

# Katalog

Print-Trafos von **ZETTLER** electronics  
A ZETTLER GROUP COMPANY



## BV Series – Encapsulated Power Transformers



**A series of cost effective, Class 2 recognized encapsulated power transformers – suited for applications in LED Lighting, Electric Metering, Motor Controls, Thermostats and other similar fields.**

### UL, VDE & CE CERTIFICATIONS

#### Key Benefits

- Less expensive than traditional open frame design.
- Significant reduction in physical footprint compared to traditional open frame formats.
- Superior thermal characteristics that make them run up to 5°C cooler in continuous duty, and up to 40°C cooler in surge testing than previous generations, due to ultra-high winding efficiency and vacuum-sealed epoxy processes.
- Can be modified to withstand 14kV surge.
- Provide minimized EMI noise without the added cost of a shield, as a result of proprietary assembly methods employed at Zettler Magnetics China wholly owned manufacturing facilities.

#### Key Features

- Input 115V OR 230V / Single and Dual Output
- Dielectric Strength 4200Vrms
- Inherently Energy Limited
- Conforms to EN 61558 AND EN 60950
- 100% Production Tested

## Standard Configurations (Custom designs up to 30VA available on request)

### EE20 Mini Series

<b>VA</b>	<b>Certificates</b>	<b>Height</b>	<b>Datasheet</b>
0.35VA	VDE / UL / CQC	16.0mm	EE20_35
0.5VA	VDE / UL / CQC	19.5mm	EE20_05
0.6VA	VDE / UL / CQC	19.5mm	EE20_06

### EI30 Series

<b>VA</b>	<b>Certificates</b>	<b>Height</b>	<b>Datasheet</b>
0.6VA	VDE / UL / CQC	15.7mm	EI30_06
1.0VA	VDE / UL / CQC	22.3mm	EI30_1
1.2VA	UL	22.3mm	EI30_12
1.5VA	VDE / UL / CQC	22.3mm "A"	EI30_15A
1.5VA	VDE / UL / CQC	24.4mm	EI30_15
1.8VA	VDE / UL / CQC	24.4mm	EI30_18
2.0VA	VDE / UL / CQC	27.4mm	EI30_2
2.3VA	VDE / UL / CQC	29.8mm	EI30_23
2.4VA	VDE / UL / CQC	27.4mm	EI30_24
2.8VA	VDE / UL / CQC	29.8mm	EI30_28

### EI38 Series

<b>VA</b>	<b>Certificates</b>	<b>Height</b>	<b>Datasheet</b>
3.2VA	VDE / CQC	27.0mm	EI38_32

# SEALED TRANSFORMER, PCB 0.35VA EE20-6.5 SERIES

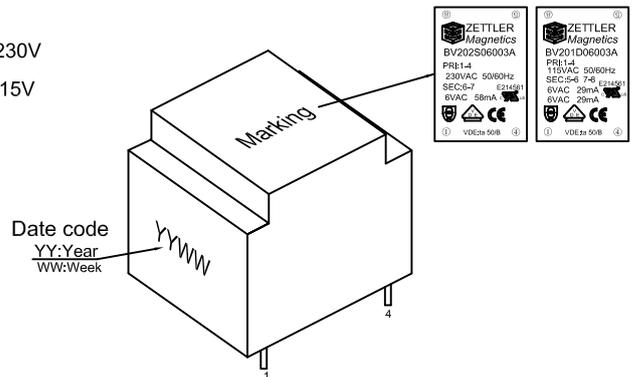
PAGE REV	DESCRIPTION	DATE	BY
A0	CREATED	2010-07-08	Jacise
A3	Modified	2012-11-13	ye
A4	Modified MECHANICAL SPECIFICATIONS	2015-10-26	ye

## 1. ELECTRICAL SPECIFICATIONS:

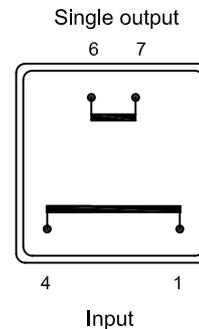
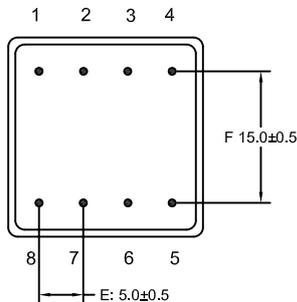
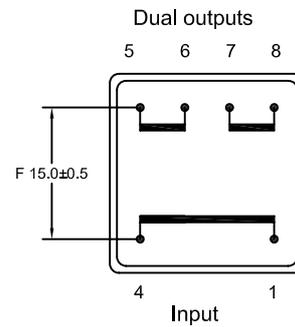
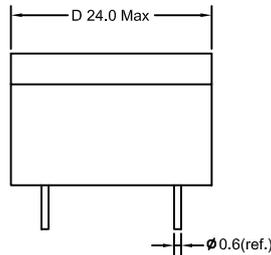
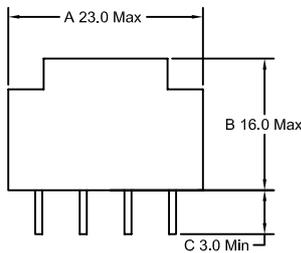
- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 50°C MAX allowed.
- D. Insulation Resistance:  
100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:  
4200Vrms 1 minute @ PRI. to SEC., when the primary input voltage is 230V  
2800Vrms 1 minute @ PRI. to SEC., when the primary input voltage is 115V

## F. APPROVALS:

UL 5085 class 2 and class 3 recognized, VDE EN 61558 recognized.  
Conforms to EN 60950 .



## 2. MECHANICAL SPECIFICATIONS:



UNIT	TOLERANCE
MM	X.X = ±0.5
3RD ANGLE	X.XX = ±0.3
	ANG = -
SCALE:	DATA
DRAWN: ye	2015-10-26
CHECKED:	
APPROVED:	

# ZETTLER MAGNETICS

TITLE: SEALED TRANSFORMER, PCB 0.35VA

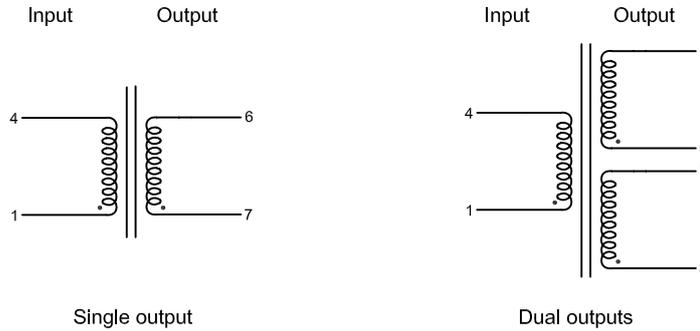
PART NO: BV20XXXX003A

ZM Project:		SPEC REV: A/4
Customers p/n:		SH NO 1/3

Web: [www.zettlermagnetics.com](http://www.zettlermagnetics.com)  
E-mail: [sales@zettlermagnetics.com](mailto:sales@zettlermagnetics.com)

PAGE REV	DESCRIPTION	DATE	BY
A0	CREATED	2010-07-08	Jacise
A3	Modified	2012-11-13	ye

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (ZETTLER)	Input Voltage	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Rated Power (VA)
BV201S06003A	115V	6±10%		58	10.5	0.35
BV201S09003A	115V	9±10%		38.9	15.5	0.35
BV201S10003A	115V	10±10%		35	17.5	0.35
BV201S12003A	115V	12±10%		29	20.5	0.35
BV201S15003A	115V	15±10%		23.3	24.5	0.35
BV201S18003A	115V	18±10%		19.4	27.5	0.35
BV201S24003A	115V	24±10%		14.6	35.5	0.35
BV201D06003A	115V	6±10%	6±10%	2×29	2×10.5	0.35
BV201D09003A	115V	9±10%	9±10%	2×19.4	2×14.5	0.35
BV201D10003A	115V	10±10%	10±10%	2×17.5	2×17.5	0.35
BV201D12003A	115V	12±10%	12±10%	2×14.6	2×20.5	0.35
BV201D15003A	115V	15±10%	15±10%	2×11.7	2×24.5	0.35
BV201D18003A	115V	18±10%	18±10%	2×14.6	2×27.5	0.35
BV201D24003A	115V	24±10%	24±10%	2×11.7	2×35.5	0.35
BV202S06003A	230V	6±10%		58	10.5	0.35
BV202S09003A	230V	9±10%		38.9	15.5	0.35
BV202S10003A	230V	10±10%		35	17.5	0.35
BV202S12003A	230V	12±10%		29	20.5	0.35
BV202S15003A	230V	15±10%		23.3	24.5	0.35
BV202S18003A	230V	18±10%		19.4	27.5	0.35
BV202S24003A	230V	24±10%		14.6	35.5	0.35
BV202D06003A	230V	6±10%	6±10%	2×29	2×10.5	0.35
BV202D09003A	230V	9±10%	9±10%	2×19.4	2×15.5	0.35
BV202D10003A	230V	10±10%	10±10%	2×17.5	2×17.5	0.35
BV202D12003A	230V	12±10%	12±10%	2×14.6	2×20.5	0.35
BV202D15003A	230V	15±10%	15±10%	2×11.7	2×24.5	0.35
BV202D18003A	230V	18±10%	18±10%	2×9.7	2×27.5	0.35
BV202D24003A	230V	24±10%	24±10%	2×7.3	2×35.5	0.35

UNIT MM	TOLERANCE X.X = ±0.5 X.XX = ±0.3 ANG = -	
3RD ANGLE 		
SCALE:	DATA	
DRAWN: ye	2015-10-26	
CHECKED:		
APPROVED:		

# ZETTLER MAGNETICS

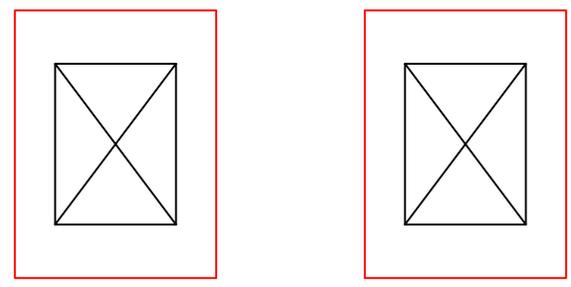
TITLE: SEALED TRANSFORMER, PCB 0.35VA			
PART NO: <b>BV20XXXX003A</b>		ZM Project:	SPEC REV: A/4
		Customers p/n:	SH NO 2/3

Web: [www.zettlermagnetics.com](http://www.zettlermagnetics.com)  
E-mail: [sales@zettlermagnetics.com](mailto:sales@zettlermagnetics.com)

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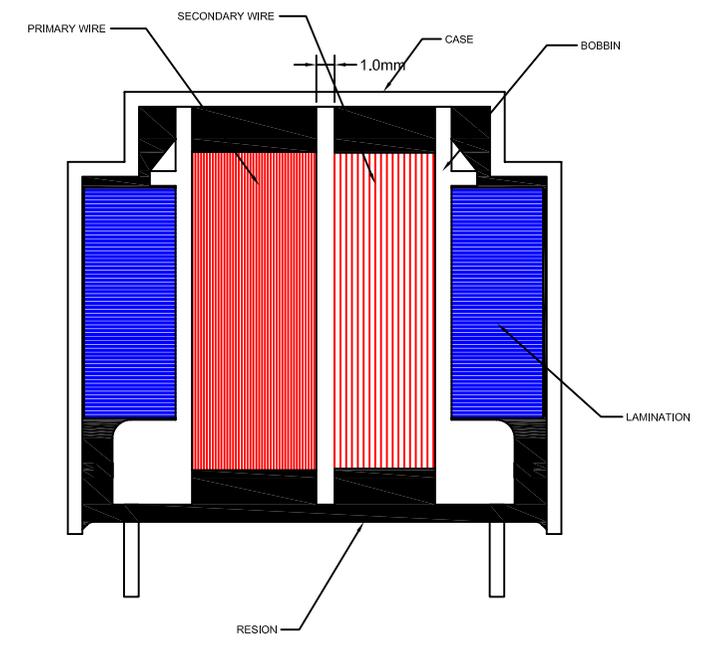
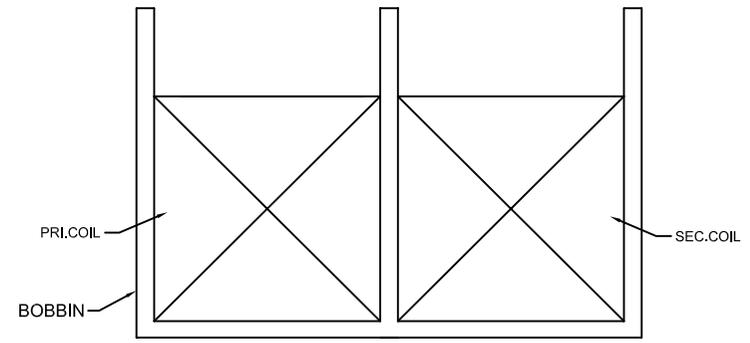
PAGE REV	DESCRIPTION	DATE	BY
A0	CREATED	2010-07-08	Jacise
A3	Modified	2012-11-13	ye

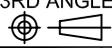
-  LAMINATION
-  COIL
-  BOBBIN



PRIMARY

SECONDARY



UNIT MM	TOLERANCE	
3RD ANGLE 	X.X = ±0,5	
	X.XX = ±0,3	
	ANG = -	
SCALE:	DATA	
DRAWN: ye	2015-10-26	
CHECKED:		
APPROVED:		

# ZETTLER MAGNETICS

TITLE: SEALED TRANSFORMER, PCB 0.35VA		
PART NO:	ZM Project:	SPEC REV: A/4
BV20XXXX003A	Customers p/n:	SH NO: 3/3

