

**Power line filters for three-phase systems**
**Rated voltage 760/440 V~, 50/60 Hz**
**Rated current 25 to 180 A**
**Construction**

- Three-line filter
- Metal case

**Features**

- High insertion loss
- Low leakage current
- Easy to install
- Degree of protection: IP 20<sup>1)</sup>
- Space-saving design
- Design based on  
EN 133200, UL 1283, CSA 22.2 No.8 1986
- Optimized for long motor cables and  
operation under full load

**Applications**

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

**Terminals**

- Safe-to-touch terminal blocks

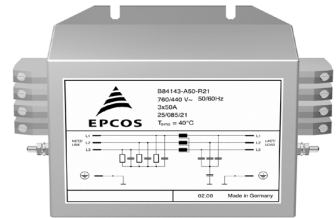
**Marking**

Marking on component:

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

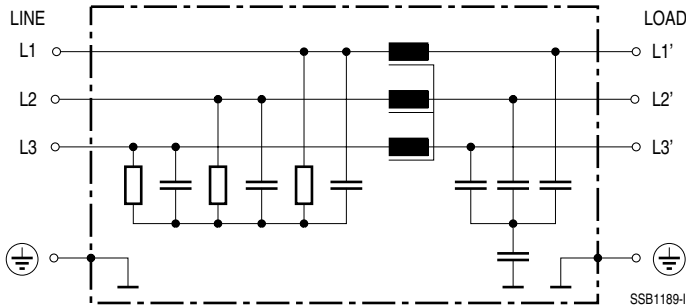
Minimum marking on packaging:

Manufacturer's logo, ordering code



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

**Typical circuit diagram**



**Technical data**

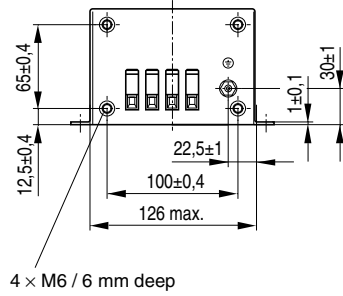
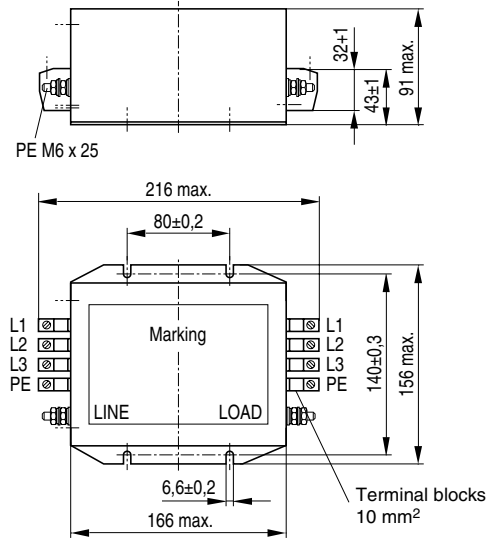
Rated voltage $V_R$	760/440 V~, 50/60 Hz
Rated current $I_R$	referred to 40 °C ambient temperature
Test voltage $V_P$	2121 V-, 2 s (line/line) 2700 V-, 2 s (lines/case)
Overload capability	$1,5 \cdot I_R$ for 3 min per hour or $2,5 \cdot I_R$ for 30 s per hour
Leakage current $I_{leak}$	at 690 V~, 50 Hz
Climatic category	25/1005/21 (- 25 °C/+ 100 °C/21 days damp heat test) in accordance with EN 60068-1

**Characteristics and ordering codes**

$I_R$	Terminal cross section $\text{mm}^2$	$I_{leak}$ mA	$R_{typ}$ m $\Omega$	Approx. weight kg	Ordering code
A					
25	10	< 7	8,0	4	B84143-A25-R21
36	10	< 7	3,8	4	B84143-A36-R21
50	10	< 12	2,0	4	B84143-A50-R21
80	25	< 12	1,0	9,5	B84143-A80-R21
120	50	< 12	0,75	10	B84143-A120-R21
150	50	< 12	0,4	10	B84143-A150-R21
180	95	< 12	0,4	13	B84143-A180-R21

