



14 SEER R-410A PACKAGE HEAT PUMP UNIT 2 to 5 TON

REFRIGERATION CIRCUIT

- All models are equipped with high efficiency two-stage Copeland UltraTech scroll compressor.
- Thermostatic Expansion Valve (TXV) on select models to control refrigerant flow.
- Variable Speed GE ECM 2.3 indoor motor with electronic speed controller on all models.
- High and Low Pressure Switches for excellent compressor protection.

BUILT TO LAST

- Galvanized-painted cabinet. One piece weather resistant top. Access panels for easy service. Side by side supply and return. Heavy gauge base rails.
- Triple-coated steel, consisting of a Polyester top coat, a urethane primer coat preceded by an oxide pretreatment.
- Integral base rails with fork-lift access on three sides. Holes provided for lifting lugs makes rooftop installation easier.
- The condenser coil has a sturdy wire inlet grille and UV rated vinyl mesh installed on the surface of the coil for additional protection.
- Advanced Air Management System for quieter operation.

EASY TO INSTALL AND SERVICE

- Combination electric cooling and electric heat, self contained for year-round comfort. Systems install on rooftop or ground level. The unit is shipped in the horizontal position and can easily be converted to downflow.
- Externally-mounted gauge ports allow for more accurate reading of operating conditions while servicing.
- Electrical controls located behind one exterior panel for easier maintenance.
- Comfort Alert™ UltraTech™ Diagnostics device on all models.
- Advanced electronic integrated defrost control switches quietly from cooling to heating.

ELECTRIC HEAT

- Slip in electrical heat from 5 to 20 kw, available as accessory.

WARRANTY*

- 7 year No Hassle Replacement™ limited warranty
 - 5 year parts limited warranty (including compressor and coils)
 - With timely registration, an additional 5 year parts limited warranty (including compressor and coils)
- *Applies to original purchaser/homeowner, some limitations may apply. See warranty certificate for complete details.



ARI Standard 210/240
Unitary Heat Pumps



LISTED



As an Energy Star® Partner, International Comfort Products has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

UNIT PERFORMANCE DATA

Model Number	COOLING		HEATING			Unit Dimensions H x W x L *	Operating Weight
	Nominal Capacity BTU/h	S.E.E.R	High Heat Capacity BTU/h	HSPF	Low Heat Capacity BTU/h		
PHX424000K00A	23,000	14.5	22,000	7.8	12,200	32-1/2 X 47-5/16 X 47-5/16	410
PHX430000K00A	29,000	14.5	28,000	7.8	15,200	32-1/2 X 47-5/16 X 47-5/16	410
PHX436000K00A	34,400	14.5	34,000	8.0	18,400	36 X 47-5/16 X 73	442
PHX442000K00A	41,000	14.5	41,000	8.0	22,000	36 X 47-5/16 X 73	568
PHX448000K00A	46,000	14.5	46,000	8.0	25,200	42 X 47-5/16 X 73	599
PHX460000K00A	58,000	14.5	57,000	8.0	32,400	42 X 47-5/16 X 73	624

* See unit dimensional drawings for mm.

UNIT SPECIFICATIONS

MODEL NUMBER	Electrical Data 208/230-1-60		Condenser Data									Sound Ratings (dBa)
	Maximum HACR Breaker or Fuse	Minimum Circuit Ampacity	Coil			Fan Motor			Fan			
			Total Face Area (Ft ²)	Fins Per Inch / Rows	Tube Dia. (Inch)	Horse Power	Full Load Amps	Locked Rotor Amps	Size Diameter (Inch)	RPM (Max)	CFM (Max)	
PHX424000K00A	30 amps	21.8	11.40	18 / 2	3/8	1/8	0.9	1.6	20	825	2100	71
PHX430000K00A	35 amps	22.8	11.46	18 / 2	3/8	1/8	0.9	1.6	20	825	2100	71
PHX436000K00A	45 amps	29.7	12.99	18 / 2	3/8	1/8	0.9	1.7	20	1100	2600	73
PHX442000K00A	45 amps	30.5	17.12	18 / 2	3/8	1/8	0.9	1.7	22	1100	3100	78
PHX448000K00A	60 amps	38.0	20.14	18 / 2	3/8	1/4	1.4	3.2	22	1100	3400	77
PHX460000K00A	60 amps	44.8	20.14	18 / 2	3/8	1/4	1.4	3.2	22	1100	3400	77

MODEL NUMBER	Evaporator Coil										Refrigerant Charge R-410 (lbs)	Shipping Weight (lbs)	
	Coil			Motor			Blower			Compressor			
	Total Face Area (Ft ²)	Fins Per Inch / Rows	Tube Diameter (Inch)	Horse Power	full Load Amps	No. of Speed Taps	Size (inches)	RPM (Max)	CFM Rated	Rated Load Amps			Locked Rotor Amps
PHX424000K00A	3.56	14 / 4	3/8	1/2	4.3	5	10 x 8	1260	800	13.3	52	10.50	420
PHX430000K00A	3.56	14 / 4	3/8	1/2	4.3	5	10 x 8	1260	875	14.1	70	10.75	420
PHX436000K00A	6.17	14 / 3	3/8	1/2	4.3	4	11 x 9	1260	1200	19.6	82	11.75	442
PHX442000K00A	6.17	14 / 3	3/8	3/4	6.8	5	11 x 9	1260	1400	18.2	96	14.50	568
PHX448000K00A	6.17	14 / 3	3/8	3/4	6.8	5	11 x 10	1260	1600	23.8	96	15.00	599
PHX460000K00A	9.76	14 / 3	3/8	1.0	9.1	5	11 x 10	1260	1750	27.4	118	16.00	624

PERFORMANCE DATA: COOLING & HEATING

MODEL NUMBER	Cooling Data			Heating Data						Evaporator Rated Airflow (SCFM)
	Rated Capacity ¹ BTU/h Cooling	S.E.E.R.	E.E.R.	Rated Capacity BTU/h @ 47° F	Rated Capacity BTU/h @ 17° F	HSPF	S / T Ratio	COP		
								@ 47° F	17° F	
PHX424000K00A	23,000	14.5	11.0	22,000	12,200	7.8	0.73	3.0	2.2	800
PHX430000K00A	29,000	14.5	11.0	28,000	15,200	7.8	0.73	3.3	2.2	1000
PHX436000K00A	34,400	14.5	11.0	34,000	18,400	8.0	0.73	3.5	2.4	1200
PHX442000K00A	41,000	14.5	11.0	41,000	22,000	8.0	0.73	3.6	2.3	1400
PHX448000K00A	46,000	14.5	11.0	46,000	25,200	8.0	0.73	3.3	2.3	1600
PHX460000K00A	58,000	14.5	11.0	57,000	32,400	8.0	0.73	3.4	2.4	1750

¹ Rated Capacity @ 230 Volts. For applications at 208 volts deduct 1000 BTU/h.

ELECTRIC HEATER USAGE CHART

EHBA Heater Model No's (Example: EHBA05KN)									
Without Circuit Breakers	05KN		07KN			10KN			
With Circuit Breakers	05KB		07KB			10KB		15KB	20KB
Unit kW	5kW		7.5kW			10kW		15kW	20kW
PHX4	USED ON								
24	X	X			X		X		
30	X	X			X		X	X	
36	X	X			X		X	X	
42		X			X		X	X	X
48		X			X		X	X	X
60		X			X		X	X	X

PHX4 - ELECTRICAL DATA: ELECTRIC HEAT ACCESSORY

HEATER MODEL	Used With	Supply Voltage	KW Rating	Nominal Heating BTUH	Supply Circuit No.	Heater Amps	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device (Amps)
EHBA05KB	2 to 5 Ton	240-1-60	5.0	17,065	L3 - L4	20.8	26.0	30
		208-1-60	3.75	12,798	L3 - L4	18.0	22.5	25
EHBA05KN	2 to 3 Ton	240-1-60	5.0	17,065	L3 - L4	20.8	26.0	30
		208-1-60	3.75	12,798	L3 - L4	18.0	22.5	25
EHBA07KB	2 to 5 Ton	240-1-60	7.5	25,598	L3-L4	31.3	39.1	40
		208-1-60	5.6	19,113	L3-L4	27.1	33.9	35
EHBA10KB	2 to 5 Ton	240-1-60	10.0	34,130	L3 - L4	41.7	52.1	60
		208-1-60	7.5	25,598	L3 - L4	36.2	45.3	45
EHBA15KB	2-1/2 to 5 Ton	240-1-60	15.0	51,195	L3 - L4	41.7	52.1	60
					L5 - L6	20.8	26.0	30
		208-1-60	11.25	38,567	L3 - L4	36.2	45.3	45
					L5 - L6	18.0	22.5	25
EHBA20KB	3-1/2 to 5 Ton	240-1-60	20	68,260	L3 - L4	41.7	52.1	60
					L5 - L6	41.7	52.1	60
		208-1-60	15.0	51,195	L3 - L4	36.2	45.3	45
					L5 - L6	36.2	45.3	45

AIRFLOW TABLE

MODEL SIZE	COOLING												HEATING (COMFORT MODE)						Electric heat				
	1st Stage						2nd Stage						1st Stage			2nd Stage			5 kW	7.5 kW	10 kW	15 kW	20 kW
	Rated SCFM			Dehum mode SCFM			Rated SCFM			Dehum mode SCFM			Rated SCFM			Rated SCFM							
	Low	Nom	High	Low	Nom	High	Low	Nom	High	Low	Nom	High	Low	Nom	High	Low	Nom	High					
24	504	560	616	403	448	493	720	800	880	576	640	704	490	490	539	700	700	770	850	850	850	-	-
30	585	650	715	468	520	572	788	875	963	630	700	770	650	650	715	875	875	963	850	850	850	1150	-
36	765	850	935	612	680	748	1080	1200	1320	864	960	1056	746	746	821	1050	1050	1155	850	850	850	1150	-
42	878	975	1073	702	780	858	1260	1400	1540	1008	1120	1232	768	853	938	1103	1225	1348	850	850	850	1150	1550
48	990	1100	1210	792	880	968	1440	1600	1760	1152	1280	1408	998	998	1097	1450	1450	1595	850	850	850	1150	1550
60	1170	1300	1430	936	1040	1144	1575	1750	1925	1260	1400	1540	1170	1170	1287	1575	1575	1733	850	850	850	1150	1550

