WaterFurnace®

*Commercial Solutions*

# Commercial Product Catalog


www.waterfurnace.com/commercial

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# About Us

**About our Engineering Design**

As a leader in the industry, WaterFurnace is dedicated to innovation, quality, and customer satisfaction. Our engineering and design team boasts a long list of innovations in the water loop heat pump industry. Notable firsts include:

- Variable speed ECM fan motors (1988)
- Multi-stage scroll compressors (1992)
- Communicating controls (1993)
- R-410A (2000)
- First 30 EER 5 COP heat pump GLHP (2006)
- Permanent magnet variable speed scroll heat pump (2012)
- Electronic expansion valves (2012)
- Vapor injected scroll compressor (2015)
- WiFi remote monitoring (2015)
- Permanent magnet variable speed screw compressor chiller (2015)
- Integrated EC plenum fans (2017)

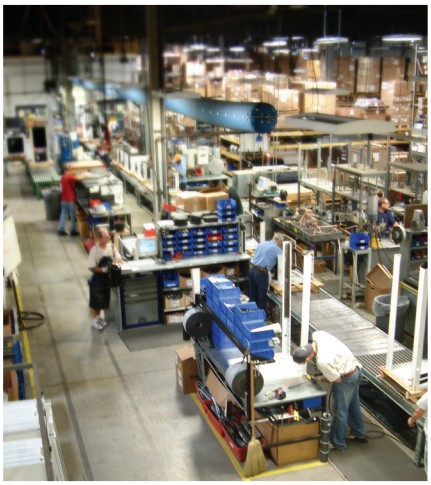
Also, our industry-exclusive ISO 17025 accredited labs are a great asset to the engineering team by providing a high quality and accurate testing.

**Quality of Manufacture**

WaterFurnace also has a well-deserved reputation for robust quality in both design and manufacture. Every unit built is exposed to a wide range of quality control procedures throughout the assembly process and is then subjected to a rigorous battery of computerized run tests to certify that it meets or exceeds performance standards for efficiency and safety, and will perform flawlessly at startup. As a further affirmation of our quality standards, each unit carries our exclusive Quality Assurance emblem, signed by the final test technician. WaterFurnace International's corporate headquarters and ISO 9001 & 14001 : 2015 certified manufacturing facility are both located in Fort Wayne, IN. A scenic three-acre pond located in front of the building serves as our geothermal heating and cooling source to comfort-condition our 110,000 square feet of manufacturing and office space. As a pioneer, and now a leader in the industry, the team of WaterFurnace engineers, customer support staff, and skilled assembly technicians are dedicated to providing the finest comfort systems available.

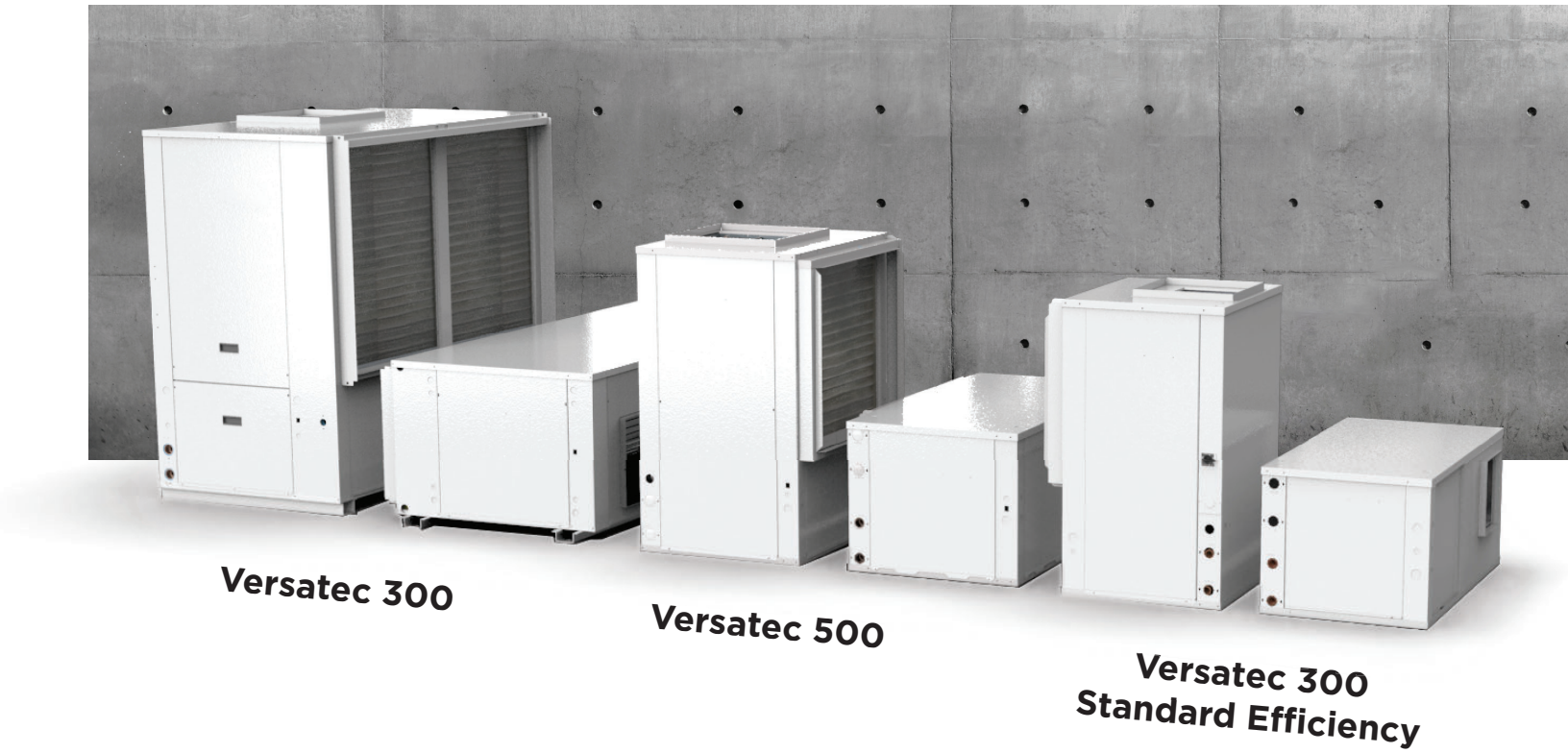
All units are computer run-tested, with conditioned source water, in all modes to ensure efficiency and reliability

- All refrigerant brazing is performed in a nitrogen atmosphere
- All units are deep evacuated to less than 150 microns prior to refrigerant charging
- All joints are helium leak-tested to ensure an annual leak rate of less than 1/4 ounce
- All major components are barcoded; eliminating the possibility of mismatched parts built into unit
- All assembly technicians thoroughly trained in proper quality procedures
- All units have mohahadel number and serial number embedded in control for local or remote retrieval
- WaterFurnace International, Inc. is an ISO 9001 & 14001 : 2015 certified manufacturing facility
- WaterFurnace International engineering labs are ISO 17025 : 2017 accredited
- UL 508A panel shop approved
- By choosing or specifying WaterFurnace products, you can be assured that you are investing in the latest technology, top efficiency and a quality designed built unit.

WaterFurnace HVAC Systems

**Built in the U.S.A**




# Quick Ship Program - The Industry's Best Lead Time

To help support a growing demand for replacement water source heat pumps, select WaterFurnace models and configurations can be ordered through our expedited Quick Ship Program.

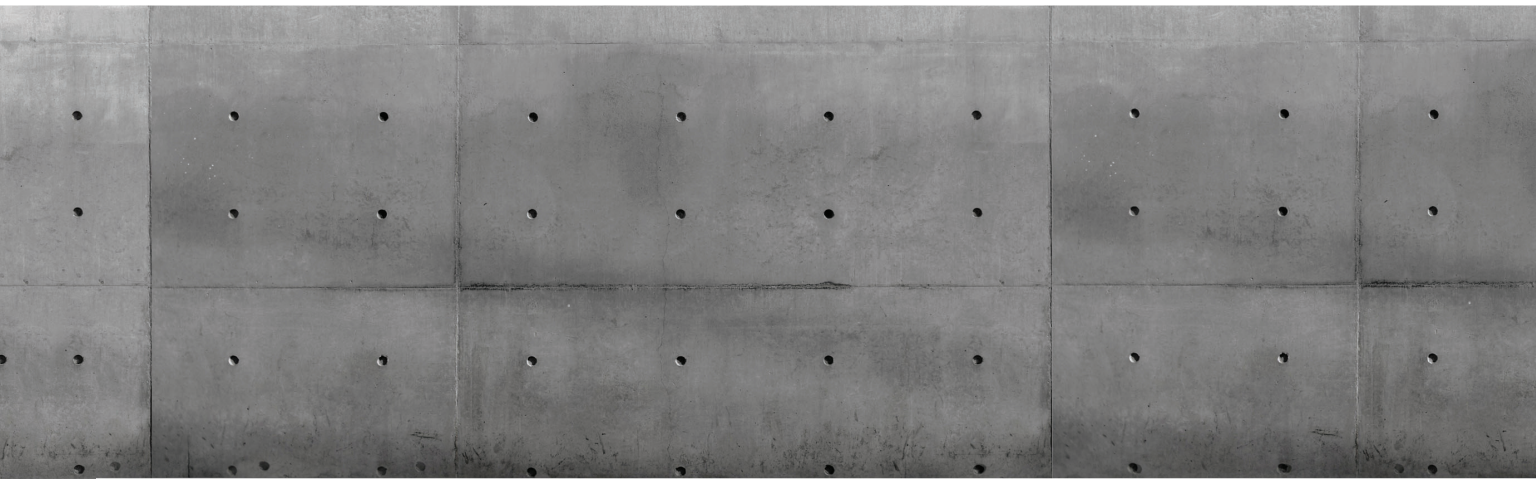
## Versatec 300 Standard Efficiency Configuration Options

**Maximum of 6 units per size and voltage with a total of 20 units per order (call customer service if a higher quantity is needed)**

- Vertical or Horizontal cabinets
- Left or Right Return Air
- Discharge Air: top (vertical), end or side discharge (horizontal)
- Sizes: Single Speed: 012, 018, 024, 030, 036, 042, 048, 060, 070
- Voltages: 208-230/60/1, 265-277/60/1, 208-230/60/3, 460/60/3
- Blower Motor Options: PSC or 5-Speed ECM (018-072)
- All-Aluminum Air Coil
- Insulated Cupronickel Water Coil
- 4-Sided Filter Rack
- Optional Sound Kit (Not available on UBH012)
- Optional Electronic Disconnect
- Optional Stainless Steel Drain Pan
- Optional 2-way Internal Valve (018-070)
- Optional UPC DDC Controller (BACnet or Lon)

| Vertical Model | Width | Depth | Height |
|---|---|---|---|
| 012 | 19.2 | 19.2 | 24.2 |
| 015-018 | 22.5 | 22.2 | 30.2 |
| 024-030 | 22.5 | 22.2 | 36.2 |
| 036 | 22.5 | 26.2 | 40.2 |
| 041 | 21.5 | 21.5 | 40.2 |
| 042-048 | 22.5 | 26.2 | 44.2 |
| 060 | 25.5 | 31.2 | 44.2 |
| 070 | 25.5 | 31.2 | 48.2 |

| Horizontal Model | Width | Depth | Height |
|---|---|---|---|
| 012* | 19.2 | 35.0 | 12.1 |
| 015-018* | 22.5 | 35.0 | 17.2 |
| 024-030 | 22.5 | 42.0 | 17.2 |
| 036 | 22.5 | 42.0 | 19.2 |
| 042-048 | 22.5 | 45.0 | 19.2 |
| 060 | 25.5 | 48.0 | 21.2 |
| 070 | 25.5 | 53.0 | 21.2 |



## Versatec 500 Configuration Options

**Maximum of 3 units per size and voltage with a total of 6 units per order**

- Vertical or Horizontal cabinets
- Left or Right return air
- Discharge air: top (vertical), end or side discharge (horizontal)
- Sizes: Single Speed: 012, 015, 018, 024, 030, 036, 042, 048, 060, 070
  Dual Capacity: 026, 038, 048, 064, 072
- Voltages: 208-230/60/1, 265-277/60/1, 208-230/60/3, 460/60/3
- Blower motor options: Standard PSC or 5-Speed ECM (015-072)
- All-Aluminum Air Coil
- Optional Insulated Water Coil
- 4-Sided Filter Rack
- Optional Sound Kit
- Optional Electrical Disconnect
- Optional Hot Water Generator
- Optional Stainless Steel Condensate Drain Pan
- Optional 2-way Internal Water Valve (015-072)
- Optional UPC DDC Controller (BACnet or Lon)

| Vertical Model | Width | Depth | Height |
|---|---|---|---|
| 012 | 22.5 | 22.2 | 30.2 |
| 015 - 018 | 22.5 | 26.2 | 40.2 |
| 024 - 030 | 22.5 | 26.2 | 44.2 |
| 036 - 038 | 25.5 | 31.2 | 44.2 |
| 042 - 049 | 25.5 | 31.2 | 48.2 |
| 060 - 072 | 25.5 | 31.2 | 52.2 |

| Model | Width | Depth | Height |
|---|---|---|---|
| 012 | 22.5 | 35.0 | 17.2 |
| 015 - 018 | 22.5 | 42.0 | 19.2 |
| 024 - 030 | 22.5 | 45.0 | 19.2 |
| 036 - 038 | 22.5 | 48.0 | 21.2 |
| 042 - 049 | 25.5 | 53.0 | 21.2 |
| 060-064 | 25.5 | 61.0 | 21.2 |
| 070-072 | 25.5 | 68.0 | 21.2 |

## Versatec 300 Configuration Options

**Maximum of 3 units per size and voltage with a total of 6 units per order (call customer service if a higher quantity is needed)**

- Vertical or Horizontal cabinets
- Left or Right return air
- Discharge air: top (vertical), end or side discharge (horizontal)
- Sizes: 095, 120, 095 horizontal, 120 horizontal
- Voltages: 208-230/60/3, 460/60/3
- Blower motor options: Standard or High Static
- 2" MERV 13 Air Filter
- All-aluminum Air Coil
- Insulated Water Coil
- Optional Sound Kit
- Optional Hot Gas Reheat
- Optional UPC DDC Controller (BACnet)
- Stainless Steel Condensate Drain Pan

| Vertical Model | Width | Depth | Height |
|---|---|---|---|
| 095 & 120 | 61.3″ | 34.0″ | 58.0″ |

| Horizontal Model | Width | Depth | Height |
|---|---|---|---|
| 095 & 120 | 89.0″ | 38.0″ | 23.8″ |

## Versatec 300 Standard Efficiency (UB) — 0.5-6 ton

- Water-to-Air Packaged Unit
- 13.2 to 14.7 EER (WLHP)
- 15.6 to 17.0 EER (GLHP)
- Single speed rotary/scroll compressors
- PSC/5 spd ECM/VS ECM Fan Motors

## Versatec 300 High Efficiency (US) — 0.75-6 ton

- Water-to-Air Packaged Unit
- 14.3 to 15.7 EER (WLHP)
- 16.1 to 18.5 EER (GLHP)
- Single speed rotary/scroll compressors
- PSC/5 spd ECM/VS ECM Fan Motors

## Versatec 300 (NL/NX) — 7-10 ton

- Water-to-Air Packaged Unit
- 13.8 to 18.9 EER (WLHP)
- 16.2 to 21.0 EER (GLHP)
- Dual scroll compressor circuits
- Belt Drive Fan Motors

## Versatec 500 (NB) — 0.75-6 ton

- Water-to-Air Packaged Unit
- 15.0 to 21.6 EER (WLHP)
- 17.0 to 30.0 EER (GLHP)
- Single speed rotary/scroll/dual capacity scroll compressors
- PSC/5 spd ECM/VS ECM Fan Motors

## Versatec 500 (UD) — 7-30 ton

- Water-to-Air Packaged Unit
- 12.1-17.5 EER (WLHP)
- 14.0-25.0 EER (GLHP)
- Single speed/dual stage scrolls (7-10 ton)
- Dual scroll compressor (12-30 ton)
- Variable Speed ECM - Backward Inclined fan motors. No belts, pulleys, VFDs needed!
- On average 25% smaller footprint vs competition
- Take-apart vertical cabinet (20-30 ton)

## Versatec 700 (UV) — 2-90 ton

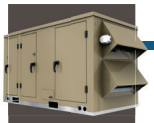
- Water-to-Air Packaged Unit
- 13.2 to 25.0 EER (WLHP)
- 4.4 to 41.0 EER (GLHP)
- Single variable speed permanent magnet scroll compressors (25%-100%)
- Integrated EC backward curve plenum fan motors with EEV
- Multi-zone VAV, single zone VAV, and CAV capable.
- Twinning capabilities with the 10 and 15 ton units for increased efficiency and smaller footprint

## Versatec 300 Consoles (LC) - 0.75-1.5 ton

- Water-to-Air Packaged Unit
- 12.2 EER (WLHP)
- 13.5 to 14.3 EER (GLHP)
- Single speed rotary compressors
- Low sill front return console cabinet
- 3 spd ECM Fan Motors

## Versatec 500 Consoles (NC) - 0.75-1.5 ton

- Water-to-Air Packaged Unit
- 12.3 to 13.6 EER (WLHP)
- 14.2 to 16.0 EER (GLHP)
- Single speed rotary compressors
- Bottom return console cabinet
- 3 spd ECM Fan Motors

## Versatec 500 Rooftop (UR) — 3-30 ton

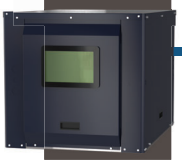
- Water-to-Air Packaged Unit
- 12.2 to 19.1 EER (WLHP)
- 13.1 to 28.0 EER (GLHP)
- Single or dual capacity scroll compressor (3-6 ton)
- Dual scroll compressor circuits (8-30 ton)
- 100% airside economizer, barometric damper (Opt)
- Plenum fan direct drive ECM motor (3-30 ton)
- 5 spd ECM or VS ECM motors with forward curve fan (3-6 ton)

## Versatec 700 Indoor DOAS (DAS) — 10-30 ton

- Water-to-Air Packaged Unit
- 2 energy wheel sizes and 3 variants
- Airside economizer integrated dampers
- Aurora Controls Network
- Double wall module for energy recovery wheel and for the exhaust plenum fan

## TruClimate 100 (NSW) — 1.5-6 ton

- Water-to-Water Heat Pump (R410A)
- 12.3 to 15.5 EER (WLHP)
- 14.0 to 17.5 EER (GLHP)
- Single speed scroll compressor



## TruClimate 100 (NDW) - 8-15 ton

- Water-to-Water Heat Pump (R410A)
- 13.3 to 15.8 EER (WLHP)
- 15.8 to 22.0 EER (GLHP)
- Dual single speed scroll compressors

## TruClimate 100 (NXW) - 10-50 ton

- Water-to-Water Heat Pump (R410A)
- 15.2 to 17.4 EER (WLHP)
- 16.5 to 22.2 EER (GLHP)
- Dual single speed scroll compressors
- Optional Vented BPHX for domestic hot water (10-30 ton)
- HydroLink Aurora Controls w/large color tablet

## TruClimate 300 with HybrEx Technology (WCXDM) - 30-50 ton

- Water-Cooled Chiller (R410A)
- Chiller Ratings:
  Chiller: 0.73 kw/ton
  IPLV: 0.46 kw per ton
- Plug-n-play out of the box staging up to 12 chiller modules.
- Fixed and variable speed mixed chiller banks factory configured.
- No condenser strainer required
- HydroLink Aurora Controls w/large color touch tablet

## TruClimate 500 (WC) - 20-80 ton

- Water-Cooled Chiller (R410A)
- Chiller Ratings:
  Full Load: 0.71 kw/ton
  IPLV: 0.54 kw/ton
- Dual single speed scroll compressors
- Removable 4-pipe header rack
- HydroLink Aurora Controls w/large color tablet

## TruClimate 700 (WC) - 20-80 ton

- Water-Cooled Chiller (R410A)
- Chiller Ratings:
  Full Load: 0.71 kw/ton
  IPLV: 0.54 kw/ton
- Dual single speed scroll compressors
- Removable 6-pipe header rack
- HydroLink Aurora Controls w/large color tablet

# Water-to-air Heat Pumps

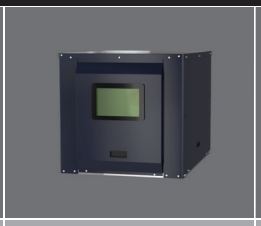




| | Versatec 300 Standard Efficiency | Versatec 300 High Efficiency | Versatec 300 | Versatec 500 | Versatec 500 |
|---|---|---|---|---|---|
| **Capacity Tons** | 0.5 - 6 | 0.75 - 6 | 7 - 10 | 0.75 - 6 | 7-30 |
| **Efficiency Water Loop Heat Pump** | up to 14.7<br>up to 4.9 | 14.3 - 15.7 EER<br>4.5 - 5.1 COP | up to 18.9<br>up to 5.4 | up to 21.6<br>up to 6.4 | up to 17.5<br>up to 5.6 |
| **Compressor** | Single-Stage Rotary<br>Single-Stage Scroll | Rotary or Scroll | Dual Scroll | Single-Stage Rotary<br>Single-Stage Scroll<br>Dual-Stage Scroll | Dual Stage Scroll (7-10 ton)<br>Dual Scroll (12.5 - 30 ton) |
| **Blower Type** | • PSC<br>• 5-Spd ECM<br>• VS ECM FC | • PSC FC<br>• 5-Spd ECM FC<br>• VS ECM FC<br>• Hi Static Options | • Belt/Sheave FC<br>• Hi Static Options | • PSC FC<br>• 5-Spd ECM FC<br>• VS ECM FC<br>• Hi Static Options | • VS Integ BC ECM Plenum Fan |
| **Cabinet Configuration** | • Vertical Topflow<br>• Horizontal | • Vertical Topflow<br>• Horizontal | • Vertical Topflow<br>• Vertical Bottomflow<br>• Horizontal | • Vertical Topflow<br>• Horizontal | • Vertical Topflow<br>• Horizontal |
| **Aurora Control Type** | • Base<br>• BACnet | • Base<br>• Advanced<br>• BACnet<br>• LON | • Base<br>• Advanced<br>• BACnet | • Base<br>• Advanced<br>• BACnet<br>• IntelliZone2 | • Base<br>• Advanced<br>• Premium<br>• BACnet<br>• IntelliZone2 |
| **Hot Water Generator (Coil Only)** | NA | 015 - 070 Vertical only | NA | 015-072 Vertical Only | NA |
| **Available Voltages** | 208-230/60/1<br>265/60/1<br>208-230/60/3<br>460/60/3<br>575/60/3<br>115/60/1 | 208-230/60/1<br>265/60/1<br>208-230/60/3<br>460/60/3<br>575/60/3 | 208-230/60/3<br>460/60/3<br>575/60/3 | 208-230/60/1<br>265/60/1<br>208-230/60/3<br>460/60/3<br>575/60/3 | 208-230/60/3<br>460/60/3<br>575/60/3 with step down transformer |
| **Air Coil** | All-Aluminum | All-Aluminum | All-Aluminum | All-Aluminum | All-Aluminum |
| **Options** | • Internal 2-wayValve<br>• Flow regulator<br>• CuNi Coax<br>• SS Drain Pan<br>• Sound Kit<br>• Disconnect<br>• Phase Guard<br>• MERV13<br>• Coated Air Coil | • Waterside Economizer<br>• CuNi Coil<br>• Internal 2-way Valve<br>• Flow regulator<br>• 2" Merv 13<br>• Disconnect<br>• Phase guard<br>• Coated Air Coil<br>• Sound Kit<br>• SS Drain Pan<br>• IntelliStart<br>• Hot Gas Bypass<br>• Hot Gas Reheat | • Integrated Waterside Economizer<br>• Internal 2-way Valve<br>• Flow regulator<br>• Hot Gas Bypass<br>• Hot Gas Reheat | • Internal 2-way Valve<br>• Flow regulator<br>• IntelliStart<br>• Hot Gas Bypass<br>• Hot Gas Reheat<br>• Disconnect<br>• Phase Guard<br>• CuNi Coax<br>• Sound Kit<br>• MERV13<br>• SS Drain Pan<br>• Coated Coil | • Internal 2-way Valve<br>• Hot Gas Bypass<br>• Modulating Hot Gas Reheat<br>•Head Pressure Control |

|  |  |  |  |  |
|---|---|---|---|---|
| **Versatec 700** | **Versatec 300 Consoles** | **Versatec 500 Consoles** | **Versatec 500 Rooftop** | **Versatec 700 Indoor DOAS** |
| 2-90 | 0.75-1.5 | 0.75 - 1.5 | 3 - 30 | 10 - 30 ton 2,000 - 8,000 cfm |
| up to 25.0<br>up to 7.8 | 12.2 EER<br>4.3 - 4.4 COP | 12.3 - 13.6 EER<br>4.3 - 4.9 COP | 12.2 - 19.1 EER<br>4.2-6.4 COP | |
| Variable Capacity Scroll | Rotary | Rotary | Scroll<br>Dual Cap Scroll<br>Twin Scrolls | Variable capacity scroll with exhaust air energy recovery wheel |
| • VS ECM FC Plenum Fan | • 3-Spd ECM FC | • 3-Spd ECM FC | • 5-Spd ECM FC (3-6)<br>• VS ECM FC (3-6)<br>• VS Integ BC ECM Plenum Fan | • VS Integrated backward inclined ECM plenum fan. |
| • Vertical Topflow<br>• Vertical Bottomflow<br>• Horizontal | • Slope Top<br>• Flat Top<br>• Chassis Only | • Slope Top<br>• Ext Slope Top<br>• Flat Top<br>• Chassis Only | • Rooftop Downflow<br>• Rooftop Sideflow<br>• Opt Economizer | • Vertical Top Flow<br>• Vertical Bottom Flow |
| • Advanced<br>• Premium<br>• BACnet<br>• IntelliZone2<br>• VAV | • Base<br>• Advanced<br>• BACnet | • Base<br>• Advanced<br>• BACnet | • Base<br>• Premium<br>• BACnet<br>• IntelliZone2 | • Advanced<br>• Premium |
| 036 - 072 Vertical Only | NA | NA | NA | NA |
| 208-230/60/1<br>208-230/60/3<br>460/60/3<br>575/60/3 with transformer | 115/60/1<br>208-230/60/1<br>265/60/1 | 115/60/1<br>208-230/60/1<br>265/60/1 | 208-230/60/1<br>265/60/1<br>208-230/60/3<br>460/60/3 | 208-230/60/3<br>460/60/3 |
| All-Aluminum | All-Aluminum | All-Aluminum | All-Aluminum | All-Aluminum |
| • Integrated Waterside Economizer<br>• Internal 2-way Valve<br>• Flow regulator<br>• Hot Gas Bypass<br>• Modulating Hot Gas Reheat<br>• Head Pressure Control | • Internal 2-way Valve<br>• Flow regulator | • Internal 2-way Valve<br>• Flow regulator | • Airside Economizer<br>• Internal 2-way Valve<br>• Hot Gas Bypass<br>• Hot Gas Reheat<br>• Enthalpy Sensors | • Airside Economizer<br>• Modulating Hot Gas Reheat<br>• High efficiency or low pressure drop energy wheels<br>• Additional differential pressure or CO2 sensors |

# Water-to-Water / Water-Cooled Chillers

| |  |  |  |  |  |
|---|---|---|---|---|---|
| | **TruClimate 100** | **TruClimate 100** | **TruClimate 100** | **TruClimate 300 with HybrEx Technology** | **TruClimate 500 and 700** |
| **Style** | Water-to-Water Packaged Chiller | Water-to-Water Packaged Chiller | Water-to-Water Packaged Chiller | Water-Cooled | Water-Cooled |
| **Capacity Range (Tons)** | 1.5 - 6 | 8 - 15 | 10 - 50 | 30-50 | 20-80 |
| **Sizes Available (Tons)** | 1.5, 2, 3.5, 4, 5, 6 | 8, 10, 12, 15 | 10, 15, 20, 30, 50 | 30, 50 | 20, 30, 40, 50, 60, 70, 80 |
| **Efficiency Water Loop Heat Pump** | 12.3 - 15.5 EER<br>4.2 - 4.8 COP | 13.3 - 15.8 EER<br>3.9 - 4.6 COP | 15.2 - 17.4 EER<br>4.3 - 5.1 COP | Full load: 0.74 kW/ton<br>IPLV: 0.54 kW/ton | Full Load: 0.71 kw/ton<br>IPLV: 0.54 kw/ton |
| **Ground Loop Heat Pump** | 14.0 - 17.5 EER<br>2.9 - 3.1 COP | 15.8 - 22.0 EER<br>2.7 - 3.5 COP | 16.5 - 22.2 EER<br>3.0 - 3.7 COP | | |
| **Compressor** | Single-Stage Scroll | Dual Scroll | Dual Scroll | Dual Scroll<br>Optional Variable Capacity Scroll | Dual Scroll<br>Optional Variable Capacity Scroll |
| **Refrigerant** | R-410A | R-410A | R-410A | R-410A | R-410A |
| **Blower** | NA | NA | NA | NA | NA |
| **Cabinet Configuration** | Compact Unit; Field switchable control box. | Compact Unit: Top & Back mounted water connections. Field switchable control box. | Enclosed | Modular | Modular |
| **Control Type** | Aurora Base, Aurora Advanced, Aurora UPC BACnet | Hydrolink2 Aurora Controls with Building Automation Communication capability BACnet | Hydrolink2 Aurora Controls with Building Automation Communication capability BACnet | Hydrolink2 Aurora Controls with Building Automation Communication capability BACnet | Hydrolink2 Aurora Controls with Building Automation Communication capability BACnet |
| **Hot Water Generator (Coil Only)** | 040 - 075 models only | NA | NA | NA | NA |
| **Available Voltages** | 208-230/60/1<br>265/60/1<br>208-230/60/3<br>460/60/3<br>575/60/3 | 208-230/60/1<br>208-230/60/3<br>460/60/3<br>575/60/3 | 208-230/60/3<br>380/60/3<br>460/60/3<br>575/60/3 | 208-230/60/3<br>460/60/3<br>575/60/3 | 208-230/60/3<br>460/60/3<br>575/60/3 |
| **Air Coil** | NA | NA | NA | | NA |
| **Options** | • Copper or Cupronickel coaxial heat exchangers<br>• IntelliStart | • IntelliStart | • Domestic Hot Water (10-30 ton)<br>• Temp setpoint control software<br>• Field-installed piping accessories<br>• Factory-installed pressure transducers<br>• Fused disconnect<br>• Phase guard | • Factory built single point power<br>• Condenser strainer<br>• CuNi condenser (upon request) | • Breaker with thru the door disconnect<br>• BACnet<br>• EEV<br>• Pipe rack:<br>  • 4 pipe rack standard (TruClimate 500)<br>  • 4 pipe rack non-reversing (TruClimate 500)<br>  • 6 pipe rack standard (TruClimate 700)<br>  • 6 pipe rack dedicated (TruClimate 700) |

# Product Features Summary

| | | Versatec 300 Standard Efficiency | Versatec 300 High Efficiency | Versatec 300 | Versatec 500 | Versatec 500 | Versatec 700 | Versatec 300 Consoles | Versatec 500 Consoles | Versatec 500 Rooftop | Versatec 700 Indoor DOAS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Capacity Tons** | | 0.5-6 | 0.75 - 6 | 7-10 | 0.75-6 | 7-30 | 2-15 | 0.75-1.5 | 0.75-1.5 | 3-30 | 10-30 |
| **WSHP EER (up to)** | | 14.7 | 15.7 | 18.9 | 21.6 | 17.5 | 25.0 | 12.2 | 13.6 | 19.1 | - |
| **WSHP COP (up to)** | | 4.9 | 5.1 | 5.4 | 6.4 | 5.6 | 7.8 | 4.4 | 4.9 | 4.8 | - |
| **Compressor Stages** | | 1 | 1 | 2 | 2 | 2 | VS | 1 | 1 | 2 | VS |
| **Blower** | | FC | FC | FC | FC | FC/BC | BC | FC | FC | BC | BC |
| **Controls** | **BACnet** | O | O | O | O | O | O | O | O | O | - |
| | **IntelliZone2** | - | - | - | O | O | O | - | - | O | - |
| | **Base** | S | S | S | S | S | - | S | S | S | - |
| | **Advanced** | - | - | - | O | O | S | - | - | O | S |
| | **Premium** | - | - | - | - | O | S | - | - | O | O |
| | **VAV** | - | - | - | - | O | O | - | - | - | - |
| | **Twinning** | - | - | - | - | - | O | - | - | - | - |
| **Internal 2-way valve** | | O | O | O | O | O | O | O | O | O | S |
| **Economizer** | | - | O | O | S | IN | IN | - | - | Air Side | Air Side |
| **HGB** | | - | O | O | O | O | O | - | - | O | - |
| **HGR** | | - | O | O | O | - | - | - | - | O | - |
| **Modulating HGR** | | - | - | - | - | O | O | - | - | - | O |
| **Head Pressure Control** | | - | - | - | - | O | O | - | - | - | O |
| **Flow Regulator** | | O | O | O | O | | O | O | O | O | |
| **EEV** | | - | - | - | - | O | S | - | - | - | S |

Key
S = Standard
O = Optional
IN = Integrated
BC = Backward Curve
FC = Forward Curve
VS = Variable Speed
VAV = Variable Air Volume

# VERSATEC 300 STANDARD EFFICIENCY WSHP - UBV/H - 0.5-6 TON

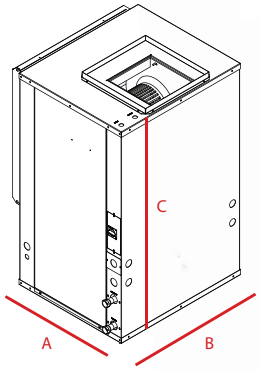
## Water-to-Air Heat Pump

### Standard Features:

- Capacities of 6,000 through 70,000 Btu/h
- Voltages: 115/60/1, 208-230/60/1, 265-277/60/1, 208-230/60/3, 460/60/3, and 575/60/3.
- Vertical and horizontal w/ true left and right return
- Horizontal end or side discharge
- Heavy gauge galvanized cabinet
- Removable inlet ring blowers
- Quiet rotary or scroll compressors in all models
- All-Aluminum rifled tube-and-lanced fin air coil
- Polymer composite drain pan
- Bi-directional balanced port TXV
- Oversized copper coaxial water heat exchanger
- Discharge mufflers on sizes 048-070
- 4 sided filter rail
- Aurora Base Controls

### Optional Features:

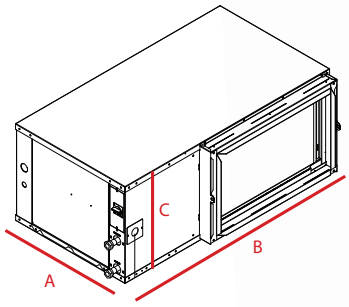
- 3 speed PSC, 5 speed ECM, or VS ECM fan motors
- Painted Cabinet
- Filter Rack
- Phase guard with optional 'dial' disconnect
- Stainless steel drain pan w/ secondary drain connection
- Extended range insulation option
- AlumiSeal air coil e-coating
- 2 in. MERV 13 filter
- Water-side economizer
- Cupronickel water coil




**Vertical**

| Vertical Cabinets | | Overall Cabinet Dimensions A (WIDTH) | B (DEPTH) | C (HEIGHT) |
|---|---|---|---|---|
| 006-012 | in. | 19.2 | 19.2 | 24.2 |
| | cm. | 48.8 | 48.8 | 61.5 |
| 015-018 | in. | 22.5 | 22.2 | 30.2 |
| | cm. | 57.2 | 56.4 | 76.7 |
| 024-030 | in. | 22.5 | 22.2 | 36.2 |
| | cm. | 57.2 | 56.4 | 91.9 |
| 036 | in. | 22.5 | 26.2 | 40.2 |
| | cm. | 57.2 | 66.5 | 102.1 |
| 041 | in. | 21.5 | 21.5 | 40.2 |
| | cm. | 54.6 | 54.6 | 102.1 |
| 042-048 | in. | 22.5 | 26.2 | 44.2 |
| | cm. | 57.2 | 66.5 | 112.3 |
| 060 | in. | 25.5 | 31.2 | 44.2 |
| | cm. | 64.8 | 79.2 | 112.3 |
| 070 | in. | 25.5 | 31.2 | 48.2 |
| | cm. | 64.8 | 79.2 | 122.4 |

| Quick Features Guide | |
|---|---|
| 5 Spd FC ECM Fan | Opt |
| VS FC ECM Fan | Opt |
| Waterside Econ | Opt |
| Hot Gas Reheat | - |
| Hot Gas Bypass | - |
| Aurora Advanced Controls | Special |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable (UPC) | - |
| DCV Capable (UPC) | Opt |
| Zoning | - |




**Horizontal**

| Horizontal Cabinets | | Overall Cabinet Dimensions A (WIDTH) | B (DEPTH) | C (HEIGHT) |
|---|---|---|---|---|
| 006-012 | in. | 19.2 | 35.0 | 12.1 |
| | cm. | 48.8 | 88.9 | 30.7 |
| 015-018 | in. | 22.5 | 35.0 | 17.2 |
| | cm. | 57.2 | 88.9 | 43.7 |
| 024-030 | in. | 22.5 | 42.0 | 17.2 |
| | cm. | 57.2 | 106.7 | 43.7 |
| 036 | in. | 22.5 | 42.0 | 19.2 |
| | cm. | 57.2 | 106.7 | 48.8 |
| 042-048 | in. | 22.5 | 45.0 | 19.2 |
| | cm. | 57.2 | 114.3 | 48.8 |
| 060 | in. | 25.5 | 48.0 | 21.2 |
| | cm. | 64.8 | 121.9 | 53.8 |
| 070 | in. | 25.5 | 53.0 | 21.2 |
| | cm. | 64.8 | 134.6 | 53.8 |

**Efficiency in an industry leading ultra-compact cabinet for retrofit and new construction WSHP applications.**

# UBV/H OPTIONS

| 1-2 | 3 | 4-6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21-22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UB | V | 036 | T | L | 0 | 0 | 0 | C | A | N | A | N | 0 | A | 3 | 0 | SS | * |

**Model Type**
UB – Versatec Compact

**Cabinet Configuration**
V – Vertical
H - Horizontal

**Unit Capacity (MBTUH)**
006, 009, 012, 015,
018, 024, 030, 036,
041[4] (Vertical)
042, 048, 060, 070

**Discharge Configuration**
T – Top (Vertical)
E – End (Horizontal)
S – Side (Horizontal)

**Return Air Configuration**
L – Left
R – Right

**Voltage**
0 – 208-230/60/1
2 – 265-277/60/1 (006-036)
3 – 208-230/60/3 (024-070)
4 – 460/60/3 (024-070)
5 – 575/60/3 (PSC Only 042-070)
9 – 115/60/1 (006-012)

**Refrigeration Option**
0 – None

**Blower Motor Options**
0 – PSC Blower
1 – Variable Speed ECM Blower (015-070)
4 – 5-Speed ECM Blower (015-070)
6 – Variable Speed Constant Torque ECM Blower (006-012)[5]

**Water Coil Options**
C – Copper
D – Insulated Copper
N – CuproNickel
P – Insulated CuproNickel

**Sound Kit**
A – None
B – Sound Kit (Not Available on UBH006-012)

**Vintage**
* - Factory Use Only

**Non-Standard Options**
SS – Standard

**Drain Pan Option**
0 – Composite, No Secondary Connection
1 – Composite, Secondary Connection
2 – Stainless Steel, No Secondary Connection
3 – Stainless Steel, Secondary Connection

**Air Coil Option**
3 – All-Aluminum, Uncoated
4 – All-Aluminum, AlumiSeal™

**Filter Option**
A – MERV 4
B – MERV 13

**Cabinet Option**
0 – Unpainted Cabinet, Filter Rail
1 – Painted Cabinet, Filter Rail
2 – Unpainted Cabinet, 4-Sided Filter Rack
3 – Painted Cabinet, 4-Sided Filter Rack

**Electrical Options [1]**
N – No Phase Guard, No Disconnect
D – No Phase Guard, Disconnect
P – Phase Guard, No Disconnect
B – Phase Guard, Disconnect

**Control Options[2]**
A – Aurora™ Base Control (ABC)
E – Aurora™ UPC DDC Controller
F – Aurora™ UPC DDC Controller with LON

**Water Control Options[3]**
N – None
R – Water Flow Regulator (015-070)
V – 2-Way Valve (015-070)
B – 2-Way Valve w/ Water Flow Regulator (015-070)
W – Waterside Economizer
S – Waterside Economizer w/ Water Flow Regulator
E – Waterside Economizer w/ 2-Way Valve
C – Waterside Economizer w/ 2-Way Valve & Water Flow Regulator

Note:
1 - Phase Guard Only Available on 208-230/60/3 and 460/60/3
2 - 50VA transformer with Aurora Base Control, and 75VA transformer with Aurora UPC control
3 - Waterside economizer option must be ordered with stainless steel drain pan and either 5-speed ECM or variable speed ECM (024-070)
4 – 2 way valve, water flow regulator, economizer, disconnect, 2" filter and filter rack not available in UBV041.
5 – Blower Motor option "6" only available in 115/60/1 and 208-230/60/1.

## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

| Model | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling EWT 77°F | | Heating EWT 32°F | |
| | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| **PSC Motor** | | | | | | | | | | | | | | |
| **006** | 2.0 | 250 | 7,100 | 13.4 | 8,000 | 4.3 | 8,400 | 21.3 | 6,800 | 3.8 | 7,400 | 15.5 | 5,400 | 3.2 |
| **009** | 3.0 | 350 | 8,100 | 12.2 | 11,400 | 4.6 | 9,900 | 19.2 | 9,600 | 4.0 | 8,900 | 14.5 | 7,600 | 3.4 |
| **012** | 3.0 | 400 | 10,200 | 12.2 | 15,200 | 4.4 | 12,200 | 18.2 | 12,600 | 3.9 | 11,200 | 14.2 | 10,200 | 3.5 |
| **015** | 4.0 | 500 | 13,200 | 12.5 | 15,400 | 4.5 | 16,000 | 20.0 | 13,000 | 4.0 | 14,000 | 15.3 | 10,400 | 3.2 |
| **018** | 5.0 | 600 | 17,300 | 13.4 | 19,000 | 4.3 | 19,800 | 20.5 | 16,000 | 3.7 | 18,000 | 15.4 | 12,600 | 3.2 |
| **024** | 6.0 | 800 | 22,900 | 13.0 | 26,000 | 4.5 | 27,000 | 19.8 | 22,600 | 4.0 | 24,500 | 14.8 | 17,000 | 3.3 |
| **030** | 8.0 | 1000 | 28,400 | 13.8 | 34,000 | 4.5 | 33,500 | 21.0 | 28,000 | 4.0 | 30,000 | 16.0 | 21,000 | 3.3 |
| **036** | 9.0 | 1150 | 34,500 | 14.0 | 43,800 | 4.7 | 40,000 | 22.0 | 35,600 | 4.2 | 36,000 | 16.3 | 26,000 | 3.3 |
| **041** | 11.0 | 1100 | 37,600 | 13.5 | 48,000 | 4.3 | 44,500 | 20.4 | 38,500 | 3.8 | 40,000 | 15.0 | 28,500 | 3.2 |
| **042** | 11.0 | 1400 | 39,200 | 13.2 | 51,000 | 4.7 | 47,000 | 20.4 | 41,400 | 4.3 | 42,000 | 15.2 | 30,500 | 3.3 |
| **048** | 12.0 | 1600 | 47,200 | 13.0 | 59,000 | 4.6 | 57,000 | 19.8 | 48,000 | 4.0 | 49,500 | 15.0 | 36,500 | 3.3 |
| **060** | 15.0 | 1900 | 57,000 | 13.5 | 66,000 | 4.3 | 67,000 | 21.0 | 55,000 | 4.0 | 58,000 | 15.2 | 43,000 | 3.3 |
| **070** | 18.0 | 2100 | 66,000 | 14.0 | 80,000 | 4.5 | 75,000 | 20.5 | 64,000 | 4.0 | 68,000 | 15.6 | 49,000 | 3.3 |
| **Variable Speed ECM** | | | | | | | | | | | | | | |
| **006** | 2.0 | 250 | 7,150 | 14.0 | 8,500 | 4.4 | 8,600 | 22.0 | 7,100 | 4.0 | 7,600 | 16.0 | 5,500 | 3.2 |
| **009** | 3.0 | 350 | 8,300 | 13.4 | 11,500 | 4.8 | 10,300 | 22.0 | 9,600 | 4.1 | 9,100 | 15.0 | 7,600 | 3.4 |
| **012** | 3.0 | 400 | 10,300 | 13.0 | 14,500 | 4.5 | 12,800 | 20.0 | 11,900 | 4.0 | 11,300 | 15.0 | 10,200 | 3.5 |
| **015** | 4.0 | 500 | 13,800 | 13.2 | 16,100 | 4.6 | 16,000 | 21.0 | 13,400 | 4.1 | 14,200 | 15.7 | 11,000 | 3.3 |
| **018** | 5.0 | 600 | 17,300 | 14.2 | 19,000 | 4.5 | 19,800 | 22.0 | 16,000 | 3.9 | 18,000 | 16.2 | 12,600 | 3.3 |
| **024** | 6.0 | 800 | 22,900 | 13.6 | 26,000 | 4.7 | 27,000 | 20.8 | 22,600 | 4.2 | 24,500 | 15.6 | 17,000 | 3.5 |
| **030** | 8.0 | 900 | 28,400 | 14.7 | 34,000 | 4.7 | 33,500 | 22.5 | 28,000 | 4.2 | 30,000 | 17.0 | 21,000 | 3.5 |
| **036** | 9.0 | 1150 | 34,500 | 14.5 | 43,800 | 4.9 | 40,000 | 23.0 | 35,600 | 4.4 | 36,000 | 17.0 | 26,000 | 3.5 |
| **041** | 11.0 | 1300 | 39,000 | 13.9 | 48,500 | 4.7 | 45,000 | 21.0 | 38,500 | 4.1 | 41,000 | 16.0 | 28,500 | 3.4 |
| **042** | 11.0 | 1400 | 39,200 | 14.2 | 51,000 | 4.9 | 47,000 | 22.0 | 41,400 | 4.5 | 42,000 | 16.6 | 30,500 | 3.5 |
| **048** | 12.0 | 1600 | 47,200 | 14.0 | 59,000 | 4.8 | 57,000 | 21.0 | 48,000 | 4.2 | 49,500 | 16.0 | 36,500 | 3.5 |
| **060** | 15.0 | 1900 | 57,000 | 14.0 | 66,000 | 4.6 | 67,000 | 22.0 | 55,000 | 4.2 | 58,000 | 16.0 | 43,000 | 3.5 |
| **070** | 18.0 | 2100 | 66,000 | 14.6 | 80,000 | 4.7 | 75,000 | 22.0 | 64,000 | 4.2 | 68,000 | 16.6 | 49,000 | 3.5 |

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature. Heating capacities based upon 68°F DB, 59°F WB entering air temperature
All ratings based upon 208V operation

AHRI CERTIFIED™ www.ahridirectory.org Water Source HP ANSI/AHRI/ASHRAE/ISO13256-1

C ETL LISTED US Intertek

All UB Series product is safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-1.

# VERSATEC 300 HIGH EFFICIENCY WSHP - USV/H - 0.75-7 TON

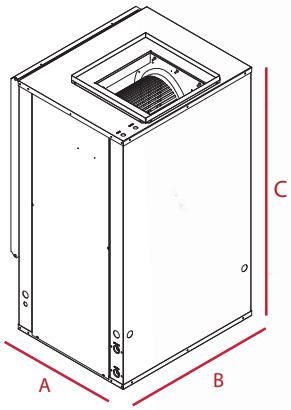
## Water-to-Air Heat Pump

### Standard Features:

- Capacities of 9,000 through 70,000 Btu/h
- Voltages: 208-230/60/1, 265-277/60/1, 208-230/60/3, 460/60/3, and 575/60/3.
- Vertical and horizontal w/ true left and right return
- Horizontal end or side discharge
- Heavy gauge galvanized cabinet
- Removable inlet ring blowers
- High efficiency rotary or scroll single speed compressors
- All-Aluminum rifled tube-and-lanced fin air coil
- Polymer composite drain pan
- Bi-directional balanced port TXV
- Oversized copper coaxial water heat exchanger
- Filter rail for open return applications.
- 75VA transformer with circuit breaker
- Aurora Base Controls

### Optional Features:

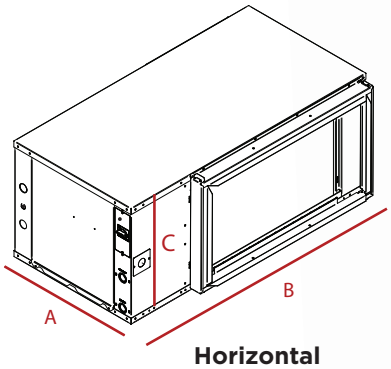
- 3 speed PSC, 5 speed ECM, or VS ECM fan motors
- Painted Cabinet
- Optional 4-sided filter rack.
- Phase guard with optional 'dial' disconnect
- Stainless steel drain pan w/ secondary drain connection
- Extended range insulation option
- AlumiSeal air coil e-coating
- 2 in. MERV 13 filter
- Water-side economizer
- Cupronickel water coil
- Internal motorized 2-way valve
- Water flow regulator
- Sound kit
- IntelliStart
- Aurora UPC BACnet (+ N2)
- Aurora UPC with LONWorks
- High static fan options
- Hot Gas Bypass
- Hot Gas Reheat
- Hot Water Generation




**Vertical**

| Vertical Cabinets | | Overall Cabinet Dimensions A (WIDTH) | B (DEPTH) | C (HEIGHT) |
|---|---|---|---|---|
| 009-012 | in. | 22.5 | 22.2 | 23.7 |
| | cm. | 57.2 | 56.4 | 60.2 |
| 015-018 | in. | 22.5 | 22.2 | 36.2 |
| | cm. | 57.2 | 56.4 | 91.9 |
| 024-030 | in. | 22.5 | 26.2 | 40.2 |
| | cm. | 57.2 | 66.5 | 102.1 |
| 036 | in. | 22.5 | 26.2 | 44.2 |
| | cm. | 57.2 | 66.5 | 112.3 |
| 041 | in. | 22.5 | 26.2 | 44.2 |
| | cm. | 57.2 | 66.5 | 112.3 |
| 042-048 | in. | 25.5 | 31.2 | 44.2 |
| | cm. | 64.8 | 79.2 | 112.3 |
| 060 | in. | 25.5 | 31.2 | 48.2 |
| | cm. | 64.8 | 79.2 | 122.4 |
| 070 | in. | 25.5 | 31.2 | 52.2 |
| | cm. | 64.8 | 79.2 | 132.6 |

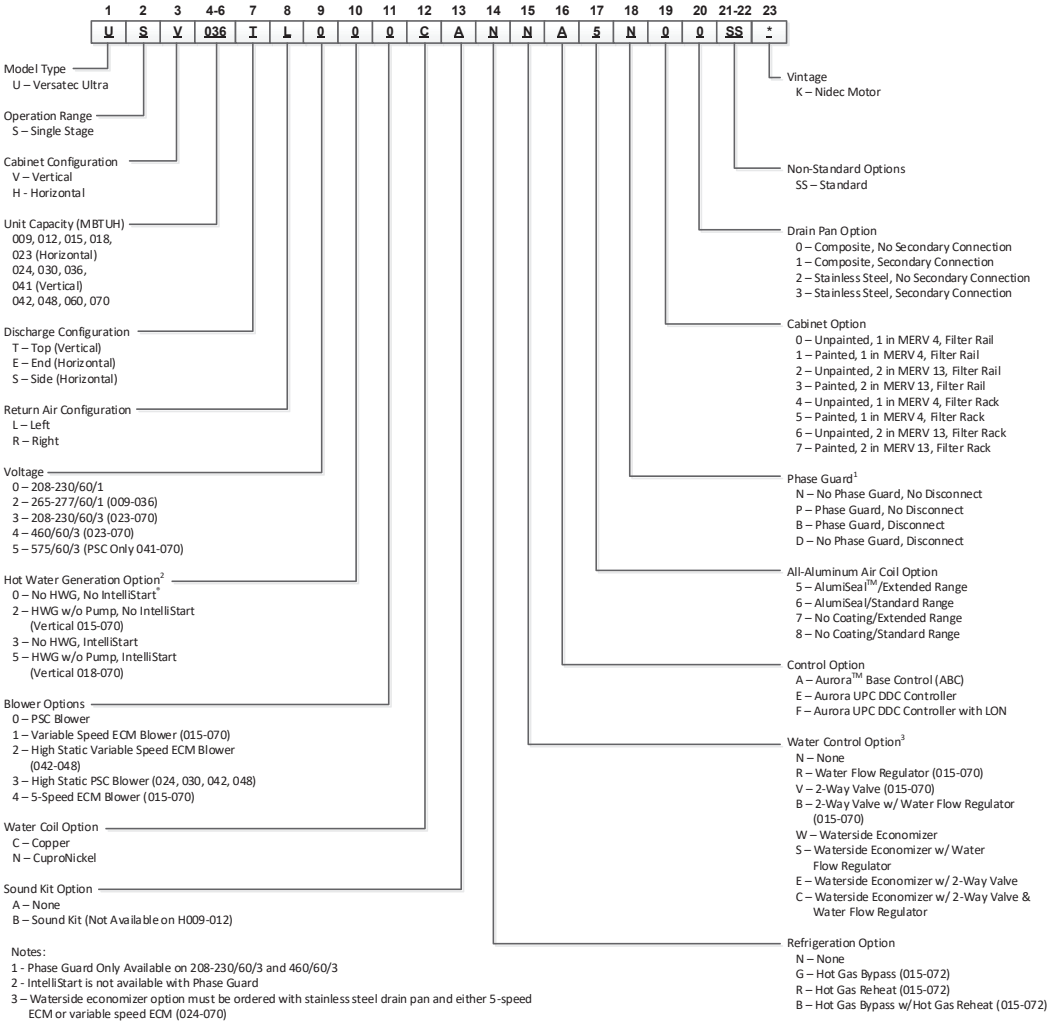
| Quick Features Guide | |
|---|---|
| 5 Spd FC ECM Fan | Opt |
| VS FC ECM Fan | Opt |
| Waterside Econ | Opt |
| Hot Gas Reheat | Opt |
| Hot Gas Bypass | Opt |
| Aurora Advanced Controls | Special |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable (UPC) | - |
| DCV Capable (UPC) | Opt |
| Zoning | - |




**Horizontal**

| Horizontal Cabinets | | Overall Cabinet Dimensions A (WIDTH) | B (DEPTH) | C (HEIGHT) |
|---|---|---|---|---|
| 009-012 | in. | 19.2 | 30.9 | 11.9 |
| | cm. | 48.8 | 78.5 | 30.2 |
| 015-023 | in. | 22.5 | 42.0 | 17.2 |
| | cm. | 57.2 | 106.7 | 43.7 |
| 024-030 | in. | 22.5 | 42.0 | 19.2 |
| | cm. | 57.2 | 106.7 | 48.8 |
| 036 | in. | 22.5 | 45.0 | 19.2 |
| | cm. | 57.2 | 114.3 | 48.8 |
| 042-048 | in. | 25.5 | 48.0 | 21.2 |
| | cm. | 64.8 | 121.9 | 53.8 |
| 060 | in. | 25.5 | 53.0 | 21.2 |
| | cm. | 64.8 | 134.6 | 53.8 |
| 070 | in. | 25.5 | 61.0 | 21.2 |
| | cm. | 64.8 | 154.9 | 53.8 |

**Mid-efficiency and high feature set in compact cabinet for retrofit and new construction WSHP applications.**




## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

**PSC Motor**

| Model | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling EWT 77°F | | Heating EWT 32°F | |
| | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| **009** | 3.0 | 350 | 8,500 | 12.2 | 11,500 | 4.4 | 10,500 | 18.2 | 9,600 | 3.7 | 9,100 | 13.5 | 7,600 | 3.0 |
| **012** | 3.5 | 400 | 10,900 | 12.7 | 14,700 | 4.4 | 12,500 | 18.2 | 12,000 | 3.8 | 11,500 | 14.7 | 9,600 | 3.2 |
| **015** | 4.0 | 500 | 14,000 | 15.0 | 16,500 | 4.8 | 16,000 | 24.0 | 15,000 | 4.1 | 14,700 | 17.2 | 11,500 | 3.5 |
| **018** | 5.0 | 600 | 17,600 | 14.6 | 21,000 | 4.7 | 20,600 | 23.5 | 17,500 | 4.0 | 18,500 | 17.0 | 13,700 | 3.5 |
| **023** | 6.0 | 800 | 23,000 | 14.5 | 26,000 | 4.5 | 25,400 | 22.5 | 21,900 | 3.9 | 23,900 | 16.8 | 17,000 | 3.4 |
| **024** | 6.0 | 800 | 23,900 | 14.6 | 27,000 | 4.7 | 26,400 | 22.8 | 22,300 | 4.0 | 24,400 | 17.0 | 17,500 | 3.5 |
| **030** | 8.0 | 1000 | 29,500 | 14.9 | 34,600 | 4.8 | 32,900 | 23.0 | 28,300 | 4.0 | 29,000 | 17.0 | 22,800 | 3.5 |
| **036** | 9.0 | 1150 | 33,300 | 14.4 | 40,600 | 4.5 | 37,700 | 21.2 | 33,000 | 3.9 | 34,500 | 16.6 | 26,000 | 3.3 |
| **041** | 11.0 | 1300 | 40,000 | 13.8 | 45,000 | 4.3 | 44,500 | 20.6 | 36,000 | 3.8 | 41,000 | 15.8 | 29,000 | 3.3 |
| **042** | 11.0 | 1400 | 40,800 | 14.5 | 45,400 | 4.5 | 45,800 | 22.0 | 37,000 | 3.8 | 42,300 | 16.8 | 29,900 | 3.3 |
| **048** | 12.0 | 1600 | 47,700 | 14.7 | 56,000 | 4.4 | 52,000 | 21.0 | 45,900 | 3.8 | 49,500 | 16.8 | 36,900 | 3.3 |
| **060** | 15.0 | 1900 | 58,400 | 14.7 | 72,500 | 4.4 | 65,500 | 20.8 | 58,400 | 3.8 | 60,900 | 16.6 | 47,100 | 3.3 |
| **070** | 18.0 | 2100 | 63,000 | 14.2 | 79,000 | 4.4 | 70,000 | 20.3 | 64,100 | 3.8 | 68,500 | 15.2 | 51,600 | 3.3 |
| **Variable Speed ECM or 5 Speed ECM Motor** | | | | | | | | | | | | | | |
| **015** | 4.0 | 500 | 14,000 | 15.3 | 16,500 | 4.9 | 16,000 | 24.3 | 15,000 | 4.4 | 14,700 | 17.5 | 11,500 | 3.7 |
| **018** | 5.0 | 600 | 17,600 | 15.2 | 21,000 | 4.8 | 20,600 | 24.0 | 17,500 | 4.4 | 18,500 | 17.5 | 13,700 | 3.7 |
| **023** | 6.0 | 800 | 23,000 | 15.0 | 26,000 | 4.7 | 25,400 | 23.0 | 21,900 | 4.3 | 23,900 | 17.0 | 17,000 | 3.6 |
| **024** | 6.0 | 800 | 23,900 | 15.1 | 27,000 | 5.0 | 26,400 | 23.4 | 22,300 | 4.5 | 24,400 | 17.5 | 17,500 | 3.8 |
| **030** | 8.0 | 900 | 29,500 | 15.7 | 34,600 | 5.1 | 32,900 | 23.9 | 28,300 | 4.4 | 29,000 | 18.3 | 22,800 | 3.8 |
| **036** | 9.0 | 1150 | 33,300 | 15.0 | 40,600 | 4.8 | 37,700 | 23.0 | 33,000 | 4.3 | 34,500 | 17.3 | 26,000 | 3.5 |
| **041** | 11.0 | 1300 | 40,000 | 14.5 | 45,000 | 4.5 | 44,500 | 22.0 | 36,000 | 4.0 | 41,000 | 16.5 | 29,000 | 3.4 |
| **042** | 11.0 | 1400 | 40,800 | 15.6 | 45,400 | 5.0 | 45,800 | 23.5 | 37,000 | 4.3 | 42,300 | 18.5 | 29,900 | 3.7 |
| **048** | 12.0 | 1600 | 47,700 | 15.5 | 56,000 | 4.8 | 52,000 | 23.4 | 45,900 | 4.2 | 49,500 | 18.1 | 36,900 | 3.6 |
| **060** | 15.0 | 1900 | 58,400 | 15.3 | 72,500 | 4.7 | 65,500 | 23.0 | 58,400 | 4.0 | 60,900 | 17.9 | 47,100 | 3.6 |
| **070** | 18.0 | 2100 | 63,000 | 14.3 | 79,000 | 4.7 | 70,000 | 21.0 | 64,100 | 4.0 | 68,500 | 16.1 | 51,600 | 3.5 |

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature. Heating capacities based upon 68°F DB, 59°F WB entering air temperature
All ratings based upon 208V operation

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C ETL LISTED US Intertek

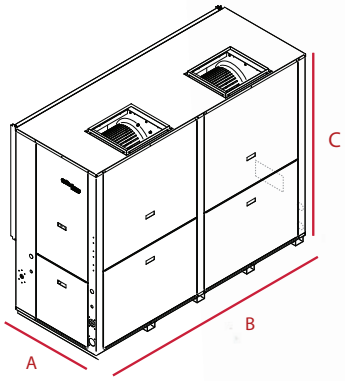
All US Series product is safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-1.

# VERSATEC 300 WSHP - NL/X - 7-10 TON

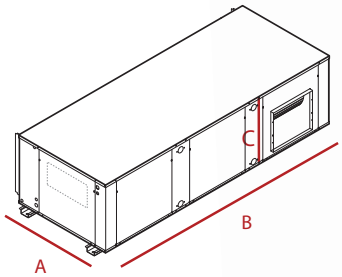
## Water-to-Air Heat Pump

### Standard Features:

- All Versatec 300 product is AHRI 260 sound rated using third party sound testing
- Large low rpm blower.
- Heavy gauge cabinet and rails on horizontals to hang for vibration isolation.
- Quiet scroll compressors in all models
- 2-dimension refrigerant piping vibration loops to isolate the compressor.
- All interior cabinet surfaces including the compressor compartment are insulated with 1/2 in. [12.7 mm] thick 1-1/2lb [681 g] density, surface coated, acoustic type glass fiber insulation.
- Corrosion-free plastic or stainless steel double-sloped drain pan to eliminate standing water and prevent bacterial growth.
- Foil-faced fiber insulation in all air handler compartments to allow cleanability and inhibit bacteria growth. Optional non-fibrous closed cell insulation is also available for more sensitive applications.
- An optional low static high efficiency 2 in. [5.1 cm] MERV 13 filter is also available
- Removable compressor access panels.
- Separate Air handler and compressor section access panels permit service testing without bypass (Vertical only).
- Removable low voltage connector for easy thermostat wiring.
- Quick attach wiring harnesses are used throughout for fast servicing.
- High and low pressure refrigerant service ports.
- Internal drop out blowers (vertical) and access panel view of all blower motors (horizontal).



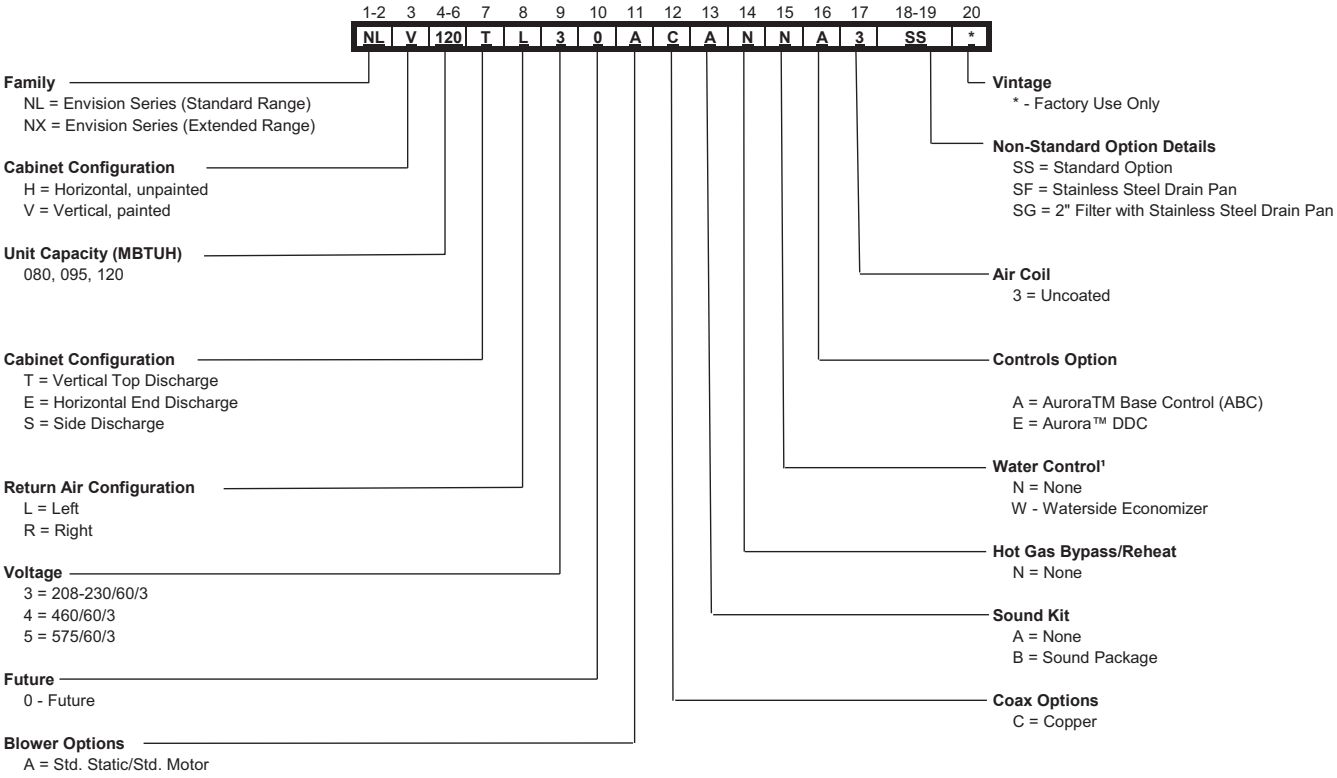

| Vertical Cabinets | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT*) |
| 080-120 | in. | 34.0 | 61.3 | 58.0 |
| | cm. | 86.4 | 155.7 | 147.3 |




| Horizontal Cabinets | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT*) |
| 080-120 | in. | 38.0 | 89.0 | 23.8 |
| | cm. | 96.5 | 226.1 | 60.5 |

| Quick Features Guide | |
|---|---|
| Belt/Sheave FC Fan | Std |
| Belt Drive FC VFD Fan | Special |
| Waterside Econ | Opt |
| Hot Gas Reheat | - |
| Hot Gas Bypass | - |
| Aurora Advanced Controls | Special |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable (UPC) | - |
| DCV Capable (UPC) | Opt |
| Zoning (Aurora Advanced) | - |
| Take-apart large vartical cabinet | - |

**Large oversized air coils, water to refrigerant heat exchangers and scroll compressors provide extremely efficient operation and produce the first 30 EER and 5 COP (ISO 13256-1 GLHP) water-source heat pump on the market. This efficiency means the Versatec 300 requires less loop than any product on the market.**




**Notes**

[1] - Waterside Economizer option must be ordered with stainless steel drain pan.

## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

**PSC Motor**

| Model | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling EWT 77°F | | Heating EWT 32°F | |
| | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| NLH080 | 22.0 | 2600 | 73,000 | 15.5 | 77,700 | 4.7 | 79,000 | 22.5 | 65,800 | 4.2 | 76,000 | 17.7 | 51,300 | 3.5 |
| NLH095 | 24.0 | 3200 | 85,500 | 15.6 | 91,000 | 4.8 | 95,000 | 23.0 | 78,000 | 4.3 | 91,200 | 18.1 | 61,600 | 3.5 |
| NLH120 | 28.0 | 3600 | 113,000 | 13.8 | 140,600 | 4.6 | 129,000 | 21.9 | 115,000 | 4.1 | 119,500 | 16.2 | 89,000 | 3.4 |
| NLV080 | 22.0 | 2600 | 76,000 | 16.5 | 85,000 | 5.0 | 84,000 | 24.2 | 71,000 | 4.4 | 83,000 | 19.7 | 55,000 | 3.7 |
| NLV095 | 24.0 | 2800 | 91,000 | 17.2 | 100,000 | 5.2 | 101,000 | 25.7 | 83,000 | 4.6 | 95,000 | 19.6 | 65,000 | 3.8 |
| NLV120 | 28.0 | 3600 | 115,000 | 15.5 | 136,000 | 5.1 | 135,000 | 24.3 | 107,500 | 4.4 | 122,000 | 18.0 | 83,000 | 3.6 |

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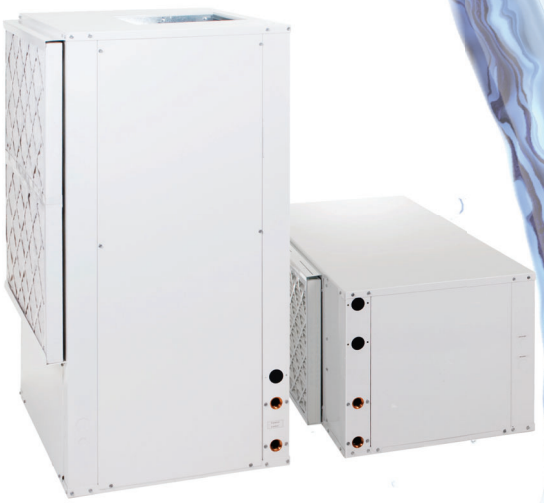
Intertek

All NL and NX Series product is Safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-1.

# VERSATEC 500 WSHP - NBV/H - 0.75-6 TON

## Water-to-Air Heat Pump

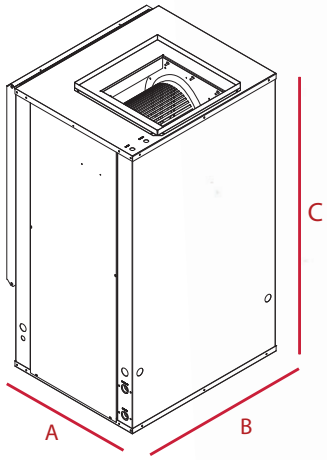


### Standard Features:

- Capacities of 6,000 through 72,000 Btu/h
- Voltages: 115/60/1, 208-230/60/1, 265-277/60/1, 208-230/60/3, 460/60/3, and 575/60/3.
- Vertical and horizontal w/ true left and right return
- Horizontal end or side discharge
- Heavy gauge galvanized cabinet
- Removable inlet ring blowers
- High efficiency rotary, single speed scroll or dual capacity scroll compressors
- All-Aluminum rifled tube-and-lanced fin air coil
- Polymer composite drain pan
- Bi-directional balanced port TXV
- Oversized copper coaxial water heat exchanger
- Discharge mufflers on sizes 048-070
- Filter rail for open return applications
- 75VA transformer with circuit breaker
- Aurora Base Controls

### Optional Features:

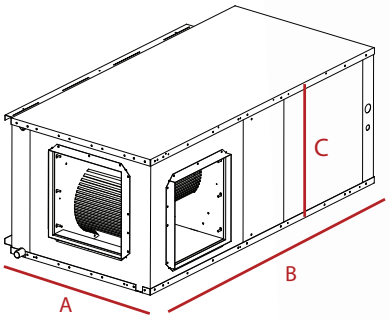
- 3 speed PSC, 5 speed ECM, or VS ECM fan motors
- Painted Cabinet
- Optional 4 sided filter rack
- Phase guard with optional 'dial' disconnect
- Stainless steel drain pan w/ secondary drain connection
- Extended range insulation option
- AlumiSeal air coil e-coating
- 2 in. MERV 13 filter
- Waterside economizer
- Cupronickel water coil
- Internal motorized 2-way valve
- Water flow regulator
- Sound kit
- IntelliStart
- Aurora Advanced Control
- Aurora UPC BACnet (+ N2)
- Aurora UPC with LONWorks
- IntelliZone Commercial and IntelliZone BACnet capabilities
- High static fan options
- Hot Gas Bypass
- Hot Gas Reheat
- Hot Water Generation




**Vertical**

| Vertical Cabinets | | Overall Cabinet Dimensions A (WIDTH) | B (DEPTH) | C (HEIGHT) |
|---|---|---|---|---|
| 009-012 | in. | 22.5 | 22.2 | 30.2 |
| | cm. | 57.2 | 56.4 | 76.7 |
| 015-018 | in. | 22.5 | 26.2 | 40.2 |
| | cm. | 57.2 | 66.5 | 102.1 |
| 024-030 | in. | 22.5 | 26.2 | 44.2 |
| | cm. | 57.2 | 66.5 | 112.3 |
| 036-038 | in. | 25.5 | 31.2 | 44.2 |
| | cm. | 64.8 | 79.2 | 112.3 |
| 042-049 | in. | 25.5 | 31.2 | 48.2 |
| | cm. | 64.8 | 79.2 | 122.4 |
| 060-072 | in. | 25.5 | 31.2 | 52.2 |
| | cm. | 64.8 | 79.2 | 132.6 |

| Quick Features Guide | |
|---|---|
| 5 Spd FC ECM Fan | Opt |
| VS FC ECM Fan | Opt |
| Waterside Econ | Opt |
| Hot Gas Reheat | Opt |
| Hot Gas Bypass | Opt |
| Aurora Advanced Controls | Special |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable (UPC) | - |
| DCV Capable (UPC) | Opt |
| Zoning (Aurora Advanced) | Opt |




**Horizontal**

| Horizontal Cabinets | | Overall Cabinet Dimensions A (WIDTH) | B (DEPTH) | C (HEIGHT) |
|---|---|---|---|---|
| 009-012 | in. | 22.5 | 35.0 | 17.2 |
| | cm. | 57.2 | 88.9 | 43.7 |
| 015-018 | in. | 22.5 | 42.0 | 19.2 |
| | cm. | 57.2 | 106.7 | 48.8 |
| 024-030 | in. | 22.5 | 45.0 | 19.2 |
| | cm. | 57.2 | 114.3 | 48.8 |
| 036-038 | in. | 25.5 | 48.0 | 21.2 |
| | cm. | 64.8 | 121.9 | 53.8 |
| 042-049 | in. | 25.5 | 53.0 | 21.2 |
| | cm. | 64.8 | 134.6 | 53.8 |
| 060-064 | in. | 25.5 | 61.0 | 21.2 |
| | cm. | 64.8 | 154.9 | 53.8 |
| 070-072 | in. | 25.5 | 68.0 | 21.2 |
| | cm. | 64.8 | 172.7 | 53.8 |

**High-efficiency single and dual stage compressors and high feature set in compact cabinet for retrofit and new construction WSHP applications.**

# NBV/H OPTIONS

| 1-2 | 3 | 4-6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21-22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NB | V | 048 | T | L | 0 | 0 | 0 | C | A | N | A | N | 1 | A | 3 | 0 | SS | * |

**Model Type**
NB – Envision² Compact

**Cabinet Configuration**
V – Vertical
H - Horizontal

**Unit Capacity (MBTUH)**
Single Speed
009, 012, 015, 018, 024, 030
036, 042, 048, 060, 070
Dual-Capacity
026, 038, 049, 064, 072

**Discharge Configuration**
T – Top (Vertical)
E – End (Horizontal)
S – Side (Horizontal)

**Return Air Configuration**
L – Left
R – Right

**Voltage**
0 – 208-230/60/1
2 – 265-277/60/1 (009-038)
3 – 208-230/60/3 (024-072)
4 – 460/60/3 (024-072)
5 – 575/60/3 (PSC Only 042-070)

**Refrigeration Option**
0 – None
2 – HWG Only w/o Pump (Vertical 018-072)
G – Hot Gas Bypass (015-072)
R – Hot Gas Reheat (015-072)
B – Hot Gas Bypass w/Hot Gas Reheat (015-072)

**Blower Option**
0 – PSC Blower (Single Speed Only)
1 – Variable Speed ECM Blower (015-072)
2 – High Static Variable Speed ECM Blower (036, 038, 042, 048, 049)
3 – High Static PSC Blower (024-048)
4 – 5-Speed ECM Blower (015-072)
6 – Variable Speed Constant Torque ECM Blower (009-012)

**Water Coil Option**
C – Copper
D – Insulated Copper
N – CuproNickel
P – Insulated CuproNickel

**Sound Kit Option**
A – None
B – Sound Kit

**Vintage**
* – Factory Use Only

**Non-Standard Option**
SS – Standard

**Drain Pan Option**
0 – Composite, No Secondary Connection
1 – Composite, Secondary Connection
2 – Stainless Steel, No Secondary Connection
3 – Stainless Steel, Secondary Connection

**Air Coil Option**
3 – All-Aluminum, Uncoated
4 – All-Aluminum, AlumiSeal™

**Filter Option**
A – MERV 4
B – MERV 13

**Cabinet Option**
0 – Unpainted Cabinet, Filter Rail
1 – Painted Cabinet, Filter Rail
2 – Unpainted Cabinet, 4-Sided Filter Rack
3 – Painted Cabinet, 4-Sided Filter Rack

**Electrical Option[1]**
N – None
A – IntelliStart® Only
E – IntelliStart and Disconnect
P – Phase Guard, No Disconnect
B – Phase Guard, Disconnect
D – No Phase Guard, Disconnect

**Control Option**
A – Aurora™ Base Control (ABC)
C – Aurora™ Advanced Control[3]
D – Aurora™ Advanced Control & Refrigeration[3]
E – Aurora™ UPC DDC Controller
F – Aurora™ UPC DDC Controller with LON
G – Aurora™ UPC DDC Controller Advanced Control[3]
H – Aurora™ UPC DDC Controller Advanced Control & Refrigeration[3]
J – Aurora™ UPC DDC Controller w/ LON Advanced Control[3]
K – Aurora™ UPC DDC Controller w/ LON Advanced Control & Refrigeration[3]

**Water Control Option[2]**
N – None
R – Water Flow Regulator
V – 2-Way Valve
B – 2-Way Valve w/ Water Flow Regulator
W – Waterside Economizer
S – Waterside Economizer w/ Water Flow Regulator
E – Waterside Economizer w/ 2-Way Valve
C – Waterside Economizer w/ 2-Way Valve & Water Flow Regulator

Note:
1 - Phase Guard Only Available on 208-230/60/3, 460/60/3, and 575/60/3.
2 – Waterside economizer option must be ordered with stainless steel drain pan and either 5-speed ECM or variable speed ECM (024-072).
3 – Control Option not available with PSC Motor.

## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

| Model | Capacity Modulation | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling EWT 77°F | | Heating EWT 32°F | |
| | | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| **PSC Motor** | | | | | | | | | | | | | | | |
| 009 | Single | 3.0 | 350 | 9,600 | 14.0 | 11,600 | 5.2 | 10,800 | 22.2 | 10,600 | 4.4 | 9,800 | 16.7 | 7,800 | 3.4 |
| 012 | Single | 3.5 | 400 | 11,300 | 14.0 | 14,800 | 5.0 | 13,200 | 23.1 | 12,000 | 4.2 | 12,000 | 16.5 | 9,500 | 3.5 |
| 015 | Single | 4.0 | 500 | 14,400 | 15.9 | 18,500 | 5.1 | 16,700 | 26.0 | 15,500 | 4.5 | 15,000 | 18.0 | 12,000 | 3.8 |
| 018 | Single | 5.0 | 600 | 17,400 | 14.8 | 23,000 | 5.1 | 20,600 | 24.7 | 18,700 | 4.3 | 18,500 | 17.3 | 14,500 | 3.5 |
| 024 | Single | 8.0 | 850 | 24,800 | 16.2 | 29,600 | 5.0 | 28,100 | 24.0 | 23,900 | 4.3 | 26,000 | 19.2 | 18,900 | 3.7 |
| 030 | Single | 8.0 | 900 | 26,800 | 17.9 | 32,900 | 5.3 | 30,800 | 27.1 | 26,000 | 4.7 | 27,900 | 21.1 | 20,300 | 3.7 |
| 036 | Single | 9.0 | 1200 | 31,500 | 14.8 | 40,200 | 5.3 | 35,100 | 24.4 | 29,200 | 4.5 | 32,900 | 19.2 | 24,400 | 3.8 |
| 042 | Single | 11.0 | 1300 | 38,300 | 15.4 | 45,600 | 5.2 | 42,300 | 23.3 | 36,000 | 4.3 | 40,300 | 18.5 | 28,900 | 3.5 |
| 048 | Single | 12.0 | 1500 | 43,200 | 13.3 | 55,600 | 4.9 | 48,900 | 22.3 | 44,700 | 4.2 | 45,500 | 16.0 | 36,400 | 3.7 |
| 060 | Single | 15.0 | 1800 | 61,000 | 15.2 | 74,100 | 5.2 | 66,600 | 22.8 | 57,300 | 4.4 | 62,300 | 17.4 | 46,100 | 3.7 |
| 070 | Single | 18.0 | 2000 | 66,200 | 14.4 | 85,000 | 4.6 | 73,500 | 20.8 | 67,100 | 4.0 | 69,100 | 16.6 | 53,500 | 3.4 |
| **Variable Speed ECM** | | | | | | | | | | | | | | | |
| 009 | Single | 3.0 | 350 | 9,600 | 14.6 | 11,700 | 5.3 | 11,000 | 23.0 | 10,700 | 4.5 | 9,800 | 17.1 | 7,800 | 3.6 |
| 012 | Single | 3.5 | 400 | 11,400 | 14.4 | 14,900 | 5.2 | 13,400 | 23.5 | 12,400 | 4.3 | 12,200 | 17.1 | 9,500 | 3.6 |
| 015 | Single | 4.0 | 500 | 14,400 | 16.5 | 18,500 | 5.3 | 16,700 | 27.0 | 15,500 | 4.7 | 15,000 | 18.8 | 12,000 | 4.0 |
| 018 | Single | 5.0 | 600 | 17,400 | 15.7 | 23,000 | 5.3 | 20,600 | 26.0 | 18,700 | 4.6 | 18,500 | 18.3 | 14,500 | 3.8 |
| 024 | Single | 8.0 | 800 | 24,800 | 17.0 | 29,600 | 5.3 | 28,100 | 27.5 | 23,900 | 4.6 | 26,000 | 19.6 | 18,900 | 3.8 |
| 030 | Single | 8.0 | 900 | 27,000 | 18.9 | 32,900 | 5.6 | 31,200 | 29.5 | 26,000 | 4.8 | 28,100 | 22.0 | 20,500 | 3.9 |
| 036 | Single | 9.0 | 1200 | 32,300 | 18.8 | 36,500 | 5.7 | 36,800 | 28.8 | 29,200 | 4.9 | 33,700 | 22.0 | 24,400 | 4.2 |
| 042 | Single | 11.0 | 1300 | 39,000 | 18.6 | 45,600 | 5.8 | 43,900 | 28.1 | 36,100 | 4.9 | 40,700 | 21.7 | 28,900 | 4.0 |
| 048 | Single | 12.0 | 1500 | 44,100 | 16.3 | 55,600 | 5.4 | 50,300 | 25.9 | 44,700 | 4.7 | 45,900 | 18.8 | 36,400 | 4.0 |
| 060 | Single | 15.0 | 1800 | 61,100 | 16.4 | 74,100 | 5.5 | 66,900 | 24.3 | 59,200 | 4.7 | 62,200 | 18.4 | 47,900 | 4.0 |
| 070 | Single | 18.0 | 2000 | 66,200 | 15.3 | 85,000 | 5.0 | 75,000 | 22.9 | 68,000 | 4.4 | 69,100 | 17.6 | 54,000 | 3.7 |
| 026 | Full | 8.0 | 950 | 24,900 | 16.8 | 30,100 | 5.5 | 27,700 | 24.0 | 23,900 | 4.8 | 26,400 | 19.6 | 19,500 | 4.0 |
| | Part | 7.0 | 750 | 18,900 | 18.6 | 22,000 | 6.1 | 22,200 | 29.7 | 17,500 | 4.9 | 21,000 | 26.0 | 16,400 | 4.5 |
| 038 | Full | 9.0 | 1300 | 36,500 | 17.0 | 43,300 | 5.5 | 40,000 | 24.4 | 35,000 | 4.9 | 38,200 | 19.7 | 28,500 | 4.2 |
| | Part | 8.0 | 1150 | 26,500 | 19.0 | 31,300 | 6.4 | 29,900 | 32.1 | 24,900 | 5.1 | 29,500 | 28.0 | 22,900 | 4.8 |
| 049 | Full | 12.0 | 1600 | 49,100 | 17.2 | 59,000 | 5.5 | 54,100 | 24.5 | 47,200 | 4.6 | 50,800 | 19.3 | 38,200 | 4.0 |
| | Part | 11.0 | 1400 | 36,300 | 19.1 | 41,700 | 6.1 | 41,600 | 33.0 | 33,600 | 4.7 | 39,800 | 27.4 | 31,000 | 4.4 |
| 064 | Full | 16.0 | 1800 | 62,300 | 16.4 | 73,900 | 5.2 | 69,000 | 23.9 | 60,400 | 4.6 | 65,500 | 19.3 | 47,300 | 3.8 |
| | Part | 14.0 | 1500 | 45,800 | 18.1 | 53,200 | 5.9 | 53,000 | 30.7 | 43,500 | 4.8 | 50,500 | 26.5 | 38,200 | 4.3 |
| 072 | Full | 18.0 | 2000 | 70,100 | 15.6 | 88,000 | 4.8 | 79,000 | 22.0 | 71,000 | 4.3 | 73,800 | 18.2 | 55,400 | 3.7 |
| | Part | 16.0 | 1500 | 54,200 | 17.0 | 66,000 | 5.1 | 61,500 | 27.6 | 52,700 | 4.3 | 59,400 | 24.9 | 47,400 | 3.9 |

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All NB product is safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-1.

# VERSATEC 500 WSHP - UDV/H - 7-30 TON

## Water-to-Air Heat Pump

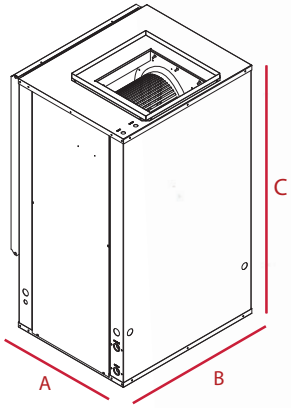
### Standard Features:

- Take-apart capabilities (20-30 ton)
- 3 vertical (7-30 ton) and 2 horizontal (7-15 ton) cabinet configurations
- Complete commercial voltage selection of 208-230 V/60 Hz/3ph, 460/60/3, and 575/60/3
- All-Aluminum rifled tube-and-fin air coils are not susceptible to formicary corrosion
- All-Aluminum interlaced air coils (12-30 ton)
- Industry leading quality through engineering and manufacturing using quality components
  - — High Efficiency and reliable permanent magnet dual and single capacity scroll compressors
  - — High Efficiency variable speed, backward inclined plenum fan with 2" w.g. ESP capability
- High efficiency performance for maximizing LEED points
- Split access panel design for ease of service.

### Optional Features:

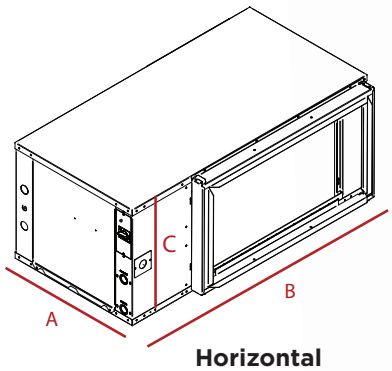
- Painted Cabinet
- Filter Rack
- Electronic expansion device with stepper motor, in-line valve design operated by direct drive motor technology. (Advanced EEV)
- Waterside Economizer
- Head pressure control capabilities
- Sound kit
- Aurora Advanced Control
- Aurora UPC BACnet (+ N2)
- Modulating hot gas reheat (on/off)
- IntelliZone Commercial and IntelliZone BACnet capabilities

| Vertical Cabinets | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 084-120 | in. | 34.0 | 36.3 | 72.5 |
| | cm. | 86.4 | 92.2 | 184.2 |
| 150-180 | in. | 34.0 | 46.3 | 72.5 |
| | cm. | 86.4 | 117.5 | 184.2 |
| 240-360 | in. | 34.0 | 88.0 | 80.0 |
| | cm. | 86.4 | 34.6 | 31.5 |




**Vertical**

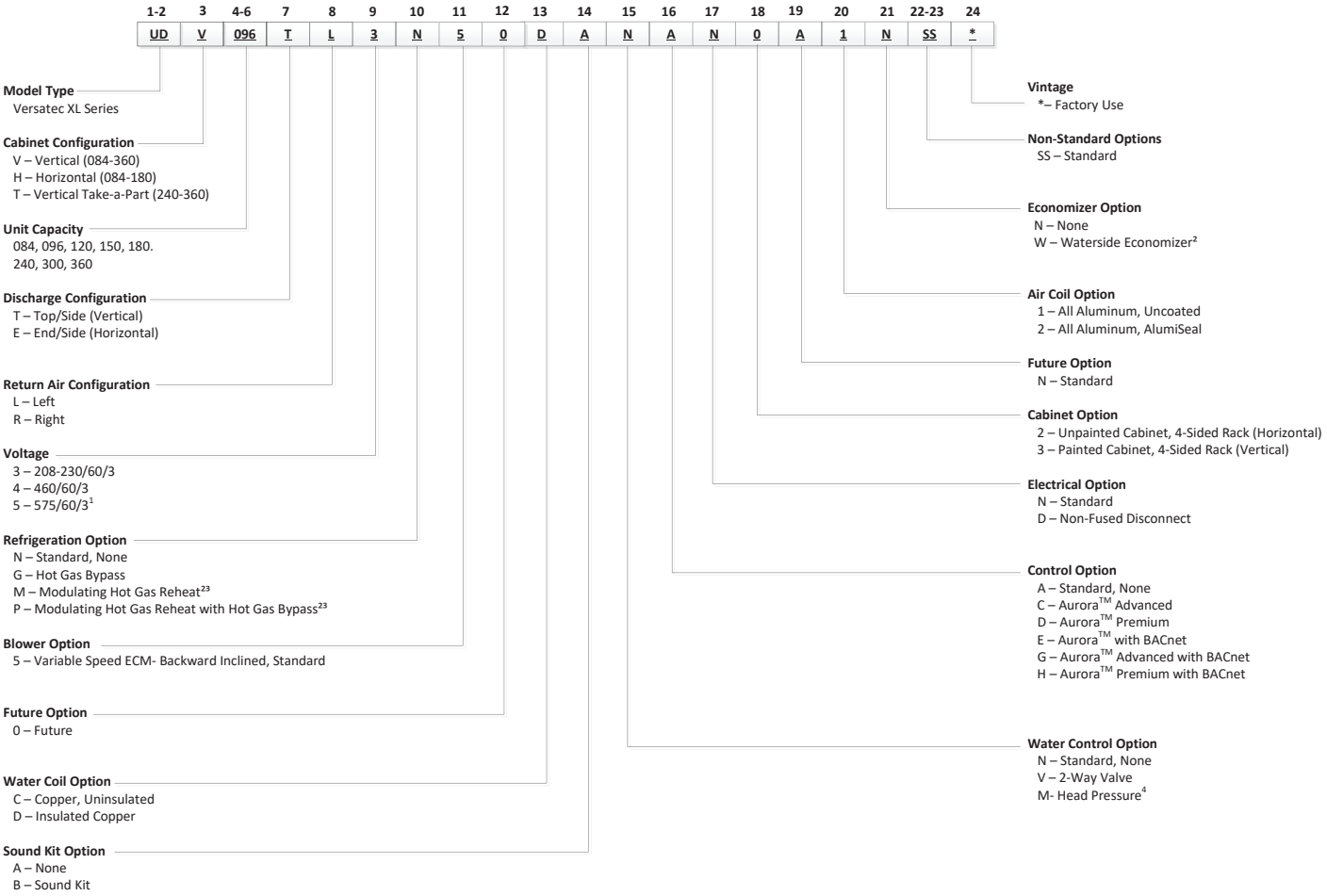
| Quick Features Guide | |
|---|---|
| 5 Spd FC ECM Fan | Opt |
| VS FC ECM Fan | Opt |
| Waterside Econ | Opt |
| Hot Gas Reheat | Opt |
| Hot Gas Bypass | Opt |
| Aurora Advanced Controls | Opt |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable (UPC) | - |
| DCV Capable (UPC) | Opt |
| Zoning | Opt |




**Horizontal**

| Horizontal Cabinets | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 084-120 | in. | 34.0 | 89.0 | 29.9 |
| | cm. | 86.4 | 226.1 | 75.9 |
| 150-180 | in. | 34.0 | 110.0 | 29.9 |
| | cm. | 86.4 | 279.4 | 75.9 |

**The reduced footprint and take-a-part cabinet option make this product suitable for both retrofit and new construction applications and provides optimum performance and flexibility in both water loop and geothermal applications.**




Note:
1- 575V option includes factory installed step down transformer on plenum fan.
2- Requires Advanced or Premium Controls.
3- Not available on UDH180
4- Head Pressure Control requires Premium Controls and Modulating Hot Gas Reheat.

## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

| Model | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling EWT 77°F | | Heating EWT 32°F | |
| | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| **Vertical** | | | | | | | | | | | | | | |
| **084** | 21 | 2500 | 86,000 | 16.0 | 103,600 | 5.0 | 98,000 | 24 | 84,000 | 4.4 | 90,000 | 18.5 | 67,000 | 3.8 |
| **096** | 24 | 2800 | 95,000 | 15.3 | 120,000 | 5 | 106,000 | 22 | 96,000 | 4.4 | 98,000 | 17.0 | 76,000 | 3.8 |
| **120** | 30 | 3600 | 119,000 | 14.5 | 140,000 | 5 | 135,000 | 21.0 | 114,000 | 4.2 | 123,000 | 16.5 | 89,000 | 3.5 |
| **150** | 36 | 4500 | 150,000 | 15.6 | 160,000 | 4.6 | 165,000 | 22 | 130,000 | 4.1 | 156,000 | 17.3 | 105,000 | 3.2 |
| **180** | 45 | 5200 | 180,000 | 14.0 | 195,000 | 4.3 | 190,000 | 18 | 162,000 | 3.8 | 184,000 | 15.2 | 128,000 | 3.2 |
| **240** | 60.0 | 7500 | 240,000 | 16.0 | 285,000 | 5.0 | 275,000 | 23.5 | 228,000 | 4.4 | 252,000 | 18.2 | 190,000 | 3.8 |
| **300** | 75.0 | 9000 | 300,000 | 15.0 | 350,000 | 4.6 | 342,000 | 23 | 290,000 | 4.1 | 315,000 | 17.2 | 230,000 | 3.7 |
| **360** | 90.0 | 9900 | 350,000 | 12.1 | 400,000 | 4.0 | 400,000 | 17 | 340,000 | 3.8 | 355,000 | 14 | 270,000 | 3.3 |
| **Horizontal** | | | | | | | | | | | | | | |
| **H084** | 21 | 2500 | 85,000 | 15.0 | 96,000 | 4.5 | 96,000 | 22 | 82,500 | 4.3 | 88,000 | 17.5 | 67,000 | 3.6 |
| **H096** | 24 | 2800 | 95,000 | 14.5 | 108,000 | 4.8 | 106,000 | 21 | 93,000 | 4.4 | 97,000 | 16.5 | 76,000 | 3.7 |
| **H120** | 30 | 3600 | 117,000 | 14.5 | 140,000 | 5 | 130,000 | 21.0 | 114,000 | 4.2 | 123,000 | 16.5 | 89,000 | 3.5 |
| **H150** | 36 | 4500 | 148,000 | 15.4 | 160,000 | 4.6 | 163,000 | 22 | 130,000 | 4.1 | 155,000 | 17 | 105,000 | 3.2 |
| **H180** | 45 | 5200 | 178,000 | 13.8 | 192,000 | 4.3 | 187,000 | 17.5 | 162,000 | 3.7 | 182,000 | 15 | 128,000 | 3.2 |

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature
Heating capacities based upon 68°F DB, 59°F WB entering air temperature
All ratings based upon 208V operation
Models 036-120 are rated and certified in accordance with ISO/AHRI/ASHRAE 13256-1
Models 144-360 are rated in accordance with ISO/AHRI/ASHRAE 13256-1 but are not certified since their capacity exceeds the scope of the AHRI program.

AHRI CERTIFIED™ www.ahridirectory.org Water Source HP ANSI/AHRI/ASHRAE/ISO13256-1

c UL us LISTED Heat Pump E347094

All UD Series product is safety listed under UL1995 thru UL and performance listed with AHRI in accordance with standard 13256-1.

# VERSATEC 700 WSHP - UVV/H - 2-6 TON

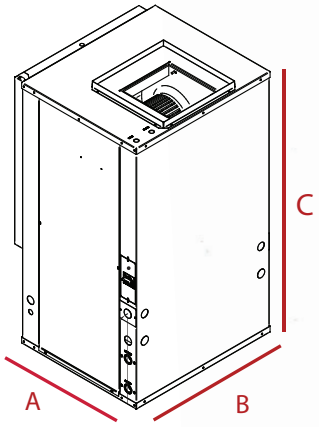
## Water-to-Air Heat Pump

### Standard Features:

- Capacities of 24,000 through 72,000 Btu/h
- Voltages: 208-230/60/1, 208-230/60/3, and 460/60/3.
- Vertical and horizontal w/ true left and right return
- Horizontal end or side discharge
- Heavy gauge galvanized cabinet
- Variable Speed ECM fan motors
- Removable inlet ring blowers
- High efficiency permanent magnet variable speed scroll compressors
- All-Aluminum rifled tube-and-lanced fin air coil
- Polymer composite drain pan
- EEV
- Oversized copper coaxial water heat exchanger
- 4 sided filter rail
- 75VA transformer with circuit breaker
- Aurora Advanced Controls

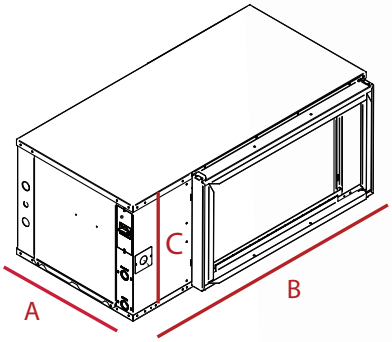
### Optional Features:

- Painted Cabinet
- Filter Rack
- Phase guard with optional 'dial' disconnect
- Stainless steel drain pan w/ secondary drain connection
- Extended range insulation option
- AlumiSeal air coil e-coating
- 2 in. MERV 13 filter
- Water-side economizer
- Cupronickel water coil
- Internal motorized 2-way valve
- Water flow regulator
- Sound kit
- Aurora UPC BACnet (+ N2)
- Aurora UPC with LONWorks
- Hot Gas Bypass
- Hot Gas Reheat
- Hot Water Generation




**Vertical**

| Vertical Cabinets | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 024-036 | in. | 25.5 | 31.2 | 44.2 |
| | cm. | 64.8 | 79.2 | 112.3 |
| 048 | in. | 25.5 | 31.2 | 48.2 |
| | cm. | 64.8 | 79.2 | 122.4 |
| 060-072 | in. | 25.5 | 31.2 | 52.2 |
| | cm. | 64.8 | 79.2 | 132.6 |



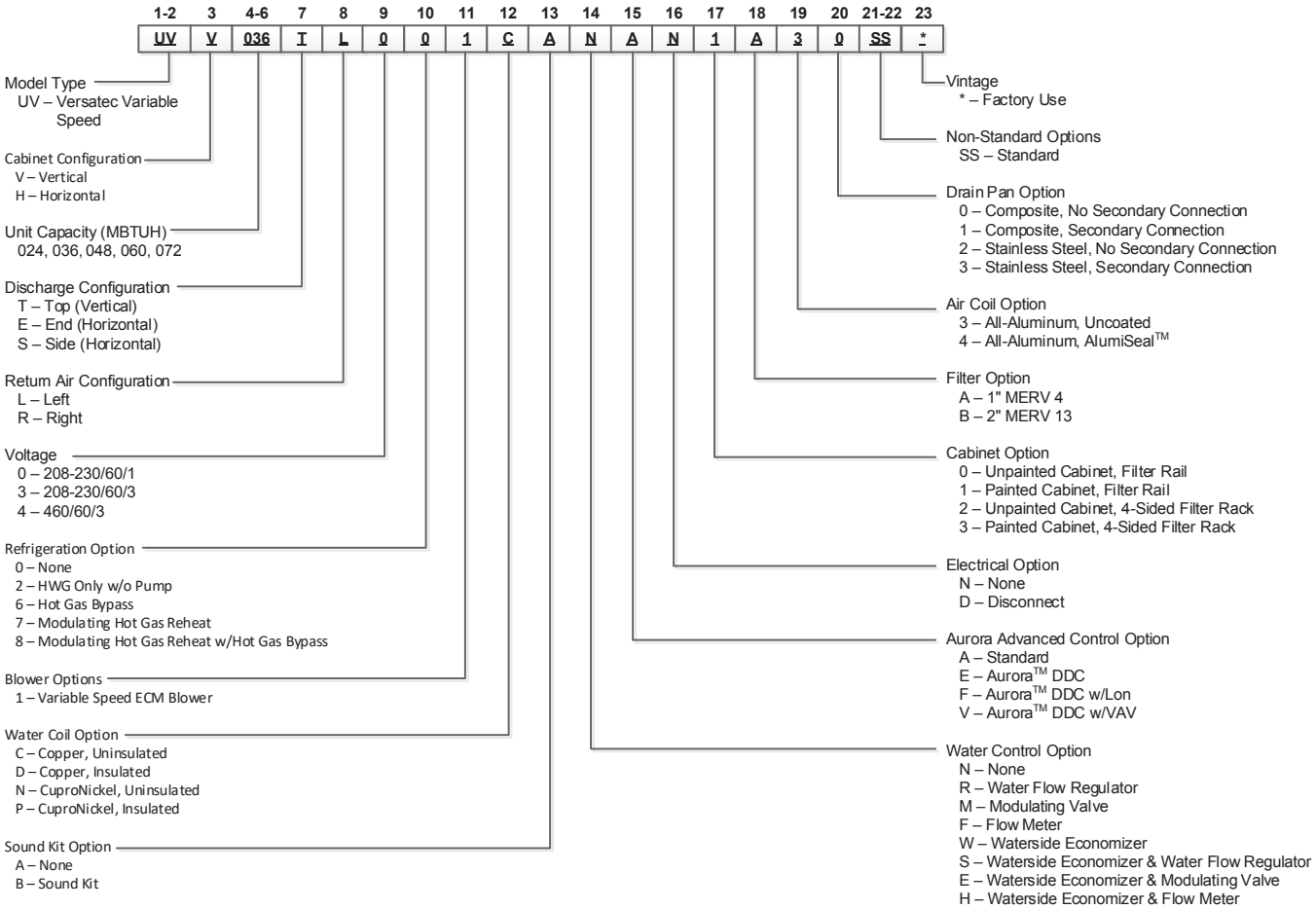

**Horizontal**

| Horizontal Cabinets | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 024-036 | in. | 25.5 | 57.0 | 21.2 |
| | cm. | 64.8 | 144.8 | 53.8 |
| 048 | in. | 25.5 | 63.0 | 21.2 |
| | cm. | 64.8 | 160.0 | 53.8 |
| 060 | in. | 25.5 | 70.0 | 21.2 |
| | cm. | 64.8 | 177.8 | 53.8 |
| 072 | in. | 25.5 | 75.0 | 21.2 |
| | cm. | 64.8 | 190.5 | 53.8 |

| Quick Features Guide | |
|---|---|
| 5 Spd FC ECM Fan | - |
| VS FC ECM Fan | Std |
| Waterside Econ | Opt |
| Hot Gas Reheat | Opt |
| Hot Gas Bypass | Opt |
| Aurora Advanced Controls | Std |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable | Opt |
| DCV Capable (UPC) | Opt |
| Zoning | Opt |

**Ultra-high-efficiency permanent magnet variable speed compressors and high feature set in compact cabinet for retrofit and new construction WSHP applications.**

# UVV/H OPTIONS




Rev.: 3 December, 2020

## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

**Variable Speed ECM Motor**

| Model | Capacity Modulation | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling Brine Full Load 77°F Part Load 68°F | | Heating Brine Full Load 32°F Part Load 41°F | |
| | | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| 024 | Full | 6 | 800 | 23,500 | 18.7 | 29,300 | 5.9 | 27,300 | 37.4 | 23,400 | 5.0 | 25,500 | 23.6 | 17,800 | 3.9 |
| | Part | 7 | 700 | 9,500 | 21.0 | 11,000 | 7.0 | 11,000 | 48.0 | 8,000 | 5.5 | 10,500 | 36.0 | 7,000 | 4.4 |
| 036 | Full | 9 | 1300 | 37,500 | 17.8 | 46,000 | 5.4 | 43,000 | 28.0 | 37,000 | 4.4 | 39,000 | 21.0 | 29,000 | 3.8 |
| | Part | 7 | 700 | 9,500 | 21.0 | 11,000 | 7.0 | 11,000 | 48.0 | 8,000 | 5.5 | 10,500 | 36.0 | 7,000 | 4.4 |
| 048 | Full | 12 | 1600 | 47,500 | 16.6 | 60,000 | 5.4 | 53,000 | 26.0 | 46,000 | 4.7 | 48,000 | 20.0 | 38,000 | 3.8 |
| | Part | 8 | 850 | 13,000 | 25.0 | 15,000 | 7.8 | 15,000 | 50.0 | 12,000 | 5.5 | 14,000 | 41.0 | 10,000 | 4.9 |
| 060 | Full | 17 | 1800 | 60,000 | 15.4 | 73,000 | 4.8 | 63,000 | 24.0 | 57,000 | 4.2 | 62,000 | 17.8 | 45,000 | 3.7 |
| | Part | 10 | 1200 | 16,000 | 21.0 | 17,000 | 7.8 | 18,000 | 45.0 | 14,000 | 5.3 | 18,000 | 36.0 | 11,000 | 4.4 |
| 072 | Full | 20 | 2000 | 70,000 | 14.0 | 90,000 | 4.6 | 78,000 | 21.0 | 72,000 | 4.0 | 71,500 | 16.4 | 58,000 | 3.4 |
| | Part | 12 | 1400 | 19,500 | 20.4 | 23,000 | 7.4 | 24,000 | 40.0 | 18,000 | 5.4 | 22,000 | 34.0 | 15,000 | 4.8 |

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature. Heating capacities based upon 68°F DB, 59°F WB entering air temperature
All ratings based upon 208V operation

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c UL us LISTED Heat Pump E347094

All UV Series product is safety listed under UL1995 thru UL and performance listed with AHRI in accordance with standard 13256-1.

# VERSATEC 700 WSHP - UVV/H - 10-90 TON

## Water-to-Air Heat Pump

### Standard Features

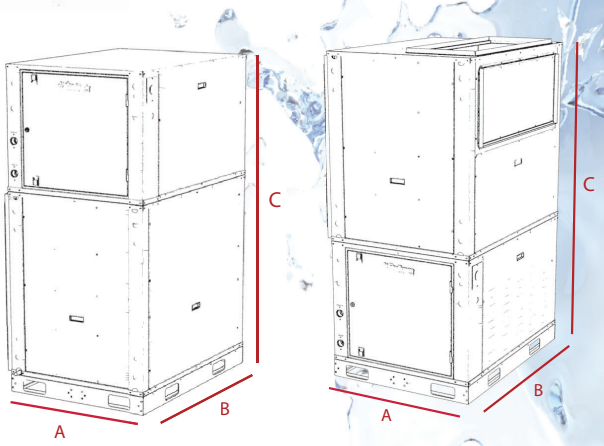
- Capacities of 120,000 and 180,000 Btu/h
- Voltages: 208-230/60/3, 460/60/3, and 575/60/3 upon request.
- Vertical topflow or downflow w/ true left and right return
- Horizontal w/ true left and right return
- Horizontal end or side discharge
- Heavy gauge galvanized cabinet
- Integrated VS ECM backward curved Plenum fans
- High efficiency permanent magnet variable speed scroll compressors
- All-Aluminum rifled tube-and-lanced fin air coil
- Stainless steel drain pan
- EEV
- Oversized copper coaxial water heat exchanger
- 4 sided filter rail
- 75VA transformer with circuit breaker
- Aurora Advanced Controls
- Twinning up to 90 tons (or 6 units)

Twinned Unit Shown

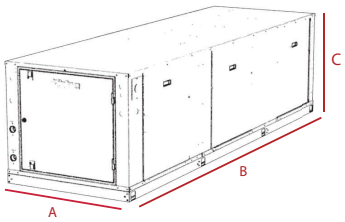
### Optional Features

- Painted Cabinet
- Filter Rack
- Phase guard with optional 'dial' disconnect
- Stainless steel drain pan w/ secondary drain connection
- Extended range insulation
- AlumiSeal air coil e-coating
- 2 in. MERV 13 filter
- Integrated Water-side economizer
- Internal motorized 2-way valve
- Water flow regulator
- Sound kit
- Aurora UPC BACnet (+ N2)
- Aurora UPC with LONWorks
- Hot Gas Bypass
- Modulating Hot Gas Reheat
- Multi-zone and single-zone VAV
- IntelliZone Commercial and IntelliZone BACnet capabilities

| Vertical Cabinets (Topflow & bottomflow) | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 120 | in. | 34.0 | 36.3 | 72.5 |
| | cm. | 86.4 | 92.2 | 184.2 |
| 180 | in. | 34.0 | 46.3 | 72.5 |
| | cm. | 86.4 | 117.5 | 184.2 |

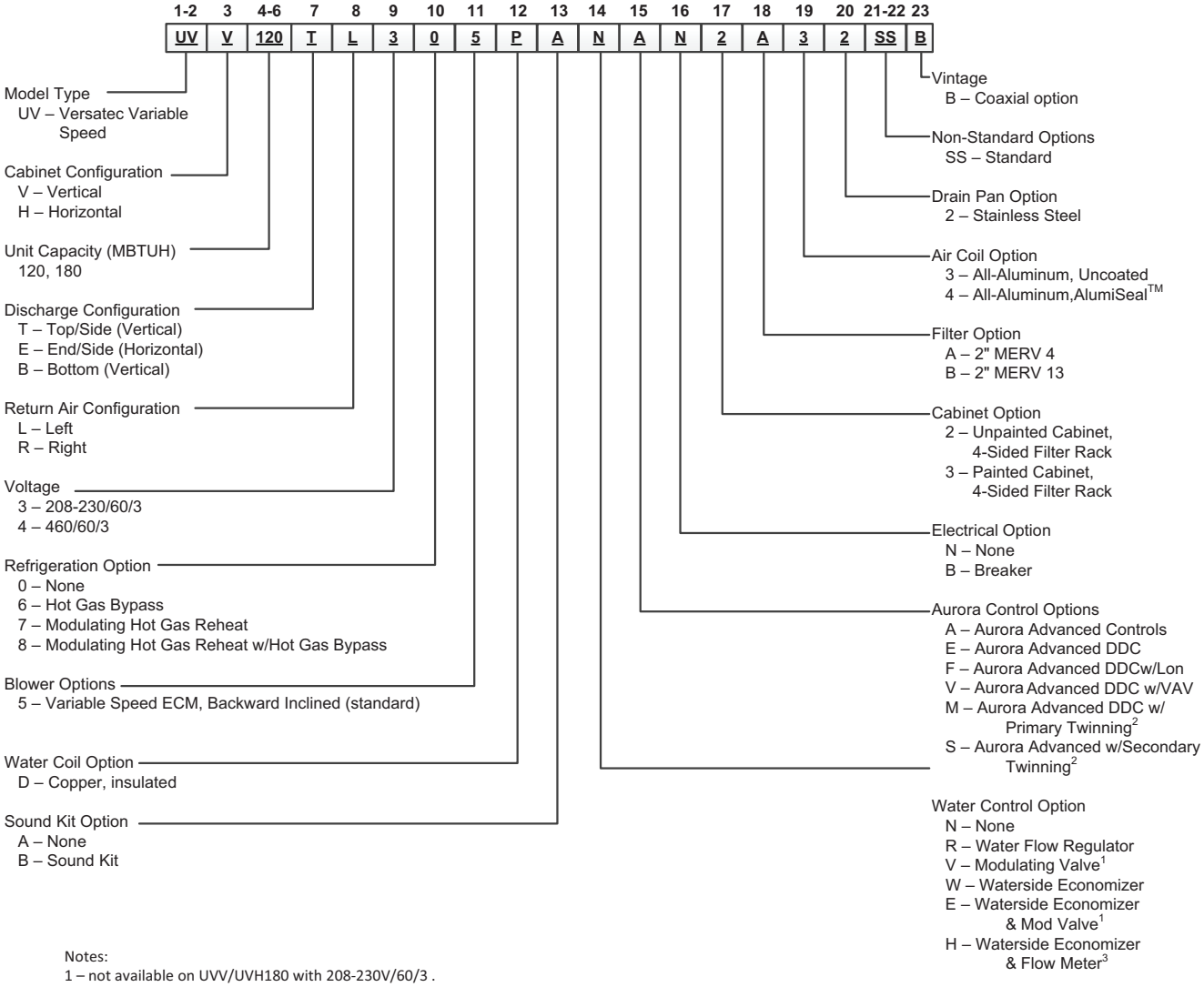



| Quick Features Guide | |
|---|---|
| VS BC ECM Plenum Fan | Std |
| Integrated Waterside Econ | Special |
| Modulating Hot Gas Reheat | Opt |
| Aurora Advanced Controls | Std |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable | Opt |
| DCV Capable (UPC) | Opt |
| Zoning | - |
| Twinning | Opt |




| Horizontal Cabinets | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 120 | in. | 34.0 | 89.0 | 29.9 |
| | cm. | 86.4 | 226.1 | 75.9 |
| 180 | in. | 34.0 | 110.0 | 29.9 |
| | cm. | 86.4 | 279.4 | 75.9 |

**Ultra-high-efficiency permanent magnet variable speed compressors and high feature set in compact cabinet for retrofit and new construction WSHP applications.**




Notes:
1 – not available on UVV/UVH180 with 208-230V/60/3 .
2 – Only available with vertical, top/side discharge units.
3 – Flow meter shipped with unit and field installed.

Rev.: 20 May 2019

## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

| Varable Speed ECM Motor | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
| Model | Capacity Modulation | Flow Rate | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling Brine Full Load 77°F Part Load 68°F | | Heating Brine Full Load 32°F Part Load 41°F | |
| | | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| 120 | Full | 30 | 4000 | 125,000 | 14.5 | 140,000 | 4.6 | 145,000 | 22.0 | 115,000 | 4.0 | 132,000 | 16.5 | 96,000 | 3.5 |
| | Part | 20 | 1500 | 40,000 | 22.0 | 40,000 | 6.0 | 50,000 | 50.0 | 25,000 | 5.0 | 45,000 | 40.0 | 24,000 | 4.5 |
| 180 | Full | 45 | 5600 | 175,000 | 13.2 | 200,000 | 4.3 | 200,000 | 18.0 | 185,000 | 4.0 | 180,000 | 14.2 | 145,000 | 3.4 |
| | Part | 20 | 2400 | 50,000 | 22.0 | 50,000 | 6.8 | 60,000 | 45.0 | 40,000 | 5.0 | 60,000 | 33.0 | 34,000 | 4.3 |

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature. Heating capacities based upon 68°F DB, 59°F WB entering air temperature
All ratings based upon 208V operation

AHRI CERTIFIED www.ahridirectory.org Water Source HP ANSI/AHRI/ASHRAE/ISO13256-1

c UL us LISTED Heat Pump E347094

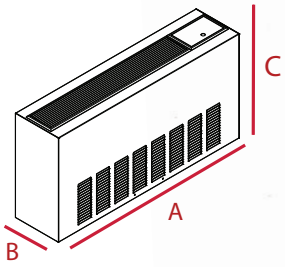
All UV Series product is safety listed under UL1995 thru UL and performance tested in accordance with AHRI/ISO standard 13256-1.

# VERSATEC 300 CONSOLES - LCS/C/W - 0.75-1.5 TON

## Water-to-Air Heat Pump

### Standard Features

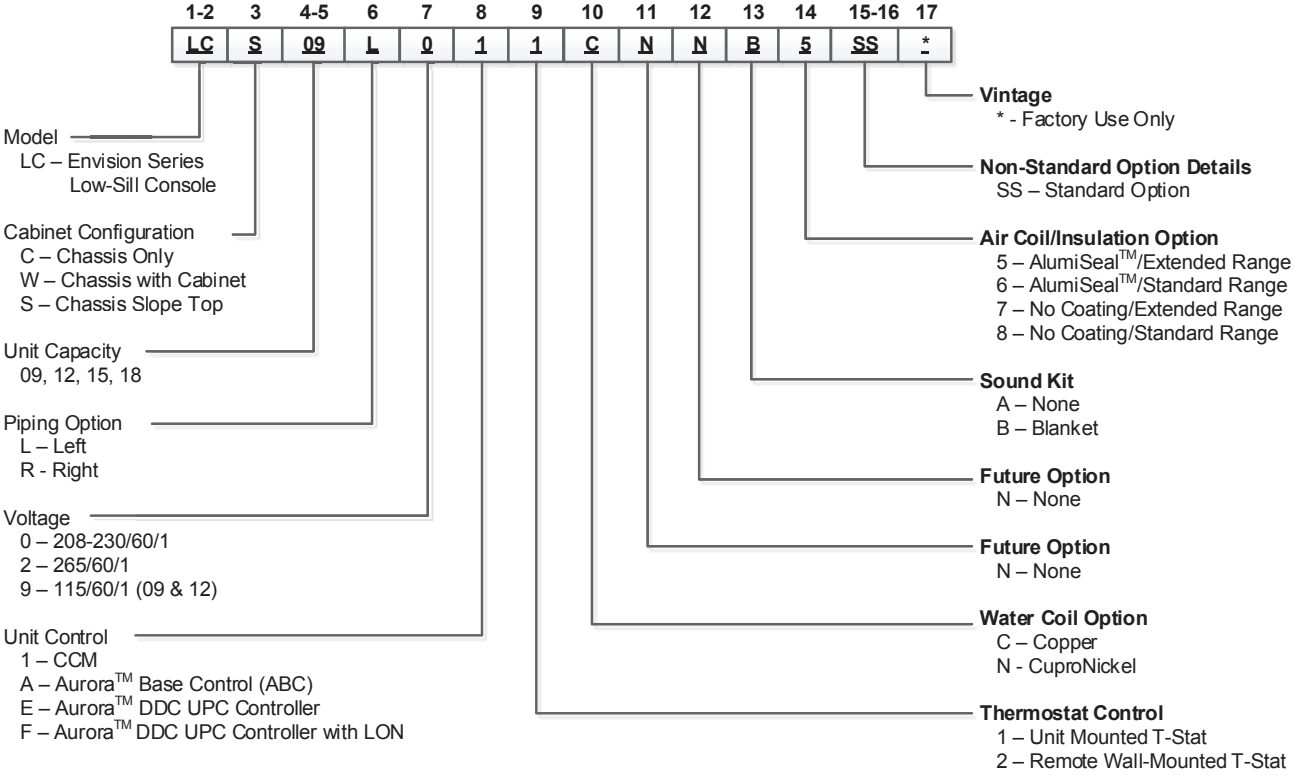
- Slope and Flat top configurations
- Footprint matches “legacy” products for easy retrofits.
- Attractive rounded corners heavy gauge cabinet.
- Quiet rotary compressors in all models.
- 2-dimension refrigerant piping vibration loops to isolate the compressor.
- All interior cabinet surfaces including the compressor compartment are insulated with 1/2 in. [12.7mm] thick 1-1/2lb [681g] density, surface coated, acoustic type glass fiber insulation.
- Removable compressor access panel
- High and low pressure refrigerant service ports.
- Internal slide out blowers.
- All refrigerant brazing is performed in a nitrogen environment.
- Computer controlled deep vacuum and refrigerant charging system.
- All joints are leak detected for maximum leak rate of less than 1/4 oz. per year.




| Model | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 009-012 | in. | 45.1 | 10.8 | 22.5 |
| | cm. | 114.6 | 27.4 | 57.2 |
| 015-018 | in. | 50.0 | 12.8 | 22.5 |
| | cm. | 127.0 | 32.4 | 57.2 |

| Quick Features Guide | |
|---|---|
| VS FC ECM Fan | - |
| 3-Spd FC ECM Fan | Std |
| Waterside Econ | - |
| Hot Gas Reheat | - |
| Hot Gas Bypass | - |
| Aurora Advanced Controls | Special |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable (UPC) | - |
| DCV Capable (UPC) | - |
| Zoning | - |

**Perfect for classrooms, offices, hotels, or any room without ductwork, the Versatec 300 Console delivers cutting edge heating and cooling technology. A single speed R-410A rotary compressor is the heart of the console, which is available in a variety of cabinet and piping configurations. It features the ability to operate across a wide range of loop temperatures and its footprint is designed to match “legacy” consoles for easy retrofitting**




NOTES: Chassis only available with left piping option.
UPC option is only available with remote wall-mounted thermostat control.
09-12 only available with PSC blower.
15-18 only available with 3-Speed ECM blower.

## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

**PSC/ECM Motor**

| Model | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling EWT 77°F | | Heating EWT 32°F | |
| | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| **09** | 2.5 | 300 | 8,500 | 13.4 | 10,500 | 4.4 | 10,200 | 22.5 | 8,700 | 3.8 | 9,000 | 16.0 | 6,700 | 3.1 |
| **12** | 3.5 | 350 | 10,500 | 12.3 | 14,400 | 4.3 | 12,400 | 19.5 | 11,800 | 3.7 | 11,000 | 14.2 | 9,500 | 3.5 |
| **15** | 4.5 | 450 | 13,500 | 13.6 | 17,000 | 4.9 | 16,200 | 22.0 | 14,000 | 4.1 | 14,200 | 15.9 | 10,500 | 3.4 |
| **18** | 5.5 | 500 | 16,200 | 12.5 | 21,000 | 4.4 | 19,000 | 19.6 | 17,000 | 3.7 | 16,600 | 15.1 | 13,300 | 3.1 |

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature. Heating capacities based upon 68°F DB, 59°F WB entering air temperature
All ratings based upon 208V operation

All LC Series product is Safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-1.

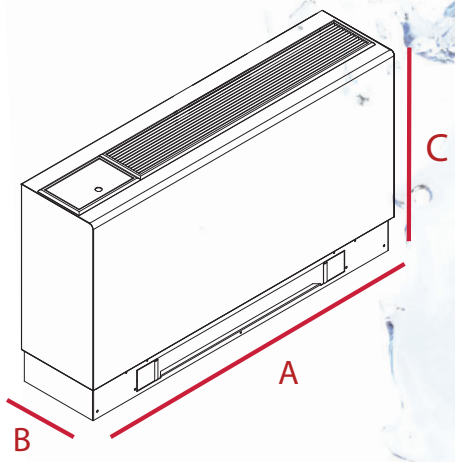
# VERSATEC 500 CONSOLES - NCS/C/W/E - 0.75-1.5 TON

## Water-to-Air Heat Pump

### Standard Features

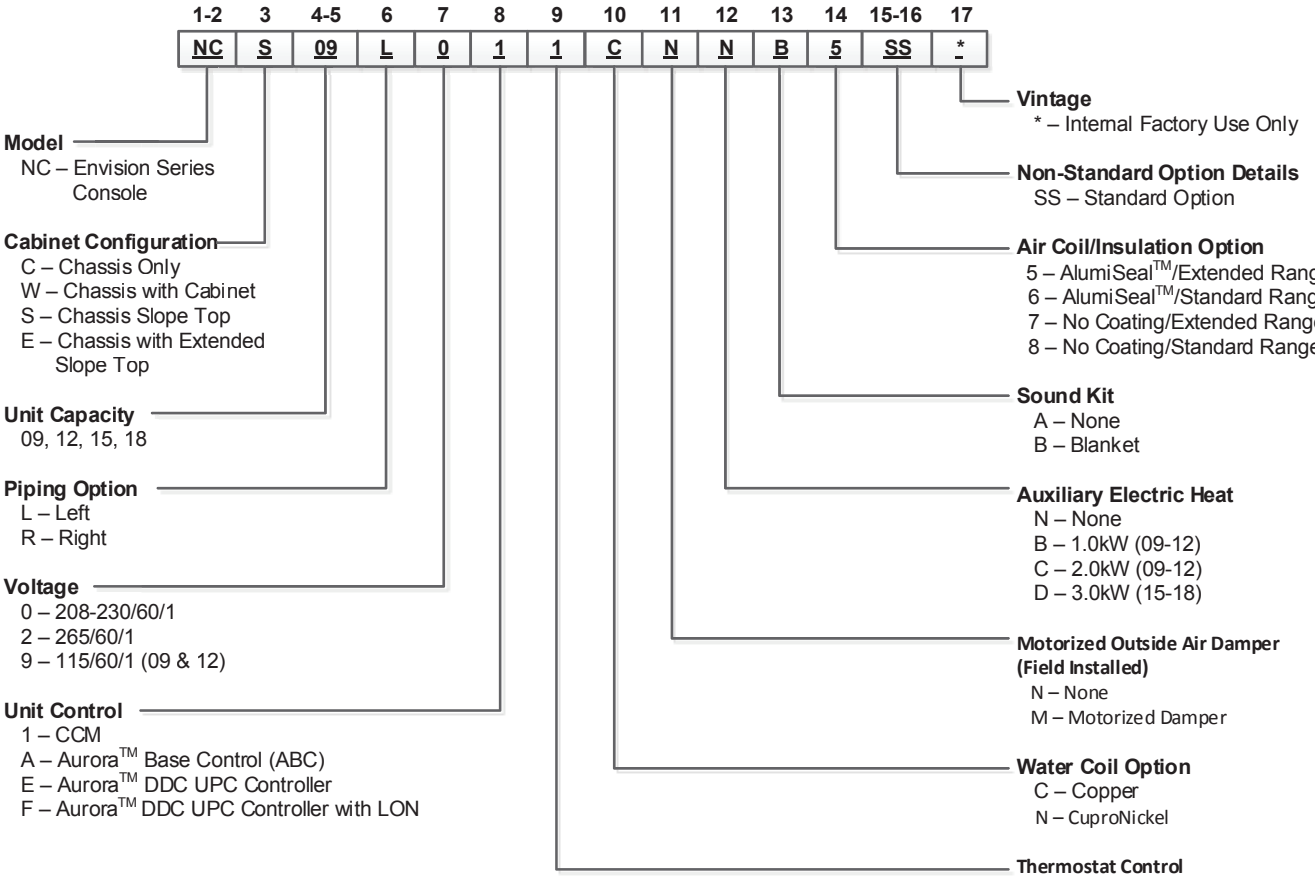
- Slope and Flat top configurations
- Extended cabinet options
- Footprint matches “legacy” products for easy retrofits.
- Attractive rounded corners heavy gauge cabinet.
- Quiet rotary compressors in all models.
- 2-dimension refrigerant piping vibration loops to isolate the compressor.
- All interior cabinet surfaces including the compressor compartment are insulated with 1/2˝ [12.7mm] thick
- 1-1/2lb [681g] density, surface coated, acoustic type glass fiber insulation.
- 2 removable compressor access panels
- Separate air handler and compressor section access panels permit service testing without bypass
- Easy access to low voltage connector for easy thermostat wiring (remote & thermostat option)
- Quick attach wiring harnesses are used throughout for fast servicing
- High and low pressure refrigerant service ports
- Internal slide out blowers
- All refrigerant brazing is performed in a nitrogen environment
- Computer controlled deep vacuum and refrigerant charging system
- All joints are leak detected for maximum leak rate of less than 1/4 oz. per year
- Computer bar code equipped assembly line insures all components are correct
- All units are computer run-tested with water to verify both function and performance

| Model | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 009-012 | in. | 45.0 | 10.8 | 25.7 |
| | cm. | 114.3 | 27.3 | 65.2 |
| 015-018 | in. | 50.0 | 12.3 | 25.7 |
| | cm. | 127.0 | 31.1 | 65.2 |




| Quick Features Guide | |
|---|---|
| VS FC ECM Fan | - |
| 3-Spd FC ECM Fan | Std |
| Waterside Econ | - |
| Hot Gas Reheat | - |
| Hot Gas Bypass | - |
| Aurora Advanced Controls | Special |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable (UPC) | - |
| DCV Capable (UPC) | - |
| Zoning | - |

**The Versatec 500 Console provides cutting edge technology in heating and cooling for commercial applications, using the latest in component and design technology. Single speed, R-410A rotary compressors are the heart of the system. Also included are oversized coaxial water-to-refrigerant heat exchangers and durable all-aluminum air coils for high efficiencies at low face velocities.**




**NOTES**:
Chassis only available with left piping option.
UPC option is only available with remote wall-mounted thermostat control.

## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

**ECM Motor**

| Model | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling EWT 77°F | | Heating EWT 32°F | |
| | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| **09** | 2.5 | 300 | 8,500 | 13.4 | 10,500 | 4.4 | 10,200 | 22.5 | 8,700 | 3.8 | 9,000 | 16.0 | 6,700 | 3.1 |
| **12** | 3.5 | 350 | 10,500 | 12.3 | 14,400 | 4.3 | 12,400 | 19.5 | 11,800 | 3.7 | 11,000 | 14.2 | 9,500 | 3.5 |
| **15** | 4.5 | 450 | 13,500 | 13.6 | 17,000 | 4.9 | 16,200 | 22.0 | 14,000 | 4.1 | 14,200 | 15.9 | 10,500 | 3.4 |
| **18** | 5.5 | 500 | 16,200 | 12.5 | 21,000 | 4.4 | 19,000 | 19.6 | 17,000 | 3.7 | 16,600 | 15.1 | 13,300 | 3.1 |

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature. Heating capacities based upon 68°F DB, 59°F WB entering air temperature
All ratings based upon operation at the lower voltage of dual voltage rated models.

All NC Series product is Safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-1.

