

COOLING CAPACITY: 24,000 - 57,500 BTU/H

HEATING CAPACITY: 22,800 - 54,500 BTU/H

PACKAGED HEAT PUMPS

2 TO 5 TONS

UP TO 14.5 SEER

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### Standard Features

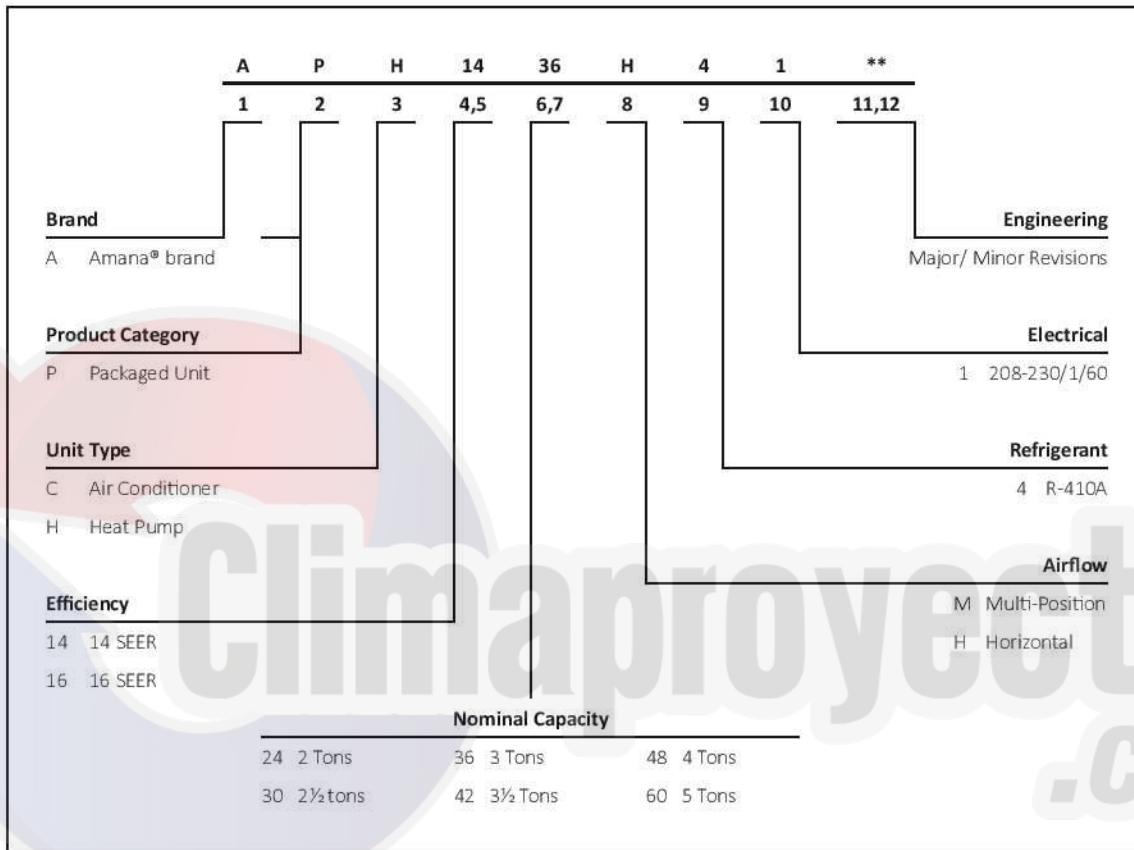
- Energy-efficient scroll compressor with internal relief valve
- Multi-speed ECM indoor blower motor
- Quiet horizontal discharge
- All-Aluminum evaporator coil
- Copper tube / aluminum fin condenser coil
- Compressor sound blanket
- Totally enclosed, permanently lubricated condenser fan motor
- Fully charged system
- Electric heat kit available as a field-installed option
- AHRI Certified; ETL Listed

### Cabinet Features

- Heavy-gauge galvanized-steel cabinet
- Attractive Architectural Gray powder-paint finish
- Aluminum foil-facing internal insulation reinforced with fiberglass scrim
- Cabinet air leakage less than 2.0% at 1.0 inch H<sub>2</sub>O when tested in accordance with ASHRAE standard 193
- Cabinet air leakage less than 1.4% at 0.5 inch H<sub>2</sub>O when tested in accordance with ASHRAE standard 193
- Fully insulated blower compartment with convenient access panels
- Louvered condenser coil protection
- One footprint for all tonnages



\* Complete warranty details available from your local dealer or at [www.amana-hac.com](http://www.amana-hac.com). To receive the 2-Year Unit Replacement Limited Warranty and 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec.



	APH14 24H41D*	APH14 30H41D*	APH14 36H41DD	APH14 36H41DE	APH14 42H41E*	APH14 48H41E*	APH14 60H41F*
<b>COOLING CAPACITY</b>							
Cooling Capacity (BTU/h)	24,000	28,400	36,000	36,000	40,500	46,000	57,500
Sensible BTU/h	17,800	22,400	27,400	27,400	30,000	35,400	41,000
SEER / EER	14.5 / 12.0	14.0 / 12.0	14.0 / 11.5	14.0 / 11.5	14.0 / 12.0	14.0 / 12.0	14.0 / 12.0
Decibels	76	76	78	78	78	80	80
AHRI Numbers	6895321	6895322	6895323	6895323	7428916	7428918	9008584
<b>HEATING CAPACITY</b>							
BTU/h (47°F)	22,800	27,600	32,200	32,200	37,600	44,000	54,500
C.O.P. (47°F)	3.8	3.8	3.7	3.7	3.8	3.8	3.6
BTU/h (17°F)	13,000	15,400	20,400	20,400	21,600	26,000	33,800
C.O.P. (17°F)	2.4	2.5	2.4	2.4	2.4	2.4	2.5
HSPF	8.0	8.0	8.0	8.0	8.0	8.0	8.0
<b>EVAPORATOR MOTOR</b>							
Type	ECM	ECM	ECM	ECM	ECM	ECM	ECM
Wheel (D x W)	10 x 8	10 x 8	10 x 8	10 x 8	10 x 8	10 x 8	11x8
Cooling CFM	875	1,050	1,200	1,200	1,300	1,600	1,700
Fan-Only CFM	800	950	1,100	1,100	1,200	1,400	1,600
RLA	3.8	3.8	3.8	3.8	3.8	5.4	5.4
No. of Speeds	5	5	5	5	5	5	5
Horsepower - RPM	½- 1,050	½- 1,050	½- 1,050	½- 1,050	½- 1,050	¾- 1,050	¾- 1,050
<b>EVAPORATOR COIL</b>							
Face Area (ft <sup>2</sup> )	5.2	5.2	6.2	6.2	6.2	6.2	7
Rows Deep/ Fins per Inch	3/ 14	3/ 14	3/ 14	3/ 14	4/ 14	4/ 14	4/ 14
Indoor Metering Device Size	0.061	0.065	0.068	0.068	0.074	0.074	0.086
Filter Size (ft <sup>2</sup> )	20 x 20 x 1	20 x 25 x 1	25 x 25 x 1	25 x 25 x 1	(2) 20x20x1	(2) 20x20x1	(2) 20x25x1
Drain Size (NPT)	¾"	¾"	¾"	¾"	¾"	¾"	¾"
Refrigerant Charge (oz.)	105	105	125	125	132	170	175
<b>CONDENSER FAN / COIL</b>							
Horsepower - RPM	1/6- 815	1/6- 815	¼- 1075	¼- 1075	¼- 1075	¼- 1075	¼- 1075
RLA/LRA	1.1 / 1.7	1.1 / 1.7	1.3/3.0	1.6 / 3.5	1.4 / 2.9	1.4 / 2.9	1.4 / 2.9
Fan Diameter / # Fan Blades	22 / 3	22 / 3	22 / 4	22 / 4	22 / 4	22 / 4	22 / 4
Face Area (ft <sup>2</sup> )	13.4	13.4	17	17	17	17	19
Outdoor Metering Device Size	0.047	0.047	0.063	0.063	0.065	0.065	0.071
Rows Deep/ Fins per Inch	1 / 24	1 / 24	1 / 24	1 / 24	1 / 24	2 / 16	2 / 20
<b>COMPRESSOR</b>							
Quantity / Type	1 / Scroll	1 / Scroll	1 / Scroll	1 / Scroll	1 / Scroll	1 / Scroll	1 / Scroll
Stage	Single	Single	Single	Single	Single	Single	Single
Compressor RLA/LRA	12.8 / 58.3	14.1 / 73	16.7 / 79	16.7 / 79	17.9 / 112	19.9 / 109	26.4 / 134
<b>ELECTRICAL DATA</b>							
Voltage/Phase (60 Hz)	208-230/ 1	208-230/ 1	208-230/ 1	208-230/ 1	208-230/ 1	208-230/ 1	208-230/ 1
Indoor Blower FLA	3.8	3.8	3.8	3.8	3.8	5.4	5.4
Outdoor Fan RLA	1.1	1.1	1.3	1.6	1.4	1.4	1.4
Total Unit Amps	17.7	19	21.9	22.1	23.1	26.7	33.2
Min. Circuit Ampacity <sup>1</sup>	21	23	26	26.3	28	32	40
Min. Overcurrent Protection (amps) <sup>2</sup>	30	35	40	40	45	50	60
<b>OPERATING WEIGHT (LBS)</b>							
	315	315	375	375	375	400	400
<b>SHIP WEIGHT (LBS)</b>							
	324	324	387	387	387	412	412

