

Raypak R6450ti-E, TWPH-6450EHT08

Raypak R6450ti-E Digital, Titanium, 119K BTU Electric Pool Heat Pump User Manual

Model: R6450ti-E / TWPH-6450EHT08

Brand: Raypak

INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Raypak R6450ti-E Digital Titanium Electric Pool Heat Pump. Please read this manual thoroughly before attempting to install or operate the unit. Proper installation and regular maintenance are crucial for optimal performance and longevity of your heat pump.

SAFETY INFORMATION

Always adhere to local electrical and plumbing codes. Installation and service must be performed by a qualified professional. Disconnect power before servicing the unit. Do not operate the heat pump if any part is submerged in water. Keep children and pets away from the unit during operation. Ensure proper ventilation around the unit.

PRODUCT OVERVIEW

The Raypak R6450ti-E is a high-efficiency digital electric pool heat pump designed to heat your pool water using ambient air. It features a durable titanium heat exchanger, suitable for various pool chemistries, and a digital control panel for precise temperature management.



Figure 1: Raypak R6450ti-E Digital Titanium Electric Pool Heat Pump. This image shows the grey, rectangular heat pump unit with a fan grill on top and louvered sides. The front panel features a small digital display area and a Raypak logo. At the bottom right, two white PVC pipe connections and a brass fitting are visible, indicating water inlet and outlet points.

SETUP AND INSTALLATION

1. Site Selection

Choose a location with adequate airflow, away from windows or noise-sensitive areas. Ensure the unit is on a solid, level surface capable of supporting its weight. Maintain minimum clearances as specified in the detailed installation guide provided with the product.

2. Electrical Connections

The R6450ti-E operates on 208/230V power. All electrical wiring must comply with national and local electrical codes. A dedicated circuit with appropriate overcurrent protection is required. Consult a licensed electrician for proper wiring.

3. Plumbing Connections

Connect the pool's filtration system plumbing to the heat pump's inlet and outlet ports. Use appropriate PVC fittings and ensure all connections are watertight. A bypass valve assembly is recommended for flow control and isolation during maintenance.

4. Initial Startup

After plumbing and electrical connections are complete and verified, ensure the pool pump is running and water is flowing through the heat pump. Then, apply power to the unit. Follow the on-screen prompts on the digital display for initial setup and configuration.

OPERATING INSTRUCTIONS

1. Digital Control Panel

The heat pump is controlled via a user-friendly digital display. Use the up/down arrows to navigate menus and adjust settings. The display shows current water temperature, desired set point, and operational status.

2. Setting Desired Temperature

Press the 'Set' button (or equivalent) and use the arrow keys to adjust the desired pool water temperature. Confirm your selection to save the setting. The unit will automatically operate to maintain this temperature.

3. Operating Modes

The heat pump primarily operates in heating mode. Some models may offer additional modes like cooling or auto. Refer to the specific digital display interface for available options and how to select them.

4. Error Codes

Should an operational issue occur, the digital display may show an error code. Consult the troubleshooting section of this manual or the full product manual for a list of codes and their meanings.

MAINTENANCE

1. Routine Cleaning

Regularly inspect and clean the evaporator coil to ensure optimal airflow. Remove any debris, leaves, or dirt that may accumulate on the coil or around the unit. Use a soft brush or garden hose with low pressure for cleaning.

2. Winterization

In colder climates, proper winterization is essential to prevent damage from freezing. This typically involves draining all water from the heat pump and plumbing lines, and covering the unit. Consult a qualified pool technician for proper winterization procedures.

3. Annual Checks

It is recommended to have a qualified service technician perform an annual inspection of your heat pump. This includes checking refrigerant levels, electrical connections, and overall system performance.

TROUBLESHOOTING

Before contacting customer support, perform these basic troubleshooting steps:

- **Unit Not Turning On:** Check the circuit breaker and ensure the unit is receiving power. Verify the pool pump is running and water flow is adequate.

- **No Heat Output:** Confirm the desired temperature setting is higher than the current pool temperature. Check for sufficient water flow through the unit. Ensure the air intake and exhaust are clear of obstructions.
- **Error Code Displayed:** Note the specific error code and refer to the comprehensive product manual for its meaning and recommended action. Many codes indicate issues with sensors, flow, or refrigerant levels.
- **Unusual Noises:** Investigate any new or loud noises. This could indicate a fan obstruction, loose components, or internal mechanical issues. Disconnect power before inspecting.

For issues that cannot be resolved with these steps, or for any complex repairs, contact a qualified Raypak service technician.

