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
- Cost saving technologie, increase of motor life time, deployment of flexible lightweight unshielded instead of expensive shielded motor cables, reduced fitting work

Weblinks

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

Technical Data	
Rated Current	4 - 16A @ 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	IP 20 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

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.

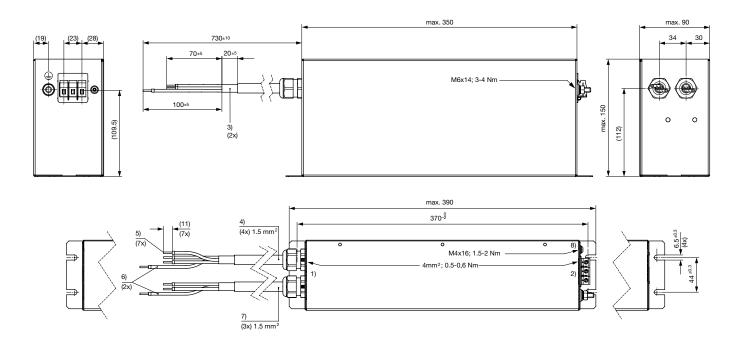
Compliances

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.			

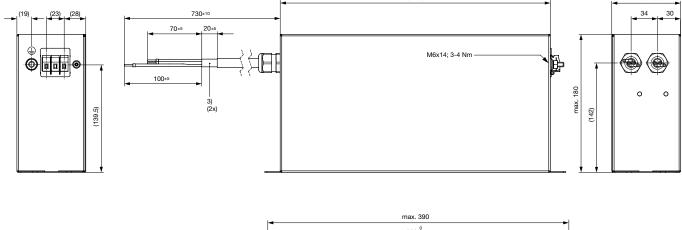
Dimension [mm]

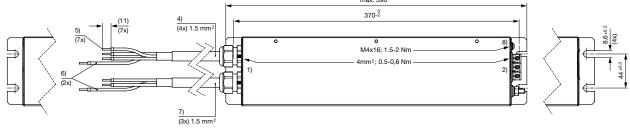
Case 2G



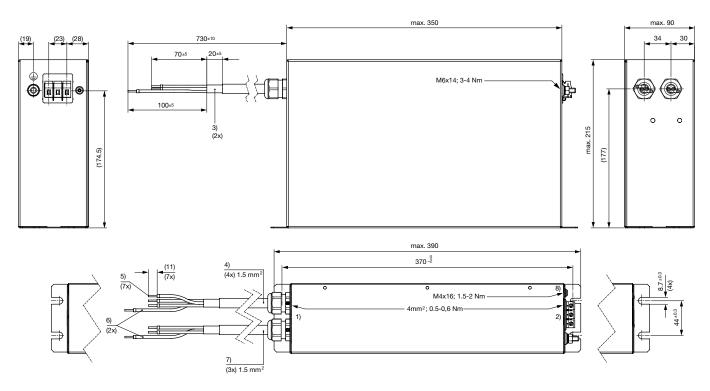
1) Inverter 2) Motor 3) Shield 4) Shielded cable 5) Endsleeves 6) Ground 7) Shieldes cable 8) Operation Mode

Case IB



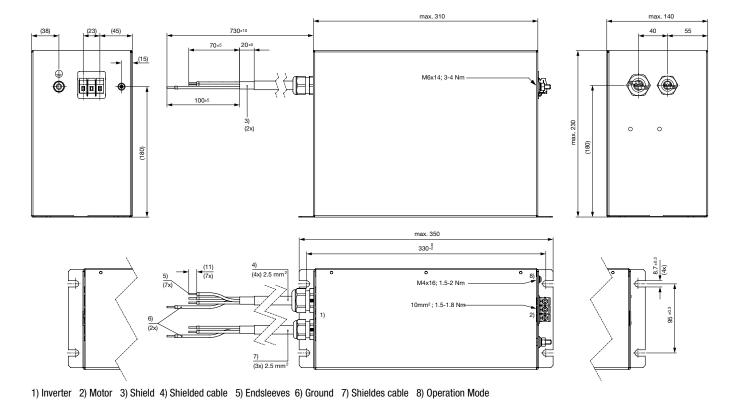


1) Inverter 2) Motor 3) Shield 4) Shielded cable 5) Endsleeves 6) Ground 7) Shieldes cable 8) Operation Mode Case 2H

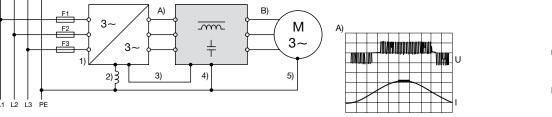


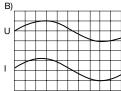
1) Inverter 2) Motor 3) Shield 4) Shielded cable 5) Endsleeves 6) Ground 7) Shieldes cable 8) Operation Mode

Case 2I



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

Ra	ted Current	Rated voltage	Switching fre- quency	Motor frequency	Rated motor power	Motor cable lenght	DC resi- stance	Total power loss	Weight	Housings	Order Number
	[A]	[VAC]	[kHz]	[Hz]	[kW]	[m]	$[m\Omega]$	[W]	[kg]		
	8	500/288	220	0200	3.0	<= 1000	220	14	16 kg	IB	FMAC-0SIB-0862
	4	500/288	220	0200	1.5	<= 1000	450	8	13 kg	2G	FMAC-0S2G-0462
	12	500/288	220	0200	5.5	<= 1000	140	20	20 kg	2H	FMAC-0S2H-1262
	16	500/288	220	0200	7.5	<= 1000	110	28	24 kg	21	FMAC-0S2I-1662

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

Packaging unit 1 Pcs