



Flexible, High Efficiency Cooling and Heating Solutions.



McQuay Enfinity™ Water Source Heat Pumps

Horizontal and Vertical Design
Standard or Extended Range/
Geothermal Models



Engineered for flexibility and performance™



McQuay Enfinity™ Water Source Heat Pumps

With McQuay Enfinity Water Source Heat Pumps You Benefit From:

- Easy, low cost design and installation.
- Standard or extended range/geothermal application flexibility.
- High efficiency, low operating costs.
- Superior indoor air quality.
- Easy, low-cost maintenance and service.
- Non-CFC, R-410A refrigerant.
- Quiet, reliable operation

More than 30 years ago, McQuay designed the first complete line of water source heat pumps for high efficiency, individually zoned comfort control in offices, schools, assisted living facilities, manufacturing facilities and other commercial buildings. Our reputation for outstanding reliability and quiet operation has been reinforced in thousands of successful installations.

McQuay Enfinity™ water source heat pumps incorporate the best of our past and the best of what's new. Using feedback from building owners, consulting engineers, contractors and service engineers, we designed Enfinity products to give you maximum flexibility to design, install, operate and maintain the ideal water source heat pump system for your building project. And we incorporated non-ozone depleting R-410A refrigerant, which—along with high Energy Efficiency Ratios (EER's)—helps preserve our environment and precious energy resources.

To learn how you can take advantage of the benefits of McQuay Enfinity water source heat pumps on your next new building or replacement project, contact your local McQuay Representative or visit www.mcquay.com.



Four Compact Vertical and Five Horizontal Cabinet Sizes

Flexible, High Efficiency Solutions

Easy, low cost design and installation

- Compact, low profile cabinet sizes make it easy to fit new construction or replacement application space requirements.
- Left or right return and straight or end discharge configurations (horizontal units) help you optimize job layouts and use minimum ductwork and piping.
- Interchangeable airside panels allow units to be modified on site (horizontal units).
- Flush FPT water fittings allow easy, one wrench connection and can reduce delays caused by shipping damage.
- Flexible control options included standalone or network operation using LonWorks®, or Alerton BACnet® communications.

Application Flexibility

- Horizontal (ceiling hung) and vertical (closet or mechanical room) units.
- Standard range (55°F to 110°F) or Extended Range/ Geothermal (30°F to 110°F) models.

High Efficiency, Low Operating Costs

- High unit EERs.
- Thermal expansion valve increases efficiency at any fluid temperature.
- Coaxial heat exchanger designed for maximum heat transfer with minimum pressure drop.
- High efficiency motor and low speed blower operation reduce energy consumption.

Superior Indoor Air Quality

- Standard, corrosion-free plastic drain pan is double-sloped to eliminate standing water and inhibit microbial growth.
- Optional non-fibrous insulation for sensitive applications.

Easy, Low-Cost Maintenance

- Easy maintenance access to the compressor section (two sides), blower section and controls.
- Removable orifice ring allows easy removal of blower and motor without detaching unit from ductwork.
- Easy side or front filter removal.
- Two refrigerant service valves (high and low) for easy service.

Quiet, Reliable Operation

- Large blower rotates at low speed for quiet operation.
- Three quiet, reliable compressor selections including rotary, reciprocating and scroll compressors.
- Vibration isolated compressor (hanger brackets for Horizontal units are also vibration isolated).
- Heavy-gauge steel cabinet construction for maximum durability and minimum vibration.
- Heavy-gauge steel mass-plate with visco elastic dampening material below the compressor helps reduce noise emission in horizontal ceiling unit sizes 019-060.

Whether you are designing an energy efficient green building or retrofitting an existing building to lower your operating costs, McQuay Enfinity water source heat pumps are the solution for your application.



Non-Ozone Depleting R-410A Refrigerant (sizes 007 to 060)

