EMC filters

4-line filters
for installations and systems
Rated current 6 to 125 A

Series/Type: **B84131**
Date: January 2006

Power line filters for 3-phase systems
Rated voltage 440/250 V AC, 50/60 Hz
Rated current 6 to 125 A

Construction

- 4-line filter
- Metal case

Features

- High insertion loss
- Compact, cost-optimized design
- Easy to install
- ENEC10, UL and CSA approval

Applications

- Power supplies for
  - data systems, telecom systems
  - medical equipment, industrial installations
  - copiers

Terminals

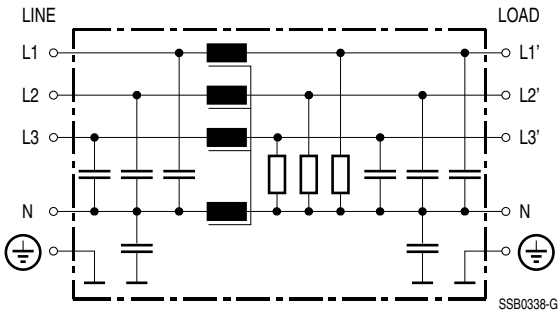
- Tab connectors 6.3 × 0.8 mm
- Screw terminals

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

Circuit diagram



Technical data and measuring conditions

Rated voltage V_R	440/250 V AC, 50/60 Hz
Rated current I_R	Referred to 40 °C ambient temperature
Test voltage V_{test}	1770 V DC, 2 s (line/line) 2700 V DC, 2 s (lines/case)
Leakage current I_{leak}	At 400 V AC, 50 Hz
Climatic category (IEC 60068-1)	25/085/21 (–25 °C/+85 °C/21 days damp heat test)
Approvals	EN 133200, UL 1283, CSA C22.2 No.8

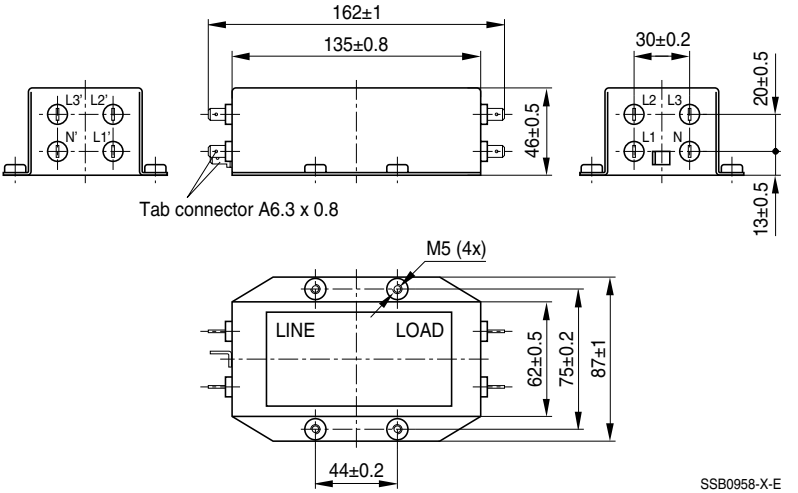
Characteristics and ordering codes

V_R AC	I_R	I_{leak}	Approx. weight	Ordering code	Approvals		
V	A	mA	kg				
440/250	6	< 3.5	0.8	B84131A0006A001	×	–	–
	16	< 3.5	1.5	B84131M0003A116	×	×	×
	25	< 3.5	2.3	B84131M0001G125	×	×	c
	35	< 3.5	2.3	B84131M0001G135	×	×	×
	35	< 3.5	2.3	B84131M0001H135	–	×	×
	50	< 3.5	4.5	B84131M0002G150	×	×	×
	63	< 3.5	4.5	B84131M0002G163	×	×	×
	80	< 3.5	12.5	B84131M0004G180	×	–	–
	125	< 3.5	12.5	B84131M0004G225	×	–	–

