

# LAMINATED Transformers



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# LAMINATED TRANSFORMERS OVERVIEW



With the addition of **era**'s encapsulated 50/60Hz transformers to the existing line of Pulse open frame transformers, Pulse now offers a complete line of laminated transformers for all your low power, linear transformer needs. With power ratings from 0.08VA to 175VA, fully encapsulated transformers, split bobbin designs, and a wide variety of domestic and international agency approvals, Pulse is truly the one stop shop for all your 50/60Hz needs.

## Advantages of Encapsulated Transformers:

- Better heat dissipation achieved through vacuum encapsulation, resulting in more output power from a smaller, more compact design.
- Vacuum encapsulation provides protection against external influences (e.g. wash operations) and mechanical stress (e.g. vibration). It also reduces the potential of noise through vibration.
- Dimensional accuracy of each transformer guaranteed by stable and controlled manufacturing processes, allowing for automatic pick and place operations.

Another new product line in the Pulse family is the Ignition Transformer, used in heating/ventilation applications for gas/oil burners. All of these new Pulse products are well known under the brand-name: **era**. The 2003 European RoHS Directive is being applied to all Pulse products .

This catalog serves as an overview for the Pulse Laminated Transformer product line. Please contact Pulse Power Applications Engineering for more information. For Pulse's complete line of Power Inductors, Transformers, Chokes and Current Sense Magnetics, please see the Switching Power Magnetics catalog.

**NOTE:** For additional listings of Pulse Power magnetics, see other Power data sheets at this URL: <http://www.pulseeng.com/products/dataSheets.aspx>

## OVERVIEW: LAMINATED TRANSFORMERS

### Mini-Line THT\* (EE20)

- Up to 0.5VA
- Temperature class  $t_a$  70°C/B

### Print-Line THT\* (EI30-EI54)

- Up to 16VA
- Temperature class  $t_a$  70°C/B (EI 30 / EI 42)
- Temperature class  $t_a$  40°C/B (EI 48 / EI 54)

### Low Profile THT\* (UI30-UI39)

- Up to 30VA
- Temperature class  $t_a$  40°C/B

### With Mounting Brackets\* (EI42-EI66)

- Up to 50VA
- Temperature class  $t_a$  70°C/B (EI 42)
- Temperature class  $t_a$  40°C/B (EI 48 / EI 66)

### Compact Power Supplies

- Up to 60VA
- Temperature class  $t_a$  40°C/B
- Din-rail Mounting

### Printed Circuit Mount

- International
- Split bobbin: single (ST) and dual primary (DST)
- Low profile
- Concentric vertical profile single (PC) and dual primary (DPC)

### Chassis Mount

- International
- Split bobbin: single (241) and dual primary (DP241)



\*Potted under vacuum, two-chamber bobbin, custom designs available upon request, THT = Through Hole.

### Ignition Transformers Spark-Line - THT

- Up to 23kV
- Ambient temperature 70°C
- Up to 2 HT connections
- Compact design
- Custom designs available



**NEW!**

For all other Pulse Inductors and Transformers, check out Pulse's new SWITCHING POWER MAGNETICS catalog for 2007. To order, see our website:

**www.pulseeng.com**

Go to Products/Literature Request

# LAMINATED TRANSFORMERS

## Type EE20 / 4 - 0.08VA










**AGENCY APPROVALS** 

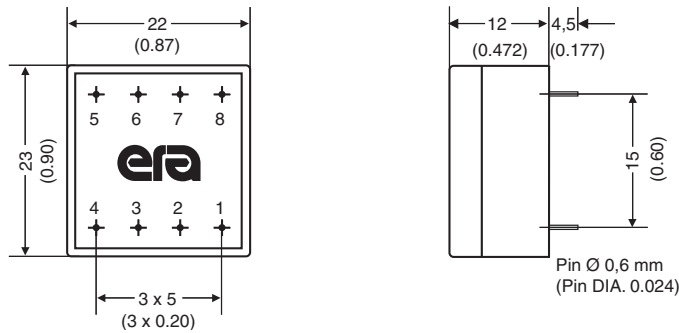
1. UL 506, File E113449 

2. UL 1585, File E175197 

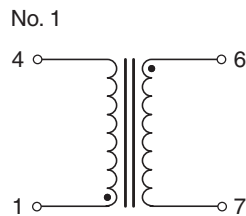
Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 13.30	9.20	1	020-5480.0	1/2
230	9 / 8.88	13.60	1	020-5481.0	1/2
230	12 / 6.67	18.30	1	020-5482.0	1/2
230	15 / 5.33	22.60	1	020-5483.0	1/2
230	18 / 4.44	27.20	1	020-5484.0	1/2
115	6 / 13.3	9.20	1	020-5470.0	1/2
115	9 / 8.88	13.60	1	020-5471.0	1/2
115	12 / 6.67	18.30	1	020-5472.0	1/2
115	15 / 5.33	22.60	1	020-5473.0	1/2
115	18 / 4.44	27.20	1	020-5474.0	1/2

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  Short-circuit-proof (where noted: 1/2/3\* under Agency Approvals)
-  Weight: 0.018kg
-  Packaging unit: 40 pieces (tray)

### Mechanical




### Schematic





# LAMINATED TRANSFORMERS


## Type EE20 / 6.1 - 0.35VA










**AGENCY APPROVALS** 

1. UL 506, File E113449 

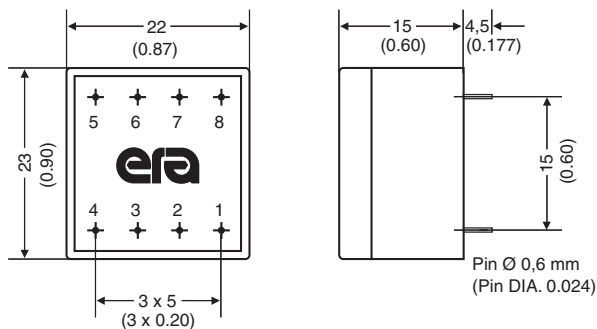
2. UL 1585, File E175197  [Class 2/3]

3. EN61558 

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  Short-circuit-proof (where noted: 1/2/3\* under Agency Approvals)
-  Weight: 0.024kg
-  Packaging unit: 40 pieces (tray)

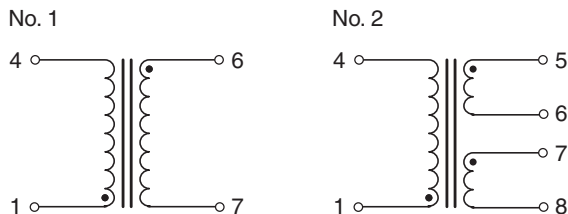
Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 58.0	10.80	1	020-5423.0	1/2/3*
230	9 / 39.0	16.50	1	020-5424.0	1/2/3*
230	12 / 29.0	21.90	1	020-5425.0	1/2/3*
230	15 / 23.0	27.00	1	020-5426.0	1/2/3*
230	18 / 19.0	31.50	1	020-5427.0	1/2/3*
230	24 / 14.0	41.70	1	020-5428.0	1/2/3*
230	2x6 / 29.0	2x10.95	2	020-5429.0	1/2/3*
230	2x9 / 19.0	2x15.60	2	020-5430.0	1/2/3*
230	2x12 / 14.0	2x20.70	2	020-5431.0	1/2/3*
230	2x15 / 12.0	2x26.00	2	020-5432.0	1
230	2x18 / 9.5	2x31.20	2	020-5433.0	1
230	2x24 / 7.0	2x41.90	2	020-5434.0	1
115	6 / 58.0	10.80	1	020-5411.0	1/2/3*
115	9 / 39.0	16.50	1	020-5412.0	1/2/3*
115	12 / 29.0	21.90	1	020-5413.0	1/2/3*
115	15 / 23.0	27.00	1	020-5414.0	1/2/3*
115	18 / 19.0	31.50	1	020-5415.0	1/2/3*
115	24 / 14.0	41.70	1	020-5416.0	1/2/3*
115	2x6 / 29.0	2x10.95	2	020-5417.0	1/2/3*
115	2x9 / 19.0	2x15.60	2	020-5418.0	1/2/3*
115	2x12 / 14.0	2x20.70	2	020-5419.0	1/2/3*
115	2x15 / 12.0	2x26.00	2	020-5420.0	1
115	2x18 / 9.5	2x31.20	2	020-5421.0	1
115	2x24 / 7.0	2x41.90	2	020-5422.0	1

### Mechanical



\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "M" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

### Schematics



# LAMINATED TRANSFORMERS

## Type EE20 / 10 - 0.50VA



**AGENCY APPROVALS**

1. UL 506, File E113449

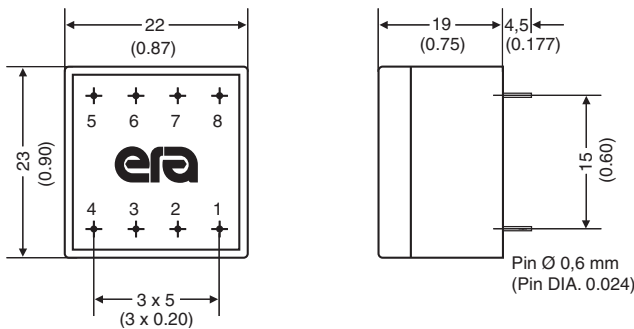
2. UL 1585, File E175197 Class 2/3

3. EN61558

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 83	8.90	1	020-5382.0	1/2/3*
230	9 / 55	13.50	1	020-5383.0	1/2/3*
230	12 / 42	19.40	1	020-5384.0	1/2/3*
230	15 / 34	24.60	1	020-5385.0	1/2/3*
230	18 / 28	29.50	1	020-5386.0	1/2/3*
230	24 / 21	39.60	1	020-5387.0	1/2/3*
230	2x6 / 42	2x9.60	2	020-5388.0	1/2/3*
230	2x9 / 28	2x15.20	2	020-5389.0	1/2/3*
230	2x12 / 21	2x19.10	2	020-5390.0	1/2/3*
230	2x15 / 16	2x23.30	2	020-5391.0	1/2/3*
230	2x18 / 14	2x29.2	2	020-5392.0	1
230	2x24 / 10	2x38.8	2	020-5393.0	1
115	6 / 83	8.90	1	020-5370.0	1/2/3*
115	9 / 55	13.50	1	020-5371.0	1/2/3*
115	12 / 42	19.40	1	020-5372.0	1/2/3*
115	15 / 34	24.60	1	020-5373.0	1/2/3*
115	18 / 28	29.50	1	020-5374.0	1/2/3*
115	24 / 21	39.60	1	020-5375.0	1/2/3*
115	2x6 / 42	2x9.60	2	020-5376.0	1/2/3*
115	2x9 / 28	2x15.20	2	020-5377.0	1/2/3*
115	2x12 / 21	2x19.10	2	020-5378.0	1/2/3*
115	2x15 / 16	2x23.30	2	020-5379.0	1/2/3*
115	2x18 / 14	2x29.20	2	020-5380.0	1
115	2x24 / 10	2x38.80	2	020-5381.0	1

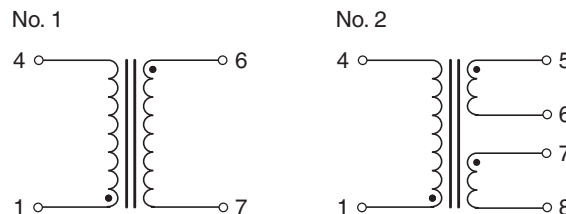
- Frequency 50/60Hz
- Potted under vacuum
- Split-bobbin
- Temperature class ta 70°C/B
- Short-circuit-proof (where noted: 1/2/3\* under Agency Approvals)
- Weight: 0.035kg
- Packaging unit: 40 pieces (tray)

### Mechanical



**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "M" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

### Schematics



# LAMINATED TRANSFORMERS


## Type EI30 / 5 - 0.5VA










**AGENCY APPROVALS** 

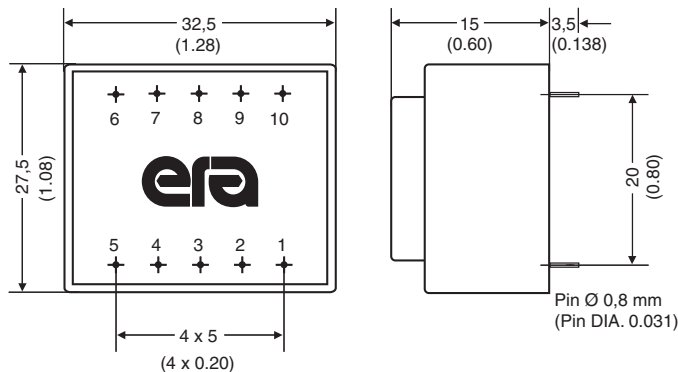
1. UL 506, File E113449 

2. UL 1585, File E175197  Class 2/3

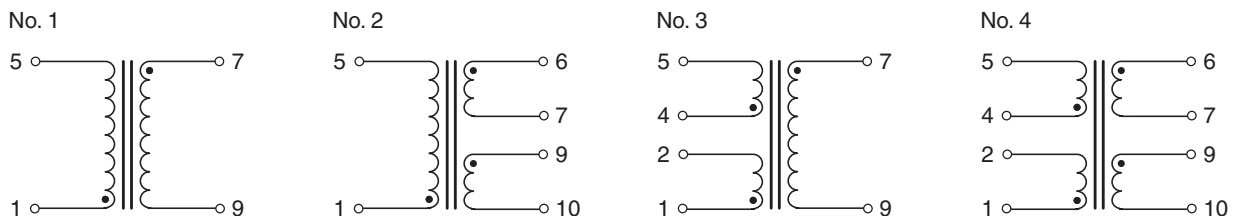
3. EN61558  

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  Short-circuit-proof (where noted: 1/2/3\* under Agency Approvals)
-  Weight: 0.06kg
-  Packaging unit: 25 pieces (tube)

### Mechanical



### Schematics



Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 83	10.40	1	030-7196.0	1/2/3*
230	9 / 55	15.60	1	030-7197.0	1/2/3*
230	12 / 42	20.80	1	030-7198.0	1/2/3*
230	15 / 33	25.40	1	030-7199.0	1/2/3*
230	18 / 28	29.50	1	030-7200.0	1/2/3*
230	24 / 20	38.10	1	030-7201.0	1/2/3*
230	2x6 / 42	2x10.60	2	030-7202.0	1/2/3*
230	2x9 / 28	2x15.50	2	030-7203.0	1/2/3*
230	2x12 / 20	2x19.70	2	030-7204.0	1/2/3*
230	2x15 / 16	2x24.80	2	030-7205.0	1/2/3*
230	2x18 / 13	2x29.80	2	030-7206.0	1
230	2x24 / 10	2x39.10	2	030-7207.0	1
115	6 / 83	10.40	1	030-7184.0	1/2/3*
115	9 / 55	15.60	1	030-7185.0	1/2/3*
115	12 / 42	20.80	1	030-7186.0	1/2/3*
115	15 / 33	25.40	1	030-7187.0	1/2/3*
115	18 / 28	29.50	1	030-7188.0	1/2/3*
115	24 / 20	38.10	1	030-7189.0	1/2/3*
115	2x6 / 42	2x10.60	2	030-7190.0	1/2/3*
115	2x9 / 28	2x15.50	2	030-7191.0	1/2/3*
115	2x12 / 20	2x19.70	2	030-7192.0	1/2/3*
115	2x15 / 16	2x24.80	2	030-7193.0	1/2/3*
115	2x18 / 13	2x29.80	2	030-7194.0	1
115	2x24 / 10	2x39.10	2	030-7195.0	1
2x115	6 / 83	10.40	3	030-5325.0	1/2/3*
2x115	9 / 55	15.60	3	030-5328.0	1/2/3*
2x115	12 / 42	20.80	3	030-5331.0	1/2/3*
2x115	15 / 33	25.40	3	030-5334.0	1/2/3*
2x115	18 / 28	29.50	3	030-5337.0	1/2/3*
2x115	24 / 20	38.10	3	030-5343.0	1/2/3*
2x115	2x6 / 42	2x10.60	4	030-5348.0	1/2/3*
2x115	2x9 / 28	2x15.50	4	030-5351.0	1/2/3*
2x115	2x12 / 20	2x19.70	4	030-5354.0	1/2/3*
2x115	2x15 / 16	2x24.80	4	030-5357.0	1/2/3*
2x115	2x18 / 13	2x29.80	4	030-5360.0	1
2x115	2x24 / 10	2x39.10	4	030-5366.0	1


\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "P" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.





# LAMINATED TRANSFORMERS



## Type EI30 / 10.5 - 1.0VA










**AGENCY APPROVALS** 

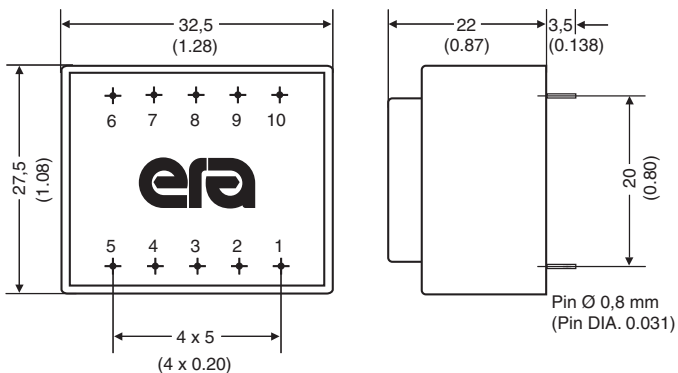
1. UL 506, File E113449  us

2. UL 1585, File E175197  Class 2/3

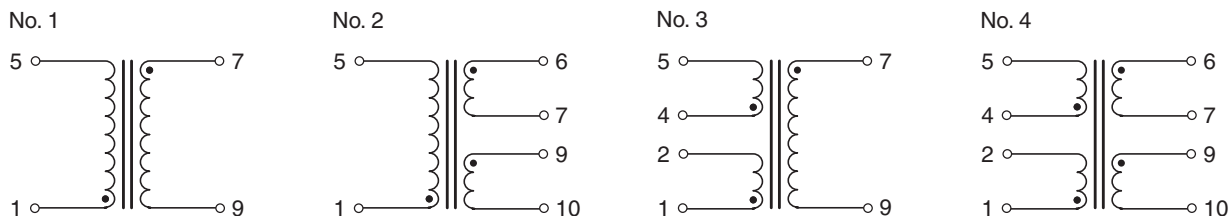
3. EN61558  

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  Short-circuit-proof (where noted: 1/2/3\* under Agency Approvals)
-  Weight: 0.07kg
-  Packaging unit: 35 pieces (tray)  
25 pieces (tube)

### Mechanical



### Schematics



Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 166	8.50	1	030-7232.0	1/2/3*
230	9 / 111	12.45	1	030-7233.0	1/2/3*
230	12 / 84	16.30	1	030-7234.0	1/2/3*
230	15 / 66	20.20	1	030-7235.0	1/2/3*
230	18 / 55	24.20	1	030-7236.0	1/2/3*
230	24 / 42	32.20	1	030-7237.0	1/2/3*
230	2x6 / 84	2x8.30	2	030-7238.0	1/2/3*
230	2x9 / 55	2x11.90	2	030-7239.0	1/2/3*
230	2x12 / 42	2x16.20	2	030-7240.0	1/2/3*
230	2x15 / 33	2x20.40	2	030-7241.0	1/2/3*
230	2x18 / 28	2x24.20	2	030-7242.0	1
230	2x24 / 21	2x32.10	2	030-7243.0	1
115	6 / 166	8.50	1	030-7220.0	1/2/3*
115	9 / 111	12.45	1	030-7221.0	1/2/3*
115	12 / 84	16.30	1	030-7222.0	1/2/3*
115	15 / 66	20.20	1	030-7223.0	1/2/3*
115	18 / 55	24.20	1	030-7224.0	1/2/3*
115	24 / 42	32.20	1	030-7225.0	1/2/3*
115	2x6 / 84	2x8.30	2	030-7226.0	1/2/3*
115	2x9 / 55	2x11.90	2	030-7227.0	1/2/3*
115	2x12 / 42	2x16.20	2	030-7228.0	1/2/3*
115	2x15 / 33	2x20.40	2	030-7229.0	1/2/3*
115	2x18 / 28	2x24.20	2	030-7230.0	1
115	2x24 / 21	2x32.10	2	030-7231.0	1
2x115	6 / 166	8.50	3	030-5693.0	1/2/3*
2x115	9 / 111	12.45	3	030-5696.0	1/2/3*
2x115	12 / 84	16.30	3	030-5699.0	1/2/3*
2x115	15 / 66	20.20	3	030-5702.0	1/2/3*
2x115	18 / 55	24.20	3	030-5705.0	1/2/3*
2x115	24 / 42	32.20	3	030-5711.0	1/2/3*
2x115	2x6 / 84	2x8.30	4	030-5716.0	1/2/3*
2x115	2x9 / 55	2x11.90	4	030-5719.0	1/2/3*
2x115	2x12 / 42	2x16.20	4	030-5722.0	1/2/3*
2x115	2x15 / 33	2x20.40	4	030-5725.0	1/2/3*
2x115	2x18 / 28	2x24.20	4	030-5728.0	1
2x115	2x24 / 21	2x32.10	4	030-5734.0	1


**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "R" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**




# LAMINATED TRANSFORMERS



## Type EI30 / 12.5 - 1.2VA










**AGENCY APPROVALS** 

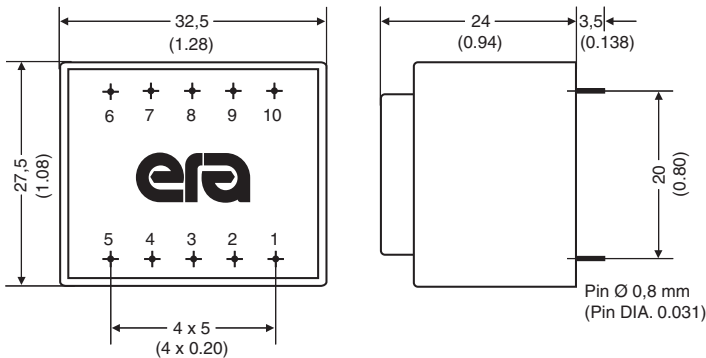
1. UL 506, File E113449  US

2. UL 1585, File E175197 [Class 2/3]

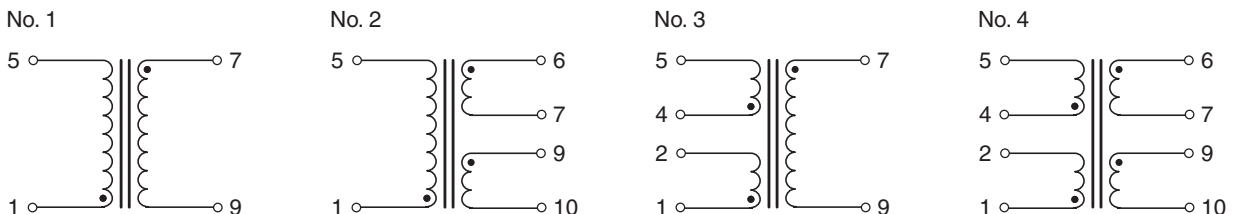
3. EN61558  

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  Short-circuit-proof (where noted: 1/2/3\* under Agency Approvals)
-  Weight: 0.08kg
-  Packaging unit: 25 pieces (tube)

