

**SIFI-E for high insertion loss**  
**Rated voltage 250 V~, 50/60 Hz**  
**Rated current 3 A to 10 A**

**Construction**

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

**Features**

- Compact design
- Very high insertion loss, even in the range below 100 kHz
- 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



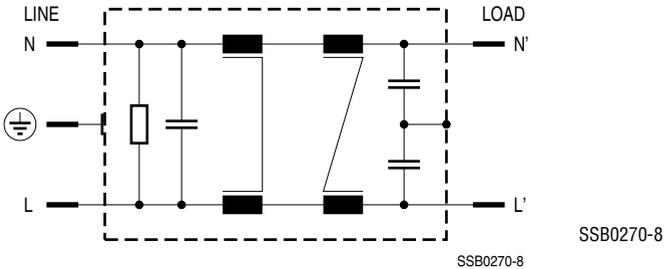
**Case styles and terminal styles**

- 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.

**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)<br>2700 V~, 2 s (lines/case)   |
| Leakage current $I_{leak}$ | < 0,5 mA at 230 V~, 50 Hz (for $I_R = 3$ A)<br>< 3,5 mA at 230 V~, 50 Hz (for $I_R \geq 6$ A)   |
| 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<br>25/085/21 (- 25 °C/+ 85 °C/21 days damp heat test)   |
| Approvals                  |    |

**Characteristics and ordering codes**

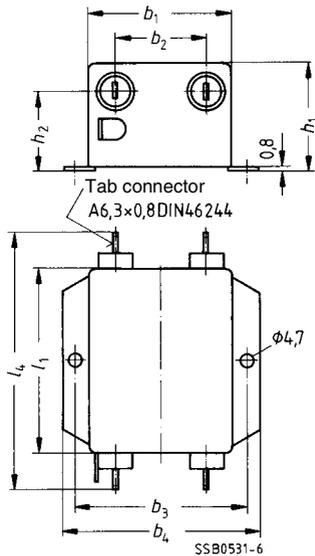
| $I_R$ | $C_R$   | $L_R$  | Case style | Appr. weight g | Ordering code | Mounting plate for top-hat rail (ordering code) |
|-------|---|--|------------|----------------|---------------|---|
| A     | 0,47 $\mu$ F (X2)<br>+<br>2 $\times$ 4700 pF (Y2) | 2 $\times$ 270 $\mu$ H<br>+<br>2 $\times$ 16 mH  | A          | 210            | B84115-E-A30  | —   |
|       |   |  | B          | 210            | B84115-E-B30  | C62122-A132-B92                                 |
|       |   |  | K          | 270            | B84115-E-K30  | —   |
| 6     | 0,47 $\mu$ F (X2)<br>+<br>2 $\times$ 22 nF (Y2)   | 2 $\times$ 100 $\mu$ H<br>+<br>2 $\times$ 4,7 mH | A          | 510            | B84115-E-A60  | —   |
|       |   |  | B          | 510            | B84115-E-B60  | C62122-A132-B95                                 |
|       |   |  | K          | 510            | B84115-E-K60  | —   |
| 10    | 0,47 $\mu$ F (X2)<br>+<br>2 $\times$ 22 nF (Y2)   | 2 $\times$ 47 $\mu$ H<br>+<br>2 $\times$ 3,6 mH  | A          | 690            | B84115-E-A110 | —   |
|       |   |  | B          | 690            | B84115-E-B110 | C62122-A132-B95                                 |

