



EMC filters

2-line filters
for installations and systems
Rated current 2 to 36 A

Series/Type: B84299K0061 ... K0067

Date: January 2006


**Power line filters for 1-phase systems
with additional LF suppression**
Rated voltage 250 V DC/AC, 50/60 Hz
Rated current 2 to 36 A

Construction

- 2-line filter
- Metal case
- Polyurethane potting (UL 94 V-0)



Features

- Especially high differential-mode insertion loss from 20 kHz upwards
- Safe mounting by press-in nuts
- Space-saving design
- ENEC10 and UL approval 

Applications

- Switch-mode power supplies for traction, safety systems, automation engineering
- Power supplies
- Industrial electronics
- DC applications

Terminals

- Litz wires

Marking

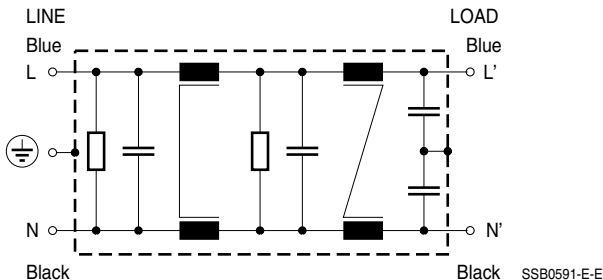
Marking on component:

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

Minimum marking on packaging:

Manufacturer's logo, ordering code



Typical circuit diagram



Technical data and measuring conditions

Rated voltage V_R	250 V DC/AC, 50/60 Hz
Rated current I_R	Referred to 40 °C ambient temperature
Test voltage V_{test}	1414 V DC, 2 s (line/line) 2830 V DC, 2 s (lines/case)
Overload capability (thermal)	1.5 · I_R for 3 min per hour or 2.5 · I_R for 30 s per hour
Leakage current I_{leak}	At 230 V AC, 50 Hz
Climatic category (IEC 60068-1)	For K0061 and K0062: 25/100/21 (-25 °C/+100 °C/21 days damp heat test) For K0063 ... K0067: 25/085/21 (-25 °C/+85 °C/21 days damp heat test)
Approvals	EN 133200, UL 1283

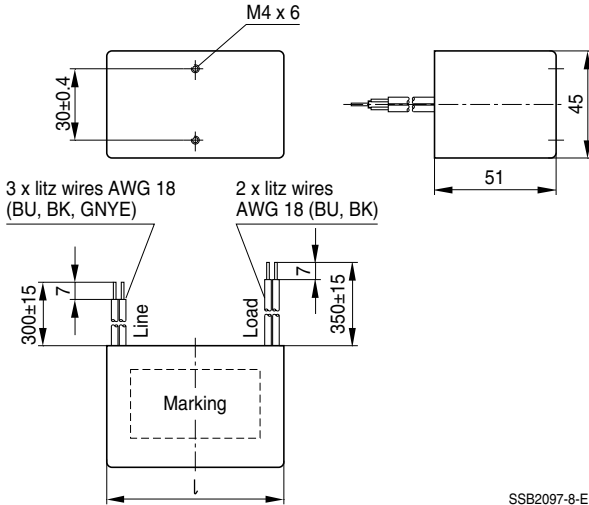
Characteristics and ordering codes

V_R AC/DC V	I_R A	Terminal cross section		I_{leak} mA	R_{typ} mΩ	Approx. weight kg	Ordering code	Approvals	
		mm ²	AWG						
250	2	1.0	18	< 3.5	530	0.35	B84299K0061C000	×	—
	4	1.0	18	< 3.5	150	0.37	B84299K0062C000	×	—
	6	1.0	18	< 3.5	100	0.82	B84299K0063	—	×
	10	1.5	16	< 3.5	45	1.0	B84299K0064C000	—	×
	16	2.5	14	< 3.5	35	1.8	B84299K0065	—	—
	25	4.0	12	< 3.5	25	2.9	B84299K0066	—	—
	36	6.0	10	< 10	10	2.9	B84299K0067	—	—

