

**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.<br>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,<br>tab connectors on load side, mounting holes with metric thread. |
| Case style L | Litz wires on face ends  |

**Marking**

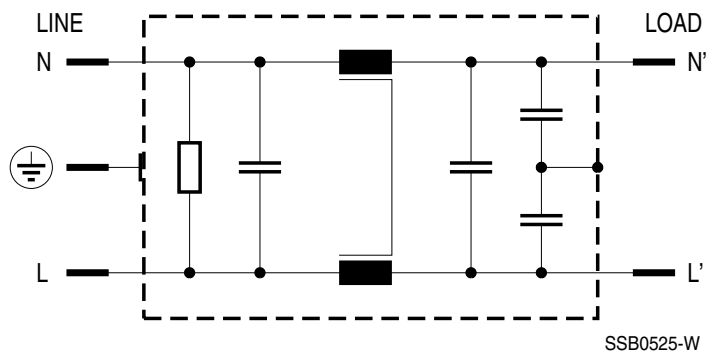
Marking on component:


 Manufacturer's logo, ordering code,  
rated voltage, rated current,  
date code

Minimum marking on packaging:

Manufacturer's logo, ordering code



**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

**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 × 0,1 μF (X2) + 2 × 4700 pF (Y2)	2 × 1,5 mH	A	80	B84111-A-A10	—
			K	140	B84111-A-K10	—
2	2 × 0,1 μF (X2) + 2 × 4700 pF (Y2)	2 × 1,5 mH	A	80	B84111-A-A20	—
3	2 × 0,1 μF (X2) + 2 × 4700 pF (Y2)	2 × 1,5 mH	A	80	B84111-A-A30	—
			K	140	B84111-A-K30	—
			L	80	B84111-A-L30	—
6	2 × 0,1 μF (X2) + 2 × 4700 pF (Y2)	2 × 1,8 mH	A	110	B84111-A-A60	—
			B	110	B84111-A-B60	C62122-A132-B91
			K	140	B84111-A-K60	—
			L	110	B84111-A-L60	—
10	2 × 0,1 μF (X2) + 2 × 4700 pF (Y2)	2 × 820 μH	A	120	B84111-A-A110	—
			B	120	B84111-A-B110	C62122-A132-B91
			L	120	B84111-A-L110	—
20	2 × 0,1 μF (X2) + 2 × 4700 pF (Y2)	2 × 470 μH	A	210	B84111-A-A120	—
			B	210	B84111-A-B120	C62122-A132-B91

**Case styles and dimensions**

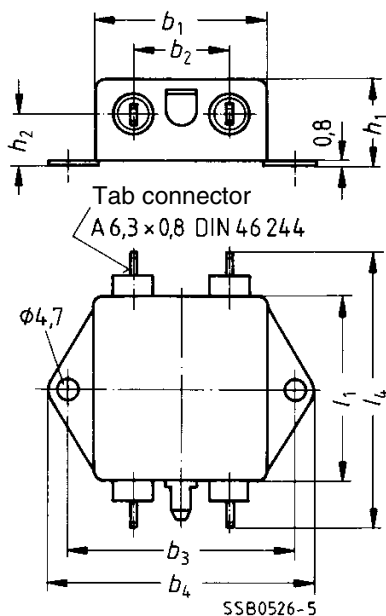
Case style	Ordering code B84111-	Dimensions in mm											Litz mm <sup>2</sup>	Style 1015
		$b_1$	$b_2$	$b_3$	$b_4$	$l_1$	$l_2$	$l_3$	$l_4$	$h_1$	$h_2$			
A	-A-A10	45	26,5	60,4	70	50	—	—	76,5	22,3	14	—	—	
K	-A-K10	51	—	—	—	63,5	—	—	—	32	—	—	—	
A	-A-A20	45	26,5	60,4	70	50	—	—	76,5	22,3	14	—	—	
A	-A-A30	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

