

PGAD SERIES



12 SEER
3 PHASE



CONVERTIBLE SINGLE PACKAGE GAS / ELECTRIC

FEATURES

EFFICIENCY

- 3 thru 5 tons Cooling, 90,000 thru 150,000 BTUH Heating

SINGLE PACKAGE

- Combination gas heating and electric cooling, self contained for year-round comfort. Systems installed on rooftop or ground level. The unit is shipped in the horizontal position and can easily be converted to downflow.

CONSTRUCTION

- 20 gauge galvanized-painted cabinet. One piece weather resistant top. Access panels for easy service. Side by side supply and return. Heavy gauge base with rails.

CABINET

- Triple-coated steel, consisting of a Polyester top coat, a urethane primer coat preceded by an oxide pretreatment.

COMPRESSOR

- All models are equipped with high efficiency scroll compressor.

SLIDE-OUT BLOWER HOUSING

- Specially designed track enhances evaporator motor and blower serviceability.

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.

METERING DEVICE

- Thermostat Expansion Valve (TXV) controls refrigerant flow, maintaining evaporator superheat for maximum efficiency.

ELECTRICAL AND GAS CONTROLS

- Located behind one exterior panel for easier maintenance.
- Electronic pilot ignition device (HSP).
- Adjustable electronic fan control with optional low speed continuous fan feature responds quickly to circulate heated air and provide maximum comfort.

HIGH / LOW PRESSURE SWITCHES

- Excellent Compressor Protection.

INDUCED DRAFT COMBUSTION SYSTEM

- For smoother combustion and optimal efficiency.

STAINLESS STEEL TUBULAR HEAT EXCHANGER

- Stainless Steel heat exchanger is more corrosion resistant for longer life and the tubular design provides efficient heat transfer. Corrosion resistant for longer life and the tubular design provides efficient heat transfer.

COIL PROTECTION

- The condenser coil has a sturdy wire inlet grille and UV rated vinyl mesh installed on the surface of the coil for additional protection.

IN-SHOT BURNERS

- Delivers more complete, efficient combustion.

2 INCH FILTERS STANDARD

- Evaporator Coil Protection

EXTERNALLY-MOUNTED GAUGE PORTS

- Allows for more accurate reading of operating conditions while servicing.

INTEGRAL BASE RAILS

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

WARRANTY

- Ten (10) year limited warranty on Heat Exchanger
- Five (5) years limited warranty on Compressor
- One (1) year limited warranty on Parts

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

462 11 1104 00

3/15/05

MODEL NUMBER	ELECTRICAL DATA			Condenser Data									
				Coil			Fan Motor			Fan			
	Volt-PH-Hz	HACR Breaker / Max. Fuse	Ampacity	Total Face Area (Sq. Ft.)	Fins Per In. / Rows	Tube Diameter (In.)	Horsepower	Full Load Amps	Locked Rotor Amps	Size Diameter (In.)	Degree Pitch	RPM (Max.)	CFM (Max.)
PGAD36D1HE	208/230-3-60	30	21.3	11.45	20 / 2	3/8	1/3	1.3	3.57	20.0	25	1120	3000
PGAD36E1HE	208/230-3-60	30	21.3	11.12			1/3	1.3	3.57	20.0	25	1120	3000
PGAD36D1LE	460-3-60	15	10.8	11.45	20 / 2	3/8	1/3	0.7	1.84	20.0	25	1120	3000
PGAD36E1LE	460-3-60	15	20.8	11.12			1/3	0.7	1.84	20.0	25	1120	3000
PGAD42D1HE	208/230-3-60	35	23.6	17.10	20 / 2	3/8	1/2	1.8	6.42	22.0	22	1140	3500
PGAD42E1HE	208/230-3-60	35	23.6	16.41			1/2	1.8	6.42	22.0	22	1140	3500
PGAD42D1LE	460-3-60	15	11.8	17.10	20 / 2	3/8	1/2	0.8	3.40	22.0	22	1140	3500
PGAD42E1LE	460-3-60	15	11.8	16.41			1/2	0.8	3.40	22.0	22	1140	3500
PGAD48D1HE	208/230-3-60	35	23.1	17.10	20 / 2	3/8	1/2	1.8	6.42	22.0	22	1140	3500
PGAD48F1HE	208/230-3-60	35	23.1	16.41			1/2	1.8	6.42	22.0	22	1140	3500
PGAD48D1LE	460-3-60	15	12.3	17.10	20 / 2	3/8	1/2	0.8	3.40	22.0	22	1140	3500
PGAD48F1LE	460-3-60	15	12.4	16.41			1/2	0.8	3.40	22.0	22	1140	3500
PGAD60E1HE	208/230-3-60	45	29.3	17.10	20 / 2	3/8	3/4	2.7	9.52	22.0	22	1140	3500
PGAD60G1HE	208/230-3-60	45	30.3	17.10			3/4	2.7	9.52	22.0	22	1140	3500
PGAD60E1LE	460-3-60	20	14.8	17.10	20 / 2	3/8	3/4	1.4	5.04	22.0	22	1140	3500
PGAD60G1LE	460-3-60	20	16.0	17.10			3/4	1.4	5.04	22.0	22	1140	3500