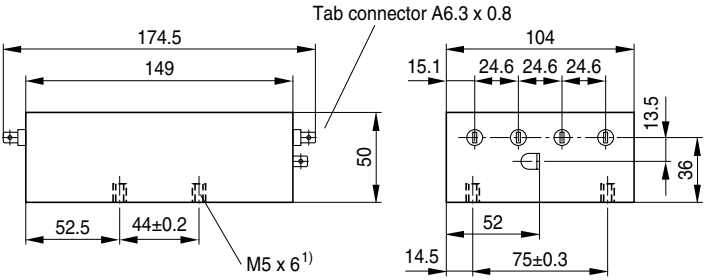
× = approval granted

Dimensional drawings

B84131A0006A001 (6 A)

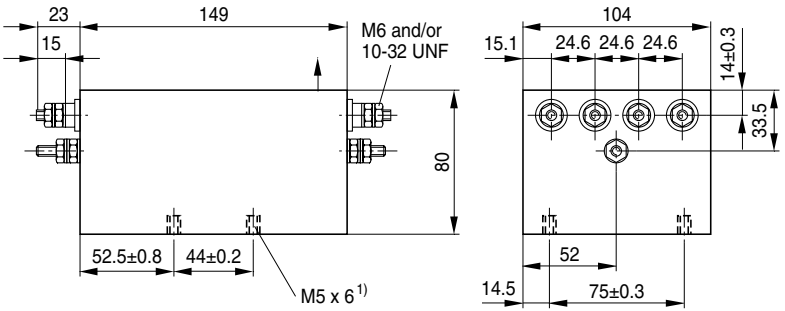


B84131M0003A116 (16 A)



1) Also suitable for screws with 10-32 UNF thread

B84131M0001G125, B84131M0001G135/H135 (25 A, 35 A)



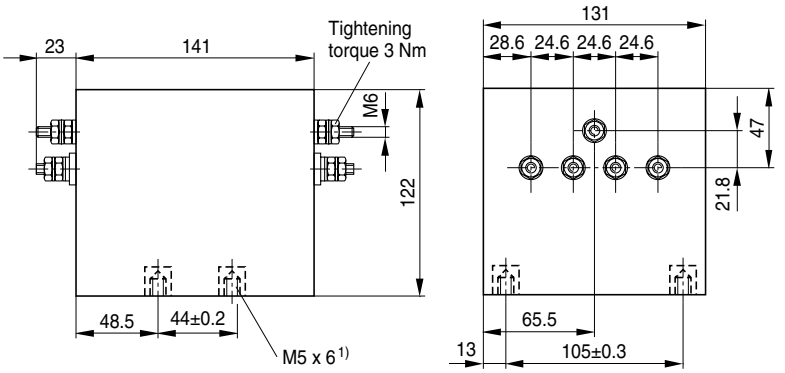
1) Also suitable for screws with 10-32 UNF thread

SSB0321-L-E

Type B84131M0001	I_R A	Screw thread	Tightening torque Nm
G125	25	M6	3
G135	35	M6	3
H135	35	10-32 UNF	2

B84131M0002G150, B84131M0002G163 (50 A, 63 A)

Screw thread M6

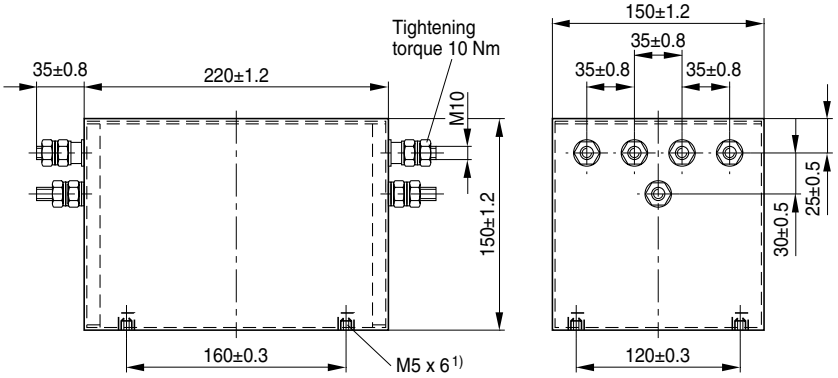


1) Also suitable for screws with 10-32 UNF thread

SSB0322-U-E

B84131M0004G180, B84131M0004G225 (80 A, 125 A)

