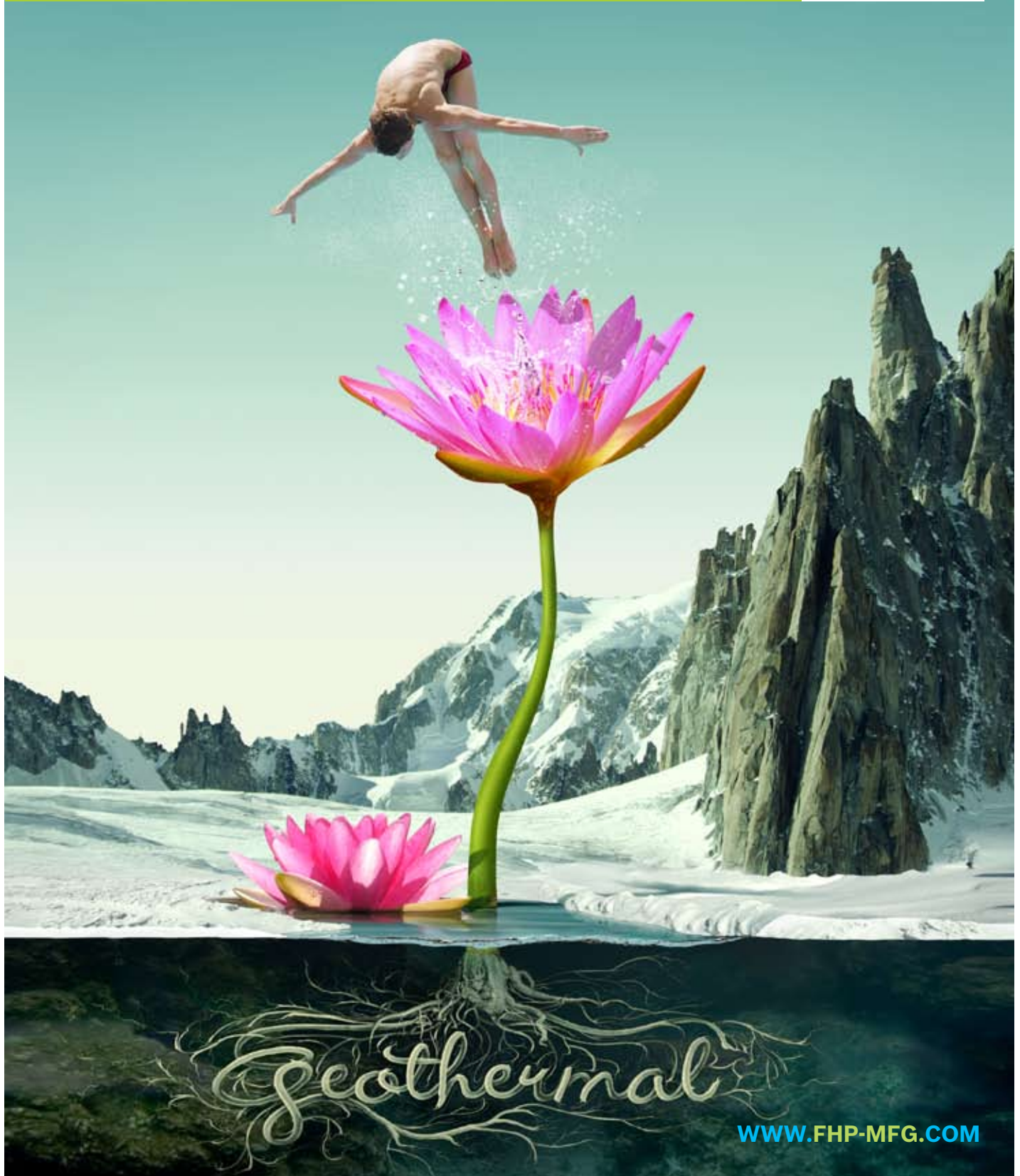




AQUARIUS II | WT SERIES

The Most Advanced Geothermal
Water To Water Series In The Market





“Environmental stewardship is a core philosophy for FHP Manufacturing from design to production to the reduction in our customers’ energy bills. At FHP, we are working on a better future every day”.

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What Is A Geothermal Heat Pump?

Geothermal heat pump technology collects the natural energy of the Earth to provide heating in the winter and cooling in the summer. Since the Earth’s surface maintains a relatively constant temperature all year long, it is the perfect vehicle to keep buildings at a more consistent, moderate temperature.

