

ZHRCLY FC124NBME

Instruction Manual for ZHRCLY Replacement Compressor

Compatible with LG Refrigeration Units (Models FC124NBME, FC150NAME, FC150NEM, FLD165NBMA)

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your ZHRCLY replacement compressor. This compressor is designed for compatibility with various LG refrigeration unit models, including FC124NBME, FC150NAME, FC150NEM, and FLD165NBMA. Please read this manual thoroughly before proceeding with installation or use.

2. SAFETY INFORMATION

Important Safety Instructions:

- **Professional Installation Recommended:** Installation of refrigeration compressors requires specialized knowledge and tools. It is strongly recommended that installation be performed by a qualified and certified refrigeration technician.
- **Electrical Hazard:** Always disconnect power to the refrigeration unit before attempting any installation, maintenance, or repair. Failure to do so can result in serious injury or death from electrical shock.
- **Refrigerant Handling:** Refrigerants must be handled by certified personnel only. Improper handling can lead to environmental damage and personal injury.
- **High Pressure:** Compressors operate under high pressure. Exercise extreme caution during handling and installation to prevent injury.
- **Weight:** Compressors can be heavy. Use appropriate lifting techniques and equipment to avoid injury.
- **Ventilation:** Ensure adequate ventilation during installation and operation to prevent accumulation of refrigerant gases.
- **Compatibility:** Verify that the replacement compressor model is compatible with your specific refrigeration unit before installation. Refer to the specifications section and your appliance's service manual.

3. PRODUCT OVERVIEW

The ZHRCLY replacement compressor is designed to restore the cooling function of compatible LG refrigeration

units. This unit, specifically model FC124NBME AC220V, is engineered to meet the operational requirements of the original equipment.



Image 1: Example of an LG compressor unit. Please note that while this image displays model FC140NEM, this manual specifically addresses the ZHRCLY replacement compressor for LG models including FC124NBME, FC150NAME, FC150NEM, and FLD165NBMA. The label indicates voltage (220-240V-50/60Hz 1PH) and a warning to "USE ONLY WITH LG CONTROLLER".

The compressor is a critical component of the refrigeration cycle, responsible for compressing refrigerant gas and circulating it through the system. Proper selection and installation are vital for optimal performance and longevity of your appliance.

4. SETUP AND INSTALLATION

Note: Installation should only be performed by a qualified refrigeration technician.

1. Preparation:

- Ensure the refrigeration unit is completely disconnected from the power supply.
- Evacuate the existing refrigerant from the system using proper recovery equipment.
- Clean the area around the compressor to prevent contamination during installation.

2. Removal of Old Compressor:

- Carefully disconnect all electrical wiring and refrigerant lines from the old compressor.
- Unmount the old compressor from its base.

3. Installation of New Compressor:

- Mount the new ZHRCLY compressor securely onto the refrigeration unit's base, ensuring proper alignment.
- Connect the refrigerant lines to the new compressor, ensuring a leak-free seal. Brazing may be required.
- Connect the electrical wiring according to the refrigeration unit's wiring diagram. Ensure all connections are secure and correctly polarized. **The compressor is designed for 220V AC input.**

- **Important:** As indicated on the product label, this compressor is designed to "USE ONLY WITH LG CONTROLLER" for optimal performance and compatibility.

4. System Evacuation and Charging:

- Evacuate the entire refrigeration system to remove air and moisture.
- Charge the system with the correct type and amount of refrigerant as specified by the refrigeration unit manufacturer.

5. Leak Detection:

- Perform a thorough leak check on all connections using appropriate leak detection methods.

5. OPERATING INSTRUCTIONS

Once properly installed and charged, the compressor operates automatically as part of the refrigeration unit's cooling cycle. The unit's thermostat or control board will regulate the compressor's operation to maintain the desired temperature.

- **Initial Startup:** After installation, restore power to the refrigeration unit. The compressor should start operating within a few minutes, depending on the unit's control logic.
- **Temperature Monitoring:** Monitor the refrigeration unit's temperature to ensure it reaches and maintains the set point.
- **Normal Operation:** The compressor will cycle on and off as needed to maintain the internal temperature. Short cycling (frequent on/off) or continuous running may indicate an issue.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and efficiency of your refrigeration unit and its compressor. It is recommended to have a qualified technician perform periodic checks.

- **Cleanliness:** Keep the area around the compressor clean and free of dust, debris, and obstructions to ensure proper airflow and heat dissipation.
- **Vibration Check:** Periodically check for excessive vibration or unusual noises from the compressor, which could indicate a problem.
- **Electrical Connections:** Ensure all electrical connections remain tight and free from corrosion. (To be checked by a qualified technician with power disconnected).
- **Refrigerant Levels:** A qualified technician should periodically check refrigerant levels and system pressure. Low refrigerant can cause the compressor to overwork and fail prematurely.

7. TROUBLESHOOTING

This section provides guidance for common issues. For complex problems, contact a qualified refrigeration technician.

Problem	Possible Cause	Solution
Compressor does not start	No power, faulty thermostat/controller, faulty start relay, motor overload protector tripped.	Check power supply. Consult a technician to diagnose and replace faulty electrical components.

Problem	Possible Cause	Solution
Compressor runs continuously	Low refrigerant charge, dirty condenser coils, faulty thermostat/sensor, oversized load.	Have a technician check refrigerant levels and clean condenser coils. Diagnose and replace faulty controls.
Unusual noise from compressor	Loose mounting, internal mechanical issue, refrigerant slugging.	Check mounting bolts. A technician should inspect for internal damage or refrigerant issues.
Insufficient cooling	Low refrigerant, compressor inefficiency, dirty coils, airflow obstruction.	Consult a technician to check refrigerant, compressor performance, and clean coils. Ensure proper ventilation.

8. SPECIFICATIONS

Feature	Detail
Brand	ZHRCLY
Compatible LG Models	FC124NBME, FLD165NBMA, FC150NAME, FC150NEM
Current Model (This Manual)	FC124NBME AC220V
Voltage	220-240V AC (as per image label, specific model FC124NBME is AC220V)
Frequency	50/60Hz (as per image label)
Phase	1PH (Single Phase) (as per image label)
Manufacturer	Original factory (as per product data)
Package Dimensions	1 x 1 x 1 inches (approximate, as per product data)
Item Weight	6.61 Pounds (approximate, as per product data)

9. WARRANTY AND SUPPORT

For warranty information and technical support regarding your ZHRCLY replacement compressor, please refer to the documentation provided at the time of purchase or contact the seller directly. Keep your purchase receipt as proof of purchase.

Seller: Keyang Mechanical parts factory

For further assistance, you may need to provide the model number (FC124NBME AC220V) and any relevant serial numbers.