2-stage filter for 3-phase systems



See below:

Approvals and Compliances

Description

- 3 phase line filter with standard attenuation

Applications

- Voltage rating 480 VAC for world wide acceptance
- Protection against interference voltage from the mains
- For standard and industrial applications
- Suitable for use in equipment according to IEC/UL 60950

Weblinks

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

Technical Data	
Rated Current	8 - 64 A
Rated voltage	480 VAC, 50/60 Hz
Approval for	8 - 64 A @ 40 (75) °C / 480 VAC
Overload Current	1.5 x lr
Leakage Current	industrial < 5 mA (440 V / 50 Hz)
Dielectric Strength	480 VAC:
	2.25 kVDC between L-L
	3 kVDC between L-PE
	Test voltage (2 sec)
Number of Filter Stages	2-stage
Weight	1.7 - 7.45 kg
Material: Housing	Metal
Sealing Compound	UL 94V-0

Mounting	Screw-on mounting on chassis, from
	top
Terminal	Screw clamps
Operating Temperature	-25 °C to 100 °C
Climatic Category	25/100/21 acc. to IEC 60068-1
Degree of Protection	IP 20 acc. to IEC 60529
Protection Class	Suitable for appliances with protection
	class I acc. to IEC 61140
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

Approvals

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

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40004666
c FL °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 60939	Passive filters for suppressing electromagnetic interference
(UL)	Designed according to	UL 1283	Electromagnetic interference 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.

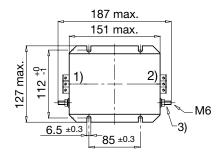
Compliances

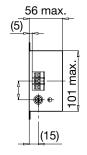
The product complies with following Guide Lines

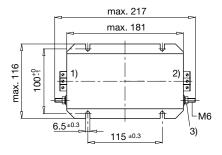
Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
RoHS	RoHS	SCHURTER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

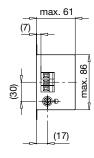
Dimension [mm]

Case 27-3 Case 31-3





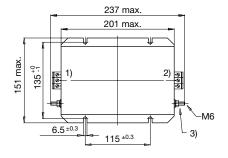


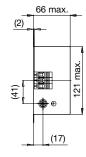


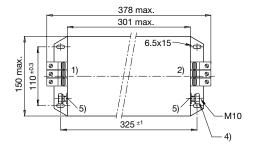
- 1) Line
- 2) Load
- 3) Nut torque 3...4 Nm

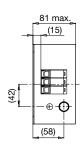
Case 32-7

Case 37-3

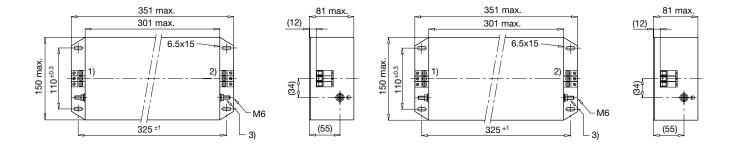








Case 40-3 Case 38-3

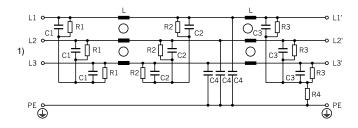


- 1) Line 2) Load
- 3) Tightening torque 3...4 Nm 4) Tightening torque 10...17 Nm
- 5) Do not unscrew lock-nut

Technical data to the filter components

	-									
Bemessungsstrom @ Tu 40°C (75°C) [A]	Characteristic	L [mH]	C1 [µF]	C2 [µF]	C3 [nF]	C4 [nF]	R1 [MΩ]	R2 [MΩ]	R3 [MΩ]	R4 [M Ω
8 (5.6)	Excellent attenuation	8	1.0	1.0	2.2	47	-	-	1	1
12 (6.6)	Excellent attenuation 5.5 1.0		1.0	2.2	47	-	-	1	1	
16 (8.8)	Excellent attenuation	4.5	1.0	1.0	2.2	47	-	-	1	1
25 (13)	High attenuation	2.4	1.0	2.2	2.2	47	-	-	1	1
25 (16)	Excellent attenuation	4.5	1.0	2.2	2.2	47	-	-	1	1
36 (19)	High attenuation	1.5	1.0	2.2	4.4	47	-	1	1	1
36 (19.5)	Excellent attenuation	3	1.0	2.2	4.4	47	1	1	1	1
50 (27)	High attenuation	1	2.2	2.2	4.4	100	-	1	1	1
64 (36)	Excellent attenuation	0.85	2.2	2.2	4.4	100	-	1	1	1

