

DC filter for photovoltaic converters

new



## Preliminary Datasheet



### Description

- DC filter in standard and medical M5 version
- Effective against symmetrical and asymmetrical interferences
- In the frequency range from 150kHz up to 300MHz

### Standards

- IEC 60939
- UL 1283, Edition 5, CSA 22.2 No. 8-M1986, @ Ta 55 (75) °C

### Approvals

- VDE License Number: pending
- UL License Number: pending

### Applications

- Modern solar inverters, that use MPP (maximum power point) trackers, generate disturbances into both the grid's AC power line, as well as the DC side of the solar module. An AC filter is normally used on the grid's AC power line, but the noise generated on the DC side tends to be overlooked. EMC standards EN 61000-6-3 and EN55014-1, however, also put limits on the noise generated from lines not connected to the grid, such as for example the line to the solar panels. Meeting these limits can be achieved by using a DC filter on the DC side of the inverter.

### References

[General Product Information](#)

### Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

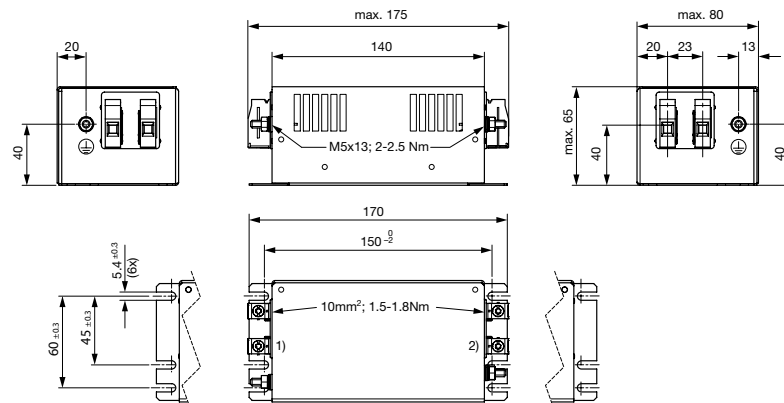
### Technical Data

Rated Current	25 - 1500A @ Ta 55 °C
Rated voltage	1200VDC MAX.
Overload Current	1.5 x Ir
Weight	1 - 15 kg
Material: Housing	Metal
Sealing Compound	UL 94V-2

Mounting	Screw-on mounting on chassis, from top
Terminal	Screw clamps for types up to 150 A and copper bars for types upwards of 250 A.
Operating Temperature [°C]	-40 °C to 100 °C
Climatic Category	40/100/21 acc. to IEC 60068-1
Degree of Protection	IP 20 (25A-150A types), IP 00 (250A-1500A types) acc. to IEC 60529
Protection Class	Suitable for appliances with protection class 1 acc. to IEC 61140

