



MODEL HPAS 2 DR 509

Heating Capacity	508,800 BTUH
Condenser Water Flow	120 GPM
Pressure Drop (cond.)	5.2 PSI
Entering Water Temp.	100 °F
Leaving Water Temp.	107.48 °F
COP	4.76
Compressors	(2) MTE 144 Reciprocating
Voltage	460/60/3Ø
RLA/LRA	21.4/115 ea.
Control Voltage	24 Volts
Minimum Circuit Amp.	30 Compressor ea.

Cooling Capacity	410,500 BTUH
Evaporator Construction	Copper/Aluminum
Cabinet Construction	Galvanized Steel
Entering Wet Bulb Temp.	72.0°F
Water Pump—2 - 1 HP	460/3/60 1.7 Amp ea.
Cooling EER	13.72
Condensers	Double Wall Vented
Construction (Cond.)	Tube-in-Tube
Fan 2 - 1 HP	460/3/60 - 1.8 Amp ea.
Refrigerant Type	R-22
Minimum Unit Amperage.	75 Amp.

STANDARD FEATURES

Liquid Receiver	Liquid Line Dryer
Compressors Service Valves	Thermostatic Expansion Valves
Liquid Line Sight Glass	Pre- Wired Mechanical Controls
Insulated Compressor Compartment	Insulated Suction Lines
Compressor Adjustable Time Delay Relay	Minimum Off Time for Compressors
Single Phase/Voltage Protection	High Side Pressure Control
Five Year Compressor Warranty/One Yr. Parts	Low Side Pressure Control

Options

Micro-Processor Based Control System
Painted Galvanize Cabinet
304 or 316 Stainless Steel Cabinet
Blower
Refrigerant Pump Down Solenoid Valves
TechniCoat 10-1 Evaporator Coated Coil
Extended Warranty on Parts & Labor 2-5 yr.

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.