A geothermal energy system pumps water or another liquid into the ground through a series of pipes, where it is warmed or cooled by the ambient temperature of the ground. That moderate temperature is then brought back to the building and will provide heating or cooling for the building as needed—efficiently and without any negative impact on the environment.

Innovative New Renewable Energy Technology

Everyone wants to save a little money and everyone enjoys luxury—often these two goals are at odds with one another. FHP Manufacturing has created the answer. The revolutionary new Aquarius II WT Series water-to-water heat pump is an incredibly efficient renewable energy source that can lower your bills and provide your home or business with the cost savings and with the luxury you expect from FHP.

The Aquarius II heat pump is the industry’s first two-step reverse cycle chiller and water heater designed specifically to meet the heating and cooling needs of today’s high-end hydronic systems. The WT Series features environmentally friendly R-410a refrigerant and represents state-of-the-art ultra-efficient heating and cooling systems.

The Aquarius II is among the most efficient systems on the market, featuring- less energy use, extended product lifespan and removing almost all noise from operation. This means that you will hardly even notice that your system is running. The high quality of the product also assures low maintenance costs.

Environmentally Friendly

FHP is committed to manufacturing environmentally friendly technologies. The WT Series is just the latest example of our passion to make a greener, cleaner and better world. Our newest heat pump not only reduces greenhouse gasses through efficient operation, it also employs the ozone-friendly refrigerant R-410a. Furthermore, FHP does not use any paints, glues or solvents that can harm the environment in the construction of this product.

We have taken these steps because environmental stewardship is a core philosophy for us, whether in design or production or in our desire to immensely reduce our customers' energy use and environmental impact. At FHP, we are working on a better future every day.

Quiet Operation

The WT Series employs a number of features to ensure that it will provide comfort quietly. The entire refrigerant system is supported by a heavy gauge base that floats on a unique high-density, visco-elastic sound barrier. The compressor is covered in a multi-density sound blanket and the heavy gauge steel cabinet is fully insulated. When employed as the heat source for radiant floor systems, this unit is the most efficient and has the quietest means available to heat and cool a building.

Superior Efficiency

While FHP's WT Series boasts industry-leading efficiency at full load heating and cooling, it is even more efficient at partial load. Unless peak capacity is required, the WT Series can run at roughly 2/3 capacity at significantly higher efficiencies than competitive products, maintaining maximum comfort with minimum energy use. This increases your energy savings even further—saving you money and providing you peace of mind.





The WT series provides almost limitless options for hydronic systems due to its two-stage compressor and high operating temperatures.



Water-To-Water Applications To Meet Every Need

Beyond using geothermal energy to help heat and cool your home or business, there are a number of innovative applications available. The WT Series provides almost limitless options for hydronic systems due to its two-stage compressor and high operating temperatures.

The WT Series employs heat exchangers specifically designed for water heating applications—meaning increased efficiency and even greater cost savings for hydronic applications. The heat exchanger is designed to adapt to the innovative two-stage compressor, so efficiency is maintained at all operating levels.

The Aquarius II WT Series water-to-water heat pump is specifically designed with these hydronic applications in mind. Whether heating your home or business or meeting your hot water needs, the FHP system will perform efficiently and reliably for years to come.

Radiant Floor Heating

WT units from FHP can meet all your radiant floor heating needs as well—with tubing encased in the floor circulating warm water throughout every room. This heated water ensures that each room is comfortably conditioned because the entire surface of your floor becomes a radiator as well, creating ambient heat that will keep you warm on even the coldest of days. This application can be used with almost any type of flooring—wood, tile, brick and even concrete flooring can have heated coils placed beneath it.

Domestic Hot Water

Hot water needs account for a large percentage of the energy a home or building consumes every year, and WT customers know that our efficient technology can meet their hot water needs as well. With the ultra-efficient WT Series, you can have part of the system dedicated to your air conditioning and heating and another portion devoted to making sure you have enough hot water to meet the needs of your entire family.

Pool And Spa Heating

Recreational pools and spas have very high water heating demands, which can be met simply and efficiently with the energy produced by your WT Series heat pump. This will allow you to offset the natural gas and other traditional fossil fuel sources used for these applications, and save you hundreds of dollars every season. Please contact FHP Manufacturing Company for more information.

Radiators

The WT Series system can also be used to replace the costly conventional electric or fossil fuel boilers used in radiator and fan coil heating systems. The high temperatures produced by the WT system offer immense cost savings and efficiencies over these traditional heating methods.