<sup>1</sup> Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

<sup>2</sup> May use fuses or HACR-type circuit breakers of the same size as noted.

Note: Always check the S&R plate for electrical data on the unit being installed.













		OUTDOOR AMBIENT TEMPERATURE												ENTERING INDOOR WET BULB TEMPERATURE															
		65				75				85				95				105				115							
IDB	AIRFLOW	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
80	MBh	36.5	37.3	39.9	42.6	35.7	36.4	38.9	41.6	34.8	35.6	38.0	40.6	34.0	34.7	37.1	39.6	32.3	33.0	35.2	37.7	29.9	30.5	32.6	34.9				
	S/T	0.95	0.89	0.73	0.54	1.00	0.93	0.75	0.56	1.00	0.95	0.77	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62				
	Δ T	24	23	20	16	24	23	20	16	24	23	20	16	23	24	20	16	22	22	20	16	20	21	19	15				
	KW	2.41	2.46	2.54	2.62	2.60	2.66	2.74	2.83	2.76	2.83	2.92	3.02	2.91	2.98	3.08	3.18	3.04	3.11	3.21	3.32	3.14	3.22	3.33	3.44				
	Amps	10.1	10.3	10.6	11.0	10.8	11.1	11.4	11.8	11.7	11.9	12.3	12.7	12.4	12.7	13.1	13.6	13.2	13.5	13.9	14.4	13.9	14.2	14.7	15.2				
	HI PR	252	271	286	298	282	304	321	334	321	345	365	380	366	393	415	433	411	443	467	487	454	489	516	539				
	LO PR	115	122	133	142	121	129	141	150	126	134	146	156	132	141	154	164	139	147	161	171	143	153	167	177				
1200	MBh	35.4	36.2	38.7	41.4	34.6	35.4	37.8	40.4	33.8	34.5	36.9	39.4	33.0	33.7	36.0	38.5	31.3	32.0	34.2	36.6	29.0	29.7	31.7	33.9				
	S/T	0.91	0.85	0.69	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.00	0.93	0.76	0.57	1.00	0.97	0.79	0.59	1.00	0.98	0.80	0.60				
	Δ T	25	24	21	16	25	24	21	17	25	24	21	17	25	24	21	17	24	24	21	17	22	22	19	15				
	KW	2.39	2.44	2.52	2.60	2.58	2.63	2.72	2.81	2.74	2.80	2.90	2.99	2.89	2.95	3.05	3.15	3.01	3.08	3.18	3.29	3.12	3.19	3.30	3.41				
	Amps	10.0	10.2	10.5	10.9	10.7	11.0	11.3	11.7	11.6	11.8	12.2	12.6	12.3	12.6	13.0	13.4	13.0	13.3	13.8	14.2	13.8	14.1	14.5	15.0				
	HI PR	249	268	283	295	279	301	318	331	318	342	361	377	362	390	411	429	407	438	463	483	450	484	511	533				
	LO PR	114	121	132	140	120	128	139	148	125	133	145	154	131	139	152	162	137	146	159	170	142	151	165	176				
1050	MBh	32.7	33.4	35.7	38.2	32.0	32.7	34.9	37.3	31.2	31.9	34.1	36.4	30.4	31.1	33.2	35.5	28.9	29.5	31.6	33.7	26.8	27.4	29.2	31.3				
	S/T	0.88	0.82	0.67	0.50	0.91	0.85	0.69	0.52	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.94	0.76	0.57	1.01	0.94	0.77	0.57				
	Δ T	25	24	21	17	25	24	21	17	25	24	21	17	26	25	21	17	25	24	21	17	24	23	20	16				
	KW	2.33	2.38	2.46	2.54	2.51	2.57	2.65	2.74	2.67	2.73	2.82	2.92	2.81	2.88	2.97	3.07	2.94	3.00	3.10	3.21	3.04	3.11	3.21	3.32				
	Amps	9.8	10.0	10.3	10.6	10.5	10.7	11.0	11.4	11.3	11.5	11.9	12.3	12.0	12.3	12.7	13.1	12.7	13.0	13.4	13.9	13.4	13.7	14.1	14.6				
	HI PR	242	260	274	286	271	292	308	321	308	332	350	365	351	378	399	416	395	425	449	468	436	470	496	517				
	LO PR	110	117	128	136	116	124	135	144	121	129	140	150	127	135	148	157	133	142	155	165	138	146	160	170				
1350	MBh	37.2	37.9	39.7	42.3	36.3	37.0	38.7	41.3	35.4	36.1	37.8	40.3	34.6	35.2	36.9	39.4	32.8	33.5	35.0	37.4	30.4	31.0	32.5	34.6				
	S/T	1.00	0.96	0.87	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.92	0.75	1.00	1.00	0.95	0.77	1.00	1.00	0.99	0.80	1.00	1.00	1.00	0.81				
	Δ T	25	25	23	20	25	25	24	21	24	25	24	21	24	24	24	21	22	23	24	20	21	21	22	19				
	KW	2.43	2.48	2.56	2.65	2.62	2.68	2.76	2.86	2.79	2.85	2.94	3.04	2.94	3.00	3.10	3.21	3.06	3.13	3.24	3.35	3.17	3.24	3.35	3.47				
	Amps	10.2	10.4	10.7	11.1	10.9	11.2	11.5	11.9	11.8	12.0	12.4	12.8	12.5	12.8	13.2	13.7	13.3	13.6	14.0	14.5	14.0	14.3	14.8	15.3				
	HI PR	254	273	289	301	285	307	324	338	324	349	368	384	369	397	420	438	415	447	472	492	459	494	522	544				
	LO PR	116	123	135	143	122	130	142	151	127	135	148	157	134	142	155	165	140	149	163	173	145	154	168	179				
85	MBh	36.1	36.8	38.5	41.1	35.2	35.9	37.6	40.1	34.4	35.1	36.7	39.2	33.6	34.2	35.8	38.2	31.9	32.5	34.0	36.3	29.5	30.1	31.5	33.6				
	S/T	0.95	0.92	0.83	0.67	0.99	0.95	0.86	0.70	1.00	0.98	0.88	0.72	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.77	1.00	1.00	0.95	0.77				
	Δ T	26	26	24	21	27	26	25	21	26	26	25	21	26	26	25	22	24	25	25	21	23	23	23	20				
	KW	2.41	2.46	2.54	2.62	2.60	2.66	2.74	2.83	2.76	2.83	2.92	3.02	2.91	2.98	3.08	3.18	3.04	3.11	3.21	3.32	3.14	3.22	3.33	3.44				
	Amps	10.1	10.3	10.6	11.0	10.8	11.1	11.4	11.8	11.7	11.9	12.3	12.7	12.4	12.7	13.1	13.6	13.2	13.5	13.9	14.4	13.9	14.2	14.7	15.2				
	HI PR	252	271	286	298	282	304	321	334	321	345	365	380	366	393	415	433	411	443	467	487	454	489	516	539				
	LO PR	115	122	133	142	121	129	141	150	126	134	146	156	132	141	154	164	139	147	161	171	143	153	167	177				

