

FACTORY OF TRANSFORMERS

Experience since 1979

Founders



MARKO PREDOJEVIĆ

General director and founder of MIDMAS DOO from 2010.
General director and cofounder of PBM CHARGERS DOO from 2014.
Cofounder of PBM MSK, Moscow from 2015.
Working experience in transformer business from 2006.
Graduated Economics science in Subotica, University of Novi Sad.
Born in Bačka Topola 02.12.1981.



DUŠAN PREDOJEVIĆ

Executive director at MIDMAS DOO from 2013. Working experience in transformer business from 2007. Graduated Economics science in Subotica, University of Novi Sad Born in Bačka Topola 31.07.1984.

About Us

Serbia is the regional hub of Balkan, a region which has witnessed growth and now MIDMAS DOO being located here. Keeping family tradition in Backa Topola of transformer production since 1979. MIDMAS DOO play its role in this era of development and interact closely with customers providing the highest level of products and services. High performance manufacturing equipment and continuous improvement management techniques combine to enhance our reputation for quality.

This vision is reinforced with our commitment to provide products and services to match and exceed the customer expectations.

With MIDMAS DOO, who has experience in transformer business from 1979, you also have a reliable supplier not only for dry transformers than also for transformer parts. Over the decades, we have developed a base of suppliers with different brands of transformer coils, lamination, wire, terminals, contactors, and other transformer parts. At the same time, with material allways on stock, and our logistics we provide immediate dispoach for regular and urgent shipments to our clients.

Up to now, we have built a sizable resource for transformer parts and components for our valued power-generation industry clients.



MIDMAS is offlicial supplier of transformers and metal boxes for the biggest Serbian chargers manufacturer company PBM Chargers from Backa Topola. PBM Chargers, a division of global PBM Group based in Italy.



THREE-PHASE TRANSFORMERS

INTRODUCTION

IP protection on EI (3UI) core transformers correspond to: IP00, IP23 and IP54. Transformers are manufactured according to EN 61558 and IEC 726, as well as CE, LVD, EMC and RoHS. Input and output voltages, characteristics, fixing and connection are defined by order. Demension in the table are available for normal, continuous charge.

In our production we perform 100% control of every particular unit. We have possibility of making custom made transformers on request. Our tradition is 40 years in transformers business, and we export 90% of our production.

SAMPLES OF TRANSFORMERS







COMPARATIVE ADVANTAGES

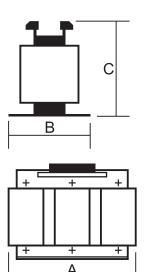
We can provide preferential origin certificate for our products for the use of free trade agreements which can provide importing our transformers to your countries without custom taxes. Those countries or trade unions are: EU, Russian Federation, Belarus, Kazakhstan, Turkey, CEFTA, EFTA, and USA. By importing our transformers to the countries listed above your company pay only 0% or 1% of custom taxes in the moment of import.

CHARACTERISTICS

Size	Power	Ma	x. dimension in	mm	Weight
	kVA	А	х В х	С	kg
EI 50/50/10-16	0,01-0,02	65	28-34	80	0,2-0,4
EI 65/65/13-20	0,02-0,04	75	35-40	90	0,5-0,7
EI 80/80/17-26	0,03-0,07	105	40-50	105	0,8-1,4
EI 100/100/21-31	0,08-0,17	120	53-63	125	2,2-3,3
EI 125/125/26-41	0,2-0,4	150	67-82	150	4,5-6,5
EI 150/150/31-41-51	0,3-0,8	180	76-86-96	180	6,5-11
EI 170/170/36-46-57	0,6-1,1	205	86-97-107	195	7-14
EI 175/175/37-45-55	0,7-1,3	210	88-95-105	205	12-17
EI 190/190/40-64	0,9-1,5	230	90-114	220	13-20
EI 200/200/41-51-61	1,0-1,7	240	97-107-117	265	16-23
EI 200/200/71-75	1,5-2,0	240	127-132	265	24-28
EI 220/220/46-60-72	1,5-2,8	265	106-120-132	290	18-30
EI 250/250/52-65-77	2,0-4,0	300	130-143-155	320	28-46
EI 250/25092-103	3,5-5,0	300	162-173	320	45-55
EI 280/280/58-75-92	3,2-5,5	340	138-155-172	345	42-65
EI 300/300/63-78-93	5,0-9,0	360	153-168-183	365	60-80
EI 350/350/63-75-88	8,0-12,0	420	163-173-188	430	70-100
EI 350/350/103-133	9,0-14,0	420	203-233	430	95-150
EI 400/400/83-110-140	14,0-35,0	480	193-220-250	480	120-190

Transformers dimensions:

- A Lenght
- B Breadth
- C Height



By: DP/0 is AxBxC=AxBxC in table; W/0 is AxBxC=AxCxB in table; DPN is AxBxC=CxBxA in table

STANDARDS

This information is only given for as a guide, but you may request a test report for confirmation. Our transformers and windings are produced according to European or International Standards,

EN 61558-2-1 : Low capacity power insulation transformers (\leq 1 KVA single phase, \leq 5 KVA three phase).