Enfinity™ Horizontal Water Source Heat Pumps

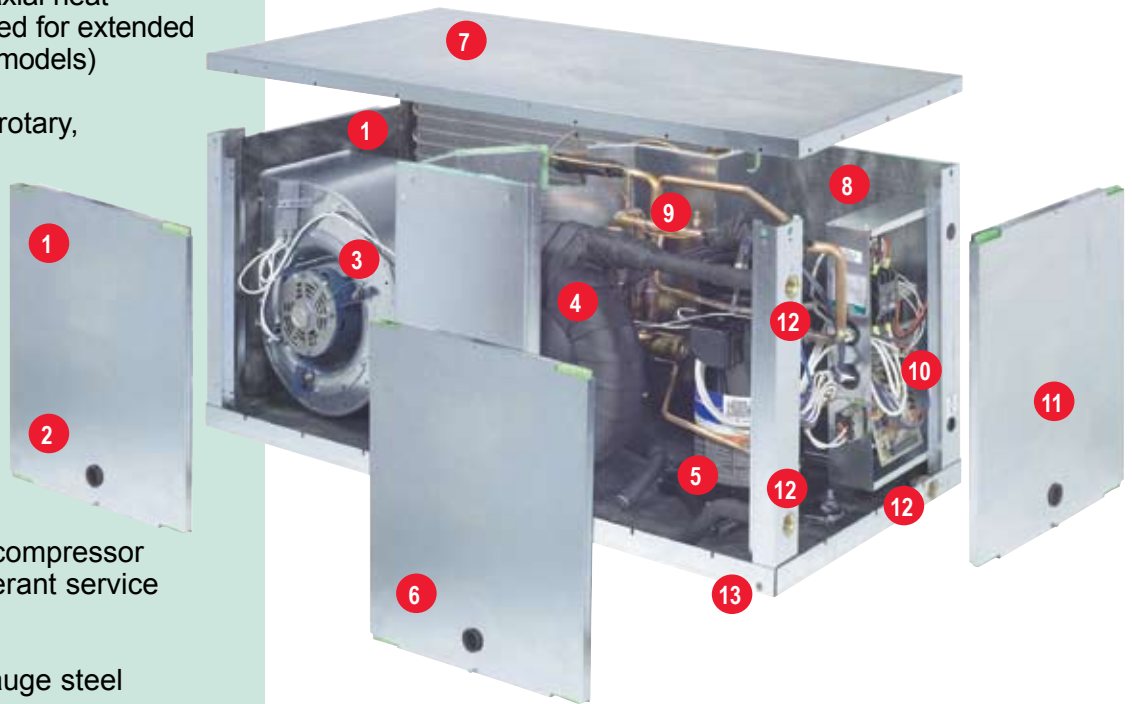
Flexible, High Efficiency, Superior Indoor Air Quality, Easy Maintenance and Quiet

1/2 to 5 tons – Size 007 through 060

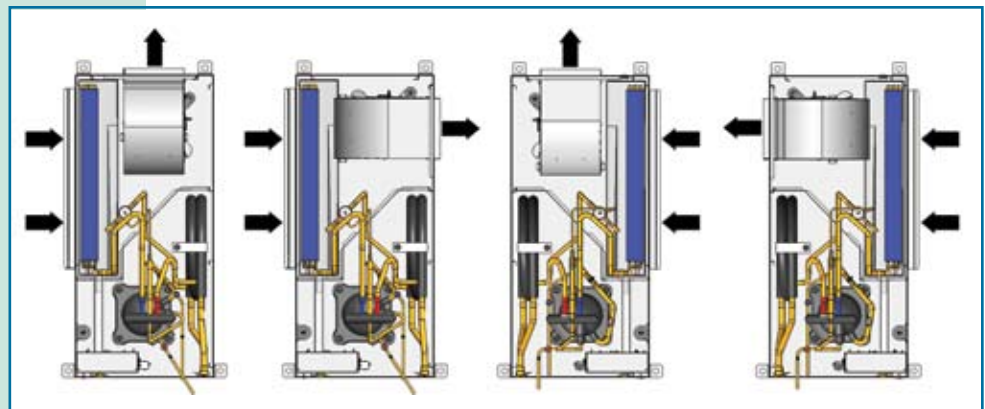
Model CCH (Standard Range: 55°F to 110°F)

Model CCW (Extended Range/Geothermal: 30°F to 110°F)

- 1 Field interchangeable airside panels for side or end discharge
- 2 Access panel for blower and motor
- 3 Large blower and high efficiency motor (high static motor optional)
- 4 High efficiency coaxial heat exchanger (insulated for extended range/geothermal models)
- 5 Vibration isolated rotary, reciprocating or scroll compressor



- 6 Access panel for compressor section and refrigerant service valves
- 7 Durable, heavy gauge steel cabinet construction
- 8 Insulated cabinet panels (closed cell insulation optional)
- 9 Two Schrader refrigerant service valves (high and low side)
- 10 Integrated standalone or network controls using LONWORKS® or Alerton BACnet® communications



