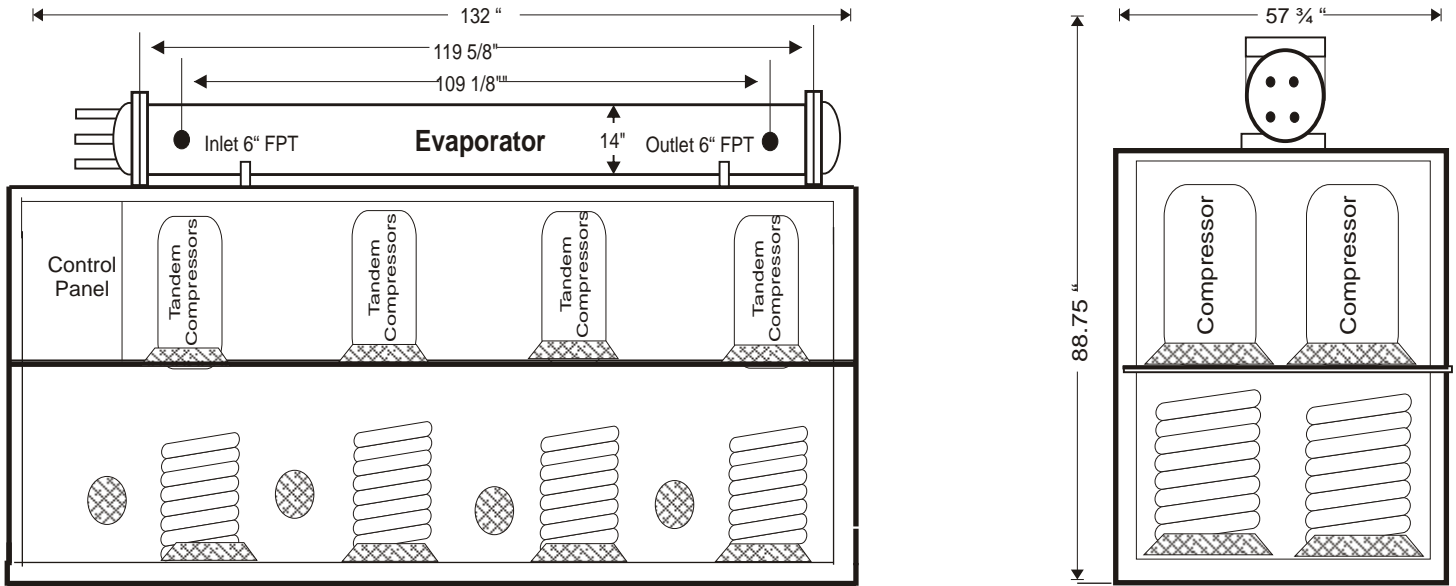


MODEL—HPWS 5 MS 3000



MODEL—HPWS 5 MS 3000

Note: In View of Continuous Product Improvements, design and specification are subject to change without Notice

Heating Capacity	3,000.0 MBTUH	Cooling Capacity	2,616.0 MBTUH
Condenser Water Flow	500 GPM	Evaporator Water Flow	450 GPM
Pressure Drop (cond.)	9.0 PSI	Pressure Drop (Evap.)	7.1 PSI
Entering Water Temp.	100	Entering Water Temp.	95.0
Leaving Water Temp.	112.0	Leaving Water Temp.	83.37
COP	7.81	Cooling EER	23.24
Compressors	(8) SZ-240 Maneurop Scroll	Condensers	Double Wall Vented
Voltage	460/60/3Ø	Condenser. Construction	Tube-in-Tube
RLA/LRA	32.7/215 ea.	Evaporator	Tube-n-Shell
Control Voltage	24 Volts	Refrigerant Type	R-134A
Minimum Circuit Amp.	40 each compressor	MCC .	280 Amp.

STANDARD FEATURES

Liquid Line Sight Glass
 Refrigerant Dryer
 Thermostatic Expansion Valves
 Insulated Evaporator & Ref. Lines
 Time Delay each Compressors
 Compressor Lock Out Relay
 Single Phase/Voltage Protection
 Vibration Isolation on Compressor

Refrigerant Charging Valves
 Hinged Control Panel
 Refrigerant Holding Charge
 Minimum Off Time for Compressors
 High Side Pressure Control (Mechanical)
 Low Side Pressure Control (Mechanical)
 Fused Protection on each compressor
 Current Over Load Relays

Options

Four Year Extended Compressor Warranty
 Five Year Parts and Labor Warranty
 Compressors Rotalock Service Valves
 Crankcase Heaters
 Refrigerant Pump Down Solenoid Valves
 Micro-Processor Based Control System
 Stinles Steel Plate Evaporators

Heat Harvester Energy Efficient Products
 Manufactured by
 Environmentally Engineered Equipment, Inc.

