Enfinity™ and Model CRH/CRW Horizontal Water Source Heat Pumps—1/2 to 6 Tons

- Non-CFC, R-410A refrigerant
- Standard or geothermal application flexibility
- Easy, low cost design and installation
- High EER promotes low operating costs and may qualify for rebates
- Superior indoor air quality and quiet operation
- Easy, low cost maintenance and service
- Flexible control options include standalone or network operation using LonWorks® or BACnet® communications
- Performance rated with ISO Standard 13256-1

For more detail, refer to Catalogs 1100 and 1102.
For the most current information, refer to www.mcquay.com.

R-22 Models CRH/CRW (1/2 to 6 tons)

Enfinity™ R-410A Models CCH/CCW (1/2 to 5 tons)

ENERGY STAR

LONMARK 3.3

Available LonMark certified

BACnet International

R-410A refrigerant (Models CCH/CCW) with no ozone depletion potential

Water Source Heat Pump Systems

Boiler/tower

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.

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.

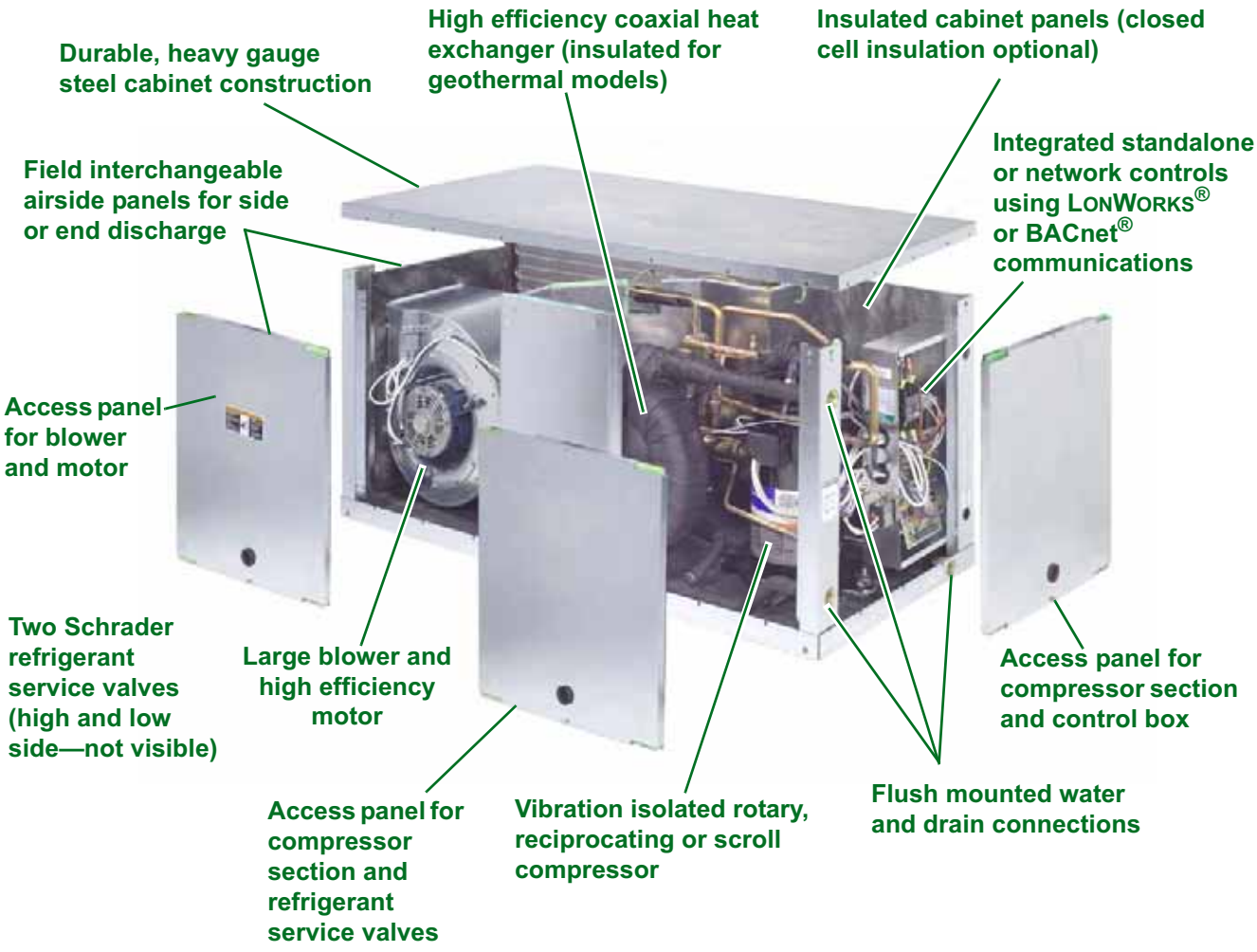
Geothermal closed loop

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.

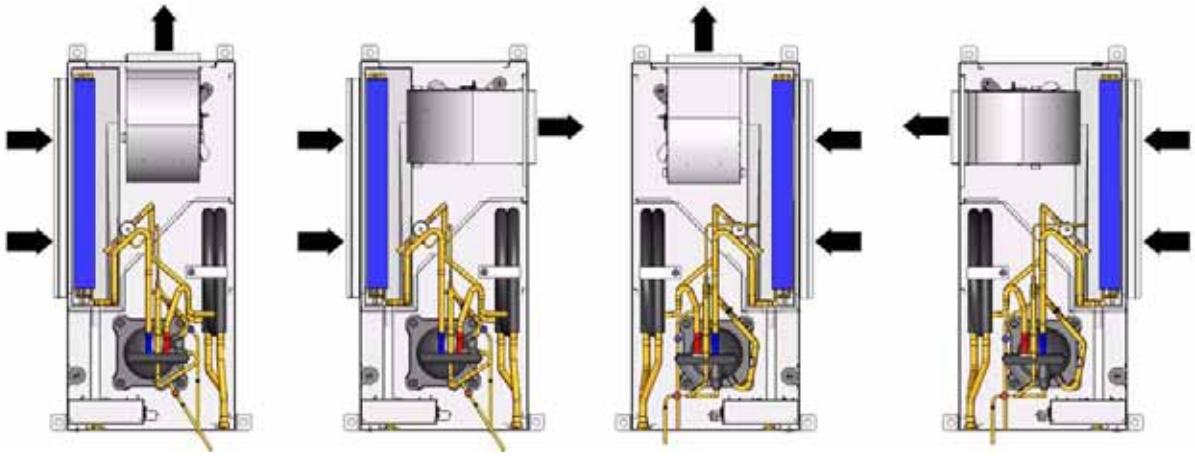
Surface water or lake loop

A "Surface Water" or "Lake" 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 drainage or aesthetic requirements. The size and the depth of the lake is critical and commercial design services should be used that certify a given body of water is sufficient to withstand the building loads.

Features



Four Different Air Configurations



Left-hand return with end discharge

Left-hand return with straight discharge

Right-hand return with end discharge

Right-hand return with straight discharge

Plastic, double-sloped drain pan

Thermal expansion valve (standard and geothermal models)

