

YORK S1-02530889000

YORK S1-02530889000 Transformer User Manual

Model: S1-02530889000

1. INTRODUCTION

This manual provides essential information for the safe and effective use of the YORK S1-02530889000 Transformer. This component is a genuine OEM (Original Equipment Manufacturer) part designed for specific industrial and HVAC applications, converting voltage from 120V primary to 24V secondary at 50/60 Hz. It is crucial to read and understand all instructions before installation and operation to ensure proper function and safety.

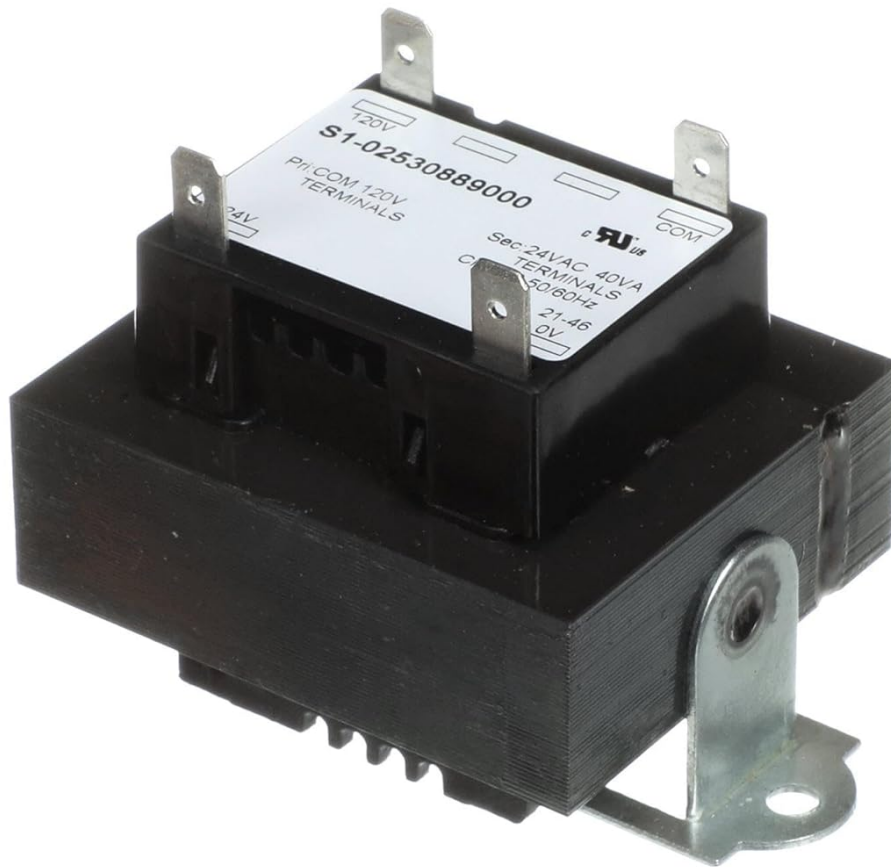


Figure 1: Front view of the YORK S1-02530889000 Transformer. This image shows the primary and secondary terminals clearly labeled, along with the mounting bracket.

2. SAFETY INFORMATION

WARNING: Electrical shock hazard. Installation and servicing should only be performed by qualified personnel.

- Always disconnect power before installing, servicing, or removing the transformer.
- Ensure proper grounding to prevent electrical shock.
- Verify input and output voltage ratings match the application requirements.
- Do not exceed the specified VA rating of the transformer.
- Protect wiring from sharp edges and high temperatures.
- Use appropriate personal protective equipment (PPE) when working with electrical components.

3. WHAT'S IN THE BOX

The package for the YORK S1-02530889000 Transformer typically includes:

- One (1) YORK S1-02530889000 Transformer (Replacement Part)

Inspect the contents upon receipt to ensure all items are present and undamaged. Contact your supplier immediately if any components are missing or damaged.

4. INSTALLATION AND SETUP

The YORK S1-02530889000 Transformer is designed for specific applications and should be installed by a qualified technician in accordance with local electrical codes and the equipment manufacturer's instructions.

4.1 Pre-Installation Checks

- Confirm the transformer's specifications (voltage, frequency, VA rating) match the system requirements.
- Ensure the mounting location is secure, dry, and provides adequate ventilation.
- Verify that the power supply is disconnected at the source before beginning installation.

4.2 Mounting

The transformer features an integrated mounting bracket. Secure the transformer firmly to a stable surface using appropriate fasteners. Ensure the mounting is robust enough to support the transformer's weight (approximately 1.5 pounds) and withstand any operational vibrations.

