

3-phase high current filter



See below:

Approvals and Compliances

Description

- High-power 3 phase filter for rated currents up to 2500 A
- 3-stage
- Very high attenuation
- 520 VAC and 760 VAC versions

Unique Selling Proposition

- Compact filter for high power
- Three stage filter for highest attenuation
- High voltage versions
- Wide temperature range

Applications

- High voltage rating 760 VAC for IT mains supply
- Especially designed for high power applications such as: Frequency Converters, UPS-Systems, Inverters for Photovoltaic Systems and Wind Energy
- Suitable for use in equipment according to IEC/UL 62368-1

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Approvals](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Microsite](#)

Technical Data

Rated Current	150 - 2500A @ Ta 50 °C
Rated voltage	520/760VAC, 50/60 Hz
Approval for	150 - 2500A @ Ta 50 °C / 520/760/520/760VAC; 50/60Hz
Overload Current	1.5 x Ir for 1 minute, per hour
Leakage Current	< 15mA (440V / 50Hz)
Dielectric Strength	520 VAC: 2.15 kVDC between L-L
	2.7 kVDC between L-PE
	Test voltage 2 sec
	760 VAC: 3 kVDC between L-L
	3.1 kVDC between L-PE
Number of Filter Stages	3-stage
Weight	9 - 67 kg
Material: Housing	Metal / Aluminium
Sealing Compound	UL 94V-0

Mounting	Screw-on mounting on chassis, from top
Terminal	Bolt and nut M10 for types up to 250 A and copper bars for types upwards of 320 A
Operating Temperature	-40 °C to 100 °C
Climatic Category	40/100/21 acc. to IEC 60068-1
Degree of Protection	IP20 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](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: FMCC SOL

Approval Logo	Certificates	Certification Body	Description
	UL Approvals	UL	UR File Number: E72928

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
	Designed according to	UL 1283	Passive filters for suppressing electromagnetic interference

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

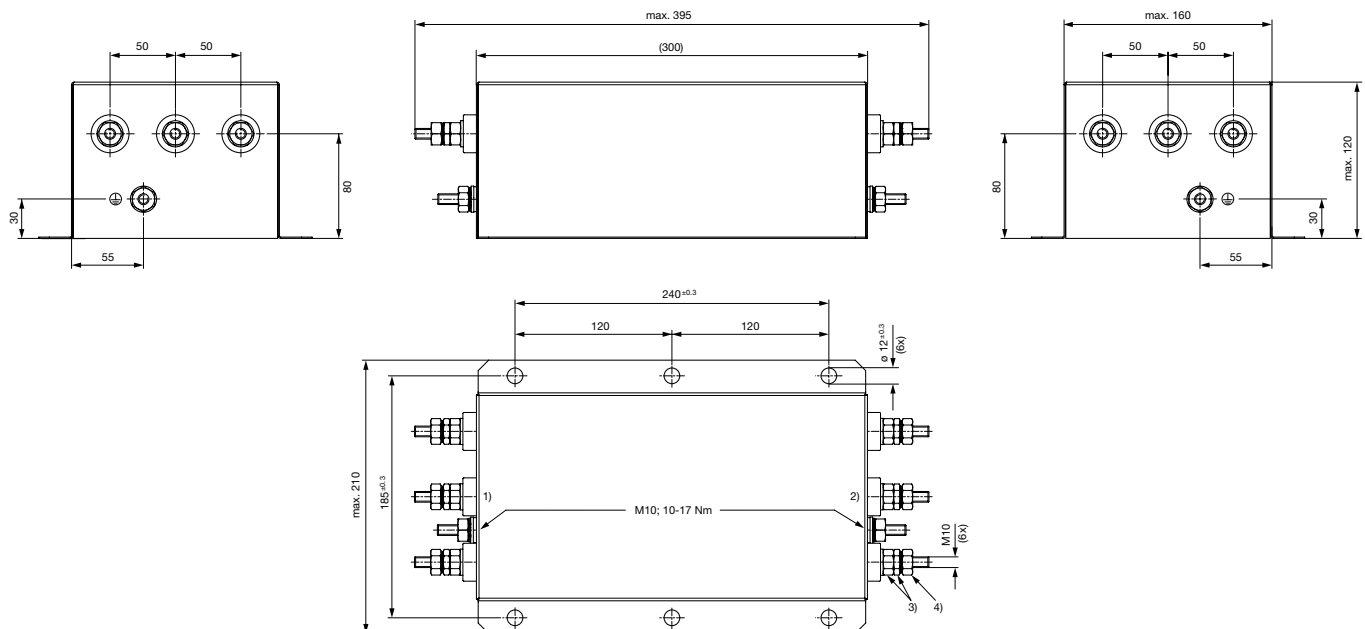
Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description
	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.
	UKCA declaration of conformity	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	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	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.

