

## POWER TRANSFORMER CHASSIS MOUNT: Isolation

## **N-257MG**

## Electrical Specifications (@25°C)

1. Maximum Power: 500 VA

2. Input Voltage: 230 V, 50 / 60 Hz
 3. Output Voltage: 115V ± 5%

4. Full Secondary Load: 4.35 Amps RMS

5. Voltage Regulation: 5 % TYP @ full load to no load

#### **Description:**

The N-257MG is power transformer for isolating equipment from direct connection to the power line. It is constructed with nonconcentrically wound coils. The primary and secondary are wound on separate arbors, then assembled on a laminate core side-by-side separated by insulation. This prevents electrical connection under normal or overload conditions between the primary and secondary windings.

#### Safety:

These units are designed with 1500V isolation between winding to winding and between winding and core. Materials and construction are rated for Class B insulation system.

Dimensions:

Unit: In inches

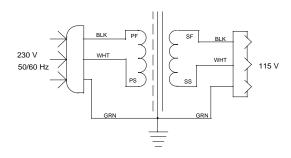
А	В	С	D	Е		
5.312	4.50	6.250	3.50	5.125		

Weight: 23.75 lbs

Mounting Holes: 0.50 x 0.250

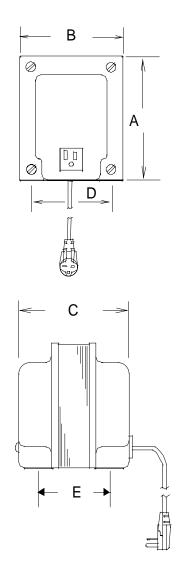
Connections: 6 ft. long cord, 6-15P NEMA Plug, 5-15R NEMA Receptacle

## **Schematic:**



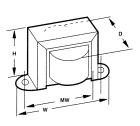
RoHS Compliance: As of manufacturing date February 2005, all standard products meet the requirements of 2002/95/EC, known as the RoHS initiative.

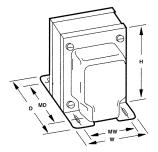


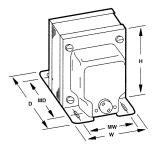


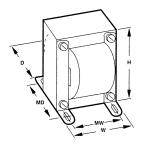
# Power Transformers

## Isolation / Medical









Case Type X

Case Type A

Case Type M

Case Type U

### :: Description

Triad isolation transformers are power transformers for isolating equipment from direct connection to the power line. They are offered in a variety of voltages and case types. Triad isolation transformers are also offered in hospital type (designed with an MD suffix) which are designed and constructed to meet the low leakage current requirements for today's medical equipment. The transformers are constructed with nonconcentrically wound coils. The primary and secondary are wound on separate arbors, then assembled on a laminate core side-by-side separated by insulation. This prevents

electrical connection, under normal or overload conditions, between the primary and secondary windings. These hospital type units are offered with a resettable circuit breaker, providing protection from overload and short circuit conditions.