Web: [www.zettlermagnetics.com](http://www.zettlermagnetics.com) E-mail: [sales@zettlermagnetics.com](mailto:sales@zettlermagnetics.com)

1 2 3 4 5 6 7 8

F  
E  
D  
C  
B  
A

F  
E  
D  
C  
B  
A

# SEALED TRANSFORMER, PCB 0.5VA EE20-10.5 SERIES

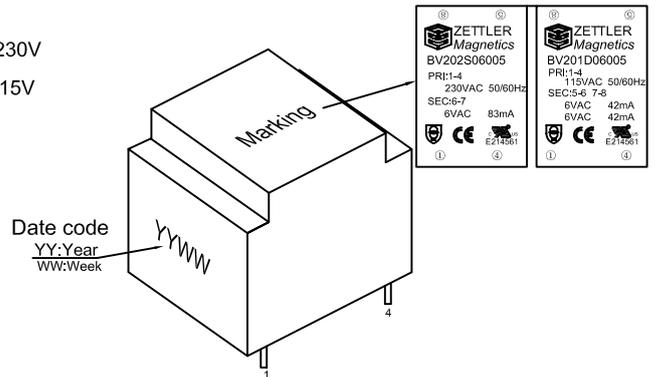
PAGE REV	DESCRIPTION	DATE	BY
A0	CREATED	2010-03-30	Jacise
A1	Modified	2015-10-30	ye

## 1. ELECTRICAL SPECIFICATIONS:

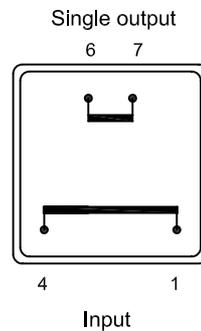
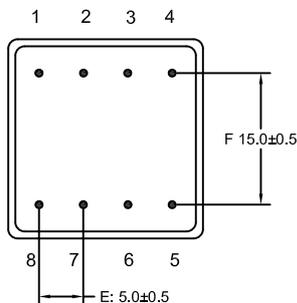
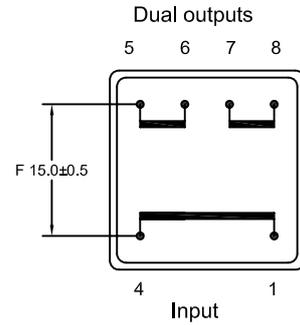
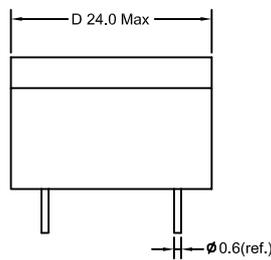
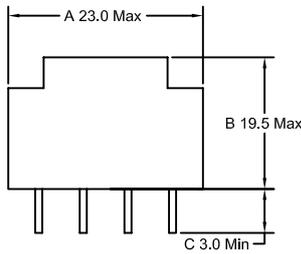
- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 50° C MAX allowed.
- D. Insulation Resistance:  
100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:  
4200Vrms 1 minute @ PRI. to SEC., when the primary input voltage is 230V  
2800Vrms 1 minute @ PRI. to SEC., when the primary input voltage is 115V

## F. APPROVALS:

- UL 5085 class 2 and class 3 recognized.
- Conforms to EN 60950 .



## 2. MECHANICAL SPECIFICATIONS:



UNIT MM	TOLERANCE
	X.X = ±0.5
	X.XX = ±0.3
	ANG = -
3RD ANGLE 	
SCALE:	DATA
DRAWN: ye	2015-10-30
CHECKED:	
APPROVED:	

# ZETTLER MAGNETICS

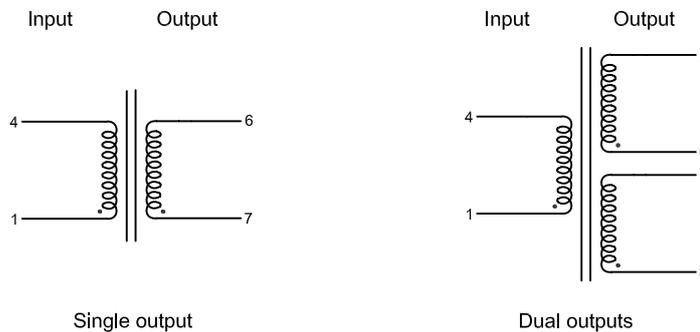
TITLE: SEALED TRANSFORMER, PCB 0.5VA

PART NO: <b>BV20XXXX005</b>	ZM Project:	SPEC REV: A/1
	Customers p/n:	SH NO 1/3

Web: [www.zettlermagnetics.com](http://www.zettlermagnetics.com)  
E-mail: [sales@zettlermagnetics.com](mailto:sales@zettlermagnetics.com)

PAGE REV	DESCRIPTION	DATE	BY
A0	CREATED	2010-03-30	Jacise
A1	Modified	2015-10-30	ye

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input:115V)	Part Number (Input:230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV201S06005	BV202S06005	6.3±10%		83.3	10.5	T 50 B	0.5
BV201S09005	BV202S09005	9.5±10%		55.6	14.5	T 50 B	0.5
BV201S10005	BV202S10005	10.5±10%		50	16.5	T 50 B	0.5
BV201S12005	BV202S12005	12.5±10%		41.7	20.0	T 50 B	0.5
BV201S15005	BV202S15005	15.5±10%		33.3	24.5	T 50 B	0.5
BV201S18005	BV202S18005	18.0±10%		27.8	28.9	T 50 B	0.5
BV201S24005	BV202S24005	24.0±10%		20.8	38.5	T 50 B	0.5
BV201D06005	BV202D06005	6.3±10%	6.0±10%	2x41.8	2X10.5	T 50 B	0.5
BV201D09005	BV202D09005	9.5±10%	9.0±10%	2x27.8	2X14.5	T 50 B	0.5
BV201D10005	BV202D10005	10.5±10%	10.0±10%	2x50	2X16.5	T 50 B	0.5
BV201D12005	BV202D12005	12.5±10%	12.0±10%	2x20.8	2X20	T 50 B	0.5
BV201D15005	BV202D15005	15.5±10%	15.0±10%	2x16.7	2X24.5	T 50 B	0.5
BV201D18005	BV202D18005	18.0±10%	18.0±10%	2x13.9	2X28.9	T 50 B	0.5
BV201D24005	BV202D24005	24.0±10%	24.0±10%	2x10.4	2X38.5	T 50 B	0.5

UNIT MM	TOLERANCE X.X = ±0.5 X.XX = ±0.3 ANG = -	
3RD ANGLE 		
SCALE:		DATA
DRAWN:	ye	2015-10-30
CHECKED:		
APPROVED:		

**ZETTLER MAGNETICS**

TITLE: SEALED TRANSFORMER, PCB 0.5VA

PART NO:

**BV20XXXX005**

ZM Project:

Customers p/n:

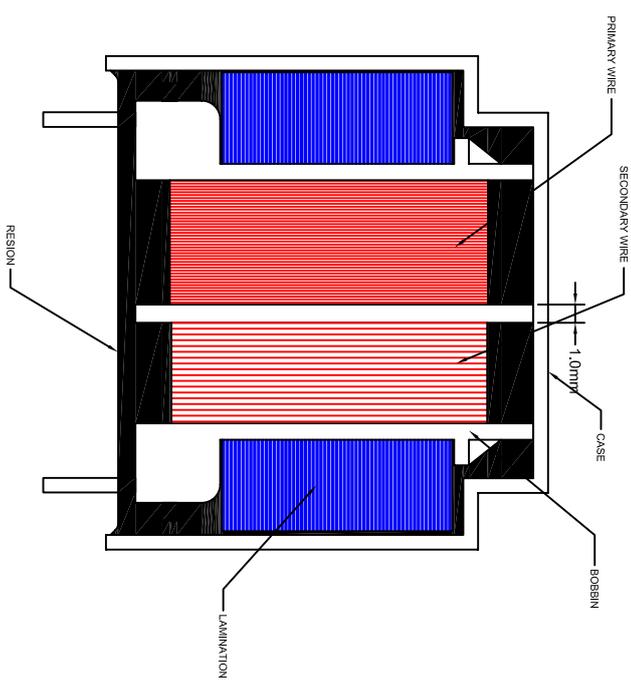
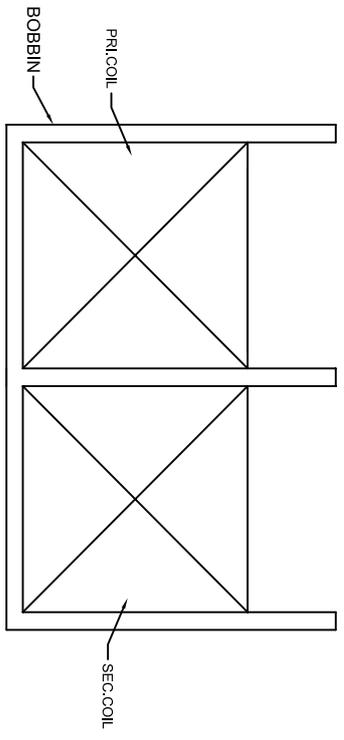
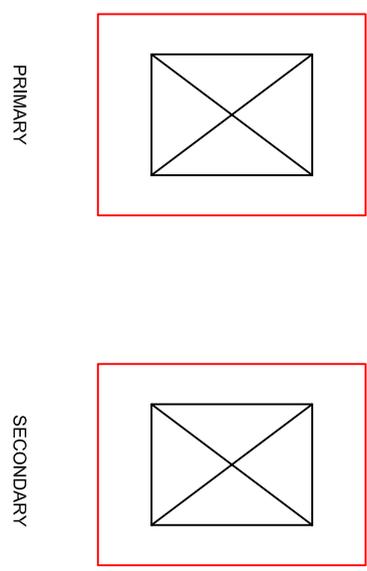
SPEC REV: A/1

SH NO 2/3

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PAGE REV	DESCRIPTION	DATE	BY
A0	CREATED	2010-03-30	Jacise
A1	Modified	2015-10-30	ye

- LAMINATION
- COIL
- BOBBIN



UNIT	TOLERANCE
MM	X.X = ±0.5
3RD ANGLE	X.XX = ±0.3
	ANG = -
SCALE:	DATA
DRAWN: ye	2015-10-26
CHECKED:	
APPROVED:	

# ZETTLER MAGNETICS

**TITLE: SEALED TRANSFORMER, PCB 0.5VA**

**PART NO: BV20XXXXX005**

ZM Project:	SPEC REV: A1
Customer's p/n:	SH NO: 3/3

Web: [www.zettlermagnetics.com](http://www.zettlermagnetics.com)      E-mail: [sdles@zettlermagnetics.com](mailto:sdles@zettlermagnetics.com)

# SEALED TRANSFORMER, PCB 0.6VA EE20-10.5 SERIES

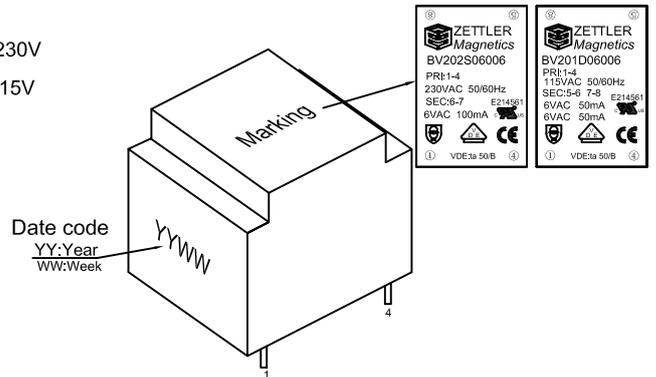
PAGE REV	DESCRIPTION	DATE	BY
A0	CREATED	2010-03-30	Jacise
A1	Modified	2015-10-30	ye

## 1. ELECTRICAL SPECIFICATIONS:

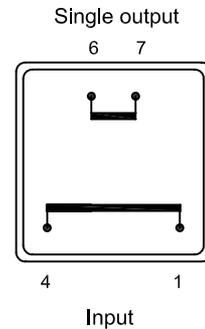
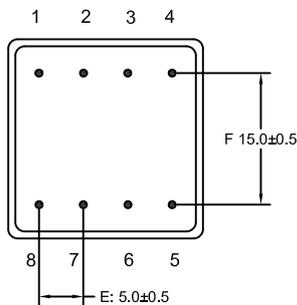
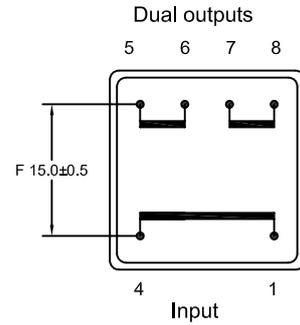
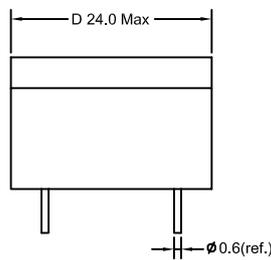
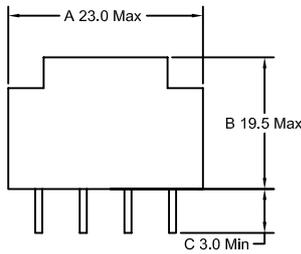
- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 50° C MAX allowed.
- D. Insulation Resistance:  
100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:  
4200Vrms 1 minute @ PRI. to SEC., when the primary input voltage is 230V  
2800Vrms 1 minute @ PRI. to SEC., when the primary input voltage is 115V

## F. APPROVALS:

UL 5085 class 2 and class 3 recognized, VDE EN 61558 recognized.  
Conforms to EN 60950 .