EXPANDED PERFORMANCE DATA

CFM		P-X424 (High Stage Cooling)																							
		75					85					105					115								
		Outdoor Ambient Temperature - Degrees F, Dry Bulb																							
		Entering Indoor Temperature - Degrees F, Wet Bulb																							
720	MBH†	22.16	22.85	23.34	23.79	25.10	27.60	27.60	26.28	20.38	20.61	21.03	22.63	24.90	19.41	19.42	19.78	21.30	23.45	18.36	18.46	19.89	21.91		
	S/†	1.00	0.86	0.69	0.67	0.49	0.50	0.50	0.50	1.00	0.91	0.72	0.70	0.51	1.00	1.00	0.74	0.72	0.52	1.00	1.00	0.77	0.74	0.53	
	AMPS*	7.00	7.04	7.06	7.17	7.32	7.89	7.92	7.94	8.06	8.21	8.85	8.87	8.90	9.17	9.90	9.90	9.93	10.05	10.21	11.03	11.04	11.16	11.33	
	HI PR	282	284	285	288	293	325	326	327	331	336	372	373	374	384	424	424	425	430	435	481	482	486	491	
	LO PR	129	133	135	145	159	132	137	147	147	161	161	137	139	150	164	139	139	141	152	166	144	144	168	
800	MBH†	22.99	23.33	23.79	25.57	28.09	22.08	22.20	22.62	24.32	26.73	21.11	21.39	23.00	25.29	20.08	20.08	20.10	21.63	23.79	18.97	18.74	20.17	22.20	
	S/†	1.00	0.90	0.72	0.69	0.51	1.00	0.92	0.73	0.71	0.51	1.00	1.00	0.75	0.72	1.00	1.00	0.77	0.75	0.54	1.00	0.80	0.77	0.55	
	AMPS*	7.09	7.11	7.14	7.25	7.39	7.99	7.99	7.99	8.02	8.13	8.28	8.95	8.95	9.09	9.25	10.00	10.00	10.12	10.29	11.13	11.11	11.23	11.40	
	HI PR	284	285	286	289	294	327	327	328	332	337	374	374	375	379	385	426	426	426	431	436	483	483	487	492
	LO PR	134	136	138	148	162	137	138	140	150	164	141	141	142	152	166	144	144	144	154	169	148	146	157	171
880	MBH†	23.72	23.77	24.15	25.95	28.50	22.76	22.76	22.95	24.66	27.09	21.74	21.68	23.30	25.61	20.66	20.66	20.36	21.89	24.07	19.50	18.96	20.40	22.44	
	S/†	1.00	0.99	0.74	0.71	0.52	1.00	1.00	0.76	0.73	0.53	1.00	1.00	0.78	0.75	1.00	1.00	0.80	0.78	0.55	1.00	0.83	0.81	0.57	
	AMPS*	7.19	7.19	7.21	7.32	7.46	8.08	8.08	8.09	8.20	8.36	9.05	9.05	9.04	9.16	9.32	10.10	10.10	10.07	10.19	10.36	11.23	11.18	11.47	
	HI PR	286	286	287	290	295	329	329	329	333	338	376	376	376	380	386	428	428	427	431	437	485	483	488	493
	LO PR	138	139	140	151	165	142	142	142	142	153	167	145	144	155	169	149	149	146	157	171	152	148	159	173
		P-X424 (Low Stage Cooling)																							
		Outdoor Ambient Temperature - Degrees F, Dry Bulb																							
		Entering Indoor Temperature - Degrees F, Wet Bulb																							
500	MBH†	15.83	16.66	17.10	18.61	20.78	19.75	19.75	17.64	16.17	17.64	14.45	14.82	16.65	18.70	13.74	13.88	14.26	15.64	17.62	13.03	13.30	14.62	16.52	
	S/†	1.00	0.85	0.69	0.65	0.49	1.00	0.87	0.70	0.67	0.50	1.00	0.90	0.72	0.68	1.00	0.93	0.74	0.70	0.51	1.00	0.76	0.72	0.52	
	AMPS*	4.88	4.91	4.92	4.96	5.01	5.57	5.60	5.62	5.68	5.75	6.34	6.37	6.39	6.48	6.58	7.22	7.27	7.39	7.52	8.24	8.27	8.42	8.59	
	HI PR	271	273	274	278	282	313	315	316	320	325	360	361	363	367	372	413	413	414	419	425	471	472	477	483
	LO PR	127	132	135	144	157	131	135	137	147	160	135	137	140	149	163	139	140	142	152	165	143	145	154	168
550	MBH†	16.48	17.06	17.49	19.04	21.24	15.76	16.11	16.53	18.03	20.17	15.03	15.16	15.55	17.00	19.08	14.29	14.55	15.95	17.97	13.54	13.54	14.89	16.82	
	S/†	1.00	0.88	0.70	0.67	0.50	1.00	0.91	0.72	0.69	0.51	1.00	0.94	0.74	0.71	1.00	1.00	0.76	0.73	0.52	1.00	0.79	0.75	0.53	
	AMPS*	4.94	4.96	4.97	5.01	5.05	5.64	5.66	5.67	5.73	5.79	6.42	6.43	6.45	6.54	6.63	7.31	7.33	7.45	7.58	8.34	8.34	8.49	8.65	
	HI PR	273	274	275	279	283	315	316	317	321	326	362	363	364	368	373	415	415	415	420	426	473	473	478	484
	LO PR	132	135	138	147	161	135	137	140	150	163	139	140	142	152	165	143	144	144	154	168	147	147	157	170
600	MBH†	17.07	17.40	17.83	19.39	21.63	16.32	16.44	16.83	18.35	20.52	15.56	15.56	15.82	17.29	19.40	14.78	14.80	16.22	18.26	13.99	13.77	15.13	17.08	
	S/†	1.00	0.91	0.72	0.69	0.51	1.00	0.94	0.74	0.71	0.52	1.00	1.00	0.76	0.73	1.00	1.00	0.79	0.75	0.54	1.00	0.81	0.78	0.55	
	AMPS*	5.00	5.01	5.02	5.06	5.09	5.70	5.71	5.73	5.78	5.84	6.50	6.50	6.51	6.59	6.68	7.40	7.39	7.51	7.63	8.44	8.44	8.55	8.71	
	HI PR	274	275	276	279	284	317	317	318	322	327	364	364	365	369	374	416	416	416	421	427	475	474	479	485
	LO PR	136	138	140	150	163	139	140	142	152	165	143	143	144	144	154	168	147	147	156	170	151	149	159	172

† Total capacities are net (I.D blower heat subtracted).

* System amps are total of indoor and outdoor amps

‡ S/T are based on 80° F db entering air at the indoor coil. For sensible capacities at other than 80° F db, deduct 835 BTU/h per 1000 cfm of indoor coil air from (MBh x S/T) for each degree below 80° F, or add 835 BTU/h per 1000 cfm of indoor coil air to (MBh x S/T) for each degree above 80° F

†† All TVA rating indoor condition (75° F db/ 63° F wb). All other indoor air temperatures are at 80° F db

