FMBC LL

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

new



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

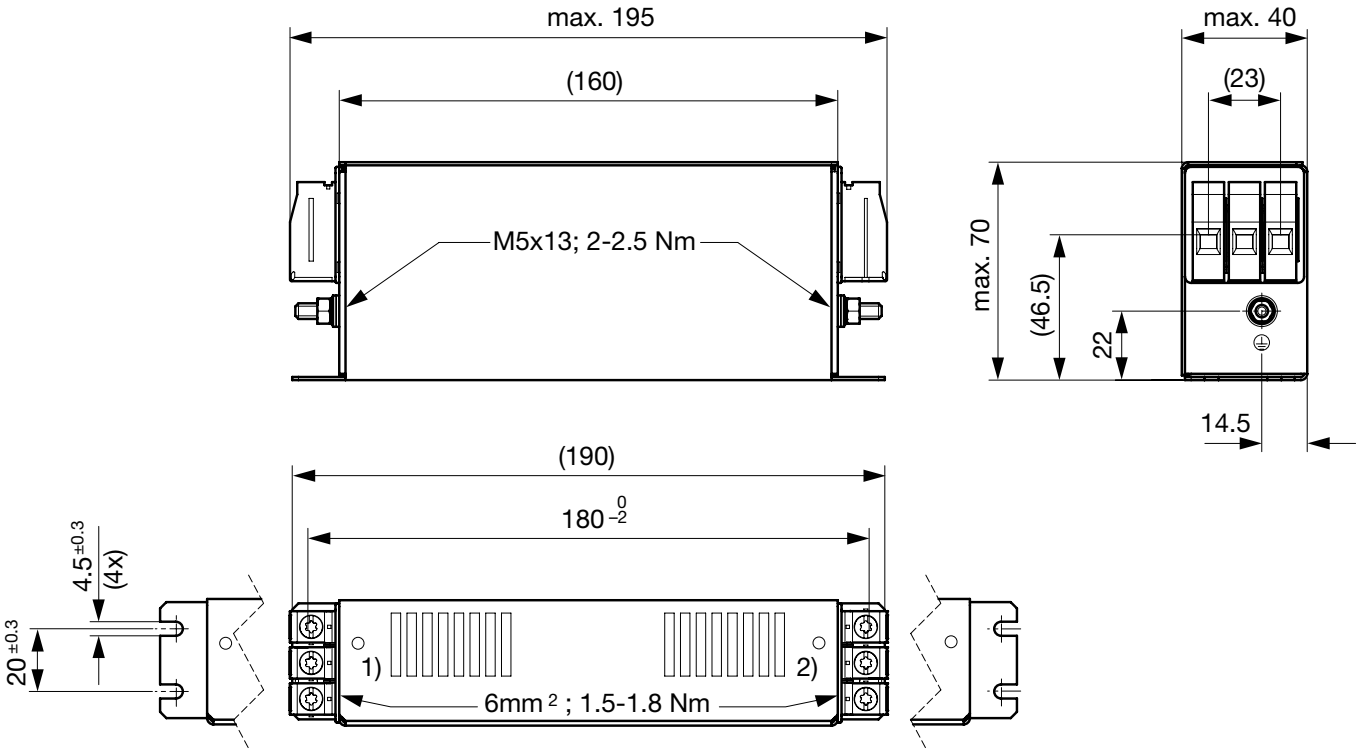
Technical Data

Rated Current	7 - 180 A
Rated voltage	520 VAC, 50/60 Hz
Approval for	7 - 180 A @ 50 °C / 520 VAC; 50/60 Hz
Overload Current	1.5 x Ir for 1 minute, per hour
Dielectric Strength	> 2.25 kVDC between L-L > 2.7 kVDC 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	> 200'000 h acc. to MIL-HB-217 F

