

Kaschke Components
GmbH

We provide inductive solutions for

- renewable energies
- smart grid
- energy efficiency



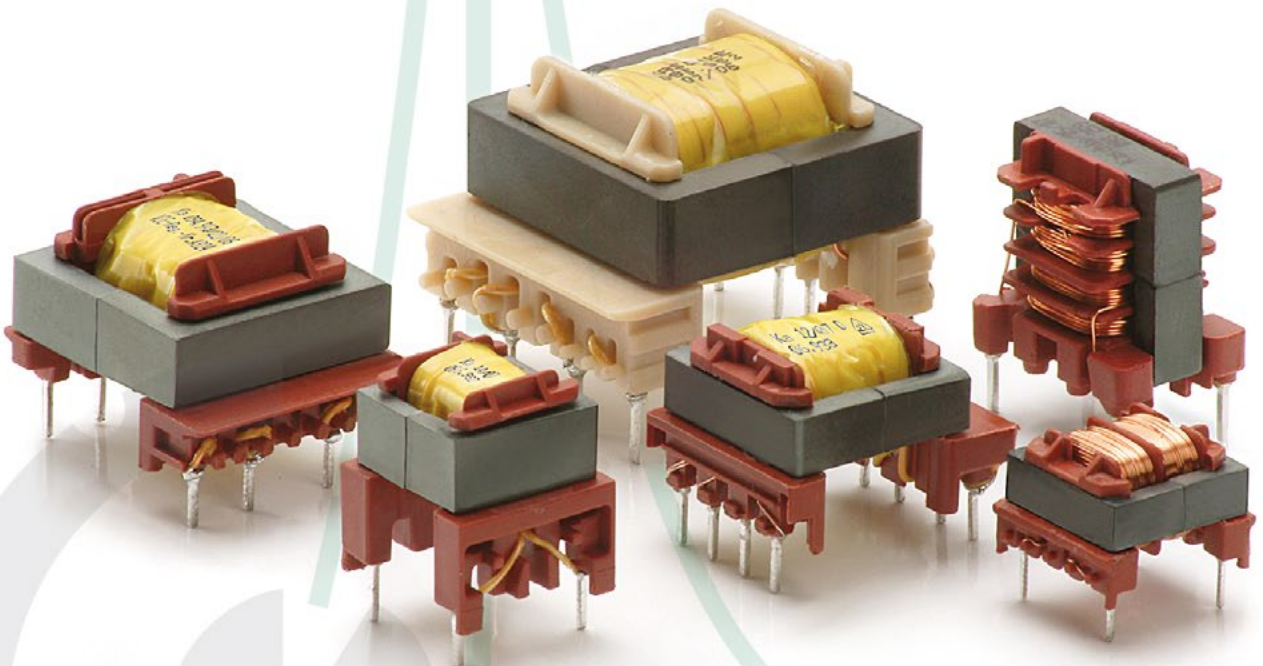
industrial electronics

automotive electronics

lighting technology

consumer goods industry

telecommunications/
entertainment electronics

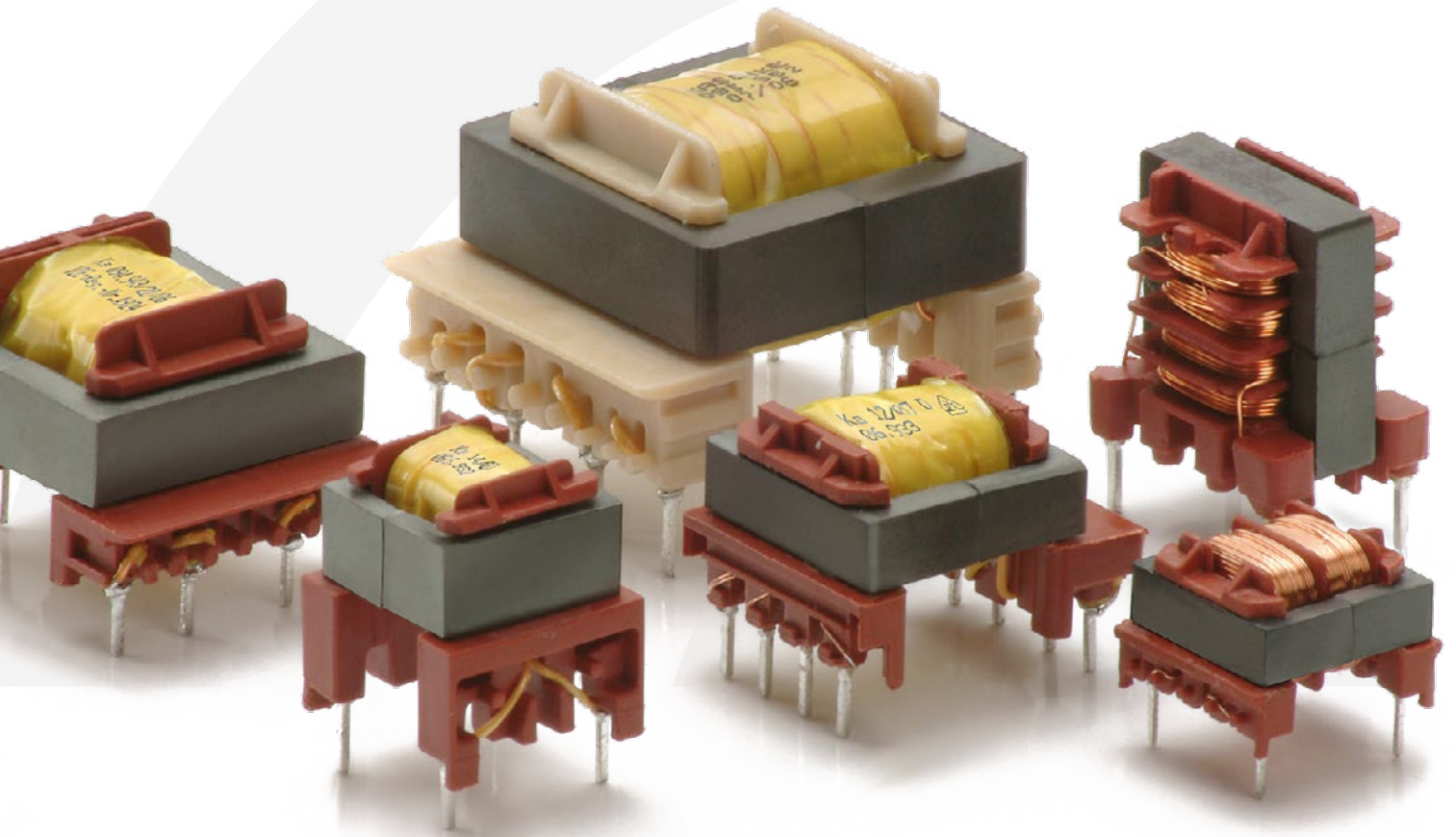


Smart Power
Safety insulation transformers for
different silicon controller families



We provide solutions.

Kaschke SMPS Safety Transformers SmarterPower Supply Design



“The concept of SmartPower is a challenge to the conventional solution of custom transformers by producing standard windings on a variety of power platforms.”

Josef Postert
Head of Sales Kaschke Components GmbH

Important notes for any design

Safety

Having the correct and safe construction of an isolating transformer is vital. The transformer provides the main safety isolation barrier between lethal voltage and the end user. If you look at most EN safety standards they go into great detail on the specification of wound components. The qualification and design of safety rated parts are often difficult and time consuming.

We provide solutions ✓

Performance

With the integration of more control circuitry into the switching IC the most complex part of PSU design is often the transformer rather than the surrounding components. A poorly designed transformer will produce an inefficient and low performing power supply even with the best switching technology.

We provide solutions ✓

Reliability

Repeatability is the critical component in all PSU designs. Variations in tolerance or quality can lead to expensive over design and field failure. The larger the production volume the larger the problem.