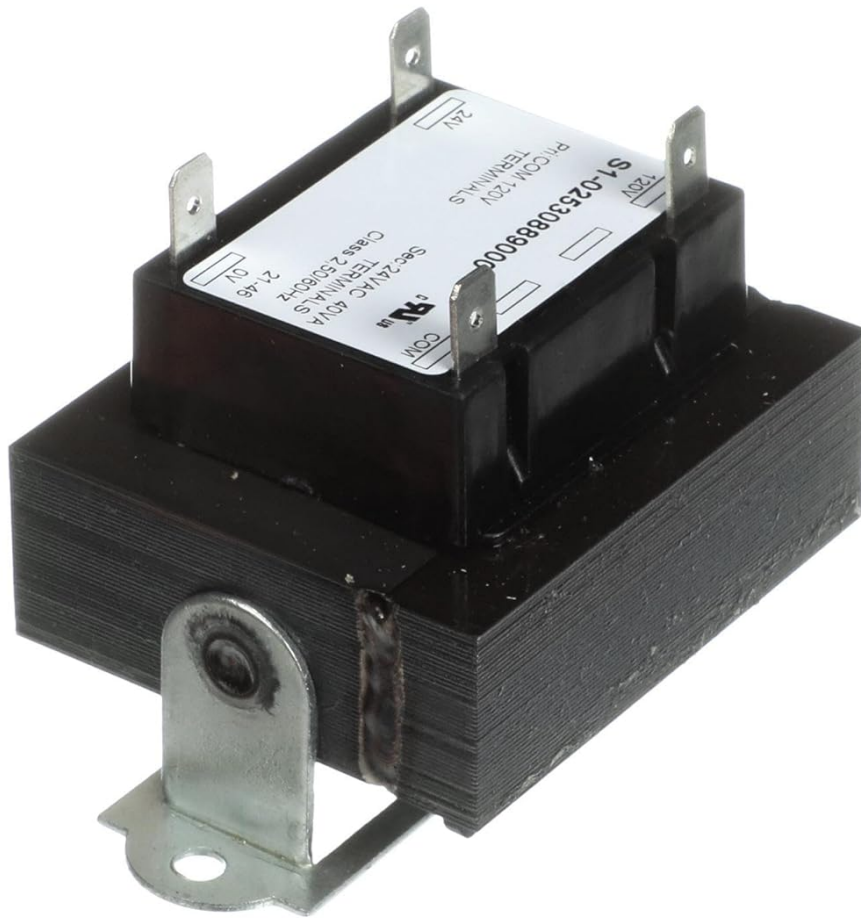


Figure 2: Side view of the transformer, highlighting the integrated mounting bracket. This bracket allows for secure attachment to a panel or chassis.

4.3 Wiring Connections

Refer to the wiring diagram provided with your equipment or on the transformer's label for correct connections. The transformer has clearly marked terminals:

- **Primary (Input) Terminals:** Typically labeled "120V" and "COM" (Common). Connect the 120V AC power supply to these terminals.
- **Secondary (Output) Terminals:** Typically labeled "24V" and "COM" (Common). These terminals provide the 24V AC output.

Important:

- Ensure all connections are tight and secure to prevent loose contacts and potential arcing.
- Use wire gauges appropriate for the current draw and local electrical codes.
- Double-check all wiring before restoring power.



Figure 3: Top view of the transformer, showing the clearly labeled primary (120V, COM) and secondary (24V, COM) terminals. Proper identification of these terminals is critical for correct wiring.

5. OPERATION

Once properly installed and wired, the YORK S1-02530889000 Transformer operates automatically to convert the input voltage. When 120V AC is supplied to the primary terminals, the transformer will provide a stable 24V AC output at its secondary terminals, suitable for powering control circuits or other low-voltage components in compatible systems.

The transformer is designed for continuous operation within its specified ratings. No user intervention is required for its basic function after installation.

6. MAINTENANCE

The YORK S1-02530889000 Transformer is a robust component designed for long-term reliability with minimal maintenance. However, periodic inspection is recommended to ensure optimal performance and safety.

6.1 Inspection Schedule

- **Annually:** Inspect the transformer and its connections.
- **As needed:** If any operational issues are suspected.

6.2 Inspection Steps

- **Disconnect Power:** Always de-energize the circuit before inspection.
- **Visual Check:** Look for any signs of physical damage, discoloration, or overheating on the transformer body and wiring.
- **Connection Integrity:** Check all terminal connections for tightness. Loose connections can cause overheating and arcing.
- **Cleanliness:** Ensure the transformer is free from dust, dirt, or debris that could impede heat dissipation. Use a dry, soft brush or compressed air for cleaning.
- **Environmental Conditions:** Verify that the operating environment remains within acceptable temperature and humidity ranges.

CAUTION: Do not attempt to disassemble the transformer. There are no user-serviceable parts inside.

7. TROUBLESHOOTING

This section provides guidance for common issues that may arise with the transformer. For complex problems or if you are unsure, consult a qualified technician.

