



2-Line Filters

B84142-A*-R

for Converters and Power Electronics

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 20¹⁾
- 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

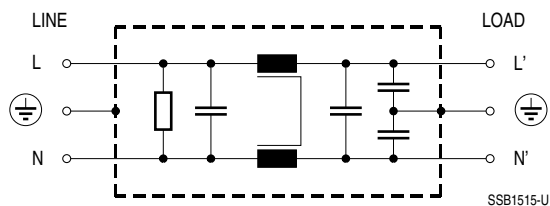


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Typical circuit diagram



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 ²	I_{leak} mA	R_{typ} mΩ	Approx. weight kg	Ordering code
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



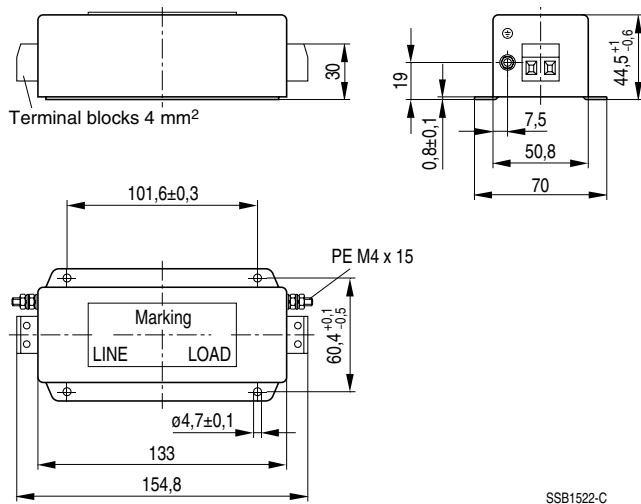
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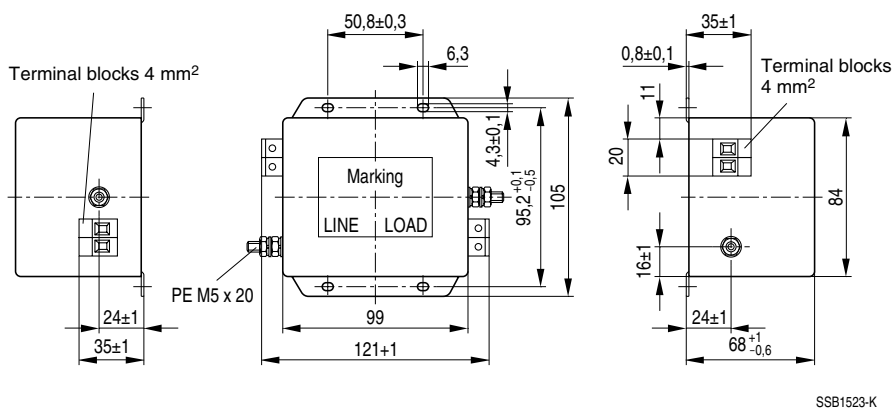
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Dimensional drawings

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B84142-A20-R



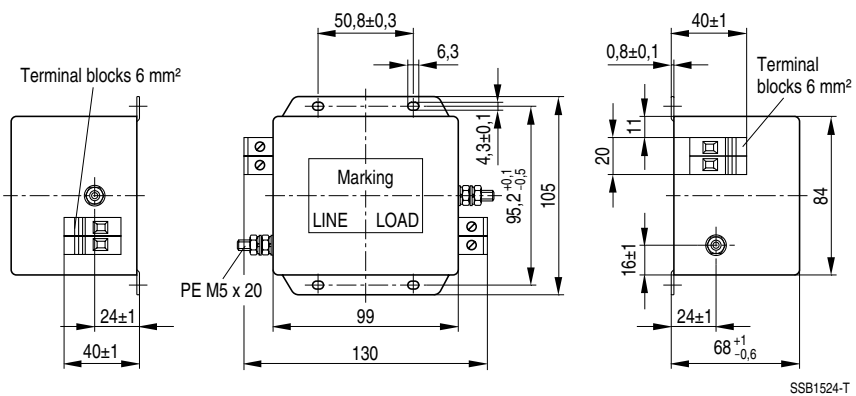


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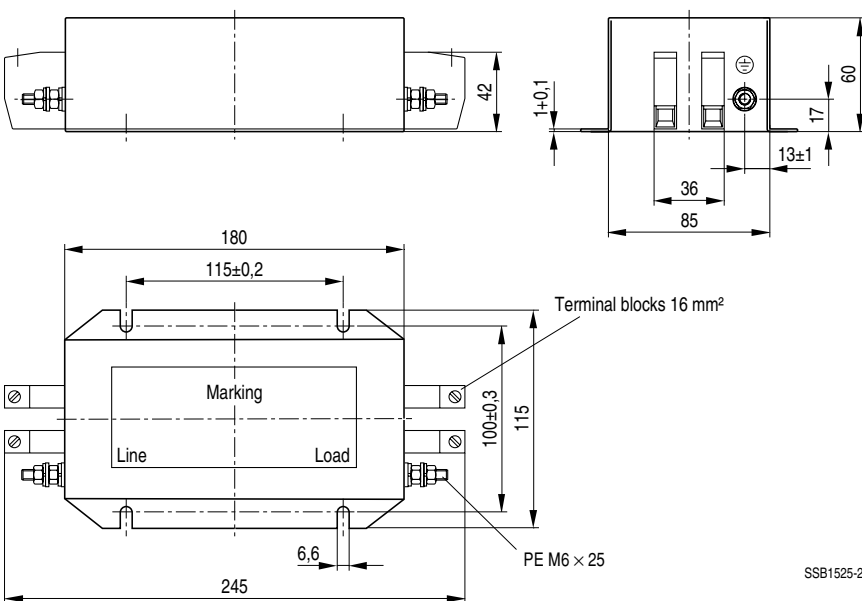
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B84142-A30-R, B84142-A40-R



