

## VEVOR VBPYCE-110

# VEVOR VBPYCE-110 Variable Frequency Pool Heat Pump

## User Manual

### 1. INTRODUCTION

Thank you for choosing the VEVOR VBPYCE-110 Variable Frequency Pool Heat Pump. This manual provides essential information for the safe and efficient installation, operation, and maintenance of your new pool heat pump. Please read this manual thoroughly before installation and use, and retain it for future reference.

The VBPYCE-110 is designed to provide both heating and cooling for swimming pools ranging from 25 m<sup>3</sup> to 50 m<sup>3</sup>, ensuring comfortable water temperatures year-round. Its variable frequency technology offers energy efficiency and quiet operation.

### 2. SAFETY INSTRUCTIONS

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

- Ensure the unit is installed by a qualified technician in accordance with all local and national electrical and plumbing codes.
- Always disconnect power to the unit before performing any maintenance or service.
- Do not operate the unit if any part is damaged or missing.
- Keep children and unauthorized persons away from the unit during operation.
- Do not block the air intake or exhaust vents of the heat pump.
- The unit must be properly grounded.
- Do not use flammable liquids or gases near the heat pump.

### 3. PRODUCT COMPONENTS

The VEVOR VBPYCE-110 heat pump consists of several key components designed for efficient performance

and durability.



**Figure 3.1: Internal Components Diagram**

This diagram illustrates the main internal components of the heat pump, including the evaporator, all-pure copper piping, floating compressor base, and main control panel. These elements work together to ensure efficient heat transfer and quiet operation.

- **Evaporator:** Designed for efficient heat absorption, contributing to power savings.
- **All-Pure Copper Piping:** Ensures rapid heating and excellent thermal conductivity.
- **Floating Compressor Base:** Reduces vibration and noise during operation.
- **Main Control Panel:** Provides easy access for operation and settings adjustment.
- **Titanium Tube Heat Exchanger:** Highly resistant to salt, chlorine, and corrosion, ensuring long-term durability.

## 4. INSTALLATION

Proper installation is crucial for the performance and longevity of your heat pump. Consult a qualified professional for installation.

### 4.1 Site Selection

- Choose a location with adequate airflow, away from obstructions.
- Ensure the unit is placed on a stable, level surface.
- Maintain sufficient clearance around the unit for maintenance and proper air circulation (refer to specifications for exact distances).
- The unit can be installed for both above-ground and in-ground pools.



**Figure 4.1: Installation Examples**

The heat pump can be integrated with various pool types, including above-ground and in-ground installations, provided proper clearances and connections are maintained.

## 4.2 Plumbing Connections

- Connect the heat pump to your pool's filtration system after the filter and before any chemical feeders.
- Use the provided universal metric-imperial connector kit for secure connections.
- Ensure all connections are watertight to prevent leaks.

## 4.3 Electrical Connections

- The unit requires an AC 220-240V, 50Hz power supply.
- All electrical wiring must comply with local codes and be performed by a licensed electrician.
- Install a dedicated circuit breaker for the heat pump.
- Ensure proper grounding to prevent electrical hazards.

## 5. OPERATING INSTRUCTIONS

The VBPYCE-110 heat pump features a user-friendly control panel for setting desired temperatures and operating modes.

## Smart Programmable Control

Supports RS485 Connection to Control Center



**Customizable Control**



**Real-Time Monitoring**



**Intelligent Linkage**



**Note:** Connect at the motherboard port for machine control via communication protocol.

**Figure 5.1: Temperature Control Range**

The heat pump maintains minimal water temperature fluctuations, enhancing swimming comfort. The heating temperature range is 9-40°C (48.2-104°F).

## Salt, Chlorine, and Corrosion Resistant

Ensures Stable Machine Operation

**Full DC Inverter Technology**  
Mitsubishi variable compressor for stronger, stable, and long-lasting performance.



**Spiral Titanium Tube Heat Exchanger**  
High efficiency, resistant to salt and chlorine.



**All-Pure Copper Piping**  
Strong thermal conductivity, efficient heat transfer.





**Figure 5.2: Quiet Operation**

Equipped with inverter technology, the heat pump operates at a noise level below 58 dB at 1 meter, ensuring minimal disruption.

### 5.1 Control Panel Overview



**Figure 5.3: Control Panel Location**

The main control panel is located on the side of the unit, providing access to various settings and operational data. It supports RS485 connection for integration with a control center.