## :: Specifications

**Primary:** 115/230 VAC, 50/60 Hz **Secondary:** 115/230 VAC **Output Watts:** 15 to 1,000 VA

## :: Standard Applications

	Secondary							Lead			Mounting				
Section	Type No.	VA	Primary Voltage	Volts ±5%	Amps	Case Type	Connections	Holes Used	H	Dimension W	s D	Dime MW	ensions MD	Wt. Lbs.	
A	N-48X	15	115	115.0	0.13	X (1)	Leads	•	115/16	35/16	2	213/16	•	1.35	
В	N-51X	35	115	115.0	0.3	X (1)	Leads	•	21/32	311/16	21/8	31/8	•	1.70	
С	N-68X	50	115/230§	115.0	0.435	X (1)	Leads	•	21/32	311/16	21/8	31/8	•	1.70	
	N-53M	85	115	115.0	0.74	M (3)	6' Cord, Plug	•	319/32	231/32	3¾	21/4	2⅓	4.70	
D	N-53MG√	85	115	115.0	0.74	M (3)	& Socket 6' Cord, Plug & Socket	٠	319/32	231/32	41/8	21/4	27/8	4.70	
Е	N-76U* N-77U*	100 100	115 115/230	115.0 115.0	0.86 0.86	U (2) U (2)	Leads Leads	•	3½ 3½	2 <sup>13</sup> / <sub>16</sub> 2 <sup>13</sup> / <sub>16</sub>	3 3	2½ 2½	2½ 2½	4.00 4.00	
	N-54M	150	115	115.0	1.3	M (3)	6' Cord, Plug	•	37/8	3%32	41/4	21/2	3	7.00	
F	N-54MG√	150	115`	115.0	1.3	M (3)	& Socket 6' Cord, Plug & Socket	•	3½	31/32	5 <sup>13</sup> / <sub>16</sub>	21/2	31/2	7.00	
	N-73A	150	115	115/230§	0.65	A (3)	Leads	1	37/8	31/32	35/8	21/2	2¾	7.00	
	N-67A	150	115/230§	115.0	1.3	A (3)	Leads	2	37/8	3%32	37/8	21/2	3	7.00	
	N-55M	250	115	115.0	2.17	M (3)	6' Cord, Plug & Socket	٠	45/8	315/16	5	3	313/16	11.00	
G	N-55MG√	250	115	115.0	2.17	M (3)	6' Cord, Plug & Socket	٠	<b>4</b> 5/8	315/16	5	3	313/16	11.00	
	N-255MG√	250	230	115.0	2.17	M (3)	6' Cord, Plug & Socket	٠	45/8	315/16	5	3	313/16	11.00	
	N-66A	250	115/230§	115.0	2.17	A (3)	Leads	2	4½	315/16	45/8	3	<b>3</b> ⅓	11.00	
Н	N-57M	500	115	115.0	4.35	M (5)	6' Cord, Plug & Socket	•	5½ <sub>16</sub>	41/2	61/4	31/2	51/8	23.75	

§ Split winding  $\sqrt{\text{With ground wire}}$  \*Unit does not include static shield Mounting hole sizes: (1) =  $\frac{4}{16}$ " (2) =  $\frac{1}{16}$ %  $\frac{4}{16}$ " (3) =  $\frac{4}{16}$ %  $\frac{4}{16}$ " (5) =  $\frac{4}{12}$ %  $\frac{4}{16}$ " (5) =  $\frac{4}{12}$ %  $\frac{4}{16}$ " (5) =  $\frac{4}{12}$ %  $\frac{4}{16}$ " (7)

## ∷ Standard Applications continued

	Secondary											Mounting				
	Туре					Case	Case		Dimensions			Dime				
Section	No.	VA	Voltage	±5%	Amps	Туре	Connections	Used	H	W	D	MW	MD	Lbs.		
	N-57MG√	500	115	115.0	4.35	M (5)	6' Cord, Plug	•	55/16	41/2	61/4	31/2	51/8	23.75		
							& Socket									
A	N-257MG√	500	230	115.0	4.35	M (5)	6' Cord, Plug	•	51/16	41/2	61/4	31/2	51/8	23.75		
							& Socket									
	N-59M	1,000	115	115.0	8.70	M (5)	6' Cord, Plug	•	51/16	41/2	71/8	31/2	6	31.0		
							& Socket									
В	N-59MG√	1,000	115	115.0	8.70	M (5)	6' Cord, Plug	•	51/16	41/2	71/8	31/2	6	31.0		
							& Socket									
	N-259MG√	1,000	230	115.0	8.70	M (5)	6' Cord, Plug	•	51/16	41/2	7½	31/2	6	31.0		
							& Socket									

 $\sqrt{\text{With ground wire}}$  Mounting hole sizes: (5) =  $\frac{1}{2} x \frac{1}{4}$ "

#### **Technical Notes**

- Line cord, plug and receptacle are U.L. listed and verified to meet federal specifications.
   Connections are by leads, plugs and sockets.

- 3. Hi-pot tested at 1,500 VRMS.
- 4. All units have static shields, except those marked with an asterisk.

## :: Medical/Dental Applications



	Secondary							Lead					Mounting				
	Туре		Primary	Volts	RMS	Case		Holes		Dimension			ensions	Wt.			
Section	No.	VA	Voltage	±5%	Amps	Туре	Connections	Used	H	W	D	MW	MD	Lbs.			
С	N-90MD	250	115	115.0	2.17	M (3)	6' Cord, Plug & Socket Circuit Breaker	•	45/8	37/8	61/s	3	415/16	11.9			
D	N-92MD	500	115	115.0	4.35	M (4)	6' Cord, Plug & Socket Circuit Breaker	•	511/32	41/2	7	31/2	5¾s	17.6			

Mounting hole sizes: (3) =  $\frac{3}{8} x \frac{3}{16}$ " (4) =  $\frac{21}{32} x \frac{9}{32}$ "

Leakage current from primary to secondary is rated at less than 50 micro-amps and is typically measured at less than 10 micro-amps.