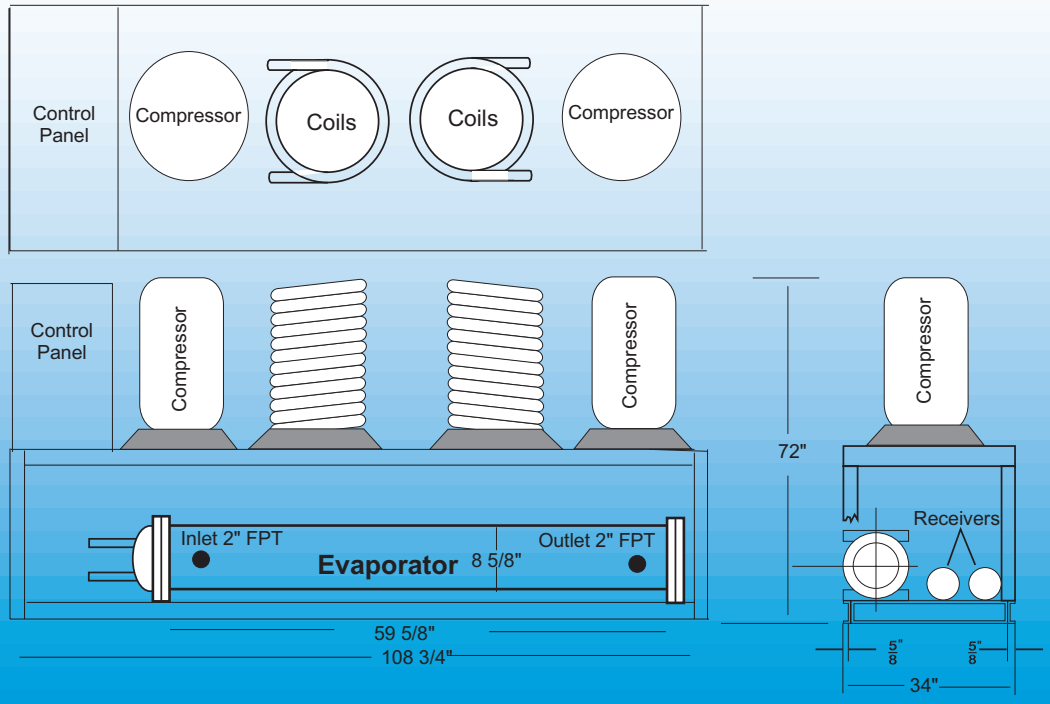
MODEL HPWS 5 DS 285



MODEL—HPWS 5 DS 285

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

Heating Capacity	284,900 BTUH	Cooling Capacity	252,600BTUH
Condenser Water Flow	50 GPM	Evaporator Water Flow	50 GPM
Pressure Drop (cond.)	5.2 PSI	Pressure Drop (Evap.)	2.38 PSI
Entering Water Temp.	100 °F	Entering Water Temp.	95.0°F
Leaving Water Temp.	111.4 °F	Leaving Water Temp.	79.9 °F
COP	8.82	Cooling EER	26..7
Compressors	(2) SZ-090 Maneurop Scroll	Condensers	Double Wall Vented
Voltage	208/230/60/3Ø	Cpnd. Construction	Tube-in-Tube
RLA/LRA	27.8/265 ea.	Evaporator	Tube-n-Shell
Control Voltage	24 Volts	Refrigerant Type	R-134A
Minimum Circuit Amp.	40 each compressor	Minimum Unit Amperage.	75.0 Amp.

STANDARD FEATURES

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

Options

- Four Year Extended Compressor Warranty
- Extended Parts & Labor Warranty- Yrar 2 thru 5
- Micro-Processor Based Control System
- Crank Case Heater
- Refrigerant Pump Down Solenoid Valves
- Condenser Water Circulating Pump for each Refrigerant Circuit

