




Catalog



**HAHN QUALITY**  
Performance that builds trust.



*“Quality will remain after the  
price has been forgotten.”*



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Performance that builds trust.

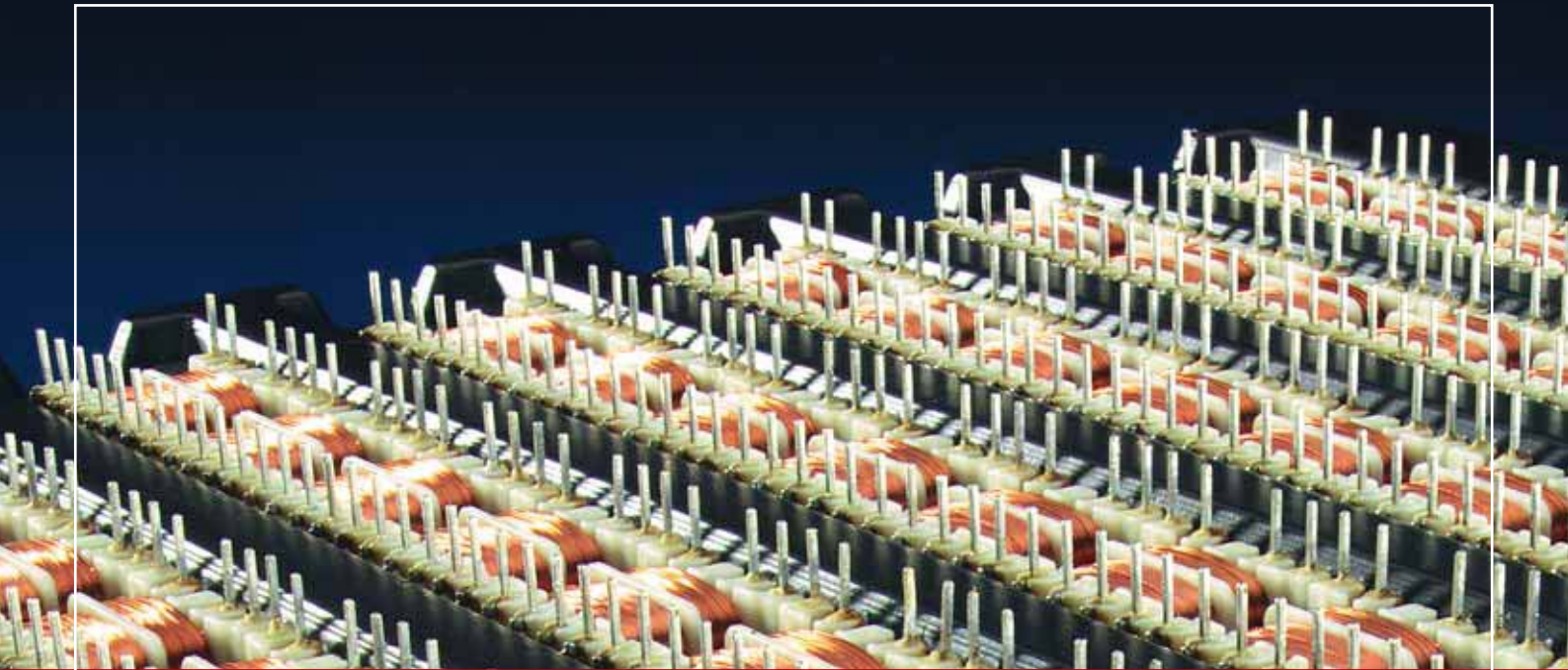


## At first we can achieve the right potential from electricity!

HAHN has been producing an almost unbelievable volume of several million transformers over the past 40 years. These have ensured the beneficial use of electrical energy by consumers all over the world, e.g. for preparing breakfast in the mornings, when going about the daily housework, in industrial production or, when enjoying the relaxing entertainment program in the evenings.

HAHN transformers are an indispensable aid everywhere, converting high voltage from wall power sockets to a serviceable source of lower current voltage. The maxim 'Performance that builds trust' has made HAHN's transformers renowned all over the world.

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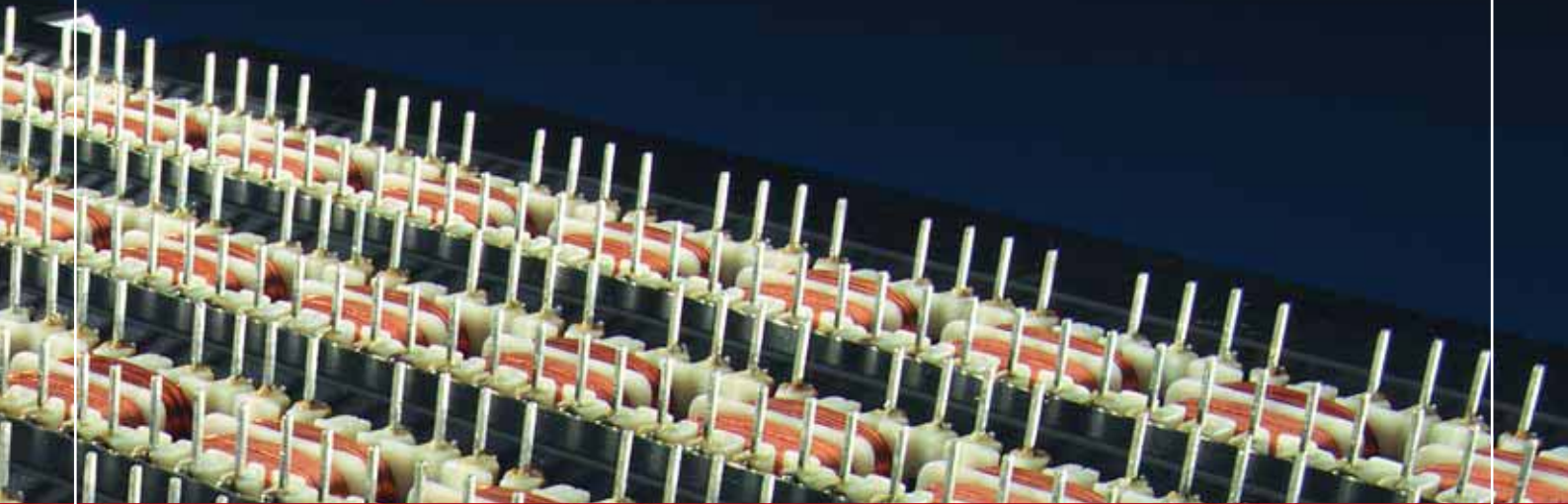


## HAHN Quality – Performance that builds trust.



This has been the corporate philosophy of the HAHN company since its foundation in 1949. Right from the start, it was the maxim of HAHN to supply products of high quality and to base all efforts on customer-requirements and satisfaction. Corporate growth has been achieved to a dynamic and reliable extent. The ongoing expansion of the manufacturing facilities furthered the improvement in quality and HAHN was able to invest in new products. Today, HAHN employs a workforce of approaching 500, which serve an international clientele in various industrial sectors. HAHN's principal aim is to continue to supply quality products and to provide reliable customer service and thus contribute to the success of its customers.

- 1949** Founded on April 21st, the company was registered as an armature winding works, repair shop for electric motors, generators, electrical installations and the sale of domestic electrical appliances.
- 1969** September – commencement of small size transformer production in the storage space of the newly renovated electrical installation shop.
- 1971** Construction of the first new hall building of 700 square meters floor space.
- 1981** Opening of new production and warehouse hall of 1,600 total square meters floor space.
- 1985** Extension of the production floor space by some 600 square meters.
- 1990** Extension of the storage space by some 500 square meters.
- 1994** Removal of the final inspection and quality control facility and the standard transformer inventory into a new hall building of some 1,000 square meter floor space.
- 1995** A new raw materials' and semi-finished products' warehouse was constructed with a floor area of some 600 square meters.
- 1996** New warehouse and goods' consignment facility was constructed with a floor space of some 600 square meters.  
Award of the DIN EN ISO 9001:1994 certification
- 1998** A new reception area was opened. Production capacity was extended by 20%. Commissioning of the new manufacturing facility in Güsten. Extension of the trading floor space by some 20,000 square meters.
- 2002** Award of the DIN EN ISO 9001:2000 certification for the locations at Hungen and Güsten in Germany.
- 2003** Disposable and re-usable packagings are given the designation 'Blue Angels'.
- 2004** A third manufacturing facility has been set up in the Ukraine.
- 2005** Starting production in our new manufacturing facility in Ukraine.
- 2008** Award of the DIN EN ISO 9001:2000 certification for the location at Novovolynsk (Ukraine)
- 2009/2010** Hungen Works  
Site expansion with warehouse building transformed into high-bay warehouse, extended staff car park;  
Further investments in automation;  
Continuous increase in production capacity



### **The parent company in Hungen, Germany**

All the business decisions of HAHN are taken here, just only half an hour away by car from Frankfurt's International Airport; in terms of a qualitative and consumer-oriented corporate cultural philosophy. New, user-friendly products are developed here. Progressive production technology for highest process quality and economically high volume is located here. All employees are trained to satisfy customer requirements all over the world.



### **Production in Güsten, Saxony-Anhalt, Germany**

The rising demand for HAHN products in Eastern European countries made it necessary to transfer partial production into a region near the border in order to reduce logistical costs.



### **3rd Production Plant in Novovolynsk (Ukraine)**

With foundation of the 3rd plant in Eastern Europe, HAHN removed the manual production from plant Hungen and Güsten to Novovolynsk. Custom-made and wage-intensive products made this step necessary to be as one of the leading transformer producer furthermore competitive on the constantly growing market.



## HAHN Electronic Component Parts.

Quality awareness, product liability legislation and the growing demands of worldwide markets today make it necessary for equipment and appliance manufacturers to pass on these stringent requirements to their subcontractors and suppliers to ensure, that no component or assembly can become a critical weak-spot. HAHN successfully meets these requirements. All products leaving the HAHN works have been manufactured of high grade, quality-controlled raw materials or semi-manufactures on the most modern production equipment. A quality-management system meeting **DIN EN ISO 9001:2008** German and European standards provides the means for ensuring such high quality.



HAHN permanently maintains a large stock-inventory of all items and sizes. Customers can take advantage of this service as required, by means of placing call orders – no matter what item of size is required – the comprehensive range from capacities 0.35 VA to 200.0 VA is always available. A detailed overview can be found on the following pages of this catalog.



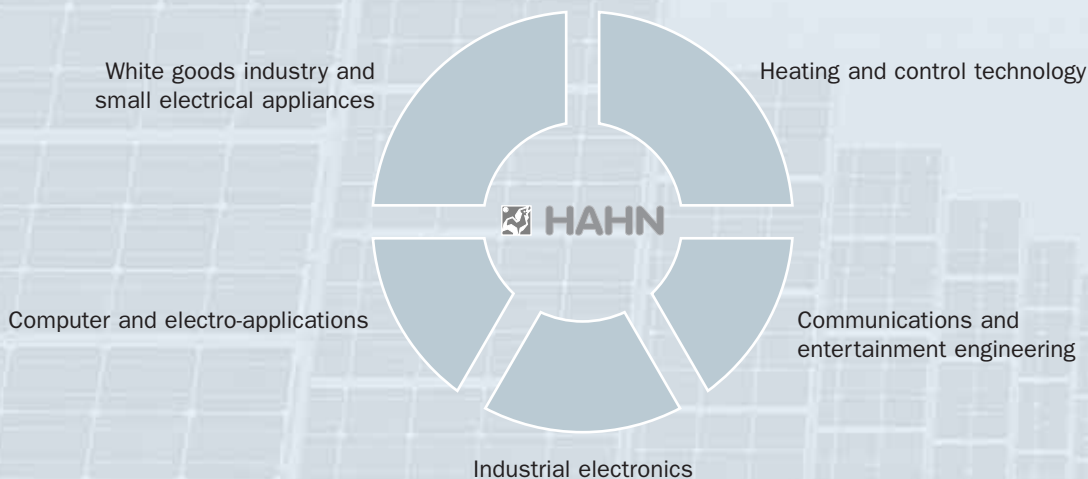


## More electrical safety and long service life for consumers' appliances.

- Chokes
- Coils, custom-made coils
- Control transformers
- Current- and voltage converters
- Flat-type transformers
- Inductive assembly components
- Isolating transformers
- Mains transformers
- Printed circuit-board transformers
- Safety transformers
- Single-phase transformers
- Small size transformers
- SMPS-transformers
- Special transformers
- Three-phase transformers
- Ignition transformers and electronic ignition devices

All HAHN transformers carry a test certificate, so that customers obtain an assurance of maximum electrical safety and long service-life for their equipment and appliances. HAHN invites new customers and other interested parties to place their reliance on its quality products and services.

### Highest quality and customer-orientated services in all industries



## Quality and economy in the production processes.

HAHN products are characterized by their performance and reliability. Ongoing in-house quality control management ensures uncompromising raw material selection and the highest standards of production with the corporate aim of achieving reliability and an optimum of economy and efficiency for customers. To ensure the competitiveness of its products, HAHN attaches great importance to automation in production. Modern technology with automatic assembly lines, integrated quality control devices, transfer systems and 'intelligent' production equipment are the prerequisites for highly rationalised and flexible manufacturing facilities. This minimizes costs and positively influences the marketability of its products. All the corporate-related decisions of HAHN are thus taken from an economic and ecological viewpoint. HAHN already exceeds such requirements by implementing numerous appropriate measures of such a nature. For example, all works-internal movements are carried out with electric vehicles and in the areas of production and distribution, HAHN employs re-useable packaging.





## Packed and consigned – all according to customer requirements.

In order to meet the requirements of any specific trade and industry, HAHN can provide practically any desired problem solution in the areas of packing and distribution. No matter whether customers require cases, cartons, polystyrene or plastic packagings – whether 'just-in-time' delivery, special forwarding services or self collection – HAHN can always provide customers with the right problem solution. The examples mentioned above meet current standards, whereby the new designed plastic tubes is worthy of special mention. The transformers can thus be extracted from a 'magazine' and inserted directly into customers' production. ESD-conform packaging is contemporary and has come to stay on the European market. HAHN will, of course re-accept packagings returned in a usable condition. These can be cleaned and used again for further consignments to customers.

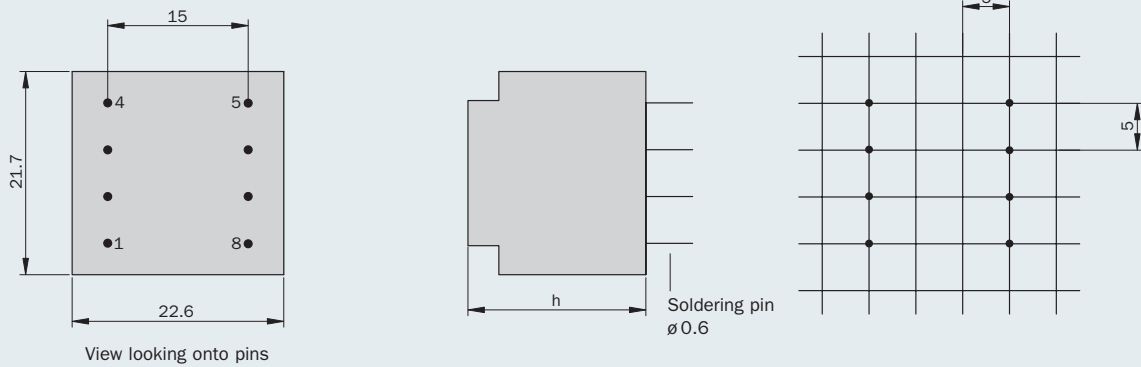




- Minimal sizes available
- Test certifications to ENEC 10-, VDE-, UL- and CSA-regulations  
Primary voltages from 12 V to 250 V  
Secondary voltages  
from 4 V to 24 V or 2 x 3 V to 2 x 12 V  
High capacity up to 0.5 VA
- Further voltages on demand
- Absolutely short-circuit-proof
- Vacuum-encapsulated, bobbin type with dual chamber windings
- Temperature class ta 70 °C/B
- High electrical safety and long service-life features
- Quality test certified per item
- Excellent temperature fluctuation resistance properties
- Self-extinguishing cast housing and sealing material

Thanks to its minimal size the BV 20 is the ideal problem solution for appliance manufacturers requiring small components and who are not prepared to enter into any compromises as regards quality and performance demands.

Processing with double-coated windings, special extreme heat-resistant epoxy insulating resins and self-extinguishing encapsulation housing materials give HAHN transformers extra electrical safety reserves enabling applications of extreme limits to be addressed.



Dimensions without tolerances ± 0.3 mm, Rights to make alterations and improvements hereby reserved

The BV 20 with insulation class B properties is especially suitable for printed circuit boards, computer processors, other electronic applications, domestic appliances, telecommunications, lighting and photo technologies.

Particularly in regard to competitiveness on international markets and the product liability of manufacturers, the BV 20 offers users the greatest functional electrical safety and long-life service by reason of its superior quality for their products.

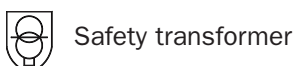
Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
<b>BV 201 .... / 6 mm</b>	0.35 VA	15 mm	0.025 kg	50/250 Stück*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV 201 0128	0.35	1	230	1-4	1 x 6	58	6-7	1 x 10.0
BV 201 0142	0.35	1	230	1-4	2 x 6	29	5-6/7-8	2 x 10.4
BV 201 0143	0.35	1	230	1-4	1 x 7.5	47	6-7	1 x 12.6
BV 201 0136	0.35	1	230	1-4	1 x 9	39	6-7	1 x 14.4
BV 201 0144	0.35	1	230	1-4	2 x 9	19	5-6/7-8	2 x 16.0
BV 201 0145	0.35	1	230	1-4	1 x 12	29	6-7	1 x 20.8
BV 201 0146	0.35	1	230	1-4	2 x 12	15	5-6/7-8	2 x 19.7
BV 201 0147	0.35	1	230	1-4	1 x 15	23	6-7	1 x 26.1
BV 201 0149	0.35	1	230	1-4	1 x 18	19	6-7	1 x 30.4
BV 201 0150	0.35	1	230	1-4	1 x 21	17	6-7	1 x 36.0
BV 201 0135	0.35	1	230	1-4	1 x 24	15	6-7	1 x 36.8

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
<b>BV 202 .... /10 mm</b>	0.50 VA	19 mm	0.035 kg	50/250 Stück*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV 202 0154	0.5	2	230	1-4	1 x 6	83	6-7	1 x 10.2
BV 202 0155	0.5	2	230	1-4	2 x 6	42	5-6/7-8	2 x 10.2
BV 202 0156	0.5	2	230	1-4	1 x 7.5	67	6-7	1 x 12.8
BV 202 0157	0.5	2	230	1-4	1 x 9	55	6-7	1 x 15.4
BV 202 0158	0.5	2	230	1-4	2 x 9	28	5-6/7-8	2 x 15.4
BV 202 0159	0.5	2	230	1-4	1 x 12	42	6-7	1 x 20.6
BV 202 0160	0.5	2	230	1-4	2 x 12	21	5-6/7-8	2 x 20.6
BV 202 0161	0.5	2	230	1-4	1 x 15	33	6-7	1 x 25.9
BV 202 0162	0.5	2	230	1-4	1 x 18	28	6-7	1 x 30.9
BV 202 0163	0.5	2	230	1-4	1 x 21	24	6-7	1 x 36.2
BV 202 0164	0.5	2	230	1-4	1 x 24	21	6-7	1 x 41.2

\* it depends on kind of packaging



All these types are held on stock

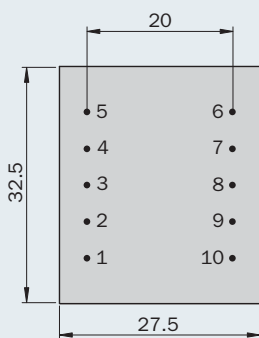


- Minimal sizes available
  - Test certifications to ENEC 10-, VDE-, UL- and CSA-regulations
  - with VDE certificate for glow wire test in accordance to standard EN 60335-1:2005
- Primary voltages  
from 12 V to 250 V or 2 x 12 V to 2 x 125 V
- Secondary voltages  
from 2 V to 38 V or 2 x 2 V to 2 x 19 V
- Capacity up to 3.6 VA
- Further voltages on demand
  - Short-circuit-proof
  - Vacuum-encapsulated, bobbin with dual chamber windings
  - Temperature class ta 40 °C/F and ta 70 °C/F

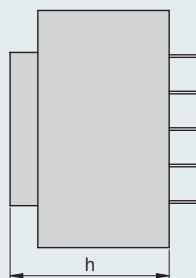
- High electrical safety and long service-life properties
- Quality test certified per item
- Excellent temperature fluctuation resistance properties
- Self-extinguishing cast housing and sealing material

Several hundreds of types provide high electrical safety and long service-life for printed circuit boards, household appliances, leisure electronics, heating and control technology as well as in assembly techniques. Transformers for special requirements with lower open-circuit (no-load) loss capacity are also available in the range.

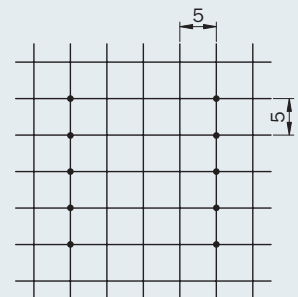
Enhanced customer benefit due to ongoing high quality standards throughout 40 years experience in transformer technology.



View looking onto pins



Soldering pin 0.6 x 0.8/  
Round pin  $\varnothing$ 0.8 mm



Dimensions without tolerances  $\pm$  0.3 mm,  
Rights to make alterations and improvements hereby reserved

Frame size/Core height	Output ta 40 °C/F	Output ta 70 °C/F	Output ta 70 °C/F with thermo-fuse ***	Size (h)	Weight	Packaging unit
BV EI 301** .... / 5.5 mm	0.6 VA	0.5/0.7 VA	0.65 VA	15.2 mm	0.044 kg	50 Stück
BV EI 302 .... / 10.5 mm	1.8 VA	1.5 VA	1.8 VA	21.8 mm	0.070 kg	50 Stück
BV EI 307 .... / 11.5 mm	2.2 VA	1.8 VA	1.8 VA	22.1 mm	0.076 kg	50 Stück
BV EI 303 .... / 12.5 mm	2.3 VA	1.9 VA	2.3 VA	23.8 mm	0.081 kg	50 Stück
BV EI 304 .... / 15.5 mm	2.6 VA	2.1 VA	2.4 VA	26.8 mm	0.099 kg	50 Stück
BV EI 305 .... / 18.0 mm	3.0 VA	2.3 VA	2.7 VA	29.5 mm	0.111 kg	50 Stück
BV EI 306 .... / 23.0 mm	3.6 VA	3.0 VA	3.4 VA	34.0 mm	0.135 kg	50/40 Stück*

\* it depends on kind of packaging

\*\* BV EI 301 Dimensions without tolerances + 0.3/- 0.5

\*\*\* absolutely short-circuit-proof with thermo-fuse;  
with ENEC 10 and VDE approval.

Frame size/Core height	Output ta 70 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 301** .... / 5.5 mm</b>	0.7 VA		15.2 mm	0.044 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 301 3582	0.7	1	230	1-5	1 x 6	117	7-9	1 x 10.3
BV EI 301 3583	0.7	1	230	1-5	2 x 6	58	6-7/9-10	2 x 10.5
BV EI 301 3584	0.7	1	230	1-5	1 x 7.5	94	7-9	1 x 12.7
BV EI 301 3585	0.7	1	230	1-5	2 x 7.5	47	6-7/9-10	2 x 12.7
BV EI 301 3586	0.7	1	230	1-5	1 x 9	78	7-9	1 x 14.6
BV EI 301 3587	0.7	1	230	1-5	2 x 9	39	6-7/9-10	2 x 14.6
BV EI 301 3588	0.7	1	230	1-5	1 x 12	58	7-9	1 x 19.5
BV EI 301 3589	0.7	1	230	1-5	2 x 12	29	6-7/9-10	2 x 19.5
BV EI 301 3590	0.7	1	230	1-5	1 x 15	47	7-9	1 x 24.5
BV EI 301 3591	0.7	1	230	1-5	2 x 15	23	6-7/9-10	2 x 24.5
BV EI 301 3592	0.7	1	230	1-5	1 x 18	39	7-9	1 x 28.3
BV EI 301 3593	0.7	1	230	1-5	1 x 21	33	7-9	1 x 32.9
BV EI 301 3594	0.7	1	230	1-5	1 x 24	29	7-9	1 x 37.8

Frame size/Core height	Output ta 70 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 301** .... / 5.5 mm</b>	0.5 VA		15.2 mm	0.044 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 301 3005	0.5	1	230	1-5	1 x 6	83	7-9	1 x 10.2
BV EI 301 3017	0.5	1	230	1-5	1 x 7.5	67	7-9	1 x 12.2
BV EI 301 2911	0.5	1	230	1-5	1 x 9	56	7-9	1 x 14.7
BV EI 301 2783	0.5	1	230	1-5	1 x 10	50	7-9	1 x 14.9
BV EI 301 2824	0.5	1	230	1-5	1 x 12	42	7-9	1 x 18
BV EI 301 2845	0.5	1	230	1-5	1 x 15	33	7-9	1 x 22.8
BV EI 301 2967	0.5	1	230	1-5	1 x 18	28	7-9	1 x 26
BV EI 301 3020	0.5	1	230	1-5	1 x 21	24	7-9	1 x 30.6

Frame size/Core height	Output ta 70 °C/F	conditionally short-circuit-proof, with thermo-fuse	Size (h)	Weight	Packaging unit
<b>BV EI 301** .... / 5.5 mm</b>	0.65 VA		15.2 mm	0.044 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 301 7002	0.65	1	230	1-5	1 x 6	108	7-9	1 x 10.5
BV EI 301 7003	0.65	1	230	1-5	2 x 6	54	6-7/9-10	2 x 10.5
BV EI 301 7004	0.65	1	230	1-5	1 x 7.5	87	7-9	1 x 13.0
BV EI 301 7005	0.65	1	230	1-5	2 x 7.5	43	6-7/9-10	2 x 13.0
BV EI 301 7006	0.65	1	230	1-5	1 x 9	72	7-9	1 x 15.4
BV EI 301 7007	0.65	1	230	1-5	2 x 9	36	6-7/9-10	2 x 15.4
BV EI 301 7008	0.65	1	230	1-5	1 x 12	54	7-9	1 x 20.4
BV EI 301 7009	0.65	1	230	1-5	2 x 12	27	6-7/9-10	2 x 20.4
BV EI 301 7010	0.65	1	230	1-5	1 x 15	43	7-9	1 x 24.9
BV EI 301 7011	0.65	1	230	1-5	2 x 15	21	6-7/9-10	2 x 24.9
BV EI 301 7012	0.65	1	230	1-5	1 x 18	36	7-9	1 x 30.1
BV EI 301 7013	0.65	1	230	1-5	1 x 21	31	7-9	1 x 35.1
BV EI 301 7014	0.65	1	230	1-5	1 x 24	27	7-9	1 x 40.0



Safety transformer



New!

