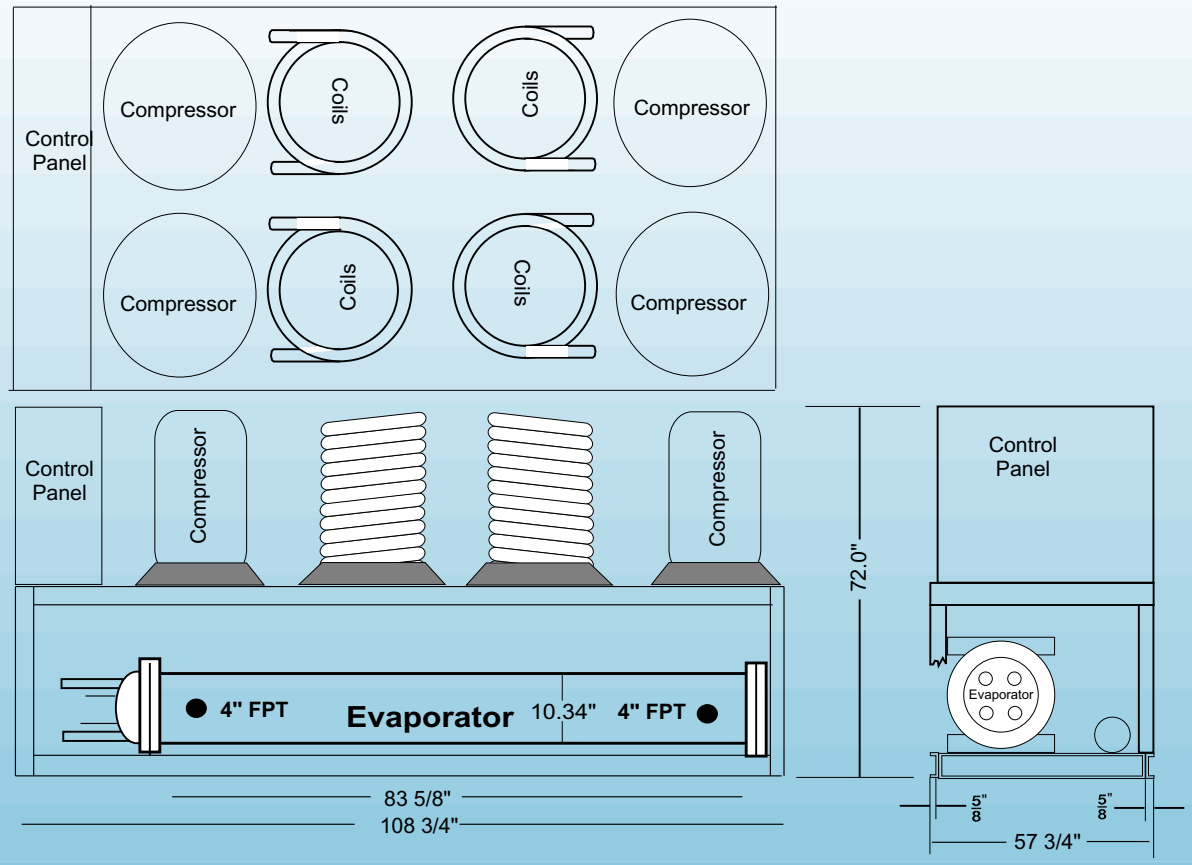
MODEL HPWS 5 MS 1041



Model—HPWS 5 MS 1041

Heating Capacity	1,040,700 BTUH	Cooling Capacity	921,200 BTUH
Condenser Water Flow	200 GPM	Evaporator Water Flow	160 GPM
Pressure Drop (cond.)	5.2 PSI	Pressure Drop (Evap.)	7.1 PSI
Entering Water Temp.	100 °F	Entering Water Temp.	95.0°F
Leaving Water Temp.	110.41°F	Leaving Water Temp.	83.48°F
COP	8.70	Cooling EER	26.29
Compressors	(4) SZ-160 Maneurop Scroll	Condensers	Double Wall Vented
Voltage	460/60/3Ø	Construction	Tube-in-Tube
RLA/LRA	19.0/175 ea.	Evaporator	Tube-in-Shell
Control Voltage	24 Volts	Refrigerant Type	R-134A
Minimum Circuit Amp.	30 each compressor	Minimum Unit Amperage	150.0 Amp.

STANDARD FEATURES

- Liquid Receiver
- Compressors Service Valves
- Liquid Line Sight Glass
- Compressor Adjustable Time Delay Relay
- Single Phase/Voltage Protection
- Condenser Flow Switch Relay
- Evaporator Flow Switch Relay
- Liquid Line Dryer
- Thermostatic Expansion Valves
- Compressor Rotation Control
- Hinged Pre-wired Control Panel
- High Side Pressure Control
- Low Side Pressure Control
- Each Compressor Fused Protected

Options

- Four Year Extended Compressor Warranty
- Warranty on all Parts & Labor Year 2 - 5
- Micro-Processor Based Control System
- Crankcase Heaters
- Refrigerant Pump Down Solenoid Valves
- Condenser Water Circulating Pump for each Refrigerant Circuit

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

Heat Harvester Energy Efficient Products

Manufactured by

Environmentally Engineered Equipment, Inc.

