EMC filters

Series/Type: B84776*A000

Date: November 2012

Power line filters for 1-phase systems
Rated voltage 250 V AC/DC
Rated current 1 A to 10 A

Construction
- 2-line filter with IEC connector, fuse holder and switch
- Appliance connector according to IEC/EN 60320-1
- Fuse holder for 2 fuses Æ5 ´ 20 mm
- Metal case
- 2-pole rocker switch

Versions
- Standard version (B84776A*)
- Medical version with low leakage current (B84776M*)

Features
- Easy to install
- Compact design
- Cost optimized construction
- Degree of protection from front side IP 40[1)]
- UL and cUL approval obtained
  ENEC 10 approval is pending

Applications
- Switched-mode power supplies for
  industrial electronics
  telecom systems
  data systems
- DC applications
- Measuring instruments
- Medical engineering

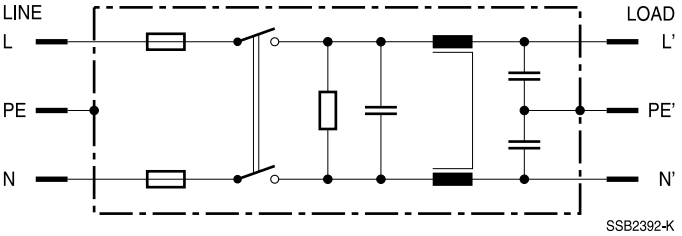
Terminals
- Line side: IEC inlet C14 according to IEC/EN 60320-1
- Load side: Tab connectors 6.3 ´ 0.8 mm

Marking
Marking on component:
Manufacturer's logo, ordering code, rated voltage, rated current, rated temperature, climatic category, date code

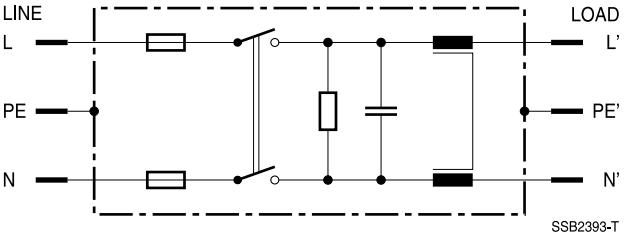
Minimum data on packaging:
Manufacturer's logo, ordering code, quantity, date code

1) To IEC 60529

Typical circuit diagram of B84776A*A000 (standard version)



Typical circuit diagram of B84776M*A000(medical version)



Technical data and measuring conditions of B84776*A000

Rated voltage		V_R	250	V DC/AC
Rated frequency		f_R	50/60	Hz
Test voltage line to line for 2 s		V_{test}	760	V AC
Test voltage line to case for 2 s (B84776A*)		V_{test}	2000	V AC
Test voltage line to case for 2 s (B84776M*)		V_{test}	2500	V AC
Rated temperature		T_R	40	°C
Climatic category (IEC 60068-1)			25/085/21	
Rocker switch	Rating		10 A (½ HP) / 250 V AC	
	Inrush current		82	A
	Electrical life time ON OFF		10000	cycles
	Mechanical life time ON OFF		50000	cycles

