

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

new



Description

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

Standards

- UL 1283
- EN 133 200

Approvals

- VDE License Number: 40023521
- UL License Number: pending

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](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

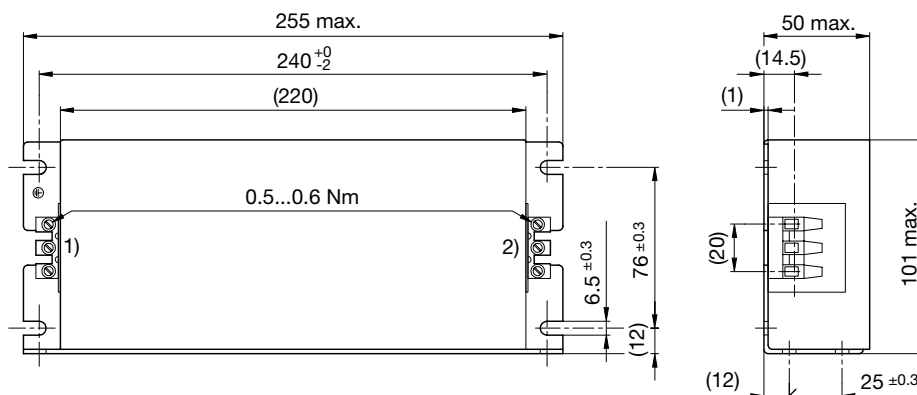
Technical Data

| | |
|---------------------------------|--|
| Rated Current | 10 - 115A @ Ta 40°C |
| Rated Voltage | 480 VAC, 50/60 Hz |
| Approval for | 10 - 115A @ Ta 40 °C / 480VAC; 50/60Hz |
| Leakage Current | industrial < 5 mA (440V / 50Hz) |
| Dielectric Strength for 480 VAC | > 2.25kVDC between L-L > 3kVDC between L-PE |
| Number of Filter Stages | 2 |
| Weight | 1.1 - 5 kg |
| Material: Housing | Aluminum |
| 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 I acc. to IEC 61140 |
| MTBF | > 200'000h acc. to MIL-HB-217 F |