MODEL NUMBER	Evaporator Coil										Compressor	Factory Refrigerant Charge R-22 Oz.	Ship. Weight (Lbs.)	Sound Rating	
	Coil			Blower H.P. / Type / Speeds	Motor		Blower			Run Load Amps					Locked Rotor Amps
	Total Face Area (Sq. Ft.)	Fins Per In. / Rows	Tube Diameter (In.)		Full Load Amps	Locked Rotor Amps	Type & Size	RPM (Max.)	CFM Rated						
PGAD36D1HE	3.56	14 / 4	3/8	3/4 / PSC / 3	5.6	12.85	DD11-9A	1075	1200	11.5	77	102	429	7.6	
PGAD36E1HE							DD11-9A	1075					439		
PGAD36D1LE	3.56	14 / 4	3/8	3/4 / PSC / 3	5.6	12.85	DD11-9A	1075	1200	5.8	39	102	429	7.6	
PGAD36E1LE							DD11-9A	1075					439		
PGAD42D1HE	8.22	14 / 3	3/8	1/2 / PSC / 4	4.4	8.6	DD10-9	1075	1400	13.9	88	180	559	8.2	
PGAD42E1HE													560		
PGAD42D1LE	8.22	14 / 3	3/8	1/2 / PSC / 4	4.4	8.6	DD10-9	1075	1400	7.0	44	180	559	8.2	
PGAD42E1LE													560		
PGAD48D1HE	8.22	14 / 4	3/8	1/2 / PSC / 4	4.4	8.6	DD10-9	1075	1650	13.5	120	215	603	7.8	
PGAD48F1HE				1.0 / PSC / 3	4.6	7.9	DD11-11	1000					630		
PGAD48D1LE	8.22	14 / 4	3/8	1/2 / PSC / 4	4.4	8.6	DD10-9	1075	1650	7.4	49.5	215	603	7.8	
PGAD48F1LE				1.0 / PSC / 3	4.6	7.9	DD11-11	1000					630		
PGAD60E1HE	8.22	14 / 4	3/8	1.0 / PSC / 4	5.0	8.6	DD11-11	1000	2000	17.3	123	227.2	626	8.0	
PGAD60G1HE				1.0 / PSC / 4	6.0	15.1		1100					636		
PGAD60E1LE	8.22	14 / 4	3/8	1.0 / PSC / 4	5.0	8.6	DD11-11	1000	2000	9.0	62	227.2	626	8.0	
PGAD60G1LE				1.0 / PSC / 4	6.0	15.1		1100					636		

PERFORMANCE DATA: HEATING

MODEL NUMBER	Input (MBTUH)	Output (MBTUH)	Efficiency * (AFUE)	Temperature Rise ° F	Gas Piping Size (In.)	Transformer Size Va.
	Standard	Standard	Std.			
PGAD36D1HE	80	62	78.0	35-65	1/2	40
PGAD36E1HE	100	79	78.0	35-65	1/2	40
PGAD36D1LE	80	62	78.0	35-65	1/2	40
PGAD36E1LE	100	79	78.0	35-65	1/2	40
PGAD42D1HE	80	62	78.0	35-65	1/2	40
PGAD42E1HE	100	79	78.0	35-65	1/2	40
PGAD42D1LE	80	62	78.0	35-65	1/2	40
PGAD42E1LE	100	79	78.0	35-65	1/2	40
PGAD48D1HE	80	62	78.0	35-65	1/2	40
PGAD48F1HE	120	95	78.0	35-65	1/2	40
PGAD48D1LE	80	62	78.0	35-65	1/2	40
PGAD48F1LE	120	95	78.0	35-65	1/2	40
PGAD60E1HE	100	79	78.0	35-65	1/2	40
PGAD60G1HE	140	108	78.0	35-65	1/2	40
PGAD60E1LE	100	79	78.0	35-65	1/2	40
PGAD60G1LE	140	108	78.0	35-65	1/2	40

* As determined by Annual Fuel Utilization Efficiency (A.F.U.E.) Rating Test. Heating capacity valid for elevations up to 2,000 feet above sea level. For elevations above 2,000 feet, rated capacity should be reduced by 4% for each 1,000 feet above sea level.