## 2. MECHANICAL SPECIFICATIONS:



UNIT MM	TOLERANCE
	X.X = ±0.5
	X.XX = ±0.3
	ANG = -
3RD ANGLE 	
SCALE:	DATA
DRAWN: ye	2015-10-30
CHECKED:	
APPROVED:	

# ZETTLER MAGNETICS

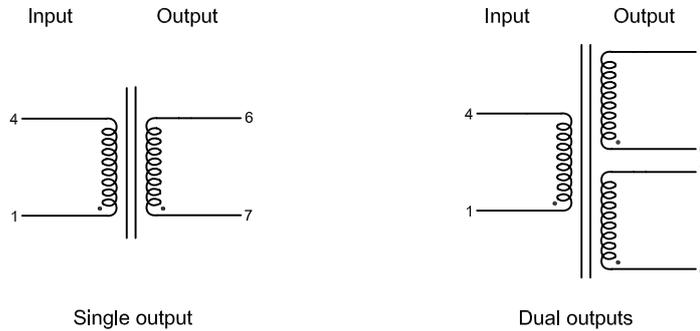
TITLE: SEALED TRANSFORMER, PCB 0.6VA

PART NO: <b>BV20XXXX006</b>	ZM Project:	SPEC REV: A/1
	Customers p/n:	SH NO 1/3

Web: [www.zettlermagnetics.com](http://www.zettlermagnetics.com)  
E-mail: [sales@zettlermagnetics.com](mailto:sales@zettlermagnetics.com)

PAGE REV	DESCRIPTION	DATE	BY
A0	CREATED	2010-03-30	Jacise
A1	Modified	2015-10-30	ye

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input:115V)	Part Number (Input:230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV201S06006	BV202S06006	6±10%		100	11.5	T 50 B	0.6
BV201S09006	BV202S09006	9±10%		66.7	14.5	T 50 B	0.6
BV201S10006	BV202S10006	10±10%		60	15.5	T 50 B	0.6
BV201S12006	BV202S12006	12±10%		50	18.5	T 50 B	0.6
BV201S15006	BV202S15006	15±10%		40	22.5	T 50 B	0.6
BV201S18006	BV202S18006	18±10%		33.3	26.5	T 50 B	0.6
BV201S24006	BV202S24006	24±10%		25	33.3	T 50 B	0.6
BV201D06006	BV202D06006	6±10%	6±10%	2×50	2×11.5	T 50 B	0.6
BV201D09006	BV202D09006	9±10%	9±10%	2×33.3	2×14.5	T 50 B	0.6
BV201D10006	BV202D10006	10±10%	10±10%	2×30	2×15.5	T 50 B	0.6
BV201D12006	BV202D12006	12±10%	12±10%	2×25	2×18.5	T 50 B	0.6
BV201D15006	BV202D15006	15±10%	15±10%	2×20	2×24.5	T 50 B	0.6
BV201D18006	BV202D18006	18±10%	18±10%	2×16.7	2×27.5	T 50 B	0.6
BV201D24006	BV202D24006	24±10%	24±10%	2×12.5	2×35.5	T 50 B	0.6

UNIT MM	TOLERANCE X.X = ±0.5 X.XX = ±0.3 ANG = -	
3RD ANGLE 		
SCALE:		DATA
DRAWN:	ye	2015-10-30
CHECKED:		
APPROVED:		

**ZETTLER MAGNETICS**

TITLE: SEALED TRANSFORMER, PCB 0.6VA

PART NO:

**BV20XXXX006**

ZM Project:

Customers p/n:

SPEC REV: A/1

SH NO 2/3

Web: [www.zettlermagnetics.com](http://www.zettlermagnetics.com)

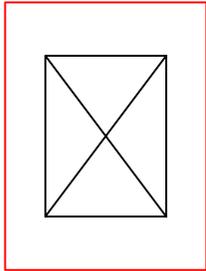
E-mail: [sales@zettlermagnetics.com](mailto:sales@zettlermagnetics.com)

PAGE REV	DESCRIPTION	DATE	BY
A0	CREATED	2010-03-30	Jacise
A1	Modified	2015-10-30	ye

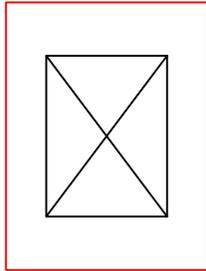
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□ COIL

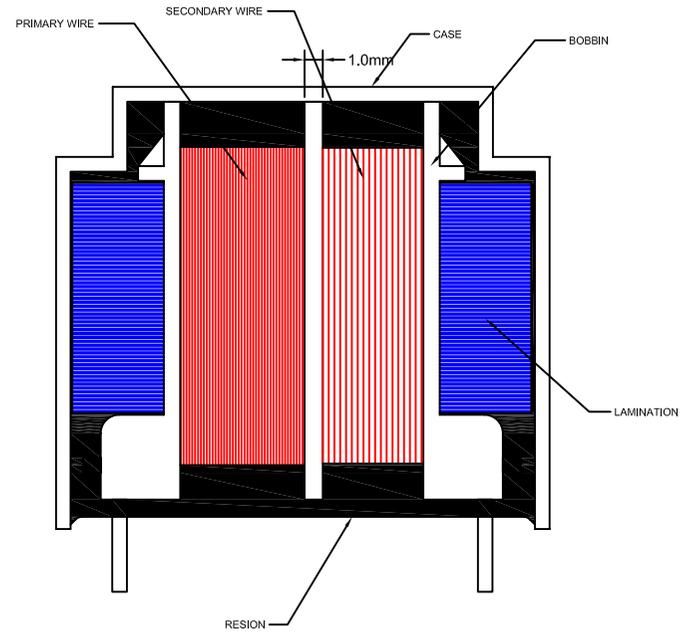
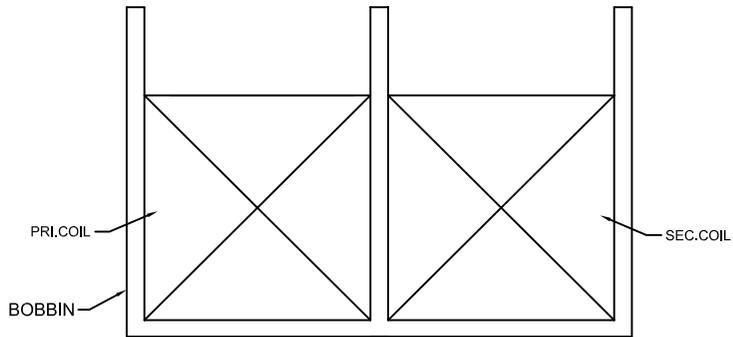
⊗ BOBBIN



PRIMARY



SECONDARY



UNIT MM	TOLERANCE X.X = ±0.5 X.XX = ±0.3 ANG = -	
3RD ANGLE 		
SCALE:	DATA	
DRAWN: ye	2015-10-30	
CHECKED:		
APPROVED:		

# ZETTLER MAGNETICS

TITLE: SEALED TRANSFORMER, PCB 0.6VA

PART NO:  
**BV20XXXX006**

ZM Project:	SPEC REV: A/1
Customers p/n:	SH NO: 3/3

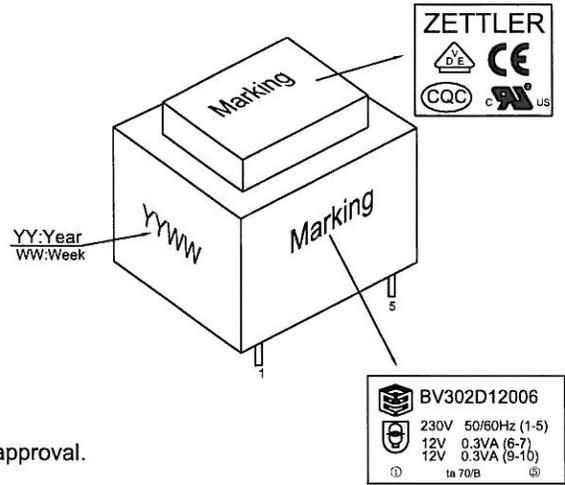
Web: [www.zettlermagnetics.com](http://www.zettlermagnetics.com)

E-mail: [sales@zettlermagnetics.com](mailto:sales@zettlermagnetics.com)

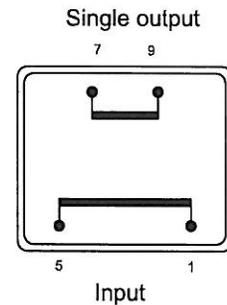
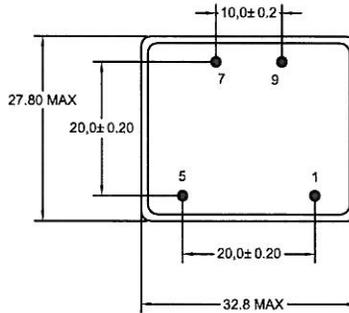
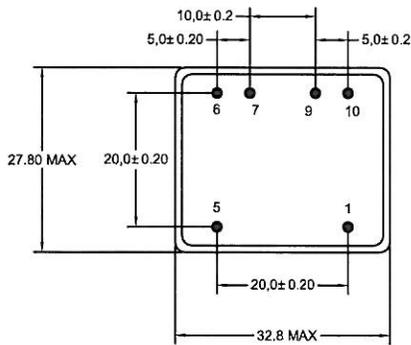
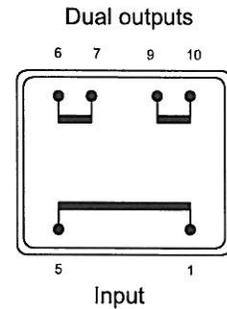
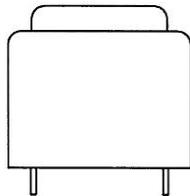
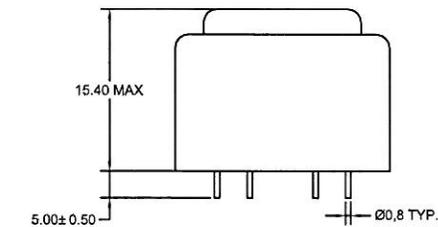
# SEALED TRANSFORMER, PCB 0.6VA EI 30-5 SERIES

## 1. ELECTRICAL SPECIFICATIONS:

- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 70° C MAX allowed.
- D. Insulation Resistance:  
100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:  
4200Vrms 1mA 1second @ PRI. to SEC.
- F. Approvals:  
UL506,UL1585 class 2 and class3, VDE, EN61558, EN60950
- G. when the primary is 115V input, the transformer are non CQC approval.



## 2. MECHANICAL SPECIFICATIONS:



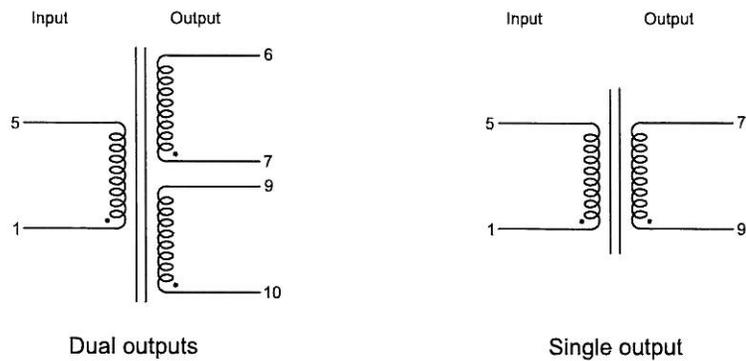
Dual outputs

Single output

A1	Changed the hi-pot from 2800V to 4200V, for 115V primary	Winston	2008-3-18
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE	SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	± 0.3	DRAWN	Janise	2008-2-18	ZETTLER MAGNETICS
X.X	± 0.2	CHECKED			
X.XX	± 0.1	APPROVED			TITLE EI 30-5 0.6VA
THICKNESS	/				
REV.	A0				MATERIAL 120° C or higher
					MODEL: EI 30-5 0.6VA
					SHEET: 1 OF 2

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input: 115V)	Part Number (Input: 230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV301S06006	BV302S06006	6±15%		100	10.5	T 70 B	0.6
BV301S09006	BV302S09006	9±15%		66	15.5	T 70 B	0.6
BV301S12006	BV302S12006	12±15%		50	20.5	T 70 B	0.6
BV301S15006	BV302S15006	15±15%		40	25.4	T 70 B	0.6
BV301S18006	BV302S18006	18±15%		33	30.4	T 70 B	0.6
BV301S24006	BV302S24006	24±15%		25	40.4	T 70 B	0.6
BV301D06006	BV302D06006	6±15%	6±15%	2×50	2×10.5	T 70 B	0.6
BV301D09006	BV302D09006	9±15%	9±15%	2×33	2×15.5	T 70 B	0.6
BV301D12006	BV302D12006	12±15%	12±15%	2×25	2×20.5	T 70 B	0.6
BV301D15006	BV302D15006	15±15%	15±15%	2×20	2×25.0	T 70 B	0.6
BV301D18006*	BV302D18006*	18±15%	18±15%	2×17	2×30.4	T 70 B	0.6
BV301D24006*	BV302D24006*	24±15%	24±15%	2×12	2×40.4	T 70 B	0.6

\* To be noted:\*marked transformers are non VDE approved.  
Those transformers meet all requirement of EN61558-2-4.

