

ECOPOOLTECH EU-PLC3500

ECOPOOLTECH Pool Heater User Manual

Model: EU-PLC3500 | Brand: ECOPOOLTECH

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1. SAFETY INFORMATION

Read all instructions carefully before installation and operation. Failure to follow these instructions may result in property damage, serious injury, or death.

General Safety Precautions

- Always disconnect power before performing any service or maintenance.
- Ensure the unit is installed on a stable, level surface.
- Keep children and pets away from the unit during operation.
- Do not operate the unit if any parts are damaged or missing.
- Maintain proper clearance around the unit for adequate airflow.

Electrical Safety

- The unit requires a 120V/1PH/60Hz power supply.
- Ensure the electrical outlet is a NEMA 20amp type, as the plug has one blade sideways.
- Do not use extension cords.
- All electrical connections must comply with local codes and regulations.
- If the power cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons to avoid a hazard.

2. PRODUCT OVERVIEW

The ECOPOOLTECH Pool Heat Pump (Model EU-PLC3500) is designed to efficiently heat above-ground and small in-ground pools, extending your swimming season. It utilizes heat pump technology for energy-efficient operation.

Key Components

- **Control Panel:** Digital display for setting and monitoring temperature.
- **Fan:** Circulates air over the evaporator coil.
- **Water In/Out Ports:** Connections for pool water circulation.
- **Heat Exchanger:** Pure titanium heat exchanger, safe for saltwater.
- **Compressor:** Powerful rotary compressor for efficient heating.



Figure 2.1: Front view of the ECOPOOLTECH Pool Heater, showing the fan, control panel, and water inlet/outlet ports. The model name EU50 is visible on the top right.



Figure 2.2: Multiple views of the ECOPOOLTECH Pool Heater, illustrating the front, side, and rear panels, highlighting the heat exchange fins.

3. SETUP AND INSTALLATION

The ECOPOOLTECH Pool Heater is designed for easy installation, often without the need for professional assistance. Follow these steps for proper setup.

3.1 Placement

- Place the heat pump on a solid, level surface outdoors.
- Ensure adequate airflow around the unit. Do not enclose it in a small space.
- Position the unit close to your pool and existing filtration system.

3.2 Water Connections

1. Connect the pool's filtration system outlet to the "WATER IN" port on the heat pump.

2. Connect the "WATER OUT" port on the heat pump to the pool's return inlet.
3. Ensure all connections are secure and watertight. The unit is designed for 1.5-inch connections; adapters may be needed for other sizes (e.g., 1.25-inch).



Figure 3.1: Diagram showing the ECOPOOLTECH Pool Heater connected in-line with an above-ground pool's pump and filter system. Water flows from the pool, through the filter, then the heat pump, and back to the pool.

3.3 Electrical Connection

- Plug the heat pump's power cord into a dedicated 120V/20A NEMA outlet. The plug has a sideways blade, requiring a compatible outlet.
- Do not share the outlet with other high-power appliances.
- Verify that the power supply matches the unit's requirements (120V/1PH/60Hz).

4. OPERATING INSTRUCTIONS

Once installed, operating your ECOPOOLTECH Pool Heater is straightforward. The intelligent control system maintains your desired water temperature.

4.1 Initial Startup

1. Ensure the pool pump is running and water is circulating through the heat pump.
2. Plug in the heat pump. The control panel will illuminate.
3. Set your desired water temperature using the control panel. Refer to the specific instructions for your control panel model for detailed button functions.
4. The unit will begin heating the water. It may take 24-48 hours to reach the desired temperature, depending on pool size and ambient conditions.

4.2 Temperature Control

- The intelligent control system will automatically turn the heater on and off to maintain the set temperature within a $\pm 2^{\circ}\text{F}$ range.
- Monitor the water temperature on the display.

4.3 Optimizing Performance

- **Pool Cover:** Using a solar cover significantly reduces heat loss and speeds up heating.
- **Run Time:** For optimal heating, run the heat pump continuously until the desired temperature is reached, then as needed to maintain it.
- **Ambient Temperature:** The unit operates efficiently in outdoor temperatures ranging from 40°F to 105°F. Optimal performance is achieved above 60°F.



Figure 4.1: A comparative chart illustrating how the ECOPOOLTECH Pool Heat Pump can extend the swimming season for several months compared to a pool without a heater.



Figure 4.2: An image depicting different types of pools (frame circular, frame rectangular, inflatable, small in-ground) that can be heated by the ECOPOOLTECH Pool Heater, emphasizing its versatility.

5. MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your pool heat pump.

5.1 Routine Cleaning

- Keep the area around the heat pump clear of debris, leaves, and other obstructions to ensure proper airflow.
- Periodically clean the exterior of the unit with a soft, damp cloth. Do not use harsh chemicals.
- Inspect the fan blades for any obstructions or damage.

5.2 Winterization (if applicable)

- In regions with freezing temperatures, disconnect the unit from the power supply.
- Drain all water from the heat pump to prevent freezing damage.
- Store the unit in a dry, protected area or cover it with a breathable, waterproof cover.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your pool heat pump.