Industry Leading Technology

The WT Series is available in capacities from 2 to 6 nominal tons and employs a two-stage scroll compressor to precisely match the load profile of the space. The high-end appliance grade cabinet is designed to fit easily through standard doorways, simplifying installation in existing homes. FHP's exclusive whisper quiet floating base pan and multi-density compressor blanket ensure that heating and cooling needs will be met quietly as well as efficiently.

FHP's state of the art control circuit includes the Comfort Alert Diagnostic Module that is matched to the unit compressor. This feature, standard on the WT Series, can significantly reduce maintenance costs by improving system technician accuracy by up to 75% over systems without a Comfort Alert Diagnostic Module.

Optional Features

Beyond the innovative, efficient technology, the Aquarius II WT Series also comes with these optional features:

- **Heat Recovery Package:**
Uses the wasted heat from the system to heat potable water
- **Cupronickel Condensers:**
A superior metal for the condensers that resists corrosion better over time

Warranty Information

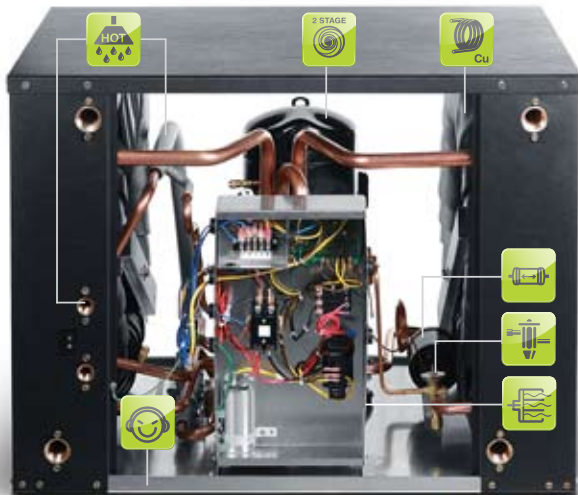
FHP's limited warranty includes the following components:








- Compressor: 10 years
- Refrigerant Circuit: 10 years
- All other parts: 5 years


FHP's limited warranty is available for the following product types:

- Sizes from 2 tons to 6 tons with 208/230 single phase voltage

WT SERIES



-  High Efficiency 2 stage compressor
-  Insulated coaxial tube-in-tube heat exchanger
-  Heat Recovery Package for domestic hot water production (optional)
-  Balanced port expansion valve
-  Bi-flow filter drier
-  Reversing valve
-  FHP's exclusive floating base pan technology for quiet operation



FHP's water to water heat pump controller offers a low cost, simple solution to the control of a water to water heat pump unit. The control is configurable to provide cooling only, heating only or auto change over control strategies based on the application of the unit in a given system.