Four Different Air Configurations

- 11 Access panel for compressor section and control box
- 12 Flush mounted water and drain connections
- 13 Hanger connection point

General Specifications

Unit Size	Airflow		Waterflow		Water Loop*						Ground Loop**							
					Cooling				Heating		Cooling				Heating			
	CFM	L/S	GPM	L/S	Btuh	Watts	EER	COP	Btuh	Watts	COP	Btuh	Watts	EER	COP	Btuh	Watts	COP
007	300	142	2.1	0.14	8028	682	11.8	3.5	10715	744	4.2	8941	622	14.4	4.2	7140	672	3.1
009	300	142	2.3	0.14	8813	681	12.9	3.8	11769	745	4.6	9237	624	14.8	4.3	7458	664	3.3
012	400	189	3.0	0.19	12941	1021	12.7	3.7	15804	1080	4.3	13954	929	15.0	4.4	10402	996	3.1
019	630	297	5.3	0.33	21000	6149	14.9	4.4	23600	6910	4.8	22600	6618	17.3	5.1	14700	4304	3.6
024	800	378	6.2	0.39	24700	7232	14.4	4.2	28400	8316	4.7	26300	7701	16.6	4.9	18000	5271	3.6
030	1000	472	7.6	0.48	30400	8901	15.3	4.5	36200	10600	5.0	30200	8843	17.4	5.1	24000	7027	3.7
036	1200	566	9.0	0.57	35800	10483	15.2	4.5	42500	12444	4.9	36200	10600	16.0	4.7	29600	8667	3.4
042	1400	661	10.7	0.68	43000	12591	15.0	4.4	50700	14845	5.0	43700	12796	17.1	5.0	35000	10248	3.7
048	1600	755	12.3	0.78	48400	14172	14.1	4.1	57100	16719	4.7	48800	14289	16.0	4.7	38100	11156	3.5
060	2000	944	15.2	0.96	59500	17422	14.6	4.3	69400	20321	4.9	62400	18271	16.1	4.7	50100	14670	3.5

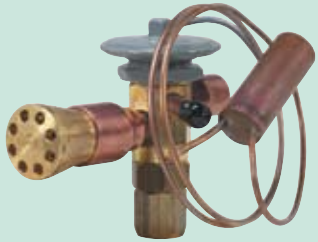
*Rated in accordance with ISO Standard 13256-1 Boiler/Tower
 ** Rated in accordance with ISO Standard 13256-1 Ground Coupled.



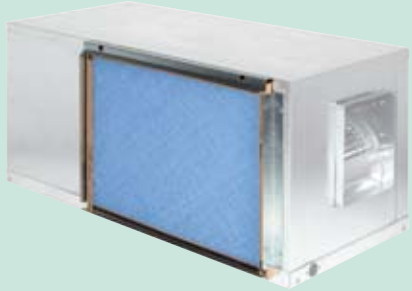
The 11.5" high cabinet of sizes 007, 009 and 012 allows greater design flexibility in applications with limited ceiling space.



Plastic, Double-Sloped Drain Pan



Thermal Expansion Valve (Standard and Extended Range Models)



