



Heat Pump Product Guide





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The Nordic Difference



Energy Efficient

Heat pumps are ENERGY STAR® certified where applicable, and use premium components and software for maximum efficiency.



Expert Support

With decades of experience, our customer service team will get you the help you need in a timely manner.



System Reliability

Quality components and Canadian craftsmanship mean our heat pumps last decades, not years.



No Proprietary Tools

Start-up and diagnostics via a free PC app, no expensive proprietary software or tools required.



Iconic Designs

Our ATW Series and High Temperature heat pumps are one-of-a-kind designs you won't find with any other manufacturer.



Canadian Quality

Designed for harsh North American conditions and built by hand in New Brunswick, Canada.



Low GWP Refrigerant

Environmentally friendly and cost efficient, our systems use low global warming potential refrigerant R-454B.



Flexible

Geothermal, air source, forced air, radiant heating. No matter your project, our heat pumps suit the application.

Find out more

Visit our website at nordicghp.com for information on our manufacturing process, take a video plant tour, or download product information. Contact us by phone at **1-800-986-6781**.

ATW Series Air to Water Heat Pump

The air-to-water series uses heat transfer from the outdoor air to heat water for a hydronic heating system, or cool water for air conditioning via hydronic fan coils. Available in sizes from **two to five nominal tons for whole-home applications.**

Features & Benefits

Indoor Unit - A 28" x 28" footprint.

Outdoor Unit - Has a hinge mounted door, true variable speed with ECM-style hub motor for maximum energy efficiency. Mounting leg kits are available.

Compressor - Copeland two-stage scroll, with double isolation for quiet operation. Located in the indoor unit for ease of cold-weather service and better refrigerant/oil management.

Refrigerant Leak Detector - Optimized for safety of R454b, an A2L refrigerant.

EEV (Electronic Expansion Valve) - Maintains an accurate and efficient refrigerant flow.

Filter-Dryer & Sight Glass - Standard on all units.

Accumulator - Protects compressor against liquid slugging.

Coaxial Heat Exchanger - Enhanced surface coaxial style heat exchanger (CuNi available).

Domestic Hot Water - double wall heat exchanger and bronze head circulator factory installed.

Intelligent Defrost Logic - Minimizes energy required to defrost the outdoor coil.

Outdoor Ice Channeling Design - Angled outdoor coil, no bottom tray to reduce ice build-up.

Gen2 Board - Includes built-in aquastat functionality, BACnet MS/TP, data logging, electronic readout of refrigerant pressures and water in/out temperatures.

Refrigerant Pressure Sensors - electronic high and low, displayed by user interface.

Service Ports - High and low service ports for quick connection to a manifold gauge set.

Cabinet - Satin galvanized with powder coat finish. Acoustically insulated for quiet operation.

Doors - Four removable side panels, electrical box swings out for unobstructed servicing.



Standard Capacity Ratings for Heating Mode (60Hz)

LLT 105°F (41°C)			Outdoor Air 17°F (- 8°C)			Outdoor Air 47°F (8°C)		
Model	Loop Flow		Input Energy Watts	Capacity Btu/hr	COPh	Input Energy Watts	Capacity Btu/hr	COPh
	GPM	L/s						
25	8.0	0.50	1,625	13,200	2.38	1,400	20,300	4.25
45	10.0	0.63	2,488	20,800	2.45	2,087	30,900	4.34
55	12.0	0.76	3,294	27,200	2.42	2,802	41,200	4.31
65	14.0	0.88	4,201	34,400	2.40	3,533	51,600	4.28
75	16.0	1.00	4,764	39,200	2.41	4,048	59,400	4.30

Standard Capacity Ratings for Cooling Mode (60Hz)

ELT 54°F (12°C)			Outdoor Air 95°F			
Model	Loop Flow		Input Energy Watts	Capacity Btu/hr	EER	COPc
	GPM	L/s				
25	8.0	0.50	1,670	16,200	9.7	2.84
45	10.0	0.63	2,422	24,700	10.2	2.99
55	12.0	0.76	3,260	32,600	10.0	2.93
65	14.0	0.88	4,079	41,200	10.1	2.96
75	16.0	1.00	4,758	47,100	9.9	2.90





ATF Series Air to Air & Water Heat Pump

Features & Benefits

Distribution type - Air source ducted heating and cooling, in-floor hydronic heating with user selectable air or water heating priority.

Size - Sizes from 45 (8.8 kW) to 75 (17.2 kW)

4-Fan Outdoor Unit - For more efficient heating and cooling in extreme conditions. Mounting leg kits available.

Leak detector - For safety of R454b, an **A2L** refrigerant.

Intelligent Defrost Logic - Minimizes energy required to defrost the outdoor coil.

Outdoor Ice Channeling Design - Less ice build-up with no bottom tray and angled outdoor coil.