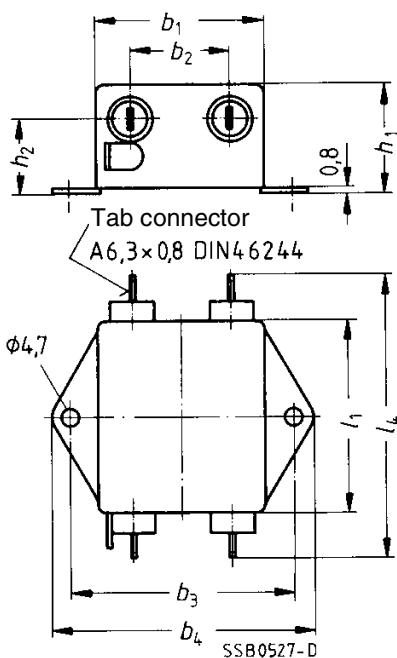
B84111-A-A30


**Case style A**

B84111-A-A60

B84111-A-A110

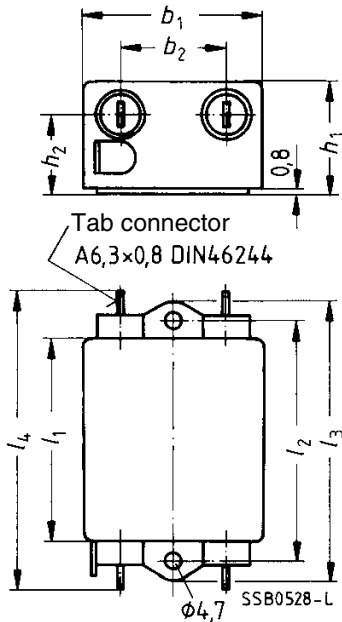
B84111-A-A120



**Case style B**

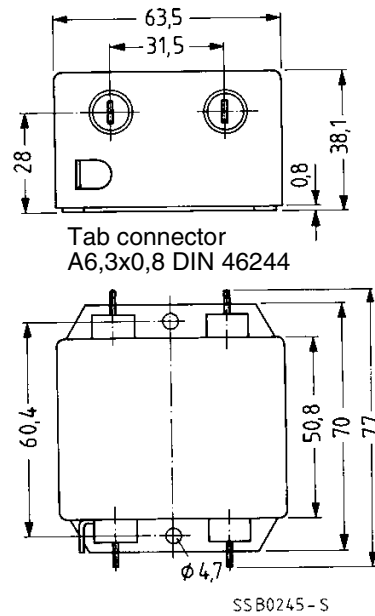
B84111-A-B60

B84111-A-B110

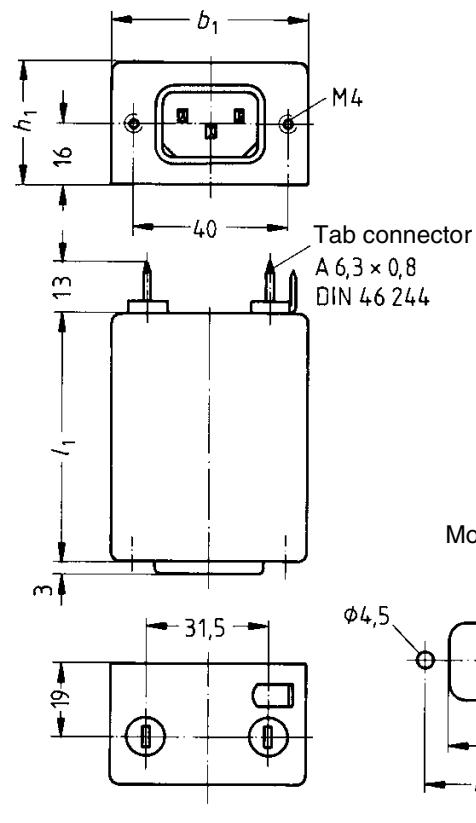


**Case style B**

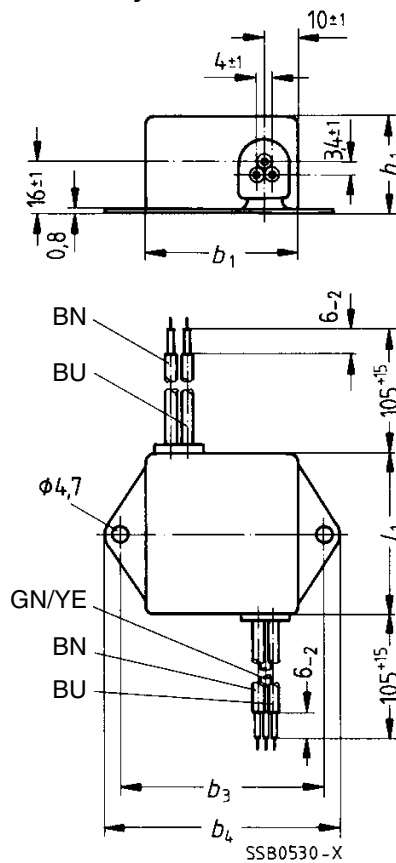
B84111-A-B120



**Case style K**



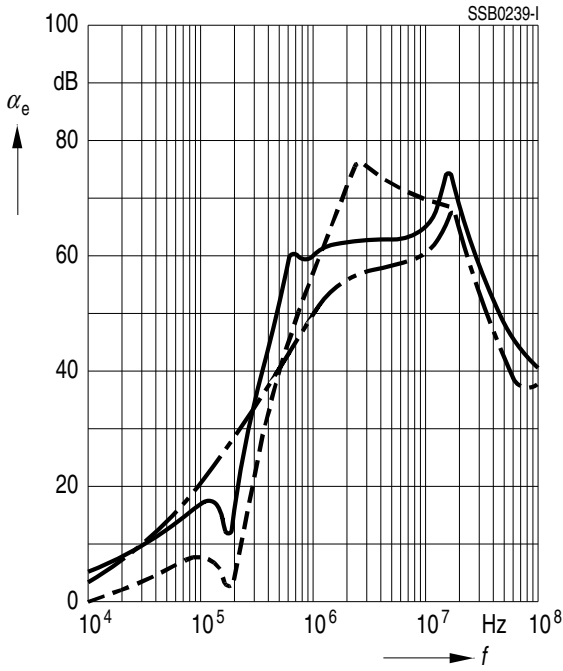
**Case style L**



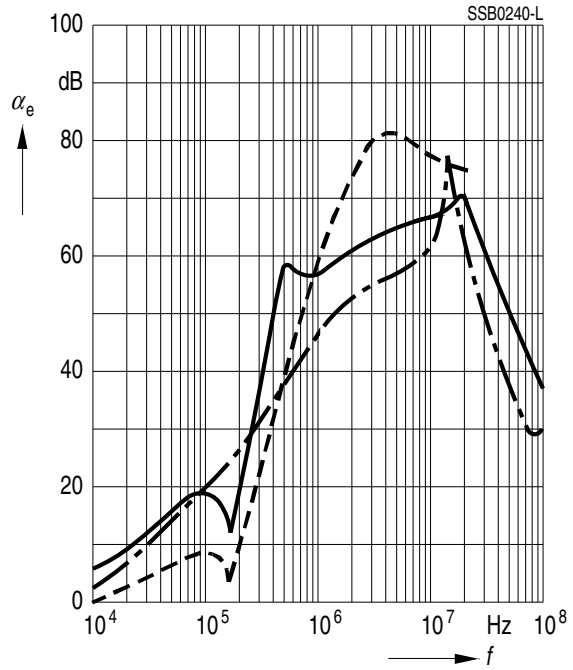
