Walfront B07P2YPVXB

Walfront Ceramic Air Heater (Model B07P2YPVXB) Instruction Manual

Efficient PTC Heating Element for Various Applications

1. Product Overview

The Walfront Ceramic Air Heater is a compact and efficient Positive Temperature Coefficient (PTC) heating element designed for various applications requiring constant temperature heating. It features ceramic heating technology combined with an aluminum tube for high heat transfer efficiency and low thermal resistance. This self-regulating heater maintains a constant temperature automatically, contributing to energy savings.

Key Features:

- **High Heat Efficiency:** Utilizes ceramic heating and aluminum tube for optimal heat transfer.
- **Constant Temperature Operation:** Automatically maintains a stable temperature, ensuring energy efficiency.
- **Insulated Design:** Provides enhanced safety during operation.
- **Versatile Application:** Suitable for small instruments, enclosed spaces, air conditioners, electric heaters, and humidifiers.

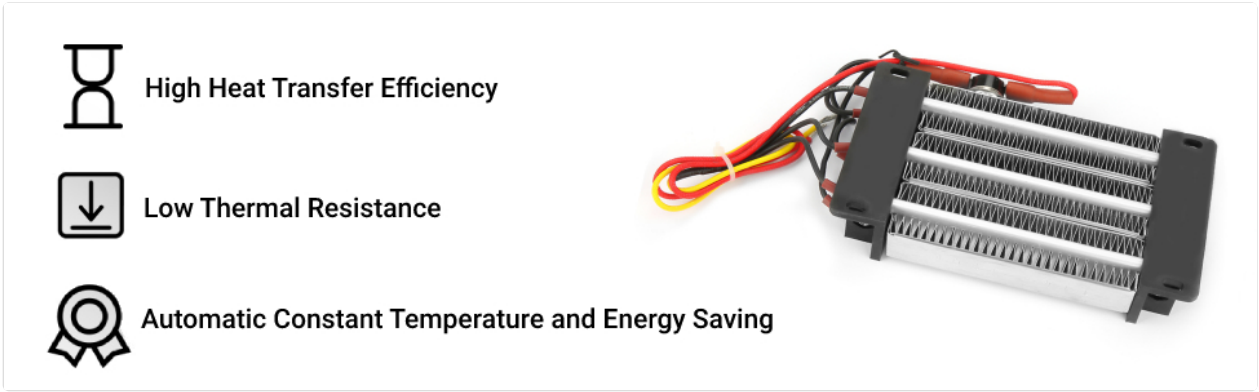

Image 1.1: The Walfront Ceramic Air Heater, illustrating its high heat transfer efficiency, low thermal resistance, and automatic constant temperature and energy-saving capabilities.

2. Safety Information

Please read and understand all safety instructions before installing or operating this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** This device operates at 110V. All electrical connections should be performed by a qualified electrician or a knowledgeable individual following local electrical codes. Ensure the power supply is disconnected before making any connections.
- **Heat Hazard:** The heater surface will become hot during operation. Avoid direct contact with the heating element to prevent burns. Allow sufficient cooling time before handling.
- **Ventilation:** Ensure adequate airflow around the heating element to prevent overheating. Do not obstruct the air inlet or outlet.
- **Dry-Drying Prevention:** The heater is equipped with a 160-degree normally closed temperature control protector. To prevent damage and ensure safe operation, the heater should not be operated in a 'dry-dry' condition (i.e., without proper airflow or heat dissipation).
- **Flammable Materials:** Keep the heater away from flammable materials, liquids, and gases.
- **Indoor Use Only:** This product is designed for indoor use in controlled environments.
- **Component Use:** This is a heating component. It must be integrated into a larger system or enclosure that provides appropriate protection and control.

3. Product Components and Dimensions

The Walfront Ceramic Air Heater consists of a PTC ceramic heating element encased in an aluminum tube with protective end brackets and pre-attached wiring for electrical connection.

