

### Power line filters for three-phase systems

Rated voltage 440/250 V~, 50/60 Hz

Rated current 16 to 1600 A

#### Construction

- Four-line filter
- Metal case
- Threaded bushes at end faces for RF-tight installation

#### Features

- Low leakage current
- Easy to install
- Degree of protection up to 180 A: IP 20<sup>1)</sup>
- Space-saving design
- Design based on  
EN 133200, UL 1283, CSA 22.2 No.8 1986

#### Applications

- General-purpose application in power electronics
- UPS
- Wind farms
- For machine tools, textile and packaging machines

#### Terminals

- Safe-to-touch terminal blocks for filters up to 180 A
- Busbars for filters 250 to 1600 A

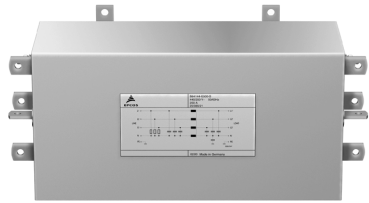
#### Marking

Marking on component:

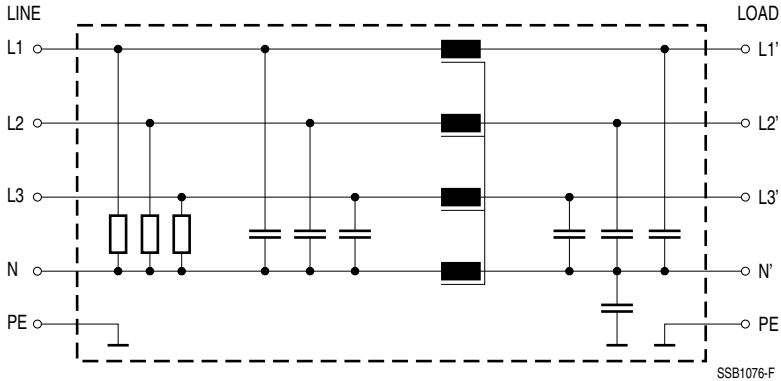
Manufacturer's logo, ordering code,  
rated voltage, rated current,  
date code

Minimum marking on packaging:

Manufacturer's logo, ordering code



1) In accordance with IEC 60529: 1989; EN 60529: 1991; DIN VDE 0470-1

**Typical circuit diagram**

**Technical data**

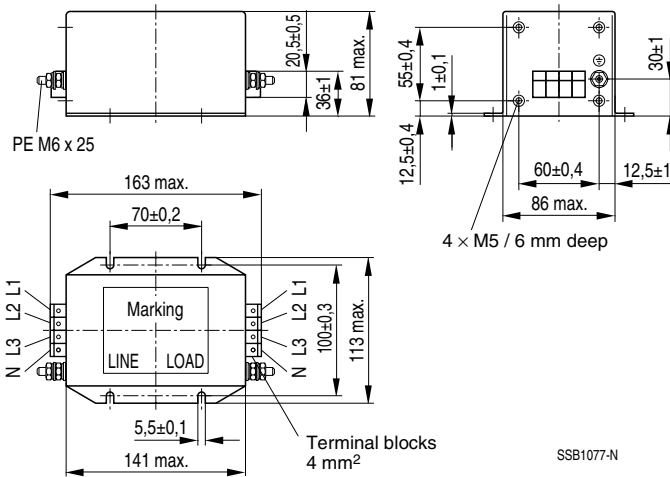
Rated voltage $V_R$	440/250 V~, 50/60 Hz
Rated current $I_R$	Referred to 40 °C ambient temperature
Test voltage $V_P$	1770 V~, 2 s (line/line) 2700 V~, 2 s (lines/case), for 16 ... 50 A 2550 V~, 2 s (lines/case), for 80 ... 180 A 2121 V~, 2 s (lines/case), for 250 ... 1600 A
Overload capability	$1,5 \cdot I_R$ for 3 min per hour $2,5 \cdot I_R$ für 30 s per hour
Leakage current $I_{leak}$	at 400 V~, 50 Hz
Climatic category	25/100/21 (-25 °C/+100 °C/21 days damp heat test) in accordance with EN 60068-1

