

# POWER TRANSFORMER CHASSIS MOUNT: TOROIDAL MEDICAL SERIES



# VPM48-1040

### **Description:**

The toroidal construction inherently reduces stray fields, increases efficiency and minimizes size compared to traditional EI transformers. The addition of a Flux Band further reduces the remaining stray fields. The shield between Primary and Secondary improves safety, reduces common mode signals and minimizes leakage current. Built with a Class F (155°) insulation system. A 140°C self-resetting thermal switch is included in each primary.

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

- 1. Maximum Power: 50VA
- 2. Input Voltages: 100, 120, 220, 240VAC, 50/60Hz
- 3. Output Voltages: 24VAC @ 2.08A or 48VAC CT @ 1.04A 4. Voltage Regulation: 11.5% TYP from full load to no load
- 5. Temperature Rise: 45°C TYP
- 6. Hipot: 4000VAC, Primary to Secondary, Primary & Secondary to Shield & mounting surface
- 7. Efficiency: 89% TYP. @ full load
- 8. Earth Leakage: ≤10µA (See Fig. 1), Patient Leakage: ≤ 25µA (see Fig. 2)

### Agency File:

UL: File E122529, UL 60601-1/(R) 2012 Medical Electrical Equipment – Part 1 with 2 MOPP CE: ES 60601-1 (IEC 60601-1:2005, MOD)

cUL: C22.2 No. 60601-1:14, Medical Electrical Equipment – Part 1 CB Certified.



Dimensions: Inches (mm)

O.D.	I.D.	HT.*
3.6 (92)	1.3(32)	1.5(38)

\*Add 0.188 (3) to the height for mounting hardware

Weight: 0.7Kg

### Mounting:

Transformer is provided with one metal mounting plate, two rubber pads, M5 x 45mm bolt, nut, spring and flat washer.

#### **Connections:**

Transformer is provided with 8" (203mm) long, 0.25" (6.35mm) stripped and tinned, stranded UL 1015 lead wire. Primaries are 22AWG, Secondaries are 20AWG, and Shield is 20AWG. The GRN/YEL shield lead is typically grounded. Do not lift transformer by leads!

#### **Input Options:**

**100VAC:** Input to Gray & Blue, jumper White & Brown, jumper Blue & Violet. **120VAC:** Input to White & Blue, jumper White & Brown, jumper Blue & Violet.

220VAC: Input to Gray & Violet, jumper Blue & Brown 240VAC: Input to White and Violet, jumper Blue & Brown

#### **Output Options:**

24VAC: Output from Black & Red, jumper Black & Orange, jumper Red to Yellow

48VAC: Output from Black & Yellow, jumper Red & Orange

Primary and secondary windings are designed to be connected in series or parallel. Windings are not intended to be used independently.

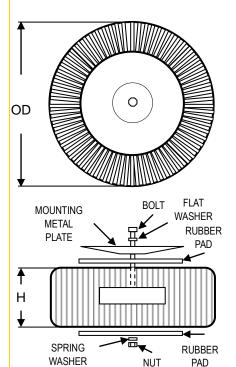
**RoHS Compliance:** As of manufacturing date February 2016, all standard products meet the requirements of 2015/863/EU, known as the RoHS 3 initiative.

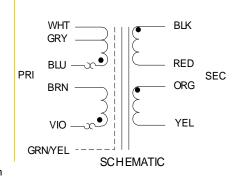
\* At printing, this document is considered "uncontrolled". Contact Triad Magnetics' website for current version

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## Earth Leakage Current:

V<sub>in</sub>: Apply 264VAC @60Hz, BLU & BRN - YEL/GRN

Connect resistor and meter between: RED & ORG - YEL/GRN

Leakage Current = 10 uA MAX

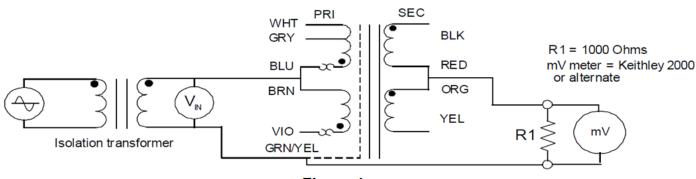


Figure 1

# Patient Leakage Current:

V<sub>in</sub>: Apply 264VAC @60Hz, WHT - VIO,

(Tie BLU & BRN, Tie RED & ORG)

GRN/YEL - BLK = 25 UARMS MAX GRN/YEL - Red & ORG = 25 UARMS MAX GRN/YEL - YEL = 25 UARMS MAX

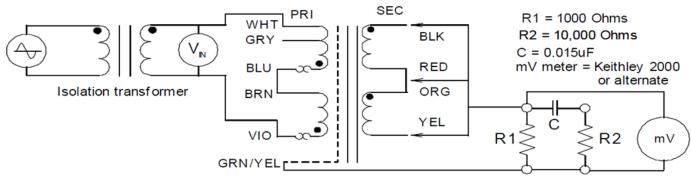


Figure 2