### Mechanical



### Schematics




Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 200	8.70	1	030-7268.0	1/2/3*
230	9 / 133	12.30	1	030-7269.0	1/2/3*
230	12 / 100	16.60	1	030-7270.0	1/2/3*
230	15 / 80	21.20	1	030-7271.0	1/2/3*
230	18 / 66	27.80	1	030-7272.0	1/2/3*
230	24 / 50	34.50	1	030-7273.0	1/2/3*
230	2x6 / 100	2x8.70	2	030-7274.0	1/2/3*
230	2x9 / 66	2x12.30	2	030-7275.0	1/2/3*
230	2x12 / 50	2x16.60	2	030-7276.0	1/2/3*
230	2x15 / 40	2x20.60	2	030-7277.0	1/2/3*
230	2x18 / 33	2x25.80	2	030-7278.0	1
230	2x24 / 25	2x32.90	2	030-7279.0	1
115	6 / 200	8.70	1	030-7256.0	1/2/3*
115	9 / 133	12.30	1	030-7257.0	1/2/3*
115	12 / 100	16.60	1	030-7258.0	1/2/3*
115	15 / 80	21.20	1	030-7259.0	1/2/3*
115	18 / 66	27.80	1	030-7260.0	1/2/3*
115	24 / 50	34.50	1	030-7261.0	1/2/3*
115	2x6 / 100	2x8.70	2	030-7262.0	1/2/3*
115	2x9 / 66	2x12.30	2	030-7263.0	1/2/3*
115	2x12 / 50	2x16.60	2	030-7264.0	1/2/3*
115	2x15 / 40	2x20.60	2	030-7265.0	1/2/3*
115	2x18 / 33	2x25.80	2	030-7266.0	1
115	2x24 / 25	2x32.90	2	030-7267.0	1
2x115	6 / 200	8.95	3	030-6061.0	1/2/3*
2x115	9 / 133	12.90	3	030-6064.0	1/2/3*
2x115	12 / 100	16.70	3	030-6067.0	1/2/3*
2x115	15 / 80	24.70	3	030-6070.0	1/2/3*
2x115	18 / 66	29.50	3	030-6073.0	1/2/3*
2x115	24 / 50	35.80	3	030-6079.0	1/2/3*
2x115	2x6 / 100	2x9.15	4	030-6084.0	1/2/3*
2x115	2x9 / 66	2x13.70	4	030-6087.0	1/2/3*
2x115	2x12 / 50	2x17.30	4	030-6090.0	1/2/3*
2x115	2x15 / 40	2x24.70	4	030-6093.0	1/2/3*
2x115	2x18 / 33	2x29.40	4	030-6096.0	1
2x115	2x24 / 25	2x35.80	4	030-6102.0	1


\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "V" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.


# LAMINATED TRANSFORMERS



## Type EI30 / 12.5 - 1.5VA










**AGENCY APPROVALS** 

1. UL 506, File E113449 

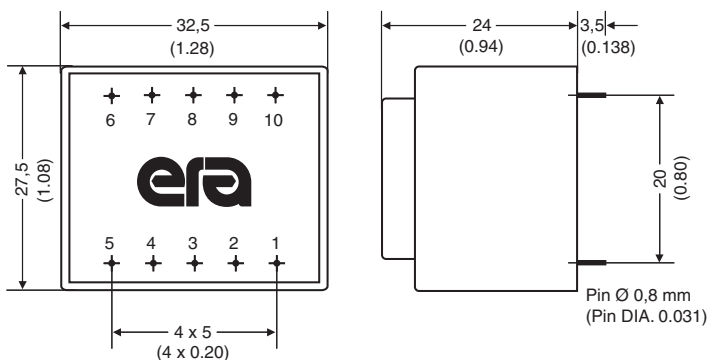
2. UL 1585, File E175197 

3. EN61558  

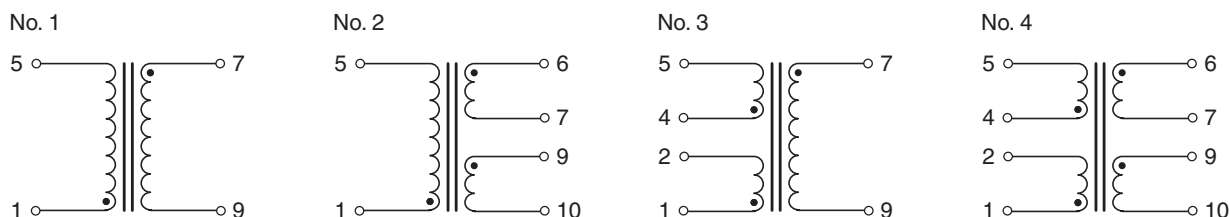
-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  Short-circuit-proof (where noted: 1/2/3\* under Agency Approvals)
-  Weight: 0.08kg
-  Packaging unit: 25 pieces (tube)

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 250	8.95	1	030-7161.0	1/2/3*
230	9 / 166	12.90	1	030-7162.0	1/2/3*
230	12 / 125	16.70	1	030-7139.0	1/2/3*
230	15 / 100	24.70	1	030-7163.0	1/2/3*
230	18 / 83	29.50	1	030-7164.0	1/2/3*
230	24 / 62	35.80	1	030-7165.0	1/2/3*
230	2x6 / 125	2x9.15	2	030-7166.0	1/2/3*
230	2x9 / 83	2x13.70	2	030-7167.0	1/2/3*
230	2x12 / 62	2x17.30	2	030-7168.0	1/2/3*
230	2x15 / 50	2x24.70	2	030-7169.0	1/2/3*
230	2x18 / 41	2x29.40	2	030-7170.0	1
230	2x24 / 31	2x35.80	2	030-7171.0	1
115	6 / 250	8.95	1	030-7150.0	1/2/3*
115	9 / 166	12.90	1	030-7151.0	1/2/3*
115	12 / 125	16.70	1	030-7136.0	1/2/3*
115	15 / 100	24.70	1	030-7152.0	1/2/3*
115	18 / 83	29.50	1	030-7153.0	1/2/3*
115	24 / 62	35.80	1	030-7154.0	1/2/3*
115	2x6 / 125	2x9.15	2	030-7155.0	1/2/3*
115	2x9 / 83	2x13.70	2	030-7156.0	1/2/3*
115	2x12 / 62	2x17.30	2	030-7157.0	1/2/3*
115	2x15 / 50	2x24.70	2	030-7158.0	1/2/3*
115	2x18 / 41	2x29.40	2	030-7159.0	1
115	2x24 / 31	2x35.80	2	030-7160.0	1
2x115	6 / 250	8.95	3	030-7711.0	1/2/3*
2x115	9 / 166	12.90	3	030-7712.0	1/2/3*
2x115	12 / 125	16.70	3	030-7713.0	1/2/3*
2x115	15 / 100	24.70	3	030-7714.0	1/2/3*
2x115	18 / 83	29.50	3	030-7715.0	1/2/3*
2x115	24 / 62	35.80	3	030-7716.0	1/2/3*
2x115	2x6 / 125	2x9.15	4	030-7717.0	1/2/3*
2x115	2x9 / 83	2x13.70	4	030-7718.0	1/2/3*
2x115	2x12 / 62	2x17.30	4	030-7719.0	1/2/3*
2x115	2x15 / 50	2x24.70	4	030-7720.0	1/2/3*
2x115	2x18 / 41	2x29.40	4	030-7721.0	1
2x115	2x24 / 31	2x35.80	4	030-7722.0	1

### Mechanical



### Schematics



**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "N" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

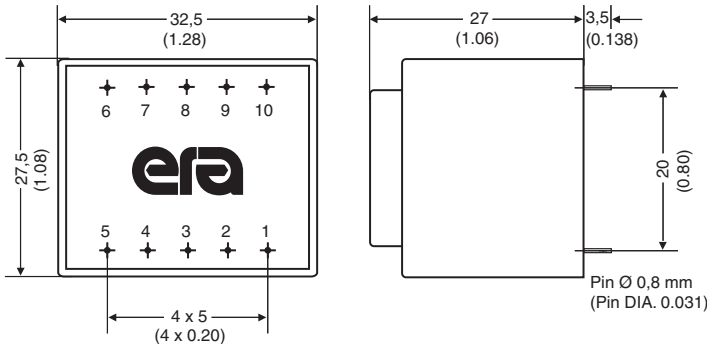
# LAMINATED TRANSFORMERS

## Type EI30 / 15.5 - 2.0VA

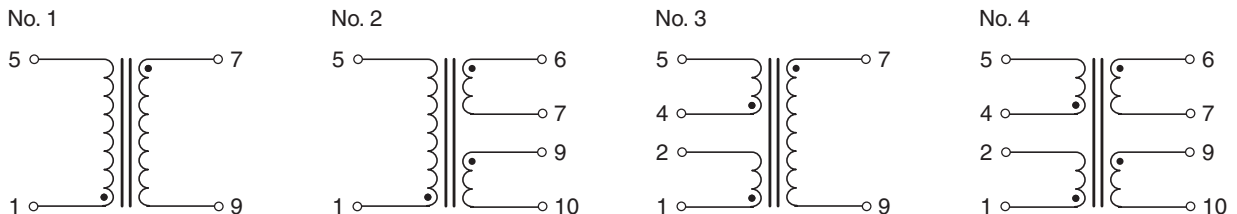


- ⦿ Frequency 50/60Hz
- ⦿ Potted under vacuum
- ⦿ Split-bobbin
- ⦿ Temperature class ta 70°C/B
- ⦿ VDE rated as inherently short-circuit proof
- ⦿ Weight: 0.10kg
- ⦿ Packaging unit: 25 pieces (tube)

### Mechanical



### Schematics



Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 333	10.50	1	030-7304.0	1/3*
230	9 / 222	14.60	1	030-7305.0	1/3*
230	12 / 166	20.00	1	030-7306.0	1/3*
230	15 / 133	26.00	1	030-7307.0	1/3*
230	18 / 111	29.60	1	030-7308.0	1/3*
230	24 / 83	37.20	1	030-7309.0	1/3*
230	2x6 / 166	2x8.70	2	030-7310.0	1/3*
230	2x9 / 111	2x14.60	2	030-7311.0	1/3*
230	2x12 / 83	2x19.45	2	030-7312.0	1/3*
230	2x15 / 66	2x24.10	2	030-7313.0	1/3*
230	2x18 / 55	2x29.10	2	030-7314.0	1
230	2x24 / 42	2x36.50	2	030-7315.0	1
115	6 / 333	10.50	1	030-7292.0	1/3*
115	9 / 222	14.60	1	030-7293.0	1/3*
115	12 / 166	20.00	1	030-7294.0	1/3*
115	15 / 133	26.00	1	030-7295.0	1/3*
115	18 / 111	29.60	1	030-7296.0	1/3*
115	24 / 83	37.20	1	030-7297.0	1/3*
115	2x6 / 166	2x8.70	2	030-7298.0	1/3*
115	2x9 / 111	2x14.60	2	030-7299.0	1/3*
115	2x12 / 83	2x19.45	2	030-7300.0	1/3*
115	2x15 / 66	2x24.10	2	030-7301.0	1/3*
115	2x18 / 55	2x29.10	2	030-7302.0	1
115	2x24 / 42	2x36.50	2	030-7303.0	1
2x115	6 / 333	10.50	3	030-6429.0	1/3*
2x115	9 / 222	14.60	3	030-6432.0	1/3*
2x115	12 / 166	20.00	3	030-6435.0	1/3*
2x115	15 / 133	26.00	3	030-6438.0	1/3*
2x115	18 / 111	29.60	3	030-6441.0	1/3*
2x115	24 / 83	37.20	3	030-6447.0	1/3*
2x115	2x6 / 166	2x8.70	4	030-6452.0	1/3*
2x115	2x9 / 111	2x14.60	4	030-6455.0	1/3*
2x115	2x12 / 83	2x19.45	4	030-6458.0	1/3*
2x115	2x15 / 66	2x24.10	4	030-6461.0	1/3*
2x115	2x18 / 55	2x29.10	4	030-6464.0	1
2x115	2x24 / 42	2x36.50	4	030-6470.0	1

\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "S" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

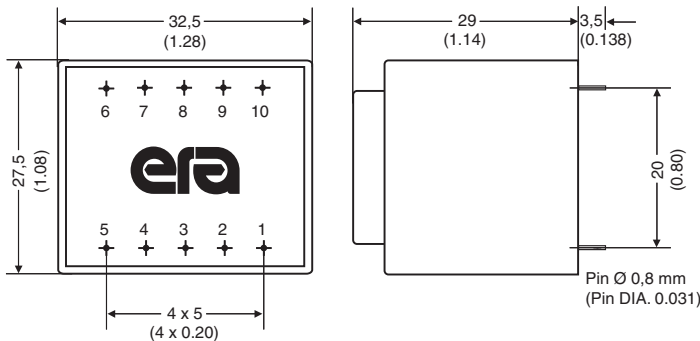
# LAMINATED TRANSFORMERS

## Type EI30 / 18.0 - 2.3VA

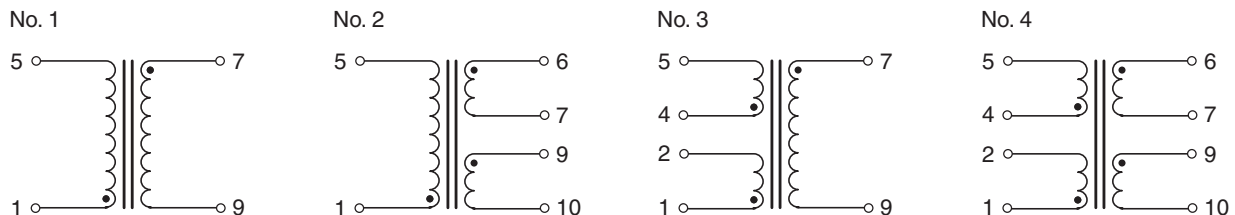


- ⊕ Frequency 50/60Hz
- ⊕ Potted under vacuum
- ⊕ Split-bobbin
- ⊕ Temperature class ta 70°C/B
- ⊕ VDE rated as inherently short-circuit proof
- ⊕ Weight: 0.112kg
- ⊕ Packaging unit: 25 pieces (tube)

### Mechanical



### Schematics



Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 384	10.00	1	030-7340.0	1/3*
230	9 / 256	13.80	1	030-7341.0	1/3*
230	12 / 192	18.60	1	030-7342.0	1/3*
230	15 / 154	23.80	1	030-7343.0	1/3*
230	18 / 128	27.80	1	030-7344.0	1/3*
230	24 / 96	34.70	1	030-7345.0	1/3*
230	2x6 / 192	2x9.90	2	030-7346.0	1/3*
230	2x9 / 128	2x14.00	2	030-7347.0	1/3*
230	2x12 / 96	2x17.50	2	030-7348.0	1/3*
230	2x15 / 77	2x24.40	2	030-7349.0	1/3*
230	2x18 / 64	2x29.30	2	030-7350.0	1
230	2x24 / 48	2x35.80	2	030-7351.0	1
115	6 / 384	10.00	1	030-7328.0	1/3*
115	9 / 256	13.80	1	030-7329.0	1/3*
115	12 / 192	18.60	1	030-7330.0	1/3*
115	15 / 154	23.80	1	030-7331.0	1/3*
115	18 / 128	27.80	1	030-7332.0	1/3*
115	24 / 96	34.70	1	030-7333.0	1/3*
115	2x6 / 192	2x9.90	2	030-7334.0	1/3*
115	2x9 / 128	2x14.00	2	030-7335.0	1/3*
115	2x12 / 96	2x17.50	2	030-7336.0	1/3*
115	2x15 / 77	2x24.40	2	030-7337.0	1/3*
115	2x18 / 64	2x29.30	2	030-7338.0	1
115	2x24 / 48	2x35.80	2	030-7339.0	1
2x115	6 / 384	10.00	3	030-6797.0	1/3*
2x115	9 / 256	13.80	3	030-6800.0	1/3*
2x115	12 / 192	18.60	3	030-6803.0	1/3*
2x115	15 / 154	23.80	3	030-6806.0	1/3*
2x115	18 / 128	27.80	3	030-6809.0	1/3*
2x115	24 / 96	34.70	3	030-6815.0	1/3*
2x115	2x6 / 192	2x9.90	4	030-6820.0	1/3*
2x115	2x9 / 128	2x14.00	4	030-6823.0	1/3*
2x115	2x12 / 96	2x17.50	4	030-6826.0	1/3*
2x115	2x15 / 77	2x24.40	4	030-6829.0	1/3*
2x115	2x18 / 64	2x29.30	4	030-6832.0	1
2x115	2x24 / 48	2x35.80	4	030-6838.0	1

\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "T" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

# LAMINATED TRANSFORMERS








## Type EI30 / 23.0 - 2.8VA



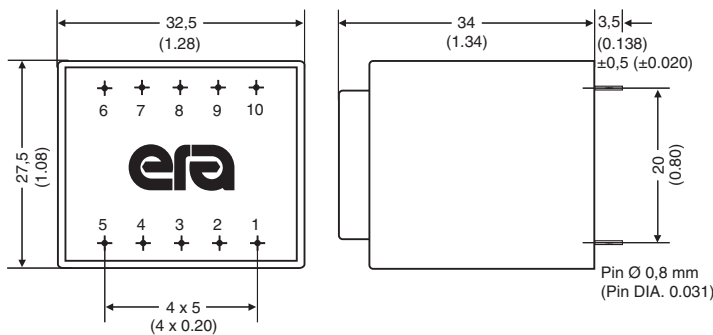
**AGENCY APPROVALS** 

1. UL 506, File E113449  us

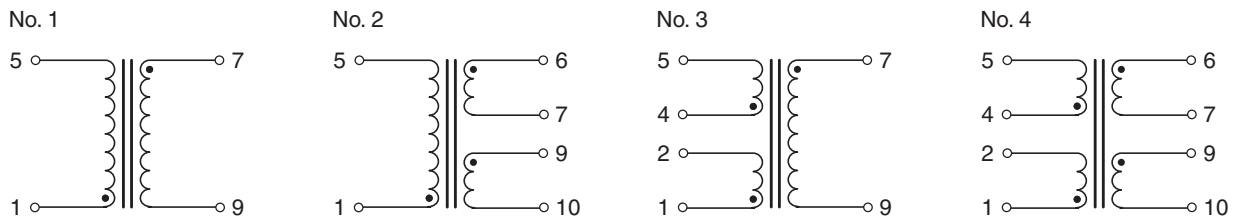
3. EN61558  

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  VDE rated as inherently short-circuit proof
-  Weight: 0.134kg
-  Packaging unit: 25 pieces (tube)

### Mechanical



### Schematics



Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 466	10.70	1	030-7584.0	1/3*
230	9 / 311	14.80	1	030-7585.0	1/3*
230	12 / 233	20.80	1	030-7586.0	1/3*
230	15 / 186	24.00	1	030-7587.0	1/3*
230	18 / 155	29.90	1	030-7588.0	1/3*
230	24 / 116	38.80	1	030-7589.0	1/3*
230	2x6 / 233	2x10.70	2	030-7590.0	1/3*
230	2x9 / 155	2x16.00	2	030-7591.0	1/3*
230	2x12 / 116	2x20.40	2	030-7592.0	1/3*
230	2x15 / 93	2x25.00	2	030-7593.0	1/3*
230	2x18 / 77	2x30.50	2	030-7594.0	1
230	2x24 / 58	2x38.70	2	030-7595.0	1
115	6 / 466	10.70	1	030-7596.0	1/3*
115	9 / 311	14.80	1	030-7597.0	1/3*
115	12 / 233	20.80	1	030-7598.0	1/3*
115	15 / 186	24.00	1	030-7599.0	1/3*
115	18 / 155	29.90	1	030-7600.0	1/3*
115	24 / 116	38.80	1	030-7601.0	1/3*
115	2x6 / 233	2x10.70	2	030-7602.0	1/3*
115	2x9 / 155	2x16.00	2	030-7603.0	1/3*
115	2x12 / 116	2x20.40	2	030-7604.0	1/3*
115	2x15 / 93	2x25.00	2	030-7605.0	1/3*
115	2x18 / 77	2x30.50	2	030-7606.0	1
115	2x24 / 58	2x38.70	2	030-7607.0	1
2x115	6 / 466	10.70	3	030-7723.0	1/3*
2x115	9 / 311	14.80	3	030-7724.0	1/3*
2x115	12 / 233	20.80	3	030-7725.0	1/3*
2x115	15 / 186	24.00	3	030-7726.0	1/3*
2x115	18 / 155	29.90	3	030-7727.0	1/3*
2x115	24 / 116	38.80	3	030-7728.0	1/3*
2x115	2x6 / 233	2x10.70	4	030-7729.0	1/3*
2x115	2x9 / 155	2x16.00	4	030-7730.0	1/3*
2x115	2x12 / 116	2x20.40	4	030-7731.0	1/3*
2x115	2x15 / 93	2x25.00	4	030-7732.0	1/3*
2x115	2x18 / 77	2x30.50	4	030-7733.0	1
2x115	2x24 / 58	2x38.70	4	030-7734.0	1

\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "U" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are **not** part of the orderable Part Number.