EXPANDED PERFORMANCE DATA

		P-X430 (High Stage Cooling)																						
		Outdoor Ambient Temperature - Degrees F, Dry Bulb				85				95				105				115						
CFM		Entering Indoor Temperature - Degrees F, Wet Bulb																						
		57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72
787	MBH†	27.07	28.40	29.01	31.13	34.12	32.51	24.95	25.67	26.21	28.12	30.82	23.78	24.19	24.68	26.48	29.03	22.50	22.62	23.05	24.73	27.11	27.11	
	S/T†	1.00	0.86	0.70	0.67	0.50	0.51	1.00	0.90	0.72	0.69	0.52	1.00	0.93	0.74	0.71	0.52	1.00	0.96	0.76	0.73	0.54	0.54	
	AMPS*	8.88	8.96	8.99	9.13	9.31	10.30	10.94	11.00	11.00	11.18	11.39	12.16	12.20	12.23	12.39	12.60	13.54	13.55	13.58	13.74	13.96	13.96	
	HI PR	296	300	301	306	313	340	343	345	350	357	389	398	406	443	444	450	488	499	500	501	507	515	
	LO PR	121	127	129	139	153	124	129	131	141	155	127	131	133	133	136	146	160	135	136	138	149	163	
875	MBH†	28.11	29.01	29.60	31.74	34.76	33.09	25.85	26.17	26.67	29.00	31.32	24.60	24.66	25.08	26.90	29.46	23.25	23.25	23.39	25.08	27.48	27.48	
	S/T†	1.00	0.89	0.72	0.69	0.51	0.52	1.00	0.94	0.75	0.72	0.53	1.00	0.99	0.77	0.74	0.54	1.00	1.00	0.79	0.77	0.55	0.55	
	AMPS*	9.02	9.08	9.11	9.25	9.44	10.05	10.08	10.08	10.22	10.42	11.10	11.12	11.15	11.30	11.51	12.32	12.32	12.32	13.70	13.86	14.08	14.08	
	HI PR	299	301	302	308	315	343	345	346	352	359	392	393	400	407	445	452	460	502	502	502	508	516	
	LO PR	126	130	132	142	156	129	132	134	144	158	132	134	136	137	138	149	163	140	140	141	151	165	
962	MBH†	29.01	29.51	30.07	32.23	35.27	33.54	26.63	26.64	27.04	28.98	31.72	25.31	25.31	25.40	27.22	29.80	23.89	23.89	23.66	25.36	27.77	27.77	
	S/T†	1.00	0.93	0.74	0.71	0.52	0.53	1.00	0.95	0.75	0.73	0.54	1.00	1.00	0.80	0.77	0.55	1.00	1.00	0.82	0.80	0.57	0.57	
	AMPS*	9.16	9.19	9.22	9.36	9.55	10.16	10.19	10.19	10.34	10.54	11.24	11.22	11.62	12.46	12.46	12.84	13.84	13.84	13.81	13.97	14.19	14.19	
	HI PR	301	303	304	309	316	346	346	347	353	361	394	394	401	409	447	453	461	505	505	504	509	517	
	LO PR	130	133	135	145	159	134	135	137	147	161	137	137	139	141	141	151	165	145	145	144	153	168	
		P-X430 (Low Stage Cooling)																						
		Outdoor Ambient Temperature - Degrees F, Dry Bulb				85				95				105				115						
		Entering Indoor Temperature - Degrees F, Wet Bulb																						
CFM		57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72
		57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72
580	MBH†	18.92	20.33	20.85	22.65	25.21	24.06	17.45	18.34	18.81	20.46	22.82	16.62	17.22	17.67	19.24	21.49	15.72	16.03	16.45	17.94	20.07	20.07	
	S/T†	1.00	0.90	0.73	0.70	0.53	0.54	1.00	0.94	0.76	0.73	0.54	1.00	0.97	0.78	0.74	0.55	1.00	1.01	0.80	0.76	0.56	0.56	
	AMPS*	6.07	6.14	6.16	6.25	6.38	6.88	6.94	6.97	7.06	7.19	7.82	8.13	8.92	8.96	8.98	9.09	9.22	10.21	10.23	10.26	10.37	10.51	
	HI PR	280	284	285	290	296	323	326	328	333	340	370	373	380	388	422	426	432	479	481	482	488	496	
	LO PR	119	126	129	138	150	122	128	131	140	153	126	131	133	134	136	146	159	135	136	139	148	162	
650	MBH†	19.87	20.94	21.47	23.31	25.94	24.71	18.30	18.84	19.31	21.00	23.40	17.41	17.68	18.11	19.72	22.01	16.44	16.46	16.83	18.35	20.51	20.51	
	S/T†	1.00	0.93	0.75	0.72	0.54	0.55	1.00	0.98	0.78	0.75	0.55	1.00	1.01	0.81	0.77	0.56	1.00	1.00	0.83	0.80	0.58	0.58	
	AMPS*	6.17	6.22	6.24	6.34	6.46	6.98	7.03	7.05	7.15	7.27	7.92	7.96	8.21	9.02	9.04	9.17	9.31	10.32	10.32	10.34	10.45	10.59	
	HI PR	283	285	287	292	298	326	328	329	335	342	373	375	376	382	425	426	433	441	483	483	490	498	
	LO PR	124	130	132	141	154	127	132	134	144	157	131	134	136	137	139	149	162	139	140	142	151	165	
715	MBH†	20.67	21.43	21.94	23.82	26.49	25.21	18.99	19.25	19.69	21.41	23.85	18.05	18.07	18.45	20.08	22.39	17.03	17.03	17.12	18.66	20.85	20.85	
	S/T†	1.00	0.96	0.77	0.74	0.55	0.56	1.00	0.99	0.79	0.76	0.56	1.00	1.00	0.83	0.80	0.58	1.00	1.00	0.86	0.82	0.59	0.59	
	AMPS*	6.25	6.29	6.32	6.41	6.54	7.07	7.10	7.12	7.22	7.35	8.01	8.03	8.15	8.29	9.11	9.14	9.24	9.38	10.41	10.41	10.52	10.66	
	HI PR	285	287	288	293	300	328	330	331	336	344	376	376	378	383	428	429	435	443	485	485	491	499	
	LO PR	129	132	135	144	157	132	134	137	146	160	135	137	139	141	141	151	165	144	144	144	153	167	

† Total capacities are net (I.D blower heat subtracted).

* System amps are total of indoor and outdoor amps

† S/T are based on 80° F db entering air at the indoor coil. For sensible capacities at other than 80° F db, deduct 835 BTU/h per 1000 cfm of indoor coil air from (MBh x S/T) for each degree below 80° F, or add 835 BTU/h per 1000 cfm of indoor coil air to (MBh x S/T) for each degree above 80° F

†† All TVA rating indoor condition (75° F db/ 63° F wb). All other indoor air temperatures are at 80° F db

EXPANDED PERFORMANCE DATA

CFM		P-X442 (High Stage Cooling)																							
		Outdoor Ambient Temperature - Degrees F, Dry Bulb									Outdoor Ambient Temperature - Degrees F, Wet Bulb														
		75			85			95			105			115											
1260	MBH†	57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72	
	S/T†	33.35	39.47	40.31	43.44	47.86	45.73	35.47	35.85	36.55	39.41	43.45	33.85	33.90	34.46	37.17	41.01	32.07	32.07	32.07	32.07	32.20	34.75	38.37	
	AMPS*	1.00	0.86	0.69	0.67	0.49	0.50	0.68	0.71	0.88	0.71	0.68	0.50	1.00	0.91	0.72	0.69	0.51	1.00	0.99	1.00	1.00	0.76	0.74	0.53
	HI PR	286	287	288	293	299	326	330	331	336	342	376	377	378	383	390	428	428	429	434	441	485	485	490	497
	LO PR	126	129	132	141	154	133	133	133	133	143	156	132	133	133	145	159	136	136	137	147	161	140	140	163
	1400	MBH†	39.73	40.27	41.02	44.19	48.68	46.46	36.68	36.66	37.11	41.00	44.09	34.96	34.96	34.96	37.69	41.56	33.08	33.08	33.08	32.64	35.20	38.84	
S/T†		1.00	0.90	0.72	0.69	0.51	0.70	0.73	0.70	0.51	0.70	0.70	0.52	1.00	0.75	0.72	0.52	1.00	1.00	1.00	0.80	0.80	0.77	0.55	
AMPS*		13.00	13.02	13.06	13.22	13.45	14.26	14.29	14.46	14.69	15.61	15.63	15.81	16.05	17.12	17.12	17.12	17.12	17.12	17.12	17.12	18.80	18.76	19.19	
HI PR		288	289	289	294	300	331	332	332	337	344	379	379	379	384	391	431	431	431	431	436	487	486	492	498
LO PR		131	132	134	144	157	133	134	134	136	146	159	137	137	138	148	161	140	140	140	144	144	142	152	166
1540		MBH†	40.94	41.01	41.59	44.80	49.33	47.04	37.72	37.72	37.72	40.48	44.60	35.92	35.92	35.36	38.10	42.00	33.95	33.95	33.95	32.98	35.56	39.20	
	S/T†	1.00	0.93	0.74	0.71	0.52	0.73	0.73	0.73	0.53	0.73	0.75	0.54	1.00	0.77	0.75	0.54	1.00	1.00	1.00	0.83	0.80	0.56		
	AMPS*	13.21	13.22	13.24	13.41	13.64	14.47	14.47	14.88	15.83	15.83	15.82	15.99	16.24	17.34	17.34	17.34	17.34	17.34	17.34	19.02	18.94	19.12	19.37	
	HI PR	290	290	290	295	301	333	333	338	345	381	381	385	392	433	433	433	433	433	433	437	489	487	492	499
	LO PR	135	135	136	146	160	138	138	148	162	141	141	140	150	163	144	144	144	144	144	144	148	144	154	168

CFM		P-X442 (Low Stage Cooling)																						
		Outdoor Ambient Temperature - Degrees F, Dry Bulb									Outdoor Ambient Temperature - Degrees F, Wet Bulb													
		75			85			95			105			115										
880	MBH†	57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72	72	57	62	63††	67	72
	S/T†	1.00	0.91	0.73	0.69	0.52	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
	AMPS*	8.67	8.66	8.65	8.63	8.61	9.64	9.63	9.62	9.58	9.54	10.73	10.72	10.71	10.65	10.59	11.98	11.98	11.97	11.89	11.80	13.45	13.35	13.24
	HI PR	272	274	275	279	284	315	316	317	321	327	362	363	364	368	374	414	414	415	420	426	472	472	483
	LO PR	129	133	135	145	158	132	135	137	147	160	135	137	139	149	162	139	139	141	151	165	143	144	167
	975	MBH†	28.96	29.51	30.18	32.78	36.50	34.83	26.71	26.70	27.22	29.60	33.03	25.44	25.44	25.57	27.84	31.11	24.05	24.05	24.05	23.78	25.93	29.04
S/T†		1.00	0.94	0.75	0.72	0.53	0.73	0.73	0.73	0.53	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	
AMPS*		8.74	8.74	8.73	8.71	8.69	9.70	9.70	9.69	9.65	9.61	10.79	10.79	10.78	10.72	10.66	12.03	12.03	12.03	11.96	11.87	13.49	13.42	13.30
HI PR		274	275	276	280	285	317	317	318	322	328	364	364	365	369	375	416	416	416	421	427	474	474	484
LO PR		134	136	138	148	161	137	138	140	149	163	140	140	142	151	165	143	144	144	154	167	148	146	170
1075		MBH†	30.00	30.13	30.72	33.36	37.15	35.41	27.62	27.62	27.62	30.07	33.55	26.28	26.28	26.28	28.25	31.56	24.82	24.82	24.82	24.12	26.29	29.43
	S/T†	1.00	0.98	0.77	0.74	0.54	0.76	0.76	0.76	0.56	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	
	AMPS*	8.82	8.82	8.81	8.79	8.77	9.78	9.78	9.77	9.73	9.69	10.85	10.85	10.85	10.80	10.74	12.09	12.09	12.11	12.03	11.95	13.54	13.49	13.37
	HI PR	276	276	277	281	286	319	319	319	323	329	366	366	366	370	376	418	418	417	422	428	476	474	485
	LO PR	138	138	140	150	163	141	141	141	144	144	144	144	144	144	148	148	148	146	156	169	152	148	172

† Total capacities are net (I.D blower heat subtracted).