SPECIFICATIONS

Feature	Specification
Model	R6450ti-E / TWPB-6450EHT08
Heating Capacity	119,000 BTU
Power Supply	208/230V
Heat Exchanger Material	Titanium
Approximate Package Dimensions (L x W x H)	51 x 42 x 38 inches
Manufacturer	Raypak


WARRANTY INFORMATION






Raypak products are covered by a manufacturer's warranty. The specific terms and duration of the warranty may vary. Please refer to the warranty card included with your product or visit the official Raypak website for detailed warranty information and registration procedures. Keep your proof of purchase for warranty claims.

CUSTOMER SUPPORT

For technical assistance, service, or parts, please contact Raypak customer support or an authorized Raypak service center. Ensure you have your product model number (R6450ti-E or TWPB-6450EHT08) and serial number ready when contacting support.

Related Documents - R6450ti-E, TWPB-6450EHT08

	<p>Raypak Pool Heater Limited Warranty</p> <p>This document outlines the limited warranty provided by Raypak, Inc. for their pool and spa heaters. It details the scope of the warranty, applicable warranty periods for various models, conditions and exclusions, and the process for making a warranty claim. The warranty covers defects in materials and workmanship under normal use and service.</p>
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	<p>Raypak E3T Electric Heater Installation and Operation Manual</p> <p>Comprehensive guide for installing and operating the Raypak E3T Electric 3-Series Titanium pool and spa heaters. Covers safety, installation, operation, troubleshooting, and warranty information for models ELS 0005, ELS 0011, ELS 0018, and ELS 0027.</p>
	<p>Raypak Gas-Fired Pool and Spa Heater Installation and Operation Manual</p> <p>Comprehensive guide for installing, operating, and maintaining Raypak gas-fired pool and spa heaters (models 206A, 266, 266A, 336A, 399, 406A). Covers safety, water chemistry, installation, operation, and troubleshooting.</p>
	<p>Raypak AVIA Gas-Fired Pool and Spa Heater Installation & Operation Manual (Models 264, 404)</p> <p>Comprehensive installation and operation manual for the Raypak AVIA gas-fired pool and spa heater, covering models 264 and 404. Includes safety warnings, installation guidelines, operating procedures, maintenance, and troubleshooting.</p>
	<p>Raypak AVIA Gas-Fired Pool and Spa Heater Installation and Operation Manual (Models 264 & 404)</p> <p>Comprehensive installation and operation manual for the Raypak AVIA Gas-Fired Pool and Spa Heater, models 264 and 404. Covers safety, installation, operation, maintenance, and troubleshooting.</p>
	<p>AVIA Gas-Fired Pool and Spa Heater Installation & Operation Manual</p> <p>This manual provides comprehensive installation, operation, and maintenance instructions for the AVIA Gas-Fired Pool and Spa Heater, Models 264 and 404. It includes safety warnings, installation procedures, operational guidance, troubleshooting tips, and specifications for optimal performance and safety.</p>

Documents - Raypak – R6450ti-E, TWPH-6450EHT08



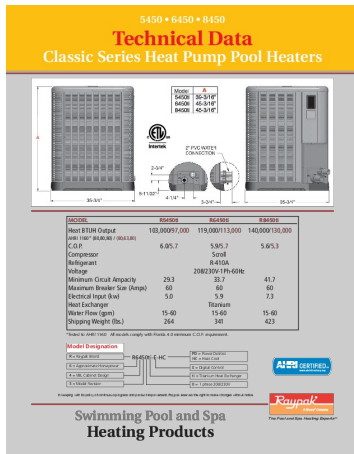
[\[pdf\]](#) Specifications Declaration of Conformity

RP P 902 6 REV B Effective 02 01 24 Replaces 05 21 23 Unilog Scroll compressor digital thermostat Ti heat exchanger small cabinet R4450ti E 80 000 TWPH 4450EHT08 300 heat Raypak 009193

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RP-P-902-6 REV B Effective 02-01-24 Replaces 05-21-23 TABLE OF CONTENTS
SECTION 1 SECTION 2 ... 5450EHT08 264 Scroll compressor, digital thermostat, Ti heat exchanger, painted classic cabinet. R6450ti-E 119,000 **TWPH-6450EHT08** 341 Scroll compressor, digital thermostat, Ti heat exchanger, p...