# LAMINATED TRANSFORMERS







## Type EI38 / 13.6 - 3.2VA



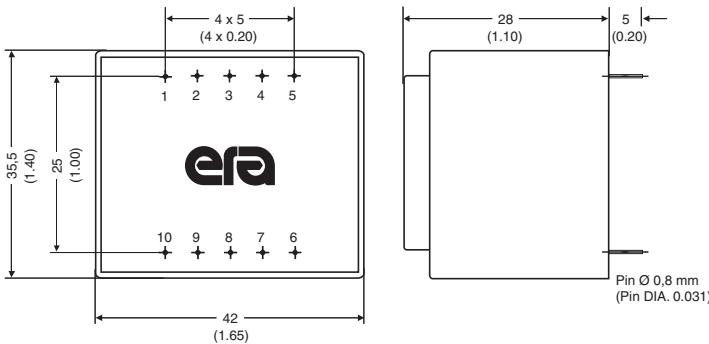
**AGENCY APPROVALS** 

1. UL 506, File E113449 

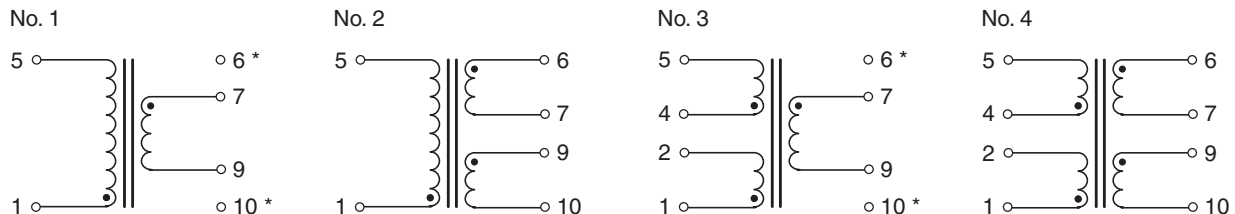
3. EN61558 

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  Weight: 0.155kg
-  Packaging unit: 25 pieces (tray)

### Mechanical



### Schematics



\* Empty-Pin

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 534	9.20	1	038-5187.0	1/3*
230	9 / 356	13.95	1	038-5190.0	1/3*
230	12 / 267	17.80	1	038-5193.0	1/3*
230	15 / 214	22.20	1	038-5196.0	1/3*
230	18 / 178	27.00	1	038-5199.0	1/3*
230	24 / 134	35.00	1	038-5205.0	1/3*
230	2x6 / 267	2x8.90	2	038-5210.0	1/3*
230	2x9 / 178	2x13.40	2	038-5213.0	1/3*
230	2x12 / 134	2x17.50	2	038-5216.0	1/3*
230	2x15 / 107	2x22.30	2	038-5219.0	1/3*
230	2x18 / 89	2x25.80	2	038-5222.0	1
230	2x24 / 67	2x35.90	2	038-5228.0	1
115	6 / 534	9.20	1	038-5049.0	1/3*
115	9 / 356	13.95	1	038-5052.0	1/3*
115	12 / 267	17.80	1	038-5055.0	1/3*
115	15 / 214	22.20	1	038-5058.0	1/3*
115	18 / 178	27.00	1	038-5061.0	1/3*
115	24 / 134	35.00	1	038-5067.0	1/3*
115	2x6 / 267	2x8.90	2	038-5072.0	1/3*
115	2x9 / 178	2x13.40	2	038-5075.0	1/3*
115	2x12 / 134	2x17.50	2	038-5078.0	1/3*
115	2x15 / 107	2x22.30	2	038-5081.0	1/3*
115	2x18 / 89	2x25.80	2	038-5084.0	1
115	2x24 / 67	2x35.90	2	038-5090.0	1
2x115	6 / 534	9.20	3	038-5325.0	1/3*
2x115	9 / 356	13.95	3	038-5328.0	1/3*
2x115	12 / 267	17.80	3	038-5331.0	1/3*
2x115	15 / 214	22.20	3	038-5334.0	1/3*
2x115	18 / 178	27.00	3	038-5337.0	1/3*
2x115	24 / 134	35.00	3	038-5343.0	1/3*
2x115	2x6 / 267	2x8.90	4	038-5348.0	1/3*
2x115	2x9 / 178	2x13.40	4	038-5351.0	1/3*
2x115	2x12 / 134	2x17.50	4	038-5354.0	1/3*
2x115	2x15 / 107	2x22.30	4	038-5357.0	1/3*
2x115	2x18 / 89	2x25.80	4	038-5360.0	1
2x115	2x24 / 67	2x35.90	4	038-5366.0	1

\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "F" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.



# LAMINATED TRANSFORMERS

## Type EI38 / 13.6 - 4.0VA



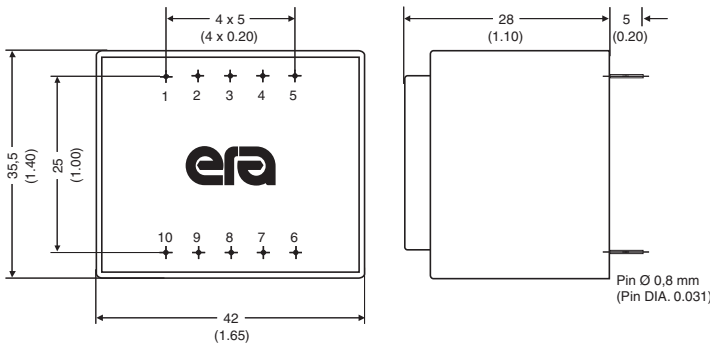
**AGENCY APPROVALS** CE

1. UL 506, File E113449 **UL** us

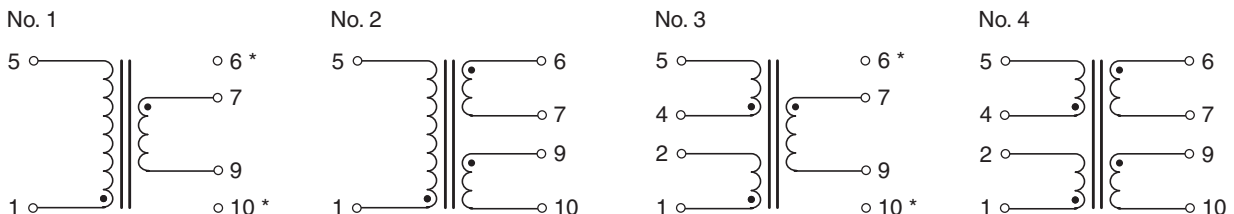
3. EN61558 **IEC** 10 **VDE**

- Frequency 50/60Hz
- Potted under vacuum
- Split-bobbin
- Temperature class ta 70°C/B
- Weight: 0.155kg
- Packaging unit: 25 pieces (tray)

### Mechanical



### Schematics



\* Empty-Pin

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 667	8.50	1	038-5412.0	1/3*
230	9 / 444	12.60	1	038-5413.0	1/3*
230	12 / 333	16.40	1	038-5414.0	1/3*
230	15 / 267	20.90	1	038-5415.0	1/3*
230	18 / 222	24.30	1	038-5416.0	1/3*
230	24 / 167	32.80	1	038-5417.0	1/3*
230	2x6 / 333	2x8.50	2	038-5418.0	1/3*
230	2x9 / 222	2x12.50	2	038-5419.0	1/3*
230	2x12 / 167	2x16.40	2	038-5420.0	1/3*
230	2x15 / 133	2x21.20	2	038-5421.0	1/3*
230	2x18 / 111	2x24.50	2	038-5422.0	1/3*
230	2x24 / 83	2x32.70	2	038-5423.0	1
115	6 / 667	8.50	1	038-5400.0	1/3*
115	9 / 444	12.60	1	038-5401.0	1/3*
115	12 / 333	16.40	1	038-5402.0	1/3*
115	15 / 267	20.90	1	038-5403.0	1/3*
115	18 / 222	24.30	1	038-5404.0	1/3*
115	24 / 167	32.80	1	038-5405.0	1/3*
115	2x6 / 333	2x8.50	2	038-5406.0	1/3*
115	2x9 / 222	2x12.50	2	038-5407.0	1/3*
115	2x12 / 167	2x16.40	2	038-5408.0	1/3*
115	2x15 / 133	2x21.20	2	038-5409.0	1/3*
115	2x18 / 111	2x24.50	2	038-5410.0	1/3*
115	2x24 / 83	2x32.70	2	038-5411.0	1
2x115	6 / 667	8.50	3	038-5424.0	1/3*
2x115	9 / 444	12.60	3	038-5425.0	1/3*
2x115	12 / 333	16.40	3	038-5426.0	1/3*
2x115	15 / 267	20.90	3	038-5427.0	1/3*
2x115	18 / 222	24.30	3	038-5428.0	1/3*
2x115	24 / 167	32.80	3	038-5429.0	1/3*
2x115	2x6 / 333	2x8.50	4	038-5430.0	1/3*
2x115	2x9 / 222	2x12.50	4	038-5431.0	1/3*
2x115	2x12 / 167	2x16.40	4	038-5432.0	1/3*
2x115	2x15 / 133	2x21.20	4	038-5433.0	1/3*
2x115	2x18 / 111	2x24.50	4	038-5434.0	1/3*
2x115	2x24 / 83	2x32.70	4	038-5435.0	1

\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "F" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.



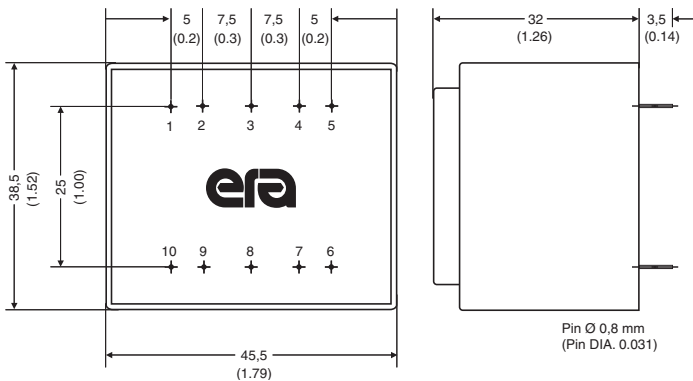
# LAMINATED TRANSFORMERS

## Type EI42 / 14.8 - 5.0VA

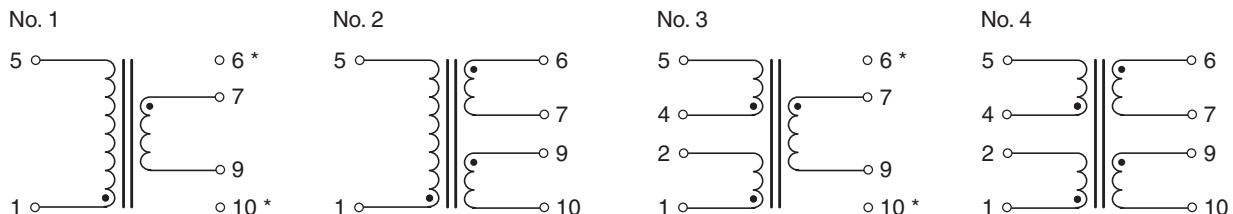


- Frequency 50/60Hz
- Potted under vacuum
- Split-bobbin
- Temperature class ta 70°C/B
- Weight: 0.2kg
- Packaging unit: 25 pieces (tray)

### Mechanical



### Schematics



\* Empty-Pin

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 834	8.10	1	042-5187.0	1/3*
230	9 / 556	12.00	1	042-5190.0	1/3*
230	12 / 417	15.50	1	042-5193.0	1/3*
230	15 / 334	19.20	1	042-5196.0	1/3*
230	18 / 278	23.00	1	042-5199.0	1/3*
230	24 / 208	30.50	1	042-5205.0	1/3*
230	2x6 / 417	2x7.70	2	042-5210.0	1/3*
230	2x9 / 278	2x11.60	2	042-5213.0	1/3*
230	2x12 / 208	2x15.20	2	042-5216.0	1/3*
230	2x15 / 167	2x19.40	2	042-5219.0	1/3*
230	2x18 / 139	2x23.10	2	042-5222.0	1/3*
230	2x24 / 104	2x30.80	2	042-5228.0	1
115	6 / 834	8.10	1	042-5049.0	1/3*
115	9 / 556	12.00	1	042-5052.0	1/3*
115	12 / 417	15.50	1	042-5055.0	1/3*
115	15 / 334	19.20	1	042-5058.0	1/3*
115	18 / 278	23.00	1	042-5061.0	1/3*
115	24 / 208	30.50	1	042-5067.0	1/3*
115	2x6 / 417	2x7.70	2	042-5072.0	1/3*
115	2x9 / 278	2x11.60	2	042-5075.0	1/3*
115	2x12 / 208	2x15.20	2	042-5078.0	1/3*
115	2x15 / 167	2x19.40	2	042-5081.0	1/3*
115	2x18 / 139	2x23.10	2	042-5084.0	1/3*
115	2x24 / 104	2x30.80	2	042-5090.0	1
2x115	6 / 834	8.10	3	042-5325.0	1/3*
2x115	9 / 556	12.00	3	042-5328.0	1/3*
2x115	12 / 417	15.50	3	042-5331.0	1/3*
2x115	15 / 334	19.20	3	042-5334.0	1/3*
2x115	18 / 278	23.00	3	042-5337.0	1/3*
2x115	24 / 208	30.50	3	042-5343.0	1/3*
2x115	2x6 / 417	2x7.70	4	042-5348.0	1/3*
2x115	2x9 / 278	2x11.60	4	042-5351.0	1/3*
2x115	2x12 / 208	2x15.20	4	042-5354.0	1/3*
2x115	2x15 / 167	2x19.40	4	042-5357.0	1/3*
2x115	2x18 / 139	2x23.10	4	042-5360.0	1/3*
2x115	2x24 / 104	2x30.80	4	042-5366.0	1

\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "G" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

# LAMINATED TRANSFORMERS

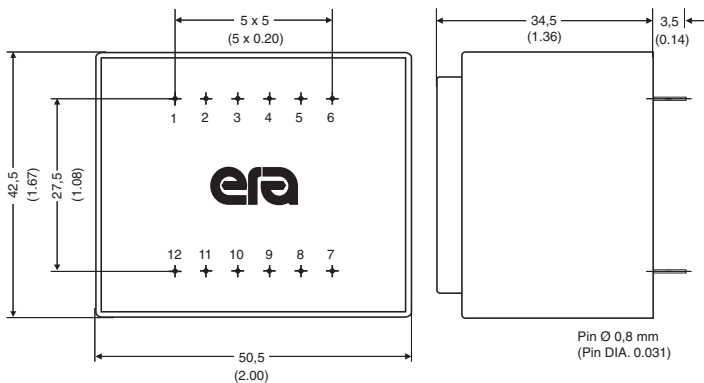
## Type EI48 / 16.8 - 10VA



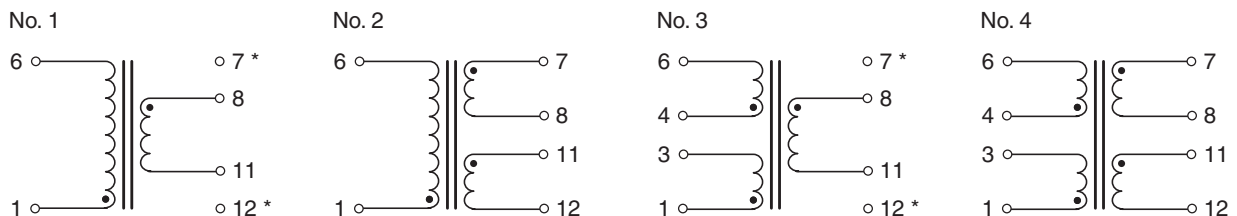
- Frequency 50/60Hz
- Potted under vacuum
- Split-bobbin
- Temperature class ta 40°C/B
- Weight: 0.295kg
- Packaging unit: 15 pieces (tray)

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 1666	7.90	1	048-5187.0	1/3*
230	9 / 1111	12.00	1	048-5190.0	1/3*
230	12 / 834	15.70	1	048-5193.0	1/3*
230	15 / 666	19.20	1	048-5196.0	1/3*
230	18 / 555	22.90	1	048-5199.0	1/3*
230	24 / 416	30.60	1	048-5205.0	1/3*
230	2x6 / 834	2x8.10	2	048-5210.0	1/3*
230	2x9 / 555	2x11.60	2	048-5213.0	1/3*
230	2x12 / 416	2x15.70	2	048-5216.0	1/3*
230	2x15 / 333	2x19.50	2	048-5219.0	1/3*
230	2x18 / 277	2x23.50	2	048-5222.0	1/3*
230	2x24 / 208	2x30.00	2	048-5228.0	1
115	6 / 1666	7.90	1	048-5049.0	1/3*
115	9 / 1111	12.00	1	048-5052.0	1/3*
115	12 / 834	15.70	1	048-5055.0	1/3*
115	15 / 666	19.20	1	048-5058.0	1/3*
115	18 / 555	22.90	1	048-5061.0	1/3*
115	24 / 416	30.60	1	048-5067.0	1/3*
115	2x6 / 834	2x8.10	2	048-5072.0	1/3*
115	2x9 / 555	2x11.60	2	048-5075.0	1/3*
115	2x12 / 416	2x15.70	2	048-5078.0	1/3*
115	2x15 / 333	2x19.50	2	048-5081.0	1/3*
115	2x18 / 277	2x23.50	2	048-5084.0	1/3*
115	2x24 / 208	2x30.00	2	048-5090.0	1
2x115	6 / 1666	7.90	3	048-5325.0	1/3*
2x115	9 / 1111	12.00	3	048-5328.0	1/3*
2x115	12 / 834	15.70	3	048-5331.0	1/3*
2x115	15 / 666	19.20	3	048-5334.0	1/3*
2x115	18 / 555	22.90	3	048-5337.0	1/3*
2x115	24 / 416	30.60	3	048-5343.0	1/3*
2x115	2x6 / 834	2x8.10	4	048-5348.0	1/3*
2x115	2x9 / 555	2x11.60	4	048-5351.0	1/3*
2x115	2x12 / 416	2x15.70	4	048-5354.0	1/3*
2x115	2x15 / 333	2x19.50	4	048-5357.0	1/3*
2x115	2x18 / 277	2x23.50	4	048-5360.0	1/3*
2x115	2x24 / 208	2x30.00	4	048-5366.0	1

### Mechanical



### Schematics



\* Empty-Pin

**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "H" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

# LAMINATED TRANSFORMERS







## Type EI54 / 18.8 - 16VA



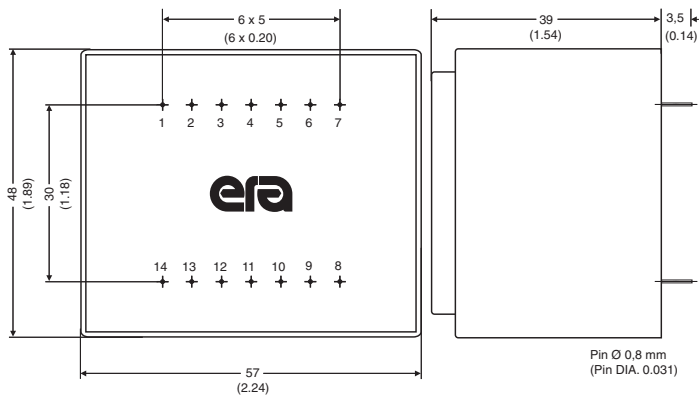
**AGENCY APPROVALS** 

1. UL 506, File E113449 

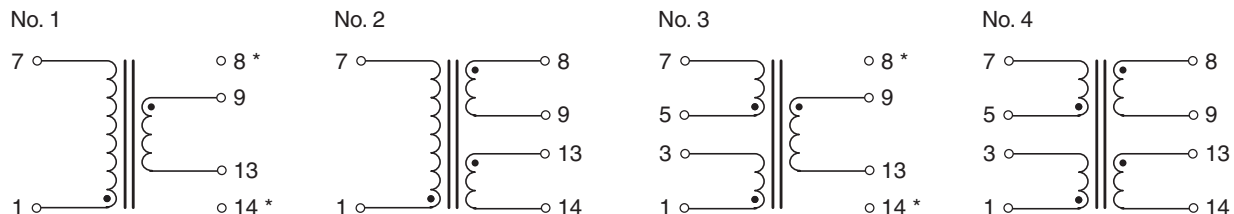
3. EN61558 

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 40°C/B
-  Weight: 0.42kg
-  Packaging unit: 10 pieces (tray)

### Mechanical



### Schematics



\* Empty-Pin

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 2666	7.60	1	054-5187.0	1/3*
230	9 / 1777	11.30	1	054-5190.0	1/3*
230	12 / 1333	14.90	1	054-5193.0	1/3*
230	15 / 1066	18.40	1	054-5196.0	1/3*
230	18 / 888	22.40	1	054-5199.0	1/3*
230	24 / 666	29.60	1	054-5205.0	1/3*
230	2x6 / 1333	2x7.70	2	054-5210.0	1/3*
230	2x9 / 888	2x11.40	2	054-5213.0	1/3*
230	2x12 / 666	2x15.00	2	054-5216.0	1/3*
230	2x15 / 533	2x18.70	2	054-5219.0	1/3*
230	2x18 / 444	2x22.40	2	054-5222.0	1/3*
230	2x24 / 333	2x29.00	2	054-5228.0	1
115	6 / 2666	7.60	1	054-5049.0	1/3*
115	9 / 1777	11.30	1	054-5052.0	1/3*
115	12 / 1333	14.90	1	054-5055.0	1/3*
115	15 / 1066	18.40	1	054-5058.0	1/3*
115	18 / 888	22.40	1	054-5061.0	1/3*
115	24 / 666	29.60	1	054-5067.0	1/3*
115	2x6 / 1333	2x7.70	2	054-5072.0	1/3*
115	2x9 / 888	2x11.40	2	054-5075.0	1/3*
115	2x12 / 666	2x15.00	2	054-5078.0	1/3*
115	2x15 / 533	2x18.70	2	054-5081.0	1/3*
115	2x18 / 444	2x22.40	2	054-5084.0	1/3*
115	2x24 / 333	2x29.00	2	054-5090.0	1
2x115	6 / 2666	7.60	3	054-5325.0	1/3*
2x115	9 / 1777	11.30	3	054-5328.0	1/3*
2x115	12 / 1333	14.90	3	054-5331.0	1/3*
2x115	15 / 1066	18.40	3	054-5334.0	1/3*
2x115	18 / 888	22.40	3	054-5337.0	1/3*
2x115	24 / 666	29.60	3	054-5343.0	1/3*
2x115	2x6 / 1333	2x7.70	4	054-5348.0	1/3*
2x115	2x9 / 888	2x11.40	4	054-5351.0	1/3*
2x115	2x12 / 666	2x15.00	4	054-5354.0	1/3*
2x115	2x15 / 533	2x18.70	4	054-5357.0	1/3*
2x115	2x18 / 444	2x22.40	4	054-5360.0	1/3*
2x115	2x24 / 333	2x29.00	4	054-5366.0	1

