



2-Line Filters

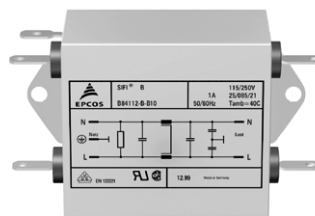
B84112

SIFI-B Series

SIFI-B for enhanced insertion loss
Rated voltage 250 V~, 50/60 Hz
Rated current 1 A to 20 A

Construction

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



Features

- Compact design
- Low leakage current
- All relevant approvals
- Cost-optimized construction
- Also for assembly on top-hat rails

Applications

- Switch-mode power supplies in
 - industrial electronics
 - telecommunications
 - data systems
 - medical engineering

Case styles and terminal styles

- Case style A Tab connectors on face ends, lateral mounting tabs. Particularly suitable for mounting on a shielding wall.
- Case style B Tab connectors on face ends, mounting tabs on face ends.
- Case style K IEC connector as per IEC 60320 C 14 on line side, tab connectors on load side, mounting holes with metric thread.
- Case style L Litz wires on face ends
- Case style P Pins fitting PCB standard grid

Marking

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

Minimum marking on packaging:
 Manufacturer's logo, ordering code

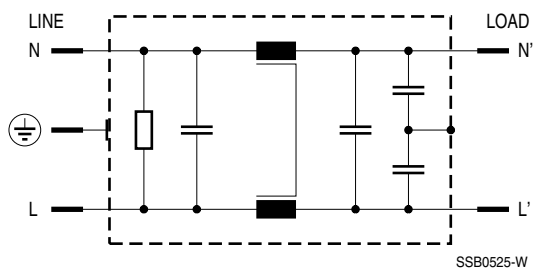


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Circuit diagram



Technical data

Rated voltage V_R	250 V~, 50/60 Hz
Rated current I_R	Referred to 40 °C ambient temperature
Test voltage V_P	1414 V-, 2 s (line/line) 2700 V-, 2 s (lines/case)
Leakage current I_{leak}	< 0,5 mA at 230 V~, 50 Hz
Discharge resistors	The discharge resistors are rated such that one second after having disconnected the device from the power line, the voltage at the line connector should have dropped to 34 V.
Climatic category	In accordance with EN 60068-1 25/085/21 (- 25 °C/+ 85 °C/21 days damp heat test)
Approvals	EN 133221


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Characteristics and ordering codes

I_R	C_R	L_R	Case style	Appr. weight g	Ordering code	Mounting plate for top-hat rail (ordering code)
A						
1	2 × 0,15 µF (X2) + 2 × 4700 pF (Y2)	2 × 10 mH	A B K L	110 110 140 110	B84112-B-A10 B84112-B-B10 B84112-B-K10 B84112-B-L10	— C62122-A132-B91 — —
2	2 × 0,15 µF (X2) + 2 × 4700 pF (Y2)	2 × 10 mH	A B L	110 110 110	B84112-B-A20 B84112-B-B20 B84112-B-L20	— C62122-A132-B91 —
3	2 × 0,22 µF (X2) + 2 × 4700 pF (Y2)	2 × 10 mH	A B K L P	140 140 210 140 140	B84112-B-A30 B84112-B-B30 B84112-B-K30 B84112-B-L30 B84112-B-P30	— C62122-A132-B92 — — —
6	2 × 0,33 µF (X2) + 2 × 4700 pF (Y2)	2 × 3,3 mH	A B K L	150 150 210 150	B84112-B-A60 B84112-B-B60 B84112-B-K60 B84112-B-L60	— C62122-A132-B92 — —
10	2 × 0,47 µF (X2) + 2 × 4700 pF (Y2)	2 × 1,8 mH	A B L	200 200 200	B84112-B-A110 B84112-B-B110 B84112-B-L110	— C62122-A132-B92 —
20	2 × 0,68 µF (X2) + 2 × 4700 pF (Y2)	2 × 1,8 mH	A B	700 700	B84112-B-A120 B84112-B-B120	— C62122-A132-B92



