

Power line filters for three-phase systems

Rated voltage 520/300 VAC, 50/60 Hz





Rated current 8 bis 150 A



Construction

- Three-line filter
- Metal case

Features

- Excellent price/performance ratio
- Ultra-compact design, low weight
- Low leakage current
- Easy to install
- Construction complies with
EN 133200, UL 1283, CSA 22.2 No. 8 1986
- Optimized for long motor cables and operation
under full loads
- ENEC, UL and CSA approval    

Applications

- Frequency converters for motor drives, e.g.
 - elevators
 - pumps
 - traction systems
 - HVAC systems (heating, ventilation and air conditioning)
- Power supplies

Terminals

Safe-to-touch terminal blocks

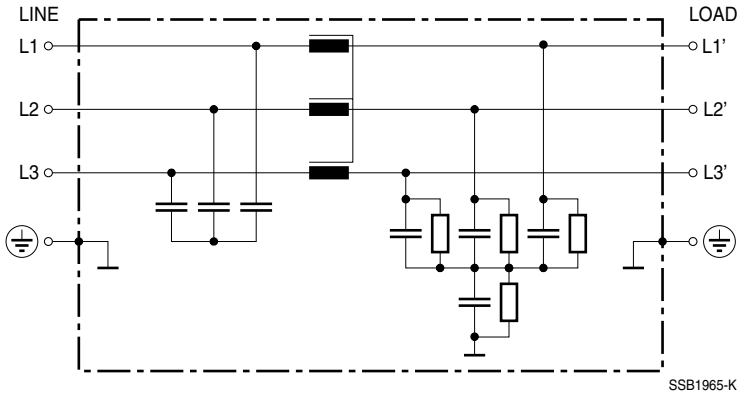
Marking

Marking on component:

Manufacturer's logo, ordering code,
rated voltage, rated current,
rated temperature, climatic category, date code





Minimum marking on packaging:

Manufacturer's logo, ordering code

Typical circuit diagram

Technical data

Rated voltage V_R	520/300 VAC, 50/60 Hz
Rated current I_R	Referred to 40 °C ambient temperature
Test voltage V_{test}	2236 VDC, 2 s (line/line) 2720 VDC, 2 s (line/case)
Overload capability	1.5 · I_R for 3 min per hour or 2.5 · I_R for 30 s per hour
Leakage current I_{leak}	at 520 VAC, 50 Hz
Climatic category	25/085/21 (-25 °C/+85 °C/21 days damp heat test) in accordance with EN 60068-1

Characteristics and ordering codes

I_R A	Terminal cross section mm ²	I_{leak} typ ¹⁾ mA	R_{typ} mΩ	Approx weight kg	Ordering code	Approvals			
									
8	4	13	16	0.58	B84143A0008R105	x	x	x	x
16	4	15	9	0.90	B84143A0016R105	x	x	x	x
25	4	15	5	1.10	B84143A0025R105	x	x	x	x
36	10	15	4	1.75	B84143A0036R105	x	x	x	x
50	10	15	2	1.75	B84143A0050R105	x	x	x	x
66	16	16	1.5	2.7	B84143A0066R105	x	x	x	x
90	35	18	1.1	4.2	B84143A0090R105	x	x	x	x
120	35	18	0.90	4.9	B84143A0120R105	x	x	x	x
150	50	18	0.55	5.3	B84143A0150R105	x	x	x	x

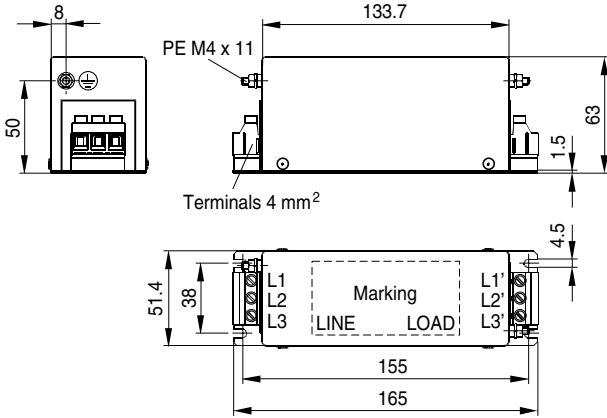
Tightening torques for PE studs and terminal blocks