× = approval granted

Dimensional drawings

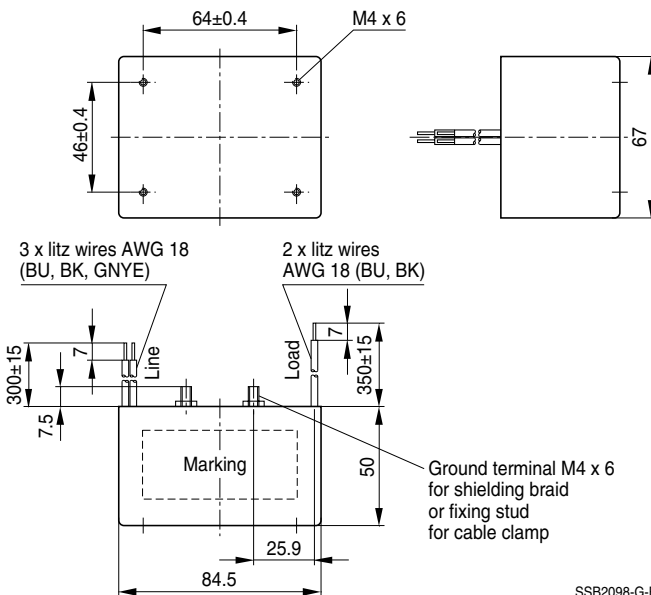
B84299K0061C000, B84299K0062C000 (2 and 4 A)



Type	Length
B84299K0061C000	65 mm
B84299K0062C000	75 mm

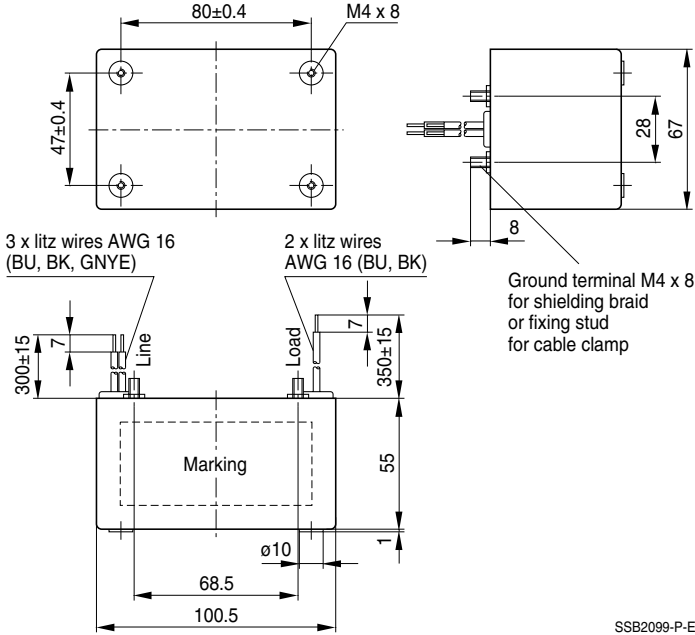
SSB2097-8-E

B84299K0063 (6 A)



