

Ultra compact and efficient 2-stage filter in ECO design for 3-phase systems



### Description

- High attenuation value
- Cost optimized filter design with excellent price / performance ratio
- Very light due to partial potting

### Standards

- IEC 60939
- UL 1283, Edition 5, CSA 22.2 No. 8-M1986, @ Ta 40 °C

### Approvals

- VDE License Number: 40023521

### Applications

- Voltage rating 480 VAC for world wide acceptance
- Especially designed for industrial applications such as: Frequency Converters, Stepper Motor Drives, UPS-Systems, Inverters
- Qualified for use in equipment according IEC/EN 60950

### References

[General Product Information](#)

### Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [Distributor-Stock-Check](#)

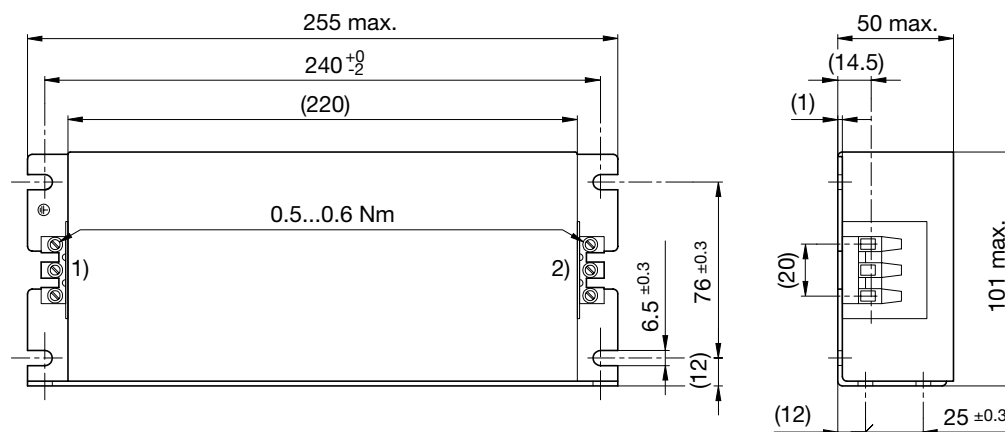
### Technical Data

Rated Current	10 - 115 A
Rated voltage	480 VAC, 50/60 Hz
Approval for	10 - 115 A @ Ta 40 °C / 480 VAC; 50/60 Hz
Overload Current	1.5 x I <sub>r</sub>
Leakage Current	industrial < 5 mA (440V / 50Hz)
Dielectric Strength for 480 VAC	> 2.25 kVDC between L-L > 3 kVDC between L-PE
Number of Filter Stages	2
Weight	1.1 - 5 kg
Material: Housing	Alu. anodised
Sealing Compound	UL 94V-0

Mounting	Screw-on mounting on chassis, upright or lengthwise
Terminal	Screw terminals
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	> 200'000 h acc. to MIL-HB-217 F

