

PHB SERIES

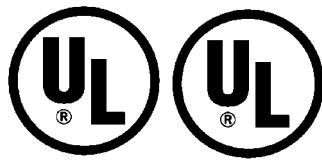
7-1/2 THRU 10 TON



Representative photo only, some models may vary in appearance.



Rated in accordance
with ARI Standard 240.



Listed By
Underwriters'
Laboratories

COMMERCIAL SINGLE PACKAGE HEAT PUMPS

COMMERCIAL PACKAGE HEAT PUMP FEATURES

EFFICIENCY

- 7-1/2 and 10 ton Cooling

SINGLE PACKAGE

- Single package cooling and heating. Self contained for year-round comfort. Systems can be installed on rooftop or ground level with the new convertible design.

CONSTRUCTION

- G-90 galvanized steel, phosphate coated with an epoxy based primer and a polyester finish coat for long lasting weatherproof construction. Access panels for easy service. Side by side supply and return. Heavy 16 gauge base with rails.

CABINET

- Sturdy galvanized steel, phosphate coated with a tough Electro Powder Coated Polyester finish.

INTEGRAL BASE RAILS

- Fork-lift access on three sides. Holes provided for lifting lugs makes rooftop installation easier.

IMPROVED INSULATION

- Dual density insulation improves temperature separation.

COPPER TUBE/ALUMINUM FIN COILS

- Enhanced aluminium fins mechanically bonded to copper tubes for improved heat transfer.

FILTER DRIERS

- To insure refrigerant cleanliness.

HIGH & LOW PRESSURE SWITCHES

- To provide excellent compressor protection.

EXTERNALLY-MOUNTED GAUGE PORTS

- Allows for easy, accurate reading of operating conditions while servicing.

INNOVATIVE EVAPORATOR BLOWER DESIGN

- "No Difference" Design allows the evaporator blower to deliver the same static capability for either horizontal or down discharge applications.

INTERNAL AIR FILTERS

- Easy access air filters to maintain a clean evaporator coil.

PRE-WIRED FOR ECONOMIZER

- Designed for slide-in, plug-in economizer installation.

ACCESSORY ELECTRIC HEAT KITS

- 10 - 60 kW

RESIDENTIAL AND COMMERCIAL SYSTEMS • SPLIT SYSTEMS • PACKAGED AIR CONDITIONERS
• COMBINATION GAS / ELECTRIC UNITS • HEAT PUMPS • AIR HANDLERS • MANUFACTURED
HOME AIR CONDITIONERS • GAS, OIL AND ELECTRIC FURNACES

International Comfort Products
650 Heil-Quaker Avenue, Lewisburg, TN 37091

UNIT SPECIFICATIONS

Model Number		PHB090N2H	PHB090N2L	PHB090N2S	PHB120N2H	PHB120N2L	PHB120N2S		
Electrical Data	Volts-PHBse-Hz	208/230-3-60		460-3-60	575-3-60		208/230-3-60	460-3-60	575-3-60
	Ampacity	39		18.2	14.8		56.3	29.0	23.3
	Maximum Fuse/HACR Breaker	50		20	20		70	35	30
Condenser Data	Coil	Total Face Area (Sq. Ft.)	23			23			
		Fins Per In. / Rows	20 / 2			20 / 2			
		Tube Diameter (In.)	3/8			3/8			
	Fan	Horsepower / Quantity	3/4 / 1			3/4 / 2			
		Motor	Full Load Amps.			3.5			
		Locked Rotor Amps.			10				
	Fan	Size Diameter (In.)	24			24			
		RPM (Maximum)	1100			1100			
		CFM (Maximum)	5800 x 1			4600 x 2			
Evaporator Coil	Coil	Total Face Area (Sq. Ft.)	23.0			23.0			
		Fins Per In. / Rows	16 / 2			16 / 2			
		Tube Diameter (In.)	3/8			3/8			
	Blower	H.P.	2	2	2	2	2	2	
		Motor	Full Load Amps.		6.8	3.4	3.4	10.4	5.2
		Locked Rotor Amps.		57.5	28.9	28.9	57.5	28.9	28.9
	Blower	Type & Size	12 x 12 Belt Drive			12 x 12 Belt Drive			
		RPM (Maximum)	1750			1750			
		CFM Rated	3000			4000			
Compressor	Quantity / Type	2 / Recip			2 / Scroll				
	Rated Load Amps.	#1	12.6	5.7	4.7	17.3	9.0	7.9	
		#2	12.6	5.7	4.7	17.3	9.0	7.9	
	Lock Rotor Amps.	#1	91	42	39	123	62	50	
		#2	91	42	39	123	62	50	
	Factory Refrigerant Charge R-22 oz. per Circuit		#1 - 193 #2 - 193			#1 - 200 #2 - 200			
Weight	Shipping (Lbs.)	1100			1150				

PERFORMANCE DATA: COOLING

Model	Rated Cap.	S/T	EER	I.P.L.V.	Capacity Stages %	Evaporator
PHB090	91,000	.75	9.3	10.4	50 / 100	3000 SCFM
PHB120	123,000	.75	9.1	9.5	50 / 100	4000 SCFM