Characteristics and ordering codes of B84776*A000

V_R = 250 V AC/DC

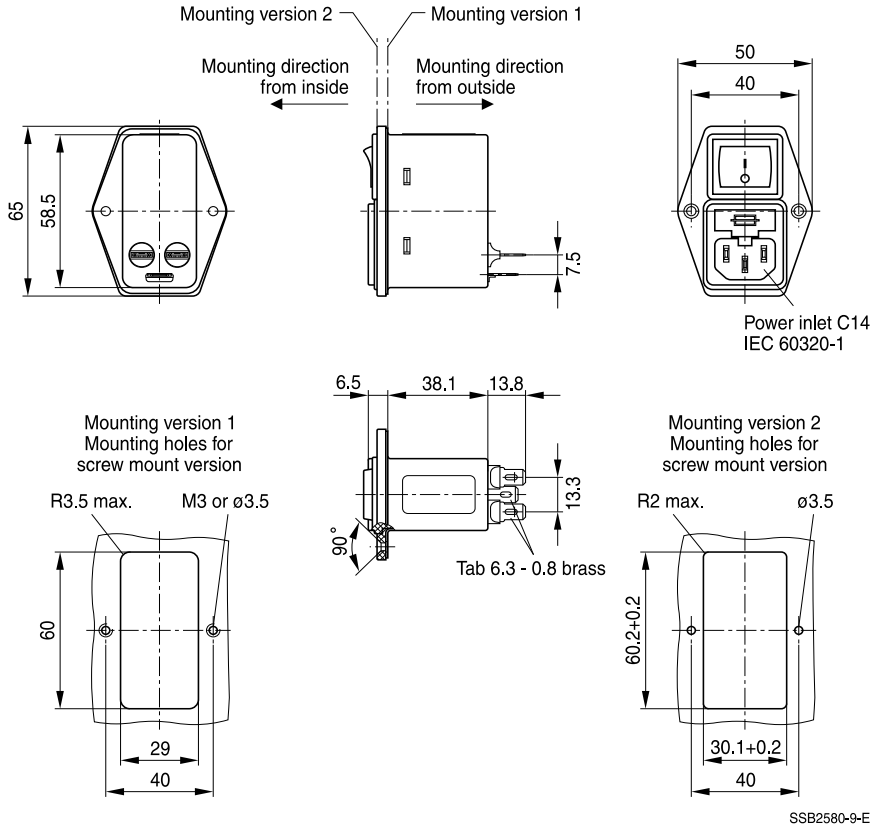
I_R	C_R X2	C_R Y2	L_R	I_{leak} [1]	R_{bleed}	Approx. weight	Ordering code	Approvals		
A	mF	pF	mH	mA	MW	g				
1	1 ´ 0.22	2 ´ 2200	2 ´ 7.6	0.173	1	90	B84776A0001A000	P	´	´
	1 ´ 0.22		2 ´ 7.6	0	1	90	B84776M0001A000	P	´	´
2	1 ´ 0.22	2 ´ 2200	2 ´ 2.0	0.173	1	90	B84776A0002A000	P	´	´
	1 ´ 0.22		2 ´ 2.0	0	1	90	B84776M0002A000	P	´	´
4	1 ´ 0.22	2 ´ 2200	2 ´ 1.0	0.173	1	90	B84776A0004A000	P	´	´
	1 ´ 0.22		2 ´ 1.0	0	1	90	B84776M0004A000	P	´	´
6	1 ´ 0.22	2 ´ 2200	2 ´ 0.46	0.173	1	90	B84776A0006A000	P	´	´
	1 ´ 0.22		2 ´ 0.46	0	1	90	B84776M0006A000	P	´	´
10	1 ´ 0.22	2 ´ 2200	2 ´ 0.33	0.173	1	130	B84776A0010A000	P	´	´
	1 ´ 0.22		2 ´ 0.33	0	1	130	B84776M0010A000	P	´	´

´ = approval is granted

P = approval is pending

1) Calculation according draft proposal IEC 60939 1 Ed. 3 (2008 10 29), annex A, "Calculation of leakage current" at 50 Hz. In practice are up to double values to be expected due to the insulation resistance values of the used ceramic capacitors. For the medical version results computationally the value 0. In practice are values 1 ... 2 mA to be expected due to the insulation resistance values of the used materials.

Dimensional drawing

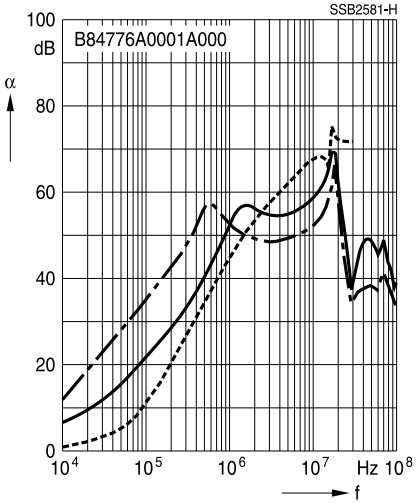


Dimensions in mm
ISO 2768-cl

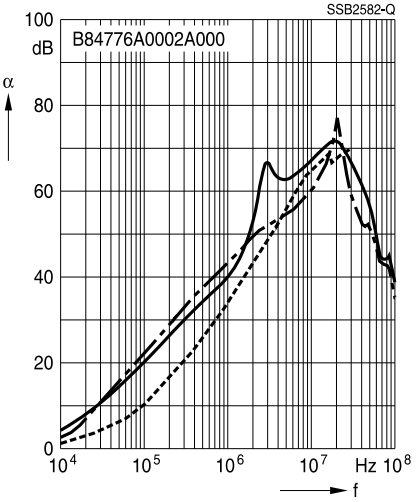
Insertion loss (typical values at Z = 50 Ω)

——————— unsymmetrical, adjacent branches terminated
—·—·—·—·—·— common mode, all branches in parallel (asymmetrical)
– – – – – – – – differential mode (symmetrical)

