

Commercial Product Catalog

LEADING THE GEOTHERMAL INDUSTRY, WATERFURNACE IS DEDICATED
TO INNOVATION, QUALITY AND CUSTOMER SATISFACTION



www.waterfurnace.com/commercial

Table of Contents

About Us	5
Quick Ship	6
Product Overview.....	8
Complete Commercial Product Line Water-to-Air.....	10
Complete Commercial Product Line Water Cooled Chillers	12
Commercial Solutions For Every Job.....	13
Features	14
Versatec Variable Speed 3-6 Ton	16
Versatec Compact Series	18
Versatec Ultra Series	20
Envision ² Compact Series.....	22
Envision XL Series	24
Envision 30 ton Series.....	26
Versatec Variable Speed 10-15 Ton	28
Versatec Packaged Rooftop Series.....	30
Envision Low Sill Console Series	32
Envision Console Series.....	34
Versatec Ultra NSW Series	36
Envision NDW Series	38
Envision ² NXW Reversible Chiller Series	40
WC Series Modular Scroll Chiller.....	42
VS Dual Screw Heat Recovery Chiller.....	44
Aurora Controls.....	46
Aurora UPC for BAS Integration	48
Aurora Features	49
Optional Accessories - Thermostats.....	50
Optional Accessories - Zoning Systems.....	51

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 waterloop 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 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 9001:2008 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 is 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 bar coded; eliminating possibility of mismatched parts built into unit
- All assembly technicians thoroughly trained in proper quality procedures
- All units have model number and serial number embedded in control for local or remote retrieval
- WaterFurnace International, Inc. is an ISO 9001:2008 certified manufacturing facility
- WaterFurnace International engineering labs are ISO 17025 accredited
- 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



Envision XL
7-10 Day Lead Time

Envision2 Compact
3-5 Day Lead Time

Versatec Compact
3-5 Day Lead Time

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 Compact 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

Envision² Compact 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

ENVISION XL 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, 240, 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 or Lon)
- Stainless Steel Condensate Drain Pan

Vertical Model	Width	Depth	Height
095 & 120	61.3"	34.0"	58.0"
240	88.1"	34.0"	68.0"

Horizontal Model	Width	Depth	Height
095 & 120	89.0"	38.0"	23.8"

WATERFURNACE COMMERCIAL



Versatec Compact (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 compressors
- Compact vertical/horizontal cabinet
- PSC/5 spd ECM/VS ECM Fan Motors



Versatec Ultra (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
- Compact vertical/horizontal cabinet
- PSC/5 spd ECM/VS ECM Fan Motors



Envision² Compact (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
- Compact vertical/horizontal cabinet
- PSC/5 spd ECM/VS ECM Fan Motors

Envision XL (NL/NX) — 7-25 ton



- Water-to-Air Packaged Unit
- 13.8 to 18.9 EER (WLHP)
- 16.2 to 21.0 EER (GLHP)
- Dual scroll compressor circuits
- Compact vertical/horizontal cabinet
- Belt Drive Fan Motors/(optional VFD drive)
- Take-apart vertical cabinet (15-25 ton)
- Integrated Plenum fan direct drive ECM motor (7-30 ton)



Envision (WA5D) — 30 ton

- Water-to-Air Packaged Unit
- 12.1 to 12.7 EER (WLHP)
- 13.1 to 13.8 EER (GLHP)
- Dual scroll compressor circuits
- Take-apart vertical cabinet
- VFD drive with forward curve fan
- Integrated Plenum fan direct drive ECM motor



Versatec Variable Speed (UV) — 3-15 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%)
- Compact vertical/horizontal/downflow cabinet
- Integrated EC backward curve plenum fan motors with EEV

COMPLETE PRODUCT LINE



Versatec Packaged (UR) — 3-30 ton

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



Low Sill Console (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



Envision Console (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 Ultra Hydronic (NSW) — 1.5-6 ton

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



Envision Dual Hydronic (NDW) - 8-15 ton

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



Envision Reversing Chiller (NXW) - 10-50 ton

- Reversible Water-to-Water Unit
- 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
- R410A



WC Modular Scroll Chillers (WC) - 20-80 ton

- Water-Cooled Chiller
- Chiller Ratings:
Full Load: 0.71 kw/ton
IPLV: 0.54 kw/ton
- Dual single speed scroll compressors
- Optional 4 or 6 pipe rack
- HydroLink Aurora Controls w/large color tablet
- R410A



Dual VS Screw Chiller (WCHV) - 175-275 ton






- Water-Cooled Chiller
- Heat Recovery Capable
- Chiller Ratings:
Chiller: 0.73 kw/ton
IPLV: 0.46 kw per ton
- Variable speed dual screw permanent magnet motor Compressors
- HydroLink Aurora Controls w/large color touch tablet
- R134a

Water-to-air Product

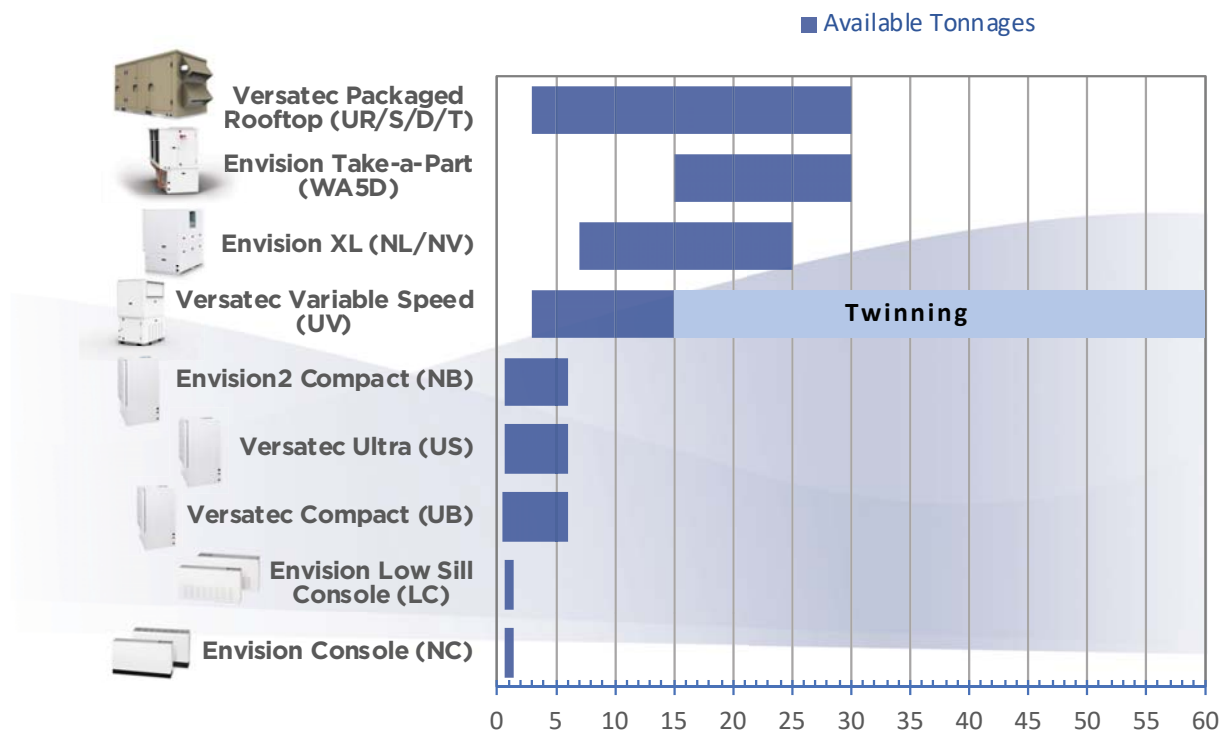
					
	Versatec Compact	Versatec Ultra	Envision² Compact	Versatec Variable Speed	Versatec Variable Speed
Style	Water-to-Air	Water-to-Air	Water-to-Air	Water-to-Air	Water-to-Air
Capacity Range (Tons)	0.5 - 6	0.75 - 6	0.75 - 6	3 - 6	10-15
Sizes Available (Tons)	0.5, 0.75, 1, 1.25, 1.5, 2, 2.5, 3, 3.5, 4, 5, 6	0.75, 1, 1.25, 1.5, 2, 2.5, 3, 3.5, 4, 5, 6	0.75, 1, 1.25, 1.5, 2, 2.5, 3, 3.5, 4, 5, 6	3, 4, 5, 6	10, 15
Efficiency Water Loop Heat Pump	13.2 - 14.7 EER 4.5 - 4.9 COP	14.3 - 15.7 EER 4.5 - 5.1 COP	15.0 - 21.6 EER 4.8 - 6.4 COP	14.0 - 25.0 EER 4.6 - 7.8 COP	13.2 - 25.0 EER 4.4 - 7.0 COP
Ground Loop Heat Pump	15.6 - 17.0 EER 3.3 - 3.5 COP	16.1 - 18.5 EER 3.4 - 3.8 COP	17.0 - 30.0 EER 3.7 - 4.8 COP	16.0 - 41.0 EER 3.4 - 4.9 COP	15.0 - 35.0 EER 3.5 - 4.2 COP
Compressor	Rotary or Scroll	Rotary or Scroll	Rotary or Scroll	Variable Capacity Scroll	Variable Capacity Scroll
Refrigerant	R-410A	R-410A	R-410A	R-410A	R-410A
Blower Type	<ul style="list-style-type: none"> • PSC • 5-Spd ECM • VS ECM FC 	<ul style="list-style-type: none"> • PSC FC • 5-Spd ECM FC • VS ECM FC • Hi Static Options 	<ul style="list-style-type: none"> • PSC FC • 5-Spd ECM FC • VS ECM FC • Hi Static Options 	<ul style="list-style-type: none"> • VS ECM FC 	<ul style="list-style-type: none"> • VS Integ BC ECM Plenum Fan
Cabinet Configuration	<ul style="list-style-type: none"> • Vertical Topflow (R/L Return) • Horizontal (R/L Return) (E/S Discharge) 	<ul style="list-style-type: none"> • Vertical Topflow (R/L Return) • Horizontal (R/L Return) (E/S Discharge) 	<ul style="list-style-type: none"> • Vertical Topflow (R/L Return) • Horizontal (R/L Return) (E/S Discharge) 	<ul style="list-style-type: none"> • Vertical Topflow (R/L Return) • Horizontal (R/L Return) (E/S Discharge) 	<ul style="list-style-type: none"> • Vertical Topflow (R/L Return) • Vertical Bottomflow (R/L Return) • Horizontal (R/L Return) (E/S Discharge)
Control Type	<ul style="list-style-type: none"> • Aurora Base • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON 	<ul style="list-style-type: none"> • Aurora Base • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON 	<ul style="list-style-type: none"> • Aurora Base • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON 	<ul style="list-style-type: none"> • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON 	<ul style="list-style-type: none"> • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON
Hot Water Generator (Coil Only)	NA	015 - 070 Vertical only	015-072 Vertical only	036 - 072 Vertical only	NA
Available Voltages	208-230/60/1 265/60/1 208-230/60/3 460/60/3 575/60/3	208-230/60/1 265/60/1 208-230/60/3 460/60/3 575/60/3	208-230/60/1 265/60/1 208-230/60/3 460/60/3 575/60/3	208-230/60/1 208-230/60/3 460/60/3	208-230/60/3, 460/60/3, 575/60/3 with transformer
Air Coil	All-Aluminum	All-Aluminum	All-Aluminum	All-Aluminum	All-Aluminum
Options	<ul style="list-style-type: none"> • Waterside Economizer • CuNi Coil • Internal 2-way Valve • Flow regulator • 2" Merv 13 • Disconnect • Phase guard • Coated Air Coil • Sound Kit • SS Drain Pan 	<ul style="list-style-type: none"> • Waterside Economizer • CuNi Coil • Internal 2-way Valve • Flow regulator • 2" Merv 13 • Disconnect • Phase guard • Coated Air Coil • Sound Kit • SS Drain Pan • IntelliStart • Hot Gas Bypass • Hot Gas Reheat 	<ul style="list-style-type: none"> • Waterside Economizer • CuNi Coil • Internal 2-way Valve • Flow regulator • 2" Merv 13 • Disconnect • Phase guard • Coated Air Coil • Sound Kit • SS Drain Pan • IntelliStart • Hot Gas Bypass • Hot Gas Reheat 	<ul style="list-style-type: none"> • Waterside Economizer • CuNi Coil • Internal 2-way Valve • Flow regulator • 2" Merv 13 • Disconnect • Phase guard • Coated Air Coil • Sound Kit • SS Drain Pan • Hot Gas Bypass • Hot Gas Reheat 	<ul style="list-style-type: none"> • Waterside Economizer • CuNi Coil • Internal 2-way Valve • Flow regulator • 2" Merv 13 • Disconnect • Phase guard • Coated Air Coil • Sound Kit • SS Drain Pan • Hot Gas Bypass • Hot Gas Reheat

