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› MARS 50321 75VA Transformer Instruction Manual

MARS 50321

MARS 50321 75VA Transformer Instruction Manual

Model: 50321

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of the MARS 50321 75VA Transformer. This power transformer is designed to convert various input voltages (120V, 208V, 240V, 480V) to a stable 24V output, suitable for a range of industrial and HVAC control applications. Please read this manual thoroughly before proceeding with installation or operation.

2. SAFETY INFORMATION

WARNING: Risk of electric shock. Installation and servicing should only be performed by qualified personnel. Disconnect power before installation or servicing.

- Always ensure the main power supply is disconnected before working with the transformer.
- Verify input voltage matches the selected wiring configuration.
- Ensure all wiring connections are secure and properly insulated.
- Do not exceed the transformer's rated VA capacity.
- This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm (Proposition 65 Warning).

3. SETUP AND INSTALLATION

The MARS 50321 transformer features an open construction and wire lead connections for versatile installation. It is designed for foot mount applications.

3.1 Mounting

Securely mount the transformer using its foot mount points to a stable, vibration-free surface. Ensure

adequate ventilation around the unit to prevent overheating.

3.2 Wiring Connections

The transformer is equipped with wire leads for both primary (input) and secondary (output) connections. Carefully identify the correct primary leads for your specific input voltage (120V, 208V, 240V, or 480V) before making connections. The output is a fixed 24V.