Diagrams

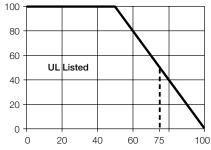


1) Line

Derating Curves

Permissible Working Current as a Function of Ambient Temperature



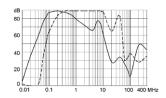


Ambient air temperature Ta °C

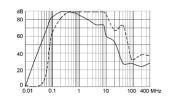
Attenuation Loss

Industrial version

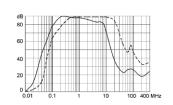
8A (FMBC-0927-0810)



12A (FMBC-0927-1210)

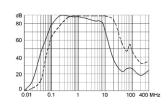


16A (FMBC-0931-1610)



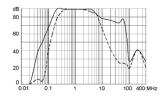
25A (FMBC-0932-2510)

- - - - 50Ω differential mode ___

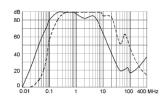


 50Ω common mode

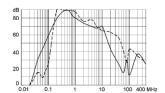
25A (FMBC-0932-2510L)



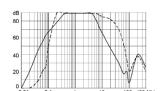
36A (FMBC-0938-3610)



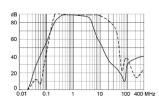
36A (FMBC-0940-3610L)



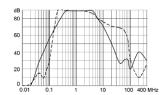
50A (FMBC-0938-5010)



50A (FMBC-0938-5010L)



64A (FMBC-0937-6410)



All Variants

Bemessungs- strom @ Tu 40°C (75°C) [A]	Characteristic	Tripped Power Dissipation [W]	Contact Resistance [mΩ]	Leakage Cur- rent [mA] @ 440V, 60Hz 1)	Weight [kg]	Screw clamps [mm2] 2)	Housings	Order Number
8 (5.6)	Excellent attenuation	10.6	55	0.5	1.7 kg	4	27-3	FMBC-0927-0810
12 (6.6)	Excellent attenuation	10	23	0.5	1.9 kg	4	27-3	FMBC-0927-1210
16 (8.8)	Excellent attenuation	14.6	19	0.5	2.28 kg	4	31-3	FMBC-0931-1610
25 (13)	High attenuation	20.7	11	0.5	3.5 kg	6	32-7	FMBC-0932-2510L
25 (16)	Excellent attenuation	18.8	10	0.5	3.4 kg	6	32-7	FMBC-0932-2510
36 (19)	High attenuation	18.3	4.7	0.5	6.5 kg	6	40-3	FMBC-0940-3610L
36 (19.5)	Excellent attenuation	29.2	7.5	0.5	7.4 kg	6	38-3	FMBC-0938-3610
50 (27)	High attenuation	25.9	3.45	1.2	7 kg	10	38-3	FMBC-0938-5010L
50 (27)	Excellent attenuation	30.3	4.0	1.2	7 kg	10	38-3	FMBC-0938-5010
64 (36)	Excellent attenuation	47.9	3.9	1.2	7.45 kg	25	37-3	FMBC-0937-6410

Most Popular.

4



Bemessungs-	Characteristic	Tripped Power	Contact Resi-	Leakage Cur-	Weight [kg]	Screw clamps	Housings	Order Number	
strom @ Tu 40°C		Dissipation [W]	stance [m Ω]	rent [mA] @		[mm2] 2)			
(75°C) [A]				440V. 60Hz 1)					

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

- 1) Nominal leakage current acc. to IEC60950 5.2.5. under normal operating conditions. Note: worst case leakage current acc. to IEC60950 Annex G4 (situation with two interrupted lines) can be much higher.
- 2) Maximum conductor cross section (wire gauge) to be used; a comparative table for AWG and mm² values can be found in the general product information www.schurter. com/emc_info

Packaging unit 1 Pcs