

## ECOPOOLTECH EU-PLC350

# ECOPOOLTECH 20000BTU Electric Swimming Pool Heat Pump User Manual

Model: EU-PLC350

Brand: ECOPOOLTECH

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your ECOPOOLTECH 20000BTU Electric Swimming Pool Heat Pump, Model EU-PLC350. Please read this manual thoroughly before installation, operation, or maintenance to ensure proper use and to prevent damage or injury.

The EU-PLC350 heat pump is designed to efficiently heat and cool water for above-ground and in-ground swimming pools, extending your swimming season and enhancing comfort. It utilizes heat pump technology to absorb energy from the ambient air and transfer it to the pool water, offering high energy efficiency.

## 2. SAFETY INFORMATION

**WARNING: Failure to follow these safety instructions could result in fire, electric shock, or other injury or damage.**

- Always disconnect power before performing any service or maintenance.
- Ensure the unit is installed by a qualified professional in accordance with all local and national electrical and plumbing codes.
- Do not operate the unit if any part is damaged or missing.
- Keep children and pets away from the unit during operation.
- Ensure proper grounding to prevent electric shock.
- Do not block the air intake or exhaust vents.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction

concerning use of the appliance by a person responsible for their safety.

### 3. PACKING LIST

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact ECOPOOLTECH customer support.



Image: Contents of the ECOPOOLTECH EU70 heat pump package. It includes the main EU70 heat pump unit, a power cord requiring a standard 20-amp outlet, adapters for converting to 1.5" rigid PVC pipes, adapters for converting to 1.5" hose with nuts, and a user manual.

- ECOPOOLTECH EU70 Heat Pump Unit
- Power Cord (built-in 10ft cord with standard 120V plug)
- Adapters for 1.5" rigid PVC pipes (2 units)
- Adapters for 1.5" hose with nuts (2 units)
- User Manual

### 4. SETUP AND INSTALLATION

The ECOPOOLTECH EU70 heat pump is designed for relatively easy hook-up. However, professional installation is recommended for optimal performance and safety.

#### 4.1 Placement Considerations

- Place the unit on a stable, level surface.
- Ensure adequate clearance around the unit for proper airflow (refer to specific clearance requirements in the full manual).

- Position the unit close to the pool and filtration system to minimize plumbing runs.



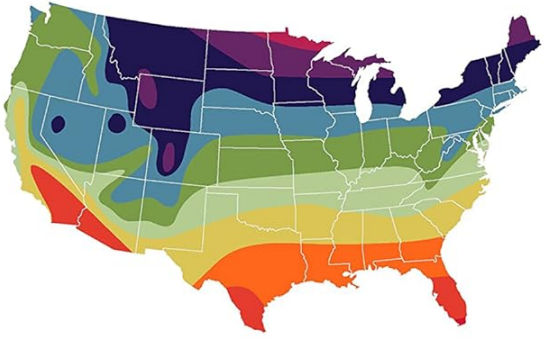
Image: An illustration demonstrating the simple setup of the ECOPOOLTECH EU70 heat pump. The unit is placed next to an above-ground pool and connected to the pool's filtration system, indicating easy installation without professional assistance.

## 4.2 Plumbing Connections

Connect the heat pump to your pool's filtration system. Water flows from the pool pump, through the heat pump, and back to the pool. Use the provided adapters for 1.5" rigid PVC pipes or 1.5" hoses with nuts as appropriate for your setup.

- Ensure all connections are secure and watertight to prevent leaks.
- The unit is equipped with a built-in flow sensor; ensure proper water flow for optimal operation.

## Choose the Appropriate Model Refer to the Average Temperature Map of the United States



Pool Size	≤1000 Gal	≤2000 Gal	≤3000 Gal	≤4000 Gal	≤5000 Gal	≤6500 Gal	≤8000 Gal	≤10000 Gal
Pool Size(Round/ft)	6'	9'	12'	14'	15'	16'	18'	20'
Pool Size(L*W/ft)	5' x 10'	7' x 14'	8' x 16'	9' x 18'	10' x 21'	12' x 20'	12' x 22'	12' x 24'
Ambient Fahrenheit								
37	EU50	EU50	EU70	EU70	EU100	EU100	--	--
42	EU50S	EU50	EU70	EU70	EU100	EU100	--	--
47	EU50S	EU50	EU70	EU70	EU70	EU100	--	--
52	EU30	EU50S	EU50	EU70	EU70	EU100	EU100	--
57	EU30	EU50S	EU50	EU70	EU70	EU100	EU100	--
62	EU30	EU30	EU50S	EU50	EU70	EU70	EU100	EU100
67	EU30	EU30	EU50S	EU50	EU70	EU70	EU100	EU100
72	EU30	EU30	EU50S	EU50S	EU50	EU70	EU100	EU100

\*If you have an inground pool, choose one size larger for safety.