**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "K" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

# LAMINATED TRANSFORMERS

## Type EI42 / 14.8 - 5VA









**AGENCY APPROVALS** 

1. UL 506, File E113449  us

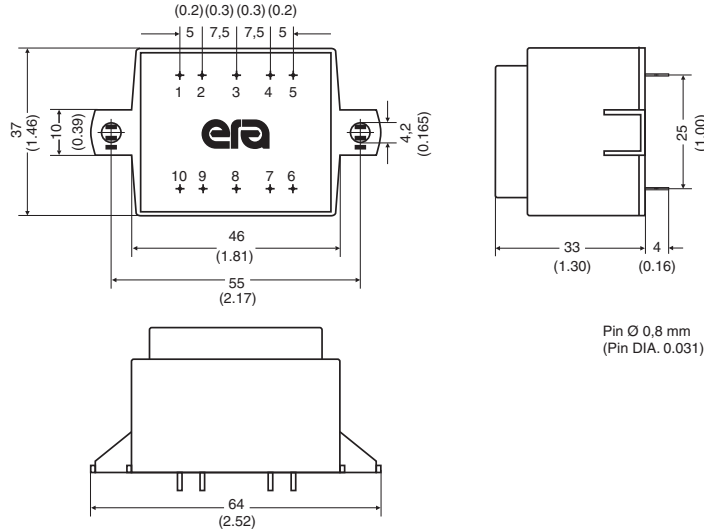
3. EN61558  

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 834	8.10	1	<b>042-5381.0</b>	1/3*
230	9 / 556	12.00	1	<b>042-5382.0</b>	1/3*
230	12 / 417	15.50	1	<b>042-5383.0</b>	1/3*
230	15 / 334	19.20	1	<b>042-5384.0</b>	1/3*
230	18 / 278	23.20	1	<b>042-5385.0</b>	1/3*
230	24 / 208	30.50	1	<b>042-5386.0</b>	1/3*
230	2x6 / 417	2x7.80	2	<b>042-5387.0</b>	1/3*
230	2x9 / 278	2x11.60	2	<b>042-5388.0</b>	1/3*
230	2x12 / 208	2x15.20	2	<b>042-5389.0</b>	1/3*
230	2x15 / 167	2x19.40	2	<b>042-5390.0</b>	1/3*

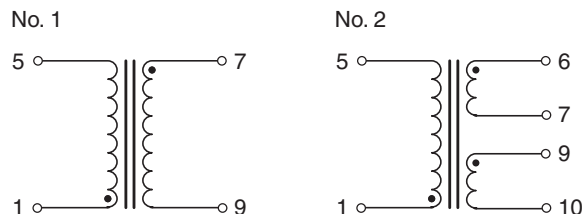
**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "G" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  Weight: 0.2kg
-  Packaging unit: 15 pieces (tray)

### Mechanical



### Schematics



# LAMINATED TRANSFORMERS

## Type EI48 / 16.8 - 10VA

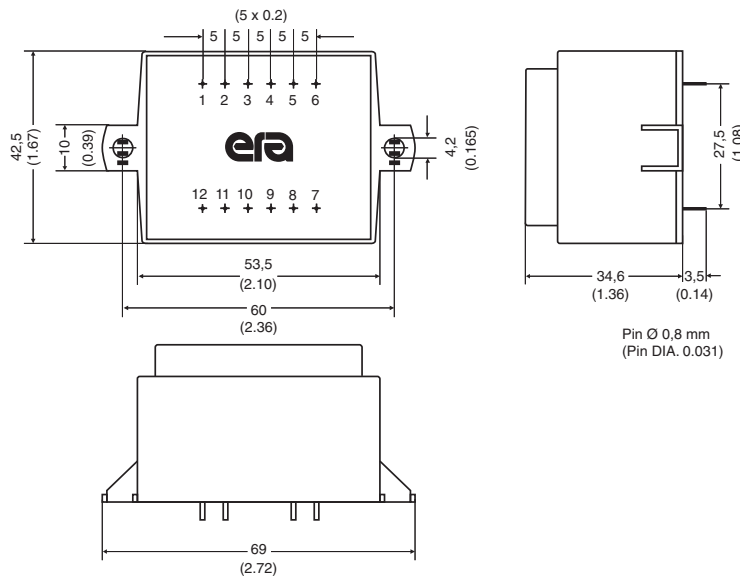


Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 1666	7.90	1	048-5381.0	1/3*
230	9 / 1111	12.00	1	048-5382.0	1/3*
230	12 / 834	15.70	1	048-5383.0	1/3*
230	15 / 666	19.20	1	048-5384.0	1/3*
230	18 / 555	22.90	1	048-5385.0	1/3*
230	24 / 416	30.60	1	048-5386.0	1/3*
230	2x6 / 834	2x7.90	2	048-5387.0	1/3*
230	2x9 / 555	2x12.00	2	048-5388.0	1/3*
230	2x12 / 416	2x15.70	2	048-5389.0	1/3*
230	2x15 / 333	2x19.20	2	048-5390.0	1/3*

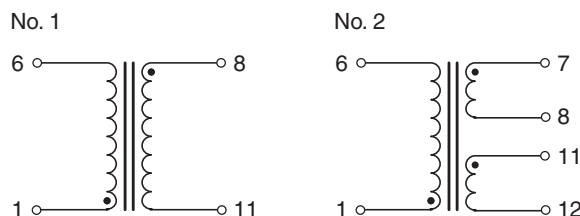
\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "H" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

- Frequency 50/60Hz
- Potted under vacuum
- Split-bobbin
- Temperature class ta 40°C/B
- Weight: 0.295kg
- Packaging unit: 10 pieces (tray)

### Mechanical




### Schematics





# LAMINATED TRANSFORMERS

## Type EI54 / 18.8 - 16VA









**AGENCY APPROVALS** 

1. UL 506, File E113449  

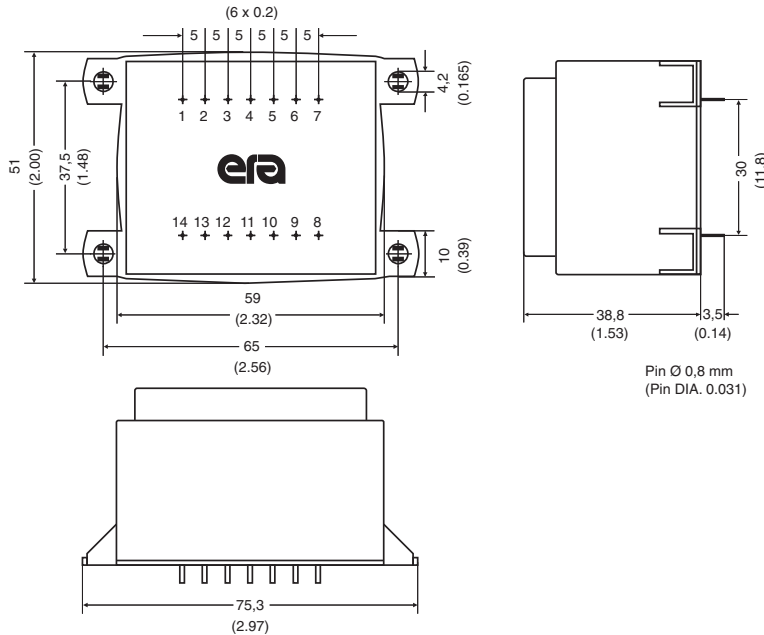
3. EN61558  

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 2666	7.60	1	054-5381.0	1/3*
230	9 / 1777	11.30	1	054-5382.0	1/3*
230	12 / 1333	14.90	1	054-5383.0	1/3*
230	15 / 1066	18.40	1	054-5384.0	1/3*
230	18 / 888	22.40	1	054-5385.0	1/3*
230	24 / 666	29.60	1	054-5386.0	1/3*
230	2x6 / 1333	2x7.70	2	054-5387.0	1/3*
230	2x9 / 888	2x11.40	2	054-5388.0	1/3*
230	2x12 / 666	2x15.00	2	054-5389.0	1/3*
230	2x15 / 533	2x18.70	2	054-5390.0	1/3*

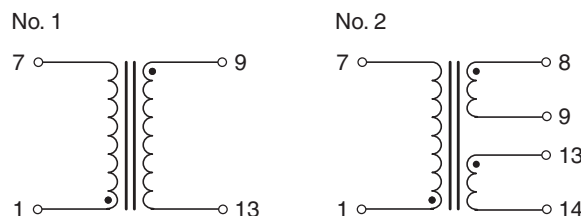
\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "K" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 40°C/B
-  Weight: 0.43kg
-  Packaging unit: 10 pieces (tray)

### Mechanical









### Schematics



# LAMINATED TRANSFORMERS

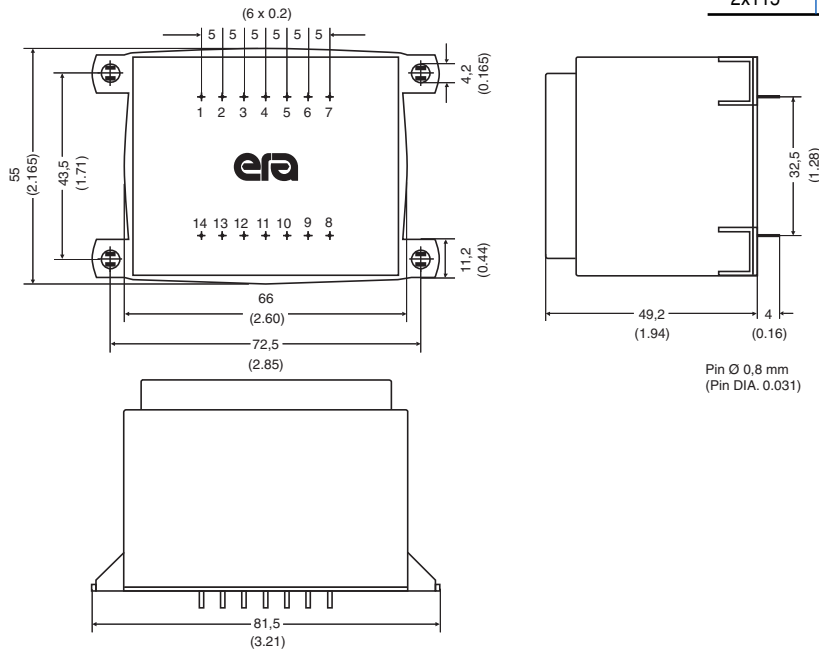
## Type EI60 / 25.5 - 25VA



-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 40°C/B
-  Weight: 0.67kg
-  Packaging unit: 6 pieces (tray)

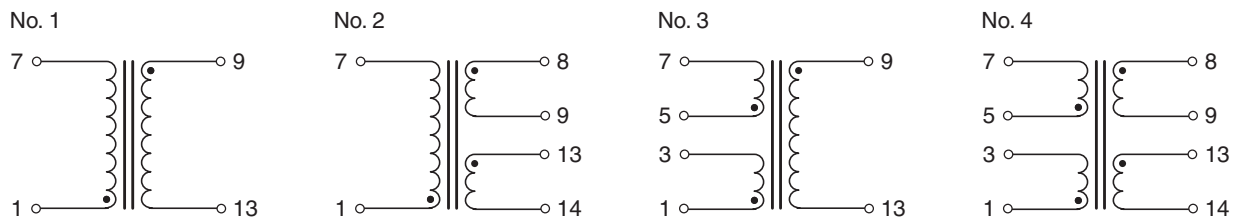
Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 4170	6.90	1	060-0201.0	3*
230	9 / 2780	10.30	1	060-0202.0	3*
230	12 / 2080	13.60	1	060-0203.0	3*
230	15 / 1670	17.00	1	060-0204.0	3*
230	18 / 1390	20.50	1	060-0205.0	3*
230	24 / 1040	27.00	1	060-0206.0	3*
230	2x6 / 2080	2x6.90	2	060-0207.0	3*
230	2x9 / 1390	2x10.50	2	060-0208.0	3*
230	2x12 / 1040	2x13.60	2	060-0209.0	3*
230	2x15 / 830	2x17.30	2	060-0210.0	3*
2x115	6 / 4170	6.90	3	060-0272.0	3*
2x115	9 / 2780	10.30	3	060-0273.0	3*
2x115	12 / 2080	13.60	3	060-0274.0	3*
2x115	15 / 1670	17.00	3	060-0275.0	3*
2x115	18 / 1390	20.50	3	060-0276.0	3*
2x115	24 / 1040	27.00	3	060-0277.0	3*
2x115	2x6 / 2080	2x6.90	4	060-0278.0	3*
2x115	2x9 / 1390	2x10.50	4	060-0279.0	3*
2x115	2x12 / 1040	2x13.60	4	060-0280.0	3*
2x115	2x15 / 830	2x17.30	4	060-0281.0	3*

### Mechanical



**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" to the orderable Part Number (these letters will also be found on the part label). The prefix is **not** part of the orderable Part Number.

### Schematics











# LAMINATED TRANSFORMERS

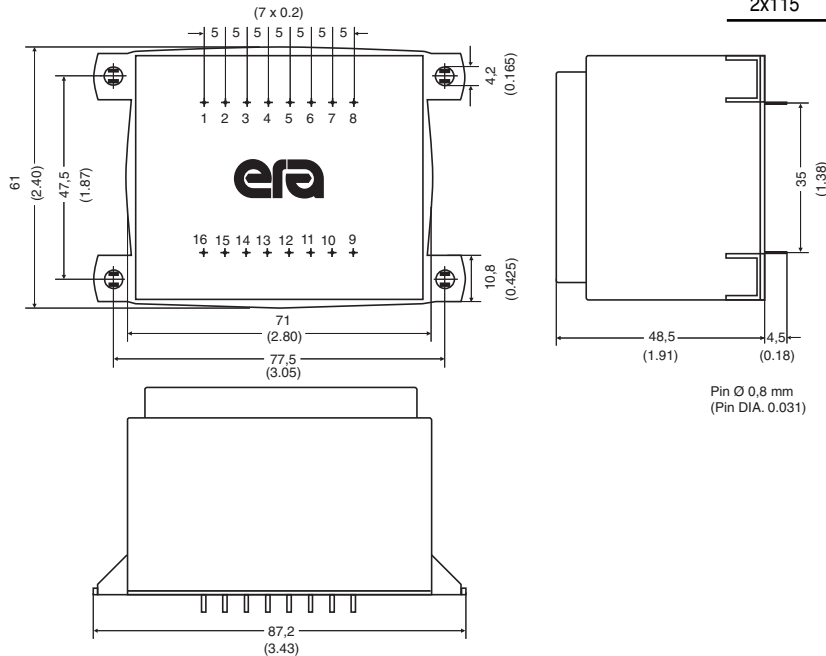
## Type EI66 / 23 - 36VA



-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 40°C/B
-  Weight: 0.75kg
-  Packaging unit: 6 pieces (tray)

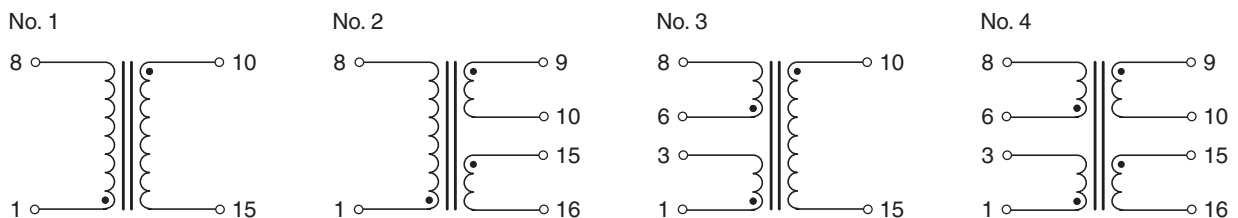
Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 6000	6.90	1	066-0131.0	3*
230	9 / 4000	10.30	1	066-0132.0	3*
230	12 / 3000	13.60	1	066-0133.0	3*
230	15 / 2400	17.00	1	066-0134.0	3*
230	18 / 2000	20.50	1	066-0135.0	3*
230	24 / 1500	27.00	1	066-0136.0	3*
230	2x6 / 3000	2x6.90	2	066-0137.0	3*
230	2x9 / 2000	2x10.50	2	066-0138.0	3*
230	2x12 / 1500	2x13.60	2	066-0139.0	3*
230	2x15 / 1200	2x17.30	2	066-0140.0	3*
2x115	6 / 6000	6.90	3	066-0226.0	3*
2x115	9 / 4000	10.30	3	066-0227.0	3*
2x115	12 / 3000	13.60	3	066-0228.0	3*
2x115	15 / 2400	17.00	3	066-0229.0	3*
2x115	18 / 2000	20.50	3	066-0230.0	3*
2x115	24 / 1500	27.00	3	066-0231.0	3*
2x115	2x6 / 3000	2x6.90	4	066-0232.0	3*
2x115	2x9 / 2000	2x10.50	4	066-0233.0	3*
2x115	2x12 / 1500	2x13.60	4	066-0234.0	3*
2x115	2x15 / 1200	2x17.30	4	066-0235.0	3*

### Mechanical



**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "A" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are **not** part of the orderable Part Number.

### Schematics



# LAMINATED TRANSFORMERS

## Type EI66 / 34.7 - 50VA (230V)

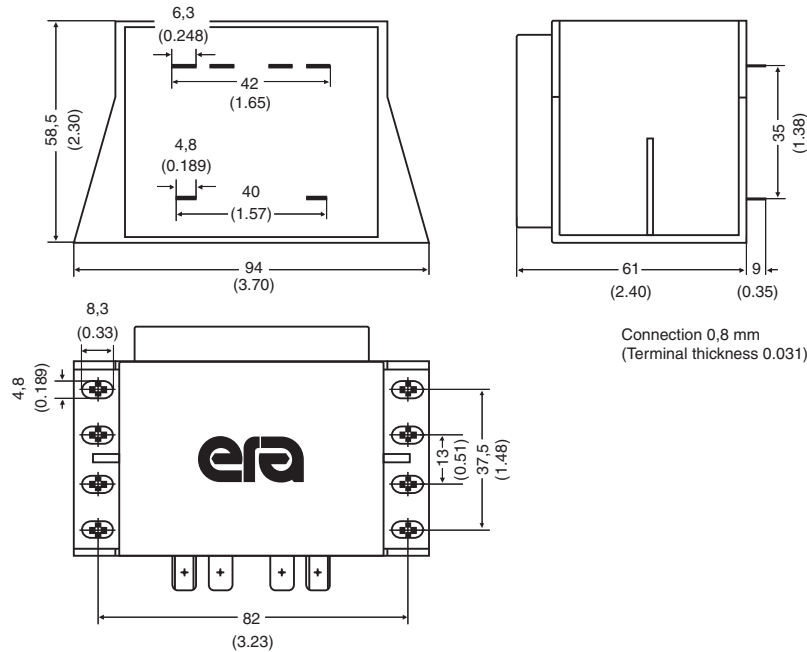


Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
230	6 / 8333	7.20	1	066-0141.0	3*
230	9 / 5560	10.40	1	066-0142.0	3*
230	12 / 4170	13.40	1	066-0143.0	3*
230	15 / 3330	17.00	1	066-0144.0	3*
230	18 / 2780	20.50	1	066-0145.0	3*
230	24 / 2080	27.10	1	066-0146.0	3*
230	2x6 / 4170	2x7.00	2	066-0147.0	3*
230	2x9 / 2780	2x10.40	2	066-0148.0	3*
230	2x12 / 2080	2x13.60	2	066-0149.0	3*
230	2x15 / 1670	2x17.60	2	066-0150.0	3*

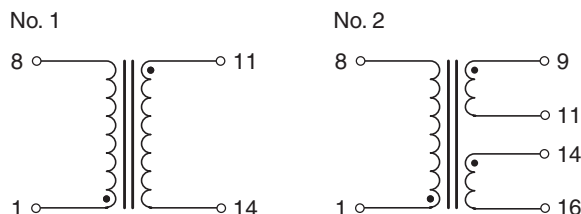
\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "B" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

- ⦿ Frequency 50/60Hz
- ⦿ Potted under vacuum
- ⦿ Split-bobbin
- ⦿ Temperature class ta 40°C/B
- ⦿ Weight: 1.04kg
- ⦿ Packaging unit: 6 pieces (tray)

### Mechanical



### Schematics



# LAMINATED TRANSFORMERS

## Type EI66 / 34.7 - 50VA (2x115V)

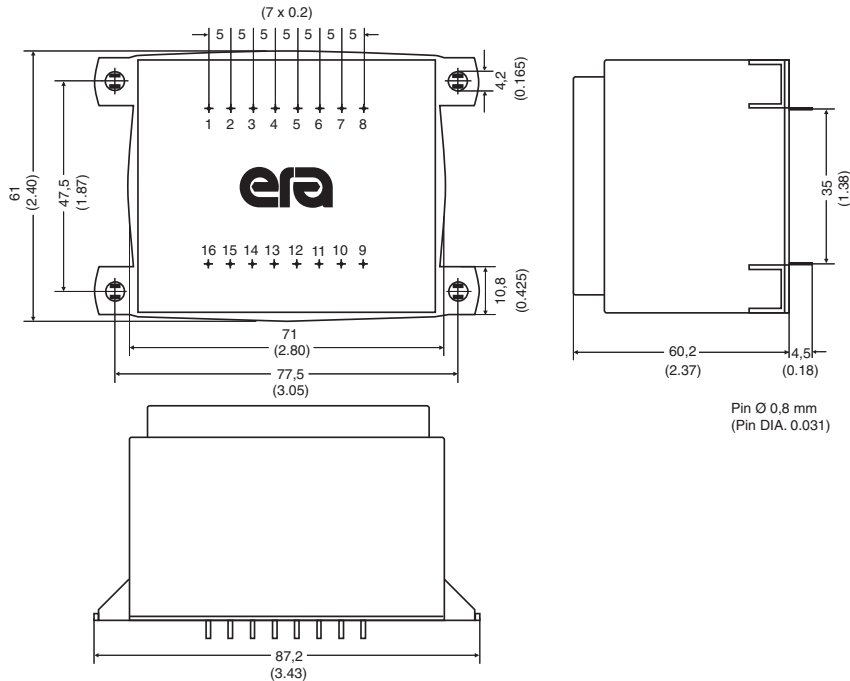


Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Schematic No.	Part Number	Agency Approvals
2x115	6 / 8333	7.20	1	066-0236.0	3*
2x115	9 / 5560	10.40	1	066-0237.0	3*
2x115	12 / 4170	13.40	1	066-0238.0	3*
2x115	15 / 3330	17.00	1	066-0239.0	3*
2x115	18 / 2780	20.50	1	066-0240.0	3*
2x115	24 / 2080	27.10	1	066-0241.0	3*
2x115	2x6 / 4170	2x7.00	2	066-0242.0	3*
2x115	2x9 / 2780	2x10.40	2	066-0243.0	3*
2x115	2x12 / 2080	2x13.60	2	066-0244.0	3*
2x115	2x15 / 1670	2x17.60	2	066-0245.0	3*