					
	Envision XL	Envision 30 Ton	Envision Console	Low Sill Console	Versatec Packaged Rooftop
Style	Water-to-Air	Water-to-Air	Water-to-Air	Water-to-Air	Water-to-Air
Capacity Range (Tons)	7 - 25	30	0.75 - 1.5	0.75 - 1.5	3-30
Sizes Available (Tons)	7, 8, 10, 13, 15, 20, 25	30	0.75, 1, 1.25, 1.5	0.75, 1, 1.25, 1.5	3, 3D, 4, 4D, 5, 5D, 6, 6D, 8, 10, 12, 15, 20, 25, 30
Efficiency Water Loop Heat Pump	13.8 - 18.9 EER 4.6 - 5.4 COP	12.1 - 12.7 EER 4.2 - 4.3 COP	12.3 - 13.6 EER 4.3 - 4.9 COP	12.2 EER 4.3 - 4.4 COP	12.2 - 19.1 EER 4.2-6.4 COP
Ground Loop Heat Pump	16.2 - 21.0 EER 3.4 - 4.2 COP	13.1 - 13.8 EER 3.2 - 3.4 COP	14.2 - 16.0 EER 3.1 - 3.5 COP	13.5 - 14.3 EER 2.8 - 3.0 COP	13.1 - 28.0 EER 3.2 - 4.8 COP
Compressor	Dual Scroll	Dual Scroll	Rotary	Rotary	Scroll, Dual Cap Scroll, Twin Scrolls
Refrigerant	R-410A	R-410A	R-410A	R-410A	R-410A
Blower	<ul style="list-style-type: none"> • Belt/Sheave FC • FC w/VFD • Hi Static Options • VS Integ. BC ECM Plenum Fan 	<ul style="list-style-type: none"> • FC w/VFD • VS Integ BC ECM Plenum Fan 	<ul style="list-style-type: none"> • 3-Spd ECM FC 	<ul style="list-style-type: none"> • 3-Spd ECM FC 	<ul style="list-style-type: none"> • 5-Spd ECM FC (3-6) • VS ECM FC (3-6) • VS Integ BC ECM Plenum Fan
Cabinet Configuration	<ul style="list-style-type: none"> • Vertical Topflow (R/L Return) • Vertical Take-Apart • Horizontal (R/L Return) (E/S Discharge) 	<ul style="list-style-type: none"> • Vertical Topflow (R/L Return) • Vertical Take-Apart • Horizontal (R/L Return) (E/S Discharge) 	<ul style="list-style-type: none"> • Slope Top • Ext Slope Top • Flat Top • Chassis Only 	<ul style="list-style-type: none"> • Slope Top • Flat Top • Chassis Only 	<ul style="list-style-type: none"> • Rooftop Downflow • Rooftop Sideflow • Opt Economizer
Control Type	<ul style="list-style-type: none"> • Aurora Base • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON 	<ul style="list-style-type: none"> • Aurora Base • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON 	<ul style="list-style-type: none"> • CCM • Aurora Base • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON 	<ul style="list-style-type: none"> • CCM • Aurora Base • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON 	<ul style="list-style-type: none"> • Aurora Base • Aurora Advanced • Aurora UPC BACnet • Aurora UPC LON
Hot Water Generator (Coil Only)	NA	NA	NA	NA	NA
Available Voltages	208-230/60/3 460/60/3 575/60/3	208-230/60/3 460/60/3 575/60/3	115/60/1 208-230/60/1 265/60/1	115/60/1 208-230/60/1 265/60/1	208-230/60/1, 265/60/1, 208-230/60/3, 460/60/3
Air Coil	All-Aluminum	All-Aluminum	All-Aluminum	All-Aluminum	All Aluminum
Options	<ul style="list-style-type: none"> • Waterside Economizer • CuNi Coil • Internal 2-way Valve • Flow regulator • 2" Merv 13 • Disconnect • Phase guard • Coated Air Coil • Sound Kit • SS Drain Pan • IntelliStart • Hot Gas Bypass • Hot Gas Reheat 	<ul style="list-style-type: none"> • Waterside Economizer • CuNi Coil • Internal 2-way Valve • Flow regulator • 2" Merv 13 • Disconnect • Phase guard • Coated Air Coil • Sound Kit • SS Drain Pan • IntelliStart • Hot Gas Bypass • Hot Gas Reheat 	<ul style="list-style-type: none"> • CuNi Coil • Internal 2-way Valve • Flow regulator • Left/Right Piping • Coated Air Coil • Sound Kit • OA Damper • Aux Electric Heat • Remote T-Stat 	<ul style="list-style-type: none"> • CuNi Coil • Internal 2-way Valve • Flow regulator • Left/Right Piping • Coated Air Coil • Sound Kit • OA Damper • Aux Electric Heat • Remote T-Stat 	<ul style="list-style-type: none"> • Air Side Economizer • CuNi Coil • Internal 2-way Valve • Flow regulator • 2" Merv 13 • Disconnect • Curbs • Conven Outlet • Phase guard • Coated Air Coil • Sound Kit • Hot Gas Bypass • Hot Gas Reheat • Enthalpy Sensors

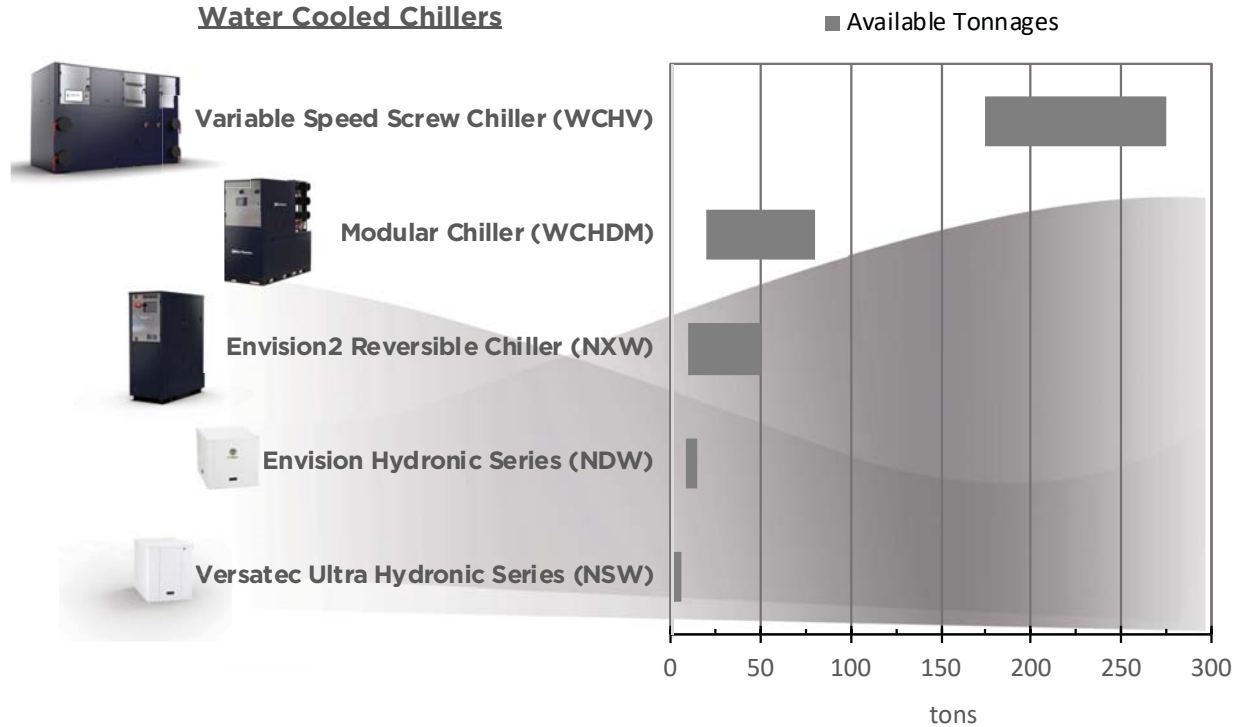
Water-Cooled Chillers

					
	Versatec Ultra Single Hydronic	Envision Hydronic NDW	Envision2 NXW Chiller	WC Dual Scroll Modular Chiller	WCHV Dual Variable Speed Screw Chiller
Style	Water-to-Water	Water-to-Water	Reversible Chiller	Water Cooled	Water Cooled
Capacity Range (Tons)	1.5 - 6	8 - 15	10 - 50	20-80	175-275
Sizes Available (Tons)	1.5, 2, 3.5, 4, 5, 6	8, 10, 12, 15	10, 15, 20, 30, 50	20, 30, 40, 50, 60, 70, 80	175, 225, 275
Efficiency Water Loop Heat Pump	12.3 - 15.5 EER 4.2 - 4.8 COP	13.3 - 15.8 EER 3.9 - 4.6 COP	15.2 - 17.4 EER 4.3 - 5.1 COP	Full Load: 0.71 kw/ton IPLV: 0.54 kw/ton	Chiller: 0.73 kw/ton IPLV: 0.46 kw/ton
Ground Loop Heat Pump	14.0 - 17.5 EER 2.9 - 3.1 COP	15.8 - 22.0 EER 2.7 - 3.5 COP	16.5 - 22.2 EER 3.0 - 3.7 COP		
Compressor	Scroll	Dual Scroll	Dual Scroll	Dual Scroll	VS Dual Screw
Refrigerant	R-410A	R-410A	R-410A	R-410A	R-134a
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	Enclosed
Control Type	Aurora Base, Aurora Advanced, Aurora UPC Bacnet/2, Aurora UPC Lon	FX10 with Building Automation Communication capability	HydroLink Aurora with Building Automation Communication capability BACnet	HydroLink Aurora with Building Automation Communication capability BACnet	HydroLink Aurora with Building Automation Communication capability BACnet
Hot Water Generator (Coil Only)	040 - 075 models only	NA	NA	NA	NA
Available Voltages	208-230/60/1 265/60/1 208-230/60/3 460/60/3 575/60/3	208-230/60/1 208-230/60/3 460/60/3 575/60/3	208-230/60/3 380/60/3 460/60/3 575/60/3	208-230/60/3, 460/60/3, 575/60/3	460/60/3
Air Coil	NA	NA	NA	NA	NA
Options	<ul style="list-style-type: none"> Copper or Cupronickel coaxial heat exchangers IntelliStart 	<ul style="list-style-type: none"> IntelliStart 	<ul style="list-style-type: none"> Domestic Hot Water (10-30 ton) Temp setpoint control software Field-installed piping accessories Factory-installed pressure transducers Fused disconnect Phase guard 	<ul style="list-style-type: none"> Breaker with thru the door disconnect BACnet EEV Pipe Rack: <ul style="list-style-type: none"> 4 pipe rack standard 4 pipe rack non-reversing 6 pipe Rack Standard 6 pipe Rack Dedicated 	<ul style="list-style-type: none"> Heat recovery capable Breaker with single point thru the door disconnect BACnet, Sound Kit EEV HydroLink Aurora Controls with color touch tablet

Water-to-Air Product



Water Cooled Chillers



Standard & Optional Features

Common Standard Features

		Versatec Compact (UB)	Versatec Ultra (US)	Envision2 Compact (NB)	Versatec VS (UV)	Versatec VS LG (UV)	Envision XL (NL/NH)	Console Series (LC/NC)	Versatec Rooftop (UR)
Common Features	Aluminum Air Coil - Formicary Corrosion Resistant	Std	Std	Std	Std	Std	Std	Std	Std
	Flush Mount Water Connections	Std	Std	Std	Std	Std	Std	Std	Std
	Composite Corrosion Proof Drain Pan	Std	Std	Std	Std	Std	Std	Std	Std
	MicroProcessor Control With HP, LP, FP, O/U Voltage, Cond Overflow Safeties. - Aurora Base Control	Std	Std	Std	Std	Std	Std	Std	Std
	MicroProcessor Control With LS, ES, Alarm, And Pulsing Fault Output, Assignable Access Relay. - Aurora Base Control	Std	Std	Std	Std	Std	Std	Std	Std
	Wire Harness Construction	Std	Std	Std	Std	Std	Std	Std	Std
	Blower With Removable Inlet Ring For Easy Fan Motor Replacement.	Std	Std	Std	Std	Std	Std	Std	Std
	Bidirectional Balanced Port TXV	Std	Std	Std	Std	Std	Std	Std	Std
	Lanced Fin Rifled Tube Air Coil w/ High Efficiency Coaxial Heat Exchanger	Std	Std	Std	Std	Std	Std	Std	Std

Common Optional Features

WaterFlow	Internal Water Valve (Modulating On Variable Speed)		Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Flow Regulator (GPM Selectable)	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Internal Pump (Limited Voltage Availability)			Special					
Controls	Disconnect/Phase Guard	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Current Reducing Soft Starter - IntelliStart		Opt	Opt					Opt
	DDC - (Aurora UPC -BACnet MS/TP, N2, Lon)	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Cabinet	Vertical Back Discharge Supply. Left or Right Return With Back Air Discharge.			Special					
	Vertical Bottomflow With Left Or Right Return And Bottom Discharge.			Opt		Opt			
	Take-Apart Large Vertical Unit Shipped With Refrigerant Quick Connects.						Opt		
Fan Motor	Fan Motor - 3 Spd PSC	Std	Std	Std					
	Fan Motor - 5 Spd ECM (Constant Torque)	Opt	Opt	Opt				Std	Opt (3-6)
	Fan Motor - Variable Speed ECM (Constant CFM)	Opt	Opt	Opt	Std				Opt (3-6)
	Fan Motor - Variable Speed ECM Plenum Fan w/ Backward Curve Fan					Std			Std
	VFD Drive With Belt Drive Fan Motor						Special		
Heat Exchangers/ Drain Pan	Water Side Economizer	Opt	Opt	Opt	Special	Special	Opt		
	Air Side Economizer								Opt
	Desuperheater Hot Water Generation		Opt	Opt	Opt				
	Insulated Heat Exchanger	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	CuproNickel Heat Exchanger	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Air Coil Coating - Alumi-Seal	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Stainless Steel Drain Pan	Opt	Opt	Opt	Opt	Std	Std	Std	Std
Refrig	Secondary Drain Connection	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Hot Gas Bypass		Opt	Opt	Opt	Opt	Opt		Opt
	Hot Gas Reheat		Opt	Opt			Opt		Opt
Filter/Other	Modulating Hot Gas Reheat			Special	Special	Special	Special		Special
	Sound Kit	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Filter - MERV 13	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Painted Cabinet	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Filter Rail - 2 and 4 sided	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4

Notes:

Special = Special Order Process not in nomenclature (Typically 8 week lead time). Consult your WF representative.

Opt = Optional and is standard nomenclature. Consult product literature.

Std = Standard feature and is in nomenclature. Consult product literature.

Acc = Accessory available. Consult your WF representative.

Exclusive & Special Features

		(UB)	(US)	(NB)	(UV)	(UV)	(NL/NH)	(LC/NC)	(UR)
Capacity Modulation	Dual Capacity Compressors Two stage compressor technology provides the highest efficiency at full load and part load. Operation from 75%-100% capacity range.			Dual (2-6)					Dual (3-6)
	Variable Capacity Compressors (Permanent Magnet Variable Speed) A traditional VFD on a 3 phase compressor may provide some capacity modulation from 50-100% but exhibits poor performance in full or part load efficiency. On the other hand the latest technology of permanent magnet variable speed compressors provides the highest efficiency at full load and the ultimate efficiency at part load operation. Also a full range of capacity operation from 20%-100% is also possible.				Std (3/6)	Std (10-15)			
Economizers	Water Side Economizers Add-on waterside economizer with internal controls.	Opt	Opt	Opt	Special	Special	Opt		
	Air Side Economizers Optional airside economizer with enthalpy sensors and software selectable control methods. A unique network or sensor-less control is also possible.								Opt
Control Features	BAS/DDC Options - Aurora UPC Control Adds DDC features of BACnet MS/TP, N2, or LON along with an Aurora Touch/ Tablet technician interface	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Fan Speed Flexibility for Humidity Control Aurora Base and Advanced Control allows several features for differing airflow settings to enhance dehumidification. These include separate heating and cooling airflow settings, dehumidification fan mode, Humidity input to activate dehumidification and active dehumidification (VS models) modes.	Std	Std	Std	Std	Std	Std	Std	Std
	Advanced Controls and Sensor Kits Aurora Advanced Controls add features of refrigerant, performance and energy monitoring along with other I/O.	Special	Special	Special	Std	Std	Special	Special	Opt
	Remote Access via Zone Sensor to Full Aurora Control Parameters When UPC is employed, full remote access to the Aurora Control using the RNet Zone Sensor in the conditioned space is possible with either an Aurora Touch or Aurora Tablet interface. UPC Required.	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	BAS Access of Heat Pump Parameters With the UPC the BAS system has full control over airflow setup, freeze protection settings, fault code reporting, energy, refrigeration and temperature monitoring as well as any temperature or any other control signal available. For instance there is no need to access each heat pump individually to adjust airflow or freeze protection settings, it can be done globally at BAS. UPC required.	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	24VAC Thermostat use with BAS/DDC (with UPC) At times it is advantageous to utilize 24VAC thermostats but still maintain BAS monitoring of the system thru BACnet, N2 or LON. A standard 24VAC thermostat can be employed simultaneously with the UPC. UPC required.	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Variable Air Volume Capability VAV capability built into the UPC Control. With the advent of variable speed compressors and 25-100% capacity modulation, modulating capacity to maintain leaving air temperature is possible.				Special	Special			
	Demand Control Ventilation (DCV) DCV capability based upon CO2 level. Ventilation can be cycled based upon zone sensor measurement of CO2 or VOC levels. (Requires UPC, and CO2 or VOC zone sensor).	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Unit 'Twinning' for Easier Retrofit Capability to combine multiple units together for easy retrofit. Four 15 ton units become a single 60 ton variable speed heat pump after twinning. Unit airflow and compressor controls are ramped between 25-100% capacity together. (UPC required.)				Opt	Opt			
	Air Zoning System By applying the IntelliZone2 BACNet, N2 or LON compatible zoning, up to 6 ducted and dampered zones can be served by one variable speed or two speed heat pump driving air dampers based upon zone temperature. Zones can be as small as 20% unit capacity with VS compressor.			Acc	Acc	Acc			Acc
Fan Motor Features	Large Belt Driven Fan w/ VFD Drive VFD drive on traditional belt driven blowers to replace complicated sheave adjustments.						Special		
	ECM High Efficiency or High Static Fan Motors 5 Spd ECM with 5 available speeds with constant torque ECM efficiency.	Opt	Opt	Opt			Opt	Std	Opt (3-6)
	VS ECM with firmware selectable fan speeds and constant CFM ECM efficiency. Software Configurable.	Opt	Opt	Opt	Std		Opt		Opt (3-6)
	VS Plenum Backward Curve ECM Fan with firmware selectable fan speeds and ECM efficiency. Software Configurable.					Std			Std
Refrigeration Features	Electronic Expansion Valve Employs a High Efficiency Electronic Expansion Valve. (requires Aurora Advanced Controls)	Special	Special	Special	Std	Std	Special	Special	Special
	Hot Gas Bypass Traditional refrigerant hot gas bypass.		Opt	Opt			Opt		Opt
	Hot Gas Reheat Traditional on-off refrigerant reheat using hot gas.		Opt	Opt			Opt		Opt
	Modulating Hot Gas Reheat Modulating refrigerant reheat using hot gas.			Special			Special		Special
	Variable Refrigerant Reheat VR2 Advanced variable reheat technology for variable speed compressor systems.				Special	Special			

Notes:
 Special = Special Order Process not in nomenclature (Typically 8 week lead time). Consult your WF representative.
 Opt = Optional and is standard nomenclature. Consult product literature.
 Std = Standard feature and is in nomenclature. Consult product literature.
 Acc = Accessory available. Consult your WF representative.