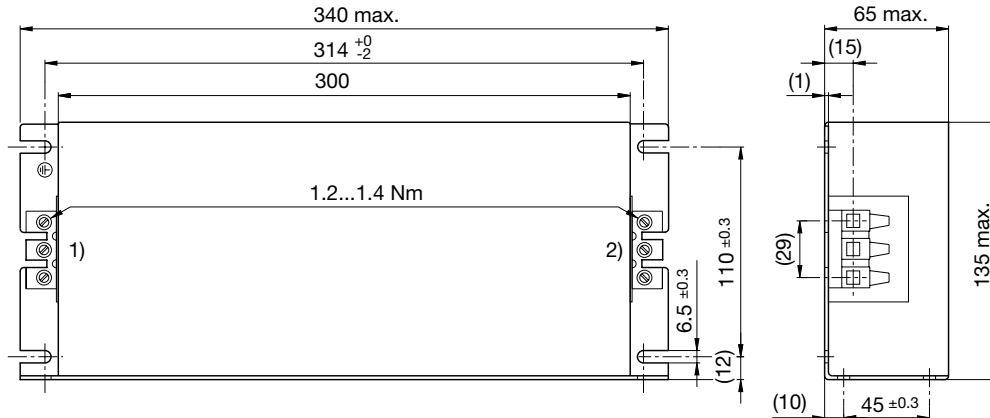
Dimensions

Case 94



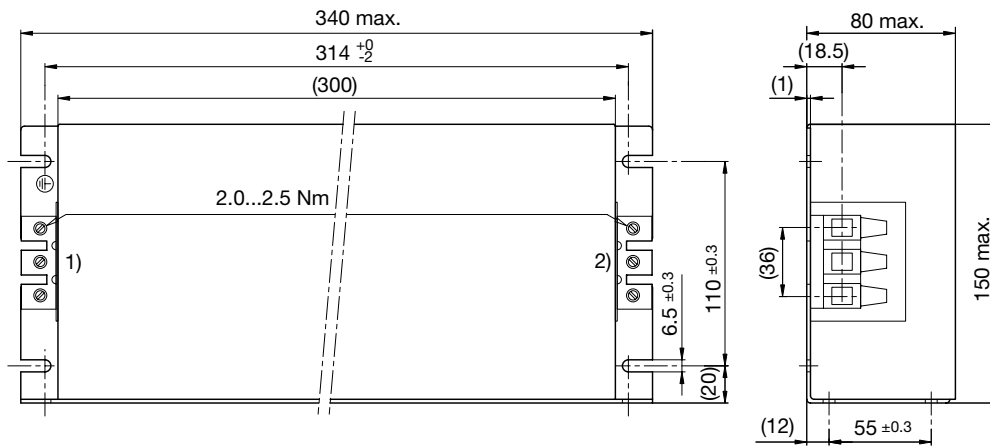
- 1) Line
2) Load

Case 95



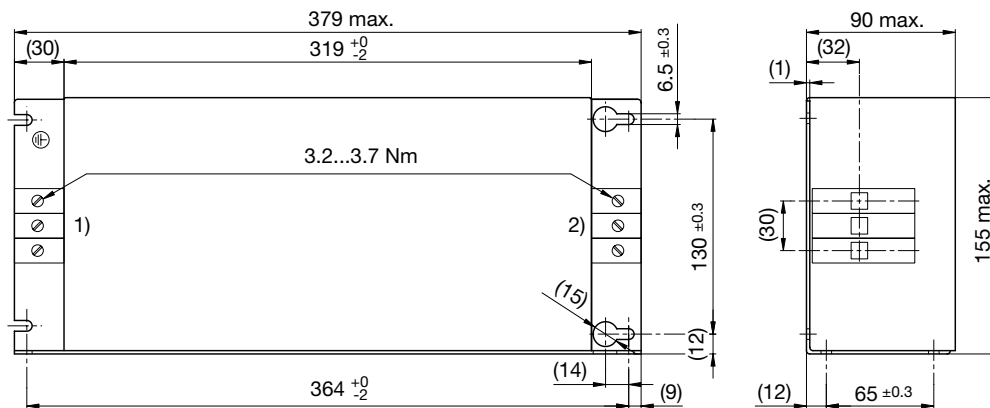
- 1) Line
- 2) Load

Case 96



- 1) Line
- 2) Load

Case 97

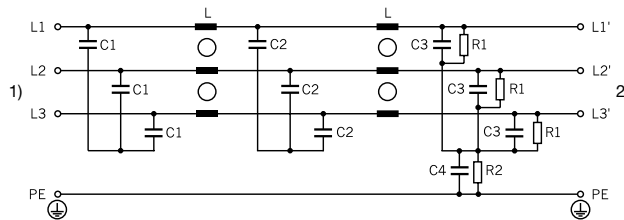


- 1) Line
- 2) Load

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 |
| 115 | 0.24 | 1 | 2.2 | 2.2 | 100 | 1 | 2.2 |
| 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 |

Diagrams



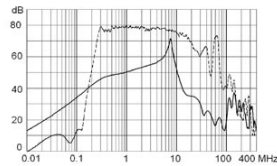
- 1) Line
2) Load

Attenuation Loss

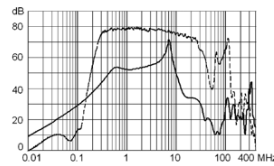
Industrial Version

- - - differential mode ____ common mode

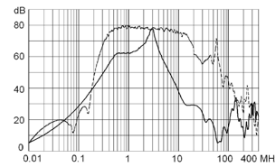
10A (FMBC-0994-1000)



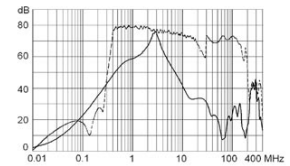
20A (FMBC-0994-2000)



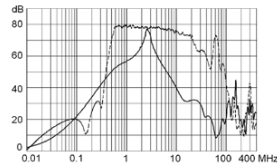
36A (FMBC-0995-3600)



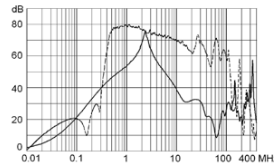
50A (FMBC-0996-5000)



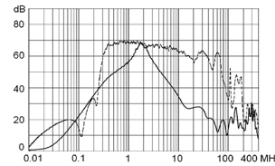
66A (FMBC-0996-6600)



80A (FMBC-0996-8000)



115A (FMBC-0997-H115)



Variants

| Rated Current [A] | Characteristic | P_{loss} [W] | Contact Resistance [mΩ] | Leakage Current | Weight [kg] | Screw clamps [mm ²] ²⁾ | Case | Order Number |
|-------------------|------------------|----------------|-------------------------|-----------------|-------------|---|------|----------------|
| 10 | High attenuation | 4 | 37 | 5 | 1.1 | 10 | 94 | FMBC-0994-1000 |
| 115 | High attenuation | 36 | 2.5 | 15.0 | 5 | 35 | 97 | FMBC-0997-H115 |
| 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 |

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

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
