

2-stage filter for 3-phase systems with low leakage current



Description

- Terminals for three phases and ground
- 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 50 (40) °C

Approvals

- VDE Certificate Number: 40040983
- UL File Number: E72928

Applications

- Suitable for applications with RCDs
- Protection against interference voltage from the mains
- Especially designed for industrial applications such as: Frequency Converters, Stepper Motor Drives, UPS-Systems, Inverters

Weblinks

[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

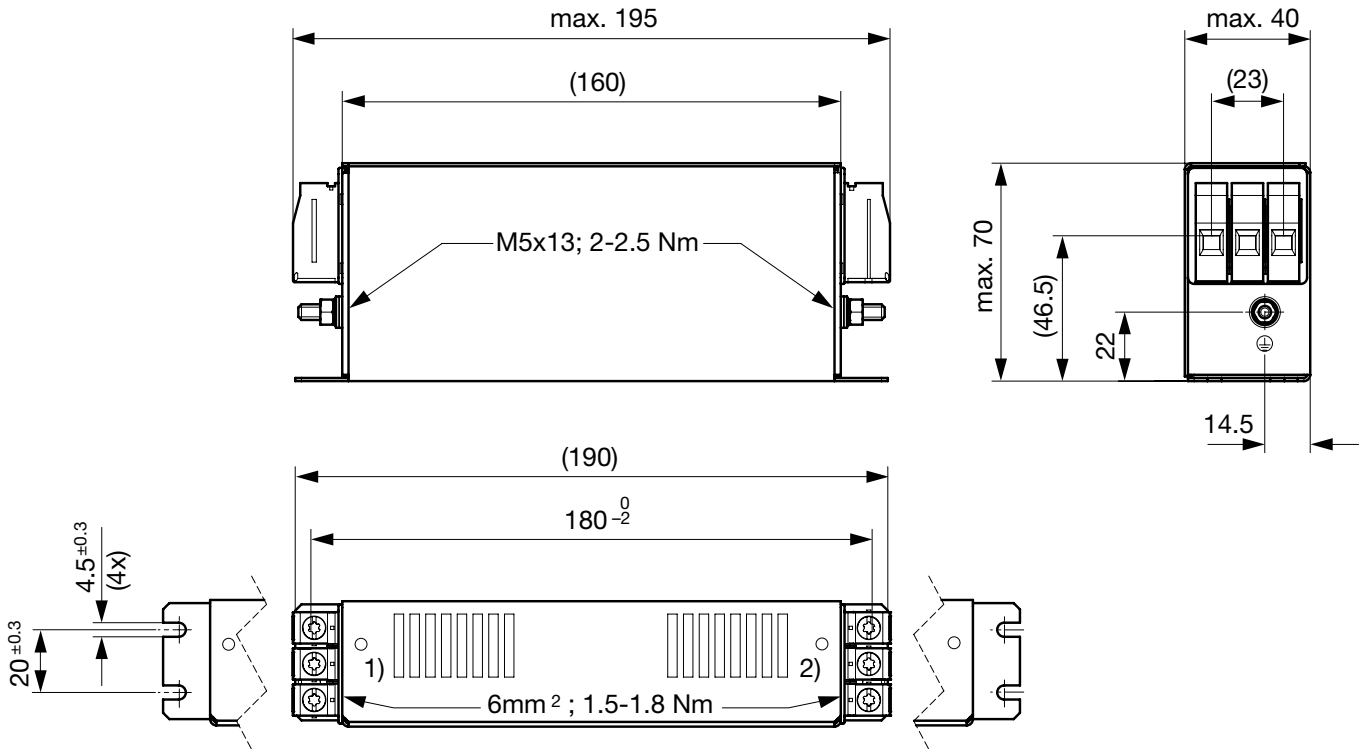
Technical Data

Rated Current	7 - 180A
Rated voltage	520VAC, 50/60 Hz
Approval for	7 - 180A @ 50 °C / 520VAC; 50/60Hz
Overload Current	1.5 x I _r for 1 minute, per hour
Dielectric Strength	> 2.25kVDC between L-L > 2.7kVDC between L-PE Test voltage 2 sec
Number of Filter Stages	2-stage
Weight	0.75 - 9.4 kg
Material: Housing	Metal
Sealing Compound	UL 94V-0

