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





See below:

Approvals and Compliances

Description

- High attenuation value

Applications

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

Weblinks

pdf datasheet, html-datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product, Microsite

Technical Data	
Rated Current	16 - 150A @ Ta 40°C
Rated voltage	480 VAC, 50/60 Hz
Approval for	16 - 150A @ Ta 40 °C / 480 VAC; 50/60 Hz
Overload Current	1.5 x lr
Leakage Current	< 15 mA (440 V / 50 Hz)
Dielectric Strength	480 VAC: > 2.25 kVDC between L-L > 3 kVDC between L-PE Test voltage 2 sec
Number of Filter Stages	1-stage
Weight	1 - 7kg
Material: Housing	Aluminum
Sealing Compound	UL 94V-0

Mounting	Screw-on mounting on chassis, upright or lengthwise
Terminal	Bolts and nuts
Operating Temperature	-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

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products. Approval Reference Type: FMAC ECO

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40028851
ور کیلا	UL Approvals	UL	UL File Number: E72928

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
<u>IEC</u>	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
(h)	Designed according to	UL 1283	Electromagnetic interference filters

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
<u>IEC</u>	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.

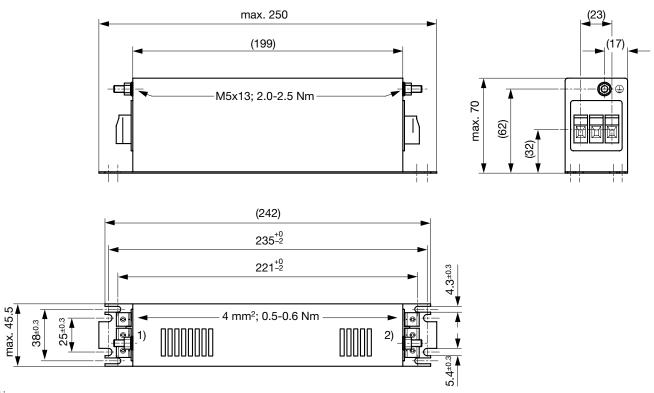
Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
RoHS	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
©	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
REACH	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

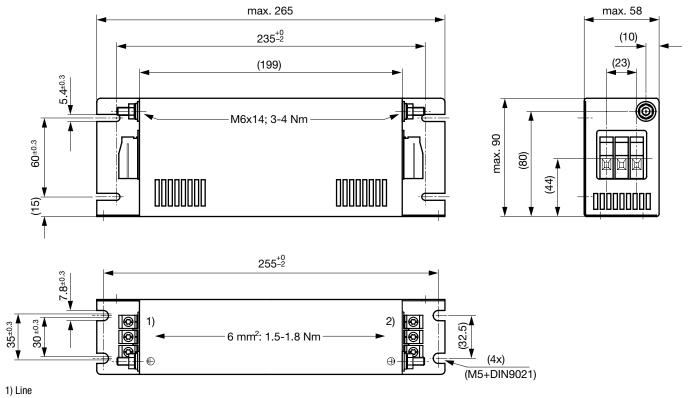
Dimension [mm]

Case 1C



1) Line 2) Load

Case 1D-6

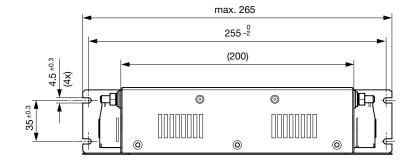


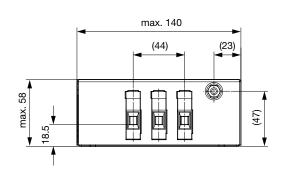
2) Load Case 1D-10

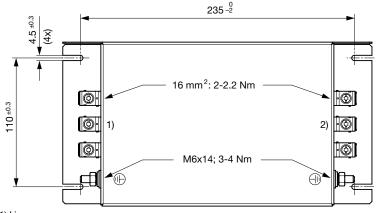
2) Load

max. 265 max. 58 235-2 (10)(23) (199)5.4±0.3 M6x14; 3-4 Nm max. 90 €0±09 (80) (44) 00000000 (15)255-2 7.8±0.3 2) (32.5) 10 mm²: 1.5-1.8 Nm (4x)(M5+DIN9021) 1) Line

