

Fasco D1103

Fasco D1103 Evaporator Coil and Refrigeration Fan Motor User Manual

Model: D1103

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Fasco D1103 Evaporator Coil and Refrigeration Fan Motor. Please read this manual thoroughly before attempting any installation or operation to ensure proper function and longevity of the product.

The Fasco D1103 is an open ventilated, shaded pole motor designed for evaporator coil and refrigeration fan applications. It features sleeve bearings and automatic thermal protection, ensuring reliable performance in its intended environment.

2. SAFETY INFORMATION

WARNING: Risk of Electric Shock and Injury.

- Always disconnect power before installing, servicing, or cleaning the motor.
- Installation and wiring must be performed by a qualified electrician or HVAC technician in accordance with all local and national electrical codes.
- Ensure the motor is properly grounded.
- Do not operate the motor if it is damaged or if any electrical connections are loose.
- Wear appropriate personal protective equipment (PPE) such as safety glasses and gloves during installation and maintenance.
- This motor is thermally protected. If it shuts off, allow it to cool before attempting to restart. Investigate the cause of overheating.

3. PRODUCT OVERVIEW

The Fasco D1103 motor is engineered for specific refrigeration and evaporator applications. Key features include:

- Open ventilated shaded pole design.
- Sleeve bearing construction.
- Automatic thermal protection for safety.
- Counterclockwise shaft end rotation.
- UL recognized and CSA or ULc certified.
- Shaft dimensions: 5/16" diameter by 2-1/4" length.



Figure 1: Fasco D1103 Evaporator Coil and Refrigeration Fan Motor. This image shows a black, cylindrical electric motor with a metal shaft extending from one end and electrical wires emerging from the side. The motor casing features ventilation slots, revealing copper windings inside. Four threaded mounting studs are visible around the motor's circumference, indicating its mounting points.

4. SETUP AND INSTALLATION

Proper installation is critical for the motor's performance and safety. Consult a qualified professional for installation if you are not experienced with electrical and HVAC systems.

1. **Power Disconnection:** Ensure all power to the equipment where the motor will be installed is disconnected at the circuit breaker or fuse box. Verify with a voltage tester.
2. **Mounting:** Securely mount the motor using the provided mounting studs. Ensure the motor is stable and free from excessive vibration. The motor is designed for 3.3" frame applications.
3. **Shaft Connection:** Connect the fan blade or other driven component to the motor shaft. Ensure it is properly aligned and secured. The shaft rotates counterclockwise when viewed from the shaft end.

- 4. **Electrical Wiring:** Connect the motor's electrical leads to the power supply (208-230V, 60Hz) according to the wiring diagram of your equipment and all applicable electrical codes. Ensure all connections are tight and insulated.
- 5. **Grounding:** Ensure the motor and the equipment it is installed in are properly grounded to prevent electrical hazards.
- 6. **Final Check:** Before restoring power, double-check all connections, mounting, and ensure no tools or debris are left near the motor or fan assembly.

5. OPERATING INSTRUCTIONS

Once installed, the Fasco D1103 motor operates automatically as part of the refrigeration or evaporator system. No manual intervention is typically required for its operation.

- **Power On:** Restore power to the equipment. The motor should begin operating when the system calls for fan operation.
- **Initial Observation:** During the first few minutes of operation, observe the motor for any unusual noises, vibrations, or signs of overheating. If any issues are detected, immediately disconnect power and troubleshoot.
- **Thermal Protection:** The motor is equipped with automatic thermal protection. If the motor overheats, it will temporarily shut down. It will restart automatically once it has cooled sufficiently. Repeated thermal cut-offs indicate an underlying issue that needs to be addressed.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and efficient operation of your Fasco D1103 motor.

- **Power Disconnection:** Always disconnect power before performing any maintenance.
- **Cleaning:** Periodically inspect the motor and fan assembly for dust, dirt, and debris accumulation. Clean the exterior of the motor and fan blades using a soft brush or compressed air. Ensure ventilation openings are clear.
- **Bearing Inspection:** The motor uses sleeve bearings. While generally maintenance-free, listen for unusual noises that might indicate bearing wear. If excessive noise or vibration occurs, consult a qualified technician.
- **Electrical Connections:** Annually inspect all electrical connections for tightness and signs of corrosion.
- **Shaft Condition:** Check the motor shaft for any signs of damage or excessive play.

7. TROUBLESHOOTING

Refer to the following table for common issues and their potential solutions.

Problem	Possible Cause	Solution
Motor does not start.	No power; faulty wiring; thermal overload tripped; seized bearings.	Check power supply and circuit breaker. Verify wiring connections. Allow motor to cool if thermally tripped. Inspect bearings for obstruction or damage.
Motor runs hot and shuts off.	Overload; insufficient ventilation; high ambient temperature; restricted airflow; faulty motor.	Check for obstructions to fan blade or motor ventilation. Ensure proper airflow. Verify motor load is within specifications. Allow motor to cool. If problem persists, motor may need replacement.

Problem	Possible Cause	Solution
Excessive noise or vibration.	Loose mounting; unbalanced fan blade; worn bearings; foreign object.	Tighten mounting bolts. Inspect fan blade for damage or imbalance. Check for foreign objects. If bearings are worn, motor replacement may be necessary.

If troubleshooting steps do not resolve the issue, contact a qualified service technician.

8. SPECIFICATIONS

Model Number	D1103
Brand	Fasco
Horsepower	1/20 HP (0.05 HP)
Voltage	208-230 Volts
Frequency	60 Hz
Amperage	1.15 Amps
Speed	1500 RPM
Frame Size	3.3 inches
Bearing Type	Sleeve Bearing
Rotation	Counterclockwise (CCW) Shaft End
Shaft Dimensions	5/16" diameter x 2-1/4" length
Protection	Automatic Thermal Protection
Certifications	UL Recognized, CSA or ULc Certified
Product Dimensions	8 x 3 x 4 inches; 3 Pounds

9. WARRANTY INFORMATION

Specific warranty details for the Fasco D1103 motor are typically provided at the point of purchase or directly by the manufacturer. Please retain your proof of purchase. For detailed warranty terms and conditions, refer to the documentation included with your product or visit the official Fasco website.

10. CUSTOMER SUPPORT

For technical assistance, replacement parts, or further inquiries regarding your Fasco D1103 motor, please contact your authorized Fasco dealer or the Fasco customer support department. Have your model number (D1103) and purchase information ready when contacting support.

You may find contact information on the manufacturer's official website or through the retailer from whom you purchased the product.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question