

E 20/10/6 (EF 20)

Core

B66311

- In accordance with IEC 61246
- E cores are supplied as single units

Magnetic characteristics (per set)

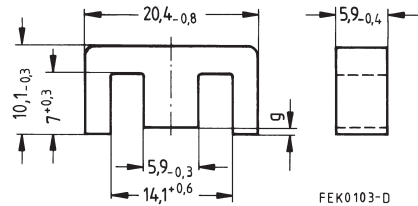
$$\Sigma l/A = 1,44 \text{ mm}^{-1}$$

$$l_e = 46,3 \text{ mm}$$

$$A_e = 32,1 \text{ mm}^2$$

$$A_{\min} = 31,9 \text{ mm}^2$$

$$V_e = 1490 \text{ mm}^3$$



Approx. weight 7,3 g/set

Ungapped

Material	A_L value nH	μ_e	$A_{L1\min}$ nH	P_V W/set	Ordering code
N30	2150 + 30/- 20 %	2460			B66311-G-X130
N27	1300 + 30/- 20 %	1490	1090	< 0,27 (200 mT, 25 kHz, 100 °C)	B66311-G-X127
N87	1470 + 30/- 20 %	1680	1090	< 0,75 (200 mT, 100 kHz, 100 °C)	B66311-G-X187

Gapped

Material	g mm	A_L value approx. nH	μ_e	Ordering code ** = 27 (N27) = 87 (N87)
N27,	0,09 ± 0,01	363	415	B66311-G90-X1**
N87	0,17 ± 0,02	227	259	B66311-G170-X1**
	0,25 ± 0,02	171	195	B66311-G250-X1**
	0,50 ± 0,05	103	118	B66311-G500-X1**

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)
N27	61,6	– 0,737	88,1	– 0,847	80,9	– 0,865
N87	61,6	– 0,737	88,5	– 0,796	78,4	– 0,873

Validity range: $K1, K2$: $0,05 \text{ mm} < s < 1,50 \text{ mm}$
 $K3, K4$: $50 \text{ nH} < A_L < 430 \text{ nH}$

Coil former (magnetic axis horizontal or vertical)

Material: GFR polyterephthalate (UL 94 V-0, insulation class to IEC 60085:

F $\triangleq$ max. operating temperature 155 °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

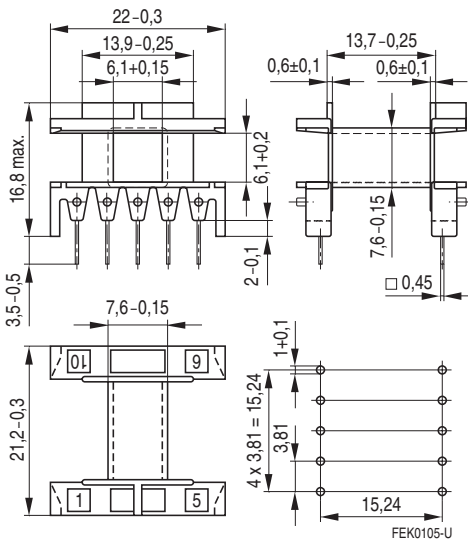
Winding: see "Processing Notes", page 159

Squared pins

For matching yoke see next page

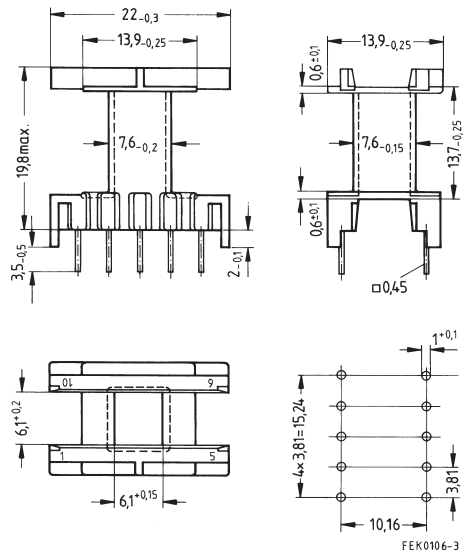
Figure	Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	Ordering code
1	1	34	41,2	42	10	B66206-A1110-T1
2	1	34	41,2	42	10	B66206-J1110-T1

Figure 1, horizontal version



Hole arrangement
View in mounting
direction

Figure 2, vertical version



Hole arrangement
View in mounting
direction

Coil former (with right-angle pins)

Material: GFR polyterephthalate (UL 94 V-0, insulation class to IEC 60085:

F $\triangleq$ max. operating temperature 155 °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 159

Squared pins

Yoke

Material: Stainless spring steel (0,2 mm)

Coil former						Ordering code
Figure	Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	
1	1	34	41,2	42	12	B66206-C1012-T1
2	1	34	41,2	42	14	B66206-C1014-T1
3	Yoke (ordering code per piece, 2 are required)					B66206-A2010

Figure 1, coil former (12 pins)