VERSATEC VARIABLE SPEED 3-6 TON - UVV/H

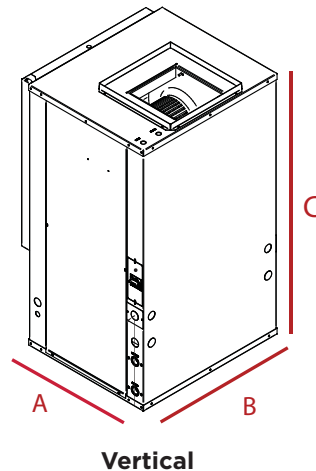
Water/Geothermal Source Heat Pump

Standard Features:

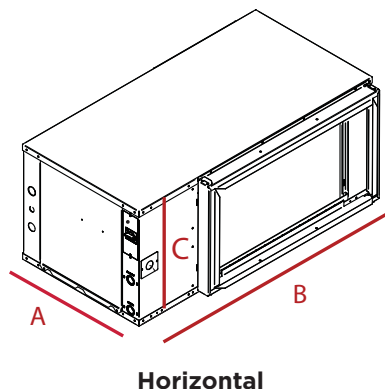
- Capacities of 36,000 through 72,000 Btu/h
- Voltages: 208-230/60/1, 208-230/60/3, and 460/60/3.
- Vertical and horizontal w/ true left and right return
- Horizontal end or side discharge
- Heavy gauge galvanized cabinet
- Variable Speed ECM fan motors
- Removeable inlet ring blowers
- High efficiency 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 Cabinets		Overall Cabinet Dimensions		
		A (WIDTH)	B (DEPTH)	C (HEIGHT)
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

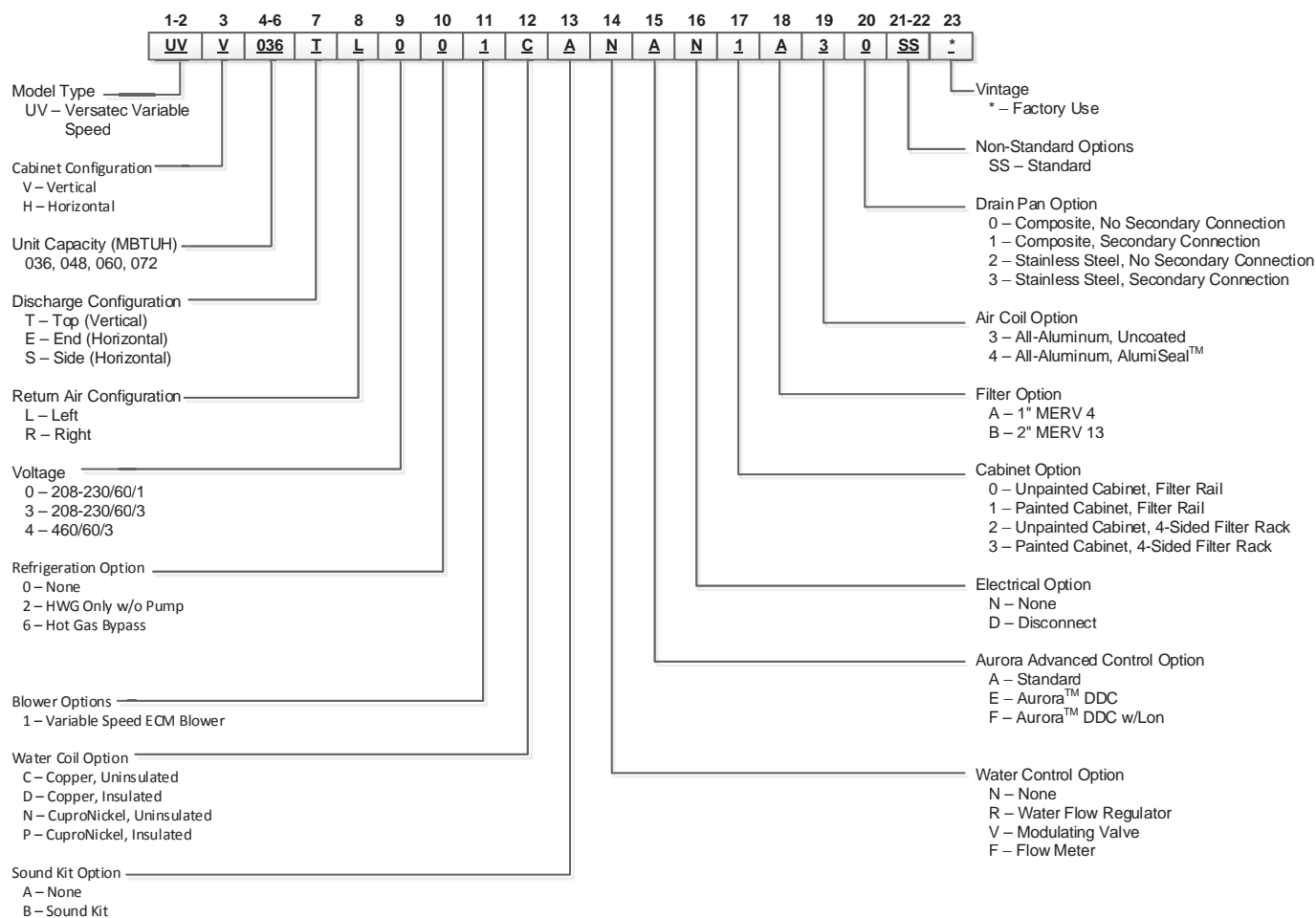


Versatec VS Quick Features Guide	
5 Spd FC ECM Fan	-
VS FC ECM Fan	Std
Waterside Econ	Special
Hot Gas Reheat	Special
Hot Gas Bypass	Opt
Aurora Advanced Controls	Std
Aurora UPC BACnet, N2 or LON	Opt
VAV Capable (UPC)	Opt
DCV Capable (UPC)	Opt
Zoning	Opt

Horizontal Cabinets		Overall Cabinet Dimensions		
		A (WIDTH)	B (DEPTH)	C (HEIGHT)
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



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



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
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



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

VERSATEC COMPACT - UBV/H - 0.5-6 TON

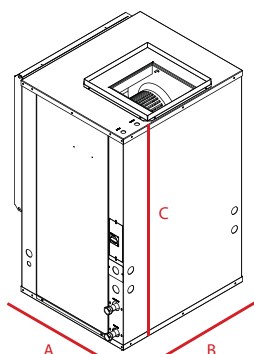
Water/Geothermal Source Heat Pump

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

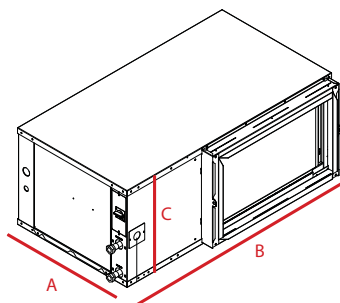


Vertical



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

Versatec Compact 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.

	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	I	L	Q	Q	Q	C	A	N	A	N	Q	A	3	Q	SS	*		
Model Type	UB – Versatec Compact																			Vintage * - Factory Use Only	
Cabinet Configuration	V – Vertical H – Horizontal																			Non-Standard Options SS – Standard	
Unit Capacity (MBTUH)	006, 009, 012, 015, 018, 024, 030, 036, 041* (Vertical) 042, 048, 060, 070																			Drain Pan Option 0 – Composite, No Secondary Connection 1 – Composite, Secondary Connection 2 – Stainless Steel, No Secondary Connection 3 – Stainless Steel, Secondary Connection	
Discharge Configuration	T – Top (Vertical) E – End (Horizontal) S – Side (Horizontal)																			Air Coil Option 3 – All-Aluminum, Uncoated 4 – All-Aluminum, AlumiSeal™	
Return Air Configuration	L – Left R – Right																			Filter Option A – MERV 4 B – MERV 13	
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)																			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	
Refrigeration Option	0 – None																			Electrical Options¹ N – No Phase Guard, No Disconnect D – No Phase Guard, Disconnect P – Phase Guard, No Disconnect B – Phase Guard, Disconnect	
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																			Control Options² A – Aurora™ Base Control (ABC) E – Aurora™ UPC DDC Controller F – Aurora™ UPC DDC Controller with LON	
Water Coil Options	C – Copper D – Insulated Copper N – CuproNickel P – Insulated CuproNickel																			Water Control Options³ 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	
Sound Kit	A – None B – Sound Kit (Not Available on UBH006-012)																				

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

PSC Motor														
			Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
Model	Flow Rate		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
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



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

VERSATEC ULTRA - USV/H - 0.75-7 TONS

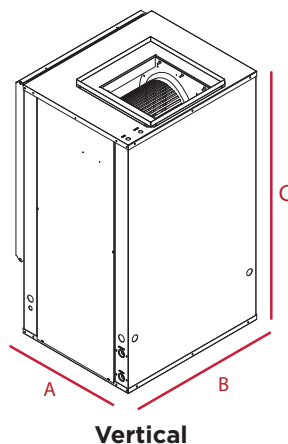
Water/Geothermal Source Heat Pump

Standard Features:

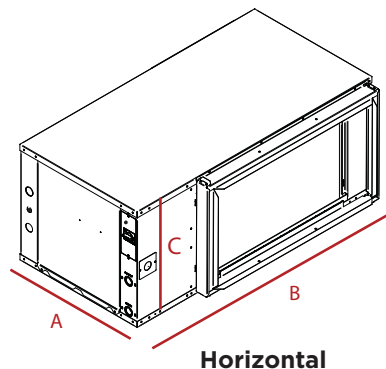
- Capacities of 9,000 through 70,000 Btu/h
- Voltages: 115/60/1, 208-230/60/1, 265-277/60/1, 208-230/60/3, 460/60/3, and 575/60/3.
- Vertical and horizontal w/ true left and right return
- Horizontal end or side discharge
- Heavy gauge galvanized cabinet
- Removeable inlet ring blowers
- High efficiency 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
- Discharge mufflers on sizes 048-070
- 4 sided filter rail
- 75VA transformer with circuit breaker
- 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
- Internal motorized 2-way valve
- Water flow regulator
- Sound kit
- IntelliStart
- Aurora Advanced Control
- Aurora UPC BACnet (+ N2)
- Aurora UPC with LONWorks
- High static fan options
- Hot Gas Bypass
- Hot Gas Reheat
- Hot Water Generation



Versatec Ultra 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	-

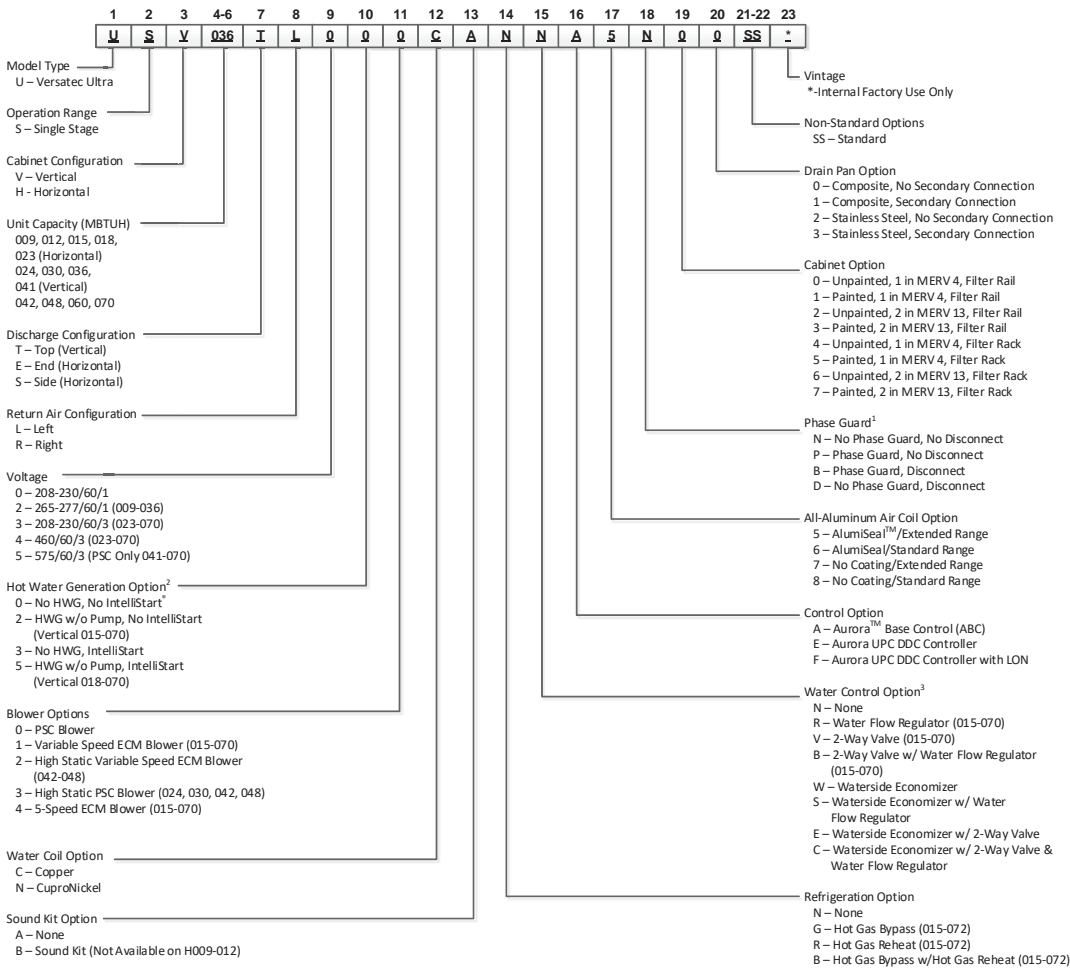


Vertical Cabinets		Overall Cabinet Dimensions		
		A (WIDTH)	B (DEPTH)	C (HEIGHT)
009-012	in.	22.5	22.2	23.7
	cm.	57.2	56.4	60.2
015-018	in.	22.5	22.2	36.2
	cm.	57.2	56.4	91.9
024-030	in.	22.5	26.2	40.2
	cm.	57.2	66.5	102.1
036	in.	22.5	26.2	44.2
	cm.	57.2	66.5	112.3
041	in.	22.5	26.2	44.2
	cm.	57.2	66.5	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