Screw thread M10



1) Also suitable for screws with 10-32 UNF thread

SSB0544-3-E

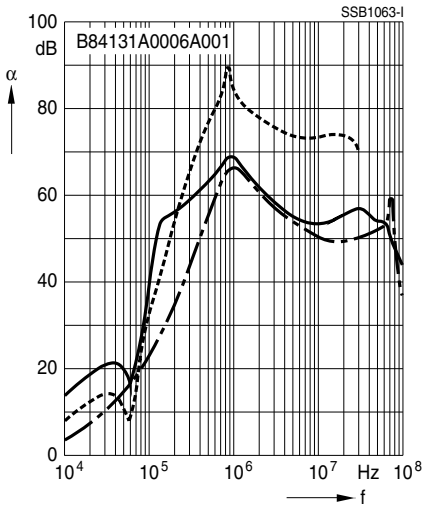
Insertion loss (typical values at Z = 50 Ω)

——————— unsymmetrical, adjacent branches terminated

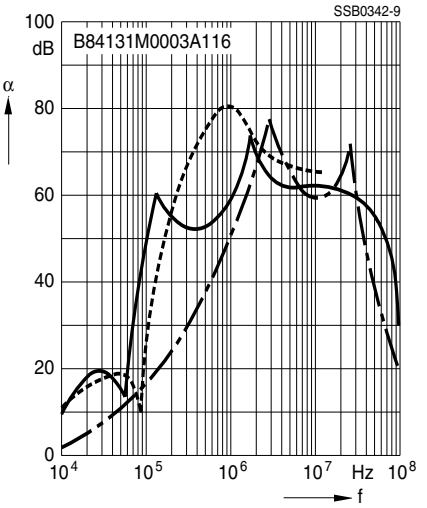
– · – · – · – · – common mode, all branches in parallel (asymmetrical)

– – – – – – – – differential mode (symmetrical)

