

Sine wave output filter with a voltage dc link



See below:

#### Approvals and Compliances

#### Description

- Design corresponding to UL 1283, CSA 22.2 No. 8, IEC/EN60939
- Enhancement of the system efficiency

#### Applications

- Optimized for long motor cables (up to 1000 m) and operation under full load
- Equipped with voltage connection to converter dc link circuit for best results
- Frequency converters in uninterruptible power supplies, elevators, heating-, ventilating- and air conditioning-systems, traction and conveyer systems
- Cost saving technologie, increase of motor life time, deployment of flexible lightweight unshielded instead of expensive shielded motor cables, reduced fitting work

#### References

This type is Phase-out without alternate type

Last order date: 15.12.2019

#### Weblinks

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

#### Technical Data

Rated Current	4 - 16 A @ Ta 40 °C
Rated voltage	500/288 VAC: 50/60 Hz
Approval for	4 - 16 A @ Ta °C / 500/288 VAC; 50 Hz
Overload Current	1.5 x Ir for 1 minute, per hour
Dielectric Strength	500/288 VAC: 1.1 kVDC between L-L 2.5 kVDC between L-PE Test voltage (2 sec)
Weight	16 - 24 kg
Material: Housing	Metal
Sealing Compound	UL 94V-2

Mounting	Screw-on mounting on chassis, from top
Terminal	Screw clamps
Operating Temperature	-25 °C to 100 °C
Climatic Category	25/100/21 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


#### 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.

#### Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 62368-1	IEC 62368-1 includes the basic requirements for safety of audio, video, information technology and office equipment.

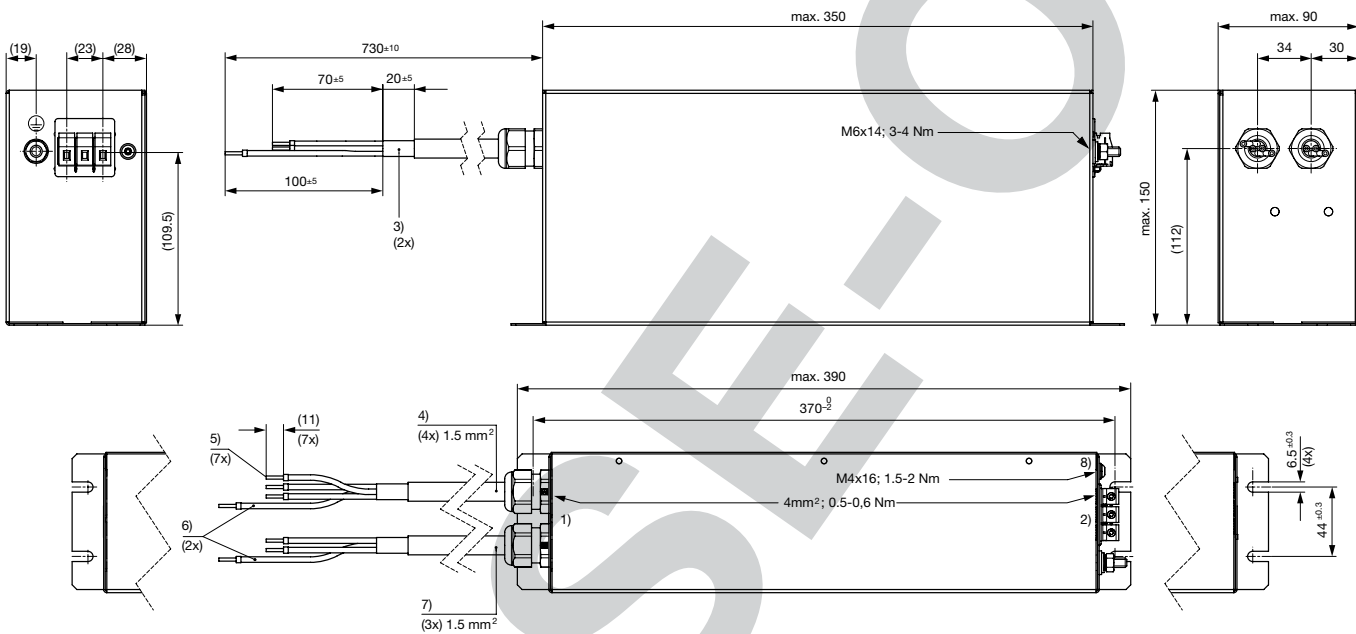
Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description
CE	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	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
China RoHS	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.

