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> [LG Inverter Refrigerator Compressor Motor FMA102NBMA FMA102NAMA TCA37071511 R600a User Manual](#)

LG FMA102NBMA, FMA102NAMA, TCA37071511

LG Inverter Refrigerator Compressor Motor User Manual

Models: FMA102NBMA, FMA102NAMA, TCA37071511

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your LG Inverter Refrigerator Compressor Motor. Please read this manual thoroughly before installation and operation, and retain it for future reference. This compressor is designed for use with R600a refrigerant and features inverter technology.

Important Note: To verify if a software update is required for your specific refrigerator model, please provide the serial number. The serial number is located on a label inside the refrigeration compartment, on the left-side wall.

2. SAFETY INFORMATION

Always prioritize safety during installation, operation, and maintenance. Only qualified technicians should handle refrigerant and electrical connections. Failure to follow safety instructions may result in property damage, personal injury, or death.

- Ensure power is disconnected before any installation or maintenance procedures.
- Handle refrigerant R600a with care; it is flammable. Ensure adequate ventilation.
- Use only original replacement parts to ensure compatibility and safety.
- Refer to your refrigerator's main service manual for specific model instructions.

3. SETUP AND INSTALLATION

Installation of the compressor motor should only be performed by a certified refrigeration technician. Incorrect installation can lead to system failure, refrigerant leaks, and safety hazards.

3.1 Unpacking

Carefully remove the compressor from its packaging. Inspect for any visible damage during transit. Do not install a damaged unit.



Image 1: Front view of the LG Inverter Refrigerator Compressor Motor. This image shows the main body of the compressor, including the suction and discharge lines, and the mounting bracket.

3.2 Component Overview

The package includes one original LG inverter compressor motor for refrigerators. Ensure all components are present before proceeding.



Image 2: Rear view of the LG Inverter Refrigerator Compressor Motor, highlighting the electrical connection points. This view shows the terminal block for power input.



Image 3: Plastic cover for the compressor's electrical components. This cover protects the wiring and terminals from environmental factors.



Image 4: Inside view of the plastic cover, showing its internal structure and mounting points. This provides a closer look at how the cover secures to the compressor.

3.3 Electrical Connections

Connect the compressor to the refrigerator's electrical system according to the wiring diagram provided in your refrigerator's service manual. Ensure proper grounding. The compressor operates at 0-220V, 60Hz.

3.4 Refrigerant Handling

This compressor uses R600a refrigerant. Proper vacuuming and charging procedures must be followed to prevent contamination and ensure optimal performance. Refer to industry standards and local regulations for R600a handling.

4. OPERATING INSTRUCTIONS

Once installed and charged, the inverter compressor motor operates automatically as part of the refrigerator's cooling system. Inverter technology allows for variable speed operation, optimizing energy efficiency and maintaining stable temperatures.

- **Initial Startup:** After installation, allow the refrigerator to stabilize for several hours before loading with food.
- **Normal Operation:** The compressor will cycle on and off, and adjust its speed as needed, to maintain the set temperature.
- **Sound:** Inverter compressors may produce varying sound levels depending on their operating speed. This is normal.

5. MAINTENANCE

The LG Inverter Refrigerator Compressor Motor is designed for long-term, reliable operation with minimal maintenance. However, regular checks of the overall refrigeration system are recommended.

- **Condenser Coils:** Ensure the refrigerator's condenser coils are clean and free of dust and debris to allow for efficient heat dissipation.
- **Ventilation:** Ensure adequate airflow around the refrigerator to prevent overheating of the compressor.
- **Professional Inspection:** It is advisable to have the refrigeration system inspected by a qualified technician periodically, especially if any performance issues are observed.

6. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues. For complex problems, always consult a qualified service technician.

Problem	Possible Cause	Solution
Refrigerator not cooling	Low refrigerant charge, compressor malfunction, control board issue.	Check for leaks, verify compressor operation, inspect control board. <i>Contact a technician.</i>
Compressor making unusual noise	Loose mounting, internal compressor issue, fan obstruction.	Check mounting bolts, inspect fan. <i>If noise persists, contact a technician.</i>
Refrigerator running constantly	Poor door seal, dirty condenser coils, thermostat malfunction, refrigerant issue.	Check door seals, clean coils, verify thermostat settings. <i>If problem continues, contact a technician.</i>

Note: The compressor itself is a sealed unit and is not user-serviceable. Any internal issues require replacement by a qualified professional.

7. SPECIFICATIONS

- **Brand:** LG
- **Model Numbers:** FMA102NBMA, FMA102NAMA, TCA37071511 (and other compatible reference codes)
- **Voltage:** 0-220V
- **Frequency:** 60Hz
- **Refrigerant Type:** R600a
- **Technology:** Inverter
- **Compatible Refrigerator Models:** GB22BGS, GB32SPP, GB44SGP, GB44SVN, GF22BGSK, LB26BGS, LB37SPP, LB45SGN, LB45SPT, LM22SGPK, LM56SPP, LM57SXT, LM57SXTN, LM65BGBS, LM65BGS, LM65BGSK, LT39BPP, LT39WPP, LT44AGD, LT51BPB, LT51SGP. (*Note: This list is not exhaustive. Verify*

compatibility with your specific refrigerator model's serial number.)

- **Included Components:** 1x LG Inverter Refrigerator Compressor Motor, 1x Plastic Element Cover.

8. WARRANTY AND SUPPORT

This product is covered by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact LG customer support.

Extended warranty options may be available through third-party providers:

- Assurant - 2 Year Home Improvement Extended Warranty (Includes Manufacturer's Warranty)
- Assurant - 3 Year Home Improvement Extended Warranty (Includes Manufacturer's Warranty)

For technical support or service inquiries, please contact LG customer service or an authorized service center. When contacting support, have your refrigerator's model and serial number, and the compressor's model number ready.

Online Resources: You can visit the official LG website for additional product information and support resources:

www.lg.com

