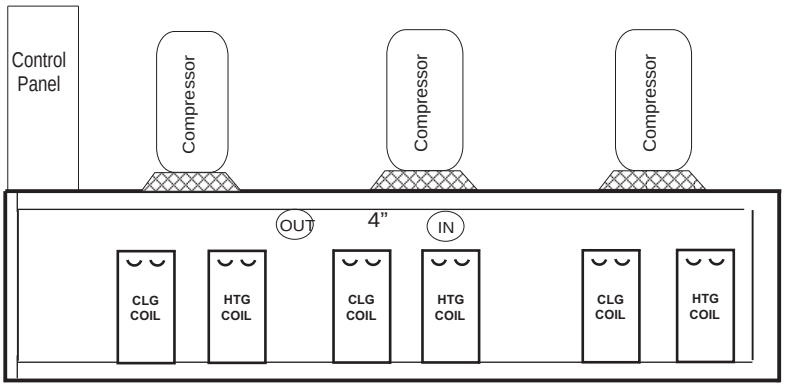
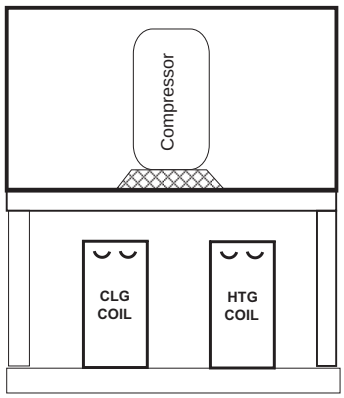
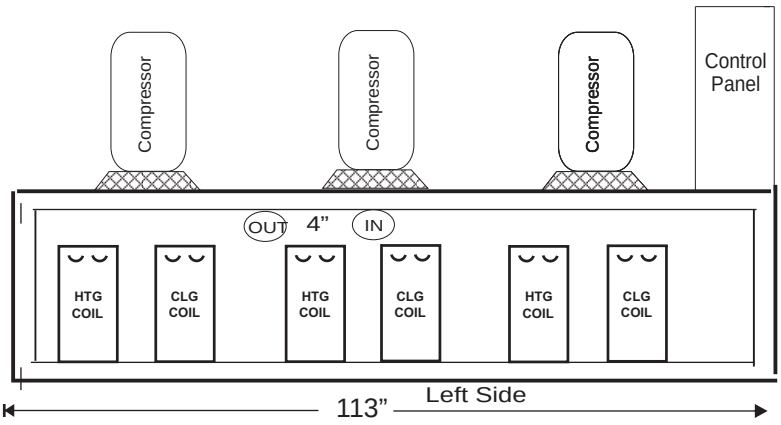


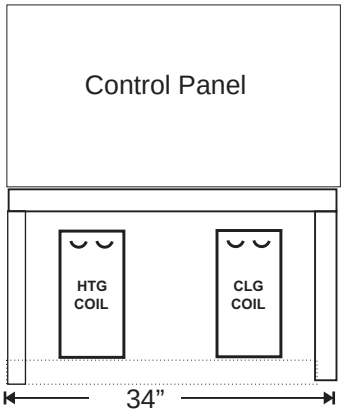
Right Side



Back



Left Side



MODEL—HPWW 5 MS 78 GT

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

Heating Capacity	1,189.7 MBTUH
Condenser Water Flow	170 GPM
Pressure Drop (cond.)	5.2 PSI
Entering Water Temp.	100 ºF
Leaving Water Temp.	112.35ºF
COP	5.92
Compressors	(6) SZ--160 Maneurop Scroll
Voltage	208/230/60/3
RLA/LRA	38.0/420 ea.
Control Voltage	24 Volts
Minimum Circuit Amp.	75 ea. compressor

Cooling Capacity	870.6 MBTUH
Evaporator Water Flow	150 GPM
Pressure Drop (Evap.)	7.1 PSI
Entering Water Temp.	65ºF
Leaving Water Temp.	53.59ºF
Cooling EER	16.79
Condensers	Double Wall Vented
Cond. Construction	Welded Plate
Evaporator	Welded Plate
Refrigerant Type	R-134a
MCA.	238 Amp.