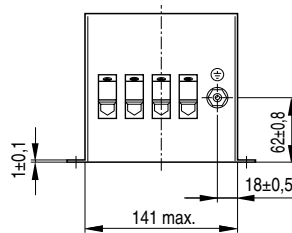
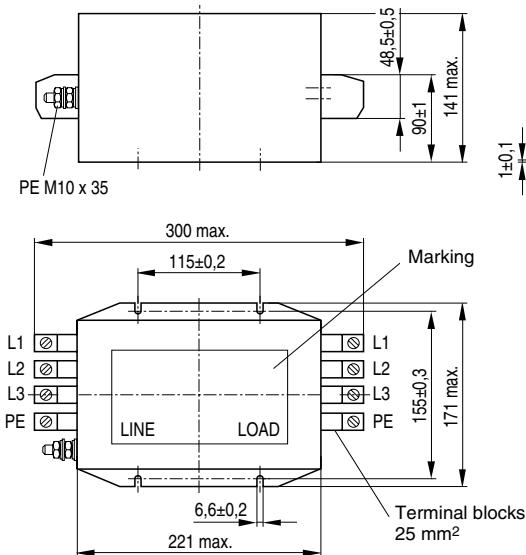
Dimensional drawings

B84143-A25-R21 ... A50-R21



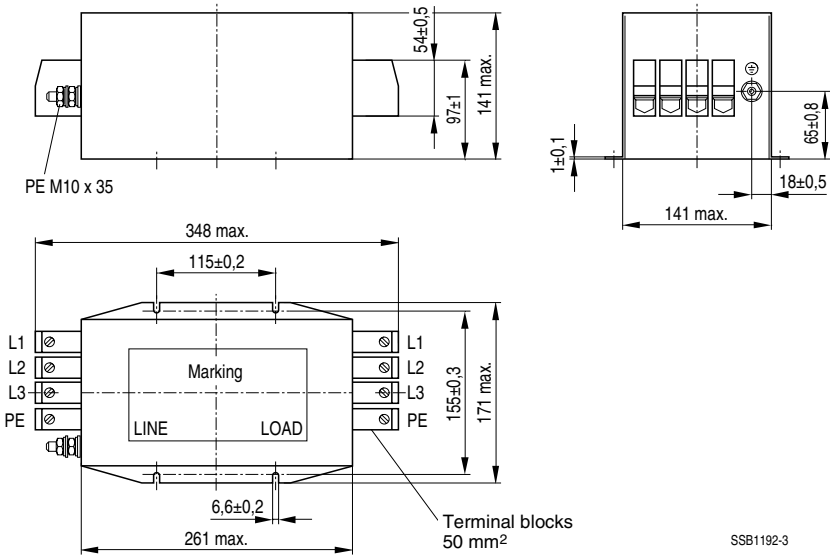
SSB1190-L

B84143-A80-R21

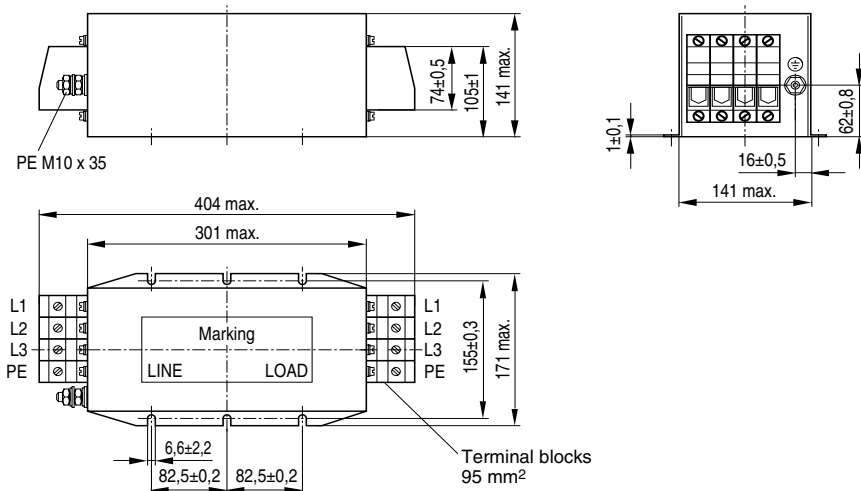


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B84143-A120-R21, B84143-A150-R21



