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› Thermal Edge Model NE08048612 Electrical Enclosure Air Conditioner, 480V, 60 Hz, 8,000 BTUH, UL Type 12 User Manual

## Thermal Edge NE08048612

# Thermal Edge Model NE08048612 Electrical Enclosure Air Conditioner User Manual

Model: NE08048612

## 1. INTRODUCTION

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This manual provides essential information for the safe and efficient operation, installation, and maintenance of the Thermal Edge Model NE08048612 Electrical Enclosure Air Conditioner. Please read this manual thoroughly before installation or operation.



Figure 1: Thermal Edge Model NE08048612 Electrical Enclosure Air Conditioner. This image shows the full unit, a tall, narrow, light-grey rectangular enclosure with a digital display on the front and a louvered vent on the right side. A smaller, matching base unit is visible below the main enclosure.

## 2. SAFETY INFORMATION

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Always observe safety precautions to reduce the risk of injury or damage. This unit operates on 480V AC power and contains refrigerant under pressure. Only qualified personnel should perform installation, maintenance, and repair.

- Disconnect all power before servicing.
- Ensure proper grounding.
- Do not block air intake or exhaust vents.
- Refer to local electrical codes for installation requirements.

## 3. KEY FEATURES

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The Thermal Edge Model NE08048612 is designed for efficient cooling of electrical enclosures. Its key features include:

- **Digital Temperature Controller:** Programmable set point and temperature controls with visible error/alarm messaging and keypad lockout.
- **Active Condensate Evaporation System:** Continuously eliminates condensate and pre-cools refrigerant for increased efficiency.
- **Robust Design:** Features a rigid chassis and seam-welded shroud for durability, with an interior designed for easy maintenance.
- **High Efficiency:** Utilizes a highly efficient rotary compressor, fully insulated and sealed cabinet, and a Thermal Expansion Valve for consistent cooling capacity.
- **Compressor Protection System:** Includes high & low refrigerant pressure cutouts, anti-short cycle protection, and run capacitors to reduce power inrush and extend compressor life.
- **NEMA Type 12 Enclosure:** Provides protection against nonhazardous indoor elements like dirt, dust, lint, dripping water, and light splashing.

## 4. SETUP AND INSTALLATION

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Proper installation is crucial for optimal performance and longevity of the unit. Refer to the detailed installation instructions provided with the unit for mounting templates and electrical wiring diagrams.

### 4.1 Mounting

The unit is designed for external mounting on an electrical enclosure. Ensure the mounting surface is flat and capable of supporting the unit's weight (approximately 142 pounds). Use appropriate hardware to secure the unit firmly to the enclosure, ensuring a sealed connection to prevent air leakage.

### 4.2 Electrical Connection

This unit requires a 480V, 60 Hz AC power supply. All electrical connections must be made by a licensed electrician in accordance with national and local electrical codes. Ensure the power supply is disconnected before making any connections.

- Verify voltage and frequency match unit specifications.
- Connect the unit to a dedicated circuit with appropriate overcurrent protection.
- Ensure proper grounding of the unit and the enclosure.

## 5. OPERATING INSTRUCTIONS

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The NE08048612 features a programmable digital controller for easy operation and monitoring.

### 5.1 Initial Power-Up

1. After installation and electrical connection, restore power to the unit.
2. The digital display will illuminate, showing the current enclosure temperature.
3. Allow a few minutes for the system to stabilize.

## 5.2 Setting Temperature

Refer to the controller's specific instructions for setting the desired temperature. Typically, this involves pressing a 'SET' button, adjusting the value using arrow keys, and confirming the setting.

## 5.3 Alarms and Messaging

The digital controller provides visible error and alarm messages. Consult the troubleshooting section or the controller's dedicated manual for interpreting these messages and taking appropriate action.

# 6. MAINTENANCE

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Regular maintenance ensures the longevity and efficient operation of your air conditioner. This unit features a filter-free design, simplifying routine care.

## 6.1 Routine Checks (Monthly)

- **Visual Inspection:** Check for any visible damage, loose connections, or unusual noises.
- **Airflow:** Ensure intake and exhaust vents are clear of obstructions.
- **Condensate Drain:** Although the unit has an active evaporation system, periodically check for any signs of excessive condensation or blockages in the condensate path.

## 6.2 Annual Servicing (By Qualified Technician)

- Refrigerant level check and recharge if necessary.
- Electrical connection integrity check.
- Cleaning of condenser and evaporator coils (if accessible and required).
- Verification of compressor operation and pressure readings.

# 7. TROUBLESHOOTING

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This section provides solutions to common issues. For problems not listed here, or if issues persist, contact Thermal Edge customer support or a qualified HVAC technician.

Problem	Possible Cause	Solution
Unit not cooling	No power; blocked airflow; low refrigerant; compressor issue.	Check power supply; clear obstructions; contact technician for refrigerant/compressor.
Excessive noise	Loose components; fan motor issue; compressor vibration.	Inspect for loose parts; contact technician for fan/compressor.
Digital display error	Sensor malfunction; control board issue.	Note error code and contact support.
Water leakage	Condensate drain blockage; unit not level.	Check and clear drain; ensure unit is level.

# 8. SPECIFICATIONS

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Attribute	Detail
Model Number	NE08048612
Cooling Capacity	8,000 BTUH (0.6 Tons)
Power Supply	480V AC, 60 Hz
Refrigerant	R 410A
Enclosure Type	UL Type 12 (NEMA Type 12)
Product Dimensions (L x W x H)	15.02 x 11.8 x 44.63 inches
Item Weight	142 pounds
Control Method	Remote (via digital controller)
Installation Type	Split System (External Mount)

## 9. WARRANTY INFORMATION

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Thermal Edge Inc. products are manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Thermal Edge website. Keep your proof of purchase for warranty claims.

## 10. CUSTOMER SUPPORT

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If you require assistance with your Thermal Edge air conditioner, please contact our customer support team. Have your model number (NE08048612) and serial number ready when contacting support.

For more information, visit the Thermal Edge Store on Amazon.