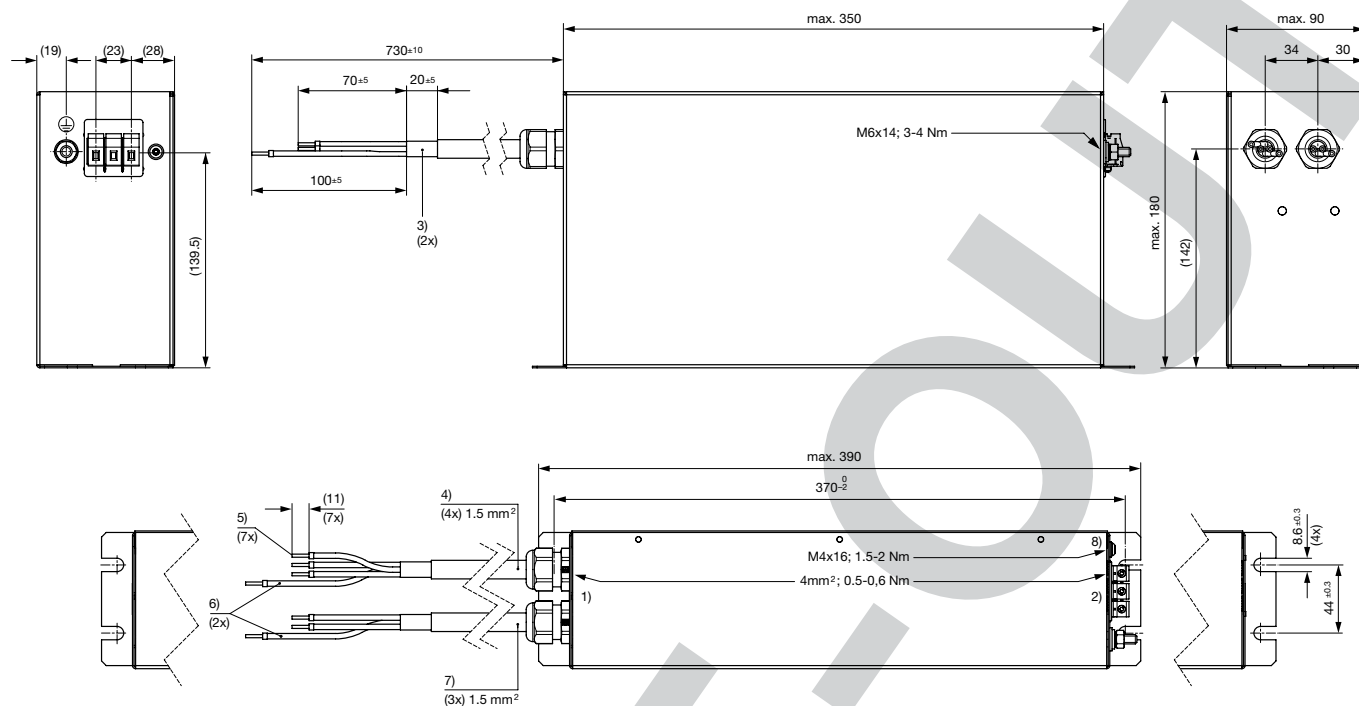
Dimension [mm]