**Characteristics and ordering codes**

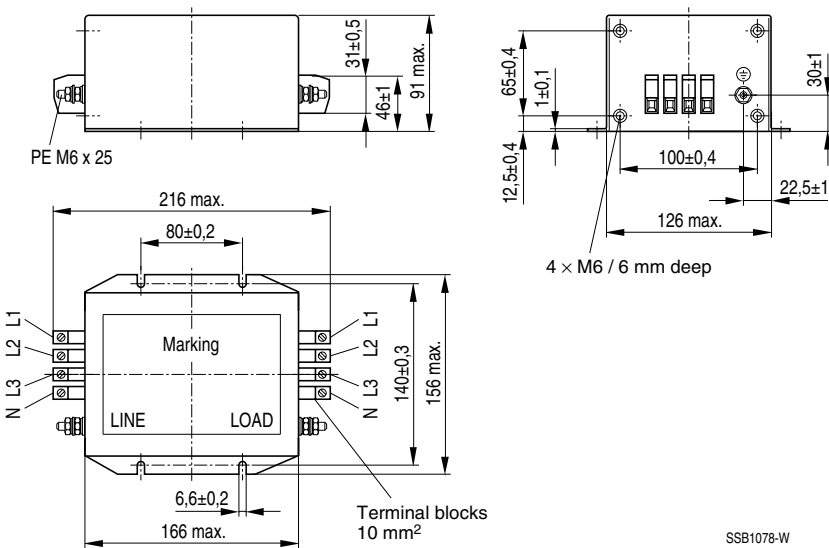
$I_R$ A	Terminal cross section mm <sup>2</sup>	$I_{leak}$ mA	$R_{typ}$ mΩ	$P_V$ W	Approx. weight kg	Ordering code
16	4	< 3,5	10	8	2,2	B84144-A16-R
25	10	< 3,5	6	11	3,7	B84144-A25-R
36	10	< 3,5	3,5	14	3,7	B84144-A36-R
50	10	< 6	1,3	10	4,0	B84144-A50-R
80	25	< 6	0,7	13	9,5	B84144-A80-R
120	50	< 6	0,5	22	10	B84144-A120-R
150	50	< 6	0,35	24	10	B84144-A150-R
180	95	< 6	0,25	24	13	B84144-A180-R
250	Busbars	< 6	0,095	18	32	B84144-G250-S
500		< 6	0,060	45	53	B84144-G500-S
1000		< 6	0,030	90	140	B84144-G1000-S
1600		< 6	0,020	150	185	B84144-G1600-S

