FMAC ECO

www.schurter.com/pg80

Ultra compact and efficient 1-stage filter in ECO design for 3-phase systems

new



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

Standards
- IEC 60939
- UL 1283

Approvals
- VDE License Number: pending
- 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, Distributor-Stock-Check

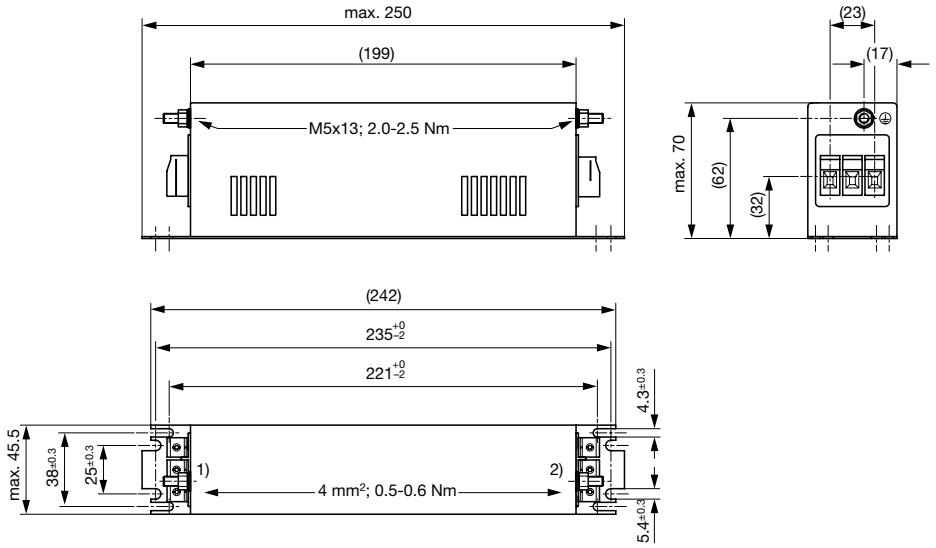
Technical Data

Rated Current	16 - 150 A @ Ta 40 °C
Rated voltage	480 VAC, 50/60 Hz
Approval for	16 - 150 A @ Ta 40 °C / 480 VAC; 50/60 Hz
Overload Current	1.5 x Ir
Leakage Current	< 33 mA (440 V / 50 Hz)
Dielectric Strength for 480 VAC	> 2.25 kVDC between L-L > 3 kVDC between L-PE Test voltage 2 sec
Number of Filter Stages	1
Weight	1 - 7 kg
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

