

villastar YC-020

Villastar Pool Heater User Manual

Model: YC-020

1. INTRODUCTION

Thank you for choosing the Villastar YC-020 Pool Heater. 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.



Figure 1.1: Villastar YC-020 Pool Heater. This image displays the main unit of the Villastar YC-020 pool heater, showcasing its compact design and primary components including the fan and control panel.

2. SAFETY INFORMATION

Always adhere to local electrical and plumbing codes. Improper installation or operation can lead to serious injury or property damage. Ensure the unit is installed by a qualified professional if you are unsure about any steps.

- Do not operate the heater if any part is submerged in water.
- Disconnect power before performing any service or maintenance.

- Keep children and pets away from the unit during operation.
- Ensure proper ventilation around the unit.

3. PRODUCT OVERVIEW

3.1 Key Features

- **Cost-Saving Efficiency:** Thermal conversion rate of COP 5.67 for energy savings.
- **Extended Pool Time:** Designed for both inground and above-ground pools, ensuring consistent warmth.
- **Simple Operation:** Features an LED display for water temperature and intuitive control settings.
- **Versatile Application:** Suitable for inground pools up to 14,000 gallons and above-ground pools up to 13,000 gallons.
- **Durable Construction:** Robust galvanized steel design with a high-power compressor and pure titanium water heat exchanger.

3.2 Components and Dimensions

WHAT'S INCLUDED

Net Weight :

168 lbs ▼▼▼



Instruction
x1



Drain-pipe(78.7in)
x1



Connector
x1



Rubber shock absorber
x4

Note: Accessories are housed within the main unit, easily retrievable by opening it.

Figure 3.1: Included Components and Dimensions. This image illustrates the physical dimensions of the Villastar YC-020 pool heater (40 inches length, 17 inches width, 32 inches height) and lists the included accessories: instruction manual, drain pipe (78.7 inches), connector, and four rubber shock absorbers. The net weight is 168 lbs.

4. SETUP AND INSTALLATION

The Villastar pool heater is designed for straightforward setup. Accessories and the manual are located inside the metal housing; use a screwdriver to access them.

4.1 Water Pipe Connection

The unit offers multiple installation options with a 1.2"/32mm water pipe connection. Ensure all connections are secure and leak-free.

4.2 Placement

Place the unit on a stable, level surface with adequate clearance for air circulation. Avoid enclosed spaces. The unit operates efficiently in outdoor temperatures from 19.4°F to 109.4°F.