All these types are held on stock

Frame size/Core height	Output ta 40 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 302 .... / 10.5 mm</b>	1.8 VA		21.8 mm	0.070 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 302 2000	1.8	2	230	1-5	1 x 6	300	7-9	1 x 8.8
BV EI 302 2005	1.8	2	230	1-5	2 x 6	150	6-7/9-10	2 x 8.8
BV EI 302 3021	1.8	2	230	1-5	1 x 7.5	240	7-9	1 x 10.7
BV EI 302 3562	1.8	2	230	1-5	2 x 7.5	120	6-7/9-10	2 x 11.0
BV EI 302 2001	1.8	2	230	1-5	1 x 9	200	7-9	1 x 12.6
BV EI 302 2006	1.8	2	230	1-5	2 x 9	100	6-7/9-10	2 x 13.0
BV EI 302 2002	1.8	2	230	1-5	1 x 12	150	7-9	1 x 16.9
BV EI 302 2007	1.8	2	230	1-5	2 x 12	75	6-7/9-10	2 x 18.3
BV EI 302 2003	1.8	2	230	1-5	1 x 15	120	7-9	1 x 21.1
BV EI 302 2008	1.8	2	230	1-5	2 x 15	60	6-7/9-10	2 x 21.8
BV EI 302 2004	1.8	2	230	1-5	1 x 18	100	7-9	1 x 25.4
BV EI 302 3022	1.8	2	230	1-5	1 x 21	86	7-9	1 x 30.4
BV EI 302 2990	1.8	2	230	1-5	1 x 24	75	7-9	1 x 34.5

Frame size/Core height	Output ta 70 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 302 .... / 10.5 mm</b>	1.5 VA		21.8 mm	0.070 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 302 2020	1.5	2	230	1-5	1 x 6	250	7-9	1 x 8.2
BV EI 302 2025	1.5	2	230	1-5	2 x 6	125	6-7/9-10	2 x 8.7
BV EI 302 3058	1.5	2	230	1-5	1 x 7.5	200	7-9	1 x 10.5
BV EI 302 3561	1.5	2	230	1-5	2 x 7.5	100	6-7/9-10	2 x 10.5
BV EI 302 2021	1.5	2	230	1-5	1 x 9	166	7-9	1 x 12.1
BV EI 302 2026	1.5	2	230	1-5	2 x 9	83	6-7/9-10	2 x 12.4
BV EI 302 2022	1.5	2	230	1-5	1 x 12	125	7-9	1 x 16.6
BV EI 302 2027	1.5	2	230	1-5	2 x 12	62	6-7/9-10	2 x 16.6
BV EI 302 2023	1.5	2	230	1-5	1 x 15	100	7-9	1 x 20.6
BV EI 302 2028	1.5	2	230	1-5	2 x 15	50	6-7/9-10	2 x 20.4
BV EI 302 2024	1.5	2	230	1-5	1 x 18	83	7-9	1 x 24.5
BV EI 302 3059	1.5	2	230	1-5	1 x 21	71	7-9	1 x 28.6
BV EI 302 2989	1.5	2	230	1-5	1 x 24	62	7-9	1 x 33.5

Frame size/Core height	Output ta 70 °C/F	conditionally short-circuit-proof, with thermo-fuse	Size (h)	Weight	Packaging unit
<b>BV EI 302 .... / 10.5 mm</b>	1.8 VA		21.8 mm	0.070 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 302 7015	1.8	2	230	1-5	1 x 6	300	7-9	1 x 9.8
BV EI 302 7016	1.8	2	230	1-5	2 x 6	150	6-7/9-10	2 x 10.6
BV EI 302 7017	1.8	2	230	1-5	1 x 7.5	240	7-9	1 x 12.2
BV EI 302 7018	1.8	2	230	1-5	2 x 7.5	120	6-7/9-10	2 x 13.4
BV EI 302 7019	1.8	2	230	1-5	1 x 9	200	7-9	1 x 14.6
BV EI 302 7020	1.8	2	230	1-5	2 x 9	100	6-7/9-10	2 x 15.9
BV EI 302 7021	1.8	2	230	1-5	1 x 12	150	7-9	1 x 19.4
BV EI 302 7022	1.8	2	230	1-5	2 x 12	75	6-7/9-10	2 x 20.9
BV EI 302 7023	1.8	2	230	1-5	1 x 15	120	7-9	1 x 24.3
BV EI 302 7024	1.8	2	230	1-5	2 x 15	60	6-7/9-10	2 x 24.8
BV EI 302 7025	1.8	2	230	1-5	1 x 18	100	7-9	1 x 29.2
BV EI 302 7026	1.8	2	230	1-5	1 x 21	86	7-9	1 x 34.1
BV EI 302 7027	1.8	2	230	1-5	1 x 24	75	7-9	1 x 38.8

Frame size/Core height	Output ta 70 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
BV EI 307 .... / 11.5 mm	1.8 VA		22.1 mm	0.076 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 307 3842	1.8	7	230	1-5	1 x 6	300	7-9	1 x 9.7
BV EI 307 3843	1.8	7	230	1-5	2 x 6	150	6-7/9-10	2 x 9.4
BV EI 307 3844	1.8	7	230	1-5	1 x 7.5	240	7-9	1 x 12.7
BV EI 307 3845	1.8	7	230	1-5	2 x 7.5	120	6-7/9-10	2 x 12.4
BV EI 307 3846	1.8	7	230	1-5	1 x 9	200	7-9	1 x 14.5
BV EI 307 3847	1.8	7	230	1-5	2 x 9	100	6-7/9-10	2 x 14.3
BV EI 307 3801	1.8	7	230	1-5	1 x 12	150	7-9	1 x 18.7
BV EI 307 3848	1.8	7	230	1-5	2 x 12	75	6-7/9-10	2 x 18.9
BV EI 307 3849	1.8	7	230	1-5	1 x 15	120	7-9	1 x 24.5
BV EI 307 3850	1.8	7	230	1-5	2 x 15	60	6-7/9-10	2 x 24.5
BV EI 307 3851	1.8	7	230	1-5	1 x 18	100	7-9	1 x 28.4
BV EI 307 3852	1.8	7	230	1-5	1 x 21	86	7-9	1 x 33.4
BV EI 307 3853	1.8	7	230	1-5	1 x 24	75	7-9	1 x 37.9

Frame size/Core height	Output ta 70 °C/F	conditionally short-circuit-proof, with thermo-fuse	Size (h)	Weight	Packaging unit
BV EI 307 .... / 11.5 mm	1.8 VA		22.1 mm	0.076 kg	50 Stück

New!

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 307 7079	1.8	7	230	1-5	1 x 6	300	7-9	1 x 9.8
BV EI 307 7080	1.8	7	230	1-5	2 x 6	150	6-7/9-10	2 x 9.8
BV EI 307 7081	1.8	7	230	1-5	1 x 7.5	240	7-9	1 x 12.9
BV EI 307 7082	1.8	7	230	1-5	2 x 7.5	120	6-7/9-10	2 x 13.2
BV EI 307 7083	1.8	7	230	1-5	1 x 9	200	7-9	1 x 14.7
BV EI 307 7084	1.8	7	230	1-5	2 x 9	100	6-7/9-10	2 x 15.2
BV EI 307 7085	1.8	7	230	1-5	1 x 12	150	7-9	1 x 19.4
BV EI 307 7086	1.8	7	230	1-5	2 x 12	75	6-7/9-10	2 x 20.1
BV EI 307 7087	1.8	7	230	1-5	1 x 15	120	7-9	1 x 24.1
BV EI 307 7088	1.8	7	230	1-5	2 x 15	60	6-7/9-10	2 x 24.1
BV EI 307 7089	1.8	7	230	1-5	1 x 18	100	7-9	1 x 28.9
BV EI 307 7090	1.8	7	230	1-5	1 x 21	86	7-9	1 x 34.8
BV EI 307 7091	1.8	7	230	1-5	1 x 24	75	7-9	1 x 38.5

Frame size/Core height	Output ta 40 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 303 .... / 12.5 mm</b>	2.3 VA		23.8 mm	0.081 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 303 2010	2.3	3	230	1-5	1 x 6	383	7-9	1 x 8.5
BV EI 303 2015	2.3	3	230	1-5	2 x 6	191	6-7/9-10	2 x 9.4
BV EI 303 3611	2.3	3	230	1-5	1 x 7.5	307	7-9	1 x 11.4
BV EI 303 3612	2.3	3	230	1-5	2 x 7.5	153	6-7/9-10	2 x 12.4
BV EI 303 2011	2.3	3	230	1-5	1 x 9	255	7-9	1 x 12.9
BV EI 303 2016	2.3	3	230	1-5	2 x 9	127	6-7/9-10	2 x 14.6
BV EI 303 2012	2.3	3	230	1-5	1 x 12	191	7-9	1 x 17.4
BV EI 303 2017	2.3	3	230	1-5	2 x 12	95	6-7/9-10	2 x 18.8
BV EI 303 2013	2.3	3	230	1-5	1 x 15	153	7-9	1 x 21.6
BV EI 303 2018	2.3	3	230	1-5	2 x 15	76	6-7/9-10	2 x 23.4
BV EI 303 2014	2.3	3	230	1-5	1 x 18	127	7-9	1 x 25.8
BV EI 303 3563	2.3	3	230	1-5	1 x 21	110	7-9	1 x 30.2
BV EI 303 2991	2.3	3	230	1-5	1 x 24	96	7-9	1 x 33.7

Frame size/Core height	Output ta 70 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 303 .... / 12.5 mm</b>	1.9 VA		23.8 mm	0.081 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 303 2030	1.9	3	230	1-5	1 x 6	316	7-9	1 x 8.6
BV EI 303 2035	1.9	3	230	1-5	2 x 6	158	6-7/9-10	2 x 9.3
BV EI 303 3060	1.9	3	230	1-5	1 x 7.5	253	7-9	1 x 11.0
BV EI 303 2095	1.9	3	230	1-5	2 x 7.5	126	6-7/9-10	2 x 12.3
BV EI 303 2031	1.9	3	230	1-5	1 x 9	211	7-9	1 x 12.9
BV EI 303 2036	1.9	3	230	1-5	2 x 9	105	6-7/9-10	2 x 13.9
BV EI 303 2032	1.9	3	230	1-5	1 x 12	158	7-9	1 x 17.2
BV EI 303 2037	1.9	3	230	1-5	2 x 12	79	6-7/9-10	2 x 18.5
BV EI 303 2033	1.9	3	230	1-5	1 x 15	126	7-9	1 x 21.5
BV EI 303 2038	1.9	3	230	1-5	2 x 15	63	6-7/9-10	1 x 21.9
BV EI 303 2034	1.9	3	230	1-5	1 x 18	105	7-9	1 x 25.8
BV EI 303 3013	1.9	3	230	1-5	1 x 21	90	7-9	1 x 30.0
BV EI 303 2100	1.9	3	230	1-5	1 x 24	79	7-9	1 x 35.5

Frame size/Core height	Output ta 70 °C/F	conditionally short-circuit-proof, with thermo-fuse	Size (h)	Weight	Packaging unit
<b>BV EI 303 .... / 12.5 mm</b>	2.3 VA		23.8 mm	0.081 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 303 7028	2.3	3	230	1-5	1 x 6	383	7-9	1 x 9.4
BV EI 303 7029	2.3	3	230	1-5	2 x 6	191	6-7/9-10	2 x 9.7
BV EI 303 7030	2.3	3	230	1-5	1 x 7.5	306	7-9	1 x 11.3
BV EI 303 7031	2.3	3	230	1-5	2 x 7.5	153	6-7/9-10	2 x 12.2
BV EI 303 7032	2.3	3	230	1-5	1 x 9	256	7-9	1 x 13.8
BV EI 303 7033	2.3	3	230	1-5	2 x 9	128	6-7/9-10	2 x 14.3
BV EI 303 7034	2.3	3	230	1-5	1 x 12	191	7-9	1 x 17.4
BV EI 303 7035	2.3	3	230	1-5	2 x 12	96	6-7/9-10	2 x 19.1
BV EI 303 7036	2.3	3	230	1-5	1 x 15	153	7-9	1 x 22.3
BV EI 303 7037	2.3	3	230	1-5	2 x 15	76	6-7/9-10	2 x 23.7
BV EI 303 7038	2.3	3	230	1-5	1 x 18	128	7-9	1 x 26.4
BV EI 303 7039	2.3	3	230	1-5	1 x 21	110	7-9	1 x 30.5
BV EI 303 7040	2.3	3	230	1-5	1 x 24	96	7-9	1 x 34.0



Frame size/Core height	Output ta 40 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 304 .... / 15.5 mm</b>	2.6 VA		26.8 mm	0.099 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 304 2040	2.6	4	230	1-5	1 x 6	434	7-9	1 x 10.4
BV EI 304 2045	2.6	4	230	1-5	2 x 6	217	6-7/9-10	2 x 10.8
BV EI 304 3564	2.6	4	230	1-5	1 x 7.5	346	7-9	1 x 12.5
BV EI 304 2840	2.6	4	230	1-5	2 x 7.5	173	6-7/9-10	2 x 12.5
BV EI 304 2041	2.6	4	230	1-5	1 x 9	289	7-9	1 x 15.9
BV EI 304 2046	2.6	4	230	1-5	2 x 9	145	6-7/9-10	2 x 16.2
BV EI 304 2042	2.6	4	230	1-5	1 x 12	217	7-9	1 x 21.7
BV EI 304 2047	2.6	4	230	1-5	2 x 12	108	6-7/9-10	2 x 22.4
BV EI 304 2043	2.6	4	230	1-5	1 x 15	174	7-9	1 x 27.4
BV EI 304 2044	2.6	4	230	1-5	1 x 18	145	7-9	1 x 30.9
BV EI 304 2995	2.6	4	230	1-5	1 x 21	123	7-9	1 x 32.1
BV EI 304 2992	2.6	4	230	1-5	1 x 24	108	7-9	1 x 41.7

Frame size/Core height	Output ta 70 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 304 .... / 15.5 mm</b>	2.1 VA		26.8 mm	0.099 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 304 2080	2.1	4	230	1-5	1 x 6	350	7-9	1 x 10.5
BV EI 304 2085	2.1	4	230	1-5	2 x 6	175	6-7/9-10	2 x 11.2
BV EI 304 2889	2.1	4	230	1-5	1 x 7.5	280	7-9	1 x 13.7
BV EI 304 2773	2.1	4	230	1-5	2 x 7.5	140	6-7/9-10	2 x 13.9
BV EI 304 2081	2.1	4	230	1-5	1 x 9	233	7-9	1 x 15.8
BV EI 304 2086	2.1	4	230	1-5	2 x 9	117	6-7/9-10	2 x 16.0
BV EI 304 2082	2.1	4	230	1-5	1 x 12	175	7-9	1 x 21.5
BV EI 304 2087	2.1	4	230	1-5	2 x 12	88	6-7/9-10	2 x 22.0
BV EI 304 2083	2.1	4	230	1-5	1 x 15	140	7-9	1 x 26.5
BV EI 304 2084	2.1	4	230	1-5	1 x 18	117	7-9	1 x 30.0
BV EI 304 2843	2.1	4	230	1-5	1 x 21	100	7-9	1 x 33.4
BV EI 304 2868	2.1	4	230	1-5	1 x 24	88	7-9	1 x 37.3

Frame size/Core height	Output ta 70 °C/F	conditionally short-circuit-proof, with thermo-fuse	Size (h)	Weight	Packaging unit
<b>BV EI 304 .... / 15.5 mm</b>	2.4 VA		26.8 mm	0.099 kg	50 Stück

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 304 7041	2.4	4	230	1-5	1 x 6	400	7-9	1 x 10.6
BV EI 304 7042	2.4	4	230	1-5	2 x 6	200	6-7/9-10	2 x 10.1
BV EI 304 7043	2.4	4	230	1-5	1 x 7.5	320	7-9	1 x 13.2
BV EI 304 7044	2.4	4	230	1-5	2 x 7.5	160	6-7/9-10	2 x 13.2
BV EI 304 7045	2.4	4	230	1-5	1 x 9	266	7-9	1 x 16.3
BV EI 304 7046	2.4	4	230	1-5	2 x 9	133	6-7/9-10	2 x 16.8
BV EI 304 7047	2.4	4	230	1-5	1 x 12	200	7-9	1 x 21.9
BV EI 304 7048	2.4	4	230	1-5	2 x 12	100	6-7/9-10	2 x 21.9
BV EI 304 7049	2.4	4	230	1-5	1 x 15	160	7-9	1 x 26.8
BV EI 304 7095	2.4	4	230	1-5	2 x 15	80	6-7/9-10	2 x 24.7
BV EI 304 7050	2.4	4	230	1-5	1 x 18	133	7-9	1 x 32.6
BV EI 304 7051	2.4	4	230	1-5	1 x 21	114	7-9	1 x 37.2
BV EI 304 7052	2.4	4	230	1-5	1 x 24	100	7-9	1 x 42.3

New!

Frame size/Core height	Output ta 40 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 305 .... / 18.0 mm</b>	3.0 VA		29.5 mm	0.111 kg	50 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 305 2050	3.0	5	230	1-5	1 x 6	500	7-9	1 x 10.7
BV EI 305 2055	3.0	5	230	1-5	2 x 6	250	6-7/9-10	2 x 10.7
BV EI 305 3565	3.0	5	230	1-5	1 x 7.5	400	7-9	1 x 13.7
BV EI 305 2922	3.0	5	230	1-5	2 x 7.5	200	6-7/9-10	2 x 13.7
BV EI 305 2051	3.0	5	230	1-5	1 x 9	334	7-9	1 x 17.3
BV EI 305 2056	3.0	5	230	1-5	2 x 9	167	6-7/9-10	2 x 15.9
BV EI 305 2052	3.0	5	230	1-5	1 x 12	250	7-9	1 x 20.4
BV EI 305 2057	3.0	5	230	1-5	2 x 12	125	6-7/9-10	2 x 20.3
BV EI 305 2053	3.0	5	230	1-5	1 x 15	200	7-9	1 x 26.7
BV EI 305 2054	3.0	5	230	1-5	1 x 18	167	7-9	1 x 32.5
BV EI 305 2188	3.0	5	230	1-5	1 x 21	143	7-9	1 x 35.7
BV EI 305 2993	3.0	5	230	1-5	1 x 24	125	7-9	1 x 42.0

Frame size/Core height	Output ta 70 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 305 .... / 18.0 mm</b>	2.3 VA		29.5 mm	0.111 kg	50 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 305 2878	2.3	5	230	1-5	1 x 6	383	7-9	1 x 11.6
BV EI 305 2882	2.3	5	230	1-5	2 x 6	192	6-7/9-10	2 x 11.1
BV EI 305 2893	2.3	5	230	1-5	1 x 7.5	305	7-9	1 x 15.2
BV EI 305 2894	2.3	5	230	1-5	2 x 7.5	153	6-7/9-10	2 x 13.0
BV EI 305 2879	2.3	5	230	1-5	1 x 9	255	7-9	1 x 17.6
BV EI 305 2866	2.3	5	230	1-5	2 x 9	127	6-7/9-10	2 x 16.1
BV EI 305 2800	2.3	5	230	1-5	1 x 12	192	7-9	1 x 21.4
BV EI 305 2847	2.3	5	230	1-5	2 x 12	96	6-7/9-10	2 x 21.8
BV EI 305 2805	2.3	5	230	1-5	1 x 15	153	7-9	1 x 28.2
BV EI 305 2844	2.3	5	230	1-5	2 x 15	76	6-7/9-10	2 x 24.1
BV EI 305 2851	2.3	5	230	1-5	1 x 18	128	7-9	1 x 32.4
BV EI 305 2772	2.3	5	230	1-5	1 x 21	110	7-9	1 x 38.4
BV EI 305 2874	2.3	5	230	1-5	1 x 24	96	7-9	1 x 45.4

Frame size/Core height	Output ta 70 °C/F	conditionally short-circuit-proof, with thermo-fuse	Size (h)	Weight	Packaging unit
<b>BV EI 305 .... / 18.0 mm</b>	2.7 VA		29.5 mm	0.111 kg	50 pieces

New!

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 305 7053	2.7	5	230	1-5	1 x 6	450	7-9	1 x 10.9
BV EI 305 7054	2.7	5	230	1-5	2 x 6	225	6-7/9-10	2 x 10.3
BV EI 305 7055	2.7	5	230	1-5	1 x 7.5	360	7-9	1 x 13.7
BV EI 305 7056	2.7	5	230	1-5	2 x 7.5	180	6-7/9-10	2 x 13.4
BV EI 305 7057	2.7	5	230	1-5	1 x 9	300	7-9	1 x 16.2
BV EI 305 7058	2.7	5	230	1-5	2 x 9	150	6-7/9-10	2 x 16.8
BV EI 305 7059	2.7	5	230	1-5	1 x 12	225	7-9	1 x 20.7
BV EI 305 7060	2.7	5	230	1-5	2 x 12	112	6-7/9-10	2 x 22.1
BV EI 305 7061	2.7	5	230	1-5	1 x 15	180	7-9	1 x 26.6
BV EI 305 7062	2.7	5	230	1-5	2 x 15	90	6-7/9-10	2 x 24.6
BV EI 305 7063	2.7	5	230	1-5	1 x 18	150	7-9	1 x 33.0
BV EI 305 7064	2.7	5	230	1-5	1 x 21	128	7-9	1 x 37.6
BV EI 305 7065	2.7	5	230	1-5	1 x 24	112	7-9	1 x 42.9

Frame size/Core height	Output ta 40 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 306 .... / 23.0 mm</b>	3.6 VA		34.0 mm	0.135 kg	50/40 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 306 3595	3.6	6	230	1-5	1 x 6	600	7-9	1 x 10.8
BV EI 306 3596	3.6	6	230	1-5	2 x 6	300	6-7/9-10	2 x 10.8
BV EI 306 3597	3.6	6	230	1-5	1 x 7.5	480	7-9	1 x 13.3
BV EI 306 3598	3.6	6	230	1-5	2 x 7.5	240	6-7/9-10	2 x 13.3
BV EI 306 3599	3.6	6	230	1-5	1 x 9	400	7-9	1 x 15.7
BV EI 306 3600	3.6	6	230	1-5	2 x 9	200	6-7/9-10	2 x 15.7
BV EI 306 3601	3.6	6	230	1-5	1 x 12	300	7-9	1 x 21.0
BV EI 306 3602	3.6	6	230	1-5	2 x 12	150	6-7/9-10	2 x 21.0
BV EI 306 3603	3.6	6	230	1-5	1 x 15	240	7-9	1 x 24.5
BV EI 306 3604	3.6	6	230	1-5	2 x 15	120	6-7/9-10	2 x 24.5
BV EI 306 3605	3.6	6	230	1-5	1 x 18	200	7-9	1 x 31.4
BV EI 306 3606	3.6	6	230	1-5	1 x 21	171	7-9	1 x 35.5
BV EI 306 3607	3.6	6	230	1-5	1 x 24	150	7-9	1 x 42.0

Frame size/Core height	Output ta 70 °C/F	absolutely short-circuit-proof	Size (h)	Weight	Packaging unit
<b>BV EI 306 .... / 23.0 mm</b>	3.0 VA		34.0 mm	0.135 kg	50/40 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 306 3359	3.0	6	230	1-5	1 x 6	500	7-9	1 x 10.5
BV EI 306 3360	3.0	6	230	1-5	2 x 6	250	6-7/9-10	2 x 10.5
BV EI 306 3361	3.0	6	230	1-5	1 x 7.5	400	7-9	1 x 12.7
BV EI 306 3362	3.0	6	230	1-5	2 x 7.5	200	6-7/9-10	2 x 12.7
BV EI 306 3363	3.0	6	230	1-5	1 x 9	333	7-9	1 x 15.9
BV EI 306 3364	3.0	6	230	1-5	2 x 9	167	6-7/9-10	2 x 15.9
BV EI 306 3365	3.0	6	230	1-5	1 x 12	250	7-9	1 x 20.3
BV EI 306 3366	3.0	6	230	1-5	2 x 12	125	6-7/9-10	2 x 20.3
BV EI 306 3367	3.0	6	230	1-5	1 x 15	200	7-9	1 x 23.8
BV EI 306 3368	3.0	6	230	1-5	2 x 15	100	6-7/9-10	2 x 23.8
BV EI 306 3369	3.0	6	230	1-5	1 x 18	167	7-9	1 x 29.2
BV EI 306 3371	3.0	6	230	1-5	1 x 21	143	7-9	1 x 34.3
BV EI 306 3372	3.0	6	230	1-5	1 x 24	125	7-9	1 x 38.4

Frame size/Core height	Output ta 70 °C/F	conditionally short-circuit-proof, with thermo-fuse	Size (h)	Weight	Packaging unit
<b>BV EI 306 .... / 23.0 mm</b>	3.4 VA		34.0 mm	0.135kg	50 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 306 7066	3.4	6	230	1-5	1 x 6	566	7-9	1 x 11.0
BV EI 306 7067	3.4	6	230	1-5	2 x 6	283	6-7/9-10	2 x 10.7
BV EI 306 7068	3.4	6	230	1-5	1 x 7.5	453	7-9	1 x 13.6
BV EI 306 7069	3.4	6	230	1-5	2 x 7.5	226	6-7/9-10	2 x 12.4
BV EI 306 7070	3.4	6	230	1-5	1 x 9	378	7-9	1 x 16.0
BV EI 306 7071	3.4	6	230	1-5	2 x 9	189	6-7/9-10	2 x 16.8
BV EI 306 7072	3.4	6	230	1-5	1 x 12	283	7-9	1 x 21.0
BV EI 306 7073	3.4	6	230	1-5	2 x 12	141	6-7/9-10	2 x 22.1
BV EI 306 7074	3.4	6	230	1-5	1 x 15	226	7-9	1 x 26.0
BV EI 306 7075	3.4	6	230	1-5	2 x 15	113	6-7/9-10	2 x 24.6
BV EI 306 7076	3.4	6	230	1-5	1 x 18	189	7-9	1 x 32.2
BV EI 306 7077	3.4	6	230	1-5	1 x 21	162	7-9	1 x 37.5
BV EI 306 7078	3.4	6	230	1-5	1 x 24	141	7-9	1 x 43.1

\* it depends on kind of packaging

New!



## EBPG EuP

### New in our product line:

Transformers fulfilling the new guidelines of “Energy using products” (EuP).

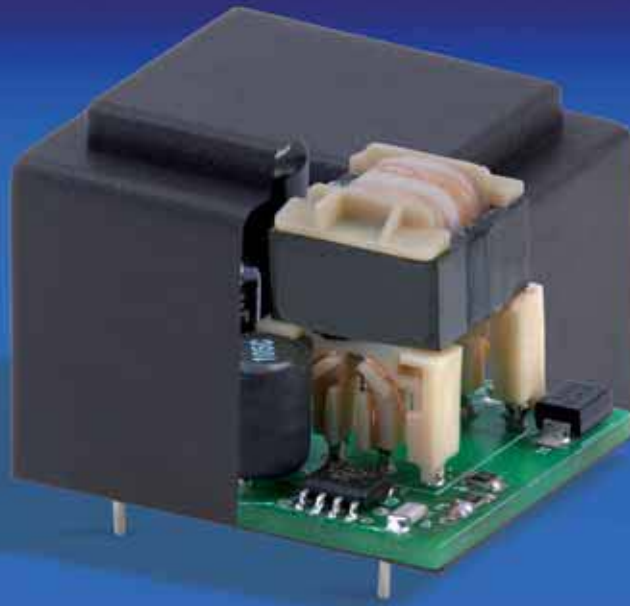
The **EuP Serie 2013** of **HAHN** is perfect for applications of the electric power supply in electrical and electronic household and office equipment with “stand by” and “off” conditions. Already today where a **reduced power consumption** of  **$P_o < 0,4 \text{ W}$**  is required, the **EuP Serie 2013** of **HAHN** will be a solution.



### EuP Serie 2013 mit $P_o < 0.4 \text{ W}$

article no.	power VA	primary voltage V	connecting pins prim.	secondary voltage V	current sec. mA	connecting pins sek.	no-load voltage V
BV EI 307 8001	1.3	230	1-5	1 x 12	108	7-9	1 x 19.8
BV EI 307 8002	1.3	230	1-5	2 x 12	54	6-7/9-10	2 x 19.8
BV EI 304 8005	2.1	230	1-5	1 x 12	175	7-9	1 x 20.5
BV EI 304 8006	2.1	230	1-5	2 x 12	88	6-7/9-10	2 x 20.5
BV EI 306 8003	2.8	230	1-5	1 x 12	233	7-9	1 x 21.4
BV EI 306 8007	2.8	230	1-5	2 x 12	117	6-7/9-10	2 x 21.4

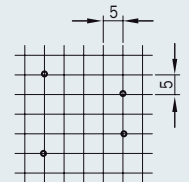
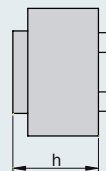
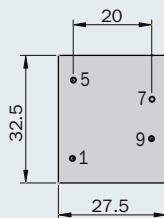
New!



EBPG  
EuP

**Ecological in design** – and solutions based on switch mode technology developed by **HAHN**. Within the scope of the Eco-Design Directive for energy-using products, we have expanded our product portfolio for you.

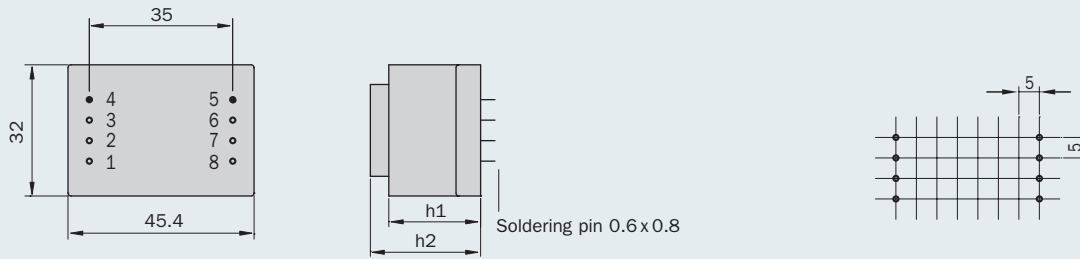
The new **HS series** by **HAHN** incorporating switch mode technology has a voltage transfer loss of **< 0.15 W** and an efficiency of **> 70 %!** It is ideal for applications within the broad input voltage range of 85 – 265 V for power supplies.



Dimensions without tolerances  $\pm 0.3$  mm,  
Rights to make alterations and improvements hereby reserved

Design is short-circuit-proof and wiring is strictly isolated according to EN 61558-2-16, EN 61558-2-17 and EN 60950. All components are UL- and EN 60335-compliant. The safety extra-low output voltage is only max. 3 W.

# Flat-type Transformers with Small Base Areas



Height	h1 (mm)	h2 (mm)
EI 30/40/5.5	12.4	16.2
EI 30/40/7.5	14.3	18.1
EI 30/40/10.5	17.2	21.0
EI 30/40/16.5	23.1	26.9
EI 30/40/26	32.9	36.7

Dimensions without tolerances  $\pm 0.3$

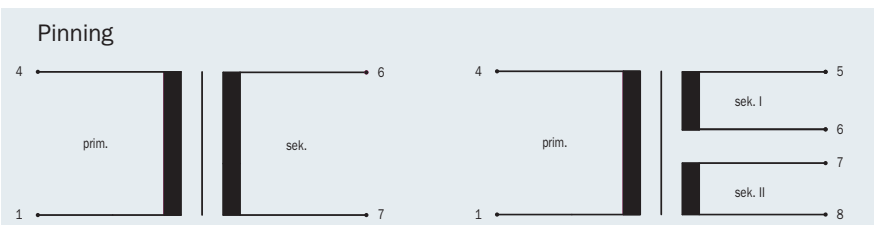
The EI 34 Series provides solutions for applications requiring low heights and a small base areas. HAHN offers rapid and economic problem solutions for customer applications especially developed by our experienced R&D development engineers.