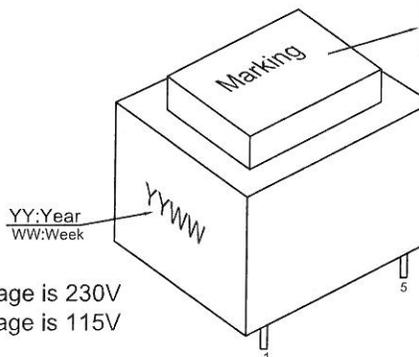
TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	MATERIAL 120° C or higher
X	± 0.3	DRAWN	Janise	2008-1-16	<b>ZETTLER MAGNETICS</b>	MODEL:
X.X	± 0.2	CHECKED				EI 30-5 0.6VA
X.XX	± 0.1	APPROVED				SHEET: 2 OF 2
THICKNESS	/					
REV.	A0				<b>TITLE</b> EI 30-5 0.6VA	

# SEALED TRANSFORMER, PCB 1VA EI 30-10.5 SERIES

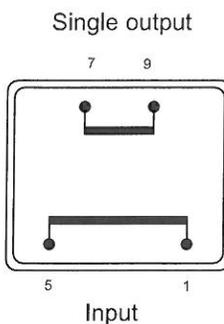
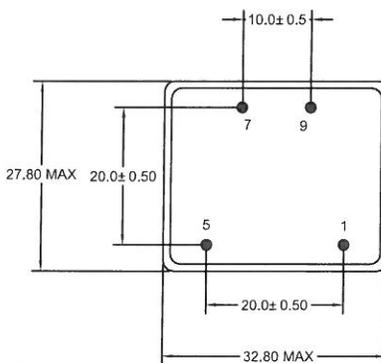
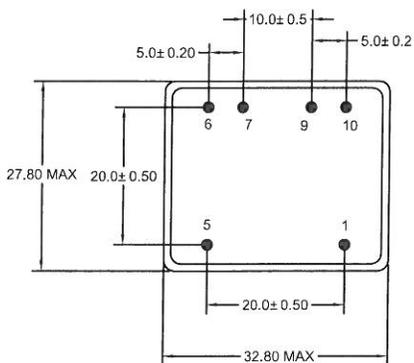
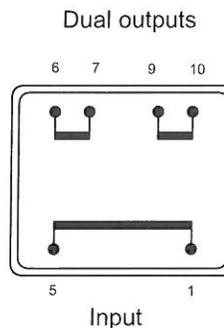
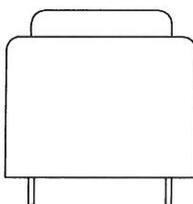
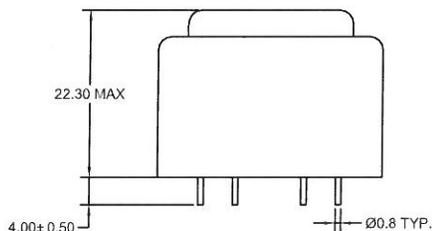


## 1. ELECTRICAL SPECIFICATIONS:

- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 70° C MAX allowed.
- D. Insulation Resistance:
  - 100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:
  - 4200Vrms 1 minute @ PRI. to SEC. ,when the primary input voltage is 230V
  - 2800Vrms 1 minute @ PRI. to SEC. ,when the primary input voltage is 115V
- F. Approvals:
  - UL5085 class 2 and class 3,VDE,EN61558,EN60950
- H. When the primary is 115V input,the transformer are non CQC approval.



## 2. MECHANICAL SPECIFICATIONS:



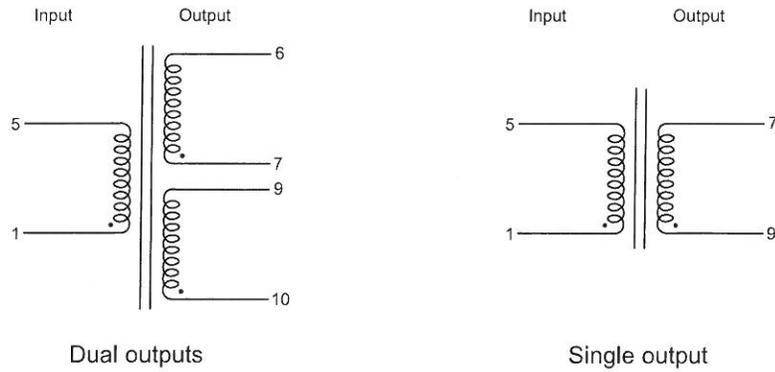
Dual outputs

Single output

A1	Changed label according to vde require	Janise	2014-11-14
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION
X	±0.3	DRAWN	Janise	2014-11-14	<b>ZETTLER MAGNETICS</b>
X.X	±0.2	CHECKED			
X.XX	±0.1	APPROVED			
THICKNESS	/				<b>TITLE</b> EI 30-10.5 1VA
REV.	A1				MATERIAL 120° C or higher
					MODEL: EI 30-10.5 1VA
					SHEET: 1 OF 2

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input:115V)	Part Number (Input:230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV301S06010	BV302S06010	6±10%		166	8.6	T 70 B	1
BV301S09010	BV302S09010	9±10%		111	13.6	T 70 B	1
BV301S10010	BV302S10010	10±10%		100	14.2	T 70 B	1
BV301S12010	BV302S12010	12±10%		83	17.2	T 70 B	1
BV301S15010	BV302S15010	15±10%		66	21.6	T 70 B	1
BV301S18010	BV302S18010	18±10%		55	25.9	T 70 B	1
BV301S24010	BV302S24010	24±10%		41	37.9	T 70 B	1
BV301D06010	BV302D06010	6±10%	6±15%	2×83	2×8.6	T 70 B	1
BV301D09010	BV302D09010	9±10%	9±15%	2×56	2×13.6	T 70 B	1
BV301D10010	BV302D10010	10±10%	10±15%	2×50	2×14.2	T 70 B	1
BV301D12010	BV302D12010	12±10%	12±15%	2×42	2×19	T 70 B	1
BV301D15010	BV302D15010	15±10%	15±15%	2×33	2×23.6	T 70 B	1
BV301D18010*	BV302D18010*	18±10%	18±15%	2×28	2×24.9	T 70 B	1
BV301D24010*	BV302D24010*	24±10%	24±15%	2×21	2×37.9	T 70 B	1

\* To be noted:\*marked transformers are non VDE approved. Those transformers meet all requirement of EN61558-2-4.

A1	ADD BV302S10010 TO LIST	Janise	2014-11-14
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	±0.3	DRAWN	Janise	2014-11-14	<b>ZETTLER MAGNETICS</b>  <b>TITLE</b> EI 30-10.5 1VA	MATERIAL 120° C or higher
X.X	±0.2	CHECKED				MODEL: EI 30-10.5 1VA
X.XX	±0.1	APPROVED				
THICKNESS	/					
REV.	A1					SHEET: 2 OF 2

# SEALED TRANSFORMER, PCB 1.2VA EI 30-10.5 SERIES

## 1. ELECTRICAL SPECIFICATIONS:

A. Input Voltage and Frequency: 115/230V @ 50/60 Hz

B. Secondary Voltage: See Electrical Table

C. Ambient Temperature: 50° C MAX allowed.

D. Insulation Resistance:

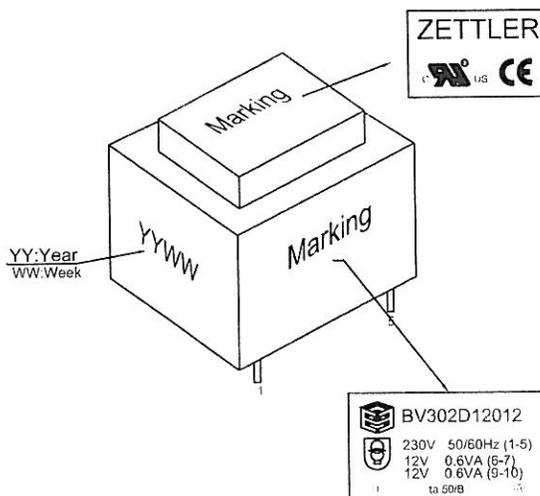
100M Ohm Min @ 500VDC PRI. to SEC.

E. Hi-Pot:

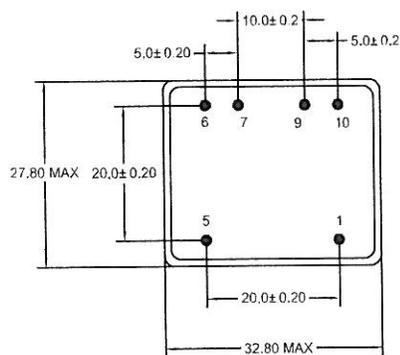
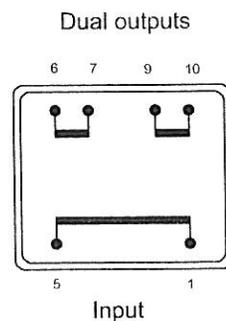
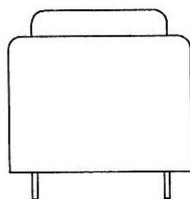
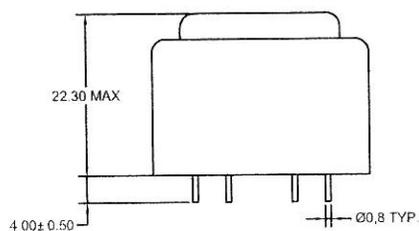
4200Vrms 1mA 1second @ PRI. to SEC.

F. Approvals:

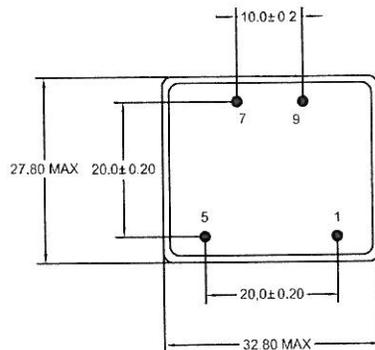
UL506



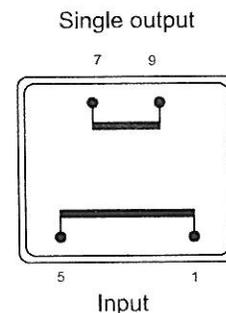
## 2. MECHANICAL SPECIFICATIONS:



Dual outputs



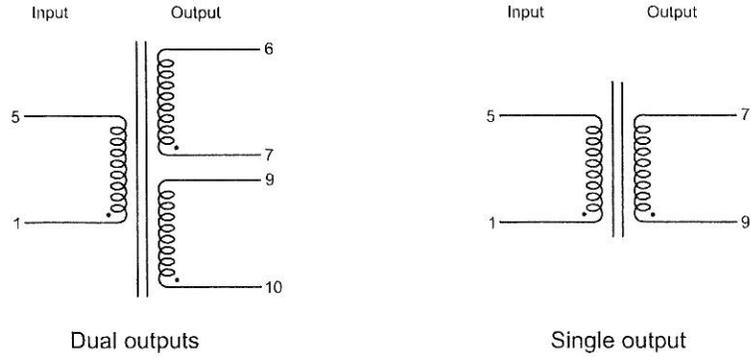
Single output



A2	added UL mark	Winston	2008-7-29
A1	Changed the hi-pot. from 2800V to 4200V for 115V primary	Winston	2008-3-18
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE	SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	± 0.3	DRAWN	Janise	<b>ZETTLER MAGNETICS</b>	MATERIAL 120° C or higher
X.X	± 0.2	CHECKED			MODEL:
X.XX	± 0.1	APPROVED			EI 30-10.5 1.2VA
THICKNESS	/				SHEET: 1 OF 2
REV.	A0			<b>TITLE</b> EI 30-10.5 1.2VA	

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

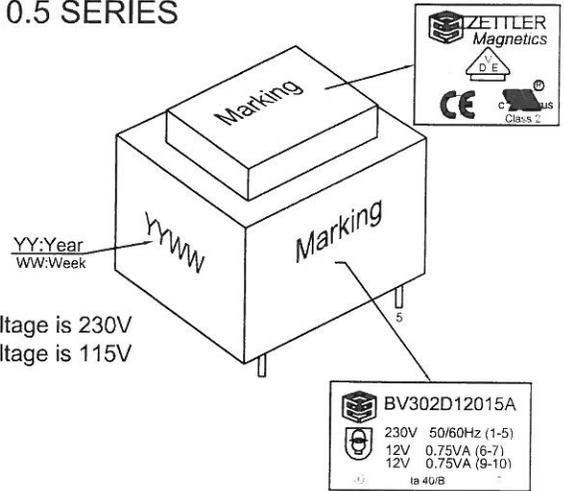
Part Number (Input:115V)	Part Number (Input:230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV301S06012	BV302S06012	6±10%		200	8.3	T 50 B	1.2
BV301S09012	BV302S09012	9±10%		133	12.5	T 50 B	1.2
BV301S12012	BV302S12012	12±10%		100	16.6	T 50 B	1.2
BV301S15012	BV302S15012	15±10%		80	20.8	T 50 B	1.2
BV301S18012	BV302S18012	18±10%		67	25.7	T 50 B	1.2
BV301S24012	BV302S24012	24±10%		50	33.3	T 50 B	1.2
BV301D06012	BV302D06012	6±10%	6±15%	2×100	2×8.3	T 50 B	1.2
BV301D09012	BV302D09012	9±10%	9±15%	2×67	2×12.5	T 50 B	1.2
BV301D12012	BV302D12012	12±10%	12±15%	2×50	2×16.6	T 50 B	1.2
BV301D15012	BV302D15012	15±10%	15±15%	2×40	2×20.8	T 50 B	1.2
BV301D18012*	BV302D18012*	18±10%	18±15%	2×33	2×25	T 50 B	1.2
BV301D24012*	BV302D24012*	24±10%	24±15%	2×25	2×33.3	T 50 B	1.2

TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	REV.	DESCRIPTION	DRAWN	DATE(MD/Y)
X	±0.3	DRAWN	Janise	2008-2-19				
X.X	±0.2	CHECKED						
X.XX	±0.1	APPROVED						
THICKNESS	/							
REV.	A0							
MODEL DESCRIPTION					ZETTLER MAGNETICS			
					TITLE			
					EI 30-10.5 1.2VA			
					MATERIAL 120° C or higher			
					MODEL: EI 30-10.5 1.2VA			
					SHEET: 2 OF 2			