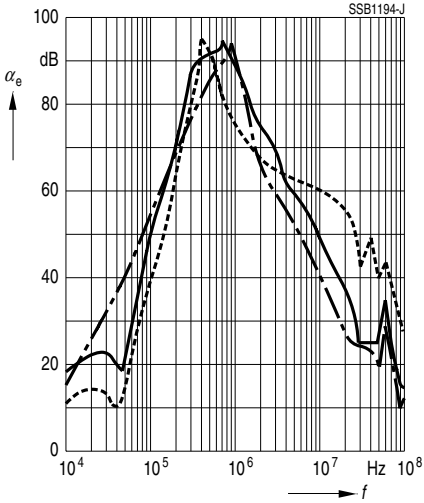
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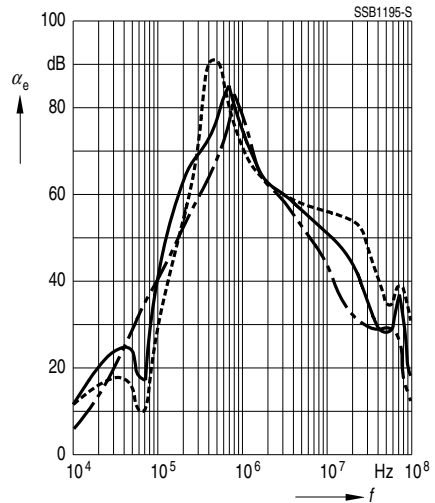
**Insertion loss** (typical values at  $Z = 50 \Omega$ )

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

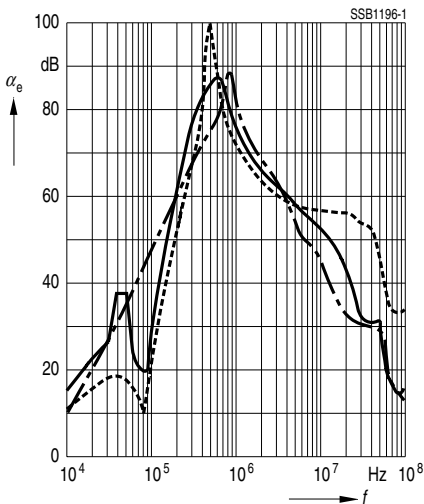
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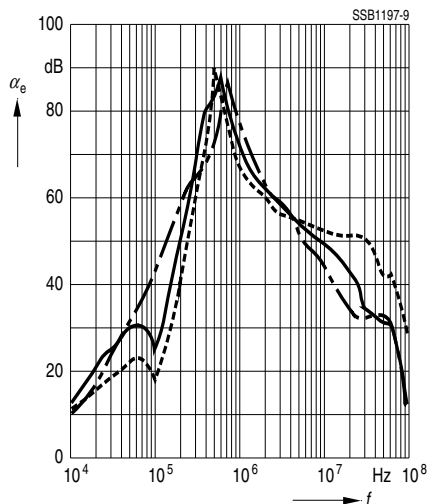
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B84143-A50-R21/B84143-A80-R21



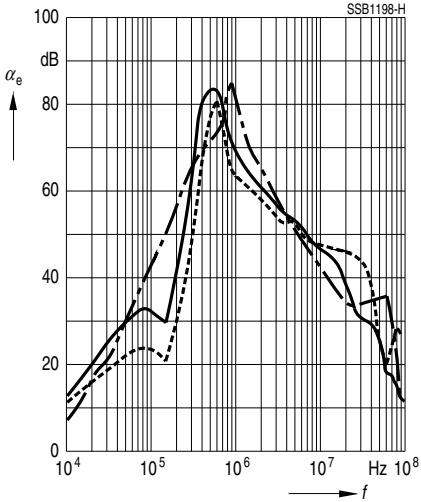
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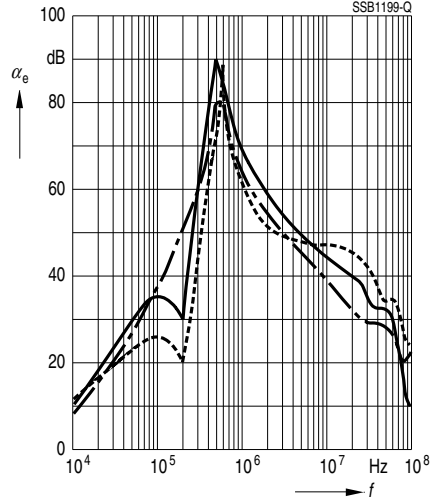
**Insertion loss** (typical values at  $Z = 50 \Omega$ )

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

B84143-A150-R21



B84143-A180-R21



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