The EI 34 Transformers meet the stringent requirements of the EN 61558 and DIN VDE 0570 standards. Short-circuit-proof and non short-circuit-proof transformers are available in five

different stacking heights. Outputs from 1.6 VA to 8.0 VA, at an ambient temperature of 70 °C, are supplyable to meet customer requirements in encapsulated versions.

HAHN has established itself on the market as a reliable and innovative supplier with its application-oriented solutions. The contact service personnel at HAHN are fully motivated, committed and competent advisers and the success of the company is also to their success.

Frame size/Core height	Output ta 70 °C/B		Height (h)	Weight
	absolutely short-circuit-proof	non short-circuit-proof		
BV EI 341 .... / 5.5 mm	1.6 VA	–	16.2 mm	75 g
BV EI 342 .... / 7.5 mm	2.0 VA	–	18.1 mm	90 g
BV EI 343 .... / 10.5 mm	2.4 VA	3.0 VA	21.0 mm	120 g
BV EI 344 .... / 16.5 mm	–	5.0 VA	26.9 mm	165 g
BV EI 345 .... / 26.0 mm	–	8.0 VA	36.7 mm	245 g



# Flat-type Transformers with Small Base Areas

Order No.	Total output VA	Frame Size	Primary voltage V	Secondary voltage V
BV EI 341 0001	1.6	1	230	1 x 6
BV EI 341 0002	1.6	1	230	2 x 6
BV EI 341 0003	1.6	1	230	1 x 7.5
BV EI 341 0004	1.6	1	230	2 x 7.5
BV EI 341 0005	1.6	1	230	1 x 9
BV EI 341 0006	1.6	1	230	2 x 9
BV EI 341 0007	1.6	1	230	1 x 12
BV EI 341 0008	1.6	1	230	2 x 12
BV EI 341 0009	1.6	1	230	1 x 15
BV EI 341 0010	1.6	1	230	2 x 15
BV EI 341 0011	1.6	1	230	1 x 18
BV EI 341 0012	1.6	1	230	1 x 21
BV EI 341 0013	1.6	1	230	1 x 24

Safety transformer, **absolutely short-circuit-proof**



Order No.	Total output VA	Frame Size	Primary voltage V	Secondary voltage V
BV EI 342 0014	2.0	2	230	1 x 6
BV EI 342 0015	2.0	2	230	2 x 6
BV EI 342 0016	2.0	2	230	1 x 7.5
BV EI 342 0017	2.0	2	230	2 x 7.5
BV EI 342 0018	2.0	2	230	1 x 9
BV EI 342 0019	2.0	2	230	2 x 9
BV EI 342 0020	2.0	2	230	1 x 12
BV EI 342 0021	2.0	2	230	2 x 12
BV EI 342 0022	2.0	2	230	1 x 15
BV EI 342 0023	2.0	2	230	2 x 15
BV EI 342 0024	2.0	2	230	1 x 18
BV EI 342 0025	2.0	2	230	1 x 21
BV EI 342 0026	2.0	2	230	1 x 24

Safety transformer, **absolutely short-circuit-proof**



Order No.	Total output VA	Frame Size	Primary voltage V	Secondary voltage V
BV EI 343 0027	2.4	3	230	1 x 6
BV EI 343 0028	2.4	3	230	2 x 6
BV EI 343 0029	2.4	3	230	1 x 7.5
BV EI 343 0030	2.4	3	230	2 x 7.5
BV EI 343 0031	2.4	3	230	1 x 9
BV EI 343 0032	2.4	3	230	2 x 9
BV EI 343 0033	2.4	3	230	1 x 12
BV EI 343 0034	2.4	3	230	2 x 12
BV EI 343 0035	2.4	3	230	1 x 15
BV EI 343 0036	2.4	3	230	2 x 15
BV EI 343 0037	2.4	3	230	1 x 18
BV EI 343 0038	2.4	3	230	1 x 21
BV EI 343 0039	2.4	3	230	1 x 24

Safety transformer, **absolutely short-circuit-proof**



Order No.	Total output VA	Frame Size	Primary voltage V	Secondary voltage V
BV EI 343 0040	3.0	3	230	1 x 6
BV EI 343 0041	3.0	3	230	2 x 6
BV EI 343 0042	3.0	3	230	1 x 7.5
BV EI 343 0043	3.0	3	230	2 x 7.5
BV EI 343 0044	3.0	3	230	1 x 9
BV EI 343 0045	3.0	3	230	2 x 9
BV EI 343 0046	3.0	3	230	1 x 12
BV EI 343 0047	3.0	3	230	2 x 12
BV EI 343 0048	3.0	3	230	1 x 15
BV EI 343 0049	3.0	3	230	2 x 15
BV EI 343 0050	3.0	3	230	1 x 18
BV EI 343 0051	3.0	3	230	1 x 21
BV EI 343 0052	3.0	3	230	1 x 24

Safety transformer, **non short-circuit-proof**



Order No.	Total output VA	Frame Size	Primary voltage V	Secondary voltage V
BV EI 344 0053	5.0	4	230	1 x 6
BV EI 344 0054	5.0	4	230	2 x 6
BV EI 344 0055	5.0	4	230	1 x 7.5
BV EI 344 0056	5.0	4	230	2 x 7.5
BV EI 344 0057	5.0	4	230	1 x 9
BV EI 344 0058	5.0	4	230	2 x 9
BV EI 344 0059	5.0	4	230	1 x 12
BV EI 344 0060	5.0	4	230	2 x 12
BV EI 344 0061	5.0	4	230	1 x 15
BV EI 344 0062	5.0	4	230	2 x 15
BV EI 344 0063	5.0	4	230	1 x 18
BV EI 344 0064	5.0	4	230	1 x 21
BV EI 344 0065	5.0	4	230	1 x 24

Safety transformer, **non short-circuit-proof**



Order No.	Total output VA	Frame Size	Primary voltage V	Secondary voltage V
BV EI 345 0066	8.0	5	230	1 x 6
BV EI 345 0067	8.0	5	230	2 x 6
BV EI 345 0068	8.0	5	230	1 x 7.5
BV EI 345 0069	8.0	5	230	2 x 7.5
BV EI 345 0070	8.0	5	230	1 x 9
BV EI 345 0071	8.0	5	230	2 x 9
BV EI 345 0072	8.0	5	230	1 x 12
BV EI 345 0073	8.0	5	230	2 x 12
BV EI 345 0074	8.0	5	230	1 x 15
BV EI 345 0075	8.0	5	230	2 x 15
BV EI 345 0076	8.0	5	230	1 x 18
BV EI 345 0077	8.0	5	230	1 x 21
BV EI 345 0078	8.0	5	230	1 x 24

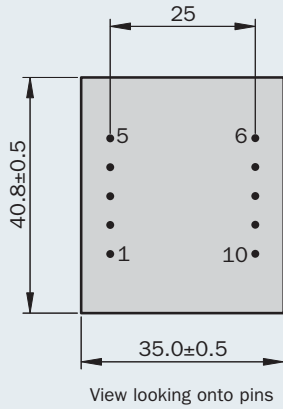
Safety transformer, **non short-circuit-proof**





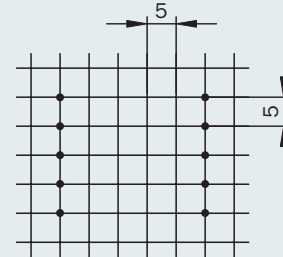
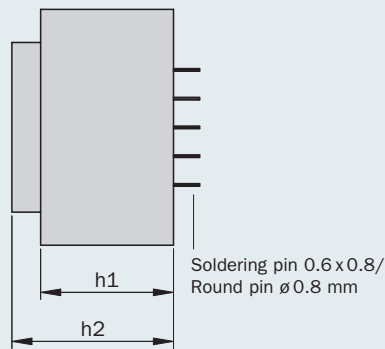
- Capacity up to 6.0 VA
- Non short-circuit-proof at temperature class ta 70 °C/B
- Standard type '0' cast housing
- Test certifications to ENEC 10-, VDE-, CSA- and UL-regulations\*
- with VDE certificate for glow wire test in accordance to standard EN 60335-1:2005
- Excellent temperature fluctuation resistance properties
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Certified item quality tested

Primary protection by means of transformer heat coils to IEC 127 standards or secondarily with PTC resistances.



View looking onto pins

Type '0' cast housing without fixing straps



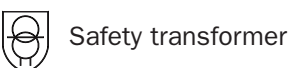
EI 38/13.6

Dimensions without tolerances ± 0.3 mm, Rights to make alterations and improvements hereby reserved

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 382 ..../13.6 mm	4.5 VA	23.1 mm	28.1 mm	0.150 kg	32/40 pieces*

\* it depends on kind of packaging

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 382 1185	4.5	2	230	1-5	1 x 6	750	7-9	1 x 9.7
BV EI 382 1186	4.5	2	230	1-5	2 x 6	375	6-7/9-10	2 x 9.2
BV EI 382 1187	4.5	2	230	1-5	1 x 7.5	600	7-9	1 x 10.6
BV EI 382 1188	4.5	2	230	1-5	2 x 7.5	300	6-7/9-10	2 x 10.9
BV EI 382 1189	4.5	2	230	1-5	1 x 9	500	7-9	1 x 13.0
BV EI 382 1190	4.5	2	230	1-5	2 x 9	250	6-7/9-10	2 x 13.0
BV EI 382 1191	4.5	2	230	1-5	1 x 12	375	7-9	1 x 17.0
BV EI 382 1192	4.5	2	230	1-5	2 x 12	187	6-7/9-10	2 x 18.4
BV EI 382 1193	4.5	2	230	1-5	1 x 15	300	7-9	1 x 20.8
BV EI 382 1194	4.5	2	230	1-5	2 x 15	150	6-7/9-10	2 x 21.2
BV EI 382 1195	4.5	2	230	1-5	1 x 18	250	7-9	1 x 24.4
BV EI 382 1196	4.5	2	230	1-5	2 x 18	125	6-7/9-10	2 x 24.9
BV EI 382 1197	4.5	2	230	1-5	1 x 24	187	7-9	1 x 33.5



\* UL on request



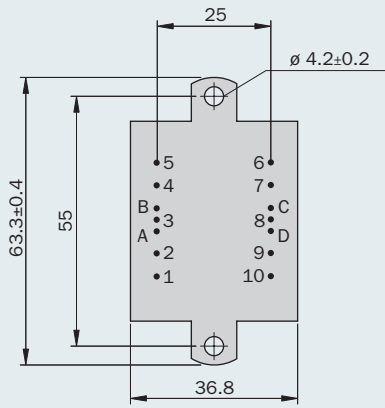




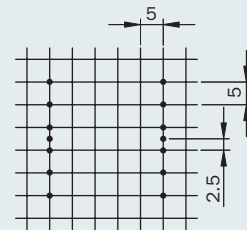
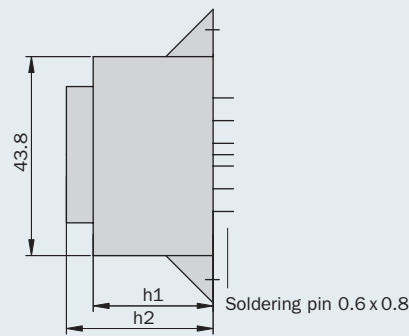


- Capacity up to 10.0 VA
- Non short-circuit-proof at temperature class ta 70 °C/B
- Standard type with 'K' cast housing
- Test certifications to ENEC 10-, VDE- and UL-regulations\*
- with VDE certificate for glow wire test in accordance to standard EN 60335-1:2005
- Excellent temperature fluctuation resistance properties
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Certified item quality tested

Primary protection by means of transformer heat coils to IEC 127 standards or secondarily with PTC resistances.



View looking onto pins



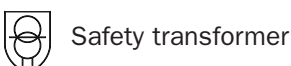
Type 'K' cast housing with 2 fixing straps

Dimensions without tolerances ± 0.3 mm, Rights to make alterations and improvements hereby reserved

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 422 .... / 14.8 mm	6.0 VA	26.4 mm	32.3 mm	0.200 kg	40/50 pieces*

\* it depends on kind of cast housing

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 422 1218	6.0	2	230	1-5	1 x 6	1000	7-9	1 x 8.7
BV EI 422 1219	6.0	2	230	1-5	2 x 6	500	6-7/9-10	2 x 8.7
BV EI 422 1220	6.0	2	230	1-5	1 x 7.5	800	7-9	1 x 10.9
BV EI 422 1221	6.0	2	230	1-5	2 x 7.5	400	6-7/9-10	2 x 10.9
BV EI 422 1222	6.0	2	230	1-5	1 x 9	667	7-9	1 x 13.0
BV EI 422 1223	6.0	2	230	1-5	2 x 9	334	6-7/9-10	2 x 13.0
BV EI 422 1224	6.0	2	230	1-5	1 x 12	500	7-9	1 x 16.7
BV EI 422 1225	6.0	2	230	1-5	2 x 12	250	6-7/9-10	2 x 16.7
BV EI 422 1226	6.0	2	230	1-5	1 x 15	400	7-9	1 x 20.2
BV EI 422 1227	6.0	2	230	1-5	2 x 15	200	6-7/9-10	2 x 20.6
BV EI 422 1228	6.0	2	230	1-5	1 x 18	334	7-9	1 x 24.6
BV EI 422 1229	6.0	2	230	1-5	2 x 18	167	6-7/9-10	2 x 24.6
BV EI 422 1230	6.0	2	230	1-5	1 x 24	250	7-9	1 x 30.8



\* UL on request



Type „0“

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 422 1320	6.0	2	230	1-5	1 x 6	1000	7-9	1 x 8.7
BV EI 422 1298	6.0	2	230	1-5	2 x 6	500	6-7/9-10	2 x 8.7
BV EI 422 1303	6.0	2	230	1-5	1 x 7.5	800	7-9	1 x 10.9
BV EI 422 1304	6.0	2	230	1-5	2 x 7.5	400	6-7/9-10	2 x 10.9
BV EI 422 1285	6.0	2	230	1-5	1 x 9	667	7-9	1 x 13.0
BV EI 422 1281	6.0	2	230	1-5	2 x 9	334	6-7/9-10	2 x 13.0
BV EI 422 1275	6.0	2	230	1-5	1 x 12	500	7-9	1 x 16.7
BV EI 422 1260	6.0	2	230	1-5	2 x 12	250	6-7/9-10	2 x 16.7
BV EI 422 1276	6.0	2	230	1-5	1 x 15	400	7-9	1 x 20.2
BV EI 422 1305	6.0	2	230	1-5	2 x 15	200	6-7/9-10	2 x 20.6
BV EI 422 1289	6.0	2	230	1-5	1 x 18	334	7-9	1 x 24.6
BV EI 422 1306	6.0	2	230	1-5	2 x 18	167	6-7/9-10	2 x 24.6
BV EI 422 1307	6.0	2	230	1-5	1 x 24	250	7-9	1 x 30.8

### Individual EI 42 transformer version

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 421 ... / 8.5 mm	3.0 VA	20.1 mm	26.2 mm	0.120 kg	40/50 pieces**
BV EI 422 ... / 14.8 mm	6.0 VA	26.4 mm	32.3 mm	0.200 kg	40/50 pieces**
BV EI 423 ... / 20.0 mm*	10.0 VA	32.1 mm	38.0 mm	0.250 kg	50 pieces

\* Only in type '0'

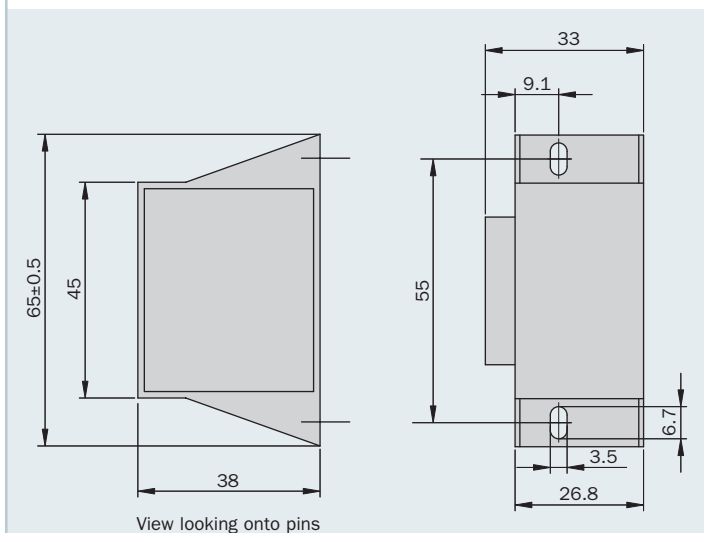
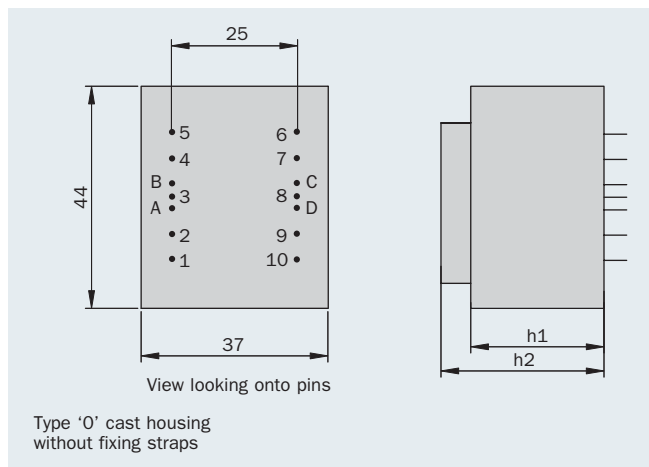
\*\* it depends on kind of cast housing

### EI 42 transformers, custom-made versions.

Parallel to the cataloged EI 42 series transformers, HAHN also produces other variants, e.g. with integrated thermo fuse or thermo switch, other housing-, fixing- and connective options as well as non-encapsulated transformers.

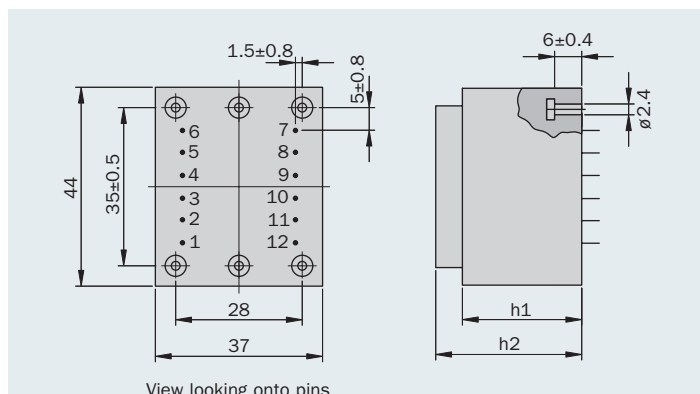
Dimensions in drawings:

- without tolerances ± 0.3 mm
- Soldering pins 0.6 x 0.8 mm
- \*alternative version with connecting grid 27.5 mm
- Round pin Ø 0.8
- Soldering post 1.1 x 0.5



Type 'SV' for upright mounting

EI 42/14,8

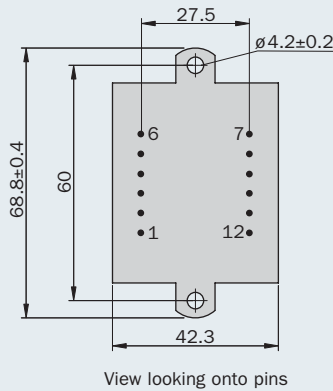


Type '0' cast housing with fixing band



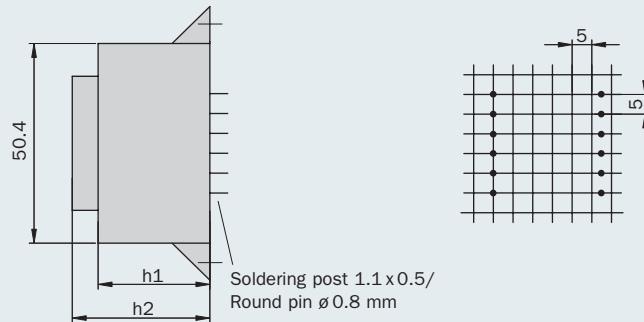
- Capacity up to 15.0 VA
- Non short-circuit-proof at temperature class ta 70 °C/B
- Standard type 'K' cast housing
- Test certifications to ENEC 10-, VDE- and UL-regulations\*
- with VDE certificate for glow wire test in accordance to standard EN 60335-1:2005
- Excellent temperature fluctuation resistance properties
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Certified item quality tested

Primary protection by means of transformer heat coils to IEC 127 standards or secondarily with PTC resistances.



View looking onto pins

Type 'K' cast housing with 2 fixing straps



Dimensions without tolerances ± 0.3 mm, Rights to make alterations and improvements hereby reserved

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 480 .... /12.5 mm*	7.0 VA	24.2 ± 0.5 mm	30.2 ± 0.5 mm	0.250 kg	27/40 pieces**
BV EI 481 .... /16.8 mm	10.0 VA	27.9 ± 0.5 mm	34.6 ± 0.5 mm	0.300 kg	27/40 pieces**
BV EI 482 .... /20.5 mm	12.0 VA	32.3 ± 0.5 mm	38.5 ± 0.5 mm	0.350 kg	27/40 pieces**
BV EI 483 .... /25.5 mm	15.0 VA	38.3 ± 0.5 mm	43.5 ± 0.5 mm	0.450 kg	27/40 pieces**

\* Only in type 'O'

\*\* it depends on kind of cast housing

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 480 1227	7.0	0	230	1-6	1 x 6	1167	8-11	1 x 7.6
BV EI 480 1228	7.0	0	230	1-6	2 x 6	583	7-8/11-12	2 x 7.6
BV EI 480 1230	7.0	0	230	1-6	1 x 7.5	934	8-11	1 x 10.1
BV EI 480 1218	7.0	0	230	1-6	2 x 7.5	467	7-8/11-12	2 x 10.1
BV EI 480 1219	7.0	0	230	1-6	1 x 9	788	8-11	1 x 11.6
BV EI 480 1220	7.0	0	230	1-6	2 x 9	388	7-8/11-12	2 x 11.6
BV EI 480 1221	7.0	0	230	1-6	1 x 12	583	7-8/11-12	1 x 15.2
BV EI 480 1222	7.0	0	230	1-6	2 x 12	292	8-11	2 x 15.4
BV EI 480 1223	7.0	0	230	1-6	1 x 15	467	8-11	1 x 18.9
BV EI 480 1224	7.0	0	230	1-6	2 x 15	233	7-8/11-12	2 x 19.0
BV EI 480 1225	7.0	0	230	1-6	1 x 18	389	8-11	1 x 22.3
BV EI 480 1229	7.0	0	230	1-6	2 x 18	195	7-8/11-12	2 x 22.3
BV EI 480 1226	7.0	0	230	1-6	1 x 24	292	8-11	1 x 29.4



Safety transformer

\* UL on request



Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 481 .... /16.8 mm	10.0 VA	27.9 ± 0.5 mm	34.6 ± 0.5 mm	0.300 kg	27/40 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 481 1142	10.0	1	230	1-6	1 x 6	1667	8-11	1 x 7.6
BV EI 481 1134	10.0	1	230	1-6	2 x 6	833	7-8/11-12	2 x 7.6
BV EI 481 1182	10.0	1	230	1-6	1 x 7.5	1333	8-11	1 x 9.8
BV EI 481 1188	10.0	1	230	1-6	2 x 7.5	667	7-8/11-12	2 x 9.8
BV EI 481 1167	10.0	1	230	1-6	1 x 9	1111	8-11	1 x 11.5
BV EI 481 1118	10.0	1	230	1-6	2 x 9	556	7-8/11-12	2 x 11.5
BV EI 481 1172	10.0	1	230	1-6	1 x 12	833	8-11	1 x 15.5
BV EI 481 1119	10.0	1	230	1-6	2 x 12	417	7-8/11-12	2 x 15.3
BV EI 481 1184	10.0	1	230	1-6	1 x 15	667	8-11	1 x 18.6
BV EI 481 1120	10.0	1	230	1-6	2 x 15	333	7-8/11-12	2 x 18.6
BV EI 481 1185	10.0	1	230	1-6	1 x 18	556	8-11	1 x 22.3
BV EI 481 1192	10.0	1	230	1-6	2 x 18	278	7-8/11-12	2 x 22.3
BV EI 481 1186	10.0	1	230	1-6	1 x 24	416	8-11	1 x 28.7

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 482 .... /20.5 mm	12.0 VA	32.3 ± 0.5 mm	38.5 ± 0.5 mm	0.350 kg	27/40 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 482 1231	12.0	2	230	1-6	1 x 6	2000	8-11	1 x 8.3
BV EI 482 1232	12.0	2	230	1-6	2 x 6	1000	7-8/11-12	2 x 8.3
BV EI 482 1233	12.0	2	230	1-6	1 x 7.5	1600	8-11	1 x 10.6
BV EI 482 1236	12.0	2	230	1-6	2 x 7.5	800	7-8/11-12	2 x 10.6
BV EI 482 1237	12.0	2	230	1-6	1 x 9	1333	8-11	1 x 12.4
BV EI 482 1238	12.0	2	230	1-6	2 x 9	667	7-8/11-12	2 x 12.4
BV EI 482 1239	12.0	2	230	1-6	1 x 12	1000	8-11	1 x 16.3
BV EI 482 1240	12.0	2	230	1-6	2 x 12	500	7-8/11-12	2 x 16.3
BV EI 482 1241	12.0	2	230	1-6	1 x 15	800	8-11	1 x 19.9
BV EI 482 1242	12.0	2	230	1-6	2 x 15	400	7-8/11-12	2 x 19.9
BV EI 482 1243	12.0	2	230	1-6	1 x 18	667	8-11	1 x 23.5
BV EI 482 1234	12.0	2	230	1-6	2 x 18	333	7-8/11-12	2 x 23.5
BV EI 482 1244	12.0	2	230	1-6	1 x 24	500	8-11	1 x 30.3

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 483 .... /25.5 mm	15.0 VA	37.5 ± 0.5 mm	43.5 ± 0.5 mm	0.450 kg	27/40 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 483 1260	15.0	3	230	1-6	1 x 6	2500	8-11	1 x 7.8
BV EI 483 1257	15.0	3	230	1-6	2 x 6	1250	7-8/11-12	2 x 7.8
BV EI 483 1258	15.0	3	230	1-6	1 x 7.5	2000	8-11	1 x 9.5
BV EI 483 1245	15.0	3	230	1-6	2 x 7.5	1000	7-8/11-12	2 x 9.5
BV EI 483 1246	15.0	3	230	1-6	1 x 9	1667	8-11	1 x 12.0
BV EI 483 1247	15.0	3	230	1-6	2 x 9	833	7-8/11-12	2 x 12.0
BV EI 483 1248	15.0	3	230	1-6	1 x 12	1250	8-11	1 x 15.9
BV EI 483 1249	15.0	3	230	1-6	2 x 12	625	7-8/11-12	2 x 15.9
BV EI 483 1250	15.0	3	230	1-6	1 x 15	1000	8-11	1 x 19.1
BV EI 483 1251	15.0	3	230	1-6	2 x 15	500	7-8/11-12	2 x 19.1
BV EI 483 1252	15.0	3	230	1-6	1 x 18	833	8-11	1 x 22.8
BV EI 483 1259	15.0	3	230	1-6	2 x 18	417	7-8/11-12	2 x 22.8
BV EI 483 1253	15.0	3	230	1-6	1 x 24	625	8-11	1 x 30.6

\* it depends on kind of cast housing

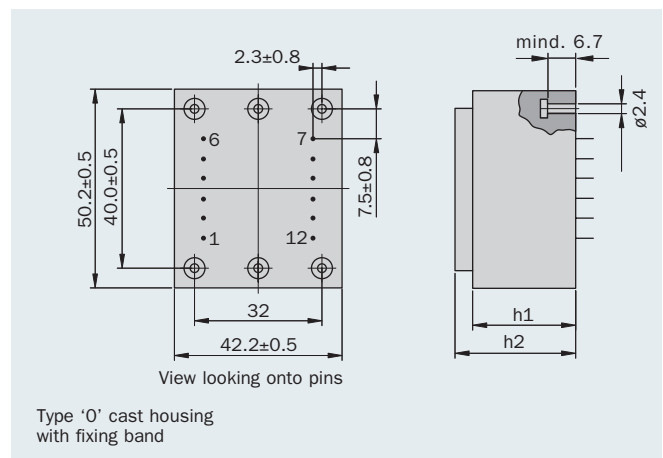
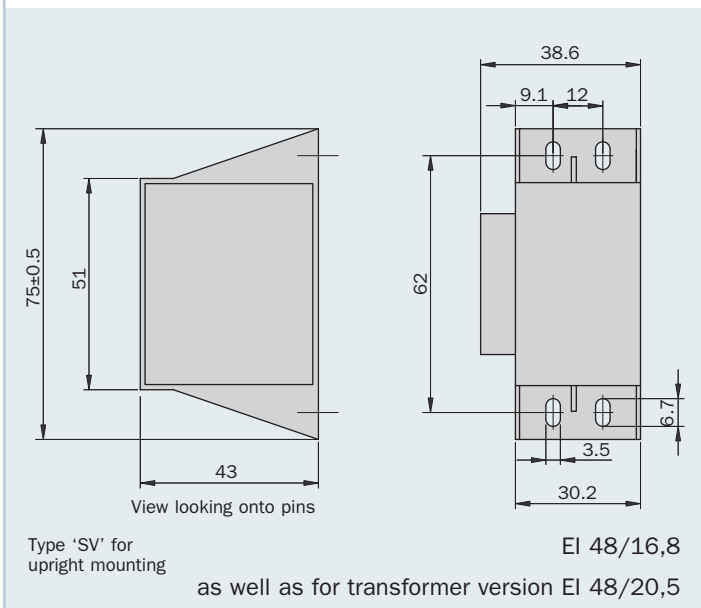
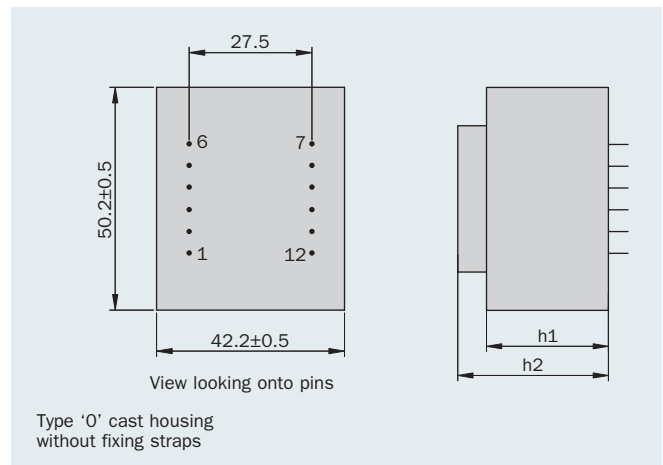
Type „0“

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 481 1325	10.0	1	230	1-6	1 x 6	1667	8-11	1 x 7.6
BV EI 481 1305	10.0	1	230	1-6	2 x 6	833	7-8/11-12	2 x 7.6
BV EI 481 1312	10.0	1	230	1-6	1 x 7.5	1333	8-11	1 x 9.8
BV EI 481 1326	10.0	1	230	1-6	2 x 7.5	667	7-8/11-12	2 x 9.8
BV EI 481 1291	10.0	1	230	1-6	1 x 9	1111	8-11	1 x 11.5
BV EI 481 1271	10.0	1	230	1-6	2 x 9	556	7-8/11-12	2 x 11.5
BV EI 481 1295	10.0	1	230	1-6	1 x 12	833	8-11	1 x 15.5
BV EI 481 1327	10.0	1	230	1-6	2 x 12	417	7-8/11-12	2 x 15.3
BV EI 481 1323	10.0	1	230	1-6	1 x 15	667	8-11	1 x 18.6
BV EI 481 1324	10.0	1	230	1-6	2 x 15	333	7-8/11-12	2 x 18.6
BV EI 481 1307	10.0	1	230	1-6	1 x 18	556	8-11	1 x 22.3
BV EI 481 1328	10.0	1	230	1-6	2 x 18	278	7-8/11-12	2 x 22.3
BV EI 481 1329	10.0	1	230	1-6	1 x 24	416	8-11	1 x 28.7

### Individual EI 48 transformer version

#### EI 48 transformers, custom-made versions.

Parallel to the cataloged EI 48 series transformers, HAHN also produces other variants, e.g. with integrated thermo fuse or thermo switch, other housing-, fixing- and connective options as well as non-encapsulated transformers.

