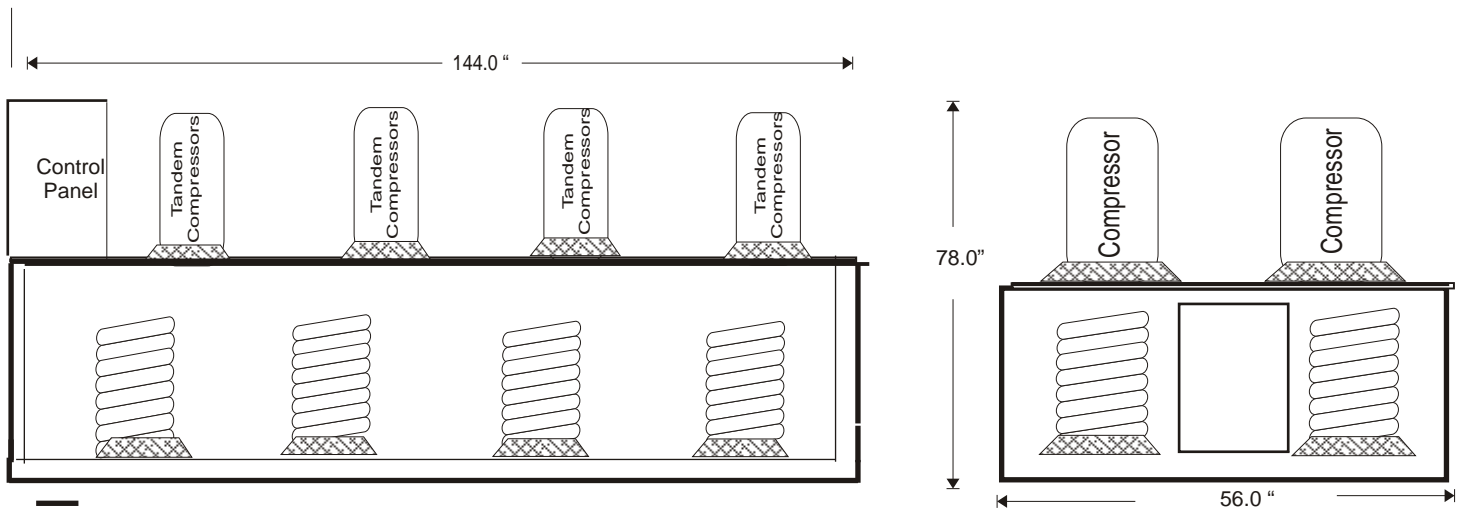


MODEL—HPWS 5 MS 3815 HT - 4



MODEL—HPWS 5 MS 3815 HT - 4

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

Heating Capacity	3,624.4 MBTUH	Cooling Capacity	3,135.9 MBTUH
Condenser Water Flow	600 GPM	Evaporator Water Flow	325 GPM
Pressure Drop (cond.)	5.2 PSI	Pressure Drop (Evap.)	7.1 PSI
Entering Water Temp.	100	Entering Water Temp.	900
Leaving Water Temp.	112.09	Leaving Water Temp.	70.7
COP (at design conditions)	7.42	Cooling EER	18.23
Compressors	(8) SZ-300 Maneurop Scroll	Condensers	316 Stainless Steel Plate
Voltage	460/60/3Ø	Evaporator	Tube in Tube
RLA/LRA	33.6/270 ea.	Refrigerant Type	R-134A
Control Voltage	24 Volts	MCC	278 Amp
Minimum Circuit Amp.	50 each compressor	Total Watts (Unit Only)	143,126

