

IEC Filter

For General-Purpose Applications

With Tab Connector at Output

Series/Type: Ordering code: B84871A*A071

2006-01-27 Date:

Version: A.0



For General-Purpose Applications

With Tab Connector at Output

Preliminary data

Rated voltage 115/250 V AC, 50/60 Hz Rated Current 1A to 10A

Construction

- Filter with IEC connector
- Appliance connector as per IEC 60320
- Filter with tab connector at output

Features

- Good attenuation performance to eliminate the common-mode and differential-mode EMI from the line-line and line-ground
- Low leakage current
- For installation in instrument housing

Applications

- Switch mode power supplies
- Commercial terminals
- Industrial electronics
- Measuring instruments

Terminals (at output)

Filter with tab connector

Marking

Marking on component:

- Manufacturer's logo, ordering code
- Rated voltage, rated current
- Date code

Minimum marking on packaging:

Manufacturer's logo, ordering code

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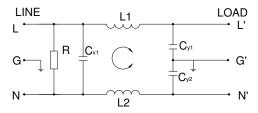


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Typical circuit diagram



Technical data

Rated voltage V _R	115/250 V AC, 50/60 Hz		
Rated current I _R	Referred to 40 ℃ respectively 50 ℃ ambient temperature		
Test voltage V _P	1768 V DC, 1 min (line/line) 2000 V AC, 1 min (lines/case)		
Leakage current / leak (at 250 V AC, 50 Hz)	< 0.19 mA		
Climatic category	In accordance with EN 60068-1 25/085/21 (− 25 °C/+ 85 °C/21 days damp heat test)		

Characteristics and ordering codes

I _R at 50 ℃	I _R at 40℃	C _R	L _R	Ordering code
1A	1,2A	0.1uF(X2)+ 2×2200pF(Y2)	2×12mH	B84871-A0001-A071
3A	3,5A	0.1uF(X2)+ 2×2200pF(Y2)	2× 2.5mH	B84871-A0003-A071
6A	7,2A	0.1uF(X2)+ 2×2200pF(Y2)	2×0.78mH	B84871-A0006-A071
10A	11,6A	0.1uF(X2)+ 2×2200pF(Y2)	2×0.225mH	B84871-A0010-A071

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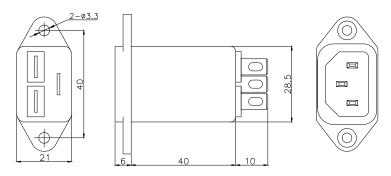
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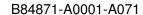
Dimensional drawing (unit: mm)

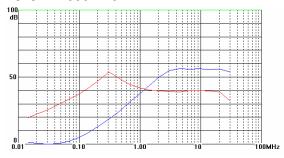
1A - 10A



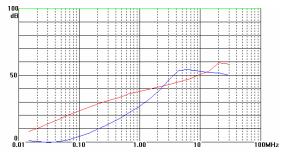
Insertion loss (Per CISPR 17 typical values at Z=50 Ohm)

-CM -DM

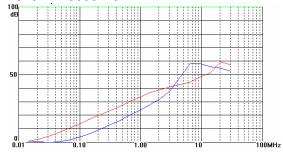




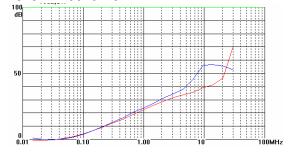
B84871-A0003-A071



B84871-A0006-A071



B84871-A0010-A071



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Cautions and warnings

Important information

Please read all safety and warning notes through carefully before installing the EMC filter and putting it into operation. 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 injury and major damage to equipment may occur if the appropriate safety measures are not carried out or the warnings in the text are not observed.

Appropriate use

The EMC filters may only be used as intended and within the specified limits 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.

Caution

EMC filters can carry dangerous voltages. Death, serious injury or major damage to equipment and property may result if the warnings and instructions in the data book are ignored.

It should be ensured that only qualified persons (electricians as defined for the respective application) 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 should be the first to be made when the EMC filter is installed and the last to be broken at de-installation. 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 with resonant circuits, impermissibly high-frequency voltage loads etc. can lead to destruction of the filter package.

EMC filters must be protected in the application against impermissible exceeding of the rated currents by suitable surge-current protection circuits



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