Image 3.1: Top view of the Walfront Ceramic Air Heater, showing the aluminum fins and electrical wiring.

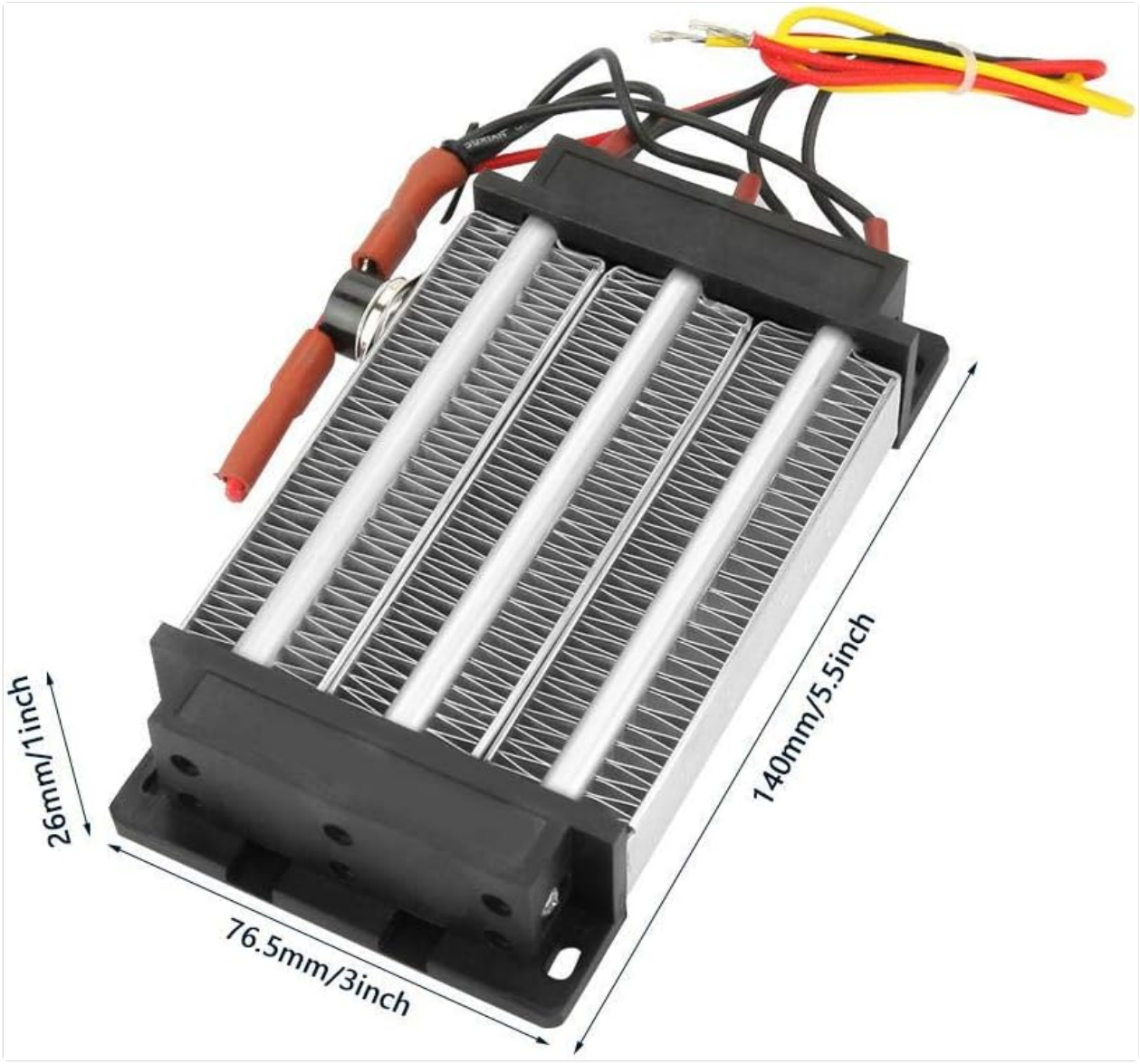

Image 3.2: The Walfront Ceramic Air Heater with its approximate dimensions: 140mm (5.5 inches) length, 76.5mm (3 inches) width, and 26mm (1 inch) height.