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 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



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

ENVISION² COMPACT - NBV/H - 0.75-6 TONS

Water/Geothermal Source Heat Pump

Standard Features:

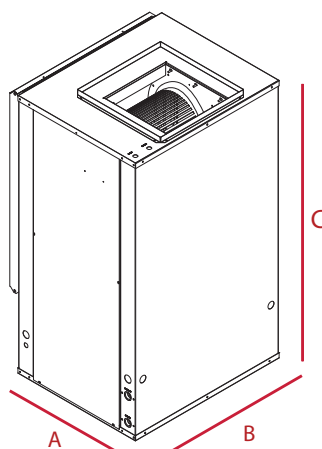
- Capacities of 6,000 through 72,000 Btu/h
- Voltages: 115/60/1, 208-230/60/1, 265-277/60/1, 208-230/60/3, 460/60/3, and 575/60/3.
- Vertical and horizontal w/ true left and right return
- Horizontal end or side discharge
- Heavy gauge galvanized cabinet
- Removable inlet ring blowers
- High efficiency 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
- 4 sided filter rail
- 75VA transformer with circ brkr
- Aurora Base Controls

Optional Features:

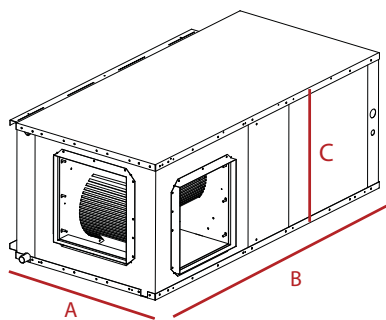
- 3 speed PSC, 5 speed ECM, or VS ECM fan motors
- Painted Cabinet
- Filter Rack
- Phase guard with optional 'dial' disconnect
- Stainless steel drain pan w/ secondary drain connection
- Extended range insulation option
- AlumiSeal air coil e-coating
- 2 in. MERV 13 filter
- Water-side economizer
- Cupronickel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

Envision² Compact 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



Vertical



Horizontal

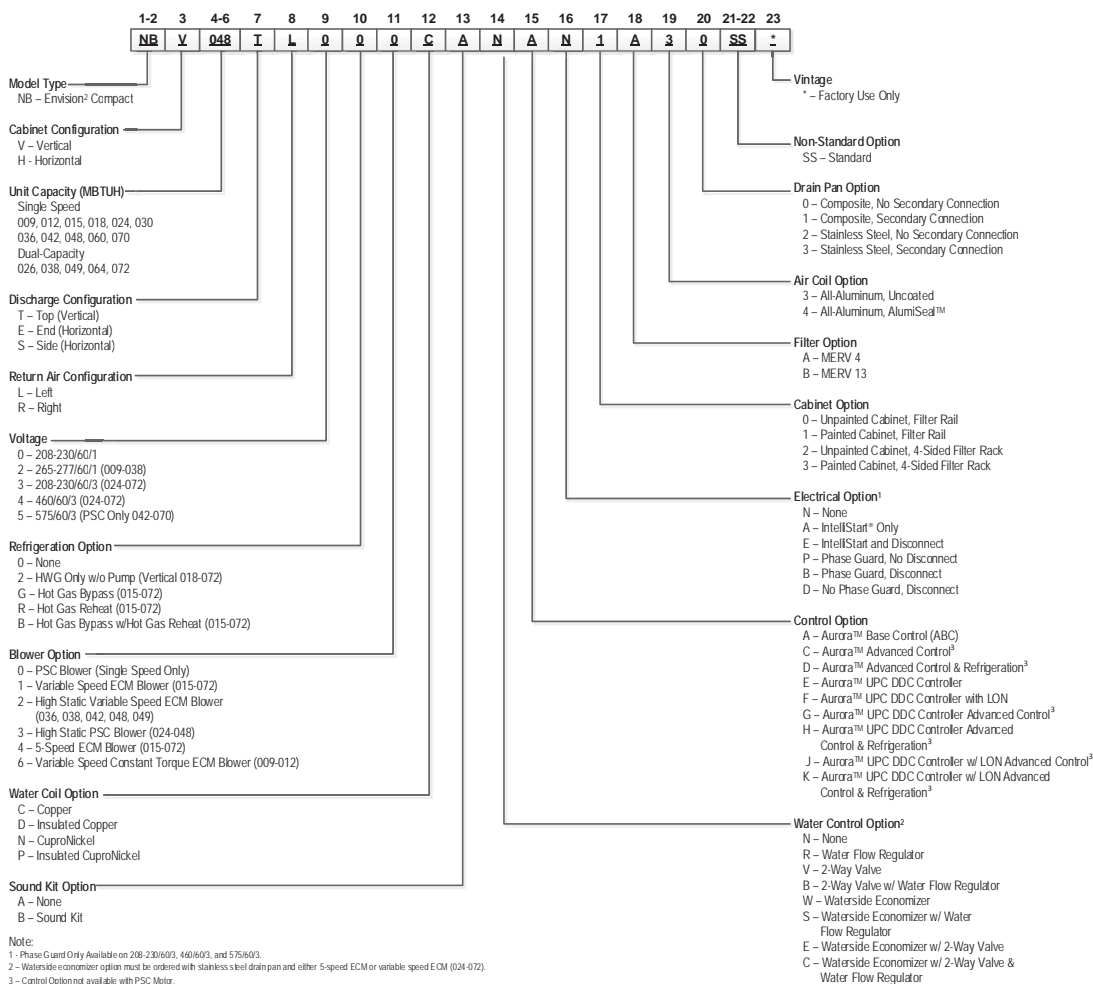


Vertical Cabinets		Overall Cabinet Dimensions		
		A (WIDTH)	B (DEPTH)	C (HEIGHT)
009-012	in.	22.5	22.2	30.2
	cm.	57.2	56.4	76.7
015-018	in.	22.5	26.2	40.2
	cm.	57.2	66.5	102.1
024-030	in.	22.5	26.2	44.2
	cm.	57.2	66.5	112.3
036-038	in.	25.5	31.2	44.2
	cm.	64.8	79.2	112.3
042-049	in.	25.5	31.2	48.2
	cm.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

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.



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

PSC 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 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	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
	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
038	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
	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



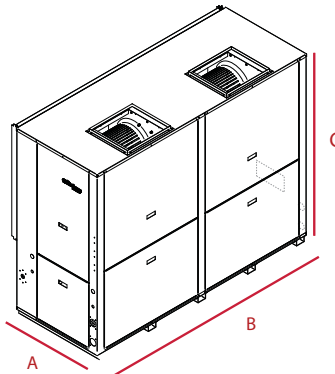
All Envision² Compact product is safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-1.

ENVISION XL - NL/X - 7-25 TONS

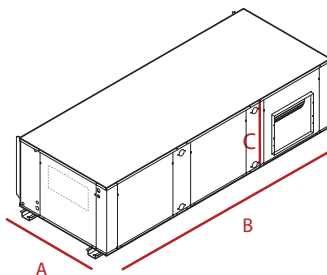
Water/Geothermal Source Heat Pump

Standard Features:

- Take-apart design that allows the unit to simply be separated in the field for those jobs with not much room to maneuver.
- All Envision Series 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
	cm.	86.4	155.7
160-300	in.	34.0	88.1
	cm.	86.4	225.8



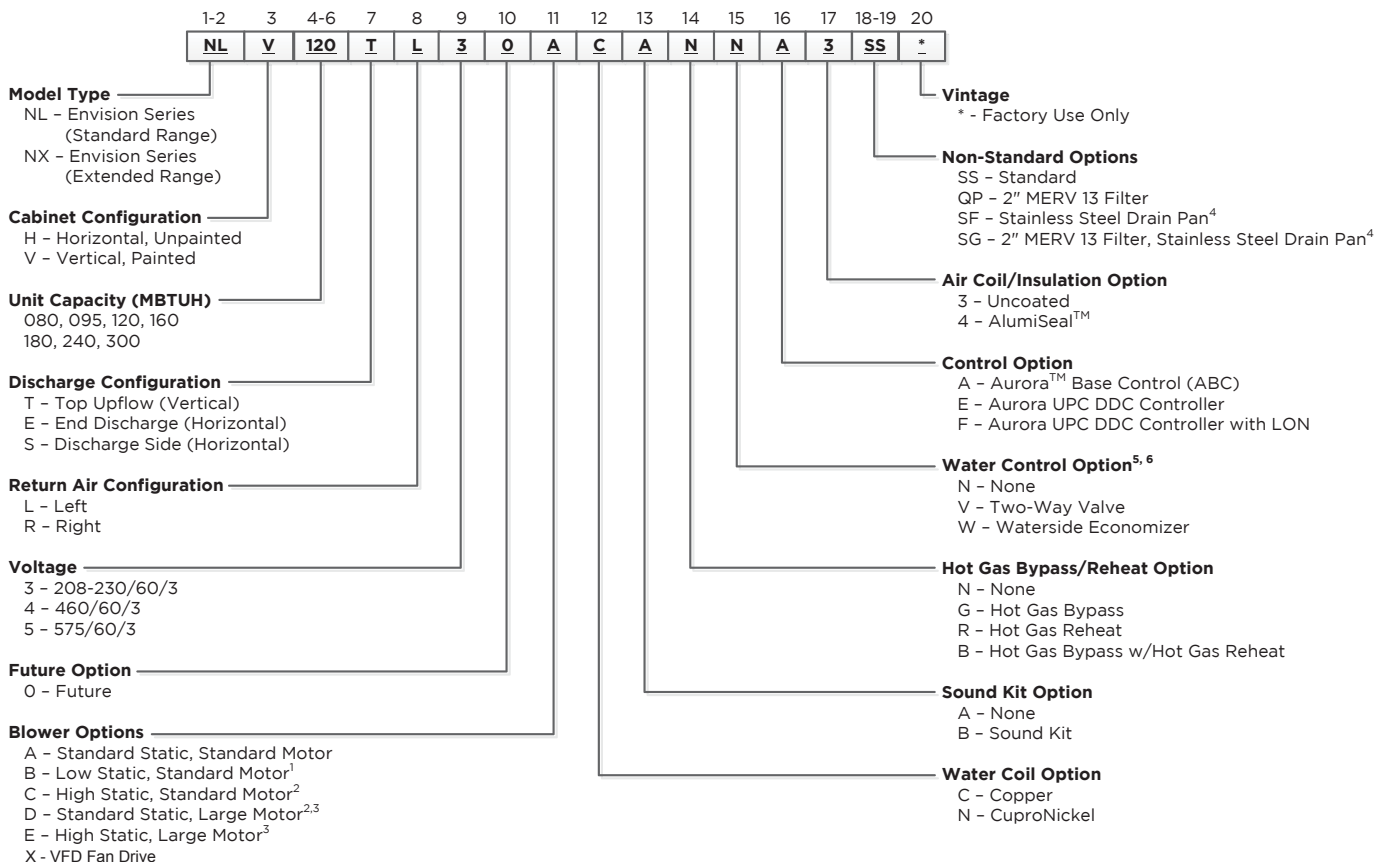
Horizontal Cabinets	Overall Cabinet Dimensions		
	A (WIDTH)	B (DEPTH)	C (HEIGHT*)
080-120	in.	38.0	89.0
	cm.	96.5	226.1

Envision XL Quick Features Guide

Belt/Sheave FC Fan	Std
Belt Drive FC VFD Fan	Special
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)	-
Take-apart large vertical 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 Envision Series requires less loop than any product on the market.



Rev.: 24 April 2015D

Notes:

- 1 - Not available on vertical NL/NX095, 180, horizontal NL/NX080
- 2 - Not available on vertical NL/NX080, 160
- 3 - Not available on horizontal NL/NX120, vertical NL/NX300
- 4 - Not available on vertical NL/NX160-300. Stainless steel is standard on vertical NL/NX160-300
- 5 - Waterside economizer option must be ordered with stainless steel drain pan
- 6 - Internal two-way valve not available with waterside economizer option

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
NLV160	35.0	5000	166,000	18.9	154,000	5.1	178,000	25.3	130,000	4.6	171,000	21.0	97,000	3.7
NLV180	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
NLV240	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
NLV300	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



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

ENVISION 30 TON - WA5D

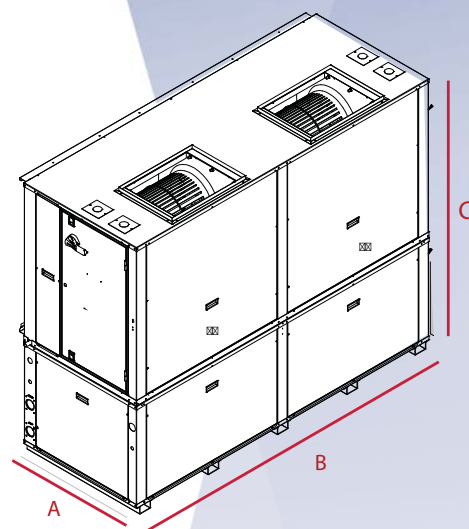
Water/Geothermal Source Heat Pump

Envision 30 ton Highlights

- Aurora DDC controls
- Capacities ranging from 360,000 Btu/h output
- Complete commercial voltage selection of 208-230 V/60 Hz/3ph, 460/60/3, and 575/60/3
- Innovative features such as:
- Variable frequency drives provide a smooth start/stop operation & LCD touchpad for speed change
- Optional take-a-part cabinet design featuring refrigerant quick disconnect fittings
- Optional factory installed waterside economizer reduces installation time and provides minimal piping
- Short Circuit Current Rating values of 100 kA
- Take-apart design that allows the unit to simply be separated in the field for those jobs with not much room to maneuver.
- By splitting the air handling section from the compressor section, the design can be taken into a building in two different sections which makes it lower weight and smaller footprint. The sections can easily be rejoined.
- The unit features refrigerant quick disconnects that enable the unit to be factory charged and run tested yet allow separation in the field without touching a refrigerant gauge.
- Variable frequency drive (VFD) with an LCD display to adjust blower speeds eliminating manual pulley adjustments.
- Hot gas reheat
- Internal 2-way water control valves
- Waterside economizer
- Electrical disconnects



Cabinet		Overall Cabinet Dimensions		
		A (WIDTH)	B (DEPTH)	C (HEIGHT*)
360	in.	34.0	88.2	70.2
	cm.	86.4	224.0	178.3



Envision 30 ton Quick Features Guide

Belt/Sheave FC Fan	Std
Belt Drive FC VFD Fan	Special
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)	-
Take-apart	-



WaterFurnace Envision 30 Ton Water Source Heat Pumps (WSHP) are an exceptional choice for large zones in commercial and institutional applications. Featuring a take-apart design, the 30 Ton can be moved into a building in two different sections, providing lower weight, smaller footprint, and better maneuverability.