NOTE: Net Ratings

PERFORMANCE DATA: ELECTRIC HEAT ACCESSORY

Heater Model	Supply Voltage	KW Rating	1st Stage Heating BTUH	2nd Stage Heating BTUH	Total Heating BTUH	Temperature Rise °F @ CFM *						
						2400	3000	3200	4000	4800	5000	6000
AEB010EHA	240-3-60	10	34,140	----	34,140	13.2	10.5	----	----			
AEB010ELA	480-3-60	10	34,140	----	34,140	13.2	10.5	----	----			
AEB010ESA	600-3-60	10	34,140	----	34,140	13.2	10.5	----	----			
AEB020EHA	240-3-60	20	68,280	----	68,280	26.3	21.1	19.8	15.8	13.2	12.6	----
AEB020ELA	480-3-60	20	68,280	----	68,280	26.3	21.1	19.8	15.8	13.2	12.6	----
AEB020ESA	600-3-60	20	68,280	----	68,280	26.3	21.1	19.8	15.8	13.2	12.6	----
AEB030EHA	240-3-60	30	102,420	----	102,420	39.5	31.6	29.6	23.7	19.8	19.0	15.8
AEB030ELA	480-3-60	30	102,420	----	102,420	39.5	31.6	29.6	23.7	19.8	19.0	15.8
AEB030ESA	600-3-60	30	102,420	----	102,420	39.5	31.6	29.6	23.7	19.8	19.0	15.8
AEB040EHA	240-3-60	40	102,420	34,140	136,560	59.3	47.4	44.4	35.6	29.6	28.4	23.7
AEB045ELA	480-3-60	45	102,420	51,210	153,630	59.3	47.4	44.4	35.6	29.6	28.4	23.7
AEB045ESA	600-3-60	45	102,420	51,210	153,630	59.3	47.4	44.4	35.6	29.6	28.4	23.7
AEB060EHA	240-3-60	60	102,420	102,420	204,840	----	----	59.3	47.4	39.5	37.9	31.6
AEB060ELA	480-3-60	60	102,420	102,420	204,840	----	----	59.3	47.4	39.5	37.9	31.6
AEB060ESA	600-3-60	60	102,420	102,420	204,840	----	----	59.3	47.4	39.5	37.9	31.6

NOTES: See Page 11 for electric heat matchup/data * Refers to all voltage models in a particular series except 208V units. For 208V units multiply selected temperature rise by 0.82.