Problem	Possible Cause	Solution
Unit does not turn on	No power, tripped breaker, faulty outlet.	Check power connection, reset breaker, test outlet. Ensure NEMA 20amp outlet is used.
Water not heating	Pool pump not running, low ambient temperature, incorrect temperature setting, dirty filter.	Ensure pool pump is on, check ambient temperature (must be above 40°F), verify temperature setting, clean pool filter.
Low water flow error	Clogged filter, closed valves, insufficient pool pump flow.	Clean or replace pool filter, open all valves in the circulation path, ensure pool pump is adequately sized and running. Advised water flow is 1000-1500 GPH.

Problem	Possible Cause	Solution
Unusual noise during operation	Debris in fan, loose components, compressor issue.	Disconnect power and inspect fan for debris. If noise persists, contact customer support.

7. TECHNICAL SPECIFICATIONS

Detailed specifications for the ECOPOOLTECH Pool Heater (Model EU-PLC3500, 16000 BTU variant).

- **Model:** EU-PLC3500 (16000 BTU)
- **Product Dimensions:** 14 x 23 x 36 inches
- **Output:** Rated 14000 BTU (Max 16184 BTU)
- **Rated/Max Current:** 6.2/8.0 Amp
- **Rated Power Input:** 0.65 kW
- **Voltage:** 120V/1PH/60Hz
- **Rated C.O.P.:** 5.62 W/W
- **Water Connection:** 1-1/4" (adapters may be needed for other sizes)
- **Advised Water Flow:** 1000-1500 GPH
- **Net Weight:** 54 lbs
- **Heat Exchanger:** Pure Titanium
- **Operating Temperature Range:** 40°F to 105°F (optimal above 60°F)
- **Certifications:** ETL Listed (Intertek)

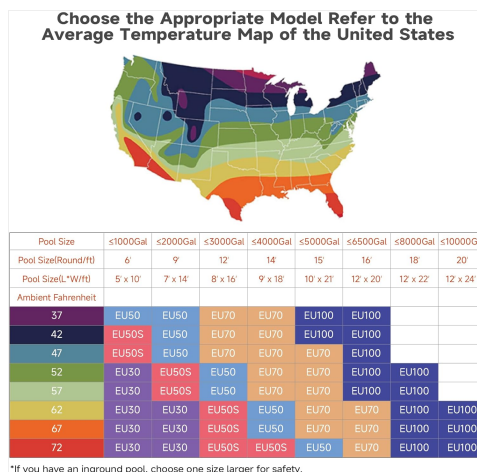


Figure 7.1: U.S. Government EnergyGuide label for the ECOPOOLTECH Swimming Pool Heat Pump EU50, indicating a thermal efficiency of 5.62.

U.S. Government

Federal law prohibits removal of this label before consumer

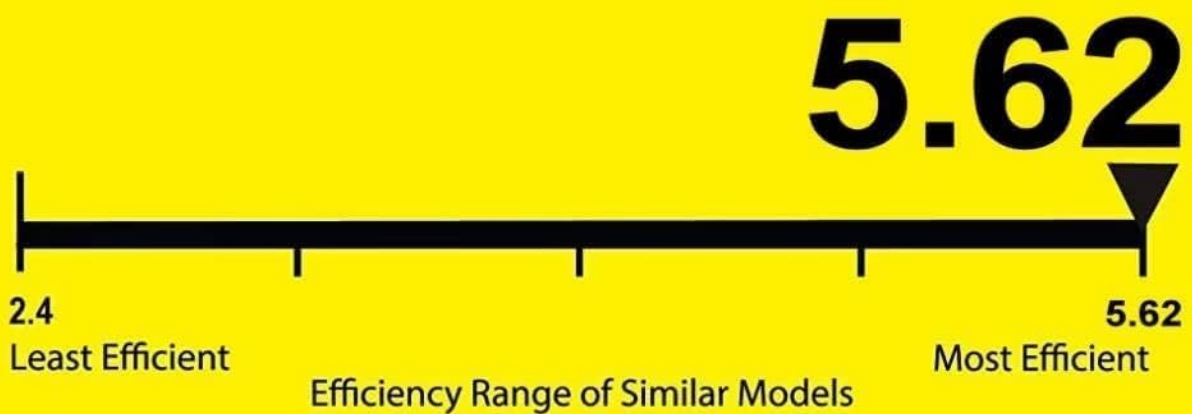
ENERGYGUIDE

Swimming Pool Heat Pump
Electric

ECOPOOLTECH
EU50



Thermal Efficiency



Efficiency range based only on models fueled by electricity.

For more information, visit www.ftc.gov/energy.

Figure 7.2: A chart guiding users to choose the appropriate ECOPOOLTECH pool heater model based on pool size (gallons, round/ft, W/ft) and average ambient Fahrenheit temperature. The EU50 model is suitable for pools up to 5000 gallons.

8. WARRANTY AND CUSTOMER SUPPORT

ECOPOOLTECH is committed to providing reliable products and excellent customer service.

8.1 Product Warranty

This ECOPOOLTECH Pool Heater comes with a **2-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims. For detailed warranty terms and conditions, please refer to the documentation included with your product or contact customer support.

8.2 Customer Support

For any questions, technical assistance, or warranty claims, please contact ECOPOOLTECH customer service. A 24-hour online service center is available to respond to inquiries in a timely manner.

You can reach our service team through the contact information provided in your user manual or on the product's nameplate. Alternatively, you may leave a message via the Amazon platform.



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