**Case styles and dimensions**

| Case style | Ordering code | Dimensions in mm        |       |       |       |       |       |       |       |       |       |
|------------|---------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |               | $b_1$                   | $b_2$ | $b_3$ | $b_4$ | $l_1$ | $l_2$ | $l_3$ | $l_4$ | $h_1$ | $h_2$ |
| A          | B84115-E-A30  | 50,8                    | 31,5  | 60,4  | 70    | 63,5  | —     | —     | 89,5  | 38,1  | 28    |
| B          | B84115-E-B30  | 50,8                    | 31,5  | —     | —     | 63,5  | 74,7  | 84,5  | 89,5  | 38,1  | 28    |
| K          | B84115-E-K30  | 50,8                    | —     | —     | —     | 79,5  | —     | —     | —     | 38    | —     |
| A          | B84115-E-A60  | see dimensional drawing |       |       |       |       |       |       |       |       |       |
| B          | B84115-E-B60  | see dimensional drawing |       |       |       |       |       |       |       |       |       |
| K          | B84115-E-K60  | see dimensional drawing |       |       |       |       |       |       |       |       |       |
| A          | B84115-E-A110 | see dimensional drawing |       |       |       |       |       |       |       |       |       |
| B          | B84115-E-B110 | see dimensional drawing |       |       |       |       |       |       |       |       |       |

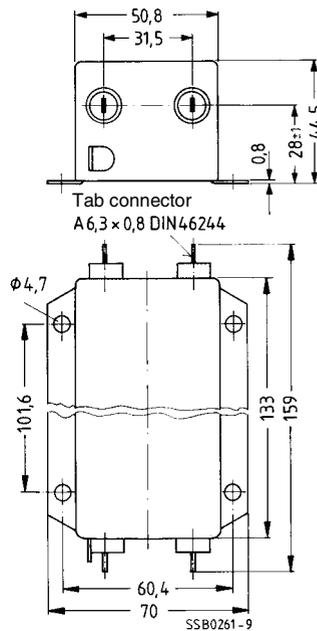
**Case style A**

B84115-E-A30


**Case style A**

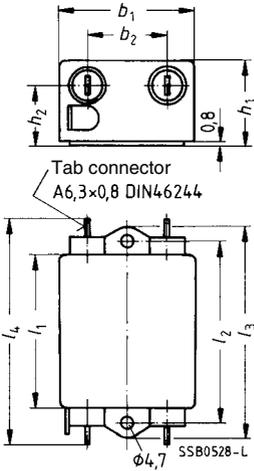
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B84115-E-A110