EN 60076 : Power transformers.
EN 61558-2-2 : Control transformers.
EN 61558-2-4 : Isolating transformers.
EN 61558-2-6 : Safety isolating transformers.

EN 61558-2-13 : Low capacity power autotransformers.

EN 61558-2-15 : Isolating transformers for the supply of medical locations.

EN 60947-4-1 : Start-up autotransformers three phase motor.

EN 61558-2-20 : Reactors

The insulations used between layers:

Class B (maximum temperature 130°C),

Class F (maximum temperature 155°C),

Class H (maximum temperature 180° C)

PROTECTION AGAINST DIRECT CONTACT

For the enclosed type transformer, the equipment is protected by a metallic enclosure as per NF EN 60529 and NF EN 62262 standard:

IP 21 – IK 08, except at the bottom

IP 55 – IK 08 or other on request.

AUTOTRANSFORMER

An autotransformer has only one winding rated for the highest voltage. The lowest voltage is obtained on the middle tap changer.

Therefore, there is no insulation between circuits and use of this type of transformers must not be used as a safety transformer or to achieve circuit separation. However, the autotransformer is a very economical solution to obtain a voltage change. For a same power and voltage ratio, an autotransformer is smaller and has a better efficiency than a transformer.

(ex.: a 10 KVA autotransformer will be the same size as a 4 KVA transformer).

Our autotransformers have a compensation tap to ensure real reversal feed.

CONTROL

All our equipment and winding characteristics are systematically tested. On request, we can provide a test report to the customer.



SINGLE-PHASE UI TRANSFORMERS

INTRODUCTION

IP protection on UI core transformers correspond to: IP00, IP23 and IP54. Transformers are manufactured according to EN 61558 and IEC 726, as well as CE, LVD, EMC and RoHS. Input and output vol- tages, characteristics, fixing and connection are defined by order. Demension in the table are available for normal, continuous charge.

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SAMPLES OF TRANSFORMERS



COMPARATIVE ADVANTAGES

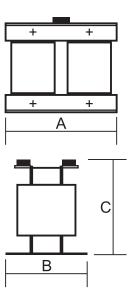
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CHARACTERISTICS

Size	Power	Ма	x. dimension in	mm	Weight
	kVA	А	х В х	С	kg
UI 30/10-16	0,004-0,012	40	28-34	80	0,1-0,3
UI 39/13-20	0,01-0,025	50	35-40	90	0,3-0,5
UI 48/17-26	0,02-0,05	60	40-50	105	0,6-0,8
UI 60/21-31	0,05-0,15	80	53-63	125	1,1-1,6
UI 75/26-41	0,15-0,25	100	67-82	150	2,5-3,5
UI 90/31-41-51	0,2-0,5	120	76-86-96	175	4,3-6,5
UI 102/36-46-57	0,35-0,6	135	82-93-103	195	6,5-9
UI 105/37-45-55	0,4-0,7	140	88-95-105	200	7-9,5
UI 114/40-64	0,65-1	150	90-114	220	9-13
UI 120/41-51-61-71	0,8-1,5	160	95-105-115-125	265	11-17
UI 132/46-60-72	1-2	175	106-120-132	290	14-20
UI 144/50-70-80	1,5-2,5	190	120-140-150	310	16-26
UI 150/52-65-77	2-3	200	130-143-155	320	21-28
UI 150/92-103	3-4	200	162-173	320	30-39
UI 168/58-75-92	2,4-4,5	230	138-155-172	345	31-43
UI 180/63-78-93	3,2-5,7	240	153-168-183	365	36-60
UI 210/63-73-88	5-7,5	280	163-173-188	430	48-65
UI 210/103-133	7,5-12	280	203-233	430	76-95
UI 240/83-110-140	12-25	320	193-220-250	480	70-110

Transformers dimensions:

- A Lenght
- B Breadth
- C Height



By: JP/0 is AxBxC=AxBxC in table; KDV/4 is AxBxC=CxBxA in table;

STANDARDS

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EN 61558-2-13 : Low capacity power autotransformers.

EN 61558-2-15 : Isolating transformers for the supply of medical locations.

EN 60947-4-1 : Start-up autotransformers three phase motor.