* System amps are total of indoor and outdoor amps

† S/T are based on 80° F db entering air at the indoor coil. For sensible capacities at other than 80° F db, deduct 835 BTU/h per 1000 cfm of indoor coil air from (MBh x S/T) for each degree below 80° F, or add 835 BTU/h per 1000 cfm of indoor coil air to (MBh x S/T) for each degree above 80° F

†† All TVA rating indoor condition (75° F db/ 63° F wb). All other indoor air temperatures are at 80° F db

EXPANDED PERFORMANCE DATA

CFM		P*X448 (High Stage Cooling)																								
		75					85					105					115									
		Outdoor Ambient Temperature - Degrees F, Dry Bulb																								
		57	62	63†	67	72	57	62	63†	67	72	57	62	63†	67	72	57	62	63†	67	72					
		Entering Indoor Temperature - Degrees F, Wet Bulb																								
		30.91	32.03	32.78	35.65	39.76	29.79	30.56	31.26	34.02	37.97	28.57	28.99	29.62	32.26	36.05	27.23	27.32	27.85	30.37	33.99	25.76	25.76	25.94	28.32	31.75
1440	MBHT	44.14	45.41	46.32	49.97	55.13	42.56	43.42	44.24	47.74	52.67	40.84	41.29	42.01	45.34	50.05	38.97	39.05	39.60	42.76	47.22	36.91	36.91	37.01	39.98	44.18
	S/T†	1.00	0.87	0.69	0.67	0.49	1.00	0.88	0.71	0.68	0.50	1.00	0.91	0.72	0.69	0.51	1.00	0.93	0.74	0.71	0.52	1.00	1.00	0.76	0.74	0.53
	AMPS*	14.79	14.86	14.90	15.09	15.35	16.17	16.22	16.26	16.46	16.72	17.68	17.70	17.74	17.94	18.22	19.33	19.34	19.37	19.58	19.87	21.18	21.18	21.18	21.39	21.69
	HI PR	288	290	291	296	302	331	333	334	339	346	379	380	381	386	393	431	431	432	437	445	487	487	487	493	500
	LO PR	127	130	132	142	155	130	132	134	144	157	133	135	136	146	160	137	137	139	149	162	141	141	141	151	165
1600	MBHT	45.70	46.32	47.11	50.81	56.03	44.02	44.30	44.95	48.49	53.49	42.20	42.16	42.64	46.00	50.77	40.22	40.22	40.16	43.34	47.84	38.05	38.05	37.49	40.48	44.70
	S/T†	1.00	0.90	0.72	0.69	0.51	1.00	0.92	0.73	0.70	0.51	1.00	1.00	0.75	0.72	0.52	1.00	1.00	0.77	0.74	0.53	1.00	1.00	0.80	0.77	0.55
	AMPS*	15.07	15.10	15.14	15.33	15.60	16.45	16.47	16.50	16.70	16.97	17.96	17.96	17.98	18.18	18.46	19.62	19.62	19.61	19.82	20.11	21.46	21.46	21.42	21.63	21.93
	HI PR	290	291	292	297	303	334	334	335	340	347	381	381	382	387	395	433	433	433	439	446	490	490	489	494	502
	LO PR	131	133	135	145	158	134	135	137	147	160	138	138	139	149	162	142	142	141	151	165	146	146	143	153	167
1760	MBHT	47.06	47.19	47.74	51.48	56.76	45.29	45.28	45.52	49.08	54.14	43.38	43.37	43.15	46.53	51.33	41.30	41.30	40.61	43.81	48.33	39.03	39.03	37.88	40.88	45.10
	S/T†	1.00	0.93	0.74	0.71	0.52	1.00	1.00	0.75	0.73	0.53	1.00	1.00	0.77	0.75	0.54	1.00	1.00	0.80	0.77	0.55	1.00	1.00	0.83	0.80	0.56
	AMPS*	15.34	15.35	15.37	15.57	15.84	16.72	16.72	16.73	16.93	17.21	18.23	18.23	18.21	18.42	18.70	19.89	19.89	19.84	20.05	20.34	21.74	21.74	21.65	21.86	22.16
	HI PR	292	292	293	298	304	336	336	336	341	348	384	384	383	388	396	435	435	434	440	447	492	492	490	495	503
	LO PR	135	136	137	147	160	138	138	139	149	162	142	142	141	151	164	145	145	143	153	167	149	149	145	155	169
P*X448 (Low Stage Cooling)																										
CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb																								
		75					85					105					115									
		Entering Indoor Temperature - Degrees F, Wet Bulb																								
		30.91	32.03	32.78	35.65	39.76	29.79	30.56	31.26	34.02	37.97	28.57	28.99	29.62	32.26	36.05	27.23	27.32	27.85	30.37	33.99	25.76	25.76	25.94	28.32	31.75

† Total capacities are net (I.D blower heat subtracted).

* System amps are total of indoor and outdoor amps

‡ S/T are based on 80° F db entering air at the indoor coil. For sensible capacities at other than 80° F db, deduct 835 BTU/h per 1000 cfm of indoor coil air from (MBh x S/T) for each degree below 80° F, or add 835 BTU/h per 1000 cfm of indoor coil air to (MBh x S/T) for each degree above 80° F

†† All TVA rating indoor condition (75° F db/ 63° F wb). All other indoor air temperatures are at 80° F db

EXPANDED PERFORMANCE DATA

		P-X460 (High Stage Cooling)																											
		Outdoor Ambient Temperature - Degrees F, Dry Bulb							95							105							115						
CFM		Entering Indoor Temperature - Degrees F, Wet Bulb																											
		57	62	63†	67	72	72	57	62	63†	67	72	72	57	62	63†	67	72	72	57	62	63†	67	72	72	57	62	63†	67
1575	MBH†	53.72	56.33	57.55	61.78	67.72	51.82	53.85	55.01	59.04	64.71	49.75	51.20	52.29	56.12	61.50	48.36	49.36	52.97	58.05	45.03	45.31	46.18	49.57	54.30				
	S/T†	1.00	0.86	0.70	0.67	0.50	1.00	0.88	0.71	0.68	0.51	1.00	0.90	0.72	0.69	0.52	1.00	0.93	0.74	0.71	0.52	1.00	0.96	0.76	0.73	0.54			
	AMPS*	17.81	17.98	18.05	18.33	18.73	19.67	19.81	19.89	20.17	20.58	21.70	21.82	21.89	22.19	22.61	23.96	24.03	24.10	24.41	24.84	26.46	26.55	26.86	27.30				
	HI PR	302	305	307	312	320	347	350	351	357	365	396	399	400	406	414	450	451	453	459	468	508	509	510	516	525			
1750	LO PR	122	128	130	140	154	125	130	132	142	156	128	132	134	144	158	132	134	137	147	161	136	137	139	149	163			
	MBH†	55.71	57.45	58.64	62.91	68.92	53.67	54.87	55.98	60.05	65.78	51.47	52.13	53.14	58.00	62.43	49.08	49.24	50.09	53.73	58.85	46.47	46.81	50.21	54.96				
	S/T†	1.00	0.90	0.72	0.69	0.51	1.00	0.92	0.73	0.70	0.52	1.00	0.94	0.75	0.72	0.53	1.00	0.97	0.77	0.74	0.54	1.00	1.00	0.79	0.76	0.55			
	AMPS*	18.20	18.32	18.39	18.67	19.07	20.06	20.15	20.22	20.51	20.92	22.10	22.15	22.22	22.53	22.95	24.36	24.37	24.43	24.74	25.18	26.86	26.86	26.88	27.19	27.63			
1925	HI PR	305	307	308	314	321	350	352	353	359	367	399	400	402	408	416	453	453	455	461	469	511	511	512	518	526			
	LO PR	127	131	133	143	157	130	133	135	145	159	133	135	137	147	161	137	137	139	150	164	141	141	142	152	166			
	MBH†	57.44	58.39	59.50	63.81	69.87	55.29	55.76	56.74	60.84	66.62	52.97	53.01	53.81	57.69	63.16	50.45	50.45	50.67	54.32	59.46	47.69	47.29	50.70	55.46				
	S/T†	1.00	0.93	0.74	0.71	0.53	1.00	0.95	0.76	0.73	0.53	1.00	1.00	0.77	0.75	0.54	1.00	1.00	0.80	0.77	0.55	1.00	1.00	0.82	0.80	0.57			
1925	AMPS*	18.58	18.64	18.71	19.00	19.40	20.44	20.48	20.54	20.84	21.25	22.49	22.49	22.54	22.85	23.27	24.74	24.74	24.75	25.06	25.50	27.24	27.24	27.19	27.51	27.95			
	HI PR	307	309	310	315	323	353	353	355	360	368	402	402	403	409	418	456	456	456	462	471	514	514	519	528				
	LO PR	131	134	136	146	160	134	136	137	148	162	138	138	139	150	164	141	141	141	152	166	145	144	144	154	169			

