



Swimming Pool, Aquaculture and Geothermal Heat Pumps

Specification Capacity Data Sheet

HRHPX031

Water Loop				Ground Water				Ground Loop			
Cooling		Heating		Cooling		Heating		Cooling		Heating	
Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP
31,000	16.0	36,000	4.8	39,000	26.0	27,000	4.1	31,800	17.6	20,000	3.6

Performance at	
1,000	CFM
7.5	GPM

Cooling							
Entering Fluid Temp (°F)	Entering Air Temp (°F)	Total Capacity (MBtuH)	Sensible Capacity (MBtuH)	SHF	Power Input (kW)	Heating of Reject (MBtuH)	EER
50	70 db 61 wb	36.08	23.88	0.66	1.65	40.72	26.5
59		34.34	23.07	0.67	1.79	39.45	22.9
70		32.13	22.05	0.69	1.97	37.86	19.1
86		28.82	20.58	0.71	2.21	35.38	15.0
100		25.81	19.21	0.74	2.42	33.10	12.1
50	75 db 63 wb	37.52	26.98	0.72	1.64	42.13	27.8
59		35.71	25.66	0.72	1.78	40.81	23.9
70		33.43	24.60	0.74	1.97	39.17	19.9
86		30.03	22.97	0.77	2.23	36.65	15.5
100		26.90	21.58	0.80	2.44	34.26	12.5
50	80.6 db 66.2 wb	39.86	28.84	0.72	1.62	44.41	29.9
59		39.00	28.76	0.74	1.79	44.12	26.0
70		35.52	26.88	0.76	1.96	41.25	21.2
86		31.00	24.65	0.80	2.22	37.61	16.0
100		28.63	23.93	0.84	2.33	35.59	14.0
50	85 db 71 wb	43.52	28.93	0.66	1.57	47.90	33.9
59		41.39	28.08	0.68	1.81	46.59	27.2
70		38.78	26.98	0.70	1.98	44.55	22.9
86		34.87	24.82	0.71	2.26	41.60	17.7
100		31.40	23.50	0.75	2.37	38.50	15.1

Heating					
Entering Fluid Temp (°F)	Entering Air Temp (°F)	Total Capacity (MBtuH)	Power Input (kW)	Heating of Abs. (MBtuH)	COP
50	60	28.69	2.15	22.32	4.5
60		33.00	2.26	26.26	5.9
68		36.52	2.33	29.56	5.2
80		41.69	2.38	34.56	5.8
100		27.00	2.22	20.41	4.1
50	68	31.73	2.37	24.62	4.5
60		36.00	2.49	28.50	4.8
68		40.45	2.54	32.76	5.3
80		25.87	2.38	18.72	3.6
50	80	29.90	2.53	22.25	3.9
60		33.38	2.64	25.36	4.2
68		38.55	2.77	30.08	4.6
80					

Low Temp Heating (with Antifreeze by ARI-ISO13256-1)					
Entering Fluid Temp (°F)	Entering Air Temp (°F)	Total Capacity (MBtuH)	Power Input (kW)	Heating of Abs. (MBtuH)	COP
25	60	18.28	1.80	13.13	3.6
32		20.93	1.90	15.44	3.8
40		24.15	2.00	18.29	4.1
25	68	17.40	1.85	12.06	3.3
32		20.00	1.96	14.29	3.5
40		23.14	2.09	17.01	3.8
25	80	16.04	1.93	10.45	2.9
32		18.57	2.05	12.55	3.1
40		21.59	2.19	15.11	3.3

Fluid Press. Drop		
Fluid Flow (GPM)	Pressure Drop	
	(FOH)	(PSIG)
3.8	2.1	0.9
5.0	3.8	1.7
6.6	6.6	2.9
7.5	8.5	3.7
9.4	13.3	5.8



Units are subject to change without notice please contact us for up-to-date values.