



WATER SOURCE & GEOTHERMAL HEAT PUMPS SPECIFICATION DATA SHEET

1315 College Street Clarksville, TN 37040 | Website: Geo.Cool

GCHP01072

WATER SOURCE & GEOTHERMAL HEAT PUMPS
R410A REFRIGERANT

WATER LOOP				GROUND WATER			
Cooling		Heating		Cooling		Heating	
Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP
72,000	13.0	87,000	4.2	76,000	19.8	68,000	4.0

GROUND LOOP				FLOW RATE	
Cooling		Heating		AIR	WATER
Capacity	EER	Capacity	COP	CFM	GPM
70,000	15.2	53,000	3.2	1,800	18

ELECTRICAL SPECIFICATIONS

Electrical Characteristics	Elect. Symbol	Compressor		Min Circuit Ampacity	Max Fuse Size
		RLA	LRA		
208/230/1/60	A	16.7	82	44	60
208/230/3/60	C	11.1	58	31	40
460/3/60	D	4.5	29	8.6	15

FLUID PRESSURE DROP

Fluid Flow (GPM)	Pressure drop	
	(FOH)	(PSIG)
10	6.39	2.77
14	11.72	5.07
16	14.90	6.45
18	18.42	7.97
20	22.27	9.64

	UNIT WEIGHT (lbs)		DIMENSION		
	Unit Weight	Shipping Weight	Length	Width	Height
Vertical	330	350	26.00	24.00	43.00
Horizontal	350	370	45.50	26.00	21.00

COOLING

Entering Fluid Temp. (°F)	Entering Air Fluid (°F)	Total Capacity (MBtuH)	Sensible Capacity (MBtuH)	SHF	Power Input (kW)	Heat Rejection (MBtuH)	EER
50	70 db 61 wb	67.45	43.62	0.65	3.50	78.72	19.1
60		64.93	42.34	0.66	3.93	77.71	16.3
70		62.41	41.20	0.67	4.37	76.70	14.1
85		58.63	39.72	0.68	5.02	75.19	11.6
100		54.85	38.46	0.71	5.67	73.67	9.6
50	75 db 63 wb	72.27	52.12	0.73	3.52	83.55	20.3
60		69.57	50.60	0.73	3.95	82.38	17.4
70		66.87	49.25	0.74	4.39	81.20	15.1
85		62.82	47.49	0.76	5.05	79.43	12.3
100		58.77	45.98	0.79	5.71	77.67	10.2
50	80.6 db 66.2 wb	78.52	57.54	0.73	3.54	90.62	22.2
60		75.59	55.85	0.74	3.99	89.19	19.0
70		72.66	54.36	0.75	4.43	87.77	16.4
85		68.27	52.43	0.77	5.09	85.64	13.4
100		63.88	50.77	0.79	5.75	83.51	11.1
50	85 db 71 wb	85.49	63.00	0.74	3.57	97.68	23.9
60		82.31	61.16	0.74	4.02	96.01	20.5
70		79.12	59.53	0.75	4.46	94.35	17.7
85		74.34	57.42	0.77	5.13	91.85	14.5
100		69.57	55.60	0.80	5.80	89.35	12.0

As a result of continuing research and development, specifications are subject to change without notice.

HEATING

Entering Fluid Temp. (°F)	Entering Air Fluid (°F)	Total Capacity (MBtuH)	Power Input (kW)	Heat of Absorb. (MBtuH)	COP
50	60	71.29	5.05	54.06	4.1
60		78.83	5.15	61.26	4.5
68		86.36	5.25	68.46	4.8
80		93.89	5.34	75.66	5.1
50	68	67.40	5.14	49.85	3.8
60		74.52	5.24	56.63	4.2
68		81.64	5.34	63.41	4.5
80		88.75	5.44	70.18	4.8
50	80	62.83	5.26	44.89	3.5
60		69.46	5.36	51.17	3.8
68		76.09	5.46	57.46	4.1
80		82.72	5.56	63.74	4.4

LOW TEMP HEATING

with Antifreeze by ARI-ISO 13256-1

Entering Fluid Temp. (°F)	Entering Air Fluid (°F)	Total Capacity (MBtuH)	Power Input (kW)	Heat of Absorb. (MBtuH)	COP
25	60	51.43	4.81	35.03	3.1
32		55.13	4.86	38.55	3.3
40		62.51	4.95	45.61	3.7
25	68	48.64	4.89	31.93	2.9
32		52.13	4.94	35.25	3.1
40		59.1	5.04	41.89	3.4
25	80	45.36	5.00	28.28	2.7
32		48.61	5.05	31.36	2.8
40		55.1	5.15	37.51	3.1