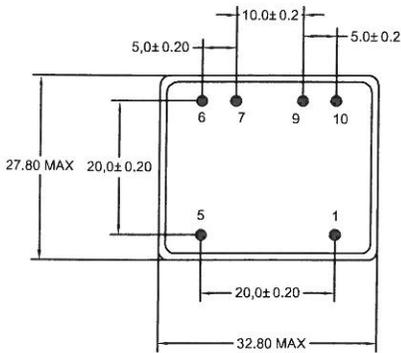
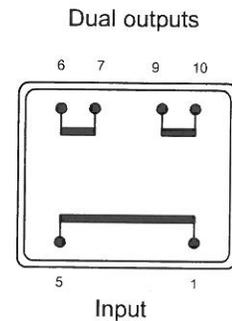
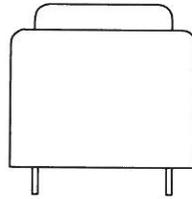
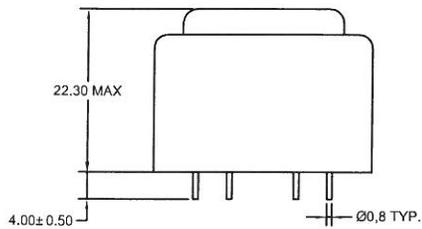
# SEALED TRANSFORMER, PCB 1.5VA EI 30-10.5 SERIES

## 1. ELECTRICAL SPECIFICATIONS:

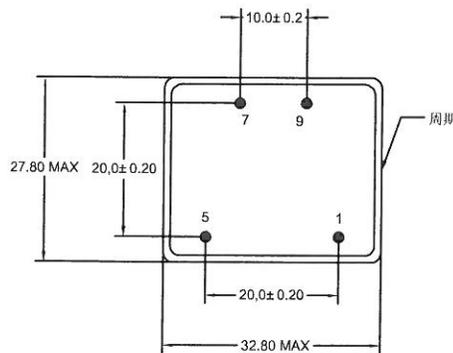
- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 40° C MAX allowed.
- D. Insulation Resistance:  
100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:  
4200Vrms 1 minute @ PRI. to SEC. ,when the primary input voltage is 230V  
2800Vrms 1 minute @ PRI. to SEC. ,when the primary input voltage is 115V
- F. Approvals:  
UL506,UL1585 class 2 and class 3,VDE,EN61558,EN60950  
In addition 230V input transformers also have CQC certification



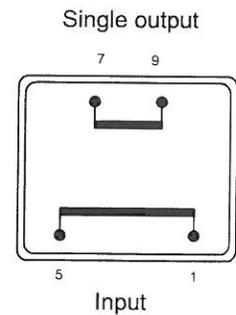
## 2. MECHANICAL SPECIFICATIONS:



Dual outputs



Single output



REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE	SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION
X	±0.3	DRAWN	Janise	2012-10-17
X.X	±0.2	CHECKED	Janise	2012-10-17
X.XX	±0.1	APPROVED	Yehua	2012-10-17
THICKNESS	/			
REV.	A0			

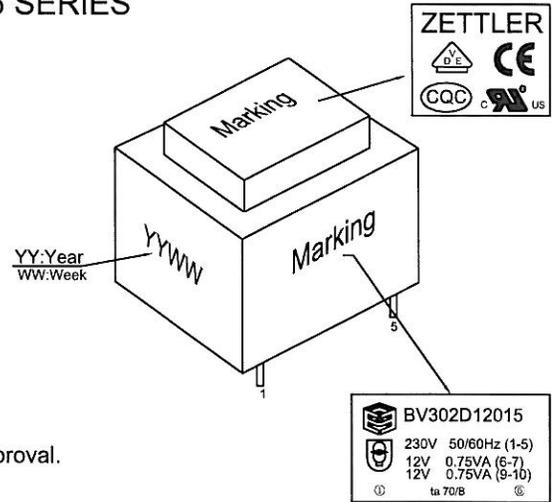
<b>ZETTLER MAGNETICS</b>	MATERIAL 120° C or higher
<b>TITLE</b> EI 30-10.5 1.5VA	MODEL: EI 30-10.5 1.5VA
	SHEET: 1 OF 2



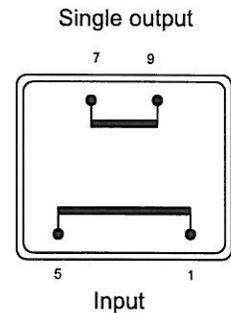
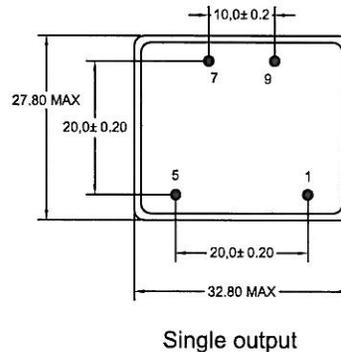
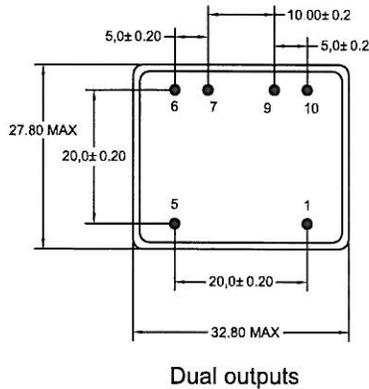
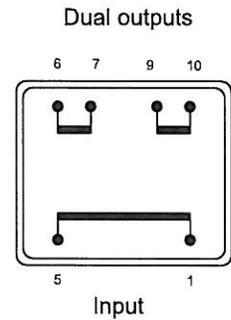
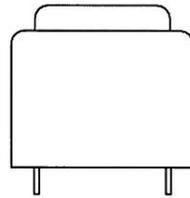
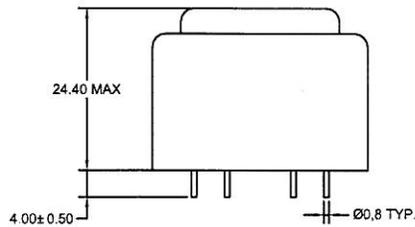
# SEALED TRANSFORMER, PCB 1.5VA EI 30-12.5 SERIES

## 1. ELECTRICAL SPECIFICATIONS:

- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 70° C MAX allowed.
- D. Insulation Resistance:
  - 100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:
  - 4200Vrms 1mA 1second @ PRI. to SEC.
- F. Approvals:
  - UL506,UL1585 class 2 and class 3,VDE,EN61558,EN60950
- G. When the primary is 115V input,the transformer are non CQC approval.



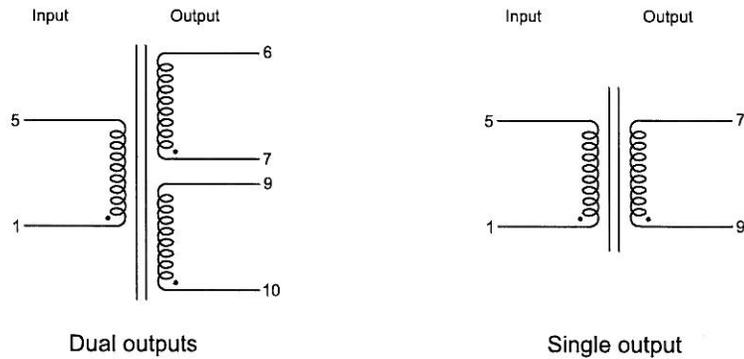
## 2. MECHANICAL SPECIFICATIONS:



A1	Changed the hi-pot from 2800V to 4200V,for 115V primary	Winston	2008-3-18
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE	SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	± 0.3	DRAWN	Janise	ZETTLER MAGNETICS	MATERIAL 120° C or higher
X.X	± 0.2	CHECKED			MODEL: EI 30-12.5 1.5VA
X.XX	± 0.1	APPROVED		TITLE EI 30-12.5 1.5VA	SHEET: 1 OF 2
THICKNESS	/				
REV.	A0				

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input: 115V)	Part Number (Input: 230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV301S06015	BV302S06015	6±10%		250	9.7	T 70 B	1.5
BV301S09015	BV302S09015	9±10%		167	14.5	T 70 B	1.5
BV301S12015	BV302S12015	12±10%		125	19.3	T 70 B	1.5
BV301S15015	BV302S15015	15±10%		100	24.2	T 70 B	1.5
BV301S18015	BV302S18015	18±10%		83	29.8	T 70 B	1.5
BV301S24015	BV302S24015	24±10%		63	38.6	T 70 B	1.5
BV301D06015	BV302D06015	6±10%	6±15%	2×125	2×9.7	T 70 B	1.5
BV301D09015	BV302D09015	9±10%	9±15%	2×83	2×15.3	T 70 B	1.5
BV301D12015	BV302D12015	12±10%	12±15%	2×63	2×19.3	T 70 B	1.5
BV301D15015	BV302D15015	15±10%	15±15%	2×50	2×24.2	T 70 B	1.5
BV301D18015*	BV302D18015*	18±10%	18±15%	2×42	2×29	T 70 B	1.5
BV301D24015*	BV302D24015*	24±10%	24±15%	2×31	2×38.6	T 70 B	1.5

\* To be noted:\*marked transformers are non VDE approved.  
Those transformers meet all requirement of EN61558-2-4.

TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)
X	±0.3	DRAWN	Janise	2008-1-16				
X.X	±0.2	CHECKED						
X.XX	±0.1	APPROVED						
THICKNESS	/							
REV.	A0							

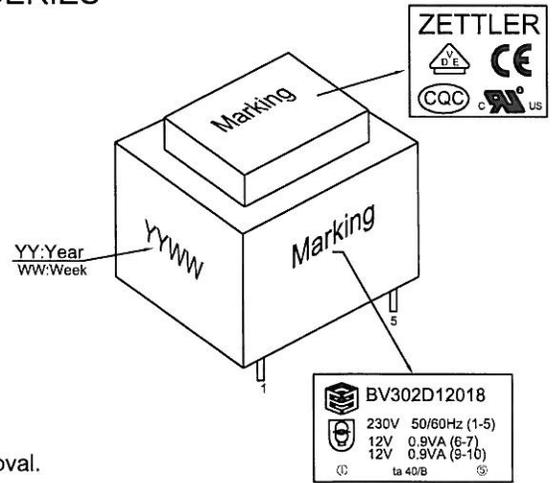
  

MODEL DESCRIPTION			
<b>ZETTLER MAGNETICS</b>		MATERIAL	120° C or higher
		MODEL:	EI 30-12.5 1.5VA
<b>TITLE</b>			
EI 30-12.5 1.5VA			
		SHEET: 2 OF 2	

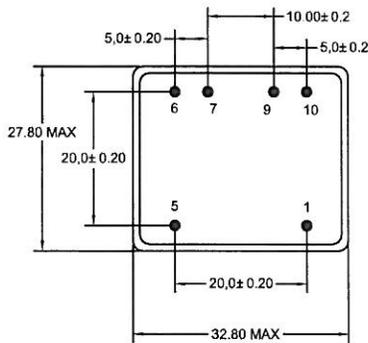
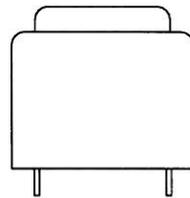
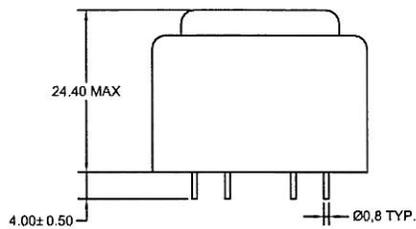
# SEALED TRANSFORMER, PCB 1.8VA EI 30-12.5 SERIES

## 1. ELECTRICAL SPECIFICATIONS:

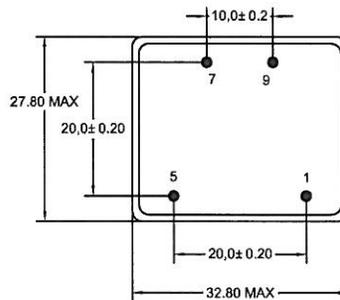
- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 40° C MAX allowed.
- D. Insulation Resistance:  
100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:  
4200Vrms 1mA 1second @ PRI. to SEC.
- F. Approvals:  
UL506,UL1585 class 2 and class 3,VDE,EN61558,EN60950
- G. When the primary is 115V input,the transformer are non CQC approval.



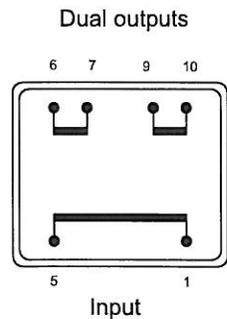
## 2. MECHANICAL SPECIFICATIONS:



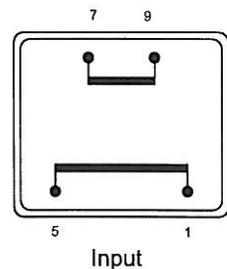
Dual outputs



Single output



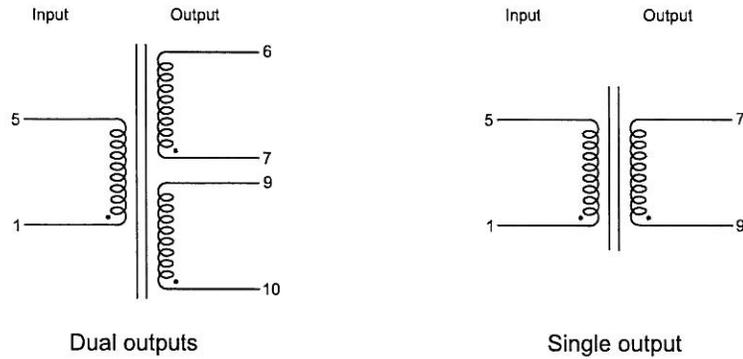
Single output



A1	Changed the hi-pot from 2800V to 4200V,for 115V primary	Winston	2008-3-18
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE	SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	± 0.3	DRAWN	Janise	ZETTLER MAGNETICS	MATERIAL 120° C or higher
X.X	± 0.2	CHECKED			MODEL: EI 30-12.5 1.8VA
X.XX	± 0.1	APPROVED		TITLE EI 30-12.5 1.8VA	SHEET: 1 OF 2
THICKNESS	/				
REV.	A0				

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input: 115V)	Part Number (Input: 230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV301S06018	BV302S06018	6±10%		300	9.8	T 40 B	1.8
BV301S09018	BV302S09018	9±10%		200	14.8	T 40 B	1.8
BV301S12018	BV302S12018	12±10%		150	19.7	T 40 B	1.8
BV301S15018	BV302S15018	15±10%		120	24.6	T 40 B	1.8
BV301S18018	BV302S18018	18±10%		100	30.3	T 40 B	1.8
BV301S24018	BV302S24018	24±10%		75	39.3	T 40 B	1.8
BV301D06018	BV302D06018	6±10%	6±15%	2×150	2×9.8	T 40 B	1.8
BV301D09018	BV302D09018	9±10%	9±15%	2×100	2×15.2	T 40 B	1.8
BV301D12018	BV302D12018	12±10%	12±15%	2×75	2×19.7	T 40 B	1.8
BV301D15018	BV302D15018	15±10%	15±15%	2×60	2×24.6	T 40 B	1.8
BV301D18018*	BV302D18018*	18±10%	18±15%	2×50	2×30.3	T 40 B	1.8
BV301D24018*	BV302D24018*	24±10%	24±15%	2×37.5	2×39.3	T 40 B	1.8

\* To be noted:\*marked transformers are non VDE approved.  
Those transformers meet all requirement of EN61558-2-4.

