



MODEL HPAS 2 DS 407

Heating Capacity	406,700 BTUH	Cooling Capacity	340,000 BTUH
Condenser Water Flow	80 GPM	Evaporator Construction	Copper/Aluminum
Pressure Drop (cond.)	5.2 PSI	Cabinet Construction	Galvanized Steel
Entering Water Temp.	100 °F	Entering Wet Bulb Temp.	72.0°F
Leaving Water Temp.	110.17 °F	Water Pump—2 - 3/4 HP	460/3/60 - 1.5 Amp ea.
COP	5.63	Cooling EER	15.63
Compressors	(2) SM 125 Scroll	Condensers	Double Wall Vented
Voltage	460/60/3Ø	Construction (Cond.)	Tube-in-Tube
RLA/LRA	14.9/120 ea.	Fan 2 - 3/4 HP	460/3/60 -1.5 Amp ea.
Control Voltage	24 Volts	Refrigerant Type	R-22
Minimum Circuit Amp.	30 compressor ea.	Minimum Unit Amperage.	75 Amp.

STANDARD FEATURES

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

Options

- Micro-Processor Based Control System
- Painted Galvanize
- 304 or 316 Stainless Steel
- Refrigerant Pump Down Solenoid Valves
- Blower
- TechniCoat 10-1 Evaporator Coating
- Warranty on all Parts & Labor Year 2-5