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

				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 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
360	Full Load	90.0	8800	355,500	12.1	454,600	4.2	401,600	17.0	375,200	3.7	356,800	13.1	290,800	3.2
	Part Load	90.0	8800	186,600	12.7	238,700	4.3	210,800	17.9	197,000	3.9	187,300	13.8	152,700	3.4



27

VERSATEC VARIABLE SPEED 10-15 TON - UVV/H

Water/Geothermal Source 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 60 tons (or 4 units)

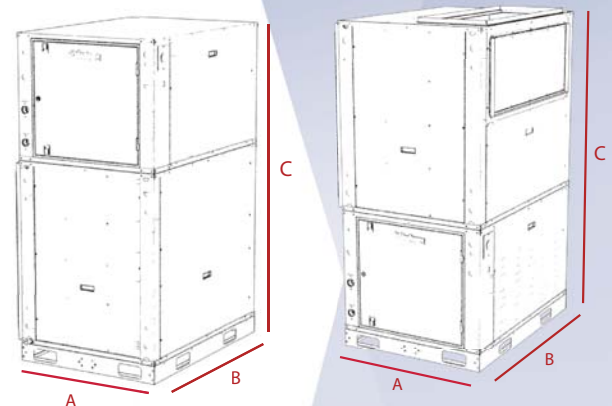


Twinning Unit Shown

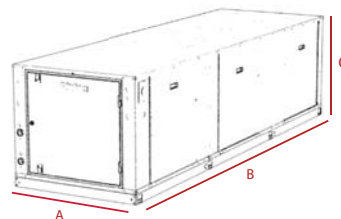
Features

- 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
- Variable Refrigerant Reheat (VR²)

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



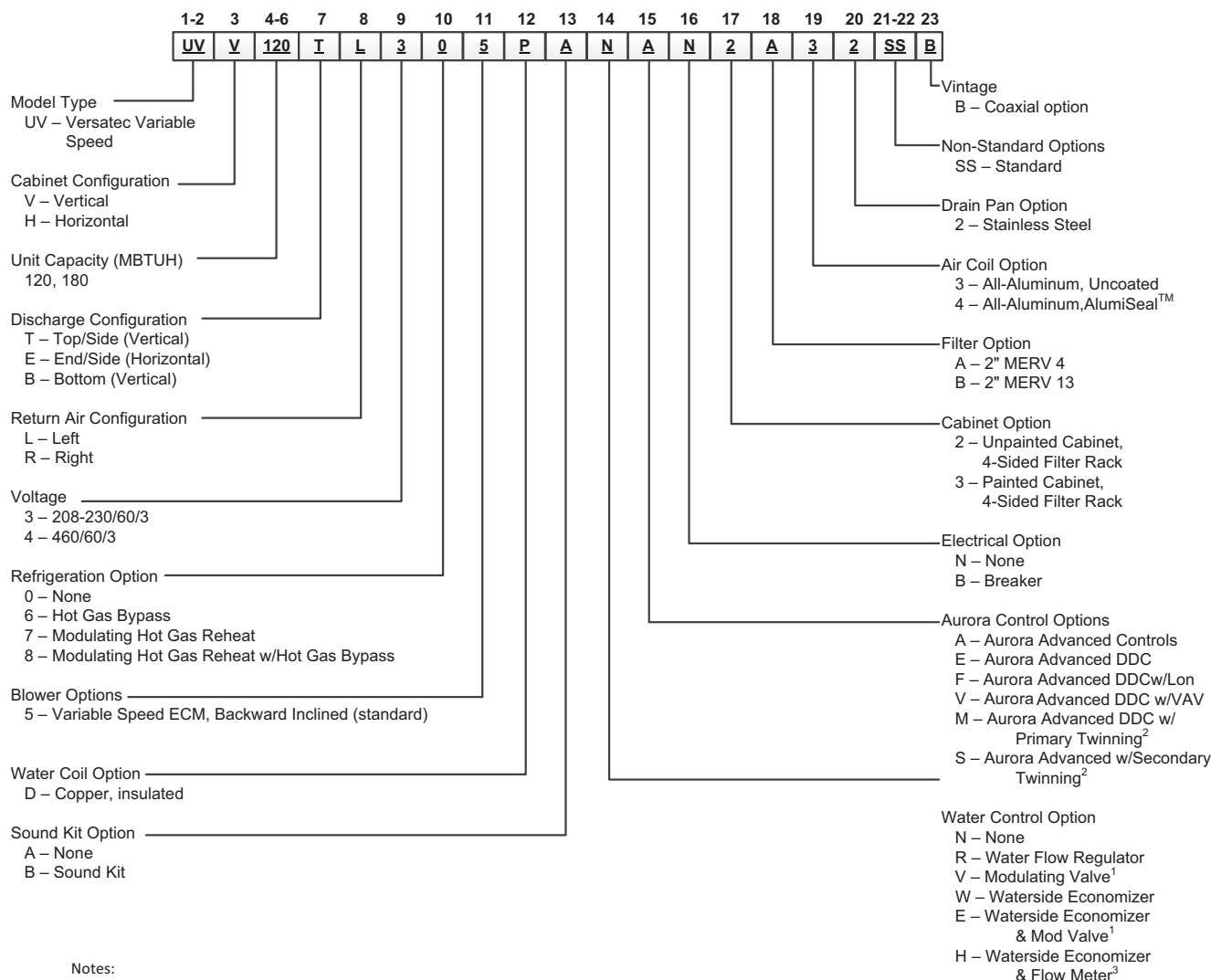
Versatec VS Large: Quick Features Guide	
VS BC ECM Plenum Fan	Std
Integrated Waterside Econ	Special
Hot Gas Reheat	Special
Variable Refrigerant Reheat (VR ²)	Opt
Aurora Advanced Controls	Std
Aurora UPC BACnet, N2 or LON	Opt
VAV Capable	Opt
DCV Capable (UPC)	Opt
Zoning	-
Twinning	Opt



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

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
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



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

VERSATEC ROOFTOP - URS/D/T - 3-30 TON

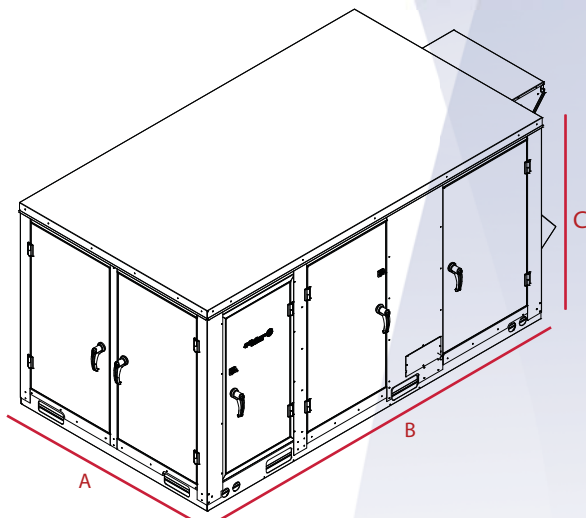
Water/Geothermal Source Heat Pump

Standard Features

- Variable Speed integrated ECM Plenum Fan with 2" w.g. esp capability - 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 (plenum fan option, topflow - special order)
- 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 field 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 Economizer
- Super quiet sound kit with multi-density compressor blanket
- Copper or cupro-nickel 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
	cm.	103.0	201.0
096-144	in.	52.0	93.0
	cm.	133.0	236.0
180-360	in.	82.0	105.0
	cm.	208.0	267.0



Versatec Rooftop 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 Packaged Water Source Rooftop is a new 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.

1-2	3	4-6	7	8	9	10	11	12	13	14-16	17	18	19	20	21	22	23	24-25	26
UR	S	036	B	Q	Q	S	D	A	N	000	S	A	N	A	3	2	N	SS	A
Model Type UR – Versatec Packaged Rooftop	Compressor Configuration S – Single Speed Scroll D – Dual Capacity Scroll T – Two Scroll, Independent Circuit	Unit Capacity (MBTUH) 036, 048, 060, 070(Single Speed) 038, 049, 064, 072(Dual Capacity) 096, 120, 144(Two Compressor) ⁸ 180, 181, 240, 300, 360(Two Compressor) ⁹	Cabinet Configuration B – Bottom Discharge/Return ¹ S – Side Discharge/Return Only (180-360)	Voltage 0 – 208-230/60/1 (036-072 Only) 3 – 208-230/60/3 4 – 460/60/3	Refrigeration Option 0 – None G – Hot Gas Bypass R – Hot Gas Reheat B – Hot Gas Reheat w/Hot Gas Bypass	Blower Options 1 – Variable Speed ECM, Forward Curve (036-072) ¹⁰ 4 – 5 Speed ECM (036-072) ^{5,10} 5 – Variable Speed ECM-Backward Inclined, High Static ¹	Water Coil Option D – Copper, Insulated P – CuproNickel, Insulated	Sound Kit Option A – None B – Sound Kit	Water Control Option N – None F – Flow Meter ² (036-144) R – Water Flow Regulator (036-072) V – 2 – Way Valve M – 2 – Way Modulating Valve ³ B – 2 – Way Valve w/ Flow Regulator (036-072)	Vintage A – Factory Use Only	Non-Standard Options SS – Standard	Future N – None	Drain Pan Option 2 – Stainless Steel, (Front Draining) 4 – Stainless Steel, (Back Draining)	Air Coil Option 3 – All-Aluminum, Uncoated 4 – All-Aluminum, AlumiSeal™	Filter Option A – 1" Throwaway B – 2" MERV 13 C – 2" MERV 8 D – 4" MERV 13	Electrical Option N – Standard, None S – Standard w/IntelliStart® ⁷ C – Non-Fused Disconnect D – Non-Fused Disconnect w/IntelliStart® ⁷ E – Non-Fused Disconnect w/GFI Outlet ^{6,7} F – Non-Fused Disconnect w/IntelliStart® ^{6,7} & GFI Outlet ^{6,7} G – Circuit Breaker H – Circuit Breaker w/IntelliStart® ⁷ J – Circuit Breaker w/GFI Outlet ⁶ K – Circuit Breaker w/IntelliStart® ^{6,7} & GFI Outlet ^{6,7}	Control Option A – Aurora™ Base Control B – Aurora Advanced Control E – Aurora w/UPC DDC Control F – Aurora w/UPC DDC Control w/LON G – Aurora Advanced w/UPC DDC Control H – Aurora Advanced w/UPC DDC w/LON	Cabinet Option S – Standard, No Outdoor Air A – Motorized Outdoor Air Damper B – Dry Bulb Economizer ^{2,3,5} C – Dry Bulb Economizer w/Barometric Relief ^{2,3,5} E – Network Controlled Economizer ^{2,3,4,5} F – Network Controlled Economizer w/Barometric Relief ^{2,3,4,5} G – Differential Enthalpy Economizer ^{2,3,5} H – Differential Enthalpy w/Barometric Relief ^{2,3,5}	Future Option 000 – None

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	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
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.



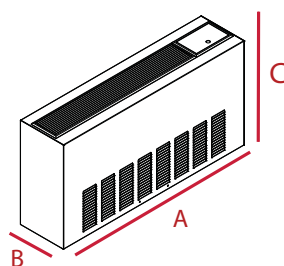
All Versatec Packaged Rooftop product is safety listed under UL1995 thru UL and performance listed with AHRI in accordance with standard 13256-1.

LOW SILL CONSOLE - LCS/C/W - 0.75-1.5 TON

Water/Geothermal Source 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.

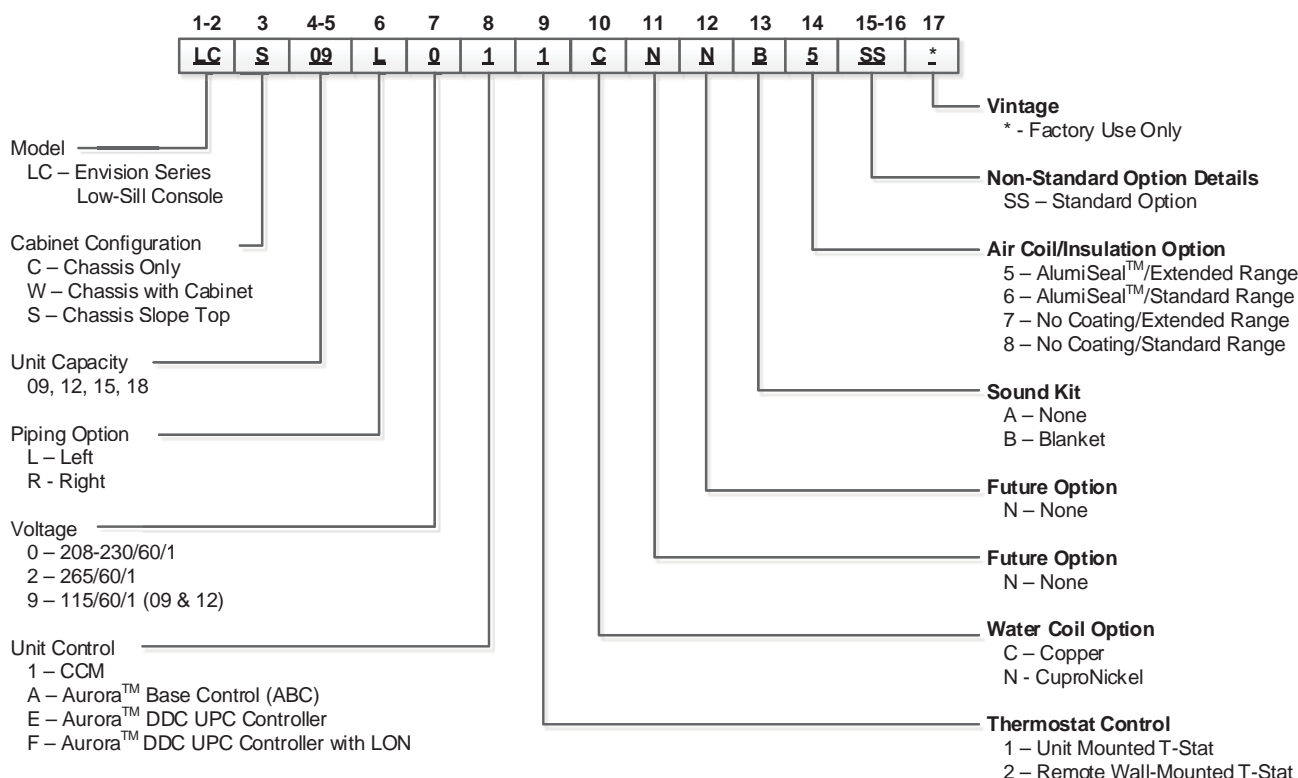


Model		Overall Cabinet Dimensions		
		A (WIDTH)	B (DEPTH)	C (HEIGHT)
009-012	in.	45.1	10.8	22.5
	cm.	114.6	27.4	57.2
015-018	in.	50.0	12.8	22.5
	cm.	127.0	32.4	57.2