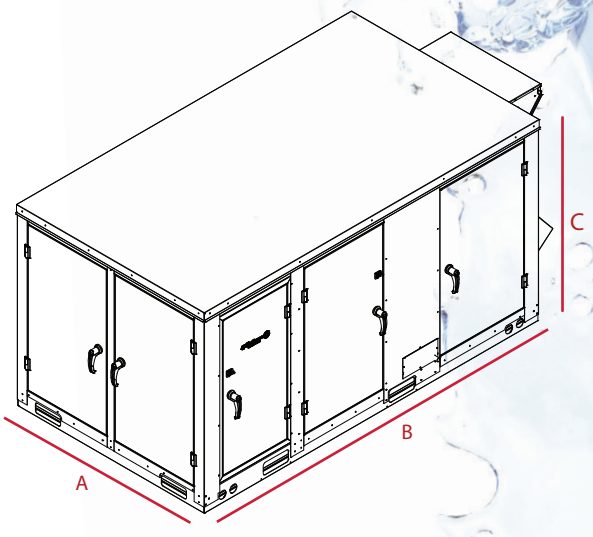
# VERSATEC 500 ROOFTOP WSHP - URS/D/T - 3-30 TON

## Water-to-Air Heat Pump

### Standard Features

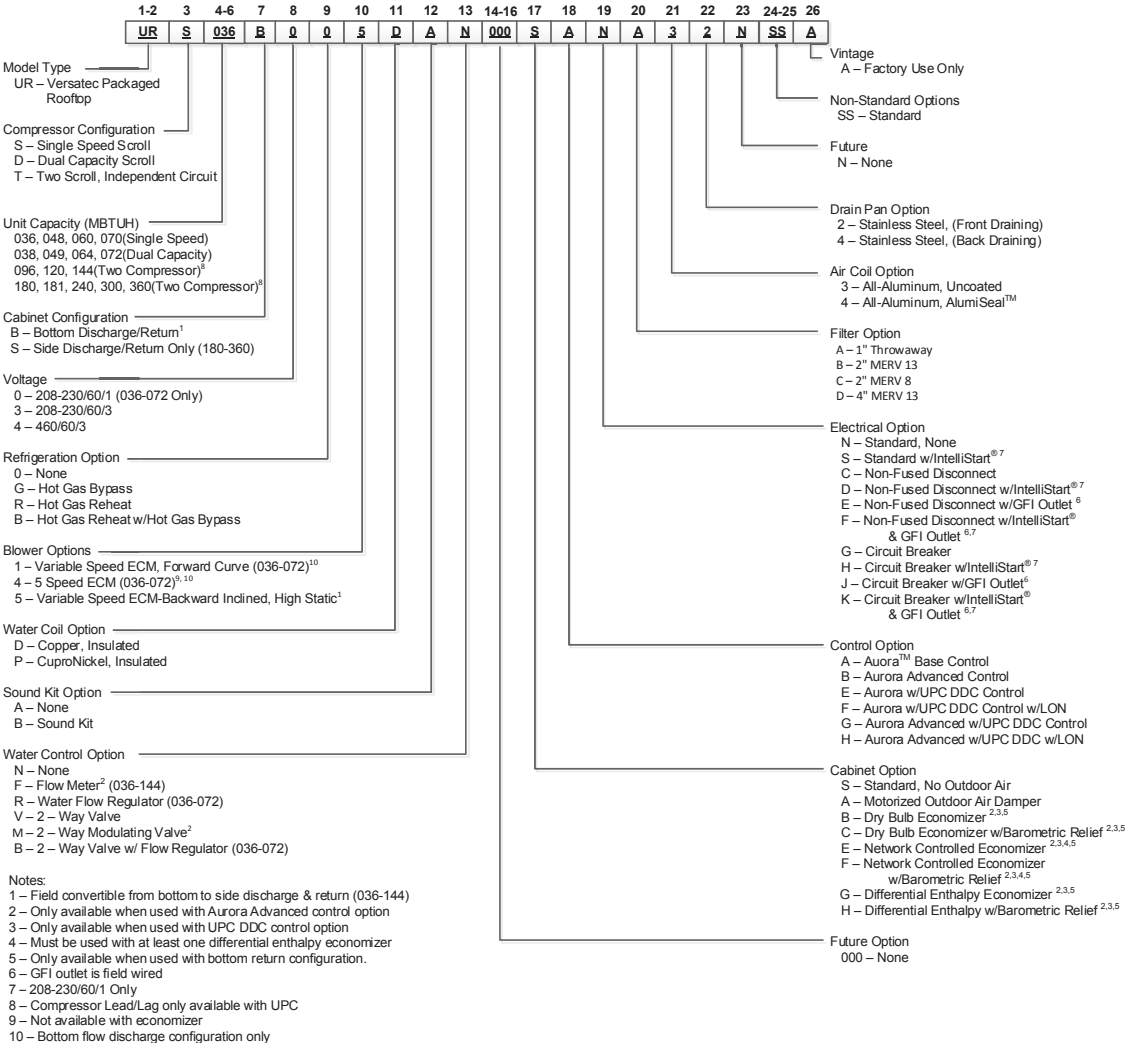
- Variable Speed integrated ECM Plenum Fan - No belts or sheaves!
- Extended range insulation and performance.
- Performance Rated with AHRI 13256-1 (036-120) and Safety listed UL1995
- All-Aluminum Air Coil (036-360) with optional Alumiseal coil coating
- Interlaced Air Coil (096-360)
- Dual capacity scroll compressor operation (selected models 036-072)
- Dual circuit scrolls (096-360)
- Cabinet configuration and construction
- Bottom flow and field convertible to side discharge
- Heavy gauge G60 sheet metal with super durable polyester powder coat paint and 1" foil faced insulation
- Double walled removable access doors with positive compression seal and composite door handles
- 1/2" Exact-O matt bottom panel insulation
- Optional factory wired GFI 115VAC convenience outlet
- Double isolated compressor mounting for quiet operation
- Dual sloped stainless steel drain pan with front or back connection
- Slide out dual sloped drain pan (036-144)
- 14" or 24" Knock-down curbs (custom curbs available)
- Variable Speed ECM fan motor with forward curve blower (036-072)
- Integrated air-side economizer with 4 different control methods
- Super quiet sound kit with multi-density compressor blanket
- Copper or cupronickel water-to-refrigerant heat exchangers
- Internally mounted water flow regulator and/or water solenoid valve for variable speed pumping systems

| Model | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 036-072 | in. | 40.0 | 79.0 | 45.0 |
| | cm. | 103.0 | 201.0 | 115.0 |
| 096-144 | in. | 52.0 | 93.0 | 48.0 |
| | cm. | 133.0 | 236.0 | 123.0 |
| 180-360 | in. | 82.0 | 105.0 | 57.0 |
| | cm. | 208.0 | 267.0 | 145.0 |




| Quick Features Guide | |
|---|---|
| 5 Spd FC ECM Fan (3-6) | Opt |
| VS FC ECM Fan (3-6) | Opt |
| VS BC ECM Plenum Fan | Std |
| Air Side Economizer (UPC) | Opt |
| Hot Gas Reheat | Opt |
| Hot Gas Bypass | Opt |
| Aurora Advanced Controls | Opt |
| Aurora UPC BACnet, N2 or LON | Opt |
| VAV Capable (UPC) | - |
| DCV Capable (UPC) | Opt |
| Zoning (Aurora Advanced) | Opt |

**The innovative Versatec 500 Rooftop WSHP is a rooftop product that is not only designed to meet the highest demands in efficiency and features but also exceeds ASHRAE 90.1-2013 requirements for rooftops and economizers. The Versatec Rooftop is a 'clean sheet' design and combines the latest in plenum fan technology, Aurora controls and economizer integration into a powerful platform of efficiency, flexibility and integrated technology.**




Notes:
1 – Field convertible from bottom to side discharge & return (036-144)
2 – Only available when used with Aurora Advanced control option
3 – Only available when used with UPC DDC control option
4 – Must be used with at least one differential enthalpy economizer
5 – Only available when used with bottom return configuration.
6 – GFI outlet is field wired
7 – 208-230/60/1 Only
8 – Compressor Lead/Lag only available with UPC
9 – Not available with economizer
10 – Bottom flow discharge configuration only

## *AHRI/ASHRAE/ISO 13256-1 English (IP) Units*

**5 Speed, VS ECM, and Plenum Motor**

| Model | Capacity Modulation | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling Brine Full Load 77°F Part Load 68°F | | Heating Brine Full Load 32°F Part Load 41°F | |
| | | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| **036** | Single | 9.0 | 1200 | 32,300 | 18.8 | 36,500 | 5.7 | 36,800 | 28.8 | 29,200 | 4.9 | 33,700 | 22.0 | 24,400 | 4.2 |
| **048** | Single | 12.0 | 1500 | 44,100 | 16.3 | 55,600 | 5.4 | 50,300 | 25.9 | 44,700 | 4.7 | 45,900 | 18.8 | 36,400 | 4.0 |
| **060** | Single | 15.0 | 1800 | 61,100 | 16.4 | 74,100 | 5.5 | 66,900 | 24.3 | 59,200 | 4.7 | 62,200 | 18.4 | 47,900 | 4.0 |
| **070** | Single | 18.0 | 2000 | 66,200 | 15.3 | 85,000 | 5.0 | 75,000 | 22.9 | 68,000 | 4.4 | 69,100 | 17.6 | 54,000 | 3.7 |
| **038** | Full | 9.0 | 1300 | 36,500 | 17.0 | 43,300 | 5.5 | 40,000 | 24.4 | 35,000 | 4.9 | 38,200 | 19.7 | 28,500 | 4.2 |
| | Part | 8.0 | 1150 | 26,500 | 19.0 | 31,300 | 6.4 | 29,900 | 32.1 | 24,900 | 5.1 | 29,500 | 28.0 | 22,900 | 4.8 |
| **049** | Full | 12.0 | 1600 | 49,100 | 17.2 | 59,000 | 5.5 | 54,100 | 24.5 | 47,200 | 4.6 | 50,800 | 19.3 | 38,200 | 4.0 |
| | Part | 11.0 | 1400 | 36,300 | 19.1 | 41,700 | 6.1 | 41,600 | 33.0 | 33,600 | 4.7 | 39,800 | 27.4 | 31,000 | 4.4 |
| **064** | Full | 16.0 | 1800 | 62,300 | 16.4 | 73,900 | 5.2 | 69,000 | 23.9 | 60,400 | 4.6 | 65,500 | 19.3 | 47,300 | 3.8 |
| | Part | 14.0 | 1500 | 45,800 | 18.1 | 53,200 | 5.9 | 53,000 | 30.7 | 43,500 | 4.8 | 50,500 | 26.5 | 35,700 | 4.3 |
| **072** | Full | 18.0 | 2000 | 70,100 | 15.6 | 88,000 | 4.8 | 79,000 | 22.0 | 71,000 | 4.3 | 73,800 | 18.2 | 55,400 | 3.7 |
| | Part | 16.0 | 1500 | 54,200 | 17.0 | 66,000 | 5.1 | 61,500 | 27.6 | 52,700 | 4.3 | 59,400 | 24.9 | 47,400 | 3.9 |
| **096** | Full | 24.0 | 3000 | 88,200 | 16.3 | 111,200 | 5.4 | 100,600 | 25.9 | 89,400 | 4.7 | 91,800 | 18.8 | 72,800 | 4.0 |
| | Part | 12.0 | 1500 | 44,100 | 16.3 | 55,600 | 5.4 | 50,300 | 25.9 | 44,700 | 4.7 | 45,900 | 18.8 | 36,400 | 4.0 |
| **120** | Full | 30.0 | 3600 | 122,200 | 16.4 | 148,200 | 5.5 | 133,800 | 24.3 | 118,400 | 4.7 | 124,400 | 18.4 | 95,800 | 4.0 |
| | Part | 15.0 | 1800 | 61,100 | 16.4 | 74,100 | 5.5 | 66,900 | 24.3 | 59,200 | 4.7 | 62,200 | 18.4 | 47,900 | 4.0 |
| **144** | Full | 36.0 | 4000 | 132,400 | 15.3 | 170,000 | 5.0 | 150,000 | 22.9 | 136,000 | 4.4 | 138,200 | 17.6 | 108,000 | 3.7 |
| | Part | 18.0 | 2000 | 66,200 | 15.3 | 85,000 | 5.0 | 75,000 | 22.9 | 68,000 | 4.4 | 69,100 | 17.6 | 54,000 | 3.7 |
| **180** | Full | 45.0 | 5600 | 180,000 | 17.1 | 190,000 | 5.0 | 187,000 | 22.2 | 149,000 | 4.3 | 185,000 | 18.5 | 109,000 | 3.4 |
| | Part | 28.0 | 2800 | 92,000 | 17.1 | 98,000 | 5.1 | 85,000 | 22.2 | 75,000 | 4.4 | 95,000 | 18.5 | 60,000 | 3.5 |
| **181** | Full | 45.0 | 5600 | 180,000 | 17.1 | 190,000 | 5.0 | 187,000 | 22.2 | 149,000 | 4.3 | 185,000 | 18.5 | 109,000 | 3.4 |
| | Part | 28.0 | 2800 | 92,000 | 17.1 | 98,000 | 5.1 | 85,000 | 22.2 | 75,000 | 4.4 | 95,000 | 18.5 | 60,000 | 3.5 |
| **240** | Full | 60.0 | 7600 | 240,000 | 16.3 | 296,000 | 5.2 | 264,000 | 22.5 | 237,000 | 4.6 | 246,000 | 17.4 | 184,000 | 3.8 |
| | Part | 35.0 | 3800 | 120,000 | 16.3 | 148,000 | 5.2 | 132,000 | 22.5 | 118,500 | 4.6 | 123,000 | 17.4 | 92,000 | 3.8 |
| **300** | Full | 75.0 | 9500 | 284,000 | 17.3 | 353,000 | 5.4 | 314,000 | 24.5 | 286,000 | 4.8 | 291,000 | 19.0 | 224,000 | 4.2 |
| | Part | 50.0 | 4800 | 142,000 | 17.3 | 176,500 | 5.4 | 157,000 | 24.5 | 143,000 | 4.8 | 145,500 | 19.0 | 112,000 | 4.2 |
| **360** | Full | 90.0 | 11000 | 360,000 | 12.2 | 455,000 | 4.2 | 400,000 | 17.0 | 375,000 | 3.7 | 355,000 | 13.1 | 290,000 | 3.2 |
| | Part | 45.0 | 5500 | 185,000 | 13.0 | 240,000 | 4.3 | 210,000 | 17.9 | 197,000 | 3.9 | 187,000 | 13.8 | 152,000 | 3.4 |

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature. Heating capacities based upon 68°F DB, 59°F WB entering air temperature. All ratings based upon 208V operation. Models 036-120 are rated and certified in accordance with ISO/AHRI/ASHRAE 13256-1. Models 144-360 are rated in accordance with ISO/AHRI/ASHRAE 13256-1 but are not certified since their capacity exceeds the scope of the AHRI program.

AHRI CERTIFIED™ www.ahridirectory.org Water Source HP ANSI/AHRI/ASHRAE/ISO13256-1

c UL us LISTED Heat Pump E347094

All UR product is safety listed under UL1995 thru UL and performance listed with AHRI in accordance with standard 13256-1.

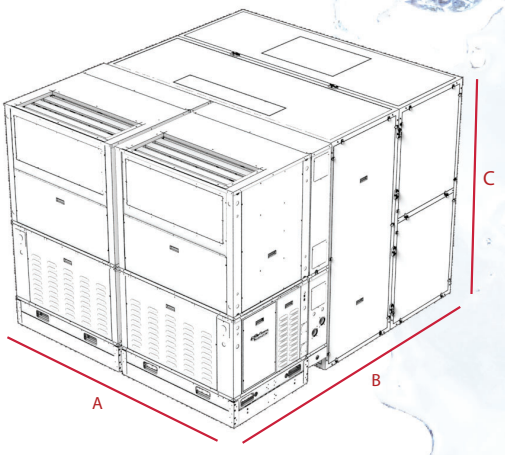
# VERSATEC 700 INDOOR DOAS WSHP - DAS - 10-30 TON

## Water-to-Air DOAS Heat Pump

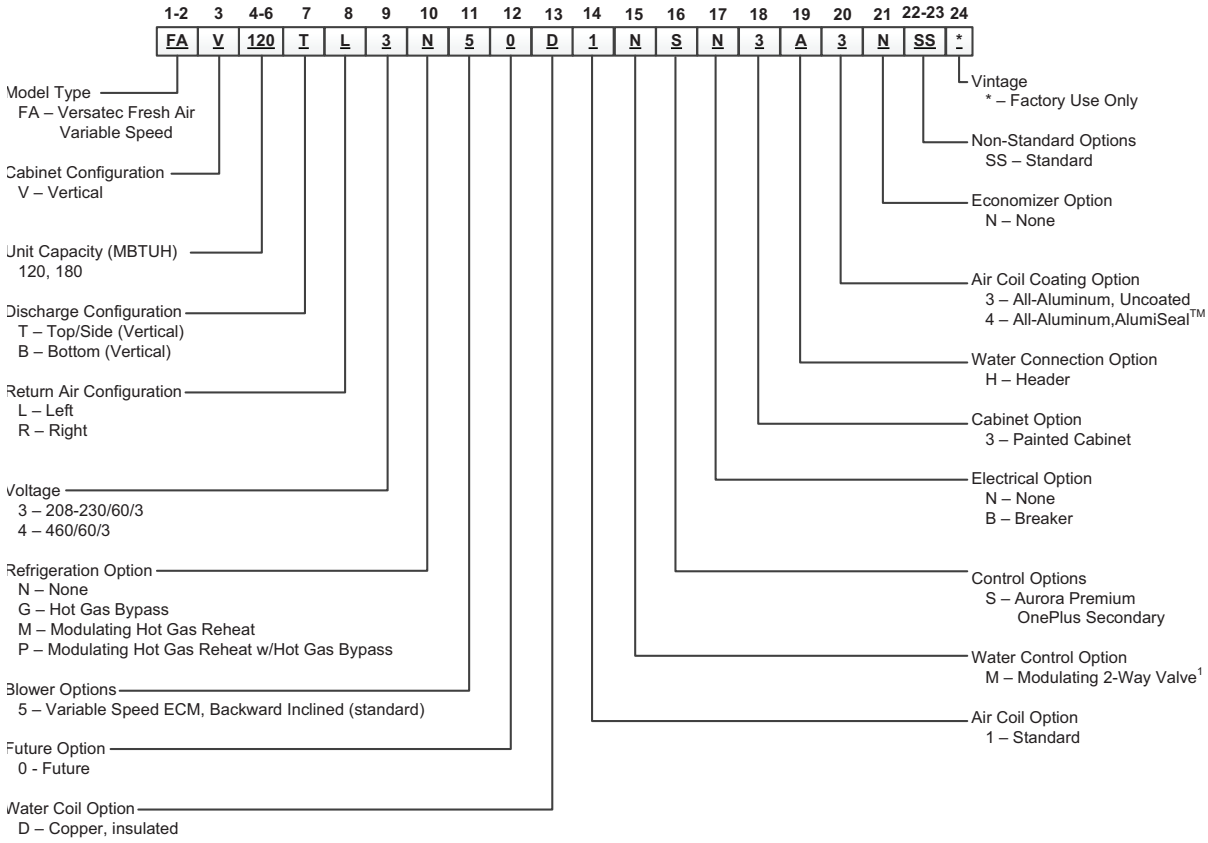
### Standard Features

- 2,000-8,000 CFM
- On-board CFM control and measurement built-in
  - CFM setpoint control over the BAS
  - No field installed air measuring station required
- Maximum dehumidification per $ft^2$
- Communicating controls platform for simple over the network diagnostics
  - BACnet MS/TP
  - BACnet IP
  - Stand-alone configurations
- Load matching capability with variable speed fans, VS compressor, high efficiency wheel
- Flexible configurations for multi-zone VAV, single-zone VAV, and CAV applications
  - Supply air reset
  - Stand-alone or BAS operation
  - Modulating hot gas reheat with head pressure control
  - Demand controlled ventilation
- Exhaust fan control
  - Building pressure relief
  - CFM setpoint control
- Spring assist backdraft dampers prevent airflow back pressure when system is operating in reduce compressor load matching
- AHRI 1060 certified Energy Recovery wheel in double wall rigid polyurethane foam injected cabinet
  - Segmented transfer media for easy removal and cleaning with minimal downtime
  - Channel matrix wheels for maximum performance and optimal efficiency
  - Patented polymer energy transfer media will never corrode
  - Rigid wheel assembly slides out for easy access

| Model | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| DAS120S1 | in. | 109.6 | 59.6 | 77.7 |
| | cm. | 2783 | 1513 | 1973 |
| DAS180S1 | in. | 109.6 | 59.6 | 77.7 |
| | cm. | 2783 | 1513 | 1973 |
| DAS240L2 | in. | 109.6 | 92.6 | 77.7 |
| | cm. | 2783 | 2352 | 1973 |
| DAS360L2 | in. | 109.6 | 92.6 | 77.7 |
| | cm. | 2783 | 2352 | 1973 |

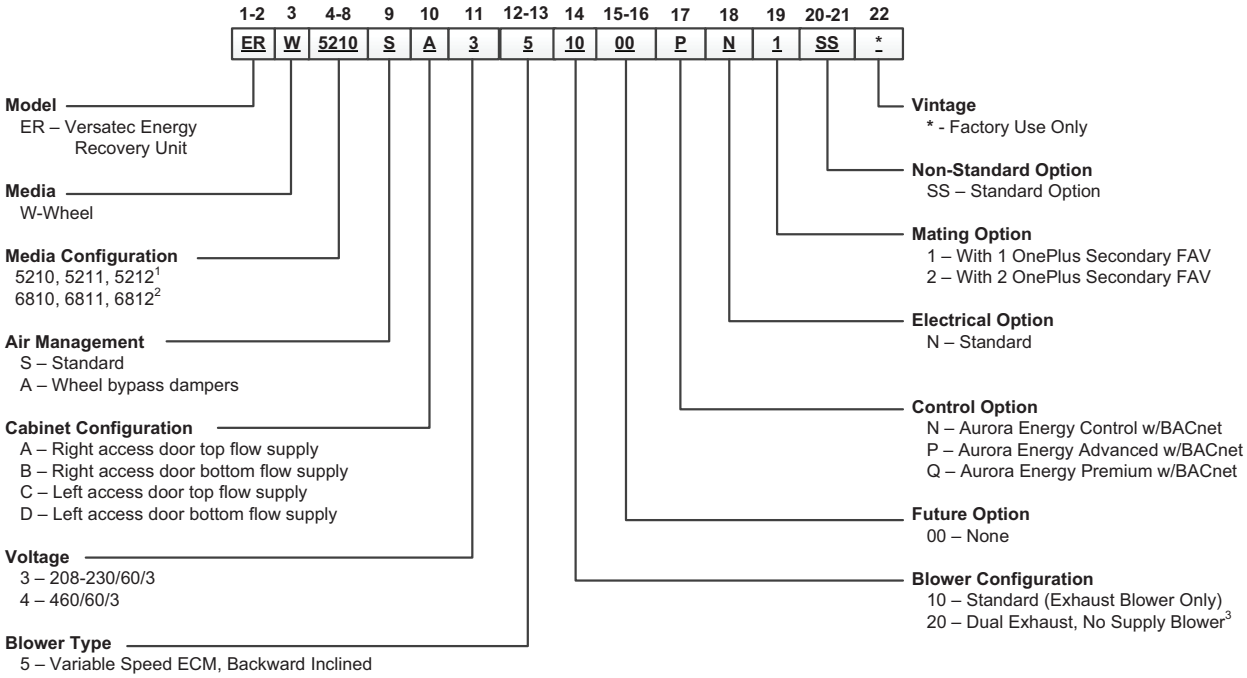



**The Versatec 700 Indoor DOAS WSHP is a modular system that provides maximum flexibility for your ventilation needs while keeping a focus on reducing installation and start up costs.**




Rev.: 1 April 2021

Note:
1 – Head pressure control sequence is enabled when modulating hot gas reheat is ordered.




Notes:
1 – Only mates with 1 OnePlus Secondary FAV
2 – Only mates with 2 OnePlus Secondary FAV
3 – Only available with 6810, 6811, 6812 media configuration

Rev.: 1 April 2021

AHRI CERTIFIED www.ahridirectory.org Water Source HP ANSI/AHRI/ASHRAE/ISO13256-1

c UL us LISTED Heat Pump E347094

The ERW cabinet is listed under UL 1812 thru UL.