Factory-Installed Filter Rack Allows Easy Side or Front Filter Removal



Removable Orifice Ring

Enfinity™ Vertical Water Source Heat Pumps

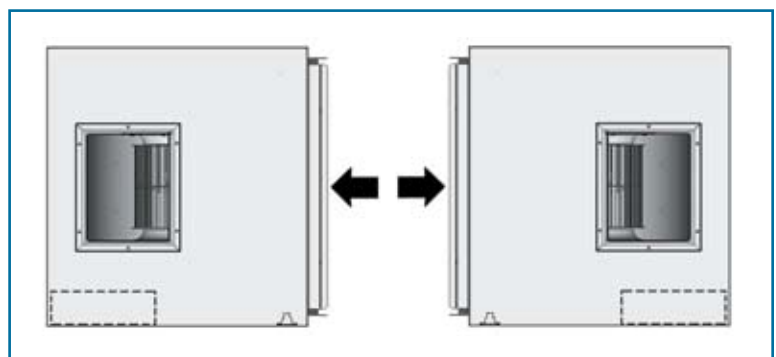
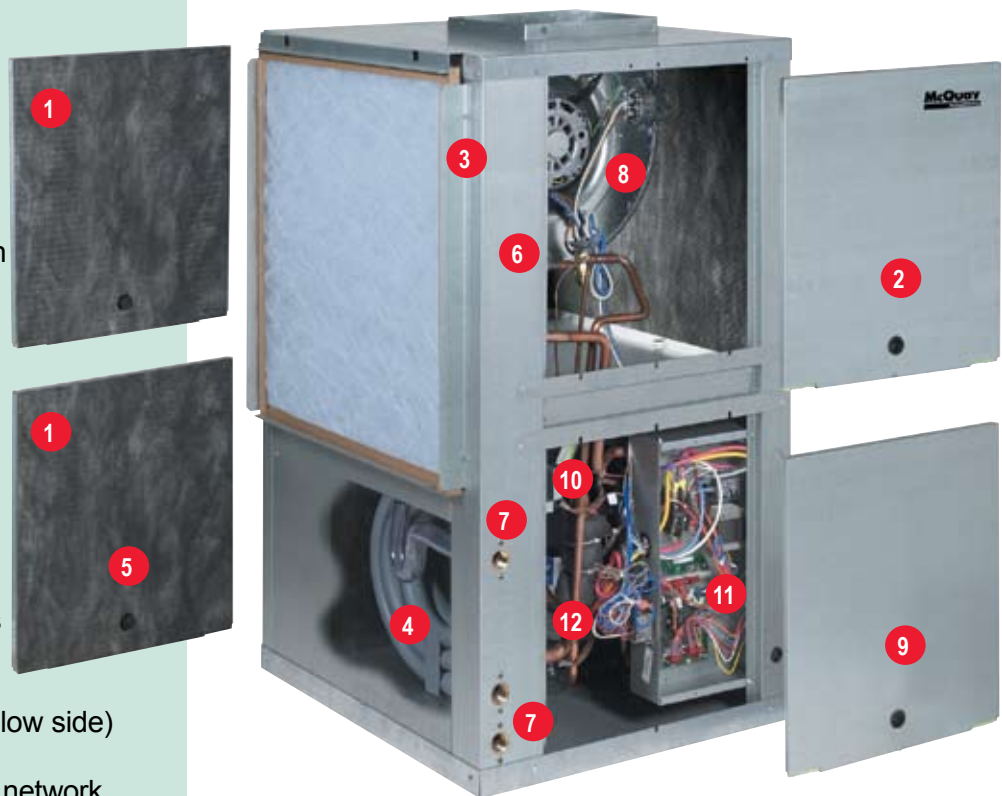
- 1 Rear panels for easy access to fan housing and compressor
- 2 Access panel for blower and motor
- 3 Factory-installed Filter Rack (side or front removal)
- 4 High efficiency coaxial heat exchanger
- 5 Insulated cabinet panels (closed cell insulation optional)
- 6 Durable, heavy gauge steel cabinet construction
- 7 Flush mounted water and drain connections
- 8 Large blower and high efficiency motor (high static motor optional)
- 9 Access panel for control box and refrigerant service valves
- 10 Two Schrader refrigerant service valves (high and low side)
- 11 Integrated standalone or network controls using LonWorks® or Alerton BACnet® communications
- 12 Vibration isolated rotary, reciprocating or scroll compressor

Flexible, High Efficiency, Superior Indoor Air Quality, Easy Maintenance and Quiet

1/2 to 5 tons – Size 007 through 060

Model FCV (Standard Range: 55°F to 110°F)

Model FCW (Extended Range/Geothermal: 30°F to 110°F)



