



# EMC Filters

3-Line Filters  
B84143-A\*-R105

Data Sheet



<http://www.epcos.com>

### Power line filters for three-phase systems

Rated voltage 480/275 V~, 50/60 Hz

Rated current 8 bis 50 A

#### Construction

- Three-line filter
- Metal case
- Book size



#### Features

- Low leakage current
- Easy to install
- Compact design
- Construction complies with EN 133200, UL 1283, CSA 22.2 No. 8 1986
- Optimized for long motor cables and operation under full loads
- UL and CSA approval pending

#### Applications

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

#### Terminals

Safe-to-touch terminal blocks

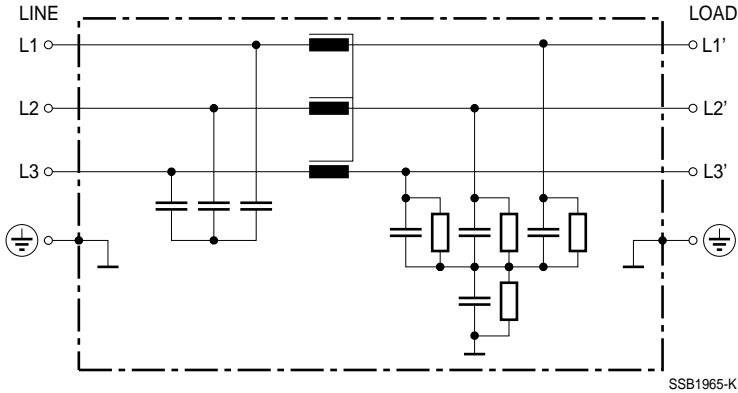
#### Marking

Marking on component:

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

Minimum marking on packaging:

Manufacturer's logo, ordering code

**Typical circuit diagrams**

**Technical data**

Rated voltage $V_R$	480/275 V~, 50/60 Hz
Rated current $I_R$	Referred to 40 °C ambient temperature
Test voltage $V_T$	2121 V~, 2 s (line/line) 2700 V~, 2 s (line/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 480 V~, 50 Hz
Climatic category	25/085/21 (– 25 °C/+85 °C/21 days damp heat test) in accordance with EN 60068-1

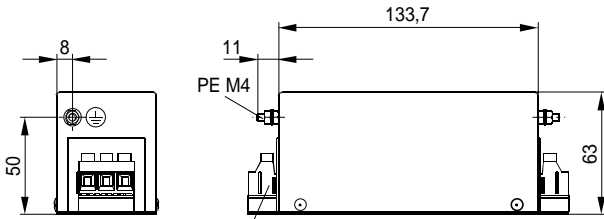
**Characteristics and ordering codes**

$I_R$ A	Terminal cross section mm <sup>2</sup>	$I_{leak}$ typ <sup>1)</sup> mA	$R_{typ}$ mΩ	Approx. weight kg	Ordering code
8	4	12	16	0,58	B84143-A8-R105
16	4	14	9	0,90	B84143-A16-R105
25	4	14	5	1,10	B84143-A25-R105
36	10	14	4	1,75	B84143-A36-R105
50	10	14	2	1,75	B84143-A50-R105