IDB = Entering Indoor Dry Bulb Temperature  
 High and low pressures are measured at the liquid and suction access fittings.  
 Shaded area reflects AHRH (TVA) conditions  
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)  
 KW = Total system power





IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115																														
		65						75						85						95						105						115																								
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71																											
70	MBh	45.1	46.7	51.2	-	44.0	45.6	50.0	-	43.0	44.5	48.8	-	41.9	43.5	47.6	-	39.8	41.3	45.2	-	36.9	38.2	41.9	-	45.8	47.2	51.1	54.8	44.8	46.1	49.9	53.6	43.7	45.0	48.7	52.3	42.6	43.9	47.5	51.0	40.5	41.7	45.1	48.5	37.5	38.6	41.8	44.9							
	S/T	0.77	0.65	0.45	-	0.80	0.67	0.46	-	0.82	0.69	0.48	-	0.85	0.71	0.49	-	0.88	0.74	0.51	-	0.89	0.74	0.51	-	0.92	0.82	0.62	0.40	0.91	0.82	0.62	0.40	0.94	0.84	0.63	0.41	0.97	0.86	0.65	0.42	1.00	0.90	0.68	0.44	1.00	0.90	0.68	0.44							
	ΔT	18	15	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-	18	16	12	-	18	16	12	-	19	17	13	-	19	16	12	-	21	19	16	11	21	19	16	11	19	18	15	10			
	KW	2.99	3.05	3.15	-	3.22	3.28	3.39	-	3.42	3.49	3.60	-	3.59	3.67	3.79	-	3.74	3.83	3.95	-	3.87	3.96	4.09	-	3.74	3.83	3.95	-	3.82	3.91	4.02	-	3.81	3.90	4.01	-	3.80	3.89	4.00	-	3.79	3.88	3.99	-	3.78	3.87	3.98	-	3.77	3.86	3.97	-			
	Amps	12.9	13.1	13.5	-	13.8	14.1	14.5	-	14.9	15.2	15.6	-	15.8	16.1	16.6	-	16.7	17.1	17.6	-	17.6	18.0	18.5	-	16.7	17.1	17.6	-	17.0	17.4	17.8	-	17.4	17.8	18.2	-	17.6	18.0	18.4	-	17.4	17.8	18.2	-	17.3	17.7	18.1	-	17.2	17.6	18.0	-			
	HI PR	242	261	275	-	272	292	309	-	309	332	351	-	352	379	400	-	396	426	450	-	437	471	497	-	396	426	450	-	400	430	454	-	400	430	454	-	396	426	450	-	380	409	432	-	380	409	432	-	442	476	502	524			
LO PR	109	116	127	-	116	123	134	-	120	128	139	-	126	134	146	-	132	141	154	-	137	145	159	-	120	128	139	-	126	134	146	-	126	134	146	-	127	136	148	-	127	136	148	-	132	141	154	-	132	141	154	-	137	145	159	-
75	MBh	43.8	45.4	49.7	-	42.7	44.3	48.5	-	41.7	43.2	47.4	-	40.7	42.2	46.2	-	38.7	40.1	43.9	-	35.8	37.1	40.7	-	43.8	45.4	49.7	-	42.7	44.3	48.5	-	41.7	43.2	47.4	-	40.7	42.2	46.2	-	38.7	40.1	43.9	-	35.8	37.1	40.7	-							
	S/T	0.74	0.62	0.43	-	0.77	0.64	0.44	-	0.79	0.66	0.45	-	0.81	0.68	0.47	-	0.84	0.70	0.49	-	0.85	0.71	0.49	-	0.81	0.68	0.47	-	0.76	0.63	0.44	-	0.76	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.68	0.47	-	0.82	0.68	0.47	-							
	ΔT	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	15	11	-	19	16	12	-	19	17	13	-	19	17	13	-	19	17	13	-	19	17	13	-	19	16	12	-	18	15	11	-			
	KW	2.97	3.03	3.12	-	3.19	3.26	3.36	-	3.39	3.46	3.57	-	3.56	3.64	3.76	-	3.71	3.80	3.92	-	3.84	3.93	4.06	-	3.56	3.64	3.76	-	3.48	3.55	3.67	-	3.48	3.55	3.67	-	3.62	3.70	3.82	-	3.62	3.70	3.82	-	3.75	3.83	3.96	-							
	Amps	12.8	13.0	13.4	-	13.7	14.0	14.4	-	14.7	15.1	15.5	-	15.6	16.0	16.5	-	16.5	16.9	17.4	-	17.4	17.8	18.4	-	14.7	15.1	15.5	-	14.4	14.7	15.1	-	14.4	14.7	15.1	-	15.2	15.6	16.1	-	16.1	16.5	17.0	-	16.1	16.5	17.0	-	17.0	17.4	17.9	-			
	HI PR	240	258	272	-	269	289	306	-	306	329	348	-	348	375	396	-	392	422	445	-	433	466	492	-	306	329	348	-	306	329	348	-	297	319	337	-	338	364	384	-	338	364	384	-	380	409	432	-	420	452	477	-			
LO PR	108	115	126	-	114	122	133	-	119	126	138	-	126	133	145	-	125	133	145	-	135	144	157	-	119	126	138	-	119	126	138	-	115	123	134	-	121	129	141	-	121	129	141	-	127	135	147	-	131	140	153	-				