Removable orifice ring

Capacity and Performance Data

Enfinity R-410A Models CCH/CCW

Unit size	Airflow		Water flow		Water loop*							Ground loop**							Dimensions L × W × H (inches)
					Cooling 86°F (30°C)				Heating 68°F (20°C)			Cooling 77°F (25°C)				Heating 32°F (0°C)			
	cfm	L/S	GPM	L/S	Btu/hr	Watts	EER	COP	Btu/hr	Watts	COP	Btu/hr	Watts	EER	COP	Btu/hr	Watts	COP	
007	300	142	2.1	0.14	8028	682	11.8	3.5	10,715	744	4.2	8941	622	14.4	4.2	7140	672	3.1	34 × 20 × 11.5
009	300	142	2.3	0.14	8813	681	12.9	3.8	11,769	745	4.6	9237	624	14.8	4.3	7458	664	3.3	34 × 20 × 11.5
012	400	189	3.0	0.19	12,941	1021	12.7	3.7	15,804	1080	4.3	13,954	929	15.0	4.4	10,402	996	3.1	40 × 20 × 11.5
019	630	297	5.3	0.33	21,000	6149	14.9	4.4	23,600	6910	4.8	22,600	6618	17.3	5.1	14,700	4304	3.6	42 × 20 × 19
024	800	378	6.2	0.39	24,700	7232	14.4	4.2	28,400	8316	4.7	26,300	7701	16.6	4.9	18,000	5271	3.6	42 × 20 × 19
030	1000	472	7.6	0.48	30,400	8901	15.3	4.5	36,200	10,600	5.0	30,200	8843	17.4	5.1	24,000	7027	3.7	46 × 21 × 20
036	1200	566	9.0	0.57	35,800	10,483	15.2	4.5	42,500	12,444	4.9	36,200	10,600	16.0	4.7	29,600	8667	3.4	46 × 21 × 20
042	1400	661	10.7	0.68	43,000	12,591	15.0	4.4	50,700	14,845	5.0	43,700	12,796	17.1	5.0	35,000	10,248	3.7	52 × 28 × 23
048	1600	755	12.3	0.78	48,400	14,172	14.1	4.1	57,100	16,719	4.7	48,800	14,289	16.0	4.7	38,100	11,156	3.5	52 × 28 × 23
060	2000	944	15.2	0.96	59,500	17,422	14.6	4.3	69,400	20,321	4.9	62,400	18,271	16.1	4.7	50,100	14,670	3.5	52 × 28 × 23

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

R-22 Models CRH/CRW

Unit size	Airflow		Water flow		Water loop*							Ground loop**							Dimensions L × W × H (inches)
					Cooling 86°F (30°C)				Heating 68°F (20°C)			Cooling 77°F (25°C)				Heating 32°F (0°C)			
	cfm	L/S	GPM	L/S	Btu/hr	Watts	EER	COP	Btu/hr	Watts	COP	Btu/hr	Watts	EER	COP	Btu/hr	Watts	COP	
007	230	109	1.4	0.09	6800	1991	12.7	3.7	9000	2635	4.7	7200	2108	14.3	4.2	5700	1669	3.4	34 × 20 × 11.5
009	300	142	2.2	0.14	8500	2489	12.2	3.6	11,200	3279	4.3	9000	2635	14.2	4.2	7500	2196	3.2	34 × 20 × 11.5
012	400	189	3.1	0.20	11,700	3426	12.3	3.6	15,200	4451	4.2	12,500	3660	14.5	4.2	9800	2870	3.2	34 × 20 × 11.5
015	500	236	4.3	0.27	17,100	5007	14.2	4.2	20,400	5973	4.6	17,600	5153	16.2	4.7	12,600	3689	3.4	42 × 20 × 19
019	630	297	5.1	0.32	19,700	5768	13.4	3.9	24,500	7174	4.6	20,800	6090	15.7	4.6	15,800	4626	3.5	42 × 20 × 19
024	800	378	6.5	0.41	25,500	7467	12.8	3.8	31,300	9165	4.4	26,700	7818	14.4	4.2	19,000	5563	3.4	42 × 20 × 19
030	1000	472	8.5	0.54	33,300	9751	13.5	4.0	39,700	11,625	4.5	33,800	9897	14.8	4.3	23,100	6764	3.4	46 × 21 × 20
036	1200	566	9.8	0.62	37,800	11,068	13.5	4.0	46,100	13,499	4.6	38,800	11,361	14.9	4.4	26,700	7818	3.4	46 × 21 × 20
042	1400	661	11.0	0.69	42,500	12,444	12.2	3.6	51,900	15,197	4.2	44,100	12,913	13.4	3.9	30,800	9019	3.2	46 × 21 × 20
048	1600	755	11.8	0.74	47,000	13,762	13.2	3.9	55,300	16,192	4.5	49,100	14,377	14.9	4.4	32,800	9604	3.4	52 × 28 × 23
060	2000	944	14.7	0.93	58,000	16,983	13.2	3.9	70,200	20,555	4.9	59,200	17,334	14.9	4.4	44,500	13,030	3.6	52 × 28 × 23
070	2400	1133	18	1.14	71,500	20,936	12.5	3.6	83,300	24,391	4.3	72,200	21,141	13.6	4.0	52,900	15,490	3.2	52 × 28 × 23

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