

Fasco D475

Fasco D475 Refrigeration Fan Motor User Manual

Model: D475

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the Fasco D475 Open Ventilated Shaded Pole Refrigeration Fan Motor. Please read this manual thoroughly before attempting to install or operate the motor. Retain this manual for future reference.

2. SAFETY INFORMATION

WARNING: Risk of electric shock. Disconnect power before servicing.

- Ensure all electrical connections comply with local and national electrical codes.
- Installation and servicing should only be performed by qualified personnel.
- Verify the motor's voltage and current ratings match the power supply.
- Do not operate the motor if it is damaged or has exposed wiring.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.
- This motor is thermally protected. Do not bypass safety features.

3. PRODUCT OVERVIEW

The Fasco D475 is an open ventilated shaded pole refrigeration fan motor designed for various refrigeration applications. It features sleeve bearings for smooth operation and is thermally protected for enhanced safety. The motor is designed for counterclockwise shaft end rotation.



Figure 1: Fasco D475 Refrigeration Fan Motor. This image displays the motor's cylindrical body, the electrical connection box on top, and the shaft with mounting studs extending from one end. A label with specifications is visible on the motor body.

Key Features:

- Open Ventilated Shaded Pole Design
- Sleeve Bearings
- Automatic Thermally Protected
- UL Recognized, CSA or ULc Certified
- Extended Hubs with Rubber Rings for Base Mount
- Counterclockwise Shaft End Rotation

4. INSTALLATION

4.1 Mounting

1. Ensure the mounting surface is stable and capable of supporting the motor's weight and operational vibrations.
2. Utilize the 1/2-inch studs provided for secure mounting.

3. The motor features extended hubs with rubber rings for base mounting. Position these correctly to minimize vibration and noise.
4. Tighten all mounting hardware securely, but do not overtighten.

4.2 Electrical Connection

Before making any electrical connections, ensure the main power supply is disconnected.

1. Locate the electrical connection box on the motor.
2. Connect the power supply wires to the motor terminals according to the wiring diagram (if provided with the unit, or consult a qualified electrician).
3. Ensure the supply voltage is 460V and the frequency is 60Hz. The motor operates at 0.5 amps.
4. Confirm all connections are tight and insulated properly to prevent short circuits.
5. Ground the motor properly as per electrical codes.

5. OPERATION

Once installed and wired correctly, the Fasco D475 motor is ready for operation. This motor is designed for continuous duty in refrigeration applications.

- Upon initial startup, observe the motor for any unusual noises or vibrations.
- Verify that the shaft rotates in a counterclockwise direction when viewed from the shaft end.
- Ensure adequate airflow around the motor for proper cooling, as it is an open ventilated design.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Fasco D475 motor.

6.1 Cleaning

- Periodically clean the exterior of the motor to prevent dust and debris buildup, which can impede cooling.
- Use a soft, dry cloth or compressed air. Do not use liquids or solvents that could damage electrical components.

6.2 Bearing Inspection

- The motor uses sleeve bearings. While generally low-maintenance, inspect for signs of wear or excessive noise during operation.
- If unusual noise or resistance is detected, consult a qualified technician for inspection and potential replacement.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with the Fasco D475 motor.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Motor does not start	No power supply, incorrect wiring, thermal overload tripped, seized bearing.	Check power connections, verify wiring, allow motor to cool and reset, inspect bearings.
Motor overheats	Insufficient ventilation, excessive load, high ambient temperature, bearing friction.	Ensure clear airflow, reduce load if possible, check ambient conditions, inspect bearings.
Excessive noise or vibration	Loose mounting, worn bearings, unbalanced fan blade (if attached).	Tighten mounting hardware, inspect/replace bearings, check fan balance.

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

8. SPECIFICATIONS

Attribute	Detail
Model Number	D475
Brand	Fasco
Motor Type	Open Ventilated Shaded Pole Refrigeration Fan Motor
Horsepower (HP)	1/15 HP
Voltage	460V
Frequency	60Hz
Amperage	0.5 Amps
Speed	1550 RPM
Frame Size	3.3" Frame
Frame Diameter	3.9 inches
Bearings	Sleeve Bearing
Thermal Protection	Automatic Thermally Protected
Rotation	Counterclockwise Shaft End Rotation
Shaft Dimensions	5/16" diameter x 2-1/2" length
Mounting	1/2" Studs, Extended Hubs with Rubber Rings for Base Mount
Certifications	UL Recognized, CSA or ULc Certified
Motor Length	4-1/2"
Material	Rubber (for rings)

9. WARRANTY INFORMATION

Fasco products are manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the warranty statement included with your purchase or visit the official Fasco website. Keep your proof of purchase for warranty claims.

10. SUPPORT

For technical assistance, replacement parts, or further inquiries, please contact Fasco customer support. Contact details can typically be found on the Fasco official website or on the product packaging.