**Insertion loss** (typical values at  $Z = 50 \Omega$ )

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

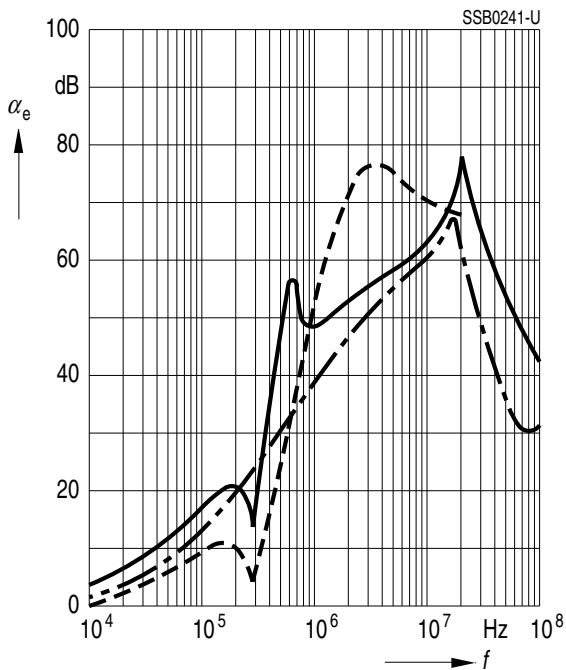
B84111-A-\*10 ... -A-\*30



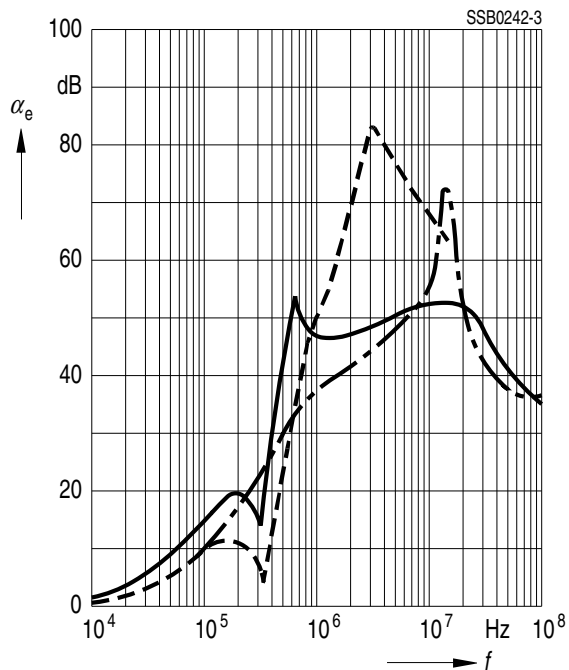
B84111-A-\*60



B84111-A-\*110



B84111-A-\*120



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**Marketing Kommunikation, Postfach 80 17 09, 81617 München, DEUTSCHLAND**

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**Marketing Communications, P.O. Box 80 17 09, 81617 Munich, GERMANY**

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