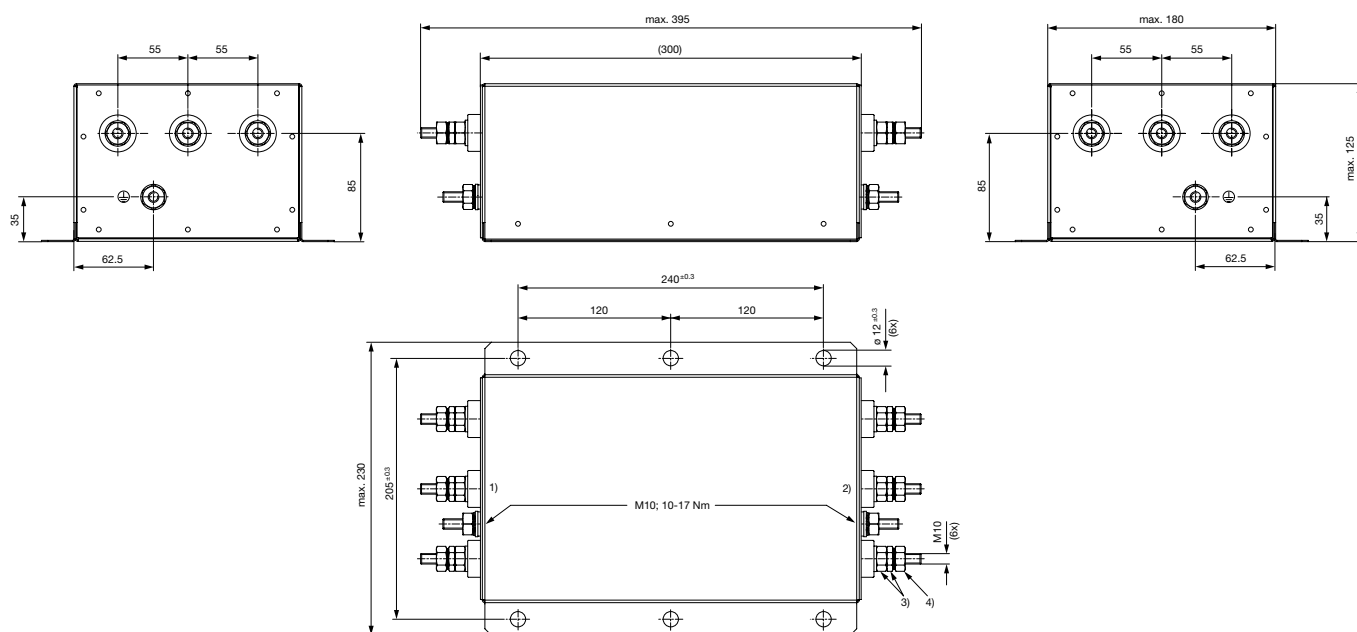
Dimension [mm]