EXPANDED PERFORMANCE DATA (COOLING) - PHB090N2H, PHB090N2L & PHB090N2S

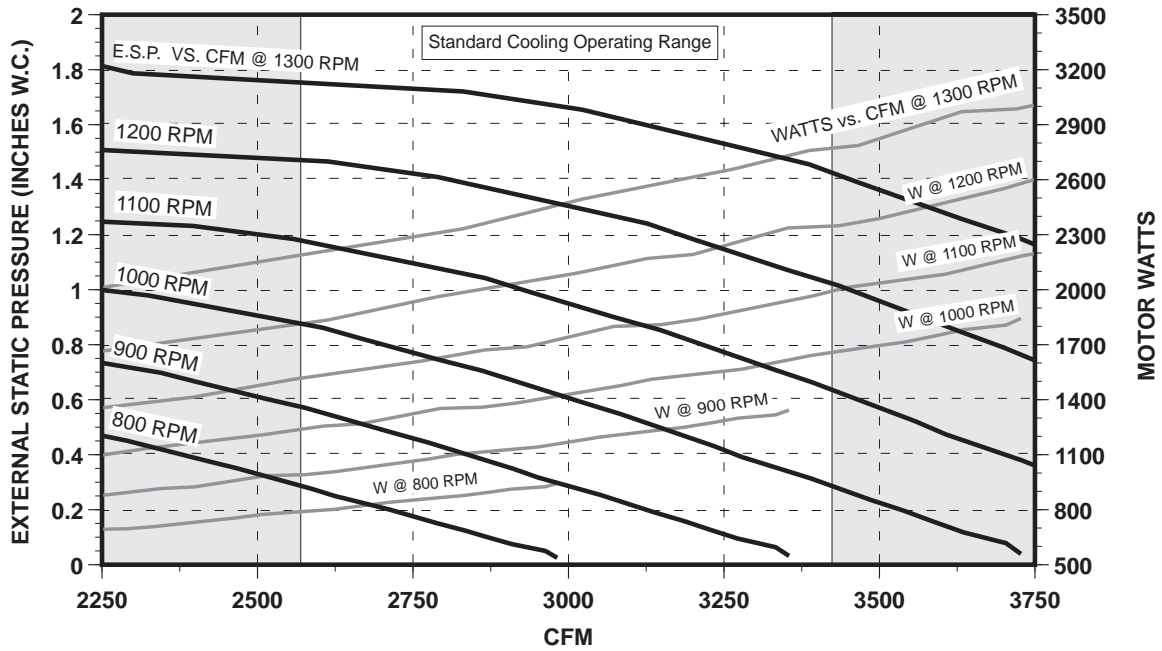
Airflow			Outdoor Ambient Temperature - Degrees F. Dry Bulb																							
			65				75				85				95				105				115			
			Entering Indoor Temperature - Degrees F. Wet Bulb																							
IDB*	CFM		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
70	3360	MBh	89.2	92.4	101.3	-	87.1	90.3	98.9	-	85.0	88.1	96.6	-	83.0	86.0	94.2	-	78.8	81.7	89.5	-	73.0	75.7	82.9	-
		S/T	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.80	0.67	0.46	-	0.83	0.69	0.48	-	0.86	0.72	0.50	-	0.86	0.72	0.50	-
		KW	7.70	7.86	8.10	-	8.27	8.44	8.70	-	8.77	8.95	9.23	-	9.21	9.40	9.70	-	9.58	9.79	10.10	-	9.90	10.12	10.44	-
	3000	MBh	86.6	89.7	98.3	-	84.6	87.6	96.0	-	82.5	85.6	93.7	-	80.5	83.5	91.5	-	76.5	79.3	86.9	-	70.9	73.5	80.5	-
		S/T	0.72	0.60	0.42	-	0.74	0.62	0.43	-	0.76	0.64	0.44	-	0.79	0.66	0.46	-	0.82	0.68	0.47	-	0.82	0.69	0.48	-
		KW	7.65	7.80	8.03	-	8.21	8.37	8.63	-	8.70	8.88	9.16	-	9.13	9.33	9.62	-	9.50	9.71	10.02	-	9.82	10.04	10.36	-
	2640	MBh	82.2	85.2	93.4	-	80.3	83.3	91.2	-	78.4	81.3	89.1	-	76.5	79.3	86.9	-	72.7	75.3	82.5	-	67.3	69.8	76.5	-
		S/T	0.69	0.57	0.40	-	0.71	0.60	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.79	0.66	0.46	-
		KW	7.53	7.68	7.91	-	8.08	8.24	8.50	-	8.56	8.74	9.01	-	8.99	9.18	9.47	-	9.35	9.55	9.85	-	9.66	9.87	10.19	-
75	3360	MBh	90.7	93.4	101.1	108.5	88.6	91.2	98.7	105.9	86.5	89.0	96.4	103.4	84.4	86.9	94.0	100.9	80.1	82.5	89.3	95.9	74.2	76.4	82.7	88.8
		S/T	0.86	0.77	0.58	0.37	0.89	0.79	0.60	0.39	0.91	0.81	0.62	0.40	0.94	0.84	0.64	0.41	0.97	0.87	0.66	0.42	0.98	0.88	0.67	0.43
		KW	7.76	7.92	8.16	8.41	8.33	8.51	8.77	9.04	8.84	9.02	9.31	9.60	9.28	9.48	9.78	10.10	9.66	9.87	10.18	10.51	9.98	10.20	10.53	10.88
	3000	MBh	88.0	90.6	98.1	105.3	86.0	88.5	95.8	102.9	83.9	86.4	93.6	100.4	81.9	84.3	91.3	98.0	77.8	80.1	86.7	93.1	72.1	74.2	80.3	86.2
		S/T	0.82	0.73	0.55	0.36	0.85	0.76	0.57	0.37	0.87	0.78	0.59	0.38	0.90	0.80	0.61	0.39	0.93	0.83	0.63	0.40	0.94	0.84	0.63	0.41
		KW	7.71	7.86	8.10	8.35	8.27	8.44	8.70	8.97	8.77	8.95	9.23	9.53	9.21	9.40	9.70	10.01	9.58	9.79	10.10	10.43	9.90	10.12	10.44	10.79
	2640	MBh	83.6	86.1	93.2	100.0	81.7	84.1	91.0	97.7	79.8	82.1	88.9	95.4	77.8	80.1	86.7	93.1	73.9	76.1	82.4	88.4	68.5	70.5	76.3	81.9
		S/T	0.78	0.70	0.53	0.34	0.81	0.73	0.55	0.35	0.83	0.74	0.56	0.36	0.86	0.77	0.58	0.37	0.89	0.80	0.60	0.39	0.90	0.80	0.61	0.39
		KW	7.59	7.74	7.97	8.22	8.14	8.31	8.56	8.83	8.63	8.81	9.08	9.37	9.06	9.25	9.54	9.85	9.43	9.63	9.94	10.26	9.74	9.95	10.27	10.61
80	3360	MBh	92.3	94.3	100.8	107.7	90.1	92.1	98.4	105.2	88.0	89.9	96.1	102.7	85.9	87.7	93.7	100.2	81.6	83.3	89.0	95.2	75.6	77.2	82.5	88.2
		S/T	0.94	0.88	0.72	0.54	1.00	0.91	0.74	0.56	1.00	0.94	0.76	0.57	1.00	0.97	0.79	0.59	1.00	1.00	0.82	0.61	1.00	1.00	0.82	0.62
		KW	7.82	7.98	8.22	8.48	8.40	8.57	8.84	9.12	8.91	9.10	9.38	9.68	9.36	9.56	9.86	10.18	9.74	9.95	10.27	10.60	10.07	10.28	10.62	10.97
	3000	MBh	89.6	91.6	97.8	104.6	87.5	89.4	95.6	102.1	85.4	87.3	93.3	99.7	83.4	85.2	91.0	97.3	79.2	80.9	86.5	92.4	73.4	75.0	80.1	85.6
		S/T	0.90	0.84	0.68	0.51	0.93	0.87	0.71	0.53	0.95	0.89	0.73	0.54	0.98	0.92	0.75	0.56	1.00	0.96	0.78	0.58	1.00	0.96	0.78	0.59
		KW	7.76	7.92	8.16	8.41	8.33	8.51	8.77	9.04	8.84	9.02	9.31	9.60	9.28	9.48	9.78	10.10	9.66	9.87	10.18	10.52	9.99	10.20	10.53	10.88
	2640	MBh	85.1	87.0	92.9	99.3	83.1	85.0	90.8	97.0	81.2	82.9	88.6	94.7	79.2	80.9	86.5	92.4	75.2	76.9	82.1	87.8	69.7	71.2	76.1	81.3
		S/T	0.86	0.80	0.65	0.49	0.89	0.83	0.68	0.51	0.91	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.98	0.92	0.75	0.56	0.99	0.92	0.75	0.56
		KW	7.65	7.80	8.03	8.28	8.21	8.37	8.63	8.90	8.70	8.88	9.16	9.45	9.13	9.33	9.62	9.93	9.50	9.71	10.02	10.34	9.82	10.04	10.36	10.70
85	3360	MBh	93.9	95.7	100.3	107.0	91.7	93.5	97.9	104.5	89.5	91.3	95.6	102.0	87.4	89.0	93.3	99.5	83.0	84.6	88.6	94.5	76.9	78.4	82.1	87.6
		S/T	0.98	0.95	0.86	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.76	1.00	1.00	0.98	0.79	1.00	1.00	0.98	0.80
		KW	7.88	8.04	8.29	8.54	8.46	8.64	8.91	9.19	8.98	9.17	9.46	9.76	9.43	9.63	9.94	10.26	9.82	10.03	10.35	10.69	10.15	10.37	10.70	11.06
	3000	MBh	91.2	92.9	97.3	103.8	89.1	90.8	95.1	101.4	86.9	88.6	92.8	99.0	84.8	86.5	90.5	96.6	80.6	82.1	86.0	91.8	74.6	76.1	79.7	85.0
		S/T	0.94	0.91	0.82	0.66	0.97	0.94	0.85	0.69	1.00	0.96	0.87	0.71	1.00	0.99	0.90	0.73	1.00	1.00	0.93	0.76	1.00	1.00	0.94	0.76
		KW	7.82	7.98	8.22	8.48	8.40	8.57	8.84	9.12	8.91	9.10	9.38	9.68	9.36	9.56	9.86	10.18	9.74	9.95	10.27	10.60	10.07	10.28	10.62	10.97
	2640	MBh	86.6	88.3	92.5	98.7	84.6	86.2	90.3	96.4	82.6	84.2	88.2	94.1	80.6	82.1	86.0	91.8	76.5	78.0	81.7	87.2	70.9	72.3	75.7	80.8
		S/T	0.90	0.87	0.78	0.64	0.93	0.90	0.81	0.66	0.96	0.92	0.83	0.68	0.99	0.95	0.86	0.70	1.00	0.99	0.89	0.72	1.00	1.00	0.90	0.73
		KW	7.70	7.86	8.10	8.35	8.27	8.44	8.70	8.97	8.77	8.95	9.23	9.52	9.21	9.40	9.70	10.01	9.58	9.79	10.10	10.43	9.90	10.12	10.44	10.78