		P-X460 (Low Stage Cooling)																											
		Outdoor Ambient Temperature - Degrees F, Dry Bulb							95							105							115						
CFM		Entering Indoor Temperature - Degrees F, Wet Bulb																											
		57	62	63†	67	72	72	57	62	63†	67	72	72	57	62	63†	67	72	72	57	62	63†	67	72	72	57	62	63†	67
1175	MBH†	38.90	40.54	41.49	44.80	49.51	37.56	38.79	39.69	42.87	47.41	36.09	36.89	37.75	40.79	45.14	34.50	34.86	35.65	38.56	42.71	32.76	32.77	33.40	36.15	40.10			
	S/T†	1.00	0.90	0.72	0.69	0.52	1.00	0.92	0.74	0.71	0.52	1.00	0.94	0.75	0.72	0.53	1.00	0.97	0.77	0.74	0.54	1.00	1.00	0.79	0.76	0.55			
	AMPS*	11.80	11.78	11.77	11.73	11.69	13.33	13.30	13.29	13.22	13.15	15.06	15.03	15.01	14.92	14.81	17.05	17.03	17.01	16.88	16.73	19.37	19.37	19.35	19.18	18.97			
	HI PR	280	282	283	287	292	323	325	326	330	336	371	372	373	378	384	423	424	425	430	436	481	482	482	487	493			
1300	LO PR	128	133	135	145	159	131	135	137	147	161	134	137	139	149	163	138	139	141	152	165	142	142	144	154	168			
	MBH†	40.38	41.39	42.32	45.67	50.46	38.95	39.56	40.43	43.66	48.27	37.40	37.62	38.41	41.50	45.91	35.71	35.72	36.24	39.19	43.39	33.88	33.88	33.91	36.70	40.68			
	S/T†	1.00	0.94	0.75	0.72	0.53	1.00	0.96	0.76	0.73	0.54	1.00	0.98	0.78	0.75	0.54	1.00	1.00	0.80	0.77	0.55	1.00	1.00	0.82	0.79	0.57			
	AMPS*	11.92	11.91	11.90	11.86	11.82	13.44	13.43	13.41	13.35	13.28	15.15	15.15	15.13	15.03	14.93	17.13	17.13	17.12	16.99	16.84	19.44	19.44	19.45	19.28	19.08			
1425	HI PR	282	283	284	288	293	325	326	327	331	337	373	373	374	379	385	426	426	426	431	437	484	484	484	488	495			
	LO PR	133	136	138	148	162	136	138	140	150	164	139	140	142	152	166	142	142	144	154	168	146	146	146	156	171			
	MBH†	41.69	42.12	42.99	46.38	51.23	40.19	40.28	41.04	44.31	48.96	38.55	38.55	38.96	42.08	46.53	36.78	36.78	36.78	39.69	43.93	34.86	34.86	34.32	37.13	41.15			
	S/T†	1.00	0.97	0.77	0.74	0.54	1.00	0.99	0.79	0.76	0.55	1.00	1.00	0.80	0.77	0.56	1.00	1.00	0.83	0.80	0.57	1.00	1.00	0.86	0.82	0.58			
1425	AMPS*	12.04	12.04	12.03	11.99	11.96	13.55	13.55	13.54	13.47	13.41	15.26	15.26	15.25	15.16	15.05	17.22	17.22	17.23	17.10	16.96	19.51	19.51	19.51	19.39	19.19			
	HI PR	283	284	285	289	294	327	327	328	332	338	375	375	375	380	386	428	428	427	432	438	486	486	485	489	496			
	LO PR	137	138	141	151	165	140	140	142	152	166	143	143	144	154	168	147	147	146	156	171	151	151	148	159	173			

† Total capacities are net (I.D blower heat subtracted).

* System amps are total of indoor and outdoor amps

‡ S/T are based on 80° F db entering air at the indoor coil. For sensible capacities at other than 80° F db, deduct 835 BTU/h per 1000 cfm of indoor coil air from (MBh x S/T) for each degree below 80° F, or add 835 BTU/h per 1000 cfm of indoor coil air to (MBh x S/T) for each degree above 80° F

†† All TVA rating indoor condition (75° F db/ 63° F wb), All other indoor air temperatures are at 80° F db

HEAT PUMP HEATING EXPANDED PERFORMANCE DATA

P*X424 (HIGH CAPACITY)

CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
720	MBh†	2.17	4.78	8.67	12.17	13.78	18.08	21.29	23.36	24.21	26.71
	T/R	11.70	14.40	18.20	21.20	22.40	23.80	23.50	23.20	23.10	22.30
	AMPS*	4.24	5.23	6.27	7.12	7.48	8.39	9.13	9.62	9.82	10.48
	HI PR	243	250	264	275	279	320	360	388	387	383
	LO PR	30	41	53	61	65	81	98	109	109	107
800	MBh†	2.10	4.71	8.71	12.20	13.65	17.18	20.14	22.00	22.75	25.38
	T/R	10.20	12.70	16.40	19.00	19.80	20.20	19.90	19.50	19.40	19.00
	AMPS*	4.24	5.22	6.24	7.07	7.33	8.16	8.87	9.34	9.54	10.22
	HI PR	236	243	257	268	269	309	349	376	375	373
	LO PR	31	42	53	61	65	80	94	104	104	103
880	MBh†	2.12	4.79	8.79	12.09	13.49	16.52	19.29	21.05	22.13	24.27
	T/R	9.30	11.80	15.00	17.10	17.70	17.60	17.30	16.90	17.10	16.40
	AMPS*	4.24	5.18	6.19	6.96	7.27	8.00	8.70	9.17	9.41	10.05
	HI PR	233	241	253	260	264	303	341	368	367	365
	LO PR	31	42	52	61	64	78	92	101	102	100

P*X424 (LOW CAPACITY)

CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
500	MBh†	4.13	4.13	5.94	7.55	8.09	11.24	14.47	16.91	17.94	19.68
	T/R	9.90	9.90	14.00	17.50	18.60	25.50	32.40	37.50	39.60	42.50
	AMPS*	5.79	5.79	6.04	6.20	6.22	6.43	6.67	6.76	6.77	6.56
	HI PR	236	236	250	264	266	293	317	355	363	375
	LO PR	45	45	57	66	71	85	102	115	120	127
550	MBh†	3.83	3.83	6.31	8.00	8.49	11.28	14.62	16.80	17.34	17.71
	T/R	8.40	8.40	13.50	16.90	17.80	23.20	29.60	33.60	34.40	34.30
	AMPS*	5.73	5.73	5.98	6.00	6.16	6.29	6.50	6.49	6.45	5.97
	HI PR	230	230	249	260	265	283	306	341	345	342
	LO PR	45	45	56	65	71	85	102	114	116	116
600	MBh†	3.87	3.87	6.51	7.76	8.29	11.41	14.56	15.94	16.04	16.24
	T/R	7.70	7.70	12.70	14.90	15.80	21.40	26.90	29.00	28.90	28.50
	AMPS*	5.70	5.70	5.81	6.01	6.03	6.17	6.28	6.18	6.05	5.59
	HI PR	227	227	247	254	256	277	295	325	324	320
	LO PR	45	45	56	66	71	85	102	108	108	108

† Total capacities are net (I.D blower heat added) system capacities

* System amps are total of indoor and outdoor amps

HEAT PUMP HEATING EXPANDED PERFORMANCE DATA

P*X430 (HIGH CAPACITY)											
CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
787	MBh†	3.33	6.61	11.17	15.07	17.00	23.34	27.39	30.12	31.27	34.93
	T/R	13.70	17.40	21.70	24.80	26.30	30.00	30.00	29.90	29.80	29.50
	AMPS*	6.18	7.06	8.06	8.85	9.23	10.26	10.84	11.23	11.39	11.92
	HI PR	247	258	282	287	293	333	374	402	401	397
	LO PR	30	39	50	58	62	79	96	108	108	108
875	MBh†	3.50	6.61	11.20	15.20	16.97	21.88	25.56	28.00	29.00	32.15
	T/R	13.00	15.60	19.50	22.40	23.50	25.10	25.00	24.80	24.60	24.20
	AMPS*	6.09	7.10	8.02	8.80	9.10	9.88	10.44	10.81	10.96	11.46
	HI PR	247	251	266	279	282	320	358	384	383	379
	LO PR	28	39	50	58	62	77	91	102	102	101
962	MBh†	3.02	6.86	11.31	15.19	16.84	20.86	24.28	26.49	27.40	30.17
	T/R	10.10	14.70	17.90	20.30	21.10	21.60	21.40	21.20	21.00	20.50
	AMPS*	6.22	6.96	7.98	8.74	8.97	9.66	10.20	10.55	10.70	11.18
	HI PR	227	254	263	272	274	310	347	372	371	367
	LO PR	30	38	49	58	61	75	88	98	97	96
P*X430 (LOW CAPACITY)											
CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
580	MBh†	3.90	6.12	8.00	9.34	10.71	13.87	17.57	20.53	21.64	25.93
	T/R	8.40	12.90	16.40	18.90	21.50	27.40	34.20	39.60	41.60	49.20
	AMPS*	6.35	6.77	7.07	7.15	7.28	7.57	7.87	8.13	8.11	8.38
	HI PR	230	246	253	257	272	295	321	345	349	381
	LO PR	33	43	55	65	68	83	99	111	116	134
650	MBh†	3.97	5.74	8.03	10.00	11.28	14.05	17.82	20.40	21.51	23.15
	T/R	7.60	10.70	14.70	18.00	20.20	24.70	30.80	34.80	36.50	38.40
	AMPS*	6.32	6.71	6.96	7.08	7.07	7.36	7.62	7.64	7.69	7.43
	HI PR	227	238	252	262	272	285	311	323	331	338
	LO PR	33	44	55	64	67	83	98	110	115	120
715	MBh†	4.00	6.23	8.57	10.11	10.95	14.19	17.87	20.15	20.54	21.04
	T/R	7.00	10.60	14.20	16.50	17.70	22.60	27.90	31.10	31.40	31.40
	AMPS*	6.31	6.65	6.89	6.97	7.03	7.22	7.41	7.41	7.32	6.87
	HI PR	225	238	252	257	262	279	300	312	313	311
	LO PR	33	43	54	64	68	82	98	108	110	110

† Total capacities are net (I.D blower heat added) system capacities

* System amps are total of indoor and outdoor amps

HEAT PUMP HEATING EXPANDED PERFORMANCE DATA

P*X436 (HIGH CAPACITY)

CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
1080	MBh†	6.52	9.85	14.51	18.15	19.92	27.33	34.05	36.48	37.90	41.61
	T/R	12.20	14.80	18.30	20.60	21.70	26.30	29.30	29.10	29.40	29.30
	AMPS*	7.18	7.90	8.85	9.70	10.09	11.39	12.43	12.81	13.05	13.64
	HI PR	239	254	269	278	268	307	346	373	375	372
	LO PR	28	36	47	55	62	80	98	111	112	113
1200	MBh†	6.51	9.89	14.59	18.40	20.35	27.16	31.69	34.00	35.70	39.99
	T/R	10.90	13.40	16.50	18.80	19.90	23.40	24.30	24.20	24.70	25.20
	AMPS*	6.95	7.89	8.95	9.77	10.03	11.19	11.99	12.38	12.66	13.40
	HI PR	239	249	263	261	270	302	334	356	359	362
	LO PR	26	36	47	57	60	76	92	104	106	108
1320	MBh†	6.55	10.15	14.55	18.62	20.45	26.88	29.95	31.99	33.07	35.98
	T/R	10.00	12.50	15.00	17.20	18.10	21.00	20.80	20.60	20.60	20.40
	AMPS*	6.98	8.16	9.10	9.70	10.08	11.12	11.72	12.09	12.29	12.84
	HI PR	236	239	247	260	269	296	324	343	343	341
	LO PR	26	38	49	56	60	74	88	98	98	98

P*X436 (LOW CAPACITY)

CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
770	MBh†	5.70	5.94	8.45	11.82	11.70	15.26	20.99	23.54	25.80	31.91
	T/R	8.00	8.80	12.20	16.80	16.50	21.10	28.50	31.50	34.40	42.00
	AMPS*	6.90	6.55	7.09	7.33	7.44	7.73	8.33	8.40	8.85	9.45
	HI PR	230	231	242	262	253	265	307	303	333	358
	LO PR	42	43	57	63	70	85	98	113	117	137
850	MBh†	5.60	5.94	9.60	11.40	12.44	16.38	20.14	24.20	26.21	32.03
	T/R	7.80	8.00	12.60	14.70	15.90	20.50	24.60	29.30	31.50	37.90
	AMPS*	6.30	6.54	6.99	7.26	7.38	7.78	7.96	8.33	8.60	9.05
	HI PR	227	228	245	253	258	277	279	299	314	338
	LO PR	42	43	54	64	68	83	101	113	117	137
935	MBh†	5.50	6.02	8.71	11.49	11.44	16.56	20.64	24.80	26.53	31.66
	T/R	7.10	7.30	10.30	13.40	13.20	18.80	22.90	27.10	28.90	33.80
	AMPS*	6.52	6.56	7.06	7.27	7.32	7.69	7.92	8.32	8.48	8.80
	HI PR	221	226	236	246	239	271	275	301	308	325
	LO PR	41	43	57	64	70	83	101	111	117	135

† Total capacities are net (I.D blower heat added) system capacities

* System amps are total of indoor and outdoor amps

HEAT PUMP HEATING EXPANDED PERFORMANCE DATA

P*X442 (HIGH CAPACITY)											
CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
1260	MBh†	10.29	13.45	19.49	21.53	24.17	30.71	38.11	43.16	45.30	48.29
	T/R	10.50	13.00	18.00	19.20	21.30	25.90	30.90	34.10	35.40	36.10
	AMPS*	10.42	11.16	11.61	12.16	12.44	13.33	14.31	14.91	15.24	15.47
	HI PR	233	237	267	258	282	314	347	369	377	379
	LO PR	31	41	49	60	61	79	98	111	115	118
1400	MBh†	10.87	15.26	19.56	22.00	24.31	31.00	37.92	41.00	41.71	38.58
	T/R	10.00	13.30	16.20	17.60	19.20	23.40	27.50	28.90	29.00	25.50
	AMPS*	10.18	10.88	11.64	12.19	12.41	13.30	14.09	14.51	14.56	14.07
	HI PR	236	251	262	255	266	298	329	351	351	331
	LO PR	29	38	49	60	62	78	95	106	106	95
1540	MBh†	10.70	13.92	19.79	21.97	24.27	31.25	37.32	38.65	39.48	41.14
	T/R	8.90	11.00	14.90	15.90	17.40	21.40	24.50	24.50	24.70	24.70
	AMPS*	10.18	11.29	11.70	12.15	12.43	13.36	14.07	14.15	14.23	14.31
	HI PR	233	232	256	250	257	286	315	335	336	333
	LO PR	28	41	49	59	63	77	90	100	101	101
P*X442 (LOW CAPACITY)											
CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
875	MBh†	5.96	8.91	11.75	14.47	16.19	20.07	23.41	27.47	30.07	36.59
	T/R	8.10	11.80	15.20	18.40	20.50	24.90	28.50	33.10	36.10	43.40
	AMPS*	9.29	9.38	9.69	9.87	9.77	10.05	10.09	10.33	10.75	11.24
	HI PR	228	242	255	268	275	289	287	306	327	361
	LO PR	33	41	51	62	64	78	97	109	114	132
975	MBh†	6.06	8.68	11.47	14.60	15.68	19.91	23.91	28.60	30.42	36.48
	T/R	7.30	10.30	13.20	16.60	17.70	22.10	26.00	30.80	32.60	38.50
	AMPS*	9.31	9.56	9.69	9.79	9.86	10.06	9.97	10.41	10.56	10.76
	HI PR	225	233	239	261	266	283	281	311	322	339
	LO PR	33	44	55	61	65	80	97	108	112	132
1075	MBh†	6.15	9.13	12.66	14.86	15.83	19.23	25.05	28.87	30.73	35.42
	T/R	6.80	9.80	13.20	15.30	16.20	19.20	24.60	28.00	29.70	33.60
	AMPS*	9.33	9.36	9.49	9.73	9.79	9.76	10.08	10.28	10.41	10.50
	HI PR	223	234	247	256	260	258	286	303	309	324
	LO PR	33	41	52	61	65	82	96	107	112	127

† Total capacities are net (I.D blower heat added) system capacities

* System amps are total of indoor and outdoor amps

HEAT PUMP HEATING EXPANDED PERFORMANCE DATA

P*X448 (HIGH CAPACITY)

CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
1440	MBh†	14.06	18.13	22.73	24.98	28.87	34.28	38.56	46.55	49.30	57.58
	T/R	11.00	14.10	17.60	19.20	22.20	26.30	29.40	35.60	37.70	44.00
	AMPS*	11.57	12.50	13.46	13.92	14.57	15.44	16.28	17.71	18.28	19.79
	HI PR	241	255	271	258	295	307	327	357	366	400
	LO PR	31	41	52	62	63	78	92	106	111	131
1600	MBh†	12.45	16.75	21.36	25.20	29.11	34.90	41.57	47.00	49.26	57.10
	T/R	8.70	11.70	14.80	17.40	20.10	24.00	28.50	32.10	33.70	38.90
	AMPS*	12.01	12.86	13.49	13.96	14.61	15.69	16.60	17.76	18.04	19.74
	HI PR	227	234	244	254	287	305	317	345	351	392
	LO PR	33	43	54	62	63	77	94	106	111	129
1760	MBh†	13.20	19.61	23.36	25.41	27.05	33.42	41.67	46.85	49.01	56.63
	T/R	8.40	12.40	14.70	15.90	16.90	20.80	25.80	29.00	30.30	34.90
	AMPS*	12.35	12.85	13.65	14.03	14.23	14.99	16.74	17.57	17.99	19.76
	HI PR	223	256	263	250	254	271	319	334	343	387
	LO PR	33	40	52	62	65	79	94	106	111	127

P*X448 (LOW CAPACITY)

CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
1000	MBh†	6.32	9.56	13.29	16.23	17.56	22.40	28.25	32.80	34.92	42.76
	T/R	7.90	11.50	15.50	18.60	19.90	24.70	30.40	34.80	36.80	44.20
	AMPS*	9.89	10.38	10.81	11.09	11.21	11.60	12.03	12.35	12.51	13.17
	HI PR	228	242	258	270	276	297	321	339	347	379
	LO PR	34	45	57	66	70	85	101	114	119	139
1100	MBh†	6.41	9.68	13.44	16.40	17.76	22.67	28.58	33.20	35.36	43.48
	T/R	7.20	10.60	14.20	17.00	18.20	22.60	27.80	31.80	33.70	40.60
	AMPS*	9.91	10.37	10.76	11.00	11.10	11.45	11.80	12.09	12.24	12.92
	HI PR	226	238	253	264	270	289	310	327	335	370
	LO PR	34	45	57	66	70	85	101	114	119	139
1200	MBh†	6.50	9.78	13.57	16.55	17.94	22.88	28.85	33.54	35.71	42.76
	T/R	6.70	9.80	13.10	15.70	16.80	20.90	25.70	29.30	31.00	44.20
	AMPS*	9.95	10.37	10.72	10.94	11.03	11.33	11.64	11.90	12.03	13.17
	HI PR	224	236	249	259	264	282	302	317	325	379
	LO PR	34	45	56	66	70	85	101	113	119	139