MODEL HPWS 5 MS 3000 - 60 Hz																	
SOURCE																	
EWTEMP																	
95 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
ENTER WATER TEMP. F @ 500 GPM,																	
CMBTUH	3,098,786	3,041,229	2,983,672	2,865,773	2,747,875	2,681,963	2,616,051	2,554,781	2,493,510	2,425,742	2,357,973	2,294,847	2,231,720	2,168,593	2,105,466	2,042,339	1,979,212
HMBTUH	3,351,109	3,308,498	3,265,886	3,181,871	3,097,858	3,049,028	3,000,198	2,961,764	2,923,330	2,834,582	2,745,833	2,752,517	2,759,199	2,765,885	2,772,568	2,779,251	2,785,936
WATTS	73,930	78,309	82,688	92,616	102,544	107,549	112,554	119,245	125,936	119,789	113,642	134,096	154,550	175,005	195,459	215,914	236,368
EER	41.92	38.84	36.08	30.94	26.8	24.94	23.24	21.42	19.8	20.25	20.75	17.11	14.44	12.39	10.77	9.46	8.37
COP	13.28	12.38	11.57	10.07	8.85	8.31	7.81	7.28	6.8	6.93	7.08	6.01	5.23	4.63	4.16	3.77	3.45
LV. WTR	83.41	88.24	93.07	97.73	102.4	107.2	112.01	116.85	121.7	126.34	130.99	136.01	141.04	146.07	151.09	156.12	161.15
SOURCE																	
EWTEMP																	
90 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
ENTER WATER TEMP. F @ 500 GPM,																	
CMBTUH	2,926,115	2,871,343	2,816,571	2,542,712	2,435,954	2,377,468	2,467,517	2,409,032	2,350,547	2,286,492	2,222,436	2,162,095	2,101,753	2,041,411	1,981,069	1,920,727	1,860,385
HMBTUH	3,178,250	3,138,332	3,098,413	2,858,254	2,785,193	2,744,161	2,851,664	2,815,643	2,779,623	2,694,588	2,609,552	2,619,116	2,628,676	2,638,239	2,647,799	2,657,362	2,666,925
WATTS	73,875	78,227	82,579	92,453	102,326	107,440	112,554	119,136	125,718	119,571	113,424	133,906	154,387	174,869	195,350	215,832	236,314
EER	70	36.71	34.11	27.5	23.81	22.13	21.92	20.22	18.7	19.12	19.59	16.15	13.61	11.67	10.14	8.9	7.87
COP	12.61	11.75	10.99	9.06	7.98	7.48	7.42	6.92	6.48	6.6	6.74	5.73	4.99	4.42	3.97	3.61	3.31
LV. WTR	82.72	87.56	92.4	96.44	101.15	105.98	111.41	116.27	121.12	125.78	130.44	135.48	140.52	145.56	150.6	155.63	160.67
SOURCE																	
EWTEMP																	
85 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
ENTER WATER TEMP. F @ 500 GPM,																	
CMBTUH	2,753,445	2,701,458	2,649,471	2,542,712	2,435,954	2,377,468	2,318,983	2,263,283	2,207,583	2,147,241	2,086,899	2,029,342	1,971,786	1,914,229	1,856,672	1,799,115	1,741,558
HMBTUH	3,005,580	2,968,447	2,931,313	2,858,254	2,785,193	2,744,161	2,703,130	2,669,894	2,636,659	2,555,337	2,474,015	2,486,363	2,498,709	2,511,057	2,523,402	2,535,750	2,548,098
WATTS	73,875	78,227	82,579	92,453	102,326	107,440	112,554	119,136	125,718	119,571	113,424	133,906	154,387	174,869	195,350	215,832	236,314
EER	37.27	34.53	32.08	27.5	23.81	22.13	20.6	19	17.56	17.96	18.4	15.15	12.77	10.95	9.5	8.34	7.37
COP	11.92	11.12	10.4	9.06	7.98	7.48	7.04	6.57	6.14	6.26	6.39	5.44	4.74	4.21	3.78	3.44	3.16
LV. WTR	82.03	86.88	91.73	96.44	101.15	105.98	110.82	115.68	120.55	125.23	129.9	134.95	140	145.05	150.1	155.15	160.2
SOURCE																	
EWTEMP																	
80 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
ENTER WATER TEMP. F @ 500 GPM,																	
CMBTUH	2,580,774	2,531,572	2,482,370	2,381,182	2,279,993	2,225,221	2,170,450	2,117,534	2,064,619	2,007,991	1,951,362	1,896,590	1,841,819	1,787,047	1,732,275	1,677,503	1,622,731
HMBTUH	2,832,725	2,798,284	2,763,840	2,696,168	2,628,491	2,591,542	2,554,597	2,523,773	2,492,954	2,415,346	2,337,734	2,352,959	2,368,186	2,383,411	2,398,636	2,413,858	2,429,083
WATTS	73,821	78,146	82,470	92,290	102,109	107,331	112,554	119,027	125,501	119,354	113,206	133,715	154,224	174,733	195,242	215,750	236,259