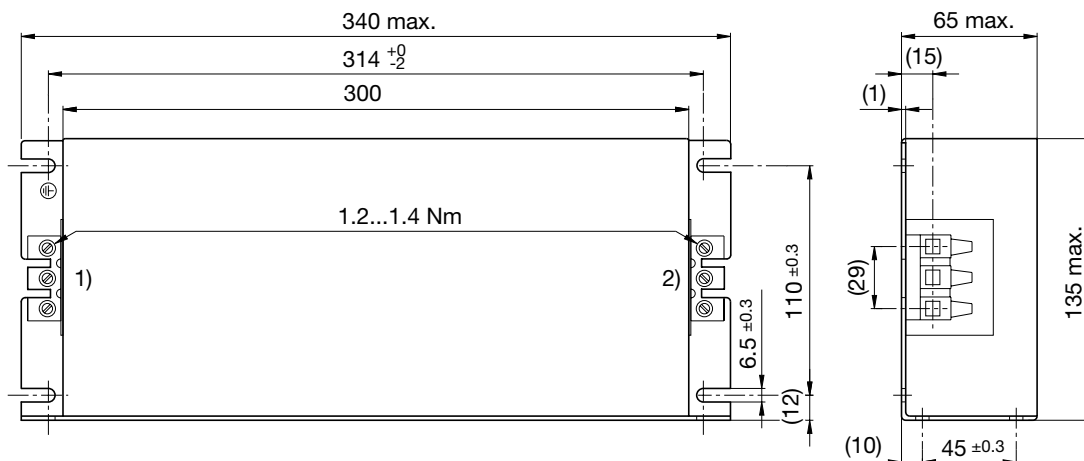
### Dimensions

Case 94



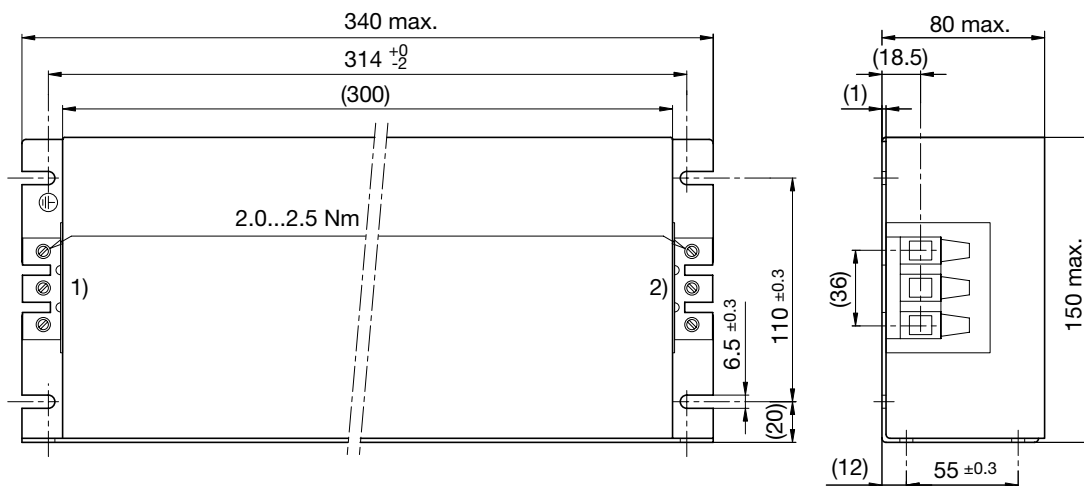
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2) Load