B84142-A50-R, B84142-A60-R

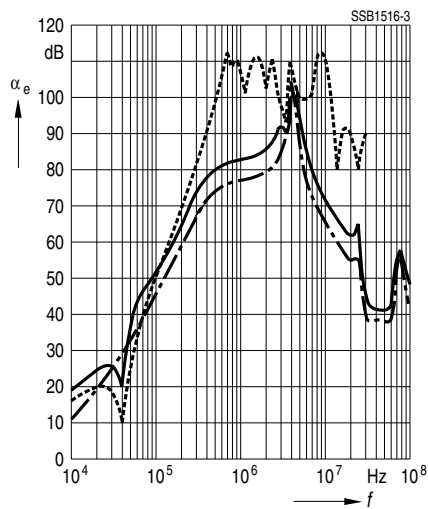




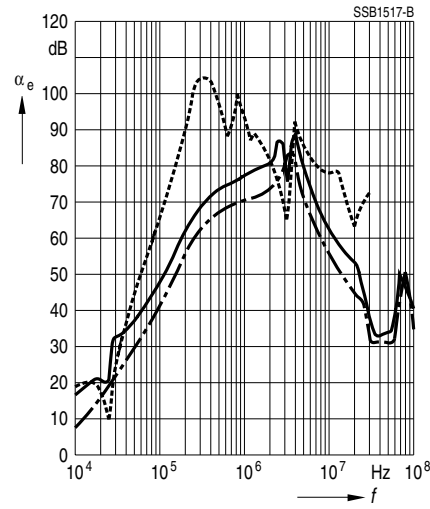
Insertion loss (typical values at $Z = 50 \Omega$)

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

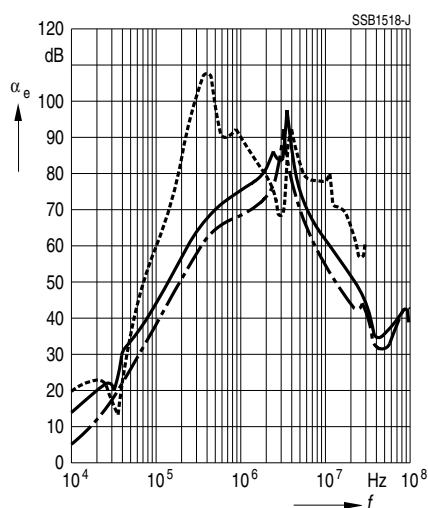
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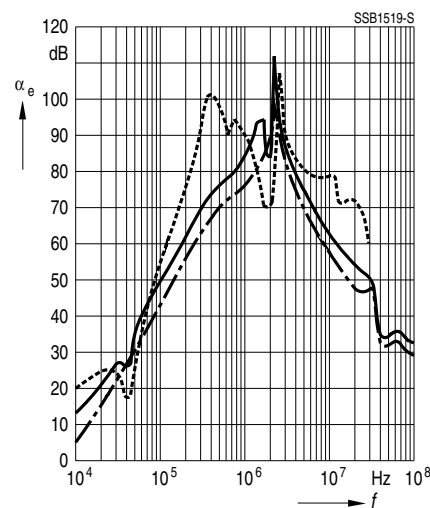
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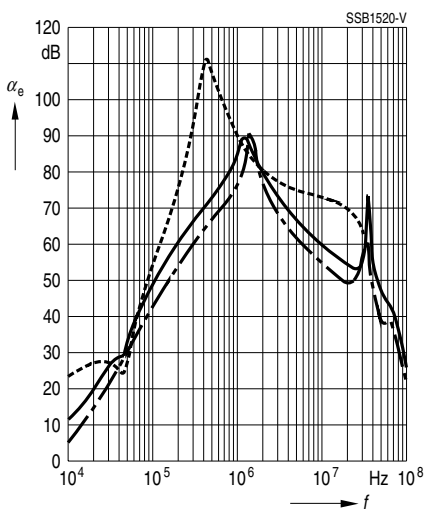




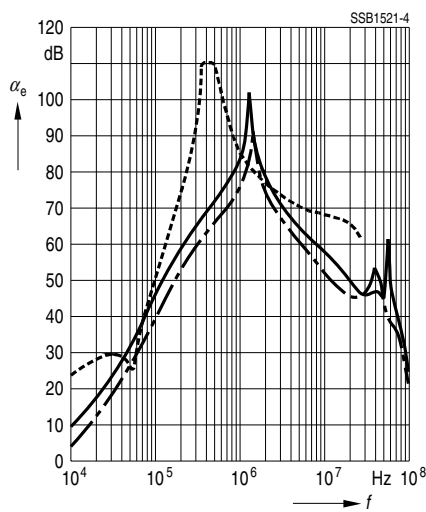
Insertion loss (typical values at $Z = 50 \Omega$)

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

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B84142-A60-R



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