Part-Load Compressor - Copeland two-stage scroll with double isolation. Located in the indoor unit for service convenience, and better refrigerant/oil management.

Domestic Hot Water - Double wall heat exchanger and factory installed ECM bronze head circulator.

Gen2 Electronic Control Board - With built-in digital user interface. Outdoor reset function, data logging, laptop USB connection, BACnet MS/TP interface.



Standard Capacity Ratings for Air Heating Mode (60Hz)

Indoor Air 70°F (21°C) db / 60°F (15.6°C) wb			H22 - Outdoor Air 47°F (8.3°C)				H32-Outdoor Air 17°F (-8.3°C)					
Model	Indoor Airflow		Input Energy		Capacity		COPh	Input Energy		Capacity		COPh
	cfm	L/s	Watts	Btu/hr	kW	W/W		Watts	Btu/hr	kW	W/W	
45	1200	566	2,237	30,000	8.8	3.93	2,002	17,900	5.2	2.62		
55	1500	708	3,013	40,200	11.8	3.91	2,649	23,500	6.9	2.60		
65	1900	897	3,820	51,100	15.0	3.92	3,383	29,900	8.8	2.59		
75	2100	991	4,392	58,600	17.2	3.91	4,092	35,600	10.4	2.55		

Standard Capacity Ratings for Air Cooling Mode (60Hz)

Indoor Air 80°F (26.7°C) db / 67°F (19°C) wb			H12 - Outdoor Air 82°F (27.8°C)				H22 - Outdoor Air 95°F (35°C)							
Model	Indoor Airflow		Input Energy		Capacity		EER	COPc	Input Energy		Capacity		EER	COPc
	cfm	L/s	Watts	Btu/hr	kW	Btu/W-hr			W/W	Watts	Btu/hr	kW		
45	1200	566	2,132	32,400	9.5	15.2	4.45	2,517	30,200	8.9	12.0	3.52		
55	1500	708	2,768	41,800	12.3	15.1	4.43	3,314	39,100	11.5	11.8	3.46		
65	1900	897	3,507	52,600	15.4	15.0	4.40	4,178	49,300	14.4	11.8	3.46		
75	2100	991	4,142	61,300	18.0	14.8	4.34	4,872	57,000	16.7	11.7	3.43		

Standard Capacity Ratings for Hydronic Heating Mode (60Hz)

Indoor Air 70°F (21°C) db / 60°F (15.6°C) wb					H12 - Outdoor Air 47°F (8.3°C)				H32 - Outdoor Air 17°F (-8.3°C)					
Model	Indoor Liquid Flow		Pressure Drop		Input Energy		Capacity		COPh	Input Energy		Capacity		COPh
	GPM	L/s	psi	kPa	Watts	Btu/hr	kW	W/W		Watts	Btu/hr	kW	W/W	
45	10.0	0.63	3.8	26	2,087	30,900	9.1	4.34	2,488	20,800	6.1	2.45		
55	12.0	0.76	3.4	23	2,802	41,200	12.1	4.31	3,294	27,200	8.0	2.42		
65	14.0	0.88	4.7	32	3,533	51,600	15.1	4.28	4,201	34,400	10.1	2.40		
75	16.0	1.01	3.8	26	4,048	59,400	17.4	4.30	4,767	39,200	11.5	2.41		



R Series Water to Air Heat Pump

Features & Benefits

- Size** - Sizes from 45 (6.1kW) through 75 (14.7 kW).
- Built-in Refrigerant Detection System** - Optimized for safety of R454b, an A2L refrigerant.
- Oversized blower for quiet operation** - Motor is a constant airflow variable speed ECM, serviceable from one side.
- Gen 2 Control Board** - Includes BACnet MS/TP, data logging, electronic readout of temperatures, refrigerant pressures and more.
- Part-Load Compressor** - Copeland high efficiency two-stage scroll compressor with double isolation mounting for quiet operation.
- Domestic Hot Water Generation** - Double wall heat exchanger and stainless steel ECM circulator factory installed on all sizes.
- Drip Tray** - Stainless steel with internally trapped clear vinyl drain (externally on RH).
- Start Capacitor Kit** - Standard on all units to maximize compressor longevity.
- Electronic Expansion Valve (EEV)** - For precise refrigerant control.
- Accumulator** - Protects compressor against liquid slugging.
- Coaxial Heat Exchanger** - Enhanced surface and heavy duty for efficiency and reliability (CuNi available).
- Heavy-Duty Cabinet** - Satin galvanized with powder coat finish. Acoustically insulated for quiet operation.
- Ease of Service** - Four removable side panels for easy service.
- Loop or Well** - All sizes pre-wired for a closed loop or a water well.



