

**Power line filters for single-phase systems**

**Rated voltage 250 V~, 50/60 Hz**

**Rated current 10 to 60 A**

**Construction**

- Two-line filter
- Metal case

**Features**

- High insertion loss
- Easy to install
- Degree of protection: IP 20<sup>1)</sup>
- Space-saving design
- Design complies with  
EN 133 200, UL 1283, CSA 22.2 No.8 1986
- Optimized for long motor cables  
and operation under full load
- EN, UL and CSA approval pending

**Applications**

- Frequency converters for motor drives, e.g.
  - elevators
  - conveyor systems
  - pumps
  - traction systems
  - HVAC systems (heating, ventilation and air conditioning)
- Power supplies

**Terminals**

- Safe-to-touch terminal blocks

**Marking**

Marking on component:

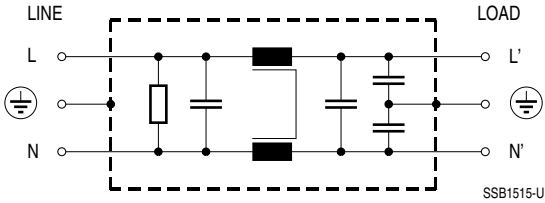
Manufacturer's logo, ordering code,  
rated voltage, rated current,  
rated temperature, date code

Minimum marking on packaging:

Manufacturer's logo, ordering code



1) In accordance with IEC 60529: 1989; EN 60529: 1991; DIN VDE 0470-1

**Typical circuit diagram**

**Technical data**

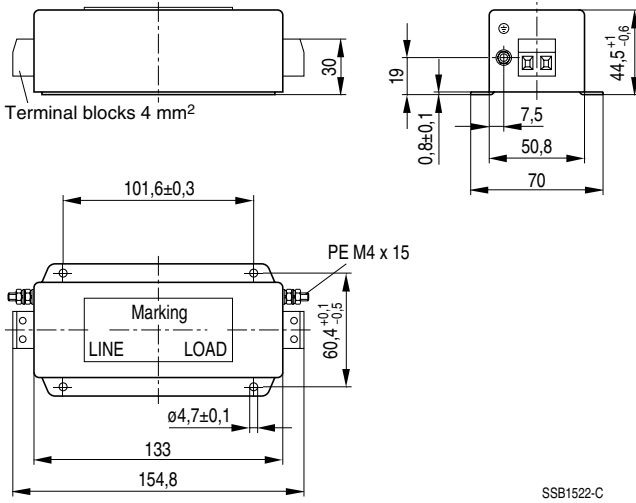
Rated voltage $V_R$	250 V~, 50/60 Hz
Rated current $I_R$	Referred to 40 °C ambient temperature
Test voltage $V_P$	1770 V~, 2 s (line/line) 2700 V~, 2 s (lines/case)
Overload capability	1,5 · $I_R$ for 3 min per hour or 2,5 · $I_R$ for 30 s per hour
Leakage current $I_{leak}$	at 250 V~, 50 Hz
Climatic category	25/100/21 (- 25 °C/+ 100 °C/21 days damp heat test) in accordance with EN 60068-1

**Characteristics and ordering codes**

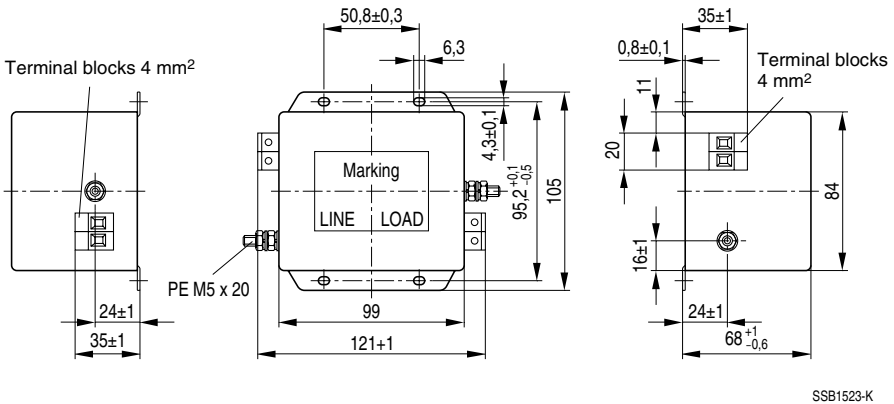
$I_R$	Terminal cross section mm <sup>2</sup>	$I_{leak}$ mA	$R_{typ}$ mΩ	Approx. weight kg	Ordering code
A					
10	4	< 8	18	0,55	B84142-A10-R
20	4	< 8	10	1,0	B84142-A20-R
30	6	< 8	5	1,0	B84142-A30-R
40	6	< 17	3,6	1,0	B84142-A40-R
50	16	< 26	1,8	2,5	B84142-A50-R
60	16	< 26	1,4	2,5	B84142-A60-R