EER	34.96	32.4	30.1	25.8	22.33	20.73	19.28	17.79	16.45	16.82	17.24	14.18	11.94	10.23	8.87	7.78	6.87
COP	11.24	10.49	9.82	8.56	7.54	7.07	6.65	6.21	5.82	5.93	6.05	5.16	4.5	4	3.6	3.28	3.01
LV. WTR	81.34	86.2	91.06	95.79	100.52	105.37	110.22	115.1	119.98	124.67	129.35	134.42	139.48	144.54	149.6	154.66	159.72
SOURCE																	
EWTEMP																	
75 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
ENTER WATER TEMP. F @ 500 GPM,																	
CMBTUH	2,408,104	2,361,687	2,315,270	2,219,651	2,124,033	2,072,974	2,021,916	1,971,786	1,921,656	1,868,740	1,815,825	1,763,838	1,711,852	1,659,865	1,607,878	1,555,891	1,503,904
HMBTUH	2,659,867	2,628,119	2,596,372	2,534,077	2,471,787	2,438,923	2,406,063	2,377,653	2,349,247	2,275,351	2,201,456	2,219,559	2,237,662	2,255,765	2,273,867	2,291,969	2,310,072
WATTS	73,766	78,064	82,362	92,126	101,891	107,222	112,554	118,918	125,283	119,136	112,989	133,525	154,061	174,597	195,133	215,669	236,205
EER	32.65	30.25	28.11	24.09	20.85	19.33	17.96	16.58	15.34	15.69	16.07	13.21	11.11	9.51	8.24	7.21	6.37
COP	10.56	9.86	9.24	8.06	7.11	6.66	6.26	5.86	5.49	5.6	5.71	4.87	4.26	3.79	3.41	3.11	2.87
LV. WTR	80.64	85.52	90.39	95.14	99.89	104.76	109.63	114.51	119.4	124.11	128.81	133.88	138.95	144.03	149.1	154.17	159.24
SOURCE																	
EWTEMP																	
70 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
ENTER WATER TEMP. F @ 500 GPM,																	
CMBTUH	2,235,433	2,191,801	2,148,170	2,058,121	1,968,072	1,920,727	1,873,382	1,826,037	1,778,692	1,729,490	1,680,288	1,631,086	1,581,885	1,532,683	1,483,481	1,434,279	1,385,077
HMBTUH	2,487,012	2,457,954	2,428,899	2,371,991	2,315,085	2,286,307	2,257,529	2,231,536	2,205,542	2,135,357	2,065,175	2,086,155	2,107,139	2,128,118	2,149,098	2,170,077	2,191,057
WATTS	73,712	77,982	82,253	91,963	101,674	107,114	112,554	118,810	125,066	118,918	112,771	133,334	153,898	174,461	195,024	215,587	236,150
EER	30.33	28.11	26.12	22.38	19.36	17.93	16.64	15.37	14.22	14.54	14.9	12.23	10.28	8.79	7.61	6.65	5.87
COP	9.89	9.24	8.65	7.56	6.67	6.25	5.88	5.5	5.17	5.26	5.37	4.58	4.01	3.57	3.23	2.95	2.72
LV. WTR	79.95	84.84	89.72	94.49	99.26	104.15	109.03	113.93	118.83	123.54	128.26	133.35	138.43	143.52	148.6	153.68	158.77
SOURCE																	
EWTEMP																	
65 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
ENTER WATER TEMP. F @ 400 GPM,																	
CMBTUH	2,062,763	2,021,916	1,981,069	1,896,590	1,812,112	1,768,480	1,724,848	1,680,288	1,635,728	1,590,240	1,544,751	1,498,334	1,451,918	1,405,501	1,359,084	1,312,667	1,266,250
HMBTUH	2,313,970	2,287,512	2,261,054	2,209,347	2,157,637	2,132,944	2,108,251	2,084,670	2,061,090	1,994,622	1,928,154	1,952,106	1,976,056	2,000,008	2,023,957	2,047,909	2,071,861
WATTS	73,603	77,819	82,035	91,637	101,238	106,787	112,336	118,483	124,630	118,483	112,336	132,954	153,571	174,189	194,806	215,424	236,042
EER	28.03	25.98	24.15	20.7	17.9	16.56	15.35	14.18	13.12	13.42	13.75	11.27	9.45	8.07	6.98	6.09	5.36
COP	9.21	8.61	8.08	7.06	6.24	5.85	5.5	5.16	4.85	4.93	5.03	4.3	3.77	3.36	3.04	2.79	2.57
LV. WTR	81.57	86.44	91.31	96.05	100.79	105.67	110.55	115.43	120.31	124.98	129.64	134.76	139.88	145	150.12	155.24	160.36
SOURCE																	
EWTEMP																	
60 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
ENTER WATER TEMP. F @ 400 GPM,																	
CMBTUH	1,899,375	1,861,314	1,823,252	1,744,343	1,665,435	1,624,588	1,583,741	1,541,966	1,500,191	1,458,416	1,416,641	1,373,009	1,329,377	1,285,745	1,242,114	1,198,4	