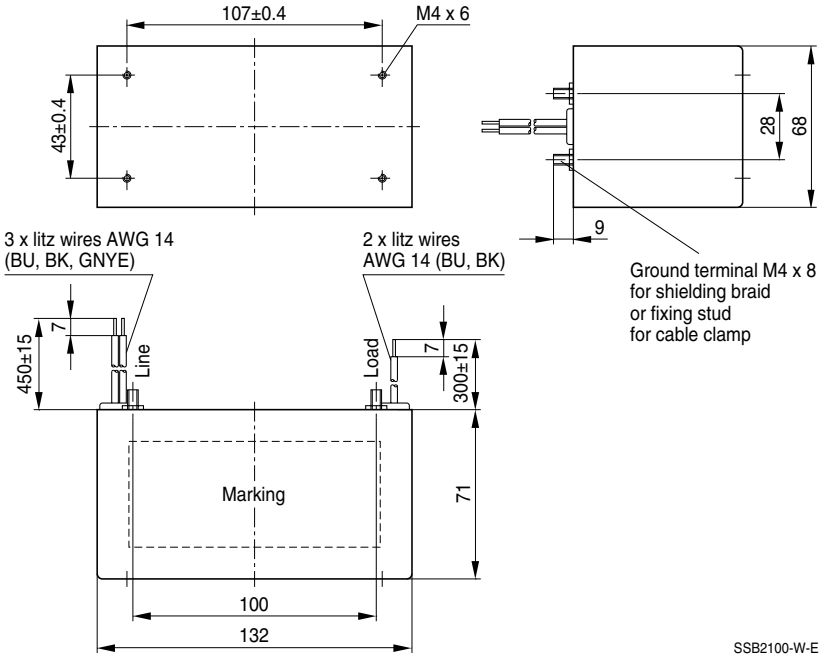
SSB2098-G-E

B84299K0064C000 (10 A)



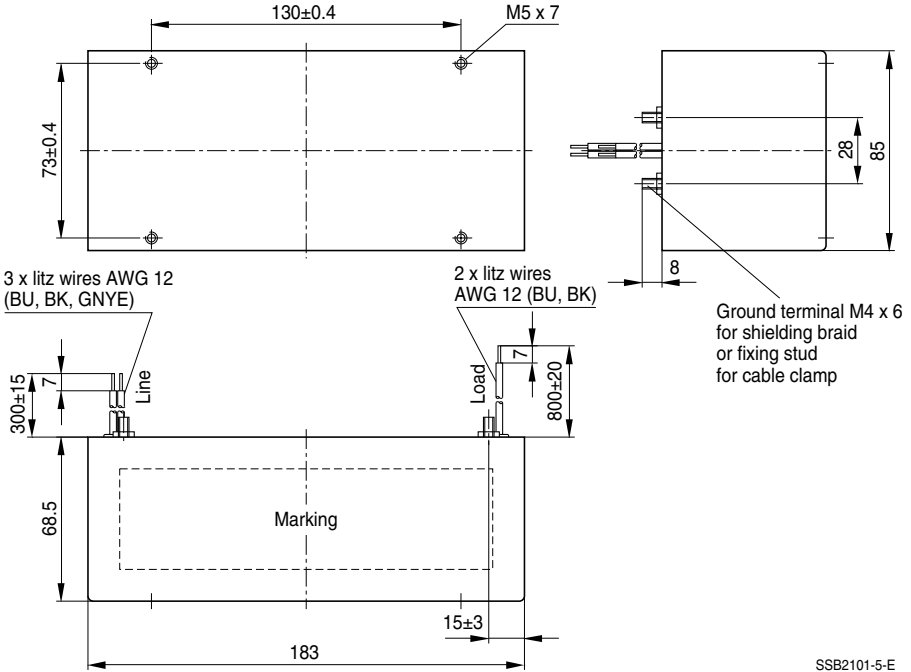
SSB2099-P-E

B84299K0065 (16 A)