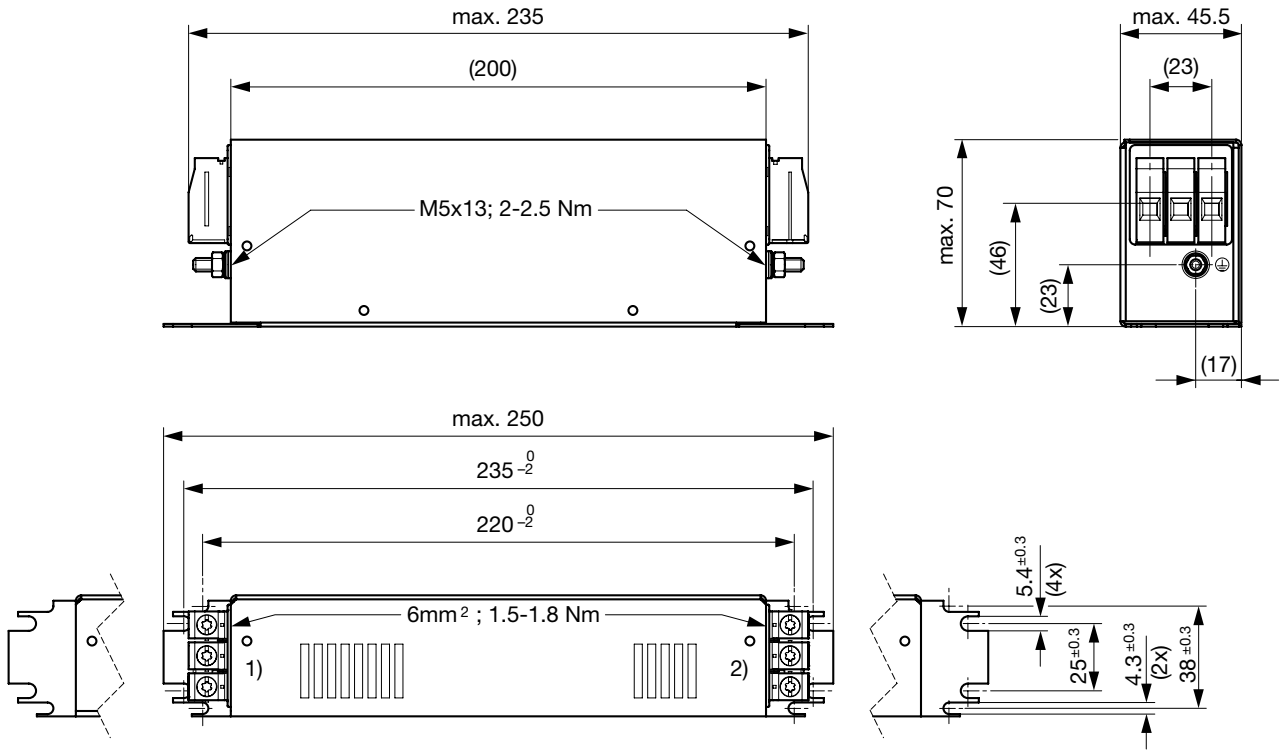
Dimension

Case 1U



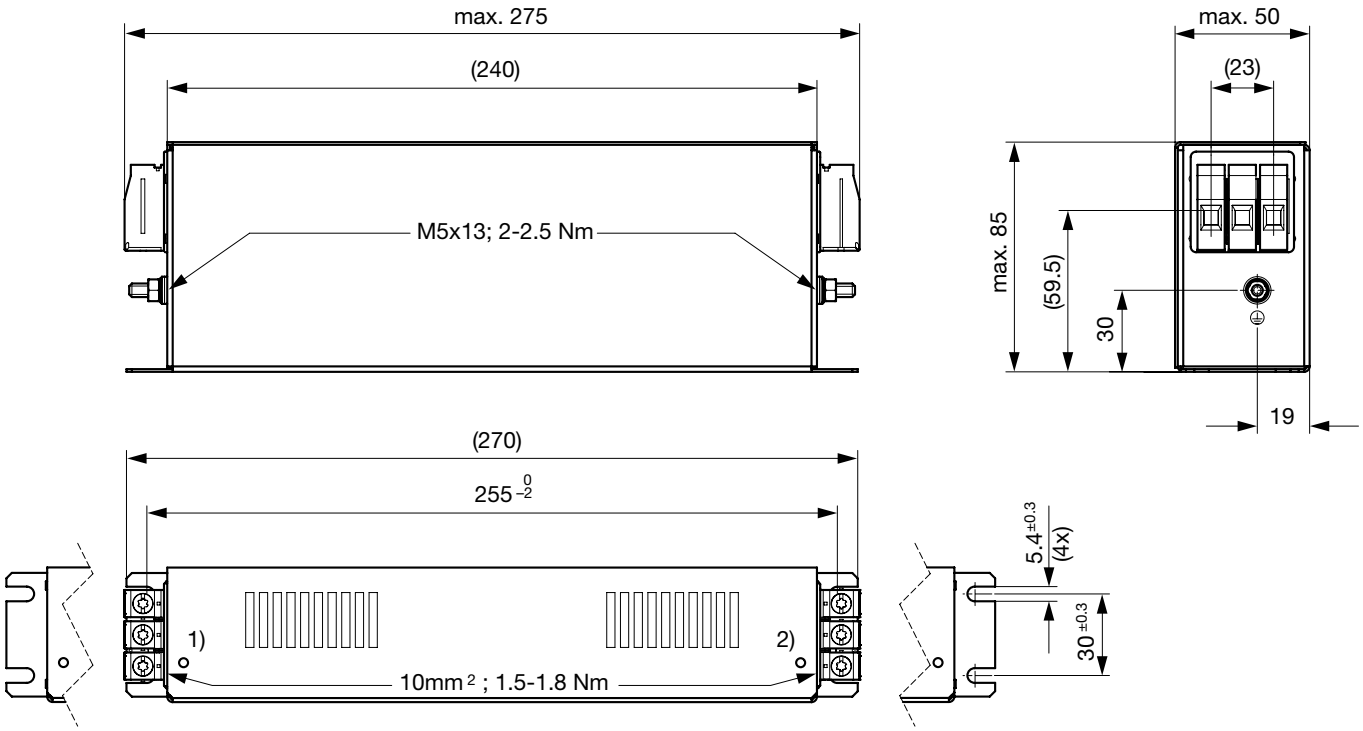
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