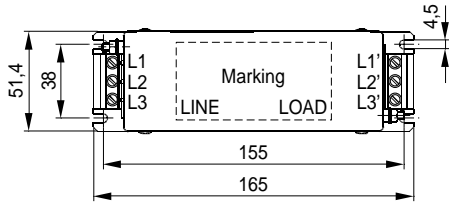
<sup>1)</sup> At rated operation

Dimensional drawings

B84143-A8-R105

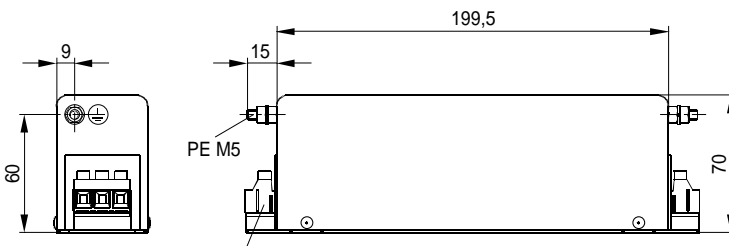


Terminal blocks 4 mm<sup>2</sup>

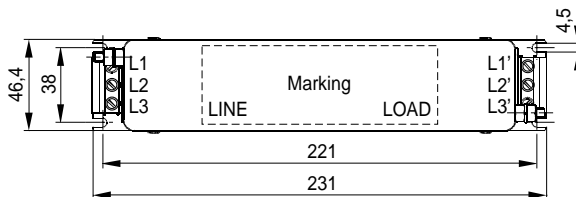


SSB1988-P

B84143-A16-R105

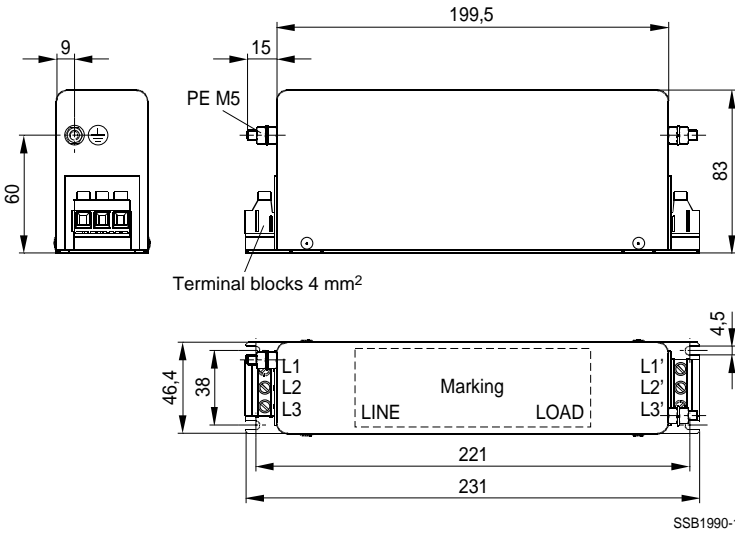


Terminal blocks 4 mm<sup>2</sup>

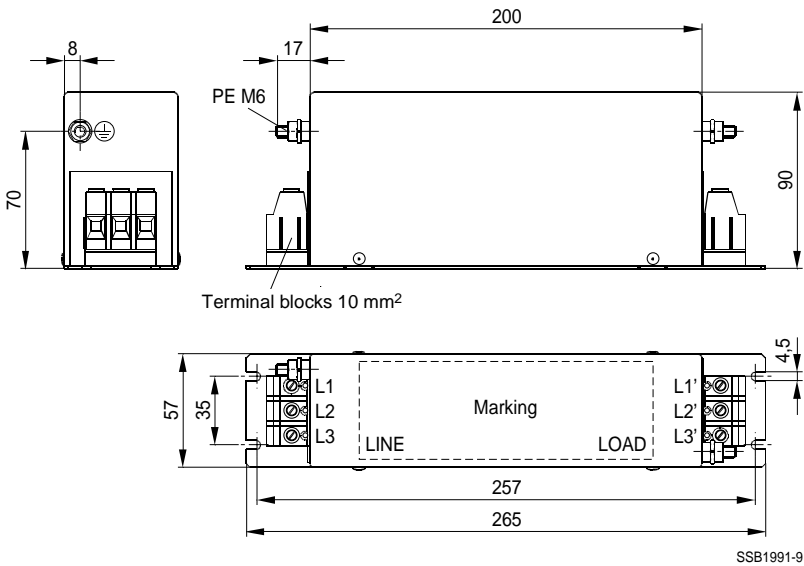


SSB1989-X

**B84143-A25-R105**

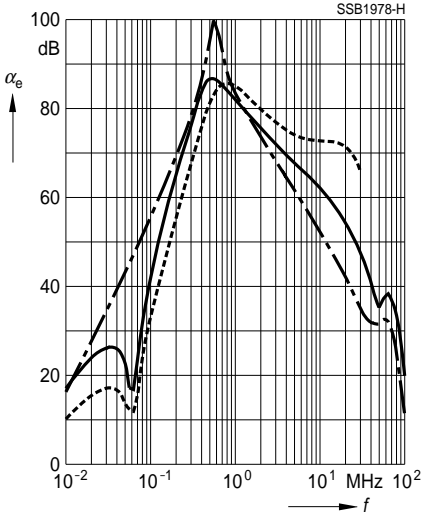
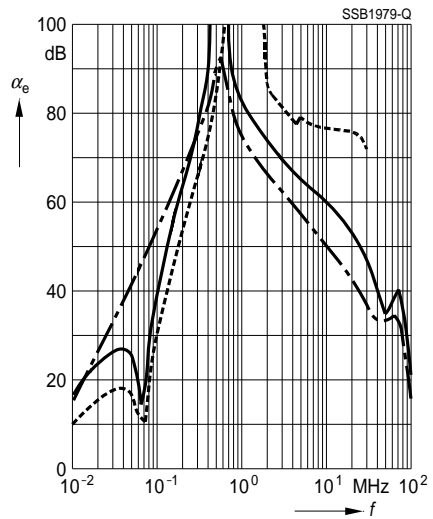
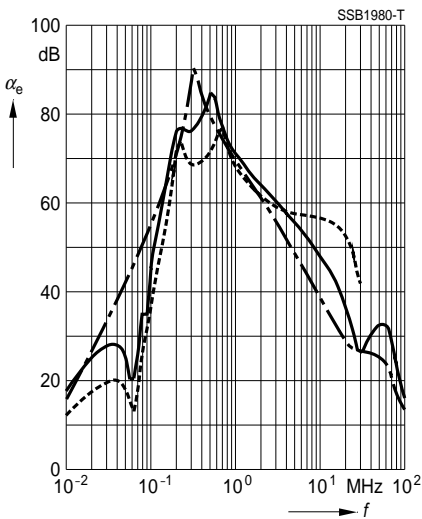