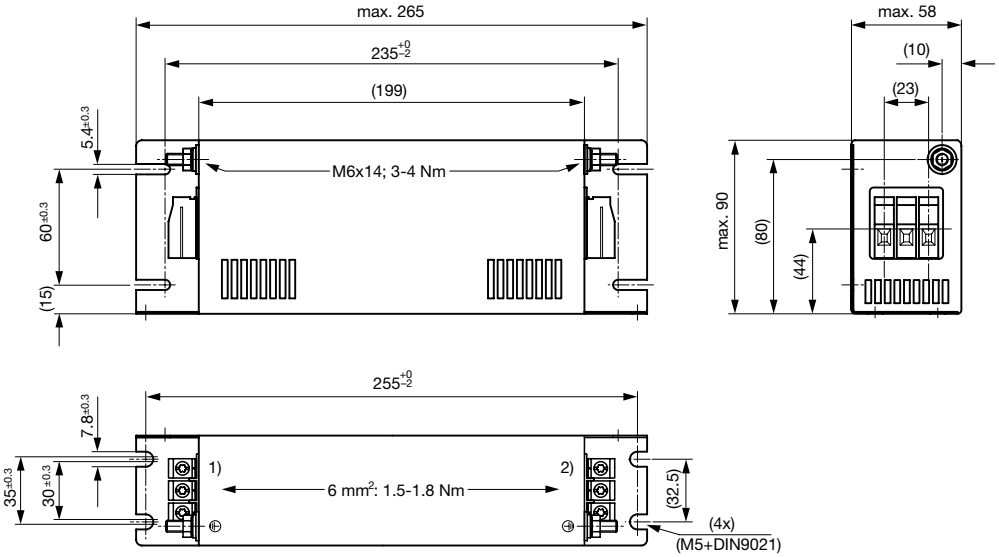
Dimensions

Case 1C



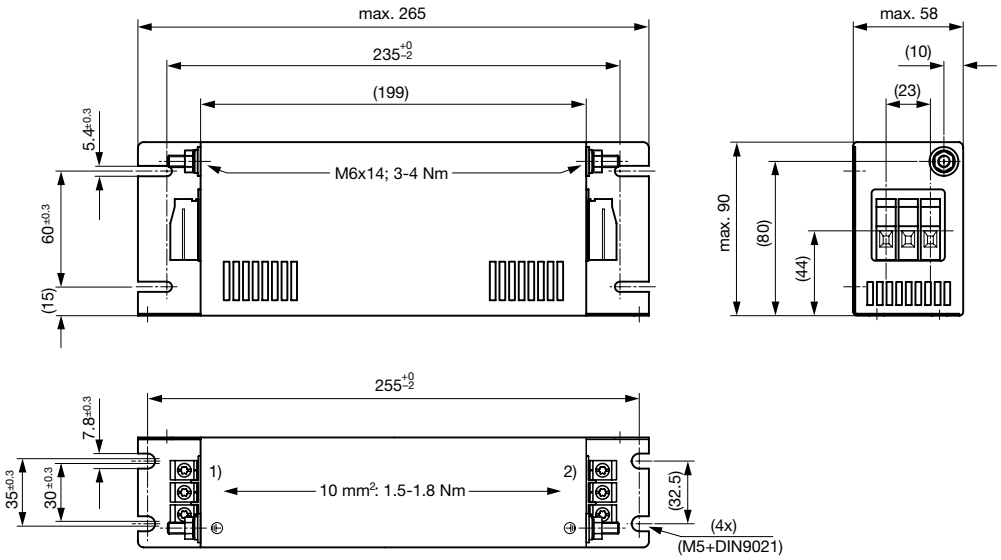
1) Line
2) Load

Case 1D-6



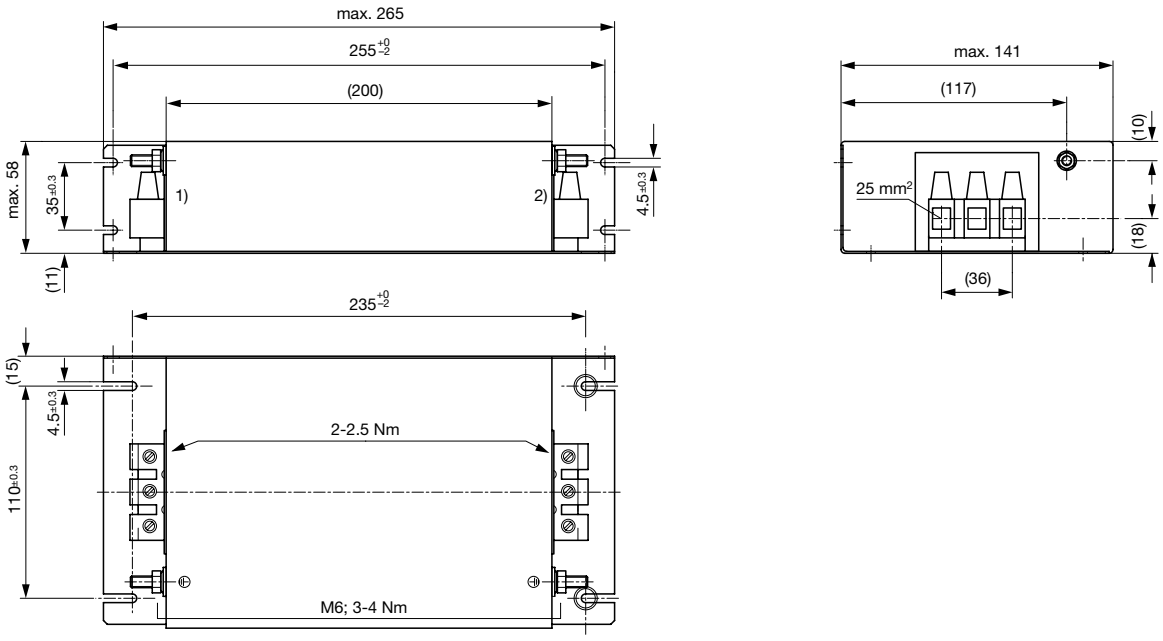
1) Line
2) Load

Case 1D-10



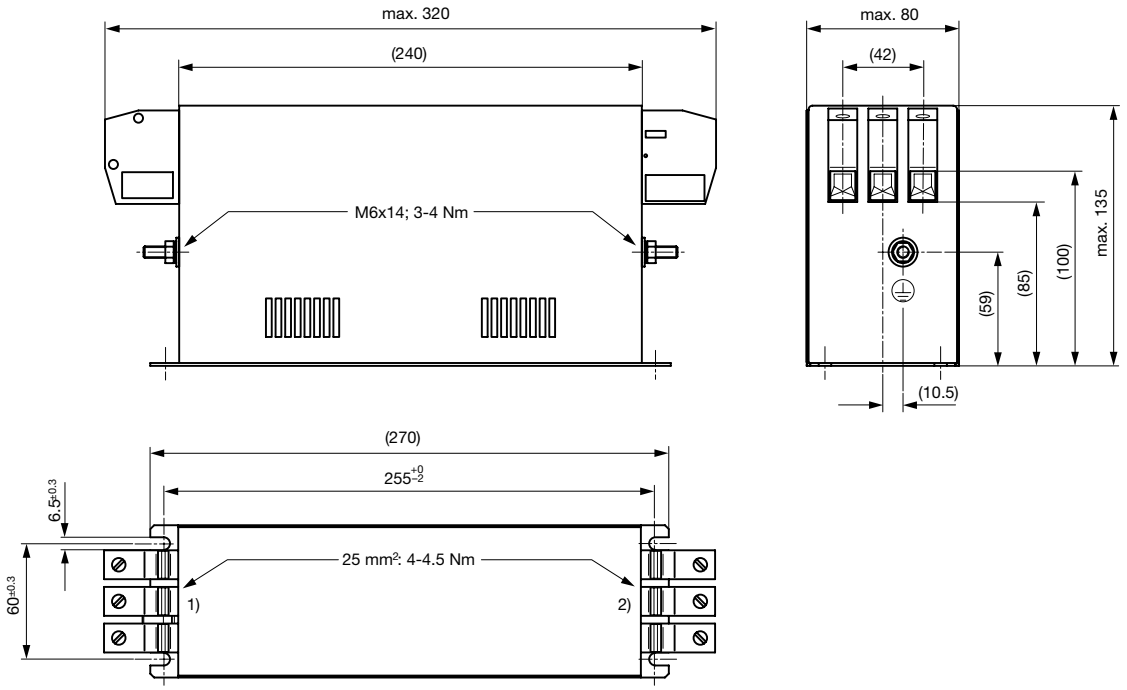