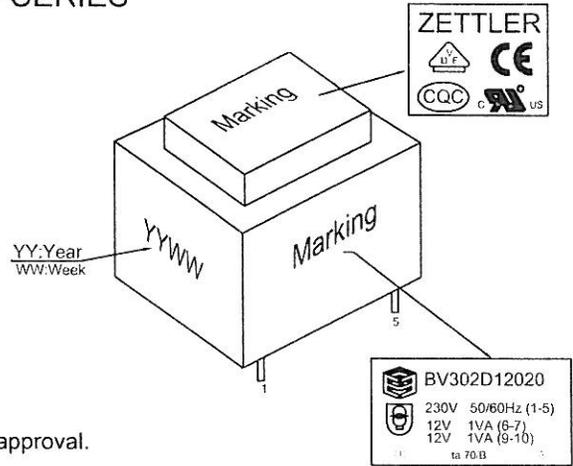
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)
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TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	±0.3	DRAWN	Janise	2008-1-16	<b>ZETTLER MAGNETICS</b>	MATERIAL 120° C or higher
X.X	±0.2	CHECKED				MODEL: EI 30-12.5 1.8VA
X.XX	±0.1	APPROVED			<b>TITLE</b> EI 30-12.5 1.8VA	SHEET: 2 OF 2
THICKNESS	/					
REV.	A0					

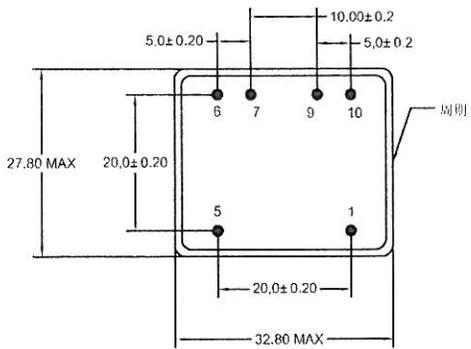
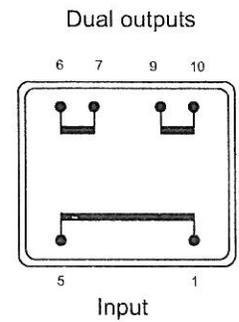
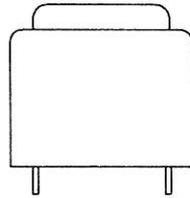
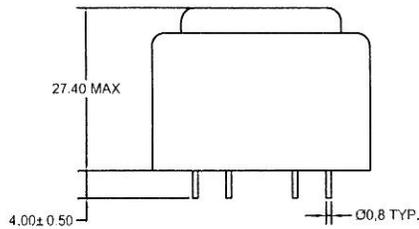
# SEALED TRANSFORMER, PCB 2VA EI 30-15.5 SERIES

## 1. ELECTRICAL SPECIFICATIONS:

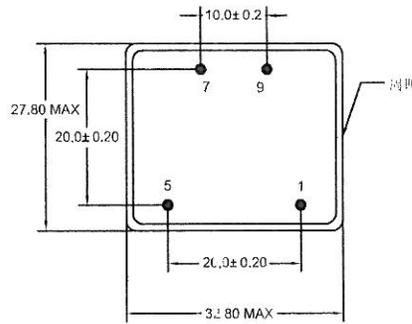
- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 70° C MAX allowed.
- D. Insulation Resistance:
  - 100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:
  - 4200Vrms 1mA 1second @ PRI. to SEC.
- F. Approvals:
  - UL506, UL1585 class 2 and class 3, VDE, EN61558, EN60950
- G. When the primary is 115V input, the transformer are non CQC approval.



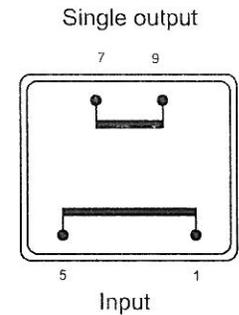
## 2. MECHANICAL SPECIFICATIONS:



Dual outputs



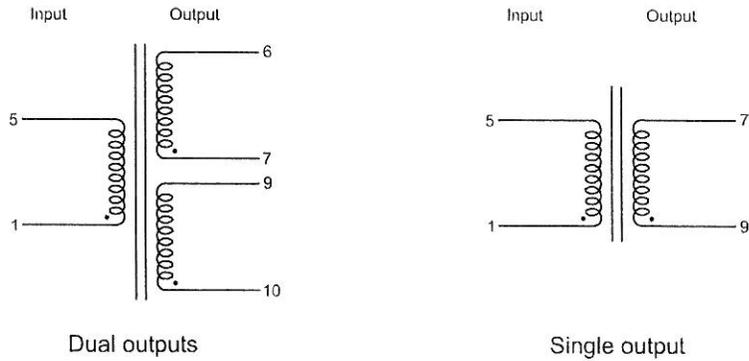
Single output



A1	Changed the hi-pot from 2800V to 4200V for 115V primary	Winston	2008-3-18
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE	SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	± 0.3	DRAWN	Janise	<b>ZETTLER MAGNETICS</b>	MATERIAL 120° C or higher
X.X	± 0.2	CHECKED			MODEL: EI 30-15.5 2VA
X.XX	± 0.1	APPROVED			SHEET: 1 OF 2
THICKNESS	/				
REV.	A0			<b>TITLE</b> EI 30-15.5 2VA	

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input:115V)	Part Number (Input:230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV301S06020	BV302S06020	6±10%		333	10.4	T 70 B	2
BV301S09020	BV302S09020	9±10%		222	15.5	T 70 B	2
BV301S12020	BV302S12020	12±10%		167	20.7	T 70 B	2
BV301S15020	BV302S15020	15±10%		133	25.8	T 70 B	2
BV301S18020	BV302S18020	18±10%		111	30.8	T 70 B	2
BV301S24020	BV302S24020	24±10%		83	41.4	T 70 B	2
BV301D06020	BV302D06020	6±10%	6±15%	2×167	2×10.4	T 70 B	2
BV301D09020	BV302D09020	9±10%	9±15%	2×111	2×15.4	T 70 B	2
BV301D12020	BV302D12020	12±10%	12±15%	2×83	2×20.7	T 70 B	2
BV301D15020	BV302D15020	15±10%	15±15%	2×67	2×25.0	T 70 B	2
BV301D18020*	BV302D18020*	18±10%	18±15%	2×56	2×30.8	T 70 B	2
BV301D24020*	BV302D24020*	24±10%	24±15%	2×42	2×41.4	T 70 B	2

\* To be noted:\*marked transformers are non VDE approved.  
Those transformers meet all requirement of EN61558-2-4.

TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)
X	± 0.3	DRAWN	Janise	2008-1-16				
X.X	± 0.2	CHECKED						
X.XX	± 0.1	APPROVED						
THICKNESS	/							
REV.	A0							

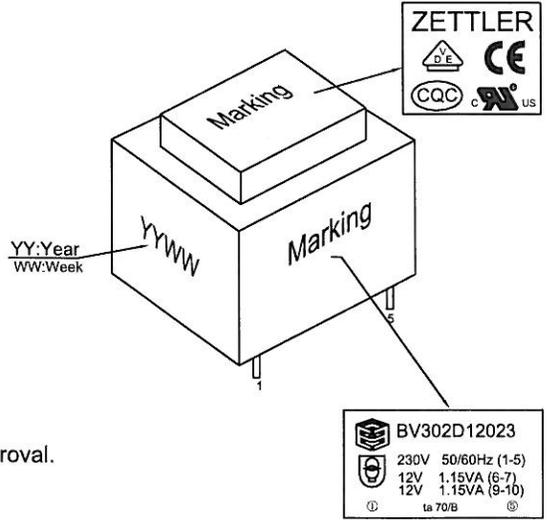
  

MODEL DESCRIPTION		MATERIAL 120° C or higher	
ZETTLER MAGNETICS		MODEL:	
		EI 30-15.5 2VA	
TITLE EI 30-15.5 2VA		SHEET: 2 OF 2	

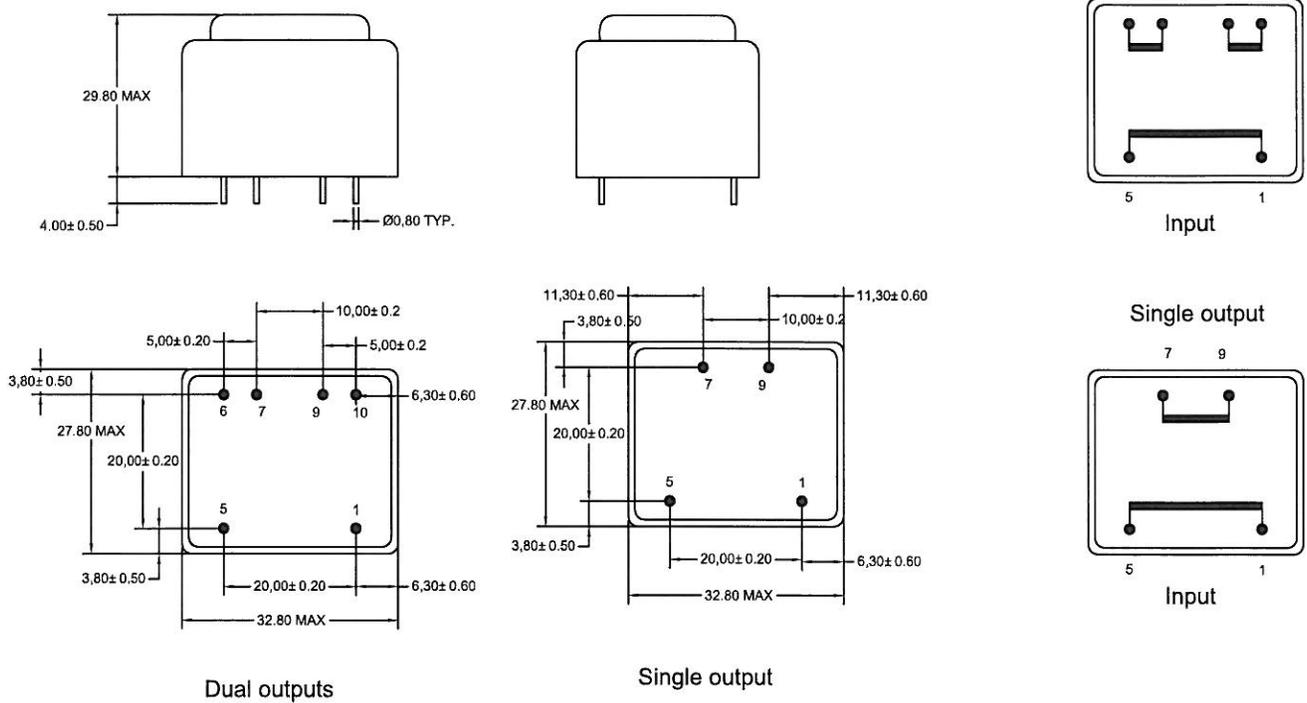
# SEALED TRANSFORMER, PCB 2.3VA EI 30-18 SERIES

## 1. ELECTRICAL SPECIFICATIONS:

- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 70° C MAX allowed.
- D. Insulation Resistance:
  - 100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:
  - 4200Vrms 1mA 1second @ PRI. to SEC.
- F. Approvals:
  - UL506,UL1585 class 2 and class 3,VDE,EN61558,EN60950
- G. When the primary is 115V input,the transformer are non CQC approval.