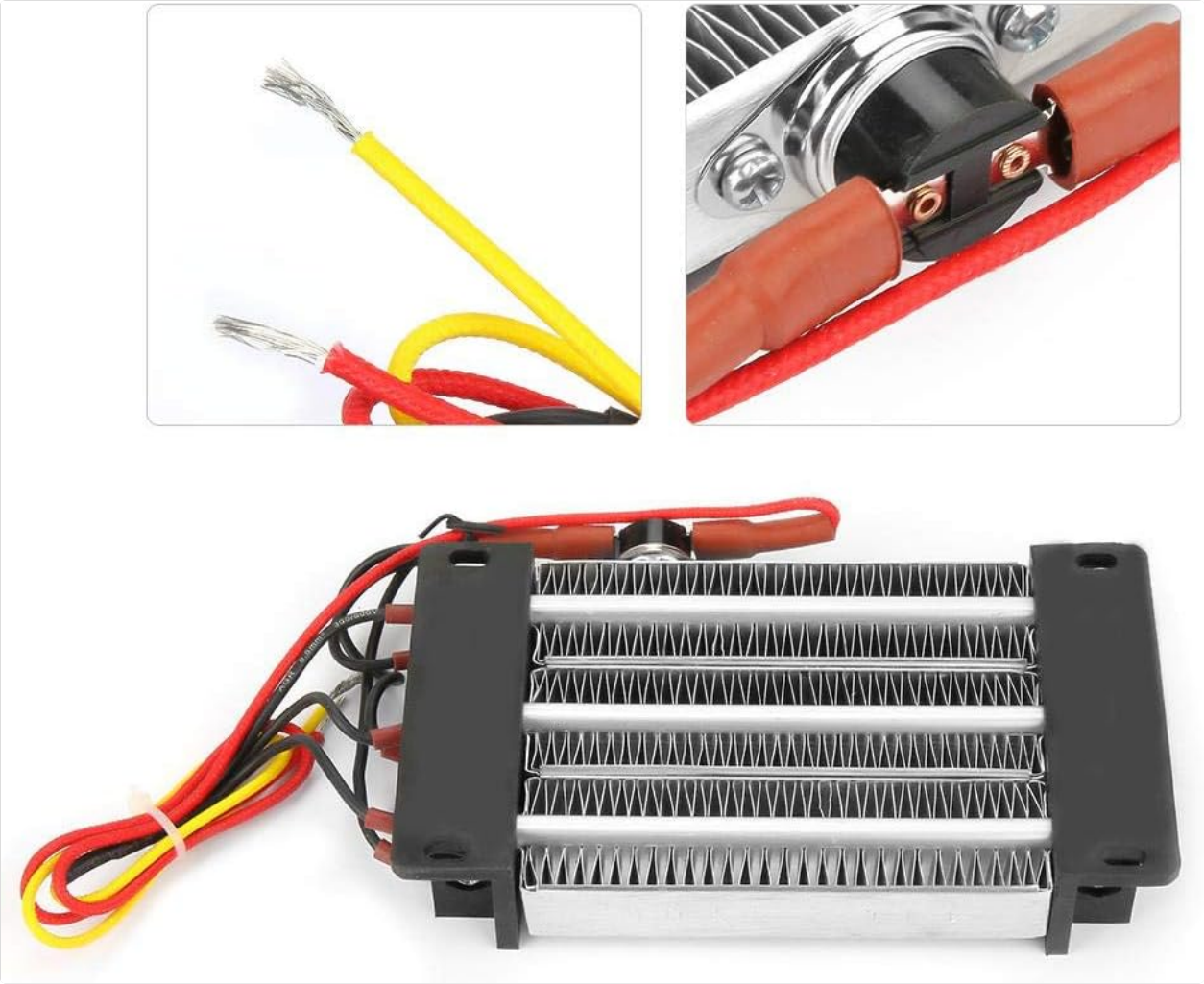

Image 3.3: Detailed view of the heater's pre-attached bare wires for electrical connection and the insulated connection points.