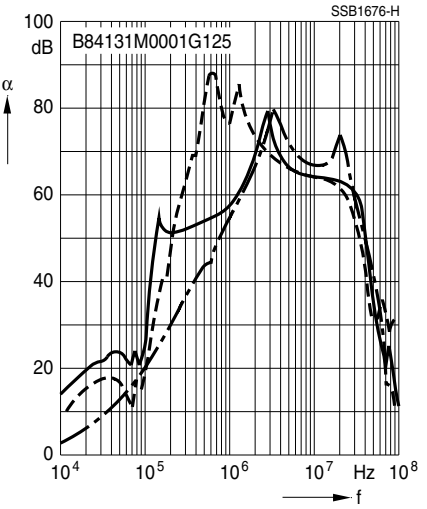
Filters for 6 A



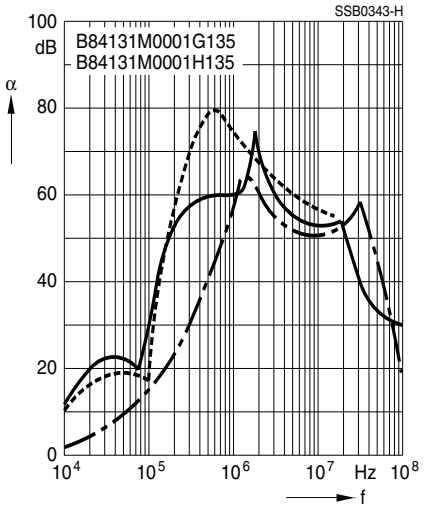
Filters for 16 A



Filters for 25 A



Filters for 35 A



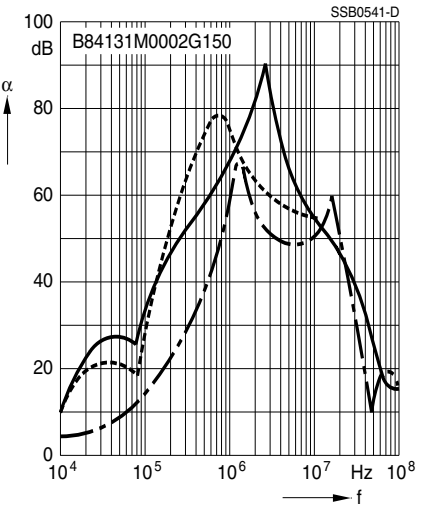
Insertion loss (typical values at Z = 50 Ω)

——————— unsymmetrical, adjacent branches terminated

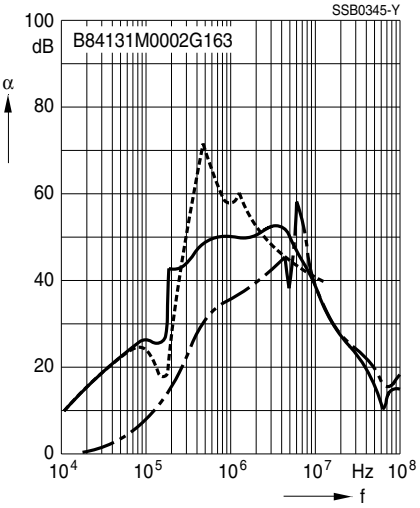
– · – · – · – · – common mode, all branches in parallel (asymmetrical)

– – – – – – – – differential mode (symmetrical)

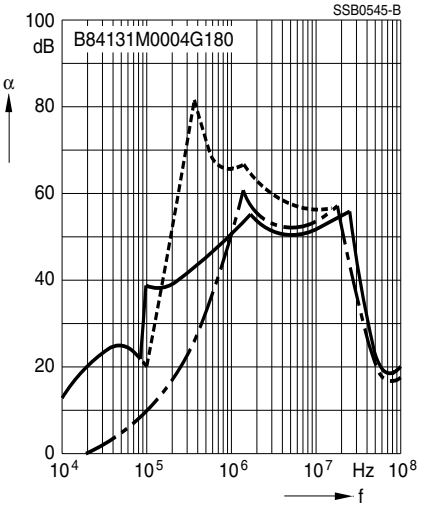
Filters for 50 A



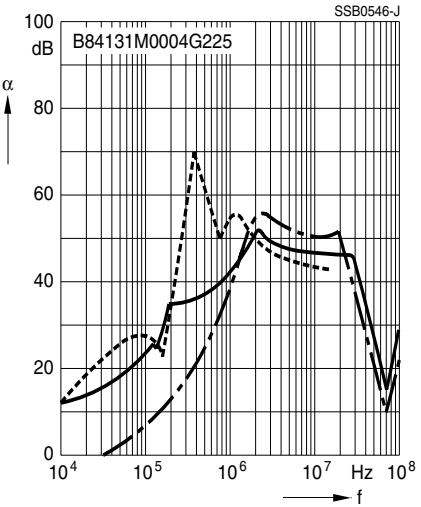
Filters for 63 A



Filters for 80 A



Filters for 125 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:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application.** As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
2. We also point out that **in individual cases, a malfunction of passive electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified.** In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of a passive electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of a passive electronic component.
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- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
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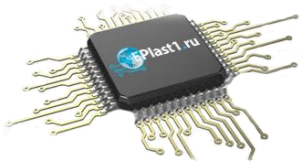
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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