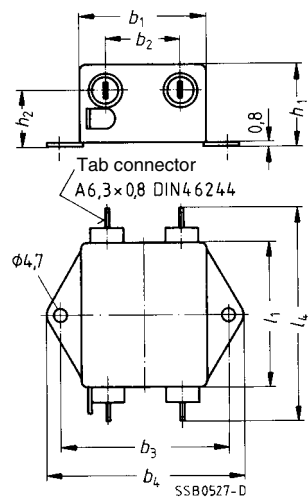
Case styles and dimensions

Case style	Ordering code B84112-	Dimensions in mm											
		b_1	b_2	b_3	b_4	l_1	l_2	l_3	l_4	h_1	h_2	Litz mm ²	Style 1015
A	-B-A10	45	26,5	60,4	70	50	—	—	76,5	28,6	20	—	—
B	-B-B10	45	26,5	—	—	50	60,4	70	76,5	28,6	20	—	—
K	-B-K10	51	—	—	—	63,5	—	—	—	32	—	—	—
L	-B-L10	45	—	—	—	50	60,4	70	—	28,6	—	0,82	AWG18
A	-B-A20	45	26,5	60,4	70	50	—	—	76,5	28,6	20	—	—
B	-B-B20	45	26,5	—	—	50	60,4	70	76,5	28,6	20	—	—
L	-B-L20	45	—	—	—	50	60,4	70	—	28,6	—	0,82	AWG18
A	-B-A30	50,8	31,5	60,4	70	63,5	—	—	89,5	28,6	20	—	—
B	-B-B30	50,8	31,5	—	—	63,5	74,7	84,5	89,5	28,6	20	—	—
K	-B-K30	50,8	—	—	—	79,5	—	—	—	32	—	—	—
L	-B-L30	50,8	—	—	—	63,5	74,7	84,5	—	28,6	—	0,82	AWG18
P	-B-P30	see dimensional drawing											
A	-B-A60	50,8	31,5	60,4	70	63,5	—	—	89,5	28,6	20	—	—
B	-B-B60	50,8	31,5	—	—	63,5	74,7	84,5	89,5	28,6	20	—	—
K	-B-K60	50,8	—	—	—	79,5	—	—	—	32	—	—	—
L	-B-L60	50,8	—	—	—	63,5	74,7	84,5	—	28,6	—	0,82	AWG18
A	-B-A110	50,8	31,5	60,4	70	63,5	—	—	89,5	38,1	28	—	—
B	-B-B110	50,8	31,5	—	—	63,5	74,7	84,5	89,5	38,1	28	—	—
L	-B-L110	50,8	—	—	—	63,5	74,7	84,5	—	38,1	—	1,35	AWG16
A	-B-A120	see dimensional drawing											
B	-B-B120	see dimensional drawing											