Image 3.4: Close-up views highlighting the high temperature resistant bracket, insulated high temperature resistant wire, and insulated high temperature resistant sheath.

4. Setup and Installation

This ceramic air heater is a component and requires integration into a suitable system. Professional installation is recommended.

Electrical Connection:

- The working voltage for this heater is 110V.
- The heater is connected via bare wires. These wires are not divided into positive and negative poles; they can be connected to the rated voltage in either orientation.

- Ensure all connections are secure and properly insulated to prevent electrical hazards.
- Always disconnect power before making or modifying electrical connections.

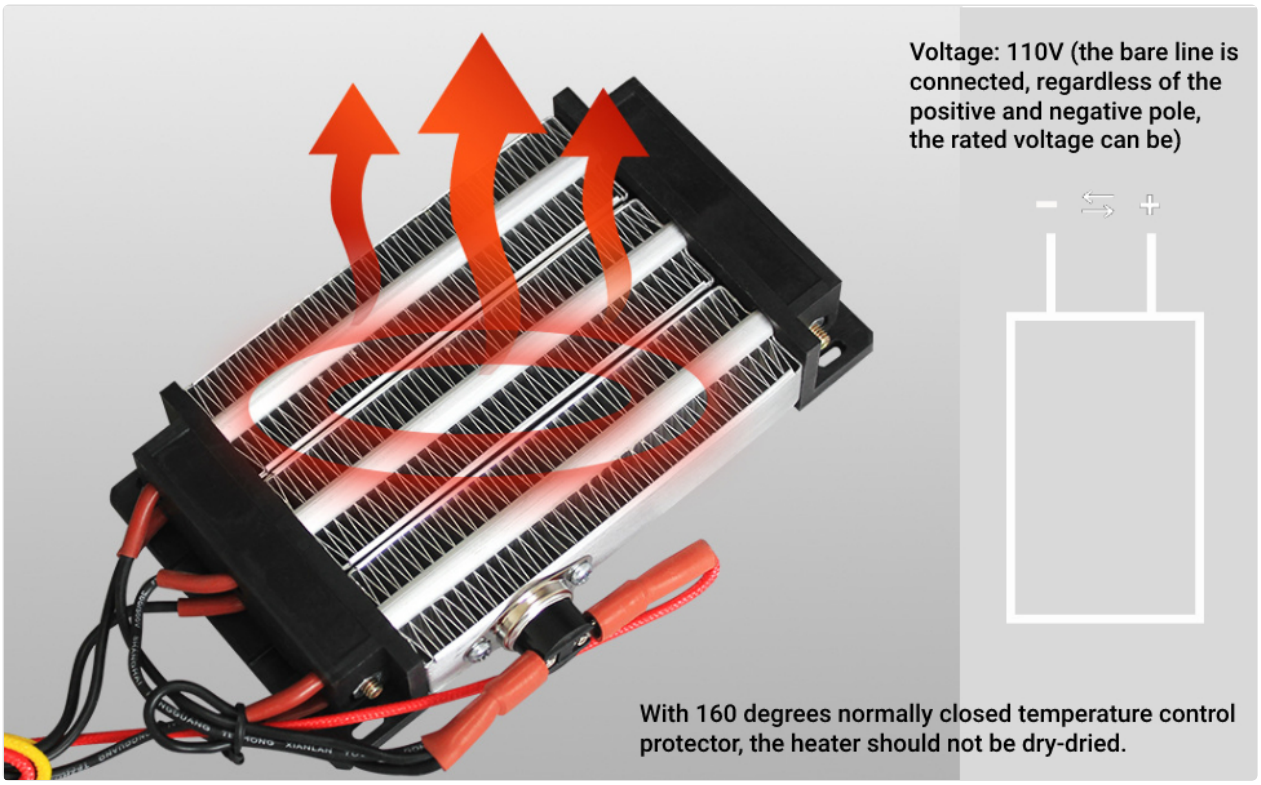

Image 4.1: Diagram illustrating the intended airflow over the heating element and the electrical connection for 110V, noting that polarity is not a concern. It also highlights the 160-degree temperature control protector and the importance of avoiding dry-drying.