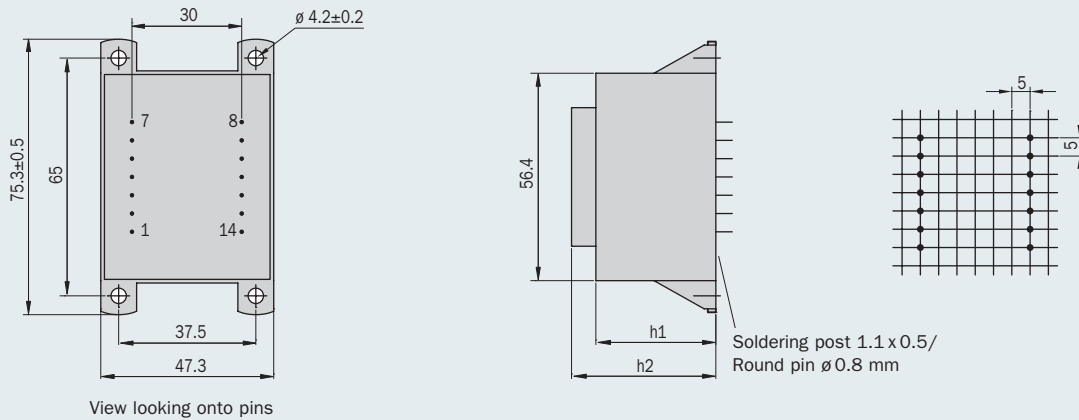


Dimensions in drawings:  
 - without tolerances ± 0.3 mm  
 - Soldering post 1.1x0.5  
 - Round pin Ø 0.8



- Capacity up to 22.0 VA
- Non short-circuit-proof at temperature class ta 70 °C/B
- Standard type with 'KK' cast housing
- Test certifications to ENEC 10-, VDE- and UL-regulations\*
- with VDE certificate for glow wire test in accordance to standard EN 60335-1:2005
- Excellent temperature fluctuation resistance properties
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Certified item quality tested

Primary protection by means of transformer heat coils to IEC 127 standards or secondarily with PTC resistances.



View looking onto pins

Soldering post 1.1 x 0.5/  
Round pin ø 0.8 mm

Type 'KK' cast housing with 4 fixing straps

Dimensions without tolerances ± 0.3 mm,  
Rights to make alterations and improvements hereby reserved

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 540 .... / 14.0 mm*	12.0 VA	28.6 ± 0.5 mm*	35.0 ± 0.5 mm*	0.350 kg	24 pieces
BV EI 541 .... / 18.8 mm	16.0 VA	32.0 ± 0.5 mm	38.8 ± 0.5 mm	0.400 kg	24 pieces
BV EI 542 .... / 23.0 mm	20.0 VA	36.5 ± 0.5 mm	43.2 ± 0.5 mm	0.500 kg	24 pieces
BV EI 543 .... / 25.5 mm	22.0 VA	40.5 ± 0.5 mm	47.4 ± 0.5 mm	0.550 kg	24 pieces

\* Only in type '0'

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 540 1137	12.0	0	230	1-7	1 x 6	2000	9-13	1 x 8.1
BV EI 540 1138	12.0	0	230	1-7	2 x 6	1000	8-9/13-14	2 x 8.1
BV EI 540 1139	12.0	0	230	1-7	1 x 7.5	1600	9-13	1 x 9.9
BV EI 540 1140	12.0	0	230	1-7	2 x 7.5	800	8-9/13-14	2 x 9.9
BV EI 540 1141	12.0	0	230	1-7	1 x 9	1333	9-13	1 x 12.2
BV EI 540 1142	12.0	0	230	1-7	2 x 9	667	8-9/13-14	2 x 12.2
BV EI 540 1143	12.0	0	230	1-7	1 x 12	1000	9-13	1 x 15.8
BV EI 540 1144	12.0	0	230	1-7	2 x 12	500	8-9/13-14	2 x 15.8
BV EI 540 1145	12.0	0	230	1-7	1 x 15	800	9-13	1 x 19.4
BV EI 540 1146	12.0	0	230	1-7	2 x 15	400	8-9/13-14	2 x 19.4
BV EI 540 1147	12.0	0	230	1-7	1 x 18	667	9-13	1 x 23.5
BV EI 540 1148	12.0	0	230	1-7	2 x 18	334	8-9/13-14	2 x 23.5
BV EI 540 1149	12.0	0	230	1-7	1 x 24	500	9-13	1 x 30.6



Safety transformer

\* UL on request



Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 541 .... /18.8 mm	16.0 VA	32.0 ± 0.5 mm	38.8 ± 0.5 mm	0.400 kg	24 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 541 1121	16.0	1	230	1-7	1 x 6	2667	9-13	1 x 7.9
BV EI 541 1128	16.0	1	230	1-7	2 x 6	1334	8-9/13-14	2 x 7.9
BV EI 541 1122	16.0	1	230	1-7	1 x 7.5	2134	9-13	1 x 9.7
BV EI 541 1129	16.0	1	230	1-7	2 x 7.5	1067	8-9/13-14	2 x 9.7
BV EI 541 1123	16.0	1	230	1-7	1 x 9	1778	9-13	1 x 11.7
BV EI 541 1130	16.0	1	230	1-7	2 x 9	889	8-9/13-14	2 x 11.7
BV EI 541 1124	16.0	1	230	1-7	1 x 12	1333	9-13	1 x 15.2
BV EI 541 1131	16.0	1	230	1-7	2 x 12	667	8-9/13-14	2 x 15.2
BV EI 541 1125	16.0	1	230	1-7	1 x 15	1067	9-13	1 x 19.1
BV EI 541 1132	16.0	1	230	1-7	2 x 15	534	8-9/13-14	2 x 19.1
BV EI 541 1126	16.0	1	230	1-7	1 x 18	889	9-13	1 x 22.3
BV EI 541 1150	16.0	1	230	1-7	2 x 18	445	8-9/13-14	2 x 22.3
BV EI 541 1110	16.0	1	230	1-7	1 x 24	667	9-13	1 x 29.1

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 542 .... /23.0 mm	20.0 VA	36.5 ± 0.5 mm	43.2 ± 0.5 mm	0.500 kg	24 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 542 1151	20.0	2	230	1-7	1 x 6	3334	9-13	1 x 7.7
BV EI 542 1152	20.0	2	230	1-7	2 x 6	1667	8-9/13-14	2 x 7.7
BV EI 542 1153	20.0	2	230	1-7	1 x 7.5	2667	9-13	1 x 9.5
BV EI 542 1154	20.0	2	230	1-7	2 x 7.5	1334	8-9/13-14	2 x 9.5
BV EI 542 1155	20.0	2	230	1-7	1 x 9	2223	9-13	1 x 11.4
BV EI 542 1156	20.0	2	230	1-7	2 x 9	1112	8-9/13-14	2 x 11.4
BV EI 542 1157	20.0	2	230	1-7	1 x 12	1667	9-13	1 x 15.0
BV EI 542 1158	20.0	2	230	1-7	2 x 12	834	8-9/13-14	2 x 15.0
BV EI 542 1159	20.0	2	230	1-7	1 x 15	1334	9-13	1 x 18.6
BV EI 542 1160	20.0	2	230	1-7	2 x 15	667	8-9/13-14	2 x 18.6
BV EI 542 1161	20.0	2	230	1-7	1 x 18	1112	9-13	1 x 21.8
BV EI 542 1162	20.0	2	230	1-7	2 x 18	556	8-9/13-14	2 x 21.8
BV EI 542 1163	20.0	2	230	1-7	1 x 24	834	9-13	1 x 29.5

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 543 .... /25.5 mm	22.0 VA	40.5 ± 0.5 mm	47.4 ± 0.5 mm	0.550 kg	24 pieces

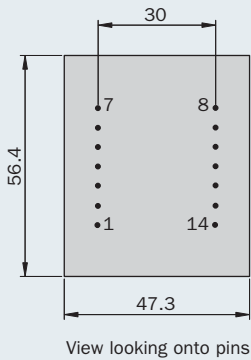
Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 543 1166	22.0	3	230	1-7	1 x 6	3667	9-13	1 x 7.4
BV EI 543 1167	22.0	3	230	1-7	2 x 6	1834	8-9/13-14	2 x 7.4
BV EI 543 1168	22.0	3	230	1-7	1 x 7.5	2934	9-13	1 x 8.9
BV EI 543 1169	22.0	3	230	1-7	2 x 7.5	1467	8-9/13-14	2 x 8.9
BV EI 543 1170	22.0	3	230	1-7	1 x 9	2445	9-13	1 x 10.7
BV EI 543 1171	22.0	3	230	1-7	2 x 9	1223	8-9/13-14	2 x 10.7
BV EI 543 1172	22.0	3	230	1-7	1 x 12	1834	9-13	1 x 14.5
BV EI 543 1173	22.0	3	230	1-7	2 x 12	917	8-9/13-14	2 x 14.5
BV EI 543 1174	22.0	3	230	1-7	1 x 15	1467	9-13	1 x 17.9
BV EI 543 1175	22.0	3	230	1-7	2 x 15	734	8-9/13-14	2 x 17.9
BV EI 543 1176	22.0	3	230	1-7	1 x 18	1223	9-13	1 x 21.0
BV EI 543 1177	22.0	3	230	1-7	2 x 18	612	8-9/13-14	2 x 21.0
BV EI 543 1178	22.0	3	230	1-7	1 x 24	917	9-13	1 x 28.0



### Individual EI 54 transformer version

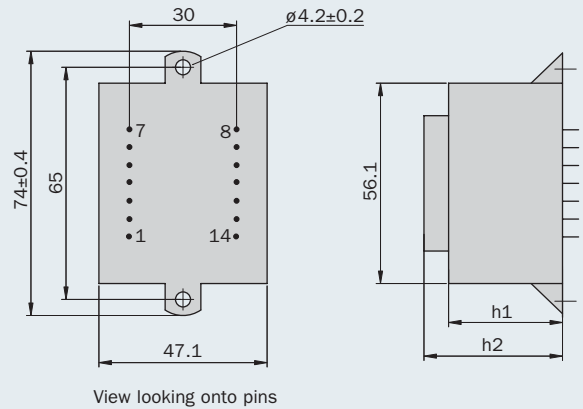
#### EI 54 transformers, custom-made versions.

Parallel to the cataloged EI 54 series transformers, HAHN also produces other variants, e.g. with integrated thermo fuse or thermo switch, other housing-, fixing- and connective options as well as non-encapsulated transformers.



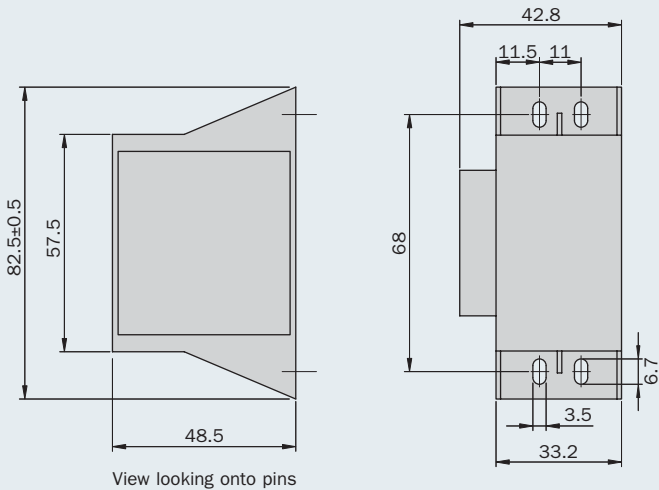
View looking onto pins

Type '0' cast housing without fixing straps



View looking onto pins

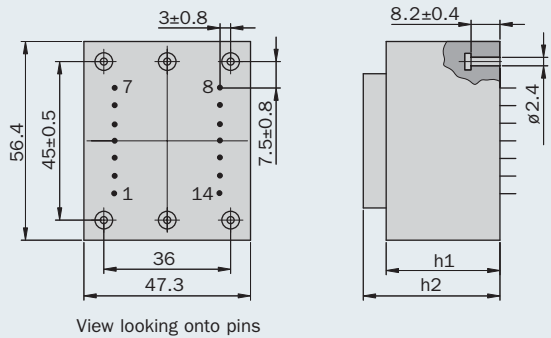
Type 'K' cast housing with 2 fixing straps



View looking onto pins

Type 'SV' for upright mounting

EI 54/18.8



View looking onto pins

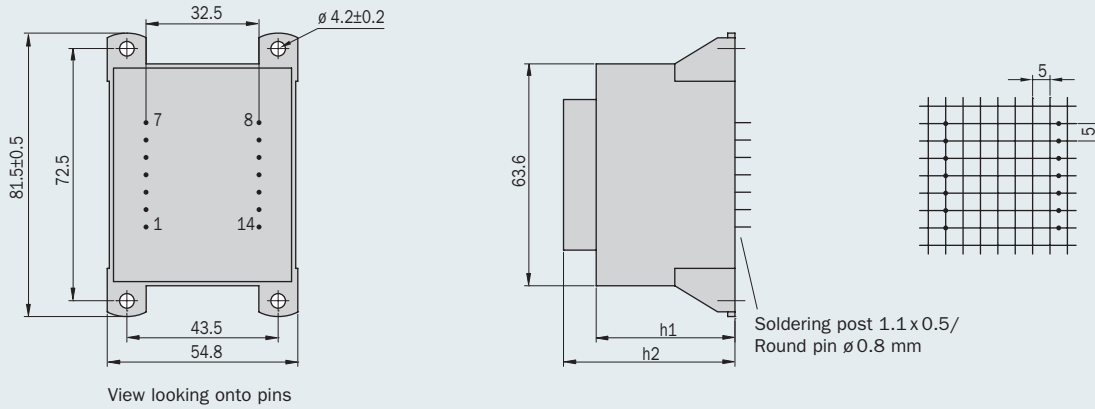
Type '0' cast housing with fixing band

Dimensions in drawings:  
 - without tolerances  $\pm 0.3$  mm  
 - Soldering post 1.1 x 0.5  
 - Round pin  $\varnothing 0.8$



- Capacity up to 35.0 VA
- Non short-circuit-proof at temperature class ta 70 °C/B
- Standard type with 'KK' cast housing
- Test certifications to ENEC 10-, VDE- and UL-regulations\*
- with VDE certificate for glow wire test in accordance to standard EN 60335-1:2005
- Excellent temperature fluctuation resistance properties
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Certified item quality tested

Primary protection by means of transformer heat coils to IEC 127 standards or secondarily with PTC resistances.



View looking onto pins

Dimensions without tolerances ± 0.3 mm, Rights to make alterations and improvements hereby reserved

Type 'KK' cast housing with 4 fixing straps

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 600 .... /16.0 mm*	17.0 VA	approx. 31.0 mm	approx. 40.5 mm	0.450 kg	18 pieces
BV EI 601 .... /21.0 mm	20.0 VA	35.2 ± 0.5 mm	44.7 ± 0.5 mm	0.600 kg	18 pieces
BV EI 602 .... /25.5 mm	28.0 VA	39.7 ± 0.5 mm	49.2 ± 0.5 mm	0.700 kg	18 pieces
BV EI 603 .... /30.5 mm	30.0 VA	44.7 ± 0.5 mm	54.2 ± 0.5 mm	0.800 kg	18 pieces
BV EI 604 .... /35.0 mm	35.0 VA	48.1 ± 0.5 mm	57.3 ± 0.5 mm	0.900 kg	18 pieces

\* Only in type '0'

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 600 1050	17.0	0	230	1-7	1 x 6	2834	9-13	1 x 7.4
BV EI 600 1051	17.0	0	230	1-7	2 x 6	1417	8-9/13-14	2 x 7.4
BV EI 600 1052	17.0	0	230	1-7	1 x 7.5	2267	9-13	1 x 9.3
BV EI 600 1053	17.0	0	230	1-7	2 x 7.5	1134	8-9/13-14	2 x 9.3
BV EI 600 1054	17.0	0	230	1-7	1 x 9	1889	9-13	1 x 11.1
BV EI 600 1055	17.0	0	230	1-7	2 x 9	945	8-9/13-14	2 x 11.1
BV EI 600 1056	17.0	0	230	1-7	1 x 12	1417	9-13	1 x 15.2
BV EI 600 1057	17.0	0	230	1-7	2 x 12	708	8-9/13-14	2 x 15.2
BV EI 600 1058	17.0	0	230	1-7	1 x 15	1134	9-13	1 x 18.2
BV EI 600 1065	17.0	0	230	1-7	2 x 15	567	8-9/13-14	2 x 18.7
BV EI 600 1072	17.0	0	230	1-7	1 x 18	944	9-13	1 x 21.8
BV EI 600 1061	17.0	0	230	1-7	2 x 18	472	8-9/13-14	1 x 21.9
BV EI 600 1062	17.0	0	230	1-7	1 x 24	708	9-13	1 x 28.9



Safety transformer

\* UL on request



Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 601 .... /21.0 mm	20.0 VA	35.2 ± 0.5 mm	44.7 ± 0.5 mm	0.600 kg	18 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 601 1069	20.0	1	230	1-7	1 x 6	3334	9-13	1 x 7.0
BV EI 601 1070	20.0	1	230	1-7	2 x 6	1667	8-9/13-14	2 x 7.0
BV EI 601 1071	20.0	1	230	1-7	1 x 7.5	2667	9-13	1 x 8.8
BV EI 601 1059	20.0	1	230	1-7	2 x 7.5	1334	8-9/13-14	2 x 8.8
BV EI 601 1060	20.0	1	230	1-7	1 x 9	2223	9-13	1 x 10.5
BV EI 601 1042	20.0	1	230	1-7	2 x 9	1111	8-9/13-14	2 x 10.5
BV EI 601 1046	20.0	1	230	1-7	1 x 12	1667	9-13	1 x 14.2
BV EI 601 1043	20.0	1	230	1-7	2 x 12	834	8-9/13-14	2 x 14.2
BV EI 601 1064	20.0	1	230	1-7	1 x 15	1334	9-13	1 x 17.0
BV EI 601 1044	20.0	1	230	1-7	2 x 15	667	8-9/13-14	2 x 17.0
BV EI 601 1066	20.0	1	230	1-7	1 x 18	1111	9-13	1 x 20.5
BV EI 601 1068	20.0	1	230	1-7	2 x 18	556	8-9/13-14	2 x 20.5
BV EI 601 1067	20.0	1	230	1-7	1 x 24	834	9-13	1 x 27.6

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 602 .... /25.5 mm	28.0 VA	39.7 ± 0.5 mm	49.2 ± 0.5 mm	0.700 kg	18 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 602 1011	28.0	2	230	1-7	1 x 6	4667	9-13	1 x 7.1
BV EI 602 1018	28.0	2	230	1-7	2 x 6	2334	8-9/13-14	2 x 7.1
BV EI 602 1012	28.0	2	230	1-7	1 x 7.5	3734	9-13	1 x 8.8
BV EI 602 1019	28.0	2	230	1-7	2 x 7.5	1867	8-9/13-14	2 x 8.8
BV EI 602 1013	28.0	2	230	1-7	1 x 9	3111	9-13	1 x 10.6
BV EI 602 1020	28.0	2	230	1-7	2 x 9	1556	8-9/13-14	2 x 10.6
BV EI 602 1014	28.0	2	230	1-7	1 x 12	2334	9-13	1 x 14.4
BV EI 602 1021	28.0	2	230	1-7	2 x 12	1167	8-9/13-14	2 x 14.4
BV EI 602 1015	28.0	2	230	1-7	1 x 15	1867	9-13	1 x 17.8
BV EI 602 1022	28.0	2	230	1-7	2 x 15	934	8-9/13-14	2 x 17.8
BV EI 602 1016	28.0	2	230	1-7	1 x 18	1556	9-13	1 x 20.5
BV EI 602 1076	28.0	2	230	1-7	2 x 18	778	8-9/13-14	2 x 20.5
BV EI 602 1017	28.0	2	230	1-7	1 x 24	1167	9-13	1 x 27.6

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 603 .... /30.5 mm	30.0 VA	44.7 ± 0.5 mm	54.2 ± 0.5 mm	0.800 kg	18 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 603 1023	30.0	3	230	1-7	1 x 6	5000	9-13	1 x 7.0
BV EI 603 1030	30.0	3	230	1-7	2 x 6	2500	8-9/13-14	2 x 7.0
BV EI 603 1024	30.0	3	230	1-7	1 x 7.5	4000	9-13	1 x 8.7
BV EI 603 1031	30.0	3	230	1-7	2 x 7.5	2000	8-9/13-14	2 x 8.7
BV EI 603 1025	30.0	3	230	1-7	1 x 9	3334	9-13	1 x 10.2
BV EI 603 1032	30.0	3	230	1-7	2 x 9	1667	8-9/13-14	2 x 10.2
BV EI 603 1026	30.0	3	230	1-7	1 x 12	2500	9-13	1 x 13.7
BV EI 603 1034	30.0	3	230	1-7	2 x 12	1250	8-9/13-14	2 x 13.7
BV EI 603 1027	30.0	3	230	1-7	1 x 15	2000	9-13	1 x 16.8
BV EI 603 1035	30.0	3	230	1-7	2 x 15	1000	8-9/13-14	2 x 16.8
BV EI 603 1028	30.0	3	230	1-7	1 x 18	1667	9-13	1 x 20.3
BV EI 603 1080	30.0	3	230	1-7	2 x 18	834	8-9/13-14	2 x 20.3
BV EI 603 1029	30.0	3	230	1-7	1 x 24	1250	9-13	1 x 27.0

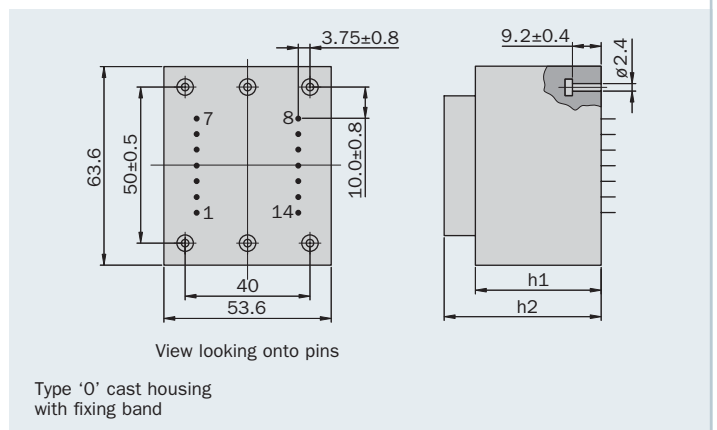
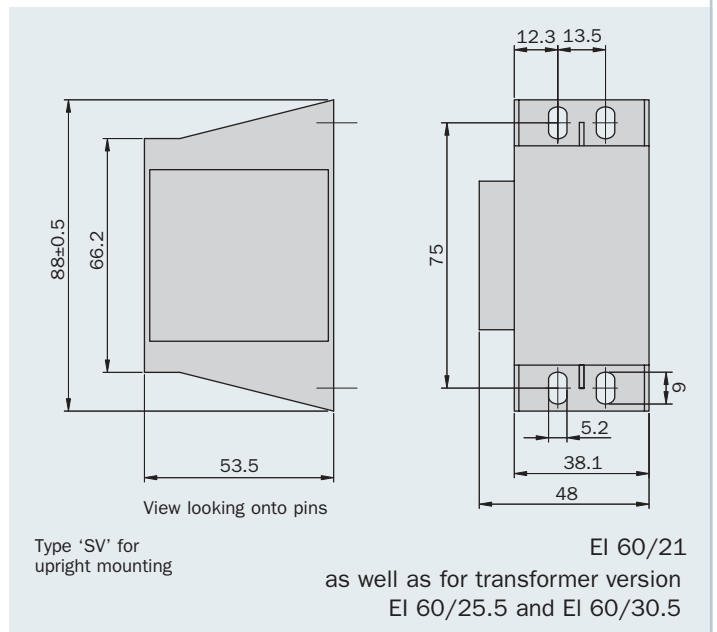
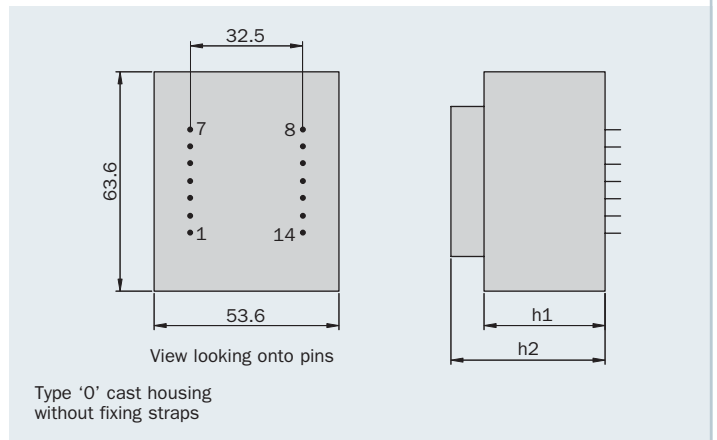
Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 604 .... /35.0 mm	35.0 VA	48.1 ± 0.5 mm	57.3 ± 0.5 mm	0.900 kg	18 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 604 1082	35.0	4	230	1-7	1 x 6	5834	9-13	1 x 7.0
BV EI 604 1083	35.0	4	230	1-7	2 x 6	2917	8-9/13-14	2 x 7.0
BV EI 604 1084	35.0	4	230	1-7	1 x 7.5	4667	9-13	1 x 8.7
BV EI 604 1085	35.0	4	230	1-7	2 x 7.5	2334	8-9/13-14	2 x 8.7
BV EI 604 1086	35.0	4	230	1-7	1 x 9	3889	9-13	1 x 10.3
BV EI 604 1087	35.0	4	230	1-7	2 x 9	1994	8-9/13-14	2 x 10.3
BV EI 604 1088	35.0	4	230	1-7	1 x 12	2917	9-13	1 x 13.9
BV EI 604 1089	35.0	4	230	1-7	2 x 12	1458	8-9/13-14	2 x 13.9
BV EI 604 1090	35.0	4	230	1-7	1 x 15	2334	9-13	1 x 17.1
BV EI 604 1091	35.0	4	230	1-7	2 x 15	1167	8-9/13-14	2 x 17.1
BV EI 604 1092	35.0	4	230	1-7	1 x 18	1994	9-13	1 x 20.3
BV EI 604 1093	35.0	4	230	1-7	2 x 18	972	8-9/13-14	2 x 20.3
BV EI 604 1094	35.0	4	230	1-7	1 x 24	1458	9-13	1 x 26.9

### Individual EI 60 transformer version

#### EI 60 transformers, custom-made versions.

Parallel to the cataloged EI 60 series transformers, HAHN also produces other variants, e.g. with integrated thermo fuse or thermo switch, other housing-, fixing- and connective options as well as non-encapsulated transformers.

