R Series
Water-to-Air Heat Pump

- Geothermal forced air heating & cooling
- Desuperheater for domestic hot water
- COPh up to 4.8
- 24"x 28" footprint
- Available in sizes 3 to 6 nominal tons for whole home applications
- CuNi heat exchanger available
- Open water well or closed loop

R Series

The water-to-air series is a geothermal heat pump that heats and cools air for ducted buildings. It also uses its built-in desuperheater to preheat domestic hot water. This unit is available in sizes from 3 to 6 nominal tons, with a horizontal configuration (RH Series) option, and works on an open water well or closed ground loop.

Features & Benefits

Size - A 24” x 28” footprint.
Fan - Oversized blower for quiet operation. Motor is a constant airflow variable speed ECM, serviceable from one side.
Drip Tray - Stainless steel with internally trapped clear vinyl drain.
Compressor - Copeland 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 refrigerant amount injected into the evaporator based on superheat.
Filter-Dryer & Sight Glass - Standard on all units.
Accumulator - Protects compressor against liquid slugging.
Coaxial Heat Exchanger - Enhanced surface and heavy duty for efficiency and reliability (CuNi available).
Domestic Hot Water - Double wall heat exchanger and bronze head ECM circulator factory installed.
Electronic Control Board - With safety and short cycle protection.
Cabinet - Satin galvanized with powder coat finish. Acoustically insulated for quiet operation.
Doors - 4 panels can be removed for maximum service access.
Loop or Well - Unit pre-wired for operation on a closed loop or a water well.

Performance Ratings

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	45	3	10.0	4.0	Stage 1	25,500	1,625	4.5	29,500	1,080	8.0	27.3
					Stage 2	35,700	2,375	4.3	38,500	1,805	6.3	21.3
	55	4	12.0	3.5	Stage 1	34,500	2,075	4.8	37,300	1,315	8.4	28.5
					Stage 2	47,200	2,960	4.6	50,200	2,245	6.6	22.5
	65	5	14.0	4.3	Stage 1	42,800	2,670	4.6	47,200	1,705	8.0	27.1
					Stage 2	58,700	3,740	4.5	62,600	2,865	6.3	21.5
	75	6	16.0	3.6	Stage 1	52,000	3,540	4.3	54,300	2,305	7.2	24.4
					Stage 2	68,500	4,780	4.2	69,800	3,710	5.7	19.4

Standard Capacity Ratings for Closed Loop (60Hz)

Closed Loop Heating EWT 32°F (Stg 1 EWT 41°F) Cooling EWT 77°F (Stg 1 EWT 68°F)	45	3	10.0	4.4	Stage 1	22,000	1,535	4.3	26,800	1,130	7.0	23.7
					Stage 2	27,200	2,155	3.6	35,100	2,155	4.8	16.3
	55	4	12.0	4.1	Stage 1	29,100	2,045	4.2	35,800	1,470	7.2	24.5
					Stage 2	35,600	2,700	3.8	45,400	2,640	5.1	17.3
	65	5	14.0	5.3	Stage 1	35,900	2,565	4.0	45,500	1,910	6.6	22.6
					Stage 2	44,000	3,390	3.7	57,600	3,445	4.9	16.8
	75	6	16.0	4.1	Stage 1	45,100	3,435	3.9	52,700	2,620	6.2	21.0
					Stage 2	53,200	4,355	3.6	66,400	4,300	4.6	15.7