Mounting	Screw-on mounting on chassis
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 I acc. to IEC 61140
MTBF	> 200'000h acc. to MIL-HB-217 F

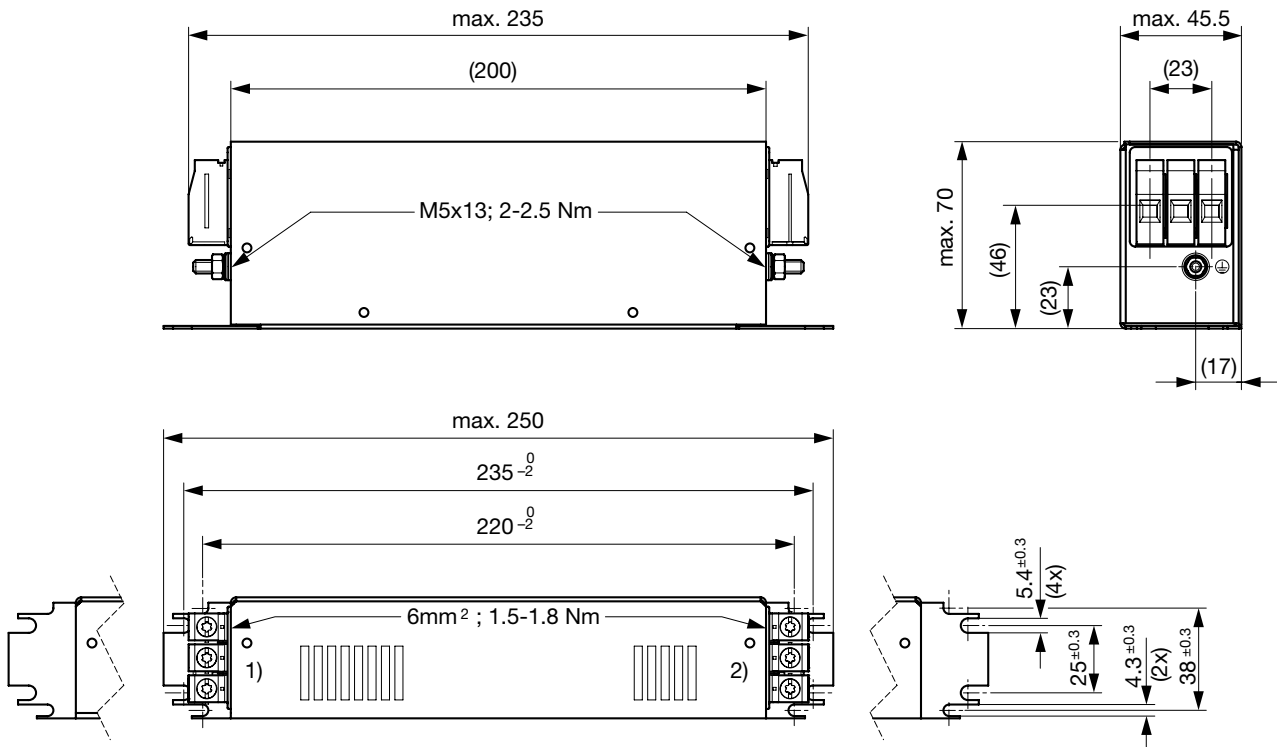
Dimension

Case 1U



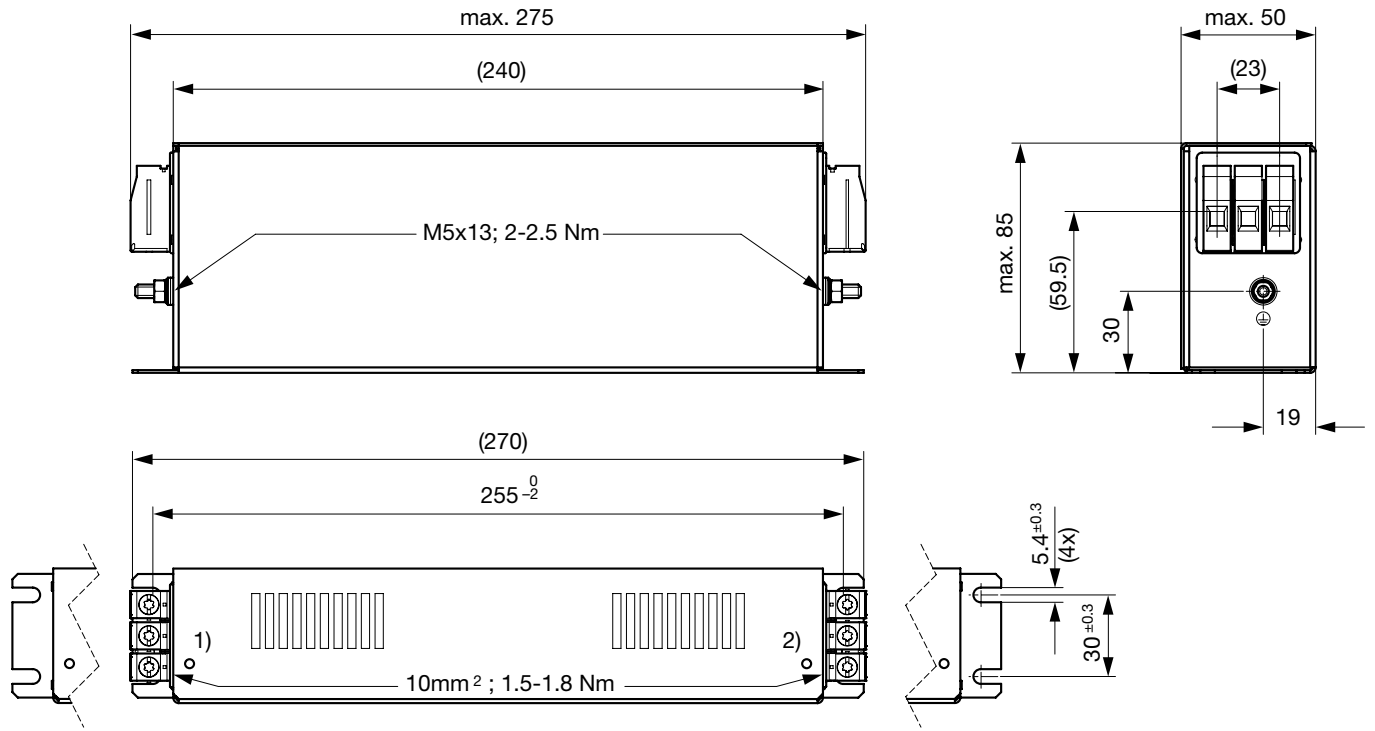
1) Line
2) Load

Case 1C



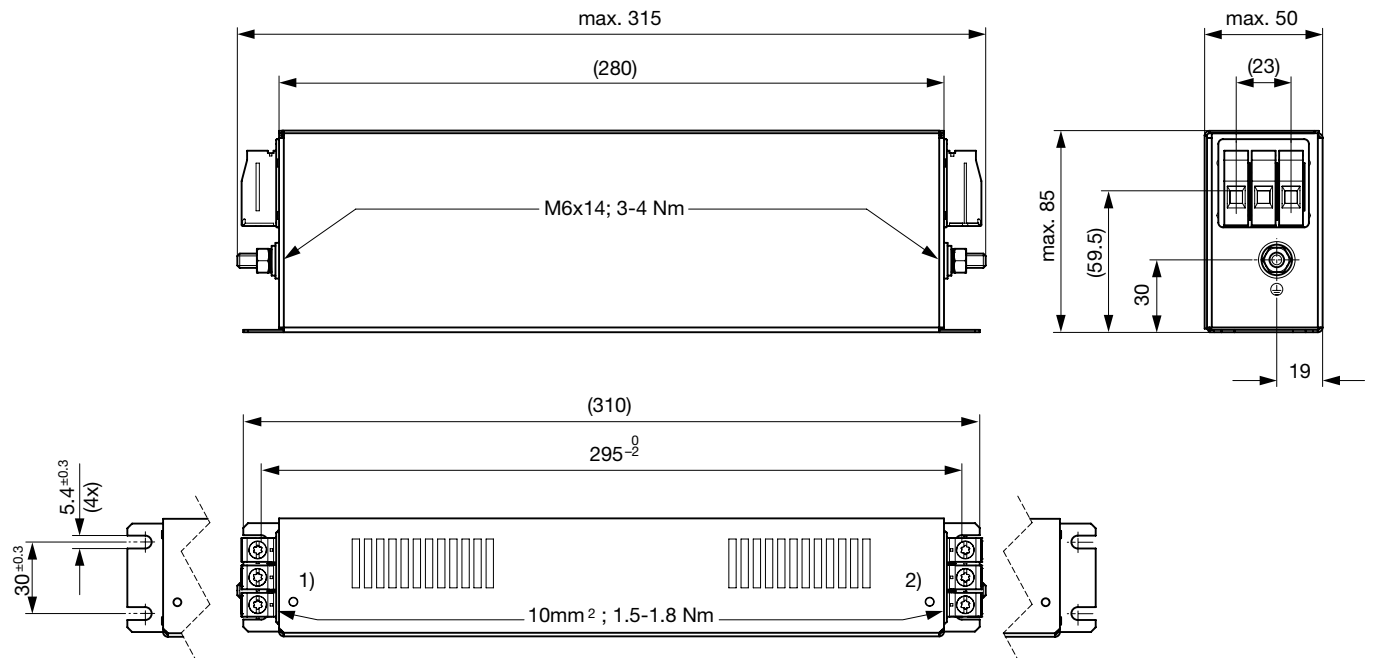