*Product not to scale

Standard Capacity Ratings for Open Loop (60Hz)

Rating Conditions	Model	Flow (GPM)	Mode	Heating Capacity (Btu/hr)	Input Energy (Watts)	COPh (Heating)	Cooling Capacity (Btu/hr)	Input Energy (Watts)	COPc (Cooling)	EER
Open Loop Heating EWT 50°F Cooling EWT 59°F	45	10.0	Stage 1	25,200	1,609	4.59	28,000	1,022	8.03	27.4
			Stage 2	35,200	2,352	4.39	36,500	1,706	6.27	21.4
	55	12.0	Stage 1	34,100	2,040	4.90	35,400	1,238	8.38	28.6
			Stage 2	46,600	2,978	4.59	47,600	2,106	6.62	22.6
	65	14.0	Stage 1	42,200	2,631	4.70	44,800	1,647	7.97	27.2
			Stage 2	57,900	3,729	4.55	59,400	2,750	6.33	21.6
	75	16.0	Stage 1	51,300	3,429	4.39	51,500	2,102	7.18	24.5
			Stage 2	67,600	4,618	4.29	68,000	3,542	5.63	19.2

Standard Capacity Ratings for Closed Loop (60Hz)

Closed Loop Heating EWT 32°F (Stg 1 EWT 41°F)	45	10.0	Stage 1	20,800	1,438	4.24	25,800	1,088	6.95	23.7
			Stage 2	25,700	2,119	3.55	33,800	2,024	4.89	16.7
	55	12.0	Stage 1	27,500	1,947	4.14	34,400	1,404	7.18	24.5
			Stage 2	33,600	2,681	3.67	43,700	2,570	4.98	17.0
	65	14.0	Stage 1	33,900	2,522	3.94	43,800	1,939	6.62	22.6
			Stage 2	41,500	3,342	3.64	55,400	3,317	4.89	16.7
75	16.0	Stage 1	42,600	3,251	3.84	50,700	2,416	6.15	21.0	
		Stage 2	50,200	4,143	3.55	63,900	4,233	4.43	15.1	





TF Series Water to Air & Water Heat Pump

Features & Benefits

- Size** - Sizes from 45 (7.5kW) through 75 (14.7kW).
- Air and Water Heating** - Heating and cooling via central forced air, hydronic in-floor heating and domestic hot water heating.
- Built-in Refrigerant Detection System** - Optimized for safety of R454b, an **A2L** refrigerant.
- Gen2 Board** - Includes built-in aquastat functionality, BACnet MS/TP, data logging, electronic readout of refrigerant pressures and water in/out temperatures.
- Part-Load Compressor** - Copeland high efficiency two-stage scroll, with double isolation for quiet operation.
- Oversized blower for quiet operation** - Motor is a constant airflow variable speed ECM, serviceable from one side.
- Domestic Hot Water Generation** - Double wall heat exchanger and stainless steel ECM circulator factory installed on all sizes.
- Start Capacitor Kit** - Standard on all units to maximize compressor longevity.
- Electronic Expansion Valve (EEV)** - For precise refrigerant control.
- Accumulator** - Protects compressor against liquid slugging.
- Coaxial Heat Exchanger** - Enhanced surface coaxial style (CuNi available).
- Service Ports** - High and low service ports for quick connection to manifold gauge.
- Coaxial Heat Exchangers** - Enhanced surface and heavy duty for efficiency and reliability (CuNi available).
- Heavy-Duty Cabinet** - Satin galvanized with powder coat finish. Acoustically insulated for quiet operation.
- Ease of Service** - Four removable side panels, electrical box swings out for unobstructed service.
- Loop or Well** - All sizes pre-wired for operation on a closed loop or a water well.



Standard Capacity Ratings for Closes Loop Air Heating (60Hz)

Rating Conditions	Model	Flow (GPM)	Mode	Heating Capacity (Btu/hr)	Input Energy (Watts)	COPh (Heating)	Cooling Capacity (Btu/hr)	Input Energy (Watts)	COPc (Cooling)	EER
Heating ELT 32°F (Stage 1 ELT 41°F) Cooling ELT 77°F (Stage 1 ELT 68°F)	45	10	Stage 1	20,800	1,438	4.24	25,800	1,088	6.95	23.7
			Stage 2	25,700	2,119	3.55	33,800	2,024	4.89	16.7
	55	12	Stage 1	27,500	1,947	4.14	34,400	1,404	7.18	24.5
			Stage 2	33,600	2,681	3.67	43,700	2,570	4.98	17.0
	65	14	Stage 1	33,900	2,522	3.94	43,800	1,939	6.62	22.6
			Stage 2	41,500	3,342	3.64	55,400	3,317	4.89	16.7
75	16	Stage 1	42,600	3,251	3.64	50,700	2,416	6.15	21.0	
		Stage 2	50,200	4,143	3.55	63,900	4,233	4.43	15.1	

Standard Capacity Ratings for Closed Loop Hydronic Heating (60Hz)

Closed Loop ELT 32°F (Stage 1 ELT 41°F)	45	10	Stage 1	17,900	1,720	3.05				
			Stage 2	24,000	2,303	3.05				
	55	12	Stage 1	26,000	2,498	3.05				
			Stage 2	32,700	3,140	3.05				
	65	14	Stage 1	32,200	3,094	3.05				
			Stage 2	40,200	3,867	3.05				
75	16	Stage 1	38,800	3,610	3.15					
		Stage 2	46,300	4,450	3.05					



W Series Water to Water Heat Pump

Features & Benefits

- Size** - Sizes from 25 (4.8kW) through 80 (16kW).
- Built-in Refrigerant Detection System** - Optimized for safety of R454b, an **A2L** refrigerant.
- Gen2 Board** - Includes built-in aquastat functionality, BACnet MS/TP, data logging, electronic readout of refrigerant pressures and water in/out temperatures.
- Part-Load Compressor** - Copeland high efficiency two-stage scroll, with double isolation for quiet operation.
- Domestic Hot Water Generation** - Double wall heat exchanger and stainless steel ECM circulator factory installed on all sizes.
- Start Capacitor Kit** - Standard on all units to maximize compressor longevity.
- Electronic Expansion Valve (EEV)** - For precise refrigerant control.
- Accumulator** - Protects compressor against liquid slugging.
- Service Ports** - High and low service ports for quick connection to manifold gauge.
- Coaxial Heat Exchangers** - Enhanced surface and heavy duty for efficiency and reliability (CuNi available).
- Heavy-Duty Cabinet** - Satin galvanized with powder coat finish. Acoustically insulated for quiet operation.
- Ease of Service** - Four removable side panels, electrical box swings out for unobstructed service.
- Loop or Well** - All sizes pre-wired for operation on a closed loop or a water well.



Standard Capacity Ratings for Open Loop (60Hz)

Rating Conditions	Model	Flow (GPM)	Heating Capacity (Btu/hr)	Input Energy (Watts)	COPh (Heating)	Cooling Capacity (Btu/hr)	Input Energy (Watts)	COPc (Cooling)	EER
Open Loop Heating EWT 104°F Cooling EWT 54°F	25	8.0	22,300	1,685	3.88	22,000	1,043	6.18	21.1
	45	10.0	33,100	2,436	3.98	34,300	1,575	6.01	20.1
	55	12.0	44,400	3,445	3.78	44,100	2,058	6.04	20.2
	65	14.0	54,200	4,206	3.78	53,400	2,561	5.95	20.1
	75	16.0	63,700	4,691	3.98	65,100	2,930	5.92	20.2
	80*	17.0	74,000	5,731	3.78	67,400	3,457	5.71	19.5

W-80 is not ENERGY STAR® certified

Standard Capacity Ratings for Closed Loop (60Hz)

Closed Loop Heating EWT 104°F Cooling EWT 54°F	25	8.0	16,300	1,566	3.05	20,200	1,403	4.22	14.4
	45	10.0	26,400	2,303	3.12	29,800	2,021	4.25	14.2
	55	12.0	37,600	3,140	3.13	39,700	2,604	4.37	15.1
	65	14.0	46,200	3,867	3.12	49,100	3,202	4.37	15.0
	75	16.0	53,400	4,450	3.13	59,400	3,634	4.34	15.0
	80*	17.0	54,300	5,310	3.00	62,300	4,272	4.27	14.6

W-80 is not ENERGY STAR® certified





R Series Commercial Water to Air Heat Pump

Features & Benefits

- Size** - Sizes from 09 (0.75 tons) through 24 (2 tons).
- Horizontal and vertical configurations** - Suitable for any application
- Heat Recovery Option** - Using R513a refrigerant, takes warm room air (60°F) and heats water up to 160°F (71°C).
- Small Refrigerant Volume** - Less than 4lbs of R454b (an **A2L** refrigerant) eliminates need for leak detector.
- ECM Fan** - 5-speed motor is standard for energy efficiency over PSC type.
- Service Access** - Front side-only access for compact installations. Blower is removable via front access.
- Safety Lockout Board** - With status light visible without removing any doors.
- Condensate Overflow Sensor** - Standard on all units.
- Back-Up Plenum Heater** - Externally mounted electric backup plenum heater.
- Compressor** - Dependable single-speed LG rotary compressor, with built-in accumulator.
- Low Noise** - Double grommet compressor isolation for low noise.
- Heat Exchanger** - Heavy duty coaxial heat exchanger.
- Air Coil** - Extra tubing wall thickness for durability.



Standard Capacity Ratings for Open Loop (60Hz)

Rating Conditions	Model	Tons	Flow (GPM)	Heating Capacity (Btu/hr)	Input Energy (Watts)	COPh (Heating)	Cooling Capacity (Btu/hr)	Input Energy (Watts)	COPc (Cooling)	EER
Open Loop Heating ELT 50°F Cooling ELT 59°F	09	0.75	2.5	9,900	673	4.31	10,100	457	6.48	22.1
	12	1	3.0	12,000	817	4.30	12,300	559	6.45	22.00
	18	1.5	4.5	18,200	1,242	4.29	18,900	871	6.36	21.7
	24	2	8.0	25,200	1,704	4.33	25,900	1,199	6.33	21.6

Standard Capacity Ratings for Closed Loop (60Hz)

Rating Conditions	Model	Tons	Flow (GPM)	Heating Capacity (Btu/hr)	Input Energy (Watts)	COPh (Heating)	Cooling Capacity (Btu/hr)	Input Energy (Watts)	COPc (Cooling)	EER
Closed Loop Heating ELT 32°F Cooling ELT 77°F	09	0.75	2.5	8,000	628	3.73	9,600	558	5.04	17.2
	12	1	3.0	9,700	771	3.69	11,800	686	5.04	17.2
	18	1.5	4.5	13,900	1,128	3.61	17,500	1,023	5.01	17.1
	24	2	8.0	18,800	1,561	3.53	24,200	1,423	4.99	17.0



WD Series Water Source Domestic Hot Water Heat Pump

Features & Benefits

- Footprint** - A 11" x 32" footprint
- Compressor** - Single stage scroll, with double isolation for quiet operation.
- Hard Start Kit** - Standard on all models.
- TXV (Thermostatic Expansion Valve)** - Maintains refrigerant amount injected into the evaporator based on superheat.
- Filter-Dryer & Sight Glass** - Standard on all units.
- Outdoor Source Heat Exchanger** - Enhanced surface coaxial style heat exchangers (CuNi available).
- DHW Condenser** - Double wall condenser for dedicated domestic hot water application.
- Refrigerant** - Contains R134a refrigerant to reach higher temperatures.
- Electronic Control Board** - With safety and short cycle protection.
- Cabinet** - Satin galvanized with powder coat finish for corrosion resistance. Acoustically insulated for quiet operation.
- Built-In Aquastat** - Domestic hot water aquastat with digital display factory installed.
- Loop or Well** - Unit pre-wired for operation on a closed loop or a water well.
- Available Sizes** - One size.
- Distribution Type** - Domestic hot water heating.

Important!

Source water temperatures must be at least 45°F (7°C) year round.



Standard Capacity Ratings 120°F (49°C) Output (60Hz)

Rating Conditions	Model	Loop Flow		Input Energy		Capacity		Delta T		COPh
		GPM	L/s	Watts	Amps	Btu/hr	kW	°F	°C	
ELT 50°F (10°C)	16	4	0.25	796	3.7	8,500	2.5	4.3	2.4	3.13

Standard Capacity Ratings 140°F (60°C) Output (60Hz)

Rating Conditions	Model	Loop Flow		Input Energy		Capacity		Delta T		COPh
		GPM	L/s	Watts	Amps	Btu/hr	kW	°F	°C	
ELT 50°F (10°C)	16	4	0.25	927	4.3	7,500	2.2	3.8	2.1	2.37





W Series Commercial Water to Water Heat Pump & Chiller

Features & Benefits

Water-to-water heat pump and chiller - designed for industrial-scale heating and cooling.

Small footprint - W-150 to W-400 features a 25" x 49" footprint and the W-500 to W-1000 has 29" x 60" footprint with vertical configuration.

Frame & Enclosure - welded and reinforced for industrial strength, can be lifted with a forklift from end or side. Enclosure is removable with 1" acoustic insulation.

Multiple Unit Installations - Set units side-by-side with zero clearance; all service can be performed from ends of units.

Dual Circuit - Two separate R454B (A2L) refrigerant circuits with common water circuit, for best part and full load efficiency and best oil management.

Pipe Routing - Dual refrigerant circuits are clearly separated for ease of service.

Dual Shell Scroll Compressors - High tolerance for flooded starts and next-generation PVE oil, for increased reliability and efficiency.

Electronic Expansion Valves (EEV's) - For precise refrigerant superheat control.

Suction Accumulators - Standard; protects compressor from liquid slugging.

Reversing Valve - Available up to size 800.

Electronic Control Board - With external digital user interface, and BACnet MS/TP communications. USB port for laptop connection using free provided software.

Full 3-Phase Protection - On both compressors.

Water Circuit - Stainless steel true dual circuit brazed plates.