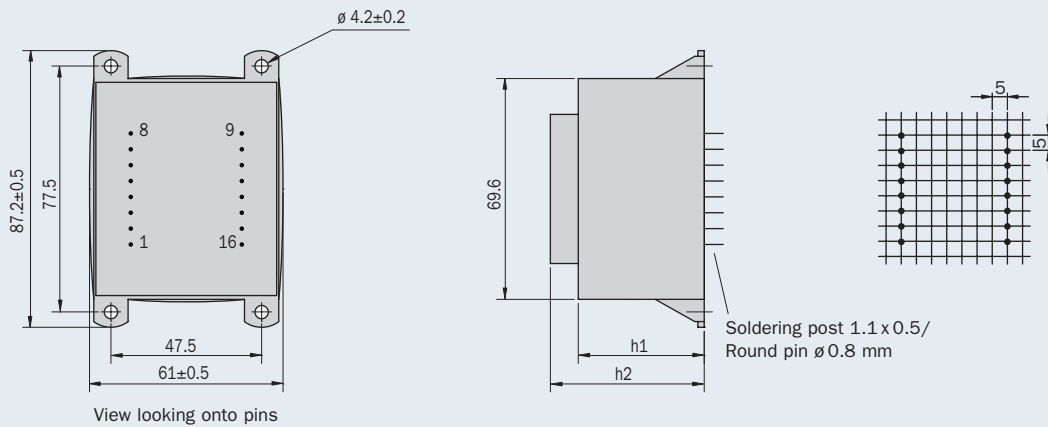


Dimensions in drawings:  
 - without tolerances  $\pm 0.3$  mm  
 - Soldering post 1.1 x 0.5 mm  
 - Round pin  $\varnothing 0.8$



- Capacity up to 50.0 VA
- Non short-circuit-proof at temperature class ta 70 °C/B
- Standard type 'KK' cast housing
- Test certifications to ENEC 10-, VDE- and cCSAus-regulations
- with VDE certificate for glow wire test in accordance to standard EN 60335-1:2005
- Excellent temperature fluctuation resistance properties
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Certified item quality tested

Protection by means of transformer heat coils to IEC 127 standards.



View looking onto pins

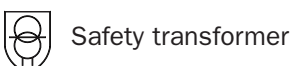
Soldering post 1.1x0.5/  
Round pin  $\varnothing 0.8$  mm

Dimensions without tolerances  $\pm 0.3$  mm,  
Rights to make alterations and improvements hereby reserved

Type 'KK' cast housing with 4 fixing straps

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 660 .... /12.0 mm	17.0 VA	29.2 ± 0.5 mm	38.5 ± 0.5 mm	0.500 kg	16 pieces
BV EI 661 .... /18.0 mm	25.0 VA	34.4 ± 0.5 mm	44.5 ± 0.5 mm	0.700 kg	16 pieces
BV EI 662 .... /23.0 mm	33.0 VA	39.7 ± 0.5 mm	48.5 ± 0.5 mm	0.800 kg	16 pieces
BV EI 663 .... /30.0 mm	44.0 VA	47.0 ± 0.5 mm	55.8 ± 0.5 mm	0.950 kg	16 pieces
BV EI 664 .... /34.8 mm	47.0 VA	51.4 ± 0.5 mm	60.2 ± 0.5 mm	1.000 kg	16 pieces
BV EI 665 .... /40.0 mm	50.0 VA	57.8 ± 0.5 mm	66.5 ± 0.5 mm	1.200 kg	16 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 660 1060	17.0	0	230	1-8	1 x 6	2833	11-14	1 x 7.4
BV EI 660 1061	17.0	0	230	1-8	2 x 6	1417	9-11/14-16	2 x 7.4
BV EI 660 1062	17.0	0	230	1-8	1 x 7.5	2267	11-14	1 x 9.1
BV EI 660 1063	17.0	0	230	1-8	2 x 7.5	1133	9-11/14-16	2 x 9.1
BV EI 660 1064	17.0	0	230	1-8	1 x 9	1889	11-14	1 x 10.8
BV EI 660 1065	17.0	0	230	1-8	2 x 9	944	9-11/14-16	2 x 10.8
BV EI 660 1066	17.0	0	230	1-8	1 x 12	1417	11-14	1 x 14.4
BV EI 660 1067	17.0	0	230	1-8	2 x 12	708	9-11/14-16	2 x 14.2
BV EI 660 1068	17.0	0	230	1-8	1 x 15	1133	11-14	1 x 18.0
BV EI 660 1069	17.0	0	230	1-8	2 x 15	567	9-11/14-16	2 x 17.8
BV EI 660 1070	17.0	0	230	1-8	1 x 18	944	11-14	1 x 21.0
BV EI 660 1071	17.0	0	230	1-8	2 x 18	472	9-11/14-16	2 x 21.0
BV EI 660 1072	17.0	0	230	1-8	1 x 24	708	11-14	1 x 28.0



Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 661 .... /18.0 mm	25.0 VA	34.4 ± 0.5 mm	44.5 ± 0.5 mm	0.700 kg	16 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 661 1073	25.0	1	230	1-8	1 x 6	4167	11-14	1 x 7.3
BV EI 661 1074	25.0	1	230	1-8	2 x 6	2083	9-11/14-16	2 x 7.3
BV EI 661 1075	25.0	1	230	1-8	1 x 7.5	3333	11-14	1 x 9.0
BV EI 661 1076	25.0	1	230	1-8	2 x 7.5	1667	9-11/14-16	2 x 9.0
BV EI 661 1077	25.0	1	230	1-8	1 x 9	2778	11-14	1 x 10.9
BV EI 661 1078	25.0	1	230	1-8	2 x 9	1389	9-11/14-16	2 x 10.6
BV EI 661 1079	25.0	1	230	1-8	1 x 12	2083	11-14	1 x 13.9
BV EI 661 1080	25.0	1	230	1-8	2 x 12	1042	9-11/14-16	2 x 13.9
BV EI 661 1081	25.0	1	230	1-8	1 x 15	1667	11-14	1 x 17.4
BV EI 661 1082	25.0	1	230	1-8	2 x 15	833	9-11/14-16	2 x 17.4
BV EI 661 1083	25.0	1	230	1-8	1 x 18	1389	11-14	1 x 20.9
BV EI 661 1084	25.0	1	230	1-8	2 x 18	694	9-11/14-16	2 x 20.5
BV EI 661 1085	25.0	1	230	1-8	1 x 24	1042	11-14	1 x 27.9

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 662 .... /23.0 mm	33.0 VA	39.7 ± 0.5 mm	48.5 ± 0.5 mm	0.800 kg	16 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 662 1086	33.0	2	230	1-8	1 x 6	5500	11-14	1 x 7.0
BV EI 662 1087	33.0	2	230	1-8	2 x 6	2750	9-11/14-16	2 x 7.0
BV EI 662 1088	33.0	2	230	1-8	1 x 7.5	4400	11-14	1 x 8.5
BV EI 662 1089	33.0	2	230	1-8	2 x 7.5	2200	9-11/14-16	2 x 8.5
BV EI 662 1090	33.0	2	230	1-8	1 x 9	3667	11-14	1 x 10.3
BV EI 662 1091	33.0	2	230	1-8	2 x 9	1389	9-11/14-16	2 x 10.3
BV EI 662 1092	33.0	2	230	1-8	1 x 12	2750	11-14	1 x 14.0
BV EI 662 1093	33.0	2	230	1-8	2 x 12	1375	9-11/14-16	2 x 14.0
BV EI 662 1094	33.0	2	230	1-8	1 x 15	2200	11-14	1 x 16.9
BV EI 662 1095	33.0	2	230	1-8	2 x 15	1100	9-11/14-16	2 x 16.9
BV EI 662 1096	33.0	2	230	1-8	1 x 18	1833	11-14	1 x 20.1
BV EI 662 1097	33.0	2	230	1-8	2 x 18	917	9-11/14-16	2 x 20.1
BV EI 662 1098	33.0	2	230	1-8	1 x 24	1375	11-14	1 x 26.8

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 663 .... /30.0 mm	44.0 VA	47.0 ± 0.5 mm	55.8 ± 0.5 mm	0.950 kg	16 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 663 1099	44.0	3	230	1-8	1 x 6	7333	11-14	1 x 6.8
BV EI 663 1100	44.0	3	230	1-8	2 x 6	3667	9-11/14-16	2 x 6.8
BV EI 663 1101	44.0	3	230	1-8	1 x 7.5	5867	11-14	1 x 8.8
BV EI 663 1102	44.0	3	230	1-8	2 x 7.5	2933	9-11/14-16	2 x 8.8
BV EI 663 1103	44.0	3	230	1-8	1 x 9	4889	11-14	1 x 10.5
BV EI 663 1104	44.0	3	230	1-8	2 x 9	2444	9-11/14-16	2 x 10.3
BV EI 663 1105	44.0	3	230	1-8	1 x 12	3667	11-14	1 x 13.7
BV EI 663 1106	44.0	3	230	1-8	2 x 12	1833	9-11/14-16	2 x 13.7
BV EI 663 1107	44.0	3	230	1-8	1 x 15	2933	11-14	1 x 17.2
BV EI 663 1108	44.0	3	230	1-8	2 x 15	1467	9-11/14-16	2 x 17.2
BV EI 663 1109	44.0	3	230	1-8	1 x 18	2444	11-14	1 x 20.2
BV EI 663 1110	44.0	3	230	1-8	2 x 18	1222	9-11/14-16	2 x 20.2
BV EI 663 1111	44.0	3	230	1-8	1 x 24	1833	11-14	1 x 26.9

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 664 .... /34.8 mm	47.0 VA	51.4 ± 0.5 mm	60.2 ± 0.5 mm	1.000 kg	16 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 664 1112	47.0	4	230	1-8	1 x 6	7833	11-14	1 x 7.3
BV EI 664 1113	47.0	4	230	1-8	2 x 6	3917	9-11/14-16	2 x 7.1
BV EI 664 1114	47.0	4	230	1-8	1 x 7.5	6267	11-14	1 x 8.6
BV EI 664 1115	47.0	4	230	1-8	2 x 7.5	3133	9-11/14-16	2 x 8.5
BV EI 664 1116	47.0	4	230	1-8	1 x 9	5222	11-14	1 x 10.0
BV EI 664 1117	47.0	4	230	1-8	2 x 9	2611	9-11/14-16	2 x 10.0
BV EI 664 1118	47.0	4	230	1-8	1 x 12	3917	11-14	1 x 13.0
BV EI 664 1119	47.0	4	230	1-8	2 x 12	1960	9-11/14-16	2 x 13.0
BV EI 664 1120	47.0	4	230	1-8	1 x 15	3133	11-14	1 x 16.4
BV EI 664 1121	47.0	4	230	1-8	2 x 15	1570	9-11/14-16	2 x 16.4
BV EI 664 1122	47.0	4	230	1-8	1 x 18	2610	11-14	1 x 19.7
BV EI 664 1123	47.0	4	230	1-8	2 x 18	1306	9-11/14-16	2 x 19.7
BV EI 664 1124	47.0	4	230	1-8	1 x 24	1958	11-14	1 x 26.3

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight	Packaging unit
BV EI 665 .... /40.0 mm	50.0 VA	57.8 ± 0.5 mm	66.5 ± 0.5 mm	1.200 kg	16 pieces

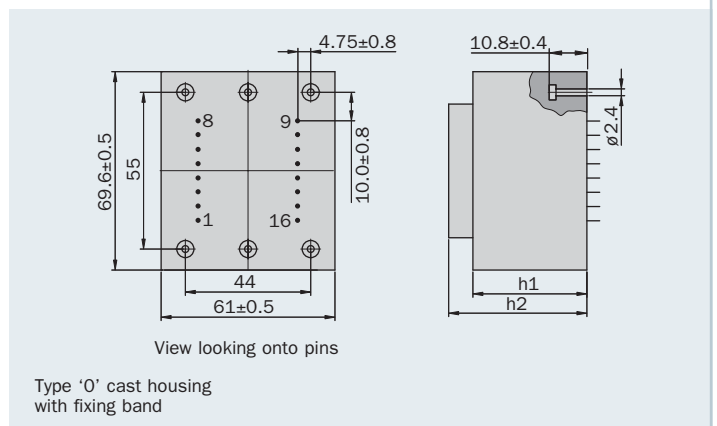
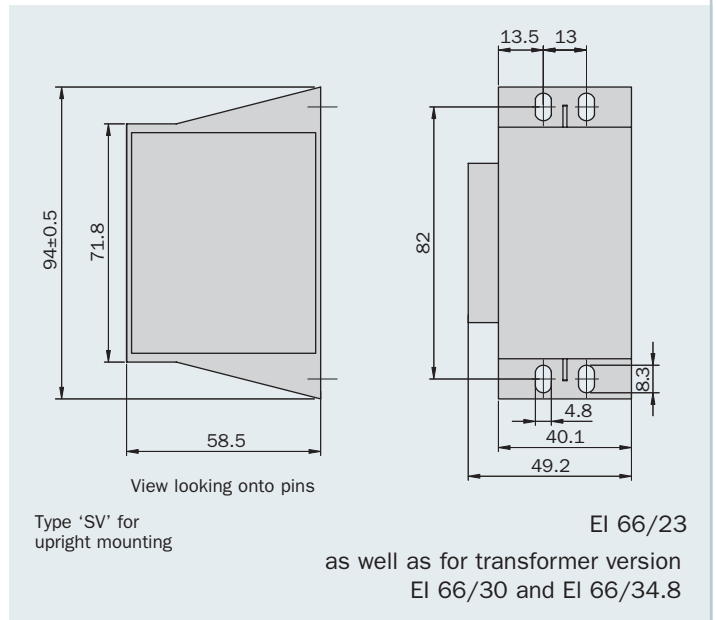
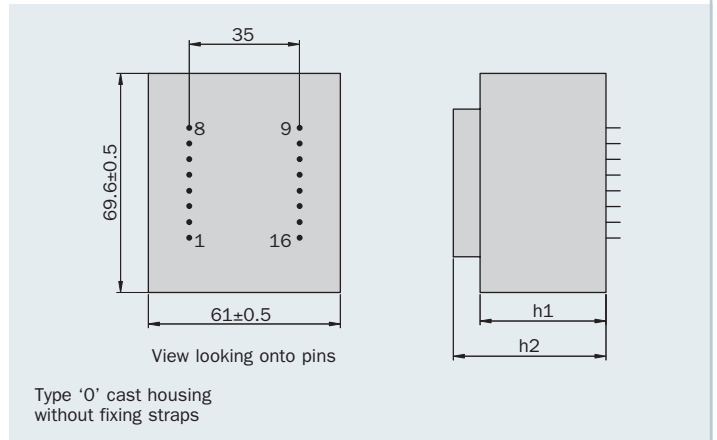
Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV EI 665 1125	50.0	5	230	1-8	1 x 6	8333	11-14	1 x 6.9
BV EI 665 1126	50.0	5	230	1-8	2 x 6	4167	9-11/14-16	2 x 6.7
BV EI 665 1127	50.0	5	230	1-8	1 x 7.5	6667	11-14	1 x 8.5
BV EI 665 1128	50.0	5	230	1-8	2 x 7.5	3333	9-11/14-16	2 x 8.5
BV EI 665 1129	50.0	5	230	1-8	1 x 9	5556	11-14	1 x 10.0
BV EI 665 1130	50.0	5	230	1-8	2 x 9	2778	9-11/14-16	2 x 10.0
BV EI 665 1131	50.0	5	230	1-8	1 x 12	4167	11-14	1 x 13.0
BV EI 665 1132	50.0	5	230	1-8	2 x 12	2083	9-11/14-16	2 x 13.0
BV EI 665 1133	50.0	5	230	1-8	1 x 15	3333	11-14	1 x 16.4
BV EI 665 1134	50.0	5	230	1-8	2 x 15	1667	9-11/14-16	2 x 16.4
BV EI 665 1135	50.0	5	230	1-8	1 x 18	2778	11-14	1 x 19.7
BV EI 665 1136	50.0	5	230	1-8	2 x 18	1388	9-11/14-16	2 x 19.7
BV EI 665 1137	50.0	5	230	1-8	1 x 24	2083	11-14	1 x 26.1



### Individual EI 66 transformer version

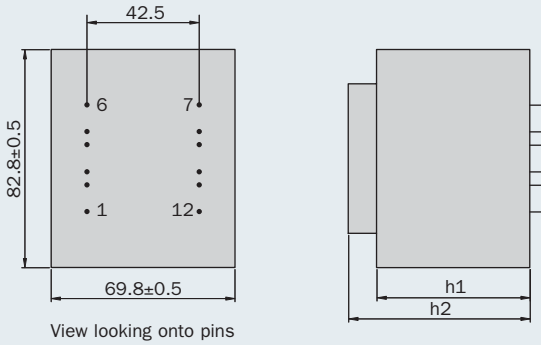
#### EI 66 transformers, custom-made versions.

Parallel to the cataloged EI 66 series transformers, HAHN also produces other variants, e.g. with integrated thermo fuse or thermo switch, other housing-, fixing- and connective options as well as non-encapsulated transformers.



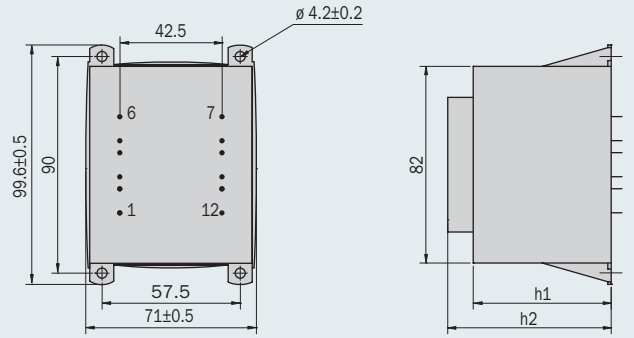
Dimensions in drawings:  
 - without tolerances  $\pm 0.3$  mm  
 - Soldering post 1.1 x 0.5 mm  
 - Round pin  $\varnothing 0.8$

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight
BV EI 781 .... /27.5 mm	50.0 VA	48.4 ± 0.5 mm	59 ± 0.5 mm	1.250 kg
BV EI 782 .... /36.5 mm	60.0 VA	57.4 ± 0.5 mm	68 ± 0.5 mm	1.500 kg
BV EI 783 .... /40.5 mm	70.0 VA	61.4 ± 0.5 mm	72 ± 0.5 mm	1.700 kg



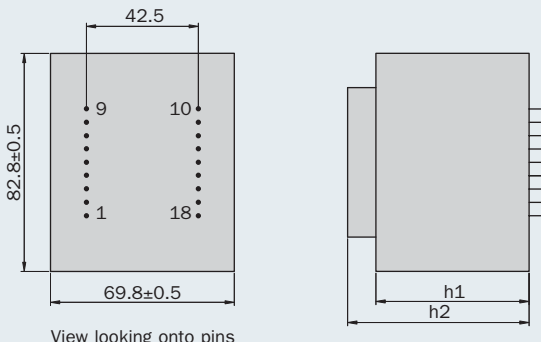
View looking onto pins

Type 'O' cast housing with 12 connection pins



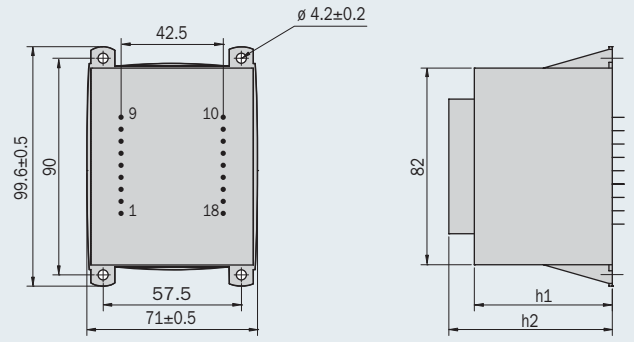
View looking onto pins

Type 'KK' cast housing with 12 connection pins



View looking onto pins

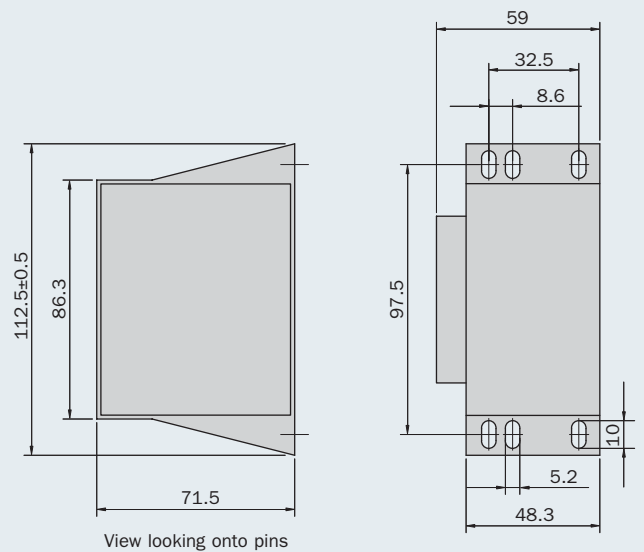
Type 'O' cast housing with 18 connection pins



View looking onto pins

Type 'KK' cast housing with 18 connection pins

Custom-made models are available on request, e.g. with or without mounting brackets, other heights, pin configurations or connections.



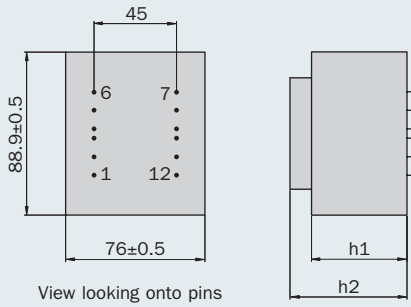
View looking onto pins

Type 'SV' for upright mounting

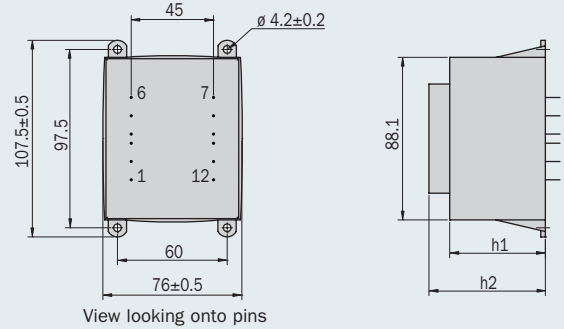
EI 78/27.5

Dimensions in drawings:  
 – without tolerances ± 0.3 mm  
 – Rights to make alterations and improvements hereby reserved

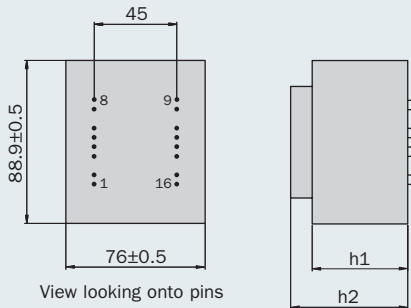
Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight
BV EI 841 .... / 29.5 mm	75.0 VA	51.4 ± 0.5 mm	63.0 ± 0.5 mm	1.600 kg
BV EI 842 .... / 43.5 mm	100.0 VA	64.7 ± 0.5 mm	76.5 ± 0.5 mm	2.100 kg



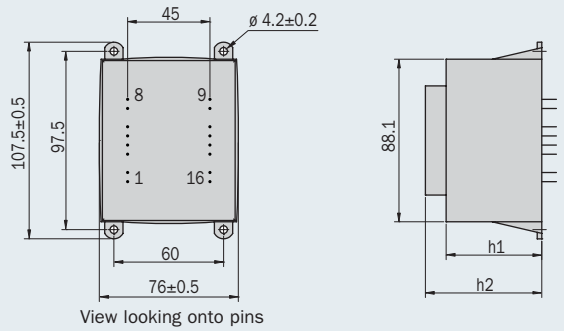
Type 'O' cast housing with 12 connection pins



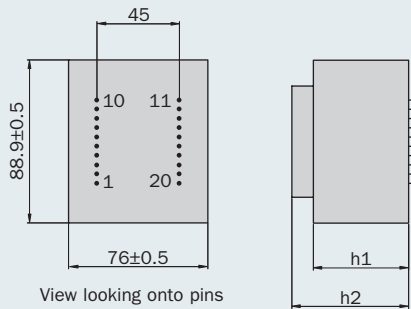
Type 'KK' cast housing with 12 connection pins



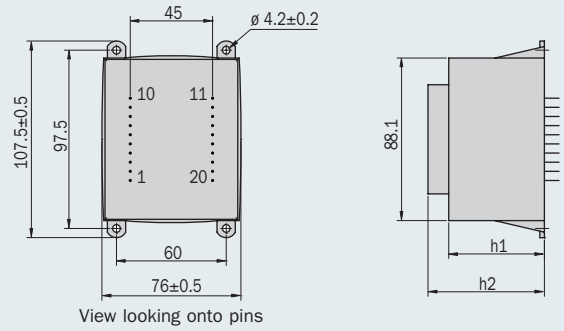
Type 'O' cast housing with 16 connection pins



Type 'KK' cast housing with 16 connection pins



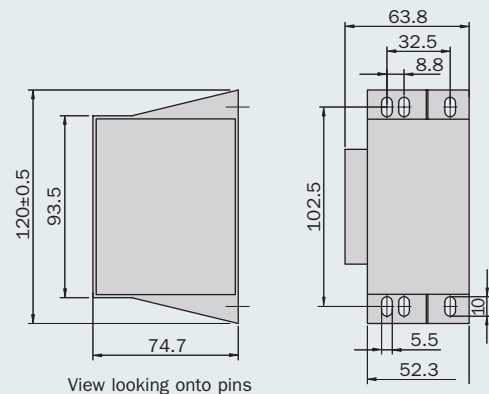
Type 'O' cast housing with 20 connection pins



Type 'KK' cast housing with 20 connection pins

Custom-made models are available on request, e.g. with or without mounting brackets, other heights, pin configurations or connections.

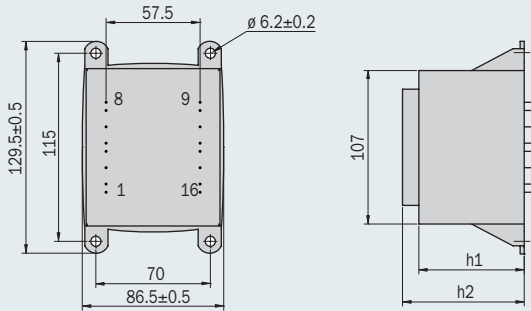
Dimensions in drawings:  
 – without tolerances ± 0.3 mm  
 – Rights to make alterations and improvements hereby reserved



Type 'SV' for upright mounting

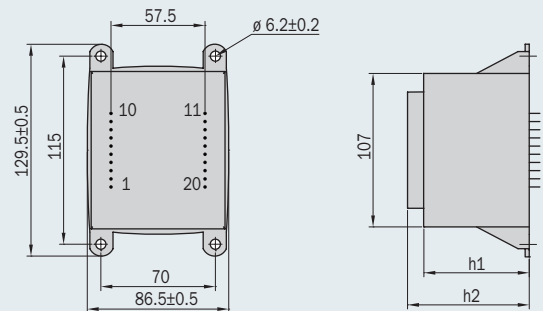
as well as for transformer version EI 84/29.5  
 EI 84/43.5

Frame size/Core height	Output ta 70 °C/B	h1 (mm)	h2 (mm)	Weight
BV EI 961 .... /35.7 mm	130.0 VA	60.2 ± 0.5 mm	74.6 ± 0.5 mm	2.600 kg
BV EI 962 .... /45.5 mm	160.0 VA	70.0 ± 0.5 mm	84.4 ± 0.5 mm	3.800 kg
BV EI 963 .... /59.5 mm	200.0 VA	84.0 ± 0.5 mm	98.4 ± 0.5 mm	4.600 kg



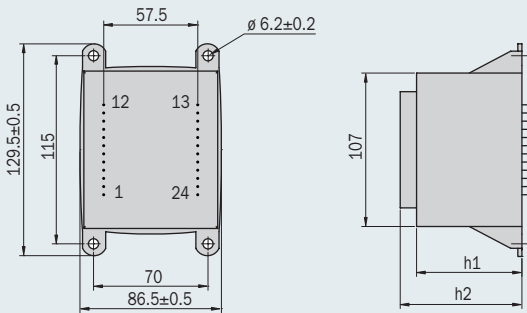
View looking onto pins

Type 'KK' cast housing with 16 connection pins



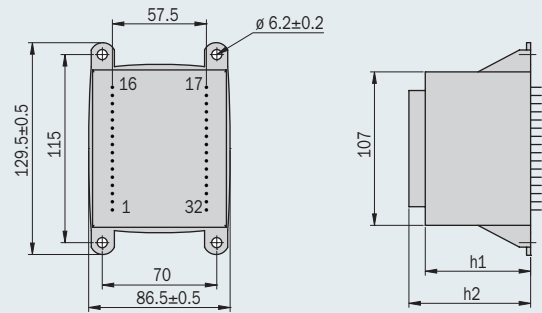
View looking onto pins

Type 'KK' cast housing with 20 connection pins



View looking onto pins

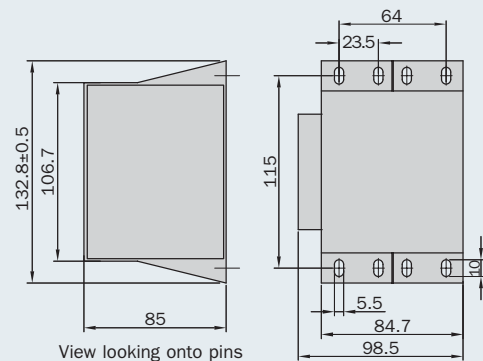
Type 'KK' cast housing with 24 connection pins



View looking onto pins

Type 'KK' cast housing with 32 connection pins

Custom-made models are available on request, e.g. with or without mounting brackets, other heights, pin configurations or connections.