Low Sill Console 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 Envision Series 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														
			Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
Model	Flow Rate		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	8,700	12.2	11,400	4.3	10,000	18.6	9,200	3.7	9,500	14.0	7,200	2.9
12	3.5	340	10,900	12.2	14,700	4.3	12,700	17.9	11,800	3.7	11,500	13.5	9,400	2.9
15	4.5	450	13,300	12.2	17,500	4.4	16,200	19.0	14,300	3.8	14,200	14.3	10,600	3.0
18	5.5	500	16,200	12.2	20,500	4.3	19,000	18.5	17,000	3.7	17,000	13.9	12,700	2.8

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



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

ENVISION CONSOLE - NCS/C/W/E - 0.75-1.5 TONS

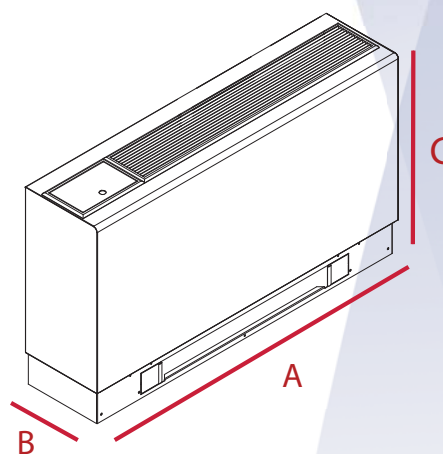
Water/Geothermal Source Heat Pump

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

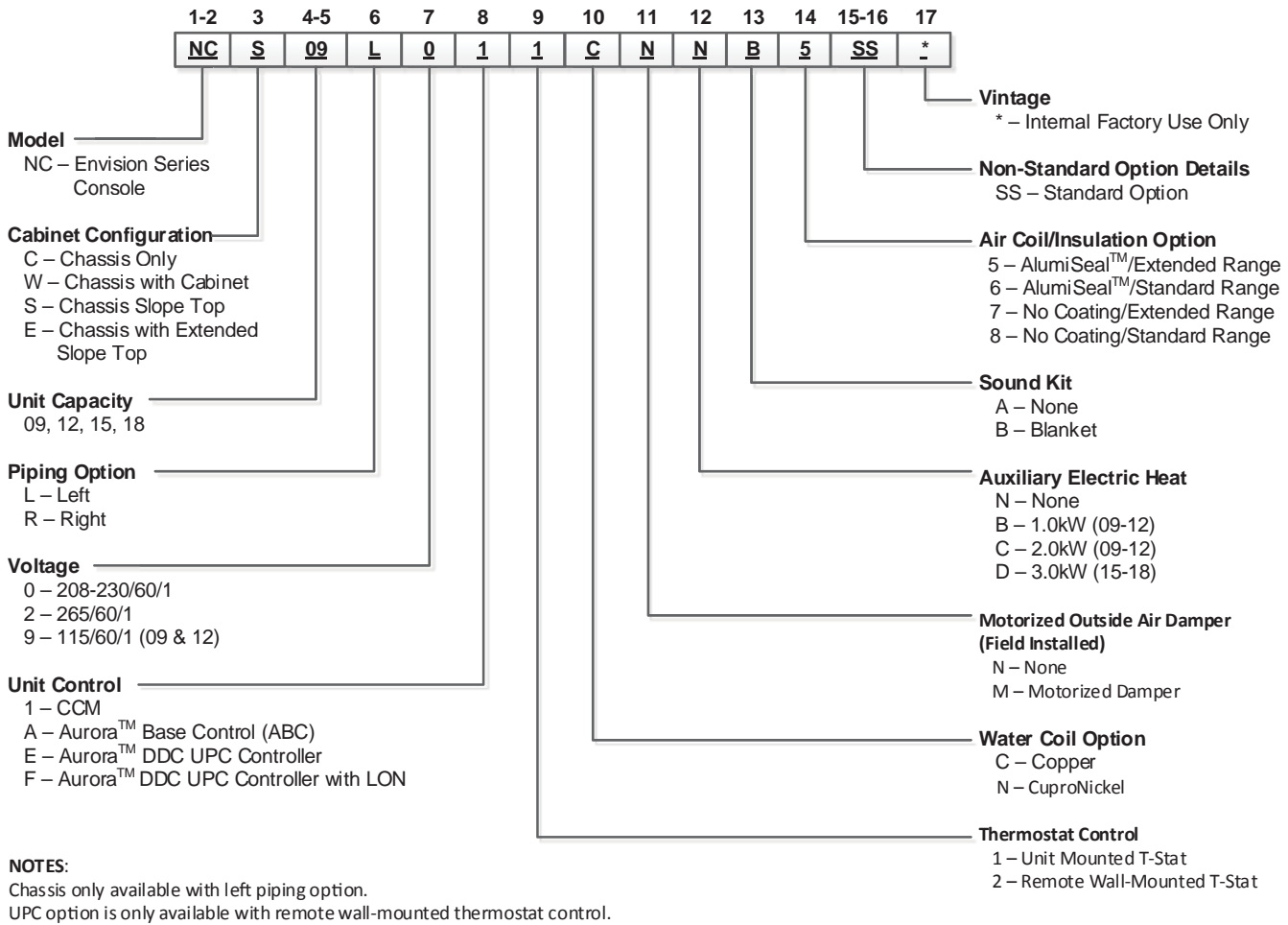


Low Sill Console Quick Features Guide

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 Envision Series Console provides cutting edge technology in heating and cooling for commercial applications, using the latest in component and design technology. Single speed, R-410A LG 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.



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

ECM Motor														
			Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
Model	Flow Rate		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 Envision Series product is Safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-1.

VERSATEC ULTRA HYDRONIC - NSW - 1.5-6 TONS

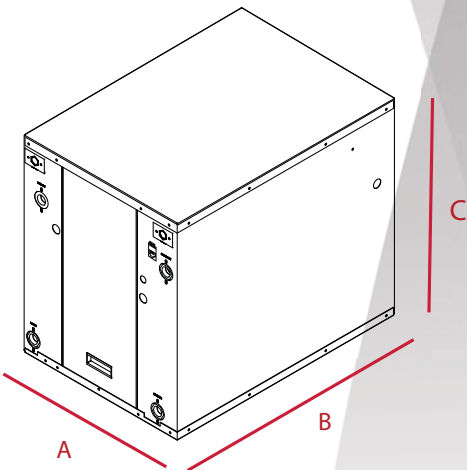
Hydronic Heat Pump

Standard Features:

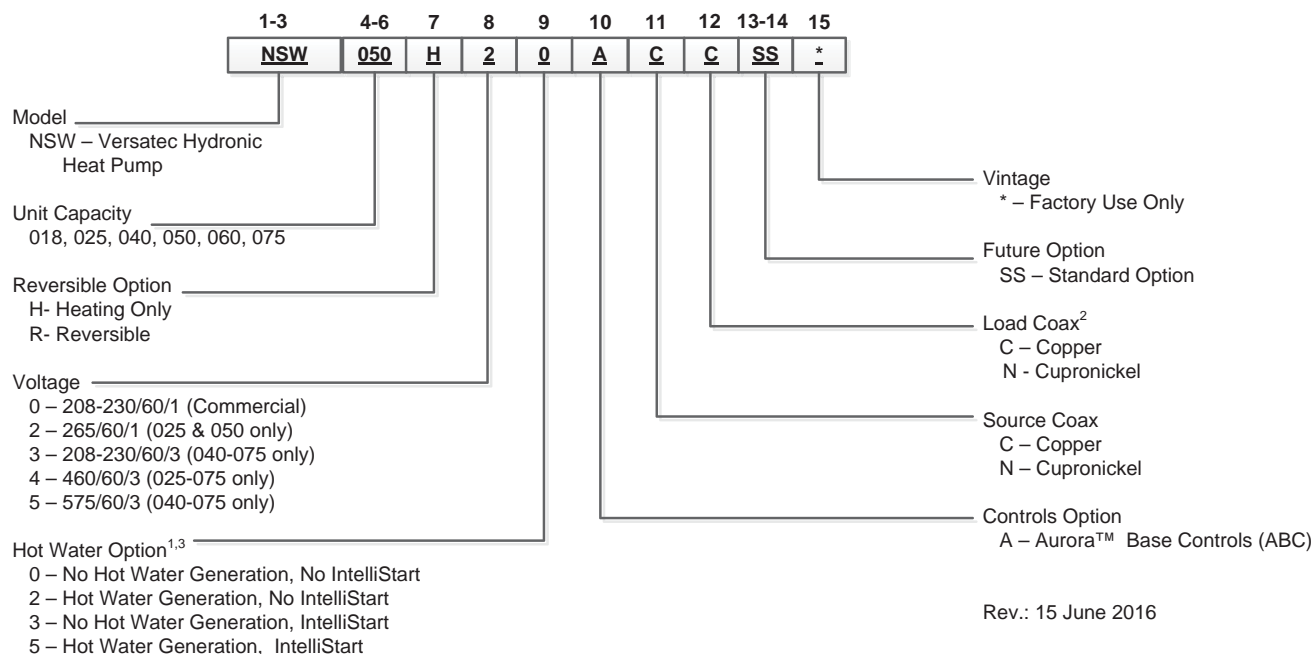
- High efficiency copper coaxial heat exchanger (vented double walled available only on 018 and 025 “heating only” models)
- Optional IntelliStart reduces starting current by 60-70%
- Field switchable control box (end to end) for application flexibility
- Insulated and corrosion resistant cabinet to 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.



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		Energy Star Compliant
		Load Gpm	Source Gpm	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	
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		Energy Star Compliant
		Load Gpm	Source Gpm	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	
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

01/03/12



All 5 Series 500W11 product is safety listed under UL1995 thru ETL and performance listed with AHRI in accordance with standard 13256-2. The 5 Series 500W11 is also ENERGY STAR® rated.

ENVISION HYDRONIC - NDW - 8-15 TONS

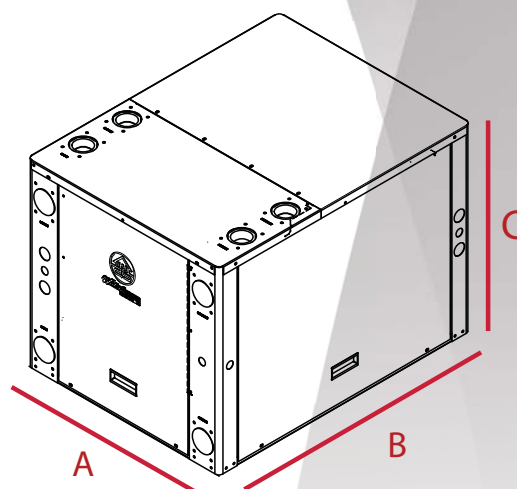
Hydronic Heat Pump

Standard Features

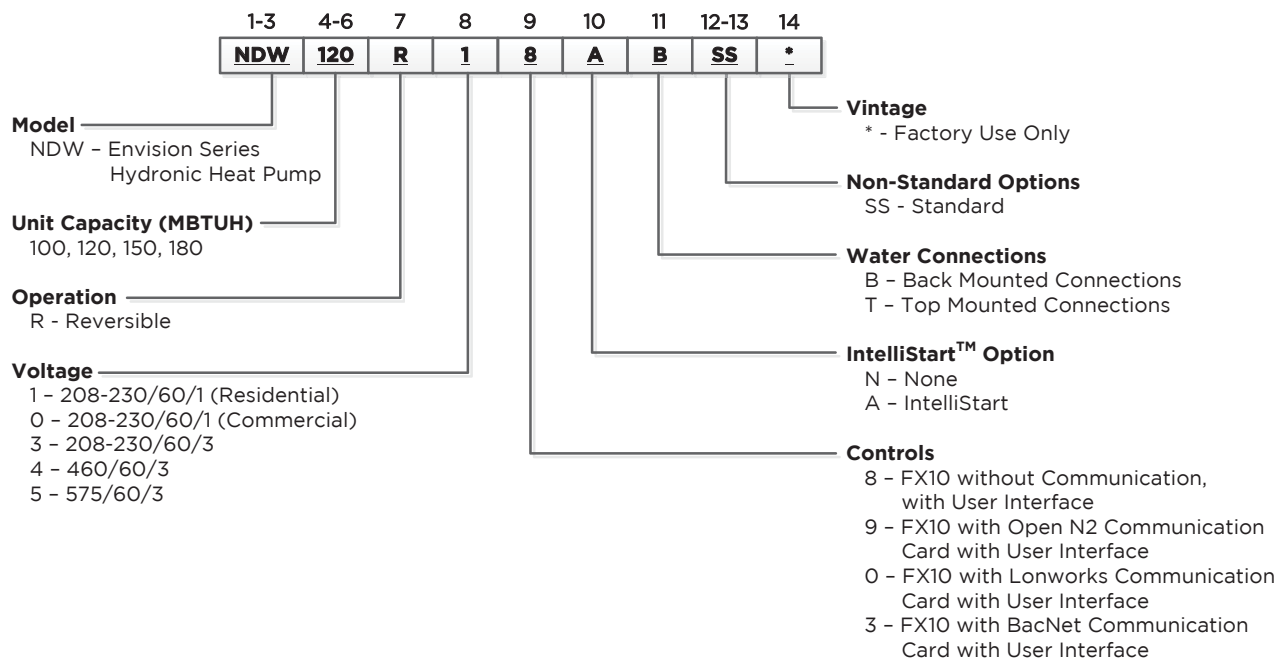
- Single phase is available.
- Heavy gauge cabinet
- Quiet scroll compressors in all models
- Two-dimension refrigerant piping vibration loops to isolate the compressor.
- All interior cabinet surfaces are insulated with 1/2 in. [12.7 mm] thick 1-1/2 lb [681 g] density, surface coated, acoustic type glass fiber insulation.
- Optional IntelliStart to reduce starting current
- Field switchable control box
- Advanced FX10 control
- 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.
- Optional user interface for diagnostics and commissioning of FX controls.
- 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 Envision Series NDW is designed to meet the high-volume water demands of today's larger luxury homes. NDW units provide high capacity heating and cooling performance, but still deliver the features homeowners have come to expect from our Envision line.