* Entering Indoor Temperature - Degrees F. Dry Bulb Standard Rating

EXPANDED PERFORMANCE DATA (HEATING) - PHB090N2H, PHB090N2L & PHB090N2S

Airflow		Outdoor Ambient Temperature - Degrees F. Dry Bulb																	
		65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
	MBh	113.1	107.1	100.9	94.2	90.0	87.2	81.0	74.7	60.1	55.4	51.0	48.2	46.4	41.6	36.9	32.2	27.5	22.5
	T/R	34.9	33.1	31.1	29.1	27.8	26.9	25.0	23.1	18.5	17.1	15.8	14.9	14.3	12.9	11.4	9.9	8.5	6.9
3000	KW	9.06	8.89	8.72	8.55	8.45	8.38	8.21	8.04	7.28	7.12	6.97	6.88	6.82	6.67	6.52	6.37	6.21	6.06
	COP	3.65	3.53	3.39	3.23	3.12	3.05	2.89	2.72	2.42	2.28	2.14	2.05	1.99	1.83	1.66	1.48	1.29	1.09
	EER	12.5	12.0	11.6	11.0	10.7	10.4	9.9	9.3	8.3	7.8	7.3	7.0	6.8	6.2	5.7	5.1	4.4	3.7

CIRCULATING BLOWER PERFORMANCE DATA - 7.5 TON UNITS (PHB090)



NOTES: 1) Maximum motor Watts is 3200 Watts for 2 HP. 2) Maximum blower wheel speed is 1800 RPM. 3) Contact factory for applications requiring operation outside standard cooling operating range. 4) Airflow data is based on dry coil with filters. For wet coil add 0.08 inches to ESP. Downflow has the same ESP as horizontal flow. 5) Pulley turns refers to turns out. In other words, 0 turns is a narrower sheave than 5 turns. 6) Blower speed **MUST** be set to give the correct air temperature rise through the unit as marked on the Rating Plate or in the *Technical Support Manual*.

CFM	EXTERNAL STATIC PRESSURE IN INCHES WATER COLUMN (PASCALS)																			
	.25 (62)		.50 (124)		.75 (186)		1.0 (249)		1.25 (311)		1.50 (373)		1.75 (435)		2.0 (497)		2.25 (559)		2.50 (622)	
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
2500					950	1100	1030	1300	1120	1550	1200	1800	1290	2150	1380	2500				
2750					990	1300	1060	1500	1145	1750	1225	2000	1320	2300	1390	2650				
3000			960	1350	1450	1600	1120	1800	1180	2000	1250	2250	1345	2550						
3250	960	1375	1025	1600	1100	1850	1160	2050	1225	2350	1290	2550	1365	2850						
3500	1010	1525	1075	1850	1145	2100	1210	2450	1275	2750	1340	3000	1390	3400						

PULLEY TURNS OPEN		0	1	2	3	4	5
FAN RPM	2 HP STD PULLEY	1224	1139	1113	1057	1001	945
	2 HP HI STATIC PULLEY	1391	1335	1280	1224	1169	1113

FACTORY SETTING TURNS OPEN	
2 HP STD PULLEY	4
2 HP HI STATIC PULLEY	See NOTE

AIRFLOW CORRECTION FACTORS - 7.5 TON

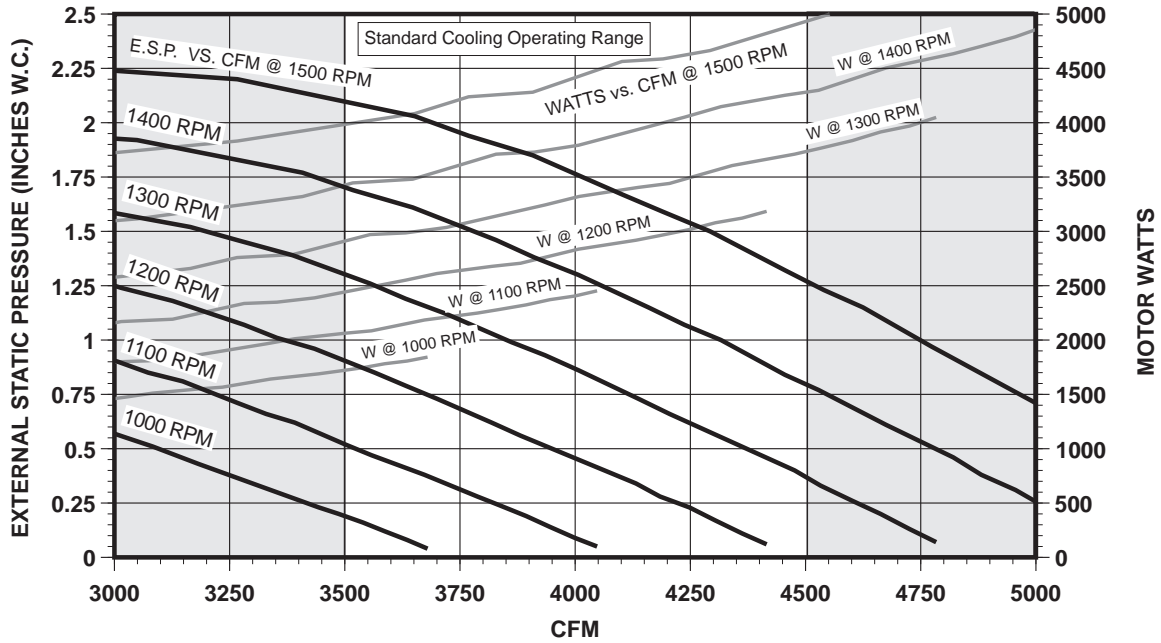
CFM - ACTUAL	2600	2800	3000	3200	3400
TOTAL MBH	0.97	0.98	1.00	1.02	1.03
SENSIBLE MBH	0.93	0.97	1.00	1.03	1.07
POWER KW	0.99	0.99	1.00	1.01	1.01