IDB = Entering Indoor Dry Bulb Temperature  
 High and low pressures are measured at the liquid and suction access fittings.  
 Shaded area reflects ACCA (TVA) conditions  
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)  
 kW = Total system power







EXPANDED HEATING DATA

APH1424H41\*\*

	OUTDOOR AMBIENT TEMPERATURE																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	28.7	27.1	25.5	23.9	22.8	22.1	20.5	18.9	16.2	15.0	13.8	13.0	12.5	11.2	10.0	8.7	7.4	6.1
T/R	31.2	29.6	27.8	26.0	24.8	24.1	22.4	20.6	17.6	16.3	15.0	14.2	13.6	12.2	10.8	9.5	8.1	6.6
kW	1.86	1.82	1.78	1.75	1.73	1.71	1.67	1.63	1.65	1.61	1.58	1.55	1.54	1.50	1.46	1.42	1.38	1.34
Amps	9.1	8.4	7.9	7.5	7.2	7.1	6.7	6.4	6.2	5.9	5.6	5.5	5.5	5.2	4.9	4.6	4.3	3.9
COP	4.51	4.36	4.19	4.00	3.87	3.78	3.59	3.39	2.87	2.71	2.56	2.45	2.38	2.19	2.00	1.79	1.57	1.32
EER	15.4	14.9	14.3	13.7	13.2	12.9	12.3	11.6	9.8	9.3	8.7	8.4	8.1	7.5	6.8	6.1	5.4	4.5
HI PR	367	352	338	324	316	310	298	286	274	262	251	245	241	232	223	214	206	199
LO PR	142	132	123	113	107	103	95	84	76	68	60	56	54	45	39	33	29	23

APH1430H41\*\*

	OUTDOOR AMBIENT TEMPERATURE																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	34.7	32.8	30.9	28.9	27.6	26.7	24.8	22.9	19.2	17.7	16.3	15.4	14.8	13.3	11.8	10.3	8.8	7.2
T/R	30.6	29.0	27.3	25.5	24.3	23.6	21.9	20.2	16.9	15.6	14.4	13.6	13.1	11.7	10.4	9.1	7.7	6.3
kW	2.26	2.22	2.17	2.13	2.10	2.08	2.04	1.99	1.98	1.93	1.89	1.86	1.84	1.79	1.75	1.70	1.66	1.61
Amps	11.0	10.3	9.7	9.1	8.8	8.7	8.2	7.8	7.5	7.2	6.9	6.8	6.7	6.4	6.0	5.7	5.3	4.9
COP	4.48	4.33	4.16	3.97	3.84	3.76	3.56	3.36	2.84	2.68	2.53	2.42	2.36	2.17	1.97	1.77	1.55	1.30
EER	15.3	14.8	14.2	13.6	13.1	12.8	12.2	11.5	9.7	9.2	8.6	8.3	8.1	7.4	6.7	6.0	5.3	4.5
HI PR	374	359	345	330	322	316	304	291	279	267	256	250	245	236	227	218	210	203
LO PR	134	124	117	107	101	97	89	80	72	64	56	52	51	43	37	31	27	21

APH1436H41\*\*

	OUTDOOR AMBIENT TEMPERATURE																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	41.5	39.3	37.0	34.6	33.0	32.0	29.7	27.4	26.9	24.8	22.9	21.6	20.8	18.7	16.5	14.4	12.3	10.1
T/R	32.0	30.3	28.5	26.7	25.5	24.7	22.9	21.1	20.8	19.2	17.7	16.7	16.1	14.4	12.8	11.1	9.5	7.8
kW	2.74	2.68	2.63	2.57	2.54	2.52	2.47	2.41	2.64	2.58	2.52	2.48	2.46	2.39	2.33	2.27	2.21	2.15
Amps	13.5	12.6	11.9	11.2	10.9	10.7	10.1	9.7	9.3	8.9	8.5	8.4	8.3	7.9	7.4	7.1	6.6	6.1
COP	4.44	4.29	4.12	3.93	3.80	3.71	3.52	3.32	2.98	2.82	2.66	2.55	2.48	2.28	2.08	1.86	1.63	1.37
EER	15.2	14.6	14.1	13.4	13.0	12.7	12.0	11.4	10.2	9.6	9.1	8.7	8.5	7.8	7.1	6.4	5.6	4.7
HI PR	367	352	338	323	316	310	298	286	274	262	251	245	241	232	223	214	206	199
LO PR	135	125	117	108	102	98	90	80	72	65	57	53	51	43	37	31	27	21

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

kW = Total system power

High pressure is measured at the liquid line access fitting.

Low pressure is measured at the compressor suction access fitting.

Amps: Unit amps (comp.+ evaporator motor + condenser fan motor)



APH1442H41\*\*

	OUTDOOR AMBIENT TEMPERATURE																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	47.1	44.6	42.0	39.3	37.5	36.3	33.8	31.1	26.7	24.6	22.7	21.4	20.6	18.5	16.4	14.3	12.2	10.0
T/R	33.6	31.8	29.9	28.0	26.7	25.9	24.0	22.2	19.0	17.5	16.1	15.2	14.7	13.2	11.7	10.2	8.7	7.1
kW	3.07	3.01	2.95	2.89	2.85	2.83	2.77	2.71	2.39	2.33	2.28	2.25	2.23	2.18	2.12	2.07	2.02	1.97
Amps	12.5	11.6	10.9	10.3	9.9	9.8	9.2	8.8	8.4	8.1	7.7	7.5	7.5	7.1	6.7	6.3	5.9	5.3
COP	4.50	4.34	4.17	3.98	3.85	3.76	3.57	3.36	3.27	3.09	2.91	2.78	2.71	2.49	2.26	2.02	1.77	1.49
EER	15.4	14.8	14.2	13.6	13.1	12.9	12.2	11.5	11.2	10.5	9.9	9.5	9.2	8.5	7.7	6.9	6.0	5.1
HI PR	370	355	341	326	319	313	301	288	276	264	253	247	243	234	225	215	208	200
LO PR	137	127	119	109	103	99	91	81	73	65	58	54	52	44	38	32	28	22