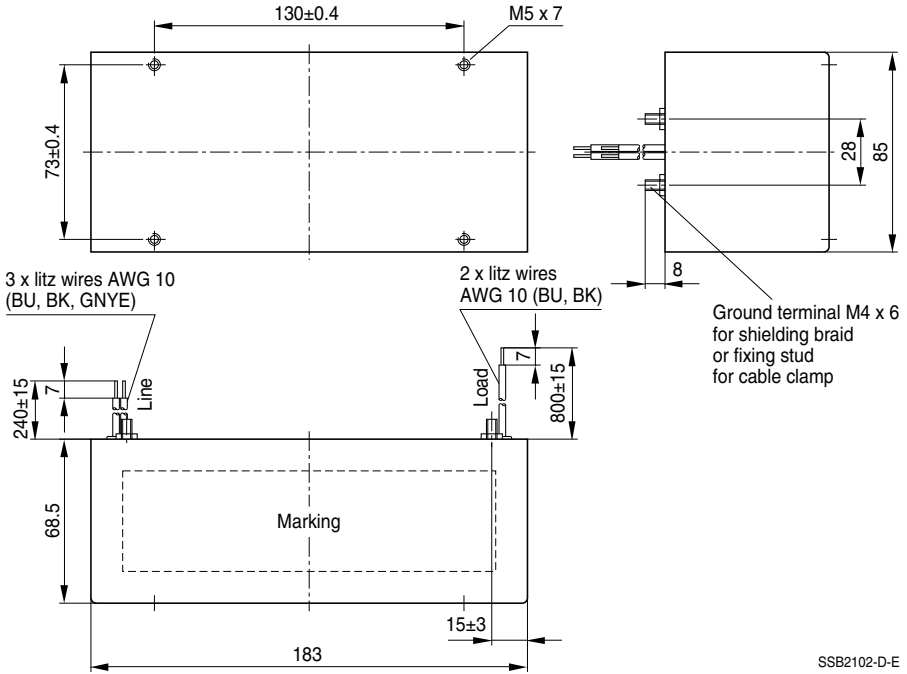
SSB2100-W-E

B84299K0066 (25 A)



SSB2101-5-E

B84299K0067 (36 A)

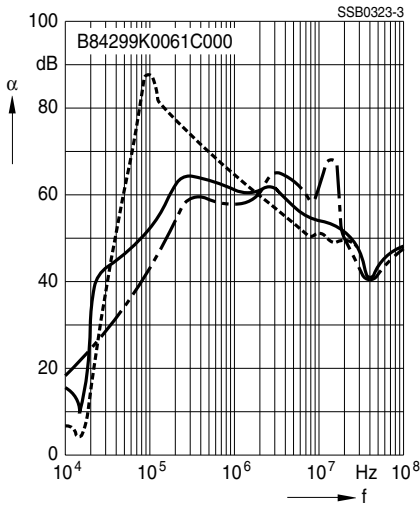


SSB2102-D-E

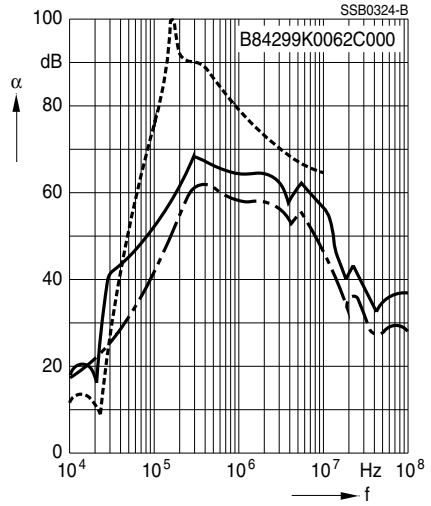
Insertion loss (typical values at $Z = 50 \Omega$)