2) Load

Case 1C



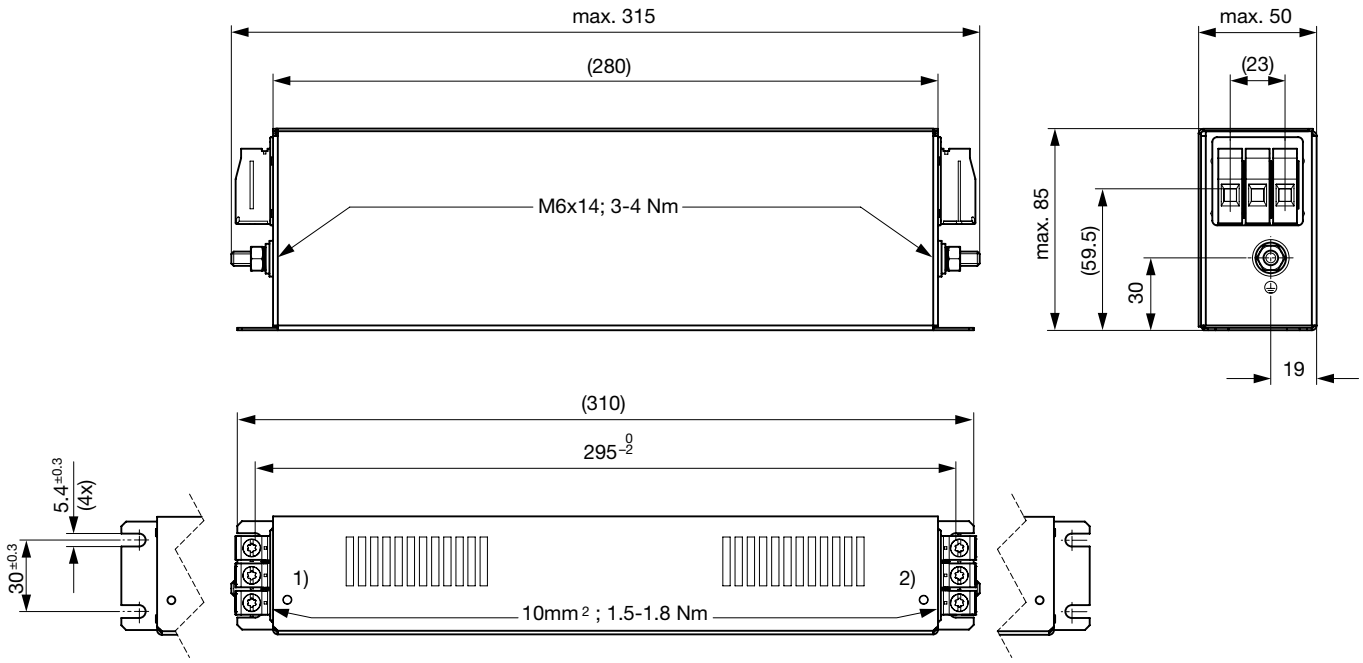
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2) Load