APH1448H41\*\*

	OUTDOOR AMBIENT TEMPERATURE																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	56.6	53.6	50.4	47.1	45.0	43.6	40.5	37.4	32.4	29.9	27.5	26.0	25.0	22.5	19.9	17.4	14.8	12.1
T/R	32.7	31.0	29.2	27.3	26.0	25.2	23.4	21.6	18.7	17.3	15.9	15.0	14.5	13.0	11.5	10.1	8.6	7.0
kW	3.61	3.54	3.47	3.40	3.36	3.33	3.26	3.19	3.17	3.10	3.03	2.99	2.96	2.89	2.82	2.75	2.67	2.60
Amps	18.5	17.2	16.2	15.4	14.9	14.6	13.8	13.2	12.7	12.2	11.7	11.5	11.3	10.8	10.2	9.7	9.1	8.3
COP	4.59	4.43	4.25	4.06	3.92	3.84	3.64	3.43	2.99	2.82	2.66	2.55	2.48	2.28	2.07	1.85	1.62	1.37
EER	15.7	15.1	14.5	13.9	13.4	13.1	12.4	11.7	10.2	9.6	9.1	8.7	8.5	7.8	7.1	6.3	5.5	4.7
HI PR	383	368	353	338	330	324	311	299	286	273	262	256	251	242	233	223	215	208
LO PR	135	126	118	108	102	98	90	80	73	65	57	53	51	43	37	31	27	22

APH1460H41\*\*

	OUTDOOR AMBIENT TEMPERATURE																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	68.5	64.9	61.0	57.1	54.5	52.8	49.1	45.2	42.1	38.9	35.8	33.8	32.5	29.2	25.9	22.6	19.3	15.8
T/R	39.6	37.5	35.3	33.0	31.5	30.6	28.4	26.2	24.4	22.5	20.7	19.6	18.8	16.9	15.0	13.1	11.1	9.1
kW	4.76	4.67	4.57	4.47	4.41	4.37	4.28	4.18	4.08	3.98	3.88	3.83	3.79	3.69	3.59	3.50	3.40	3.30
Amps	23.9	22.2	20.9	19.7	19.0	18.7	17.7	16.8	16.1	15.4	14.8	14.4	14.2	13.6	12.7	12.0	11.2	10.2
COP	4.21	4.07	3.91	3.74	3.61	3.54	3.36	3.17	3.02	2.86	2.70	2.58	2.51	2.32	2.11	1.89	1.66	1.40
EER	14.4	13.9	13.4	12.8	12.3	12.1	11.5	10.8	10.3	9.8	9.2	8.8	8.6	7.9	7.2	6.5	5.7	4.8
HI PR	407	390	375	358	350	343	330	317	303	290	278	272	267	257	247	237	228	220
LO PR	130	121	113	104	98	94	87	77	70	62	55	51	49	41	36	30	26	21

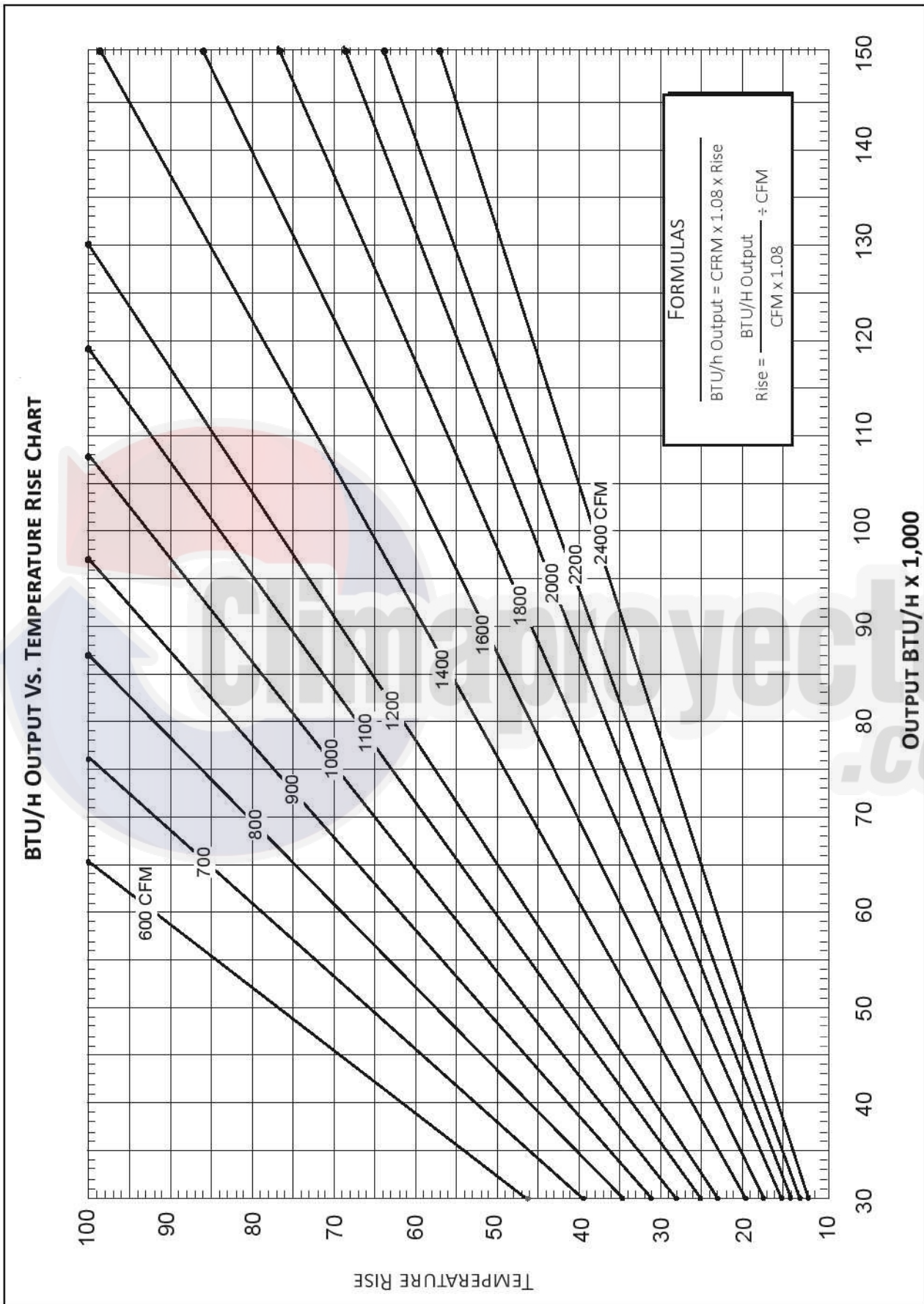
Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

kW = Total system power

High pressure is measured at the liquid line access fitting.

Low pressure is measured at the compressor suction access fitting.