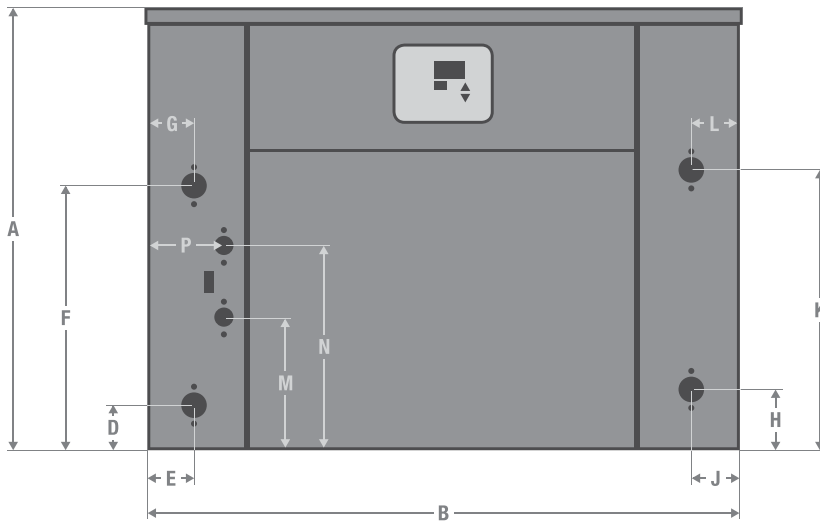
ALL UNITS RATED IN ACCORDANCE WITH AHRI/ISO/ASHRAE/ANSI 13256-2												
LOAD TEMPERATURE												
AQUARIUS II WT SERIES	Water Loop (WLHP)				Ground Water (GWHP)				Ground Loop (GLHP)			
	53.6°F		104°F		53.6°F		104°F		53.6°F		104°F	
	SOURCE TEMPERATURE											
86°F		68°F		59°F		50°F		77°F		32°F		
CAPACITY AND EFFICIENCY DATA												
	COOLING CAPACITY	EER	HEATING CAPACITY	COP	COOLING CAPACITY	EER	HEATING CAPACITY	COP	COOLING CAPACITY	EER	HEATING CAPACITY	COP
WT025												
Part Load	15,500	14.7	22,000	4.6	18,500	25.7	17,000	3.7	18,000	22.1	15,500	3.1
Full Load	21,000	13.4	31,000	4.4	24,500	21.2	25,000	3.6	22,500	15.9	19,500	2.8
WT035												
Part Load	22,500	14.5	31,000	4.7	25,500	24.5	25,000	3.6	24,000	20.6	22,000	3.1
Full Load	29,000	12.6	43,000	4.3	34,000	20.2	34,000	3.5	30,000	14.5	27,000	2.8
WT049												
Part Load	29,000	13.8	42,000	4.5	33,500	23.5	34,500	3.8	32,500	20.1	30,500	3.2
Full Load	39,000	12.8	58,000	4.1	45,000	19.7	47,000	3.6	41,000	14.9	37,500	2.9
WT061												
Part Load	37,000	14.2	55,000	4.7	42,500	23.3	41,500	3.6	41,000	19.8	36,500	3.0
Full Load	49,000	12.9	74,500	4.2	56,000	19.9	59,000	3.4	51,000	14.8	44,500	2.7
WT071												
Part Load	43,500	13.5	65,500	4.4	50,500	21.8	52,000	3.5	48,500	18.7	45,000	3.1
Full Load	57,500	12.4	86,500	4.1	64,000	18.8	70,000	3.4	60,000	14.8	53,000	2.9

WT 025 - 071 SERIES | DIMENSIONS

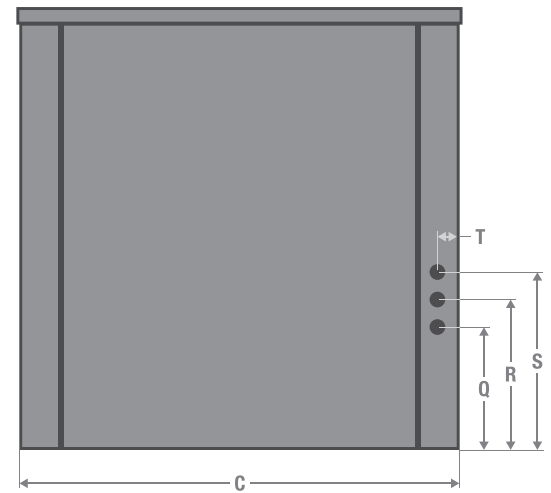
MODEL	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	WATER CONN.	HRP CONN.
WT025	2.70	2.50	13.70	2.50	3.25	1.95	14.25	1.95	7.15	11.00	4.25	6.55	8.05	9.55	1.25	0.75	0.25
WT035	2.30	2.30	14.30	2.35	3.70	2.55	15.70	2.55	7.15	11.00	4.25	6.55	8.05	9.55	1.25	0.75	0.35
WT049	2.30	2.60	14.30	2.65	3.70	2.65	15.70	2.65	7.15	11.00	4.25	6.55	8.05	9.55	1.25	1.00	0.49
WT061	2.30	2.60	14.30	2.65	3.20	2.65	15.20	2.65	7.15	11.00	4.25	6.55	8.05	9.55	1.25	1.00	0.61
WT071	2.50	2.60	21.75	4.45	2.50	4.45	21.75	2.60	7.15	11.00	4.25	6.55	8.05	9.55	1.25	1.00	0.71

NOTE: Overall cabinet dimensions A x B x C are the same for all sizes: 24.00 x 32.50 x 24.00 in

UNIT FRONT



LEFT SIDE



NOTES: All dimensions within +/- 0.125" Specifications subject to change without notice

How To Start Using Geothermal Energy In Your Home Or Business

You can tap into renewable energy for your home or business with our innovative geothermal heat pump systems by speaking directly with your local FHP-Bosch Group representative.

They can help you determine which system is the best fit for both your home or business and your financial needs. With new incentives available from federal, state and local governments, there has never been a better time to start saving money and doing your part to contribute to a greener, cleaner and better world.



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