1) Line
2) Load

Case 1Q



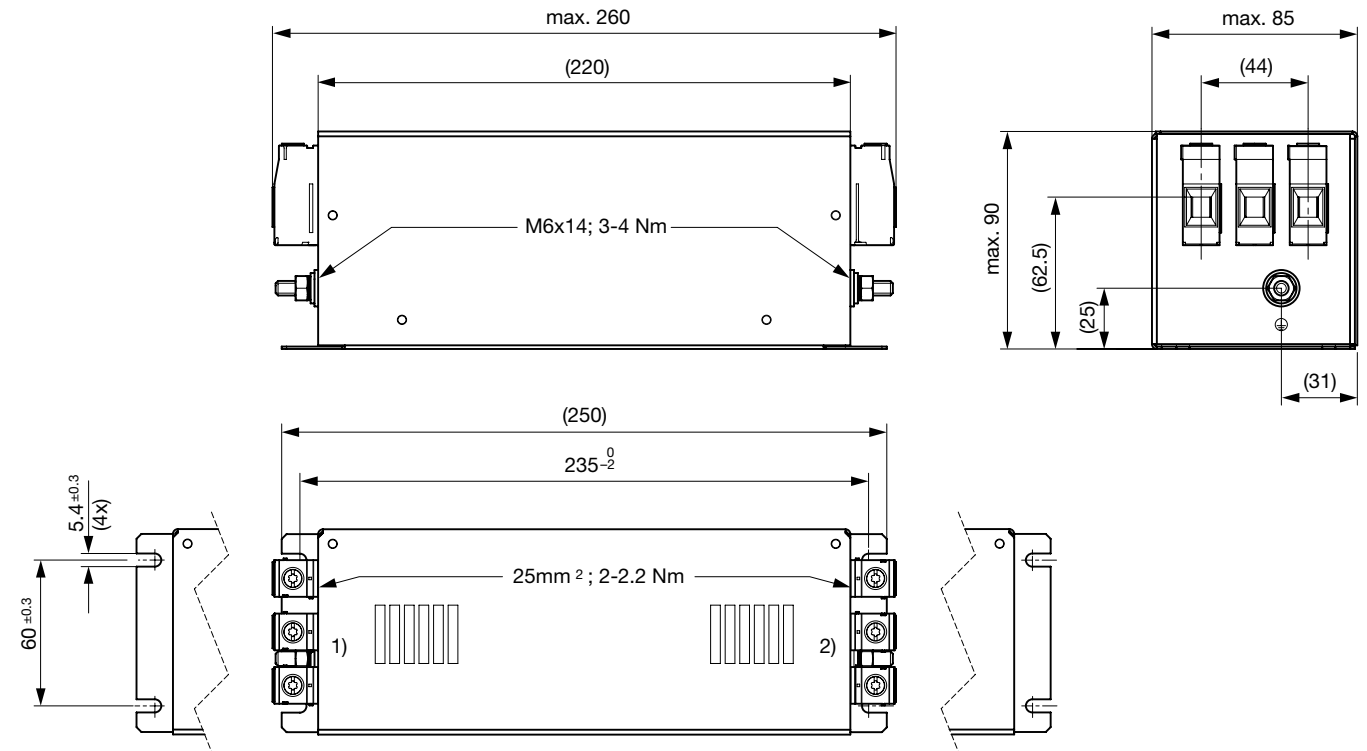
- 1) Line
- 2) Load

Case 1R



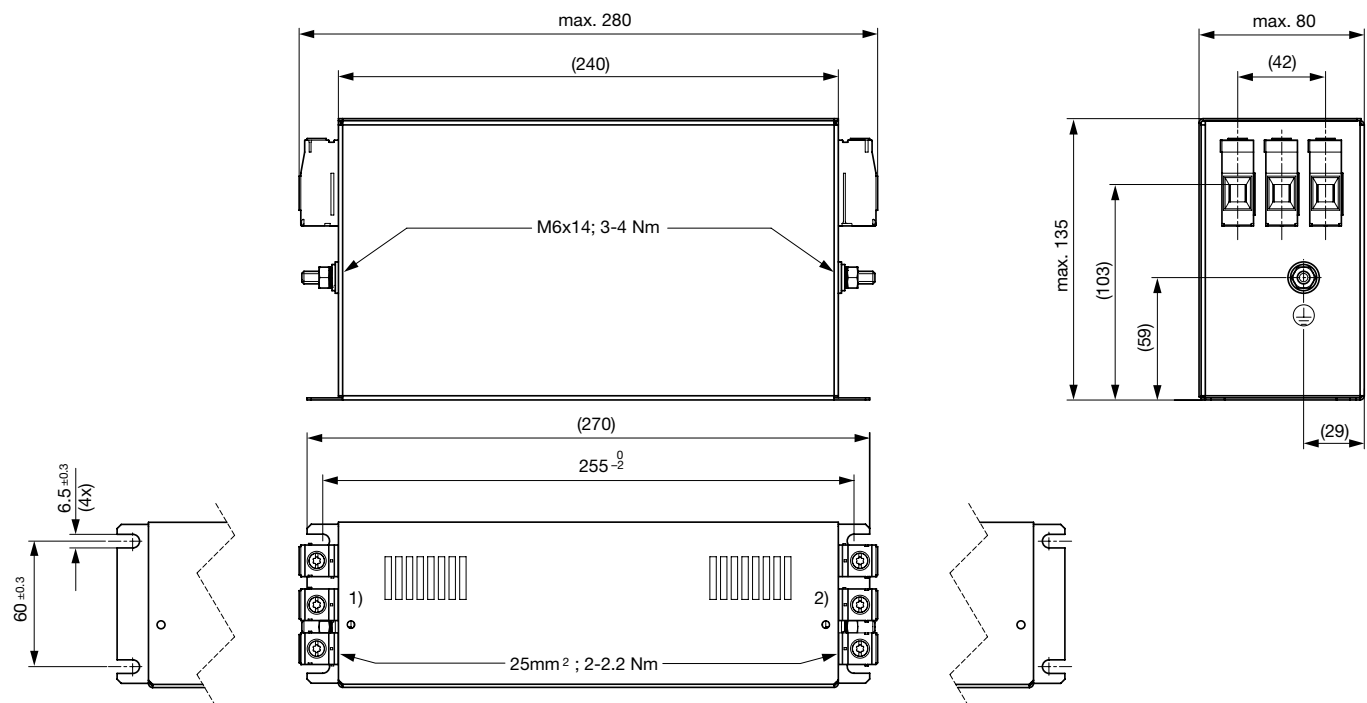
- 1) Line
- 2) Load

Case 1S



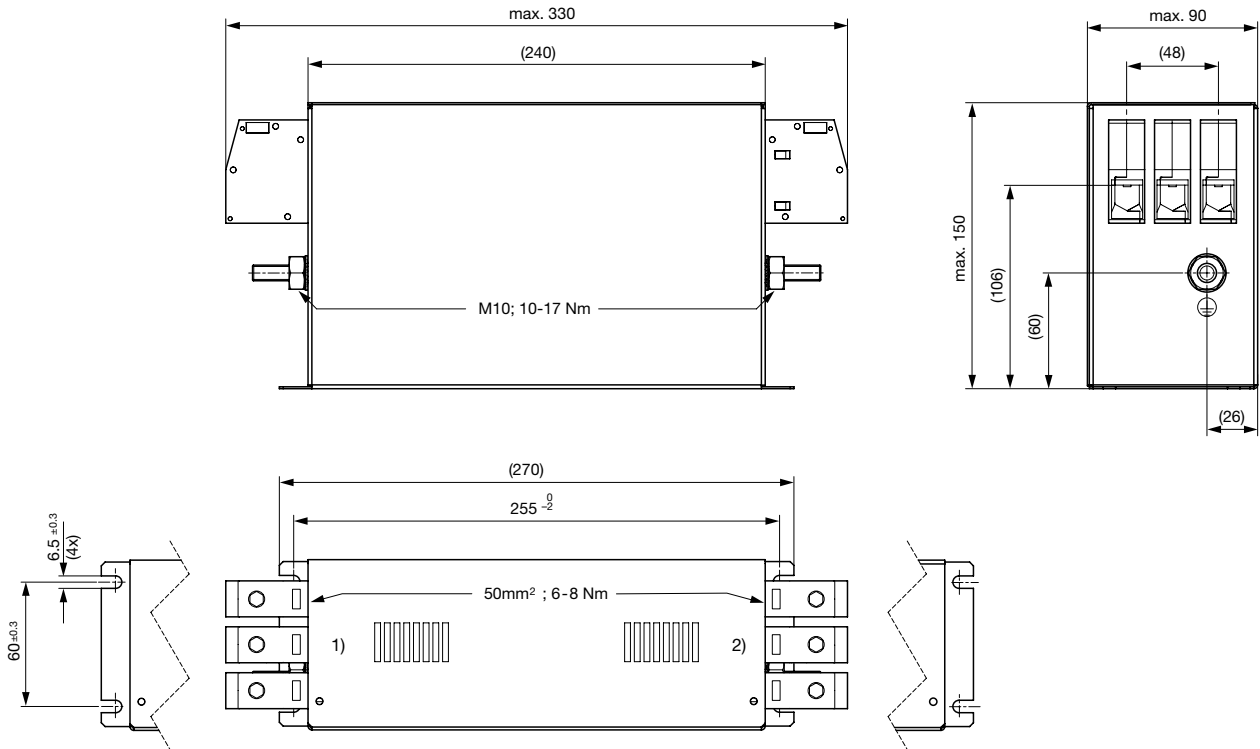
- 1) Line
- 2) Load

Case 1F



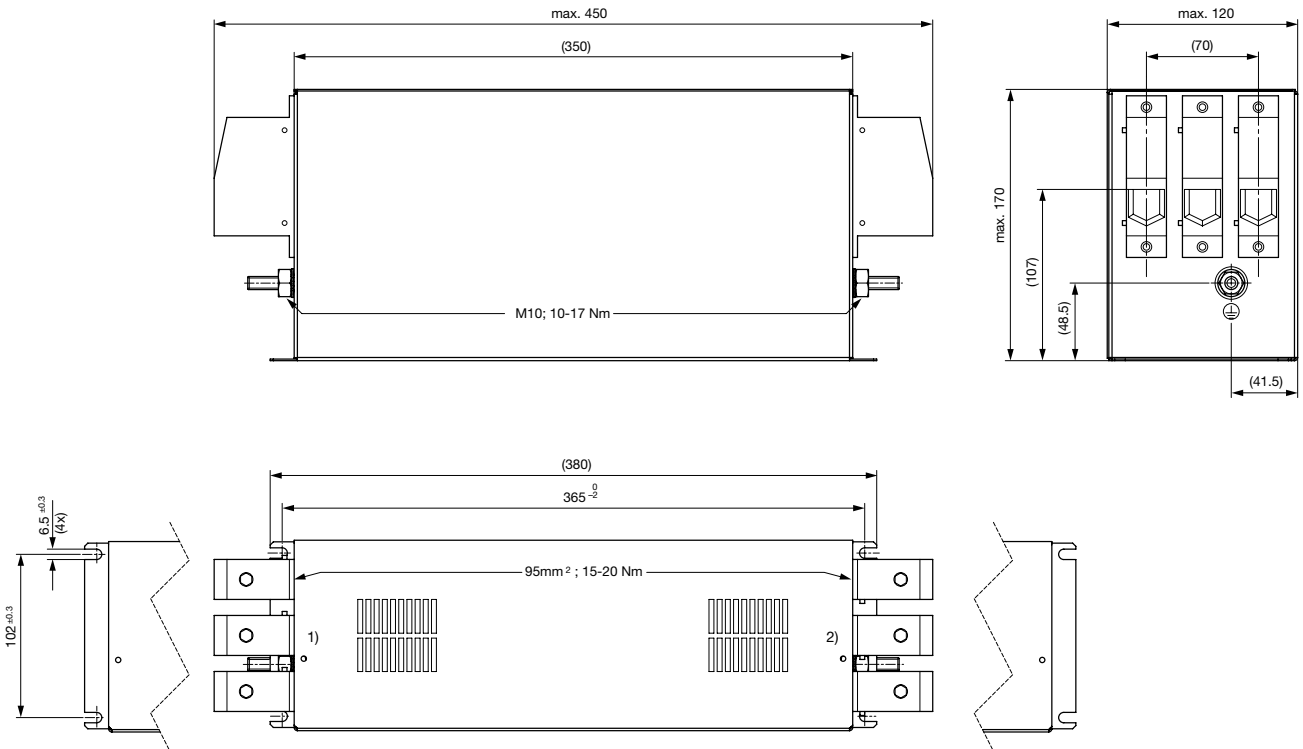
- 1) Line
- 2) Load

Case 1G