Case 95



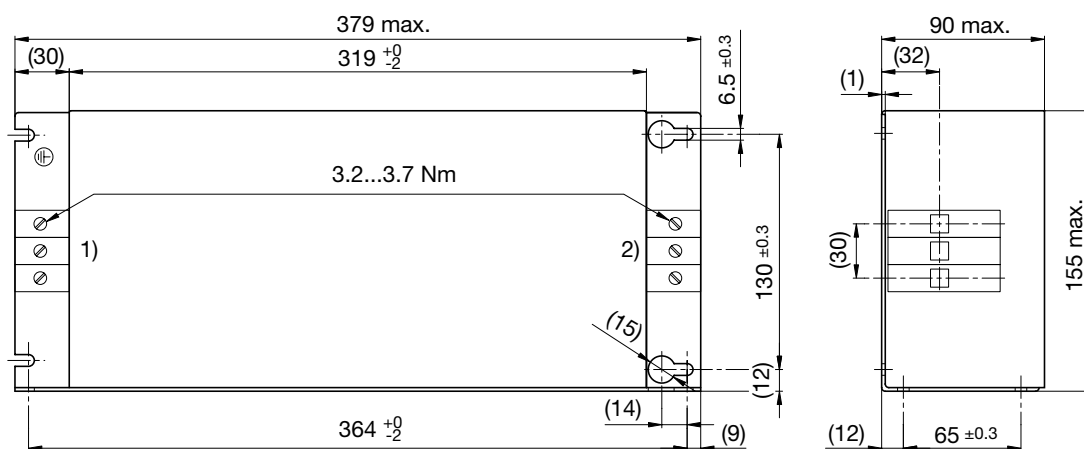
- 1) Line
- 2) Load

Case 96



- 1) Line
- 2) Load

Case 97

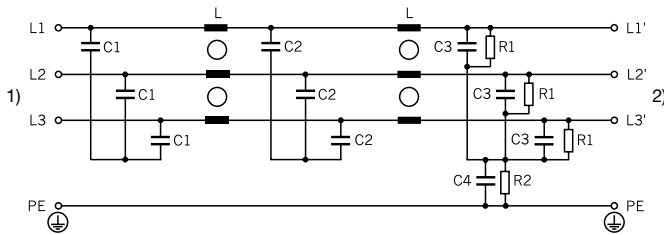


- 1) Line
- 2) Load

Technical data to the filter components

Rated Current [A]	L [mH]	C1 [µF]	C2 [µF]	C3 [µF]	C4 [nF]	R1 [MΩ]	R2 [MΩ]
10	2.3	1	1	1	10	1	1
20	1.5	1	1	1	10	1	1
36	0.9	1	1	2.2	47	1	2.2
50	0.45	1	1	2.2	47	1	2.2
66	0.45	1	1	2.2	47	1	2.2
80	0.32	1	1	2.2	47	1	2.2
115	0.24	1	2.2	2.2	100	1	2.2

Diagrams



- 1) Line
- 2) Load

Attenuation Loss

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

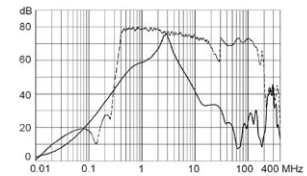
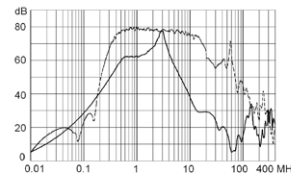
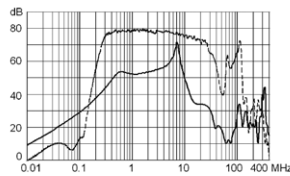
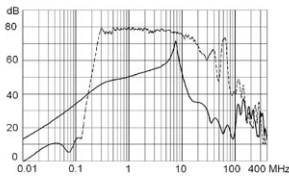
Industrial Version

10A (FMBC-0994-1000)

20A (FMBC-0994-2000)

36A (FMBC-0995-3600)

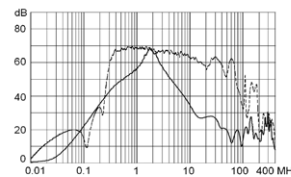
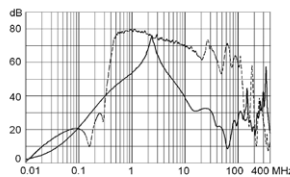
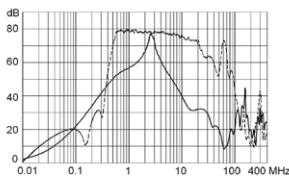
50A (FMBC-0996-5000)



66A (FMBC-0996-6600)

80A (FMBC-0996-8000)

115A (FMBC-0997-H115)



Variants

Rated Current @ Ta 40°C (75°C) [A]	Characteristic	Tripped Power Dissipation [W]	Contact Resistance [mΩ]	Leakage Current	Weight [kg]	Screw clamps [mm <sup>2</sup> 2)	Housing	Order Number
10	High attenuation	4	37	5	1.1	10	94	FMBC-0994-1000
20	High attenuation	9	20	5	1.6	10	94	FMBC-0994-2000
36	High attenuation	5	3.5	7.5	2.2	16	95	FMBC-0995-3600
50	High attenuation	20	7.5	7.5	2.7	16	95	FMBC-0995-5000
66	High attenuation	22	4.5	7.5	3.4	25	96	FMBC-0996-6600
80	High attenuation	24	3.5	7.5	3.4	25	96	FMBC-0996-8000
115	High attenuation	36	2.5	15.0	5	35	97	FMBC-0997-H115

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)

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.

**Packaging unit**

1 Pcs

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