

Philmore TR250

Philmore Power Transformer 12.6V-3A (Model TR250) Instruction Manual

Your guide to safe and effective use.

INTRODUCTION

This manual provides essential information for the safe and proper installation, operation, and maintenance of your Philmore 12.6V-3A Power Transformer, Model TR250. Please read this manual thoroughly before use and retain it for future reference.

SAFETY INFORMATION

WARNING: Electrical shock hazard. Always disconnect power before installation or servicing. Installation should be performed by qualified personnel.

- Ensure the input voltage matches the transformer's rating (120 VAC).
- Do not expose the transformer to moisture or extreme temperatures.
- Verify all connections are secure and properly insulated to prevent short circuits.
- Do not exceed the rated current of 3000 mA.

PRODUCT OVERVIEW

The Philmore 12.6V-3A Power Transformer is designed to convert 120 VAC input to 12.6 VAC output with a 3000 mA current rating. It features a center-tapped secondary winding, providing flexibility for various applications.



Image 1: Philmore 12.6V-3A Power Transformer. This image shows the transformer unit with its metal mounting bracket, the primary (black) wires, and the secondary (red with green center tap) wires.

Components:

- **Primary Wires:** Two black wires for 120 VAC input connection.
- **Secondary Wires:** Two red wires and one green wire (center tap) for 12.6 VAC output. The green wire provides half the voltage (6.3 VAC) from the center to either red lead.
- **Mounting Bracket:** Metal bracket with holes for secure installation.

SETUP AND INSTALLATION

1. **Mounting:** Secure the transformer using the metal mounting bracket. The mounting hole center-to-center distance is 3.20 inches. Use appropriate screws or bolts for your mounting surface.
2. **Primary Connection (Input):** Connect the two black primary wires to your 120 VAC power source. Ensure proper insulation of all connections.
3. **Secondary Connection (Output):** Connect the red and green secondary wires to your load.
 - For 12.6 VAC output, connect across the two red wires.
 - For 6.3 VAC output, connect between one red wire and the green center-tap wire.
4. **Verification:** Before applying full power, double-check all wiring for correctness and security.

OPERATING INSTRUCTIONS

Once properly installed and connected, the transformer operates automatically when the 120 VAC input power is supplied. It will provide the specified 12.6 VAC (or 6.3 VAC with center tap) output to your connected load.

- Ensure the load connected does not draw more than 3000 mA (3 Amperes) to prevent overheating and damage.
- The transformer may become warm during operation; this is normal. Ensure adequate ventilation around the unit.

MAINTENANCE

The Philmore Power Transformer is designed for long-term, reliable operation with minimal maintenance.

- Periodically inspect the wiring for any signs of wear, damage, or loose connections.
- Keep the transformer free from dust and debris to ensure proper heat dissipation.
- Do not attempt to open or repair the transformer. Refer servicing to qualified personnel.

TROUBLESHOOTING

No Output Voltage:

- Check the 120 VAC input power source.
- Verify all primary and secondary connections are secure.
- Inspect for any blown fuses or tripped circuit breakers in the input circuit.
- Ensure the transformer is not overloaded. Disconnect the load and test the output voltage.

Transformer Overheating:

- Ensure the connected load does not exceed the 3000 mA current rating.
- Check for adequate ventilation around the transformer.
- Verify there are no short circuits in the output wiring or the connected load.

SPECIFICATIONS

Input Voltage:	120 VAC
Rated Output Voltage:	12.6 VAC (across entire secondary)
Rated Current:	3000 mA (3 Amperes)
Secondary VAC (No Load):	15.1V
Resistive Load:	4.4 Ohms
Output VAC (with Load):	13.78V
Mounting Hole Center-to-Center:	3.20 inches
Height:	2.28 inches
Width:	2.79 inches
Depth:	2.39 inches
Primary Wire Colors:	Black
Secondary Wire Colors:	Red (output), Green (center tap)
Model Number:	TR250
UPC:	038975642505

WARRANTY INFORMATION

Philmore products are manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact Philmore customer support.

CUSTOMER SUPPORT

If you encounter any issues or have questions regarding your Philmore Power Transformer, please contact Philmore customer support for assistance. Have your model number (TR250) and purchase details ready. *Contact information is typically found on the manufacturer's website or product packaging.*