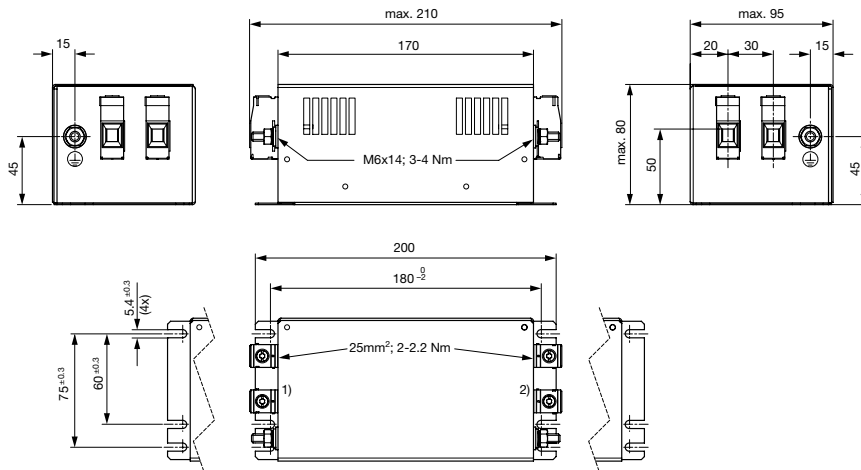
### Dimensions

Case 2P



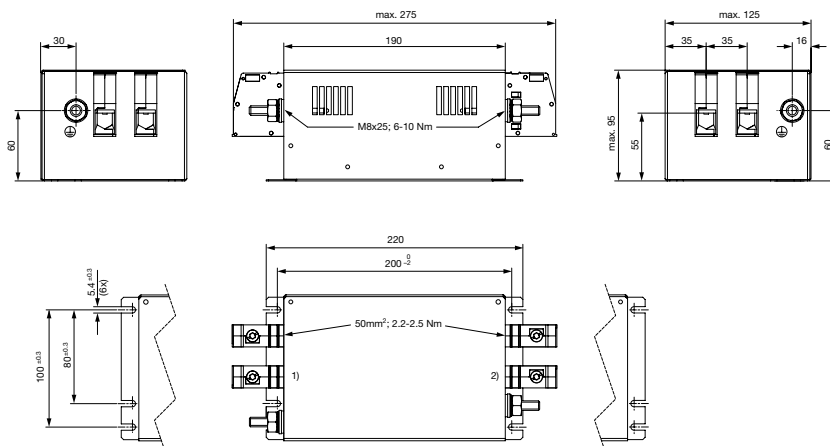
- 1) Line
- 2) Load

### Case 2Q



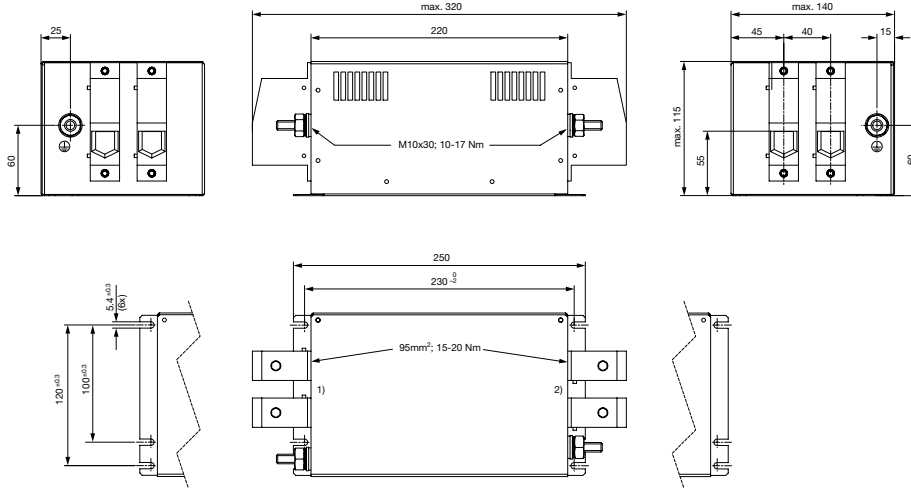
- 1) Line
- 2) Load

### Case 2R

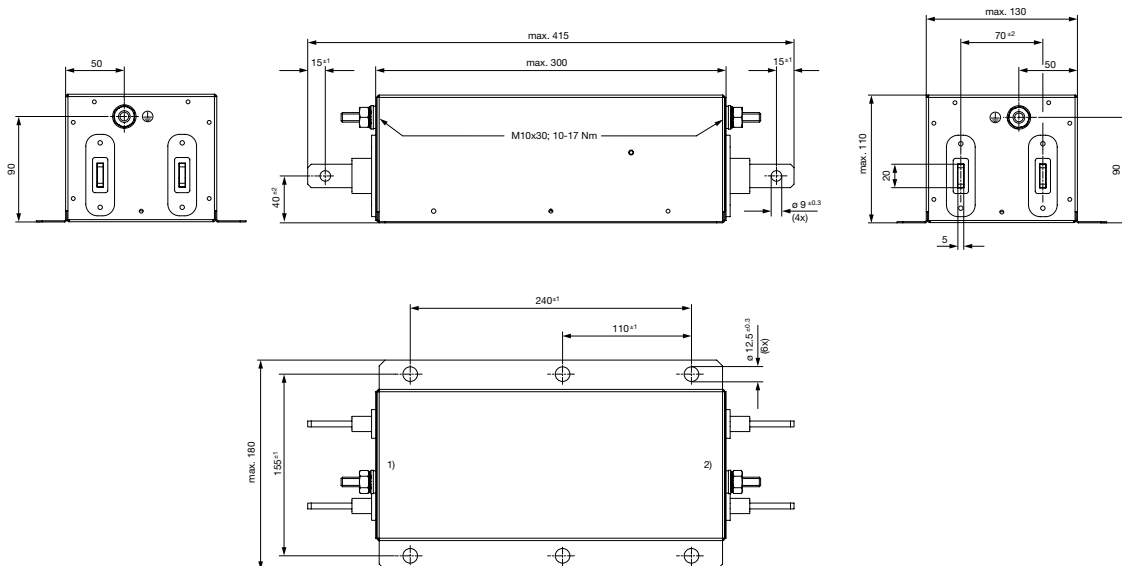


- 1) Line
- 2) Load

Case 2S

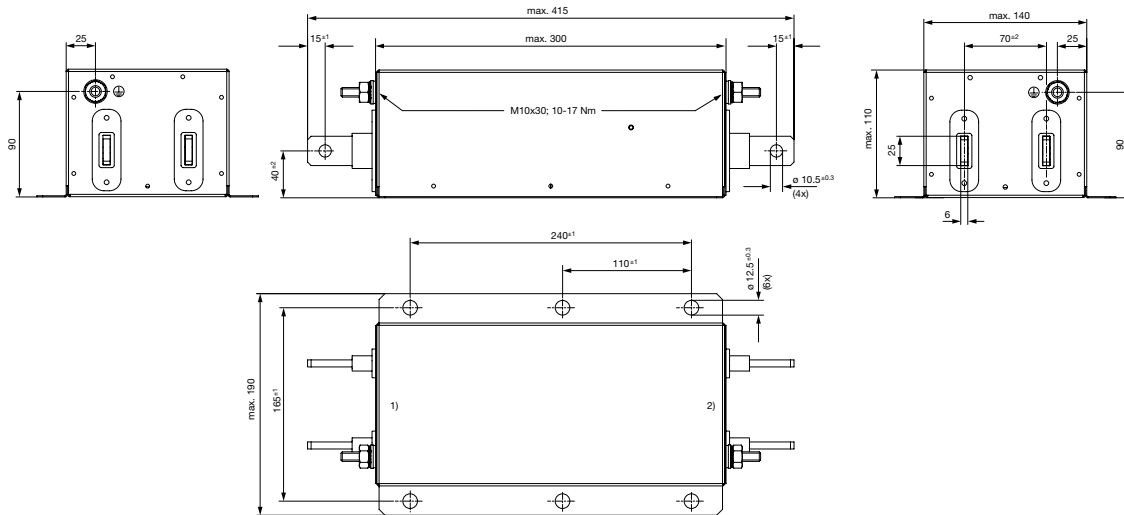


- 1) Line
  - 2) Load
- Case 2T

