

General-Purpose Filters SIFI-A Series

B84111

SIFI-A for normal attenuation
Rated voltage 250 Vac, 50/60 Hz
Rated current 1 A to 20 A

Construction

- Two-line filter
- Aluminum case

Features

- Compact design
- Low leakage current
- All relevant marks of conformity
- Cost-optimized construction

Applications

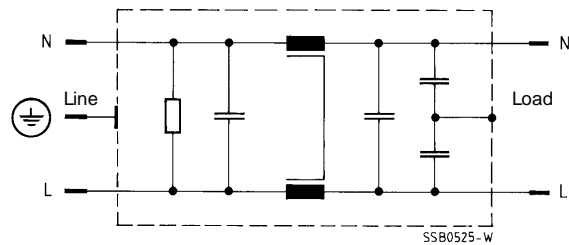
- Switch-mode power supplies in
 - industrial electronics
 - telecommunications
 - data systems
 - medical engineering

Terminals

Various terminal styles
depending on case styles A, B, K, L



Circuit diagram



General-Purpose Filters
SIFI-A Series

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Technical data

| | |
|----------------------------|---|
| Rated voltage V_R | 250 Vac, 50/60 Hz |
| Rated current I_R | Referred to 40 °C ambient temperature |
| Test voltage V_P | 1414 Vdc, 2 s (line/line) 2700 Vdc, 2 s (lines/case) |
| Leakage current I_{leak} | < 0,5 mA at 250 Vac, 50 Hz |
| Climatic category | In accordance with IEC 68-1 25/085/21 (- 25 °C/+ 85 °C/21 days damp heat test) |

Characteristics and ordering codes

| I_R | C_R | L_R | Case style | Appr. weight g | Ordering code | Approvals | | | | | |
|-------|--|------------|------------|----------------|---------------|-----------|---|---|---|---|---|
| | | | | | | | | | | | |
| A | 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 | × | × | × | × | × | × |
| | | | 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 | × | × | × | × | × | × |
| | | | 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 | × | × | × | × | × | × |

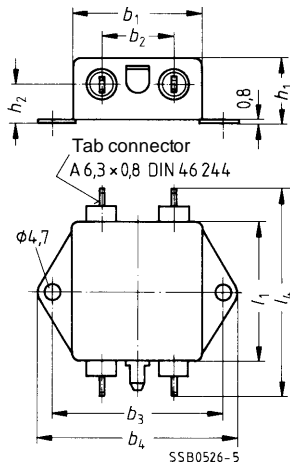
× = mark of conformity granted

Case styles and dimensions

| Case style | Ordering code B84111- | Dimensions in mm | | | | | | | | | | | Litz mm ² | 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 outline drawing | | | | | | | | | | | — | — |

