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Dayton 3M552

Dayton Electric Motor Model 3M552 User Manual

1/100 hp, 1550 RPM, 115 Volt, 3.3" Diameter

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your Dayton Electric Motor Model 3M552. This motor is designed for various applications requiring a 1/100 horsepower, 1550 RPM, 115 Volt motor with a 3.3-inch diameter. Please read these instructions thoroughly before proceeding with installation or operation.

2. SAFETY INSTRUCTIONS

- Always disconnect power before installing, servicing, or cleaning the motor.
- Ensure all electrical connections comply with local and national electrical codes.
- Do not operate the motor in wet or damp conditions unless specifically rated for such environments.
- Keep hands, clothing, and tools clear of moving parts.
- If you are unsure about any electrical procedures, consult a qualified electrician.

3. SETUP AND INSTALLATION

Proper installation is crucial for the motor's performance and longevity. Follow these guidelines:

3.1 Mounting

The Dayton 3M552 motor is designed for specific mounting configurations. Ensure the mounting surface is stable and capable of supporting the motor's weight and operational vibrations. Use appropriate fasteners to secure the motor firmly.



Figure 1: Rear view of the Dayton Electric Motor Model 3M552, illustrating the mounting bolts and the terminal block for electrical connections. Ensure these bolts are securely fastened to a stable surface.

3.2 Electrical Connection

This motor operates on 115 Volts. Connect the motor to a power supply that matches its voltage and frequency requirements. Ensure all wiring is correctly insulated and protected. If the motor includes a pre-attached power cord, ensure the outlet is compatible and properly grounded.



Figure 2: The Dayton Electric Motor Model 3M552, showing the main body, output shaft, and attached power cord with a standard two-prong plug. Verify the power supply matches the motor's 115V requirement.

- Verify the power source voltage matches the motor's 115V rating.

- Ensure the circuit is protected by an appropriately sized fuse or circuit breaker.
- For permanent installations, consult a qualified electrician to ensure compliance with all electrical codes.

4. OPERATING INSTRUCTIONS

Once properly installed and connected, the Dayton 3M552 motor is ready for operation.

- **Initial Start-up:** After ensuring all connections are secure and safety precautions are observed, apply power to the motor.
- **Normal Operation:** The motor is designed to operate at 1550 RPM under its rated load. Monitor for any unusual noises or vibrations during the first few minutes of operation.
- **Stopping the Motor:** Disconnect power to stop the motor.

Avoid frequent starting and stopping, as this can reduce motor lifespan. Ensure the motor is not continuously overloaded beyond its 1/100 hp rating.

5. MAINTENANCE

Regular maintenance helps ensure the longevity and reliable performance of your electric motor.

- **Cleaning:** Periodically clean the exterior of the motor to prevent dust and debris buildup, which can impede cooling. Use a dry cloth or compressed air. Do not use liquids directly on the motor.
- **Inspection:** Regularly inspect the motor for any signs of wear, damage, or loose connections. Check the mounting bolts for tightness.
- **Lubrication:** This motor is typically designed with sealed bearings that do not require periodic lubrication. Refer to the motor's label for specific lubrication requirements if any.
- **Ventilation:** Ensure the motor has adequate ventilation to prevent overheating. Do not obstruct cooling vents.

6. TROUBLESHOOTING

If you encounter issues with your Dayton 3M552 motor, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Motor does not start	No power supply Loose electrical connections Overload protection tripped Motor seized	Check power outlet and circuit breaker Verify all wiring connections are secure Reset circuit breaker; check for overload condition Inspect for obstructions; if seized, professional service may be required
Motor runs hot	Overload Insufficient ventilation High ambient temperature Bearing issues	Reduce load on the motor Clear obstructions around the motor; ensure proper airflow Operate in a cooler environment if possible Contact professional service
Unusual noise or vibration	Loose mounting Worn bearings Foreign object in motor Unbalanced load	Tighten mounting bolts Contact professional service Disconnect power and inspect for obstructions Check the attached load for balance

If troubleshooting steps do not resolve the issue, or if you suspect internal damage, discontinue use and consult a qualified service technician.

7. SPECIFICATIONS

Specification	Value
Model	3M552
Brand	Dayton
Horsepower (hp)	1/100
Speed (RPM)	1550
Voltage	115 Volts
Diameter	3.3 inches
Material	Copper
Manufacturer	Dayton
ASIN	B00EBXSIBA

8. WARRANTY AND SUPPORT

For information regarding warranty coverage and technical support for your Dayton Electric Motor Model 3M552, please refer to the documentation provided with your purchase or contact Dayton customer service directly. Keep your purchase receipt as proof of purchase.

