

Nordic Heat Pump Product Guide







Maritime Geothermal has been manufacturing the Nordic line of geothermal and air source heat pumps for over 30 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.

The Nordic Difference



CSA Test Lab

We have the only CSA Certified Test Lab in Canada, which helps us design high-performance machines.



Unique Designs

Our ATW, EMW, High Temp heat pumps are unique designs you won't find with any other manufacturer.



Customer Service

With decades of experience, our customer service team will get you the help you need, no waiting required.



Canadian Quality

Designed and built in Canada means we use the best components and take care in the assembly plant.

Want more information?

Visit our website at **nordicghp.com** for information on our manufacturing process, take a video plant tour, or download product information. You can also contact us at **506-756-8135**.







Nordic Air to Water Heat Pump

The ATW Series heats water up to 120°F (50°C) for an in-floor radiant heating system, and chills water for air conditioning via a hydronic air handler. This system uses heat transfer from the outdoor air, and can operate in temperatures as low as -7°F (-21.7°C). At that point, electronic backup via a buffer tank would take over.

The ATW Series has been specially designed to work in Canadian climates. Design features like locating the compressor indoors, our unique intelligent defrost logic, and a fan design that reduces ice build-up all allow our air to water heat pump to perform well in cold weather.

ATW Series Information	
Available Sizes	2.5 to 6 nominal tons
Distribution Type	Radiant in-floor heat, cooling via hydronic fan coils
Capabilities	Heating, cooling and domestic hot water
COP	Up to 3.88
Certifications	TUV

Product Features

- Oversized outdoor unit for superior heating in colder outdoor temperatures.
- Intelligent defrost logic minimizes energy required to defrost the outdoor coil.
- Outdoor ice channeling designed to prevent ice build-up.
- Compressor is located inside the indoor unit for ease of cold-weather service.
- Domestic hot water available via double walled heat exchanger and ECM bronze heat circulator (factory installed).
- Electronic control board has digital user interface and is located in indoor unit for protection from the weather.



Nordic Commercial Water to Water Heat Pump

The Nordic W Series Commercial heat pump features an upright configuration with two compressors and separate refrigerant circuits. The vertical configuration of this unit means it can be installed in single or multi-unit configurations and is available in sizes up to 70 nominal tons. This heat pump is available in either hot water only or reversible (hot and chilled water).

The W Series Commercial heat pump is designed for large-scale heating and cooling and waste heat recovery systems. A desuperheater can be added for an extra cost.



W Series Commercial Information	
Available Sizes	9 to 70 tons.
Distribution Type	Radiant in-floor heat, cooling via hydronic fan coils
Capabilities	Heating and cooling
COP	4.1
Certifications	TUV

Nordic Commercial Water to Air Series

The Nordic Commercial R Series is a water to air heat pump designed for use in commercial applications such as apartment buildings, offices, or condos. This heat pump is available in sizes from 0.75 to 2 nominal tons, and can be purchased in a horizontal or vertical configuration.

This unit is designed for a compact fit into small spaces. The vertical version features a 19" x 19" footprint and a height of just 42". This heat pump has a single stage compressor and a 5-speed ECM fan motor.



W Series Commercial Information	
Available Sizes	0.75 to 2 tons
Distribution Type	Forced air
Capabilities	Heating and cooling
COP	Up to 4.2
Certifications	CSA



Nordic High-Temperature Water to Water Heat Pump

The WH Series heat pump is a high-temperature heat pump capable of producing hot water up to **160°F(71°C)**. It does so using a source side liquid temperature in the range of 45°F (7.2°C) to 122°F(50°C), and R134a refrigerant. The source could be the buffer tank on the indoor side of a geothermal heat pump, a cooling loop from an industrial process, or a water well.

The WH Series heat pump is ideal for commercial or residential applications requiring high-temperature hot water, and is available is in sizes from 2 to 30 nominal tons. A 6.5 ton double wall version is also available for dedicated domestic hot water heating.



WH Series Information	
Available Sizes	2 to 30 nominal tons
Distribution Type	Domestic hot water* or hot water baseboards
Capabilities	Heating and domestic hot water
COP	4.72
Certifications	TUV

^{*} WH-85 is available as a dedicated domestic hot water heating unit.

Nordic Energy Module Series

The EMW Series is an all-in-one geothermal solution for residential and light commercial in-floor heating systems. Within a single cabinet is a liquid-to-water heat pump with buffer tank, floor circulator, expansion tank and all control electronics.

The EMW saves many hours of plumbing and wiring by combining most mechanical room components into one unit. This unit is also available in two-tank versions with separate hot and cold tanks, which allow it to switch from heating to cooling mode instantly with no efficiency loss or waiting.



EMW Series Information	
Available Sizes	3 to 6.5 nominal tons
Distribution Type	Hot water for in-floor heating
Capabilities	Heating, cooling and domestic hot water
COP	3.42 - 3.65
Certifications	CSA



Nordic Water to Air Heat Pump

The R Series is a liquid-to-air geothermal heat pump providing whole home heating and cooling. This heat pump will work on either an open or closed loop, and has a desuperheater for domestic hot water. The R Series is available in vertical and horizontal configurations.

This heat pump is available in sizes from 2 to 6.5 nominal tons. The R Series is ENERGY STAR certified and has the smallest footprint in the industry at 24" x 28". Cupro nickel heat exchangers are available on this unit.





R Series Information	
Available Sizes	2 to 6.5 nominal tons
Distribution Type	Forced air heating and cooling
Capabilities	Heating, cooling and domestic hot water
COP	3.7-4.9
Certifications	ENERGY STAR, AHRI, CSA, CE

Nordic Water to Air & Water Heat Pump

The TF Series is a triple function geothermal heat pump. It combines a traditional water-to-air and water-to-water heat pump, and adds domestic hot water preheating capabilities. The result is a heat pump that can provide hot water for radiant in-floor heat, forced air heating and cooling, and domestic hot water, all in a single machine.

The TF Series works on an open or closed loop system, has a unique "call waiting" feature, and allows the user to set water or air heating priority.





TF Series Information	
Available Sizes	3 to 6.5 nominal tons
Distribution Type	Forced air and radiant in-floor
Capabilities	Heating, cooling and domestic hot water
COP	4.5
Certifications	ENERGY STAR, AHRI, CSA, CE



Nordic Water to Water Heat Pump

The W Series is a liquid-to-water heat pump that heats water for radiant in-floor heating, and cools water for air conditioning via fan coils. This geothermal heat pump also has a desuperheater for domestic hot water preheating.

The W Series is designed for whole home heating and is available in sizes from 2 to 6.5 nominal tons. This unit is ENERGY STAR certified and Cupro nickel heat exchangers are available on this unit.



W Series Information	
Available Sizes	2 to 6.5 nominal tons
Distribution Type	Radiant in-floor, forced air cooling with fan coils
Capabilities	Heating, cooling and domestic hot water
COP	3.9
Certifications	ENERGY STAR, AHRI, CSA, CE

Nordic Pool Conditioner Heat Pump

The PC Series is a high efficiency heat recovery heat pump. It cools and dehumidifies the pool area and rejects the heat back into the air stream, into the pool, or to an external outdoor condenser unit.

This heat pump is typically used in homes with indoor swimming pools. It has coated air coils, and a titanium exchanger specifically suited to the unique indoor pool environment. This unit has an included humidistat, and a filter dryer and sight glass as standard features.





PC Series Information	
Available Sizes	3 to 6.5 nominal tons
Distribution Type	Forced air, other
Capabilities	Cooling, dehumidification
Configuration	Horizontal
Certifications	CSA



