

HIGH TEMPERATURE

WATER SOURCE HEAT PUMP CHILLER R410A - WHPX070DZV (B)

Leaving Chilled Water °F	Leaving Condenser Water Temperature																			
	105 °F					110 °F					115 °F					120 °F				
	Tons	kW ²	EER ³	THR ⁴	COP _{HR} ⁵	Tons	kW ²	EER ³	THR ⁴	COP _{HR} ⁵	Tons	kW ²	EER ³	THR ⁴	COP _{HR} ⁵	Tons	kW ²	EER ³	THR ⁴	COP _{HR} ⁵
24	45.8	60.16	9.1	755,414	3.68	44.1	64.09	8.2	747,489	3.42	42.2	68.30	7.4	740,095	3.17	40.4	72.81	6.7	733,378	2.95
26	47.8	60.15	9.5	779,374	3.80	46.0	64.08	8.6	770,679	3.52	44.1	68.29	7.8	762,456	3.27	42.2	72.80	7.0	754,854	3.04
28	49.9	60.14	10.0	804,133	3.92	48.0	64.07	9.0	794,648	3.63	46.0	68.28	8.1	785,579	3.37	44.0	72.79	7.3	777,072	3.13
30	52.0	60.13	10.4	829,714	4.04	50.1	64.05	9.4	819,421	3.75	48.0	68.26	8.4	809,486	3.47	46.0	72.77	7.6	800,056	3.22
32	54.2	60.12	10.8	856,143	4.17	52.2	64.04	9.8	845,023	3.86	50.1	68.25	8.8	834,203	3.58	47.9	72.76	7.9	823,831	3.32
34	56.5	60.12	11.3	883,445	4.30	54.4	64.04	10.2	871,479	3.99	52.2	68.24	9.2	859,755	3.69	50.0	72.75	8.2	848,421	3.42
36	58.9	60.12	11.7	911,644	4.44	56.7	64.03	10.6	898,812	4.11	54.4	68.23	9.6	886,166	3.80	52.1	72.73	8.6	873,852	3.52
38	61.3	60.12	12.2	940,764	4.58	59.0	64.03	11.1	927,048	4.24	56.7	68.22	10.0	913,460	3.92	54.3	72.72	9.0	900,147	3.63
40	63.8	60.13	12.7	970,830	4.73	61.5	64.03	11.5	956,212	4.37	59.1	68.22	10.4	941,662	4.04	56.6	72.71	9.3	927,331	3.74
42	66.4	60.15	13.2	1,001,868	4.88	64.0	64.04	12.0	986,326	4.51	61.5	68.22	10.8	970,798	4.17	58.9	72.71	9.7	955,428	3.85
44	69.0	60.18	13.8	1,033,900	5.03	66.6	64.06	12.5	1,017,418	4.65	64.0	68.23	11.3	1,000,890	4.30	61.3	72.71	10.1	984,465	3.97
46	71.8	60.21	14.3	1,066,952	5.19	69.2	64.09	13.0	1,049,510	4.80	66.6	68.25	11.7	1,031,964	4.43	63.8	72.72	10.5	1,014,464	4.09
48	74.6	60.26	14.9	1,101,049	5.35	72.0	64.12	13.5	1,082,628	4.95	69.2	68.28	12.2	1,064,045	4.56	66.4	72.74	11.0	1,045,450	4.21
50	77.5	60.31	15.4	1,136,215	5.52	74.8	64.17	14.0	1,116,795	5.10	72.0	68.31	12.6	1,097,157	4.70	69.1	72.76	11.4	1,077,449	4.34
55	85.2	60.51	16.9	1,228,969	5.95	82.3	64.34	15.3	1,206,970	5.50	79.2	68.45	13.9	1,184,610	5.07	76.1	72.79	12.5	1,162,035	4.67
60	93.4	60.81	18.4	1,328,942	6.40	90.3	64.59	16.8	1,304,246	5.91	87.0	68.67	15.2	1,279,045	5.46	83.7	73.06	13.7	1,253,485	5.03

Leaving Chilled Water °F	Leaving Condenser Water Temperature																			
	125 °F					130 °F					135 °F					140 °F				
	Tons	kW ²	EER ³	THR ⁴	COP _{HR} ⁵	Tons	kW ²	EER ³	THR ⁴	COP _{HR} ⁵	Tons	kW ²	EER ³	THR ⁴	COP _{HR} ⁵	Tons	kW ²	EER ³	THR ⁴	COP _{HR} ⁵
24																				
26																				
28																				
30																				
32	45.8	77.60	7.1		3.18															
34	47.7	77.58	7.4		3.28															
36	49.8	77.57	7.7		3.37	43.8	72.15	7.3	772,374	3.14										
38	51.9	77.55	8.0		3.47	45.7	72.29	7.6	795,622	3.22										
40	54.0	77.54	8.4		3.56	47.7	72.43	7.9	819,462	3.31	45.3	76.65	7.1	805,636	3.08					
42	56.3	77.53	8.7		3.66	49.7	72.59	8.2	843,910	3.41	47.2	76.80	7.4	829,205	3.16					
44	58.6	77.52	9.1		3.77	51.7	72.75	8.5	868,978	3.50	49.2	76.96	7.7	853,363	3.25	46.6	81.43	6.9	837,591	3.01
46					3.87	53.8	72.92	8.9	894,679	3.59	51.2	77.13	8.0	878,123	3.33	48.6	81.60	7.1	861,406	3.09
48					3.98	55.9	73.11	9.2	921,027	3.69	53.3	77.32	8.3	903,497	3.42	50.5	81.78	7.4	885,804	3.17
50					4.08	58.1	73.30	9.5	948,035	3.79	55.4	77.51	8.6	929,500	3.51	52.6	81.97	7.7	910,798	3.25
55					4.36	63.9	73.86	10.4	1,018,528	4.04	60.9	78.05	9.4	997,342	3.74	57.9	82.51	8.4	975,980	3.46
60					4.64	69.9	74.51	11.3	1,093,435	4.30	66.7	78.69	10.2	1,069,398	3.98	63.4	83.14	9.2	1,045,178	3.68

Notes:

1. All performance data is based on a 10 °F chilled water temperature drop through the evaporator, and 10°F rise through the condenser.
2. kW - Total Power Input in kWatts
3. EER - Energy Efficiency Ratio for COOL Mode (Btuh / Watts)
4. THR - Total Heat Rejection for HEAT Mode (Btuh)
5. COP_{HR} - Coefficient of Performance for Heat Pump