Type 'SV' for upright mounting

EI 96/59,7  
as well as for transformer version  
EI 96/35.7 and EI 96/45.5

Dimensions in drawings:  
 – without tolerances ± 0.3 mm  
 – Rights to make alterations and improvements hereby reserved



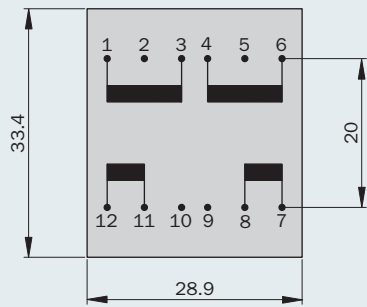
- Capacity up to 1.0 VA
- Temperature class ta 70 °C/B
- Absolutely short-circuit-proof
- Test certification to ENEC 05-, KEMA KEUR-, CSA- and UL-regulations
- Excellent temperature fluctuation resistance properties
- Vacuum-encapsulated, bobbin type with dual chamber windings
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Item quality certification

HAHN flat-type transformers with compact designing, consistent long service-life and durability for all applications.

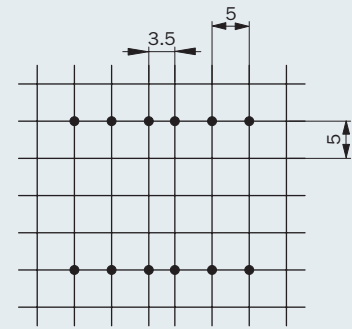
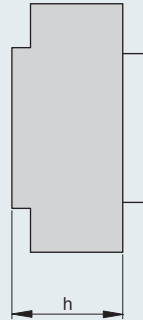
Several hundreds of serial item sizes provide the highest degree of flexibility wherever flat-type construction components are required. Dual, primary and secondary voltages provide additional flexibility in development work. Approved under Standard EN 61558.

#### **HAHN flat-type transformers UI 21, UI 30, UI 39, UI 48**

An extensive standard range with capacities from 1.0–60.0 VA. HAHN transformers are quality products meeting all demands placed on highly developed electro-technical equipment. Of course, item quality certified, vacuum-encapsulated and tested with 6000 V prim./sec. (VDE 0570 and CEE 15 regulations require only 3750 V). Leakage distance and air paths at least 10 mm. Temperature class ta 70 °C/B as per VDE 0570, EN 61558 and CEE 15 regulations/standards. An innovative insulation technique in the provides for even greater primary and secondary voltage stability casting, in all sizes of the UI 30 to UI 39 types.



View looking onto pins



prim I: 1-3 | sec I: 7-8  
prim II: 4-6 | sec II: 11-12

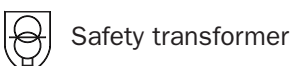
UI 21/7.3

Dimensions without tolerances ± 0.3 mm, Soldering pin Ø 0.6, Rights to make alterations and improvements hereby reserved

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 21 .... / 7.3 mm	1.0 VA	14.9 mm	0.050 kg	40 pieces

- Capacity: 1.0 VA
- ta 70 °C/B meeting VDE 0570/ EN 61558 regulations/standard
- Circuit for 115 V  
Bridge: 1 to 4 and 3 to 6
- Circuit for 230 V  
Bridge: 3 to 4
- Secondary double voltage  
Bridge: 8 to 11
- Secondary double current  
Bridge: 7 to 11 and 8 to 12
- Test voltage: 6000 V

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 21 0011	1.0	21	230	1-3	1 x 3	333	7-8	1 x 4.7
BV UI 21 0012	1.0	21	230	1-3	1 x 6	166	7-8	1 x 10.4
BV UI 21 0013	1.0	21	230	1-3	1 x 7.5	133	7-8	1 x 12.9
BV UI 21 0014	1.0	21	230	1-3	1 x 9	111	7-8	1 x 14.4
BV UI 21 0015	1.0	21	230	1-3	1 x 10	100	7-8	1 x 15.4
BV UI 21 0016	1.0	21	230	1-3	1 x 12	83	7-8	1 x 20.4
BV UI 21 0017	1.0	21	230	1-3	1 x 15	67	7-8	1 x 24.6
BV UI 21 0018	1.0	21	230	1-3	1 x 18	56	7-8	1 x 29.1
BV UI 21 0019	1.0	21	230	1-3	1 x 21	47	7-8	1 x 34.0
BV UI 21 0021	1.0	21	230	1-3	1 x 24	42	7-8	1 x 39.7
BV UI 21 0001	1.0	21	2 x 115	1-3/4-6	2 x 3	166	7-8/11-12	2 x 5.8
BV UI 21 0002	1.0	21	2 x 115	1-3/4-6	2 x 6	82	7-8/11-12	2 x 11.4
BV UI 21 0008	1.0	21	2 x 115	1-3/4-6	2 x 7.5	67	7-8/11-12	2 x 13.1
BV UI 21 0003	1.0	21	2 x 115	1-3/4-6	2 x 9	56	7-8/11-12	2 x 17.1
BV UI 21 0004	1.0	21	2 x 115	1-3/4-6	2 x 12	41	7-8/11-12	2 x 21.8



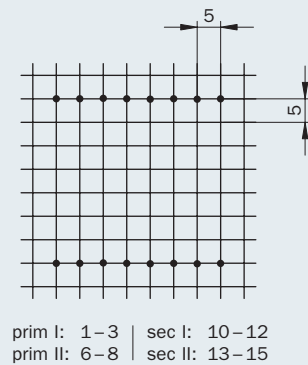
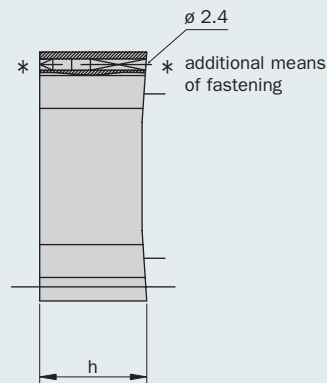
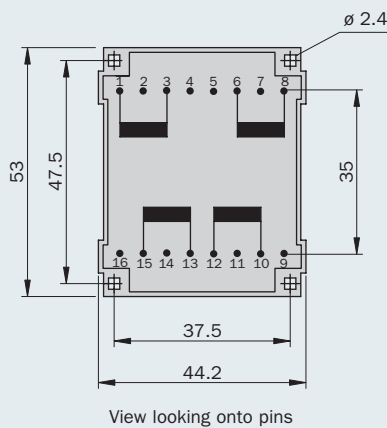
All these types are held on stock



- Capacity up to 16.0 VA
- Temperature class ta 70 °C/B, but not short-circuit-proof
- Test certifications to ENEC 05-, KEMA KEUR-, CSA- and UL-regulations
- Vacuum encapsulated, bobbin type with dual chamber windings
- Excellent temperature fluctuation resistance properties
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Item quality certification

Secondary protection by means of external PTC resistances.

Parallel to the cataloged UI 30 series transformers, HAHN also produces other variants, e.g. with integrated thermo fuse or thermo switch.



Dimensions without tolerances ± 0.3 mm, Soldering pin 0.6x0.8 or ø0.8, Rights to make alterations and improvements hereby reserved

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 301 .... / 5.5 mm	3.0 VA	17.8 mm	0.130 kg	18/24 pieces*
BV UI 302 .... / 7.5 mm	4.0 VA	19.8 mm	0.150 kg	18/24 pieces*
BV UI 303 .... /10.5 mm	6.0 VA	22.8 mm	0.180 kg	18/24 pieces*
BV UI 304 .... /16.5 mm	10.0 VA	28.8 mm	0.260 kg	15/18 pieces*
BV UI 305 .... /26.0 mm	16.0 VA	37.6 mm	0.370 kg	15/18 pieces*

\* it depends on kind of packaging

- Capacity: 3/4/6/10/16 VA
- ta 70 °C/B as per VDE 0570/ EN 61558 regulations/standards
- Circuit for 115 V  
Bridge: 1 to 6 and 3 to 8
- Circuit for 230 V  
Bridge: 3 to 6
- Secondary double voltage  
Bridge: 12 to 13
- Secondary double current  
Bridge: 10 to 13 and 12 to 15
- Test voltage: 6000 V

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 301 0167	3.0	1	2 x 115	1-3/6-8	2 x 6	250	10-12/13-15	2 x 7.9
BV UI 301 0168	3.0	1	2 x 115	1-3/6-8	2 x 9	167	10-12/13-15	2 x 14.0
BV UI 301 0133	3.0	1	2 x 115	1-3/6-8	2 x 12	126	10-12/13-15	2 x 18.5
BV UI 301 0166	3.0	1	2 x 115	1-3/6-8	2 x 15	100	10-12/13-15	2 x 22.8

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 302 .... / 7.5 mm	4.0 VA	19.8 mm	0.150 kg	18/24 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 302 0164	4.0	2	2 x 115	1-3/6-8	2 x 6	333	10-12/13-15	2 x 9.5
BV UI 302 0161	4.0	2	2 x 115	1-3/6-8	2 x 9	222	10-12/13-15	2 x 13.5
BV UI 302 0144	4.0	2	2 x 115	1-3/6-8	2 x 12	166	10-12/13-15	2 x 20.1
BV UI 302 0165	4.0	2	2 x 115	1-3/6-8	2 x 15	133	10-12/13-15	2 x 24.9

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 303 .... / 10.5 mm	6.0 VA	22.8 mm	0.180 kg	18/24 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 303 0162	6.0	3	2 x 115	1-3/6-8	2 x 6	500	10-12/13-15	2 x 9.0
BV UI 303 0158	6.0	3	2 x 115	1-3/6-8	2 x 9	334	10-12/13-15	2 x 12.8
BV UI 303 0145	6.0	3	2 x 115	1-3/6-8	2 x 12	250	10-12/13-15	2 x 17.2
BV UI 303 0163	6.0	3	2 x 115	1-3/6-8	2 x 15	200	10-12/13-15	2 x 21.8

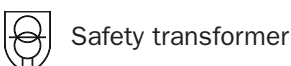
Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 304 .... / 16.5 mm	10.0 VA	28.8 mm	0.260 kg	15/18 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 304 0155	10.0	4	2 x 115	1-3/6-8	2 x 6	833	10-12/13-15	2 x 8.7
BV UI 304 0129	10.0	4	2 x 115	1-3/6-8	2 x 7.5	667	10-12/13-15	2 x 10.0
BV UI 304 0153	10.0	4	2 x 115	1-3/6-8	2 x 9	555	10-12/13-15	2 x 12.4
BV UI 304 0154	10.0	4	2 x 115	1-3/6-8	2 x 12	416	10-12/13-15	2 x 16.0
BV UI 304 0136	10.0	4	2 x 115	1-3/6-8	2 x 15	333	10-12/13-15	2 x 19.7
BV UI 304 0159	10.0	4	2 x 115	1-3/6-8	2 x 18	277	10-12/13-15	2 x 23.3

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 305 .... / 26.0 mm	16.0 VA	37.6 mm	0.370 kg	15/18 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 305 0147	16.0	5	2 x 115	1-3/6-8	2 x 6	1330	10-12/13-15	2 x 7.5
BV UI 305 0148	16.0	5	2 x 115	1-3/6-8	2 x 9	888	10-12/13-15	2 x 10.9
BV UI 305 0149	16.0	5	2 x 115	1-3/6-8	2 x 12	666	10-12/13-15	2 x 14.6
BV UI 305 0150	16.0	5	2 x 115	1-3/6-8	2 x 15	533	10-12/13-15	2 x 18.0
BV UI 305 0151	16.0	5	2 x 115	1-3/6-8	2 x 18	444	10-12/13-15	2 x 21.5
BV UI 305 0152	16.0	5	2 x 115	1-3/6-8	2 x 21	380	10-12/13-15	2 x 25.0

\* it depends on kind of packaging



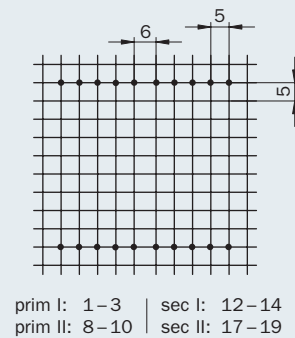
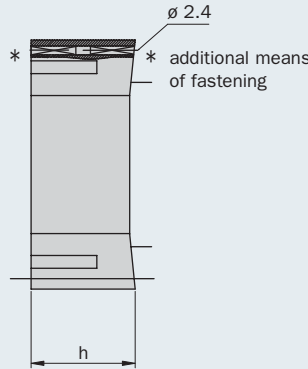
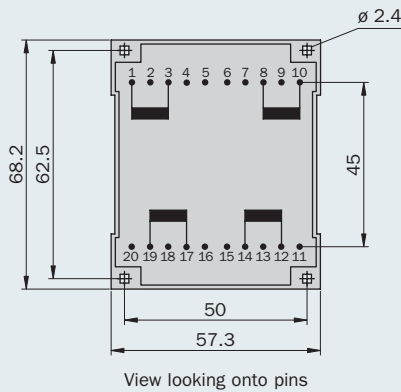




- Capacity up to 30.0 VA
- Temperature class ta 70 °C/B, non short-circuit-proof
- Test certifications to ENEC 05-, KEMA KEUR-, CSA- and UL-regulations
- Vacuum encapsulated, bobbin type with dual chamber windings
- Excellent temperature fluctuation resistance properties
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Item quality certification

Secondary protection by means of external PTC resistances.

Parallel to the cataloged UI 39 series transformers, HAHN also produces other variants, e.g. with integrated thermo fuse or thermo switch.



Dimensions without tolerances ± 0.3 mm, Soldering pin 0.6 x 0.8 or Ø 0.8, Rights to make alterations and improvements hereby reserved

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 392 ... / 8.0 mm	10.0 VA	23.0 mm	0.290 kg	8/15 pieces*
BV UI 393 ... / 10.2 mm	14.0 VA	25.2 mm	0.330 kg	8/15 pieces*
BV UI 394 ... / 13.5 mm	18.0 VA	28.5 mm	0.390 kg	8/15 pieces*
BV UI 395 ... / 17.0 mm	24.0 VA	32.0 mm	0.460 kg	8/15 pieces*
BV UI 396 ... / 21.0 mm	30.0 VA	36.0 mm	0.550 kg	8/15 pieces*

\* it depends on kind of packaging

- Capacity: 1.2/10/14/18/24/30 VA
- ta 70 °C/B as per VDE 0570/ EN 61558 regulations/standard
- Circuit for 115 V  
Bridge: 1 to 8 and 3 to 10
- Circuit for 230 V  
Bridge: 3 to 8
- Secondary double voltage  
Bridge: 14 to 17
- Secondary double current  
Bridge: 12 to 17 and 14 to 19
- Test voltage: 6000 V

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 392 0092	10.0	2	2 x 115	1-3/8-10	2 x 6	833	12-14/17-19	2 x 8.2
BV UI 392 0076	10.0	2	2 x 115	1-3/8-10	2 x 9	556	12-14/17-19	2 x 11.9
BV UI 392 0093	10.0	2	2 x 115	1-3/8-10	2 x 12	416	12-14/17-19	2 x 16.4
BV UI 392 0077	10.0	2	2 x 115	1-3/8-10	2 x 15	333	12-14/17-19	2 x 19.3
BV UI 392 0094	10.0	2	2 x 115	1-3/8-10	2 x 18	277	12-14/17-19	2 x 23.8

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 393 .... /10.2 mm	14.0 VA	25.2 mm	0.330 kg	8/15 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 393 0085	14.0	3	2 x 115	1-3/8-10	2 x 6	1166	12-14/17-19	2 x 8.3
BV UI 393 0074	14.0	3	2 x 115	1-3/8-10	2 x 9	778	12-14/17-19	2 x 12.4
BV UI 393 0081	14.0	3	2 x 115	1-3/8-10	2 x 12	583	12-14/17-19	2 x 16.4
BV UI 393 0078	14.0	3	2 x 115	1-3/8-10	2 x 15	467	12-14/17-19	2 x 20.6
BV UI 393 0062	14.0	3	2 x 115	1-3/8-10	2 x 18	389	12-14/17-19	2 x 24.7

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 394 .... /13.5 mm	18.0 VA	28.5 mm	0.390 kg	8/15 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 394 0086	18.0	4	2 x 115	1-3/8-10	2 x 6	1500	12-14/17-19	2 x 8.7
BV UI 394 0110	18.0	4	2 x 115	1-3/8-10	2 x 7.5	1200	12-14/17-19	2 x 10.2
BV UI 394 0063	18.0	4	2 x 115	1-3/8-10	2 x 9	1000	12-14/17-19	2 x 13.0
BV UI 394 0087	18.0	4	2 x 115	1-3/8-10	2 x 12	750	12-14/17-19	2 x 16.7
BV UI 394 0088	18.0	4	2 x 115	1-3/8-10	2 x 15	600	12-14/17-19	2 x 20.4
BV UI 394 0075	18.0	4	2 x 115	1-3/8-10	2 x 18	500	12-14/17-19	2 x 23.6

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 395 .... /17.0 mm	24.0 VA	32.0 mm	0.460 kg	8/15 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 395 0089	24.0	5	2 x 115	1-3/8-10	2 x 6	2000	12-14/17-19	2 x 7.8
BV UI 395 0098	24.0	5	2 x 115	1-3/8-10	2 x 9	1333	12-14/17-19	2 x 11.4
BV UI 395 0091	24.0	5	2 x 115	1-3/8-10	2 x 12	1000	12-14/17-19	2 x 14.9
BV UI 395 0083	24.0	5	2 x 115	1-3/8-10	2 x 15	800	12-14/17-19	2 x 18.5
BV UI 395 0099	24.0	5	2 x 115	1-3/8-10	2 x 18	666	12-14/17-19	2 x 22.0
BV UI 395 0100	24.0	5	2 x 115	1-3/8-10	2 x 21	571	12-14/17-19	2 x 25.0

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 396 .... /21.0 mm	30.0 VA	36.0 mm	0.550 kg	8/15 pieces*

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 396 0101	30.0	6	2 x 115	1-3/8-10	2 x 6	2500	12-14/17-19	2 x 8.1
BV UI 396 0102	30.0	6	2 x 115	1-3/8-10	2 x 9	1666	12-14/17-19	2 x 11.3
BV UI 396 0079	30.0	6	2 x 115	1-3/8-10	2 x 12	1250	12-14/17-19	2 x 15.0
BV UI 396 0103	30.0	6	2 x 115	1-3/8-10	2 x 15	1000	12-14/17-19	2 x 18.6
BV UI 396 0080	30.0	6	2 x 115	1-3/8-10	2 x 18	833	12-14/17-19	2 x 22.3

\* it depends on kind of packaging



Safety transformer



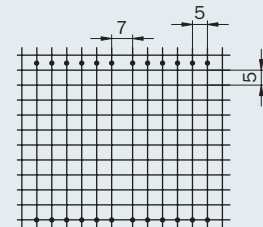
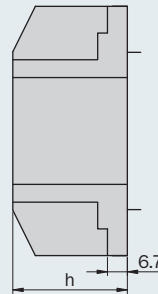
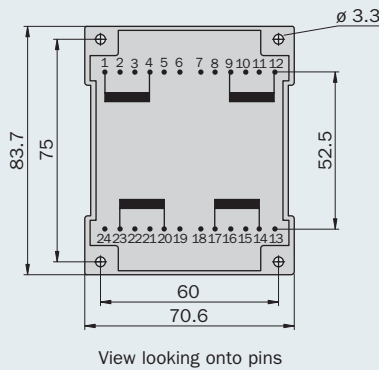
All these types are held on stock



- Capacity up to 60.0 VA
- Temperature class ta 70 °C/B, non short-circuit-proof
- Test certification to ENEC O5-, KEMA KEUR-, CSA- and UL-regulations
- Excellent temperature fluctuation resistance properties
- Vacuum-encapsulated, bobbin type with dual chamber windings
- High electrical safety and long service-life features
- High voltage resistance
- Self-extinguishing cast housing and sealing material
- Item quality certification

Secondary protection by means of external transformer heat coils to IEC 127 standards.

Parallel to the cataloged UI 48 series transformers, HAHN also produces other variants, e.g. with integrated thermo fuse or thermo switch.



prim I: 1-4 | sec I: 14-17  
prim II: 9-12 | sec II: 20-23

Dimensions without tolerances ± 0.3 mm, Soldering post 1.1 x 0.5, Rights to make alterations and improvements hereby reserved

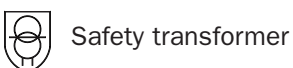
Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 481 .... / 17.0 mm	40.0 VA	38.7 mm	0.780 kg	10 pieces
BV UI 482 .... / 26.0 mm	60.0 VA	47.9 mm	1.100 kg	10 pieces

- Capacity: 40 VA/60 VA
- ta 70 °C/B as per VDE 0570/ EN 61558 regulations/standard
- Circuit for 115 V  
Bridge: 1 to 9 and 4 to 12
- Circuit for 230 V  
Bridge: 4 to 9
- Secondary double current  
Bridge: 17 to 20
- Secondary double voltage  
Bridge: 14 to 20 and 17 to 23
- Test voltage: 6000 V

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 481 0001	40.0	1	2 x 115	1-4/9-12	2 x 6	3333	14-17/20-23	2 x 7.3
BV UI 481 0002	40.0	1	2 x 115	1-4/9-12	2 x 9	2222	14-17/20-23	2 x 10.8
BV UI 481 0003	40.0	1	2 x 115	1-4/9-12	2 x 12	1666	14-17/20-23	2 x 14.3
BV UI 481 0004	40.0	1	2 x 115	1-4/9-12	2 x 15	1333	14-17/20-23	2 x 17.7
BV UI 481 0005	40.0	1	2 x 115	1-4/9-12	2 x 18	1111	14-17/20-23	2 x 21.7

Frame size/Core height	Output ta 70 °C/B	Size (h)	Weight	Packaging unit
BV UI 482 .... / 26.0 mm	60.0 VA	47.9 mm	1.100 kg	10 pieces

Order No.	Total output VA	Frame Size	Primary voltage V	Connecting pins prim.	Secondary voltage V	Current sec. mA	Connecting pins sec.	No-load voltage V
BV UI 482 0007	60.0	2	2 x 115	1-4/9-12	2 x 6	5000	14-17/20-23	2 x 7.3
BV UI 482 0008	60.0	2	2 x 115	1-4/9-12	2 x 9	3333	14-17/20-23	2 x 10.5
BV UI 482 0009	60.0	2	2 x 115	1-4/9-12	2 x 12	2500	14-17/20-23	2 x 14.0
BV UI 482 0010	60.0	2	2 x 115	1-4/9-12	2 x 15	2000	14-17/20-23	2 x 17.5
BV UI 482 0032	60.0	2	2 x 115	1-4/9-12	2 x 16	1875	14-17/20-23	2 x 18.1
BV UI 482 0011	60.0	2	2 x 115	1-4/9-12	2 x 18	1666	14-17/20-23	2 x 21.1
BV UI 482 0012	60.0	2	2 x 115	1-4/9-12	2 x 21	1428	14-17/20-23	2 x 24.5



All these types are held on stock



- High capacity up to 120.0 VA
- Primary voltages from 12 V to 400 V
- Secondary voltages from 6 V to 24 V or 2 x 6 V to 2 x 24 V
- Minimal size
- Test certifications to VDE-, ENEC 10-, CSA- and UL-regulations
- with VDE certificate for glow wire test in accordance to standard EN 60335-1:2005
- Vacuum-encapsulated, bobbin with dual chamber windings
- Item quality certification
- Temperature class ta 70 °C/B meeting VDE 0570/EN 61558 regulations
- High electrical safety and long service-life features
- Excellent temperature fluctuation resistance properties
- Self-extinguishing cast housing and sealing material

These transformers are especially characterized by particularly simple and economic appliance installation and provide the same cogent economic- and safety perspectives for equipment- and appliance makers as the EI Series.

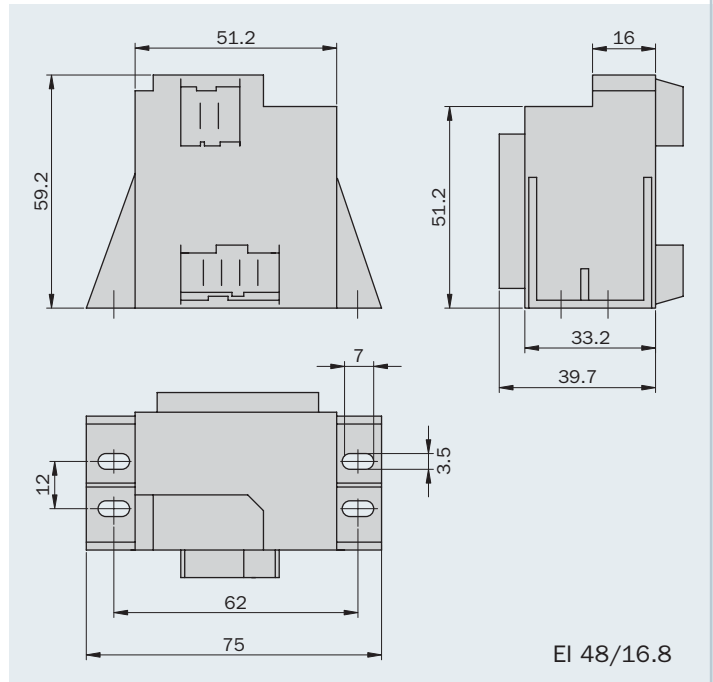


The RAST 5 interconnective techniques developed by HAHN for transformers provide makers of electrical and white goods with assured economical- and electrical safety aspects in the manufacture of appliances.

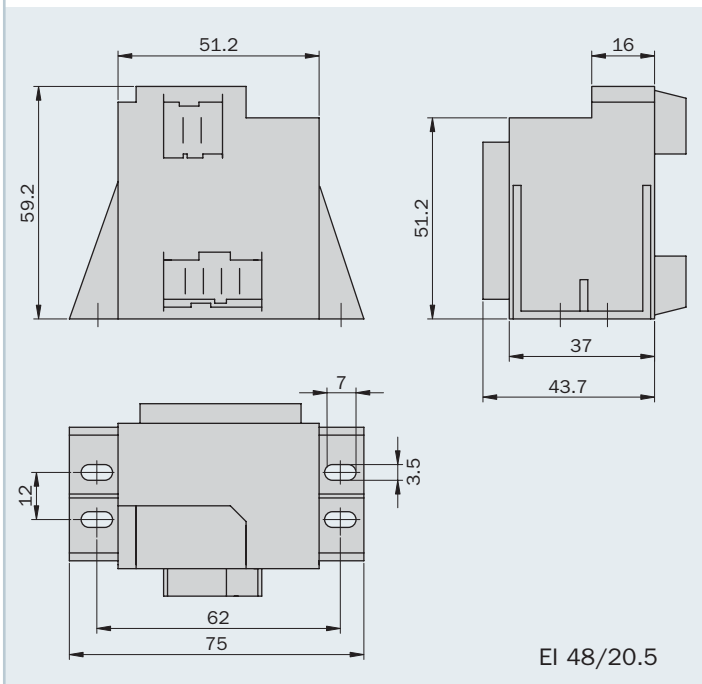
**RAST 5 transformers of the series EI 48 and EI 54**

Frame size/Core height	Output	Temperature class
EI 48 / 16.8	10.0 VA	ta 70 °C/B
EI 48 / 20.5	12.0 VA	ta 70 °C/B
EI 54 / 18.8	16.0 VA	ta 70 °C/B

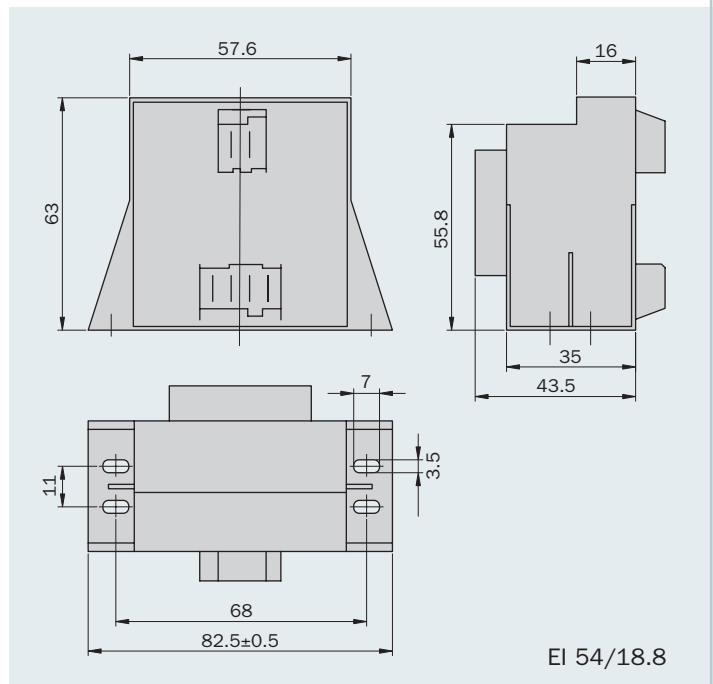
All transformers of the RAST 5 series are equipped with a variable user-friendly parallel-wired connector to VDE 0627/PM 906 (Regulations of the Association of German Electrical Engineers). This greatly facilitates the assembly of the components by as much as a third. It only remains to attach the lead connectors to the primary and secondary sides. The tedious and time-consuming routines of soldering, screw-attachment or individual plug-ins is no longer required. Especially coded connectors with form guides ensure proper assembly. Confusion in connecting up routines is impossible, even for a layman. Lead connectors are prefabricated, thus also reducing costs.



