

POWER TRANSFORMER CHASSIS MOUNT: TOROIDAL MEDICAL SERIES



VPM100-5000

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: 500VA
- 2. Input Voltages: 100, 120, 220, 240VAC, 50/60Hz
- 3. Output Voltages: 50VAC @10.0A or 100VAC CT @ 5.0A
- 4. Voltage Regulation: 4.4% TYP from full load to no load
- 5. Temperature Rise: 50°C TYP
- 6. Hipot: 4000VAC, Primary to Secondary, Primary & Secondary to Shield & mounting surface
- 7. Efficiency: 95% TYP. @ full load
- 8. Earth Leakage: ≤10µA (See Fig. 1), Patient Leakage: ≤ 100µA (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





Dimensions: Inches (mm)

O.D.	I.D.	HT.*
5.8 (147)	2.0(51)	2.5(64)

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

Weight: 4.6Kg

Mounting:

Transformer is provided with one metal mounting plate, two rubber pads, M8 x 70mm 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 20AWG, Secondaries are 16AWG, 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:

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50VAC: Output from Black & Red, jumper Black & Orange, jumper Red to Yellow

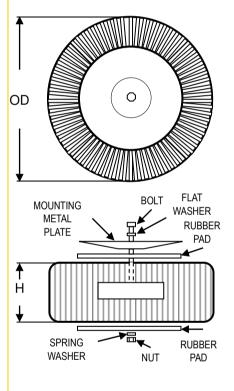
100VAC: Output from Black & Yellow, jumper Red & Orange

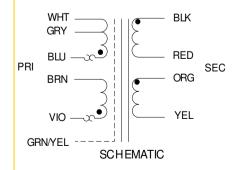
Primary and secondary windings are designed to be connected in series or parallel. Windings are not intended to be used independently.

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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Publish Date: June 3, 2019



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Earth Leakage Current:

V_{in}: Apply 264VAC @60Hz, BLU & BRN - YEL/GRN

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

Leakage Current = 10 uA MAX

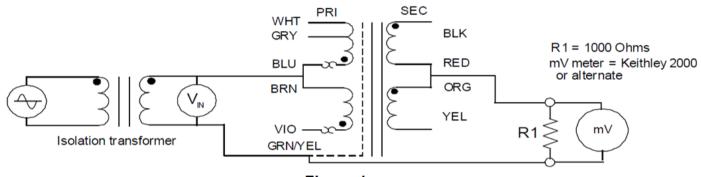


Figure 1

Patient Leakage Current:

Vin: Apply 264VAC @60Hz, WHT - VIO,

(Tie BLU & BRN, Tie RED & ORG)

 GRN/YEL - BLK =
 100
 uARMS MAX

 GRN/YEL - Red & ORG =
 100
 uARMS MAX

 GRN/YEL - YEL =
 100
 uARMS MAX

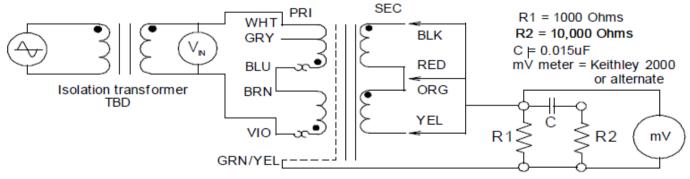


Figure 2