NOTE: High static pulleys are field installed and **MUST** be adjusted by the installing technician. See Page 9 for approved high static motor/pulley combinations.

NOTES: 1. Multiply correction factor times performance data.
2. Resulting sensible capacity cannot exceed total capacity.

 Not Applicable
  High Static Data
 W = Watts

CIRCULATING BLOWER PERFORMANCE DATA - 10 TON UNITS (PHB120)



NOTES: 1) Maximum motor Watts is 4250 Watts for 2 HP and 4900 Watts for 3 HP. 2) Maximum blower wheel speed is 1800 RPM. 3) Contact factory for applications requiring operation outside standard cooling operating range. 4) Airflow data is based on dry coil with filters. For wet coil add 0.08 inches to ESP. Downflow has the same ESP as horizontal flow. 5) Pulley turns refers to turns out. In other words, 0 turns is a narrower sheave than 5 turns. 6) Blower speed **MUST** be set to give the correct air temperature rise through the unit as marked on the Rating Plate or in the *Technical Support Manual*.

CFM	EXTERNAL STATIC PRESSURE IN INCHES WATER COLUMN (PASCALS)																			
	.25 (62)		.50 (124)		.75 (186)		1.0 (249)		1.25 (311)		1.50 (373)		1.75 (435)		2.0 (497)		2.25 (559)		2.50 (622)	
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
3500	1010	1760	1100	2050	1160	2300	1240	2600	1300	2900	1350	3350	1410	3500	1480	3850	1530	4100		
3750	1080	2100	1150	2400	1210	2750	1290	2900	1340	3300	1400	3600	1460	3900	1510	4300				
4000	1150	2550	1210	2900	1275	3150	1340	3500	1390	3600	1440	4000	1500	4400	1550	4750				
4250	1200	3050	1275	3350	1330	3650	1390	3900	1450	4300	1500	4600	1550	5100						
4500	1260	3500	1325	3850	1390	4200	1450	4550	1500	4950	1550	5200								

PULLEY TURNS OPEN		0	1	2	3	4	5
FAN RPM	2 HP STD PULLEY	1391	1335	1280	1224	1169	1113
	3 HP HI STATIC PULLEY	1558	1502	1446	1391	1335	1280

FACTORY SETTING TURNS OPEN	
2 HP STD PULLEY	4
3 HP HI STATIC PULLEY	(See NOTE)

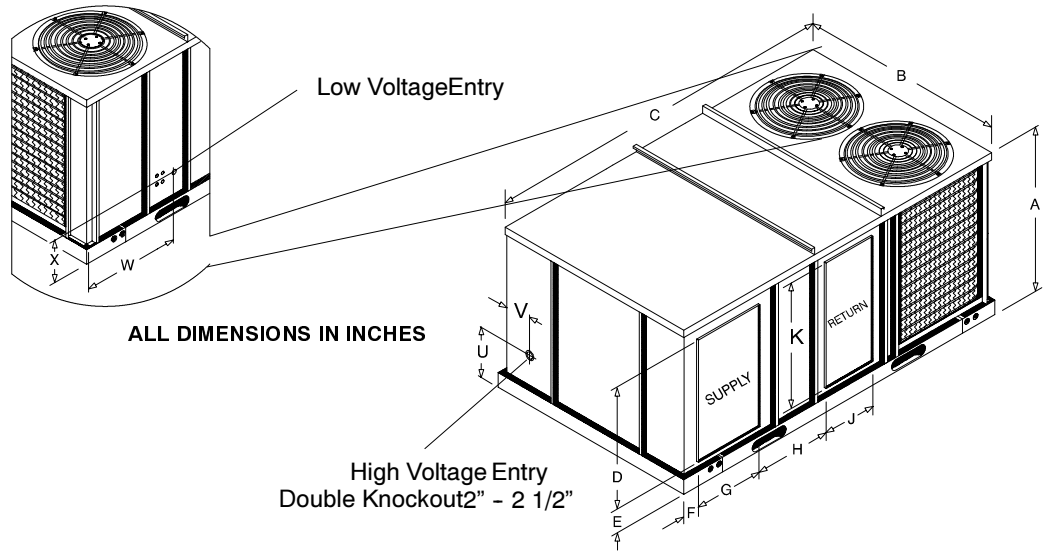
AIRFLOW CORRECTION FACTORS - 10 TON					
CFM - ACTUAL	3200	3600	4000	4400	4800
TOTAL MBH	0.95	0.97	1.00	1.03	1.05
SENSIBLE MBH	0.89	0.95	1.00	1.05	1.11
POWER KW	0.98	0.99	1.00	1.01	1.02

NOTE: High static pulley are field installed and **MUST** be adjusted by the installing technician. See Page 9 for approved high static motor/pulley combinations.

NOTES: 1. Multiply correction factor times performance data.
2. Resulting sensible capacity cannot exceed total capacity.