We provide solutions ✓

- Integrated safety margin
- Min. 3.75 kV primary to secondary isolation as standard
- All parts use UL listed materials
- Complies with EN safety standards

- Kaschke Power Ferrite K2006 or equivalent low loss material
- Optimized for low leakage inductance
- Optimized for low interwinding capacitance
- Shield windings – improved EMC performance

- Designed for manufacture
- 100% test
- Triple Insulated Wire on all parts
- Fully automated production process

Kaschke Plug & Play

With over 50 years of market experience we lead the way in the development of standard transformer solutions for SMPS control IC's. All of our designs meet the necessary safety and performance criteria of EN61558. They are also fulfilling the transformer requirements for safety insulation according to:

- EN 60065
- EN 60950
- EN 60335
- EN62109 (types on request)

EMC filters meets the criteria for EN60938.

Approved parts by 

Simple to design with

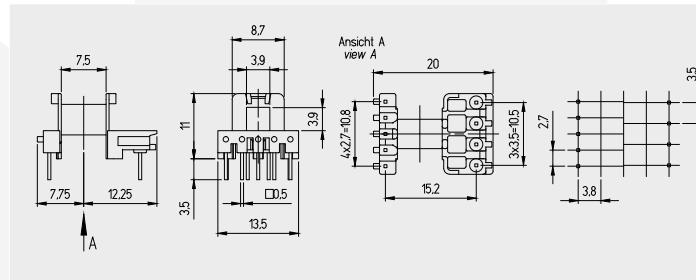
The parts that are listed, are our 'Standard Range' , which we define as popular lines with multiple customers. This 'Standard Range' is continuously updated to keep up with the latest development in power supply silicon. Samples are available to customers free of charge, our default quantity is 2 pieces of any device. You can either contact the Kormag office directly or complete the online enquiry form, we then despatch the same day.

- Free samples
- 50 piece pack sizes for prototyping
- Off-the-shelf stock
- Stockist – www.kormag.co.uk

Transformer for Flyback-Converter

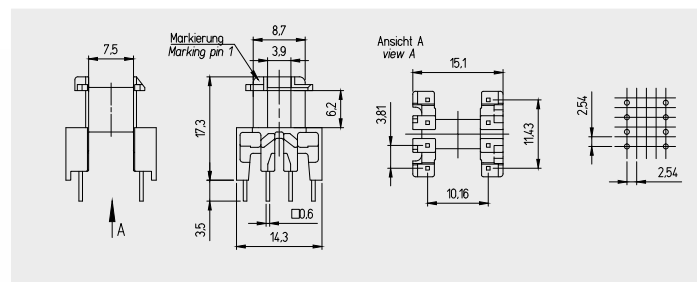
E 13/4 Platform

Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
4W	85-265 VAC	2,39 mH ± 10%	3 V / 0,75 A	3 V / 0,75 A	≥ 6 mm	x	-	071951
4W	85-265 VAC	2,39 mH ± 10%	12 V / 0,2 A	12 V / 0,2 A	≥ 6 mm	x	-	071952