Mounting:

- The heater features mounting holes on its end brackets for secure installation within an enclosure or system.
- Ensure the mounting location allows for proper air circulation around the heating fins.
- Avoid mounting in areas where the heater could be exposed to moisture or excessive vibration.

5. Operating Instructions

Once properly installed and connected to a 110V power supply, the Walfront Ceramic Air Heater will begin to generate heat. As a PTC (Positive Temperature Coefficient) heater, it possesses self-regulating properties.

- **Automatic Constant Temperature:** The heater is designed to automatically maintain a constant temperature. This means its power output will adjust based on the ambient temperature, reducing power consumption as the surrounding temperature rises.
- **Energy Saving:** Due to its self-regulating nature, the heater will consume less power once the desired operating temperature is reached, typically reducing to 90%, 80%, or even less of its rated power.
- **Overheat Protection:** The integrated 160-degree normally closed temperature control protector acts as a safety mechanism, preventing the heater from exceeding a safe operating temperature under normal conditions.

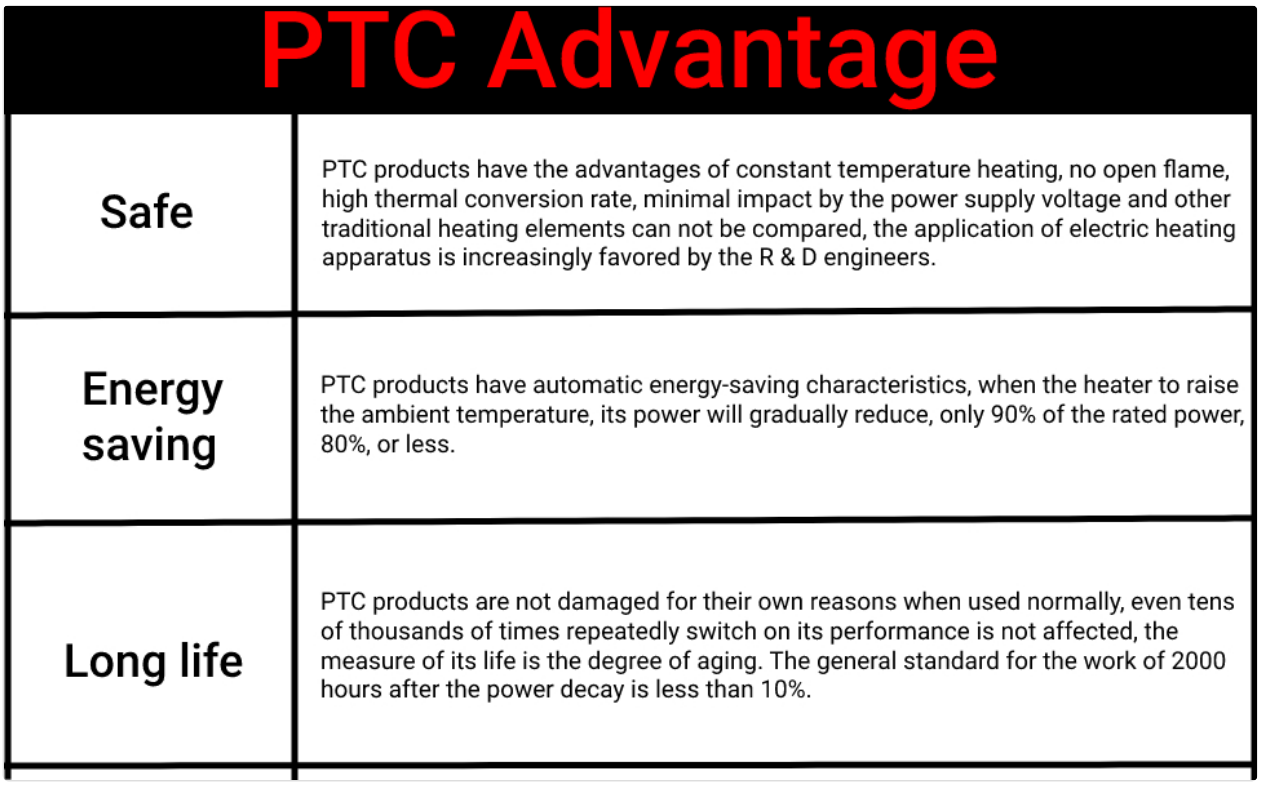

Image 5.1: A table outlining the advantages of PTC products, including safety due to constant temperature heating and no open flame, automatic energy saving, and long life with minimal performance degradation over thousands of hours.

6. Maintenance

The Walfront Ceramic Air Heater is designed for low maintenance. However, periodic checks can help ensure optimal performance and longevity.

- **Cleaning:** Ensure the heating fins remain free of dust and debris. Accumulated dust can reduce heating efficiency and potentially lead to overheating. Use a soft brush or compressed air to gently clean the fins when the unit is completely cool and disconnected from power.
- **Wiring Inspection:** Periodically inspect the electrical connections and wiring for any signs of wear, fraying, or damage. Replace any damaged wiring immediately.
- **Airflow:** Verify that the area around the heater maintains adequate airflow. Obstructions can hinder performance and safety.
- **No User Serviceable Parts:** Do not attempt to disassemble the heater. There are no user-serviceable parts inside.