Case 1Q



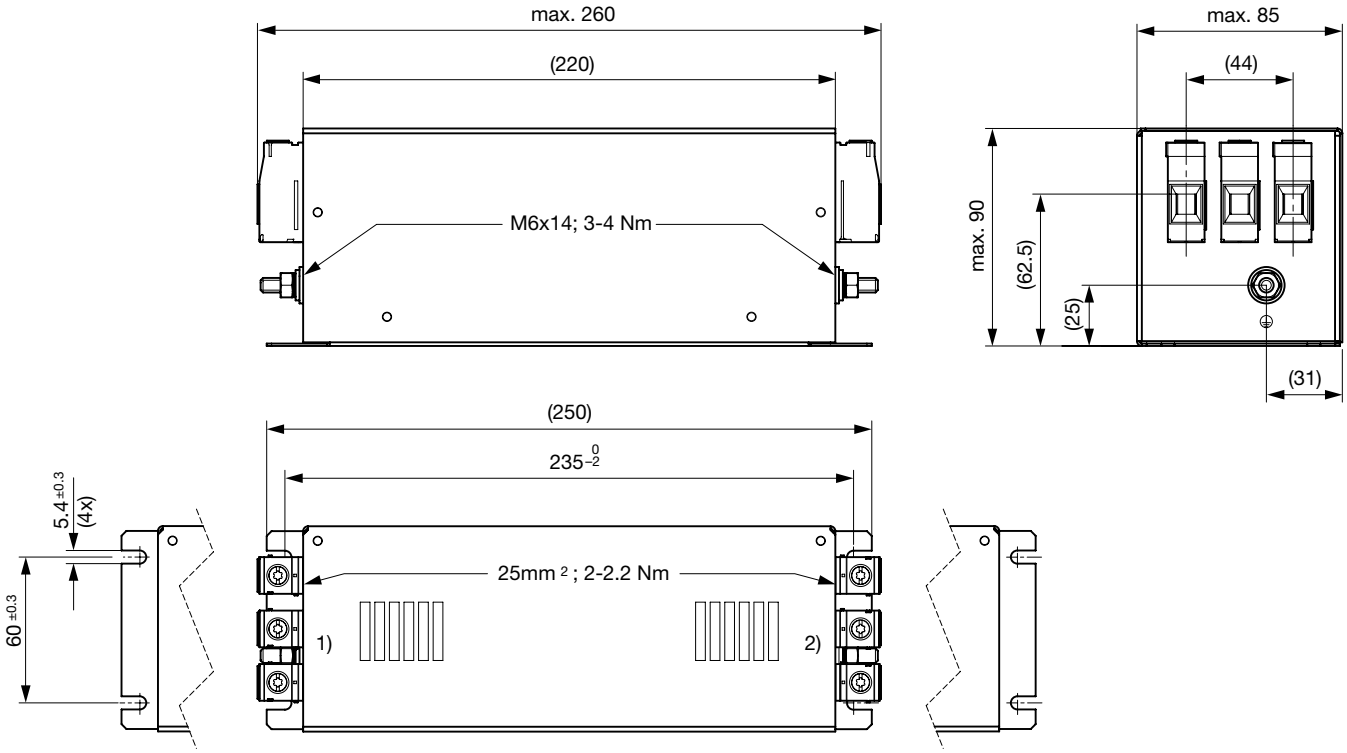
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2) Load