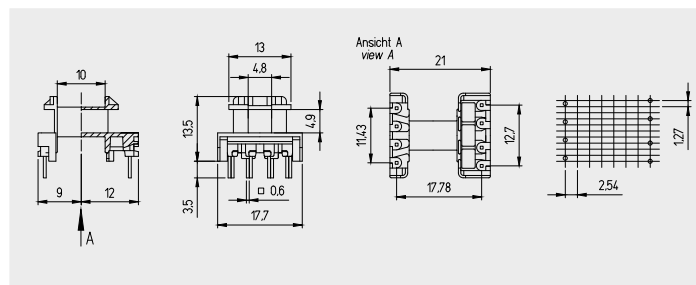
E 13/6 Platform

Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
3 W	85-265 VAC	1,18 mH ± 15 %	12V / 0,125 A	12V / 0,125 A	≥ 6 mm	-	-	096922
3 W	85-265 VAC	1,4 mH ± 15 %	12V / 0,25 A	-	≥ 6 mm	-	-	096931
3 W	85-265 VAC	1,4 mH ± 15 %	6V / 0,5 A	-	≥ 6 mm	-	-	096930
3 W	85-265 VAC	2,8 mH ± 10 %	3V / 1 A	-	≥ 6 mm	-	-	096901
3 W	85-265 VAC	2,8 mH ± 10 %	5V / 0,6 A	-	≥ 6 mm	-	-	096902
3 W	85-265 VAC	2,8 mH ± 10 %	12V / 0,25 A	-	≥ 6 mm	-	-	096903
3 W	85-265 VAC	2,8 mH ± 10 %	15V / 0,2 A	-	≥ 6 mm	-	-	096904
3 W	85-265 VAC	2,62 mH ± 10 %	12V / 0,125 A	12V / 0,125 A	≥ 6 mm	x	x	096906
3 W	85-265 VAC	3,4 mH ± 15 %	12V / 0,25 A	-	≥ 6 mm	x	-	096951
3 W	85-265 VAC	3,8 mH ± 10 %	12V / 0,25 A	-	≥ 6 mm	x	x	096971
4 W	85-265 VAC	3,4 mH ± 15 %	6V / 0,7 A	-	≥ 6 mm	x	-	096950
4 W	85-265 VAC	1,6 mH ± 10 %	5V / 0,8 A	-	≥ 6 mm	x	-	096840
4 W	85-265 VAC	1,5 mH ± 10 %	12V / 0,35 A	-	≥ 6 mm	x	-	096841
4 W	85-265 VAC	1,5 mH ± 10 %	6V / 0,7 A	-	≥ 6 mm	x	-	096940
4 W	85-265 VAC	2,4 mH ± 15 %	12V / 0,35 A	-	≥ 6 mm	-	-	096941
4.5 W	85-265 VAC	2,4 mH ± 10 %	18V / 0,25 A	-	≥ 6 mm	x	-	096943
5 W	85-265 VAC	1,94 mH ± 10 %	18V / 0,3 A	-	≥ 6 mm	-	-	096929