Amps: Unit amps (comp.+ evaporator motor + condenser fan motor)



MODEL	SPEED*	VOLTS		E.S.P. (IN. OF H2O)							
				0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80
APH14 24H41**	T1	230	CFM Watts	914 69	866 80	818 91	770 102	722 114	674 125	626 136	578 147
	T2,T3	230	CFM Watts	914 69	866 80	818 91	770 102	722 114	674 125	626 136	578 147
	T4, T5	230	CFM Watts	1,231 168	1,179 180	1,127 193	1,074 205	1,022 218	969 230	917 243	865 255
APH14 30H41**	T1	230	CFM Watts	1,005 91	961 102	918 114	874 125	831 137	787 149	744 160	700 172
	T2,T3	230	CFM Watts	1,110 120	1,067 132	1,023 144	980 155	936 167	893 178	849 190	806 202
	T4, T5	230	CFM Watts	1,462 241	1,409 253	1,357 266	1,305 278	1,252 291	1,200 303	1,147 315	1,095 328
APH14 36H41**	T1	230	CFM Watts	1,151 132	1,097 144	1,042 156	988 169	933 181	879 194	824 206	770 219
	T2,T3	230	CFM Watts	1,261 131	1,215 144	1,169 157	1,123 169	1,076 182	1,030 194	984 207	937 220
	T4, T5	230	CFM Watts	1,577 277	1,525 290	1,472 302	1,420 314	1,367 327	1,315 339	1,263 352	1,210 364
APH14 42H41**	T1	230	CFM Watts	1,165 118	1,122 130	1,080 142	1,037 154	995 166	953 178	910 190	868 202
	T2,T3	230	CFM Watts	1,365 188	1,322 200	1,280 212	1,237 224	1,195 236	1,153 248	1,110 260	1,068 272
	T4, T5	230	CFM Watts	1,645 285	1,602 297	1,560 309	1,517 321	1,475 333	1,433 346	1,390 358	1,348 370
APH14 48H41E*	T1	230	CFM Watts	1,337 179	1,297 190	1,218 203	1,155 210	1,118 225	1,088 243	1,022 249	989 268
	T2,T3	230	CFM Watts	1,711 330	1,640 341	1,605 358	1,537 370	1,496 377	1,441 394	1,397 408	1,347 418
	T4, T5	230	CFM Watts	2,002 498	1,935 521	1,885 516	1,827 534	1,767 551	1,732 567	1,669 571	1,618 574
APH14 60H41**	T1	230	CFM Watts	1,507 168	1,459 175	1,410 183	1,362 191	1,314 199	1,266 207	1,218 214	1,169 222
	T2,T3	230	CFM Watts	1,793 363	1,745 371	1,697 379	1,649 387	1,600 394	1,552 402	1,504 410	1,456 418
	T4, T5	230	CFM Watts	1,919 449	1,870 457	1,822 465	1,774 472	1,726 480	1,678 488	1,629 496	1,581 503

\* Speed set at T2 at factory.

HEAT KIT ELECTRICAL DATA (BLOWER ONLY, HEAT MODE)

MODEL AND HEAT KIT USAGE	CIRCUIT #1		CIRCUIT #2		SINGLE-POINT KIT		ACTUAL KW / BTU@ 240V
	MCA <sup>1</sup>	MOP <sup>2</sup>	MCA <sup>1</sup>	MOP <sup>2</sup>	MCA <sup>1</sup>	MOP <sup>2</sup>	
<b>APH1424H41D*</b>	1.9	---	---	---	--	--	---
HKR-05*, HKR-05C*	21 / 25	25 / 25	---	---	46	50	4.75 / 16,200
HKR-08*, HKR-08C*	32 / 36	35 / 40	---	---	57	60	7 / 23,800
HKR-10*, HKR-10C*	43 / 49	45 / 50	---	---	70	80	9.5 / 32,400
<b>APH1430H41**</b>	2.3	---	---	---	--	--	---
HKR-05*, HKR-05C*	21 / 25	25 / 25	---	---	47	50	4.75 / 16,200
HKR-08*, HKR-08C*	32 / 36	35 / 40	---	---	59	60	7 / 23,800
HKR-10*, HKR-10C*	43 / 49	45 / 50	---	---	72	80	9.5 / 32,400
HKP-15C*	43 / 49	45 / 50	21 / 25	25 / 25	97	100	14.25 / 48,600
<b>APH1436H41DD</b>	2.3	---	---	---	--	--	---
HKR-05*, HKR-05C*	21 / 25	25 / 25	---	---	50.7	60	4.75 / 16,200
HKR-08*, HKR-08C*	32 / 36	35 / 40	---	---	62.4	70	7 / 23,800
HKR-10*, HKR-10C*	43 / 49	45 / 50	---	---	75.5	80	9.5 / 32,400
HKP-15C*	43 / 49	45 / 50	21 / 25	25 / 25	100.2	110	14.25 / 48,600
<b>APH1436H41DE</b>	2.3	---	---	---	--	--	---
HKR-05*, HKR-05C*	21 / 25	25 / 25	---	---	51	60	4.75 / 16,200
HKR-08*, HKR-08C*	32 / 36	35 / 40	---	---	62.7	70	7 / 23,800
HKR-10*, HKR-10C*	43 / 49	45 / 50	---	---	75.8	80	9.5 / 32,400
HKP-15C*	43 / 49	45 / 50	21 / 25	25 / 25	100.5	110	14.25 / 48,600
<b>APH1442H41E*</b>	3.6	---	---	---	--	--	---
HKP-05C*	21 / 25	25 / 25	---	---	52	60	4.75 / 16,200
HKR-08C*	32 / 36	35 / 40	---	---	64	70	7 / 23,800
HKP-10C*	43 / 49	45 / 50	---	---	77	80	9.5 / 32,400
HKP-15C*	43 / 49	45 / 50	21 / 25	25 / 25	102	110	14.25 / 48,600
HKP-20C	43 / 49	45 / 50	43 / 49	45 / 50	127	150	19.0 / 64,800
<b>APH1448H41E*</b>	3.6	---	---	---	--	--	---
HKP-05C*	21 / 25	25 / 25	---	---	56	70	4.75 / 16,200
HKR-08C*	32 / 36	35 / 40	---	---	68	80	7 / 23,800
HKP-10C*	43 / 49	45 / 50	---	---	81	90	9.5 / 32,400
HKP-15C*	43 / 49	45 / 50	21 / 25	25 / 25	106	110	14.25 / 48,600
HKP-20C	43 / 49	45 / 50	43 / 49	45 / 50	131	150	19.0 / 64,800
<b>APH1460H41F*</b>	7.5	---	---	---	--	--	---
HKP-05C*	21 / 25	25 / 25	---	---	65	80	4.75 / 16,200
HKR-08C*	32 / 36	35 / 40	---	---	76	90	7 / 23,800
HKP-10C*	43 / 49	45 / 50	---	---	89	100	9.5 / 32,400
HKP-15C*	43 / 49	45 / 50	21 / 25	25 / 25	114	125	14.25 / 48,600
HKP-20C	43 / 49	45 / 50	43 / 49	45 / 50	139	150	19.0 / 64,800