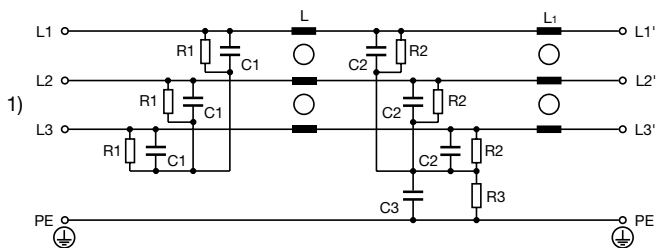
- 1) Line
- 2) Load

Case 1V



- 1) Line
- 2) Load

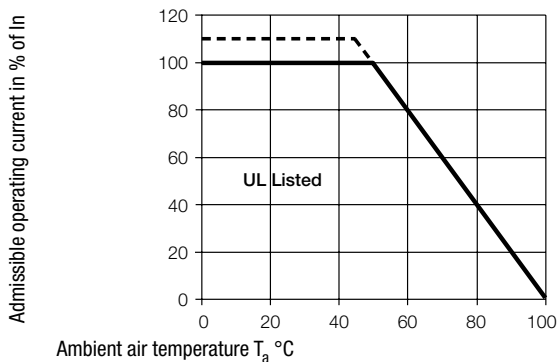
Diagrams



1) Line

Derating Curves

Permissible Working Current as a Function of Ambient Temperature

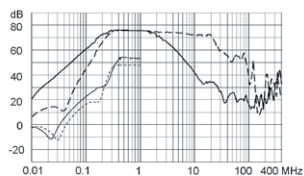


Attenuation Loss

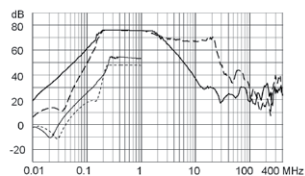