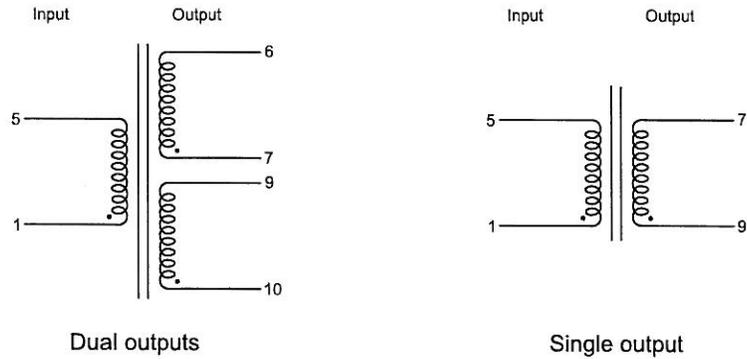
## 2. MECHANICAL SPECIFICATIONS:



A2	Added dimension measurements	Winston	2008-7-17
A1	Changed the hi-pot from 2800V to 4200V,for 115V primary	Winston	2008-3-18
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE	SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	± 0.3	DRAWN	Janise	<b>ZETTLER MAGNETICS</b>	MATERIAL 120° C or higher
X.X	± 0.2	CHECKED			MODEL: EI 30-18 2.3VA
X.XX	± 0.1	APPROVED		<b>TITLE</b> EI 30-18 2.3VA	SHEET: 1 OF 2
THICKNESS	/				
REV.	A0				

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input: 115V)	Part Number (Input: 230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV301S06023	BV302S06023	6±10%		383	10.5	T 70 B	2.3
BV301S09023	BV302S09023	9±10%		256	15.7	T 70 B	2.3
BV301S12023	BV302S12023	12±10%		192	21	T 70 B	2.3
BV301S15023	BV302S15023	15±10%		153	25.9	T 70 B	2.3
BV301S18023	BV302S18023	18±10%		128	31.4	T 70 B	2.3
BV301S24023	BV302S24023	24±10%		96	41.9	T 70 B	2.3
BV301D06023	BV302D06023	6±10%	6±15%	2×192	2×10.5	T 70 B	2.3
BV301D09023	BV302D09023	9±10%	9±15%	2×128	2×15.7	T 70 B	2.3
BV301D12023	BV302D12023	12±10%	12±15%	2×96	2×21	T 70 B	2.3
BV301D15023	BV302D15023	15±10%	15±15%	2×77	2×25.0	T 70 B	2.3
BV301D18023*	BV302D18023*	18±10%	18±15%	2×64	2×31.4	T 70 B	2.3
BV301D24023*	BV302D24023*	24±10%	24±15%	2×48	2×41.9	T 70 B	2.3

\* To be noted: \*marked transformers are non VDE approved.  
Those transformers meet all requirement of EN61558-2-4.

TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)
X	± 0.3	DRAWN	Janise	2008-1-16				
X.X	± 0.2	CHECKED						
X.XX	± 0.1	APPROVED						
THICKNESS	/							
REV.	A0							

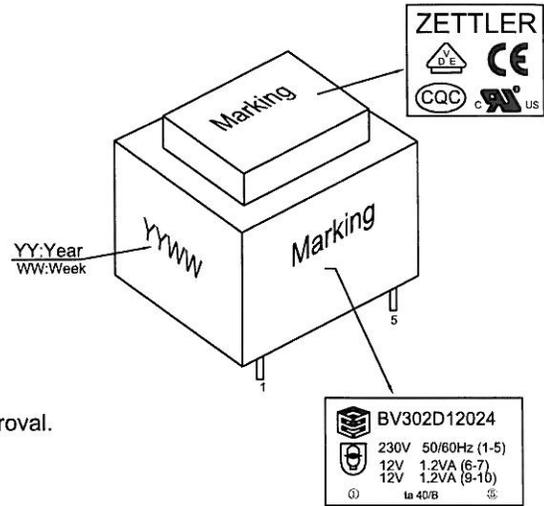
  

 <b>ZETTLER MAGNETICS</b>		MATERIAL 120° C or higher
<b>TITLE</b> EI 30-18 2.3VA		MODEL: EI 30-18 2.3VA
		SHEET: 2 OF 2

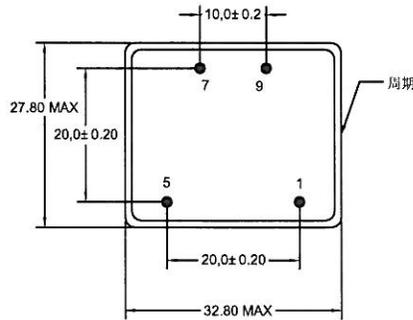
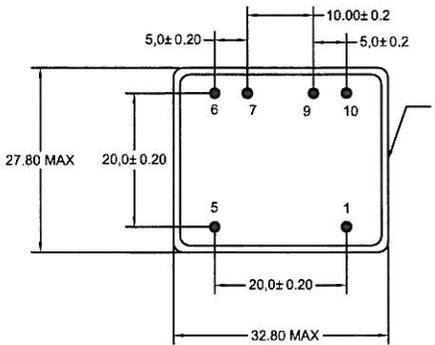
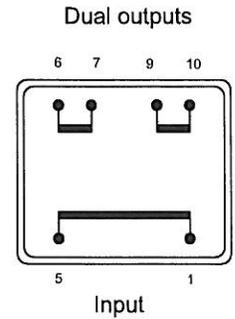
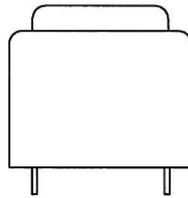
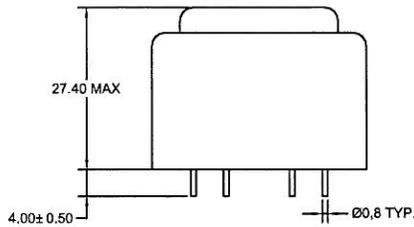
# SEALED TRANSFORMER, PCB 2.4VA EI 30-15.5 SERIES

## 1. ELECTRICAL SPECIFICATIONS:

- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 40° C MAX allowed.
- D. Insulation Resistance:
  - 100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:
  - 4200Vrms 1mA 1second @ PRI. to SEC.
- F. Approvals:
  - UL506,VDE,EN61558,EN60950
- G. When the primary is 115V input,the transformer are non CQC approval.

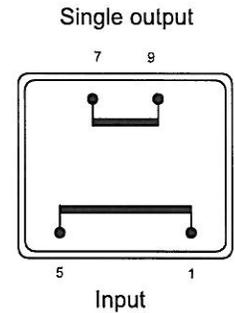


## 2. MECHANICAL SPECIFICATIONS:



Dual outputs

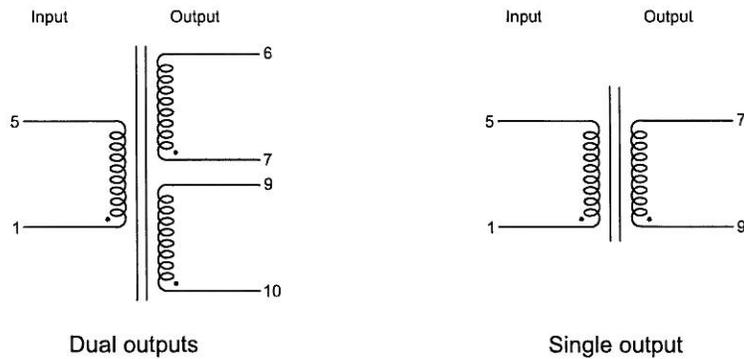
Single output



A1	Changed the hi-pot from 2800V to 4200V,for 115V primary	Winston	2008-3-18
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE	SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION
X	± 0.3	DRAWN	Janise	<b>ZETTLER MAGNETICS</b> MATERIAL 120° C or higher MODEL: EI 30-15.5 2.4VA SHEET: 1 OF 2
X.X	± 0.2	CHECKED		
X.XX	± 0.1	APPROVED		
THICKNESS	/			
REV.	A0			<b>TITLE</b> EI 30-15.5 2.4VA

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input: 115V)	Part Number (Input: 230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV301S06024	BV302S06024	6±10%		400	10.5	T 40 B	2.4
BV301S09024	BV302S09024	9±10%		267	15.5	T 40 B	2.4
BV301S12024	BV302S12024	12±10%		200	21	T 40 B	2.4
BV301S15024	BV302S15024	15±10%		160	25.3	T 40 B	2.4
BV301S18024	BV302S18024	18±10%		133	31	T 40 B	2.4
BV301S24024	BV302S24024	24±10%		100	42	T 40 B	2.4
BV301D06024	BV302D06024	6±10%	6±15%	2×200	2×10.5	T 40 B	2.4
BV301D09024	BV302D09024	9±10%	9±15%	2×133	2×15.5	T 40 B	2.4
BV301D12024	BV302D12024	12±10%	12±15%	2×100	2×21	T 40 B	2.4
BV301D15024	BV302D15024	15±10%	15±15%	2×80	2×24.5	T 40 B	2.4
BV301D18024*	BV302D18024*	18±10%	18±15%	2×67	2×31	T 40 B	2.4
BV301D24024*	BV302D24024*	24±10%	24±15%	2×50	2×42	T 40 B	2.4

\* To be noted: \*marked transformers are non VDE approved. Those transformers meet all requirement of EN61558-2-4.

TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)
X	±0.3	DRAWN	Janise	2008-1-16				
X.X	±0.2	CHECKED						
X.XX	±0.1	APPROVED						
THICKNESS	/							
REV.	A0							

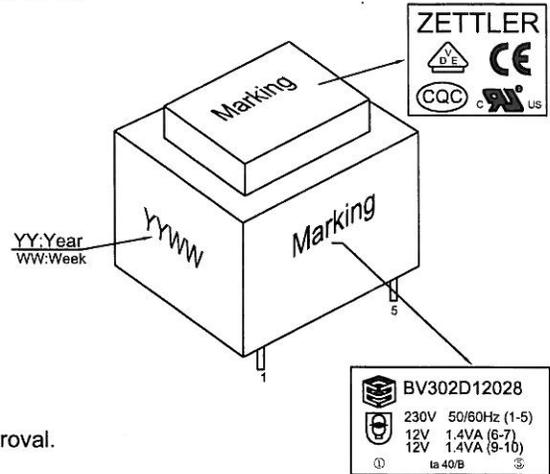
  

MODEL DESCRIPTION			
<b>ZETTLER MAGNETICS</b>		MATERIAL	120° C or higher
		MODEL:	EI 30-15.5 2.4VA
<b>TITLE</b>			
EI 30-15.5 2.4VA			
		SHEET: 2 OF 2	

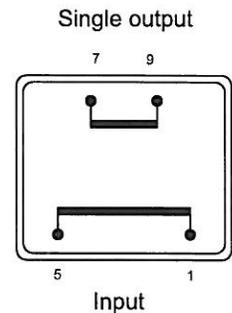
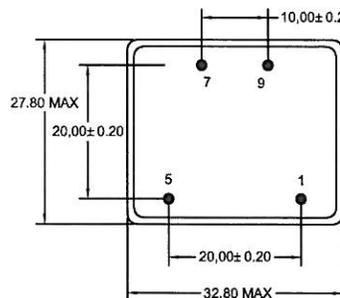
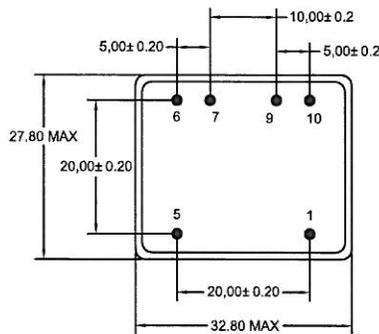
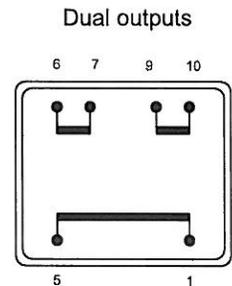
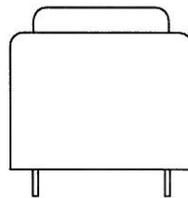
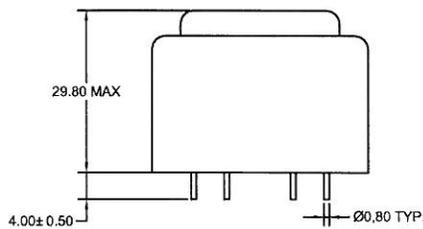
# SEALED TRANSFORMER, PCB 2.8VA EI 30-18 SERIES

## 1. ELECTRICAL SPECIFICATIONS:

- A. Input Voltage and Frequency: 115/230V @ 50/60 Hz
- B. Secondary Voltage: See Electrical Table
- C. Ambient Temperature: 40° C MAX allowed.
- D. Insulation Resistance:  
100M Ohm Min @ 500VDC PRI. to SEC.
- E. Hi-Pot:  
4200Vrms 1mA 1second @ PRI. to SEC.
- F. Approvals:  
UL506,VDE,EN61558,EN60950
- G. When the primary is 115V input,the transformer are non CQC approval.



