

Villastar Pool Heat Pump User Manual

Model: YC-005

1. PRODUCT OVERVIEW

The Villastar YC-005 Pool Heat Pump is designed to efficiently heat and cool both above-ground and inground pools up to 5000 gallons. It features advanced technology for energy efficiency, providing a comfortable swimming experience while minimizing operating costs. This durable unit is built for long-lasting performance and offers easy temperature control.

Key features include:

- High efficiency and energy saving with a COP score of 4.45.
- Heating capacity up to 16,036 BTU, suitable for pools up to 5,000 gallons.
- Adjustable temperature control for both heating (59°F-104°F) and cooling (46°F-82°F).
- Simple plug-and-play installation with 1-1/4" water pipe connection.
- Built-in advanced protection system for safe operation.

2. SAFETY INFORMATION

Always read and understand all safety warnings and instructions before installing, operating, or maintaining this product. Failure to follow these instructions could result in serious injury or property damage.

- Ensure the unit is installed on a stable, level surface.
- Do not operate the unit if any part is damaged or if the power cord is frayed.
- Keep children and pets away from the unit during operation.
- Ensure proper electrical grounding to prevent electric shock.
- Do not block the air intake or exhaust vents.
- Disconnect power before performing any maintenance or troubleshooting.

3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- Villastar YC-005 Pool Heat Pump Unit
- Corrugated Pipes

- Hose Clamps
- Inlet/Outlet Joints
- Water Pump Unions
- User Manual

4. SETUP AND INSTALLATION

The Villastar YC-005 Pool Heat Pump is designed for efficient and rapid installation. Follow these steps carefully:

4.1 Prepare Auxiliary Materials

Before starting, gather all necessary auxiliary materials, including pipes, heat pump inlet and outlet joints, water pump unions, and hose clamps.



Image: Villastar YC-005 Pool Heat Pump unit with its power cord and a coiled hose, ready for installation.

4.2 Connect Pipes and Clamps

Insert the hose clamps into the corrugated pipes. Then, attach the heat pump inlet and outlet joints to the corresponding ports on the heat pump unit.

EFFICIENT HEATING







HEATING CAPACITY

16000 BTU



EFFICIENCY

4.45 COP



NOISE

50 DB

Image: The Villastar Pool Heat Pump unit, highlighting its efficient heating capabilities with 16000 BTU heating capacity, 4.45 COP efficiency, and 50 dB noise level.

4.3 Connect to Water Pump and Pool

Connect the water pump union to your pool's filter pump. Ensure the pump has a flow rate greater than 12 GPM and includes a hair strainer. Finally, connect the pipes from the heat pump to the pool's inlet and outlet. Ensure all connections are secure using the provided clamps.

Note: A separate pool pump with a hair strainer and a flow rate greater than 12 GPM is required for optimal operation.

Your browser does not support the video tag.

Video: This video demonstrates the easy installation process of the Villastar above-ground pool heat pump, showing connections to the pool and water pump.

4.4 Remove Air and Power On

After all connections are complete, add water to the system to remove any trapped air. Once the air is purged, you can power on the unit and proceed with debugging.

WONDERFUL SOLUTION FOR POOL HEATING!

Strong heating capacity, economic operating



villastar

Image: The Villastar Pool Heat Pump unit positioned next to a swimming pool, illustrating its role as a heating solution.

5. OPERATING INSTRUCTIONS

The Villastar YC-005 features an intuitive LED display for easy operation and temperature control.

5.1 Control Panel Overview

The control panel allows you to turn the unit on/off, select operating modes, and adjust the desired water temperature.

WIDE RANGE OF APPLICATIONS

Suitable for all kinds of swimming pool heating, indoor or outdoor



Image: A close-up view of the Villastar Pool Heat Pump's control panel, showing the digital display and buttons for adjusting temperature, turning on/off, and mode selection.

5.2 Power On/Off

To power on the unit, press the "Power" key. The display will show "OFF" initially, then flash the set temperature three times before displaying the actual water temperature. To turn off the unit, press the "Power" key again; the display will show "OFF".

5.3 Mode Selection

Press the "M" key to switch between heating mode, cooling mode, and automatic mode (heating + cooling). The corresponding icon will appear on the display.

5.4 Adjusting Temperature

Use the "Up" and "Down" arrow keys to adjust the desired setting temperature. The set temperature will flash three times, then the display will revert to showing the actual water temperature.

Your browser does not support the video tag.