Case 2G



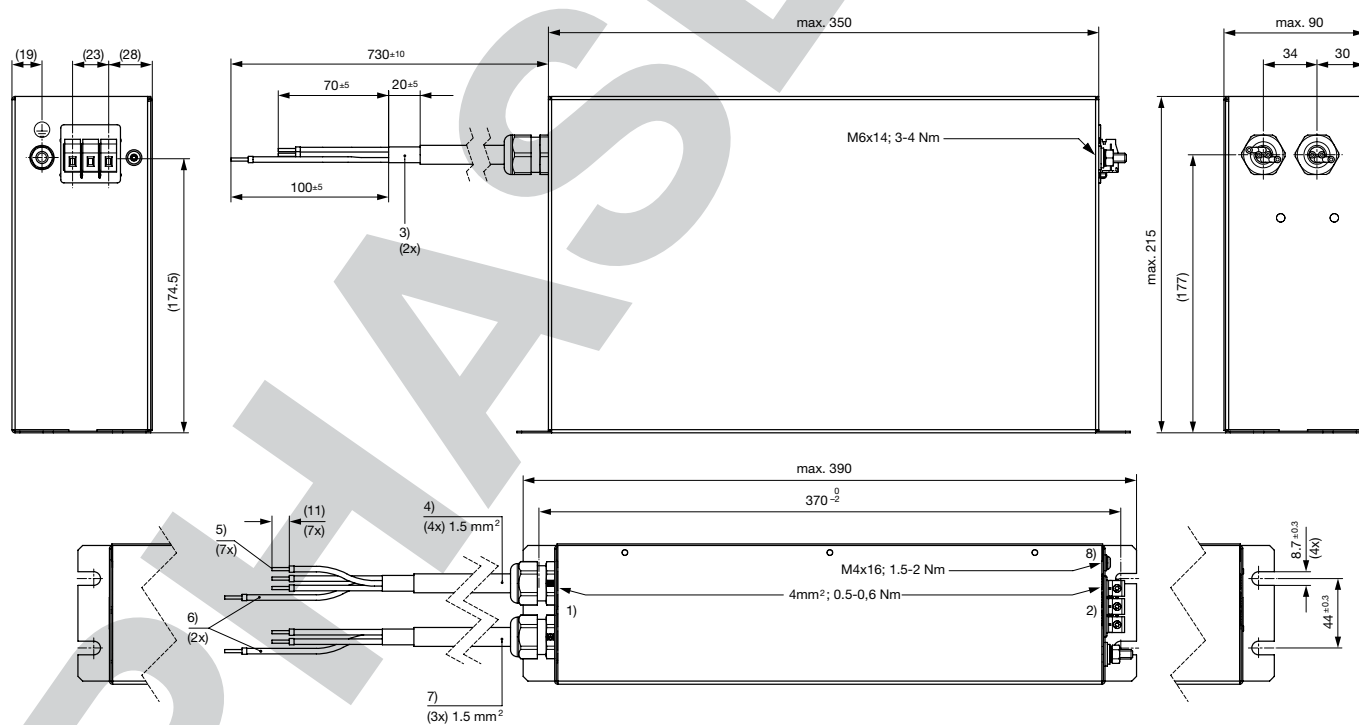
1) Inverter 2) Motor 3) Shield 4) Shielded cable 5) Endsleeves 6) Ground 7) Shieldes cable 8) Operation Mode

Case IB



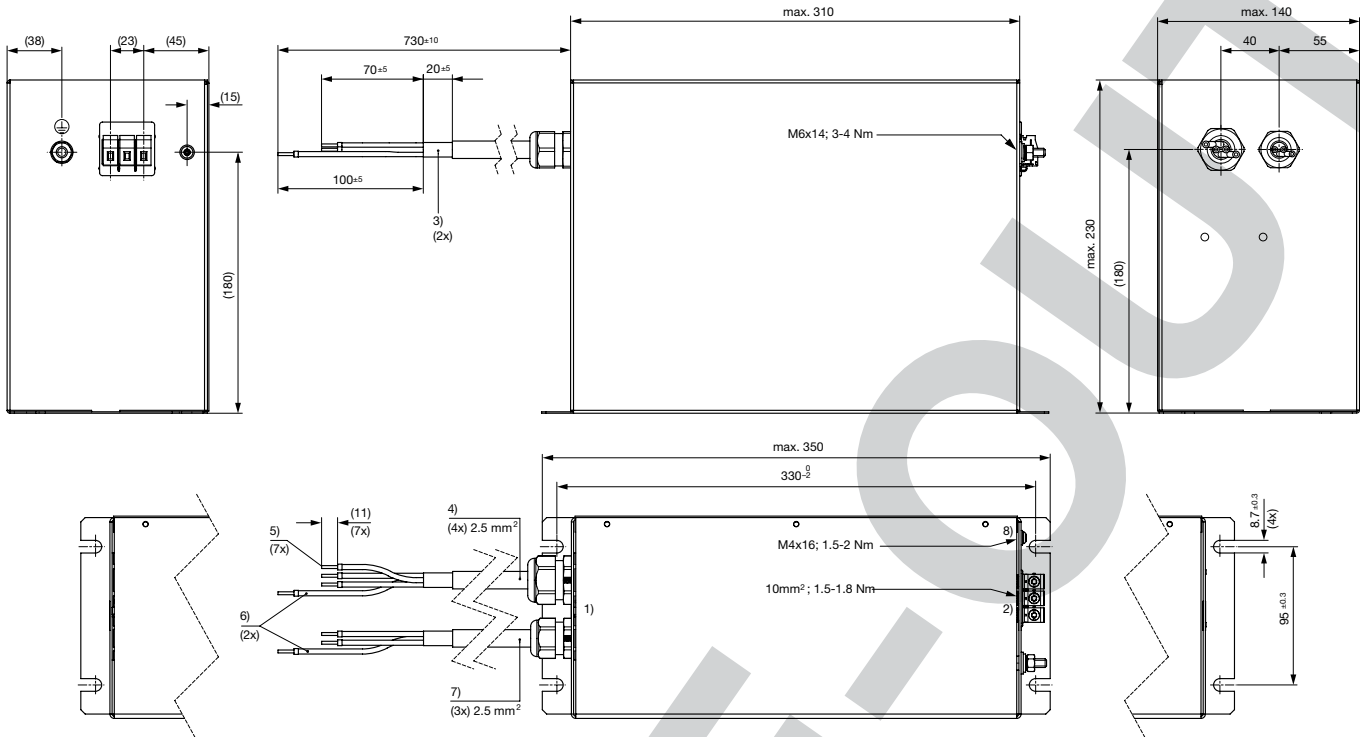
1) Inverter 2) Motor 3) Shield 4) Shielded cable 5) Endsleeves 6) Ground 7) Shielded cable 8) Operation Mode