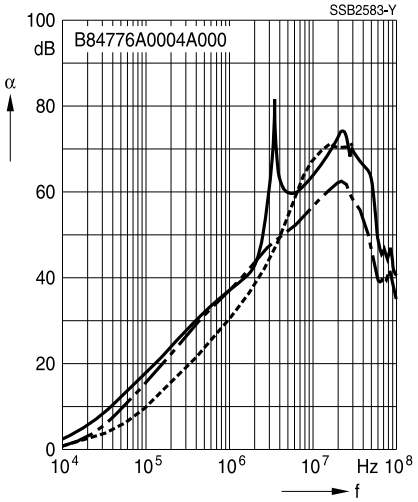
Filter for 1 A



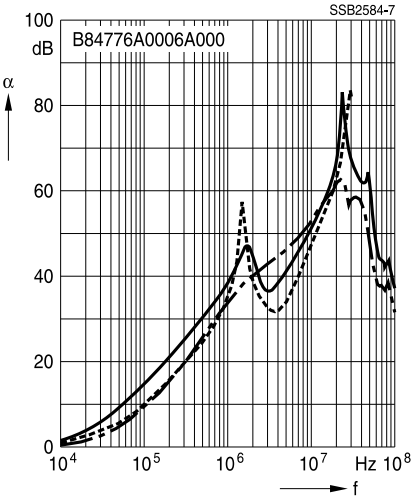
Filter for 2 A



Filter for 4 A



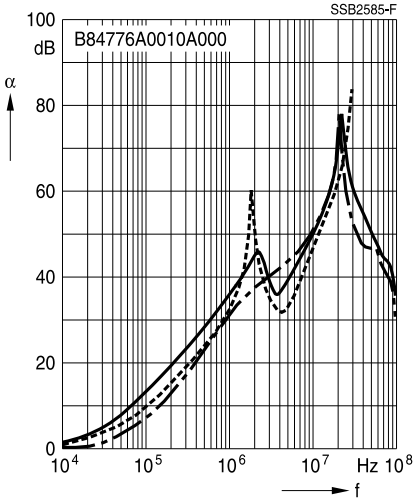
Filter for 6 A



Insertion loss (typical values at Z = 50 Ω)

——————— unsymmetrical, adjacent branches terminated
—·—·—·—·—·— common mode, all branches in parallel (asymmetrical)
– – – – – – – – differential mode (symmetrical)

Filter for 10 A



Insertion loss (typical values at Z = 50 Ω)

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—·—·—·—·— common mode, all branches in parallel (asymmetrical)
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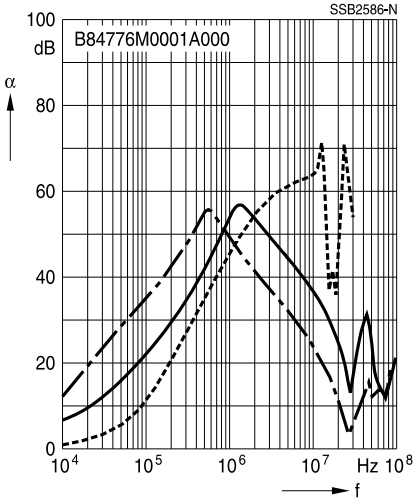
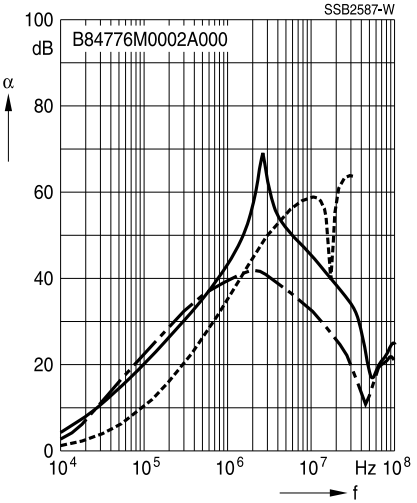
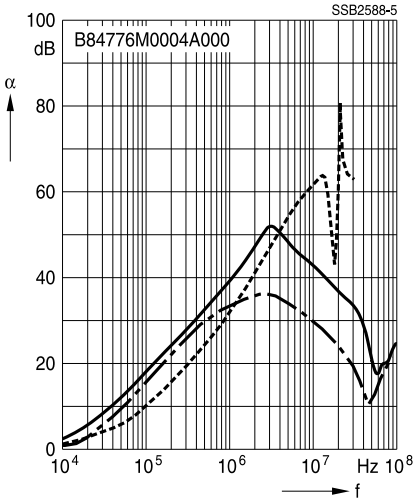
Filter for 1 A



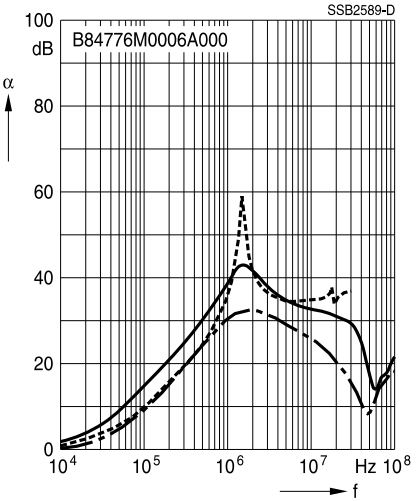
Filter for 2 A



Filter for 4 A



Filter for 6 A



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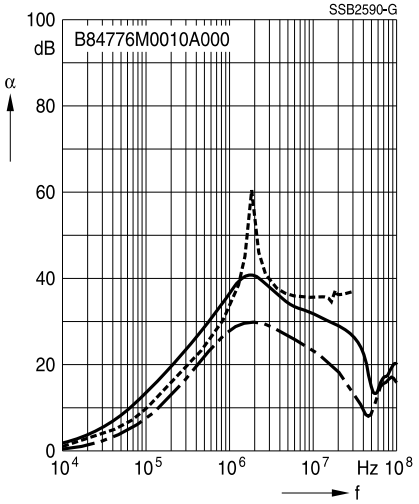
Filter for 10 A



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