1) Line
2) Load

Case 1E



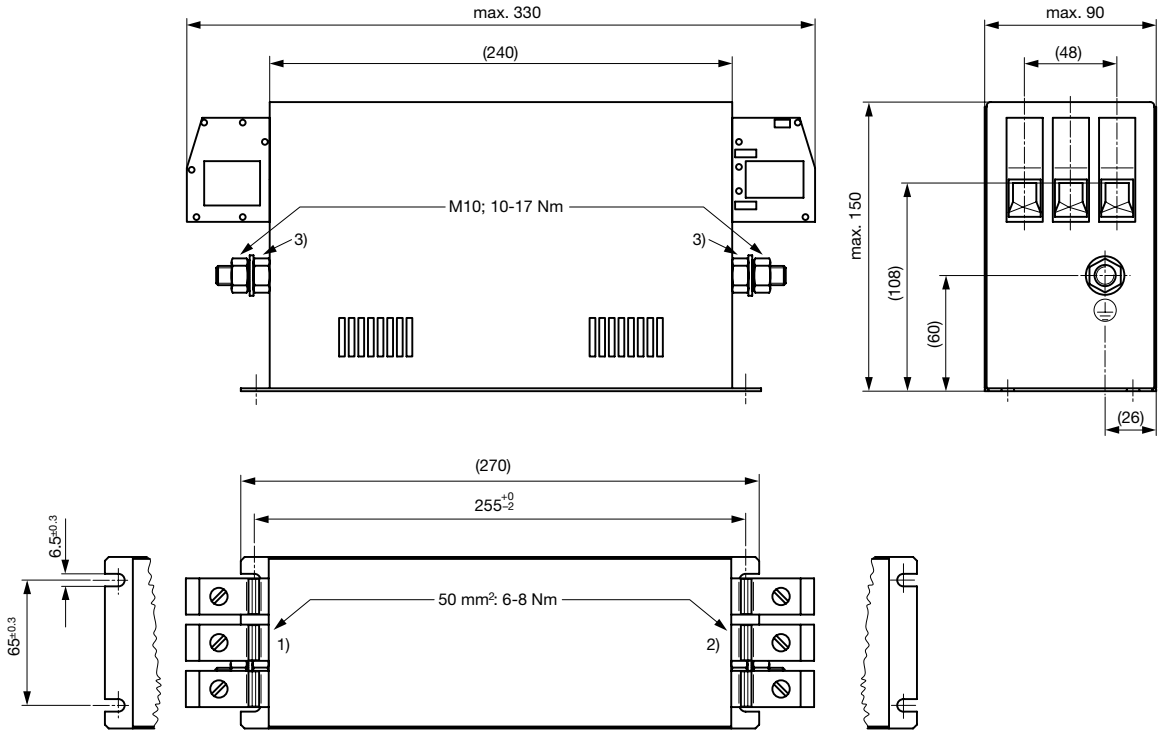
1) Line
2) Load

Case 1T



1) Line
2) Load

Case 1G

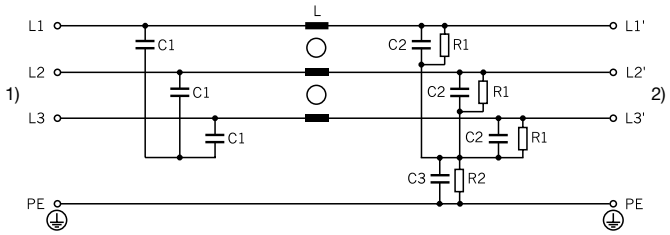


1) Line
2) Load
3) Do not unscrew lock-nut, keep lock-nut fastened while tightening