HEATING & COOLING FUNCTION

Running temperature range 19.4°F~109.4°F

Cooling Mode
46°F~82°F

Heating Mode
46°F~104°F

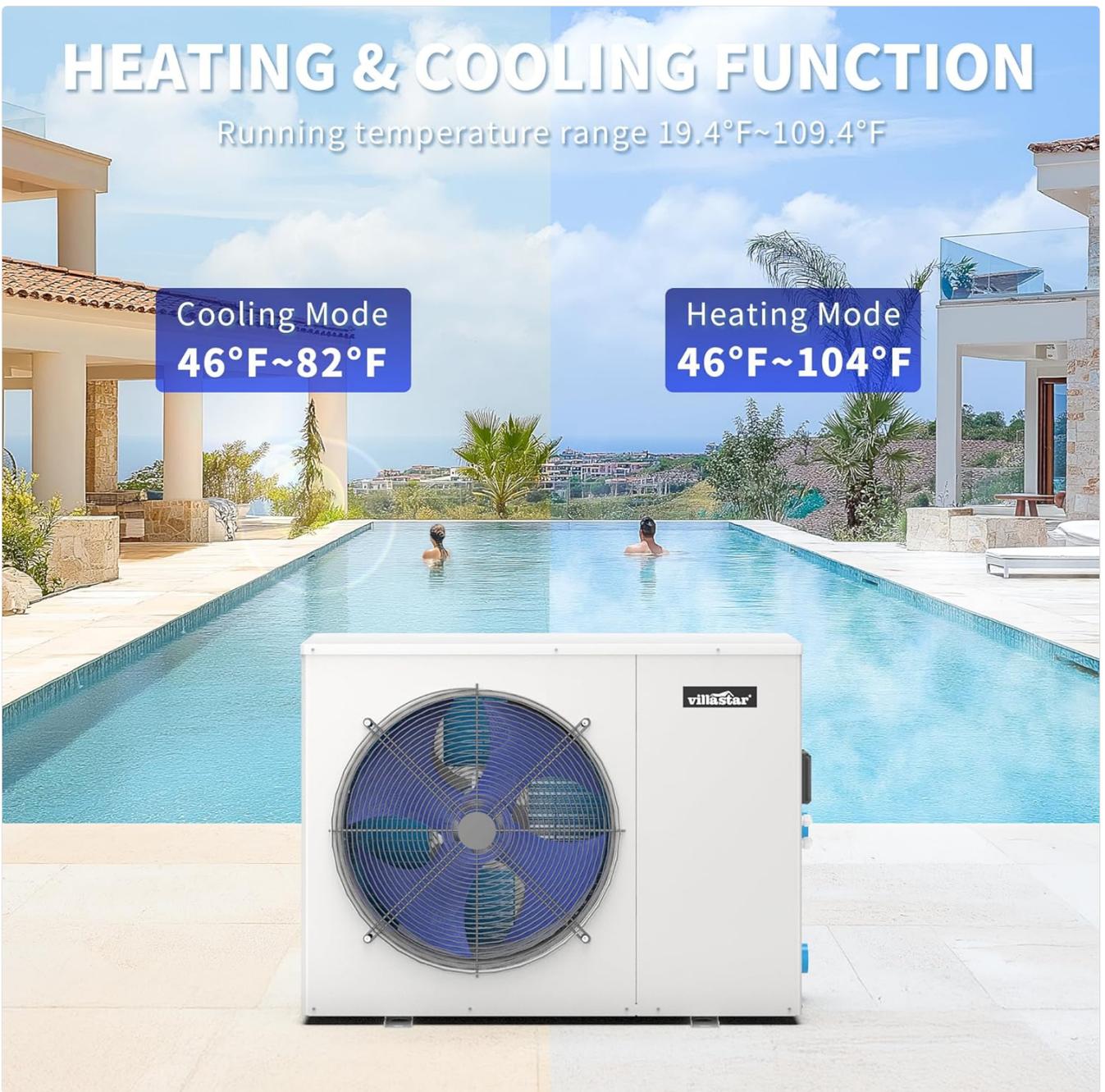


Figure 4.1: Heater Placement and Functionality. This image shows the Villastar YC-020 pool heater positioned next to a swimming pool, highlighting its dual heating (46°F~104°F) and cooling (46°F~82°F) modes.

5. OPERATING INSTRUCTIONS

The Villastar pool heater features an intuitive control panel for easy operation.

5.1 Control Panel



Figure 5.1: Control Panel Overview. This image displays the LED control panel of the Villastar YC-020 pool heater, detailing the functions of each button: Turn on/off, Times, Mode Selections, Up, and Down. It also notes that holding the Mode button for 3 seconds switches between Celsius and Fahrenheit.

5.2 Setting Water Temperature

Use the 'Up' and 'Down' buttons to adjust the desired water temperature. The LED display clearly shows the current

water temperature. The heater can efficiently heat pool water up to a comfortable 104°F.

5.3 Dual Mode Function

The unit supports both heating and cooling modes. Select the desired mode using the 'Mode Selections' button on the control panel.

- **Heating Mode:** Operates within a temperature range of 46°F to 104°F.
- **Cooling Mode:** Operates within a temperature range of 46°F to 82°F.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your Villastar pool heater.

- **Clean the Unit:** Periodically clean the exterior of the unit to prevent dust and debris buildup, especially around the fan and air intake/exhaust vents.
- **Check Water Connections:** Regularly inspect all water pipe connections for any signs of leaks or corrosion. Tighten connections as needed.
- **Winterization:** In colder climates, follow proper winterization procedures to protect the unit from freezing temperatures. Consult a pool professional if unsure.

7. TROUBLESHOOTING

If you encounter issues with your pool heater, refer to the following common troubleshooting steps:

- **No Power:** Check the power supply, circuit breaker, and ensure the unit is properly plugged in.
- **Insufficient Heating:** Verify the set temperature is higher than the current pool temperature. Ensure adequate water flow through the unit (recommended 1500-2500 GPH). Check for debris in the filter or pump.
- **Unusual Noise:** Inspect the fan for obstructions. Ensure the unit is level and stable.
- **Error Codes:** If an error code appears on the LED display, consult the specific error code section in the full manual (if available) or contact customer support.

8. SPECIFICATIONS

Technical specifications for the Villastar YC-020 Pool Heater:

WHY CHOOSE US

The graphic compares three heating options: Solar, Electric, and Gas, which are marked with a red 'X' in a circle, indicating they are not chosen. The Air-Source Pool Heat Pump is marked with a green checkmark in a circle, indicating it is the chosen option. The reasons for choosing the Air-Source Pool Heat Pump are: Faster heating, Higher efficiency and Lower costs, and No Pollutant Emissions.

Figure 8.1: Detailed Product Specifications. This image presents a table of specifications for the Villastar YC-020 Air-Source Swimming Pool Heat Pump, including heating capacity (BTU/h), power input (BTU/h), COP, power supply (110-120V/60Hz), max power input (BTU/h), max current (A), setting temperature range for heating and cooling, net weight (168 lbs), noise level (62dB(A)), and water flow (1500-2500 GPH).

Specification	Value
Model Number	YC-020
Product Dimensions	40 x 17 x 32 inches
Heating Capacity (80°F Air 80°F Water 63% RH)	68000 BTU/hr
Power Input (80°F Air 80°F Water 63% RH)	12000 BTU/hr
COP (80°F Air 80°F Water 63% RH)	5.67
Heating Capacity (50°F Air 80°F Water 63% RH)	40944 BTU/hr
Power Input (50°F Air 80°F Water 63% RH)	10236 BTU/hr
COP (50°F Air 80°F Water 63% RH)	4.00
Power Supply	230V/60Hz
Max Power Input	15184 BTU/hr
Max Current	25.5 A
Setting Temperature Range (Heating)	46°F ~ 104°F
Setting Temperature Range (Cooling)	46°F ~ 82°F
Net Weight	168 lbs
Noise Level	62 dB(A)
Recommended Water Flow	1500-2500 GPH

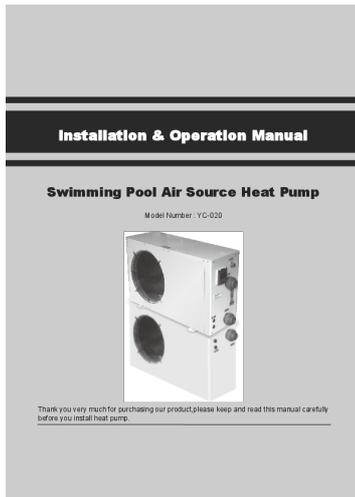
9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the warranty card included with your product or contact Villastar customer service directly. Keep your purchase receipt as proof of purchase.

Villastar Customer Service: Please visit the official Villastar website or refer to the contact information provided in your product packaging for support.

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[Villastar Swimming Pool Air Source Heat Pump Installation & Operation Manual \(Model YC-020\)](#)

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. lang:en score:23 filesize: 2.72 M page_count: 33 document date: 2023-09-21