					MODEL HPWS 5 MS 1041										
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 200 GPM,										
95 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	1,052,400	1,032,400	1,012,400	990,200	968,000	944,600	921,200	896,800	872,400	844,400	816,400	789,000	761,600	734,200	706,800
HMBTUH	1,138,271	1,123,049	1,107,827	1,091,566	1,075,305	1,058,048	1,040,792	1,024,241	1,007,691	987,473	967,255	949,411	931,567	913,724	895,880
WATTS	25,160	26,560	27,960	29,700	31,440	33,240	35,040	37,340	39,640	41,920	44,200	47,000	49,800	52,600	55,400
EER	41.83	38.87	36.21	33.34	30.79	28.42	26.29	24.02	22.01	20.14	18.47	16.79	15.29	13.96	12.76
COP	13.26	12.39	11.61	10.77	10.02	9.33	8.7	8.04	7.45	6.9	6.41	5.92	5.48	5.09	4.74
LV. WTR	81.39	86.23	91.08	95.92	100.76	105.58	110.41	115.25	120.08	124.88	129.68	134.5	139.32	144.14	148.96
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 200 GPM,										
90 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	988,800	969,800	950,800	869,400	849,600	828,600	864,400	841,200	818,000	791,600	765,200	739,200	713,200	687,200	661,200
HMBTUH	1,074,535	1,060,313	1,046,091	970,561	956,632	941,775	983,718	968,232	952,745	934,127	915,509	898,928	882,348	865,768	849,188
WATTS	25,120	26,520	27,920	29,640	31,360	33,160	34,960	37,220	39,480	41,760	44,040	46,800	49,560	52,320	55,080
EER	70	36.57	34.05	29.33	27.09	24.99	24.73	22.6	20.72	18.96	17.38	15.79	14.39	13.13	12
COP	12.53	11.71	10.98	9.59	8.94	8.32	8.24	7.62	7.07	6.55	6.09	5.63	5.22	4.85	4.52
LV. WTR	80.75	85.61	90.47	94.71	99.57	104.42	109.84	114.69	119.53	124.35	129.16	133.99	138.83	143.66	148.5
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 200 GPM,										
85 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	925,200	907,200	889,200	869,400	849,600	828,600	807,600	785,600	763,600	738,800	714,000	689,400	664,800	640,200	615,600
HMBTUH	1,010,935	997,713	984,491	970,561	956,632	941,775	926,918	912,632	898,345	881,327	864,309	849,128	833,948	818,768	803,588
WATTS	25,120	26,520	27,920	29,640	31,360	33,160	34,960	37,220	39,480	41,760	44,040	46,800	49,560	52,320	55,080
EER	36.83	34.21	31.85	29.33	27.09	24.99	23.1	21.11	19.34	17.69	16.21	14.73	13.41	12.24	11.18
COP	11.79	11.02	10.33	9.59	8.94	8.32	7.77	7.18	6.67	6.18	5.75	5.32	4.93	4.59	4.27
LV. WTR	80.11	84.98	89.85	94.71	99.57	104.42	109.27	114.13	118.99	123.82	128.65	133.49	138.34	143.19	148.04
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 200 GPM,										
80 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	861,600	844,600	827,600	809,000	790,400	770,600	750,800	730,000	709,200	686,000	662,800	639,600	616,400	593,200	570,000
HMBTUH	947,198	934,976	922,754	909,957	897,159	883,502	869,845	856,622	843,399	827,981	812,562	798,646	784,729	770,813	756,896
WATTS	25,080	26,480	27,880	29,580	31,280	33,080	34,880	37,100	39,320	41,600	43,880	46,600	49,320	52,040	54,760
EER	34.35	31.9	29.68	27.35	25.27	23.3	21.53	19.68	18.04	16.49	15.1	13.73	12.5	11.4	10.41
COP	11.07	10.35	9.7	9.01	8.4	7.83	7.31	6.77	6.28	5.83	5.43	5.02	4.66	4.34	4.05
LV. WTR	79.48	84.35	89.23	94.1	98.98	103.84	108.7	113.57	118.44	123.28	128.13	132.99	137.85	142.71	147.57
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 200 GPM,										
75 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	798,000	782,000	766,000	748,600	731,200	712,600	694,000	674,400	654,800	633,200	611,600	589,800	568,000	546,200	524,400
HMBTUH	883,462	872,240	861,018	849,352	837,686	825,229	812,772	800,613	788,453	774,635	760,816	748,163	735,510	722,857	710,204
WATTS	25,040	26,440	27,840	29,520	31,200	33,000	34,800	36,980	39,160	41,440	43,720	46,400	49,080	51,760	54,440
EER	31.87	29.58	27.51	25.36	23.44	21.59	19.94	18.24	16.72	15.28	13.99	12.71	11.57	10.55	9.63
COP	10.34	9.67	9.06	8.43	7.87	7.33	6.84	6.34	5.9	5.48	5.1	4.72	4.39	4.09	3.82