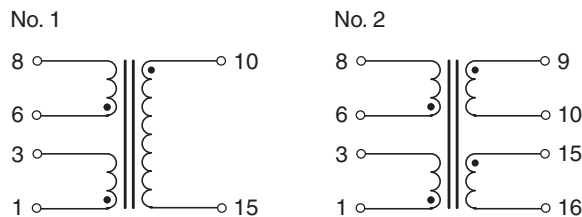
\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "B" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

- ⊕ Frequency 50/60Hz
- ⊕ Potted under vacuum
- ⊕ Split-bobbin
- ⊕ Temperature class ta 40°C/B
- ⊕ Weight: 1.04kg
- ⊕ Packaging unit: 6 pieces (tray)

### Mechanical




### Schematics





# LAMINATED TRANSFORMERS

## Type UI30 / 5.5 - 2VA



**AGENCY APPROVALS** 

1. UL 506, File E113449  **us**

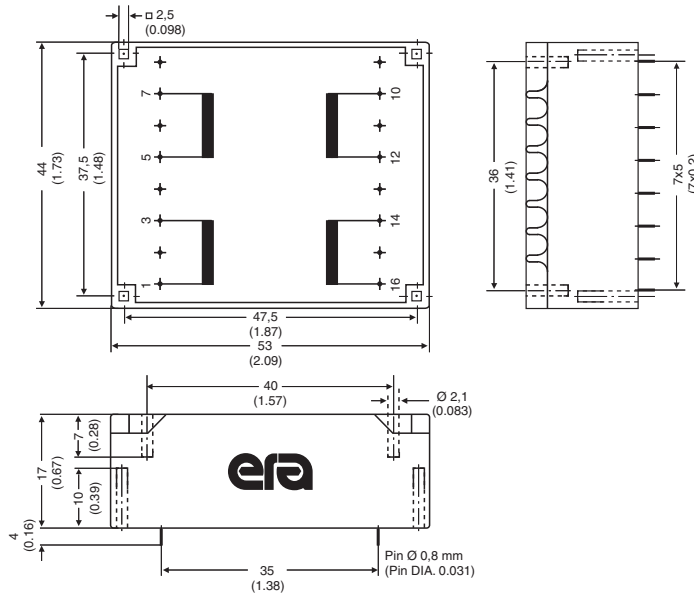
3. EN61558 

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Part Number	Agency Approvals
2x115	6/166 / 6/166	9.10/9.10	<b>030-6866.0</b>	1/3*
2x115	9/111 / 9/111	13.60/13.60	<b>030-6869.0</b>	1/3*
2x115	12/83 / 12/83	17.60/17.60	<b>030-6872.0</b>	1/3*
2x115	15 / 66 / 15/66	23.00/23.00	<b>030-6875.0</b>	1/3*
2x115	18/55 / 18/55	24.80/24.80	<b>030-6878.0</b>	1/3*
2x115	21/47 / 21/47	30.50/30.50	<b>030-6881.0</b>	1

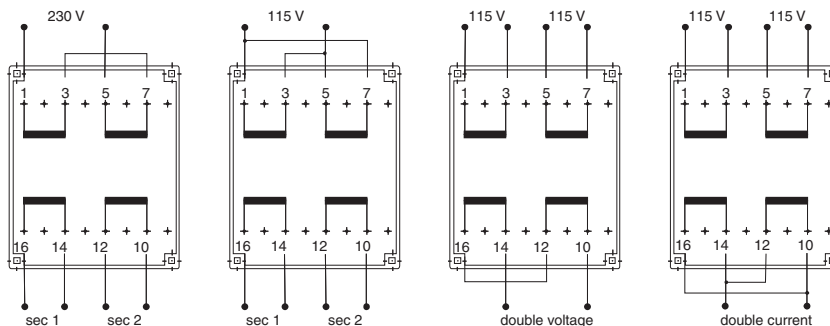
**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "L" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

- ⓘ Frequency 50/60Hz
- ⓘ Weight: 0.115kg
- ⓘ Potted under vacuum
- ⓘ Packaging unit: 15 pieces (tray)
- ⓘ Split-bobbin
- ⓘ Fixing material for □ 2,5mm (0.098 inch)
- ⓘ Temperature class ta 70°C/B
- Self-tapping screws: DIN 7513 (M 3x8)
- Sheet-metal screws: DIN 7971 (2,9x6,5)

### Mechanical



### Schematics



# LAMINATED TRANSFORMERS

## Type UI30 / 7.5 - 4VA



**AGENCY APPROVALS**   








1. UL 506, File E113449

3. EN61558

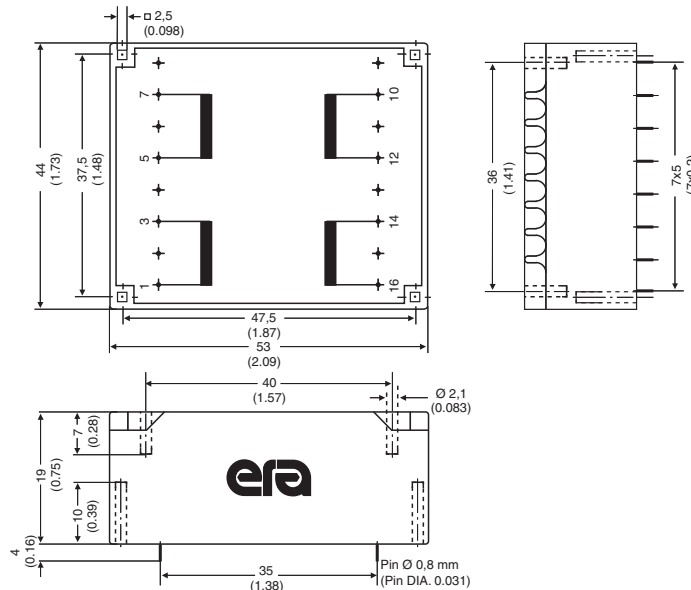


Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Part Number	Agency Approvals
2x115	6/333 / 6/333	8.60/8.60	<b>030-6935.0</b>	1/3*
2x115	9/222 / 9/222	12.40/12.40	<b>030-6938.0</b>	1/3*
2x115	12/166 / 12/166	15.90/15.90	<b>030-6941.0</b>	1/3*
2x115	15/133 / 15/133	20.80/20.80	<b>030-6944.0</b>	1/3*
2x115	18/111 / 18/111	24.30/24.30	<b>030-6947.0</b>	1/3*
2x115	21/95 / 21/95	28.10/28.10	<b>030-6950.0</b>	1

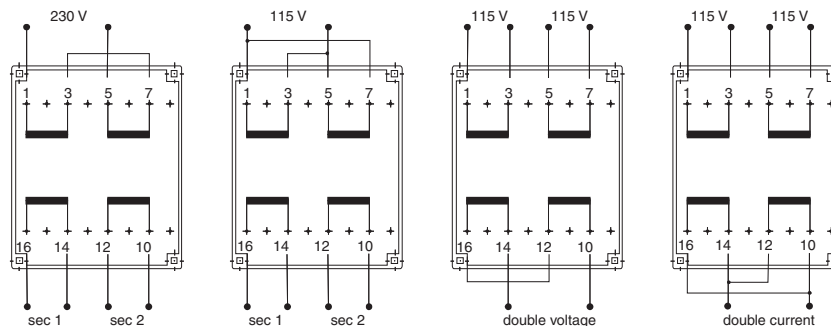
**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "L" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 70°C/B
-  Weight: 0.145kg
-  Packaging unit: 15 pieces (tray)
-  Fixing material for  $\square$  2,5mm (0.098 inch)
  - Self-tapping screws: DIN 7513 (M 3x8)
  - Sheet-metal screws: DIN 7971 (2,9x6,5)

### Mechanical



### Schematics



# LAMINATED TRANSFORMERS

Type UI30 / 10.5 - 6VA










**AGENCY APPROVALS** 

1. UL 506, File E113449 

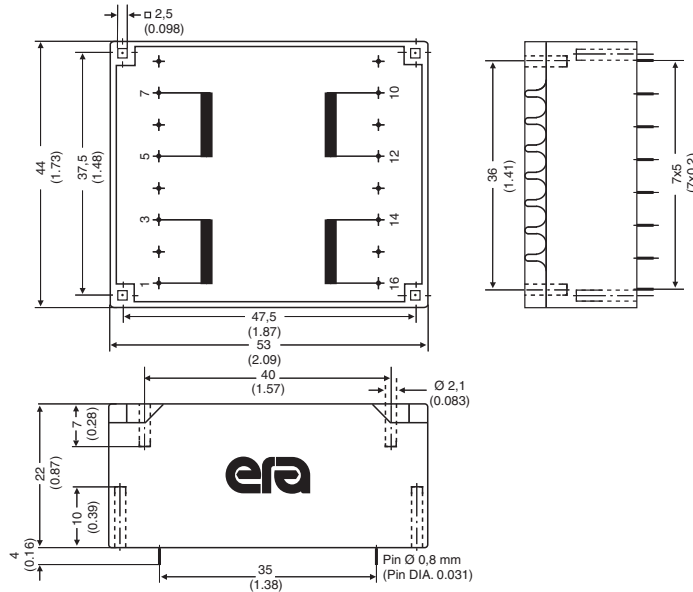
3. EN61558  

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Part Number	Agency Approvals
2x115	6/500 / 6/500	8.50/8.50	<b>030-7004.0</b>	1/3*
2x115	9/333 / 9/333	12.70/12.70	<b>030-7007.0</b>	1/3*
2x115	12/250 / 12/250	16.30/16.30	<b>030-7010.0</b>	1/3*
2x115	15/200 / 15/200	20.30/20.30	<b>030-7013.0</b>	1/3*
2x115	18/166 / 18/166	24.30/24.30	<b>030-7016.0</b>	1/3*
2x115	21/142 / 21/142	28.30/28.30	<b>030-7019.0</b>	1

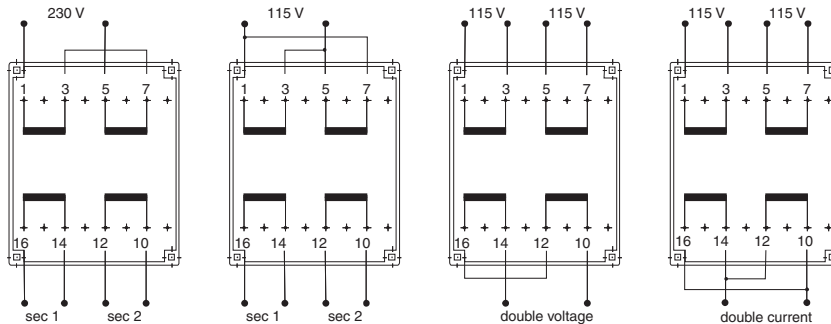
\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "L" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 40°C/B
-  Weight: 0.175kg
-  Packaging unit: 15 pieces (tray)
-  Fixing material for  $\square$  2,5mm (0.098 inch)
  - Self-tapping screws: DIN 7513 (M 3x8)
  - Sheet-metal screws: DIN 7971 (2,9x6,5)

## Mechanical



## Schematics



# LAMINATED TRANSFORMERS

## Type UI30 / 16.5 - 10VA










**AGENCY APPROVALS**    

1. UL 506, File E113449

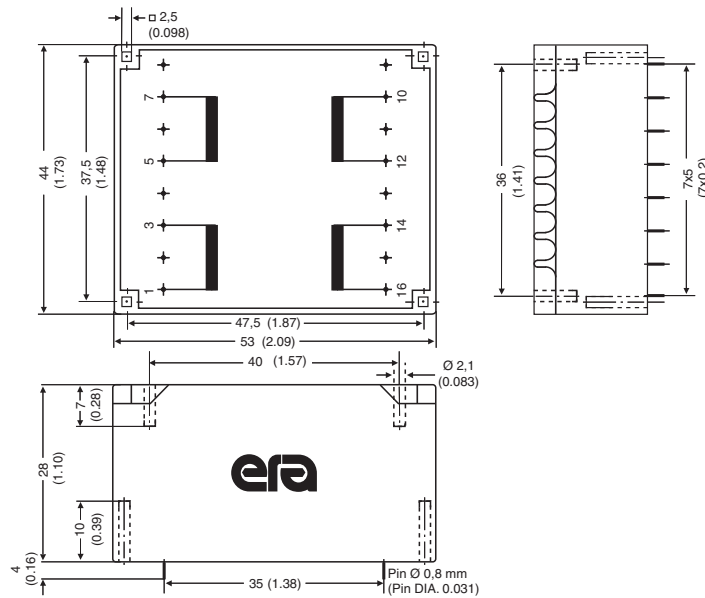
3. EN61558

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Part Number	Agency Approvals
2x115	6/833 / 6/833	9.00/9.00	<b>030-7073.0</b>	1/3*
2x115	9/555 / 9/555	13.40/13.40	<b>030-7076.0</b>	1/3*
2x115	12/416 / 12/416	17.20/17.20	<b>030-7079.0</b>	1/3*
2x115	15/333 / 15/333	21.70/21.70	<b>030-7082.0</b>	1/3*
2x115	18/277 / 18/277	24.80/24.80	<b>030-7085.0</b>	1/3*
2x115	21/238 / 21/238	29.50/29.50	<b>030-7088.0</b>	1

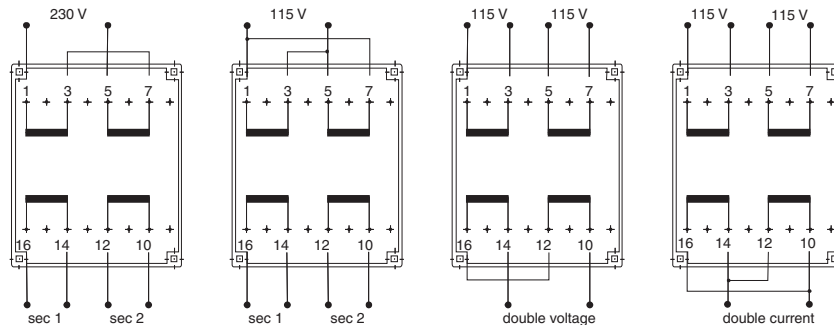
**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "L" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 40°C/B
-  Weight: 0.24kg
-  Packaging unit: 15 pieces (tray)
-  Fixing material for □ 2,5mm (0.098 inch)
  - Self-tapping screws: DIN 7513 (M 3x8)
  - Sheet-metal screws: DIN 7971 (2,9x6,5)

### Mechanical



### Schematics









# LAMINATED TRANSFORMERS

Type UI39 / 8 - 10VA










**AGENCY APPROVALS** 

1. UL 506, File E113449 

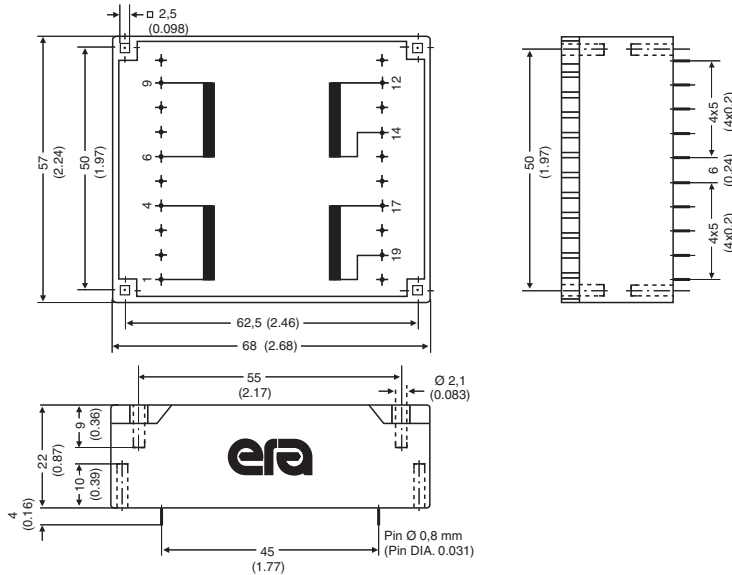
3. EN61558  

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Part Number	Agency Approvals
2x115	6/833 / 6/833	8.50/8.50	<b>039-5026.0</b>	1/3*
2x115	9/555 / 9/555	12.40/12.40	<b>039-5029.0</b>	1/3*
2x115	12/416 / 12/416	15.90/15.90	<b>039-5032.0</b>	1/3*
2x115	15/333 / 15/333	20.30/20.30	<b>039-5035.0</b>	1/3*
2x115	18/277 / 18/277	24.30/24.30	<b>039-5038.0</b>	1/3*
2x115	21/238 / 21/238	28.10/28.10	<b>039-5041.0</b>	1

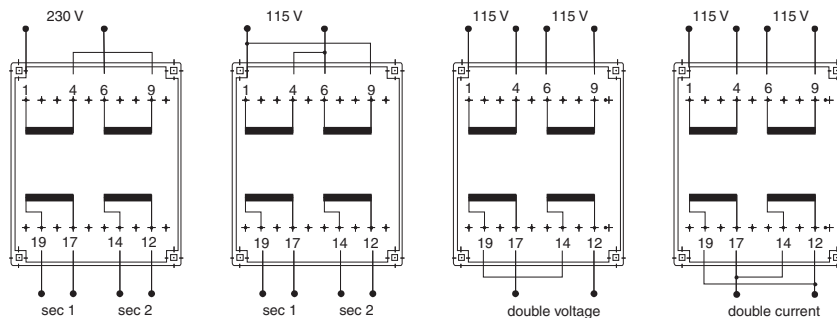
**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "L" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 40°C/B
-  Weight: 0.28kg
-  Packaging unit: 10 pieces (tray)
-  Fixing material for  $\square$  2,5mm (0.098 inch)
  - Self-tapping screws: DIN 7513 (M 3x8)
  - Sheet-metal screws: DIN 7971 (2,9x6,5)

## Mechanical



## Schematics



# LAMINATED TRANSFORMERS

## Type UI39 / 10.2 - 14VA



**AGENCY APPROVALS** **CE**

1. UL 506, File E113449 **UL** **US**

3. EN61558 **10** **VDE**

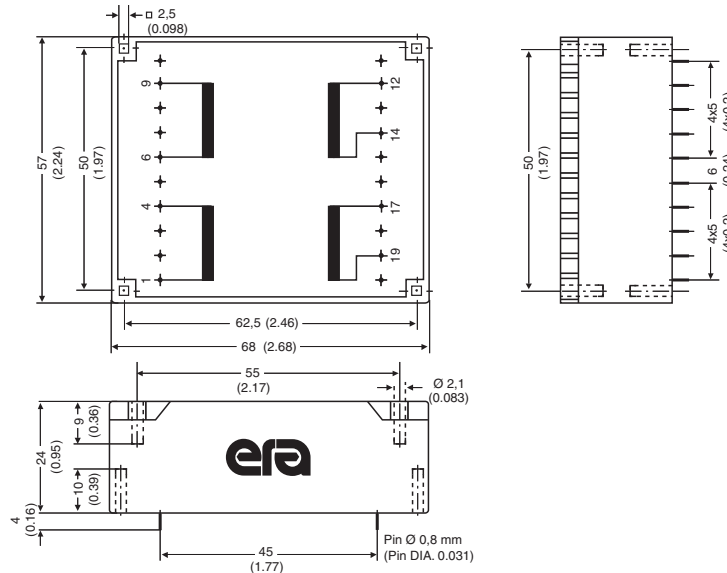


Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Part Number	Agency Approvals
2x115	6/1166 / 6/1166	7.80/7.80	<b>039-5095.0</b>	1/3*
2x115	9/777 / 9/777	11.20/11.20	<b>039-5098.0</b>	1/3*
2x115	12/583 / 12/583	14.80/14.80	<b>039-5101.0</b>	1/3*
2x115	15/466 / 15/466	18.80/18.80	<b>039-5104.0</b>	1/3*
2x115	18/388 / 18/388	22.70/22.70	<b>039-5107.0</b>	1/3*
2x115	21/333 / 21/333	24.80/24.80	<b>039-5110.0</b>	1/3*

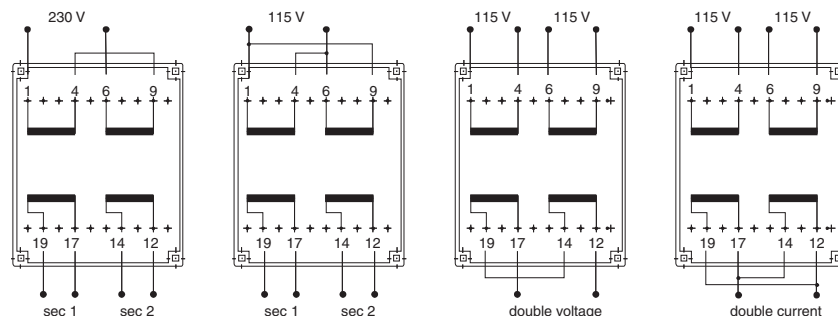
**\*NOTE:** When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "L" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

- ⦿ Frequency 50/60Hz
- ⦿ Potted under vacuum
- ⦿ Split-bobbin
- ⦿ Temperature class ta 40°C/B
- ⦿ Weight: 0.315kg
- ⦿ Packaging unit: 10 pieces (tray)
- ⦿ Fixing material for □ 2,5mm (0.098 inch)
  - Self-tapping screws: DIN 7513 (M 3x8)
  - Sheet-metal screws: DIN 7971 (2,9x6,5)