Technical data to the filter components

Rated Current [A]	L [mH]	C1 [µF]	C2 [µF]	C3 [µF]	R1 [MΩ]	R2 [MΩ]	Filter-Type
110	0.55	6.6	6.6	3.3	1	1	Industrial Version
150	0.48	6.6	6.6	3.3	1	1	Industrial Version
16	0.55	2.2	2.2	3.3	1	1	Industrial Version
25	0.45	2.2	2.2	3.3	1	1	Industrial Version
36	0.57	2.2	2.2	3.3	1	1	Industrial Version
43/80	0.55	4.7	4.7	3.3	1	1	Industrial Version
50	0.65	4.7	3.3	3.3	1	1	Industrial Version
55	0.75	4.7	3.3	3.3	1	1	Industrial Version
64	0.55	4.7	4.7	3.3	1	1	Industrial Version

Diagrams



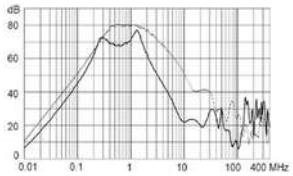
1) Line
2) Load

Attenuation Loss

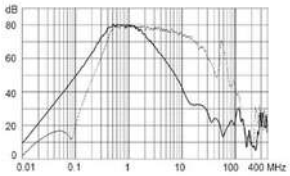
- - - - differential mode _____ common mode

Industrial Version

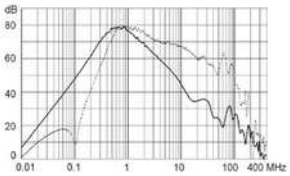
16A (FMAC-091C-1610)



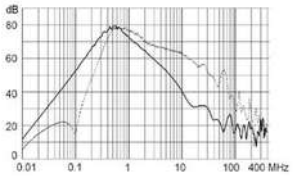
25A (FMAC-091C-2510)



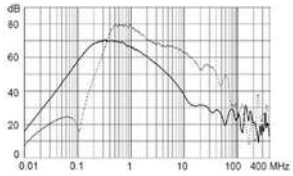
36A (FMAC-091D-3610)



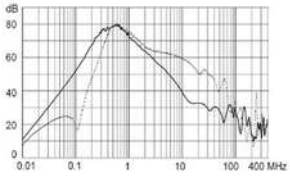
50A (FMAC-091D-5010)



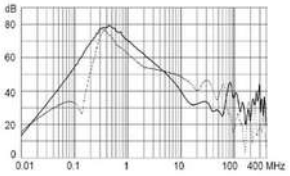
55A (FMAC-091D-5510)



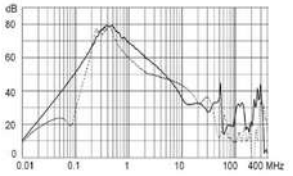
64A (FMAC-091E-6410)



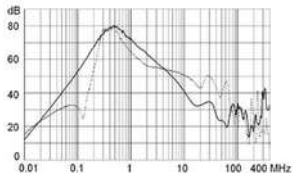
80A (FMAC-091T-8010)



110A (FMAC-091G-H110)



150A (FMAC-091G-H210)



Variants

Rated Current @ Ta 40°C (75°C) [A]	Characteristic	Rated Voltage [VAC]	Tripped Power Dissipation [W]	Leakage Current [mA] 1)	Contact Resistance [mΩ]	Weight [kg]	Screw clamps [mm²] 2)	Housing	Order Number
16	High attenuation	480	6	96	7.6	1	4	1C	FMAC-091C-1610
25	High attenuation	480	8	96	4.1	1	4	1C	FMAC-091C-2510
36	High attenuation	480	10	96	2.5	1.3	6	1D-6	FMAC-091D-3610
50	High attenuation	480	13	103	1.7	1.7	10	1D-10	FMAC-091D-5010
55	High attenuation	480	14	103	1.5	1.7	10	1D-10	FMAC-091D-5510
64	High attenuation	480	17	103	1.4	2	25	1E	FMAC-091E-6410
43/80	High attenuation	480	22	110	1.1	5.1	25	1T	FMAC-091T-8010
110	High attenuation	480	28	110	0.8	5.8	50	1G	FMAC-091G-H110
150	High attenuation	480	40	110	0.6	7	50	1G	FMAC-091G-H210

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

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

SCHURTER ELECTRONIC COMPONENTS
The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments.