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› Villastar YC-005 Electric Pool Heater User Manual

### villastar YC-005

# Villastar YC-005 Electric Pool Heater User Manual

Model: YC-005 | Brand: Villastar

## 1. INTRODUCTION

This manual provides comprehensive instructions for the safe installation, efficient operation, and proper maintenance of your Villastar YC-005 Electric Pool Heater. Designed for above-ground and inground pools up to 5000 gallons, this heat pump offers an energy-efficient solution to extend your swimming season and maintain a comfortable water temperature. Please read this manual thoroughly before installation and operation to ensure optimal performance and longevity of your unit.

## 2. SAFETY INFORMATION

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

- Always disconnect power to the unit before performing any service or maintenance.
- Ensure the unit is installed by a qualified professional or in accordance with all local electrical and plumbing codes.
- Do not operate the unit if the power cord or plug is damaged.
- Keep children and pets away from the unit during operation.
- Ensure proper ventilation around the heat pump. Do not block air inlets or outlets.
- This appliance is for outdoor use only.

## 3. PACKAGE CONTENTS

Verify that all components are present and undamaged upon unpacking:

- Villastar YC-005 Heat Pump Unit
- Corrugated Pipes (typically 3 sections)

- Hose Clamps (multiple)
- Heat Pump Inlet and Outlet Joints
- Water Pump Unions
- User Manual (this document)

## 4. SETUP AND INSTALLATION

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### 4.1 Pre-Installation Checks

- **Pool Size Compatibility:** The YC-005 is suitable for above-ground pools up to 5,000 gallons and inground pools up to 4,000 gallons.
- **Required Water Flow:** A pool pump with a minimum flow rate of 12 GPM (gallons per minute) is required for optimal operation. Ensure your existing filter pump meets this requirement.
- **Location:** Place the heat pump on a stable, level surface outdoors, ensuring adequate air circulation around the unit. Avoid enclosed spaces.

### 4.2 Physical Installation Steps

Follow these steps to connect your Villastar YC-005 heat pump:

1. **Prepare Pipes:** Insert a hose clamp onto each end of the corrugated pipes.
2. **Attach Heat Pump Joints:** Securely attach the provided heat pump inlet and outlet joints to the corresponding ports on the Villastar YC-005 unit.
3. **Connect to Filter Pump:** Connect one end of a corrugated pipe to the water pump union, then attach the union to your pool's filter pump. Ensure a tight seal.
4. **Connect to Heat Pump:** Connect the other end of the pipe from the filter pump to the "Water Inlet" port on the heat pump. Use a hose clamp to secure the connection.
5. **Connect to Pool:** Connect a second corrugated pipe from the "Water Outlet" port on the heat pump to the return inlet of your swimming pool. Secure with a hose clamp.



Figure 1: Villastar YC-005 Electric Pool Heater main unit.

# SWIMMING POOL HEAT PUMP

Extend Your Swim Season to  
6 Months for Year-Round Comfort



**16000 BTU**  
Heating Power



**COP 4.45**  
High Efficiency



**50DB**  
Quiet Operation



**Multiple**  
Safety Features



**villastar**★

Figure 2: Close-up of the Water Inlet and Water Outlet ports on the heat pump, showing connection points.



Figure 3: Illustrates the secure hose connection to the heat pump's water inlet/outlet.

### 4.3 Installation Video Guide

For a visual guide on the installation process, please watch the official Villastar video below:

Your browser does not support the video tag.

Video 1: Villastar above ground pool heat Pump easy to install. This video demonstrates the step-by-step process of connecting the heat pump to your pool and filter system.

### 4.4 Initial Startup

1. **Fill with Water:** Ensure your pool is filled to the appropriate level and the filter pump is running to circulate water through the heat pump.
2. **Remove Air:** Before powering on, ensure all air is purged from the system. This can typically be done by opening the air relief valve on your filter pump until a steady stream of water emerges.
3. **Power On:** Plug the heat pump into a grounded electrical outlet. The unit's display should show "OFF". Press the power button to turn on the unit.

## 5. OPERATING INSTRUCTIONS

### 5.1 Control Panel Overview

The Villastar YC-005 features a user-friendly control panel with an LED display and four buttons:

- **Up Arrow (▲):** Increases temperature setting.
- **Down Arrow (▼):** Decreases temperature setting.
- **Power Button (⏻):** Turns the unit On/Off.
- **Mode Button (M):** Switches between heating, cooling, and automatic modes.