Image: The ECOPOOLTECH heat pump with an overlay indicating the advised water flow rate of 1500-2000 GPH (Gallons Per Hour) for optimal performance.

### 4.3 Electrical Connection

The unit comes with a 10ft power cord and requires a standard 120V plug. A dedicated 20-amp outlet is recommended for safe and efficient operation.

- Ensure the electrical supply matches the unit's requirements (120V/1PH/60Hz).
- Do not use extension cords.

## 5. OPERATING INSTRUCTIONS

The ECOPOOLTECH EU70 features an intelligent control system designed for ease of use.

### 5.1 Initial Startup

1. Ensure all plumbing and electrical connections are secure.
2. Turn on your pool's filtration pump to ensure water flow through the heat pump.
3. Plug in the ECOPOOLTECH heat pump. The intelligent control IC will automatically initiate operation.

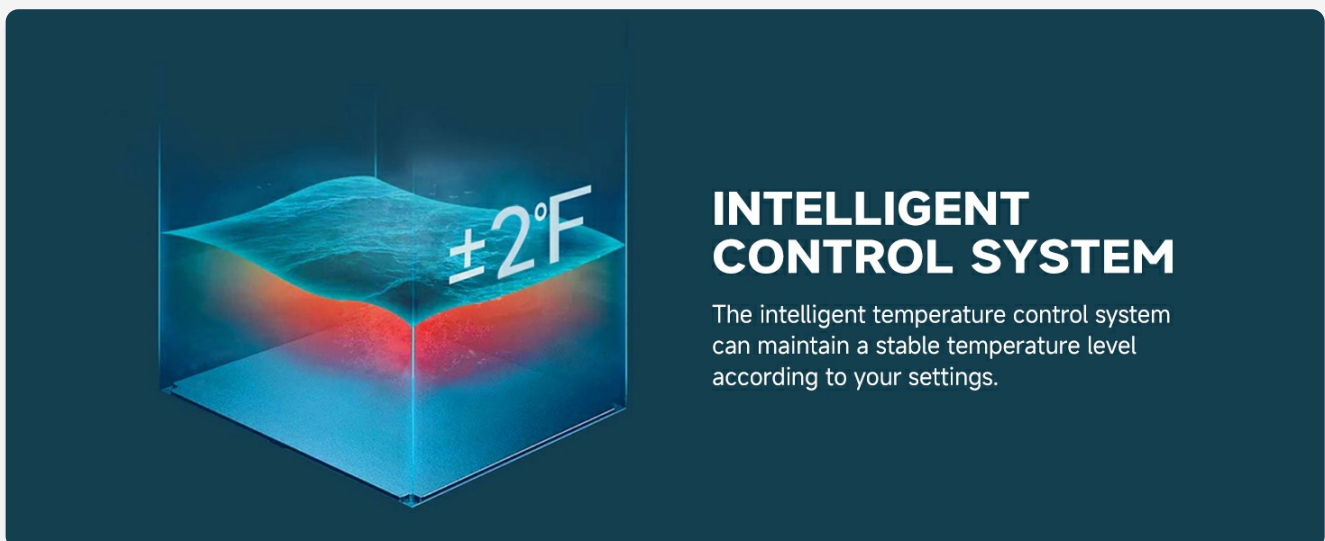


Image: A visual representation of the intelligent control system, highlighting its ability to maintain a stable pool water temperature within a variance of  $\pm 2^{\circ}\text{F}$  according to user settings.