PERFORMANCE DATA: COOLING

MODEL NUMBER	Rated Capacity ¹ BTUH	S / T Ratio	S.E.E.R.	E.E.R. ³	Power Input Watts	Evaporator Rated Airflow (SCFM)	Ext. Static Pressure Drop ² Wet
PGAD36D1H/LE	34,400	.77	12.05	10.10	3405	1200	.20
PGAD36E1H/LE							.30
PGAD42D1H/LE	41,500	.77	12.10	10.35	4008	1400	.34
PGAD42E1H/LE							
PGAD48D1H/LE	48,000	.78	12.10	10.08	4760	1650	.31
PGAD48F1H/LE							
PGAD60E1H/LE	57,500	.80	12.05	9.71	6022	2000	.38
PGAD60G1H/LE							

¹ ARI Rated Capacity @ 230 Volts 80°db/67°wb -95° amb.. For applications at 208 volts deduct 1000 BTUH. ² Includes a .08 drop for a filter ³ For reference only

PERFORMANCE DATA: COOLING

Model Number	Motor Speed	Air Delivery in CFM * External Static Pressure (In. W.C.)					
		.20	.30	.40	.50	.60	.70
PGAD36D1H/LE	HI	1435	1375	1310	1245	1175	1105
	MED	1270	1220	1165	1100	1045	990
	LO	1110	1080	1045	1005	955	905
PGAD36E1H/LE	HI	1645	1580	1515	1450	1385	1315
	MED HI	1490	1440	1385	1330	1270	1210
	MED LO	1295	1270	1235	1195	1145	1095
	LO	1070	1055	1040	1020	990	955
PGAD42D1H/LE 42E1H/LE 47D1H/LE	HI	1860	1795	1725	1650	1570	1485
	MED HI	1735	1680	1620	1560	1485	1405
	MED LO	1540	1505	1465	1415	1350	1280
	LO	1460	1430	1395	1345	1290	1225
PGAD48F1H/LE	HI	2185	2125	2065	2010	1950	1875
	MED	1805	1775	1735	1690	1635	1580
	LO	1685	1660	1625	1585	1540	1485
PGAD60E1H/LE	HI	2250	2190	2125	2060	1990	1915
	MED HI	2090	2045	1995	1935	1875	1805
	MED LO	1650	1630	1600	1565	1525	1475
	LO	1315	1300	1280	1255	1225	1185
PGAD60G1H/LE	HI	2400	2325	2250	2170	2085	2000
	MED HI	2335	2270	2200	2125	2050	1965
	MED LO	2205	2145	2080	2015	1940	1865
	LO	2095	2040	1985	1920	1855	1780

Air delivery against shown external static pressures taken with 230V to unit and dry coil. For wet coil subtract approximately 25 CFM. Add .08 static for internal filters.

* Dry coil, no filter.