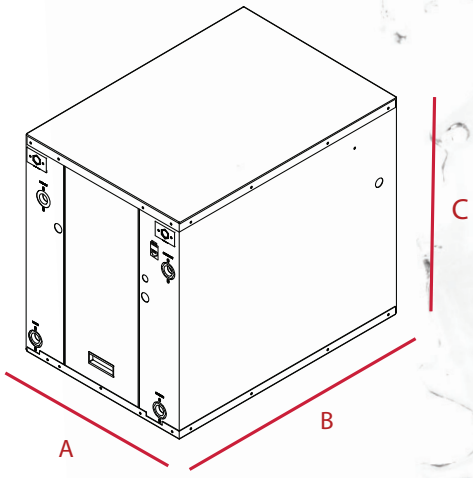
# TRUCLIMATE 100 WATER-TO-WATER HEAT PUMP - NSW - 1.5-6 TON

## Water-to-Water Heat Pump

### Standard Features:

- High efficiency copper coaxial heat exchanger (vented double walled available only on 018 and 025 “heating only” models)
- Optional IntelliStart reduces starting current by 60-70%
- Field switchable control box (end to end) for application flexibility
- Insulated and corrosion resistant cabinet to reduce noise
- Aurora Base Controls
- Dual isolation compressor mounts to reduce noise and vibration
- Captive FPT water connections eliminate ‘egg-shaping’ backup wrench
- Discharge Muffler Helps quiet compressor gas pulsations
- Zero ODP and GWP R-410A refrigerant
- Optional Hot Water Generator available on 040-075
- High efficiency copper or cupronickel coaxial heat exchangers
- Full refrigerant suction tube, heat exchanger, and waterline insulation to prevent condensation at low loop temperatures
- High efficiency scroll compressors for improved reliability
- Compressor sound blankets for reduced noise
- Standard waterlines out the front (field switchable to back via control box)

| Model | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 18 | in. | 19.5 | 23.5 | 26.1 |
| | cm. | 49.5 | 59.7 | 66.3 |
| 25 | in. | 19.5 | 23.5 | 26.1 |
| | cm. | 49.5 | 59.7 | 66.3 |
| 40 | in. | 22.0 | 31.0 | 26.2 |
| | cm. | 55.9 | 78.7 | 66.5 |
| 50 | in. | 22.0 | 31.0 | 26.2 |
| | cm. | 55.9 | 78.7 | 66.5 |
| 60 & 75 | in. | 22.0 | 31.0 | 26.2 |
| | cm. | 55.9 | 78.7 | 66.5 |




**Large oversized water-to-water refrigerant heat exchangers and scroll compressors provide extremely efficient operation. The Aurora Controls extend this innovation and performance.**

| 1-3 | 4-6 | 7 | 8 | 9 | 10 | 11 | 12 | 13-14 | 15 |
|---|---|---|---|---|---|---|---|---|---|
| NSW | 050 | H | 2 | 0 | A | C | C | SS | * |

Model
NSW – Versatec Hydronic Heat Pump

Unit Capacity
018, 025, 040, 050, 060, 075

Reversible Option
H- Heating Only
R- Reversible

Voltage
0 – 208-230/60/1 (Commercial)
2 – 265/60/1 (025 & 050 only)
3 – 208-230/60/3 (040-075 only)
4 – 460/60/3 (025-075 only)
5 – 575/60/3 (040-075 only)

Hot Water Option[1,3]
0 – No Hot Water Generation, No IntelliStart
2 – Hot Water Generation, No IntelliStart
3 – No Hot Water Generation, IntelliStart
5 – Hot Water Generation, IntelliStart

Vintage
* – Factory Use Only

Future Option
SS – Standard Option

Load Coax[2]
C – Copper
N - Cupronickel

Source Coax
C – Copper
N – Cupronickel

Controls Option
A – Aurora™ Base Controls (ABC)

Rev.: 15 June 2016

NOTES: 1 – Available on 040, 050, 060, and 075 only. Hot water generator requires field installed external pump kit.
2 – NSW018 and NSW025 heating only models are available only with copper double wall vented load coax for potable water, and are not designed to be converted to dedicated cooling units.
3 – IntelliStart not available on 265/60/1 and 575/60/3 voltages.

***AHRI/ASHRAE/ISO 13256-2 English (IP) Units***

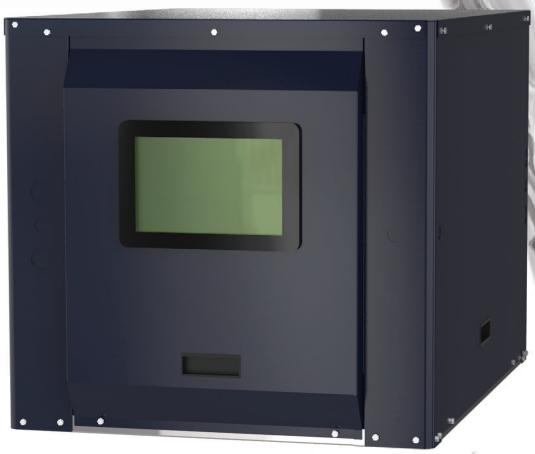
| Model | Capacity Modulation | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Cooling 86°F Source 53.6°F Load | | Heating 68°F Source 104°F Load | | Cooling 59°F Source 53.6°F Load | | Heating 50°F Source 104°F Load | | |
| | | Load Gpm | Source Gpm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Energy Star Compliant |
| **018** | Single | 5 | 5 | 16,400 | 14.0 | 22,200 | 4.5 | 18,800 | 22.9 | 18,500 | 3.7 | Yes |
| **025** | Single | 7 | 7 | 23,700 | 13.6 | 32,800 | 4.6 | 26,700 | 21.2 | 27,100 | 3.8 | Yes |
| **040** | Single | 10 | 10 | 35,900 | 15.5 | 47,900 | 4.8 | 40,900 | 23.4 | 39,100 | 3.9 | Yes |
| **050** | Single | 15 | 15 | 49,800 | 13.9 | 65,000 | 4.4 | 55,600 | 21.6 | 54,200 | 3.7 | Yes |
| **060** | Single | 18 | 18 | 55,400 | 13.6 | 78,000 | 4.7 | 62,500 | 20.6 | 63,200 | 3.8 | Yes |
| **075** | Single | 19 | 19 | 66,000 | 12.3 | 93,100 | 4.2 | 74,100 | 18.0 | 77,100 | 3.5 | No |

| Model | Capacity Modulation | Flow Rate | | Ground Loop Heat Pump | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Cooling 77°F Source 53.6°F Load | | Heating 32°F Source 104°F Load | | |
| | | Load Gpm | Source Gpm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Energy Star Compliant |
| **018** | Single | 5 | 5 | 17,300 | 16.6 | 14,700 | 3.1 | Yes |
| **025** | Single | 7 | 7 | 24,700 | 16.1 | 22,000 | 3.1 | Yes |
| **040** | Single | 10 | 10 | 37,700 | 17.5 | 30,500 | 3.1 | Yes |
| **050** | Single | 15 | 15 | 51,500 | 16.4 | 44,200 | 3.1 | Yes |
| **060** | Single | 18 | 18 | 58,000 | 16.1 | 50,100 | 3.1 | Yes |
| **075** | Single | 19 | 19 | 68,400 | 14.0 | 61,500 | 2.9 | No |

All NSW series product is safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-1. The TruClimate 100 is also ENERGY STAR® rated.

# TRUCLIMATE 100 WATER-TO-WATER HEAT PUMP - NDW - 8-15 TON

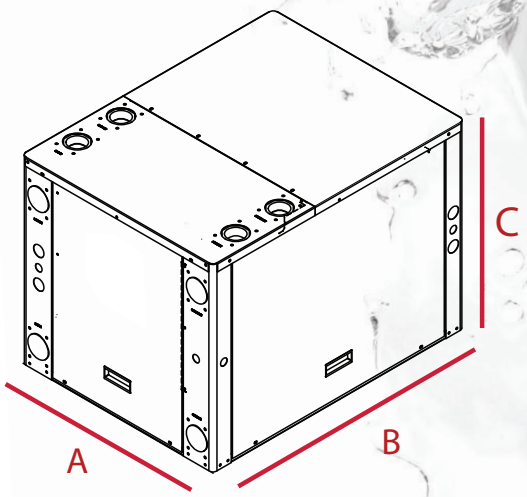
## Water-to-Water Heat Pump



### Standard Features

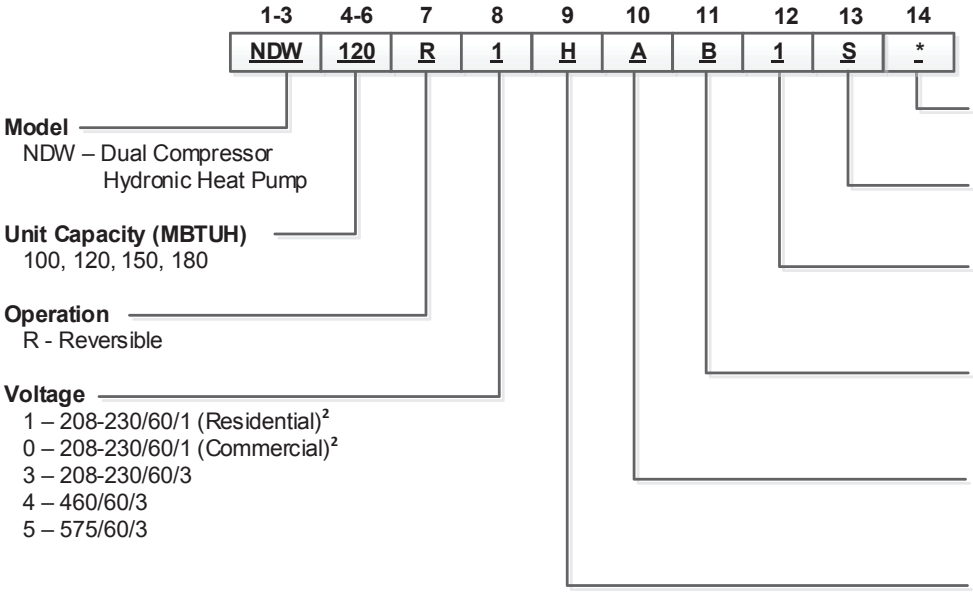
- Single phase is up to 15 tons.
- Heavy gauge cabinet
- Quiet scroll compressors in all models
- Two-dimension refrigerant piping vibration loops to isolate the compressor.
- All interior cabinet surfaces are insulated with 1/2 in. [12.7 mm] thick 1-1/2 lb [681 g] density, surface coated, acoustic type glass fiber insulation.
- Optional IntelliStart to reduce starting current
- Field switchable control box
- Aurora HydroLink Controls
- Ultra-compact cabinet
- Optional top or back mounted water lines
- Multi-density laminate lined compressor blanket designed to suppress low frequency noise.
- Removable compressor access panels.
- Quick attach wiring harnesses are used throughout for fast servicing.
- High and low pressure refrigerant service ports.
- 10” industrial touch screen HMI for easy diagnostics and commissioning
- All refrigerant brazing is performed in a nitrogen purge environment.
- Computer controlled deep vacuum and refrigerant charging system.
- All joints are leak detected for maximum leak rate of less than 1/4 oz. per year.
- Computer bar code equipped assembly line insures all components are correct.
- All units are computer run-tested with water to verify both function and performance.

| Model | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 100-180 | in. | 25.58 | 33.6 | 24.01 |
| | cm. | 64.97 | 85.3 | 60.99 |




**The TruClimate 100 is designed to meet the high-volume water demands of today’s commercial buildings. TruClimate 100 units provide high capacity heating and cooling performance, but still deliver the features building owners have come to expect from our TruClimate line.**

# NDW OPTIONS




**Model**
NDW – Dual Compressor Hydronic Heat Pump

**Unit Capacity (MBTUH)**
100, 120, 150, 180

**Operation**
R - Reversible

**Voltage**
1 – 208-230/60/1 (Residential)[2]
0 – 208-230/60/1 (Commercial)[2]
3 – 208-230/60/3
4 – 460/60/3
5 – 575/60/3

**Vintage**
* – Factory Use Only

**Non-Standard Options**
S – Standard

**Control Box Location**
1 – Front
2 – Back

**Water Connections**
B – Back Mounted Connections
T – Top Mounted Connections

**IntelliStart™ Option**
N – None
A – IntelliStart [3]

**Controls**
H – Aurora Advanced Controls with Energy and Refrigeration Monitoring HydroZone 0 (HZO) Included
B – Aurora HydroLink2 (BACnet)[1 4]

Notes:
1 – Aurora HydroLink2 controls available for commercial units only.
2 – Dual power feed required.
3 – IntelliStart Option available for single phase voltage options only.
4 – HydroLink2 control option available to Commercial Reps only.

**Rev.:** 10 Oct 2020B

***AHRI/ASHRAE/ISO 13256-2 English (IP) Units***

| | | | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | Capacity Modulation | Flow Rate | | Cooling EST 86°F ELT 53.6°F | | Heating EST 68°F ELT 104°F | | Cooling EST 59°F ELT 53.6°F | | Heating EST 50°F ELT 104°F | | Cooling Full EST 77°F Part EST 68°F ELT 53.6°F | | Heating Full EST 32°F Part ELT 41°F ELT 104°F | |
| | | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| 100 | Full | 23 | 23 | 93,000 | 14.6 | 125,000 | 4.0 | 105,000 | 22.0 | 103,000 | 3.3 | 100,000 | 16.8 | 82,000 | 3.0 |
| | Part | 23 | 23 | 50,000 | 15.8 | 65,000 | 4.6 | 56,000 | 24.5 | 53,000 | 3.7 | 54,000 | 22.0 | 47,000 | 3.4 |
| 120 | Full | 28 | 28 | 103,000 | 14.0 | 142,000 | 4.0 | 123,000 | 21.6 | 118,000 | 3.3 | 114,000 | 16.2 | 93,000 | 3.0 |
| | Part | 28 | 28 | 58,000 | 15.5 | 76,000 | 4.4 | 65,000 | 22.4 | 62,500 | 3.7 | 63,000 | 21.1 | 55,000 | 3.4 |
| 150 | Full | 32 | 32 | 129,000 | 13.5 | 199,000 | 4.0 | 153,000 | 21.1 | 148,000 | 3.2 | 147,000 | 16.0 | 123,000 | 2.8 |
| | Part | 32 | 32 | 72,000 | 15.3 | 101,000 | 4.3 | 75,000 | 22.0 | 73,000 | 3.7 | 78,000 | 20.7 | 70,000 | 3.3 |
| 180 | Full | 36 | 36 | 150,000 | 13.3 | 221,000 | 3.9 | 175,000 | 19.8 | 173,000 | 3.1 | 165,000 | 15.8 | 139,000 | 2.7 |
| | Part | 36 | 36 | 78,000 | 15.0 | 113,000 | 4.2 | 89,000 | 20.9 | 87,000 | 3.7 | 86,000 | 18.4 | 82,000 | 3.5 |

All ratings based upon 208V operation.

All NDW Series product is safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-2. The NDW Series is also Energy Star rated.

# TRUCLIMATE 100 WATER-TO-WATER HEAT PUMP - NXW - 10-50 TON

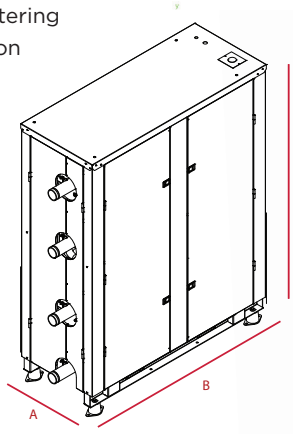
## Water-to-Water Heat Pump

### Standard Features

- Capacities ranging from 120-600 MBtu/hr output
- Complete commercial voltage selection of 208-230V/60Hz/3ph, 460/60/3, 575/60/3
- Oversized brazed plate heat exchangers offer high efficiency with industry low waterside pressure drop
- True-dual brazed plate heat exchangers provide better part load efficiencies compared to two single-circuit evaporators
- Compressor suction/discharge tubes come with braided stainless steel vibration absorbers to dampen compressor vibration on system piping
- Fork pockets and lifting points in the frame enable maneuverability for installation and shipment
- Factory installed pressure/temperature port externally accessible for improved serviceability
- Finger-touch safe power fuses provide circuit protection
- Rugged plug assembly wiring harness provides a solid yet serviceable connection for control wiring to the control panel.
- Factory installed high accuracy sensors measure system pressures and temperatures
- Superheat/subcooling, compressor run time, and entering/leaving water temperatures are displayed through the 3D high definition images of the color touch HMI.
- Set point control via factory installed leaving/entering water temperatures or remote temperature option
- Phase guard monitor provides phase reversal, phase imbalance, and loss of phase protection

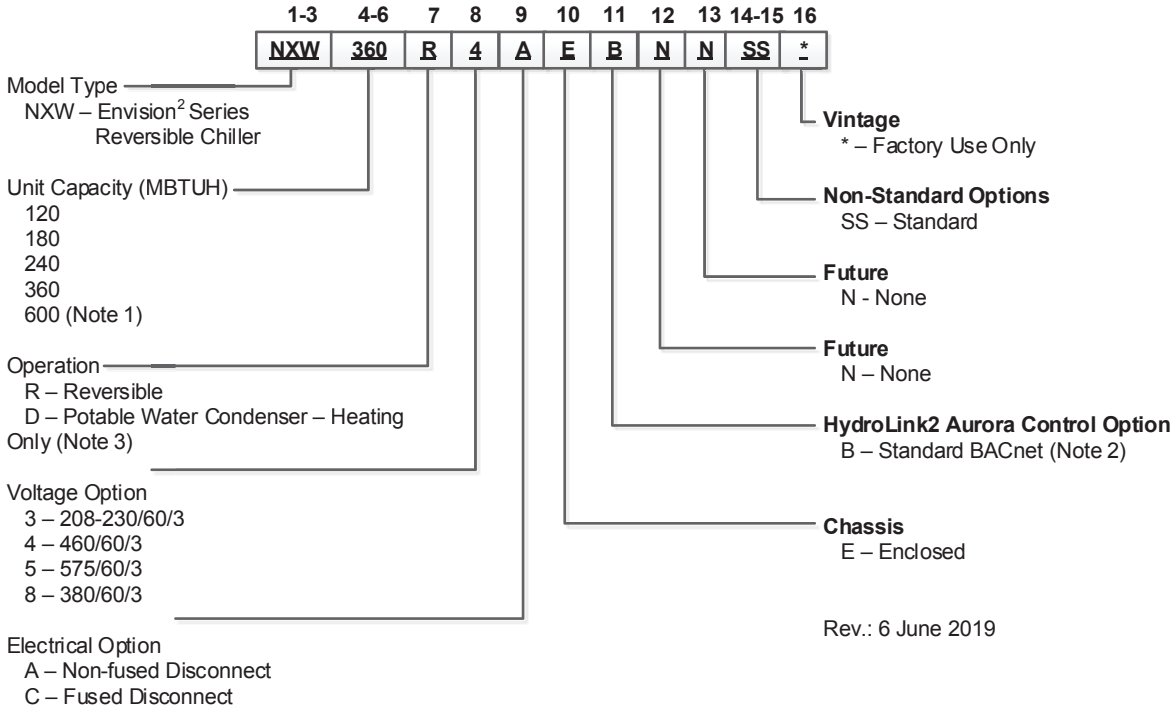
Wide array of standard factory installed options including:

- Factory mounted, internally wired, rotary-style, non-fused disconnect
- HydroLink Aurora controls with BACnet, or non-communicating options.
- **Domestic Hot Water (10-30 ton)**
- HydroLink Supervisory Controller




| Vertical Cabinets | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 120-180 | in. | 24.1 | 42.5 | 57.3 |
| | cm. | 61.2 | 108.0 | 145.6 |
| 240-360 | in. | 24.1 | 50.5 | 64.2 |
| | cm. | 61.2 | 128.3 | 163.1 |
| 600 | in. | 24.1 | 58.5 | 71.1 |
| | cm. | 61.2 | 148.6 | 180.6 |

**The TruClimate 100 Water-to-Water Heat Pump with premium efficiency is now available with HydroLink Aurora controls platform which provides numerous factory installed options to provide better service, diagnostic, and monitoring ability.**




Notes:
1. NXW600 not available in 208-230/60/3 option.
2. Standard controls option includes BACnet and standalone control.
3. Potable Water units only available with unit capacity of 120, 180, 240 and 360 MBTUH.

***AHRI/ASHRAE/ISO 13256-2 English (IP) Units***

| Model | Capacity Modulation | Flow Rate | | Water Loop Heat Pump | | | | Ground Water Heat Pump | | | | Ground Loop Heat Pump | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Cooling EWT 86°F | | Heating EWT 68°F | | Cooling EWT 59°F | | Heating EWT 50°F | | Cooling EWT 77°F | | Heating EWT 32°F | |
| | | gpm | cfm | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP | Capacity Btuh | EER Btuh/W | Capacity Btuh | COP |
| 120 | Full | 40 | 40 | 145,400 | 16.0 | 189,000 | 4.5 | 161,400 | 22.5 | 157,200 | 3.8 | 147,700 | 17.3 | 118,800 | 3.0 |
| | Part | 40 | 40 | 79,300 | 17.4 | 101,500 | 5.1 | 84,400 | 24.1 | 84,600 | 4.4 | 82,900 | 22.2 | 69,800 | 3.3 |
| 180 | Full | 60 | 60 | 201,300 | 15.9 | 263,700 | 4.6 | 225,100 | 21.5 | 217,000 | 3.9 | 208,300 | 17.2 | 173,400 | 3.2 |
| | Part | 60 | 60 | 105,500 | 17.0 | 138,700 | 5.0 | 177,700 | 23.0 | 112,600 | 4.2 | 115,400 | 20.5 | 100,900 | 3.5 |
| 240 | Full | 80 | 80 | 265,700 | 16.0 | 347,500 | 4.7 | 306,900 | 23.4 | 280,600 | 3.9 | 275,300 | 17.9 | 219,400 | 3.3 |
| | Part | 80 | 80 | 140,100 | 16.7 | 182,100 | 5.0 | 163,600 | 24.6 | 141,400 | 4.2 | 150,000 | 21.6 | 115,800 | 3.5 |
| 360 | Full | 120 | 120 | 394,700 | 16.0 | 487,600 | 4.3 | 452,300 | 22.1 | 420,300 | 4.0 | 410,200 | 17.5 | 339,300 | 3.3 |
| | Part | 120 | 120 | 206,000 | 16.9 | 256,000 | 4.6 | 241,100 | 23.2 | 214,400 | 4.3 | 223,200 | 21.2 | 183,500 | 3.7 |
| 600 | Full | 200 | 200 | 602,000 | 15.2 | 798,000 | 4.3 | 756,000 | 19.9 | 622,000 | 4.0 | 633,000 | 16.5 | 533,100 | 3.4 |
| | Part | 200 | 200 | 313,300 | 16.1 | 419,000 | 4.6 | 407,000 | 20.9 | 318,000 | 4.3 | 376,000 | 19.6 | 303,900 | 3.7 |

All NXW Series product is Safety listed under UL1995 thru ETL and performance tested in accordance with standard AHRI/ISO 13256-2.

# TRUCLIMATE 300 WATER-COOLED CHILLER WITH HYBREX TECHNOLOGY

## WCXD/WCXV - 30-50 TON

### WATER-COOLED CHILLER

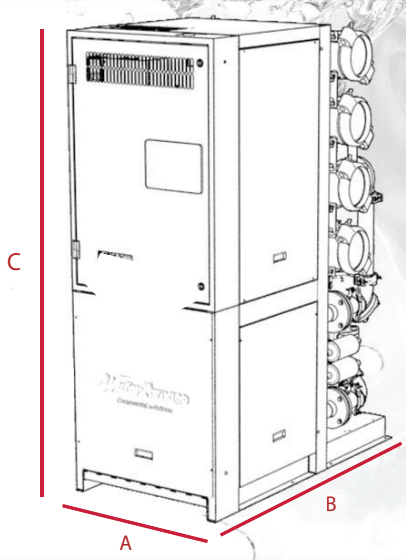
### Standard Features

- Capacities - 30-50Ton cooling output
- Voltages: 208-230V/60Hz/3ph and 460/60/3
- Robust coaxial heat exchanger on the condenser side reduces fouling and clogging.
- True dual/independent circuit configuration
- Standard Aurora HydroLink 2 microprocessor controls (robust compressor envelop protection control, head pressure control, max evaporator pressure control, “Delta-T” control, advanced refrigeration monitoring)
- Color touch-screen interface on lead primary unit with advanced trending and diagnostics, and standard provisions for remote access.
- Multiple units can be staged together using the HybrEx Supervisory controller located in the primary unit with a complete plug and play solution for ease of installation and single point of communication to the BAS.
- Variable Speed Lead Compressor or optional Dual Variable speed compressor solutions for increase in load tracking capabilities and part load efficiencies.

### Factory Installed Options

- Factory tuned electronic expansion valve.
- Single point disconnect breaker panel with included cut-to-length wire runs for powering each unit.
- Optional high accuracy flow meter on each loop providing the ability to monitor flow and adding additional freeze detection level.

| No Header Rack | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 030 | in. | 28.0 | 54.62 | 72.0 |
| | cm. | 71.12 | 138.73 | 182.88 |
| 050 | in. | 33.0 | 64.0 | 72.07 |
| | cm. | 83.82 | 162.56 | 183.05 |

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Water-Cooled Water Chilling and Heat Pump Water-Heating Packages AHRI Standards 550/590 and 551/591

WaterFurnace’s TruClimate WCX products are certified by AHRI to AHRI Standard 550/590.

**This product features the ultimate in serviceability with its highly compact and service driven design. The design allows up to 12 modular units to be installed together using the integrated 4 pipe header rack, “plug and play” controls for easy installation and ultimate troubleshooting and safety capabilities.**

## WCXDM030A3AABS3S6GC100NSSS

| 1 | 2-3 | 4 | 5 | 6-8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 - 19 | 20 | 21 | 22 | 23 | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W | CX | D | M | 030 | * | 3 | A | A | B | S | 3 | N | 6GC | 1 | 0 | 0 | N | SSS |

**Brand**
W – WaterFurnace

**Model Type**
CX – Coax Chiller Cooling Only

**Compressor Type**
D – Dual Scroll
V – Variable Speed Lead Scroll

**Cabinet Configuration**
M – Modular

**Unit Capacity (Nominal Tons)**
030 , 050

**Vintage**
* – Factory Use Only

**Voltage**
3 – 208-230/60/3
4 – 460/60/3

**Electrical Option**
A – Non-Fused Disconnect
C – Fused Disconnect
D – Power Distribution Block (no disconnect)

**Control Option**[1]
A – Secondary Unit
B – Secondary Unit (Left Single Point Disconnect Panel)
C – Secondary Unit (Right Single Point Disconnect Panel)
D – Primary Unit (Master Controller)
X – Primary Unit (Master Controller and Left Single Point Disconnect Panel)
W – Primary Unit (Master Controller and Right Single Point Disconnect Panel)

**Sound Kit Option**
A – None
B – Compressor Sound Blanket

**Cabinet Option**
S – Standard

**Refrigeration Option**
3 – EEV

**Evaporator Option**
N – No Strainer
S – Standard (Strainer)

**Water Control Option**
6GC – Grooved 6in integrated 4 pipe

**Coax Condenser Option**
1 – No strainer
2 – Strainer

**Unit Designator**
1 – Unit 1 Primary Unit Only
2 – Unit 2 Secondary Unit Only
3 – Unit 3 Secondary Unit Only
4 – Unit 4 Secondary Unit Only
5 – Unit 5 Secondary Unit Only
6 – Unit 6 Secondary Unit Only
7 – Unit 7 Secondary Unit Only
8 – Unit 8 Secondary Unit Only
9 – Unit 9 Secondary Unit Only
A – Unit 10 Secondary Unit Only
B – Unit 11 Secondary Unit Only
c – Unit 12 Secondary Unit Only

**Future Option**
0 – Not Applicable

**Future Option**
N – Not Applicable

**Non-Standard Options**
SSS – None

## SPLD4030L410*

| SP | L | D | 4 | 030 | L | 4 | 1 | 0 | * |
|---|---|---|---|---|---|---|---|---|---|

**Model**
SP – Single Point Disconnect Panel

**Fault Current Protection**
L – Standard Fault Current - 5kA SCCR[1]

**Chiller Model**[4]
C – WCX Hybrid Chiller Primary VS
D – WCX Hybrid Chiller Secondary VS
E – WCX Hybrid Chiller Primary Fixed
F – WCX Hybrid Chiller Secondary Fixed

**System Voltage**
3 – 208-230/60/3
4 – 460/60/3

**Unit Size**
030 – 30Ton
050 – 50Ton

**Configuration**[3]
L – Left Configuration
R – Right Configuration

**Vintage**
* – Factory Use Only

**Future Use**
0 – Future Use

**Number of Units Fixed**[2]
0 – None
1 – Single Fixed Speed
2 – Two Fixed Speed
3 – Three Fixed Speed
4 – Four Fixed Speed
5 – Five Fixed Speed
6 – Six Fixed Speed
7 – Seven Fixed Speed
8 – Eight Fixed Speed
9 – Nine Fixed Speed
A – Ten Fixed Speed

**Number of Units VS**[2]
0 – None
1 – One Variable Speed
2 – Two Variable Speed
3 – Three Variable Speed
4 – Four Variable Speed
5 – Five Variable Speed
6 – Six Variable Speed
7 – Seven Variable Speed
8 – Eight Variable Speed
9 – Nine Variable Speed
A – Ten Variable Speed

**Notes:**
1. Standard Fault Current 5kA SCCR option includes no feeder protection and individual breakers for each chiller.
2. Availability Chart shows which options are available as standard offering. The panel is limited based on maximum of 10 breakers and 950MCA.
3. Left of Right Configuration designates the location of the single with respect to the bank of units.
4. Single Point panel is selected in conjunction with “Secondary Unit” only when a second panel in required for the bank of units.