Case 1R



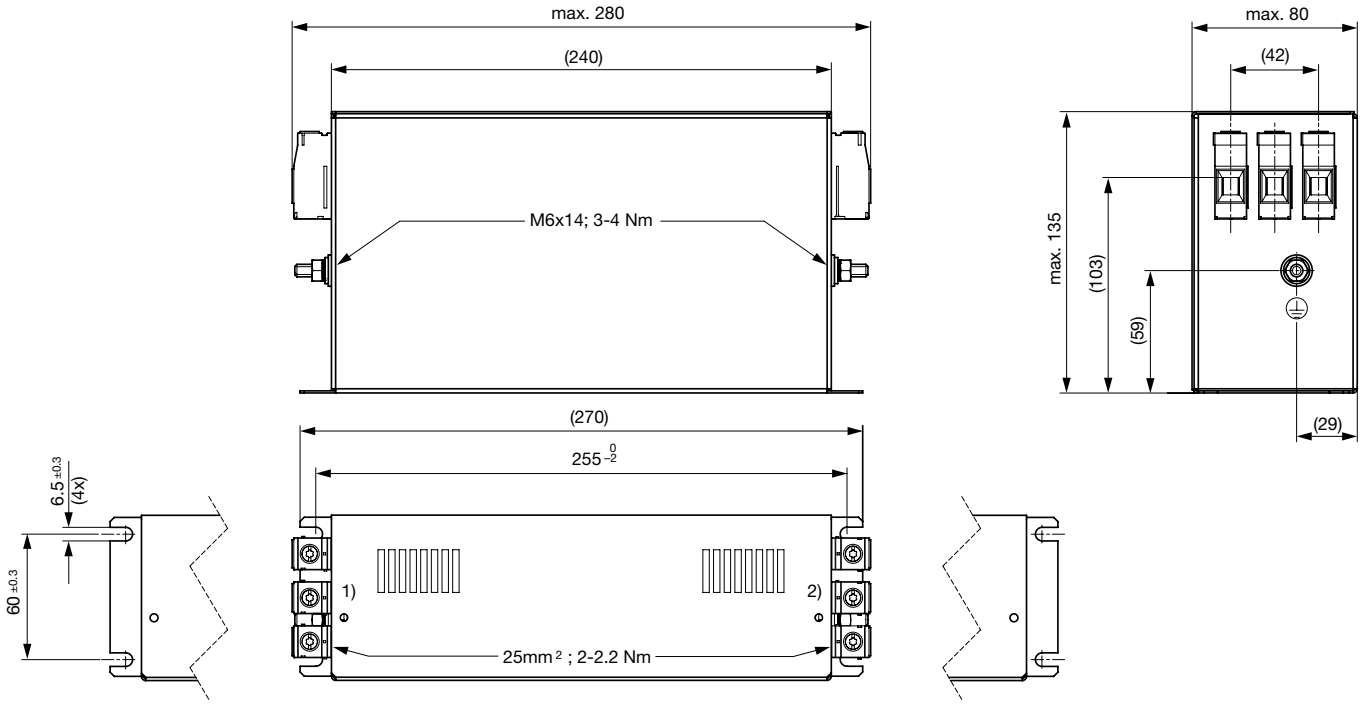
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Case 1S