Dimensional drawings

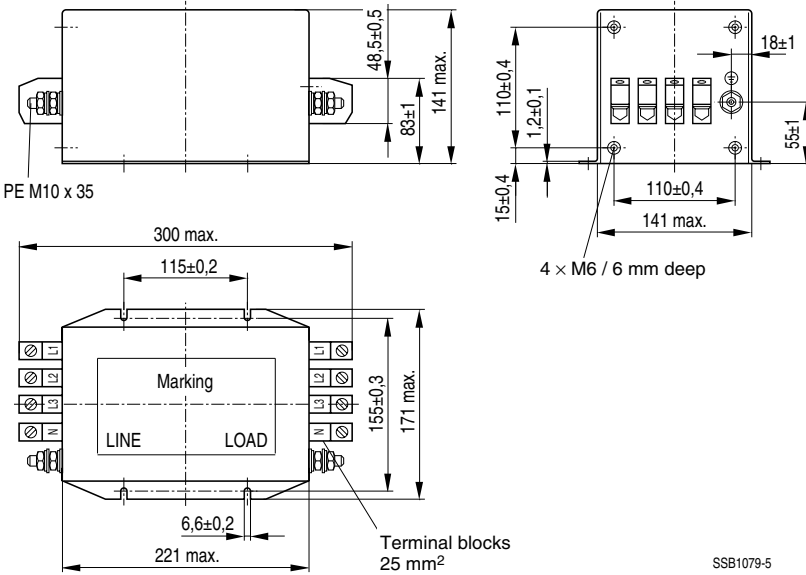
B84144-A16-R



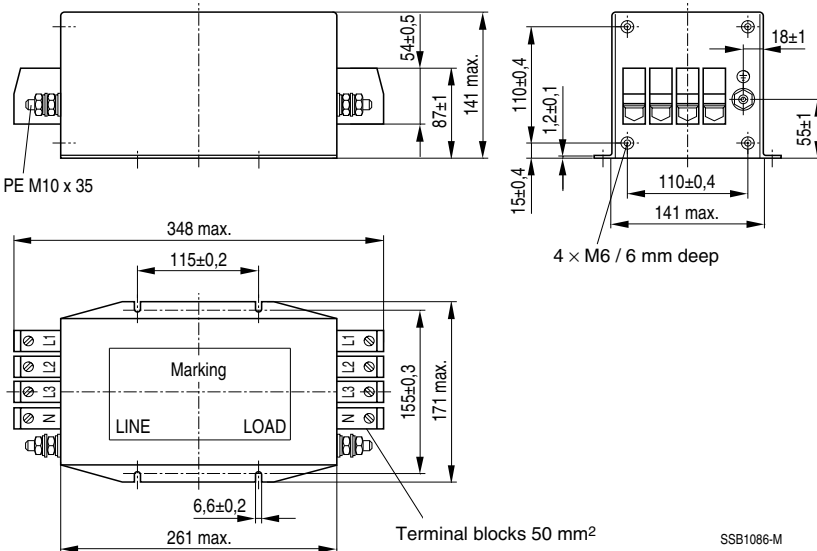
B84144-A25-R ... B84144-A50-R



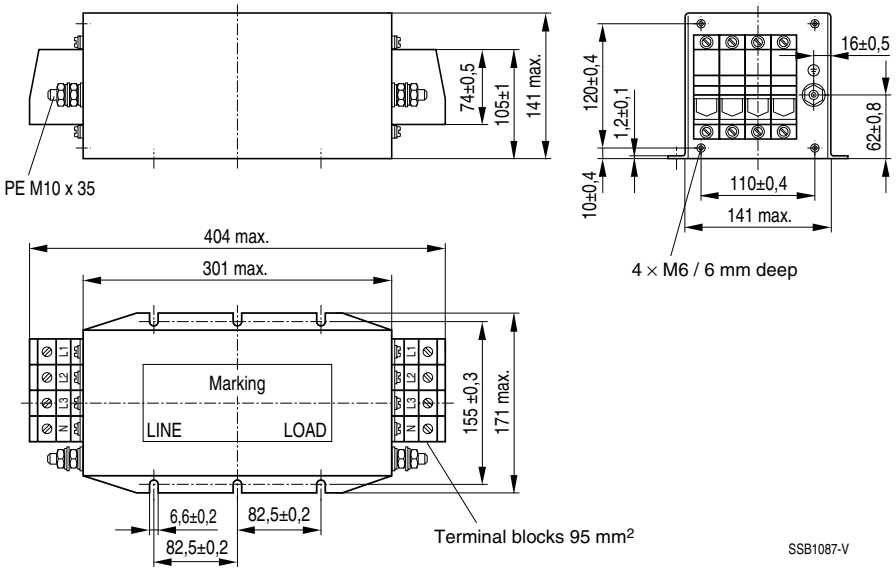
**B84144-A80-R**



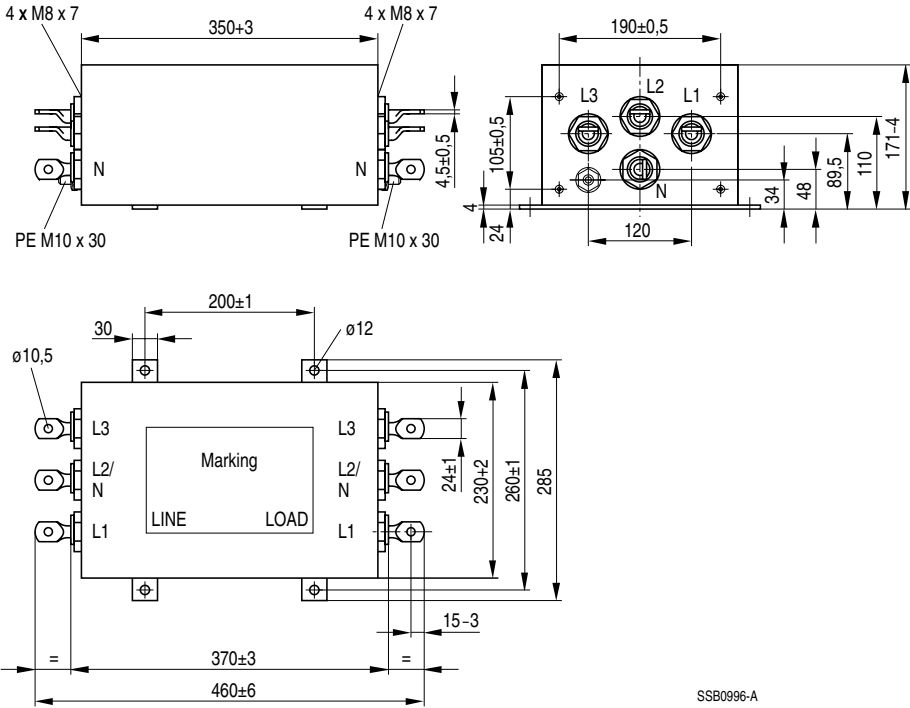
**B84144-A120-R, B84144-A150-R**



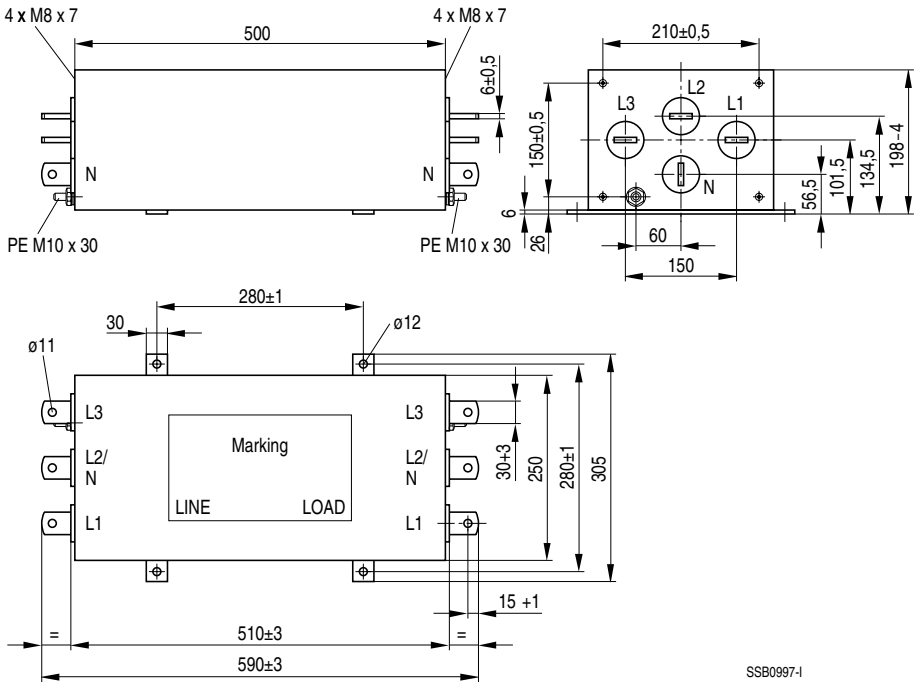
B84144-A180-R



B84144-G250-S



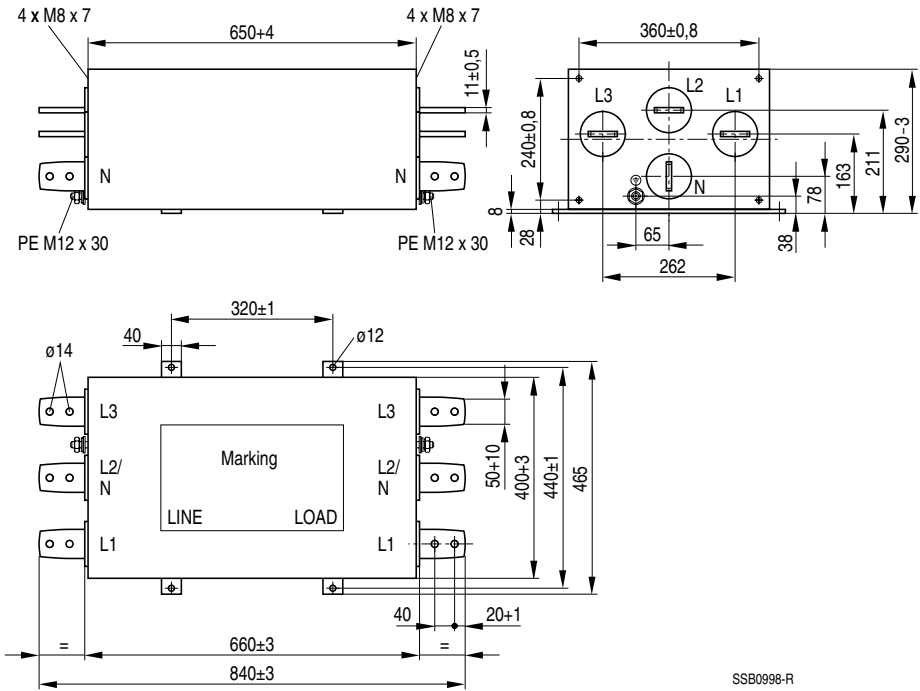