Case 3A

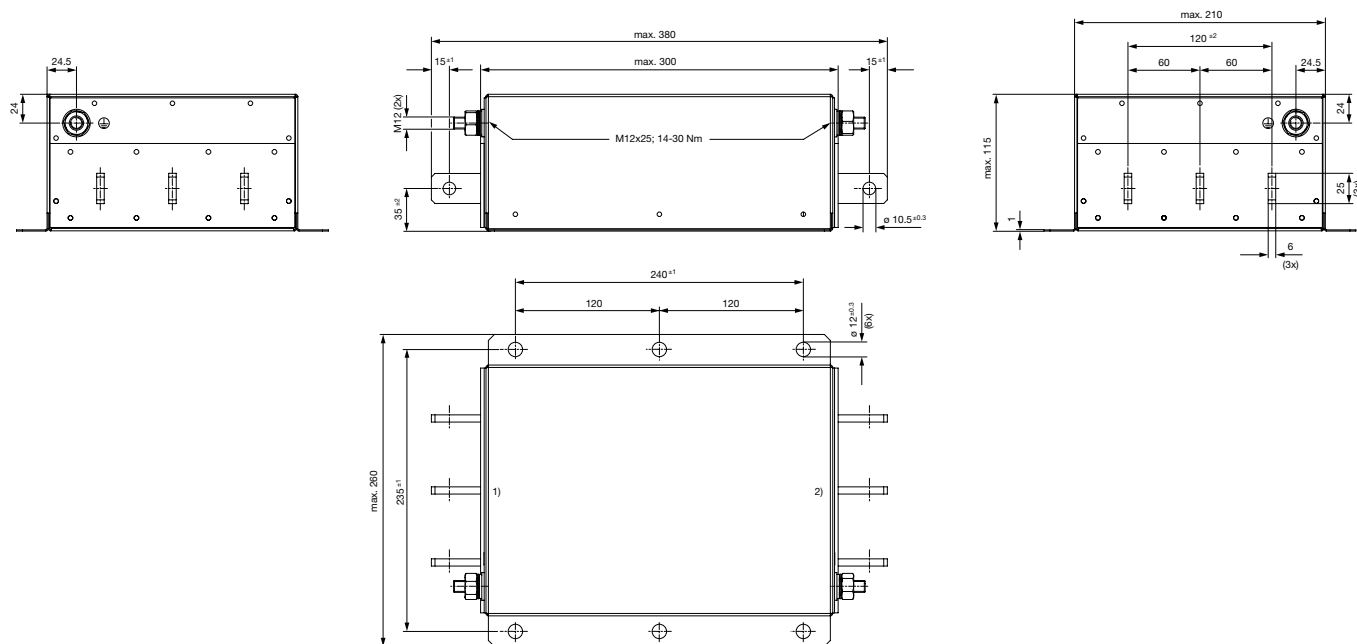


- 1) Line
- 2) Load
- 3) Lock-nut do not unscrew
- 4) Nut torque 10...17 Nm, keep lock-nut fastened

Case 3B



- 1) Line
 - 2) Load
 - 3) Lock-nut do not unscrew
 - 4) Nut torque 10...17 Nm, keep lock-nut fastened
- Case 3C

