# VERTA SERIES

## Air-to-Water Heat Pump

## BETTER FOR YOUR JOB AND FOR THE PLANET

The Verta Series offers a smart, energy-efficient solution for modern hydronic heating and cooling needs.

### KEY FEATURES:

- **7" LED Touchscreen with user-friendly system interface**
- **Eco-friendly R32 Refrigerant**
- **Designed to heat water in low ambient conditions**
- **Sleek, modern design**
- **Heating, cooling and domestic hot water capabilities**
- **Built-in controls for hybrid applications**


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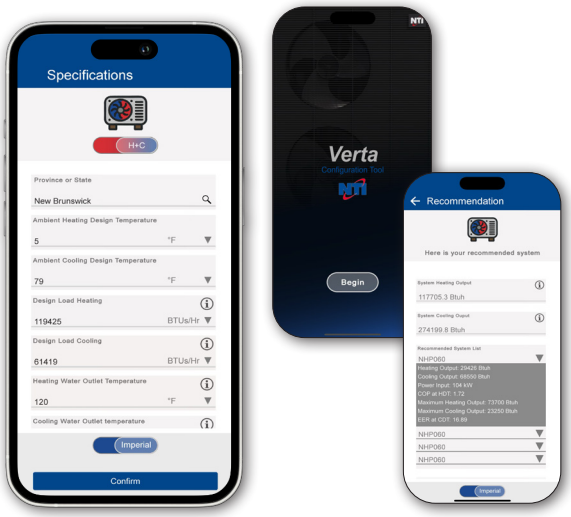
## FEATURES AND BENEFITS

The perfect fit for a single-family house or apartment with limited space.

- **7" LED Touchscreen System Control**
  The intuitive system interface enables users to effortlessly connect and manage external products such as boilers or electric heaters, ensuring seamless integration for hybrid applications.
- **DHW Storage**
  Set timer as needed for each day in a week.
- **Heating Curve**
  Adjust outlet water temperature based on ambient temperature automatically.
- **Auto Heat Cool Switch**
  Heating and cooling can be switched automatically based on ambient temperature or external signal.
- **Equipped with R32 Refrigerant**
  Sustainable, economic and efficient, R32 is a high-performance gas that is good for the environment. Its Global Warming Potential (GWP) two third less than R410A.
- **High Temperatures even in Low Ambients**
  The Verta Air-to-Water Heat Pump can achieve high delivered water temperatures in low ambient conditions while maintaining high efficiencies (see spec table for more details).
- **Limited Warranty**
  From installation date:
  5 years - Compressor
  3 years - All Other Parts

## SIZING / PERFORMANCE APP




Scan to watch the NTI Verta Sizing tool in action!

Download on the App Store | GET IT ON Google Play

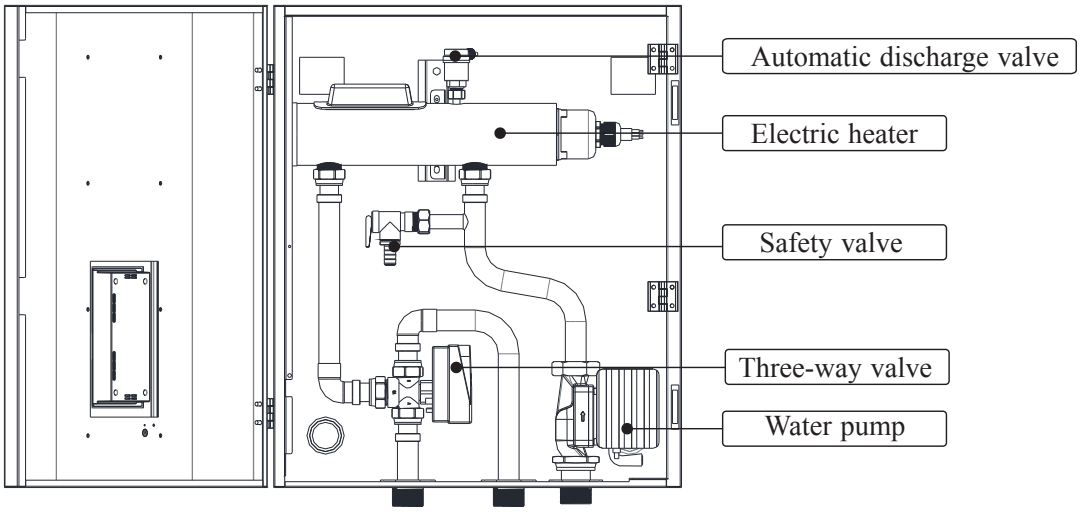
- **Smart system recommendations** for Heating only or Heating & Cooling—choose Imperial or Metric units with ease!
- **Real-time performance insights:** Instantly see recommended heating and cooling output in BTUH based on your custom design temperatures.
- **Clear model comparisons:** View model numbers side-by-side with all key specs—heating/cooling output, input power, unit efficiency (COP/EER), and maximum capacities.
- **Effortless decision-making:** Based on data provided, the app turns complex choices into clear and precise selections allowing the user to confidently apply the proper products.

# TECHNICAL FEATURES

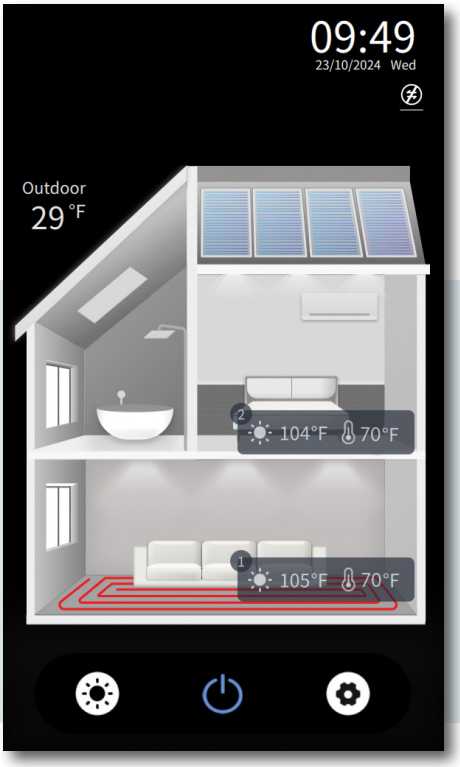
## Hydrobox/Control Box

The Verta Series Monoblock Air-to-Water Heat Pump requires an indoor unit for installation, and NTI offers two options for this component: the Control Box (Control32-7) and the Hydrobox (Hydro32-7).

The **Hydrobox** (pictured here), is a wall-mounted unit, and includes a 7" LED touchscreen system interface and main control board (PCB). In addition, the Hydrobox includes a 3kW backup heater, a hydronic circulating pump, and a 3-way valve for domestic hot water (DHW) applications. It communicates with the outdoor unit, only requiring a 24-gauge, 3-wire cable (provided by the factory). The Hydrobox requires a separate 208-230V power supply to operate the backup heater. Designed as a pre-piped solution, the Hydrobox simplifies installation and helps save time on the project, making it an ideal choice for installers seeking efficiency and ease of integration.




The **Control Box** is also a wall-mounted unit that includes the 7" LED user-friendly touchscreen system interface, the main control board (PCB), and all necessary field wiring, such as temperature sensors. Installation is straightforward, requiring only a 24-gauge, 3-wire communication cable, like the Hydrobox, to connect the control box to the outdoor unit, ensuring a seamless setup.




## 7" LED Touchscreen System Control

At the core of the Verta Series is its intuitive 7" LED touchscreen, designed to simplify the commissioning process. This user-friendly interface presents all parameters and options in clear, easy-to-read English, ensuring a fast and efficient setup for installers.

The touchscreen also provides real-time temperature readings (when applicable), displays the current unit status, and alerts users to any faults or warnings, offering clear instructions for troubleshooting and resolution.

## OUTDOOR UNIT PRODUCT SPECIFICATIONS

| | | Units | NHP32-036 | NHP32-060 |
|---|---|---|---|---|
| Cooling | Capacity Range | BTU/hr (kW) | 9,500-48,400 (2.8-14.2) | 18,000-74,000 (5.3-21.7) |
| | Efficiency Range | EER | 8.15-22.97 | 7.85-28.8 |
| | Efficiency | IPLV | 20.64 | 21.04 |
| | Ambient Temp Range | °F (°C) | 55-125 (12.8-51.7) | |
| | Delivered Water Temp Range | °F (°C) | 39-49 (3.9-9.4) | |
| Heating | Capacity Range | BTU/hr (kW) | 1,600-42,900 (0.7-12.6) | 3,400-73,500 (1-21.5) |
| | Efficiency Range | COP | 0.96-7.10 | 0.58-6.97 |
| | Ambient Temp Range | °F (°C) | -13-113 (-25-45) | |
| | Delivered Water Temp Range | °F (°C) | 68-140 (20-60) | |
| Electrical | Power | V/Ph/Hz | 208-230/1/60 | |
| | Fan Motor | A | 0.6 | 0.6 x 2 |
| | Compressor Motor | A | 14.0 | 28.7 |
| | MCA | A | 24.5 | 41 |
| | MOPD | A | 30 | 60 |
| | SCCR | kA | 5 | |
| Refrigerant | Type | | R32 | |
| | Factory Charge | lbs (kg) | 3.97 (1.8) | 5.73 (2.6) |
| | Normal Pressure Low Side | PSI | 609 | |
| | Normal Pressure High Side | PSI | 174 | |
| Fan | Quantity | | 1 | 2 |
| | Power Input | W | 90 | 90 x 2 |
| | Type | | Brushless DC motor | |
| | Max Speed | RPM | 900 | |
| Sound (1 meter) | Range | dBa | 40-50 | 44-54 |
| Hydronic | Rated Flow | GPM | 9.1 | 14.4 |
| | Max Water Temp | °F(°C) | 140 (60) | |
| | Piping Connections | Inch (mm) | NPT 1-1/4" (DN32) | |
| | Rated Pressure Drop | PSI (ft W.C) | 3.6 (8.4) | 7.66 (17.7) |
| Compressor | Type | | Rotary Inverter | |
| | Speed Range | Hz | 30-90 | 30-76 |
| | Brand | | Mitsubishi | |
| | Quantity | | 1 | |

## INDOOR UNIT PRODUCT SPECIFICATIONS

| | Units | HYDRO32-7 | CONTROL32-7 |
|---|---|---|---|
| Unit Power Supply | V/Ph/Hz | 208-230/1/60 | 115/1/60 |
| Input Power | kW | 0.2 | 0.2 |
| Unit Maximum Overload Protection | A | 15 | 15 |
| Heater Maximum Overload Protection | A | 20 | / |
| Heater Supply | V/Hz | 208-230V/60 | / |
| Heater Rated Input Power | kW | 2.4/3.0 | / |
| Piping Connection | Inch | NPT 1 1/4 | / |

**100% CHECKED AND TESTED**

Every single NTI product undergoes a rigorous internal process of automated quality, efficiency and safety tests before coming to you.