### Mechanical



### Schematics



# LAMINATED TRANSFORMERS

Type UI39 / 13.5 - 18VA



**AGENCY APPROVALS**   

1. UL 506, File E113449

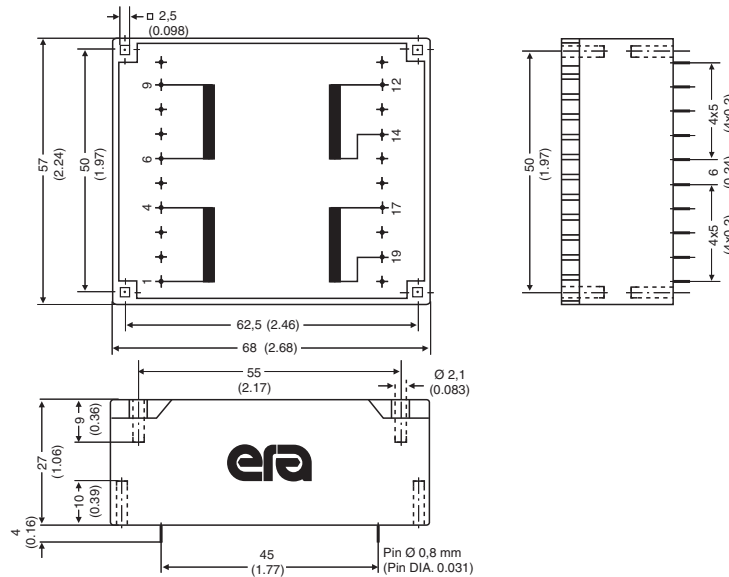
3. EN61558

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Part Number	Agency Approvals
2x115	6/1500 / 6/1500	8.40/8.40	<b>039-5164.0</b>	1/3*
2x115	9/1000 / 9/1000	11.60/11.60	<b>039-5167.0</b>	1/3*
2x115	12/750 / 12/750	15.30/15.30	<b>039-5170.0</b>	1/3*
2x115	15/600 / 15/600	19.40/19.40	<b>039-5173.0</b>	1/3*
2x115	18/500 / 18/500	22.50/22.50	<b>039-5176.0</b>	1/3*
2x115	21/428 / 21/428	24.60/24.60	<b>039-5179.0</b>	1/3*

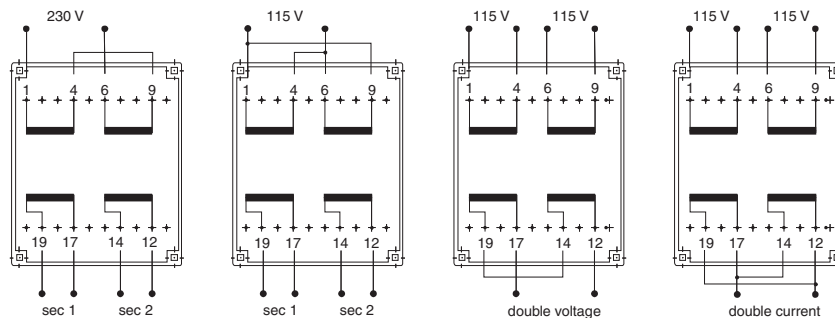
\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "L" to the orderable Part Number (these letters will also be found on the part label). **The prefix and suffix are not part of the orderable Part Number.**

- Frequency 50/60Hz
- Weight: 0.375kg
- Potted under vacuum
- Packaging unit: 10 pieces (tray)
- Split-bobbin
- Fixing material for □ 2,5mm (0.098 inch)
- Temperature class ta 40°C/B
- Self-tapping screws: DIN 7513 (M 3x8)
- Sheet-metal screws: DIN 7971 (2,9x6,5)

## Mechanical



## Schematics



# LAMINATED TRANSFORMERS

Type UI39 / 17 - 24VA



**AGENCY APPROVALS**   

1. UL 506, File E113449

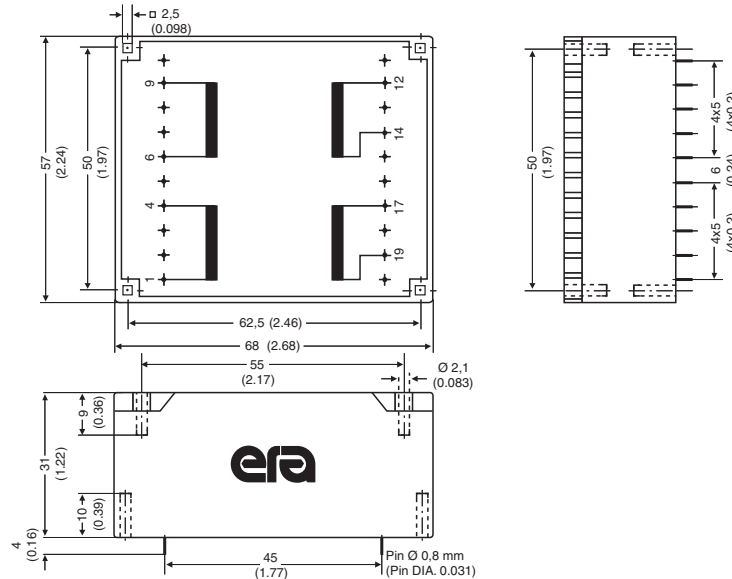
3. EN61558

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Part Number	Agency Approvals
2x115	6/2000 / 6/2000	8.10/8.10	<b>039-5233.0</b>	1/3*
2x115	9/1333 / 9/1333	11.10/11.10	<b>039-5236.0</b>	1/3*
2x115	12/1000 / 12/1000	14.40/14.40	<b>039-5239.0</b>	1/3*
2x115	15/800 / 15/800	19.20/19.20	<b>039-5242.0</b>	1/3*
2x115	18/666 / 18/666	22.10/22.10	<b>039-5245.0</b>	1/3*
2x115	21/571 / 21/571	24.70/24.70	<b>039-5248.0</b>	1/3*

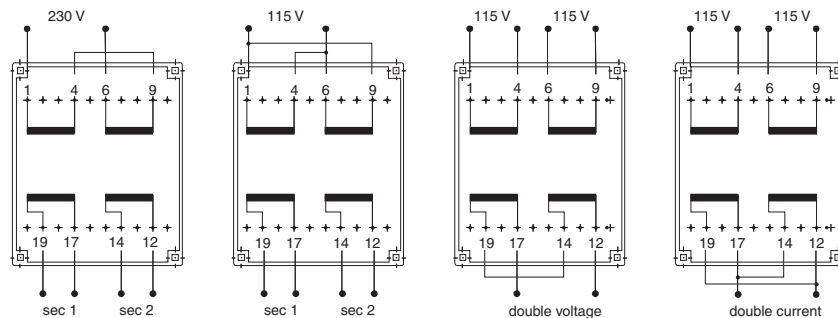
\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "L" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

- Frequency 50/60Hz
- Weight: 0.445kg
- Potted under vacuum
- Packaging unit: 10 pieces (tray)
- Split-bobbin
- Fixing material for □ 2,5mm (0.098 inch)
- Temperature class ta 40°C/B
- Self-tapping screws: DIN 7513 (M 3x8)
- Sheet-metal screws: DIN 7971 (2,9x6,5)

## Mechanical




## Schematics





# LAMINATED TRANSFORMERS

Type UI39 / 21 - 30VA










**AGENCY APPROVALS** 

1. UL 506, File E113449 

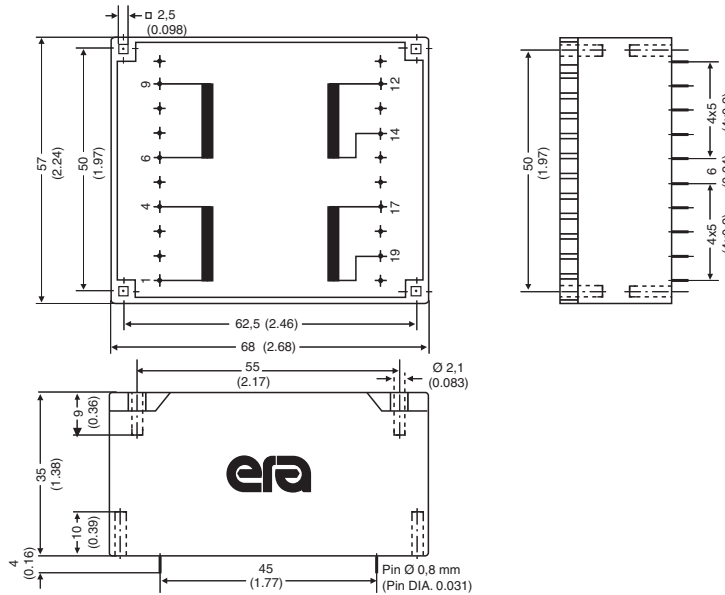
3. EN61558  

Primary (V)	Secondary (V / mA)	No-Load Voltage (V)	Part Number	Agency Approvals
2x115	6/2500 / 6/2500	6.70/6.70	<b>039-5302.0</b>	1/3*
2x115	9/1666 / 9/1666	10.30/10.30	<b>039-5305.0</b>	1/3*
2x115	12/1250 / 12/1250	13.80/13.80	<b>039-5308.0</b>	1/3*
2x115	15/1000 / 15/1000	17.20/17.20	<b>039-5311.0</b>	1/3*
2x115	18/833 / 18/833	20.60/20.60	<b>039-5314.0</b>	1/3*
2x115	21/714 / 21/714	23.50/23.50	<b>039-5317.0</b>	1/3*

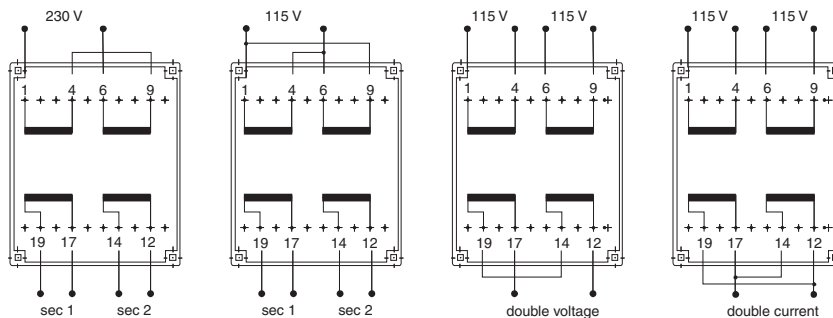
\*NOTE: When checking the approval status of this product with VDE, add the prefix "BV" and the suffix "L" to the orderable Part Number (these letters will also be found on the part label). The prefix and suffix are not part of the orderable Part Number.

-  Frequency 50/60Hz
-  Potted under vacuum
-  Split-bobbin
-  Temperature class ta 40°C/B
-  Weight: 0.53kg
-  Packaging unit: 10 pieces (tray)
-  Fixing material for  $\square$  2,5mm (0.098 inch)
  - Self-tapping screws: DIN 7513 (M 3x8)
  - Sheet-metal screws: DIN 7971 (2,9x6,5)

## Mechanical



## Schematics



# LAMINATED TRANSFORMERS

## Type EI48 / 16.8 (AC)



- ⊕ Potted under vacuum
- ⊕ Split-bobbin
- ⊕ Temperature class  $t_a$  40°C/B
- ⊕ Non-inherently short circuit proof with integrated thermal fuse
- ⊕ Connection via lead wire with ferrule
- ⊕ Wire length: 150mm
- ⊕ Weight: 0.3kg
- ⊕ Packaging unit: 8 pieces (tray)

Part Number	Primary (V)	Secondary (V <sub>AC</sub> / mA)	No-Load Voltage (V)
048-0738.4	230	8/1250	10.50

## Type EI48 / 16.8 (DC)



- ⊕ Potted under vacuum
- ⊕ Split-bobbin
- ⊕ Temperature class  $t_a$  40°C/B
- ⊕ Integrated rectifier
- ⊕ Non-inherently short circuit proof with integrated thermal fuse
- ⊕ Connection via lead wire with ferrule
- ⊕ Wire length: 150mm
- ⊕ Weight: 0.3kg
- ⊕ Packaging unit: 8 pieces (tray)

Part Number	Primary (V)	Secondary (V <sub>DC</sub> / mA)	No-Load Voltage (V)
048-0739.4	230	12/700	27.50
048-0740.4	230	24/350	46.00

# LAMINATED TRANSFORMERS

## Type EI66 / 23



- ⊕ Potted under vacuum
- ⊕ Split-bobbin
- ⊕ Temperature class ta 40°C/B
- ⊕ Integrated rectifier
- ⊕ Non-inherently short circuit proof with integrated thermal fuse
- ⊕ Connection via lead wire with ferrule
- ⊕ Wire length: 150mm
- ⊕ DIN-rail mounting
- ⊕ Weight: 1.0kg
- ⊕ Packaging unit: 4 pieces (tray)

Part Number	Primary (V)	Secondary (Vdc / mA)	No-Load Voltage (V)
066-0329.4	230	12/2000	18.00
066-0330.4	230	24/1000	36.50

## Type EI84 / 29.5



- ⊕ Potted under vacuum
- ⊕ Split-bobbin
- ⊕ Temperature class ta 40°C/B
- ⊕ Integrated rectifier
- ⊕ Connection via lead wire with ferrule
- ⊕ Wire length: 150mm
- ⊕ DIN-rail mounting
- ⊕ Weight: 1.94kg
- ⊕ Packaging unit: 4 pieces (tray)






Part Number	Primary (V)	Secondary (Vdc / mA)	No-Load Voltage (V)
084-0082.0	230	12/5000	18.00
084-0083.0	230	24/2500	35.50



# IGNITION TRANSFORMERS

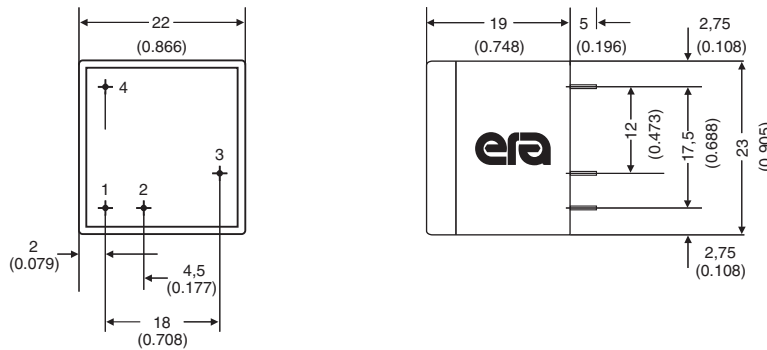
## Spark-Line - 233mH - 375mH



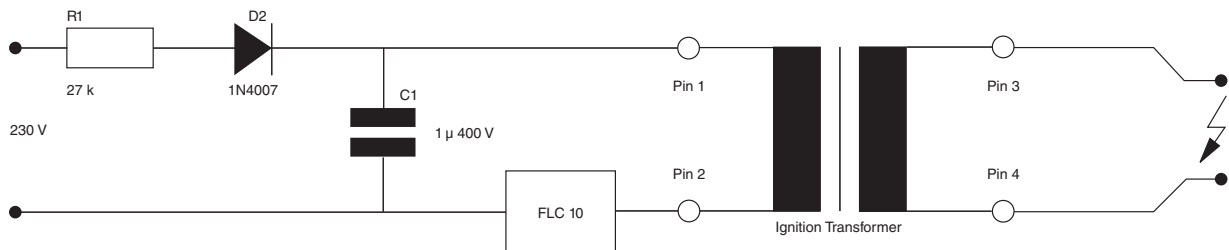
-  Compact Design
-  Available up to 23kV
-  Ambient Temperature 70°C
-  Weight: 0.018kg
-  Packaging unit: 55 pieces (tray)

Part Number	Primary Resistance (±10%) (Pin 1-2)	Secondary Resistance (±10%) (Pin 3-4)	Primary Inductance (±15%) (Pin 1-2)	Secondary Inductance (±15%) (Pin 3-4)	Winding Ratio	Secondary Voltage @ load 30pF	Ambient Temperature	No-Load Operation (MAX)
125-0028.0	26mΩ	520Ω	6μH	240mH	1:200	>22kV	70°C	30s
125-0031.0	26mΩ	786Ω	6μH	375mH	1:256	>20kV	70°C	30s
125-0033.0	59mΩ	822Ω	12μH	340mH	1:175	>23kV	70°C	30s
125-0039.0	59mΩ	590Ω	12μH	233mH	1:150	>23kV	70°C	30s

### Mechanical








### Schematic



# IGNITION TRANSFORMERS

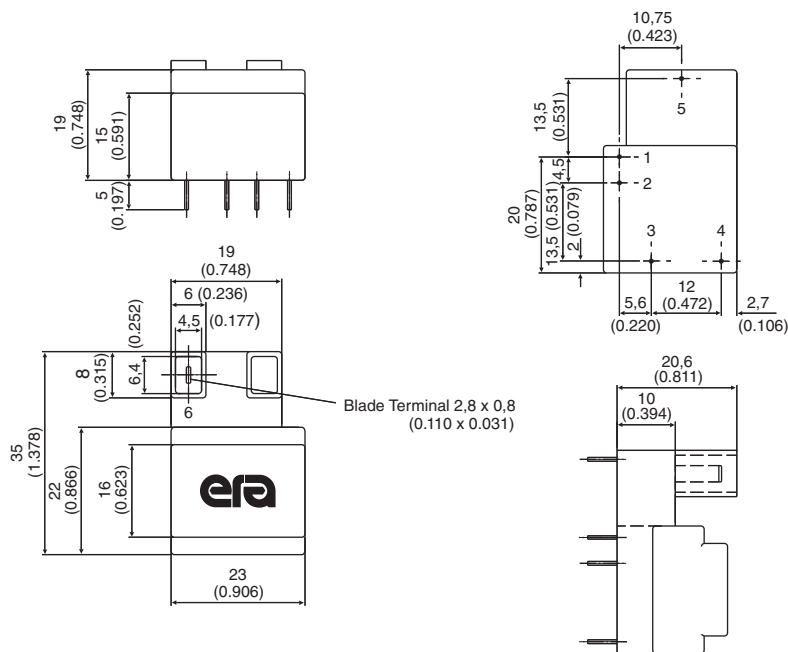
## Spark-Line - Secondary External (1x)



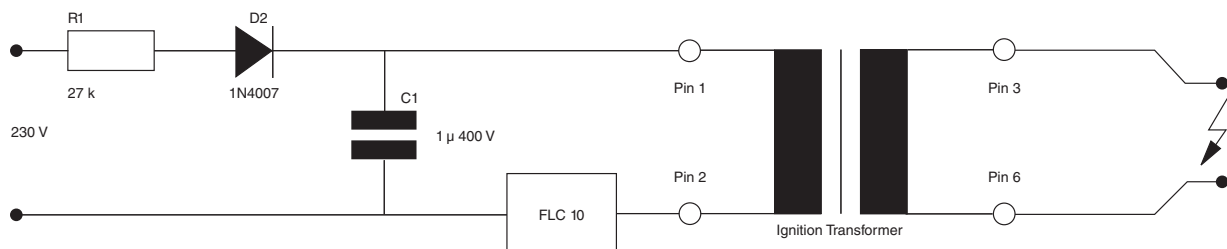
-  Compact Design
-  Available up to 22kV
-  Ambient Temperature 70°C
-  Weight: 0.019kg
-  Packaging unit: 45 pieces (tray)

Part Number	Primary Resistance (±10%) (Pin 1-2)	Secondary Resistance (±10%) (Pin 3-6)	Primary Inductance (±15%) (Pin 1-2)	Secondary Inductance (±15%) (Pin 3-6)	Winding Ratio	Secondary Voltage @ load 30pF	Ambient Temperature	No-Load Operation (MAX)
125-0032.0	26mΩ	520Ω	6μH	240mH	1:200	>22kV	70°C	30s

### Mechanical



### Schematic



# IGNITION TRANSFORMERS

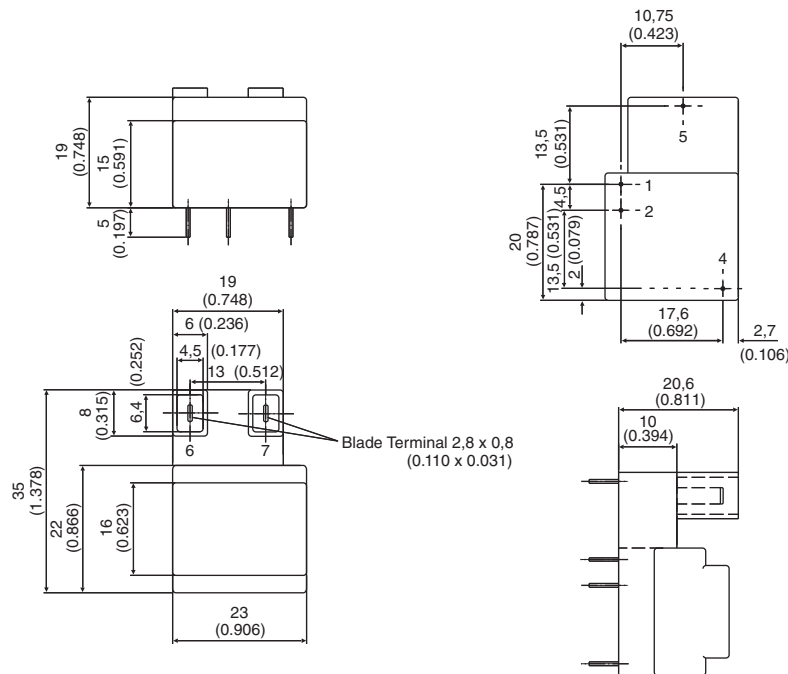
## Spark-Line - Secondary External (2x)



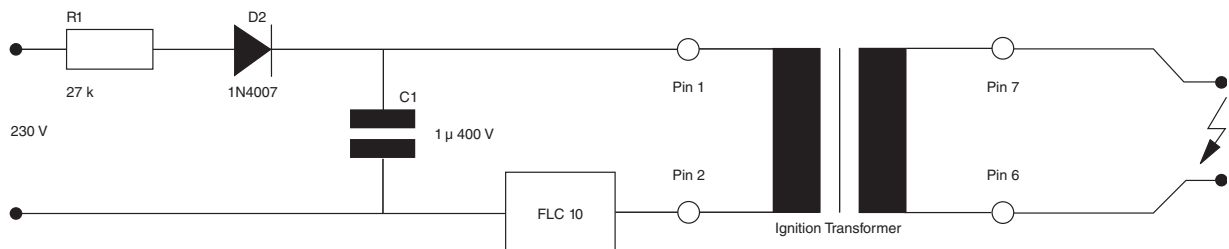
- Compact Design
- Available up to 23kV
- Ambient Temperature 70°C
- Weight: 0.018kg
- Packaging unit: 45 pieces (tray)

