

Swimming Pool, Aquaculture and Geothermal Heat Pumps

Specification Capacity Data Sheet

HRHPX048

Water Loop				Ground Water				Ground Loop			
Cooling		Heating		Cooling		Heating		Cooling		Heating	
Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP
51,000	18.0	58,000	5.0	57,000	27.0	50,000	4.3	53,000	20	39,000	3.6

Performance at	
1,600	CFM
12.0	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	53.61	35.38	0.66	2.25	59.69	30.1
59		51.60	34.40	0.67	2.53	58.61	25.1
70		49.05	33.17	0.68	2.83	57.09	20.8
86		45.65	32.01	0.70	3.34	55.44	15.9
100		41.80	29.62	0.71	3.82	53.22	12.5
50	75 db 63 wb	55.50	39.89	0.72	2.24	61.55	31.3
59		53.43	38.87	0.73	2.52	60.42	26.1
70		51.23	38.28	0.75	2.85	59.34	21.5
86		46.91	35.76	0.76	3.34	56.72	16.3
100		44.88	35.16	0.78	3.90	56.58	13.1
50	80.6 db 66.2 wb	59.08	43.83	0.74	2.22	65.05	33.7
59		57.00	43.06	0.76	2.58	64.20	27.0
70		54.16	42.05	0.78	2.84	62.25	22.8
86		51.00	40.09	0.79	3.30	60.67	18.0
100		46.30	38.74	0.84	3.82	57.74	13.8
50	85 db 71 wb	63.80	42.84	0.67	2.18	69.64	37.3
59		61.39	42.12	0.69	2.48	68.23	30.6
70		58.37	40.96	0.70	2.83	66.42	24.7
86		54.01	39.46	0.73	3.34	63.81	18.8
100		50.07	37.88	0.76	3.82	61.51	14.9

Heating					
Entering Fluid Temp (°F)	Entering Air Temp (°F)	Total Capacity (MBtuH)	Power Input (kW)	Heating of Abs. (MBtuH)	COP
50	60	49.68	3.57	39.12	4.7
60		55.83	3.64	45.02	5.2
68		60.84	3.70	49.82	5.5
80		68.28	3.77	57.03	6.1
50		50.00	3.88	38.37	4.3
60	68	54.70	3.89	43.05	4.7
68		58.00	3.87	46.40	5.0
80		66.85	4.04	54.66	5.5
50	80	47.72	4.21	34.96	3.7
60		53.13	4.29	40.08	4.1
68		57.74	4.37	44.42	4.3
80		64.87	4.50	51.13	4.7

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	36.08	3.32	26.35	3.7
32		39.61	3.39	29.65	4.0
40		43.73	3.45	33.54	4.3
25	68	35.58	3.57	25.02	3.4
32		39.00	3.65	28.17	3.6
40		42.95	3.67	32.02	3.9
25	80	34.86	3.93	23.05	3.0
32		38.16	3.98	26.18	3.2
40		42.25	4.06	29.99	3.4

Fluid Press. Drop		
Fluid Flow (GPM)	Pressure Drop	
	(FOH)	(PSIG)
6.0	3.3	1.4
8.0	5.9	2.6
10.6	10.2	4.4
12.0	13.1	5.7
15.0	20.5	8.9



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