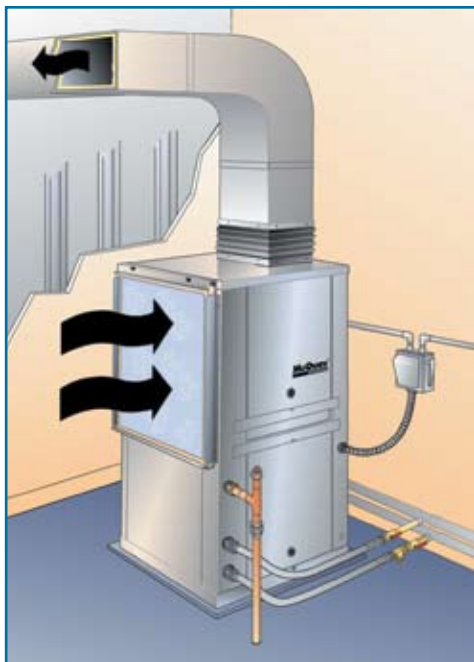
Flexible Air Configurations

General Specifications

Unit Size	Airflow		Waterflow		Water Loop*							Ground Loop**						
					Cooling				Heating			Cooling				Heating		
	CFM	L/S	GPM	L/S	Btuh	Watts	EER	COP	Btuh	Watts	COP	Btuh	Watts	EER	COP	Btuh	Watts	COP
007	230	109	1.4	0.09	6200	1815	12.2	3.6	8000	2342	4.3	6600	1933	14.2	4.2	5000	1464	3.1
009	300	142	2.2	0.14	8500	2489	11.8	3.5	11600	3397	4.3	9100	2665	13.8	4.0	7400	2167	3.3
012	400	189	3.1	0.20	11200	3279	12.1	3.6	15200	4451	4.3	12000	3514	14.2	4.1	9400	2752	3.2
019	630	297	5.2	0.33	19800	5798	13.9	4.1	24900	7291	4.7	21400	6266	16.2	4.7	14800	4334	3.5
024	800	378	5.9	0.37	22800	6676	13.0	3.8	30200	8843	4.7	24500	7174	15.1	4.4	18400	5388	3.6
030	1000	472	7.2	0.45	30400	8901	14.6	4.3	37200	10893	4.8	31400	9194	16.9	5.0	24500	7174	3.5
036	1200	566	8.8	0.56	35700	10453	15.1	4.4	43800	12825	4.9	36900	10805	17.4	5.1	29200	8550	3.7
042	1400	661	10.7	0.68	41000	12005	15.1	4.4	51900	15197	4.9	42700	12503	17.6	5.2	33900	9926	3.7
048	1600	755	11.6	0.73	45700	13381	13.8	4.0	56900	16661	4.5	47900	14026	16.1	4.7	36700	10746	3.3
060	2000	944	14.8	0.93	60100	17594	13.9	4.1	74300	21756	4.7	61300	17949	16.0	4.7	48200	14113	3.5

*Rated in accordance with ISO Standard 13256-1 Boiler/Tower

** Rated in accordance with ISO Standard 13256-1 Ground Coupled



Plastic, Double-Sloped Drain Pan



Thermal Expansion Valve (Standard and Extended Range Models)



High efficiency coaxial heat exchanger (insulated for geothermal models)



Removable Orifice Ring

Water Source Heat Pump Systems

Water source heat pump systems are one of the most efficient systems available for heating and cooling buildings. High efficiency, self-contained McQuay Infinity units can be placed in virtually any location within a building. Each unit responds only to the heating or cooling load of the individual zone it serves. This provides excellent comfort levels for occupants, better control of energy use for building owners and lower seasonal operating costs.

A global leader in system solutions for air conditioning, heating, ventilating and refrigeration.



(800) 432-1342
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Boiler/Tower Loop

A "Boiler/Tower" application uses a simple two pipe water circulating system that adds heat, removes heat or transfers rejected heat to other units throughout the building. The water temperature for heating is usually provided by a natural gas or electric boiler located in a mechanical room. The condensing water temperature is provided by a cooling tower that dissipates waste heat. This application can be the lowest cost of the loop options available.



Geothermal Closed Loop

Vertical loops (shown) are installed by drilling vertical bore holes into the earth and inserting a plastic polyethylene supply/return pipe into the holes. Horizontal loops are installed in trenches approximately 5 feet below the ground surface. Both vertical and horizontal loops extract the Earth's natural heat and reject it back.



Open Loop "Well Water"

"Open Loop" well water systems use ground water to remove or add heat to the interior water loop. The key benefit of an open loop system is the constant water temperature, usually 50°F to 60°F, which provides efficient operation at a low first cost. Open Loop applications are commonly used in coastal areas where soil characteristics allow reinjection wells to return the water back to the aquifer. Reinjection wells must be approved by the U.S. Environmental Protection Agency.



Surface Water or Lake Loop

A "Surface Water" or "Lake" (shown) closed loop system is a geothermal loop that is directly installed in a lake or body of water that is near the building. In many cases, the body of water is constructed on the building site to meet run-off or aesthetic requirements. The size and the depth of the lake is critical, and commercial design services should be used to certify that a given body of water is sufficient for building loads.

McQuay International delivers engineered, flexible solutions for commercial, industrial and institutional HVAC requirements with reliable products, knowledgeable applications expertise and responsive support. McQuay products and services are provided through a worldwide network of dedicated sales and service offices.

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Products Manufactured in an ISO Certified Facility.