EXPANDED PERFORMANCE DATA (COOLING) - PGAD36D1HE, PGAD36E1HE, PGAD36D1LE, PGAD36E1LE - Net Capacities

Airflow IDB* CFM			Outdoor Ambient Temperature - Degrees F. Dry Bulb																							
			65				75				85				95				105				115			
			Entering Indoor Temperature - Degrees F. Wet Bulb																							
			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	1344	MBh	33.7	34.9	38.3	-	32.9	34.1	37.4	-	32.1	33.3	36.5	-	31.4	32.5	35.6	-	29.8	30.9	33.8	-	27.6	28.6	31.3	-
		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	-
		KW	2.72	2.77	2.85	-	2.91	2.96	3.05	-	3.07	3.13	3.22	-	3.22	3.28	3.38	-	3.34	3.41	3.51	-	3.45	3.52	3.62	-
	1200	MBh	32.7	33.9	37.2	-	32.0	33.1	36.3	-	31.2	32.3	35.4	-	30.4	31.6	34.6	-	28.9	30.0	32.8	-	26.8	27.8	30.4	-
		S/T	0.74	0.62	0.43	-	0.76	0.64	0.44	-	0.78	0.65	0.45	-	0.81	0.68	0.47	-	0.84	0.70	0.49	-	0.85	0.71	0.49	-
		KW	2.70	2.75	2.83	-	2.89	2.94	3.03	-	3.05	3.11	3.20	-	3.19	3.26	3.35	-	3.31	3.38	3.48	-	3.42	3.49	3.60	-
1056	MBh	31.1	32.2	35.3	-	30.4	31.5	34.5	-	29.6	30.7	33.7	-	28.9	30.0	32.8	-	27.5	28.5	31.2	-	25.5	26.4	28.9	-	
	S/T	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.43	-	0.78	0.65	0.45	-	0.80	0.67	0.47	-	0.81	0.68	0.47	-	
	KW	2.67	2.71	2.79	-	2.85	2.90	2.98	-	3.00	3.06	3.15	-	3.14	3.21	3.30	-	3.26	3.33	3.43	-	3.37	3.44	3.54	-	
75	1344	MBh	34.3	35.3	38.2	41.0	33.5	34.5	37.3	40.0	32.7	33.7	36.4	39.1	31.9	32.8	35.5	38.1	30.3	31.2	33.8	36.2	28.1	28.9	31.3	33.6
		S/T	0.88	0.79	0.60	0.38	0.91	0.81	0.62	0.40	0.93	0.84	0.63	0.41	0.96	0.86	0.65	0.42	1.00	0.90	0.68	0.44	1.00	0.90	0.68	0.44
		KW	2.74	2.79	2.87	3.25	2.93	2.99	3.07	3.16	3.09	3.16	3.25	3.35	3.24	3.31	3.40	3.51	3.37	3.43	3.54	3.65	3.47	3.54	3.65	3.77
	1200	MBh	33.3	34.3	37.1	39.8	32.5	33.5	36.2	38.9	31.7	32.7	35.4	38.0	31.0	31.9	34.5	37.0	29.4	30.3	32.8	35.2	27.2	28.1	30.4	32.6
		S/T	0.84	0.75	0.57	0.37	0.87	0.78	0.59	0.38	0.89	0.80	0.60	0.39	0.92	0.82	0.62	0.40	0.95	0.85	0.65	0.42	0.96	0.86	0.65	0.42
		KW	2.72	2.77	2.85	2.93	2.91	2.96	3.05	3.14	3.07	3.13	3.22	3.32	3.22	3.28	3.38	3.48	3.34	3.41	3.51	3.62	3.45	3.52	3.62	3.74
1056	MBh	31.6	32.6	35.2	37.8	30.9	31.8	34.4	36.9	30.1	31.0	33.6	36.1	29.4	30.3	32.8	35.2	27.9	28.8	31.1	33.4	25.9	26.6	28.8	31.0	
	S/T	0.80	0.72	0.54	0.35	0.83	0.74	0.56	0.36	0.85	0.76	0.58	0.37	0.88	0.79	0.60	0.38	0.91	0.82	0.62	0.40	0.92	0.82	0.62	0.40	
	KW	2.68	2.73	2.81	2.89	2.87	2.92	3.00	3.09	3.03	3.09	3.18	3.27	3.17	3.23	3.33	3.43	3.29	3.36	3.46	3.56	3.39	3.46	3.57	3.68	
