

## 2-stage filter for 3-phase systems

**Description**

- 3 phase line filter with standard attenuation
- High symmetrical and asymmetrical attenuation
- In the frequency range from 10kHz up to 300MHz

**Standards**

- IEC 60939
- UL 1283, Edition 5, CSA 22.2 No. 8-M1986, @ Ta 75 °C

**Approvals**

- VDE Certificate Number: 40004666
- UL File Number: E72928

**Applications**

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

**References****Weblinks**

[pdf](#), [html](#), [General Product Information](#), [Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

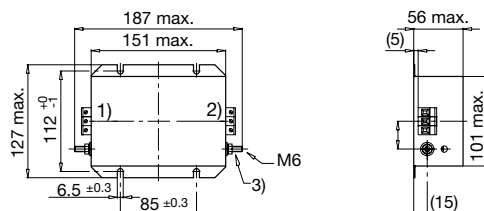
**Technical Data**

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

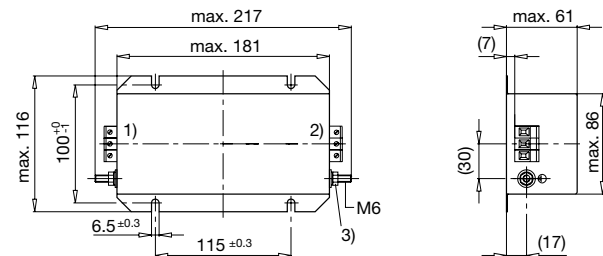
Mounting	Screw-on mounting on chassis, from top
Terminal	Screw clamps
Operating Temperature [°C]	-25 °C to 100 °C
Climatic Category	25/100/21 acc. to IEC 60068-1
Degree of Protection	IP 20 acc. to IEC 60529
Protection Class	Suitable for appliances with protection class 1 acc. to IEC 61140
MTBF	> 200'000h acc. to MIL-HB-217 F

**Dimensions**

## Case 27-3

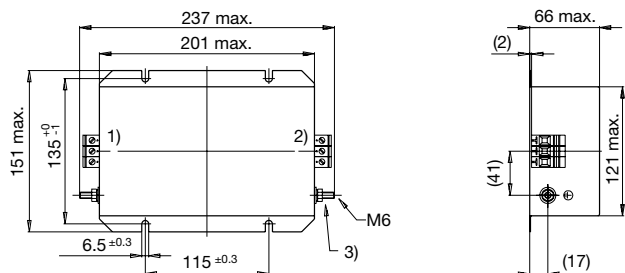


## Case 31-3

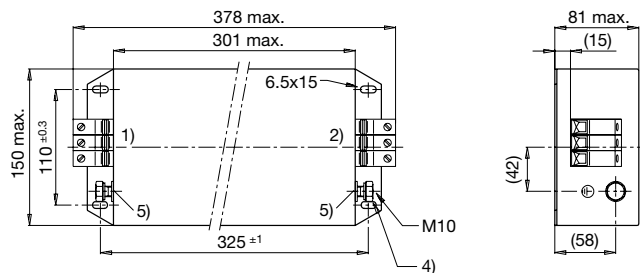


- 1) Line
- 2) Load
- 3) Nut torque 3...4 Nm

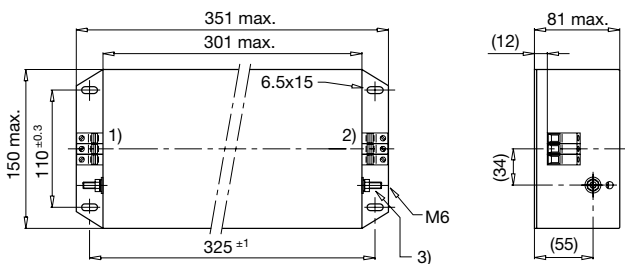
Case 32-7



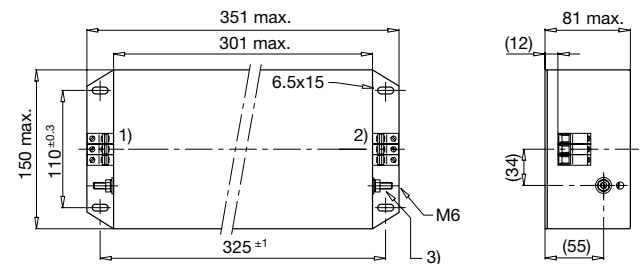
Case 37-3



Case 38-3



Case 40-3

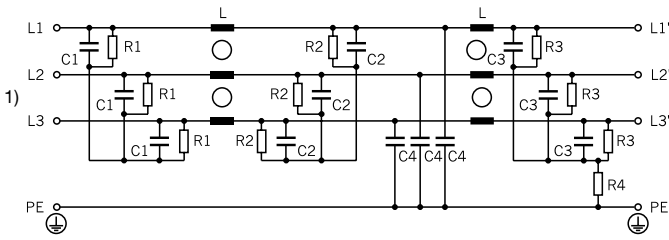


- 1) Line
- 2) Load
- 3) Tightening torque 3...4 Nm
- 4) Tightening torque 10...17 Nm
- 5) Do not unscrew lock-nut

### Technical data to the filter components

Rated Current @ Ta 40°C (75°C) [A]	Characteristic	L [mH]	C1 [µF]	C2 [µF]	C3 [nF]	C4 [nF]	R1 [MΩ]	R2 [MΩ]	R3 [MΩ]	R4 [MΩ]
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