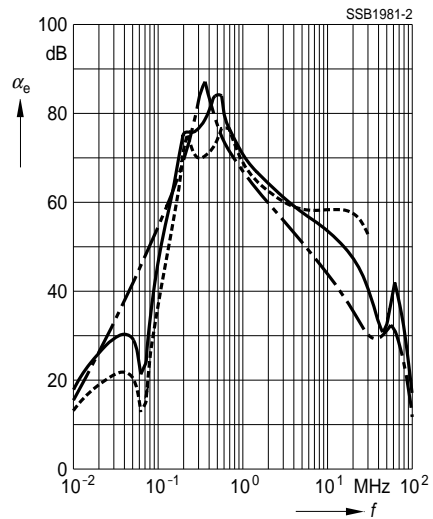


**B84143-A36-R105, B84143-A50-R105**



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

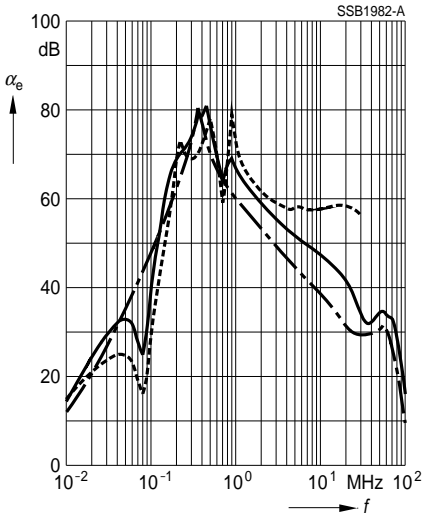
- unsymmetrical, adjacent branches terminated
- - - - - common mode, all branches in parallel (asymmetrical)
- - - - - differential mode (symmetrical)

**B84143-A8-R105**

**B84143-A16-R105**

**B84143-A25-R105**

**B84143-A36-R105**


**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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