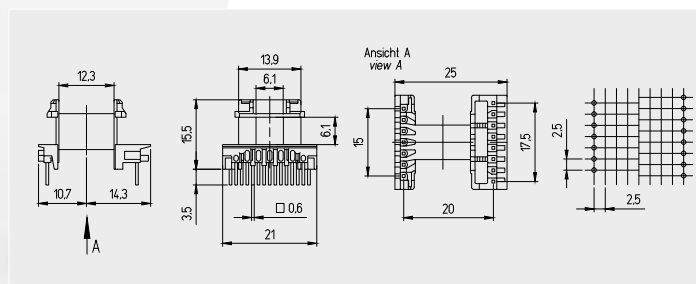
E 16/5 Platform

	Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
VDE	1,5 W	85-265 VAC	5,67 mH ± 10 %	6V / 0,1 A	6V / 0,1 A	≥ 8 mm	-	-	063928
	2 W	85-265 VAC	4,1 mH ± 15 %	3,3V / 0,6	-	≥ 8 mm	x	-	093709
	3 W	85-265 VAC	2,8 mH ± 15 %	15V / 0,2	-	≥ 8 mm	-	-	093904
VDE	3 W	85-265 VAC	3,9 mH ± 10 %	6V / 0,25 A	6V / 0,25 A	≥ 8 mm	-	-	063929
	4 W	85-265 VAC	2,8 mH ± 10 %	5V / 0,4 A	7V / 0,25 A	≥ 8 mm	x	x	093758
	4,5 W	85-265 VAC	1,6 mH ± 10 %	6V / 0,75 A	-	≥ 8 mm	x	-	093940
	4,5 W	85-265 VAC	2,2 mH ± 10 %	18V / 0,25 A	-	≥ 8 mm	x	-	093943
VDE	3-6 W	85-265 VAC	3,9 mH ± 10 %	9-12V / 0,25 A	9-12V / 0,25 A	≥ 8 mm	-	-	063930
VDE	6 W	85-265 VAC	1,55 mH ± 15 %	6V / 0,5 A	6V / 0,5 A	≥ 8 mm	-	x	063931
VDE	6 W	85-265 VAC	1,55 mH ± 15 %	12V / 0,25 A	12V / 0,25 A	≥ 8 mm	-	x	063932
VDE	8 W	85-265 VAC	1,58 mH ± 12 %	6V / 0,65 A	6V / 0,65 A	≥ 8 mm	-	x	093830
	8 W	85-265 VAC	2,0 mH ± 15 %	13V / 0,3 A	13V / 0,3 A	≥ 8 mm	-	x	093832
VDE	9 W	85-265 VAC	0,89 mH ± 10 %	6V / 0,75 A	6V / 0,75 A	≥ 8 mm	-	x	063933
VDE	9 W	85-265 VAC	0,89 mH ± 10 %	12V / 0,37 A	12V / 0,37 A	≥ 8 mm	-	x	063934
	9 W	85-265 VAC	2,55 mH ± 15 %	5V / 0,5 A	12V / 0,5 A	≥ 8 mm	-	-	093203



E 20/6 Platform

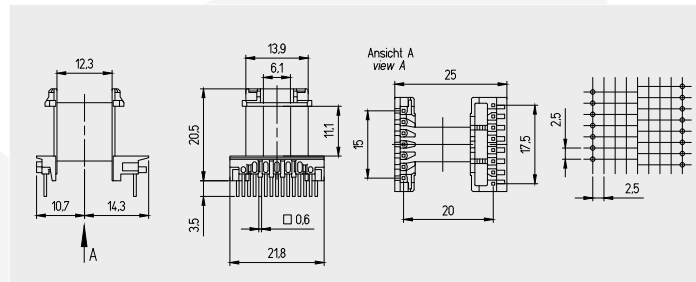
	Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
	14 W	85-265 VAC	1,9 mH ± 10 %	5V / 1,2 A	19V / 0,4 A	≥ 8 mm	-	-	094944
VDE	18 W	85-265 VAC	1,16 mH ± 10 %	6V / 1,5 A	6V / 1,5 A	≥ 8 mm	-	-	094940
VDE	18 W	85-265 VAC	1,16 mH ± 10 %	12V / 0,75 A	12V / 0,75 A	≥ 8 mm	-	-	094941
VDE	18 W	85-265 VAC	1,2 mH ± 10 %	18V / 0,5 A	18V / 0,5 A	≥ 8 mm	-	-	094943
VDE	19 W	85-265 VAC	1,1 mH ± 10 %	24V / 0,5 A	6V / 1 A	≥ 8 mm	-	-	094942
VDE	22 W	85-265 VAC	0,94 mH ± 10 %	5V / 1,4 A	12V / 1,2 A	≥ 8 mm	x	-	094932
VDE	22 W	85-265 VAC	0,94 mH ± 10 %	6V / 1,8 A	6V / 1,8 A	≥ 8 mm	x	-	094931
VDE	22 W	85-265 VAC	0,94 mH ± 10 %	5V / 0,8 A	24V / 0,8 A	≥ 8 mm	x	-	094930
VDE	22 W	85-265 VAC	0,94 mH ± 10 %	12V / 0,9 A	12V / 0,9 A	≥ 8 mm	x	-	094929
	22 W	85-265 VAC	0,94 mH ± 10 %	20V / 0,55 A	20V / 0,55 A	≥ 8 mm	x	-	094792



* Multiple outputs can be connected in series or in parallel as long as the maximum power of the transformer is not exceeded. Please see web site or data sheets for possible configurations.
 ** The "Power" shown is the nominal power of the supply. It may vary depending on the design of the circuit.