B84144-G500-S



SSB0997-1

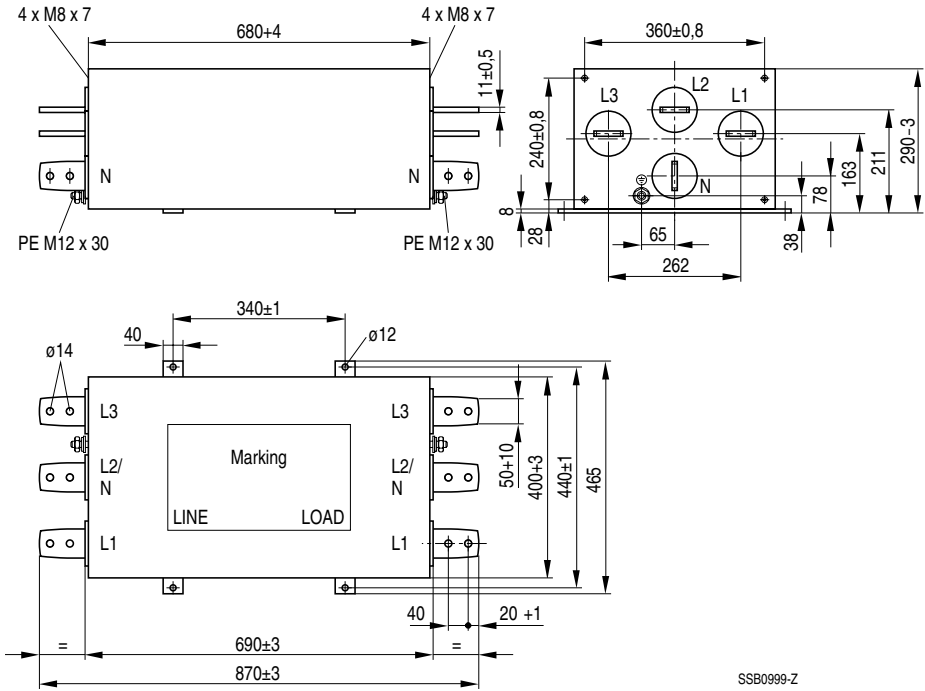


B84144-G1000-S



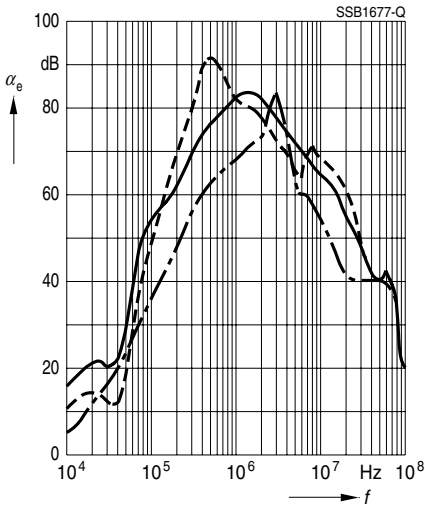
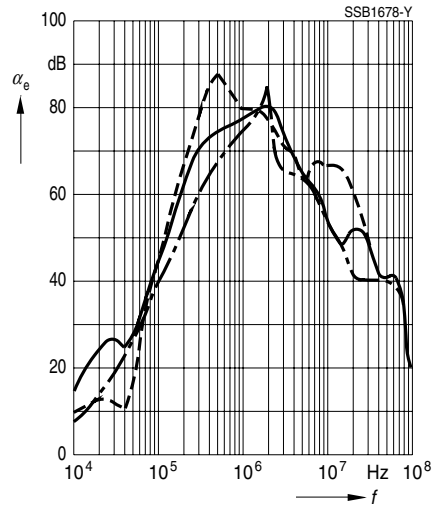
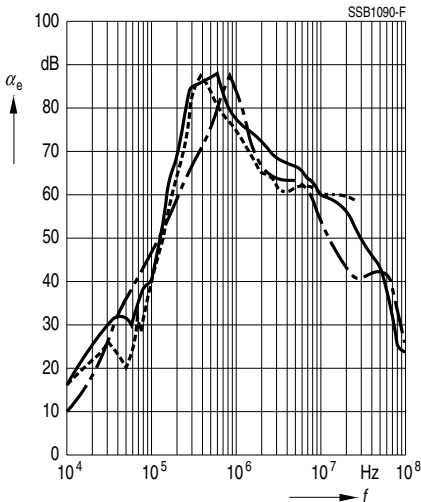
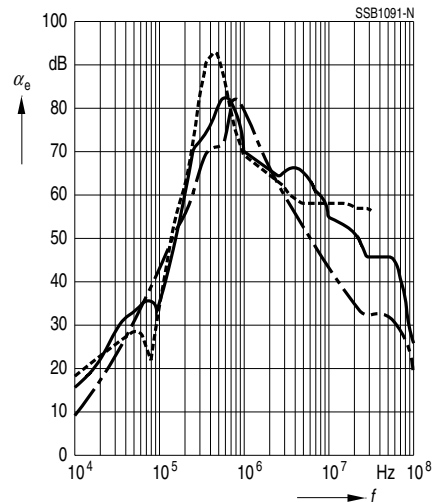
SSB0998-R

Maßbild B84144-G1600-S



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

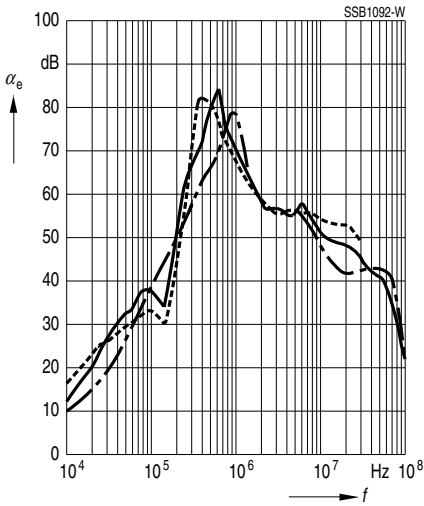