W Series Commercial Sizes 150-1000



W Series Commercial Sizes 120-235



Full performance tables, specifications and manuals are available at nordicghp.com

Standard Capacity Ratings (60Hz)

Performance Rating Conditions	Model	Tons	Flow (GPM)	Heating Capacity (Btu/hr)	Input Energy (Watts)	COPh (Heating)	Cooling Capacity (Btu/hr)	Input Energy (Watts)	COPc (Cooling)	EER	
Closed Loop Heating EWT 104°F Cooling EWT 54°F 35% Propylene Glycol	Single Circuit										
	W-120	10	30	91,000	7,900	3.38	109,500	7,205	4.45	15.2	
	W-140	11.5	34	104,600	8,980	3.41	125,800	8,225	4.48	15.3	
	W-180	15	45	136,200	11,783	3.39	164,100	10,871	4.43	15.1	
	W-235	20	60	177,100	15,284	3.40	213,400	14,037	4.45	15.2	
	Dual Circuit										
	W-150	12	36	108,700	9,639	3.30	135,400	8,623	4.60	15.7	
	W-185	15	48	146,600	12,766	3.37	165,800	10,562	4.60	15.7	
	W-240	20	60	194,300	16,398	3.47	216,300	13,604	4.66	15.9	
	W-300	23	72	218,100	18,194	3.51	262,100	16,180	4.75	16.2	
	W-400	30	100	275,400	23,851	3.38	351,400	21,822	4.72	16.1	
	W-500	40	120	367,800	32,049	3.36	452,700	28,287	4.69	16.0	
	W-600	50	150	462,000	40,296	3.36	556,000	35,186	4.63	15.8	
	W-800	65	190	585,800	51,364	3.34	715,500	45,562	4.60	15.7	
W-900	70	210	638,600	55,886	3.35	771,500	49,785	4.54	15.5		
W-1000	81	225	756,500	66,657	3.33	864,500	56,129	4.51	15.4		

WH Series Commercial High Temperature Water to Water Heat Pump

The WH Series heat pump utilizes incoming liquid in the temperature range of 40°F (7°C) to 122°F (50°C). Sources such as the buffer tank on the indoor side of a geothermal heat pump, a cooling loop, or well water can be used. This unit has an **output temperature up to 160°F (71°C)** and is available from **10 to 65 tons** in the configurations pictured. For smaller model sizes, visit nordicghp.com for details.

Domestic Hot Water

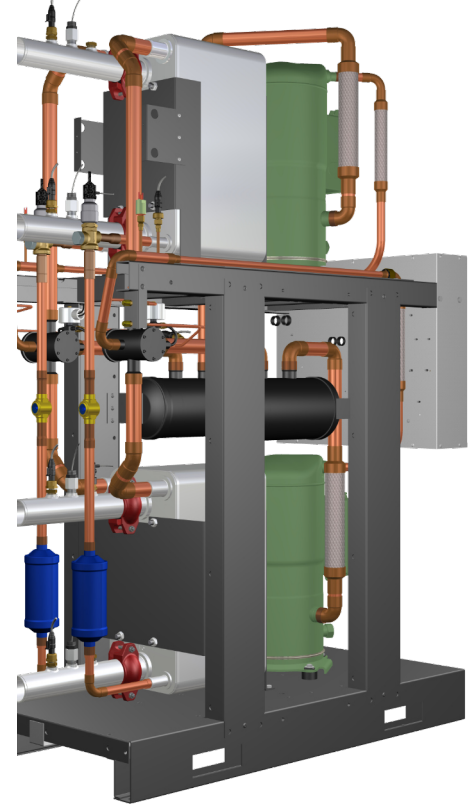
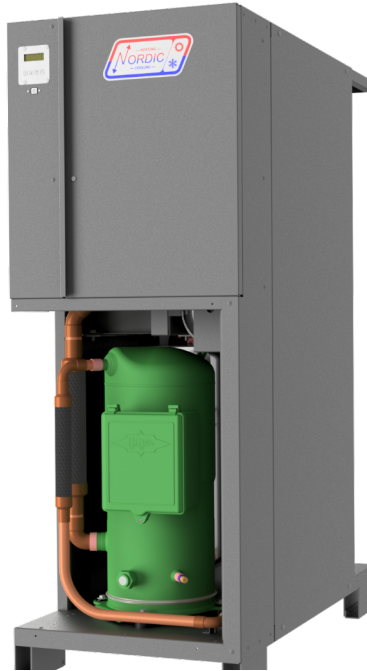
Single circuit (WH 120-235) are available with double wall brazed plate heat exchangers for direct **domestic hot water heating temperatures up to 160°F (71°C)**.

Performance Ratings

Full specifications, capacity, and performance ratings can be found on our website, nordicghp.com.

Pricing & Availability

Please call 1-506-756-8135 or email info@nordicghp.com for pricing and availability.