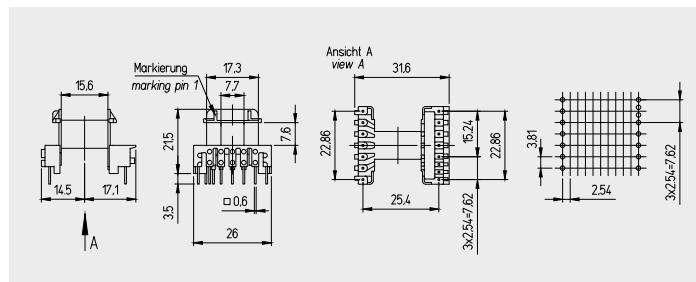
E 20/11 Platform

Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
27W	85-265 VAC	797 $\mu\text{H} \pm 10\%$	6 V / 2,2 A	6V/2,2 A	≥ 8 mm	x	-	094980
27W	85-265 VAC	797 $\mu\text{H} \pm 10\%$	12 V / 1,1 A	12V/1,1 A	≥ 8 mm	x	-	094981



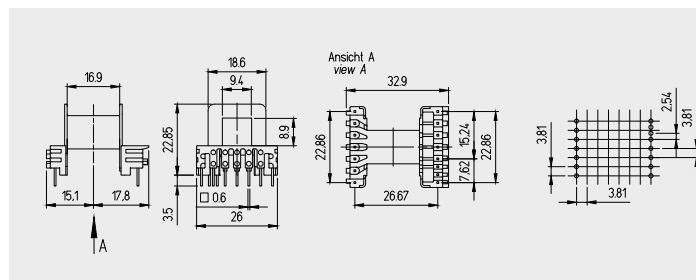
E 25/7 Platform

Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
28 W	85-265 VAC	1,28 mH $\pm 10\%$	13,8 V / 1 A	13,8 V / 1 A	≥ 8 mm	x	-	095931
34 W	85-265 VAC	504 $\mu\text{H} \pm 10\%$	5 V / 2,5 A	12 V / 1,8 A	≥ 8 mm	x	-	095954
34 W	85-265 VAC	504 $\mu\text{H} \pm 10\%$	5 V / 2 A	24 V / 1,0 A	≥ 8 mm	x	-	095953
38 W	85-265 VAC	504 $\mu\text{H} \pm 10\%$	15 V / 1,3 A	15 V / 1,3 A	≥ 8 mm	x	-	095952
45 W	85-265 VAC	504 $\mu\text{H} \pm 10\%$	30 V / 0,75 A	30 V / 0,75 A	≥ 8 mm	x	-	095951
45 W	85-265 VAC	504 $\mu\text{H} \pm 10\%$	12 V / 1,9 A	12 V / 1,9 A	≥ 8 mm	x	-	095956



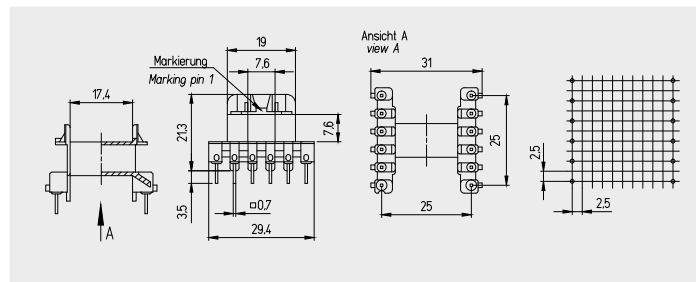
EFS 25/13 Platform

Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
55 W	85-265 VAC	350 $\mu\text{H} \pm 10\%$	15 V / 1,8 A	15 V / 1,8 A	≥ 8 mm	x	-	195951
55 W	85-265 VAC	350 $\mu\text{H} \pm 10\%$	24 V / 1,8 A	6 V / 1,8 A	≥ 8 mm	x	-	195952