- unsymmetrical, adjacent branches terminated
- · - · - · - · - common mode, all branches in parallel (asymmetrical)
- - - - - differential mode (symmetrical)

**B84144-A16-R ... -A36-R**

**B84144-A50-R**

**B84144-A80-R**

**B84144-A120 ... -A150-R**


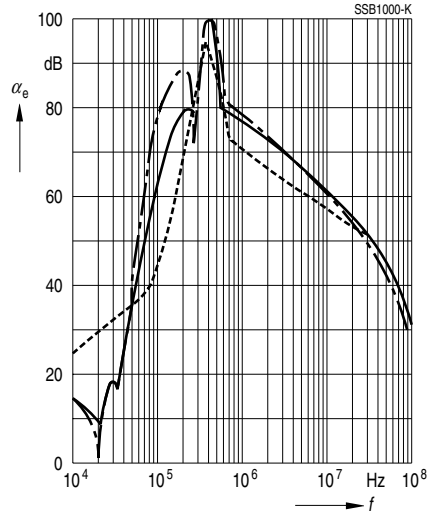
Insertion loss (typical values at  $Z = 50 \Omega$ )

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

B84144-A180-R



B84144-G250-S ... -G1600-S



**Herausgegeben von EPCOS AG**

**Unternehmenskommunikation, Postfach 80 17 09, 81617 München, DEUTSCHLAND**

**☎ ++49 89 636 09, FAX (0 89) 636-2 26 89**

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**Published by EPCOS AG**

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

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