

Genteq 5SME39NXL5033

Genteq 5SME39NXL5033 Direct Drive Blower Motor Instruction Manual

Model: 5SME39NXL5033

1. SAFETY INFORMATION

WARNING: Read and understand all instructions before installing, operating, or performing maintenance on this motor. Failure to follow these instructions may result in electric shock, fire, serious injury, or death.

- Always disconnect power before servicing or installing the motor.
- Installation and wiring must be performed by a qualified electrician in accordance with all local and national electrical codes.
- Ensure proper grounding to prevent electrical shock.
- Wear appropriate personal protective equipment (PPE) such as safety glasses and gloves.
- Do not operate the motor if it is damaged or has exposed wiring.
- Keep hands and clothing clear of moving parts during operation.

2. PRODUCT OVERVIEW

The Genteq 5SME39NXL5033 is a 3/4 HP Direct Drive Blower Motor designed for use in condenser or evaporator fan applications. This Electronically Commutated Motor (ECM) features a 48-frame design, 1050 Nameplate RPM, and operates at 460 Volts. It offers 5 speeds for versatile performance and is built for continuous duty with ball bearings for durability.



Figure 1: Genteq 5SME39NXL5033 Direct Drive Blower Motor. This image shows the overall appearance of the motor, including its housing and shaft.

3. SPECIFICATIONS

Feature	Specification
Brand	Genteq
Model Number	5SME39NXL5033
Motor Design	ECM (Electronically Commutated Motor)
Horsepower (HP)	3/4 HP (0.75 hp)
Nameplate RPM	1050 rpm
Voltage	460 volts
Full Load Amps	3.1 A
Frame	48
Max. Ambient Temp.	45°C
Duty	Continuous
Number of Speeds	5
Motor Mounting Type	Band
Motor Bearings	Ball
Motor Shaft Rotation	CWSE (Clockwise Shaft End)
Body Diameter	5-5/8"
Overall Length	11-1/4"
Shaft Diameter	1/2"

Feature	Specification
Shaft Design	Flat
Bolt Circle Diameter	5-3/8"
Application	Condenser or Evaporator Fan Motor
Item Weight	16 ounces

4. SETUP AND INSTALLATION

4.1 Pre-Installation Checks

- Verify that the motor specifications (voltage, HP, RPM) match the requirements of your application.
- Inspect the motor for any shipping damage. Do not install a damaged motor.
- Ensure the mounting location is clean, dry, and provides adequate ventilation.

4.2 Mounting the Motor

This motor is designed for band mounting. Secure the motor firmly using appropriate mounting bands and hardware suitable for the motor's weight and operational vibrations. Ensure the motor is level and aligned correctly with the driven component (e.g., fan blade) to prevent premature wear and vibration.

4.3 Electrical Connections

CAUTION: All electrical work must be performed by a qualified electrician. Ensure power is disconnected at the source before making any connections.

1. Identify the motor's wiring leads. Refer to the wiring diagram provided with the motor or on the motor's nameplate for specific connections.
2. Connect the motor to a 460-volt power supply. Ensure proper phase sequence if applicable.
3. Connect the ground wire to a reliable earth ground.
4. Verify all connections are secure and insulated.
5. The motor has 5 speeds. Connect the appropriate speed control wires as per your system's requirements.
6. The shaft rotation is CWSE (Clockwise Shaft End). Verify this matches your application's requirement. If reverse rotation is needed, consult the motor's specific wiring diagram for reversal instructions, if available.

5. OPERATING INSTRUCTIONS

Once installed and wired correctly, the Genteq 5SME39NXL5033 motor is ready for operation. This ECM motor is designed for continuous duty in its specified applications.

- **Initial Start-up:** After installation, briefly apply power to check for correct rotation and smooth operation. Immediately disconnect power if any unusual noise, vibration, or overheating is observed.
- **Speed Selection:** The motor offers 5 distinct speeds. These speeds are typically controlled by external HVAC system controls. Ensure the selected speed is appropriate for the airflow requirements of your system.
- **Continuous Duty:** The motor is rated for continuous operation within its specified temperature and load limits. Avoid operating the motor beyond its rated capacity.

6. MAINTENANCE

The Genteq 5SME39NXL5033 motor is designed for minimal maintenance. However, regular inspection can extend its lifespan and ensure optimal performance.

- **Cleaning:** Periodically clean the exterior of the motor to prevent dust and debris buildup, which can impede cooling. Ensure power is disconnected before cleaning.
- **Inspection:** Regularly inspect the motor for signs of wear, damage, or loose connections. Check for unusual noises or excessive vibration during operation.
- **Bearings:** This motor uses ball bearings, which are typically sealed and lubricated for life, requiring no additional lubrication under normal operating conditions.
- **Ventilation:** Ensure that the motor's ventilation openings are clear and unobstructed to allow for proper heat dissipation.

7. TROUBLESHOOTING

Before attempting any troubleshooting, ensure power is disconnected. If you are unsure about any procedure, consult a qualified technician.

Problem	Possible Cause	Solution
Motor does not start	No power supply Incorrect wiring Motor overload Internal motor fault	Check power source and circuit breaker. Verify wiring against diagram. Check for obstructions or excessive load on the fan. Consult a qualified technician.
Motor runs hot	Insufficient ventilation Overload High ambient temperature Bearing issues	Clear obstructions from motor vents. Reduce load if possible; ensure fan is free-spinning. Ensure ambient temperature is within specifications (max 45°C). Consult a qualified technician.
Excessive noise or vibration	Loose mounting Unbalanced fan blade Worn bearings Misalignment	Tighten mounting bands and hardware. Inspect and balance the fan blade. Consult a qualified technician for bearing replacement. Check alignment of motor shaft to fan.
Motor trips circuit breaker	Short circuit Overload Motor fault	Inspect wiring for shorts. Check for excessive load. Consult a qualified technician.

8. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided at the time of purchase or contact the authorized Genteq distributor or the seller directly. Warranty terms and conditions may vary.

For technical support or service inquiries, please contact your supplier or a qualified HVAC technician. Provide the full model number (5SME39NXL5033) and serial number (if applicable) when seeking assistance.

