-110-813
6	Standard version	1.9	13	0.5	3-110-814
10	Standard version	2.8	6.9	0.5	3-110-815
16	Standard version	3.6	3.5	0.5	3-111-514
20	Standard version	3.5	2.2	0.5	3-110-816
3	Standard version HP	2.3	63.6	0.5	3-110-835
6	Standard version HP	2.2	15.3	0.5	3-110-836
10	Standard version HP	2.5	6.2	0.5	3-110-837
16	Standard version HP	2.8	2.7	0.5	3-111-517
20	Standard version HP	2.5	1.5	0.5	3-110-838

 $Availability for all products can be searched real-time: \\ https://www.schurter.com/en/info-center/support-tools/stock-check-distributors$ 

Packaging unit

10 Pcs

# Zubehör

Description



DIN\_Rail\_Kit
Mounting accessory for compact 1- and 3-phase filters