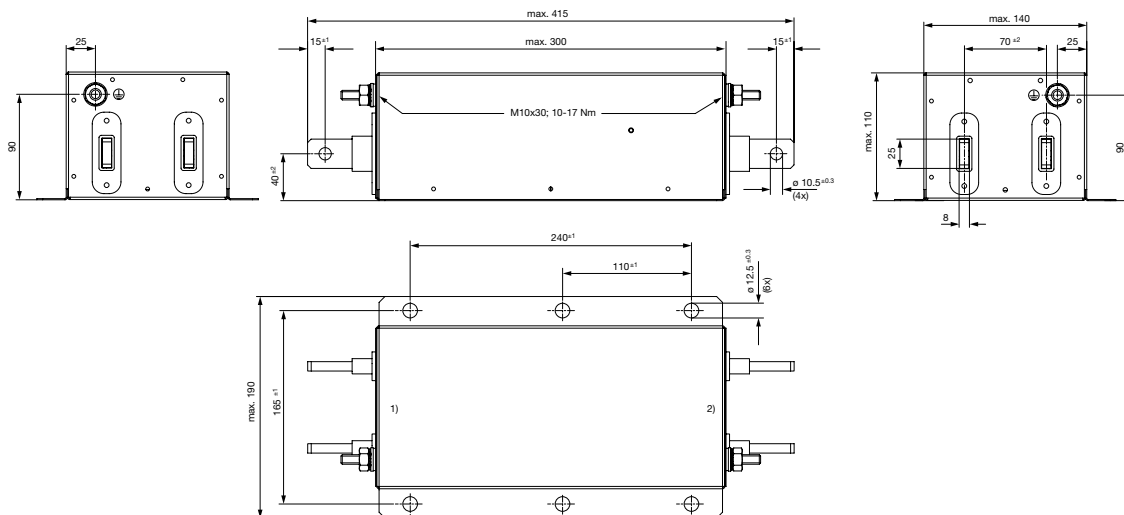


- 1) Line
- 2) Load

### Case 2U1

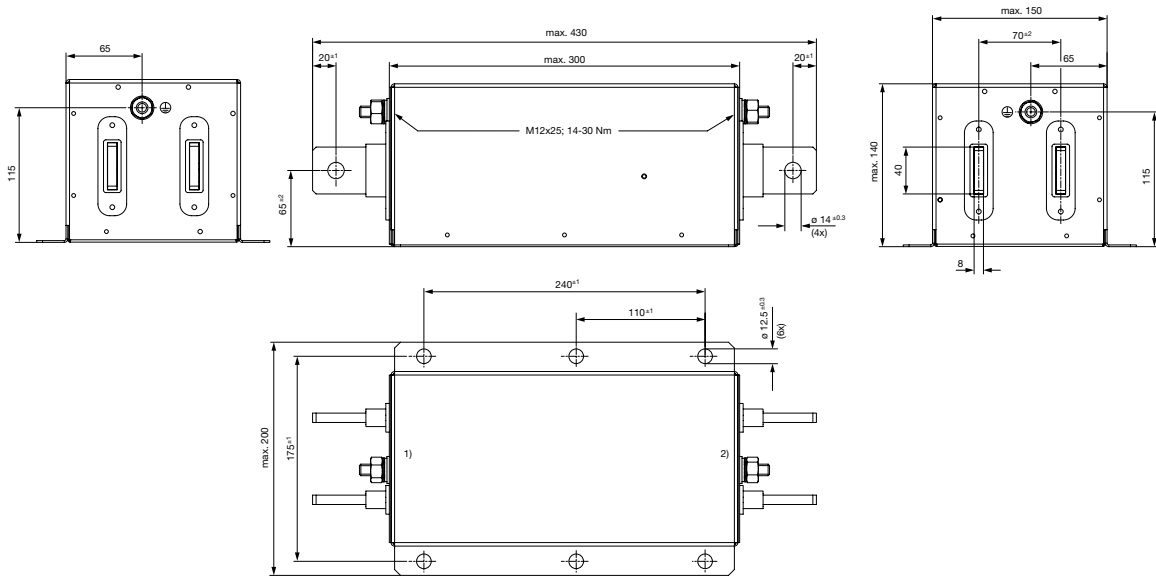


- 1) Line
  - 2) Load
- Case 2U2

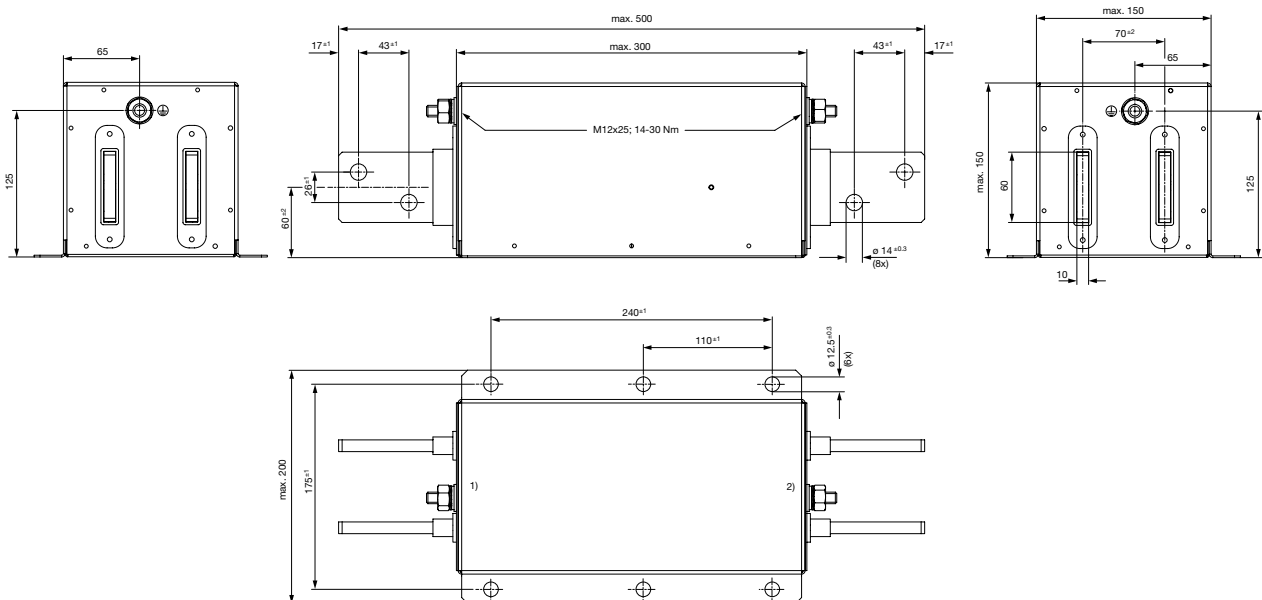


- 1) Line
- 2) Load

Case 2V

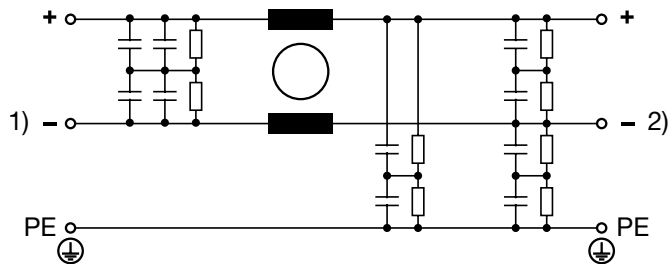


- 1) Line
  - 2) Load
- Case 2W

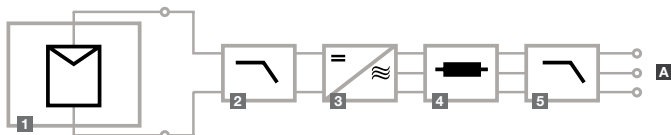


- 1) Line
- 2) Load