I_R A	Terminals		PE stud	
	mm ²	Tightening torque	Size	Tightening torque
8	4	0.5 to 0.6 Nm	M4 × 11	1.4 ±0.1 Nm
16	4	0.5 to 0.6 Nm	M5 × 15	2.8 ±0.1 Nm
25	4	0.5 to 0.6 Nm	M5 × 15	2.8 ±0.1 Nm
36	10	1.2 to 1.5 Nm	M6 × 24	4.8 ±0.2 Nm
50	10	1.2 to 1.5 Nm	M6 × 24	4.8 ±0.2 Nm
66	16	1.5 to 1.8 Nm	M6 × 24	4.8 ±0.2 Nm
90	35	3.2 to 3.7 Nm	M10 × 34	23.3 ±1 Nm
120	35	3.2 to 3.7 Nm	M10 × 34	23.3 ±1 Nm
150	50	6 to 8 Nm	M10 × 34	23.3 ±1 Nm

¹⁾ At rated operation

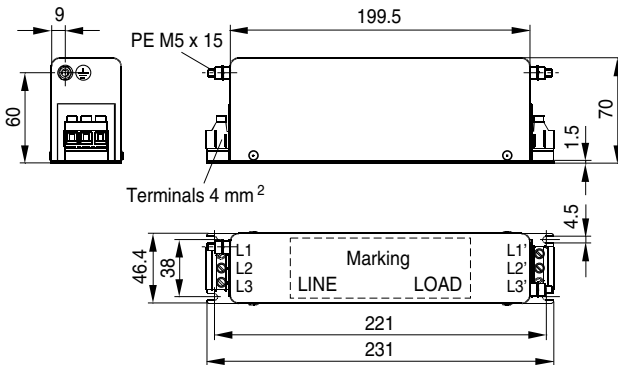
Dimensional drawings

B84143A0008R105



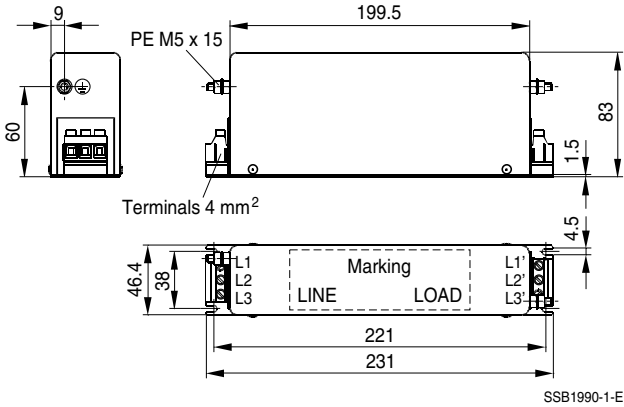
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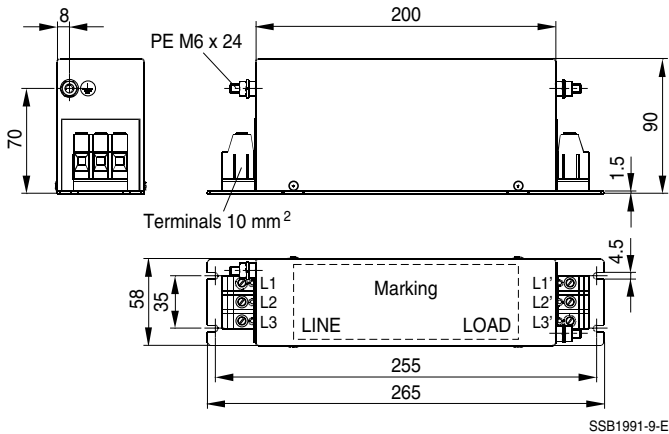