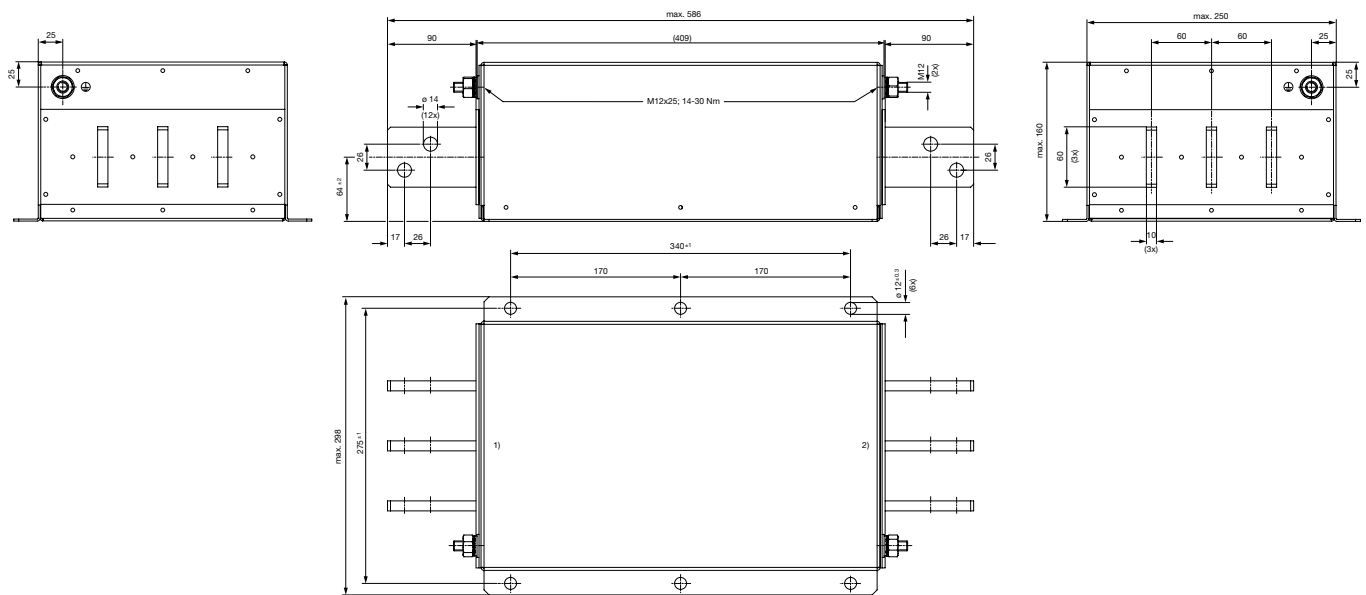


- 1) Line
- 2) Load

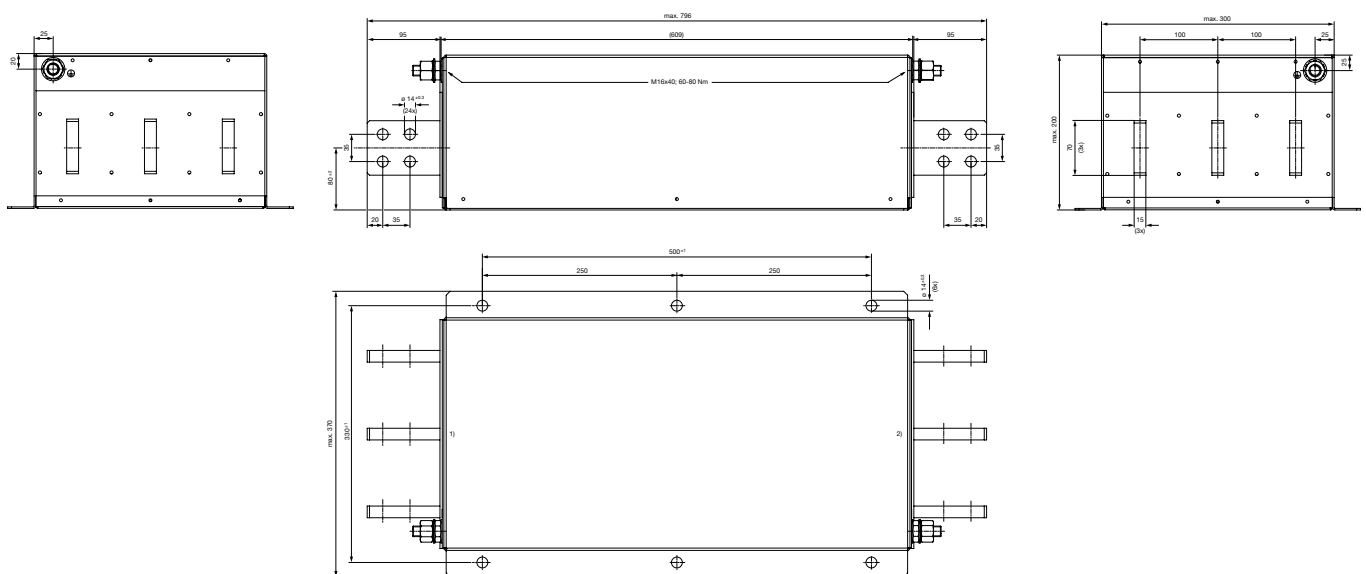
Case 3E



Case 3F

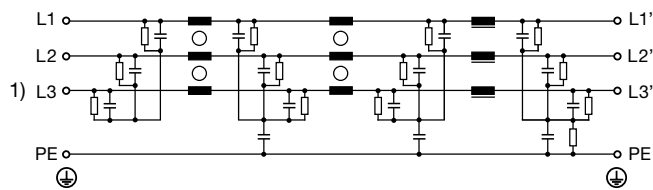


- 1) Line
 2) Load
 Case 3G



- 1) Line
 2) Load

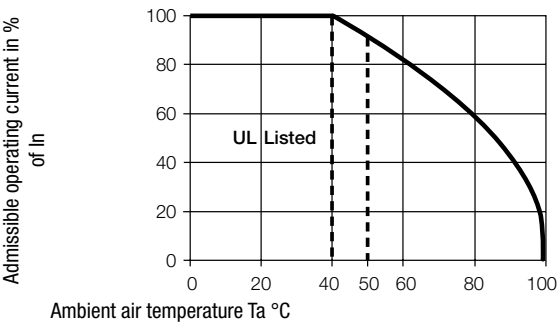
Diagrams



1) Line

Derating Curves

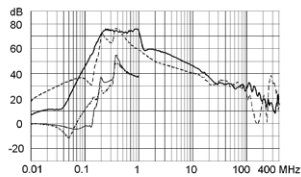
Permissible Working Current as a Function of Ambient Temperature



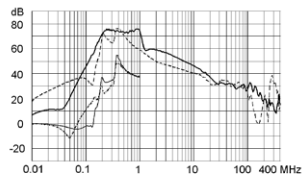
Attenuation Loss . . . 0.1/100Ω differential mode 100/0.1Ω differential mode - - - 50Ω differential mode ____ 50Ω common mode