† Total capacities are net (I.D blower heat added) system capacities

* System amps are total of indoor and outdoor amps

HEAT PUMP HEATING EXPANDED PERFORMANCE DATA

P*X460 (HIGH CAPACITY)											
CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
1575	MBh†	16.93	21.89	29.76	32.08	33.99	40.90	48.34	55.96	57.86	69.44
	T/R	11.30	14.70	20.00	21.50	22.80	27.40	32.50	37.80	39.10	47.30
	AMPS*	14.57	15.52	16.18	17.22	17.54	18.71	19.98	21.87	21.68	24.48
	HI PR	228	237	276	260	265	282	301	348	328	387
	LO PR	32	41	47	58	62	74	90	101	108	127
1750	MBh†	18.19	24.51	30.14	32.40	34.33	41.42	48.67	57.00	59.06	70.52
	T/R	11.00	14.80	18.10	19.50	20.60	24.90	29.30	34.50	35.70	42.90
	AMPS*	14.13	14.97	16.20	17.20	17.51	18.62	19.74	21.36	21.46	23.74
	HI PR	238	258	268	255	259	275	291	319	319	357
	LO PR	29	37	47	58	61	75	90	102	108	127
1925	MBh†	18.67	24.97	30.54	32.74	34.69	41.80	49.23	57.69	60.60	71.70
	T/R	10.20	13.60	16.70	17.80	18.90	22.80	26.80	31.50	33.20	39.40
	AMPS*	14.29	14.98	16.28	17.24	17.53	18.57	19.63	21.20	21.74	23.59
	HI PR	235	250	263	251	255	269	283	312	326	349
	LO PR	30	37	47	58	61	75	90	101	106	126
P*X460 (LOW CAPACITY)											
CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb									
		-10	0	10	17	20	30	40	47	50	60
		Entering Indoor Temperature - Degrees F, Dry Bulb									
		70									
1170	MBh†	10.45	13.87	18.17	22.17	23.50	27.18	33.52	38.70	42.76	52.47
	T/R	12.00	15.30	19.30	22.90	24.00	26.80	32.00	36.20	39.80	47.70
	AMPS*	12.96	13.13	13.23	13.59	13.73	14.03	14.35	14.72	15.46	16.54
	HI PR	233	243	261	286	292	281	300	317	345	384
	LO PR	33	43	54	61	66	82	97	109	115	135
1300	MBh†	10.48	13.79	17.51	22.00	22.05	28.54	33.83	40.60	43.20	52.30
	T/R	10.80	13.60	16.60	20.40	20.20	25.20	28.90	34.10	36.00	42.40
	AMPS*	12.90	13.12	13.37	13.35	13.63	14.05	14.01	14.78	15.01	15.59
	HI PR	230	237	246	274	260	299	291	322	331	358
	LO PR	33	43	55	62	68	81	97	109	114	134
1430	MBh†	10.49	14.01	17.67	22.20	22.19	27.64	35.80	40.95	43.58	51.47
	T/R	9.80	12.60	15.20	18.60	18.40	22.10	27.80	31.10	32.80	37.60
	AMPS*	12.87	12.87	13.31	13.25	13.45	13.54	14.14	14.53	14.73	15.13
	HI PR	227	236	243	270	255	267	303	316	322	343
	LO PR	33	42	54	62	68	81	96	108	114	132

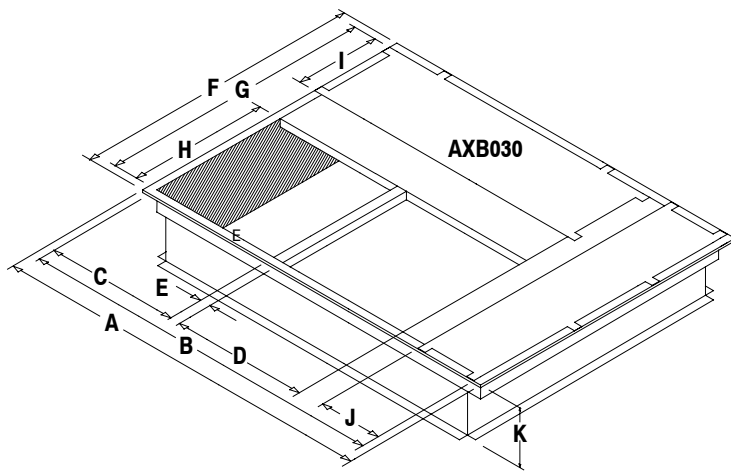
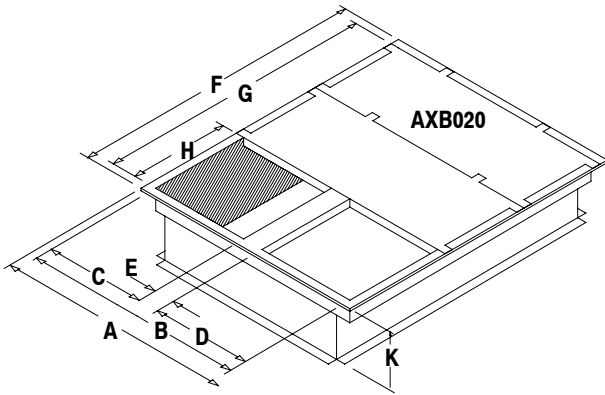
† Total capacities are net (I.D blower heat added) system capacities

* System amps are total of indoor and outdoor amps

ACCESSORIES

ROOF CURBS

Model Number	Height (K) - inches (mm)	Use With Model Size
AXB020CLA	8" (203.2)	24, 30
AXB020CMA	14" (355.6)	
AXB020CHA	24" (609.6)	
AXB030CLA	8" (203.2)	36, 42, 48, 60
AXB030CMA	14" (355.6)	
AXB030CHA	24" (609.6)	



ROOF CURB DIMENSIONS inches (mm)

Model Number	A	B	C	D	E	F	G	H	I	J	K (LA)	K (MA)	K (HA)
AXB020(L,M,H)A	42-3/4 (1086)	39-3/4 (1010)	18 (457)	18 (457)	3-3/4 (95)	42-3/4 (1086)	39-3/4 (1010)	18 (457)	-	-	8 (210)	14 (356)	24 (610)
AXB030(L,M,H)A	67-3/4 (1721)	64-3/4 (1721)	23 (584)	23 (584)	2-1/2 (63.5)	42-3/4 (1086)	39-3/4 (1010)	23 (584)	12 (305)	12 (305)	8 (210)	14 (356)	24 (610)

SQUARE to ROUND TRANSITION inches (mm)

Model Number	Round Size	Use With Roof Curb	Use With Model Size
AXB020CTA	16" (406)	AXB020CLA, AXB020CMA, AXB020CHA	24, 30
AXB030CTA	18" (457)	AXB030CLA, AXB030CMA, AXB030CHA	36, 42, 48, 60

CONCENTRIC GRILLE - FLUSH MOUNT

Model Number	Use With Roof Curb	Use With Model Size
AXB020CFA	AXB020CLA, AXB020CMA, AXB020CHA	24, 30
AXB030CFA	AXB030CLA, AXB030CMA, AXB030CHA	36, 42, 48, 60

CONCENTRIC GRILLE - STEP DOWN

Model Number	Use With Roof Curb	Use With Model Size
AXB020CSA	AXB020CLA, AXB020CMA, AXB020CHA	24, 30
AXB030CSA	AXB030CLA, AXB030CMA, AXB030CHA	36, 42, 48, 60

ACCESSORIES

ECONOMIZERS (ALL FULLY MODULATING)*

Part Number	Application	Motion	Control	Use With Model Size
AXB020HED	Horizontal	Fully Modulating w/ Return Air Damper w/ Relief Damper	Enthalpy	24, 30
AXB030HED				36, 42, 48, 60
AXB020EMD	Downflow			24, 30
AXB030EME				36, 42, 48, 60
AXB020HPE	Horizontal	Fully Modulating w/ Return Air Damper w/ Relief Damper	Dry Bulb Only	24, 30
AXB030HPE				36, 42, 48, 60
AXB020EPE	Downflow			24, 30
AXB030EPF				36, 42, 48, 60

- * Three position economizers no longer available.
 Economizers for model sizes 24 & 30 include Filters and Filter Racks.
 Economizers for model sizes 36, 42, 48, and 60 do NOT include Filters (Filter Racks shipped with unit).

0% - 25% FRESH AIR DAMPERS (use in DOWNFLOW application only) *

Model Number	Control	Use With Model Size
AXB020FAC	Manual	24, 30
AXB030FAC		36, 42, 48, 60
AXB020FMC	Motorized	24, 30
AXB030FMC		36, 42, 48, 60

- * Unit must have internal filters to protect evaporator coil when Fresh Air Damper is installed.
 Model sizes 24 & 30 shipped WITHOUT Filter Racks or Filters.
 Model sizes 36, 42, 48, and 60 shipped WITH Internal Filter Racks, but WITHOUT Filters.

FILTER RACK and FILTER * inches (mm)

Model Number	Application	Filter Location	Filter Size	Use With Model Size
AXB020FKA	Downflow	Internal	18 x 25 x 1 (457 x 635 x 25)	24, 30
AXB020FHC	Horizontal	External	20 x 25 x 1 (508 x 635 x 25)	

- * Model sizes 24 & 30 shipped WITHOUT Filter Racks or Filters.
 Model sizes 36, 42, 48, and 60 shipped WITH Internal Filter Racks, but WITHOUT Filters.

LOW AMBIENT CONTROL

Model Number	FAST Part Number	Description	Use With Model Size
ALA14CU0A	n/a	Pressure switch cycles condenser fan	ALL
n/a	1148232	Freeze 'stat, opens 30° F, closes 50° F	ALL