STANDARD FEATURES

Liquid Line Sight Glass	Refrigerant Charging Valves
Refrigerant Dryer	Hinged Control Panel
Thermostatic Expansion Valves	Refrigerant Holding Charge
Insulated Evaporator & Ref. Lines	Minimum Off Time for Compressors
Time Delay each Compressors	High Side Pressure Control (Mechanical)
Compressor Lock Out Relay	Low Side Pressure Control (Mechanical)
Single Phase/Voltage Protection	Fused Protection on each compressor
Vibration Isolation on 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 3815 - 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 @ 600 GPM,																	
CMBTUH	3,932,431	3,859,093	3,785,754	3,633,507	3,481,260	3,403,280	3,325,300	3,246,391	3,167,482	3,087,646	3,007,809	2,927,043	2,846,278	2,765,513	2,684,748	2,603,982	2,523,217
HMBTUH	4,249,366	4,195,430	4,141,491	4,031,947	3,922,404	3,868,748	3,815,089	3,762,082	3,709,074	3,658,757	3,608,442	3,560,632	3,512,823	3,465,014	3,417,205	3,369,395	3,321,586
WATTS	92,861	98,546	104,230	116,742	129,254	136,381	143,507	151,096	158,685	167,334	175,984	185,640	195,296	204,952	214,608	224,264	233,920
EER	42.35	39.16	36.32	31.12	26.93	24.95	23.17	21.49	19.96	18.45	17.09	15.77	14.57	13.49	12.51	11.61	10.79
COP	13.41	12.47	11.64	10.12	8.89	8.31	7.79	7.3	6.85	6.41	6.01	5.62	5.27	4.95	4.67	4.4	4.16
LV. WTR	84.17	88.99	93.81	98.45	103.08	107.9	112.72	117.55	122.37	127.2	132.03	136.87	141.71	146.55	151.4	156.24	161.08
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 @ 600 GPM,																	
CMBTUH	3,713,344	3,643,719	3,574,094	3,225,039	3,087,646	3,017,092	3,135,919	3,060,724	2,985,529	2,909,405	2,833,281	2,756,230	2,679,178	2,602,126	2,525,074	2,448,022	2,370,970
HMBTUH	4,030,091	3,979,684	3,929,275	3,622,647	3,527,677	3,481,352	3,624,408	3,575,206	3,526,005	3,479,403	3,432,802	3,388,707	3,344,611	3,300,515	3,256,418	3,212,322	3,168,226
WATTS	92,806	98,437	104,067	116,498	128,928	136,027	143,126	150,742	158,358	167,008	175,658	185,314	194,970	204,626	214,282	223,938	233,594
EER	70	37.02	34.34	27.68	23.95	22.18	21.91	20.3	18.85	17.42	16.13	14.87	13.74	12.72	11.78	10.93	10.15
COP	12.72	11.85	11.06	9.11	8.02	7.5	7.42	6.95	6.52	6.1	5.73	5.36	5.03	4.73	4.45	4.2	3.97
LV. WTR	83.44	88.27	93.1	97.08	101.76	106.61	112.09	116.92	121.76	126.6	131.45	136.3	141.15	146.01	150.86	155.71	160.56
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 @ 600 GPM,																	
CMBTUH	3,494,257	3,428,345	3,362,433	3,225,039	3,087,646	3,017,092	2,946,538	2,875,057	2,803,575	2,731,165	2,658,754	2,585,416	2,512,077	2,438,739	2,365,400	2,292,062	2,218,723
HMBTUH	3,811,004	3,764,310	3,717,614	3,622,647	3,527,677	3,481,352	3,435,027	3,389,539	3,344,051	3,301,163	3,258,275	3,217,893	3,177,510	3,137,128	3,096,744	3,056,362	3,015,979
WATTS	92,806	98,437	104,067	116,498	128,928	136,027	143,126	150,742	158,358	167,008	175,658	185,314	194,970	204,626	214,282	223,938	233,594
EER	37.65	34.83	32.31	27.68	23.95	22.18	20.59	19.07	17.7	16.35	15.14	13.95	12.88	11.92	11.04	10.24	9.5
COP	12.03	11.2	10.47	9.11	8.02	7.5	7.03	6.59	6.19	5.79	5.43	5.09	4.78	4.49	4.23	4	3.78
LV. WTR	82.71	87.55	92.4	97.08	101.76	106.61	111.45	116.3	121.15	126.01	130.87	135.73	140.6	145.46	150.33	155.19	160.06
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 @ 600 GPM,																	
CMBTUH	3,275,169	3,212,971	3,150,772	3,020,805	2,890,838	2,823,998	2,757,158	2,689,389	2,621,621	2,552,924	2,484,227	2,414,602	2,344,977	2,275,352	2,205,726	2,136,101	2,066,476