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

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

MODEL HPAS 2 SS 407													
WB TE,P	ENTERING WATER TEMP. F @ 80 GPM												
72 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	380,400	374,200	368,000	361,300	354,600	347,300	340,000	331,900	323,800	315,300	306,800	297,500	288,200
HMBTUH	428,455	424,951	421,448	417,853	414,259	410,509	406,758	402,720	398,681	394,755	390,828	386,613	382,399
WATTS	16,280	17,070	17,860	18,770	19,680	20,720	21,760	22,950	24,140	25,480	26,820	28,310	29,800
EER	23.37	21.92	20.6	19.25	18.02	16.76	15.63	14.46	13.41	12.37	11.44	10.51	9.67
COP	7.71	7.29	6.91	6.52	6.17	5.8	5.48	5.14	4.84	4.54	4.27	4	3.76
LV. WTR	80.72	85.63	90.54	95.45	100.36	105.27	110.17	115.07	119.97	124.87	129.77	134.67	139.56
WB TE,P	ENTERING WATER TEMP. F @ 80 GPM												
67 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	353,800	347,900	342,000	335,600	329,200	322,200	315,200	307,500	299,800	291,600	283,400	274,500	265,600
HMBTUH	401,650	398,481	395,311	392,051	388,791	385,375	381,958	378,354	374,749	371,157	367,565	363,818	360,072
WATTS	16,220	17,020	17,820	18,740	19,660	20,710	21,760	22,960	24,160	25,510	26,860	28,370	29,880
EER	21.81	20.44	19.19	17.91	16.74	15.56	14.49	13.39	12.41	11.43	10.55	9.68	8.89
COP	7.26	6.86	6.5	6.13	5.79	5.45	5.14	4.83	4.54	4.26	4.01	3.76	3.53
LV. WTR	80.05	84.97	89.89	94.81	99.72	104.64	109.55	114.46	119.37	124.28	129.19	134.1	139.01
WB TE,P	ENTERING WATER TEMP. F @ 80 GPM												
62 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	327,200	321,600	316,000	309,900	303,800	297,100	290,400	283,100	275,800	267,900	260,000	251,500	243,000
HMBTUH	374,845	372,010	369,175	366,249	363,323	360,241	357,158	353,988	350,818	347,559	344,301	341,023	337,745
WATTS	16,160	16,970	17,780	18,710	19,640	20,700	21,760	22,970	24,180	25,540	26,900	28,430	29,960
EER	20.25	18.95	17.77	16.56	15.47	14.35	13.35	12.32	11.41	10.49	9.67	8.85	8.11
COP	6.8	6.42	6.08	5.74	5.42	5.1	4.81	4.52	4.25	3.99	3.75	3.51	3.3
LV. WTR	79.37	84.3	89.23	94.16	99.09	104.01	108.93	113.85	118.77	123.69	128.61	133.53	138.45
WB TE,P	ENTERING WATER TEMP. F @ 80 GPM												
57 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	301,800	296,400	291,000	285,200	279,400	273,000	266,600	259,700	252,800	245,300	237,800	229,600	221,400
HMBTUH	349,241	346,639	344,038	341,446	338,854	336,106	333,358	330,622	327,886	325,062	322,238	319,328	316,418
WATTS	16,100	16,920	17,740	18,680	19,620	20,690	21,760	22,980	24,200	25,570	26,940	28,490	30,040
EER	18.75	17.52	16.4	15.27	14.24	13.19	12.25	11.3	10.45	9.59	8.83	8.06	7.37
COP	6.36	6	5.68	5.36	5.06	4.76	4.49	4.22	3.97	3.72	3.5	3.28	3.09
LV. WTR	78.73	83.67	88.6	93.54	98.47	103.41	108.34	113.27	118.2	123.13	128.06	132.99	137.91
WB TE,P	ENTERING WATER TEMP. F @ 80 GPM												
52 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	277,400	272,300	267,200	261,700	256,200	250,100	244,000	237,400	230,800	223,600	216,400	208,600	200,800
HMBTUH	324,568	322,300	320,033	317,776	315,518	313,138	310,758	308,322	305,886	303,430	300,974	298,498	296,023
WATTS	16,020	16,850	17,680	18,630	19,580	20,670	21,760	22,980	24,200	25,590	26,980	28,540	30,100
EER	17.32	16.16	15.11	14.05	13.08	12.1	11.21	10.33	9.54	8.74	8.02	7.31	6.67
COP	5.94	5.6	5.3	5	4.72	4.44	4.18	3.93	3.7	3.47	3.27	3.06	2.88
LV. WTR	78.12	83.06	88	92.95	97.89	102.83	107.77	112.71	117.65	122.59	127.53	132.47	137.4
WB TE,P	ENTERING WATER TEMP. F @ 80 GPM												
47 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	254,200	249,400	244,600	239,300	234,000	228,200	222,400	216,000	209,600	202,800	196,000	188,500	181,000
HMBTUH	301,163	299,196	297,228	295,205	293,181	291,136	289,090	286,922	284,754	282,732	280,711	278,569	276,427
WATTS	15,960	16,790	17,620	18,580	19,540	20,640	21,740	22,980	24,220	25,620	27,020	28,590	30,160
EER	15.93	14.85	13.88	12.88	11.98	11.06	10.23	9.4	8.65	7.92	7.25	6.59	6
COP	5.53	5.22	4.94	4.66	4.4	4.13	3.9	3.66	3.44	3.23	3.04	2.85	2.69
LV. WTR	77.53	82.48	87.43	92.38	97.33	102.28	107.23	112.18	117.12	122.07	127.02	131.97	136.91
WB TE,P	ENTERING WATER TEMP. F @ 80 GPM												
42 DEG	70	75	80	85	90	95	100	105	110	115	120	125	130
CMBTUH	232,200	227,600	223,000	217,900	212,800	207,200	201,600	195,600	189,600	183,000	176,400	173,700	171,000
HMBTUH	278,890	277,191	275,492	273,703	271,913	270,067	268,222	266,488	264,754	262,967	261,179	263,803	266,427
WATTS	15,880	16,730	17,580	18,550	19,520	20,620	21,720	22,970	24,220	25,630	27,040	28,600	30,160
EER	14.62	13.6	12.68	11.75	10.9	10.05	9.28	8.52	7.83	7.14	6.52	6.07	5.67
COP	5.15	4.85	4.59	4.32	4.08	3.84	3.62	3.4	3.2	3.01	2.83	2.7	2.59
LV. WTR	76.98	81.93	86.89	91.85	96.8	101.75	106.71	111.66	116.62	121.58	126.53	131.6	136.66