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

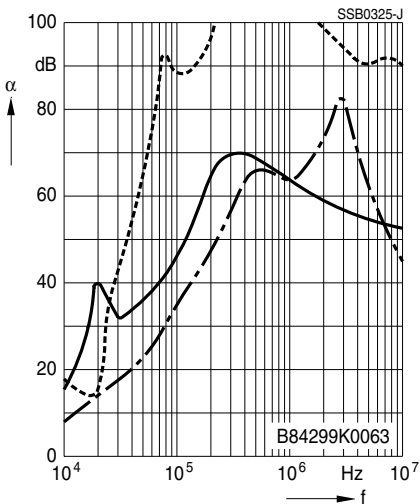
Filters for 2 A



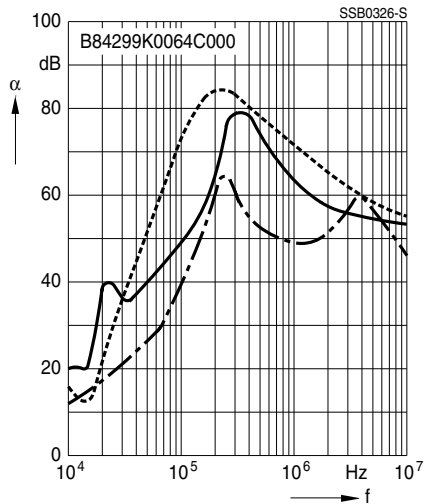
Filters for 4 A



Filters for 6 A



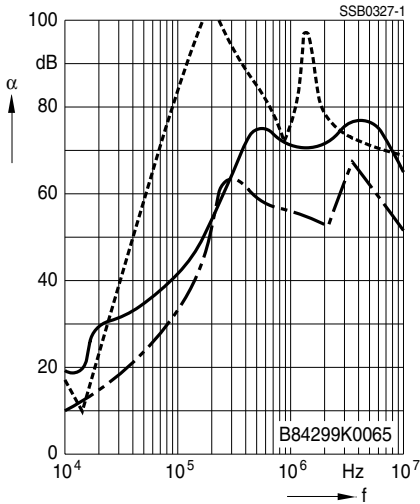
Filters for 10 A



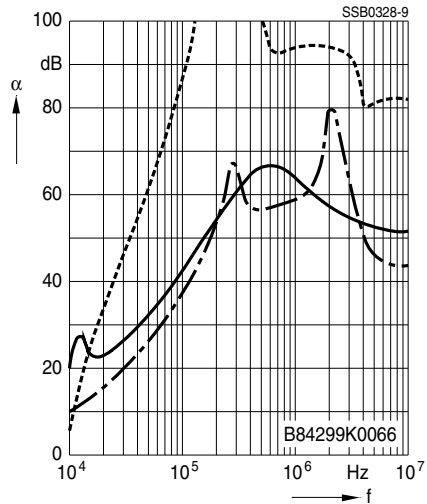
Insertion loss (typical values at $Z = 50 \Omega$)

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

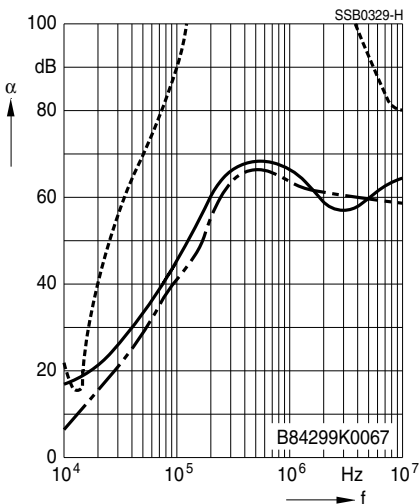
Filters for 16 A




Filters for 25 A



Filters for 36 A



Important information

Please read all safety and warning notes carefully before installing the EMC filter and putting it into operation (see ) . The same applies to the warning signs on the filter. Please ensure that the signs are not removed nor their legibility impaired by external influences.

Death, serious bodily injury and substantial material damage to equipment may occur if the appropriate safety measures are not carried out or the warnings in the text are not observed.

Using according to the terms

The EMC filters may be used only for their intended application within the specified values in low-voltage networks in compliance with the instructions given in the data sheets and the data book. The conditions at the place of application must comply with all specifications for the filter used.

Warnings

- It shall be ensured that only qualified persons (electricity specialists) are engaged on work such as planning, assembly, installation, operation, repair and maintenance. They must be provided with the corresponding documentation.
- Danger of electric shock. EMC filters contain components that store an electric charge. Dangerous voltages can continue to exist at the filter terminals for longer than five minutes even after the power has been switched off.
- The protective earth connections shall be the first to be made when the EMC filter is installed and the last to be disconnected. Depending on the magnitude of the leakage currents, the particular specifications for making the protective-earth connection must be observed.
- Impermissible overloading of the EMC filter, such as impermissible voltages at higher frequencies that may cause resonances etc. can lead to destruction of the filter housing.
- EMC filters must be protected in the application against impermissible exceeding of the rated currents by suitable overcurrent protective.

The following applies to all products named in this publication:

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