Video: This video demonstrates the display and operation of the Villastar Pool Heat Pump, including how to power on, change

modes, and adjust temperature settings.

Your browser does not support the video tag.

Video: A promotional video showcasing the Villastar Mini Swimming Pool Heat Pump for Above-Ground Pools, highlighting its features and benefits.

6. MAINTENANCE

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

- Clean the Coils:** Periodically inspect and clean the evaporator coils to ensure optimal airflow and heat exchange. Remove any debris, leaves, or dirt.
- Check Water Flow:** Ensure there is adequate water flow through the unit. Reduced flow can impact performance. Clean pool filters regularly.
- Inspect Connections:** Regularly check all pipe connections and electrical wiring for leaks or damage. Tighten any loose clamps.
- Winterization:** If you live in an area with freezing temperatures, properly winterize the unit by draining all water and covering it to protect it from harsh weather.
- Professional Inspection:** Consider an annual professional inspection to ensure all components are functioning correctly.

7. TROUBLESHOOTING

Here are some common issues and their potential solutions:

Problem	Possible Cause	Solution
Unit not turning on	No power, tripped breaker, unit in "OFF" mode.	Check power supply, reset breaker, press "Power" button.
Poor heating/cooling performance	Low water flow, dirty coils, incorrect temperature setting, ambient temperature too low/high.	Ensure adequate water flow (check pump/filter), clean coils, adjust temperature setting, check operating temperature range.
Unusual noises	Loose components, debris in fan, compressor issue.	Inspect for loose parts, remove debris, contact customer support if compressor noise persists.
Water leakage	Loose pipe connections, damaged O-rings.	Tighten connections, inspect and replace O-rings if necessary.

If you encounter issues not listed here or if troubleshooting steps do not resolve the problem, please contact Villastar customer support.

8. SPECIFICATIONS

Detailed technical specifications for the Villastar YC-005 Pool Heat Pump:

Feature	Detail
Model	YC-005
Brand	villastar

Feature	Detail
Heating Capacity (BTU/hr)	16000
Recommended Pool Size	Up to 5000 gallons
Power Supply	110-120V/60Hz
Max Power Input	4623 BTU/h
Max Current	7.1 A
Heating Temperature Range	59°F - 104°F
Cooling Temperature Range	46°F - 82°F
Noise Level	50dB(A)
Product Dimensions (L x W x H)	17 x 14 x 17 inches
Net Weight	59 lbs
Indoor/Outdoor Usage	Outdoor
Form Factor	Cabinet

Adjust the desired water temperature

Turn on/off



Heating mode

Cooling mode

The pool water temperature

Change mode between cooling, heating, and AUTO

EASY TO OPERATE

Image: An exploded view diagram of the Villastar Pool Heat Pump, showing its main internal components such as the compressor, evaporator, iron tube heat exchanger, and controller.



Image: A table detailing the air-source swimming pool heat pump specifications for model YC-005, including heating capacity, power input, COP, temperature ranges, weight, and noise level, alongside its physical dimensions.

9. WARRANTY AND SUPPORT

Villastar is committed to providing exceptional products and customer service. Your Villastar Pool Heat Pump comes with a manufacturer's warranty. Please refer to the warranty card included with your purchase for specific terms and conditions.

For any questions, issues, or technical support, please contact Villastar customer service. We offer 24-hour online support to assist you.

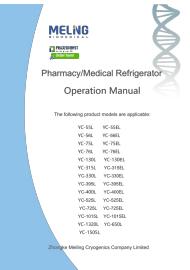
Contact Information:

Brand: Villastar

Online Support: Available 24/7 (as per product features)

Manufacturer: Villastar

Related Documents - YC-005

	<p>Villastar MiniPool Heat Pump YC-005 Installation and Operation Manual</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>Villastar Swimming Pool Air Source Heat Pump Installation & Operation Manual (Model YC-020)</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>MELING Biomedical Pharmacy/Medical Refrigerator Operation Manual</p> <p>This operation manual provides detailed instructions for the safe and effective use, installation, maintenance, and troubleshooting of MELING Biomedical Pharmacy/Medical Refrigerators. It covers various models and includes safety precautions, operating procedures, and technical specifications.</p>
	<p>YC Controller Setup and Operation Manual</p> <p>This manual provides detailed instructions for setting up and operating YC series controllers. It covers technical specifications, installation procedures, Wi-Fi configuration, and integration with various IoT platforms such as MQTT, HomeAssistant, and SprutHub.</p>