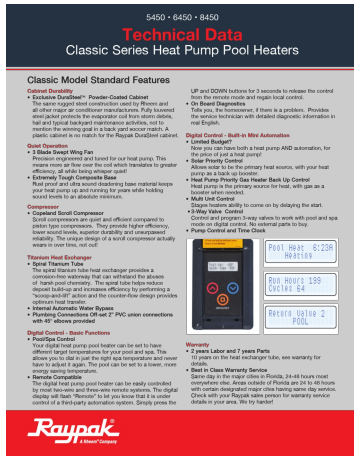
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R5450ti R6450ti R845 ... Designation R = Raypak Brand 6 = Approximate
Horsepower 4 = VBL Cabinet Design 5 = Model Revision R6450ti-E-HC PD = Power
Defrost HC = Heat Cool E = Digital Control ti = Titanium Heat Exchanger 0 =...
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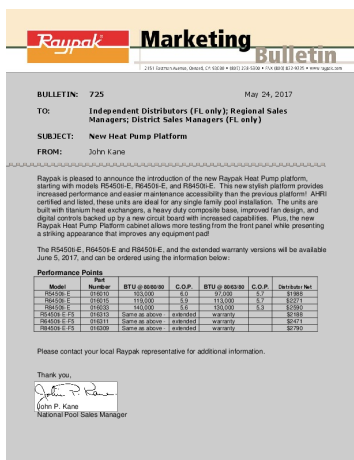


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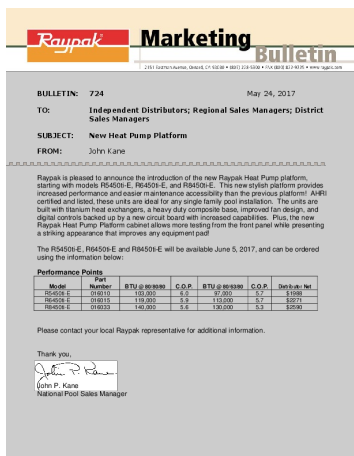
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BULLETIN: 725 May 24, 2017 TO: Independent Distributors FL only ; Regional Sales
Managers; District Sales Managers FL only SUBJECT: New Heat Pump Platform
FROM: John Kane Raypak is pleased to announce the introduction of the new
Raypak Heat Pump platform, starting with models R5450ti-E, R...

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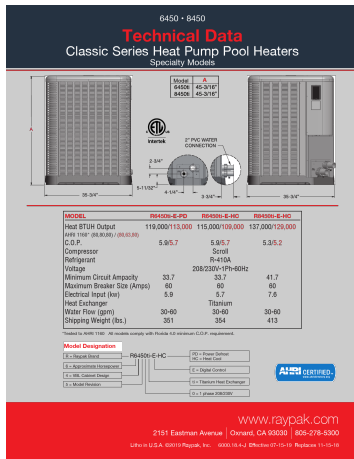
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BULLETIN: 724 May 24, 2017 TO: Independent Distributors; Regional Sales
Managers; District Sales Managers SUBJECT: New Heat Pump Platform FROM:
John Kane Raypak is pleased to announce the introduction of the new Raypak Heat
Pump platform, starting with models R5450ti-E, R6450ti-E, and R8450t...
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119,000/113,000 115,000/109,000 137,000/129,000 AHRI 1160* 80,80,80 / 80,63,80
C.O.P. 5.9/5.7 5.9/5.7 5.3/5.2 Compressor Scroll Refrigeran...

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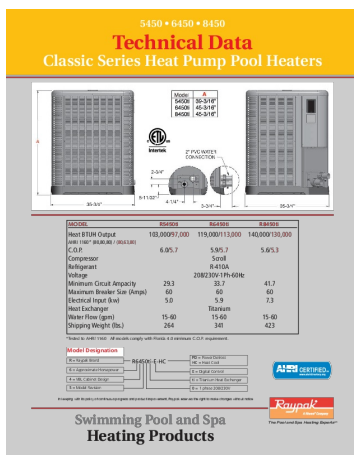


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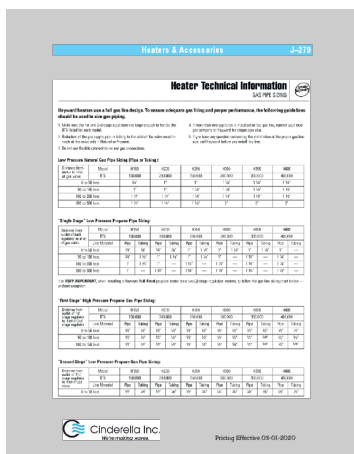
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2021 RESIDENTIAL POOL SPA PRODUCT CATALOG PD6000.1 Rev A Effective 01-01-21 Replaces 04-01-20 2 ... 03,000 016010 Scroll compressor, digital thermostat, Ti heat exchanger, painted classic cabinet. R6450ti-E 119,000 016015 Scroll compressor, digital thermostat, Ti heat exchanger, painted classi...

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