The main control panel typically includes:

- **Power Button:** To turn the unit ON/OFF.
- **Mode Selection:** To switch between heating, cooling, and automatic modes.
- **Temperature Adjustment:** Up/Down arrows to set the desired water temperature.
- **Display Screen:** Shows current water temperature, set temperature, and operating status.

## 5.2 Setting Desired Temperature

1. Turn on the heat pump using the power button.
2. Select the desired operating mode (heating or cooling).
3. Use the temperature adjustment buttons to set your preferred pool water temperature. The unit will automatically work to reach and maintain this temperature.

The heating temperature range is 9-40°C (48.2-104°F), and the cooling temperature range is 8-28°C (46.4-82.4°F).

## 6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your VEVOR heat pump.

### 6.1 Routine Checks

- **Clean the Coils:** Periodically inspect and clean the evaporator coils to remove dirt, leaves, and debris that can obstruct airflow.
- **Check Water Flow:** Ensure there is adequate water flow through the heat pump. Reduced flow can impact efficiency.
- **Inspect for Leaks:** Regularly check all plumbing connections for any signs of leaks.
- **Clear Obstructions:** Ensure the area around the heat pump is free from obstructions to allow for proper air circulation.



**Figure 6.1: Durability Features**

The heat pump features a spiral titanium tube heat exchanger and all-pure copper piping, providing excellent resistance to salt, chlorine, and corrosion, which contributes to its long-term durability and reduced maintenance needs.

### 6.2 Winterization

If you live in an area where temperatures drop below freezing, it is essential to winterize your heat pump to prevent damage:

1. Disconnect power to the unit.
2. Drain all water from the heat pump and plumbing lines to prevent freezing.
3. Cover the unit with a protective, breathable cover.

## 7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your VEVOR pool heat pump. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
Heat pump not turning on.	No power supply; tripped circuit breaker; faulty wiring.	Check power connection and circuit breaker. Consult an electrician if wiring is suspected.
Insufficient heating/cooling.	Low water flow; dirty coils; incorrect temperature setting; ambient temperature too low/high.	Ensure pump is running and filter is clean. Clean evaporator coils. Verify temperature settings. Check operating environment temperature limits.
Unit is noisy.	Loose components; fan obstruction; unit not level.	Check for loose parts. Clear any obstructions from the fan. Ensure the unit is on a level surface.
Water leaks.	Loose plumbing connections; damaged O-rings or seals.	Tighten all plumbing connections. Inspect and replace any damaged seals.

## 8. SPECIFICATIONS

Detailed technical specifications for the VEVOR VBPYCE-110 Variable Frequency Pool Heat Pump.



Item Model Number: **VBPYCE-110**

Max Input Power: **2.81 kW**

Rated Heating Capacity: **2.51-11.38 kW**

Heating Temperature Range: **48.2-104°F / 9-40°C**

Cooling Temperature Range: **46.4-82.4°F / 8-28°C**

Main Material: **Carbon Steel**

Net Weight: **107.0 lbs / 48.5 kg**

Product Dimensions: **35.7 x 14.2 x 24.5 inches / 905 x 360 x 620 mm**

Accessories Included:

**1 x User Manual**

**4 x Shock-absorbing Pads**

**2 x Drain Nozzle**

**1 x 2m Drain Hose**

**2 x Universal Metric-Imperial Connector Kit**



**Figure 8.1: Product Dimensions and Included Accessories**

This image provides a visual representation of the heat pump's dimensions and lists the accessories included with the unit.

Feature	Detail
Model Number	VBPYCE-110
Max Input Power	2.81 kW
Rated Heating Capacity	2.51 - 11.38 kW
Heating Temperature Range	9 - 40°C (48.2 - 104°F)
Cooling Temperature Range	8 - 28°C (46.4 - 82.4°F)
Recommended Pool Size	25 - 50 m <sup>3</sup>
Operating Environment Temperature	-10 to 40°C (14 to 104°F)
Power Supply	AC 220-240V, 50Hz
Noise Level	< 58 dB (at 1m)
Net Weight	48.5 kg (107.0 lbs)
Product Dimensions (L x W x H)	91 x 36 x 62 cm (35.7 x 14.2 x 24.5 inches)
Main Material	Carbon Steel

## 8.2 Included Accessories

- 1 x User Manual
- 4 x Shock-absorbing Pads
- 2 x Drain Nozzle
- 1 x 2m Drain Hose
- 2 x Universal Metric-Imperial Connector Kit

## 9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the warranty card included with your product or visit the official VEVOR website. Keep your purchase receipt as proof of purchase.

For assistance, contact VEVOR customer service with your model number (VBPYCE-110) and purchase details.