## 5.2 Temperature Setting

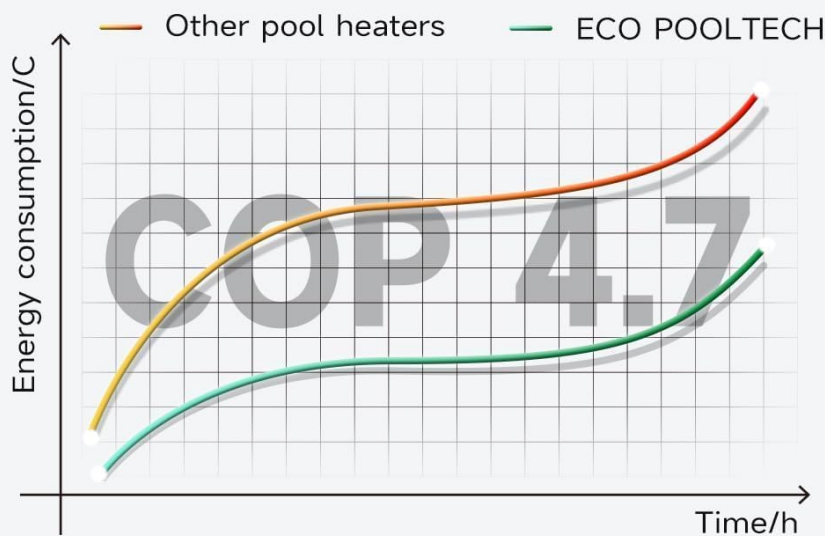
The intelligent control system allows you to set your desired pool water temperature. Once set, the unit will automatically maintain this temperature. Refer to the display panel on the unit for specific temperature adjustment controls.

- The unit can operate within ambient temperatures from 30°F to 100°F.
- Under optimal conditions, it can heat water up to 105°F.

## 5.3 Energy Efficiency

The EU70 heat pump operates with a high Coefficient of Performance (COP) of 4.7, meaning for every unit of electricity consumed, 4.7 units of heat are generated. This makes it a highly efficient choice for pool heating.

# Max 22462 BTU



\* ECO POOLTECH pool heat pumps are backed by genuine, tested data, giving you confidence in their energy efficiency and performance.



Image: A graph comparing the energy consumption of ECOPOOLTECH pool heaters against other brands, demonstrating ECOPOOLTECH's superior efficiency with a Coefficient of Performance (COP) of 4.7. The image also displays the ETL US Listed certification mark.

U.S. Government

Federal law prohibits removal of this label before consumer

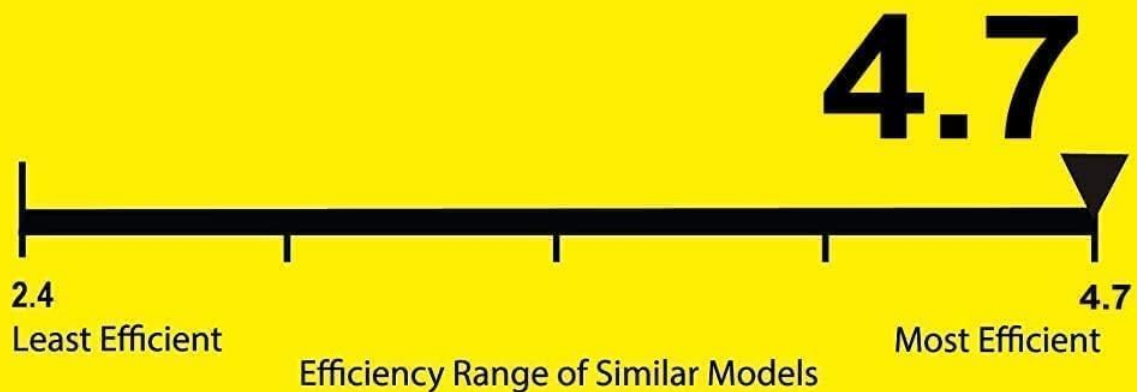
# ENERGYGUIDE

Swimming Pool Heat Pump  
Electric

ECOPOOLTECH  
EU70



## Thermal Efficiency



Efficiency range based only on models fueled by electricity.

For more information, visit [www.ftc.gov/energy](http://www.ftc.gov/energy).

Image: The U.S. Government EnergyGuide label for the ECOPOOLTECH EU70 Electric Swimming Pool Heat Pump, indicating a thermal efficiency rating of 4.7, which is at the most efficient end of the range for similar models.