STANDARD FEATURES

Liquid Receiver
Compressors Service Valves
Liquid Line Sight Glass
Liquid Line Dryer
Thermostatic Expansion Valves
Hinged Control Panel

Comp. Adjustable Time Delay
Single Phase/Current Protection
Condenser Flow Switch Time Delay
Evaporator Flow Switch Relay

High Side Pressure Control (Mechanical)
Low Side Pressure Control (Mechanical)
Fused Protection on each Compressor

Options

Four Year Extended Comp. Warranty
Warranty on all Parts & Labor Year 2 - 5
Micro-Processor Based Control System
Crank case Heaters
Refrigerant Pump Down Solenoid Valves
Single Wall Condenser for Bld. Heat
Refrigerant De-superheater

Heat Harvester Energy Efficient Products
Manufactured by
H H Systems, Inc.

							HPWW 5 MS 78 GT										
SOURCE							(6 - SZ 160)										
EWTEMP							ENTER WATER TEMP. F @ 170 GPM,										
65 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
CMBTUH	1,006,200	985,200	964,200	941,700	919,200	894,900	870,600	844,800	819,000	791,400	763,800	735,300	706,800	678,300	649,800	621,300	592,800
HMBTUH	1,133,778	1,119,945	1,106,113	1,091,906	1,077,700	1,062,615	1,047,530	1,032,276	1,017,022	1,001,095	985,167	969,773	954,379	938,985	923,591	908,197	892,803
WATTS	37,380	39,480	41,580	44,010	46,440	49,140	51,840	54,930	58,020	61,440	64,860	68,700	72,540	76,380	80,220	84,060	87,900
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	7.39	6.74
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	3.17	2.98
LV. WTR	83.34	88.18	93.02	97.85	102.68	107.51	112.33	117.15	121.97	126.78	131.59	136.41	141.23	146.05	150.87	155.69	160.51
SOURCE																	
EWTEMP							ENTER WATER TEMP. F @ 170 GPM,										
60 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
CMBTUH	910,800	891,300	871,800	851,100	830,400	807,900	785,400	761,400	737,400	712,200	687,000	660,600	634,200	607,800	581,400	555,000	528,600
HMBTUH	1,038,173	1,025,840	1,013,508	1,000,999	988,490	975,205	961,920	948,262	934,603	921,076	907,548	894,049	880,550	867,051	853,553	840,054	826,555
WATTS	37,320	39,420	41,520	43,920	46,320	49,020	51,720	54,750	57,780	61,200	64,620	68,400	72,180	75,960	79,740	83,520	87,300
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	6.65	6.05
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	2.95	2.77
LV. WTR	82.22	87.07	91.93	96.78	101.63	106.48	111.32	116.16	121	125.84	130.68	135.52	140.36	145.2	150.05	154.89	159.73
SOURCE																	
EWTEMP							ENTER WATER TEMP. F @ 170 GPM,										
55 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
CMBTUH	822,000	804,300	786,600	767,100	747,600	726,900	706,200	684,300	662,400	639,000	615,600	591,300	567,000	542,700	518,400	494,100	469,800
HMBTUH	949,168	938,533	927,898	916,487	905,076	893,489	881,901	870,343	858,784	846,852	834,919	823,521	812,122	800,723	789,324	777,925	766,526
WATTS	37,260	39,330	41,400	43,770	46,140	48,810	51,480	54,510	57,540	60,900	64,260	68,040	71,820	75,600	79,380	83,160	86,940
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	5.94	5.4
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	2.74	2.58
LV. WTR	81.17	86.05	90.92	95.79	100.65	105.52	110.38	115.24	120.11	124.97	129.83	134.69	139.56	144.42	149.29	154.16	159.02
SOURCE																	
EWTEMP							ENTER WATER TEMP. F @ 170 GPM,										
50 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
CMBTUH	739,800	723,300	706,800	689,100	671,400	652,200	633,000	612,900	592,800	571,500	550,200	527,700	505,200	482,700	460,200	437,700	415,200
