



MODEL HPAS 5 DS 248

Heating Capacity	248,400 BTUH	Cooling Capacity	209,400 BTUH
Condenser Water Flow	60 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.	108.28 °F	Water Pump—2 - ¾ HP	460/3/60 - 1.7 Amp ea
COP	5.30	Cooling EER	15.26
Compressors	(2) SZ 110 Scroll	Condensers	Double Wall Vented
Voltage	460/60/3Ø	Construction (Cond.)	Tube-in-Tube
RLA/LRA	13.8/120 ea	Fan 2 - ¾ HP	460/3/60 - 1.8 Amps ea
Control Voltage	24 Volts	Refrigerant Type	R-134A
Minimum Circuit Amp.	30 compressor ea.	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
Compressors Time Delay Adjustable Relay	High Side Pressure Control
Phase/Voltage Protection	Low Side Pressure Control
Five Year Compressor Warranty/One Yr. Parts	Hinged Control Panel

Options

Micro-Processor Based Control System
Painted Galvanize
304 or 316 Stainless Steel
Technicoat 10-1 Coated Evaporator Coil
Refrigerant Pump Down Solenoid Valves
Blower
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 5 DS 248															
WB TEMP.	ENTER WATER TEMP. F @ 60 GPM,														
72 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	241,800	236,900	232,000	226,600	221,200	215,300	209,400	203,300	197,200	190,600	184,000	177,200	170,400	163,600	156,800
HMBTUH	269,241	266,013	262,785	259,331	255,876	252,126	248,376	244,734	241,091	237,256	233,420	229,658	225,895	222,133	218,371
WATTS	10,340	10,830	11,320	11,890	12,460	13,090	13,720	14,440	15,160	15,970	16,780	17,670	18,560	19,450	20,340
EER	23.38	21.87	20.49	19.06	17.75	16.45	15.26	14.08	13.01	11.93	10.97	10.03	9.18	8.41	7.71
COP	7.63	7.2	6.8	6.39	6.02	5.64	5.3	4.97	4.66	4.35	4.08	3.81	3.57	3.35	3.15
LV. WTR	78.98	83.87	88.76	93.65	98.53	103.41	108.28	113.16	118.04	122.91	127.78	132.66	137.53	142.41	147.28
WB TEMP.	ENTER WATER TEMP. F @ 60 GPM,														
67 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	221,000	216,400	211,800	206,800	201,800	196,400	191,000	185,300	179,600	173,500	167,400	161,000	154,600	148,200	141,800
HMBTUH	248,509	245,581	242,654	239,565	236,476	233,226	229,976	226,734	223,491	220,122	216,752	213,390	210,027	206,665	203,302
WATTS	10,360	10,850	11,340	11,900	12,460	13,090	13,720	14,440	15,160	15,960	16,760	17,650	18,540	19,430	20,320
EER	21.33	19.94	18.68	17.38	16.2	15	13.92	12.83	11.85	10.87	9.99	9.12	8.34	7.63	6.98
COP	7.03	6.63	6.27	5.9	5.56	5.22	4.91	4.6	4.32	4.04	3.79	3.54	3.32	3.12	2.93
LV. WTR	78.29	83.19	88.09	92.99	97.89	102.78	107.67	112.56	117.45	122.34	127.23	132.12	137	141.89	146.78
WB TEMP.	ENTER WATER TEMP. F @ 60 GPM,														
62 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	200,200	195,900	191,600	187,000	182,400	191,000	172,600	179,400	162,000	167,000	150,800	154,000	138,800	132,800	126,800
HMBTUH	227,777	225,149	222,522	219,799	217,076	227,826	211,576	220,834	205,891	213,587	200,084	206,321	194,159	191,196	188,234
WATTS	10,380	10,870	11,360	11,910	12,460	13,090	13,720	14,440	15,160	15,950	16,740	17,630	18,520	19,410	20,300
EER	19.29	18.02	16.87	15.7	14.64	14.59	12.58	12.42	10.69	10.47	9.01	8.74	7.49	6.84	6.25
COP	6.43	6.07	5.74	5.41	5.1	5.1	4.52	4.48	3.98	3.92	3.5	3.43	3.07	2.89	2.72