80	1344	MBh	34.9	35.7	38.1	40.7	34.1	34.8	37.2	39.8	33.3	34.0	36.3	38.8	32.5	33.2	35.4	37.9	30.8	31.5	33.7	36.0	28.6	29.2	31.2	33.3
		S/T	0.96	0.90	0.74	0.55	1.00	0.94	0.76	0.57	1.00	0.96	0.78	0.58	1.00	1.00	0.81	0.60	1.00	1.00	0.84	0.63	1.00	1.00	0.84	0.63
		KW	2.76	2.81	2.89	2.98	2.95	3.01	3.09	3.19	3.12	3.18	3.27	3.37	3.27	3.33	3.43	3.54	3.39	3.46	3.56	3.68	3.50	3.57	3.68	3.80
	1200	MBh	33.9	34.6	37.0	39.5	33.1	33.8	36.1	38.6	32.3	33.0	35.3	37.7	31.5	32.2	34.4	36.8	29.9	30.6	32.7	34.9	27.7	28.3	30.3	32.4
		S/T	0.92	0.86	0.70	0.52	0.95	0.89	0.73	0.54	0.98	0.92	0.75	0.56	1.00	0.95	0.77	0.58	1.00	0.98	0.80	0.60	1.00	0.99	0.81	0.60
		KW	2.74	2.79	2.87	2.95	2.93	2.99	3.07	3.16	3.10	3.16	3.25	3.35	3.24	3.31	3.41	3.51	3.37	3.43	3.54	3.65	3.47	3.54	3.65	3.77
1056	MBh	32.2	32.9	35.1	37.6	31.4	32.1	34.3	36.7	30.7	31.4	33.5	35.8	29.9	30.6	32.7	34.9	28.4	29.1	31.0	33.2	26.3	26.9	28.8	30.7	
	S/T	0.88	0.83	0.67	0.50	0.91	0.86	0.70	0.52	0.94	0.88	0.71	0.53	0.97	0.91	0.74	0.55	1.00	0.94	0.77	0.57	1.01	0.95	0.77	0.58	
	KW	2.70	2.75	2.83	2.91	2.89	2.94	3.03	3.12	3.05	3.11	3.20	3.30	3.19	3.26	3.35	3.45	3.31	3.38	3.48	3.59	3.42	3.49	3.60	3.71	
85	1344	MBh	35.5	36.2	37.9	40.4	34.7	35.3	37.0	39.5	33.8	34.5	36.1	38.6	33.0	33.7	35.3	37.6	31.4	32.0	33.5	35.7	29.1	29.6	31.0	33.1
		S/T	1.00	0.98	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.76	1.00	1.00	0.97	0.78	1.00	1.00	1.00	0.81	1.00	1.00	1.00	0.82
		KW	2.78	2.83	2.91	3.00	2.97	3.03	3.12	3.21	3.14	3.20	3.30	3.40	3.29	3.36	3.46	3.56	3.42	3.49	3.59	3.70	3.53	3.60	3.71	3.83
	1200	MBh	34.5	35.1	36.8	39.3	33.7	34.3	35.9	38.3	32.9	33.5	35.1	37.4	32.1	32.7	34.2	36.5	30.5	31.0	32.5	34.7	28.2	28.8	30.1	32.1
		S/T	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.71	1.00	0.99	0.89	0.72	1.00	1.00	0.92	0.75	1.00	1.00	0.96	0.78	1.00	1.00	0.96	0.78
		KW	2.76	2.81	2.89	2.98	2.95	3.01	3.09	3.19	3.12	3.18	3.27	3.37	3.27	3.33	3.43	3.54	3.39	3.46	3.56	3.68	3.50	3.57	3.68	3.80
1056	MBh	32.7	33.4	35.0	37.3	32.0	32.6	34.1	36.4	31.2	31.8	33.3	35.6	30.5	31.0	32.5	34.7	28.9	29.5	30.9	33.0	26.8	27.3	28.6	30.5	
	S/T	0.92	0.89	0.80	0.65	0.96	0.92	0.83	0.68	0.98	0.95	0.85	0.69	1.00	0.98	0.88	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.92	0.75	
	KW	2.72	2.77	2.85	2.93	2.91	2.96	3.05	3.14	3.07	3.13	3.22	3.32	3.22	3.28	3.38	3.48	3.34	3.41	3.51	3.62	3.45	3.52	3.62	3.74	