Part Number	Primary Resistance (±10%) (Pin 1-2)	Secondary Resistance (±10%) (Pin 6-7)	Primary Inductance (±15%) (Pin 1-2)	Secondary Inductance (±15%) (Pin 6-7)	Winding Ratio	Secondary Voltage @ load 30pF	Ambient Temperature	No-Load Operation (MAX)
125-0035.0	26mΩ	520Ω	6μH	240mH	1:200	>22kV	70°C	30s
125-0049.0	59mΩ	822Ω	12μH	340mH	1:175	>23kV	70°C	30s

### Mechanical

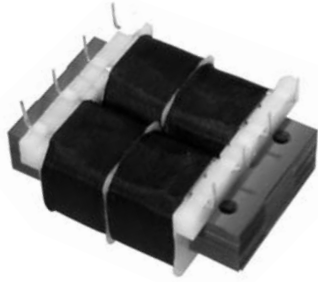


### Schematic



# LAMINATED TRANSFORMERS

## Low Frequency, Open-Style Laminated, Low Profile, Plug-In Series

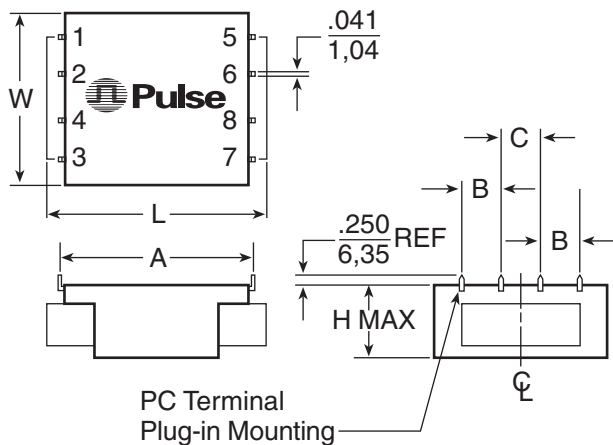


**AGENCY APPROVALS**

- UL, 506, File E73539
- UL 1446, File E179499
- CSA 22.2#66, File LR68051-2

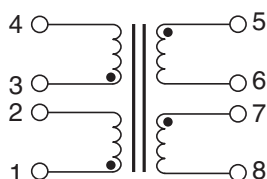
- ⊕ Semi-toroidal construction reduces EMI
- ⊕ Low profile - Ideal for low height PC board applications
- ⊕ 1500V<sub>RMS</sub> HIPOT
- ⊕ Vacuum impregnated - withstands board washing systems and reduces audible noise
- ⊕ Baked resin provides environmentally-resistant finish
- ⊕ Sizes 2, 6 and 12 are available as encapsulated, hermetically sealed (request drawings)

### Mechanical



Part Number	Size	Secondary RMS Rating	
		Series	Parallel
LP10-250B23	2	10V C.T. @ 250mA	5V @ 500mA
LP10-600B1	6	10V C.T. @ 600mA	5V @ 1.20A
LP10-1200B2	12	10V C.T. @ 1.20A	5V @ 2.40A
LP12-200B24	2	12.6V C.T. @ 200mA	6.3V @ 400mA
LP12-450B3	6	12.6V C.T. @ 450mA	6.3V @ 900mA
LP12-900B4	12	12.6V C.T. @ 900mA	6.3V @ 1.80A
LP16-150B25	2	16V C.T. @ 150mA	8V @ 300mA
LP16-350B5	6	16V C.T. @ 350mA	8V @ 700mA
LP16-700B6	12	16V C.T. @ 700mA	8V @ 1.40A
LP18-135B105	2	18V C.T. @ 135mA	9V @ 270mA
LP18-325B106	6	18V C.T. @ 325mA	9V @ 650mA
LP18-650B107	12	18V C.T. @ 650mA	9V @ 1.30A
LP20-125B26	2	20V C.T. @ 125mA	10V @ 250mA
LP20-300B7	6	20V C.T. @ 300mA	10V @ 600mA
LP20-600B8	12	20V C.T. @ 600mA	10V @ 1.20A
LP24-100B27	2	24V C.T. @ 100mA	12V @ 200mA
LP24-250B9	6	24V C.T. @ 250mA	12V @ 500mA
LP24-500B10	12	24V C.T. @ 500mA	12V @ 1.00A
LP28-90B115	2	28V C.T. @ 90mA	14V @ 180mA
LP28-215B116	6	28V C.T. @ 215mA	14V @ 430mA
LP28-430B117	12	28V C.T. @ 430mA	14V @ 860mA
LP30-85B125	2	30V C.T. @ 85mA	15V @ 170mA
LP30-200B126	6	30V C.T. @ 200mA	15V @ 400mA
LP30-400B127	12	30V C.T. @ 400mA	15V @ 800mA
LP34-75B28	2	34V C.T. @ 75mA	17V @ 150mA
LP34-170B11	6	34V C.T. @ 170mA	17V @ 340mA
LP34-340B12	12	34V C.T. @ 340mA	17V @ 680mA
LP40-60B29	2	40V C.T. @ 60mA	20V @ 120mA
LP40-150B13	6	40V C.T. @ 150mA	20V @ 300mA
LP40-300B14	12	40V C.T. @ 300mA	20V @ 600mA
LP56-45B30	2	56V C.T. @ 45mA	28V @ 90mA
LP56-100B15	6	56V C.T. @ 100mA	28V @ 200mA
LP56-200B16	12	56V C.T. @ 200mA	28V @ 400mA
LP88-28B31	2	88V C.T. @ 28mA	44V @ 56mA
LP88-65B17	6	88V C.T. @ 65mA	44V @ 130mA
LP88-130B18	12	88V C.T. @ 130mA	44V @ 260mA
LP120-20B32	2	120V C.T. @ 20mA	60V @ 40mA
LP120-50B19	6	120V C.T. @ 50mA	60V @ 100mA
LP120-100B20	12	120V C.T. @ 100mA	60V @ 200mA
LP230-10B33	2	230V C.T. @ 10mA	115V @ 20mA
LP230-25B21	6	230V C.T. @ 25mA	115V @ 50mA
LP230-50B22	12	230V C.T. @ 50mA	115V @ 100mA

### Schematic

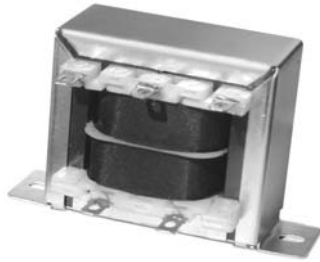



### Dimensions (inches)


Size	L	W	H	A	B	C	Wt. (oz.)	Reg. (% TYPE)	Trise (°C TYPE)
2	1.875	1.562	.650	1.600	.375	.375	5	20	25
6	1.875	1.562	.850	1.600	.375	.375	7	18	30
12	2.500	2.000	1.065	2.000	.500	.500	11	15	30

# LAMINATED TRANSFORMERS

## Low Frequency, Open-Style Laminated, Chassis-Tran Series



**AGENCY APPROVALS** 

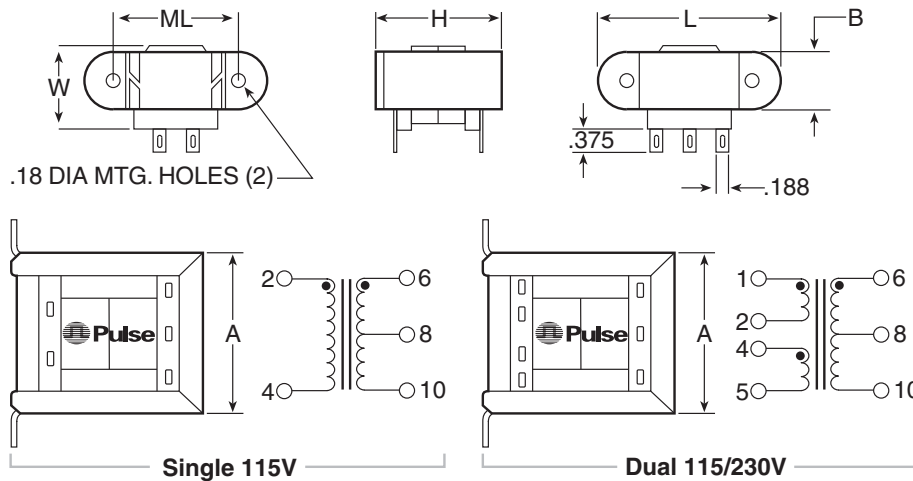
- UL, 506, File E73539
- UL 1446, File E179499
- CSA 22.2#66, File LR68051-2 
- UL Recognized Class B

- ⊕ Channel frame mounting
- ⊕ Split bobbin. High isolation (2500V). 2500V<sub>RMS</sub> Hipot
- ⊕ Non-concentric design - eliminates ESS
- ⊕ No crossover between primary/secondary winding leads
- ⊕ Vacuum impregnated - withstands board washing systems and reduces audible noise
- ⊕ Baked resin provides environmentally-resistant finish
- ⊕ Center tapped secondary offers dual outputs
- ⊕ Terminals suitable for either hard wiring or quick connect

Part Number		Secondary RMS Rating
Single 115V	Dual 115/230V	
241-3-10A1	(not available)	10V C.T. @ 0.25A
241-4-10A11	DP 241-4-10A11	10V C.T. @ 0.6A
241-5-10A21	DP 241-5-10A21	10V C.T. @ 1.2A
241-6-10A31	DP 241-6-10A31	10V C.T. @ 3.0A
241-7-10A41	DP 241-7-10A41	10V C.T. @ 5.0A
241-8-10A51	DP 241-8-10A51	10V C.T. @ 10A
241-3-12A2	(not available)	12.6V C.T. @ 0.2A
241-4-12A12	DP 241-4-12A12	12.6V C.T. @ 0.5A
241-5-12A22	DP 241-5-12A22	12.6V C.T. @ 1.0A
241-6-12A32	DP 241-6-12A32	12.6V C.T. @ 2.5A
241-7-12A42	DP 241-7-12A42	12.6V C.T. @ 4.0A
241-8-12A52	DP 241-8-12A52	12.6V C.T. @ 8.0A
241-3-16A3	(not available)	16V C.T. @ 0.15A
241-4-16A13	DP 241-4-16A13	16V C.T. @ 0.4A
241-5-16A23	DP 241-5-16A23	16V C.T. @ 0.8A
241-6-16A33	DP 241-6-16A33	16V C.T. @ 2.0A
241-7-16A43	DP 241-7-16A43	16V C.T. @ 3.5A
241-8-16A53	DP 241-8-16A53	16V C.T. @ 6.25A
241-3-20A4	(not available)	20V C.T. @ 0.12A
241-4-20A14	DP 241-4-20A14	20V C.T. @ 0.3A
241-5-20A24	DP 241-5-20A24	20V C.T. @ 0.6A
241-6-20A34	DP 241-6-20A34	20V C.T. @ 1.5A
241-7-20A44	DP 241-7-20A44	20V C.T. @ 2.8A
241-8-20A54	DP 241-8-20A54	20V C.T. @ 5.0A
241-3-24A5	(not available)	24V C.T. @ 0.1A
241-4-24A15	DP 241-4-24A15	24V C.T. @ 0.25A
241-5-24A25	DP 241-5-24A25	24V C.T. @ 0.5A
241-6-24A35	DP 241-6-24A35	24V C.T. @ 1.25A
241-7-24A45	DP 241-7-24A45	24V C.T. @ 2.4A
241-8-24A55	DP 241-8-24A55	24V C.T. @ 4.0A
241-3-28A6	(not available)	28V C.T. @ 0.085A
241-4-28A16	DP 241-4-28A16	28V C.T. @ 0.2A
241-5-28A26	DP 241-5-28A26	28V C.T. @ 0.42A
241-6-28A36	DP 241-6-28A36	28V C.T. @ 1.1A
241-7-28A46	DP 241-7-28A46	28V C.T. @ 2.0A
241-8-28A56	DP 241-8-28A56	28V C.T. @ 3.6A
241-3-36A7	(not available)	36V C.T. @ 0.065A
241-4-36A17	DP 241-4-36A17	36V C.T. @ 0.17A
241-5-36A27	DP 241-5-36A27	36V C.T. @ 0.35A
241-6-36A37	DP 241-6-36A37	36V C.T. @ 0.85A
241-7-36A47	DP 241-7-36A47	36V C.T. @ 1.5A
241-8-36A57	DP 241-8-36A57	36V C.T. @ 2.8A
241-3-48A8	(not available)	48V C.T. @ 0.05A
241-4-48A18	DP 241-4-48A18	48V C.T. @ 0.125A
241-5-48A28	DP 241-5-48A28	48V C.T. @ 0.25A
241-6-48A38	DP 241-6-48A38	48V C.T. @ 0.63A
241-7-48A48	DP 241-7-48A48	48V C.T. @ 1.2A
241-8-48A58	DP 241-8-48A58	48V C.T. @ 2.0A
241-3-56A9	(not available)	56V C.T. @ 0.045A
241-4-56A19	DP 241-4-56A19	56V C.T. @ 0.11A
241-5-56A29	DP 241-5-56A29	56V C.T. @ 0.22A
241-6-56A39	DP 241-6-56A39	56V C.T. @ 0.54A
241-7-56A49	DP 241-7-56A49	56V C.T. @ 1.0A
241-8-56A59	DP 241-8-56A59	56V C.T. @ 1.8A
241-3-120A10	(not available)	120V C.T. @ 0.02A
241-4-120A20	DP 241-4-120A20	120V C.T. @ 0.05A
241-5-120A30	DP 241-5-120A30	120V C.T. @ 0.1A
241-6-120A40	DP 241-6-120A40	120V C.T. @ 0.25A
241-7-120A50	DP 241-7-120A50	120V C.T. @ 0.5A
241-8-120A60	DP 241-8-120A60	120V C.T. @ 0.85A

### Mechanicals

### Schematics



### Dimensions (inches)

Size	VA	L	W	H	A	B	ML	Wt. (lb.)
3	2.4	2.06	1.06	1.19	1.62	0.56	1.75	0.25
4	6	2.38	1.25	1.38	1.69	0.69	2.00	0.44
5	12	2.81	1.38	1.63	1.94	0.81	2.38	0.70
6	30	3.25	1.69	1.94	2.31	1.06	2.81	1.10
7	56	3.69	1.81	2.25	2.69	1.06	3.13	1.70
8	100	4.03	2.25	2.56	3.06	1.31	3.56	2.75





# LAMINATED TRANSFORMERS

## Low Frequency, Open-Style Laminated, International PC Plug-In Series



**AGENCY APPROVALS**

- UL, 506, File E73539
- UL Recognized Class B
- UL 1446, File E179499
- CSA 22.2#66, File LR68051-2
- TUV, EN61558

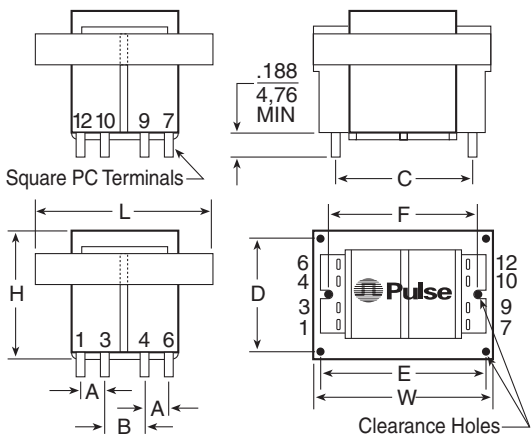





- ⚙️ PC board plug-in mounting
- ⚙️ Double reinforced insulation
- ⚙️ Dual bobbin; high (4000V) primary to secondary isolation
- ⚙️ Non-concentric design - eliminates ESS and reduces primary to secondary capacitance
- ⚙️ No crossover between primary/secondary leads
- ⚙️ Vacuum impregnated - withstands board washing systems and reduces audible noise
- ⚙️ Baked resin provides an environmentally-resistant finish

Part No. PC Mount	VA (Size)	Secondary RMS Rating	
		Series	Parallel
14A-2.5-10B1	2.5	10V C.T. @ 0.25A	5V @ 0.5A
14A-5.0-10B2	5	10V C.T. @ 0.5A	5V @ 1.0A
14A-10-10B3	10	10V C.T. @ 1.0A	5V @ 2.0A
14A-20-10B4	20	10V C.T. @ 2.0A	5V @ 4.0A
14A-30-10B5	30	10V C.T. @ 3.0A	5V @ 6.0A
14A-56-10B6	56	10V C.T. @ 5.6A	5V @ 11.2A
14A-2.5-12B7	2.5	12.6V C.T. @ 0.2A	6.3V @ 0.4A
14A-5.0-12B8	5	12.6V C.T. @ 0.4A	6.3V @ 0.8A
14A-10-12B9	10	12.6V C.T. @ 0.8A	6.3V @ 1.6A
14A-20-12B10	20	12.6V C.T. @ 1.6A	6.3V @ 3.2A
14A-30-12B11	30	12.6V C.T. @ 2.4A	6.3V @ 4.8A
14A-56-12B12	56	12.6V C.T. @ 4.4A	6.3V @ 8.8A
14A-2.5-16B13	2.5	16V C.T. @ 0.15A	8V @ 0.3A
14A-5.0-16B14	5	16V C.T. @ 0.31A	8V @ 0.62A
14A-10-16B15	10	16V C.T. @ 0.62A	8V @ 1.25A
14A-20-16B16	20	16V C.T. @ 1.25A	8V @ 2.5A
14A-30-16B17	30	16V C.T. @ 1.9A	8V @ 3.8A
14A-56-16B18	56	16V C.T. @ 3.5A	8V @ 7.0A
14A-2.5-20B19	2.5	20V C.T. @ 0.12A	10V @ 0.24A
14A-5.0-20B20	5	20V C.T. @ 0.25A	10V @ 0.5A
14A-10-20B21	10	20V C.T. @ 0.5A	10V @ 1.0A
14A-20-20B22	20	20V C.T. @ 1.0A	10V @ 2.0A
14A-30-20B23	30	20V C.T. @ 1.5A	10V @ 3.0A
14A-56-20B24	56	20V C.T. @ 2.8A	10V @ 5.6A
14A-2.5-24B25	2.5	24V C.T. @ 0.1A	12V @ 0.2A
14A-5.0-24B26	5	24V C.T. @ 0.21A	12V @ 0.42A
14A-10-24B27	10	24V C.T. @ 0.42A	12V @ 0.84A
14A-20-24B28	20	24V C.T. @ 0.83A	12V @ 1.66A
14A-30-24B29	30	24V C.T. @ 1.25A	12V @ 2.5A
14A-56-24B30	56	24V C.T. @ 2.33A	12V @ 4.66A
14A-2.5-28B31	2.5	28V C.T. @ 0.09A	14V @ 0.18A
14A-5.0-28B32	5	28V C.T. @ 0.18A	14V @ 0.36A
14A-10-28B33	10	28V C.T. @ 0.36A	14V @ 0.72A
14A-20-28B34	20	28V C.T. @ 0.72A	14V @ 1.44A
14A-30-28B35	30	28V C.T. @ 1.06A	14V @ 2.12A
14A-56-28B36	56	28V C.T. @ 2.0A	14V @ 4.0A
14A-2.5-36B37	2.5	36V C.T. @ 0.07A	18V @ 0.14A
14A-5.0-36B38	5	36V C.T. @ 0.14A	18V @ 0.28A
14A-10-36B39	10	36V C.T. @ 0.28A	18V @ 0.56A
14A-20-36B40	20	36V C.T. @ 0.56A	18V @ 1.12A
14A-30-36B41	30	36V C.T. @ 0.82A	18V @ 1.64A
14A-56-36B42	56	36V C.T. @ 1.56A	18V @ 3.12A

### Mechanical

### Schematic



### Dimensions (inches)

VA (size)	Wt. (lb.)	L	W	H	A	B	C	D	E	F	Pin Dim.	E
2.5	0.25	1.625	1.312	1.125	0.20	0.250	1.00	—	—	1.062	.025 SQ	#4
5	0.37	1.625	1.312	1.375	0.20	0.400	1.00	—	—	1.062	.025 SQ	#4
10	0.53	1.875	1.562	1.375	0.20	0.400	1.14	—	—	1.250	.038 SQ	#4
20	0.90	2.25	1.875	1.625	0.40	0.400	1.46	—	—	1.500	.038 SQ	#4
30	1.15	2.625	2.187	1.562	0.55	0.275	1.68	2.18	1.75	—	.045 SQ	#6
56	1.70	3.000	2.500	1.812	0.60	0.300	1.90	2.50	2.00	—	.045 SQ	#6







# LAMINATED TRANSFORMERS

## Low Frequency, Open-Style Laminated, International High Power Series



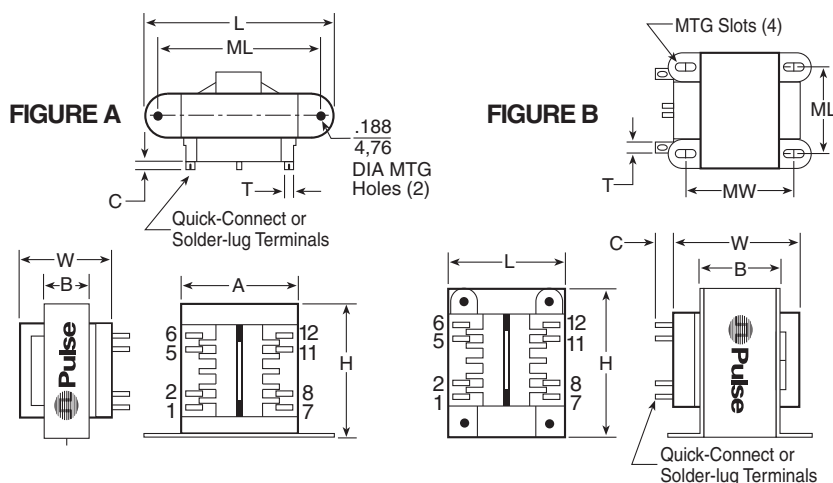
**AGENCY APPROVALS**

- UL, 506, File E73539
- UL Recognized Class B
- UL 1446, File E179499
- CSA 22.2#66, File LR68051-2
- TUV, EN61558

