

POWER TRANSFORMER « CHASSIS MOUNT : TOROIDAL MEDICAL SERIES

VPM24-4170

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: 100VA
- 2. Input Voltages: 100, 120, 220, 240VAC, 50/60Hz
- 3. Output Voltages: 12VAC @ 8.34A or 24VAC CT @ 4.17A
- 4. Voltage Regulation: 8.9% 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: 91% 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



Dimensions: Inches (mm)

	(
O.D.	I.D.	HT.*	
3.8 (96)	1.5(37)	2.0(52)	

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

Weight: 1.2Kg

Mounting:

Transformer is provided with one metal mounting plate, two rubber pads, M6 x 55mm 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 18AWG, 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:

12VAC: Output from Black & Red, jumper Black & Orange, jumper Red to Yellow **24VAC:** 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.

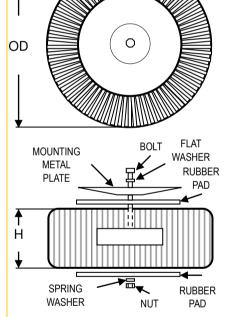
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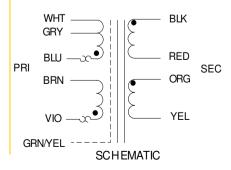
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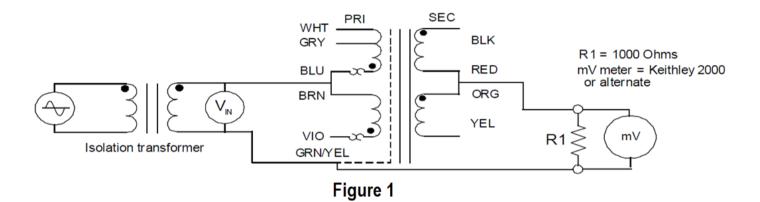


Earth Leakage Current:

Vin : Apply 264VAC @60Hz, BLU & BRN - YEL/GRN

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

Leakage Current = 10 uA MAX



Patient Leakage Current:

V _{in} :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				
Isolation transformer	WHT GRY BLU BRN VIO		R1 = 1000 Ohms R2 = 10,000 Ohms C = 0.015uF mV meter = Keithley 2000 or alternate R1 $\stackrel{\frown}{}$ R2 $\stackrel{\frown}{}$ mV			
Figure 2						