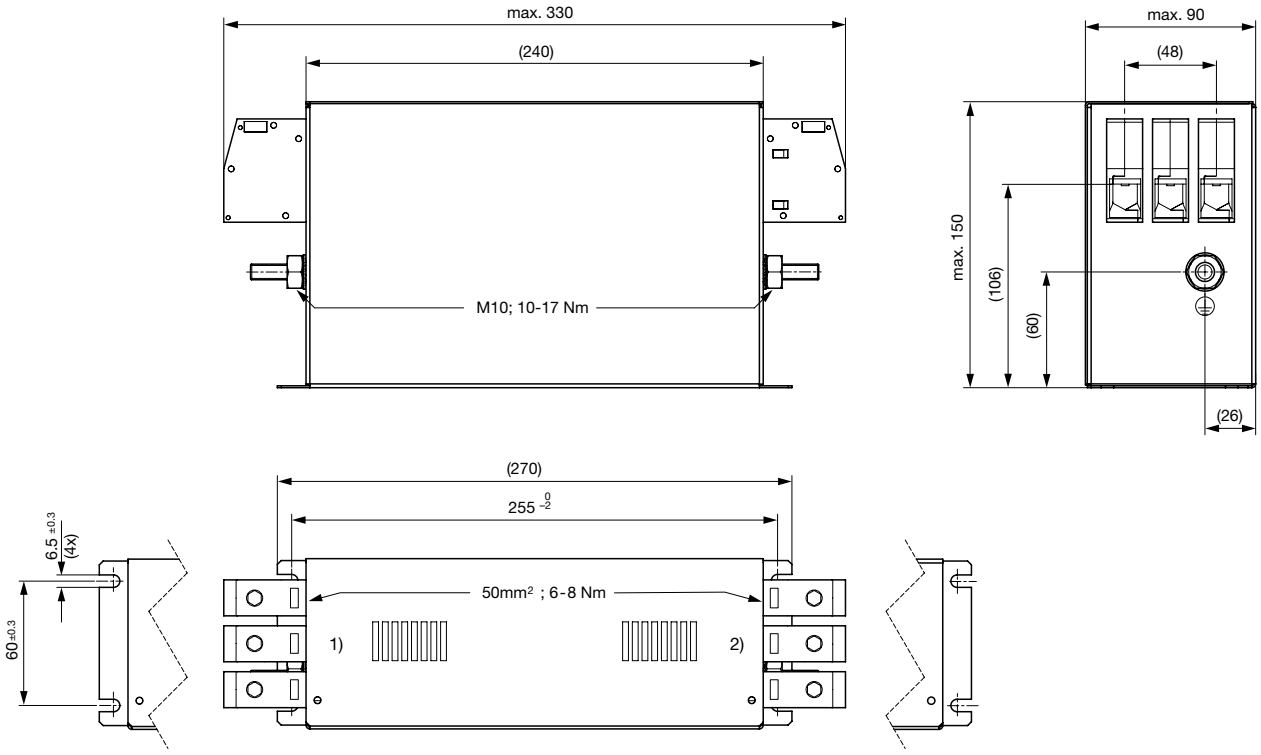
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2) Load

Case 1F



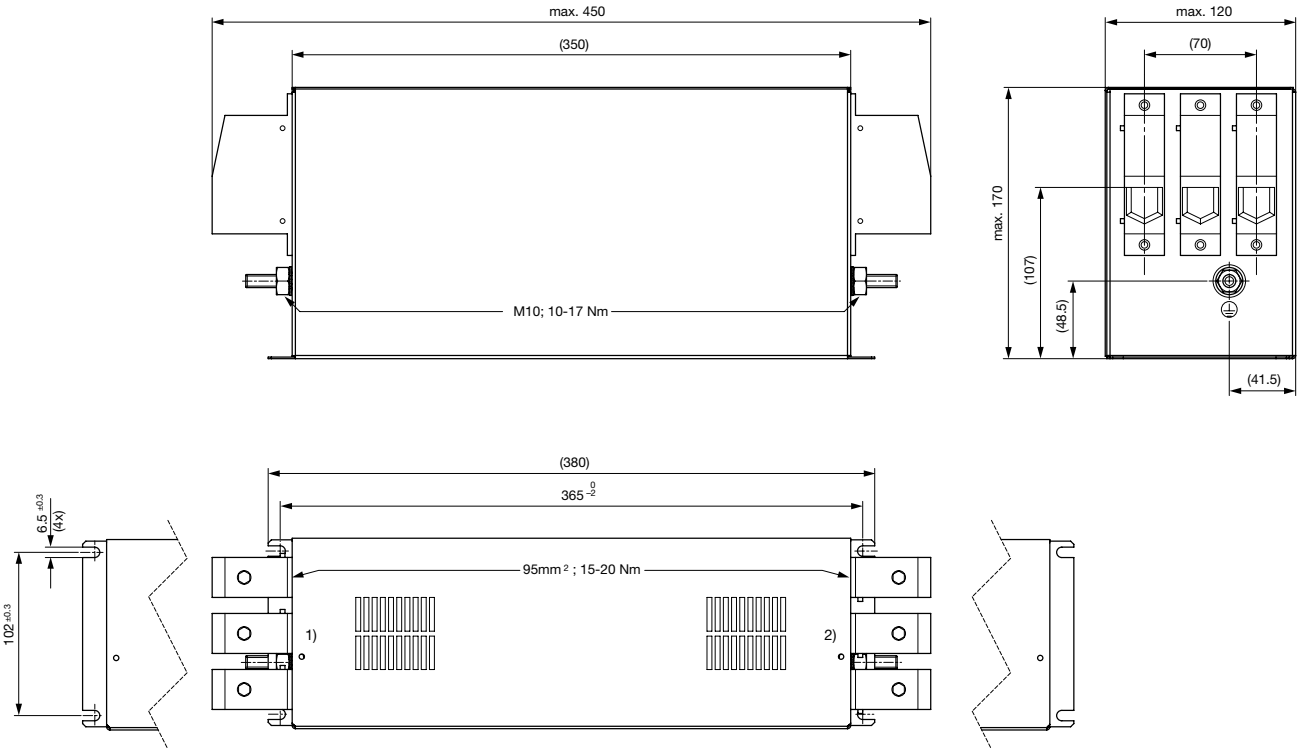
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2) Load