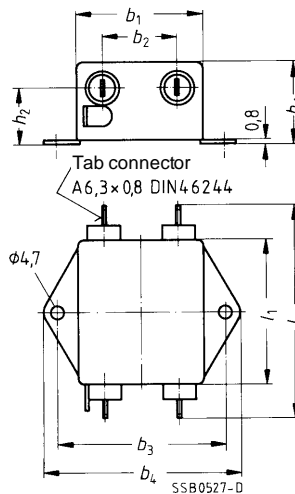
Case style A

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



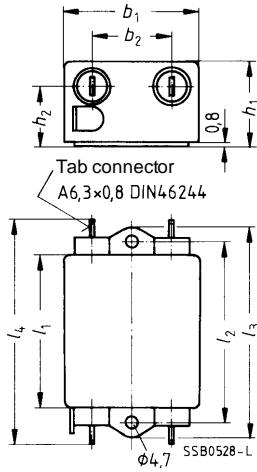
Case style A

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



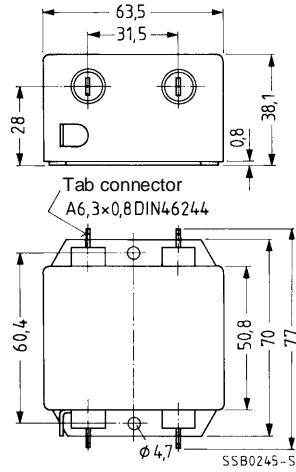
Case style B

B84111-A-B60
 B84111-A-B110

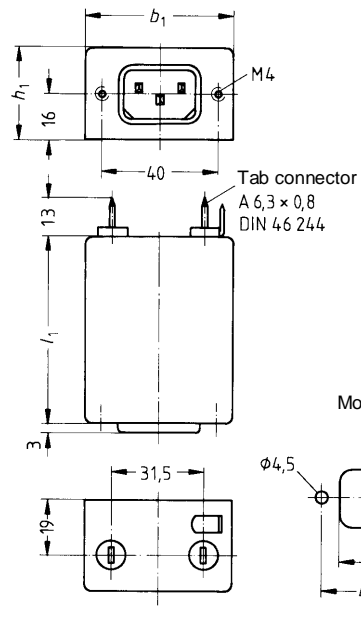


Case style B

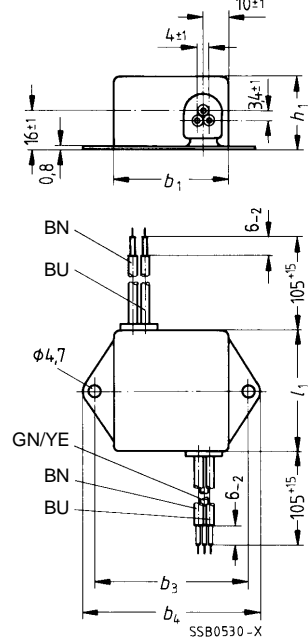
B84111-A-B120



Case style K



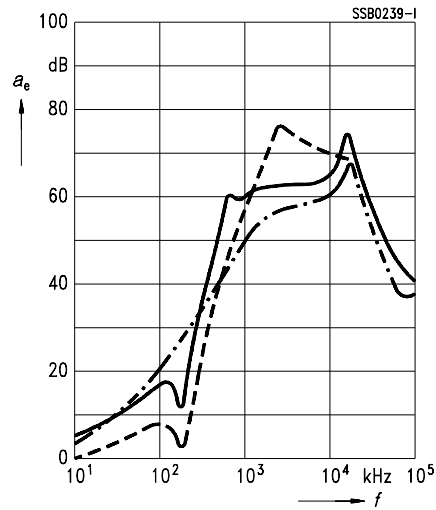
Case style L



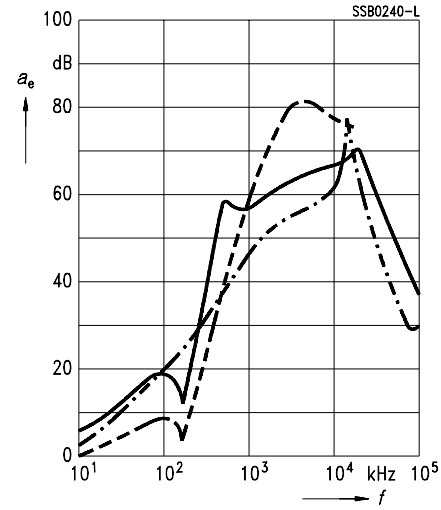
Insertion loss (typical values at $Z = 50 \Omega$)

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

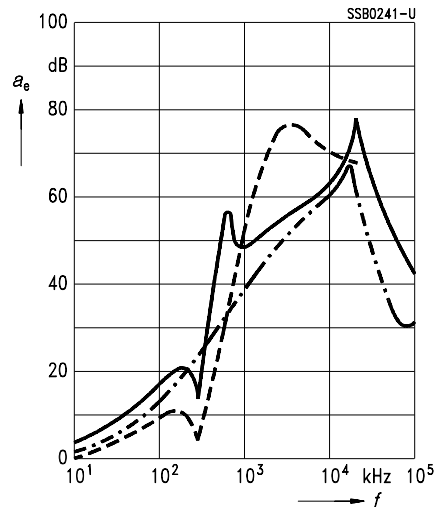
B84111-A-*10 ... -A-*30



B84111-A-*60



B84111-A-*110



B84111-A-*120