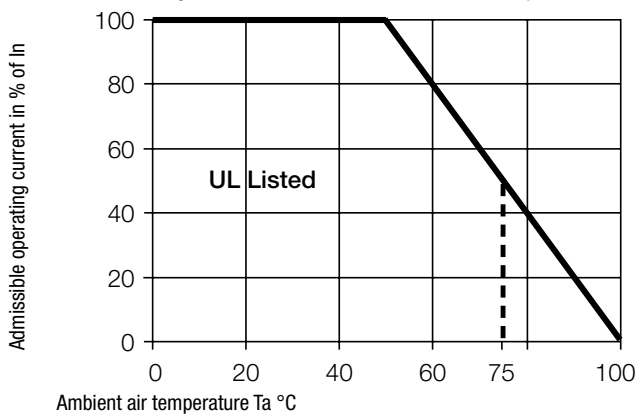
Diagrams



1) Power Line

Derating Curves

Permissible Working Current as a Function of Ambient Temperature



Attenuation Loss

--- differential mode    \_\_\_\_ common mode

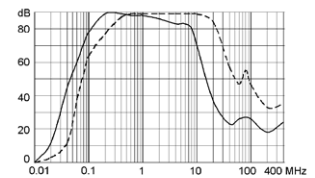
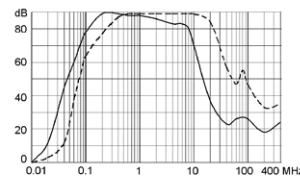
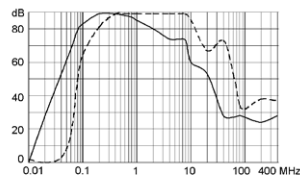
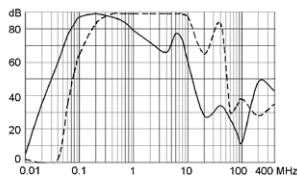
Industrial Version

8A (FMBC-0927-0810)

12A (FMBC-0927-1210)

16A (FMBC-0931-1610)

25A (FMBC-0932-2510)

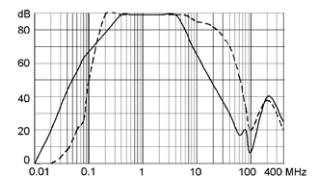
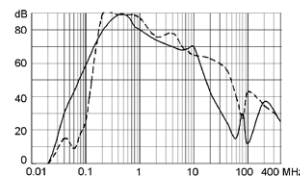
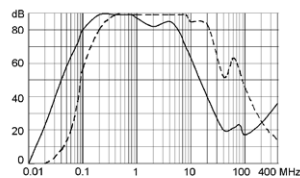
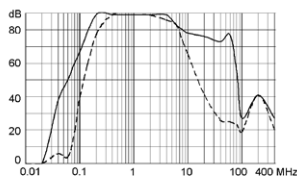


25A (FMBC-0932-2510L)

36A (FMBC-0938-3610)

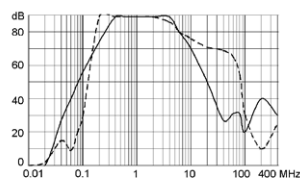
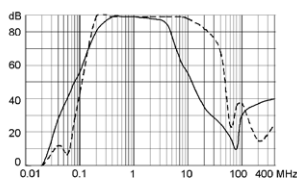
36A (FMBC-0940-3610L)

50A (FMBC-0938-5010)



50A (FMBC-0938-5010L)

64A (FMBC-0937-6410)



### Variants

Rated Current @ Ta 40°C (75°C) [A]	Characteristic	Tripped Power Dissipation [W]	Contact Resi- stance [mΩ]	Leakage Cur- rent [mA] <sup>1)</sup>	Weight [kg]	Screw clamps [mm <sup>2</sup> ] <sup>2)</sup>	Housing	Order Number
8 (5.6)	Excellent attenuation	10.6	55	19	1.7	4	27-3	FMBC-0927-0810
12 (6.6)	Excellent attenuation	10	23	19	1.9	4	27-3	FMBC-0927-1210
16 (8.8)	Excellent attenuation	14.6	19	19	2.28	4	31-3	FMBC-0931-1610
25 (13)	High attenuation	20.7	11	19	3.5	6	32-7	FMBC-0932-2510L
25 (16)	Excellent attenuation	18.8	10	19	3.4	6	32-7	FMBC-0932-2510
36 (19)	High attenuation	18.3	4.7	19	6.5	6	40-3	FMBC-0940-3610L
36 (19.5)	Excellent attenuation	29.2	7.5	19	7.4	6	38-3	FMBC-0938-3610
50 (27)	High attenuation	25.9	3.45	39	7	10	38-3	FMBC-0938-5010L
50 (27)	Excellent attenuation	30.3	4.0	39	7	10	38-3	FMBC-0938-5010
64 (36)	Excellent attenuation	47.9	3.9	39	7.45	25	37-3	FMBC-0937-6410

1) Worst case leakage current acc. to IEC60950 - Annex G4 (situation with two interrupted lines). Nominal leakage current acc. to IEC60950 - 5.2.5. can be found in section technical data.

2) Maximum conductor cross section (wire gauge) to be used; a comparative table for AWG and mm<sup>2</sup> values can be found in the general product information [www.schurter.com/emc\\_info](http://www.schurter.com/emc_info)

**Packaging unit** 1 Pcs