Features & Benefits

	Single Circuit WH 120 to 235	Dual Circuit WH-150 to 800
Compact footprint allows for installation in single or multi-unit configurations.	41" x 20"	49" x 25" (150-400) 60" x 29" (500 and up)
Designed for industrial scale heating, cooling and domestic hot water heating up to 160°F (71°C).	Heating, cooling, DHW	Heating, cooling, simultaneous heating and cooling
Domestic hot water heating to temperatures up to 160°F (71°C).	✓	✗
Reversing valve (optional) for active cooling.	✓	✓
Copeland single scroll compressor with crankcase heater.	✓	✓
Suction accumulator for compressor liquid protection.	✓	✓
Electronic expansion valves (EEVs) for precise refrigerant control.	✓	✓
R513a refrigerant for higher temperature range.	✓	✓
316SS single wall brazed plate evaporator for space heating & cooling.	✓	✓
316SS double wall brazed plate condenser for dedicated DHW.	✓	✗
316SS water lines , single circuit models use for potable water	✓	✓
Gen2 control board with BACnet MS/TP communications, and USB port for laptop connection with free software.	✓	✓

PC Series Pool Conditioner

Features & Benefits

- Distribution type** - A high efficiency pool room dehumidifier that **cools and dehumidifies pool room air**. Heat recovery to pool water, room air, or heat rejection to optional outdoor condenser.
- Size** - Sizes from 45 (13.5 kW) to 80 (30.3 kW)
- Indoor Unit** - A 32" x 60" footprint with options of top, bottom or side discharge upon ordering.
- Optional Outdoor Unit** - To enable air cooling when pool and room are already heated to desired setpoints.
- Built-in Refrigerant Detection System** - Optimized for safety of R454b, an **A2L** refrigerant.
- Gen2 Electronic Control Board** - With built-in digital user interface. Includes data logging, laptop USB connection, and BACnet interface.
- Heat Exchanger** - Titanium/PVC coaxial pool water heat exchanger, corrosion resistance superior to copper or CuNi
- Compressor** - Scroll compressor with start capacitor on single phase models, dual grommet-mounted for reduced noise.
- Blower** - Galvanized, full size ECM blower for constant airflow regardless of external static pressure.
- Suction Accumulator** - Protects compressor from liquid slugging.
- Two 4-Way Reversing Valves** - For refrigerant routing.
- Electronic Expansion Valves (EEV)** - For precise refrigerant control.
- Cabinet** - Acoustically insulated satin galvanized with powder coat finish for corrosion resistance.
- Service Access** - Four access panels for service ease.
- Thermostat** - Communicating air thermostat with temperature and humidity, wiring included.
- Onboard Water Temperature Control** - No external sensor or aquastat required.
- Plenum Heater** - Available from 5 kW - 20kW.



*Product not to scale

PC Series Standard Capacity Ratings (60Hz)

Rating Conditions	Model	Loop Flow		Airflow		Input Energy	Capacity			Moisture Removal @ 50% RH		Moisture Removal @ 60% RH		Typical Pool Surface Area	
		GPM	L/s	CFM	L/s		Watts	Btu/hr	kW	lb(kg)	hr	lb(kg)	hr	ft ²	m ²
EWT 80°F (27 °C) EAT 82°F (28 °C)	45	21	1.3	1150	540	2020	46,000	13.5	14	6.4	18	8.2	600	56	
	55	28	1.8	1500	710	3000	64,000	18.8	19	8.6	23	10	800	74	
	65	35	2.2	1900	900	4050	77,000	22.6	24	11	30	14	1050	98	
	75	40	2.5	2200	1040	4570	87,000	25.5	28	13	33	15	1200	110	
	80	45	2.8	2300	1085	5790	103,300	30.3	32	14	38	17	1350	130	



WP Series Pool Heating Pump

Features & Benefits

Distribution Type - Will heat any pool water including chlorinated or salt water, ability to heat up to 105°F (41°C), suitable for a hot tubs or spas.

Size - Sizes from 45 (7.2 kW) to 80 (16.1 kW)

Built-in Refrigerant Detection System - Optimized for safety of R454b, an **A2L** refrigerant.

Gen2 Board - Includes built-in aquastat functionality, BACnet MS/TP, data logging, electronic readout of refrigerant pressures and water in/out temperatures.

Compressor - Single stage scroll, with double isolation for quiet operation.

Start Capacitor Kit - Standard on units to maximize compressor longevity.

Electronic Expansion Valve (EEV) - For precise refrigeration control.

Heat Exchanger - Titanium/PVC coaxial pool water heat exchanger, corrosion resistance superior to copper or CuNi, suitable for salt or chlorinated water.

Accumulator - Protects compressor against liquid slugging.

Service Ports - High and low service ports for quick connection to a manifold gauge.

Heavy-Duty Cabinet - Satin galvanized with powder coat finish for corrosion resistance. Acoustically insulated for quiet operation.

Doors - All 4 side panels can be removed, electrical box swings out for unobstructed 4-side servicing.

Loop or Well - Unit pre-wired for operation on a closed loop or a water well.