Not Applicable 3 HP Data W = Watts

UNIT DIMENSIONS

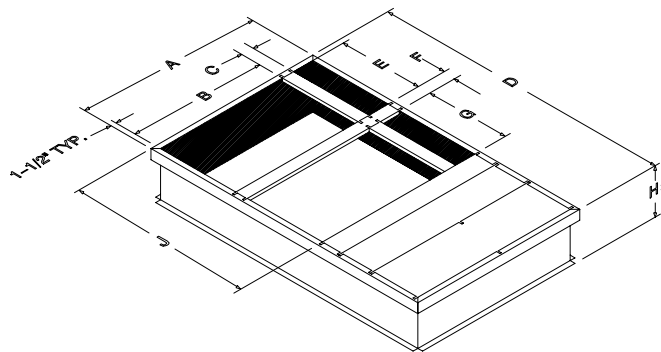


ALL DIMENSIONS IN INCHES

Unit Size	A	B	C	D	E	F	G	H	J	K
7-1/2 & 10 Ton	44-13/16	57-9/16	90-11/16	32-1/16	5-1/8	4-5/16	18-1/4	16-7/16	14-9/16	36-1/16

ACCESSORIES

ROOF CURB



ROOF CURB DIMENSIONS

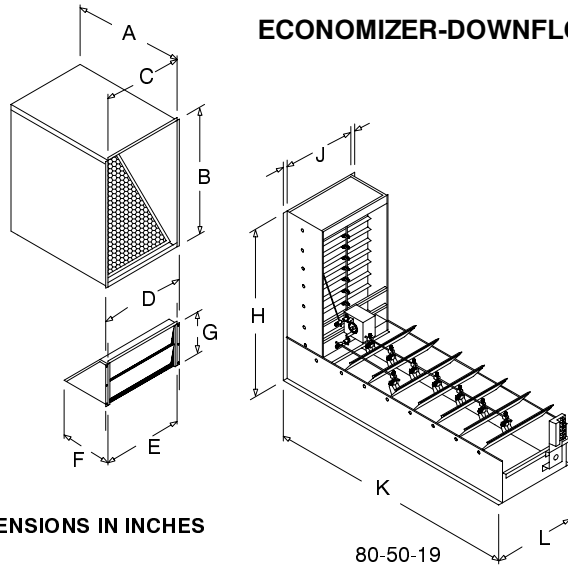
Model No.	Unit Size	A	B	C	D	E	F	G	H	J
AXB040C*A	7-1/2 & 10 Ton	51	38-1/2	3-1/2	84-1/8	23-3/4	3-1/2	23-3/4	*	52-1/2

*Roof curbs are available in three heights:

Model #	Letter	Height
	L	8"
	M	14"
	H	24"

ACCESSORIES (CONT...)

ECONOMIZER-DOWNFLOW



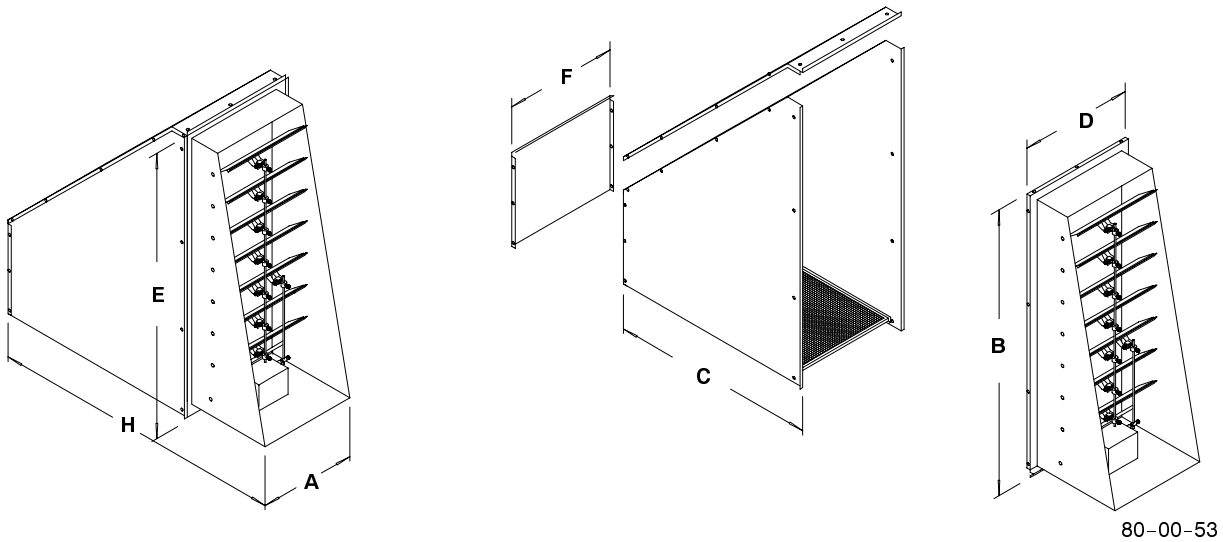
ALL DIMENSIONS IN INCHES

ECONOMIZER DIMENSIONS - DOWNFLOW

Model No.	A	B	C	D	E	F	G	H	J	K	L
AXB040E**	25-1/2	28-7/8	17-9/16	19-1/2	17-9/16	11-1/2	9-1/2	38-1/8	14-3/4	44-5/8	16-3/4

**SEE PAGE 9 FOR COMPLETE MODEL NUMBER LISTING

ECONOMIZER-DOWNFLOW (WITHOUT RELIEF AND RETURN AIR DAMPERS)



ECONOMIZER DIMENSIONS - DOWNFLOW

Model No.	A	B	C	D	E	F	G	H
AXB040ECA	12-7/16	36-5/8	26	14-5/16	37-3/8	14-7/16	2-3/8	37

