AC Filter Cost Optimized



- Line filter in standard and medical version

FMLB-41

See below: Approvals and Compliances

Characteristics

- Designed for standard applications

- Protection against interference voltage from the mains
- Possible interferences generated in the equipment are strongly attenuated
- Suitable for use in equipment according to IEC/UL 62368-1
- Suitable for use in medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP)

Other versions on request

- Version with varistor for overvoltage protection

References

Alternative: Standard version We recommend for new applications the type FMAB NEO

Weblinks

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

Technical Data

Description

- standard attenuation

- 1-stage

Ratings IEC	1 - 10A @ Ta 40 °C / 250 VAC; 50 Hz
Ratings UL/CSA	1 - 10A @ Ta 40 °C / 125 VAC; 60 Hz
Leakage Current	standard < 0.25 mA (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-	-25 °C to 100 °C
rature	
Climatic Category	25/100/21 acc. to IEC 60068-1
Protection Class	Suitable for appliances with protection
	class I acc. to IEC 61140
Terminal	Quick connect terminals 6.3 x 0.8 mm
Material	Nickel plated steel

Line Filter	Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8
	Technical Details
MTBF	> 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.

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Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products. Approval Reference Type: FMLB

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40004673
c FL us	UL Approvals	UL	UR File Number: E72928

Product standards

Product standards that are referenced

Organization	Design	Standard	Description				
IEC	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference				
(YL)	Designed according to	UL 1283	Passive filters for suppressing electromagnetic interference				
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	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
IEC	Suitable for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

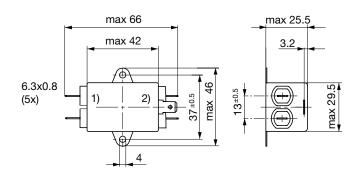
Compliances

The product complies with following Guide Lines

IdentificationDetailsInitiatorDescriptionC €CE declaration of conformitySCHURTER AGThe 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.L K UKCA declaration of conformitySCHURTER AGThe UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.L K RoHSSCHURTER AGDirective RoHS 2011/65/EU, Amendment (EU) 2015/863I China RoHSSCHURTER AGThe law SJ /T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.I REACHSCHURTER AGOn 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.I Medical EquipmentSCHURTER AGSchuRTER AG									
C C requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. UKA 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. Image: SCHURTER AG Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 Image: SCHURTER AG Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 Image: 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. Image: 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. Image: Medical Equipment SCHURTER AG Suitable for use in medical equipment according to IEC/UL 60601-1 (1	Identification	Details	Initiator	Description					
RoHS SCHURTER AG Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 Image: China RoHS SCHURTER AG Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 Image: 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. Image: The Medical Equipment SCHURTER AG Suitable for use in medical equipment according to IEC/UL 60601-1 (1	CE	CE declaration of conformity	SCHURTER AG	requirements laid down in the harmonisation of Community legislation on					
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. Y Medical Equipment SCHURTER AG Suitable for use in medical equipment according to IEC/UL 60601-1 (1	UK CA	UKCA declaration of conformity	SCHURTER AG	requirements laid down in the British Amendment of Regulation (EC)					
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. Medical Equipment SCHURTER AG Suitable for use in medical equipment according to IEC/UL 60601-1 (1	RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863					
REACH Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force. Medical Equipment SCHURTER AG Suitable for use in medical equipment according to IEC/UL 60601-1 (1	©	China RoHS	SCHURTER AG						
	REACH	REACH	SCHURTER AG	Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as					
	T	Medical Equipment	SCHURTER AG						

-**o** L'

Dimension [mm]



1) Line

2) Load

Diagrams

LO

N **O**-

1)

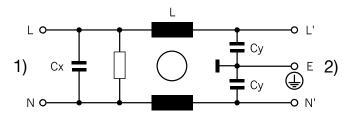
Standard version

L L • L' LO Су o_E 2) 1) Сх Сх Ð Су **-**0 N' ΝO 1) Line 2) Load

Medical Version (M5)

1) Line 2) Load

Medical Version (M80)



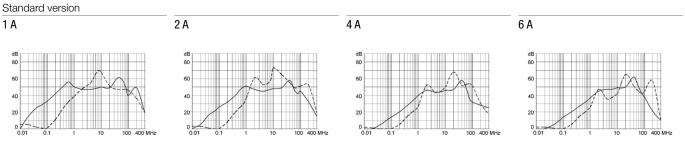
1) Line 2) Load

o_E 2) Ð **-0** N'

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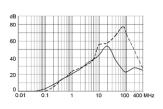
Attenuation Loss

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

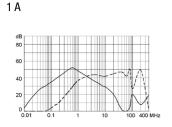


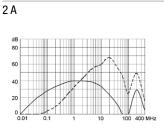
4 A

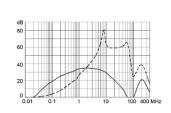


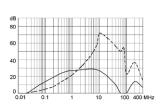


Medical version (M5)





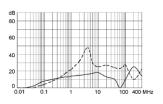




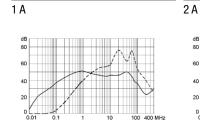
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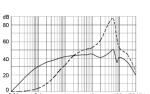
6 A

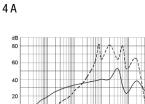
10 A

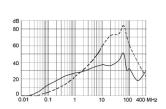


Medical version (M80)

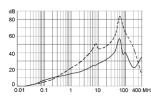












All Variants

Rated Current [A]	Filter-Type	Leakage Cur- rent [mA]	L [mH]	Cx (X2) [nF]	Cy (Y2) [nF]	Weight [g]	Housing	Order Number
1	Standard version	0.25	2 x 10	68	2.2	50 g	41	5500.2026
2	Standard version	0.25	2 x 4	68	2.2	50 g	41	5500.2027
4	Standard version	0.25	2 x 1.5	68	2.2	50 g	41	5500.2028
6	Standard version	0.25	2 x 0.8	68	2.2	65 g	41	5500.2029
10	Standard version	0.25	2 x 0.3	68	2.2	65 g	41	5500.2030
1	Medical Version (M5)	0.005	2 x 10	68	-	50 g	41	5500.2077
2	Medical Version (M5)	0.005	2 x 4	68	-	50 g	41	5500.2078
4	Medical Version (M5)	0.005	2 x 1.5	68	-	50 g	41	5500.2079
6	Medical Version (M5)	0.005	2 x 0.8	68	-	65 g	41	5500.2080
10	Medical Version (M5)	0.005	2 x 0.3	68	-	65 g	41	5500.2081
1	Medical Version (M80)	0.08	2 x 10	68	0.47	50 g	41	5500.2089
2	Medical Version (M80)	0.08	2 x 4	68	0.47	50 g	41	5500.2090
4	Medical Version (M80)	0.08	2 x 1.5	68	0.47	50 g	41	5500.2091
6	Medical Version (M80)	0.08	2 x 0.8	68	0.47	65 g	41	5500.2092
10	Medical Version (M80)	0.08	2 x 0.3	68	0.47	65 g	41	5500.2093

Most Popular.

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

Packaging unit

25 Pcs