Standard Capacity Ratings (60Hz)

Rating Conditions	Model	Loop Flow		Indoor Pool Pressure Drop		Pool Water Loop Flow		Input Energy Watts	Capacity		COPh
		GPM	L/s	psi	kPa	GPM	L/s		Btu/hr	kW	
Pool Water LWT 80°F (27°C) ELT 50°F (10°C)	45	8	0.50	1.6	11	21	1.3	1758	34,300	10.1	5.7
	55	10	0.63	2.6	18	28	1.8	2503	46,100	13.5	5.4
	65	12	0.76	3.8	26	35	2.2	3066	56,300	16.5	5.4
	75	14	0.88	4.7	32	40	2.5	3605	67,000	19.6	5.4
	80	16	1.0	5.8	40	45	2.8	4176	76,600	22.4	5.4



Hydronic Air Handlers

The Nordic AHW Series and AH4P Series are ducted hydronic air handlers (fan coils) that transfer the heating or cooling effect from heated or chilled water into air in a forced air duct system.

Features & Benefits		AHW Series	AH4P Series
Requires one indoor water loop , switched seasonally between heated and chilled water.		✓	✗
Requires both heated and chilled indoor hydronic loops for instant heating and cooling		✗	✓
Provides dehumidification		✗	✓
Available in size 65 with modulating air and water flow		✓	✓
Both vertical and horizontal configurations available		✓	✓
Provision for internal electric plenum heater		✓	✗
Plenum heater is installed externally in discharge ductwork		✗	✓
Five field selectable airflows from 900-2300 cfm.		✓	✓
Premium constant-airflow ECM delivers air flow regardless of back pressure.		✓	✓
Powder coated galvanized sheet metal cabinet		✓	✓
Acoustically insulated for quiet operation		✓	✓



Standard Capacity Ratings (60Hz)										
Rating Conditions	Airflow (CFM)	Water flow		Heating EWT			Cooling EWT			
		GPM	L/s	100°F (38°C)	120°F (49°C)	160°F (71°C)	40°F (4°C)		50°F (10°C)	
	Capacity Btu/hr (kW)			Capacity Btu/hr (kW)	Capacity Btu/hr (kW)	Capacity Btu/hr (kW)	Sensible Capacity Btu/hr (kW)	Capacity Btu/hr (kW)	Sensible Capacity Btu/hr (kW)	
Heating EAT 68°F (20°C) Cooling EAT 80.6°F (27°C) (46% RH)	900	4	0.25	25,000 (7.3)	40,900 (12.0)	73,100 (21.4)	34,900 (10.2)	26,300 (7.7)	24,600 (7.2)	21,900 (6.4)
		6	0.38	27,300 (8.0)	44,500 (13.0)	79,400 (23.3)	40,800 (11.9)	29,000 (8.5)	27,800 (8.2)	23,500 (6.9)
		8	0.50	28,300 (8.3)	46,200 (13.5)	82,200 (24.1)	44,700 (13.1)	30,800 (9.0)	30,000 (8.8)	24,500 (7.2)
	1500	4	0.25	32,300 (9.5)	53,100 (15.6)	95,000 (27.8)	42,200 (12.4)	35,200 (10.3)	31,300 (9.2)	29,500 (8.7)
		6	0.38	37,300 (10.9)	61,100 (17.9)	109,200 (32.0)	50,900 (14.9)	39,800 (11.7)	36,300 (10.6)	33,300 (9.8)
		8	0.50	40,100 (11.7)	65,500 (19.2)	117,000 (34.3)	57,100 (16.7)	42,800 (12.5)	39,600 (11.6)	35,300 (10.4)
	2300	4	0.25	37,900 (11.1)	62,500 (18.3)	111,900 (32.8)	48,400 (14.2)	42,700 (12.5)	34,200 (10.0)	34,200 (10.0)
		6	0.38	45,700 (13.4)	75,000 (22.0)	134,300 (39.4)	59,200 (17.3)	50,300 (14.7)	41,600 (12.2)	41,600 (12.2)
		8	0.50	50,600 (14.8)	82,800 (24.3)	148,300 (43.5)	67,300 (19.7)	54,900 (16.1)	48,800 (14.3)	46,000 (13.5)





About Maritime Geothermal

Maritime Geothermal Ltd. has been manufacturing the Nordic® line of geothermal and air source heat pumps for over 40 years. We're committed to manufacturing reliable, competitively priced heat pumps that meet customer expectations and exceed industry guidelines.

From our inception in 1983 to our modern manufacturing facility and testing lab, we've been a pioneer in innovative geothermal technology for decades, while also ensuring that product quality, attention to detail and customer support remain our top priority.

Our company believes that renewable heating and cooling is the best way to combat rising energy costs and the environmental challenges we face in the future, and we're committed to being part of the solution.

Find out more

Visit our website at nordicghp.com for complete product documentation. Contact us by phone with your technical and sales questions at **1-800-986-6781**.



www.nordicghp.com

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