..... 0.1/100Ω differential mode 100/0.1Ω differential mode - - - - differential mode ____ common mode

Industrial version

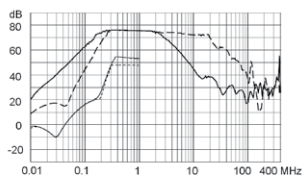
7A



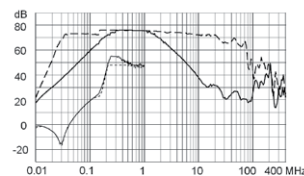
16A



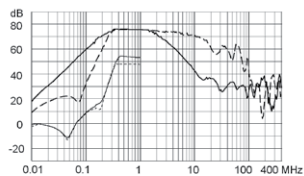
30A



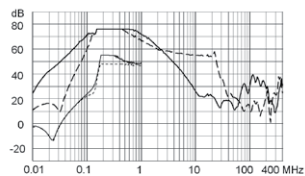
42A



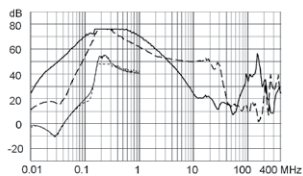
55A



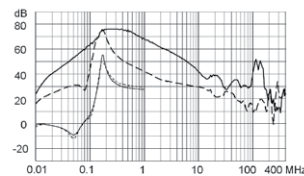
75A



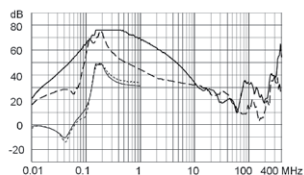
100A



130A



180A



All Variants

Rated Current @ Ta 50°C (40°C) [A]	Rated Voltage [VAC]	Power _{loss} @ 25°C, 50Hz [W]	Leakage Current @ 400VAC, 50Hz	Weight [kg]	Screw clamps [mm ²] ²⁾	Housing	Packaging unit	Order Number
7 (7.7)	520	1.5	4.4	0.75 kg	6	1U	3	FMBC-R91C-0712
16 (17.5)	520	5.4	4.4	1.2 kg	6	1C	3	FMBC-R91C-1612
30 (32.9)	520	6.6	4.4	9.4 kg	10	1Q	4	FMBC-R91Q-3012
42 (46)	520	10.7	4.4	9.4 kg	10	1R	3	FMBC-R91R-4212
55 (60.2)	520	13.3	4.4	2.4 kg	25	1S	2	FMBC-R91S-5512
75 (82.2)	520	19.6	17.5	4.1 kg	25	1F	1	FMBC-R91F-7512
100 (109.5)	520	26.3	17.5	5.4 kg	50	1G	1	FMBC-R91G-J012
130 (142.4)	520	10	19.3	4.6 kg	50	1G	1	FMBC-R91G-J312
180 (197.1)	520	31	19.3	9.4 kg	95	1V	1	FMBC-R91V-J812

Availability for all products can be searched real-time: <http://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