WB TEMP.		ENTER WATER TEMP. F @ 120 GPM,											
72 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	506,350	490,380	474,410	458,440	442,470	426,500	410,530	393,526	376,521	359,517	342,512	325,508	308,503
HMBTUH	578,023	566,490	554,957	543,424	531,891	520,358	508,824	496,428	484,031	471,634	459,237	446,840	434,443
WATTS	23,500	24,800	26,100	27,400	28,700	30,000	31,300	32,650	34,000	35,350	36,700	38,050	39,400
EER	21.55	19.77	18.18	16.73	15.42	14.22	13.12	12.05	11.07	10.17	9.33	8.55	7.83
COP	7.21	6.69	6.23	5.81	5.43	5.08	4.76	4.45	4.17	3.91	3.67	3.44	3.23
LV. WTR	79.64	84.45	89.25	94.06	98.87	103.68	108.48	113.28	118.07	122.86	127.66	132.45	137.24
WB TEMP.		ENTER WATER TEMP. F @ 120 GPM,											
67 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	465,348	450,476	435,605	420,734	405,863	390,991	376,120	360,369	344,617	328,866	313,114	297,363	281,611
HMBTUH	536,680	525,903	515,128	504,353	493,577	482,801	472,025	460,455	448,884	437,314	425,743	414,173	402,602
WATTS	23,400	24,600	25,800	27,000	28,200	29,400	30,600	31,825	33,050	34,275	35,500	36,725	37,950
EER	19.89	18.31	16.88	15.58	14.39	13.3	12.29	11.32	10.43	9.59	8.82	8.1	7.42
COP	6.72	6.26	5.85	5.47	5.13	4.81	4.52	4.24	3.98	3.74	3.51	3.3	3.11
LV. WTR	78.95	83.77	88.59	93.41	98.23	103.05	107.87	112.68	117.48	122.29	127.1	131.91	136.71
WB TEMP.		ENTER WATER TEMP. F @ 120 GPM,											
62 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	424,345	410,573	396,800	383,028	369,255	355,483	341,710	327,212	312,713	298,215	283,716	269,218	254,719
HMBTUH	495,335	485,318	475,299	465,281	455,263	445,245	435,226	424,483	413,738	402,994	392,249	381,506	370,761
WATTS	23,300	24,400	25,500	26,600	27,700	28,800	29,900	31,000	32,100	33,200	34,300	35,400	36,500
EER	18.21	16.83	15.56	14.4	13.33	12.34	11.43	10.56	9.74	8.98	8.27	7.61	6.98
COP	6.23	5.83	5.46	5.13	4.82	4.53	4.26	4.01	3.78	3.56	3.35	3.16	2.98
LV. WTR	78.26	83.09	87.92	92.76	97.59	102.42	107.26	112.08	116.9	121.72	126.54	131.36	136.18
WB TEMP.		ENTER WATER TEMP. F @ 120 GPM,											
57 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	383,343	370,669	357,995	345,321	332,648	319,974	307,300	294,055	280,809	267,564	254,318	241,073	227,827
HMBTUH	453,992	444,731	435,470	426,209	416,949	407,688	398,427	388,510	378,591	368,674	358,756	348,838	338,920
WATTS	23,200	24,200	25,200	26,200	27,200	28,200	29,200	30,175	31,150	32,125	33,100	34,075	35,050
EER	16.52	15.32	14.21	13.18	12.23	11.35	10.52	9.74	9.01	8.33	7.68	7.07	6.5
COP	5.73	5.38	5.06	4.77	4.49	4.24	4	3.77	3.56	3.36	3.18	3	2.83
LV. WTR	77.57	82.42	87.26	92.11	96.95	101.8	106.64	111.48	116.31	121.15	125.98	130.82	135.65
WB TEMP.		ENTER WATER TEMP. F @ 120 GPM,											
52 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	342,340	330,765	319,190	307,615	296,040	284,465	272,890	260,898	248,905	236,913	224,920	212,928	200,935
HMBTUH	412,648	404,145	395,641	387,138	378,635	370,131	361,628	352,537	343,445	334,354	325,262	316,171	307,079
WATTS	23,100	24,000	24,900	25,800	26,700	27,600	28,500	29,350	30,200	31,050	31,900	32,750	33,600
EER	14.82	13.78	12.82	11.92	11.09	10.31	9.58	8.89	8.24	7.63	7.05	6.5	5.98
COP	5.23	4.93	4.66	4.4	4.16	3.93	3.72	3.52	3.33	3.16	2.99	2.83	2.68
LV. WTR	76.88	81.74	86.6	91.45	96.31	101.17	106.03	110.88	115.73	120.57	125.42	130.27	135.12
WB TEMP.		ENTER WATER TEMP. F @ 120 GPM,											
47 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	307,403	296,791	286,180	275,569	264,958	254,346	243,735	232,898	222,060	211,223	200,385	189,548	178,710
HMBTUH	376,687	368,805	360,925	353,044	345,164	337,282	329,401	321,124	312,846	304,569	296,290	288,013	279,735
WATTS	22,800	23,600	24,400	25,200	26,000	26,800	27,600	28,350	29,100	29,850	30,600	31,350	32,100
EER	13.48	12.58	11.73	10.94	10.19	9.49	8.83	8.22	7.63	7.08	6.55	6.05	5.57
COP	4.84	4.58	4.33	4.1	3.89	3.69	3.5	3.32	3.15	2.99	2.84	2.69	2.55
LV. WTR	76.28	81.15	86.02	90.89	95.76	100.62	105.49	110.35	115.22	120.08	124.94	129.8	134.66
WB TEMP.		ENTER WATER TEMP. F @ 120 GPM,											
42 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	272,465	262,818	253,170	243,523	233,875	224,228	214,580	204,898	195,215	185,533	175,850	166,168	156,485
HMBTUH	340,725	333,467	326,208	318,950	311,691	304,434	297,175	289,711	282,247	274,783	267,318	259,855	252,390
WATTS	22,500	23,200	23,900	24,600	25,300	26,000	26,700	27,350	28,000	28,650	29,300	29,950	30,600
EER	12.11	11.33	10.59	9.9	9.24	8.62	8.04	7.49	6.97	6.48	6	5.55	5.11
COP	4.44	4.21	4	3.8	3.61	3.43	3.26	3.1	2.95	2.81	2.67	2.54	2.42
LV. WTR	75.68	80.56	85.44	90.32	95.2	100.08	104.95	109.83	114.71	119.58	124.46	129.33	134.21