



2-Line Filters

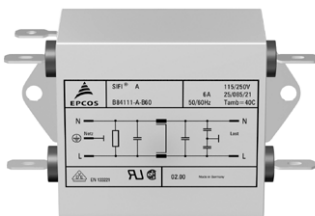
B84111

SIFI-A Series

SIFI-A for normal 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

Marking

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

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

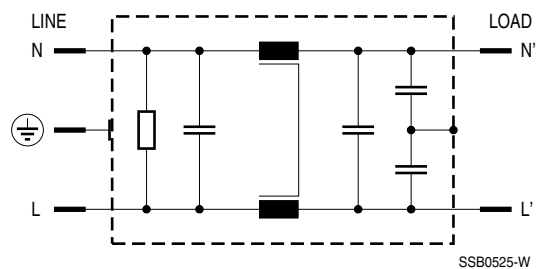


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Circuit diagram



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	



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Characteristics and ordering codes

I_R A	C_R	L_R	Case style	Appr. weight g	Ordering code	Mounting plate for top-hat rail (ordering code)
1	$2 \times 0,1 \mu\text{F}$ (X2) + $2 \times 4700 \text{ pF}$ (Y2)	$2 \times 1,5 \text{ mH}$	A K	80 140	B84111-A-A10 B84111-A-K10	— —
2	$2 \times 0,1 \mu\text{F}$ (X2) + $2 \times 4700 \text{ pF}$ (Y2)	$2 \times 1,5 \text{ mH}$	A	80	B84111-A-A20	—
3	$2 \times 0,1 \mu\text{F}$ (X2) + $2 \times 4700 \text{ pF}$ (Y2)	$2 \times 1,5 \text{ mH}$	A K L	80 140 80	B84111-A-A30 B84111-A-K30 B84111-A-L30	— — —
6	$2 \times 0,1 \mu\text{F}$ (X2) + $2 \times 4700 \text{ pF}$ (Y2)	$2 \times 1,8 \text{ mH}$	A B K L	110 110 140 110	B84111-A-A60 B84111-A-B60 B84111-A-K60 B84111-A-L60	— C62122-A132-B91 — —
10	$2 \times 0,1 \mu\text{F}$ (X2) + $2 \times 4700 \text{ pF}$ (Y2)	$2 \times 820 \mu\text{H}$	A B L	120 120 120	B84111-A-A110 B84111-A-B110 B84111-A-L110	— C62122-A132-B91 —
20	$2 \times 0,1 \mu\text{F}$ (X2) + $2 \times 4700 \text{ pF}$ (Y2)	$2 \times 470 \mu\text{H}$	A B	210 210	B84111-A-A120 B84111-A-B120	— C62122-A132-B91



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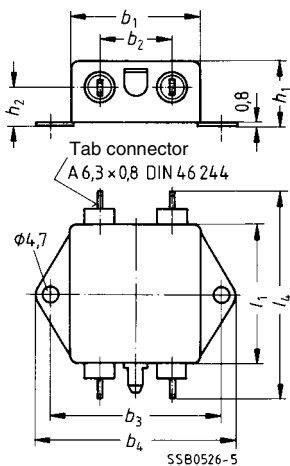
SIFI-A Series

Case styles and dimensions

Case style	Ordering code B84111-	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	-A-A10	45	26,5	60,4	70	50	—	—	76,5	22,3	14	—	—
K	-A-K10	51	—	—	—	63,5	—	—	—	32	—	—	—
A	-A-A20	45	26,5	60,4	70	50	—	—	76,5	22,3	14	—	—
A	-A-A30	45	26,5	60,4	70	50	—	—	76,5	22,3	14	—	—
K	-A-K30	51	—	—	—	63,5	—	—	—	32	—	—	—
L	-A-L30	45	—	60,4	70	50	—	—	—	28,6	—	0,82	AWG18
A	-A-A60	45	26,5	60,4	70	50	—	—	76,5	28,6	20	—	—
B	-A-B60	45	26,5	—	—	50	60,4	70	76,5	28,6	20	—	—
K	-A-K60	51	—	—	—	63,5	—	—	—	32	—	—	—
L	-A-L60	45	—	60,4	70	50	—	—	—	28,6	—	0,82	AWG18
A	-A-A110	45	26,5	60,4	70	50	—	—	76,5	28,6	20	—	—
B	-A-B110	45	26,5	—	—	50	60,4	70	76,5	28,6	20	—	—
L	-A-L110	45	—	60,4	70	50	—	—	—	28,6	—	1,35	AWG16
A	-A-A120	63,5	31,5	74,7	84,5	50,8	—	—	77	38,1	28	—	—
B	-A-B120	see dimensional drawing											

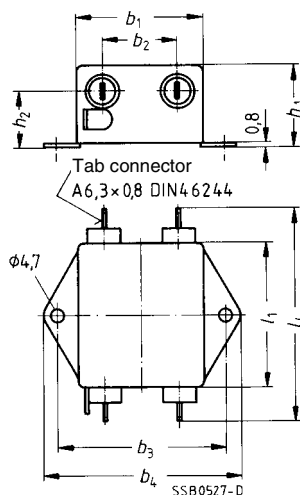
Case style A

B84111-A-A10
B84111-A-A20
B84111-A-A30



Case style A

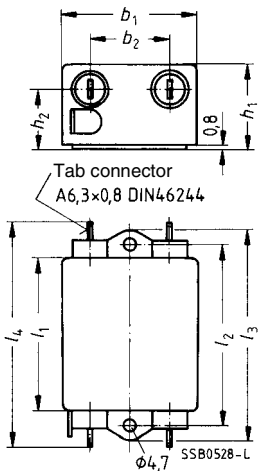
B84111-A-A60
B84111-A-A110
B84111-A-A120