## 6. MAINTENANCE

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

- **Clean the Unit:** Periodically clean the exterior of the unit to remove dust, leaves, and other debris that may obstruct airflow.
- **Check Airflow:** Ensure the air intake and exhaust vents are clear of obstructions.
- **Inspect Plumbing:** Regularly check all plumbing connections for leaks and ensure they are secure.
- **Winterization:** If you live in an area with freezing temperatures, proper winterization procedures are crucial to prevent damage. Consult a professional or refer to the full manual for detailed winterization steps.
- **Use a Pool Cover:** A solar cover is highly recommended to prevent heat loss and facilitate faster heating of your pool to the desired temperature.



Image: An above-ground pool covered with a blue pool cover, emphasizing that a pool cover aids in heat retention, which is crucial for efficient heating and maintaining pool temperature.

## 7. TROUBLESHOOTING

This section addresses common issues you might encounter. For more complex problems, please contact customer support.

- **What size pools will the heater work with?** The EU70 can heat pools up to 6500 gallons, 21' round or 13'x26' oval. However, if you reside in colder regions, it's recommended to choose one size larger (e.g., EU100).
- **What is the operating temp range for the heater?** The EU70 can operate in ambient temp ranging from above 30°F to 100°F. It performs optimally in above 60°F.
- **Is it compatible with saltwater?** Yes, all ECOPOOLTECH heaters are equipped with titanium heat exchangers, which are compatible with both saltwater and freshwater.
- **Why is it necessary to put a solar cover?** A solar cover is significantly helpful to prevent heat loss and facilitate faster heating of your pool to your desired temperature.
- **How to get after-sales support?** Please leave a message via Amazon. Or reach our service team through the contact info on user manual or the nameplate.
- **Unit Not Heating:**
  - Check power supply and connections.
  - Ensure adequate water flow through the unit. Low flow can trigger an error (e.g., Error Code 6).
  - Verify the set temperature is higher than the current pool temperature.
  - Ensure ambient air temperature is within the operating range (30°F - 100°F).
- **Error Code Displayed:**
  - Refer to the specific error code in the full user manual for detailed explanations and solutions.
  - Common errors may relate to water flow, temperature sensors, or electrical issues.
- **Slow Heating:**

- Ensure the pool is covered when not in use to minimize heat loss.
- Verify the pool size is within the recommended capacity for the EU70 (up to 6500 gallons).
- Check if the ambient temperature is significantly low, which can reduce heating efficiency.

## 8. SPECIFICATIONS

Detailed technical specifications for the ECOPOOLTECH EU-PLC350 Heat Pump.

Image: A detailed list of technical specifications for the ECOPOOLTECH EU70 heat pump. Key specs include: Output (Rated 20000 BTU, Max 22462 BTU), Rated C.O.P. (4.7 W/W), Net Dimension (30"x11.5"x20" inch), Rated/Max Current (13/17 Amp), Voltage (120V/1PH/60Hz), Water Connection (1-1/2"), Rated Power Input (1.4 kW), Advised Water Flow (1500-2000GPH), and Net Weight (64lb). It also notes a built-in 10ft power cord with standard 120V plug and performance ratings at Air 80°F, Humidity 80%, Water Heated to 80°F.

Specification	Value
Model Number	EU-PLC350
Output (Rated/Max)	20000 BTU / 22462 BTU
Rated C.O.P.	4.7 W/W
Voltage	120V/1PH/60Hz
Rated/Max Current	13/17 Amp
Rated Power Input	1.4 kW
Product Dimensions (L x W x H)	30 x 11.5 x 20 inches
Item Weight	64 lbs
Water Connection	1-1/2 inches
Advised Water Flow	1500-2000 GPH
Max Pool Volume (Recommended)	Up to 6500 gallons
Operating Ambient Temperature Range	30°F to 100°F
Heat Exchanger Material	Threaded Titanium Coil (compatible with saltwater)

Note: Performance ratings are based on Air 80°F, Humidity 80%, Water Heated to 80°F.

## 9. WARRANTY AND SUPPORT

ECOPOOLTECH is committed to providing excellent service. For warranty information, technical support, or after-sales inquiries, please refer to the contact information provided in your product packaging or on the unit's nameplate. You may also contact ECOPOOLTECH customer service through the Amazon platform.

As a responsible brand, ECOPOOLTECH ensures all product data is based on tested results. We offer 24-hour online service to respond to customer questions in a timely manner.