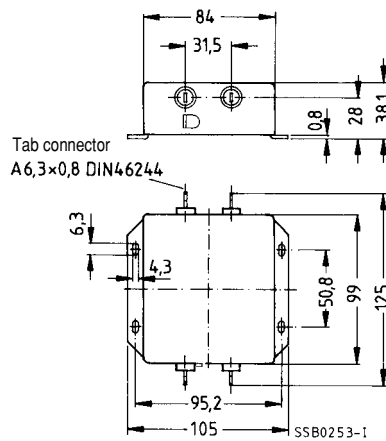
Case style A

B84112-B-A10 ...
B84112-B-A110



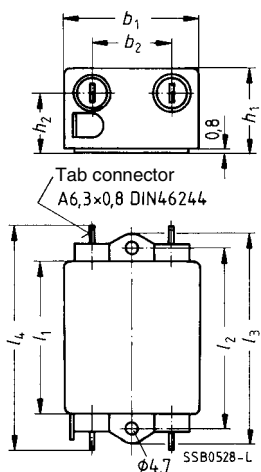
Case style A

B84112-B-A120



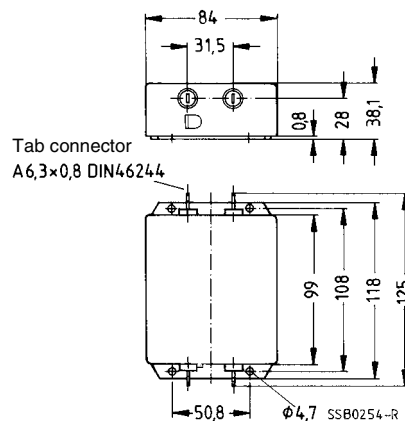
Case style B

B84112-B-B10 ...
B84112-B-B110

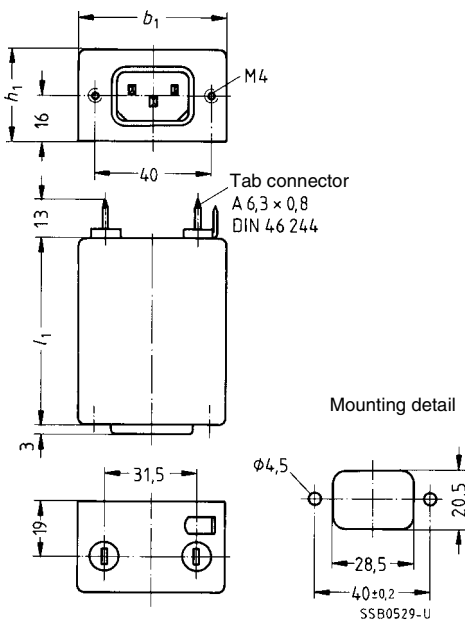


Case style B

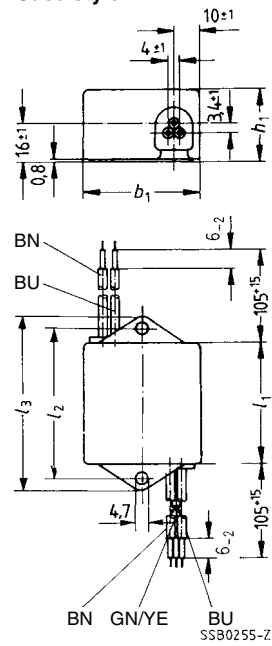
B84112-B-B120



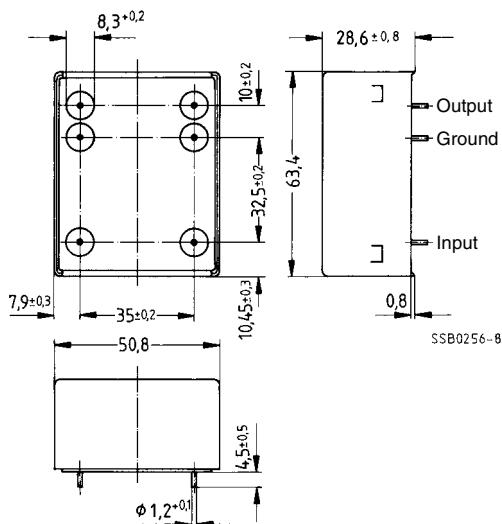
Case style K



Case style L



Case style P

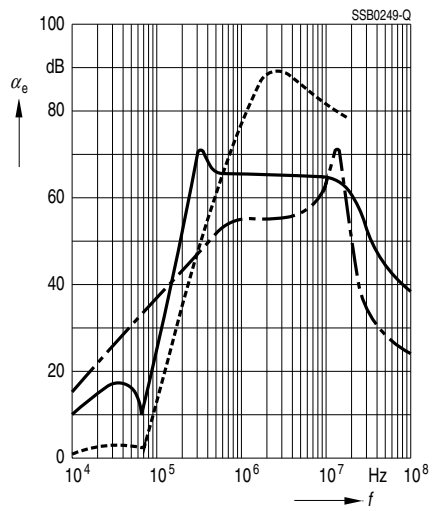




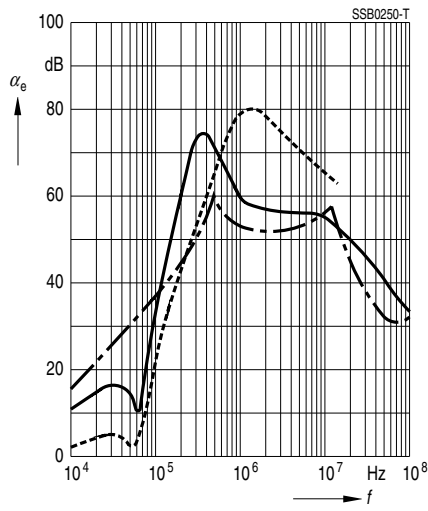
Insertion loss (typical values at $Z = 50 \Omega$)

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

B84112-B-*10
B84112-B-*20



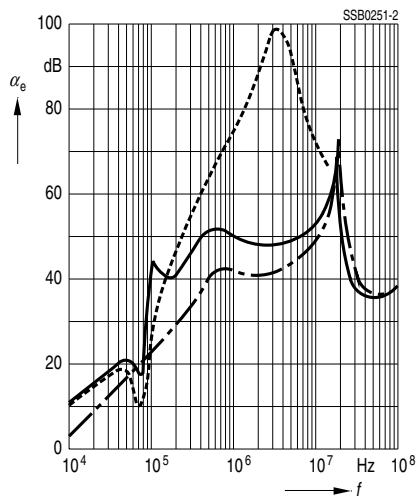
B84112-B-*30



B84112-B-*60
B84112-B-*110



B84112-B-*120



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