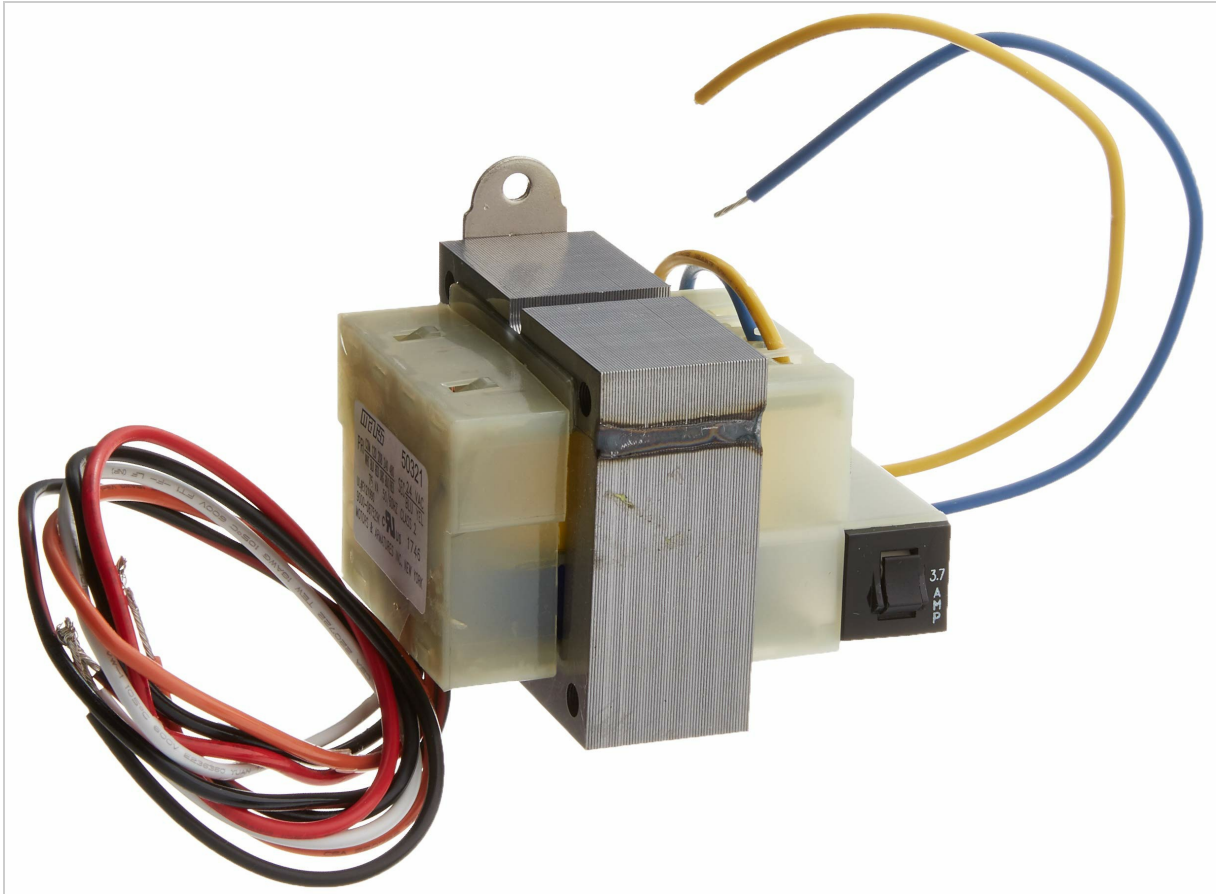


Figure 1: MARS 50321 75VA Transformer. This image shows the transformer with its multiple colored wire leads for input voltage selection and the 24V output leads. The open construction and foot mount tabs are visible.

Refer to the wiring diagram provided with the product packaging for specific color codes and connection instructions for each input voltage. Ensure all connections are tight and insulated to prevent short circuits.

4. OPERATION

Once properly installed and wired, the transformer operates automatically. When power is supplied to the primary side, the transformer will convert it to 24V on the secondary side. This 24V output is then used to power control circuits or other low-voltage devices.

- Verify the output voltage with a multimeter after initial power-up to ensure correct operation.
- Monitor for any unusual noises or excessive heat during the first few minutes of operation.

5. MAINTENANCE

The MARS 50321 transformer is designed for reliable, long-term operation with minimal maintenance. However, periodic checks can help ensure continued performance.

- **Annual Inspection:** Visually inspect the transformer and its wiring for any signs of wear, damage, or loose connections.

- **Cleaning:** Ensure the transformer remains free of dust and debris, which can impede heat dissipation. Use a soft, dry brush or compressed air for cleaning.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges to prevent premature failure.

CAUTION: Always disconnect power before performing any maintenance or cleaning.

6. TROUBLESHOOTING

If the transformer is not functioning as expected, consider the following common issues and solutions:

Problem	Possible Cause	Solution
No output voltage	No input power	Check circuit breaker or fuse for the input power supply.
No output voltage	Incorrect wiring	Verify primary and secondary wiring connections against the diagram.
No output voltage	Internal fault	If all external checks fail, the transformer may be faulty and require replacement.
Transformer is hot	Overload on secondary side	Reduce the load connected to the 24V output. Ensure total VA does not exceed 75VA.
Transformer is hot	Poor ventilation	Ensure adequate airflow around the transformer.

For issues not covered here, contact a qualified electrician or the manufacturer's support.

7. SPECIFICATIONS

- **Model:** 50321
- **Brand:** MARS
- **Input Voltage:** 120V, 208V, 240V, 480V AC
- **Output Voltage:** 24V AC
- **VA Rating:** 75VA
- **Connection Type:** Wire Leads
- **Mounting Type:** Foot Mount
- **Item Weight:** Approximately 2 Pounds
- **Minimum Frequency:** 50 Hz
- **Specification Met:** NEMA
- **Included Components:** 1 transformer
- **Manufacturer:** MARS - Motors & Armatures, Inc.
- **UPC:** 685744503217

8. WARRANTY INFORMATION

For detailed warranty information regarding the MARS 50321 transformer, please refer to the documentation included with your purchase or contact MARS - Motors & Armatures, Inc. directly. Warranty

terms and conditions may vary.

9. CUSTOMER SUPPORT

If you require technical assistance, have questions about installation, or need to report a product issue, please contact the manufacturer:

MARS - Motors & Armatures, Inc.

Refer to the product packaging or the manufacturer's official website for current contact information.