Case 2H



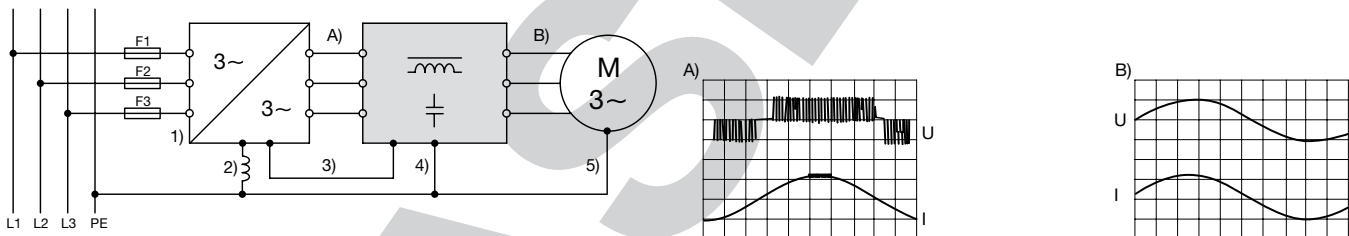
1) Inverter 2) Motor 3) Shield 4) Shielded cable 5) Endsleeves 6) Ground 7) Shielded cable 8) Operation Mode

### Case 2I



1) Inverter 2) Motor 3) Shield 4) Shielded cable 5) Endsleeves 6) Ground 7) Shielded cable 8) Operation Mode

### Diagrams



#### Note:

The inverter switching frequency must lie within the range from 2 to 20kHz. A switching frequency below or above the mentioned range will result in poor performances. Sine wave output filters with dc-link produce leakage currents. These leakage currents could, in combination with certain OEM inverter types, disturb overall system performance, causing a "over current or short to earth" error message on the inverter. For such cases Schurter suggests the following three solutions or a combination of each:

- 1) Increasing the switching frequency of the inverter (drawback: increased power loss in the inverter)
- 2) Activating the low leakage sine wave output filter operation mode by removing the factory set detachable screw (drawback: light increase of the leakage current in the motor)
- 3) Connecting a ground wire choke type DEH in the inverters earth connection (drawback: additional component)

1) Inverter 2) Ground choke 3) DC-Link 4) Sine wave output filter 5) Motor

## All Variants

Rated Current	Rated voltage	Switching frequency	Motor frequency	Rated motor power	Motor cable length	DC resistance	Total power loss	Weight	Housings	Order Number
[A]	[VAC]	[kHz]	[Hz]	[kW]	[m]	[mΩ]	[W]	[kg]		
8	500/288	2...20	0...200	3.0	<= 1000	220	14	16 kg	1B	<a href="#">FMAC-0S1B-0862</a>
4	500/288	2...20	0...200	1.5	<= 1000	450	8	13 kg	2G	<a href="#">FMAC-0S2G-0462</a>
12	500/288	2...20	0...200	5.5	<= 1000	140	20	20 kg	2H	<a href="#">FMAC-0S2H-1262</a>
16	500/288	2...20	0...200	7.5	<= 1000	110	28	24 kg	2I	<a href="#">FMAC-0S2I-1662</a>

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

**Packaging unit** 1 Pcs

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