

W Series Water-to-Water Heat Pump



-

- Geothermal radiant in-floor heating.
- Desuperheater for domestic hot water
- COP up to 3.9

NORDI

- Hot water temperatures up to 120°F
- Available in sizes 2 to 6 nominal tons for whole home applications

JS

- CuNi heat exchanger available
- Open or closed loop

Air-Conditioning, Heating, and Refrigeration Institute

ENERGY STAR





The residential water to water heat pump (W Series) is a geothermal heat pump that heats water for radiant in-floor heating, 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

Indoor Unit - Industry leading 24" x 28" footprint with premium appearance. Compressor - Copeland Ultratech® two-stage scroll, with double isolation for quiet operation.

Hard Start Kit - Standard on all models.

TXV - Expansion valve system maintains maximum capacity under all operating conditions.

Filter Drier & Sight Glass - Standard on all units.

Accumulator - Protects compressor against liquid slugging.

Turbotec® - Enhanced surface coaxial style heat exchangers (CuNi available).

Domestic Hot Water - Double wall heat exchanger and bronze head ECM circulator factory installed.

Service Ports - High and low service ports for guick connection to a manifold gauge set.

Electronic Lock-Out Board - With short cycle timer protection.

Cabinet - Satin galvanized with baked enamel finish. Acoustically insulated for quiet operation.

Doors - All 4 side panels can be removed, electrical box swings out for unobstructed 4-side servicing.

Thermostats - Ranco® 2-stage digital aquastats available.

8.0

10.0

12.0

14.0

16.0

17.0

4.9

4.5

4.1

6.3

4.9

4.5

Stage 2

Stage 1

Stage 2

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 104°F Cooling EWT 54°F	25	2	8.0	4.2	Stage 1	16,400	1,300	3.7	17,700	695	7.5	25.5
					Stage 2	22,600	1,740	3.8	23,200	1,105	6.2	21.0
	45	3	10.0	3.9	Stage 1	22,800	1,855	3.6	24,500	985	7.3	24.8
					Stage 2	32,700	2,455	3.9	34,000	1,665	6.0	20.4
	55	4	12.0	3.6	Stage 1	32,100	2,475	3.8	33,900	1,370	7.2	24.7
					Stage 2	45,000	3,565	3.7	44,700	2,180	6.0	20.5
	65	5	14.0	5.1	Stage 1	39,300	3,200	3.6	41,300	1,755	6.9	23.5
					Stage 2	54,900	4,345	3.7	54,800	2,710	5.9	20.2
	75	6	16.0	4.6	Stage 1	47,800	3,785	3.7	49,800	2,120	6.9	23.5
					Stage 2	64,500	4,845	3.9	62,400	3,105	5.9	20.1
	80	6	17.0	4.2	Stage 1	77,000	6,095	3.7	73,000	3,725	5.7	19.6
					Stage 2							
Standard Capacity Ratings for Closed Loop (60Hz)												
	25	2	0 0	4.0	Stage 1	14,100	1,290	3.2	17,100	800	6.5	21.4

17,300

19,200

26 000

29 000

34.600

34,100

42,600

41,100

49 000

58.000

1,635

1,760

2 4 5 5

2.740

3,270

3,120

4,025

3,765

4 6 3 0

5.860

3.1

3.2

31

3.1

3.1

3.2

3.1

3.2

31

29

21,000

23,000

31 000

31.500

40.300

39,100

49,600

45,600

55 900

66.000

1,305

1,205

2 1 2 5

1,615

2.685

1,975

3,305

2,535

3 750

4.460

Closed Loop Heating EWT 104°F (Stg 1 ELT 41°F) Cooling EWT 54°F (Stag 1 ELT 68°F)

25

45

55

65

75

80

2

3

4

5

6

6

4.7

5.6

43

5.7

4.4

5.8

4.4

5.3

44

43

16.1

19.1

14 6

19.5

15.0

19.8

15.0

18.0

14 9

14.8