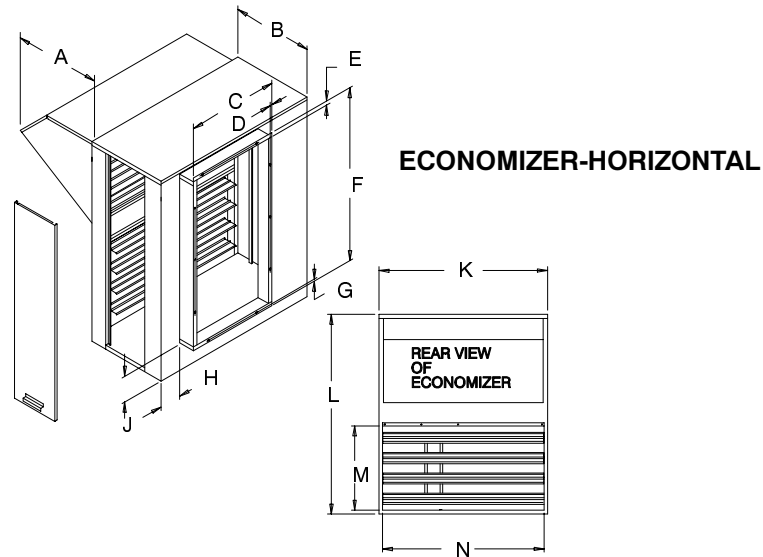
STATIC ADDITIONS DUE TO EITHER HORIZONTAL OR DOWNFLOW ECONOMIZER OR MANUAL AIR DAMPER ADDED ACCESSORY

Unit Size	7-1/2 TON	10 TON
Static Addition	.05"	.10"

PART NUMBERS FOR APPROVED HIGH STATIC CONVERSIONS

Unit	Motor	Motor Pulley	Blower Pulley	Belt
7-1/2 TON	No Change	1071319	No Change	No Change
10 TON	1070646	1071718	No Change	No Change

ACCESSORIES (CONT...)



ECONOMIZER DIMENSIONS - HORIZONTAL

Model No.	Unit Size	A	B	C	D	E	F	G	H	J	K	L	M	N
AXB040H**	7-1/2 & 10 Ton	20-7/8	20-1/8	15-27/32	1/2	1	37-17/64	1/2	2-1/2	3	30-5/8	46-3/8	21-1/4	28-15/16

ROOF CURBS

Description	Model Number	Used on
8"	AXB040CLA	7-1/2 & 10 TON
14"	AXB040CMA	7-1/2 & 10 TON
24"	AXB040CHA	7-1/2 & 10 TON

ECONOMIZERS-DOWNFLOW

Description	Model Number	Used on
Fully Modulating	AXB040EMB	7-1/2 & 10 TON
Three Position with Air Damper	AXB040EPC	7-1/2 & 10 TON
Three Position without Air Damper	AXB040ECA	7-1/2 & 10 TON

ECONOMIZERS-HORIZONTAL

Description	Model Number	Used on
Fully Modulating	AXB040HEB	7-1/2 & 10 TON
Three Position	AXB040HPC	7-1/2 & 10 TON

OUTDOOR AIR DAMPERS

Description	Model Number	Used on
Manual 0- 25%	AXB040FAB	7-1/2 & 10 TON
Motorized- 25%	AXB040FMB	7-1/2 & 10 TON

LOW AMBIENT CONTROLS

Description	Model Number	Used on
To 0° F	NACB050ZLA	7-1/2 & 10 TON

COIL PROTECTION

Description	Model Number	Used on
Coil Guard	AXB040GCB	7-1/2 & 10 TON
Hail Guard	AXB040GHB	7-1/2 & 10 TON

ELECTRICAL DATA - ELECTRIC HEAT ACCESSORY

Unit Model	Heater Model	Supply Voltage	KW Rating	Nominal BTUH	Heater Amps	Motor Amps	Minimum Circuit Ampacity	Fuse or NECR Breaker
PHB090N2H	AEB010EHA	240-3-60	10	34,140	24.1	6.8	63.1	70
	AEB020EHA		20	68,280	48.2		87.2	90
	AEB030EHA		30	102,420	72.3		111.5	120
	AEB040EHA		40	136,560	99.0		138.0	150
PHB090N2L	AEB010ELA	480-3-60	10	34,140	12.0	3.4	30.2	35
	AEB020ELA		20	68,280	24.1		42.3	45
	AEB030ELA		30	102,420	36.1		54.3	60
	AEB045ELA		45	153,630	54.2		72.4	70
PHB090N2S	AEB010ESA	600-3-60	10	34,140	9.6	2.7	24.4	25
	AEB020ESA		20	68,280	19.3		34.1	35
	AEB030ESA		30	102,420	28.9		43.7	45
	AEB045ESA		45	153,630	54.2		58.2	60
PHB120N2H	AEB020EHA	240-3-60	20	68,280	48.2	10.4	104.5	120
	AEB030EHA		30	102,420	72.3		128.8	140
	AEB040EHA		40	136,560	99.0		155.3	170
	AEB060EHA		60	204,840	144.5		200.8	200
PHB120N2L	AEB020ELA	480-3-60	20	68,280	24.1	5.2	53.1	60
	AEB030ELA		30	102,420	36.1		65.1	70
	AEB045ELA		45	153,630	54.2		83.2	90
	AEB060ELA		60	204,840	72.3		101.3	110
PHB120N2S	AEB020ELA	600-3-60	20	68,280	19.3	2.7	42.6	50
	AEB030ELA		30	102,420	28.9		52.2	60
	AEB045ELA		45	153,630	43.4		66.7	70
	AEB060ELA		60	204,840	57.8		81.1	90

MODEL NUMBER IDENTIFICATION GUIDE

MODEL NUMBER	P	H	B	090	N	2	H	Electrical Characteristics
Product Family								H = 208 / 230-3-60
P = Single Package								L = 460-3-60
Fuel Type								S = 575-3-60
H = Heat Pump								
Design Series								Blower Options
Capacity (Nominal BTU)								2 = Standard Belt Drive
090 = 7-1/2 Ton								Heat Input
120 = 10 Ton								N = Shipped without heat

NOTES:

GUIDE SPECIFICATION

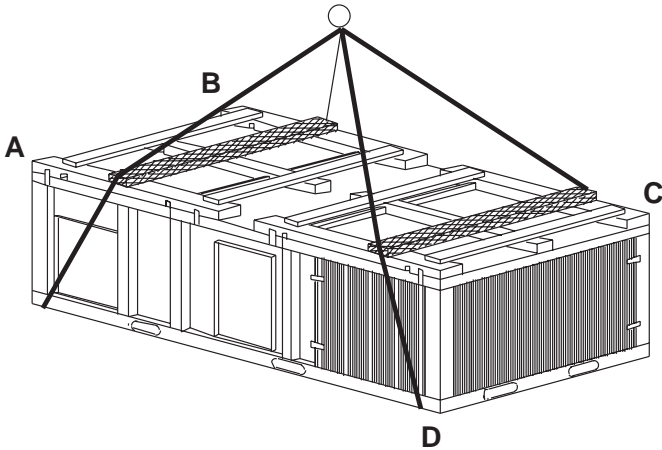
CABINET

The cabinet shall be made of sturdy G-90 galvanized steel, phosphate coated with an epoxy based primer and a polyester finish coat for long lasting weatherproof construction. Base rails shall be 16 gauge steel and have fork lift slots plus holes provided for lifting shackles. The unit shall be designed with convertible airflow for horizontal or downflow applications with conversion to horizontal airflow being accomplished by relocating two panels. The indoor blower compartment interior cabinet surfaces shall be insulated with a minimum 1/2" thick, flexible glass fiber insulation, coated on the air side. Aluminum foil faced glass fiber insulation shall be used in the furnace compartment.

COOLING SECTION

The unit shall be factory charged and operationally ready upon delivery. The unit shall have two independent refrigerant systems providing two stage cooling operation. Each refrigerant circuit shall have a high efficiency, fully hermetic compressor with internal overload protection, high and low pressure switches, filter drier, and copper tube / aluminum fin evaporator and condenser coils. The unit shall be designed for two-stage cooling operation down to 40°F. as shipped and pre-wired for economizer type accessories as shipped from the factory.

RIGGING DETAILS



CORNER WEIGHTS (LBS)

MODEL	A	B	C	D	OPERATING WEIGHT TOTAL
7-1/2 TON	219	303	295	213	1,030
10 TON	229	317	308	223	1,075

AGENCY CERTIFICATIONS



COILS

The evaporator and condenser coils shall be fabricated with aluminum fins mechanically bonded to copper tubing. Both coils shall be pressure tested prior to assembly into the unit and electronically leak tested after assembly into the unit. The evaporator coil shall be protected from dust and debris on the return air side by factory installed low velocity, 2" thick glass fiber air filters. Filter face velocity shall not exceed 220 FPM for 7-1/2 and 10 ton units at nominal airflows.

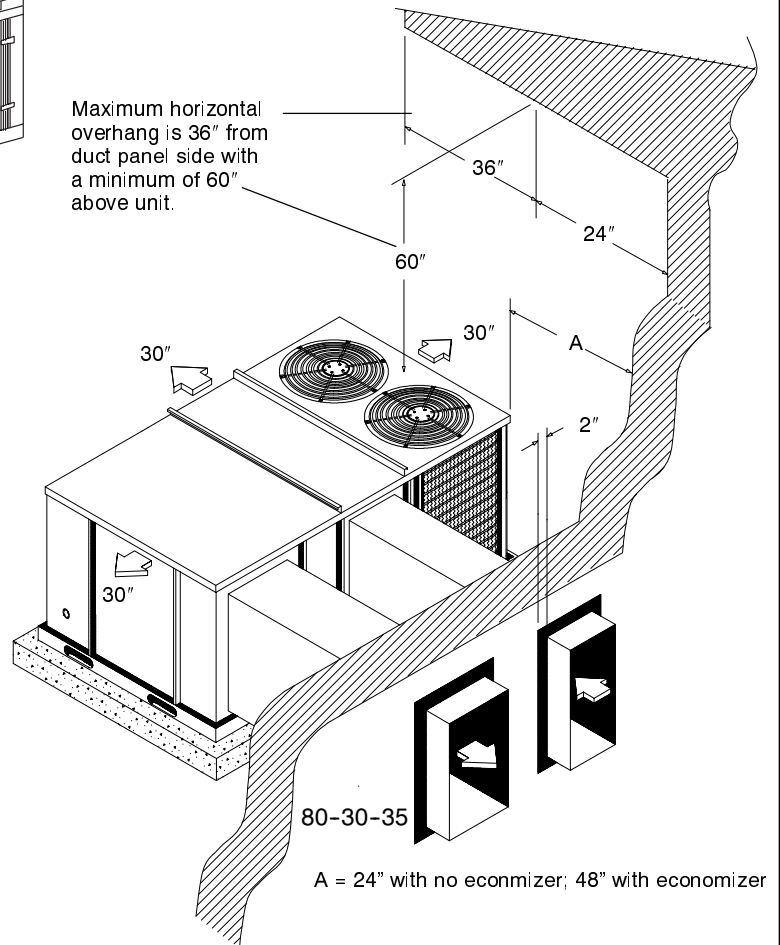
CONDENSER FAN(S)

The 7-1/2 Ton units shall have a single direct-drive propeller-fan/motor assembly and the 10 Ton units shall have two condenser fan assemblies. The assemblies shall be mounted directly to a vertical-discharge grille that is easily removed for service. Motors are 1100 RPM with permanently lubricated ball bearings and internal overload protection.

EVAPORATOR BLOWER

The 7-1/2 and 10 Ton units shall have a single belt driven evaporator blower. The evaporator blower motor (56 frame) shall have permanently lubricated ball bearings and internal overload protection. An adjustable motor drive sheave for matching air flow requirements shall be standard. Additionally, high static kits shall be available for air flows above the standard requirement. The external static capability of the unit shall be the same for horizontal and downflow discharge.

INSTALLATION CLEARANCES



A = 24" with no economizer; 48" with economizer