HMBTUH	866,559	857,021	847,484	837,873	828,261	818,072	807,882	798,021	788,160	778,328	768,495	758,794	749,093	739,392	729,690	719,989	710,288
WATTS	37,140	39,180	41,220	43,590	45,960	48,600	51,240	54,240	57,240	60,600	63,960	67,710	71,460	75,210	78,960	82,710	86,460
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	5.29	4.8
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	2.55	2.41
LV. WTR	80.2	85.09	89.97	94.86	99.75	104.63	109.51	114.39	119.28	124.16	129.04	133.93	138.82	143.7	148.59	153.47	158.36
SOURCE																	
EWTEMP							ENTER WATER TEMP. F @ 170 GPM,										
45 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
CMBTUH	664,200	649,500	634,800	617,700	600,600	583,200	565,800	547,200	528,600	509,100	489,600	469,200	448,800	428,400	408,000	387,600	367,200
HMBTUH	790,344	772,368	754,392	755,517	756,642	748,253	739,863	731,400	722,936	713,778	704,619	697,939	691,260	684,580	677,900	671,220	664,541
WATTS	36,960	36,000	35,040	40,380	45,720	48,360	51,000	53,970	56,940	59,970	63,000	67,020	71,040	75,060	79,080	83,100	87,120
EER	17.97	18.04	18.12	15.3	13.14	12.06	11.09	10.14	9.28	8.49	7.77	7	6.32	5.71	5.16	4.66	4.21
COP	6.27	6.29	6.31	5.48	4.85	4.53	4.25	3.97	3.72	3.49	3.28	3.05	2.85	2.67	2.51	2.37	2.23
LV. WTR	79.3	84.09	88.88	93.89	98.91	103.81	108.71	113.61	118.51	123.4	128.29	133.21	138.14	143.06	147.98	152.9	157.82
SOURCE																	
EWTEMP							ENTER WATER TEMP. F @ 170 GPM,										
40 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
CMBTUH	594,000	579,900	565,800	550,800	535,800	519,600	503,400	486,600	469,800	451,800	433,800	415,200	396,600	378,000	359,400		
HMBTUH	719,530	712,393	705,255	698,139	691,023	683,731	676,439	669,673	662,908	656,273	649,638	643,632	637,626	631,620	625,614		
WATTS	36,780	38,820	40,860	43,170	45,480	48,090	50,700	53,640	56,580	59,910	63,240	66,930	70,620	74,310	78,000		
EER	16.15	14.94	13.85	12.76	11.78	10.8	9.93	9.07	8.3	7.54	6.86	6.2	5.62	5.09	4.61		
COP	5.73	5.38	5.06	4.74	4.45	4.17	3.91	3.66	3.43	3.21	3.01	2.82	2.65	2.49	2.35		
LV. WTR	78.47	83.38	88.3	93.22	98.13	103.05	107.96	112.88	117.8	122.72	127.65	132.58	137.5	142.43	147.36		
SOURCE																	
EWTEMP							ENTER WATER TEMP. F @ 170 GPM,										
35 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
CMBTUH	529,800	516,600	503,400	489,600	475,800	461,100	446,400	430,800	415,200	399,000	382,800						
HMBTUH	654,511	648,171	641,831	635,915	629,999	624,207	618,415	612,747	607,079	602,142	597,205						
WATTS	36,540	38,550	40,560	42,870	45,180	47,790	50,400	53,310	56,220	59,520	62,820						
EER	14.5	13.4	12.41	11.42	10.53	9.65	8.86	8.08	7.39	6.7	6.09						
COP	5.25	4.93	4.64	4.35	4.09	3.83	3.6	3.37	3.16	2.96	2.79						
LV. WTR	77.7	82.63	87.55	92.48	97.41	102.35	107.28	112.21	117.14	122.09	127.03	125	130	135	140	145	150
SOURCE																	
EWTEMP							ENTER WATER TEMP. F @ 170 GPM,										
30 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
CMBTUH	470,400	458,400	446,400	433,800	421,200	407,700	394,200	380,100	366,000								
HMBTUH	594,292	589,152	584,012	579,194	574,375	569,681	564,987	560,818	556,650								
WATTS	36,300	38,310	40,320	42,600	44,880	47,460	50,040	52,950	55,860								
EER	12.96	11.97	11.07	10.18	9.39	8.59	7.88	7.18	6.55								
COP	4.8	4.51	4.24	3.98	3.75	3.52	3.31	3.1	2.92								
LV. WTR	76.99	81.93	86.87	91.82	96.76	101.7	106.65	111.6	116.55	115	120	125	130	135	140	145	150