Standard version

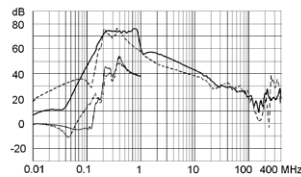
150 A / 520 V



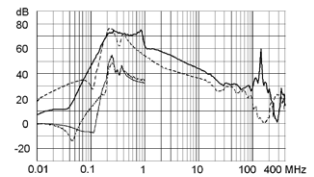
180 A / 520 V



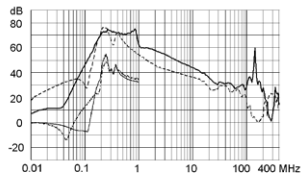
250 A / 520 V



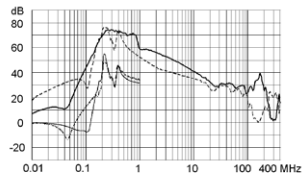
320 A / 520 V



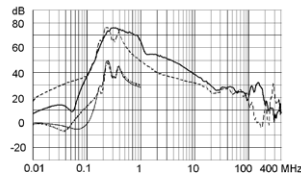
400 A / 520 V



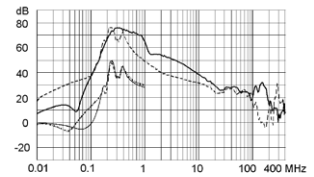
600 A / 520 V



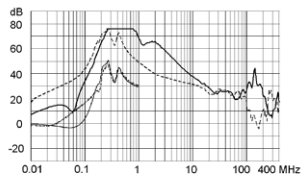
800 A / 520 V



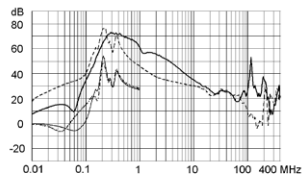
1000 A / 520 V



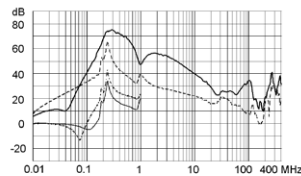
1600 A / 520 V



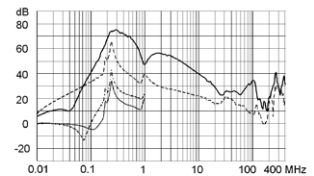
2500 A / 520 V



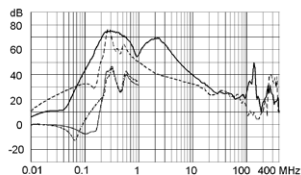
150 A / 760 V



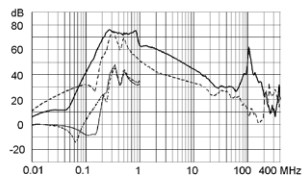
180 A / 760 V



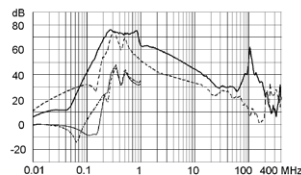
250 A / 760 V



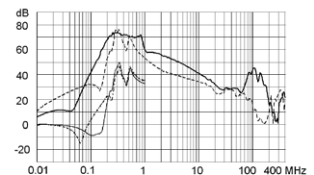
320 A / 760 V



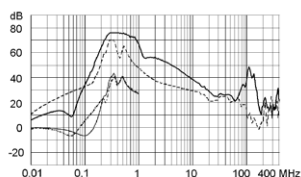
400 A / 760 V



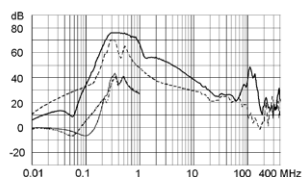
600 A / 760 V



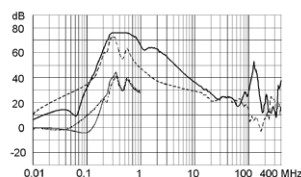
800 A / 760 V



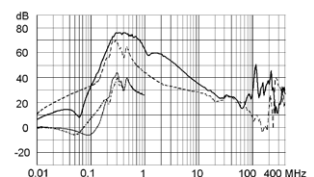
1000 A / 760 V



1600 A / 760 V



2500 A / 760 V



Variants

Rated Current @ Ta 50°C (40°C) [A]	Rated Voltage [VAC]	Power (kW)	Leakage Cur- rent [mA] @ 440V, 60Hz 1)	Power Dissipation [W]	Weight [kg]	Housing	Order Number
150 (164)	520	75	14.1	8	9 kg	3A	FMCC-H93A-J532
180 (197)	520	90	14.1	11	9 kg	3A	FMCC-H93A-J832
250 (250)	520	132	14.1	13	11 kg	3B	FMCC-H93B-K532
320 (350)	520	160	14.1	16	12 kg	3C	FMCC-H93C-L252
400 (438)	520	220	14.1	25	12 kg	3C	FMCC-H93C-M052