- ⊕ Chassis mounting
- ⊕ Dual bobbin; double reinforced insulation
- ⊕ High (4000V) primary to secondary isolation
- ⊕ Non-concentric design - eliminates ESS and reduces primary to secondary capacitance
- ⊕ No crossover between primary/secondary leads
- ⊕ Baked resin provides environmentally-resistant finish

### Mechanical



**Schematic**

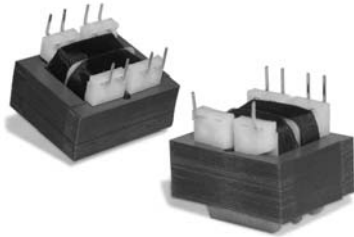
Part No. Chassis Mount	VA (Size)	Secondary RMS Rating	
		Series	Parallel
A41-25-10A1	25	10V C.T. @ 2.5A	5V @ 5.0A
A41-43-10A2	43	10V C.T. @ 4.3A	5V @ 8.6A
A41-80-10A3	80	10V C.T. @ 8.0A	5V @ 16.0A
A41-130-10A4	130	10V C.T. @ 13.0A	5V @ 26.0A
A41-175-10A5	175	10V C.T. @ 17.5A	5V @ 35.0A
A41-25-12A7	25	12.6V C.T. @ 2.0A	6.3V @ 4.0A
A41-43-12A8	43	12.6V C.T. @ 3.4A	6.3V @ 6.8A
A41-80-12A9	80	12.6V C.T. @ 6.3A	6.3V @ 12.6A
A41-130-12A10	130	12.6V C.T. @ 10.3A	6.3V @ 20.6A
A41-175-12A11	175	12.6V C.T. @ 14.0A	6.3V @ 28.0A
A41-25-16A13	25	16V C.T. @ 1.6A	8V @ 3.2A
A41-43-16A14	43	16V C.T. @ 2.7A	8V @ 5.4A
A41-80-16A15	80	16V C.T. @ 5.0A	8V @ 10.0A
A41-130-16A16	130	16V C.T. @ 8.1A	8V @ 16.2A
A41-175-16A17	175	16V C.T. @ 11.0A	8V @ 22.0A
A41-25-20A19	25	20V C.T. @ 1.25A	10V @ 2.5A
A41-43-20A20	43	20V C.T. @ 2.2A	10V @ 4.4A
A41-80-20A21	80	20V C.T. @ 4.0A	10V @ 8.0A
A41-130-20A22	130	20V C.T. @ 6.5A	10V @ 13.0A
A41-175-20A23	175	20V C.T. @ 8.8A	10V @ 17.6A
A41-25-24A25	25	24V C.T. @ 1A	12V @ 2A
A41-43-24A26	43	24V C.T. @ 1.8A	12V @ 3.6A
A41-80-24A27	80	24V C.T. @ 3.3A	12V @ 6.6A
A41-130-24A28	130	24V C.T. @ 5.4A	12V @ 10.8A
A41-175-24A29	175	24V C.T. @ 7.3A	12V @ 14.6A
A41-25-28A31	25	28V C.T. @ 0.9A	14V @ 1.86A
A41-43-28A32	43	28V C.T. @ 1.5A	14V @ 3.0A
A41-80-28A33	80	28V C.T. @ 2.8A	14V @ 5.6A
A41-130-28A34	130	28V C.T. @ 4.6A	14V @ 9.2A
A41-175-28A35	175	28V C.T. @ 6.25A	14V @ 12.5A
A41-25-36A37	25	36V C.T. @ 0.7A	18V @ 1.4A
A41-43-36A38	43	36V C.T. @ 1.2A	18V @ 2.4A
A41-80-36A39	80	36V C.T. @ 2.2A	18V @ 4.4A
A41-130-36A40	130	36V C.T. @ 3.6A	18V @ 7.2A
A41-175-36A41	175	36V C.T. @ 4.8A	18V @ 9.6A
A41-25-230A42	25	230V C.T. @ 0.11A	115V @ 0.22A
A41-43-230A43	43	230V C.T. @ 0.19A	115V @ 0.38A
A41-80-230A44	80	230V C.T. @ 0.35A	115V @ 0.7A
A41-130-230A45	130	230V C.T. @ 0.57A	115V @ 1.14A
A41-175-230A46	175	230V C.T. @ 0.76A	115V @ 1.52A

### Dimensions (inches)

VA (size)	Wt. (lb.)	L	W	H	A	B	C	T	ML	MW	MTG.	FIG.
25	1.25	2.812	1.875	2.312	2.00	1.125	0.330	0.187	2.375	—	#6	A
43	1.60	3.125	2.062	2.687	2.25	1.125	0.312	0.187	2.812	—	#6	A
80	2.80	2.500	2.375	3.050	—	1.375	0.330	0.187	2.000	2.180	#6	B
130	4.10	2.812	2.875	3.380	—	1.625	0.395	0.187	2.250	2.500	#8	B
175	5.50	3.125	2.875	3.750	—	1.625	0.395	0.187	2.500	2.500	#8	B

# LAMINATED TRANSFORMERS

## Low Frequency, Open-Style Laminated, Split Bobbin, Horizontal Plug-In Series



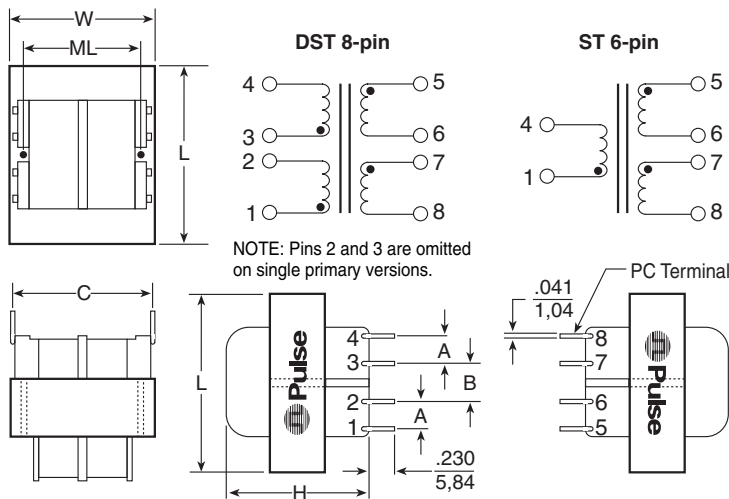
**AGENCY APPROVALS**

- UL, 506, File E73539
- UL 1446, File E179499
- UL 1585, File E169010  
Class 2 Component Recognition
- CSA 22.2#66, File LR68051-2
- UL Recognized Class B

- High (2500V) isolation; 2500V<sub>RMS</sub> HIPOT
- Non-concentric design - eliminates ESS
- No crossover between primary/secondary winding leads
- Vacuum impregnated - withstands board washing systems and reduces audible noise
- Baked resin provides an environmentally-resistant finish
- Rugged construction - no additional mounting hardware
- Universal design, fits industry-standard footprints
- Available in single or dual primary

### Mechanicals

### Schematics



### Dimensions (inches)

Size	VA	L	W	H	A	B	C	ML	Wt. (lb.)
2	1.1	1.13	1.13	0.94	0.25	0.25	1.20	----	0.17
3	2.4	1.38	1.13	1.19	0.25	0.25	1.20	----	0.25
4	6.0	1.63	1.31	1.31	0.25	0.35	1.28	1.06	0.44
5	12	1.86	1.56	1.44	0.30	0.40	1.41	1.25	0.70
6	20	2.25	1.86	1.44	0.30	0.40	1.60	1.50	0.80
7*	36	2.63	2.19	1.56	0.40	0.40	1.80	----	1.10

Part No. 115V-6Pin	Part No. 115/230V-8Pin	Secondary RMS Rating	
		Series	Parallel
ST2-10B41 <sup>1</sup>	DST2-10B41 <sup>1</sup>	10V C.T. @ 0.11A	5V @ 0.22A
ST3-10B1 <sup>1</sup>	DST3-10B1 <sup>1</sup>	10V C.T. @ 0.25A	5V @ 0.5A
ST4-10B2	DST4-10B2	10V C.T. @ 0.6A	5V @ 1.2A
ST5-10B3	DST5-10B3	10V C.T. @ 1.2A	5V @ 2.4A
ST6-10B4	DST6-10B4	10V C.T. @ 2A	5V @ 4A
ST7-10B51	DST7-10B51	10V C.T. @ 3.6A	5V @ 7.2A
ST2-12B42 <sup>1</sup>	DST2-12B42 <sup>1</sup>	12.6V C.T. @ 0.09A	6.3V @ 0.18A
ST3-12B5 <sup>1</sup>	DST3-12B5 <sup>1</sup>	12.6V C.T. @ 0.2A	6.3V @ 0.4A
ST4-12B6	DST4-12B6	12.6V C.T. @ 0.5A	6.3V @ 1.0A
ST5-12B7	DST5-12B7	12.6V C.T. @ 1.0A	6.3V @ 2.0A
ST6-12B8	DST6-12B8	12.6V C.T. @ 1.6A	6.3V @ 3.2A
ST7-12B52	DST7-12B52	12.6V C.T. @ 2.85A	6.3V @ 5.7A
ST2-16B43 <sup>1</sup>	DST2-16B43 <sup>1</sup>	16V C.T. @ 0.07A	8V @ 0.14A
ST3-16B9 <sup>1</sup>	DST3-16B9 <sup>1</sup>	16V C.T. @ 0.15A	8V @ 0.3A
ST4-16B10	DST4-16B10	16V C.T. @ 0.4A	8V @ 0.8A
ST5-16B11	DST5-16B11	16V C.T. @ 0.8A	8V @ 1.6A
ST6-16B12	DST6-16B12	16V C.T. @ 1.25A	8V @ 2.5A
ST7-16B53	DST7-16B53	16V C.T. @ 2.25A	8V @ 4.5A
ST2-20B44 <sup>1</sup>	DST2-20B44 <sup>1</sup>	20V C.T. @ 0.055A	10V @ 0.11A
ST3-20B13 <sup>1</sup>	DST3-20B13 <sup>1</sup>	20V C.T. @ 0.12A	10V @ 0.24A
ST4-20B14	DST4-20B14	20V C.T. @ 0.3A	10V @ 0.6A
ST5-20B15	DST5-20B15	20V C.T. @ 0.6A	10V @ 1.2A
ST6-20B16	DST6-20B16	20V C.T. @ 1A	10V @ 2A
ST7-20B54	DST7-20B54	20V C.T. @ 1.8A	10V @ 3.6A
ST2-24B45 <sup>1</sup>	DST2-24B45 <sup>1</sup>	24V C.T. @ 0.045A	12V @ 0.09A
ST3-24B17 <sup>1</sup>	DST3-24B17 <sup>1</sup>	24V C.T. @ 0.1A	12V @ 0.2A
ST4-24B18	DST4-24B18	24V C.T. @ 0.25A	12V @ 0.5A
ST5-24B19	DST5-24B19	24V C.T. @ 0.5A	12V @ 1.0A
ST6-24B20	DST6-24B20	24V C.T. @ 0.8A	12V @ 1.6A
ST7-24B55	DST7-24B55	24V C.T. @ 1.5A	12V @ 3.0A
ST2-28B46	DST2-28B46	28V C.T. @ 0.04A	14V @ 0.08A
ST3-28B21	DST3-28B21	28V C.T. @ 0.085A	14V @ 0.17A
ST4-28B22	DST4-28B22	28V C.T. @ 0.2A	14V @ 0.4A
ST5-28B23	DST5-28B23	28V C.T. @ 0.42A	14V @ 0.84A
ST6-28B24	DST6-28B24	28V C.T. @ 0.7A	14V @ 1.4A
ST7-28B56	DST7-28B56	28V C.T. @ 1.3A	14V @ 2.6A
ST2-36B47	DST2-36B47	36V C.T. @ 0.03A	18V @ 0.06A
ST3-36B25	DST3-36B25	36V C.T. @ 0.065A	18V @ 0.13A
ST4-36B26	DST4-36B26	36V C.T. @ 0.17A	18V @ 0.34A
ST5-36B27	DST5-36B27	36V C.T. @ 0.35A	18V @ 0.7A
ST6-36B28	DST6-36B28	36V C.T. @ 0.55A	18V @ 1.1A
ST7-36B57	DST7-36B57	36V C.T. @ 1.0A	18V @ 2.0A
ST2-48B48	DST2-48B48	48V C.T. @ 0.023A	24V @ .046A
ST3-48B29	DST3-48B29	48V C.T. @ 0.05A	24V @ 0.1A
ST4-48B30	DST4-48B30	48V C.T. @ 0.125A	24V @ 0.25A
ST5-48B31	DST5-48B31	48V C.T. @ 0.25A	24V @ 0.5A
ST6-48B32	DST6-48B32	48V C.T. @ 0.4A	24V @ 0.8A
ST7-48B58	DST7-48B58	48V C.T. @ 0.75A	24V @ 1.5A
ST2-56B49	DST2-56B49	56V C.T. @ 0.02A	28V @ 0.04A
ST3-56B33	DST3-56B33	56V C.T. @ 0.045A	28V @ 0.09A
ST4-56B34	DST4-56B34	56V C.T. @ 0.11A	28V @ 0.22A
ST5-56B35	DST5-56B35	56V C.T. @ 0.22A	28V @ 0.44A
ST6-56B36	DST6-56B36	56V C.T. @ 0.35A	28V @ 0.7A
ST7-56B59	DST7-56B59	56V C.T. @ 0.65A	28V @ 1.3A
ST2-120B50	DST2-120B50	120V C.T. @ 0.01A	60V @ 0.02A
ST3-120B37	DST3-120B37	120V C.T. @ 0.02A	60V @ 0.04A
ST4-120B38	DST4-120B38	120V C.T. @ 0.05A	60V @ 0.1A
ST5-120B39	DST5-120B39	120V C.T. @ 0.1A	60V @ 0.2A
ST6-120B40	DST6-120B40	120V C.T. @ 0.16A	60V @ 0.32A
ST7-120B60	DST7-120B60	120V C.T. @ 0.3A	60V @ 0.6A

<sup>1</sup> UL 1585 approved, Class 2 - Not Wet, Class 3 - Wet

\*Size 7 has 4 MTG. holes on 2.188" x 1.75" centers.



# LAMINATED TRANSFORMERS

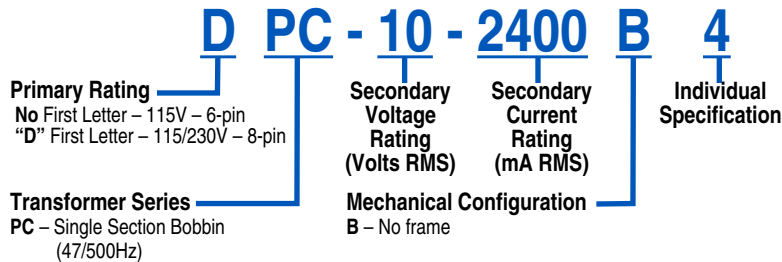
## Low Frequency, Open-Style Laminated, Concentric Vertical Profile, PC Plug-In Series



**AGENCY APPROVALS**

- UL, 506, File E73539
- UL Recognized Class B
- UL 1446, File E179499
- CSA 22.2#66, File LR68051-2

- PC Series Concentric Vertical Mount**  
Isolation between primary and secondary of 1500V.
- Vacuum Impregnated** to withstand modern board washing systems and to reduce audible noise.
- Available in single or dual primary**
- Baked Resin** provides fully cured and environmentally resistant finish that will not peel or flake.
- Rugged Construction**
- Universal Design** compatible with industry-standard footprints

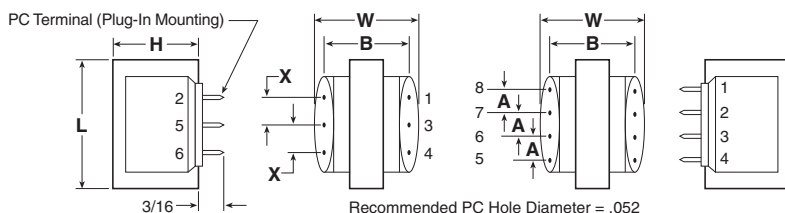


### Dimensions (inches)

Size	VA	Wt. (oz.)	L	H	W	B	6-pin X	8-pin A
25	1.0	2.5	1.000	0.830	1.375	1.200	0.250	0.200
37	1.2	3	1.375	1.188	1.125	1.000	0.312	0.200
50	4.4	5	1.625	1.375	1.250	1.100	0.400	0.250
62	10	9	1.875	1.625	1.438	1.300	0.400	0.250
24	24	12	1.625	1.375	2.250	2.100	0.400	0.250

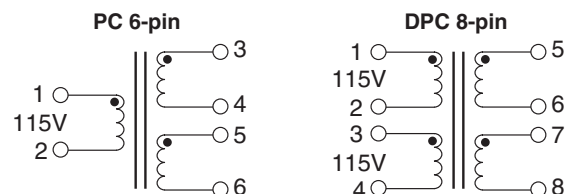
### Mechanical

Dimensions for Style B (no frame) are shown.



Single 115V 6-Pin	Dual 115/230V 8-Pin	Size	Series V.C.T.@mA	Parallel @ 2x Current V.@mA
PC-10-90B53	DPC-10-90B53	25	10 @ 90	5 @ 180
PC-10-120B1	DPC-10-120B1	37	10 @ 120	5 @ 240
PC-10-440B2	DPC-10-440B2	50	10 @ 440	5 @ 880
PC-10-1000B3	DPC-10-1000B3	62	10 @ 1000	5 @ 2000
PC-10-2400B4	DPC-10-2400B4	24	10 @ 2400	5 @ 4800
PC-12-70B54	DPC-12-70B54	25	12.6 @ 70	6.3 @ 140
PC-12-100B5	DPC-12-100B5	37	12.6 @ 100	6.3 @ 200
PC-12-350B6	DPC-12-350B6	50	12.6 @ 350	6.3 @ 700
PC-12-800B7	DPC-12-800B7	62	12.6 @ 800	6.3 @ 1600
PC-12-2000B8	DPC-12-2000B8	24	12.6 @ 2000	6.3 @ 4000
PC-16-55B55	DPC-16-55B55	25	16 @ 55	8 @ 110
PC-16-75B9	DPC-16-75B9	37	16 @ 75	8 @ 150
PC-16-260B10	DPC-16-260B10	50	16 @ 260	8 @ 520
PC-16-640B11	DPC-16-640B11	62	16 @ 640	8 @ 1280
PC-16-1500B12	DPC-16-1500B12	24	16 @ 1500	8 @ 3000
PC-20-45B56	DPC-20-45B56	25	20 @ 45	10 @ 90
PC-20-60B13	DPC-20-60B13	37	20 @ 60	10 @ 120
PC-20-220B14	DPC-20-220B14	50	20 @ 220	10 @ 440
PC-20-500B15	DPC-20-500B15	62	20 @ 500	10 @ 1000
PC-20-1200B16	DPC-20-1200B16	24	20 @ 1200	10 @ 2400
PC-24-35B57	DPC-24-35B57	25	24 @ 35	12 @ 70
PC-24-50B17	DPC-24-50B17	37	24 @ 50	12 @ 100
PC-24-180B18	DPC-24-180B18	50	24 @ 180	12 @ 360
PC-24-450B19	DPC-24-450B19	62	24 @ 450	12 @ 900
PC-24-1000B20	DPC-24-1000B20	24	24 @ 1000	12 @ 2000
PC-28-30B58	DPC-28-30B58	25	28 @ 30	14 @ 60
PC-28-40B49	DPC-28-40B49	37	28 @ 40	14 @ 80
PC-28-160B50	DPC-28-160B50	50	28 @ 160	14 @ 320
PC-28-360B51	DPC-28-360B51	62	28 @ 360	14 @ 720
PC-28-800B52	DPC-28-800B52	24	28 @ 800	14 @ 1600
PC-34-25B59	DPC-34-25B59	25	34 @ 25	17 @ 50
PC-34-35B21	DPC-34-35B21	37	34 @ 35	17 @ 70
PC-34-125B22	DPC-34-125B22	50	34 @ 125	17 @ 250
PC-34-300B23	DPC-34-300B23	62	34 @ 300	17 @ 600
PC-34-700B24	DPC-34-700B24	24	34 @ 700	17 @ 1400
PC-40-20B60	DPC-40-20B60	25	40 @ 20	20 @ 40
PC-40-30B25	DPC-40-30B25	37	40 @ 30	20 @ 60
PC-40-110B26	DPC-40-110B26	50	40 @ 110	20 @ 220
PC-40-250B27	DPC-40-250B27	62	40 @ 250	20 @ 500
PC-40-600B28	DPC-40-600B28	24	40 @ 600	20 @ 1200
PC-56-15B61	DPC-56-15B61	25	56 @ 15	28 @ 30
PC-56-20B29	DPC-56-20B29	37	56 @ 20	28 @ 40
PC-56-80B30	DPC-56-80B30	50	56 @ 80	28 @ 160
PC-56-180B31	DPC-56-180B31	62	56 @ 180	28 @ 360
PC-56-420B32	DPC-56-420B32	24	56 @ 420	28 @ 840
PC-120-8B63	DPC-120-8B63	25	120 @ 8	60 @ 16
PC-120-10B37	DPC-120-10B37	37	120 @ 10	60 @ 20
PC-120-35B38	DPC-120-35B38	50	120 @ 35	60 @ 70
PC-120-85B39	DPC-120-85B39	62	120 @ 85	60 @ 170
PC-120-200B40	DPC-120-200B40	24	120 @ 200	60 @ 400
PC-230-4B65	DPC-230-4B65	25	230 @ 4	115 @ 8
PC-230-5B45	DPC-230-5B45	37	230 @ 5	115 @ 10
PC-230-20B46	DPC-230-20B46	50	230 @ 20	115 @ 40
PC-230-40B47	DPC-230-40B47	62	230 @ 40	115 @ 80
PC-230-100B48	DPC-230-100B48	24	230 @ 100	115 @ 200

### Schematics







# LAMINATED TRANSFORMERS



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Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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