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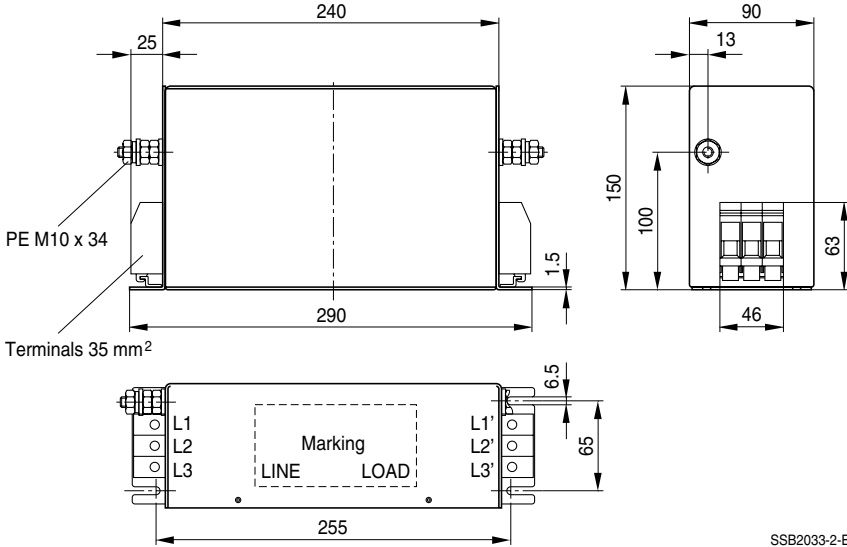
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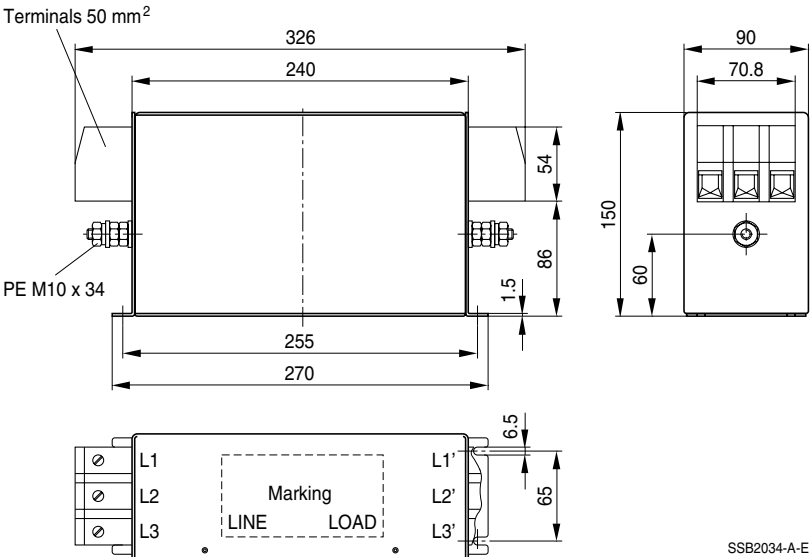
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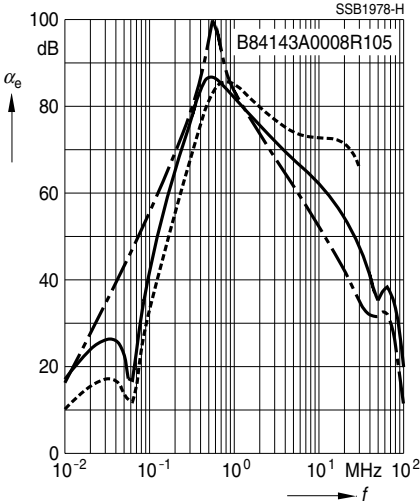


for Converters and Power Electronics

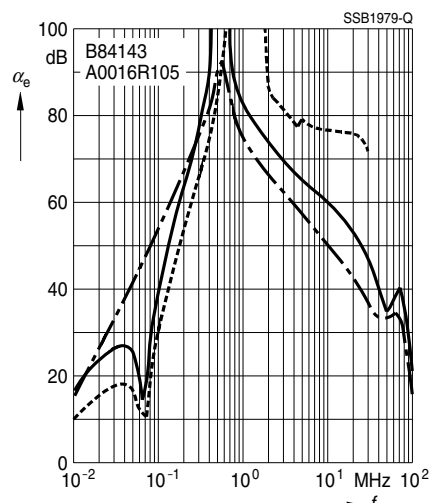
Insertion loss (typical values at $Z = 50 \Omega$)