Case 1G



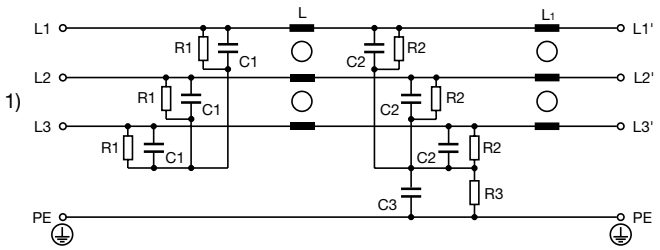
1) Line
2) Load

Case 1V



1) Line
2) Load

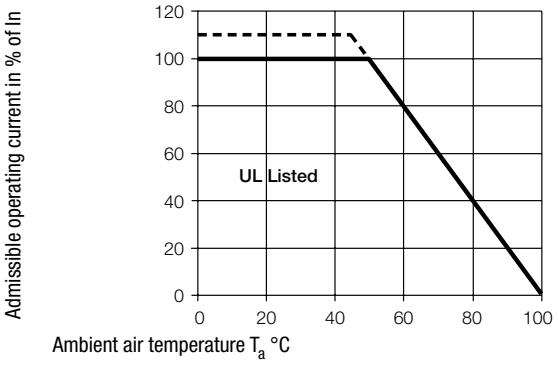
Diagrams



1) Line

Derating Curves

Permissible Working Current as a Function of Ambient Temperature

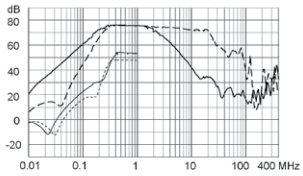


Attenuation Loss

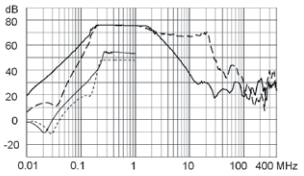
. . . . . 0.1/100Ω differential mode ..... 100/0.1Ω differential mode - - - - differential mode _____ common mode

Industrial version

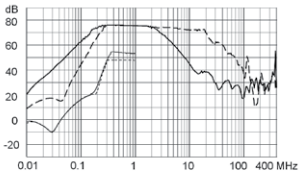
7A



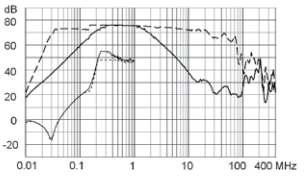
16A



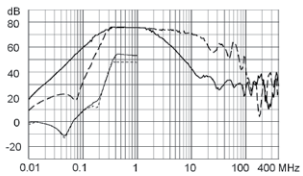
30A



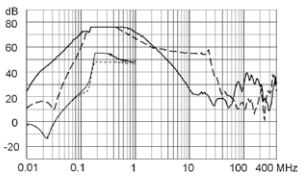
42A



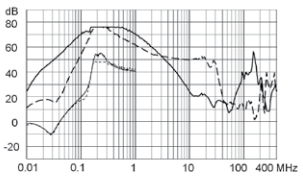
55A



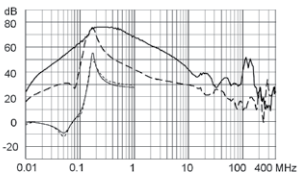
75A



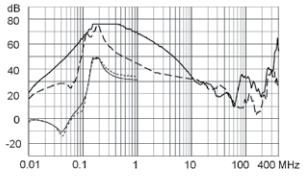
100A



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	1.8 kg	10	1Q	4	FMBC-R91Q-3012
42 (46)	520	10.7	4.4	1.8 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 mm^2 values can be found in the general product information www.schurter.com/emc_info

29.07.2015

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.