7. Troubleshooting

If the heater is not functioning as expected, consider the following common issues:

- **No Heat Output:**
  - Check if the heater is properly connected to a 110V power source.
  - Verify that the power source itself is active (e.g., circuit breaker not tripped).
  - Inspect wiring for loose connections or damage.
- **Insufficient Heat:**
  - Ensure there is adequate airflow over the heating fins. Obstructions can reduce efficiency.

- Clean any dust or debris from the fins.
- Confirm the ambient temperature is within the expected operating range for the heater's constant temperature function.

- **Overheating/Safety Cut-off:**
  - If the heater repeatedly triggers its 160-degree temperature control protector, it indicates insufficient heat dissipation.
  - Check for airflow obstructions or if the heater is being operated in a 'dry-dry' condition.
  - Allow the unit to cool down completely before attempting to restart. Address the cause of overheating.

If problems persist after performing these checks, consult a qualified technician.

8. Specifications

Attribute	Specification
Brand	Walfront
Model	B07P2YPVXB
Special Feature	Constant Temperature, Overheat Protection
Color	Black
Form Factor	Rack (Component)
Indoor/Outdoor Usage	Indoor
Recommended Uses	Small instruments, enclosed spaces, air conditioners, electric heaters, humidifiers
Heating Element Type	PTC Ceramic
Fuel Type	Electric
Voltage	110 Volts
Amperage	6.8 Amps
Product Dimensions	5.51 x 1.02 x 3.01 inches (140 x 26 x 76.5 mm)
Item Weight	8.4 ounces
UPC	783335977802
Date First Available	February 25, 2019

9. Warranty and Support

Specific warranty information for the Walfront Ceramic Air Heater (Model B07P2YPVXB) is not provided in this manual. For details regarding warranty coverage, terms, and conditions, please refer to the product packaging or contact the manufacturer directly.

Manufacturer Contact:

For technical support, inquiries, or to report issues, please contact Walfront customer service through their official channels. Refer to the purchase documentation or the Walfront brand store on Amazon for contact information.

Walfront Store Link: Visit the Walfront Store on Amazon

Related Documents - B07P2YPVXB

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