**Case style B**

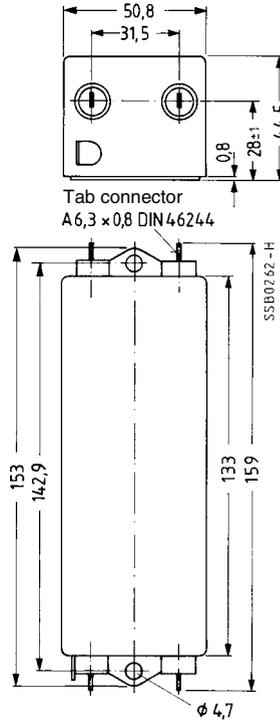
B84115-E-B30



**Case style B**

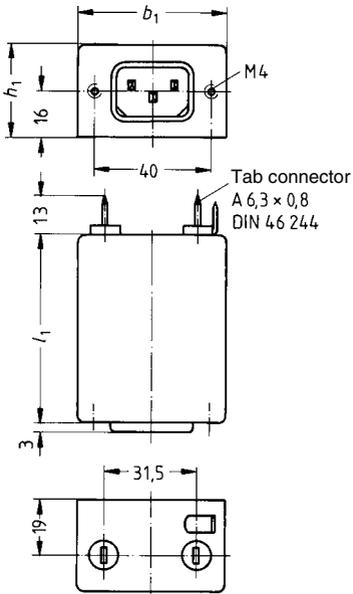
B84115-E-B60

B84115-E-B110

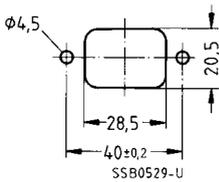


Case style K

B84115-E-K30

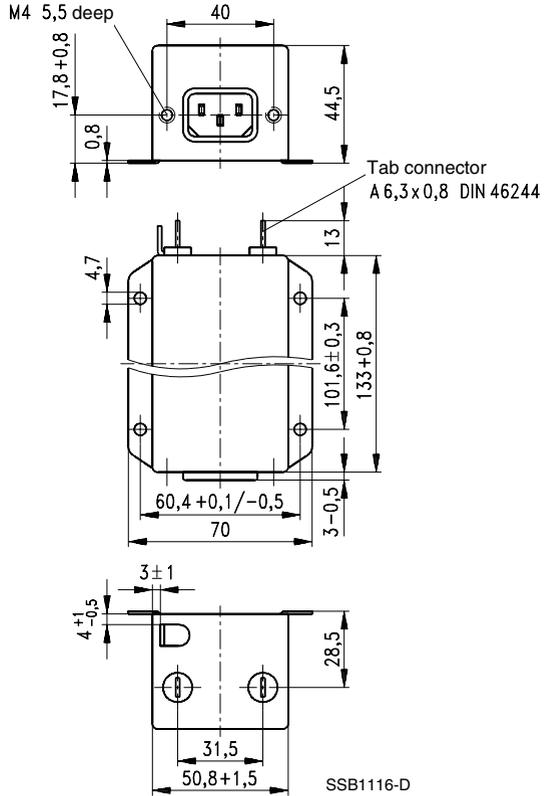


Mounting detail



Case style K

B84115-E-K60

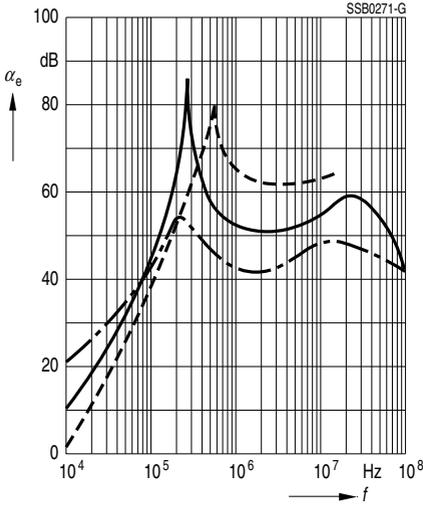


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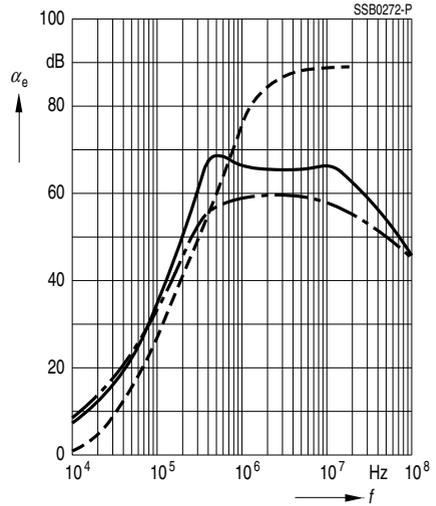
**Insertion loss** (typical values at  $Z = 50 \Omega$ )

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

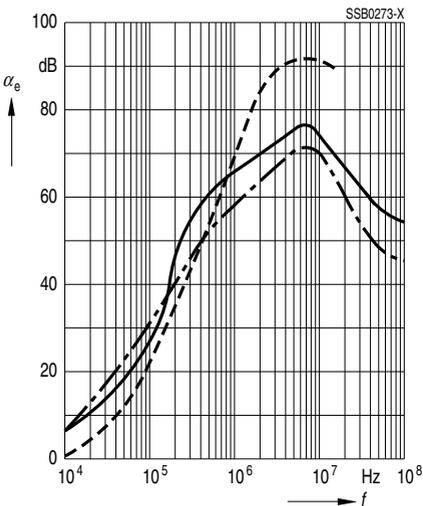
B84115-E-\*30



B84115-E-\*60



B84115-E-\*110



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