Problem	Possible Cause	Solution
No output voltage (0V AC)	No input voltage; Blown fuse/breaker; Open primary winding; Loose connections.	Verify input power supply. Check and reset circuit breaker or replace fuse. Inspect primary wiring for continuity. Tighten all connections.
Incorrect output voltage	Incorrect input voltage; Overload; Faulty transformer.	Measure input voltage to ensure it is 120V AC. Reduce load on the secondary side. If input is correct and load is within limits, the transformer may be faulty and require replacement.
Transformer is hot to the touch	Overload; Poor ventilation; Short circuit in secondary circuit.	Check the load on the secondary side to ensure it does not exceed the transformer's VA rating. Ensure adequate airflow around the transformer. Inspect secondary wiring for short circuits.
Humming or buzzing noise	Normal operation (slight hum); Loose laminations; Overload.	A slight hum is normal. If excessive, check for loose mounting or laminations. Verify load is not exceeding VA rating.

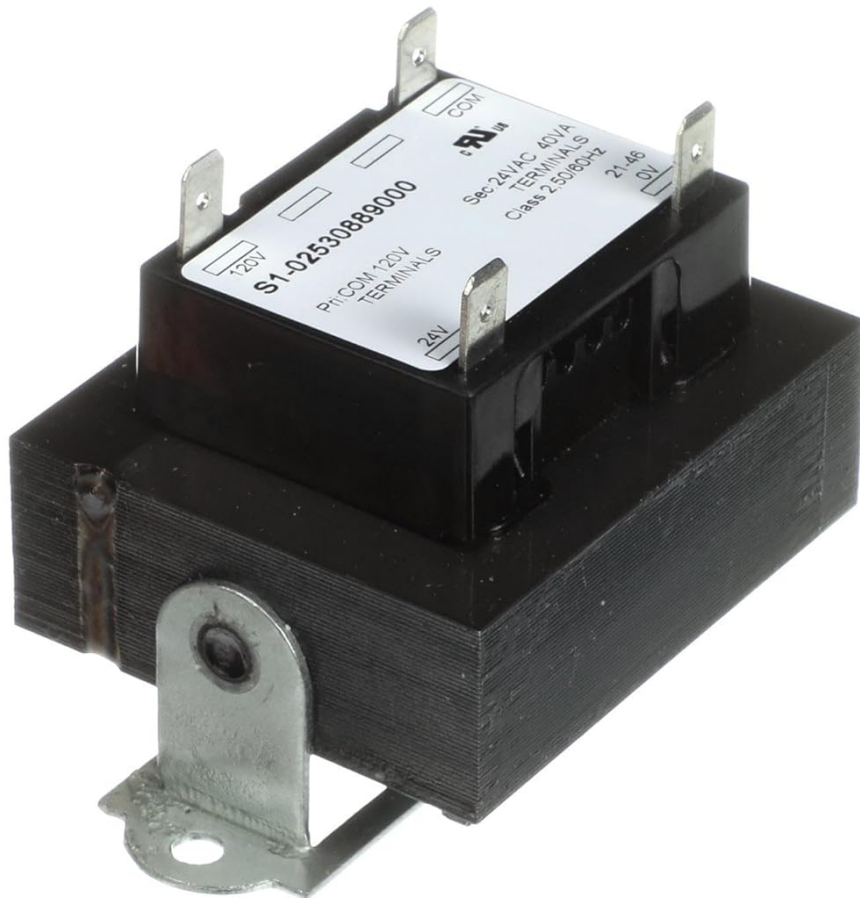


Figure 4: Angled view of the transformer, showing its compact design. This view helps in identifying potential areas for inspection during troubleshooting.

8. SPECIFICATIONS

Key technical specifications for the YORK S1-02530889000 Transformer:

- **Model Number:** S1-02530889000
- **Brand:** YORK
- **Primary Voltage:** 120V AC
- **Secondary Voltage:** 24V AC
- **Frequency:** 50/60 Hz
- **VA Rating:** 40VA
- **Product Dimensions:** 4 x 2.5 x 3 inches (approximate)
- **Item Weight:** 1.5 Pounds
- **Manufacturer:** York

- **Date First Available:** September 22, 2010

9. WARRANTY INFORMATION

As a genuine OEM (Original Equipment Manufacturer) part, the YORK S1-02530889000 Transformer is typically covered by the standard warranty provided by YORK for its replacement parts. Specific warranty terms, duration, and conditions may vary. Please refer to the official YORK warranty documentation or contact YORK customer support for detailed information regarding your product's warranty coverage.

10. CUSTOMER SUPPORT

For technical assistance, replacement parts, or further inquiries regarding the YORK S1-02530889000 Transformer, please contact YORK customer support or your authorized YORK distributor.

You can typically find contact information on the official YORK website or through your original point of purchase. When contacting support, please have the model number (S1-02530889000) and any relevant system information ready.