## 2. MECHANICAL SPECIFICATIONS:



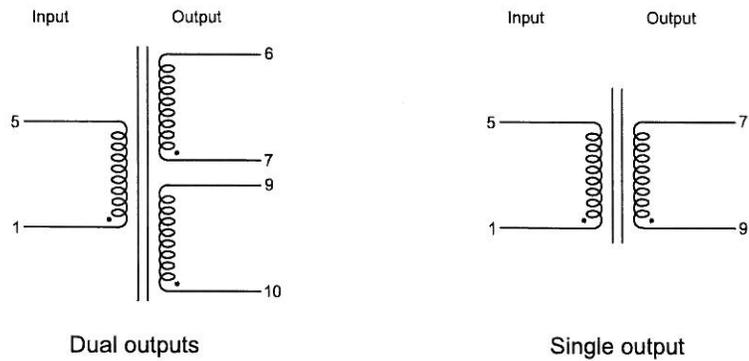
Dual outputs

Single output

A1	Changed the hi-pot from 2800V to 4200V,for 115V primary	Winston	2008-3-18
REV.	DESCRIPTION	DRAWN	DATE(M/D/Y)

TOLERANCE	SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	± 0.3	DRAWN	Janise	ZETTLER MAGNETICS	MATERIAL 120° C or higher
X.X	± 0.2	CHECKED			MODEL: EI 30-18 2.8VA
X.XX	± 0.1	APPROVED		TITLE EI 30-18 2.8VA	SHEET: 1 OF 2
THICKNESS	/				
REV.	A0				

3. SCHEMATIC DIAGRAM:



4. ELECTRICAL TABLE:

Part Number (Input: 115V)	Part Number (Input: 230V)	Secondary Voltage (V)		Secondary current (mA)	No-load Voltage (V)(max)	Ambient temperature (°C)	Rated Power (VA)
BV301S06028	BV302S06028	6±10%		467	10.5	T 40 B	2.8
BV301S09028	BV302S09028	9±10%		311	15.4	T 40 B	2.8
BV301S12028	BV302S12028	12±10%		233	21.1	T 40 B	2.8
BV301S15028	BV302S15028	15±10%		187	26.3	T 40 B	2.8
BV301S18028	BV302S18028	18±10%		156	30.9	T 40 B	2.8
BV301S24028	BV302S24028	24±10%		117	42.1	T 40 B	2.8
BV301D06028	BV302D06028	6±10%	6±15%	2×233	2X10.5	T 40 B	2.8
BV301D09028	BV302D09028	9±10%	9±15%	2×156	2X15.4	T 40 B	2.8
BV301D12028	BV302D12028	12±10%	12±15%	2×117	2X21.1	T 40 B	2.8
BV301D15028	BV302D15028	15±10%	15±15%	2×93	2X25.0	T 40 B	2.8
BV301D18028*	BV302D18028*	18±10%	18±15%	2×70	2X31.5	T 40 B	2.8
BV301D24028*	BV302D24028*	24±10%	24±15%	2×58	2X42.1	T 40 B	2.8

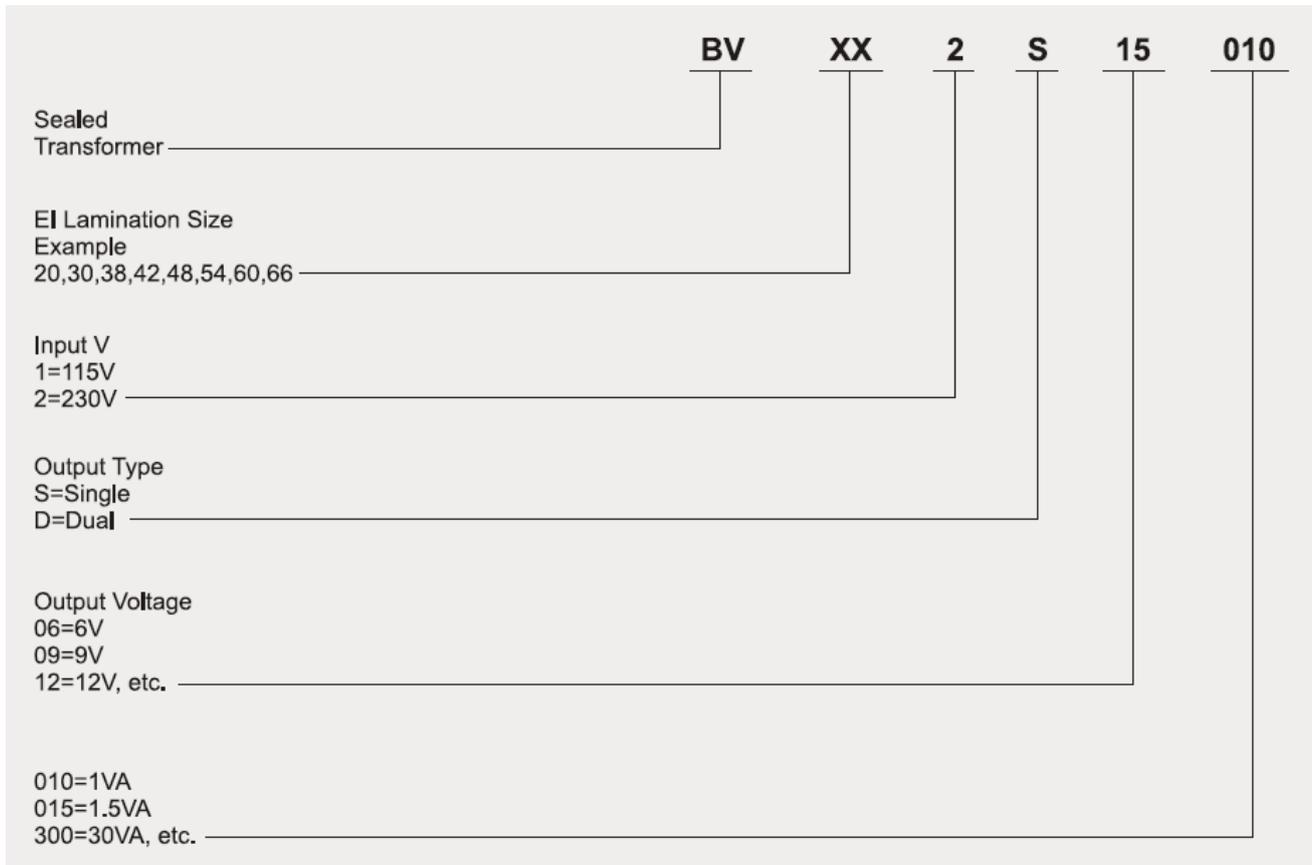
\* To be noted:\*marked transformers are non VDE approved.  
Those transformers meet all requirement of EN61558-2-4.

TOLERANCE		SCALE NOT 1:1	UNIT mm	DATE (M/D/Y)	MODEL DESCRIPTION	
X	± 0.3	DRAWN	Janise	2008-2-18	 <b>ZETTLER MAGNETICS</b>  <b>TITLE</b> EI 30-18 2.8VA	MATERIAL 120° C or higher
X.X	± 0.2	CHECKED				MODEL:
X.XX	± 0.1	APPROVED				EI 30-18 2.8VA
THICKNESS	/					
REV.	A0					SHEET: 2 OF 2

**3.2VA SEALED TRANSFORMER EI38X13.6 SERIES**



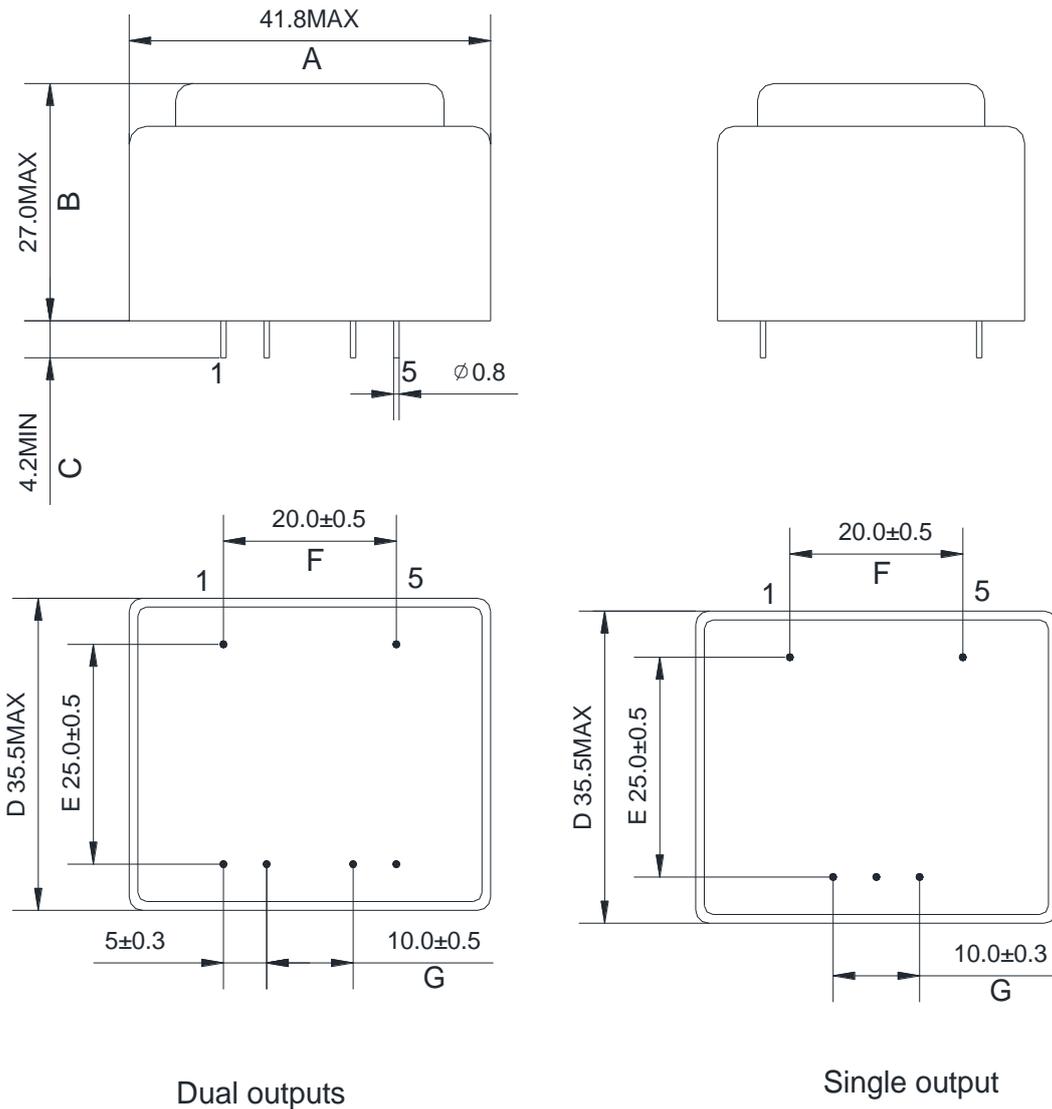
**ORDERING CODE**



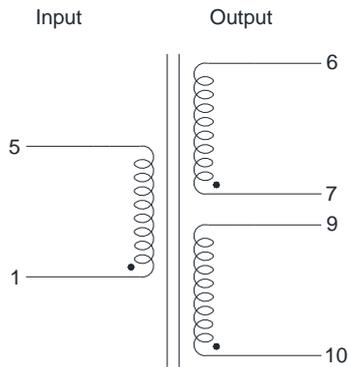
### FEATURES

- VDE CQC Approved:  
VDE file No.40032536  
CQC file No.CQC 1001054660
- Vacuum Filling
- Split Bobbin Design
- Self-Extinguishing Plastics UL94V-0
- Dielectric Strength:  
INPUT:230V 4200Vrms  
INPUT:115V 2800Vrms
- Operation Frequency:50/60Hz
- Resin Class B IEC 85  
(20,000 h Testing to IEC 216)
- 100% Production Tested

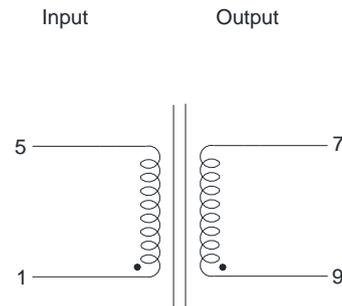
### OUTLINE DIMENSIONS



### SCHEMATIC DIAGRAM:



Dual outputs



Single output

### ELECTRONIC SPECIFICATIONS

Secondary Protection (mA)	Order Number	Input Voltage (V)	SEC. Voltage (V)	Rated Current (mA)	Rated Power (VA)	No-load Voltage (V)	Ambient TEMP. (°C)	Weight (g)	Certificate			
									VDE	UL	CQC	CE
T630	BV381S06032	115V	6	533	3.2	8.0	T70B	148	●		●	●
T400	BV381S09032	115V	9	356	3.2	12.0	T70B	148	●		●	●
T400	BV381S10032	115V	10	320	3.2	14.0	T70B	148	●		●	●
T315	BV381S12032	115V	12	267	3.2	16.0	T70B	148	●		●	●
T250	BV381S15032	115V	15	213	3.2	20.0	T70B	148	●		●	●
T200	BV381S18032	115V	18	178	3.2	24.1	T70B	148	●		●	●
T160	BV381S24032	115V	24	133	3.2	32.4	T70B	148	●		●	●
T315	BV381D06032	115V	2x6	2x267	3.2	2x8	T70B	148	●		●	●
T200	BV381D09032	115V	2x9	2x178	3.2	2x12	T70B	148	●		●	●
T200	BV381D10032	115V	2x10	2x160	3.2	2x14	T70B	148	●		●	●
T160	BV381D12032	115V	2x12	2x133	3.2	2x16	T70B	148	●		●	●
T125	BV381D15032	115V	2x15	2x107	3.2	2x20	T70B	148	●		●	●
T100	BV381D18032	115V	2x18	2x89	3.2	2x24.1	T70B	148	●		●	●
T80	BV381D24032	115V	2x24	2x67	3.2	2x32.4	T70B	148				●
T630	BV382S06032	230V	6	533	3.2	8.0	T70B	148	●		●	●
T400	BV382S09032	230V	9	356	3.2	12.0	T70B	148	●		●	●
T400	BV382S10032	230V	10	320	3.2	14.0	T70B	148	●		●	●
T315	BV382S12032	230V	12	267	3.2	16.0	T70B	148	●		●	●
T250	BV382S15032	230V	15	213	3.2	20.0	T70B	148	●		●	●
T200	BV382S18032	230V	18	178	3.2	24.1	T70B	148	●		●	●
T160	BV382S24032	230V	24	133	3.2	32.4	T70B	148	●		●	●
T315	BV382D06032	230V	2x6	2x267	3.2	2x8	T70B	148	●		●	●
T200	BV382D09032	230V	2x9	2x178	3.2	2x12	T70B	148	●		●	●
T200	BV382D10032	230V	2x10	2x160	3.2	2x14	T70B	148	●		●	●
T160	BV382D12032	230V	2x12	2x133	3.2	2x16	T70B	148	●		●	●
T125	BV382D15032	230V	2x15	2x107	3.2	2x20	T70B	148	●		●	●
T100	BV382D18032	230V	2x18	2x89	3.2	2x24.1	T70B	148	●		●	●
T80	BV382D24032	230V	2x24	2x67	3.2	2x32.4	T70B	148				●

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