EI 48/16.8



EI 48/20.5



EI 54/18.8

Available on request with the following attributes

Dimensions in drawings:  
– without tolerances ± 0.3 mm

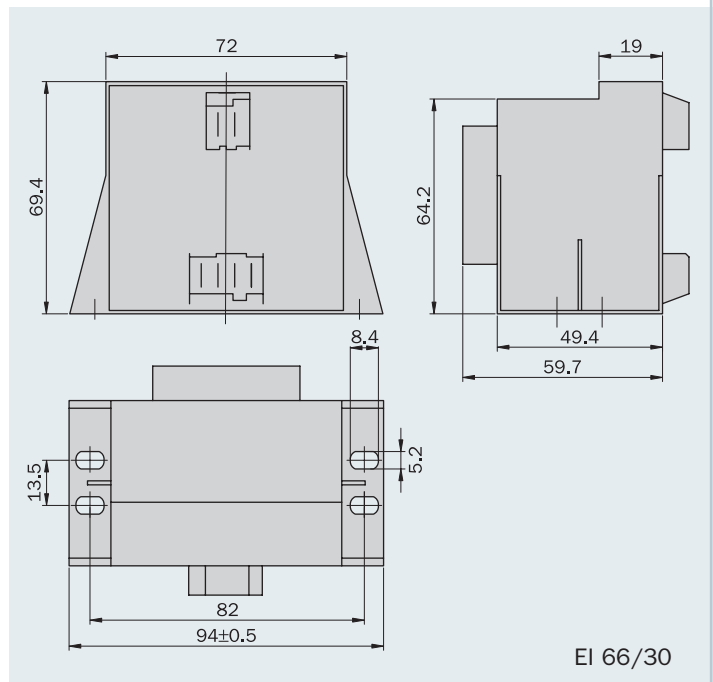
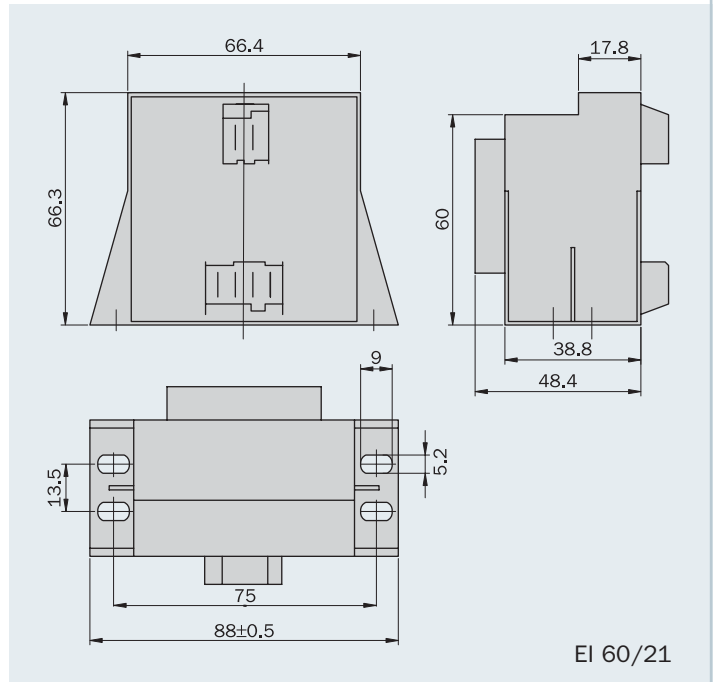


**RAST 5 transformers of the series EI 60 and EI 66**

Frame size/Core height	Output	Temperature class
EI 60 / 21.0	20.0 VA	ta 70 °C/B
EI 66 / 30.0	40.0 VA	ta 70 °C/B

**Maximum Convenience combined with cogent Quality.**

Equipped with service- and user-friendly connective techniques plus the usual quality benefits of the EI transformer series. Designed to customer requirements – capacities from 10.0 VA to 120.0 VA. Temperature class ta 70 °C/B. Vacuum encapsulated items are, subjected of course to 100 % quality control.



Available on request with the following attributes

Dimensions in drawings:  
– without tolerances ± 0.3 mm

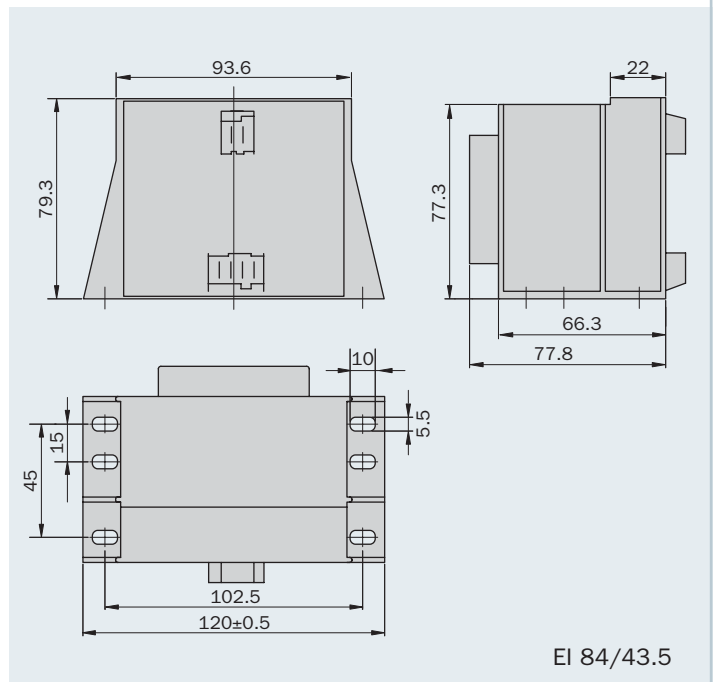
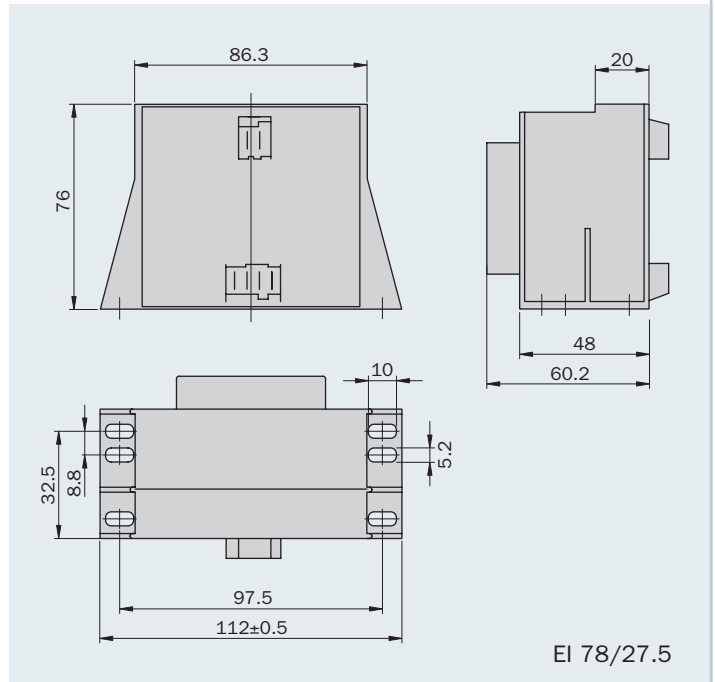


**RAST 5 transformers of the series EI 78 and EI 84**

Frame size/Core height	Output	Temperature class
EI 78 / 27.5	50.0 VA	ta 70 °C/B
EI 84 / 43.5	120.0 VA	ta 70 °C/B

**Assured Safety Standards.**

All HAHN transformers are manufactured from well proven, long-term tested raw materials and produced on the most modern production equipment. All consignments are accompanied by a test certificate, thus assuring customers of the highest degree of electrical safety and long service-life for their appliances.



Available on request with the following attributes

Dimensions in drawings:  
– without tolerances ± 0.3 mm







**The range of E-construction types consist of two basic versions:**

1. Construction type with round medium limb

ETD-cores

EC-cores and ER-cores

2. Construction type with angular medium limb

EE-cores

EF-cores and EFD-cores

**Numerous industrial power suppliers use HAHN transformers in their switching operations!**

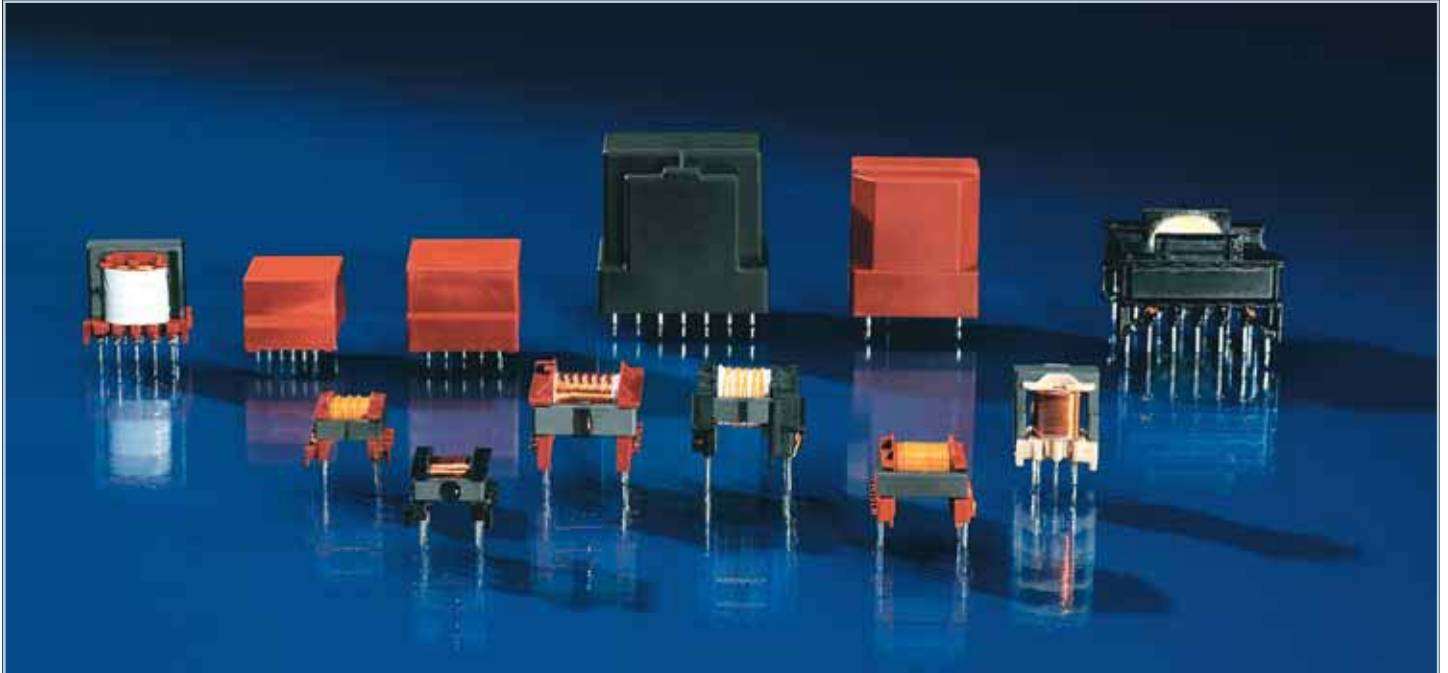
Based on the use of optimized components from HAHN Electrical Isolation System UL 1446 and the optimal winding, HAHN products are according to EN 60 950 and EN 61 558-2-16.

Our know-how and the special HAHN process for the production of open, impregnated and vacuum-encapsulated Flyback Converters provide optimal customer benefits. Lead-free, tinned and SMD variants ensure reliable connections. Our technical superiority and optimized automatic processes guarantee the reliable performance and functionality of all electrical components.

All Flyback Converters are produced according to your specifications. Short development times and high-efficiency production stand for the HAHN quality of our components.

Dimensioning programs from well-known IC manufacturers such as Power Integration, Infineon and ST-microelectronic coupled with our own developed measuring equipment make it possible for HAHN to provide you with your own customized components. Such solutions have proven to be rapid and extremely economical.





**HAHN Flyback Converters with the following characteristics:**

- Construction to EN 61 558, EN 60 950
- operational frequency 10 – 500 kHz
- increased creeping distance 8 mm possible

**Insulating material classifications**

- E / 120°C
- B / 130°C (optional)
- F / 155°C (optional)
- UL 94-V0 (optional)
- 100 % unleaded

**100 % piece inspections**

- Inductivity
- Turns ratio
- Winding direction
- Voltage resistance (50 Hz/2 s)

Switch Mode Power Supplies with HAHN Flyback Converters – can be employed for lower and middle range capacities with the structural size quantities EF 12,6 to EF 30. The use in manufacture of high quality core materials enables operational frequencies up to 500 kHz.

All HAHN Flyback Converters are manufactured to EN 60 950 and EN 61 558 standards. Considerable know-how and specialist experience in transformer technology for open, encapsulated, impregnated or vacuum encapsulated converters are guarantees for HAHN quality and optimum customer benefit. All converters are customer-specific finished to customer specifications.

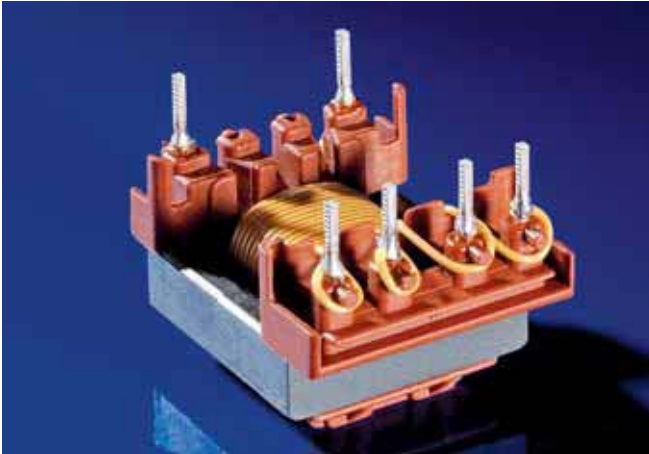
Current developments in electronic components involve ever shorter research and development time periods and every greater manufacturing reliability.

HAHN has the opportunity of optimally developing flyback converters for well known manufacturers of regulator controllers, e.g. Power Integration, Infinion, Philips or ON Semiconductor as customer-specific components. These were all rapid-, economic- and high quality problem solutions from HAHN.

Size	Capacity*
EF 12,6/4	up to 5 W
EF 16/5	up to 9 W
EF 20/6	up to 20 W
EF 25/7	up to 45 W
EF 30/7	up to 70 W

\* Dependent on input voltage range and switch governor type.

# Standard Flyback Converter of the Type EF 16/5

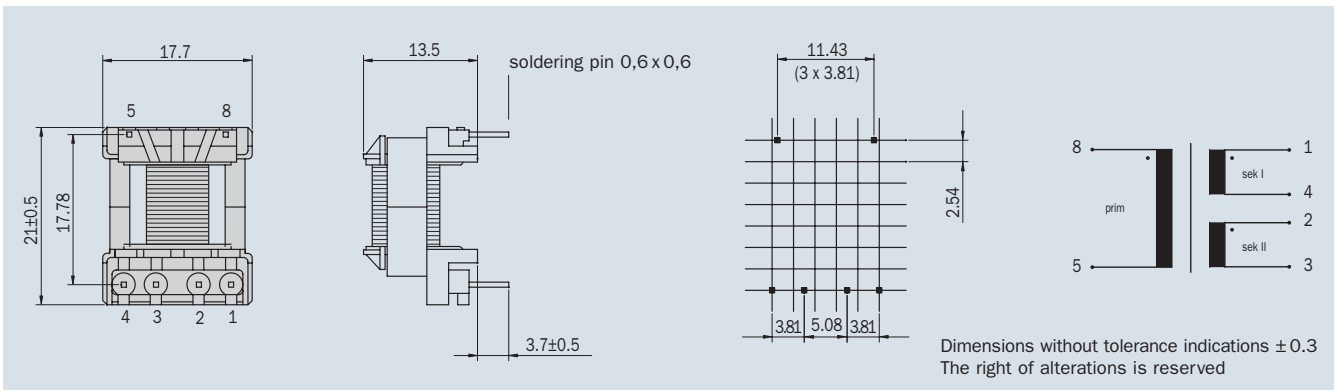


## Technical Specifications

- Construction to EN 61 558, EN 60 950
- **Creeping distance 8 mm min.**
- 100 % unleaded
- UL listed materials
- Insulation material class E
- Two outputs for connection in parallel or in series<sup>(\*)</sup>

## 100 % piece inspection

- Inductance
- Turns ratio
- Winding direction
- Voltage resistance (50 Hz/2 s)



## TinySwitch-II® Product Family TNY 264/5 W

Order No.	Output [W]	Primary voltage [V]	Connecting pin prim	Secondary voltage I [V]	Current sec I [mA]	Connecting pin sec I	Secondary voltage II [V]	Current sec II [mA]	Connecting pin sec II
V 50100*	5.0	85–265	5–8	3	830	1–4	3	830	2–3
V 50101*	5.0	85–265	5–8	9	280	1–4	9	280	2–3
V 50102*	5.0	85–265	5–8	12	210	1–4	12	210	2–3
V 50103*	5.0	85–265	5–8	15	170	1–4	15	170	2–3

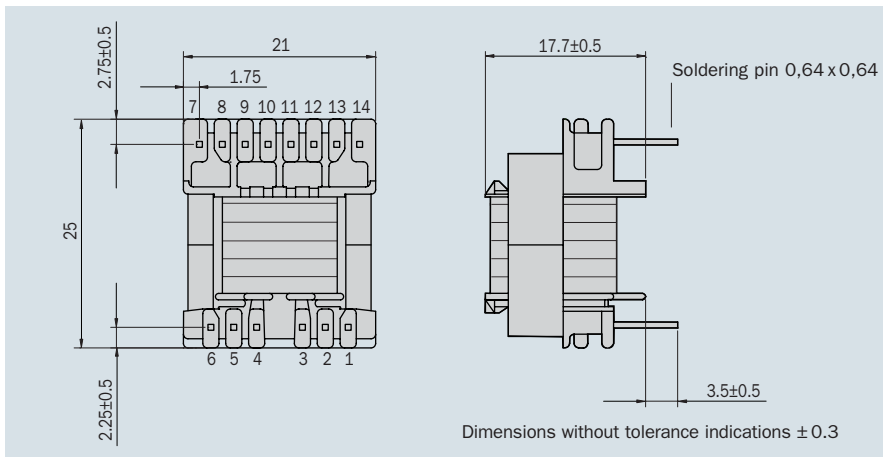
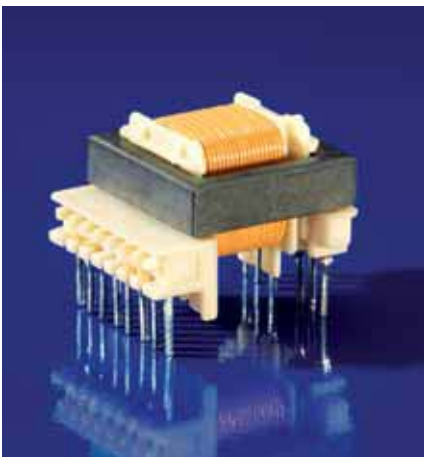
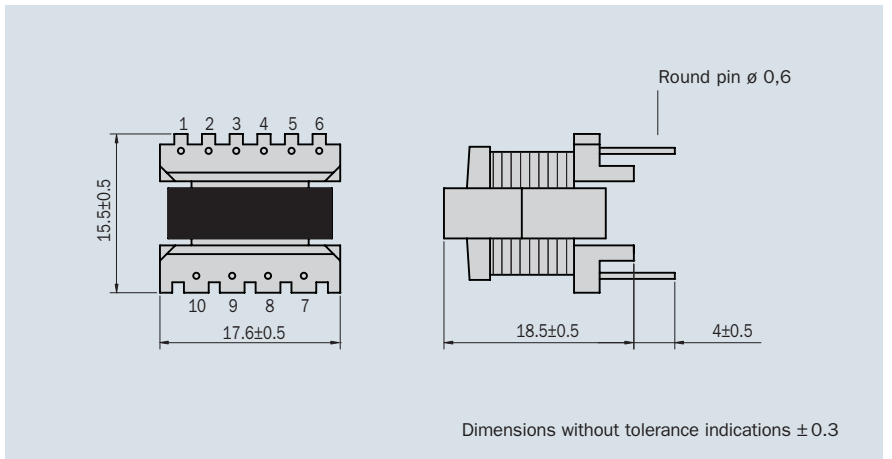
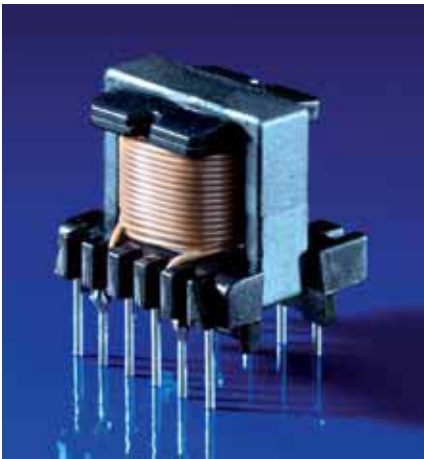
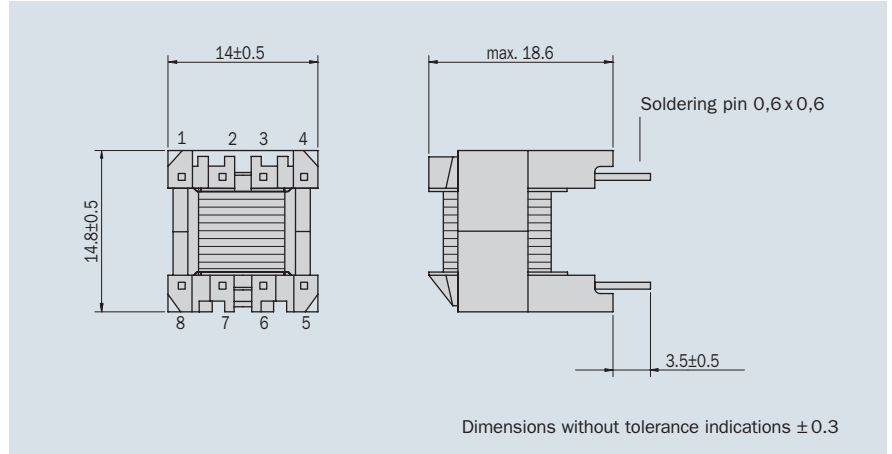
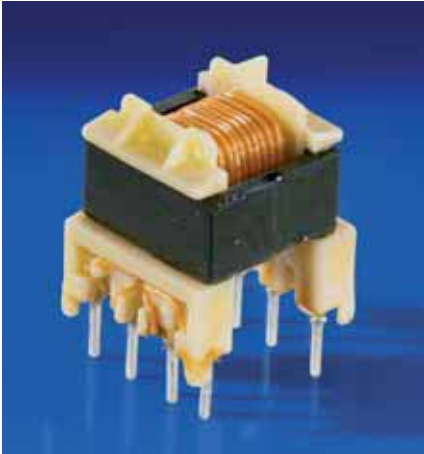
## TinySwitch-II® Product Family TNY 266/5 W

Order No.	Output [W]	Primary voltage [V]	Connecting pin prim	Secondary voltage I [V]	Current sec I [mA]	Connecting pin sec I	Secondary voltage II [V]	Current sec II [mA]	Connecting pin sec II
V 50104	5.0	85–265	5–8	12	390	1–2	3.3	100	3–4
V 50105	5.0	85–265	5–8	24	195	1–2	3.3	100	3–4
V 50106	5.0	85–265	5–8	12	375	1–2	5	100	3–4
V 50107	5.0	85–265	5–8	24	187	1–2	5	100	3–4

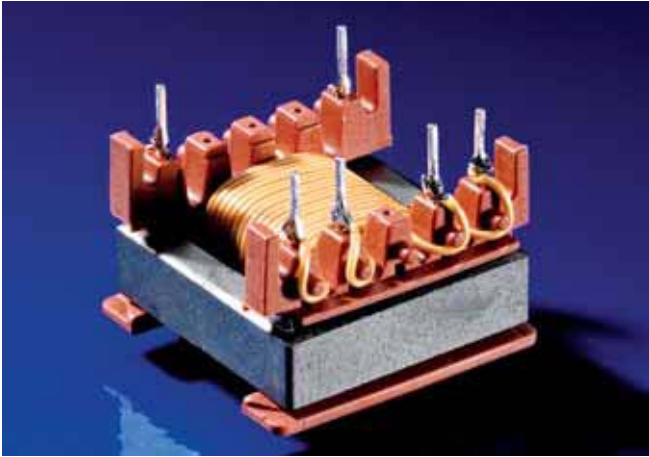
## TinySwitch-III® Product Family TNY 276/7 W

Order No.	Output [W]	Primary voltage [V]	Connecting pin prim	Secondary voltage I [V]	Current sec I [mA]	Connecting pin sec I	Secondary voltage II [V]	Current sec II [mA]	Connecting pin sec II
V 50110*	7.0	85–265	5–8	3	1170	1–4	3	1170	2–3
V 50111*	7.0	85–265	5–8	9	390	1–4	9	390	2–3
V 50112*	7.0	85–265	5–8	12	290	1–4	12	290	2–3
V 50113*	7.0	85–265	5–8	15	230	1–4	15	230	2–3
V 50114	7.0	85–265	5–8	12	555	1–2	3.3	100	3–4
V 50115	7.0	85–265	5–8	24	277	1–2	3.3	100	3–4
V 50116	7.0	85–265	5–8	12	540	1–2	5	100	3–4
V 50117	7.0	85–265	5–8	24	270	1–2	5	100	3–4

# Flyback Converter – Individual Versions with up to 8 mm Creeping Distance



# Standard Flyback Converter of the Type EF 20/6

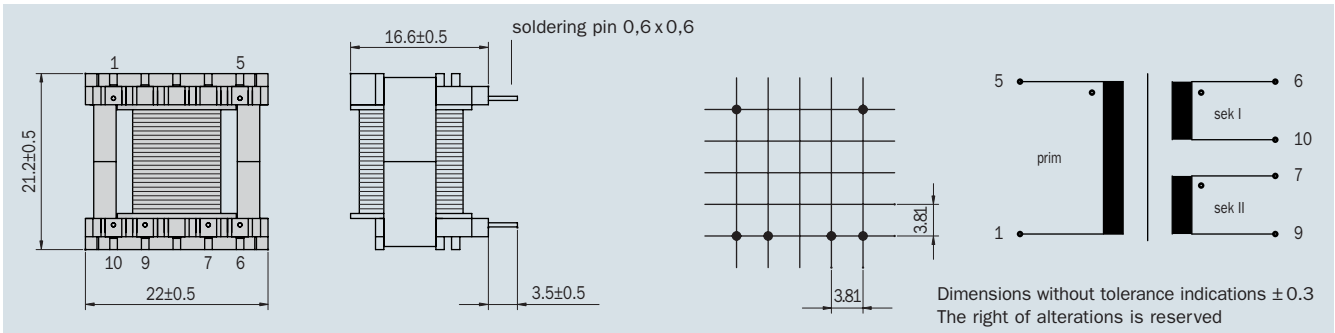


## Technical Specifications

- Construction to EN 61 558, EN 60 950
- **Creeping distance 4 mm min.**
- 100% unleaded
- UL listed materials
- Insulation material class E
- Two outputs for connection in parallel or in series<sup>(\*)</sup>

## 100 % piece inspection

- Inductance
- Turns ratio
- Winding direction
- Voltage resistance (50 Hz/2 s)



## TinySwitch-II® Product Family TNY 267/8 W

Order No.	Output [W]	Primary voltage [V]	Connecting pin prim	Secondary voltage I [V]	Current sec I [mA]	Connecting pin sec I	Secondary voltage II [V]	Current sec II [mA]	Connecting pin sec II	
V 50200*	8.0	85–265	1–5	3	1330	6–10	3	1330	7–9	
V 50201*	8.0	85–265	1–5	9	440	6–10	9	440	7–9	
V 50202*	8.0	85–265	1–5	12	330	6–10	12	330	7–9	
V 50203*	8.0	85–265	1–5	15	270	6–10	15	270	7–9	
V 50204	8.0	85–265	1–5	12	640	6–7	3.3	100	9–10	New!
V 50205	8.0	85–265	1–5	24	320	6–7	3.3	100	9–10	New!
V 50206	8.0	85–265	1–5	12	625	6–7	5	100	9–10	New!
V 50207	8.0	85–265	1–5	24	312	6–7	5	100	9–10	New!