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

					MODEL HPWS 5 DS 285										
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 50 GPM,										
95 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	291,200	285,500	279,800	273,200	266,600	259,600	252,600	245,300	238,000	230,400	222,800	214,900	207,000	199,100	191,200
HMBTUH	312,634	308,606	304,578	299,651	294,723	289,805	284,887	279,908	274,929	269,650	264,370	259,303	254,236	249,169	244,102
WATTS	6,280	6,770	7,260	7,750	8,240	8,850	9,460	10,140	10,820	11,500	12,180	13,010	13,840	14,670	15,500
EER	46.37	42.17	38.54	35.25	32.35	29.33	26.7	24.19	22	20.03	18.29	16.52	14.96	13.57	12.34
COP	14.59	13.36	12.29	11.33	10.48	9.59	8.82	8.09	7.44	6.87	6.36	5.84	5.38	4.98	4.61
LV. WTR	82.51	87.35	92.19	96.99	101.79	106.6	111.4	116.2	121	125.79	130.58	135.38	140.17	144.97	149.77
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 50 GPM,										
90 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	273,400	268,000	262,600	239,600	233,800	227,600	237,000	230,100	223,200	216,000	208,800	201,300	193,800	186,300	178,800
HMBTUH	294,970	291,208	287,447	266,119	261,991	257,839	269,287	264,674	260,060	255,181	250,302	245,601	240,899	236,198	231,497
WATTS	6,320	6,800	7,280	7,770	8,260	8,860	9,460	10,130	10,800	11,480	12,160	12,980	13,800	14,620	15,440
EER	70	39.41	36.07	30.84	28.31	25.69	25.05	22.71	20.67	18.82	17.17	15.51	14.04	12.74	11.58
COP	13.67	12.55	11.57	10.04	9.29	8.53	8.34	7.66	7.06	6.51	6.03	5.54	5.11	4.73	4.39
LV. WTR	81.8	86.65	91.5	95.65	100.48	105.32	110.78	115.59	120.41	125.21	130.02	134.83	139.64	144.45	149.26
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 50 GPM,										
85 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	255,600	250,500	245,400	239,600	233,800	227,600	221,400	214,900	208,400	201,600	194,800	187,700	180,600	173,500	166,400
HMBTUH	277,170	273,708	270,247	266,119	261,991	257,839	253,687	249,474	245,260	240,781	236,302	232,001	227,699	223,398	219,097
WATTS	6,320	6,800	7,280	7,770	8,260	8,860	9,460	10,130	10,800	11,480	12,160	12,980	13,800	14,620	15,440
EER	40.44	36.84	33.71	30.84	28.31	25.69	23.4	21.21	19.3	17.56	16.02	14.46	13.09	11.87	10.78
COP	12.85	11.79	10.88	10.04	9.29	8.53	7.86	7.22	6.65	6.15	5.69	5.24	4.83	4.48	4.16
LV. WTR	81.09	85.95	90.81	95.65	100.48	105.32	110.15	114.98	119.81	124.64	129.46	134.28	139.11	143.94	148.77
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 50 GPM,										
80 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	237,800	233,000	228,200	222,800	217,400	211,600	205,800	199,700	193,600	187,200	180,800	174,100	167,400	160,700	154,000
HMBTUH	259,507	256,311	253,115	249,387	245,660	241,873	238,087	234,240	230,392	226,313	222,234	218,298	214,363	210,427	206,492
WATTS	6,360	6,830	7,300	7,790	8,280	8,870	9,460	10,120	10,780	11,460	12,140	12,950	13,760	14,570	15,380
EER	37.39	34.11	31.26	28.6	26.26	23.86	21.75	19.73	17.96	16.34	14.89	13.44	12.17	11.03	10.01
COP	11.96	11	10.16	9.38	8.69	7.99	7.37	6.78	6.26	5.79	5.36	4.94	4.56	4.23	3.93
LV. WTR	80.38	85.26	90.13	94.98	99.83	104.68	109.53	114.37	119.22	124.06	128.89	133.74	138.58	143.42	148.26
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 50 GPM,										
75 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	220,000	215,500	211,000	206,000	201,000	195,600	190,200	184,500	178,800	172,800	166,800	160,500	154,200	147,900	141,600