Dimensional drawings

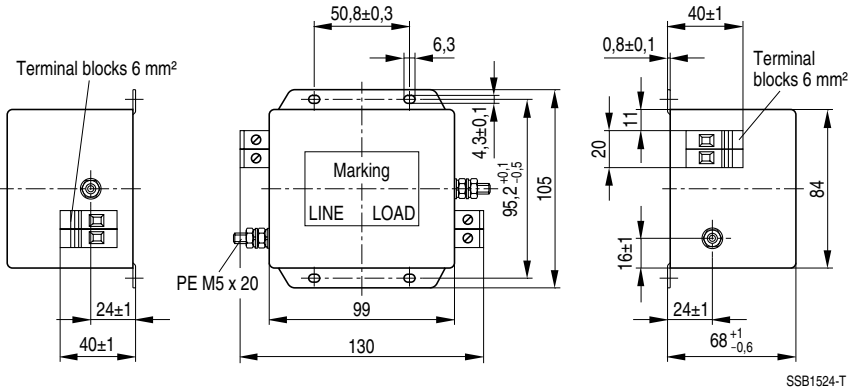
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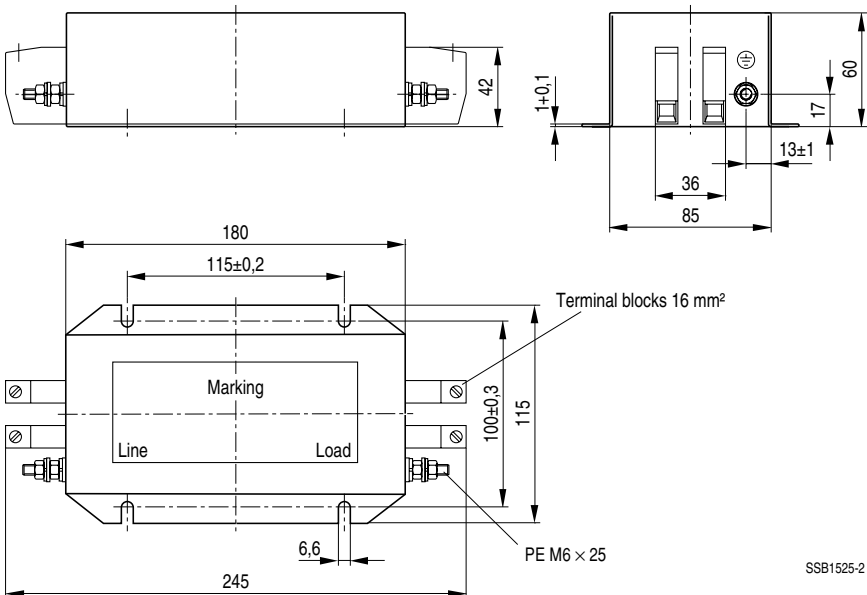
B84142-A20-R