EN 61558-2-20 : Reactors

The insulations used between layers:

Class B (maximum temperature 130°C),

Class F (maximum temperature 155° C),

Class H (maximum temperature 180° C)

PROTECTION AGAINST DIRECT CONTACT

For the enclosed type transformer, the equipment is protected by a metallic enclosure as per NF EN 60529 and NF EN 62262 standard:

IP 21 – IK 08, except at the bottom

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AUTOTRANSFORMER

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(ex.: a 10 KVA autotransformer will be the same size as a 4 KVA transformer).

Our autotransformers have a compensation tap to ensure real reversal feed.

CONTROL

All our equipment and winding characteristics are systematically tested.

On request, we can provide a test report to the customer.

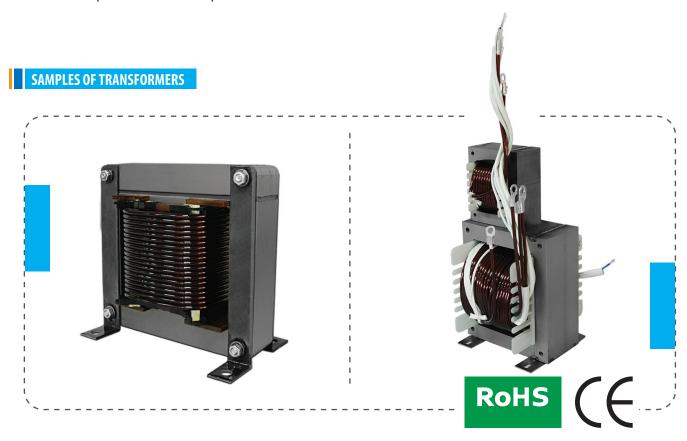


SINGLE-PHASE EI TRANSFORMERS

INTRODUCTION

Single - phase Transformers on El Core are available as Control, Isolating and Safety-isolating transformers and correspond EN 61588, as well as CE, LVD, EMC and RoHS. Input and output voltages, cha- racteristics, fixing and connection are defined by order. Dimensions in the table are informative. Presenting powers are available for normal, continuous charge.

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COMPARATIVE ADVANTAGES

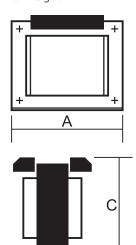
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CHARACTERISTICS

Size	Power	Ma	x. dimension in	mm	Weight
	VA	А	x B x	С	kg
EI 30/10-18	0,5-2	30	26-33	35	0,1-0,2
EI 38/13	2	38	31	50	0,18
EI 42/14-20	3-5	42	32-38	55	0,2-0,3
EI 48/16-20	5-10	48	43-51	69	0,25-0,35
EI 54/18	8-15	54	45	74	0,4
EI 60/21-25-31	12-30	60	55-59-65	82	0,5-0,8
EI 66/23-34	25-35	66	59-71	87	0,75-1
EI 78/27-36	30-60	78	64-73	101	1,1-1,5
EI 84/29-32	50-75	84	66-69	107	1,5-1,8
EI 84/38-43-52	70-110	84	75-80-88	107	1,9-2,2
EI 96/35-45-59	100-240	96	77-87-101	121	2,3-3,7
EI 105/37-45-60	140-280	105	79-87-102	134	2,7-4,3
EI 106/33-46	150-220	106	89-102	137	2,6-3,8
EI 108/36-52-65	130-270	108	78-92-105	136	3,2-4,8
EI 120/41-53	180-300	120	88-100	149	4,5-5,5
EI 120/61-53	280-500	120	108-120	149	5,8-7,3
EI 135/42-52-57	320-460	135	95-105-115	163	5,5-7,2
EI 135/62-72	400-550	135	115-125	163	7,5-9
EI 150N/50-66-92	450-900	150	107-124-150	180	7-13,5
EI 170/66-76	600-1200	170	161-171	200	13,8-18,5
EI 174/62-72	600-900	174	128-138	200	14-16,5
EI 174/82-102	800-1200	174	148-168	200	17-21
EI 192/66-70-82	1000-1500	192	138-142-154	220	15-22
EI 192/92-100-110	1400-2200	192	164-172-182	220	24-30
EI 231/100	2000-3000	231	200	260	25-44

Transformers dimensions:

- A Lenght
- B Breadth
- C Height



В

By:

PV/0, ZT/0 is AxBxC=AxBxC in table; PV/1, ZT/1 is AxBxC=CxBxA in table; PV/4, ZT/4 is AxBxC=AxCxB in table

STANDARDS

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EN 61558-2-20 : Reactors

The insulations used between layers:

Class B (maximum temperature 130° C),

Class F (maximum temperature 155° C),

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TRANSFORMERS FOR SECURITY SYSTEMS

INTRODUCTION

HELM transformers are state of art products for security systems in power range from 20 VA up to 75 VA. Secondary voltage can be produced from 12V to 40V. Transformers are equipped with primary fuse. Secondary side can be with terminal block or wire. Transformers are ROHS, EN61558 compliant, CE and GOST-R certified.