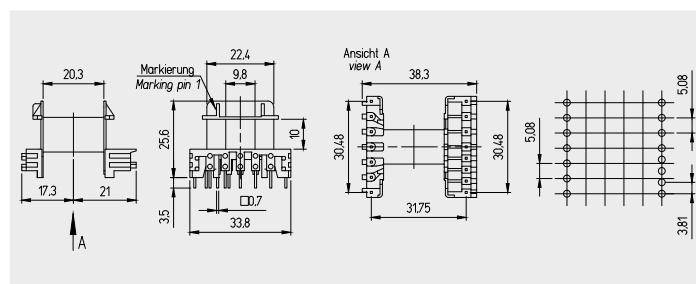
E 30/7 Platform

Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
48W	85-265 VAC	930 $\mu\text{H} \pm 10\%$	13,8V / 3,5A	-	≥ 6 mm	x	-	066932
42 W	85-265 VAC	346 $\mu\text{H} \pm 10\%$	14V / 3 A	-	≥ 6 mm	x	-	066929
50 W	85-265 VAC	320 $\mu\text{H} \pm 10\%$	24V / 2 A	-	≥ 6 mm	x	-	066930
56 W	85-265 VAC	290 $\mu\text{H} \pm 10\%$	28V / 2 A	-	≥ 6 mm	x	-	066931



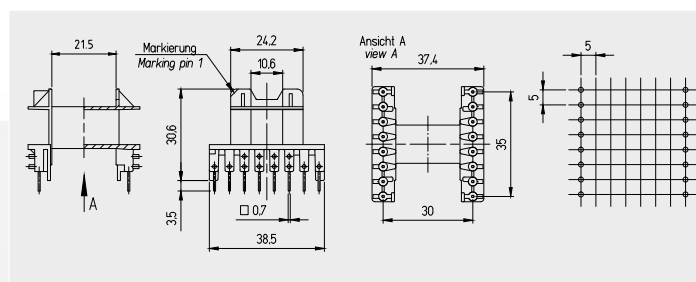
E 32/9 Platform

Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
70W	85-265 VAC	281 $\mu\text{H} \pm 10\%$	12V / 2,8 A	12V / 2,8A	≥ 8 mm	x	-	149950
70W	85-265 VAC	281 $\mu\text{H} \pm 10\%$	24V / 2,5 A	6V / 1,5 A	≥ 8 mm	x	-	149951



E 36/11 Platform

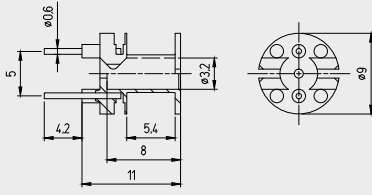
Power**	Inputvoltage	Primary Inductance	Output 1	Output2	Creepage	AUX	Shield	Part Number
68 W	85-265 VAC	530 $\mu\text{H} \pm 10\%$	15V / 4.5 A	-	≥ 8 mm	x	-	067043
96 W	85-265 VAC	178 $\mu\text{H} \pm 10\%$	30V / 1,6 A	30V / 1,6A	≥ 8 mm	x	-	067039
96 W	85-265 VAC	134 $\mu\text{H} \pm 10\%$	24V / 4 A	-	≥ 8 mm	x	-	067050



* Multiple outputs can be connected in series or in parallel as long as the maximum power of the transformer is not exceeded. Please see web site or data sheets for possible configurations.
 ** The "Power" shown is the nominal power of the supply. It may vary depending on the design of the circuit.