B84142-A30-R, B84142-A40-R



B84142-A50-R, B84142-A60-R

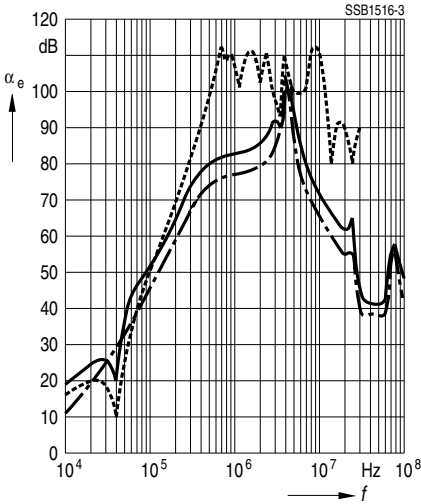


for Converters and Power Electronics

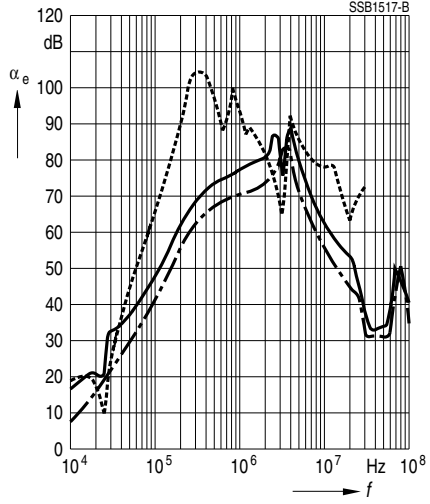
Insertion loss (typical values at  $Z = 50 \Omega$ )

- unsymmetrical, adjacent branches terminated
- - - - - common mode, all branches in parallel (asymmetrical)
- - - - - differential mode (symmetrical)

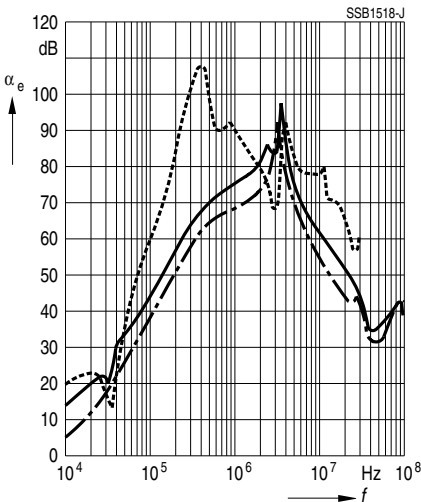
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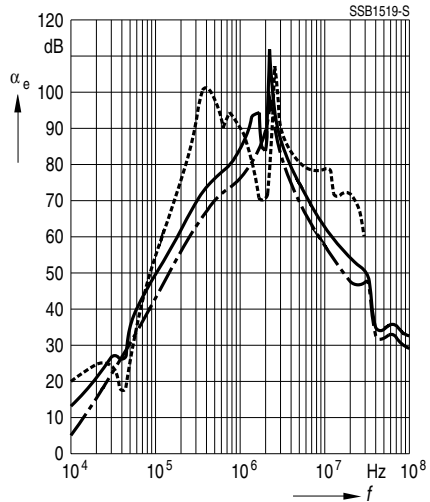
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B84142-A30-R



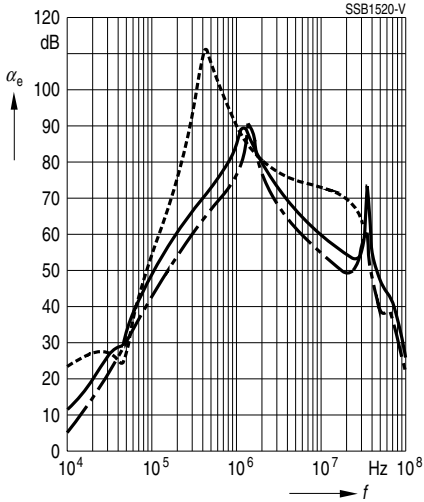
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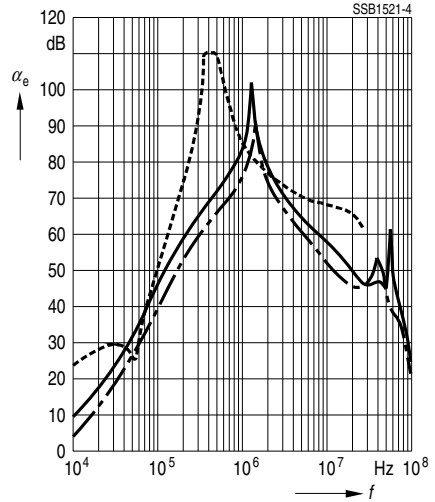
**Insertion loss** (typical values at  $Z = 50 \Omega$ )

- unsymmetrical, adjacent branches terminated
- - - - - common mode, all branches in parallel (asymmetrical)
- - - - - differential mode (symmetrical)

B84142-A50-R



B84142-A60-R



**Herausgegeben von EPCOS AG**

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