

Genteq 1086486 / K48HXFCM-3726

Genteq K48HXFCM-3726 Fan Motor

USER MANUAL

Model: K48HXFCM-3726 / 1086486

Important Safety Information

WARNING: To reduce potential electrical shock, always disconnect power before servicing this fan motor. Follow all national and local electrical codes for proper grounding. Individually insulate any unused lead wires to prevent electrical hazards.

Failure to follow these instructions could result in serious injury, death, or property damage.

Product Overview

The Genteq K48HXFCM-3726 / 1086486 is a high-quality condenser fan motor designed for various HVAC applications, including ICP, Heil, Tempstar, and Comfort Maker units. This motor is a critical component for maintaining proper airflow and cooling efficiency in your system.

Key Features:

- 1/5 Horsepower (HP)
- Operates at 208-230 Volts (V)
- Rotational Speed of 1075 Revolutions Per Minute (RPM)
- Part Number: 1086486 (also HQ1086486EM & Emerson # K48HXFCM-3726)
- 5-inch diameter (Frame 42Y)
- 2-inch shaft extension
- Thermally Protected
- Air Over Cont (Air Over Continuous) design



Figure 1: The Genteq K48HXFCM-3726 fan motor. This image shows the dark gray motor body, the central shaft extending upwards, and the red, black, and brown electrical wires connected to a white terminal block. A product label with specifications and warnings is visible on the side of the motor.

Specifications

Brand	Genteq
Model Name	tempstar (K48HXFCM-3726 / 1086486)
Horsepower (HP)	1/5 HP
Voltage	208-230 Volts
Speed	1075 RPM
Frequency	60 Hz
Amperage	1.08 Amp
Phase	1 Phase
Part Number	1086486 / K48HXFCM-3726

Frame Size	42Y
Material	Copper
Manufacturer	ICP / Heil / Tempstar (Motor by NIDEC Motor Corporation)
UPC	751109532199

Setup and Installation

Installation of the Genteq K48HXFCM-3726 fan motor should only be performed by a qualified HVAC technician. Improper installation can lead to electrical shock, fire, or damage to the unit.

- 1. Power Disconnection:** Ensure all power to the HVAC unit is completely disconnected at the circuit breaker before beginning any work. Verify with a voltage tester.
- 2. Access Old Motor:** Carefully remove the access panels and components necessary to reach the existing fan motor. Note the orientation and wiring of the old motor.
- 3. Remove Old Motor:** Disconnect all electrical wiring and mounting hardware from the old motor. Carefully remove it from the unit.
- 4. Mount New Motor:** Install the new Genteq motor using the appropriate mounting hardware. Ensure it is securely fastened and properly aligned with the fan blade. The motor is 5" in diameter (Frame 42Y) and the shaft extends 2" out.
- 5. Wiring Connections:** Connect the electrical wires to the new motor according to the wiring diagram of your HVAC unit. Pay close attention to voltage (208-230V) and phase (1 Phase) requirements. **Important:** Individually insulate any unused lead wires to prevent short circuits or electrical hazards.
- 6. Fan Blade Attachment:** Securely attach the fan blade to the motor shaft. Ensure the blade is balanced and spins freely without obstruction.
- 7. Reassemble Unit:** Replace all access panels and components that were removed.
- 8. Test Operation:** Restore power to the HVAC unit. Test the fan motor's operation to ensure it starts, runs smoothly, and provides adequate airflow. Monitor for any unusual noises or vibrations.

Operating Instructions

Once properly installed, the Genteq K48HXFCM-3726 fan motor operates automatically as part of your HVAC system's cooling or heating cycle.

- Ensure your thermostat is set to the desired mode (e.g., Cool, Heat, Fan On).
- The motor will engage when the system calls for fan operation to circulate air or dissipate heat from the condenser coil.
- Listen for smooth operation. Any unusual grinding, squealing, or rattling noises may indicate an issue.

Maintenance

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

- **Annual Inspection:** Have a qualified HVAC technician inspect the motor and fan assembly annually.
- **Cleaning:** Periodically clean any dust, dirt, or debris from the motor housing and fan blades. Accumulation can lead to overheating and reduced efficiency. Use a soft brush or vacuum.
- **Check Connections:** Ensure all electrical connections are secure and free from corrosion.

- **Shaft and Bearings:** Check for any excessive play or wobble in the motor shaft. This motor is typically sealed and does not require lubrication. If unusual noises or vibrations occur, professional inspection is recommended.
- **Airflow:** Ensure that the area around the motor and fan is clear of obstructions to allow for proper airflow (Air Over Cont design).

Troubleshooting

If you experience issues with your fan motor, consider the following common troubleshooting steps. For complex issues, contact a qualified HVAC technician.

Problem	Possible Cause	Solution
Motor does not start	No power, faulty wiring, seized bearings, faulty capacitor (if external)	Check circuit breaker. Verify wiring connections. Inspect motor for obstructions. Consult technician for internal issues or capacitor check.
Motor makes unusual noise (grinding, squealing)	Worn bearings, fan blade hitting obstruction, loose mounting	Disconnect power and inspect fan blade for obstructions. Check motor mounting. If noise persists, motor may need replacement.
Motor overheats and shuts off	Poor airflow, excessive load, internal fault, dirty coils	Ensure clear airflow around motor and condenser coils. Check fan blade for balance. If problem persists, contact a technician.
Motor runs slowly or weakly	Low voltage, faulty capacitor (if external), partial winding short	Verify correct voltage supply. A technician can test the capacitor and motor windings.

Warranty Information

Specific warranty terms for the Genteq K48HXFCM-3726 / 1086486 fan motor are provided by the manufacturer or the seller at the time of purchase. Please refer to your purchase documentation or contact the vendor directly for detailed warranty coverage, duration, and claim procedures.

Customer Support

For technical assistance, installation guidance, or troubleshooting beyond the scope of this manual, it is highly recommended to contact a certified HVAC professional or the manufacturer, Genteq.

- **Manufacturer:** ICP / Heil / Tempstar (Motor by NIDEC Motor Corporation)
- **Product Model:** K48HXFCM-3726 / 1086486
- **UPC:** 751109532199
- For general information, you may visit the NIDEC Motor Corporation website: www.usmotors.com



[Genteq Evergreen EM Indoor Blower Motor Installation Guide](#)

Comprehensive installation guide for Genteq Evergreen EM Indoor Blower Motors (models 6103E, 6203E, 6105E, 6205E, 6107E, 6207E, 6110E, 6210E), covering wiring, startup, diagnostics, mechanical installation, and specifications.



[Genteq Evergreen VS Motor and User Interface Installation Guide](#)

Comprehensive installation guide for the Genteq Evergreen VS motor and user interface, covering replacement of older ECM motors, wiring diagrams, setup, commissioning, diagnostics, and specifications for HVAC systems. Features advanced capabilities via the Evergreen VS Optimizer tool.