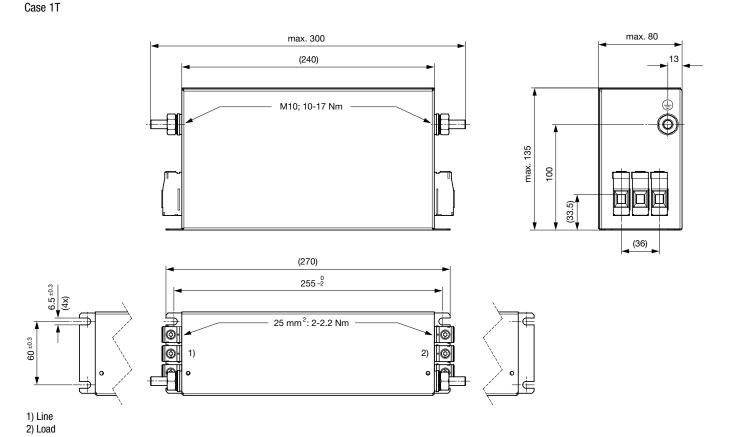
Case 1E



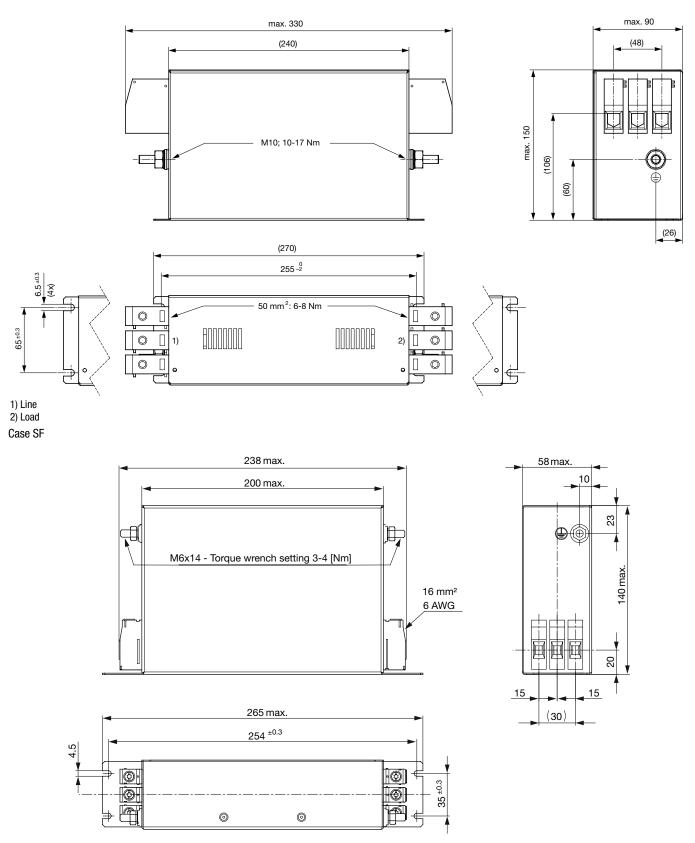




1) Line 2) Load



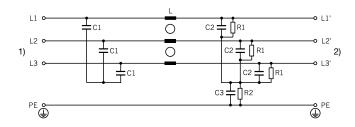
Case 1G



Technical data to the filter components

connical data to the inter-components							
Rated Current [A]	L [mH]	C1 [µF]	C2 [µF]	C3 [µF]	R1 [MΩ]	R2 [M Ω]	Filter- Type
110	0.55	6.6	6.6	3.3	1	1	Indus-
150	0.48	6.6	6.6	3.3	1	1	Indus-
16	0.55	2.2	2.2	3.3	1	1	Indus-
25	0.45	2.2	2.2	3.3	1	1	Indus-
36	0.57	2.2	2.2	3.3	1	1	Indus-
50	0.65	4.7	3.3	3.3	1	1	Indus-
55	0.75	4.7	3.3	3.3	1	1	Indus-
64	0.55	4.7	3.3	3.3	1	1	Indus-
80	0.55	4.7	4.7	3.3	1	1	Indus-

