

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

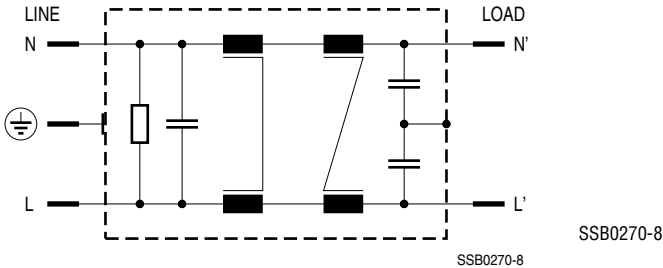
- Case style A Tab connectors on face ends, lateral mounting tabs.
 Particularly suitable for mounting on a shielding wall.
- Case style B Tab connectors on face ends, mounting tabs on face ends.
- Case style K IEC connector as per IEC 60320 C 14 on line side,
 tab connectors on load side, mounting holes 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) 2700 V~, 2 s (lines/case) |
| Leakage current I_{leak} | < 0,5 mA at 230 V~, 50 Hz (for $I_R = 3$ A) < 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 25/085/21 (- 25 °C/+ 85 °C/21 days damp heat test) |
| Approvals |  |

Characteristics and ordering codes

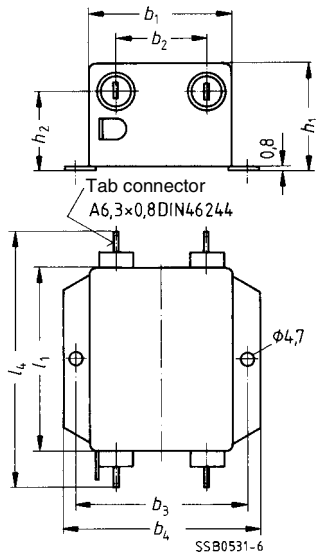
| I_R | C_R | L_R | Case style | Appr. weight g | Ordering code | Mounting plate for top-hat rail (ordering code) |
|-------|---|--|------------|----------------|---------------|---|
| A | 0,47 μ F (X2) + 2 \times 4700 pF (Y2) | 2 \times 270 μ H + 2 \times 16 mH | A | 210 | B84115-E-A30 | — |
| | | | B | 210 | B84115-E-B30 | C62122-A132-B92 |
| | | | K | 270 | B84115-E-K30 | — |
| 6 | 0,47 μ F (X2) + 2 \times 22 nF (Y2) | 2 \times 100 μ H + 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 μ F (X2) + 2 \times 22 nF (Y2) | 2 \times 47 μ H + 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 | | | | | | | | | |