HMBTUH	3,591,732	3,548,564	3,505,396	3,417,576	3,329,757	3,287,053	3,244,350	3,202,667	3,160,984	3,121,810	3,082,632	3,045,963	3,009,294	2,972,624	2,935,954	2,899,285	2,862,616
WATTS	92,752	98,328	103,904	116,253	128,602	136,027	142,365	150,389	158,032	166,682	175,331	184,987	194,643	204,299	213,955	223,611	233,267
EER	35.31	32.68	30.32	25.98	22.48	20.81	19.32	17.88	16.59	15.32	14.17	13.05	12.05	11.14	10.31	9.55	8.86
COP	11.35	10.57	9.88	8.61	7.59	7.1	6.66	6.24	5.86	5.49	5.15	4.82	4.53	4.26	4.02	3.8	3.6
LV. WTR	81.98	86.83	91.69	96.4	101.1	105.96	110.82	115.68	120.54	125.41	130.28	135.16	140.03	144.91	149.79	154.67	159.55
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 @ 600 GPM,																	
CMBTUH	3,056,082	2,997,597	2,939,112	2,816,571	2,694,031	2,630,904	2,567,777	2,503,722	2,439,667	2,374,683	2,309,700	2,243,788	2,177,876	2,111,964	2,046,053	1,980,141	1,914,229
HMBTUH	3,372,460	3,332,818	3,293,180	3,212,506	3,131,834	3,092,751	3,053,669	3,015,791	2,977,918	2,942,453	2,906,992	2,874,036	2,841,080	2,808,124	2,775,169	2,742,213	2,709,257
WATTS	92,698	98,219	103,741	116,008	128,275	135,320	142,365	150,389	158,032	166,355	175,001	184,661	194,317	203,973	213,629	223,285	232,941
EER	32.97	30.52	28.33	24.28	21	19.44	18.04	16.69	15.47	14.27	13.2	12.15	11.21	10.35	9.58	8.87	8.22
COP	10.66	9.94	9.3	8.11	7.15	6.7	6.28	5.89	5.53	5.18	4.87	4.56	4.28	4.03	3.81	3.6	3.41
LV. WTR	81.25	86.11	90.98	95.71	100.44	105.31	110.18	115.06	119.93	124.81	129.69	134.58	139.47	144.36	149.25	154.14	159.03
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 @ 600 GPM,																	
CMBTUH	2,836,995	2,782,223	2,727,451	2,612,338	2,497,224	2,437,810	2,378,397	2,318,055	2,257,713	2,196,443	2,135,173	2,072,974	2,010,776	1,948,577	1,886,379	1,824,180	1,761,982
HMBTUH	3,153,186	3,117,072	3,080,963	3,007,437	2,933,914	2,898,449	2,862,988	2,828,920	2,794,848	2,763,100	2,731,349	2,702,106	2,672,864	2,643,621	2,614,379	2,585,136	2,555,894
WATTS	92,643	98,110	103,578	115,763	127,949	134,966	141,984	149,682	157,739	166,029	174,678	184,334	193,990	203,646	213,302	222,958	232,614
EER	30.62	28.36	26.33	22.57	19.52	18.06	16.75	15.49	14.35	13.23	12.22	11.25	10.37	9.57	8.84	8.18	7.57
COP	9.97	9.31	8.72	7.61	6.72	6.29	5.91	5.54	5.2	4.88	4.58	4.29	4.04	3.8	3.59	3.4	3.22
LV. WTR	80.51	85.39	90.27	95.03	99.78	104.67	109.55	114.43	119.32	124.21	129.11	134.01	138.91	143.82	148.72	153.62	158.52
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	2,617,908	2,566,849	2,515,791	2,408,104	2,300,417	2,244,716	2,189,016	2,132,388	2,075,759	2,018,202	1,960,646	1,902,160	1,843,675	1,785,190	1,726,705	1,668,220	1,609,735
HMBTUH	2,933,727	2,900,958	2,868,187	2,801,534	2,734,878	2,702,942	2,671,007	2,640,836	2,610,665	2,582,630	2,554,597	2,529,067	2,503,538	2,478,002	2,452,473	2,426,944	2,401,414
WATTS	92,534	97,893	103,251	115,274	127,296	134,259	141,222	148,974	156,726	165,376	174,026	183,682	193,338	202,992	212,648	222,304	231,960
EER	28.29	26.22	24.37	20.89	18.07	16.72	15.5	14.31	13.24	12.2	11.27	10.36	9.54	8.79	8.12	7.5	6.94
COP	9.29	8.68	8.14	7.12	6.29	5.9	5.54	5.19	4.88	4.58	4.3	4.03	3.79	3.58	3.38	3.2	3.03
LV. WTR	84.67	89.51	94.35	99.01	103.68	108.52	113.36	118.21	123.06	127.92	132.78	137.65	142.52	147.39	152.27	157.14	162.01
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	2,411,817	2,363,543	2,315,270	2,214,081	2,112,893	2,061,834	2,010,776	1,957,861	1,904,945	1,851							