

EFD 30/15/9
Core
B66423

- E core with flattened, lower center leg for especially flat transformer design
- For DC/DC converters
- EFD cores are supplied as single units

Magnetic characteristics (per set)

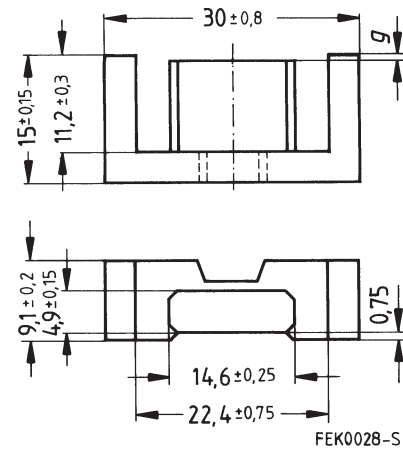
$$\Sigma/A = 0,99 \text{ mm}^{-1}$$

$$l_e = 68 \text{ mm}$$

$$A_e = 69 \text{ mm}^2$$

$$A_{\min} = 69 \text{ mm}^2$$

$$V_e = 4690 \text{ mm}^3$$

Approx. weight 24 g/set

Ungapped

Material	A_L value nH	μ_e	$A_{L1\min}$ nH	P_V W/set	Ordering code
N87	2050 + 30/- 20 %	1610	1280	< 2,60 (200 mT, 100 kHz, 100 °C)	B66423-G-X187

Gapped

Material	A_L value nH	μ_e	g approx. mm	Ordering code
N87	160 ± 10 %	125	0,71	B66423-U160-K187
	250 ± 10 %	196	0,38	B66423-U250-K187
	315 ± 10 %	246	0,27	B66423-U315-K187

The A_L value in the table applies to a core set comprising one ungapped core (dimension $g = 0$) and one gapped core (dimension $g > 0$).

Calculation factors (for formulas, see “E cores: general information”, page 382)

Material	Relationship between air gap – A_L value		Calculation of saturation current			
	$K1$ (25 °C)	$K2$ (25 °C)	$K3$ (25 °C)	$K4$ (25 °C)	$K3$ (100 °C)	$K4$ (100 °C)
N87	125	- 0,712	176	- 0,796	161	- 0,873

Validity range: $K1, K2: 0,10 \text{ mm} < s < 2,00 \text{ mm}$
 $K3, K4: 70 \text{ nH} < A_L < 630 \text{ nH}$

Coil former

Material: GFR thermosetting plastic; UL 94 V-0, insulation class to IEC 60085:
 B66424-B: F \triangleq max. operating temperature 155 °C; color code green
 B66424-W: H \triangleq max. operating temperature 180 °C; color code black

Solderability: to IEC 60068-2-20, test Ta, method 1 (aging 3): 235 °C, 2 s

Resistance to soldering heat: to IEC 60068-2-20, test Tb, method 1B: 350 °C, 3,5 s

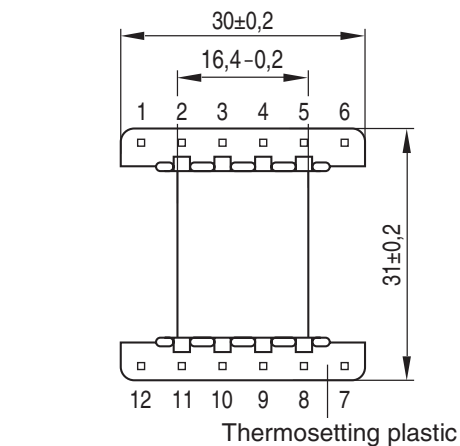
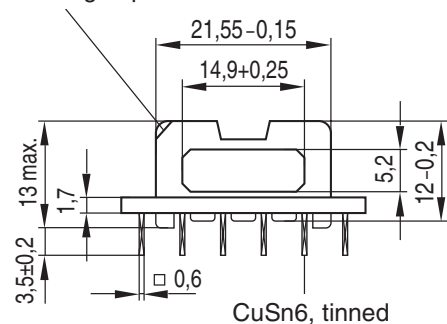
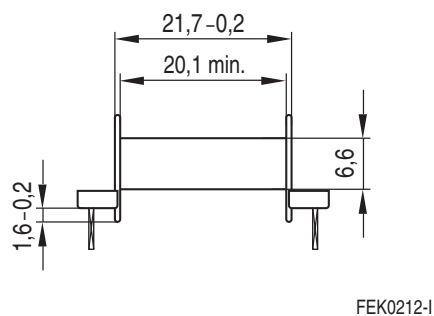
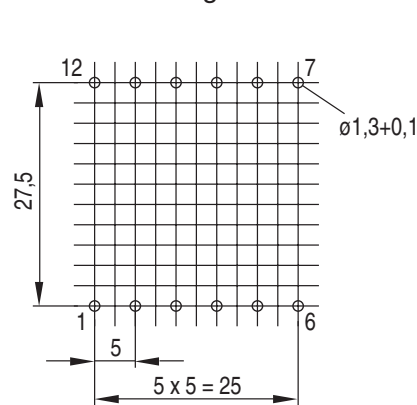
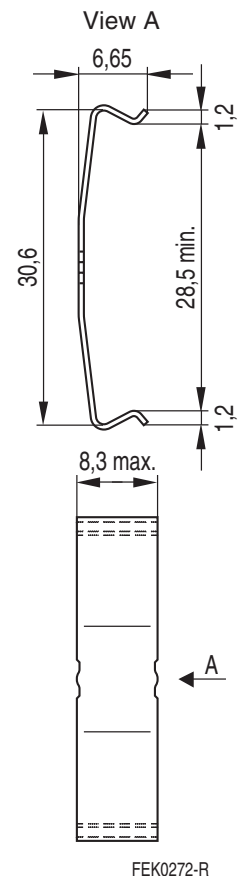
Winding: see "Processing Notes", page 157

Squared pins

Yoke

Material: Stainless spring steel (0,45 mm)

Coil former					Ordering code
Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	
1	52,3	56,7	37,3	12	B66424-B1012-D1 B66424-W1012-D1
Yoke (ordering code per piece, 2 are required)					B66424-B2000

Coil former

Marking of pin 1

Mounting holes

Yoke


Herausgegeben von EPCOS AG

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