

## POWER TRANSFORMER **CHASSIS MOUNT : Isolation**

## **N-48X**

#### Electrical Specifications (@25°C)

- 1. Maximum Power: 15 VA
- 2. Input Voltage:
- 115 V, 50 / 60 Hz 3. Output Voltage: 115V <u>+</u> 5%
- 4. Full Secondary Load: 0.13 Amps RMS
- 5. Voltage Regulation: 20 % TYP @ full load to no load

#### **Description:**

The N-48X 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:

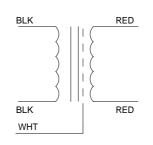
These units are designed with 1500V isolation between winding to winding and between winding and core. Materials and construction are rated for Class B insulation system.

Dimensi	ons:	Unit: In inches						
А	В	С	D					
1.937	3.312	2.00	2.812					

Weight: 1.35 lbs

Connections: 7.0±1" leads, 0.250±0.062" Skin & Tin

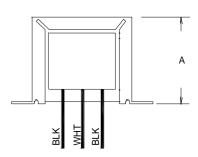
#### **Schematic:**

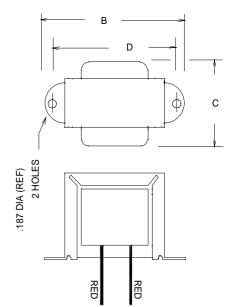


Input: Blk to Blk Output: Red to Red Shield: Wht

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

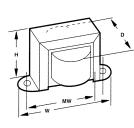


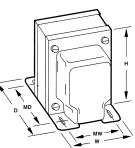




# **Power Transformers**

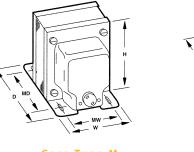
## Isolation / Medical

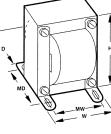




#### Case Type X

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

#### **Standard Applications**

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

	Secondary							Lead			Mounting				
Section	Type No.	VA	Primary Voltage	Volts ±5%	Amps	Case Type	Connections	Holes Used	Н	Dimension W	s D	Dir MW	nensions / MD	Wt. Lbs.	
А	N-48X	15	115	115.0	0.13	X (1)	Leads	•	115/16	35/16	2	2 <sup>13</sup> /16	•	1.35	
В	N-51X	35	115	115.0	0.3	X (1)	Leads	•	2%32	311/16	21/8	<u>3½</u>	•	1.70	
С	N-68X	50	115/230§	115.0	0.435	X (1)	Leads	•	2%32	3 <sup>11</sup> /16	21/8	31/8	•	1.70	
D	N-53M N-53MG√	85 85	115 115	115.0 115.0	0.74 0.74	M (3) M (3)	6' Cord, Plug & Socket 6' Cord, Plug & Socket	•	3 <sup>1</sup> % <sub>32</sub> 3 <sup>1</sup> % <sub>32</sub>	2 <sup>31</sup> / <sub>32</sub> 2 <sup>31</sup> / <sub>32</sub>	3¾ 4¼	2¼ 2¼	2¾ 27⁄8	4.70 4.70	
E	N-76U* N-77U*	100 100	115 115/230	115.0 115.0	0.86 0.86	U (2) U (2)	Leads Leads	:	37/16 37/16	2 <sup>13</sup> ⁄16 2 <sup>13</sup> ⁄16	3 3	2¼ 2¼	2½ 2½	4.00 4.00	
F	N-54M N-54MG√	150 150	115 115	115.0 115.0	1.3 1.3	M (3) M (3)	6' Cord, Plug & Socket 6' Cord, Plug & Socket	•	37/8 37/8	3%32 3%32	4¼ 5 <sup>13</sup> ⁄16	2½ 2½	3 3½	7.00 7.00	
	N-73A N-67A	150 150	115 115/230§	115/230§ 115.0	0.65 1.3	A (3) A (3)	Leads Leads	1 2	37/8 37/8	3%32 3%32	3 <sup>5</sup> /8 37/8	2½ 2½	2¾ 3	7.00 7.00	
	N-55M N-55MG√	250 250	115 115	115.0 115.0	2.17 2.17	M (3) M (3)	6' Cord, Plug & Socket 6' Cord, Plug	:	45/8 45/8	3 <sup>15</sup> /16 3 <sup>15</sup> /16	5	3 3	3 <sup>13</sup> /16 3 <sup>13</sup> /16	11.00 11.00	
G	N-255MG√	250	230	115.0	2.17	M (3)	6' Cord, Plug & Socket 6' Cord, Plug & Socket		478	3 <sup>15</sup> /16	5	3	3 <sup>13</sup> /16	11.00	
	N-66A	250	<mark>115/230</mark> §	115.0	2.17	A (3)	Leads	2	4%	315/16	41/8	3	31/8	11.00	
н	N-57M	500	115	115.0	4.35	M (5)	6' Cord, Plug & Socket	٠	5%16	4½	6¼	31/2	51/8	23.75	

§ Split winding √With ground wire \*Unit does not include static shield Mounting hole sizes: (1) =  $\frac{3}{16}$ " (2) =  $\frac{13}{64} \times \frac{3}{8}$ " (3) =  $\frac{3}{8} \times \frac{3}{16}$ " (5) =  $\frac{1}{2} \times \frac{1}{4}$ "

### \*\* Standard Applications continued

	Secondary								Mounting					
Section	Type No.	WA	Primary Voltage	Volts ±5%	Amps	Case Type	Connections	Holes Used	H	Dimensio W	ns D	Dime MW	nsions MD	Wt. Lbs.
	N-57MG√	500	115	115.0	4.35	M (5)	6' Cord, Plug & Socket	·	55/16	<b>4</b> <sup>1</sup> / <sub>2</sub>	6¼	31/2	51/8	23.75
A	N-257MG√	500	230	115.0	4.35	M (5)	6' Cord, Plug & Socket	•	55/16	41/2	6¼	31/2	51/8	23.75
	N-59M	1,000	115	115.0	8.70	M (5)	6' Cord, Plug & Socket	•	55/16	4½	71/8	<b>3½</b>	6	31.0
В	N-59MG√	1,000	115	115.0	8.70	M (5)	6' Cord, Plug & Socket	•	55/16	41/2	71/8	31/2	6	31.0
	<b>N-259MG</b> √	1,000	230	115.0	8.70	M (5)	6' Cord, Plug & Socket	·	51/16	4½	71/8	31/2	6	31.0

 $\sqrt{With ground wire}$  Mounting bole 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.

File E102910

### \*\* Medical/Dental Applications

Secondary								Lead				Mou		
Continu	Туре	7/4	Primary	Volts	RMS	Case	Connections	Holes		Dimension				Wt. Lbs.
Section	No.	WA	Voltage	±5%	Amps	Туре	Connections	Used	H	W	D	MW	MD	LDS.
C	N-90MD	250	115	115.0	2.17	M (3)	6' Cord, Plug & Socket Circuit Breaker	·	45/8	37/8	61/8	3	4 <sup>15</sup> /16	11.9
D	N-92MD	500	115	115.0	4.35	M (4)	6' Cord, Plug & Socket Circuit Breaker	•	5 <sup>11</sup> / <sub>32</sub>	4½	7	31/2	5¾	17.6

ΰL

/0 UL

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.