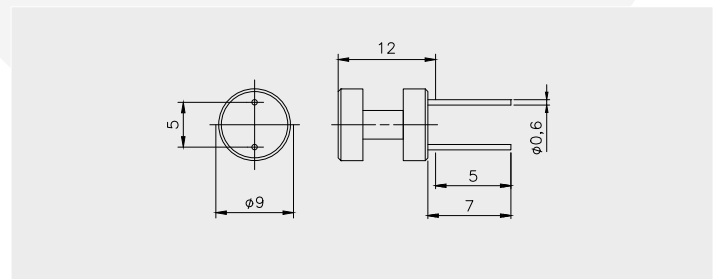
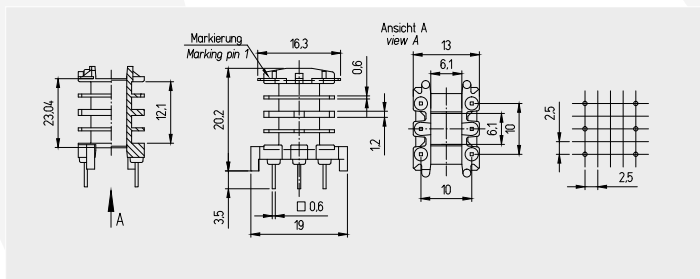
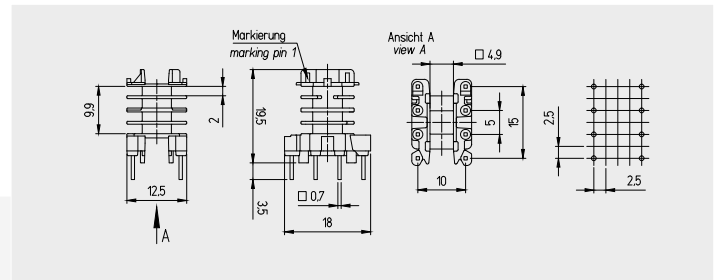
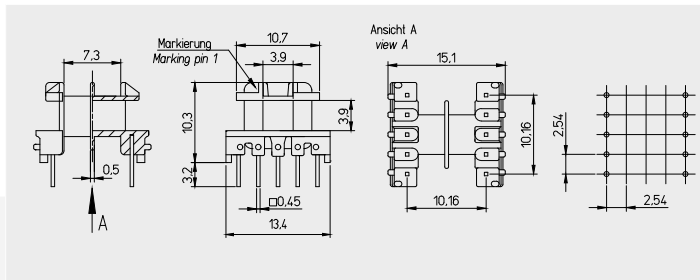
Inductance for Buck-Converter

Power**	Inputvoltage	Primary Inductance	Output 1	Part Number
4 W	85-265 VAC	0,68 mH	5-15V / 410mA	037262
4 W	85-265 VAC	1,0mH	5-15V / 300mA	037259
4 W	85-265 VAC	1,5mH	5-15V / 270mA	037256



EMC Filter

Power**	Inputvoltage	Primary Inductance	Platforms	Part Number
0,24 A	85-265 VAC	33 mH	E13/4	071925
0,26 A	85-265 VAC	27 mH	E13/4	071924
0,28 A	85-265 VAC	22 mH	E13/4	071923
0,54 A	85-265 VAC	12 mH	E13/4	071921
0,35 A	85-265 VAC	47 mH	E16	093657
0,4 A	85-265 VAC	39 mH	E16	093551
0,5 A	85-265 VAC	27 mH	E16	093267
0,625 A	85-265 VAC	15 mH	E16	093259
0,9 A	85-265 VAC	8,75 mH	E16	093216
0,8 A	85-265 VAC	22,5 mH	E20	094916
1,05 A	85-265 VAC	220 uH	8 mm Drum	036617
1,7 A	85-265 VAC	100 uH	8 mm Drum	036613
3,7 A	0-60 V DC	6.8 uH	8 mm Drum	036230
4,3 A	0-60 V DC	4.7 uH	8 mm Drum	036238
5,5 A	0-60 V DC	3.3 uH	8 mm Drum	036242
5,6 A	0-60 V DC	10 uH	8 mm Drum	036601



Drawings without ferrite cores, tolerances and maximum values. For further technical datas, please visit www.kormag.co.uk

* Multiple outputs can be connected in series or in parallel as long as the maximum power of the transformer is not exceeded. Please see web site or data sheets for possible configurations.

** The "Power" shown is the nominal power of the supply. It may vary depending on the design of the circuit.

All information given without liability. If you require further information about our products, do not hesitate to contact our representatives, or visit our website, www.kaschke.de.

Kaschke Components GmbH

Rudolf-Winkel-Straße 6 · 37079 Göttingen · Germany

Fon +49 (0) 551 5058-6 · Fax +49 (0) 551 65756

kaschke.de