Diagrams



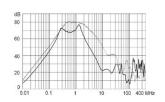
1) Line

2) Load

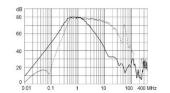
Attenuation Loss

Industrial version

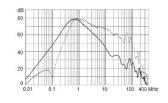
16A (FMAC-091C-1610)



25A (FMAC-091C-2510)

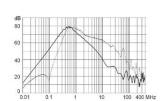


36A (FMAC-091D-3610)

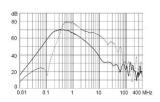


50A (FMAC-091D-5010)

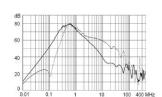
- - - - 50Ω differential mode _____ 50Ω common mode



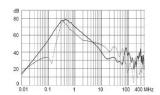
55A (FMAC-091D-5510)



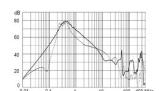
64A (FMAC-091E-6410)



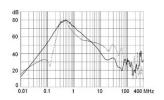
80A (FMAC-091T-8010)



110A (FMAC-091G-H110)



150A (FMAC-091G-H210)



All Variants

Bemessungs- strom @ Tu 40°C (75°C) [A]	Characteristic	Rated Voltage [VAC]	Tripped Po- wer Dissipa- tion [W]	Leakage Current [mA] @ 440V,	Contact Resistance [m Ω]	Weight [kg]	Screw clamps [mm2] 2)	Housings	Order Number	_
16	High attenuation	480	6	8.9	7.6	1 kg	4	1C	FMAC-091C-1610	
25	High attenuation	480	8	8.9	4.1	1 kg	4	1C	FMAC-091C-2510	
36	High attenuation	480	10	8.9	2.5	1.3 kg	6	1D-6	FMAC-091D-3610	
50	High attenuation	480	13	10.2	1.7	1.7 kg	10	1D-10	FMAC-091D-5010	
55	High attenuation	480	14	10.2	1.5	1.7 kg	10	1D-10	FMAC-091D-5510	
64	High attenuation	480	17	10.2	1.4	2 kg	16	1E	FMAC-091E-6410	
110	High attenuation	480	28	11.8	0.8	5.8 kg	50	1G	FMAC-091G-H110	
150	High attenuation	480	40	11.8	0.6	7 kg	50	1G	FMAC-091G-H210	
80	High attenuation	480	22	11.1	1.1	5.1 kg	25	1T	FMAC-091T-8010	
64	High attenuation	480	17	10.2	1.4	2 kg	16	SF	FMAC-3FSF-6410	

Most Popular.

 $A \textit{vailability} for \textit{all} \textit{ products} \textit{ can be searched real-time:} \textit{https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER} \textit{and} \textit{ products} \textit{ can be searched real-time:} \textit{https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER} \textit{ products} \textit{ can be searched real-time:} \textit{https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER} \textit{ products} \textit{ can be searched real-time:} \textit{ https://www.schurter.com/en/Stock-Check-SCHURTER} \textit{ products} \textit{ can be searched real-time:} \textit{ https://www.schurter.com/en/Stock-Check-SCHURTER} \textit{ products} \textit{ can be searched real-time:} \textit{ https://www.schurter.com/en/Stock-Check-SCHURTER} \textit{ products} \textit{ can be searched real-time:} \textit{ https://www.schurter.com/en/Stock-Check-SCHURTER} \textit{ products} \textit{ can be searched real-time:} \textit{ https://www.schurter.com/en/Stock-Check-SCHURTER} \textit{ products} \textit{ p$

Packaging unit

1 Pcs

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