

ECOPOOLTECH EE100a

ECOPOOLTECH EU100 Pool Heat Pump

Instruction Manual

1. INTRODUCTION

Thank you for choosing the ECOPOOLTECH EU100 Pool Heat Pump. This manual provides essential information for the safe and efficient installation, operation, and maintenance of your new pool heater. Please read this manual thoroughly before installation and keep it for future reference. The EU100 is designed to extend your swimming season by efficiently heating your pool water, utilizing advanced inverter technology for optimal performance and energy savings.

2. SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- **Electrical Safety:** All electrical work must be performed by a qualified and licensed electrician in accordance with all local and national electrical codes. The unit operates on 208V~230V/60Hz. Ensure proper grounding and circuit protection (20 Amp circuit breakers recommended).
- **Water Safety:** Ensure all water connections are secure to prevent leaks. Do not operate the unit without proper water flow.
- **Placement:** Install the heat pump in a well-ventilated area, away from flammable materials and obstructions that could block airflow.
- **Children and Pets:** Keep children and pets away from the unit during operation.
- **Maintenance:** Disconnect power before performing any maintenance or service.

3. PRODUCT OVERVIEW AND FEATURES

The ECOPOOLTECH EU100 is a high-performance pool heat pump designed for both above-ground and in-ground pools. It features advanced inverter technology for efficient and consistent heating.



Front view of the ECOPOOLTECH EU100 Pool Heat Pump.

EU100 PERFECT POOL HEATER

Max output 36000BTU

COP 5.5



Key features and dimensions of the EU100 Pool Heat Pump.

Key Features:

- **Extended Swim Season:** Capable of heating water up to 105°F, operating efficiently in ambient temperatures between 20°F and 100°F, allowing for a longer swimming season.
- **Inverter Heating System:** Automatically adjusts compressor speed and working frequency based on water temperature, ensuring optimal energy efficiency and consistent heating.
- **Energy Savings:** Achieves a high Coefficient of Performance (COP) of 5.5, meaning for every unit of electricity consumed, 4.7 times the heat is generated.
- **Versatile Application:** Ideal for above-ground pools up to 10,000 gallons and in-ground pools up to 8,000 gallons, with a max output of 38864 BTU/hr.
- **Easy Operation:** Features an intelligent control IC that automatically maintains your desired pool temperature without constant adjustments.
- **Screen Protector Cover:** Protects the display screen from direct sunlight, rainwater, and chemical damage, extending its lifespan.



EXTEND YOUR POOL SEASON FOR MONTHS

With ECO POOLTECH
Pool Heat Pump



Without Pool Heat Pump



Visual representation of extending the pool season with the heat pump.

SCREEN PROTECTOR COVER

Effectively prevent direct sunlight, rainwater erosion, and chemical damage, and extend the service life of the display screen.



The EU100 is suitable for pools up to 10,000 gallons.

4. SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your ECOPOOLTECH EU100. It is highly recommended to have a qualified professional handle the electrical installation.

4.1. Unpacking and Inspection:

Carefully unpack the heat pump and inspect it for any shipping damage. Report any damage to your supplier immediately.

4.2. Packing List:

Ensure all components listed below are present in the package:

PACKING LIST



Need to purchase 20 Amp circuit breakers and wires by yourself, and it is recommended to have an electrician install them.



Adapters for converting to 1.5" rigid PVC pipes



Adapters for converting to 1.5" hose with nuts



User Manual

- ECOPOOLTECH EU100 Pool Heat Pump Unit
- Adapters for converting to 1.5" rigid PVC pipes
- Adapters for converting to 1.5" hose with nuts
- User Manual
- *Note: 20 Amp circuit breakers and electrical wires are NOT included and must be purchased separately. Professional installation is strongly recommended.*

4.3. Placement:

Choose a location that allows for adequate airflow around the unit. Avoid enclosed spaces or areas where exhaust air can be recirculated. The unit should be placed on a stable, level surface, ideally near the pool and filtration system.



The heat pump should be placed on a stable surface with adequate clearance for airflow.

4.4. Water Connections:

Connect the heat pump to your pool's filtration system using the provided adapters. The unit has 1-1/2" water connections. Ensure all connections are watertight to prevent leaks.

4.5. Electrical Connections:

This step must be performed by a qualified electrician.

The EU100 requires a 208V~230V/60Hz power supply. Connect the unit to a dedicated circuit with appropriate overcurrent protection (e.g., 20 Amp circuit breaker). Refer to the wiring diagram in the full user manual for detailed instructions.

5. OPERATING INSTRUCTIONS

The ECOPOOLTECH EU100 is designed for user-friendly operation with its intelligent control system.

5.1. Initial Startup:

1. Ensure the pool pump is running and there is adequate water flow through the heat pump.
2. Turn on the power supply to the heat pump at the circuit breaker.

3. The unit's display will illuminate.

5.2. Setting Desired Temperature:

Use the control panel to set your desired pool water temperature. The intelligent control IC will automatically manage the heating process to reach and maintain this temperature.



The control panel is protected by a durable screen cover.

5.3. Automatic Operation:

Once the desired temperature is set, the heat pump will automatically adjust its operation using inverter technology. This allows the compressor to run at variable speeds, optimizing energy consumption and maintaining a stable water temperature. The unit will cycle on and off as needed to maintain the set point.