In our production we perform 100% control of every particular unit. We have possibility of making custom made transformers on request. Our tradition is 40 years in transformers business, and we export 90% of our production.

SAMPLES OF 45 VA TRANSFORMERS





WHY BUY FROM US?

We can provide preferential origin certificate for our products for the use of free trade agreements which can provide importing our chargers to your countries without custom taxes. Those countries or trade unions are: EU, Russian Federation, Belarus, Kazakhstan, Turkey, CEFTA, EFTA, and USA. By importing our transformers to the countries listed above your company pay only 0% or 1% of custom taxes in the moment of import.

DIMENSIONS

• TYPE 20VA:

A- 64mm, B-54mm, C-75.5mm, D-88mm, depth 48mm

• TYPE 30VA:

A- 64mm, B-54mm, C-75.5mm, D-88mm, depth 48mm

• TYPE 40VA:

A- 64mm, B-54mm, C-75.5mm, D-88mm, depth 57 mm

TYPE 45VA:

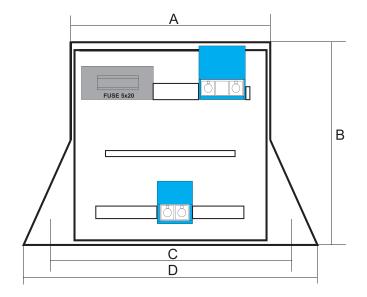
A- 64mm, B-54mm, C-75.5mm, D-88mm, depth 57 mm

• TYPE 60VA:

A-79mm, B-66mm, C-93mm, D-105mm, depth 64 mm

• TYPE 75VA:

A-79mm, B-66mm, C-93mm, D-105mm, depth 72.5mm



TYPE 20VA

Туре	Primary voltage	Secondary voltage	Secondary current
IZ 50931	230V/50Hz	12V	1.66A
IZ 50943	230V/50Hz	16.5V	1.21A
IZ 50945	230V/50Hz	18V	1.11A
IZ 50946	230V/50Hz	24V	0.83A
IZ 50947	230V/50Hz	40V	0.50A

TYPE 30VA

Туре	Primary voltage	Secondary voltage	Secondary current
IZ 50948	230V/50Hz	12V	2.50A
IZ 50925	230V/50Hz	16.5V	1.81A
IZ 50949	230V/50Hz	18V	1.66A
IZ 50950	230V/50Hz	24V	1.25A
IZ 50951	230V/50Hz	40V	0.75A

TYPE 40VA

Туре	Primary voltage	Secondary voltage	Secondary current
IZ 50930	230V/50Hz	12V	3.33A
IZ 50944	230V/50Hz	16.5V	2.42A
IZ 50956	230V/50Hz	18V	2.22A
IZ 50957	230V/50Hz	24V	1.66A
IZ 50958	230V/50Hz	40V	1.00A

TYPE 45VA

Туре	Primary voltage	Secondary voltage	Secondary current
IZ 50952	230V/50Hz	12V	3.75A
IZ 50924	230V/50Hz	16.5V	2.72A
IZ 50953	230V/50Hz	18V	2.50A
IZ 50954	230V/50Hz	24V	1.87A
IZ 50955	230V/50Hz	40V	1.12A

TYPE 60VA

Туре	Primary voltage	Secondary voltage	Secondary current
IZ 50959	230V/50Hz	12V	5.00A
IZ 50960	230V/50Hz	16.5V	3.63A
IZ 50961	230V/50Hz	18V	3.33A
IZ 50962	230V/50Hz	24V	2.50A
IZ 50963	230V/50Hz	40V	1.50A

TYPE 75VA

Туре	Primary voltage	Secondary voltage	Secondary current
IZ 50964	230V/50Hz	12V	6.25A
IZ 50965	230V/50Hz	16.5V	4.54A
IZ 50966	230V/50Hz	18V	4.16A
IZ 50926	230V/50Hz	24V	3.12A
IZ 50967	230V/50Hz	40V	1.87A

Ta 60°C/B, epoxy resin cast, insulation primary - secondary 4kVA, insulation primary - core 2.5kVA, insulation secondary-core 2.5kVA, safety insulation transformer, conditionally short-circuit safe, tolerance of secondary voltage 5%.

Prescribed primary circuit fuse: 20VA 125mAT, 30VA 250mAT, 40VA 315mAT, 45VA 315mAT, 60VA 400mAT, 75VA 630mAT.





MIDMAS DOO

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