



R Series Water-to-Air Heat Pump



- Geothermal forced air heating & cooling
- Desuperheater for domestic hot water
- COP up to 4.9
- Industry leading 5 & 6 ton footprint 24x28
- Available in sizes 2 to 6 nominal tons for whole home applications
- CuNi heat exchanger available
- Open or closed loop



R Series

The water to air heat pump (R Series) is a geothermal heat pump that heats and cools air for ducted heating and air conditioning, and uses its built-in desuperheater to preheat domestic hot water. This unit is available in sizes from 2 to 6 nominal tons, and works on an open or closed ground loop.

Features & Benefits

- Size** - Smallest 5-6 ton footprint in the industry at 24" x 28"
- Appearance** - New, industry leading graphics.
- R410a** - Environmentally friendly, non-ozone-depleting refrigerant.
- Fan** - Oversized blower for quiet operation. Motor is constant airflow variable speed ECM, serviceable from one side.
- Drip Tray** - Stainless steel with internally trapped clear vinyl drain.
- Compressor** - Copeland Ultratech® high efficiency two-stage scroll, with double isolation for quiet operation.
- Hard Start Kit** - Standard on all single phase units.
- TXV** - Thermostatic expansion valve maintains maximum capacity under all operating conditions.
- Filter Drier** - Standard on all units.
- Sight Glass** - Standard on all units.
- Accumulator** - Protects compressor against liquid slugging.
- Coaxial Heat Exchangers** - Heavy duty for reliability, enhanced surface for efficiency (CuNi available).
- Domestic Hot Water** - Double wall heat exchanger and ECM bronze head circulator factory installed.
- Electronic Control Board** - With safety and short cycle protection.
- Cabinet** - Satin galvanized, powder coated, and acoustically insulated for quiet operation.
- Loop or Well** - Unit pre-wired for operation on a closed loop or a water well.



Standard Capacity Ratings for Open Loop (60Hz)

Rating Conditions	Model	Tons	Flow (GPM)	Outdoor dP (psi)	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	25	2	8.0	2.7	Stage 1	17,900	1,070	4.9	21,000	640	9.6	32.7
					Stage 2	23,100	1,540	4.4	26,800	1,160	6.8	23.1
	45	3	10.0	4.0	Stage 1	25,500	1,645	4.6	29,500	1,080	8.0	27.3
					Stage 2	35,700	2,375	4.4	38,500	1,805	6.2	21.7
	55	4	12.0	3.5	Stage 1	34,700	2,075	4.9	37,500	1,315	8.3	28.5
					Stage 2	47,500	2,960	4.7	50,500	2,245	6.6	22.5
	65	5	14.0	4.3	Stage 1	42,800	2,670	4.7	47,200	1,705	8.1	27.5
					Stage 2	58,700	3,740	4.6	62,600	2,865	6.4	21.8
	75	6	16.0	3.6	Stage 1	52,000	3,540	4.3	56,500	2,305	7.2	24.5
					Stage 2	68,500	4,780	4.2	72,000	3,710	5.7	19.4
	80	6	17.0	4.1	Stage 1	77,500	5,315	4.3	87,900	4,130	6.2	21.1
					Stage 2							

Standard Capacity Ratings for Closed Loop (60Hz)

Closed Loop Heating EWT 32°F (Stg 1 EWT 41°F) Cooling EWT 77°F (Stag 1 EWT 68°F)	25	2	8.0	2.9	Stage 1	15,200	1,035	4.3	20,100	790	7.5	25.5
					Stage 2	18,300	1,450	3.7	24,800	1,460	5.7	17.0
	45	3	10.0	4.4	Stage 1	22,000	1,535	4.2	26,800	1,130	6.9	23.7
					Stage 2	27,200	2,155	3.7	35,100	2,155	4.8	16.3
	55	4	12.0	4.1	Stage 1	29,300	2,045	4.2	36,000	1,470	7.2	24.5
					Stage 2	35,900	2,700	3.9	45,700	2,640	5.1	17.3
	65	5	14.0	5.3	Stage 1	35,900	2,565	4.1	45,500	1,910	6.7	23.8
					Stage 2	44,000	3,390	3.8	57,600	3,445	4.9	16.8
	75	6	16.0	4.1	Stage 1	45,700	3,435	3.9	55,000	2,620	6.3	21.0
					Stage 2	53,500	4,355	3.6	67,500	4,300	4.7	15.7
	80	6	17.0	4.5	Stage 1	63,000	4,940	3.7	84,200	4,950	5.0	17.1
					Stage 2							