HMBTUH	241,843	238,913	235,983	232,656	229,328	225,907	222,487	219,005	215,524	211,845	208,166	204,596	201,026	197,457	193,887
WATTS	6,400	6,860	7,320	7,810	8,300	8,880	9,460	10,110	10,760	11,440	12,120	12,920	13,720	14,520	15,320
EER	34.38	31.41	28.83	26.38	24.22	22.03	20.11	18.25	16.62	15.1	13.76	12.42	11.24	10.19	9.24
COP	11.07	10.2	9.45	8.73	8.1	7.45	6.89	6.35	5.87	5.43	5.03	4.64	4.29	3.98	3.71
LV. WTR	79.68	84.56	89.44	94.31	99.18	104.04	108.9	113.76	118.62	123.48	128.33	133.19	138.04	142.9	147.76
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 50 GPM,										
70 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	202,200	198,000	193,800	189,200	184,600	179,600	174,600	169,300	164,000	158,400	152,800	146,900	141,000	135,100	129,200
HMBTUH	224,180	221,516	218,851	215,924	212,996	209,942	206,887	203,771	200,656	197,376	194,097	190,894	187,690	184,486	181,282
WATTS	6,440	6,890	7,340	7,830	8,320	8,890	9,460	10,100	10,740	11,420	12,100	12,890	13,680	14,470	15,260
EER	31.4	28.74	26.4	24.16	22.19	20.2	18.46	16.76	15.27	13.87	12.63	11.4	10.31	9.34	8.47
COP	10.2	9.42	8.74	8.08	7.5	6.92	6.41	5.91	5.47	5.06	4.7	4.34	4.02	3.74	3.48
LV. WTR	78.97	83.86	88.76	93.64	98.52	103.4	108.28	113.15	118.03	122.9	127.77	132.64	137.51	142.38	147.25
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 30 GPM,										
65 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	184,400	180,500	176,600	172,400	168,200	163,600	159,000	154,100	149,200	144,000	138,800	133,300	127,800	122,300	116,800
HMBTUH	206,653	204,220	201,788	199,260	196,733	194,010	191,287	188,503	185,719	182,840	179,961	177,089	174,217	171,345	168,473
WATTS	6,520	6,950	7,380	7,870	8,360	8,910	9,460	10,080	10,700	11,380	12,060	12,830	13,600	14,370	15,140
EER	28.28	25.97	23.93	21.91	20.12	18.36	16.81	15.29	13.94	12.65	11.51	10.39	9.4	8.51	7.71
COP	9.29	8.61	8.01	7.42	6.89	6.38	5.92	5.48	5.09	4.71	4.37	4.04	3.75	3.49	3.26
LV. WTR	83.78	88.62	93.46	98.29	103.12	107.94	112.76	117.57	122.39	127.19	132	136.81	141.62	146.43	151.24
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 30 GPM,										
60 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	166,600	163,000	159,400	155,600	151,800	191,000	143,400	179,400	134,400	167,000	124,800	154,000	114,600	109,500	104,400
HMBTUH	188,989	186,823	184,656	182,529	180,401	221,444	175,687	213,769	170,851	205,772	165,893	197,686	160,880	158,374	155,868
WATTS	6,560	6,980	7,400	7,890	8,380	8,920	9,460	10,070	10,680	11,360	12,040	12,800	13,560	14,320	15,080
EER	25.4	23.35	21.54	19.72	18.11	21.41	15.16	17.82	12.58	14.7	10.37	12.03	8.45	7.65	6.92
COP	8.44	7.84	7.31	6.78	6.31	7.27	5.44	6.22	4.69	5.31	4.04	4.53	3.48	3.24	3.03
LV. WTR	82.6	87.46	92.32	97.17	102.03	109.77	111.72	119.26	121.39	128.72	131.06	138.18	140.73	145.56	150.4
SOURCE															
EWTEMP					ENTER WATER TEMP. F @ 30 GPM,										
55 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	150,000	146,800	143,600	140,000	136,400	132,600	128,800	124,700	120,600	116,200	111,800	107,200	102,600	98,000	93,400
HMBTUH	172,458	170,691	168,924	166,963	165,001	163,044	161,087	159,035	156,983	154,903	152,824	150,784	148,744	146,704	144,663
WATTS	6,580	7,000	7,420	7,900	8,380	8,920	9,460	10,060	10,660	11,340	12,020	12,770	13,520	14,270	15,020
EER	22.8	20.97	19.35	17.72	16.28	14.87	13.62	12.4	11.31	10.25	9.3	8.39	7.59	6.87	6.22