



# 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



## FEATURES AND BENEFITS

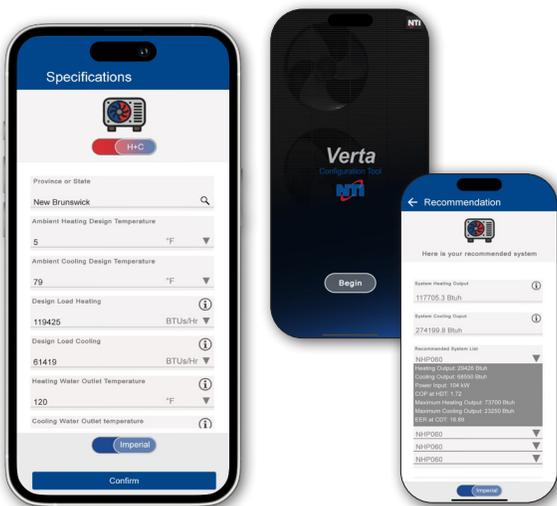
The perfect fit for a single-family house or apartment with limited space.

- 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!



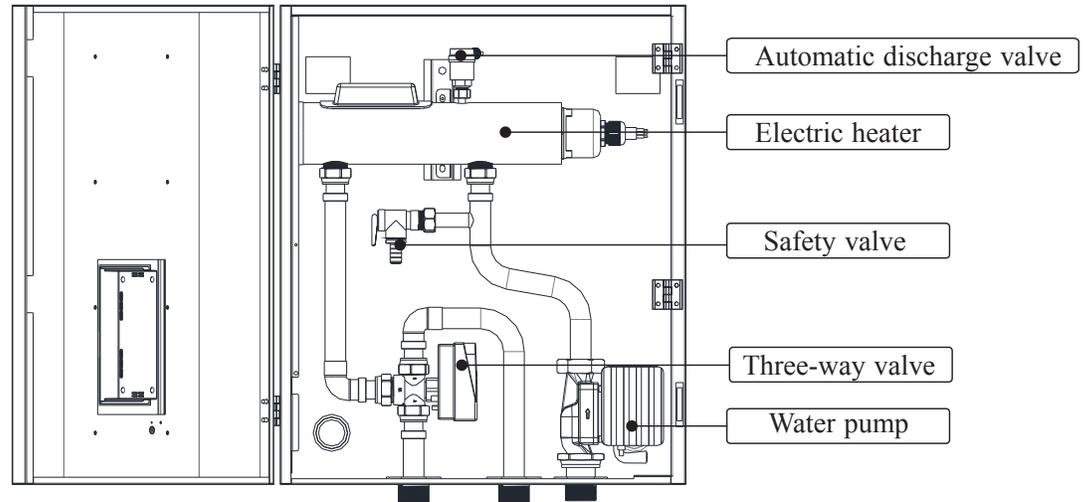
- Smart system recommendations** for Heating only or Heating & Cooling—choose Imperial or Metric units with ease!
- Real-time performance insights:** Instantly see recommended heating and cooling output in BTUH based on your custom design temperatures.
- Clear model comparisons:** View model numbers 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.

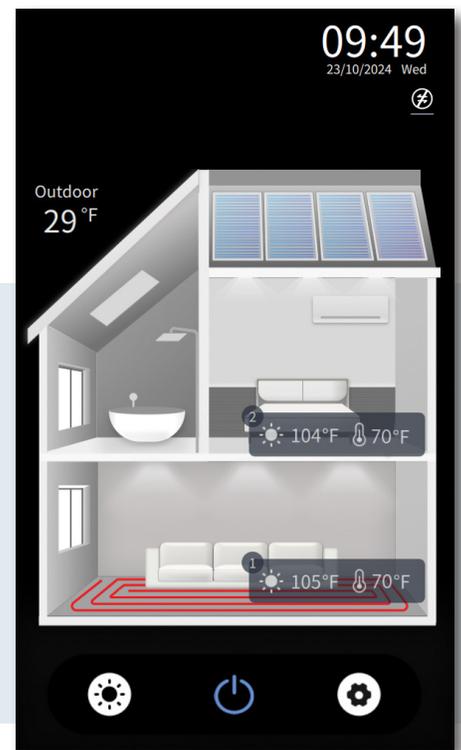


The **Control Box** is also a wall-mounted unit that includes the 7" LED user-friendly touchscreen system interface, the main control board (PCB), and all necessary field wiring, such as temperature sensors. Installation is straightforward, requiring only a 24-gauge, 3-wire communication cable, like 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	Nominal Capacity*	Tons	2.5	4.6
	Nominal Efficiency*	EER	8.57	9.19
	Efficiency**	IPLV/IP	21.02	21.0
	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
	Rated Flow	GPM	9.1	14.4
Hydronic	Max Water Temp	° F (° C)	140 (60)	
	Piping Connections	Inch (mm)	NPT 1-1/4" (DN32)	
	Rated Pressure Drop	PSI (ft W.C)	0.64 (1.47)	6.67 (15.39)
	Type		Rotary Inverter	
Compressor	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	/

\*Nominal Capacity and efficiency are tested in accordance with NTI ACCL All Working Conditions Data Sheet Ver 3.01. For more specific data points/ranges, please refer to the graphs in this manual or to the Verta sizing tool located here <https://ntiboilers.com/product/verta-series>

\*\*IPLV/IP and capacities are tested and certified in accordance with AHRI 550/590.

### 100% CHECKED AND TESTED

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