### 5.2 Basic Operation

1. **Turning On:** After connecting power, press the Power button (⏻). The display will flash the set temperature three times, then show the actual water temperature.
2. **Changing Modes:** Press the Mode button (M) to cycle through heating mode (sun icon), cooling mode (snowflake icon), and automatic mode (heating + cooling).
3. **Adjusting Temperature:** While the set temperature is flashing, use the Up (▲) or Down (▼) arrow buttons to adjust your desired water temperature. The unit will automatically save the setting after a few seconds.
4. **Turning Off:** Press the Power button (⏻) again. The display will show "OFF".

### 5.3 Control Panel Operation Video

Watch this video for a demonstration of the control panel functions:

Your browser does not support the video tag.

Video 2: Villastar Pool Heat Pump Display and Operation. This video guides you through starting the unit, changing modes, and adjusting temperature settings.

## 6. MAINTENANCE

Regular maintenance ensures the longevity and efficiency of your Villastar YC-005 heat pump:

- **Clean Exterior:** Periodically wipe down the exterior of the unit with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Clear Airflow:** Ensure the air intake and exhaust vents are free from debris, leaves, or other obstructions. Clean the fan blades if necessary (with power disconnected).
- **Check Connections:** Regularly inspect all hose connections and clamps for leaks or looseness. Tighten as needed.
- **Winterization:** If temperatures drop below freezing, it is crucial to properly winterize your heat pump. Drain all water from the unit and pipes to prevent freezing and damage. Consult a professional if unsure.

## 7. TROUBLESHOOTING

If you encounter issues with your Villastar YC-005, refer to the common problems and solutions below:

Problem	Possible Cause	Solution
Unit does not turn on.	No power, tripped breaker, faulty plug.	Check power connection, reset breaker, test outlet.
<b>E3 Error Code</b> (No Water Flow).	Insufficient water flow from pool pump, air in system, clogged filter.	Ensure pool pump is running and has sufficient flow (>12 GPM). Purge air from the system. Clean or replace pool filter. Check for kinks in hoses.
Pool not heating sufficiently.	Incorrect temperature setting, low ambient temperature, pool size too large, insufficient run time.	Verify set temperature. Allow more time for heating, especially in cooler weather. Ensure pool size is within recommended limits.
Unusual noise from unit.	Debris in fan, loose components, compressor issue.	Disconnect power and check for debris in fan. Tighten any loose screws. If noise persists, contact customer support.

If the problem persists after attempting these solutions, please contact Villastar customer support.

## 8. SPECIFICATIONS





Feature	Specification
Brand	villastar
Model Number	YC-005
Heat Output	16000 British Thermal Units (BTU/hr)
Coefficient of Performance (COP)	Up to 4.45
Max Pool Capacity	Up to 5000 gallons (above ground), 4000 gallons (inground)
Voltage	110V / 120 Volts
Operating Temperature Range	23°F to 109.4°F (-5°C to 43°C)
Max Temperature Setting	104°F (40°C)
Noise Level	Approx. 50 dB
Product Dimensions (D x W x H)	18.9" x 17.29" x 19.29"
Item Weight	67.9 pounds
Heat Exchanger Material	Pure Titanium

## 9. WARRANTY AND SUPPORT

Villastar products are manufactured to high-quality standards. For specific warranty details and to register your product, please refer to the warranty card included with your purchase or visit the official Villastar website. For technical support, troubleshooting assistance, or replacement parts, please contact Villastar customer service through the contact information provided on their website or your point of purchase.

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### Related Documents - YC-005

	<p><a href="#">Villastar MiniPool Heat Pump YC-005 Installation and Operation Manual</a></p> <p>Comprehensive installation and operation manual for the Villastar MiniPool Heat Pump Model YC-005. This guide provides technical specifications, detailed installation steps for above-ground and in-ground pools, electrical wiring diagrams, troubleshooting fault codes, and material preparation lists to ensure optimal performance and longevity of your swimming pool heat pump.</p>
	<p><a href="#">Villastar Swimming Pool Air Source Heat Pump Installation &amp; Operation Manual (Model YC-020)</a></p> <p>This comprehensive manual guides users through the installation, operation, safety, and maintenance of the Villastar Swimming Pool Air Source Heat Pump, model YC-020. Learn about its working principles, technical specifications, and troubleshooting.</p>
	<p><a href="#">VEVOR YC-5532 Pool Handrail: Installation and Safety Guide</a></p> <p>This document provides essential safety instructions, assembly precautions, component details, and installation guidance for the VEVOR YC-5532 pool handrail. Ensure safe and proper setup for your swimming pool.</p>
	<p><a href="#">VEVOR Pool Handrails YC-3022/YC-3223 Installation and Safety Guide</a></p> <p>Official installation and safety guide for VEVOR Pool Handrails, models YC-3022 and YC-3223. Provides essential product information, safety precautions, assembly guidance, and support contact details.</p>