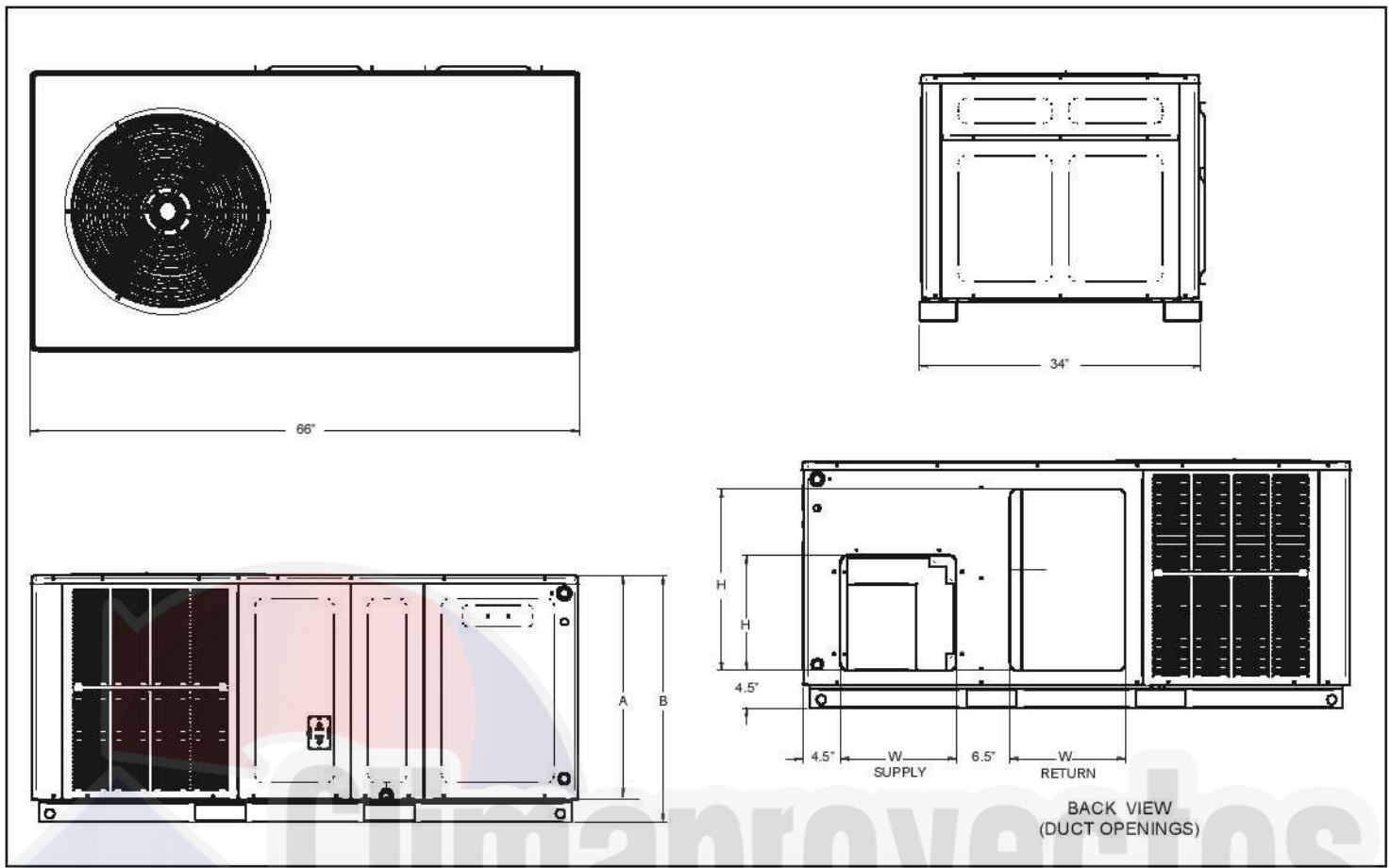
<sup>1</sup> Minimum Circuit Ampacity @ 208 / 240 V

<sup>2</sup> Maximum Overcurrent Protection Device @ 208 / 240 V

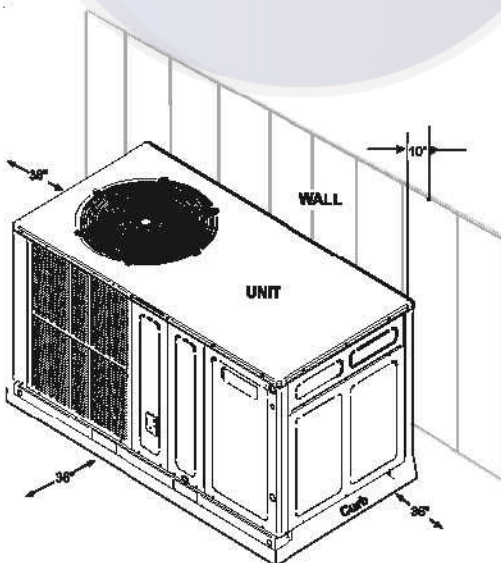
\* Revision level that may or may not be designated

C Circuit breaker option

**NOTE:** HKP-15C\* and HKP-20C\* replace HKR-15C and HKR-20C respectively to meet new UL1995 requirements.

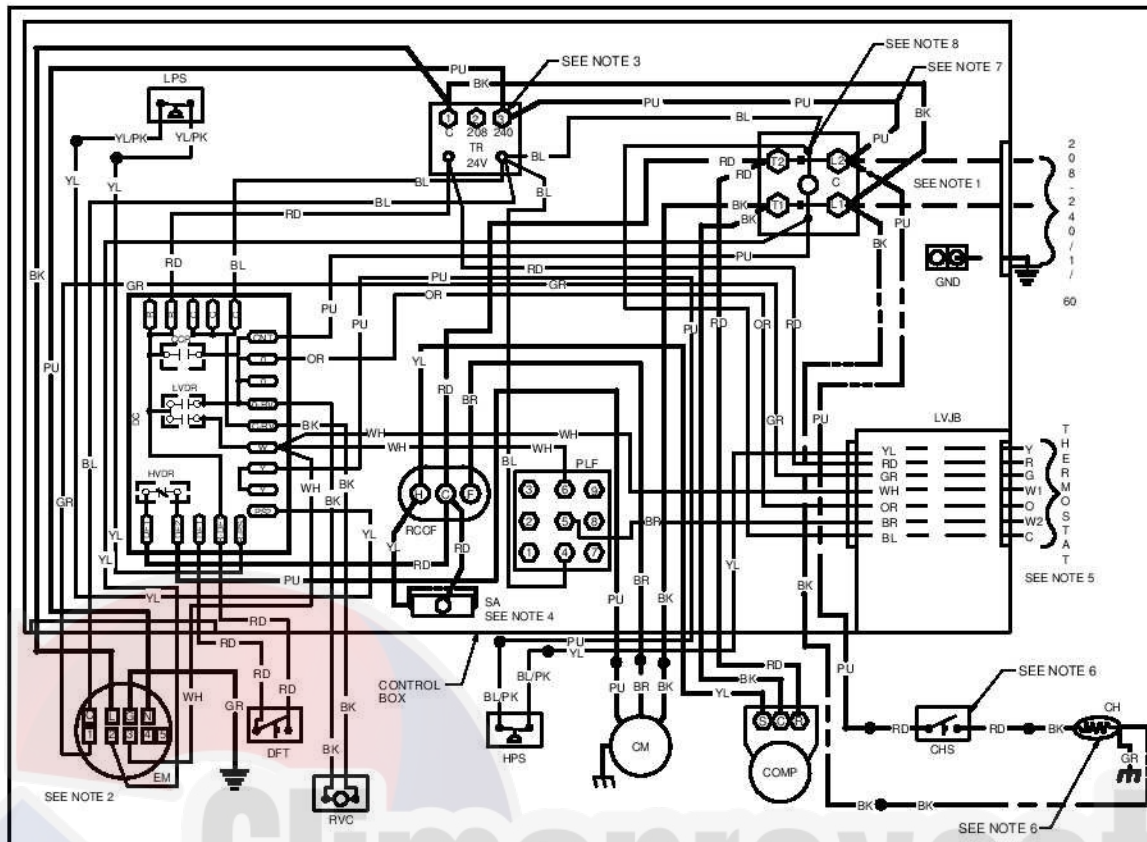


**MINIMAL CLEARANCES**



MODEL	UNIT DIMENSIONS				CHASSIS SIZE
			HEIGHT		
	W	D	A	B	
APH1424H41**	66	34	27½	30	Small
APH1430H41**	66	34	27½	30	Small
APH1436H41**	66	34	32½	35	Medium
APH1442H41**	66	34	32½	35	Medium
APH1448H41**	66	34	32½	35	Medium
APH1460H41**	66	34	36	38½	Large

