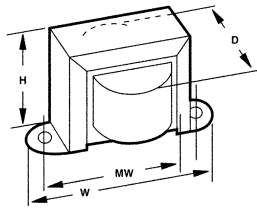
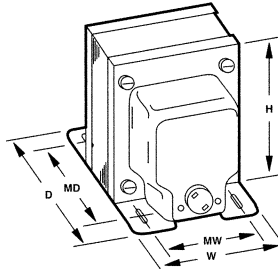


# Power Transformers

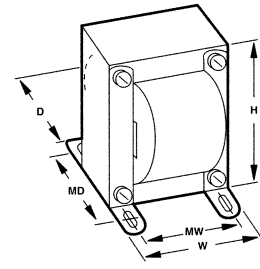
## Autotransformers



Case Type X



Case Type M



Case Type U

### :: Description

Triad autotransformers are single winding transformers in which the primary coil is a fraction of the entire winding for voltage step-up or the secondary coil is a fraction of the entire winding for voltage step-down (see Technical Notes for an equivalent circuit diagram). In ordinary double wound power transformers, the primary and secondary are isolated and all the power is transferred by induction. In autotransformers, part of the power is transferred conductively through

the windings. Triad autotransformers come in a variety of configurations, case types and output watts (VA) ratings in excess of 2,000 watts. A universal isolation/autotransformer/voltage control model is available with up to a 4,000 output watts rating when operated as an autotransformer.

### :: Specifications

See Technical Notes

### :: Step-Up/Step-Down Autotransformers

Section	Type No.	VA	Primary Voltage	Secondary		Case Type	Connections	Dimensions			Mounting Dimensions		Wt. Lbs.
				Volts ±5%	RMS Amps			H	W	D	MW	MD	
A	N-1X	50	230	115	0.435	X (1)	Leads	2 <sup>7</sup> / <sub>32</sub>	3 <sup>1</sup> / <sub>16</sub>	2	3 <sup>3</sup> / <sub>8</sub>	•	1.5
B	N-3M	85	230	115	0.74	M (3)	6' Cord, Plug & Socket	3 <sup>9</sup> / <sub>32</sub>	2 <sup>2</sup> / <sub>32</sub>	2 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>4</sub>	1 <sup>7</sup> / <sub>8</sub>	3.0
	N-3MGΔ	85	230	115	0.74	M (3)	6' Cord, Plug & Socket	3 <sup>7</sup> / <sub>32</sub>	2 <sup>2</sup> / <sub>32</sub>	3 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>8</sub>	3.0
C	N-2X	100	230	115	0.87	X (1)	Leads	2 <sup>7</sup> / <sub>8</sub>	4	2 <sup>1</sup> / <sub>16</sub>	3- <sup>3</sup> / <sub>8</sub>	•	2.1
D	N-150MG	150	115	230	0.65	M (3)	6'-3 Wire Cord, Plug & Socket	3 <sup>1</sup> / <sub>32</sub>	2 <sup>2</sup> / <sub>32</sub>	3 <sup>7</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>7</sup> / <sub>8</sub>	4.9
	F-302U#	150	277	115	1.30	U (2)	Leads	2 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>2</sup> / <sub>16</sub>	2	2.9
	N-4M	150	230	115	1.30	M (3)	6' Cord, Plug & Socket	3 <sup>9</sup> / <sub>32</sub>	2 <sup>2</sup> / <sub>32</sub>	3 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>8</sub>	4.7
	N-4MGΔ	150	230	115	1.30	M (3)	6' Cord, Plug & Socket	3 <sup>9</sup> / <sub>32</sub>	2 <sup>2</sup> / <sub>32</sub>	4 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>7</sup> / <sub>8</sub>	4.7

Δ Has 3-wire plug, cord and socket # 60 Hz

Mounting hole sizes: (1) = <sup>3</sup>/<sub>16</sub>" (2) = <sup>1</sup>/<sub>16</sub>" x <sup>3</sup>/<sub>8</sub>" (3) = <sup>3</sup>/<sub>8</sub>" x <sup>3</sup>/<sub>16</sub>"

**:: Step-Up/Step-Down Autotransformers continued**

Section	Type No.	VA	Primary Volts	Secondary		Case Type	Connections	Dimensions			Mounting Dimensions		Wt. Lbs.
				Volts ±5%	RMS Amps			H	W	D	MW	MD	
A	N-6U	200	230	115	1.70	U (2)	Leads	3/8	2 3/16	2 3/16	2 1/4	2 1/4	3.60
B	N-250MGΔ	250	115	230	1.10	M (3)	6' -3 Wire Cord, Plug & Socket	3/8	3/4	3 3/16	2 1/2	2 1/16	6.60
C	N-5M	250	230	115	2.17	M (3)	6' Cord, Plug & Socket	3/8	3 3/32	4 1/4	2 1/2	3	7.00
	N-5MGΔ	250	230	115	2.17	M (3)	6' Cord, Plug & Socket	3/8	3 3/32	4 3/16	2 1/2	3 1/2	7.00
D	N-500MGΔ	500	115	230	2.20	M (3)	6' -3 Wire Cord, Plug & Socket	4/8	3/8	4 1/4	3	3 3/8	11.20
E	N-7M	600	230	115	5.22	M (3)	6' Cord, Plug & Socket	4/8	3 15/16	5	3	3 3/8	12.00
	N-7MGΔ	600	230	115	5.22	M (3)	6' Cord, Plug & Socket	4/8	3 15/16	5	3	3 3/8	12.00
F	N-1000MGΔ	1,000	115	230	4.35	M (4)	6' -3 Wire Cord, Plug & Socket	5/8	4 1/2	5 1/2	3 1/2	4 3/8	17.39
G	N-9M	1,250	230	115	10.85	M (4)	6' Cord, Plug & Socket	5/16	4 1/2	6	3 1/2	4 1/2	21.00
	N-9MGΔ	1,250	230	115	10.85	M (4)	6' Cord, Plug & Socket	5/16	4 1/2	6	3 1/2	4 1/2	21.00
H	N-11M	2,000	230	115	17.40	M (4)	6' Cord, Plug & Socket	5/8	4 1/2	8 1/4	3 1/2	6 3/8	33.25
	N-11MGΔ	2,000	230	115	17.40	M (4)	6' Cord, Plug & Socket	5/8	4 1/2	8 1/4	3 1/2	6 3/8	33.25

Δ Has 3-wire plug, cord and socket

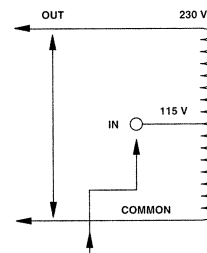
Mounting hole sizes: (2) = 3/64 x 3/8" (3) = 3/8 x 3/16" (4) = 2/32 x 3/32"

**:: Outline Dimensions**

**Technical Notes**

1. Output wattage (VA) ratings 50 to 2,000 W.
2. Wide selection of case types, including 6' line cords, plugs, sockets and lugs.
3. All transformers are 50/60 Hz line frequency, except as noted.
4. Hi-pot tested at 1,500 VRMS.

**Autotransformer**



(Single winding input providing input/output)