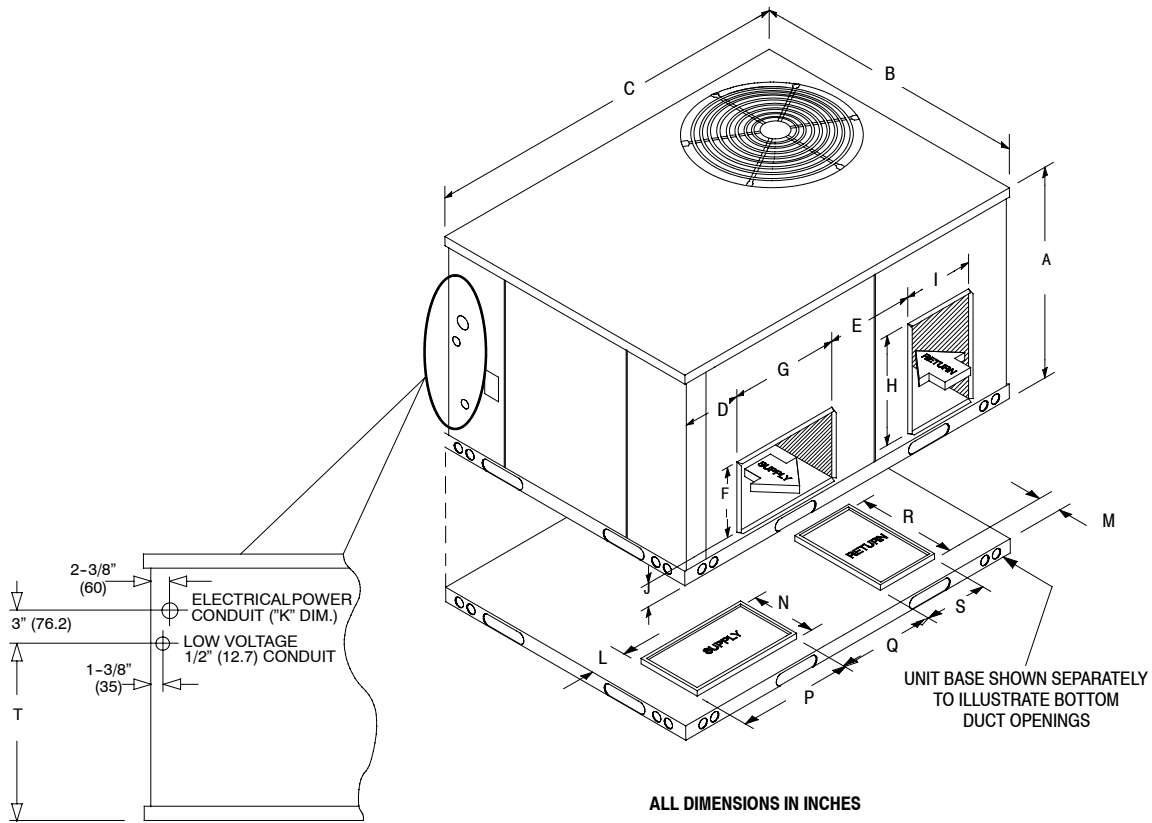
COIL PROTECTION

FAST Part Number	Description	Use With Model Size
1149485	Coil Guard, black, two-piece	24, 30
1068133	Hail Guard, black, two-piece	24, 30
1149486	Coil Guard, black, three-piece	36, 42, 48, 60
1068134	Hail Guard, black, three-piece	36, 42, 48, 60

OUTDOOR THERMOSTAT

Model Number	Description	Use With Model Size
AMF002OTA	2 Stage, Electronic	ALL

UNIT DIMENSIONS



Model Size (Ton)	A	B	C	D	E	F	G	H	I	J	K	L	M	N**	P**	Q	R	S	T	Bottom L x W * Inside Base Rail
2, 2 1/2	32-1/2 (825)	47-3/8 (1203)	47-3/8 (1203)	3-1/8 (79)	11-1/8 (283)	12 (305)	14-1/4 (362)	14-1/4 (362)	12 (305)	4 (102)	3/4 & 1 (19 & 25)	4-1/4 (108)	4-3/8 (111)	14-1/2 (368)	12-1/4 (311)	12-1/8 (308)	14-1/4 (362)	12-1/4 (311)	21-1/2 (546)	43-1/8 x 43-1/8 (1095 x 1095)
3, 3 1/2	36 (914)	47-3/8 (1203)	73 (1854)	4-5/8 (117)	15 (381)	12 (305)	18-3/4 (476)	18-3/4 (476)	12 (305)	4 (102)	1 & 1-1/4 (25 & 32)	4-1/4 (108)	5-1/4 (133)	12-1/4 (311)	19 (483)	15 (381)	19 (483)	12-1/4 (311)	25-1/16 (637)	68-3/4 x 43-1/8 (1746 x 1095)
4, 5	42 (1067)	47-3/8 (1203)	73 (1854)	4-5/8 (117)	15 (381)	12 (305)	18-3/4 (476)	18-3/4 (476)	12 (305)	4 (102)	1 & 1-1/4 (25 & 32)	4-1/4 (108)	5-1/4 (133)	12-1/4 (311)	19 (483)	15 (381)	19 (483)	12-1/4 (311)	31-1/16 (789)	68-3/4 x 43-1/8 (1746 x 1095)

** The supply opening in the drawing is shown for the orientation in the 3 to 5 Ton units. The opening for the 2 to 2-1/2 Ton units is rotated 90°, so the N and P dimensions are correct.

MODEL NOMENCLATURE

MODEL SERIES	P	H	X	4	36	000	K	00	A	1
P = Package										
H = Heat Pump										
X = R-410A										
4 = 14										
SEER										
24 = 24,000 BTUH = 2 Tons										
30 = 30,000 BTUH = 2.5 Tons										
36 = 36,000 BTUH = 3 Tons										
42 = 42,000 BTUH = 3.5 Tons										
48 = 48,000 BTUH = 4 Tons										
60 = 60,000 BTUH = 5 Tons										
NOMINAL COOLING BTUH										
000 = No heat										
NOMINAL HEATING BTUH										
K = 208/230-1-60										
VOLTAGE										
00 = No Options										
FACTORY INSTALLED OPTIONS										
Sales Model Digit										
Engineering Digit										

GUIDE SPECIFICATIONS

CABINET

The cabinet is made of G-90 galvanized steel, phosphate coated with a tough acrylic finish coat for long lasting weatherproof construction. The base rails are 18 gauge steel with fork lift slots and holes provided for lifting shackles. The unit is designed with convertible airflow for either horizontal or downflow applications with conversion accomplished by relocating two panels. Indoor blower compartment interior cabinet surfaces are insulated with a minimum 3/4" thick, flexible glass insulation, coated on the air side. Aluminum foil faced glass fiber insulation is used in the furnace compartment.

COOLING SECTION

The unit is factory charged and operationally ready upon delivery. The unit refrigerant circuit has a high efficiency fully hermetic compressor with internal overload protection, and copper tube / aluminum fin evaporator and condenser coils. The unit is designed for cooling operation to 40° F and will be capable of being wired for field installed economizer type accessories.

COILS

The evaporator and condenser coils are fabricated with aluminum fins mechanically bonded to copper tubing. Both coils are pressure tested prior to assembly into the unit and electronically leak tested after assembly into the unit.

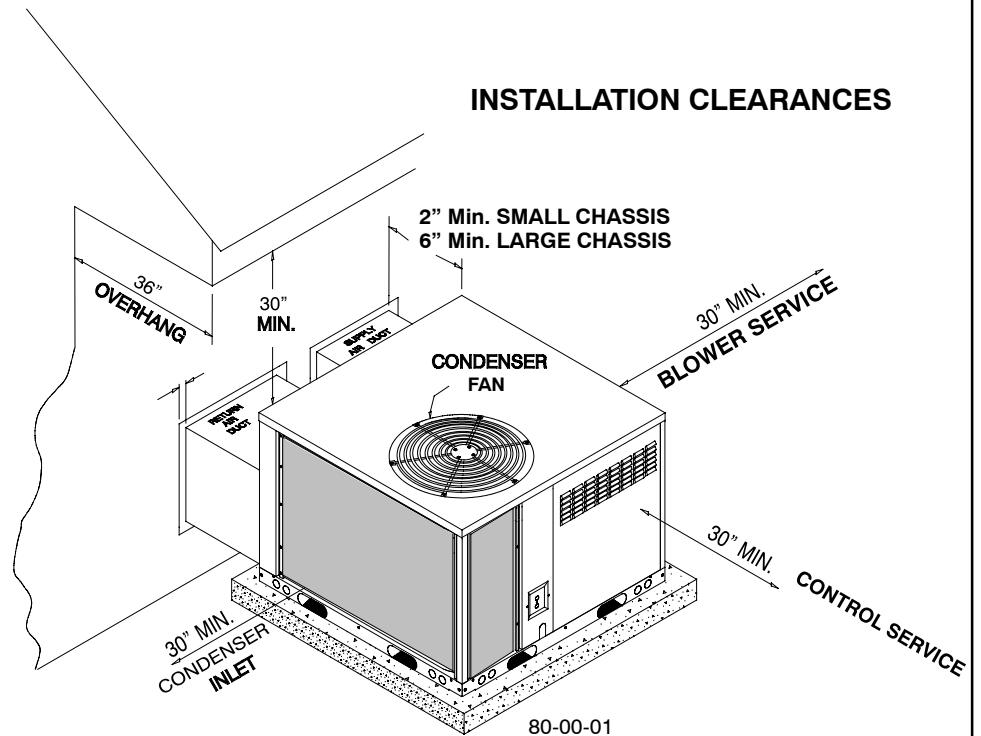
CONDENSER FAN

The unit has a single direct-drive propeller-fan / motor assembly. The assembly is mounted directly to a vertical-discharge grille that is easily removed for service. Motors are 1100 RPM with sleeve or ball bearings and internal overload protection.

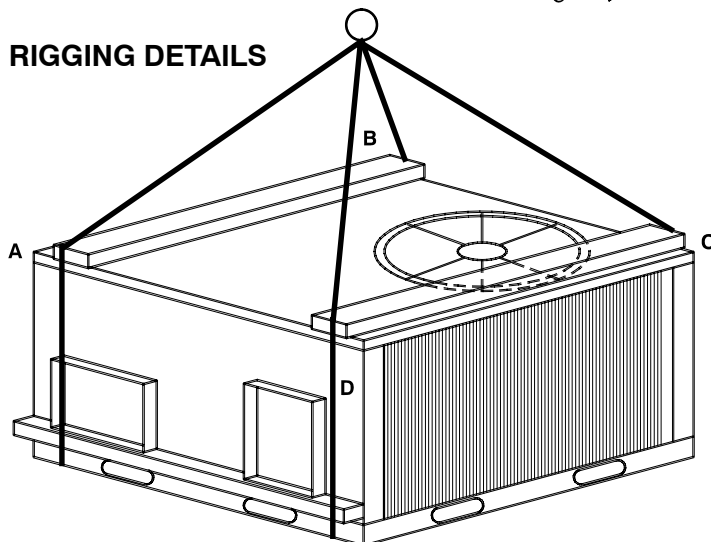
EVAPORATOR BLOWER

All units have a direct-drive evaporator blower motor as a standard. The direct-drive evaporator blower motor has sleeve bearings and internal overload protection.

INSTALLATION CLEARANCES



RIGGING DETAILS



CORNER WEIGHTS (LBS)

MODEL	A	B	C	D	OPERATING WEIGHT TOTAL
PHX424	81	114	123	91	410
PHX430	81	114	123	91	410
PHX436	91	124	133	94	442
PHX442	117	160	171	121	568
PHX448	134	159	172	135	599
PHX460	128	173	181	142	624