LV. WTR	77.6	82.51	87.42	92.33	97.24	102.6	107.06	112.36	116.87	122.12	126.67	131.88	136.47	141.38	146.28
WB TEMP.	ENTER WATER TEMP. F @ 60 GPM,														
57 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	180,800	176,900	173,000	168,800	164,600	160,000	155,400	150,500	145,600	140,500	135,400	129,900	124,400	118,900	113,400
HMBTUH	208,377	206,149	203,922	201,599	199,276	196,826	194,376	191,900	189,423	187,019	184,615	182,153	179,691	177,228	174,766
WATTS	10,380	10,870	11,360	11,910	12,460	13,090	13,720	14,430	15,140	15,930	16,720	17,610	18,500	19,390	20,280
EER	17.42	16.27	15.23	14.17	13.21	12.22	11.33	10.43	9.62	8.82	8.1	7.38	6.72	6.13	5.59
COP	5.88	5.56	5.26	4.96	4.69	4.41	4.15	3.9	3.67	3.44	3.24	3.03	2.85	2.68	2.52
LV. WTR	76.95	81.87	86.8	91.72	96.65	101.56	106.48	111.4	116.32	121.24	126.16	131.07	135.99	140.91	145.83
WB TEMP.	ENTER WATER TEMP. F @ 60 GPM,														
52 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	162,800	159,200	155,600	163,200	147,800	143,600	139,400	135,000	130,600	125,900	121,200	116,200	111,200	106,200	101,200
HMBTUH	190,377	188,415	186,454	195,931	182,408	180,358	178,308	176,297	174,286	172,283	170,279	168,282	166,286	164,289	162,293
WATTS	10,380	10,860	11,340	11,890	12,440	13,070	13,700	14,400	15,100	15,890	16,680	17,560	18,440	19,320	20,200
EER	15.68	14.66	13.72	13.73	11.88	10.99	10.18	9.38	8.65	7.92	7.27	6.62	6.03	5.5	5.01
COP	5.37	5.08	4.82	4.83	4.3	4.04	3.81	3.59	3.38	3.18	2.99	2.81	2.64	2.49	2.35
LV. WTR	76.35	81.28	86.22	91.53	96.08	101.01	105.95	110.88	115.81	120.75	125.68	130.61	135.55	140.48	145.41
WB TEMP.	ENTER WATER TEMP. F @ 60 GPM,														
47 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	146,200	142,900	139,600	136,000	132,400	128,600	124,800	120,700	116,600	112,300	108,000	103,400	98,800	94,200	89,600
HMBTUH	173,709	172,047	170,385	168,662	166,940	165,256	163,572	161,861	160,150	158,546	156,942	155,346	153,749	152,153	150,556
WATTS	10,360	10,840	11,320	11,870	12,420	13,040	13,660	14,360	15,060	15,850	16,640	17,520	18,400	19,280	20,160
EER	14.11	13.18	12.33	11.46	10.66	9.86	9.14	8.41	7.74	7.09	6.49	5.9	5.37	4.89	4.44
COP	4.91	4.65	4.41	4.16	3.94	3.71	3.51	3.3	3.12	2.93	2.76	2.6	2.45	2.31	2.19
LV. WTR	75.79	80.74	85.68	90.62	95.57	100.51	105.45	110.4	115.34	120.29	125.23	130.18	135.13	140.07	145.02
WB TEMP.	ENTER WATER TEMP. F @ 60 GPM,														
42 DEG .	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
CMBTUH	130,800	127,800	124,800	121,500	118,200	114,700	111,200	107,500	103,800	99,800	95,800	91,700	87,600	83,500	79,400
HMBTUH	158,241	156,879	155,517	154,060	152,603	151,219	149,835	216,443	147,213	145,910	144,606	143,475	142,345	141,214	140,083
WATTS	10,340	10,820	11,300	11,840	12,380	13,000	13,620	34,220	15,020	15,810	16,600	17,470	18,340	19,210	20,080
EER	12.65	11.81	11.04	10.26	9.55	8.82	8.16	3.14	6.91	6.31	5.77	5.25	4.78	4.35	3.95
COP	4.48	4.25	4.03	3.81	3.61	3.41	3.22	1.85	2.87	2.7	2.55	2.41	2.27	2.15	2.04
LV. WTR	75.28	80.23	85.19	90.14	95.09	100.04	105	112.22	114.91	119.87	124.82	129.78	134.75	139.71	144.67