600 (657)	520	315	14.1	43	14 kg	3D	FMCC-H93D-U052
800 (876)	520	400	14.1	56	26 kg	3E	FMCC-H93E-Q052
1000 (1095)	520	560	14.1	88	26 kg	3E	FMCC-H93E-S052

Rated Current @ Ta 50°C (40°C) [A]	Rated Voltage [VAC]	Power (kW)	Leakage Cur- rent [mA] @ 440V, 60Hz 1)	Power Dissipation [W]	Weight [kg]	Housing	Order Number
1600 (1600)	520	900	14.1	150	29 kg	3F	FMCC-H93F-S652
2500 (2500)	520	1320	14.1	286	67 kg	3G	FMCC-H93G-T552
150 (164)	760	110	13.5	8	9 kg	3A	FMCC-I93A-J534
180 (197)	760	132	13.5	11	9 kg	3A	FMCC-I93A-J834
250 (250)	760	200	13.5	13	11 kg	3B	FMCC-I93B-K534
320 (350)	760	250	13.5	16	12 kg	3C	FMCC-I93C-L254
400 (438)	760	315	13.5	25	12 kg	3C	FMCC-I93C-M054
600 (657)	760	500	13.5	43	14 kg	3D	FMCC-I93D-U054
800 (876)	760	630	13.5	56	26 kg	3E	FMCC-I93E-Q054
1000 (1095)	760	710	13.5	88	26 kg	3E	FMCC-I93E-S054
1600 (1600)	760	1320	13.5	150	29 kg	3F	FMCC-I93F-S654
2500 (2500)	760	2000	13.5	286	67 kg	3G	FMCC-I93G-T554

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>

1) Leakage current according IEC 60939-1

Packaging unit	1 Pcs
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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Schurter:](#)

[FMCC-H93D-U052](#) [FMCC-H93E-S052](#) [FMCC-H93F-S652](#) [FMCC-H93A-J532](#) [FMCC-H93G-T552](#) [FMCC-H93C-L252](#) [FMCC-H93E-Q052](#) [FMCC-H93A-J832](#) [FMCC-I93C-L254](#) [FMCC-I93B-K534](#) [FMCC-I93E-Q054](#) [FMCC-I93D-U054](#) [FMCC-I93E-S054](#) [FMCC-I93C-M054](#) [FMCC-I93A-J834](#) [FMCC-I93G-T554](#) [FMCC-I93A-J534](#) [FMCC-H93B-K532](#) [FMCC-I93F-S654](#) [FMCC-H93C-M052](#)