## Diagrams



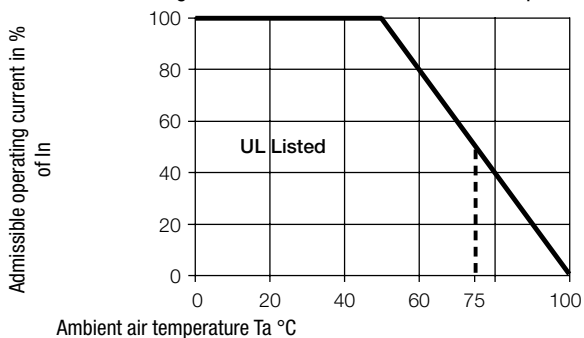
- 1) Solar module
- 2) Frequency inverter



- 1) Solar module
- 2) DC filter
- 3) Frequency inverter
- 4) Commutation choke
- 5) AC filter
- A) Power grid

## Derating Curves

Permissible Working Current as a Function of Ambient Temperature



## Variants

Rated Current @ $T_a$ 55°C (75°C) [A]	Rated Voltage [VDC]	Housing	Order Number
25 (19)	1200	2P	FMER-G92P-2517
50 (37)	1200	2Q	FMER-G92Q-5017
75 (56)	1200	2Q	FMER-G92Q-7517
100 (74)	1200	2R	FMER-G92R-J017
150 (112)	1200	2S	FMER-G92S-J517
250 (186)	1200	2T	FMER-G92T-K557
400 (298)	1200	2U1	FMER-G92U-M057
600 (447)	1200	2U2	FMER-G92U-U057
800 (596)	1200	2V	FMER-G92V-Q057
1000 (745)	1200	2V	FMER-G92V-S057
1500 (1118)	1200	2W	FMER-G92V-S557