LV. WTR	78.84	83.73	88.61	93.5	98.38	103.26	108.13	113.01	117.89	122.75	127.61	132.48	137.36	142.23	147.1
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 200 GPM,										
70 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	734,400	719,400	704,400	688,200	672,000	654,600	637,200	618,800	600,400	580,400	560,400	540,000	519,600	499,200	478,800
HMBTUH	819,725	809,503	799,281	788,747	778,213	766,956	755,699	744,603	733,507	721,289	709,070	697,681	686,291	674,901	663,512
WATTS	25,000	26,400	27,800	29,460	31,120	32,920	34,720	36,860	39,000	41,280	43,560	46,200	48,840	51,480	54,120
EER	29.38	27.25	25.34	23.36	21.59	19.88	18.35	16.79	15.39	14.06	12.87	11.69	10.64	9.7	8.85
COP	9.61	8.98	8.42	7.84	7.33	6.83	6.38	5.92	5.51	5.12	4.77	4.42	4.12	3.84	3.59
LV. WTR	78.2	83.1	88	92.89	97.79	102.67	107.56	112.45	117.34	122.22	127.09	131.98	136.87	141.75	146.64
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 120 GPM,										
65 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	670,800	656,800	642,800	627,800	612,800	596,600	580,400	563,200	546,000	527,600	509,200	490,200	471,200	452,200	433,200
HMBTUH	755,852	746,630	737,408	727,937	718,466	708,410	698,353	688,184	678,015	667,396	656,778	646,515	636,253	625,990	615,727
WATTS	24,920	26,320	27,720	29,340	30,960	32,760	34,560	36,620	38,680	40,960	43,240	45,800	48,360	50,920	53,480
EER	26.92	24.95	23.19	21.4	19.79	18.21	16.79	15.38	14.12	12.88	11.78	10.7	9.74	8.88	8.1
COP	8.89	8.31	7.79	7.27	6.8	6.34	5.92	5.51	5.14	4.77	4.45	4.14	3.85	3.6	3.37
LV. WTR	82.6	87.45	92.3	97.14	101.98	106.81	111.64	116.47	121.3	126.13	130.95	135.78	140.61	145.44	150.27
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 120 GPM,										
60 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	607,200	594,200	581,200	567,400	553,600	538,600	523,600	507,600	491,600	474,800	458,000	440,400	422,800	405,200	387,600
HMBTUH	692,115	683,894	675,672	667,333	658,993	650,137	641,280	632,175	623,069	614,050	605,032	596,033	587,034	578,034	569,035
WATTS	24,880	26,280	27,680	29,280	30,880	32,680	34,480	36,500	38,520	40,800	43,080	45,600	48,120	50,640	53,160
EER	24.41	22.61	21	19.38	17.93	16.48	15.19	13.91	12.76	11.64	10.63	9.66	8.79	8	7.29
COP	8.15	7.62	7.15	6.68	6.25	5.83	5.45	5.07	4.74	4.41	4.11	3.83	3.57	3.34	3.14
LV. WTR	81.54	86.4	91.27	96.13	100.99	105.84	110.69	115.54	120.39	125.24	130.09	134.94	139.79	144.64	149.49
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 120 GPM,										
55 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	548,000	536,200	524,400	511,400	498,400	484,600	470,800	456,200	441,600	426,000	410,400	394,200	378,000	361,800	345,600
HMBTUH	632,779	625,689	618,599	610,991	603,384	595,659	587,934	580,228	572,523	564,568	556,613	549,014	541,414	533,815	526,216
WATTS	24,840	26,220	27,600	29,180	30,760	32,540	34,320	36,340	38,360	40,600	42,840	45,360	47,880	50,400	52,920
EER	22.06	20.45	19	17.53	16.2	14.89	13.72	12.55	11.51	10.49	9.58	8.69	7.89	7.18	6.53
COP	7.46	6.99	6.57	6.13	5.75	5.36	5.02	4.68	4.37	4.07	3.81	3.55	3.31	3.1	2.91
LV. WTR	72.07	77.05	82.02	87	91.97	96.95	101.92	106.9	111.87	116.85	121.82	126.79	131.77	136.75	141.72

SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 120 GPM,										
50 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	493,200	482,200	471,200	459,400	447,600	434,800	422,000	408,600	395,200	381,000	366,800	351,800	336,800	321,800	306,800
HMBTUH	577,706	571,348	564,989	558,582	552,174	545,381	538,588	532,014	525,440	518,885	512,330	505,863	499,395	492,928	486,460
WATTS	24,760	26,120	27,480	29,060	30,640	32,400	34,160	36,160	38,160	40,400	42,640	45,140	47,640	50,140	52,640
EER	19.92	18.46	17.15	15.81	14.61	13.42	12.35	11.3	10.36	9.43	8.6	7.79	7.07	6.42	5.83
COP	6.84	6.41	6.02	5.63	5.28	4.93	4.62	4.31	4.03	3.76	3.52	3.28	3.07	2.88	2.71
LV. WTR	79.63	84.53	89.42	94.31	99.21	104.09	108.98	113.87	118.76	123.65	128.54	133.43	138.33	143.22	148.11