

**GKNNCCBA VTH1113Y, BCD-310WDPG, 445WDGG**

# **GKNNCCBA Refrigerator Computer Board Inverter Board VTH1113Y Instruction Manual**

## **1. INTRODUCTION**

---

This manual provides essential information for the installation, operation, and maintenance of the GKNNCCBA Refrigerator Computer Board Inverter Board VTH1113Y. This board is designed to control the compressor in compatible Haier refrigerator models, ensuring efficient and reliable performance. Please read this manual thoroughly before proceeding with installation or use.



Image 1: The GKNCCBA Refrigerator Computer Board Inverter Board VTH113Y. This image displays the electronic circuit board, which serves as the compressor driver for compatible refrigerators.

## 2. SETUP AND INSTALLATION

The installation of the Refrigerator Computer Board Inverter Board VTH113Y requires technical expertise and should only be performed by a qualified technician. Improper installation can lead to damage to the refrigerator, the board, or personal injury.

### 2.1 Safety Precautions

- **Disconnect Power:** Always ensure the refrigerator is completely disconnected from the main power supply before beginning any installation or repair work.
- **Static Discharge:** Wear anti-static gloves or use an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to the electronic components.
- **Handle with Care:** Electronic boards are delicate. Avoid touching components directly and handle the board by its edges.
- **Professional Installation:** It is highly recommended that installation be carried out by a certified appliance repair technician.

### 2.2 Installation Steps (Technician Guidance)

1. Locate the existing inverter board within the refrigerator's compressor compartment.
2. Carefully disconnect all wiring harnesses and mounting screws from the old board. Note the orientation and connection points for proper reinstallation.
3. Remove the old inverter board.
4. Install the new GKNCCBA VTH1113Y board in the same location, securing it with the appropriate screws.
5. Reconnect all wiring harnesses to their corresponding ports on the new board. Ensure all connections are secure and correctly oriented.
6. Verify all connections and ensure no wires are pinched or loose.
7. Restore power to the refrigerator and observe its operation.

### 3. OPERATING PRINCIPLES

---

The GKNCCBA Refrigerator Computer Board Inverter Board VTH1113Y is a critical component for the efficient operation of your refrigerator's compressor. It functions by:

- **Precise Temperature Control:** The board accurately adjusts the compressor's speed and operation to maintain a stable internal temperature, optimizing food preservation.
- **Energy-saving and Efficient:** It modulates power delivery to the compressor based on actual cooling demand, reducing energy consumption and promoting electricity savings.
- **Extended Life:** By providing stable and controlled operation, the board minimizes wear and tear on the compressor, thereby extending the overall service life of the refrigerator.
- **Intelligent Protection:** Integrated protection functions, such as over-current and over-temperature safeguards, prevent damage to the compressor and the board itself in abnormal operating conditions.

### 4. MAINTENANCE

---

The inverter board itself requires minimal user maintenance. However, to ensure its longevity and optimal performance, consider the following:

- **Keep Dry:** Ensure the compressor compartment remains dry and free from moisture, which can damage electronic components.
- **Cleanliness:** Periodically, a qualified technician may inspect the compartment for dust or debris accumulation around the board and clean it using appropriate methods (e.g., compressed air).
- **Avoid Physical Damage:** Protect the board from impacts or physical stress.
- **Regular Refrigerator Maintenance:** Adhere to the refrigerator manufacturer's recommended maintenance schedule for the appliance as a whole.

### 5. TROUBLESHOOTING

---

If your refrigerator experiences issues after the installation of the new inverter board, consider the following troubleshooting steps. **Always disconnect power before inspecting any internal components.**

- **No Power to Refrigerator:** Check the main power supply, circuit breaker, and ensure the refrigerator is properly plugged in.
- **Refrigerator Not Cooling:** Verify that all connections to the inverter board are secure. Ensure the compressor is receiving power and attempting to start.
- **Unusual Noises:** If new noises occur, it may indicate an issue with the compressor or its mounting. Consult a technician.

- **Error Codes:** If your refrigerator displays error codes, refer to your refrigerator's main user manual for specific diagnostics related to those codes.
- **Intelligent Protection Activation:** If the board's intelligent protection features (over-current, over-temperature) activate, the refrigerator may shut down or operate intermittently. This indicates an underlying issue that requires professional diagnosis.

For complex issues or if the problem persists, contact a qualified appliance repair technician for diagnosis and repair.

## 6. SPECIFICATIONS

Feature	Description
Product Type	Refrigerator Computer Board / Inverter Board / Compressor Driver Board
Model Number	VTH1113Y
Compatible Refrigerator Models	BCD-225WDGK, BCD-451WDIZU1, BCD-345WDGFU1, BCD-335WDGFU1, BCD-432WDVMU1, BCD-453WLDEBU1, BCD-325WDGFU1, BCD-485WLDCD, BCD-475WLDEBU1, BCD-360WDCAU1, BCD-458WDVMU1, BCD-485WDCZ, BCD-360WDCL, BCD-325WDGB, BCD-360WDCKU1, BCD-480WDGB, BCD-310WDPG, BCD-445WDGG, BCD-219WDGD, BCD-216WLDCZ, BCD-221WDECU1, BCD-217WDVLU1, BCD-216WDPX, BCD-535WDCJ, BCD-531WDVLU1, BCD-275WDCM, BCD-485WLDCT, BCD-463WDES, BCD-550WDCG, BCD-270WDEWU1, BCD-273WDCG, BCD-608WDGPIU1, BCD-650WBEYU1, BCD-590WBEYU1, BCD-542WDCY, BCD-541WDPJ, BCD-606WDCFU1, BCD-540WDGI, BCD-601WDPR, BCD-600WDCD, BCD-540WLDPP, BCD-540WLDCV, BCD-540WDCG, LC-172WEU1, LC-172WBU1, LC-172WAU1, LC-172WDU1
Key Functions	Precise temperature control, energy-saving, extended compressor life, intelligent protection (over-current, over-temperature)
Manufacturer	weiqhao
ASIN	B0DYN6LLCC

## 7. WARRANTY AND SUPPORT

For information regarding warranty coverage, technical support, or replacement parts, please contact the seller or manufacturer directly. Keep your purchase receipt or order details handy when contacting support.

For further assistance with your Haier refrigerator, please refer to the official Haier service and support channels.