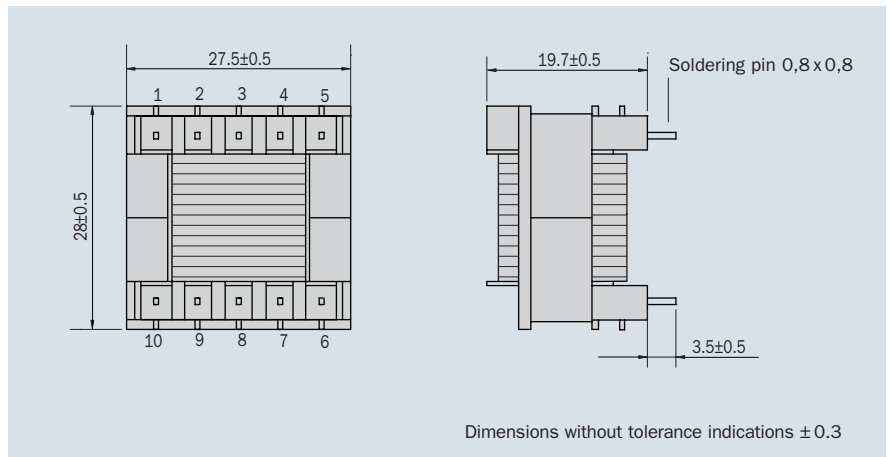
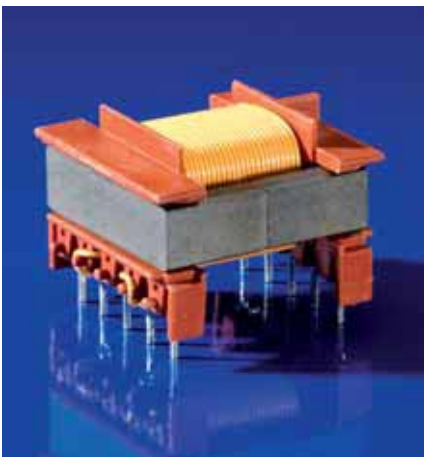
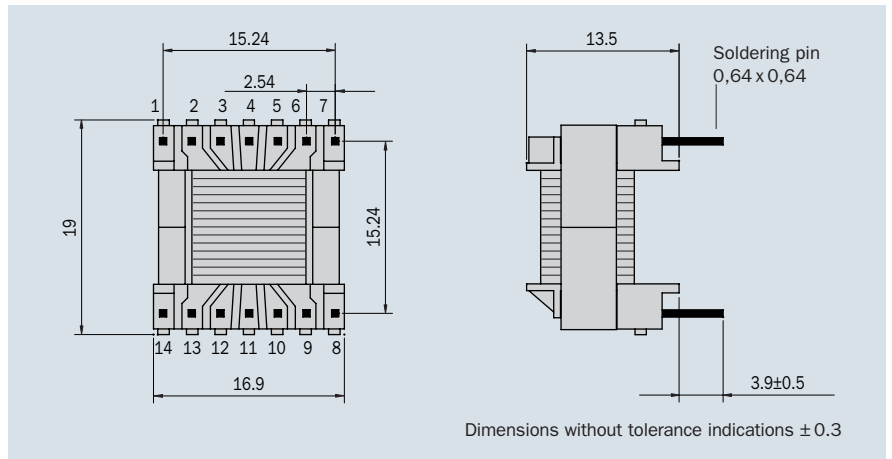
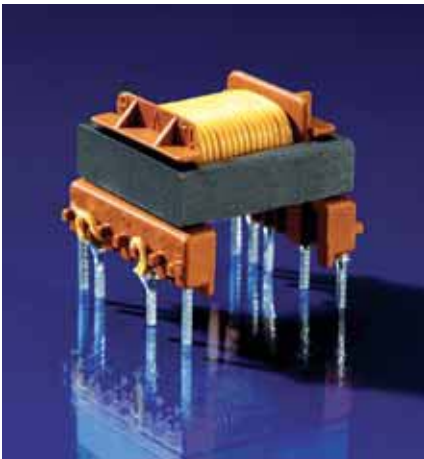
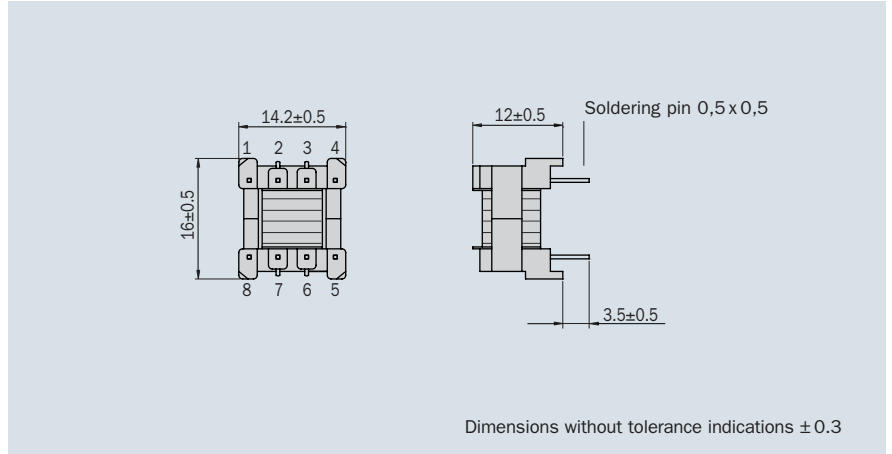
## TinySwitch-III® Product Family TNY 279/16 W

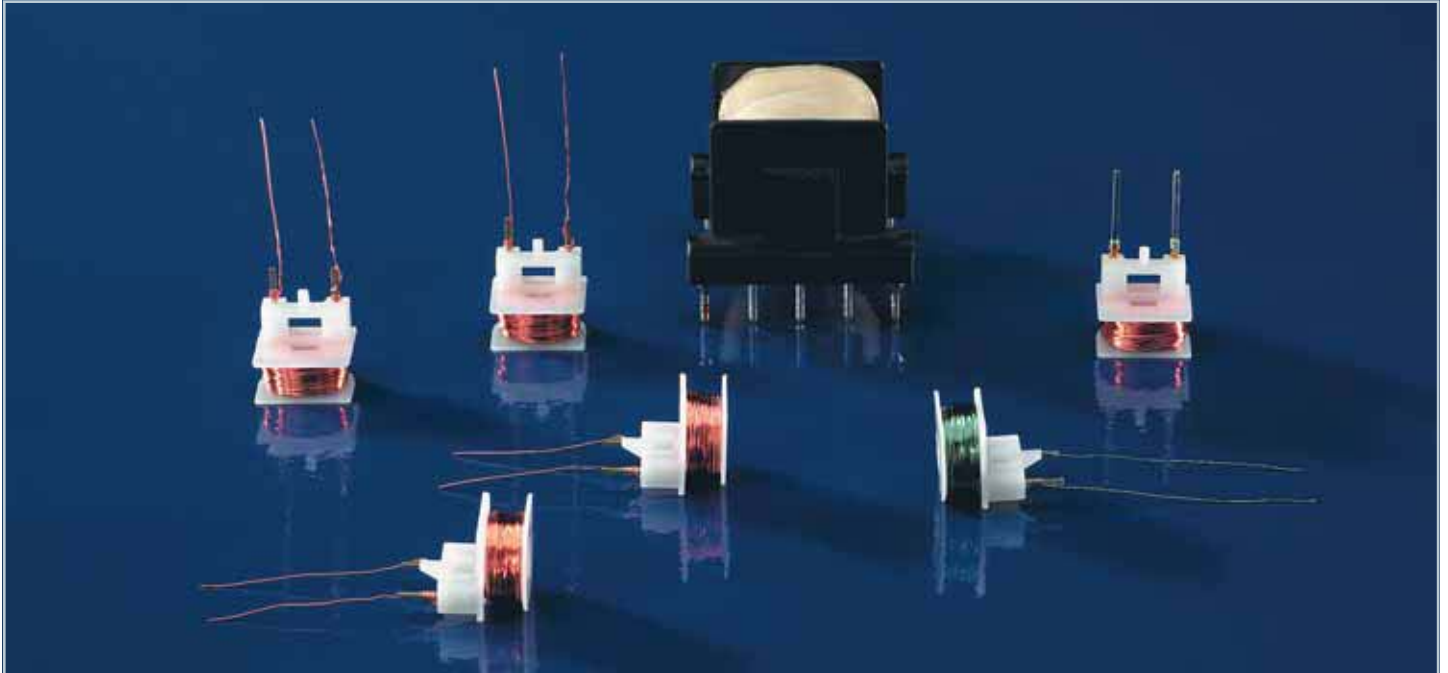
Order No.	Output [W]	Primary voltage [V]	Connecting pin prim	Secondary voltage I [V]	Current sec I [mA]	Connecting pin sec I	Secondary voltage II [V]	Current sec II [mA]	Connecting pin sec II
V 50210*	16.0	85–265	1–5	3	2670	6–10	3	2670	7–9
V 50211*	16.0	85–265	1–5	9	890	6–10	9	890	7–9
V 50212*	16.0	85–265	1–5	12	670	6–10	12	670	7–9
V 50213*	16.0	85–265	1–5	15	530	6–10	15	530	7–9

## TinySwitch-III® Product Family TNY 278/16 W

Order No.	Output [W]	Primary voltage [V]	Connecting pin prim	Secondary voltage I [V]	Current sec I [mA]	Connecting pin sec I	Secondary voltage II [V]	Current sec II [mA]	Connecting pin sec II	
V 50214	16.0	85–265	1–5	12	1300	6–7	3.3	100	9–10	New!
V 50215	16.0	85–265	1–5	24	650	6–7	3.3	100	9–10	New!
V 50216	16.0	85–265	1–5	12	1290	6–7	5	100	9–10	New!
V 50217	16.0	85–265	1–5	24	645	6–7	5	100	9–10	New!

# Flyback Converter – Individual Versions with up to 4 mm Creeping Distance





HAHN has gained a niche in the market as a reliable supplier of application-oriented special transformer coils. Our customer contact staff are exceedingly well motivated and contribute extensively to the success of the business.

HAHN is already able to produce special transformer coils in all the various constructions types to consumer specifications.

HAHN will work together with the customer to develop all manner of applications to obtain an appropriate and viable problem solution. The high grade quality of HAHN products and the readiness of the HAHN organisation to provide an appropriate customer service are also contributions to the success of the business.



HAHN's secret lies in the employment of optimised components and the consequent exploitation inherent in the possibilities of hi-tech manufacturing. This enables specialty components in high grade quality to be produced in conjunction with many years of close collaboration with its subcontractors and suppliers as well as the benefit of flexible manufacturing facilities. HAHN's experienced research and development department and its special in-house tooling facility are guarantees for rapid and economic problem solutions straight from the HAHN works.

No matter whether small amounts or large volumes – the highly flexible manufacturing concept with extensively automated production equipment – makes it possible to meet practically any consumer requirement and to implement this materially and technically; and, this not only in a highly economic manner but also on a short-term basis.

New!



## For safe and stable ignition of gas heating systems!

- Circuit board assembly
- Compact design
- for unipolar or bipolar ignition
- for one or two ignition points
- stringent individual quality-testing
- self-extinguishing potting and housing material

Ignition transformers from HAHN guarantee safe and stable ignition of your gas-powered heating systems. Compact in design, they are ideal for use with printed circuit boards.

Within our comprehensive Quality Management System which includes several interim checks, each component is subjected to a final 100% test. In this test, not only the characteristic data are checked but a high-voltage insulation test is carried out.

The specially selected components are all subjected to a glow wire test according to DIN EN 60 335-1:2005, section 30.2.3.



New!



**For safe and stable ignition of boiler systems in the heating industry.**

Electronic stroke-spark ignition for use in gas-condensing boiler systems. High-performance ignition for oil-burning systems.

- Voltages 230 V~ and 120 V~
- Single- or dual-pole ignition
- One or two ignition points
- Quality is based on individual testing
- EMV according to EN 55014-1 and EN 55014-2
- Construction according to DIN EN 60335-1 and DIN EN 60335-2-102

Electronic ignition devices from HAHN are designed according to the highest requirements in heating and industrial plants.

Continuous monitoring of all process steps and the use of top-quality components guarantee safety, reliability and durability. All components are subjected to a 100% individual final check. Here, not only characteristic data are checked; integrated high-voltage tests are carried out that guarantee voltage stability. All ignition devices are compliant with current national and international standards.

For the user, national regulations are binding. Protection from electrical contact is the responsibility of the user.

New!



## Expanded coil program

The increasing requirements regarding the electromagnetic compatibility of network harmonics according to DIN EN 61000-3 has motivated HAHN to provide economical solutions for optimizing your products – whether by supplying alternative energy to networks or by reducing harmonics caused by conversion.

HAHN, with its vast experience and technical know-how, is now able to provide solutions in the form of a wide range of customized coils. The application areas comprise smoothing chokes, commutation chokes, power chokes, PFC chokes and storage chokes in various core materials such as laminated sheet metal, tape-wound core, iron powder and ferrite.

**Whether it's a matter of designing a choke, optimizing connections and wiring, assembly via foot angle or top-hat rail G 35, our vastly experienced team of highly qualified development engineers will be able to help.**



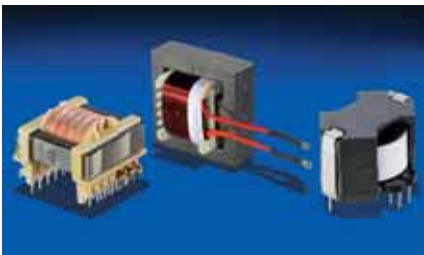
## Laminated Iron Core Chokes / Tape-wound Core Choke

- Frequency range 0–400 Hz
- Current range 0–200 A
- Types EI 30 to EI 120, UI 30 to UI 120, Tape-wound core SUI
- Open, impregnated or vacuum-encapsulated
- Economically priced and customized to your own specific requirements with respect to design, fitting and contacting
- Minimum power loss
- High degree of temperature resistance



## Iron Powder Core Chokes

- Frequency range 0–100 kHz
- Current range 0–30 A
- Types: toroidal or pot core
- Open, impregnated or vacuum-encapsulated
- Economically priced and customized to your own specific requirements with respect to design, fitting and contacting
- Minimum power loss
- High degree of temperature resistance

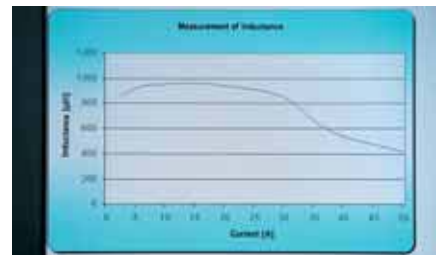


## Ferrite Chokes

- Frequency range 10 kHz–1 MHz
- Current range 0–200 A
- Types EE 13 – EE 120, RM, PQ, UI to 126, toroidal
- Open, impregnated or vacuum-encapsulated
- Economically priced and customized to your own specific requirements with respect to design, fitting and contacting
- Minimum power loss
- High degree of temperature resistance



By using state-of-the-art measurement technology and through cooperation with a technical university in the area of EMC, HAHN is able to provide you with comprehensive support right from the beginning of your development work. This will save you time and money.





## **Safety coupled with HAHN quality for your applications!**

Should you need an AC or DC power supply?

These are available from HAHN with integrated components (residual ripple  $\leq 5\%$ ).

Today, our flexible production allows us to make transformers both with and without rectification. Special safeguards protect your products in line with the stringent requirements of VDE / ENEC and UL. Our highly qualified and experienced HAHN developers coupled with our own tooling facility guarantee rapid and economic solutions for you.

Our technical superiority, comprehensive Quality Management and interim testing programs for each individual component guarantee reliable functionality.

Our highly flexible production concept, proven technology and product experience makes it possible to fulfill and technically implement practically any individual requirements you may have along with the amounts you require.

Transformers both with and without secure insulation, automatic transformers and unregulated power supplies round off the HAHN product range. Our own development and production within Europe guarantee solutions with optimal customer benefits.



custom-made bunch of cables

- Vacuum encapsulated dual chamber windings
- Excellent temperature fluctuation reactivity
- Highest degrees of safety and durability
- High degree of voltage-leak resistance
- Self-dissolving encapsulation- and bonnet materials
- Piece verified quality with test certificate
- Transformers conform to European Standard EN 61558



fuse elements

#### Following supply connector variants are possible

- Flat plugs
- Rast 5
- Terminal blocks
- Custom-made connectors



rectifier units

	Frame size	Output (max)	Dimensions (a x b x )
AC	EI 48	12 VA* bei ta 70°C/B	
DC	EI 48	6 W* bei ta 40°C/B	
AC	EI 54	20 VA* bei ta 70°C/B	60 x 64 x 52
DC	EI 54	10 W* bei ta 40°C/B	60 x 64 x 52
AC	EI 60	30 VA* bei ta 70°C/B	66 x 67 x 60
DC	EI 60	16 W* bei ta 40°C/B	66 x 67 x 60
AC	EI 66	47 VA* bei ta 70°C/B	72 x 70 x 66
DC	EI 66	24 W* bei ta 40°C/B	72 x 70 x 66
AC	EI 78	60 VA* bei ta 70°C/B	84 x 76 x 74
DC	EI 78	40 W* bei ta 40°C/B	84 x 76 x 74
AC	EI 84	100 VA* bei ta 70°C/B	91 x 80 x 79
DC	EI 84	50 W* bei ta 40°C/B	91 x 80 x 79

\* dependent on types of supply connection and circuit breaking facilities

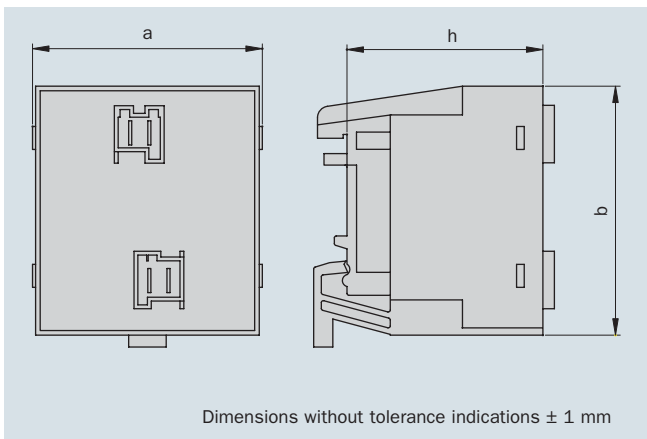
# Top-Hat-Rail Transformer Fixtures



- Vacuum encapsulated dual chamber windings
- Excellent temperature fluctuation reactivity
- Highest degrees of safety and durability
- High degree of voltage-leak resistance
- Self-extinguishing cast housing materials
- Piece verified quality with test certificate
- Transformers conform to European Standard EN 61558

## Following supply connector variants are possible

- Flat plugs
- Rast 5
- Terminal blocks
- Custom-made connectors



## HAHN quality now available for Switchgear Cabinets and Domestic Supply Services

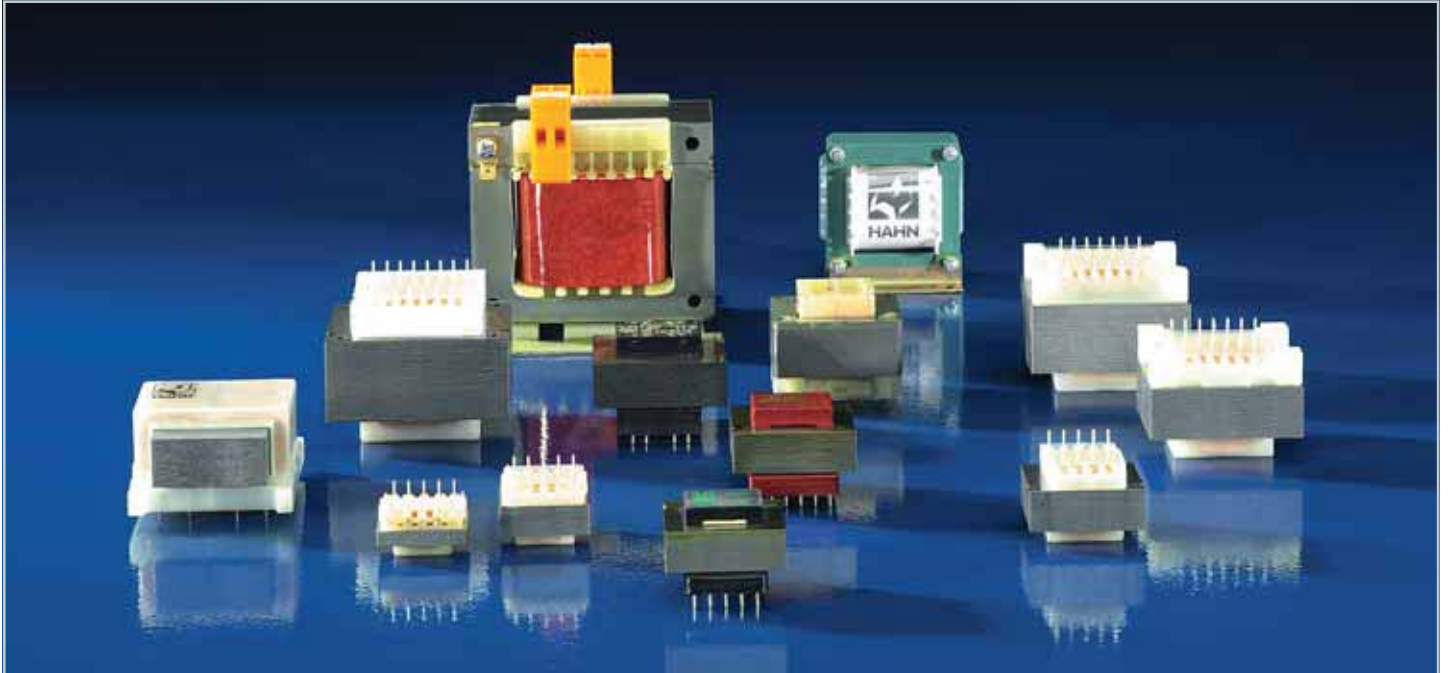
HAHN transformers are suitable for mounting in switchgear cabinets with the application of special encapsulation bonnets complying with German Industrial and European Standard: DIN EN 50 022 and equipped with snap-on fixtures.

These encapsulated transformers stand for optimal durability and a rapid simplified mounting for such facilities. Ongoing quality control – even at the level of components – as well as 100 % piece verification ensures the highest degree of quality from the HAHN Works.

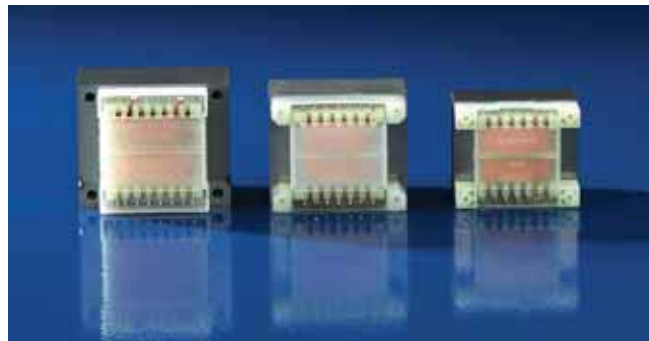
Frame size	Output (max) at temp. 70°C/B	Dimensions (a x b x h)
AC EI 48	12 VA*	52.5 x 59.3 x 45
AC EI 54	20 VA*	60 x 64 x 52
AC EI 60	30 VA*	66 x 67 x 60
AC EI 66	47 VA*	72 x 70 x 66
AC EI 78	60 VA*	84 x 76 x 74

\* dependent on types of supply connection and circuit breaking facilities

## DC variants are planned



Open single-phase transformers for the power supply of appliances and assemblies. For applications with restricted spacing, HAHN's unsealed transformers are a real alternative. New versions have been introduced by reducing the casing volume. Reduced weights lead to reduced costs and can be realized in the form of printed circuit transformers, size EI 30–EI 96 as well as UI 30–UI 48. Applications for switch cabinets can be fitted with the sizes EI 60–EI 150. Attachment facilities with angle pieces for top-hat rails are available. Impregnation with resin protects the unit against environmental impingements. The use of dual chamber bobbin windings guarantees an electrically safe galvanic separation to VDE 0570/EN 61 558 regulations. The materials employed meet insulation class B (130 °C) minimum. Class F (155 °C) is also available on request.



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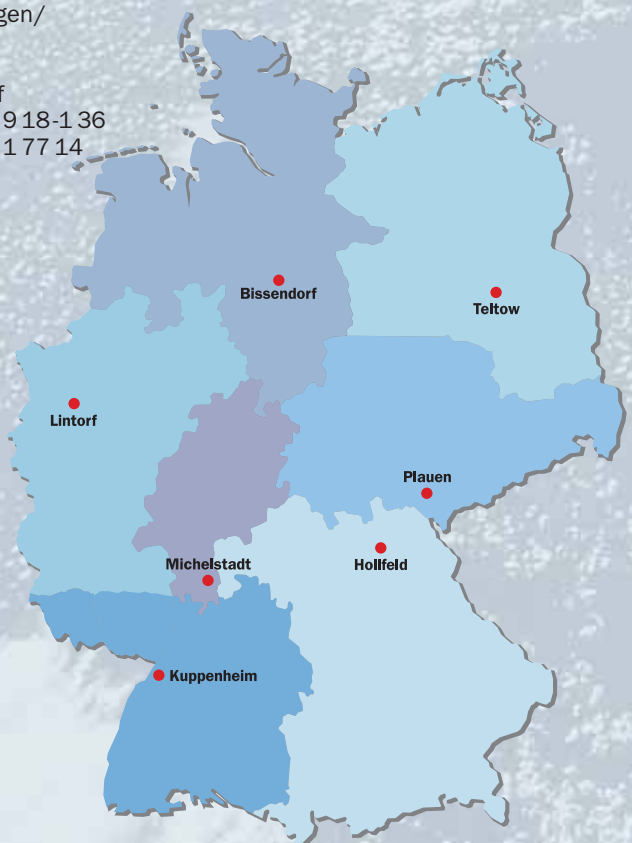
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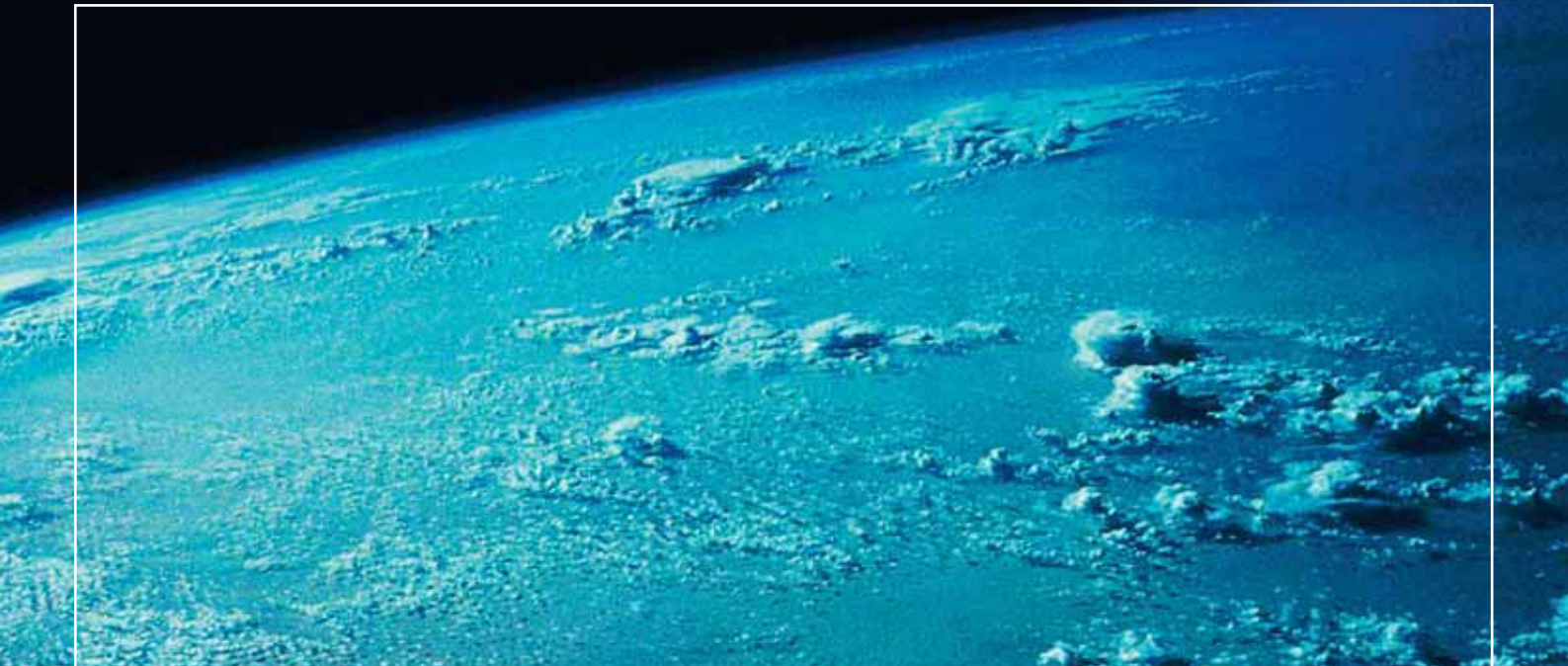
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