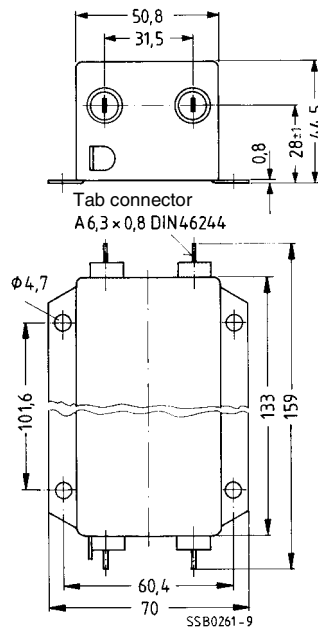
Case style A

B84115-E-A30


Case style A

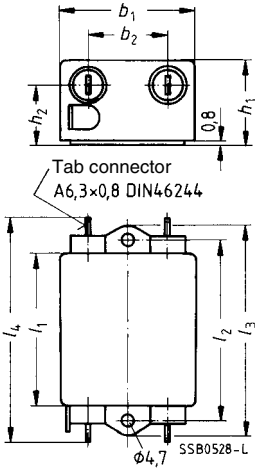
B84115-E-A60

B84115-E-A110



Case style B

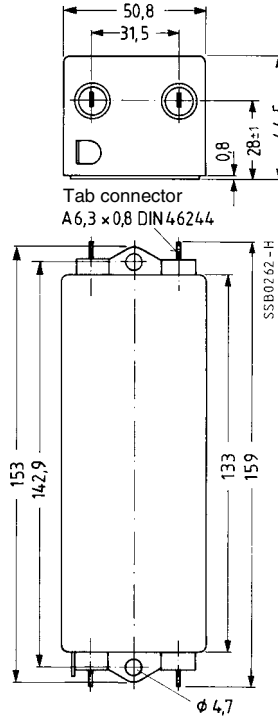
B84115-E-B30



Case style B

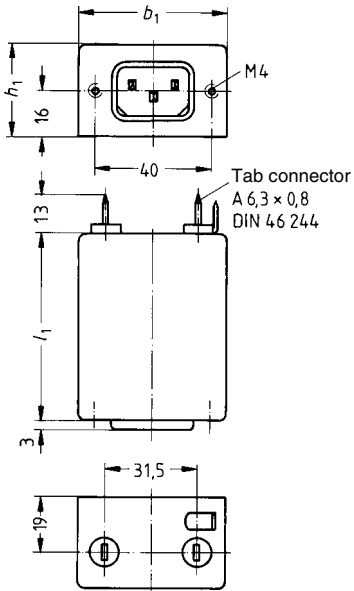
B84115-E-B60

B84115-E-B110

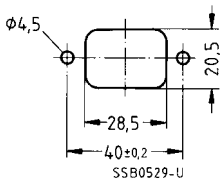


Case style K

B84115-E-K30

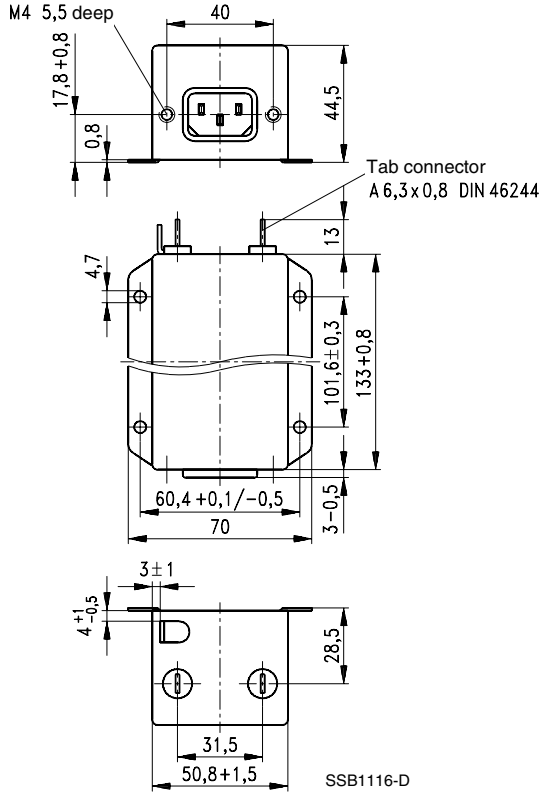


Mounting detail



Case style K

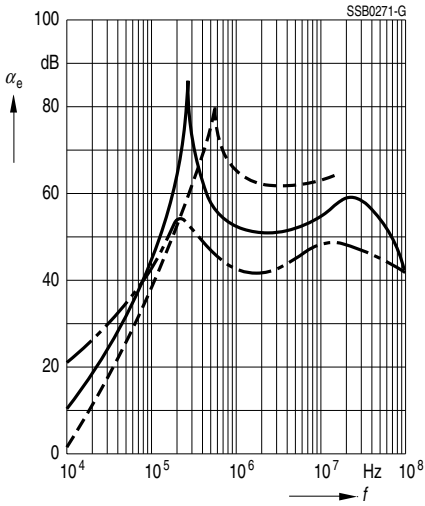
B84115-E-K60



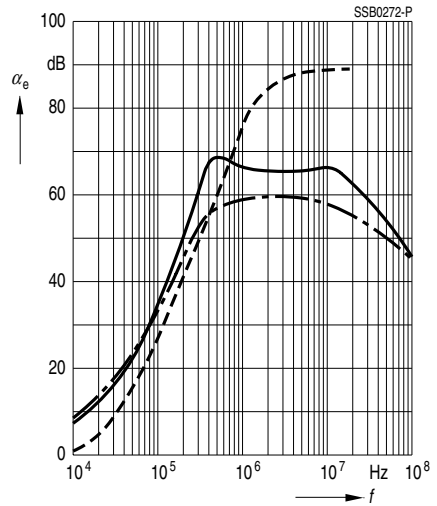
Insertion loss (typical values at $Z = 50 \Omega$)

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

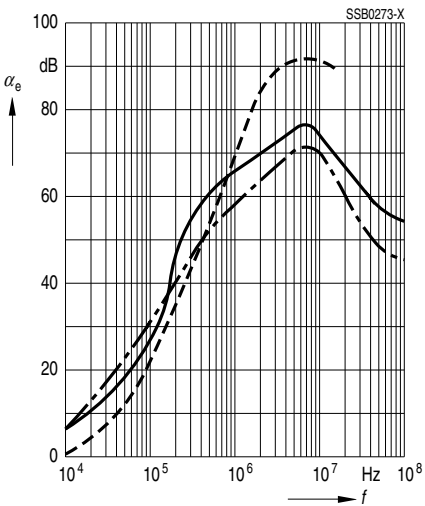
B84115-E-*30



B84115-E-*60



B84115-E-*110



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