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Water-Cooled Water Chilling and Heat Pump Water-Heating Packages AHRI Standards 550/590 and 551/591

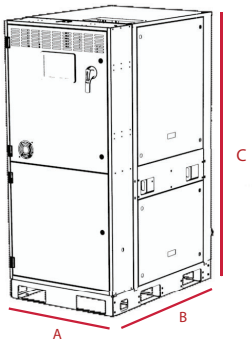
# TRUCLIMATE 500/700 WATER-COOLED CHILLER

## WCH/CR - 20-80 TON

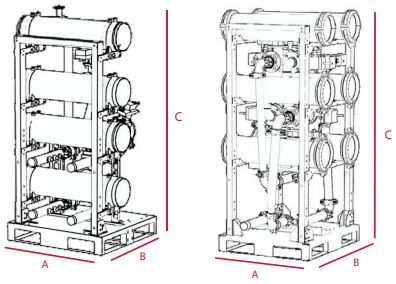
### WATER-COOLED CHILLER

### Standard Features for the TruClimate 500 Chiller

- Capacities ranging from 20-80 ton output
- Complete commercial voltage selection of 208-230V/60Hz/3ph, 460/60/3, 575/60/3
- Oversized brazed plate heat exchangers offer high efficiency with industry low waterside pressure drop
- True-dual circuit brazed plate heat exchangers provide better part load efficiencies compared to two single circuit evaporators
- Heavy gauge, galvanized steel enclosure with quick-turn latched access panels that can easily be removed for ease of service
- Fork pockets and lifting points in the frame enable maneuverability for installation and shipment
- Circuit breakers provide circuit protection and minimal downtime.
- Removable 4 pipe rack in a wide variety of
- Configurations to suit any building's needs
- Standard Aurora Hydrolink microprocessor controls include set-point control, advanced refrigeration monitoring, a standard color touch-screen interface, advanced trending and diagnostics, and standard provisions for remote access using BACnet, LonWorks or standalone options.
- Multiple units can be staged together using the Remote HydroLink Supervisory Controller for automatic and optimal staging of all units in a system. Supervisory controller can also accommodate additional controls including flow meters, pump control, power analyzers, and additional sensors.
- Refrigeration modules & header rack can ship separately, eliminating downtime & lowering first installed cost.




| No Header Rack | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 020-080 | in. | 33.5 | 46.3 | 73.5 |
| | cm. | 85.09 | 117.60 | 186.69 |

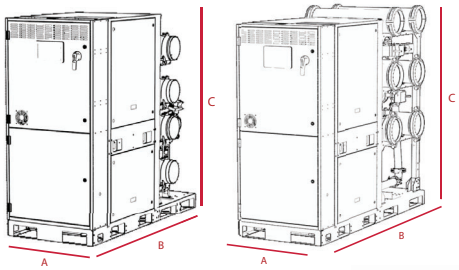



TruClimate 500 TruClimate 700

| Header Rack | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 020-080 | in. | 34.0 | 38.0 | 73.29 |
| | cm. | 86.36 | 96.52 | 186.15 |

### Additionally, the TruClimate 700 Chiller includes:

- Patented 6-pipe header rack design for simultaneous heating and cooling operation with a single unit.




TruClimate 500 TruClimate 700

| With Header Rack | | Overall Cabinet Dimensions | | |
|---|---|---|---|---|
| | | A (WIDTH) | B (DEPTH) | C (HEIGHT) |
| 020-080 | in. | 34.0 | 74.11 | 73.29 |
| | cm. | 86.36 | 188.23 | 186.15 |

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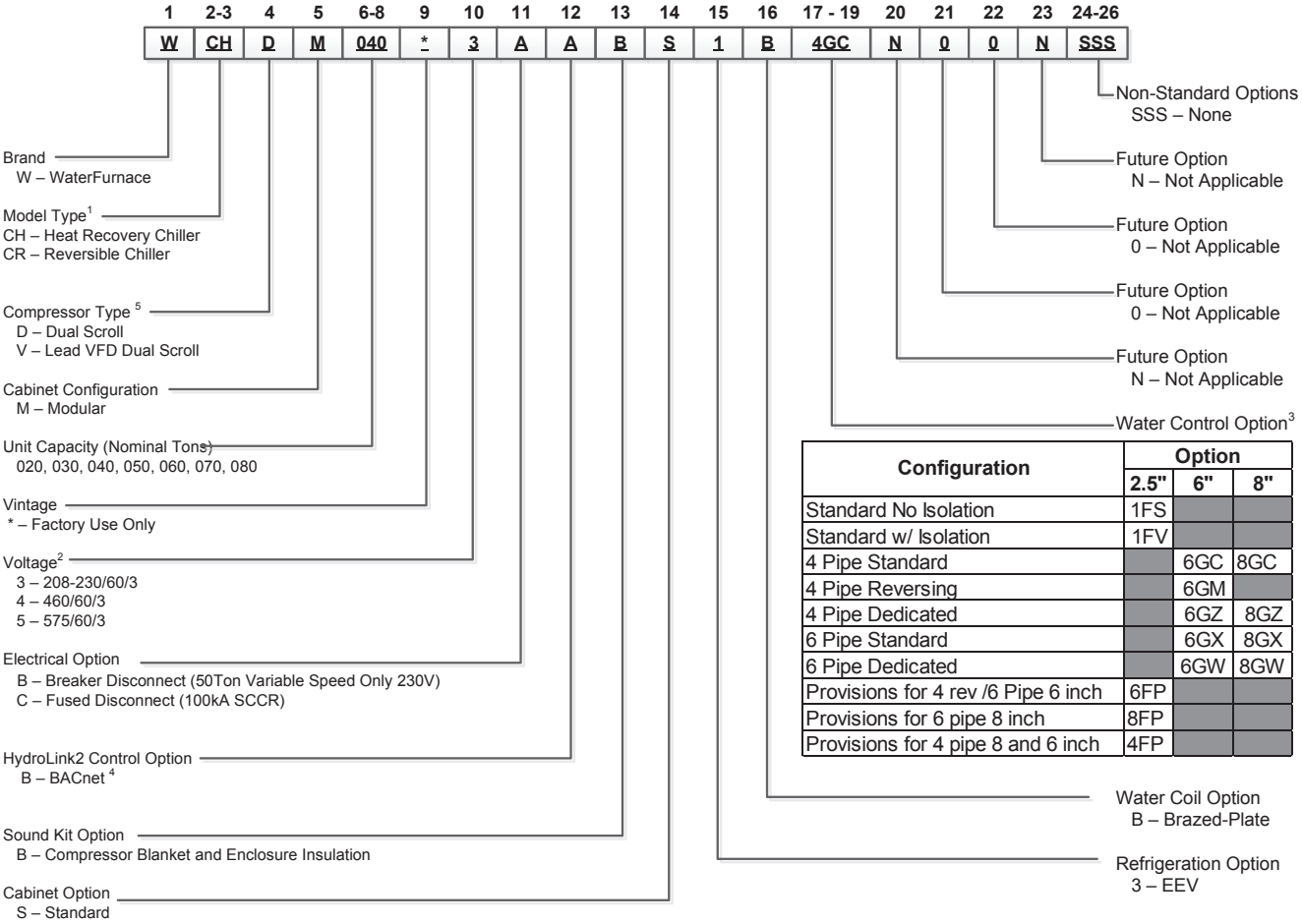
Water-Cooled Water Chilling and Heat Pump Water-Heating Packages AHRI Standards 550/590 and 551/591

WaterFurnace's TruClimate WCH/WCX products are certified by AHRI to AHRI Standard 550/590.

**The modular design of this product allows units to be installed on an as-needed basis, and the detachable pipe rack allows for service on each module without compromising the rest of the system.**

# WCHDM040B3AABS1B4GCN00NSSS




| Configuration | Option | | |
|---|---|---|---|
| | 2.5" | 6" | 8" |
| Standard No Isolation | 1FS | | |
| Standard w/ Isolation | 1FV | | |
| 4 Pipe Standard | | 6GC | 8GC |
| 4 Pipe Reversing | | 6GM | |
| 4 Pipe Dedicated | | 6GZ | 8GZ |
| 6 Pipe Standard | | 6GX | 8GX |
| 6 Pipe Dedicated | | 6GW | 8GW |
| Provisions for 4 rev /6 Pipe 6 inch | 6FP | | |
| Provisions for 6 pipe 8 inch | 8FP | | |
| Provisions for 4 pipe 8 and 6 inch | 4FP | | |

Notes:
1 – “CH” and “CR” models available from 20-80 ton.
2 – See electrical availability table for detailed offering by voltage.
3 – Standard no isolation and standard w/ isolation supplied with 2-½” flange connection.
All 4 pipe and 6 pipe options with grooved connection standard, flange conversion available.
All “Provisions” water control options allow the module to be field connected to the specific header rack and with this option the header rack must be purchased separately from the unit. See standalone header rack nomenclature.
“4 Pipe Dedicated” can only be used in conjunction with “6 Pipe Dedicated”.
4. Standard control option includes BACnet and standalone control.
5. Lead VFD Option available only in 30Ton and 50Ton Heat Recovery Option and in 30Ton reversible option.

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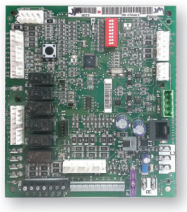
# Aurora Controls Network

**Aurora Control Network (ACN)**

The Aurora Control Network (ACN) is a sophisticated, communicating control platform designed with a modular approach to deliver powerful features that are fit for use on a wide range of applications such as standard fixed-speed, water-source heat pumps, variable speed compressor technology up to dedicated outdoor air system (DOAS) units with exhaust air energy recovery. What makes ACN so powerful is modularity, ability to communicate, and firmware that is developed for each application. ACN is a complete commercial comfort control system that brings all aspects of the HVAC system into one cohesive module network. Each Aurora module will contain logic to control all features connected to it.

The Aurora Control functions on 4-wire communication done through the ModBus protocol that is an open source protocol that has become more popular with equipment manufacturers for use in HVAC equipment.  The Aurora has one slave 'bus' for the microprocessor boards and accessory devices on which it communicates.

Here are the main devices of that make up the Aurora Control Network:

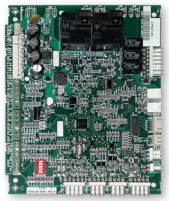


**Aurora Base Control (ABC)**

Aurora Base Control (ABC) is the main board that controls the basic functions of compressor, fan motor, RV, thermostat and other basic component control.

**Aurora Interface Diagnostic (AID) Tool**

Aurora Interface Diagnostic (AID) Tool is a hand held device that can be plugged into any ABC board for quick setup, configuration, diagnostic and troubleshooting capability.



**Aurora Expansion Board (AXB)**

Aurora Expansion Board (AXB) is added to an ABC to include features like compressor current monitoring, loop pump slaving, intelligent hot water assist control, VS pump control, and also allows optional energy, refrigeration and performance monitoring add-on sensor kits.

**Aurora WebLink (AWL)**

Aurora Web Link (AWL) is a device that can be added on for 'black box capability to record all sensor and control events for forensic diagnosis onto an SD memory card and for wireless connection to the internet. Note: This is not available on all units or units with building automation connection.


**Universal Protocol Converter (UPC)**
Universal Protocol Converter (UPC) is designed to be added-on to an Aurora Control system so it can be integrated into the Building Automation System (BAS) with ease. The UPC converts Modbus communication from the Aurora Control System to BACnet, LON, or Open N2 to a building automation system.

**Aurora Touch UPC (ATU)**
Aurora Touch UPC (ATU) is diagnostic device much like the AID Tool only that it is specifically designed to work with UPC add-on. With the ATU, there is now diagnostic capability to directly plug into a compatible thermostat or UPC to troubleshoot the heat pump.


**Thermostats**
Communicating thermostat models are available for connection to the Aurora System with varying features such as faults in plain English, color touch screen option, USB photo capability, etc.


**IntelliZone2 (IZ2)**
IntelliZone2 (IZ2) is added to the system but requires the AXB for a dedicated communication port specifically designed for the IZ2. IZ2 allows for up to 6 zones with variable speed compressors. This option cannot be used when the unit is equipped with UPC option.


**IntelliZone2 BACnet**
IntelliZone2 (IZ2) BACnet provides the same features and benefits of the IZ2 but adds the ability to communicate over BACnet to the building automation system. IZ2 BACnet requires the heat pump to be built with the UPC option.

**Other Communicating Components:**

- Variable speed compressor drive (VS Drive) drive communicates with the ABC for commands and returns status, sensor values, and faults.
- Electronic Expansion Valve (EEV) board is a small board connected to the AXB which controls the EEV via pressure and temperature sensors and a stepper motor. This board is only used on larger tonnage equipment. Smaller tonnage EEVs are controlled directly by the AXB.
- Expansion for other communicating components such as ECM Fan Motor and other devices for fit for use application.
- UPC sensors communicate on the RNet to the UPC which offers the advantage of troubleshooting for any UPC thermostat or sensor. For more information see the literature guide table for additional documentation

# Optional Accessories - Thermostats

A wide array of thermostats are available for the standalone operation of the system. These include both 24VAC traditional thermostats as well as 4 wire communicating versions.

1.

**TP32W03**

2.

**TP32U03-05**

3.

**TPCC32U01**

4.

**TP32S01-02**

5.

**TA32V01C-06C**

6.

**ZS Zone Sensors Aurora UPC**

| | Illustration | Heat/Cool Stages | Color/BW | Programmable | Touch-screen | Text Based | Fault Flash | ComfortTalk | Dual Fuel | Humidity | 4 Wire | Ext Sensor | Communicating | BACnet | LonWorks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TP32W03** | 1 | 3/2 | BW | • | • | | • | | • | | | • | | | |
| **TP32U03** | 2 | 3/2 | BW | • | | • | | • | • | | | • | | | |
| **TP32U04** | 2 | 3/2 | BW | • | | • | | • | • | • | | • | | | |
| **TP32U05** | 2 | 3/2 | BW | • | | • | | • | • | | • | • | | | |
| **TPCC32U01** | 3 | 3/2 | Color | • | • | • | | • | • | • | • | • | • | | |
| **TPCM32U03A** | 2 | 3/2 | BW | • | | • | | • | • | | • | • | • | | |
| **TPCM32U04A** | 2 | 3/2 | BW | • | | • | | • | • | • | • | • | • | | |
| **TP32S01** | 4 | 3/2 | BW | • | | • | • | • | • | | | • | | | |
| **TP32S02** | 4 | 3/2 | BW | • | | • | • | • | • | • | | • | | | |
| **TA32V01C** | 5 | 3/2 | BW | | | | | | | • | | • | | • | • |
| **TA32V02C** | 5 | 3/2 | BW | | | | | | | • | | • | | • | • |
| **TA32V03C** | 5 | 3/2 | BW | | | | | | | • | | • | | • | • |
| **TA32V04C** | 5 | 3/2 | BW | • | | | | | | • | | • | | • | • |
| **TA32V05C** | 5 | 3/2 | BW | • | | | | | | • | | • | | • | • |
| **TA32V06C** | 5 | 3/2 | BW | • | | | | | | • | | • | | • | • |
| **ZS Sensors** | 6 | 3/2 | BW | • | | | | | | Opt | • | | | | |

NOTE: All thermostats include auto changeover function.

## Aurora UPC Zone Sensors

1.

**ZS**

2.

**ZS Plus**

3.

**ZS Pro**

4.

**ZS Pro-F**

| | Illustration | Temp, CO2, humidity/VOC Options | Aurora Touch/ Android Tablet Access Port | Occupancy Status LED | Occupancy Override Button | Setpoint Adjust | Large LCD Dispay | Alarm/Ault Indicator | °F or °C Button |
|---|---|---|---|---|---|---|---|---|---|
| **ZS Standard** | 1 | • | • | | | | | | |
| **ZS Plus** | 2 | • | • | • | • | • | | | |
| **ZS Pro** | 3 | • | • | • | • | • | • | • | |
| **ZS Pro-F** | 3 | • | • | • | • | • | • | • | • |

# IntelliZone2 Commercial and BACnet Comfort Zoning Systems

Commercial properties come with complex heating and cooling challenges—especially in multi-use buildings with a variety of spaces, purposes, and zones. To maximize a property's potential, WaterFurnace's IntelliZone2 Comfort Zoning System makes it easy to control and regulate temperatures in multiple zones.

With the IntelliZone2 system, a single water source heat pump can be used to support up to six zones, which utilizes less equipment for a lower total cost. With fewer units needed, more space is available in the mechanical room and can be used for other purposes.

Additionally, a BACnet version is available for the IntelliZone2 system. It offers seamless integration into building automation systems for multi-zone control in more complex commercial properties.

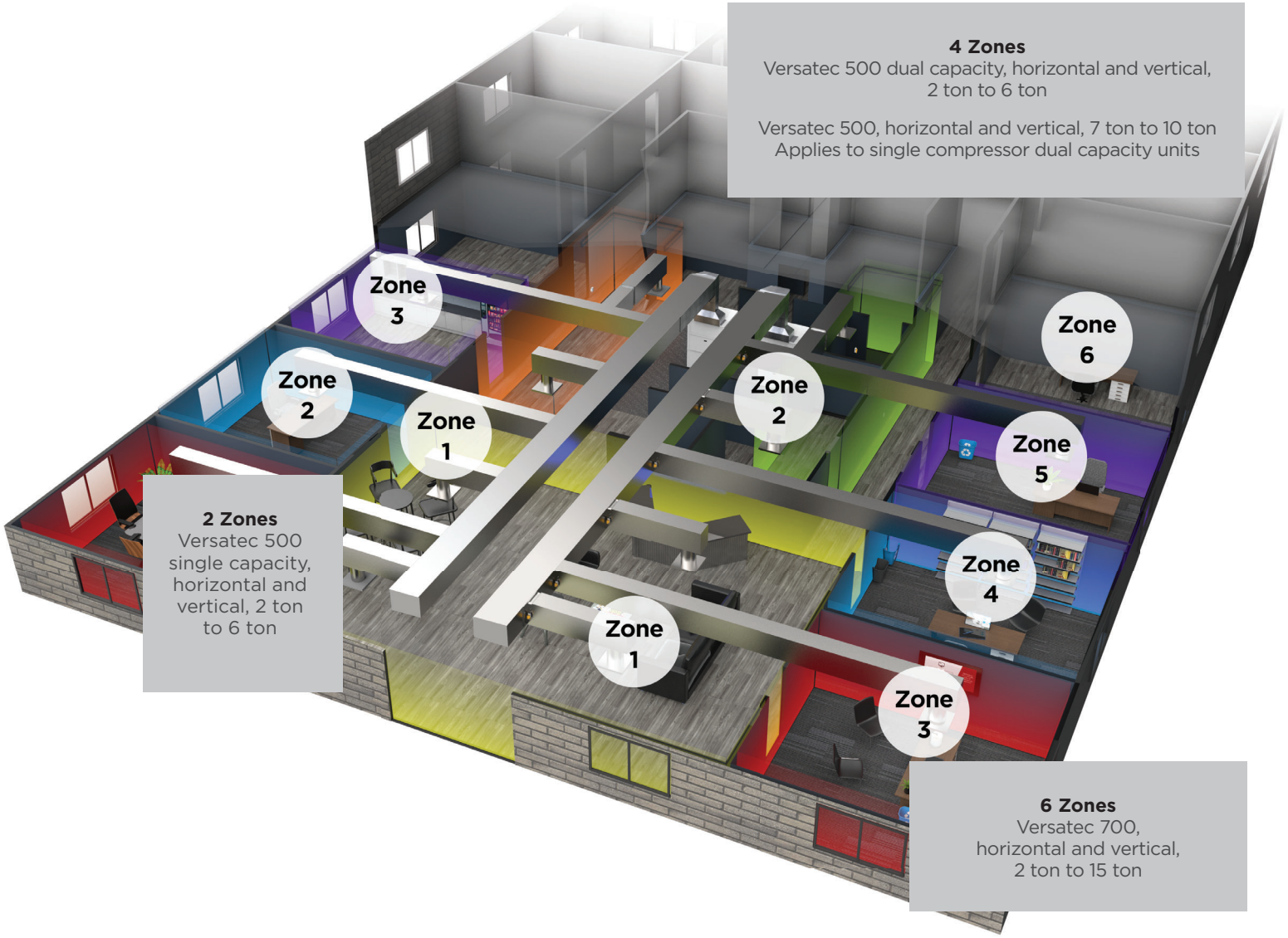
Best of all, unlike zoning control equipment made by other manufacturers, the IntelliZone2 Comfort Zoning System was engineered and designed by and for WaterFurnace—providing peace of mind and reliable performance with WaterFurnace water source heat pumps.

The IntelliZone2 System is compatible with a wide range of water source heat pumps, including:

*Versatec 700 2-15 Ton*

*Versatec 500 7-10 Ton*

*Versatec 500 2-6 Ton*




**4 Zones**
Versatec 500 dual capacity, horizontal and vertical, 2 ton to 6 ton

Versatec 500, horizontal and vertical, 7 ton to 10 ton
Applies to single compressor dual capacity units

**2 Zones**
Versatec 500 single capacity, horizontal and vertical, 2 ton to 6 ton

**6 Zones**
Versatec 700, horizontal and vertical, 2 ton to 15 ton

# IntelliZone2 Components


**IntelliZone2 Relay Board (Firmware Version 2.01 or Later)**

The IntelliZone2 relay board provides basic relay logic for the damper operation and serves as a common connection point for all IntelliZone2 thermostats and the heat pump.

**IntelliZone2 MasterStat**

The IntelliZone2 MasterStat is the master control for the system and has all of the programming for operation. It is a 4.3 in. communicating color touch screen device that also functions as a zone thermostat for Zone 1. Optional remote sensor capability is also available.

**IntelliZone2 ZoneStat (Optional)**

The IntelliZone2 ZoneStat is a zone thermostat option for any of Zones 2 through 6. It has full setback capability and communicates to the IntelliZone2 system.



**IntelliZone2 SensorStat (Optional)**

The IntelliZone2 SensorStat is a zone thermostat option for any of Zones 2 through 6. It has full setback capability (through the MasterStat interface only) and communicates to the IntelliZone2 system.

**IntelliZone2 Outdoor Sensor**

The IntelliZone2 Outdoor Sensor measures the outdoor temperature and communicates to the IntelliZone2 system. This temperature is displayed on the MasterStat, and also used to balance response as well as auxiliary electric heat use. The Outdoor Sensor is included in every IntelliZone2 kit.

**TPCC32U01 (Optional) (Firmware Version 3.01 or Later)**

The TPCC32U01 is a 4.3in communicating color touch screen device that can be used as a zone thermostat for zones 2 through 6. It has full set back capability and communicates to the IntelliZone2 System.

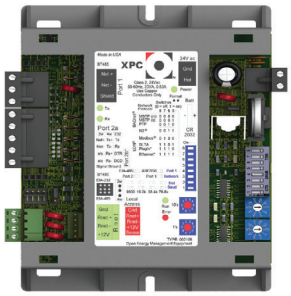
**SensorStat-Remote-Kit (Optional)**

The SensorStat-Remote-Kit is an option for an invisible thermostat installation and communicates with the IntelliZone2 relay panel. The kit will include the SensorStat Remote, TSU03 (mud in sensor) and wire nuts. This kit will monitor the zone temperature in zones 2 through 6. All set point adjustments are made at the MasterStat.

# IntelliZone2 BACnet Components


**IntelliZone2 BACnet Zoning Board**

The IntelliZone2 BACnet zoning board is the master control for the system, has much of the programming for operation, provides basic relay logic for the damper operation and serves as a common connection point for the IntelliZone2 XPC Control and the heat pump.




**IntelliZone2 BACnet XPC Control**

The IntelliZone2 BACnet XPC Control provides the BACnet interface for the system to the BAS. It is a communicating device that connects to all zone sensors.

**IntelliZone2 BACnet Zone Sensors**

The IntelliZone2 BACnet Zone Sensors are used for all zones. Sensors are available with humidity, CO2 and VOC options as well as with and without temperature display and setpoint adjustment controls.

Note: Only one zone sensor with a CO2 or VOC option may be used per system.

**IntelliZone2 Damper System**

The IntelliZone2 BACnet Damper Systems come in round or rectangular construction with 2 or 3-wire accuators.

Manufactured by
WaterFurnace International, Inc.
9000 Conservation Way
Fort Wayne, IN 46809
www.waterfurnace.com

**PC1550EW** **04/22**

Product: **Commercial Products Specification Catalog**

WaterFurnace HVAC Systems
**Built in the U.S.A**