Rev.: 22 April 2013D

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

ENVISION² NXW - 10-50 TONS

Reversible Chiller

Standard Features

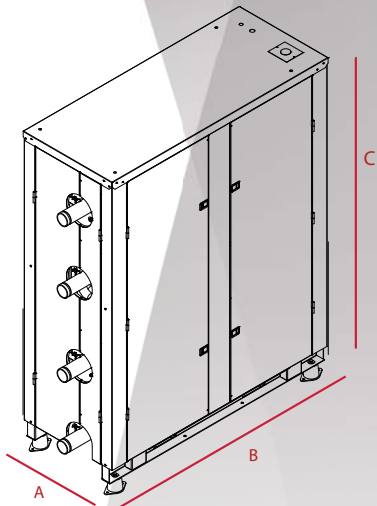
- Capacities ranging from 120-600 MBtu/hr output
- Complete commercial voltage selection of 208-230V/60Hz/3ph, 460/60/3, 575/60/3
- Oversized brazed plate heat exchangers offer high efficiency with industry low waterside pressure drop
- True-dual brazed plate heat exchangers provide better part load 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
- Heavy gauge, galvanized steel enclosure with hinged 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
- Factory installed pressure/temperature port externally accessible for improved serviceability
- Finger-touch safe power fuses provide circuit protection
- Primary fusing to control transformer to protect low voltage components from spikes in current fault
- 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 thru 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:

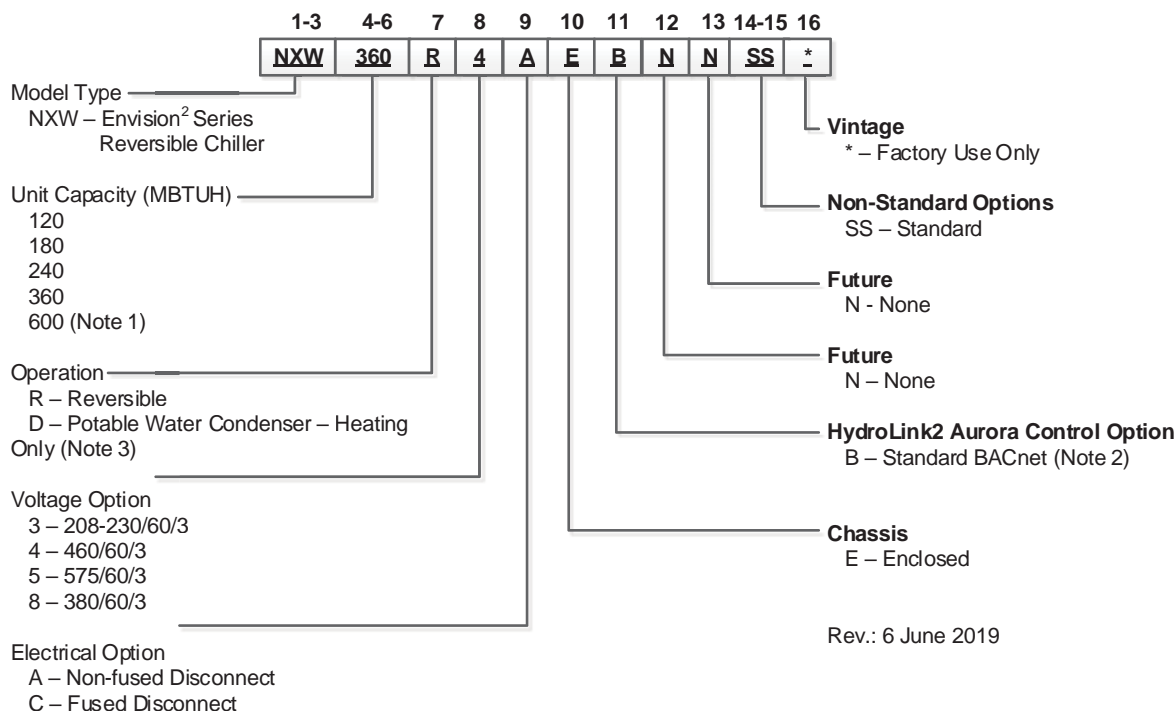
- Factory mounted, internally wired, rotary-style, non-fused disconnect
- HydroLink Aurora controls with LonWorks, BACnet, or non-communicating options.
- **Domestic Hot Water (10-30 ton)**
- HydroLink Supervisory Controller



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 Envision² Reversible Chiller Series 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.



Rev.: 6 June 2019

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 Envision² NXW Series product is Safety listed under UL1995 thru ETL and performance tested in accordance with standard AHRI/ISO 13256-2.

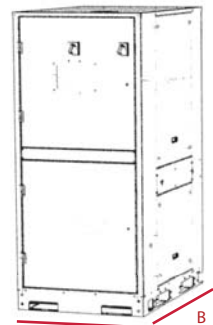
WC MODULAR SCROLL CHILLERS

WCH/CR - 20-80 TONS

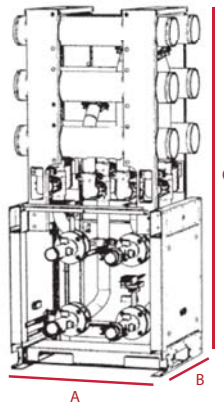
CHILLER

Standard Features

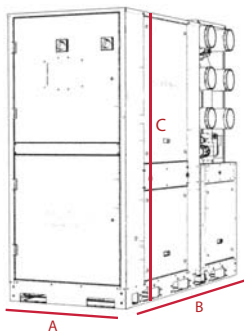
- Capacities ranging from 20-80 ton output
- Complete commercial voltage selection of 208-230V/60Hz/3ph, 460/60/3, 575/60/3
- Oversized brazed plate heat exchangers offer high efficiency with industry low waterside pressure drop
- True-dual circuit brazed plate heat exchangers provide better part load 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 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.	33.0	46.5	73.3
	cm.	83.8	118.1	186.2



Header Rack		Overall Cabinet Dimensions		
		A (WIDTH)	B (DEPTH)	C (HEIGHT)
020-080	in.	34.0	28.4	74.69
	cm.	86.4	72.1	189.7

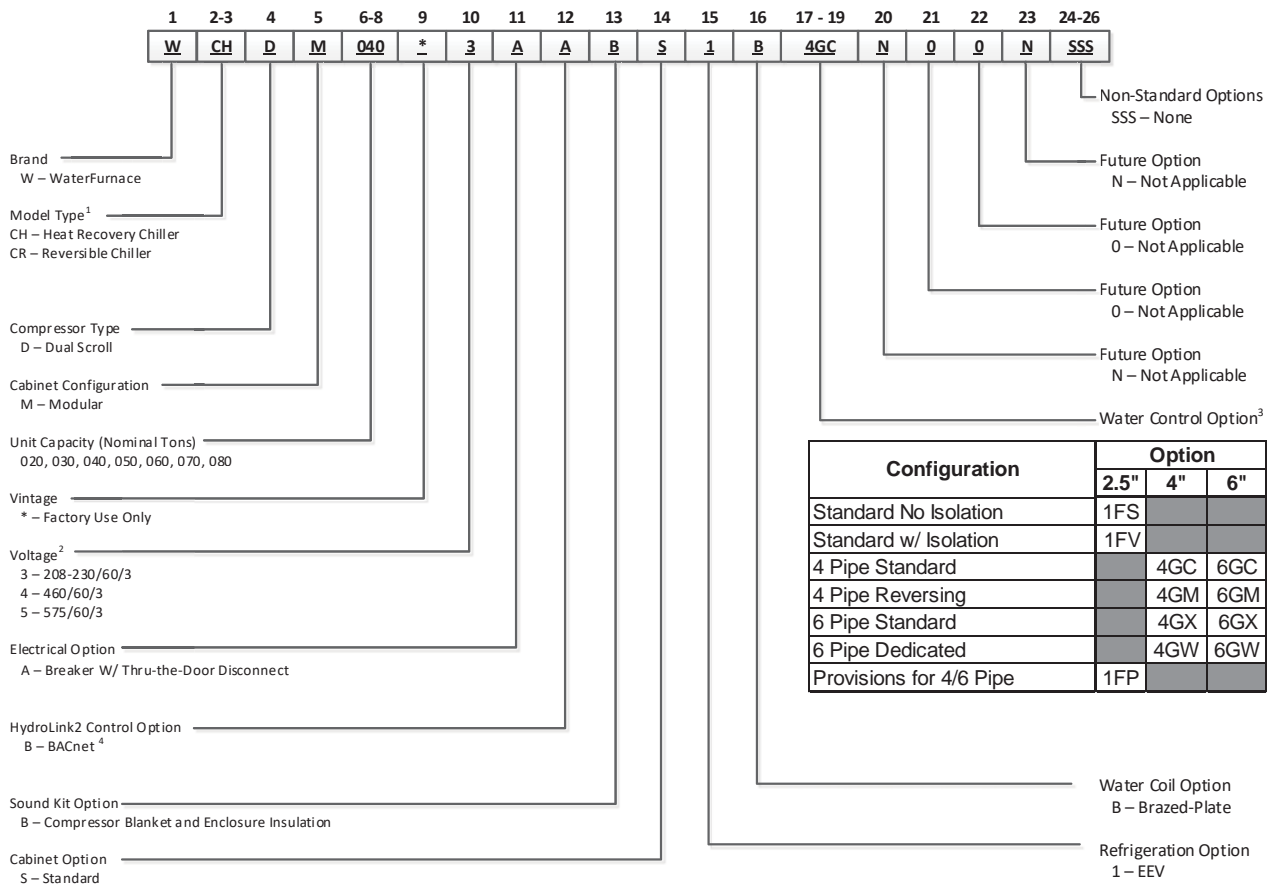


With Header Rack		Overall Cabinet Dimensions		
		A (WIDTH)	B (DEPTH)	C (HEIGHT)
020-080	in.	34.0	74.96	74.69
	cm	86.4	190.4	189.7



The Modular Scroll Chiller features the ultimate in energy efficiency with its optional patented 6 Pipe Header Rack design, utilizing low pressure drop 3-way valves for precise control of flow and balancing, which allows for the industry's only simultaneous heating and cooling operation with a single unit. 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



Notes:

1 – “CH” models are non-reversible and are from 20-80 ton. “CR” models are reversible and available from 20-50 ton. “CV” models available in 30 and 50 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.

Provisions for 4/6 pipe has all necessary wiring and equipment for 4 or 6 pipe water options for instances when the removable pipe rack was sold separate from the unit

4. Standard controls option includes BACnet and standalone control.

IPLV English (IP) Units

Model	Full Load Range			IPLV	
	Cooling Capacity (MBtu/hr)	Input Power (kW)	EER	EER	kW/ton
020	265,000	15.8	16.8	21.6	0.557
030	390,000	24.1	16.3	20.5	0.584
040	510,000	31.1	16.4	22.4	0.536
050	620,000	37.9	16.5	22.0	0.546
060	805,000	49.1	16.4	22.0	0.546
070	892,000	54.7	16.3	21.5	0.558
080	990,000	62.5	15.9	21.3	0.564

*Tested in accordance with AHRI 550, but not certified by AHRI.



All WC Modular Scroll Series product is Safety listed under UL1995 thru ETL

VS DUAL SCREW HEAT RECOVERY CHILLER

WCHV - 175-275 TONS

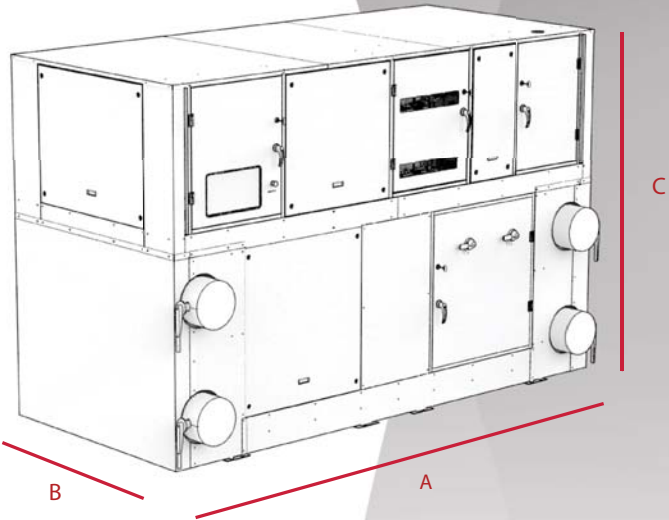
CHILLER

Standard Features

- Simultaneously chill 44 °F water and heat 140 °F water for simultaneous COP's over 7.0
- Capacity Ranges of 175, 225, and 275 ton chilled water output.
- Voltage of 460/60/3
- Refrigerant R134a
- Oversized brazed plate heat exchangers offer high efficiency with industry low waterside pressure drop
- Fork pockets in the frame enable maneuverability for installation and shipment
- Circuit breakers provide circuit protection and minimal downtime. SCCR of 65kA.
- 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.
- Multiple units can be staged together using Remote HydroLink Supervisory Control Accessory 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.
- Dual permanent magnet variable speed screw compressors feature the highest efficiency, full capacity turn down to 25%, and legendary screw reliability.
- Power factor corrected and EMI noise suppression drive components.
- Refrigerant cooled compressor drive.
- Heavy gauge Finite Element Analysis (FEA) optimized steel frame.
- Vibration isolated discharge refrigerant lines
- HydroLink Aurora Advanced Controls featuring Niagara Firmware Environment
 - Safeties: HP, LP, LOC, 3 levels of freeze detection
 - Selectable water temp alarms
 - Onboard setpoint control with selectable sensors
 - Energy, performance and refrigeration monitoring
 - BACnet/MSTP and BACnet IP
 - Large Color Touch screen tablet HMI



No Header Rack		Overall Cabinet Dimensions		
		A (WIDTH)	B (DEPTH)	C (HEIGHT)
175, 225, 275	in.	146.5	69.0	93.8
	cm.	372.1	175.3	238.3



Wide operating range and R134a refrigerant make this chiller a gem in the application of heat recovery.

WCHVE275*4AABS3B6FAN00NSSS

	1	2-3	4	5	6-8	9	10	11	12	13	14	15	16	17 - 19	20	21	22	23	24-26
	W	CH	V	E	275	*	4	A	B	B	S	3	B	6FA	N	0	0	N	SSS
Brand	W - WaterFurnace																		Non-Standard Options SSS - None
Model Type	CH - Heat Recovery Chiller																		Future Option N - Not Applicable
Compressor Type	V - Variable Speed																		Future Option 0 - Not Applicable
Cabinet Configuration	E - Enclosed																		Future Option 0 - Not Applicable
Unit Capacity (Nominal Tons)	175,225,275																		Future Option N - Not Applicable
Vintage	* - Factory Use Only																		Water Control Option 6FA - 6" w/iso vlv
Voltage	4 - 460/60/3																		Water Coil Option B - Brazed-Plate
Electrical Option	A - Standard, Fused Disconnect																		Refrigeration Option 3 - EEV
Control Option	B - Stand-Alone / BACnet																		Cabinet Option S - Standard
																			Sound Kit Option B - Sound Kit

IPLV English (IP) Units

Model	Full Load Range			IPLV	
	Cooling Capacity (MBtu/hr)	Input Power (kW)	EER	EER	kW/ton
175	2,100,000	128.4	16.4	25.9	0.464
225	2,600,000	166.8	15.6	24.6	0.487
275	3,200,000	220.0	14.5	24.6	0.489

*Tested in accordance with AHRI 550, but not certified by AHRI.



All WCHVE Series Screw Chillers product is Safety listed under UL1995 thru ETL.

Aurora Water Source Heat Pump Controls

Aurora Base Control (ABC)

The ABC microprocessor provides all the features necessary to operate today's standard WSHPs that utilize dual capacity compressors and variable speed ECM/5 speed ECM blower motors with hot gas reheat. This control can communicate to a handheld diagnostic tool to help the installing contractor or service technician with equipment setup and service. By utilizing Modbus RTU communication protocol, the ABC board can communicate with additional devices on the Aurora network.

Aurora Advanced Control (ABC + AXB)

An expansion board (AXB) is added to the Aurora Base Control (ABC) for enhanced sensor and IO capability. The Aurora Advanced Control opens a whole new world into advanced WSHP control and remote monitoring as well as advanced technology such as variable speed compressors and EEV's. The Aurora Advanced Control, coupled with the Aurora UPC, allows all of this information to be communicated to the DDC allowing full remote monitoring and control.

