

## Genteq 5SME39HXL110

# Genteq 5SME39HXL110-1/2 HP ECM Direct Drive Blower Motor Instruction Manual

Model: 5SME39HXL110 (also known as 6005)

## 1. INTRODUCTION

This manual provides essential instructions for the safe and efficient installation, operation, and maintenance of your Genteq 5SME39HXL110-1/2 HP ECM Direct Drive Blower Motor. Please read this document thoroughly before attempting any installation, operation, or maintenance procedures to ensure proper function and safety.

## 2. SAFETY INFORMATION

**WARNING:** Electrical shock hazard. Always disconnect power to the unit before installing, servicing, or performing any maintenance on the motor. Failure to do so can result in serious injury or death. Only qualified and trained personnel should install or service this motor.

**WARNING:** Moving parts. Keep hands, hair, and clothing clear of rotating parts during operation. Ensure all guards are in place before operating the system.

**WARNING:** This product may contain materials cautioned by California Proposition 65. For more information, visit [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

## 3. PRODUCT OVERVIEW

The Genteq 5SME39HXL110 is a 1/2 HP ECM (Electronically Commutated Motor) Direct Drive Blower Motor specifically designed for HVAC/R applications. This motor serves as an efficient replacement for traditional PSC blower motors, offering improved performance and reliability.

### Key Features:

- **Motor Design:** ECM (Electronically Commutated Motor) for enhanced efficiency.
- **Enclosure:** Open Air-Over design.
- **Thermal Protection:** Automatic thermal protection for safety.
- **Bearings:** Durable ball bearings.

- **Shaft Rotation:** Capable of both Clockwise (CW) and Counter-Clockwise (CCW) rotation.
- **Standards:** UL Recognized (1004).
- **Application:** Suitable for residential or light commercial HVAC systems.



Image: Genteq 5SME39HXL110-1/2 HP ECM Direct Drive Blower Motor. This image displays the primary view of the motor, illustrating its compact structure and electrical connection points.

## 4. SETUP AND INSTALLATION

This motor is engineered as a direct replacement, facilitating straightforward installation. Ensure that the mounting surface is stable and capable of supporting the motor's weight. Proper alignment of the motor shaft with the blower assembly is crucial for optimal performance and to prevent premature wear.

### Installation Steps:

1. **Disconnect Power:** Ensure all electrical power to the HVAC system is completely disconnected at the circuit breaker.
2. **Remove Old Motor:** Carefully remove the existing blower motor, noting all electrical connections and mounting positions.
3. **Mount New Motor:** Securely mount the Genteq 5SME39HXL110 motor using its band mounting type. The motor can be installed in any angle position.

- 4. **Electrical Connections:** Connect the motor wiring according to the HVAC system's wiring diagram. The motor includes a 115VAC White Jumper and an HVAC System ID Label for assistance. Verify that the voltage supply (115V or 230V) matches the motor's requirements.
- 5. **Verify Rotation:** Before final assembly, briefly restore power to verify correct shaft rotation (CW/CCW) and adjust if necessary.
- 6. **Secure All Components:** Ensure all connections are tight and secure, and all covers and guards are properly reinstalled.

## 5. OPERATING INSTRUCTIONS

The Genteq 5SME39HXL110 motor is designed for continuous duty operation. Once installed and wired correctly, the motor will operate in conjunction with your HVAC system's controls.

### Normal Operation:

- **Voltage:** The motor is compatible with 115V or 230V electrical systems, operating at 60/50 Hz.
- **RPM:** The nameplate RPM is 1070.
- **Amperage:** Full Load Amps are 6.7A at 115V and 4.0A at 230V.
- **Temperature:** Designed to operate within an ambient temperature range of -40 to 40 degrees Celsius.

Monitor the system for unusual noises or vibrations during initial operation, which may indicate an installation issue.

## 6. MAINTENANCE

Regular maintenance helps ensure the longevity and efficient operation of your Genteq motor. Always disconnect power before performing any maintenance.

### Recommended Maintenance:

- **Cleaning:** Periodically inspect the motor and its enclosure for dust, dirt, or debris accumulation. Clean with a soft brush or compressed air to ensure proper airflow and cooling.
- **Connections:** Check all electrical connections for tightness and signs of corrosion. Loose connections can lead to overheating or intermittent operation.
- **Bearings:** The motor is equipped with sealed ball bearings that are designed for long service life and typically do not require lubrication.
- **Vibration:** Listen for any unusual noises or excessive vibration, which could indicate a problem with the motor or the connected blower assembly.

## 7. TROUBLESHOOTING

This section provides guidance for common issues you might encounter. For complex problems, consult a qualified HVAC technician.

| Problem              | Possible Cause                                                 | Solution                                                                      |
|----------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------|
| Motor does not start | No power supply, incorrect wiring, faulty control board        | Check circuit breaker, verify wiring connections, consult HVAC technician     |
| Motor overheats      | Insufficient airflow, excessive load, high ambient temperature | Ensure clear air passages, check blower for obstructions, verify motor sizing |

| Problem                      | Possible Cause                                                     | Solution                                                                            |
|------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Excessive noise or vibration | Loose mounting, unbalanced blower wheel, worn bearings             | Tighten mounting bolts, inspect blower wheel, consult technician for bearing issues |
| Motor runs intermittently    | Loose electrical connections, thermal overload trip, control issue | Check wiring, allow motor to cool, inspect control board                            |

## 8. SPECIFICATIONS

Detailed technical specifications for the Genteq 5SME39HXL110 motor:

| Specification        | Value               |
|----------------------|---------------------|
| Brand                | Genteq              |
| Model                | 5SME39HXL110 (6005) |
| HP                   | 1/2                 |
| Nameplate RPM        | 1070                |
| Voltage              | 115/230V            |
| Frequency            | 60/50 Hz            |
| Phase                | 1                   |
| Full Load Amps       | 6.7/4.0A            |
| Frame                | 48                  |
| Insulation Class     | B                   |
| Shaft Diameter       | 1/2 inch            |
| Shaft Length         | 4-15/16 inches      |
| Overall Length       | 11-1/4 inches       |
| Body Diameter        | 5-5/8 inches        |
| Motor Frame Material | Cast Aluminum       |
| Ambient Temperature  | -40 to 40 Degrees C |
| Item Weight          | 13.9 pounds         |

## 9. WARRANTY INFORMATION

This Genteq motor comes with a manufacturer's warranty. The warranty period is **12 Months from Installation or 18-24 Months from the manufacture date**, whichever comes first. Please retain your proof of purchase and installation records for warranty claims. For specific terms and conditions, refer to the documentation provided by the manufacturer or your authorized dealer.

## 10. SUPPORT

For technical assistance, troubleshooting beyond the scope of this manual, or warranty service, please contact your authorized Genteq dealer or a certified HVAC professional. Do not attempt to repair the motor yourself, as this may void the warranty and could lead to further damage or injury.

When contacting support, please have the motor's model number (5SME39HXL110 or 6005) and serial number readily available.