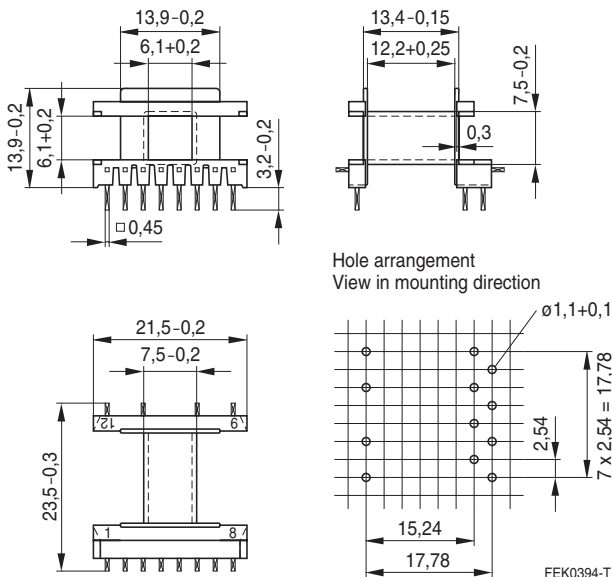


Figure 2, coil former (14 pins)

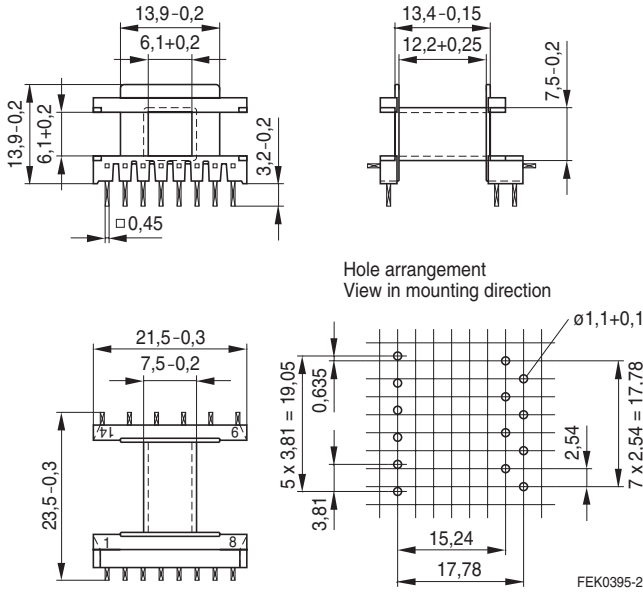
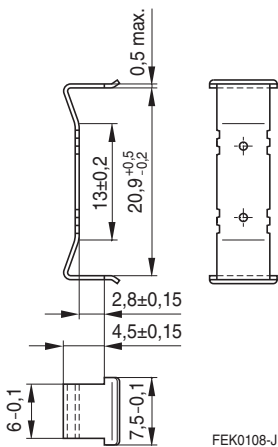


Figure 3, Yoke



Coil former for luminaires

■ Also to be used without clamps

Material: GFR polyterephthalate (UL 94 V-0, insulation class to IEC 60085:

F $\triangleq$ max. operating temperature 155 °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 159

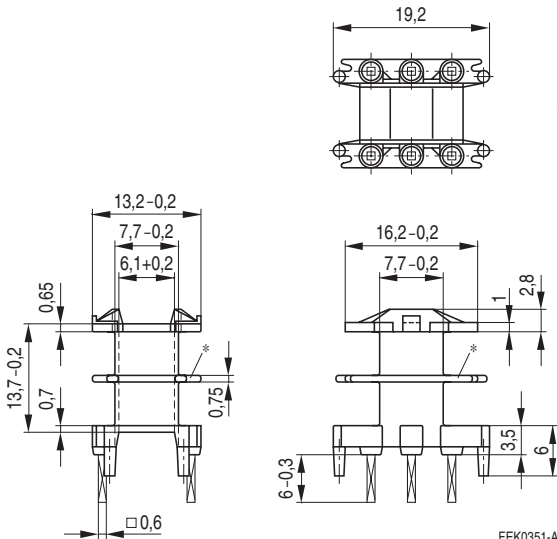
Squared pins

Yoke

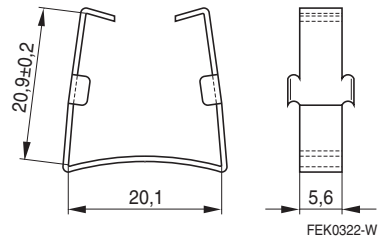
Material: Nickel silver (0,3 mm)

Sections	A_N mm ²	l_N mm	A_R value $\mu\Omega$	Pins	Ordering code
1	32,7	42,3	44,5	6	B66206-J1106-T1
2	30,7	42,3	34,4	6	B66206-J1106-T2
Yoke					B66206-A2001

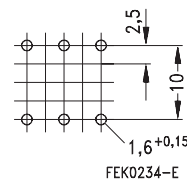
Coil former



Yoke



Hole arrangement
View in mounting direction



* Omitted for one-section version. Where nothing is specified the tolerances are $\pm 0,1$ mm.

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