Aurora Unitary Protocol Converter (UPC)

The Aurora Unitary Protocol Converter (UPC) is an integrated solution and communicates directly with the Aurora Heat Pump Controls and allows access/control of a variety of internal Aurora heat pump operations such as sensors, relay operation, faults and other information. In turn, the UPC then converts internal Aurora Modbus protocol to BACnet MS/TP, or N2 protocols and communicates to the BAS system. LonWorks is also available with an optional plugin board. This provides the great benefit of complete control integration and a myriad of information available to the BAS from the heat pump control. Plus it also allows individual unit configuration such as ECM fan speeds or freeze detection setting directly over the BAS without the need for access to the actual heat pump



Versatec Compact
1/2-30 Ton WSHP



Rooftop
3-30 Ton WSHP Rooftop

The Aurora Advanced Engineered WSHP

	Aurora Base	Aurora Base w/ UPC	Aurora Advanced	Aurora Advanced w/ UPC
Unit Capacity Control	1/2 to 30 ton WSHP		1/2 to 30 ton WSHP	
	3 to 30 ton WSHP Rooftop		3 to 30 ton WSHP Rooftop	
User interface	Thermostat Terminals	Standalone w/Zone Sensor	Thermostat Terminals	Standalone w/Zone Sensor
	Alarm and Status LED's	BACnet/N2/Lon	Alarm and Status LED's	BACnet/N2/Lon
	AID Tool	Aurora Touch	AID Tool	Aurora Touch
Networking Capability	Thermostat Terminals to DDC System	BACnet MSTP/N2/Lon	Thermostat Terminals to DDC System	BACnet MSTP/N2/Lon

Aurora Base System Applications

Connect to traditional thermostat via 24VAC thermostat signals with heating, cooling and dehumidification modes of operation. Optional Aurora UPC allows BACnet MSTP, N2 or LonWorks (add-on board) connection.

Aurora Base Standalone

- PSC or ECM Fan Control
- Rotary, or Scroll Compressor (Single or Dual Stage)
- Load Shed
- Condensate Level Sensor
- Status and Alarm LEDs
- Test Mode
- Selectable Freeze protection
- Emergency Shutdown Input
- Waterside Economizer Control
- AID Tool
- Two Stage Fan Control
- Two Stage Auxiliary Heat Control
- Motorized Water Valve Control
- Hot Gas Reheat
- Dehumidification Control
- Communicating integrated EC Plenum Fan
- Field configurable Accessory Relay
- Pulsed 24VAC Dry Relay Alarm
- Software Selectable Fan Speeds
- Optional Heating cycle Reversing Valve operation



ABC



TSTAT



AID Service Tool

Additional Features with Aurora Base with UPC

- BACnet/N2 or Lon
- Compressor proving
- Fan proving
- Occupancy Sensor
- Dirty Filter Switch
- User Friendly Aurora Touch Color Touch Screen service Tool
- Valve End Switch
- CO2 alarm
- CO2 Ventilation
- VAV Mode (variable speed compressor)
- Integrated Rooftop Economizer Enthalpy Control
- Occupancy Scheduling
- Aurora Touch access at zone sensor
- BACnet Configurable Aurora system



ABC



UPC



Aurora Touch Service Tool

Aurora Advanced System Applications

Connect to traditional thermostat via 24VAC thermostat signals with heating, cooling and dehumidification modes of operation. Optional Aurora UPC allows BACnet MSTP, N2 or LonWorks (add-on board) connection.

Aurora Advanced Standalone

- All of Aurora Base Features
- Variable Speed Perm Magnet compressor
- Compressor Current Monitoring
- Field configurable Accessory Relay 2
- Analog output for driving modulating damper or solenoid valve
- Electronic Expansion Valve
- Variable Speed Pump Output
- Other configurable output relays and analog/digital inputs
- Full unit energy monitoring of compressor, fan and Auxiliary heat current and power.
- Optional Performance Monitoring Kits
- Water temp in/out (Kit 1) Flow Rate heat of Extraction/Rejection (Kit 2)
- Optional Refrigerant Monitoring Ki
- Refrigerant temperatures and pressures including superheat and subcooling.



ABC



AXB



TSTAT



AID Service Tool

Additional Features with Aurora Base with UPC

- BACnet/N2 or Lon
- Compressor proving
- Fan proving
- Occupancy Sensor
- Dirty Filter Switch
- User Friendly Aurora Touch Color Touch Screen service Tool
- Valve End Switch
- CO2 alarm
- CO2 Ventilation
- VAV Mode (variable speed compressor)
- Integrated Rooftop Economizer Enthalpy Control
- Occupancy Scheduling
- Aurora Touch access at zone sensor
- Bacnet Configurable Aurora system



ABC



AXB

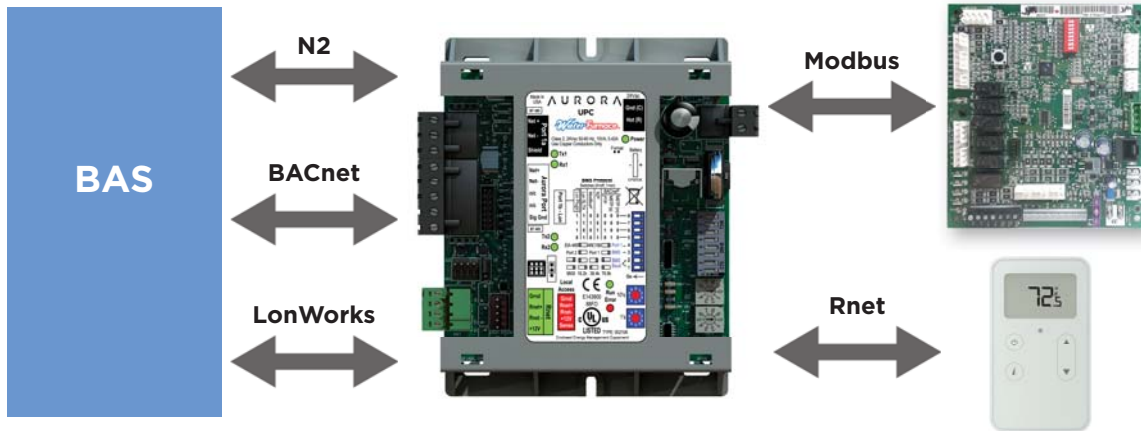


UPC



Aurora Touch Service Tool

Aurora UPC for BAS Integration



The Aurora Unitary Protocol Converter (UPC) is designed to add-on to any Aurora Base or Advanced heat pump control and is designed to allow water source heat pumps to be integrated into Building Automation Systems (BAS) with ease. The Aurora UPC is an integrated solution and communicates directly with the Aurora Heat Pump Control. It allows access/control of a variety of internal Aurora heat pump operations such as sensors, relay operation, faults and other information. In turn, the UPC then converts internal Aurora Modbus protocol to BACnet MS/TP, N2, or LON protocols and communicates to the BAS system. This provides the great benefit of complete control integration and a myriad of information available to the BAS from the heat pump control

- Allows individual unit configuration such as ECM fan speeds or freeze protection setting directly over the BAS without the need for access to the actual heat pump.
- Field Selectable protocol and baud rate via DIP switches
- All zone temperatures and zone sensors are connected to the UPC on an RNet bus, simplifying hook up at the unit.
- RNet sensors can include a combination of zone temperature and humidity, CO2, and VOC sensors. Multiple configurations are available.
- Built-in support for an Aurora Color Touch interface unit or the newly released Android App Adaptor Cable allowing any Android device to interface the Aurora UPC
- There are an extensive number of points that the UPC has available over the network for integration into the BAS. A list of the BACnet points, N2 points, and LON SNVTs are available along with their individual point descriptions by contacting the Commercial Solutions Group at 1-877-677-4420.
- Several features are "built in" to the Aurora UPC programming such as Air Side Economizer Programming (Rooftop), Variable Air volume (VAV) support and Demand Controlled Ventilation (DCV)
- Remote access of the Heat pump and all configuration and service parameters at the zone sensor. No need for ladder to access overhead units or to venture to the rooftop to initially access! Do it all from the zone sensor!



Aurora Features

	Aurora Base	Aurora Base w/ UPC	Aurora Advanced	Aurora Advanced w/ UPC
Random Start Delay	Standard	Standard	Standard	Standard
24VAC Thermostat inputs	Standard	-	Standard	-
Compressor Minimum On/Off Timers	Standard	Standard	Standard	Standard
High Condensate Level Sensor	Standard	Standard	Standard	Standard
High Refrigerant Pressure Protection	Standard	Standard	Standard	Standard
Loss of Refrigerant Charge Protection	Standard	Standard	Standard	Standard
Reversing Valve Default to Heating Mode	Standard	Standard	Standard	Standard
Over/Under Voltage	Standard	Standard	Standard	Standard
Alarms (24 VAC)	Standard	Standard	Standard	Standard
Dry Alarm Contacts Standard	Standard	Standard	Standard	Standard
Pulsing Alarms (24VAC)	Standard	Standard	Standard	Standard
WaterFreeze Detection	Standard	Standard	Standard	Standard
Selectable Water Freeze Detection	Standard	Standard	Standard	Standard
Emergency Shutdown	Standard	Standard	Standard	Standard
Load Shed	Standard	Standard	Standard	Standard
Field Configurable Accessory Relay 1	Standard	Standard	Standard	Standard
5 Spd or VS ECM Operation	Standard	Standard	Standard	Standard
Communicating integrated EC Plenum Fan	Standard	Standard	Standard	Standard
Multi Speed Plenum Fan	Standard	Standard	Standard	Standard
Fan Speed Software Configurable	Standard	Standard	Standard	Standard
One or Two Stage Compressor	Standard	Standard	Standard	Standard
WaterSide Economizer	Standard	Standard	Standard	Standard
Hot Gas Reheat	Standard	Standard	Standard	Standard
Motorized Water Control Valve Delay	Standard	Standard	Standard	Standard
Fault Retry prior to Lockout	Standard	Standard	Standard	Standard
Test Mode to shorten delays	Standard	Standard	Standard	Standard
Aid Tool Service Interface	Optional		Optional	
Compressor Proving		Standard		Standard
Fan proving		Standard		Standard
Occupancy Sensor		Standard		Standard
Dirty filter Switch		Standard		Standard
Bacnet MSTP or N2		Standard		Standard
LonWorks PCB		Optional		Optional
Compressor Current Monitoring			Standard	Standard
Air Coil Freeze Detection			Standard	Standard
Two Auxiliary Alarm Inputs			Standard	Standard
Variable Speed Compressor			Standard	Standard
Integrated Rooftop Economizer Enthalpy Control			Standard	Standard
Variable Speed Pump - Software Configurable			Standard	Standard
Field Configurable Accessory Relay 2			Standard	Standard
Modulating Water Valve			Standard	Standard
Analog out for driving Modulating Damper for Water Valve			Standard	Standard
Other configurable output relays and analog/digital inputs			Standard	Standard
Electronic Expansion Valve			Optional	Optional
Energy Monitoring Current and Power			Standard	Standard
Refrigerant Monitoring			Optional	Optional
Performance Monitoring Kit 1 (Temperatures)			Optional	Optional
Performance Monitoring Kit 2 (water flow and Ht of Ext/Rej)			Optional	Optional
CO ₂ /VOC Demand Ventilation		Optional		Optional
CO ₂ /VOC Setpoint Alarm		Optional		Optional
VAV Operation (variable speed compressor)		Optional		Optional
Supply Air Temp Control		Optional		Optional
Aurora Touch Service Interface		Optional		Optional

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.



	Illustration	Heat/Cool Stages	Color/BW	Programmable	Touch-screen	Text Based	Fault Flash	ComfortTalk	Dual Fuel	Humidity	4 Wire	Ext Sensor	HP Communication	BACnet	LonWorks
TA32W02	1	3/2	BW				•								
TP32W03	2	3/2	BW	•	•		•		•			•			
TP32U03	3	3/2	BW	•		•		•	•			•			
TP32U04	3	3/2	BW	•		•		•	•	•		•			
TP32U05	3	3/2	BW	•		•		•	•	•	•	•			
TPCC32U01	4	3/2	Color	•	•	•		•	•	•	•	•	•		
TPCM32U03A	3	3/2	BW	•		•		•	•	•	•	•	•		
TPCM32U04A	3	3/2	BW	•		•		•	•	•	•	•	•		
TP32S01	5	3/2	BW	•								•			
TP32S02	5	3/2	BW	•				•				•			
TA32V01C	6	3/2	BW						•			•		•	•
TA32V02C	6	3/2	BW						•			•		•	•
TA32V03C	6	3/2	BW						•			•		•	•
TA32V04C	6	3/2	BW	•					•			•		•	•
TA32V05C	6	3/2	BW	•					•			•		•	•
TA32V06C	6	3/2	BW	•					•			•		•	•
ZS Sensors	7	3/2	BW	•					Opt	•					

NOTE: All thermostats include auto changeover function.

Aurora UPC Zone Sensors

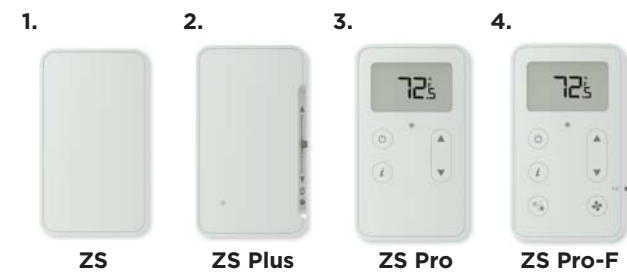


	Illustration	Temp CO ₂ humidity/VOC Options	Aurora Touch/Android Tablet Access Port	Occupancy Status LED	Occupancy Override Button	Setpoint Adjust	Large LCD Display	Alarm/Ault Indicator	°F or °C Button
ZS Standard	1	•	•						
ZS Plus	2	•	•	•	•				
ZS Pro	3	•	•	•	•	•	•	•	
ZS Pro-F	3	•	•	•	•	•	•	•	•

Optional Accessories - Zoning Systems (No DDC)

IntelliZone2 Zoning System - Standalone (No DDC)

The IntelliZone2 Comfort Zoning System is a residential/commercial zone control system which works with dual stage Envision2/5 Series and Versatec Variable Speed/7 Series units (up to 15 tons) to space condition up to six zones independently. The system is designed for non-DDC standalone systems using a fully communicating environment and requires Aurora Advanced control option for the equipment. Each zone is controlled by its own space thermostat and damper motor(s) using a maximum 1-inch W.G. inlet static pressure at zone dampers. The IntelliZone2 monitors the thermostats, puts the system in the proper mode of operation, and energizes the correct number of stages of heating or cooling and airflow. The IntelliZone2 was designed to solve problems that are inherent with HVAC zoning by eliminating the bypass damper and applying variable speed compressor and fan technology to zoning. In the commercial environment it is now possible to replace multiple smaller units with a single large unit with zoning to reduce installation costs and improve comfort.

The IntelliZone2 System is a perfect match to variable speed system by extending comfort and energy savings. The 25% minimum capacity of the variable speed systems allows even small zones to be controlled comfortably with the system. The IntelliZone2 is also compatible with our Symphony/AWL Wi-Fi Smart Cloud System.

An IntelliZone2 - 24V version is also available for traditional 24VAC controlled systems using traditional Y1 and Y2 type signals to the equipment.

The IntelliZone2 is also available with BACnet.



IntelliZone2 ZoneStat

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

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

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

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.



ZDR Rectangular Dampers

(8-30in Wide x 8-14in High)

ZDC Rectangular Dampers

(6-14in Diameter)



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



PC1550EW

10/19

Product:

Commercial Products Specification Catalog



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