MODEL	DUCT OPENINGS			
	SUPPLY		RETURN	
	W	H	W	H
APH1424H41**	14	14	14	22
APH1430H41**	14	14	14	22
APH1436H41**	14	14	14	24
APH1442H41**	14	14	14	24
APH1448H41**	14	14	14	24
APH1460H41**	14	14	14	24



SEE NOTE 2

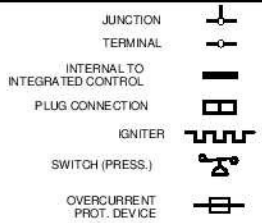
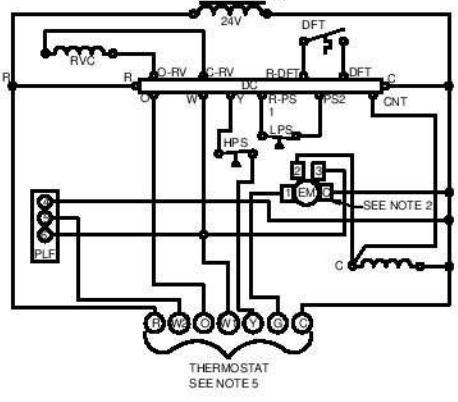
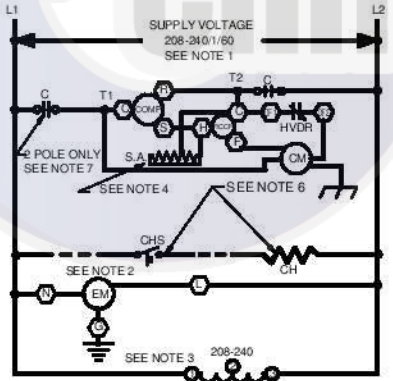
COMPONENT LEGEND

- C CONTACTOR
- CGR COMPRESSOR CONTACTOR RELAY
- CH CRACKCASE HEATER
- CHS CRACKCASE HEATER SWITCH
- CM CONDENSER MOTOR
- COMP COMPRESSOR
- DC DEFROST CONTROL
- DFT DEFROST THERMOSTAT
- EM EVAPORATOR MOTOR
- GND EQUIPMENT GROUND
- HVDR HIGH VOLTAGE DEFROST RELAY
- LPS LOW PRESSURE SWITCH
- LVDR LOW VOLTAGE DEFROST RELAY
- LVJB LOW VOLTAGE JUNCTION BOX
- PLF FEMALE PLUG / CONNECTOR
- RVC REVERSING VALVE COIL
- RCCF RUN CAPACITOR FOR COMPRESSOR AND FAN START ASSIST
- SA START ASSIST SWITCH
- TR TRANSFORMER
- HPS HIGH PRESSURE SWITCH

- FACTORY WIRING
- LINE VOLTAGE
  - LOW VOLTAGE
  - OPTIONAL HIGH VOLTAGE

- FIELD WIRING
- HIGH VOLTAGE
  - LOW VOLTAGE

- WIRE CODE
- BK BLACK
  - BL BLUE
  - BR BROWN
  - GR GREEN
  - OR ORANGE
  - PU PURPLE
  - RD RED
  - WH WHITE
  - YL YELLOW



NOTES:

1. REPLACEMENT WIRE MUST BE SAME SIZE AND TYPE INSULATION AS ORIGINAL (AT LEAST 105°C) USE COPPER CONDUCTOR ONLY.
2. TO CHANGE EVAPORATOR MOTOR SPEED MOVE WHITE AND YELLOW LEADS FROM EM 2" AND 3" TO 4" AND 5". IF BOTH LEADS ARE ENERGIZED, THE HIGHER SPEED SETTING IS USED.
3. FOR 208 VOLT TRANSFORMER OPERATION MOVE PURPLE WIRES FROM TERMINAL 3 TO TERMINAL 2 ON TRANSFORMER.
4. START ASSIST FACTORY EQUIPPED WHEN REQUIRED.
5. USE COPPER CONDUCTORS ONLY.
6. CRACKCASE HEATER AND CRACKCASE HEATER SWITCH FACTORY EQUIPPED WHEN REQUIRED.
7. DOUBLE POLE CONTACTOR SHOWN. SINGLE POLE CONTACTOR COULD BE FACTORY EQUIPPED AS AN ALTERNATE CONFIGURATION.
8. COMMON SIDE OF CONTACTOR CAN NOT BE GROUNDED OR CONNECTED TO ANY OTHER COMMON (24V).

SEE UNIT RATING PLATE FOR TYPE AND SIZE OF OVER CURRENT PROTECTION



0140G01640-E

**WARNING** High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

Wiring is subject to change. Always refer to the wiring diagram or the unit for the most up-to-date wiring.

ACCESSORY DESCRIPTION	ITEM NUMBER	
	SMALL CHASSIS	MEDIUM/LARGE CHASSIS
Downflow Economizer (use w/PCCP roof curb)	DDNECNJPCHHA	DDNECNJPCHHA
Downflow Plenum Kit (use w/PCCP roof curb)	PCP101-103	PCP101-103
Downflow Plenum Kit (R-8) (use w/PCCP roof curb)	PCP101-103 R8	PCP101-103 R8
Elbow Flashing w/R-8 Liner	PCEF101-103	PCEF101-103
Economizer Wiring Harness	0259G00215	0259G00215
External Horizontal Filter Rack	DPHFRA	DPHFRA
Horizontal Economizer	DHZECNJPCHM	DHZECNJPCHM
Inline Fuse Kit	INFKPKG01	INFKPKG01
Isolation Relay Kit (req'd with Economizer)	IRKT-01	IRKT-01
Manual Damper	PCMD101-103	PCMD101-103
Manual Damper- Horizontal	GPHMD101-103	GPHMD101-103
Motorized Damper	PCMDM101-103	PCMDM101-103
Outdoor Thermostat & Emergency Heat Relay Kit	OT/EHR18-60	OT/EHR18-60
Outdoor Thermostat Kit w/ Lockout Stat	OT18-60A	OT18-60A
Roof Curb	PCCP101-103	PCCP101-103
Square to Round Downflow (use w/PCCP roof curb)	SQRPC101	SQRPC102-103
Square to Round Horizontal	SQRPCH101	SQRPCH102-103

### SINGLE-POINT KIT ACCESSORY KITS

Select the single-point kit accessory based on the unit model.

MODEL	SINGLE-POINT KIT
APH1424H41**	SPK-30
APH1430H41**	SPK-35
APH1436H41**	SPK-40
APH1442H41**	SPK-45
APH1448H41**	SPK-50
APH1460H41**	SPK-60

