

# **EMC** filters

Series/Type: B84773\*A000 Date: November 2012

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IEC inlet filters

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 and fuse holder
- Appliance connector according to IEC/EN 60320-1
- Fuse holder for 2 fuses Æ5 ´ 20 mm
- Metal case

## Versions

- Standard version (B84773A\*)
- Medical version with low leakage current (B84773M\*)

## Features

- Easy to install
- Compact design
- Cost optimized construction
- Degree of protection from front side IP 40<sup>1)</sup>
- UL and cUL approval obtained Level of the second se

## 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





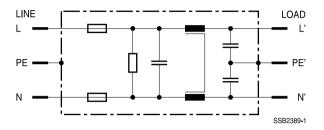


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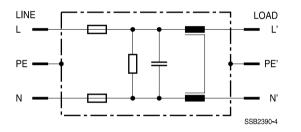
# 2-line filters

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Typical circuit diagram of B84773A\*A000 (standard version)



Typical circuit diagram of B84773M\*A000 (medical version)





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Technical data and measuring conditions of B84773\*A000

Rated voltage	V <sub>R</sub>	250	V DC/AC	
Rated frequency	f <sub>R</sub>	50/60	Hz	
Test voltage line to line for 2 s (B84773A*)	V <sub>test</sub>	760	V AC	
Test voltage line to line for 2 s (B84773M*)	V <sub>test</sub>	1700	V DC	
Test voltage line to case for 2 s (B84773A*)	V <sub>test</sub>	2000	V AC	
Test voltage line to case for 2 s (B84773M*)	V <sub>test</sub>	2500	V AC	
Rated temperature	T <sub>R</sub>	40	°C	
Climatic category (IEC 60068-1)		25/085/21		

Characteristics and ordering codes of B84773\*A000

 $V_R = 250 \text{ V AC/DC}$ 

I <sub>R</sub>	C <sub>R</sub>	C <sub>R</sub>	L <sub>R</sub>	I <sub>leak</sub> 1)	$R_{bleed}$	Approx.	Ordering code	Approvals		
	X2	Y2				weight				
А	тF	pF	mH	mA	MW	g		<b>E</b> 10	71	c <b>9//</b>
1	1´0.1	2´2200	2´5.4	0.173	1	55	B84773A0001A000	Ρ	,	,
	1´0.1		2´5.4	0	1	55	B84773M0001A000	Ρ		,
2	1´0.1	2´2200	2´2.7	0.173	1	55	B84773A0002A000	Ρ	'	,
	1′0.1		2´2.7	0	1	55	B84773M0002A000	Ρ	·	,
4	1´0.1	2´2200	2´1.1	0.173	1	55	B84773A0004A000	Ρ	,	,
	1′0.1		2´1.1	0	1	55	B84773M0004A000	Ρ	·	,
6	1´0.1	2´2200	2´0.3	0.173	1	55	B84773A0006A000	Ρ	,	,
	1 ´ 0.1		2´0.3	0	1	55	B84773M0006A000	Ρ	'	,
10	1´0.1	2´2200	2´0.2	0.173	1	75	B84773A0010A000	Ρ	`	,
	1 ′ 0.1		2´0.2	0	1	75	B84773M0010A000	Р		,

´ = approval is granted

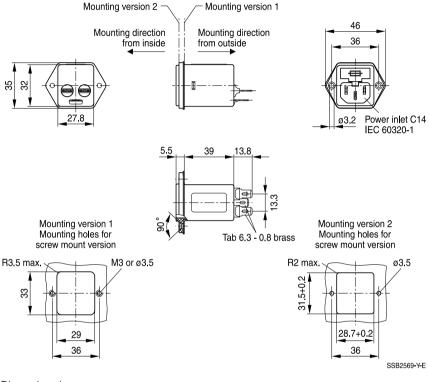
P = approval is pending

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.



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#### **Dimensional drawing**



Dimensions in mm ISO 2768-cl

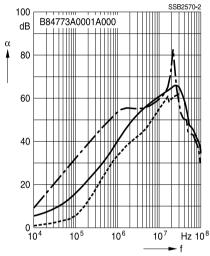


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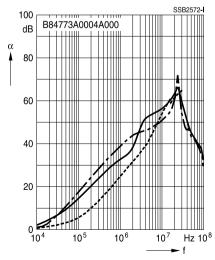
Insertion loss (typical values at Z = 50 W)

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

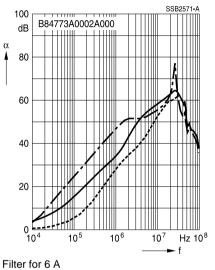
Filter for 1 A

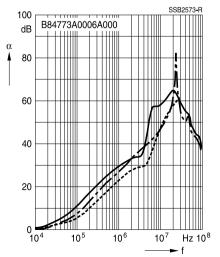


Filter for 4 A









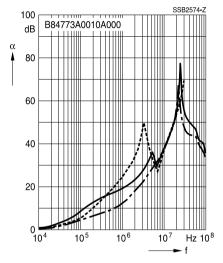


IEC inlet filters

Insertion loss (typical values at Z = 50 W)

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

#### Filter for 10 A



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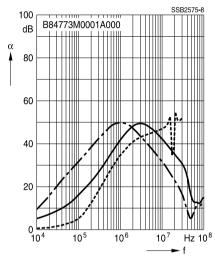


IEC inlet filters

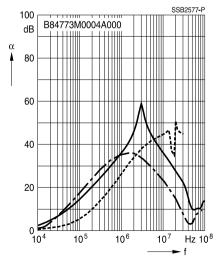
Insertion loss (typical values at Z = 50 W)

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- -- differential mode (symmetrical)

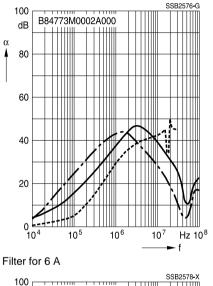
Filter for 1 A

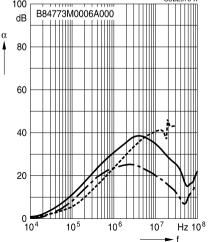


Filter for 4 A









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Please readautions and warniags Important notes the end of this document.

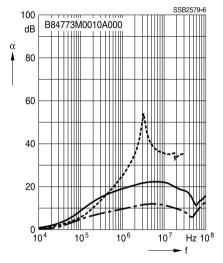


IEC inlet filters

Insertion loss (typical values at Z = 50 W)

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

#### Filter for 10 A



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