

## POWER TRANSFORMER CHASSIS MOUNT: Isolation

## N-73A

## Electrical Specifications (@25°C)

1. Maximum Power: 150 VA

2. Input Voltage: 115V@50/60Hz

3. Output Voltage:

Series: 115V Parallel: 230V

4. Full Secondary Load: 0.65 Amps RMS

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

## **Description:**

The N-73A 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.

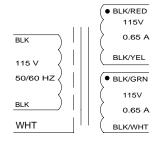
| Dimen | sions: | Į.    | <u>Jnit: In</u> | inches |
|-------|--------|-------|-----------------|--------|
| Α     | В      | С     | D               | Е      |
| 3.875 | 3.281  | 3.625 | 2.50            | 2.750  |

Weight: 7.0 Lbs.

Mounting Holes: .375 x .187"

Connections: 10.0±1" leads, 0.250±0.062" Skin & Tin

#### **Schematic:**



INPUT - BLK to BLK

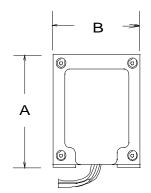
OUTPUT: Series: BLK/RED to BLK/WHT, JUMPER BLK/YEL to BLK/GRN

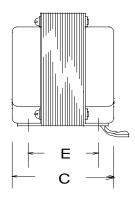
Parallel: BLK/RED to BLK/YEL, JUMPER BLK/RED to BLK/GRN and BLK/YEL to BLK/WHT

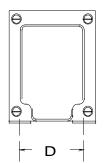
SHIELD: WHT

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



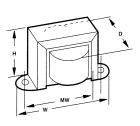


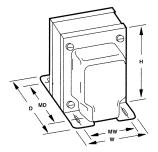


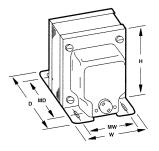


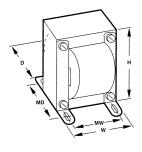
# Power Transformers

## 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

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  |                    |                |              |                |                                 |               |            |  |                                 | Mou        |               |              |
|---------|------------------|------------|--------------------|----------------|--------------|----------------|---------------------------------|---------------|------------|--|---------------------------------|------------|---------------|--------------|
| Section | Type<br>No.      | VA         | Primary<br>Voltage | Volts<br>±5%   | Amps         | Case<br>Type   | Connections                     | Holes<br>Used | H          | Dimension<br>W   | s<br>D                          | Dime<br>MW | ensions<br>MD | Wt.<br>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                           | •             | 2%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 | •             | 319/32     | 231/32   | 41/8                            | 21/4       | 27/8          | 4.70         |
| Е       | N-76U*<br>N-77U* | 100<br>100 | 115<br>115/230     | 115.0<br>115.0 | 0.86<br>0.86 | U (2)<br>U (2) | Leads<br>Leads                  | •             | 3½<br>3½   | 2 <sup>13</sup> / <sub>16</sub><br>2 <sup>13</sup> / <sub>16</sub> | 3<br>3                          | 2½<br>2½   | 2½<br>2½      | 4.00<br>4.00 |
|         | N-54M            | 150        | 115                | 115.0          | 1.3          | M (3)          | 6' Cord, Plug                   | •             | 37/8       | 3%32   | 41/4                            | 2½         | 3             | 7.00         |
| F       | N-54MG√          | 150        | 115`               | 115.0          | 1.3          | M (3)          | & Socket 6' Cord, Plug & Socket | •             | 37/8       | 31/32  | 5 <sup>13</sup> / <sub>16</sub> | 2½         | 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<br>& Socket       | •             | 45/8       | 315/16   | 5                               | 3          | 313/16        | 11.00        |
| G       | N-55MG√          | 250        | 115                | 115.0          | 2.17         | M (3)          | 6' Cord, Plug<br>& Socket       | •             | 45/8       | 315/16   | 5                               | 3          | 313/16        | 11.00        |
|         | N-255MG√         | 250        | 230                | 115.0          | 2.17         | M (3)          | 6' Cord, Plug<br>& Socket       | •             | 45/8       | 315/16   | 5                               | 3          | 313/16        | 11.00        |
|         | N-66A            | 250        | 115/230§           | 115.0          | 2.17         | A (3)          | Leads                           | 2             | <b>4</b> ½ | 315/16   | 45/8                            | 3          | <b>3</b> 5/8  | 11.00        |
| Н       | N-57M            | 500        | 115                | 115.0          | 4.35         | M (5)          | 6' Cord, Plug<br>& Socket       | •             | 55/16      | 41/2   | 61/4                            | 3½         | 5½            | 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    |           |       | Primary | Volts |      | Case  |               |      | Dimensions |      |      | Dimensions |      | Wt.   |  |  |
| Section | No.       | VA    | Voltage | ±5%   | Amps | Type  | 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 | •    | 55/16      | 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 | •    | 55/16      | 41/2 | 71/8 | 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



|         |        |     | Lead    |       |      |       |  | Mounting |        |          |      |      |         |      |
|---------|--------|-----|---------|-------|------|-------|--|----------|--------|----------|------|------|---------|------|
|         | Туре   |     | Primary | Volts | RMS  | Case  |  | Holes    |        | Dimensio |      |      | 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<br>& Socket<br>Circuit Breaker | •        | 45/8   | 37/8     | 61/8 | 3    | 415/16  | 11.9 |
| D       | N-92MD | 500 | 115     | 115.0 | 4.35 | M (4) | 6' Cord, Plug<br>& Socket<br>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.