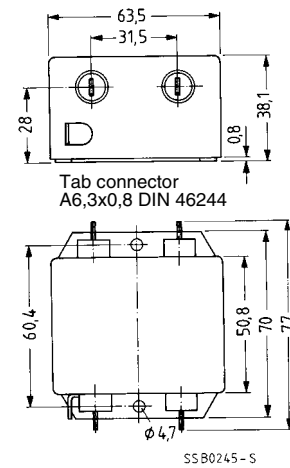
Case style B

B84111-A-B60
B84111-A-B110

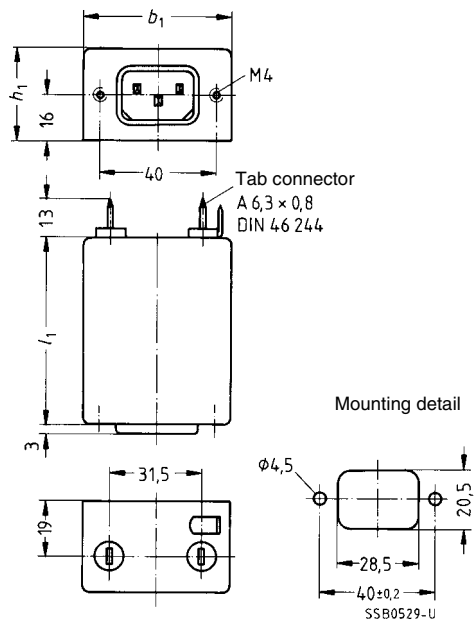


Case style B

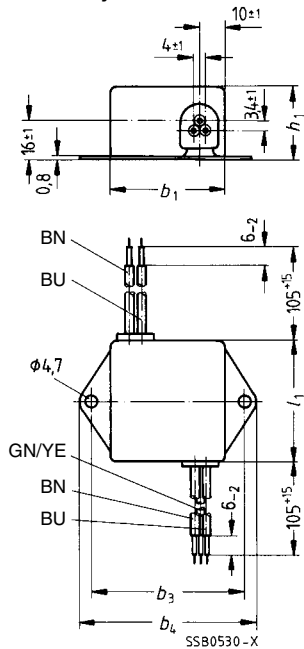
B84111-A-B120



Case style K



Case style L

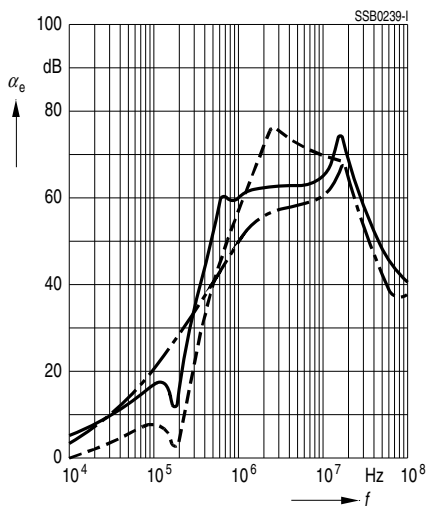




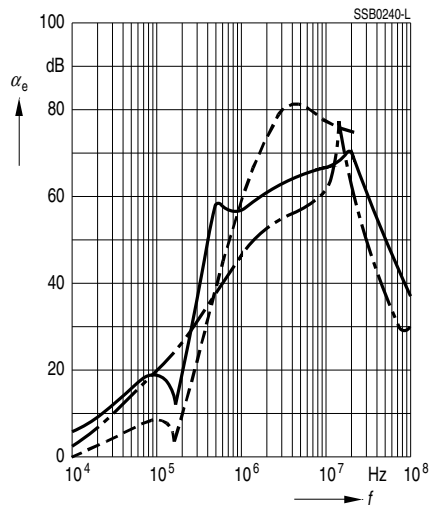
Insertion loss (typical values at $Z = 50 \Omega$)

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

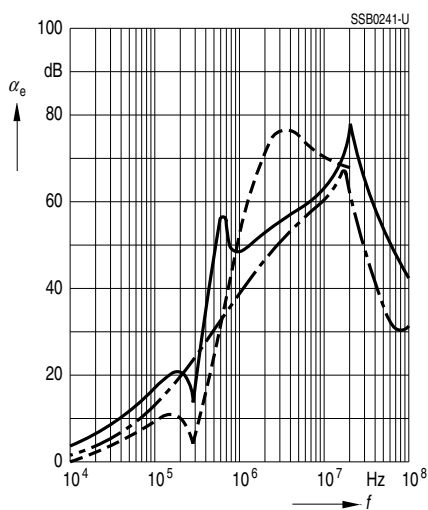
B84111-A-*10 ... -A-*30



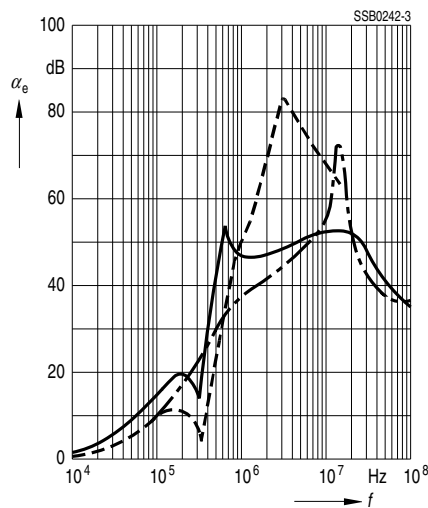
B84111-A-*60



B84111-A-*110



B84111-A-*120



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