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

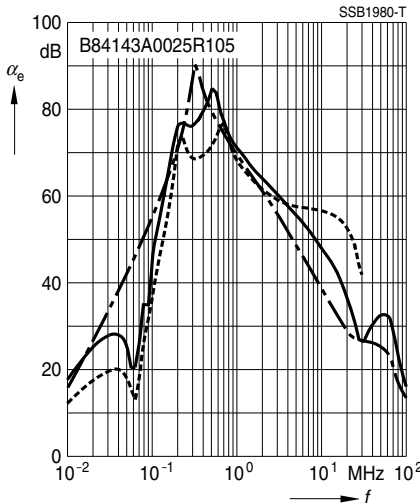
8 Ampere



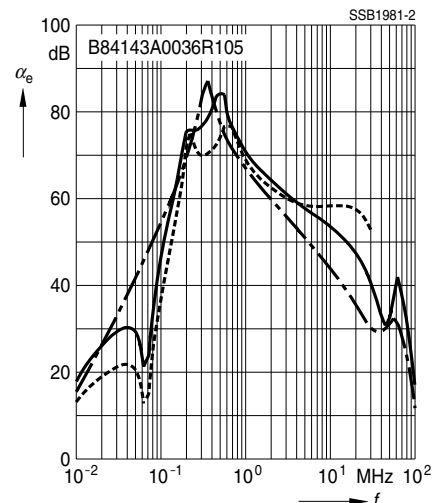
16 Ampere



25 Ampere



36 Ampere

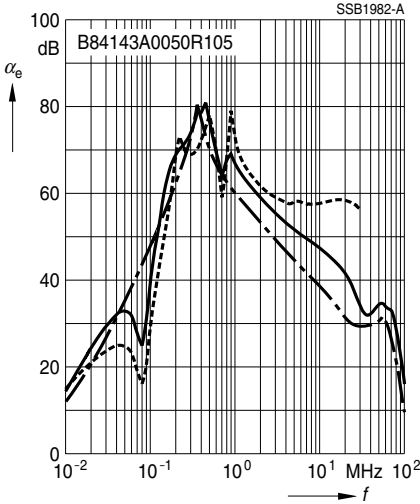


for Converters and Power Electronics

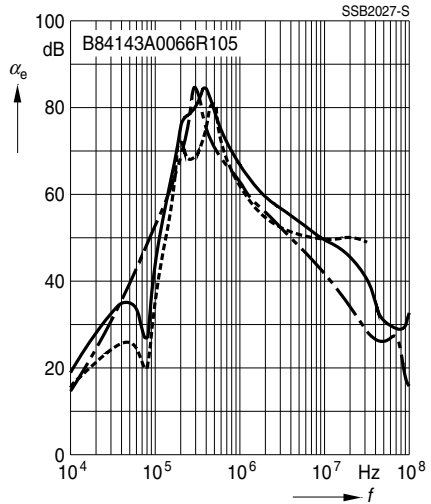
Insertion loss (typical values at $Z = 50 \Omega$)

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

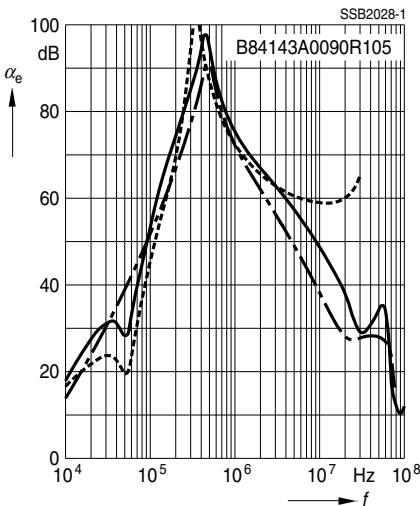
50 Ampere



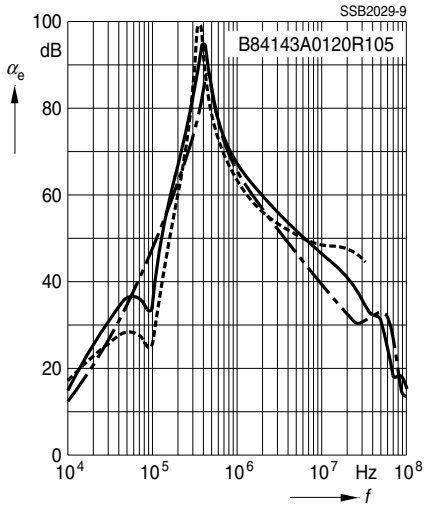
66 Ampere



90 Ampere



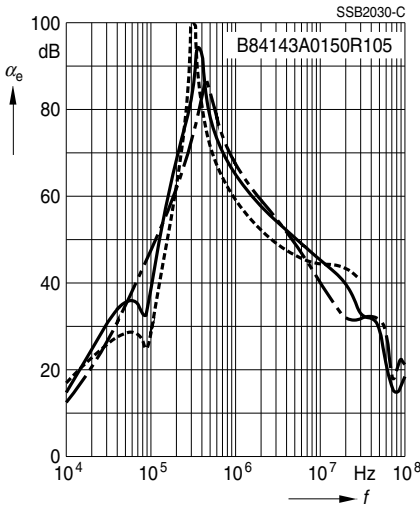
120 Ampere



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

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

150 Ampere



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