The heat pump is designed to operate effectively within an ambient temperature range of 20°F to 100°F. In colder conditions, the unit may perform an automatic defrost cycle to prevent ice buildup on the coils, which is normal operation.

6. MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your ECOPOOLTECH EU100 Pool Heat Pump.

6.1. General 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. Avoid using harsh chemicals.
- Ensure the screen protector cover for the control panel is clean and free from dirt to maintain visibility.

6.2. Coil Cleaning:

Inspect the evaporator coils regularly for dirt and debris. If dirty, gently clean them with a soft brush or low-pressure water spray. Do not bend the fins.

6.3. Winterization:

If you live in an area where temperatures drop below freezing for extended periods, proper winterization of your heat pump is essential to prevent damage. Consult the comprehensive user manual or a pool professional for detailed winterization procedures, which typically involve draining water from the unit and covering it.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter. For more complex problems, please contact ECOPOOLTECH customer support.

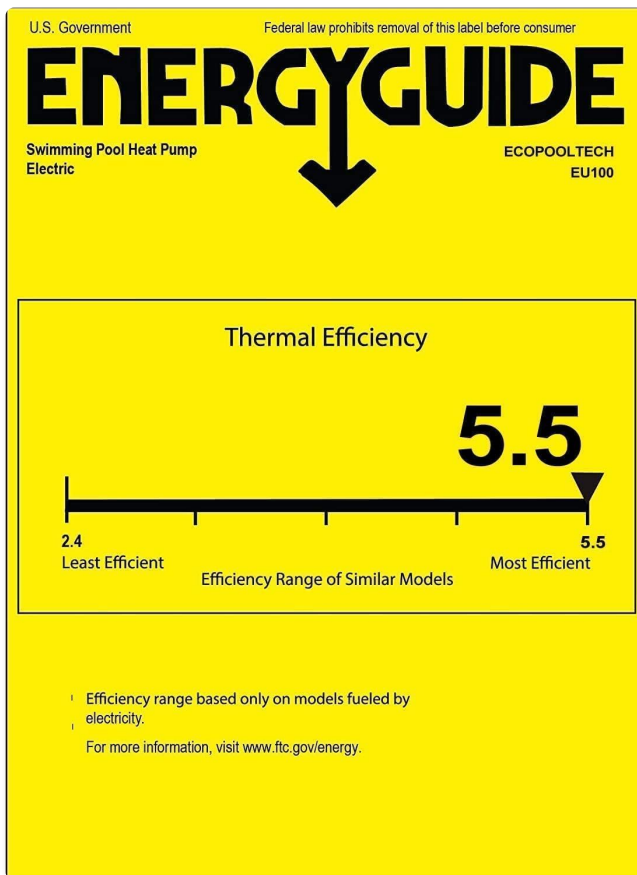
Problem	Possible Cause	Solution
Unit does not turn on	No power supply; Circuit breaker tripped; Loose electrical connection.	Check power supply; Reset circuit breaker; Verify electrical connections (by a qualified electrician).
Pool not heating sufficiently	Low ambient temperature; Insufficient run time; Incorrect temperature setting; Poor water flow.	Allow more time for heating; Check temperature setting; Ensure pool pump is running and filters are clean; Verify water flow.
Unit leaks water	Loose water connections; Condensation (normal); Internal leak.	Tighten water connections; Condensation is normal and drains from the bottom; If persistent, contact support.
Unit turns off automatically	Low water flow (flow switch activated); Overheating; Electrical issue; Error code displayed.	Check pool pump and filter; Ensure proper ventilation; Note any error codes and consult manual or support.
Coils freezing in cold weather	Normal operation in low ambient temperatures.	The unit has an automatic defrost cycle. This is expected behavior and will resolve itself.

8. SPECIFICATIONS

Detailed technical specifications for the ECOPOOLTECH EU100 Pool Heat Pump:

Specification	Value
Model Number	EE100a

Specification	Value
Max Output	38864 BTU/hr (Rated 36000 BTU)
Rated/Max Current	10.5/13.5 Amp
Rated Power Input	2.16 kW
Rated C.O.P.	5.5 W/W
Voltage	208V~230V/60Hz
Advised Water Flow	2000-3000 GPH
Product Dimensions (L x W x H)	40.16 x 15.35 x 24.41 inches (36.5 x 14.5 x 23.5 inches for main unit)
Item Weight	115.9 pounds (Net Weight 86lb)
Water Connection	1-1/2 inches
Manufacturer	ECO POOLTECH



U.S. Government Energy Guide for the ECOPOOLTECH EU100, showing a thermal efficiency of 5.5.

9. WARRANTY AND SUPPORT

ECOPOOLTECH is committed to providing excellent customer service. For any questions, technical assistance, or warranty claims, please refer to the warranty card included with your product or contact our support team. ECOPOOLTECH offers a 24-hour online service center to respond to customer inquiries in a timely manner. For specific warranty terms and conditions, please consult your purchase documentation or the official ECOPOOLTECH website.

For more information, visit the [ECOPOOLTECH Store on Amazon](#).

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