EXPANDED PERFORMANCE DATA (COOLING) - PGAD42D1HE, PGAD42E1HE, PGAD42D1LE, PGAD42E1LE - Net Capacities

Airflow IDB* CFM			Outdoor Ambient Temperature - Degrees F. Dry Bulb																							
			65				75				85				95				105				115			
			Entering Indoor Temperature - Degrees F. Wet Bulb																							
			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	1568	MBh	40.7	42.1	46.2	-	39.7	41.2	45.1	-	38.8	40.2	44.0	-	37.8	39.2	43.0	-	35.9	37.2	40.8	-	33.3	34.5	37.8	-
		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	-
		KW	3.20	3.26	3.35	-	3.42	3.49	3.59	-	3.61	3.68	3.79	-	3.78	3.86	3.98	-	3.93	4.01	4.13	-	4.06	4.14	4.27	-
	1400	MBh	39.5	40.9	44.8	-	38.6	40.0	43.8	-	37.6	39.0	42.8	-	36.7	38.1	41.7	-	34.9	36.2	39.6	-	32.3	33.5	36.7	-
		S/T	0.74	0.62	0.43	-	0.76	0.64	0.44	-	0.78	0.65	0.45	-	0.81	0.68	0.47	-	0.84	0.70	0.49	-	0.85	0.71	0.49	-
		KW	3.18	3.24	3.33	-	3.39	3.46	3.56	-	3.59	3.66	3.77	-	3.76	3.83	3.95	-	3.90	3.98	4.10	-	4.02	4.11	4.23	-
1232	MBh	37.5	38.9	42.6	-	36.6	38.0	41.6	-	35.8	37.1	40.6	-	34.9	36.2	39.6	-	33.1	34.4	37.6	-	30.7	31.8	34.9	-	
	S/T	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.43	-	0.78	0.65	0.45	-	0.80	0.67	0.47	-	0.81	0.68	0.47	-	
	KW	3.13	3.19	3.28	-	3.34	3.41	3.51	-	3.53	3.60	3.71	-	3.70	3.77	3.89	-	3.84	3.92	4.04	-	3.96	4.04	4.17	-	
75	1568	MBh	41.4	42.6	46.1	49.5	40.4	41.6	45.0	48.3	39.4	40.6	43.9	47.2	38.5	39.6	42.9	46.0	36.5	37.6	40.7	43.7	33.9	34.9	37.7	40.5
		S/T	0.88	0.79	0.60	0.38	0.91	0.81	0.62	0.40	0.93	0.84	0.63	0.41	0.96	0.86	0.65	0.42	1.00	0.90	0.68	0.44	1.00	0.90	0.68	0.44
		KW	3.22	3.28	3.38	3.47	3.44	3.51	3.61	3.72	3.64	3.71	3.82	3.94	3.81	3.89	4.01	4.13	3.96	4.04	4.16	4.29	4.09	4.17	4.30	4.44
	1400	MBh	40.2	41.3	44.7	48.0	39.2	40.4	43.7	46.9	38.3	39.4	42.7	45.8	37.4	38.5	41.6	44.7	35.5	36.5	39.5	42.4	32.9			

EXPANDED PERFORMANCE DATA (COOLING) - PGAD48D1HE, PGAD48F1HE, PGAD48D1LE, PGAD48F1LE - Net Capacities

Airflow IDB* CFM			Outdoor Ambient Temperature - Degrees F. Dry Bulb																													
			65					75					85					95					105					115				
			Entering Indoor Temperature - Degrees F. Wet Bulb																													
			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	1848	MBh	47.0	48.8	53.4	-	45.9	47.6	52.2	-	44.8	46.5	50.9	-	43.8	45.4	49.7	-	41.6	43.1	47.2	-	38.5	39.9	43.7	-						
		S/T	0.78	0.65	0.45	-	0.81	0.68	0.47	-	0.83	0.70	0.48	-	0.86	0.72	0.50	-	0.89	0.74	0.52	-	0.90	0.75	0.52	-						
	KW	3.77	3.85	3.96	-	4.04	4.12	4.25	-	4.28	4.37	4.50	-	4.49	4.58	4.72	-	4.67	4.76	4.91	-	4.82	4.92	5.08	-							
	1650	MBh	45.7	47.3	51.9	-	44.6	46.2	50.7	-	43.5	45.1	49.4	-	42.5	44.0	48.2	-	40.4	41.8	45.8	-	37.4	38.7	42.5	-						
		S/T	0.75	0.62	0.43	-	0.77	0.65	0.45	-	0.79	0.66	0.46	-	0.82	0.68	0.47	-	0.85	0.71	0.49	-	0.86	0.72	0.50	-						
	75	1848	MBh	47.8	49.2	53.3	57.2	46.7	48.1	52.1	55.9	45.6	47.0	50.8	54.6	44.5	45.8	49.6	53.2	42.3	43.5	47.1	50.6	39.2	40.3	43.6	46.8					
S/T			0.89	0.80	0.60	0.39	0.92	0.83	0.62	0.40	0.95	0.85	0.64	0.41	0.98	0.87	0.66	0.43	1.00	0.91	0.69	0.44	1.00	0.91	0.69	0.44						
KW		3.80	3.88	3.99	4.11	4.07	4.15	4.28	4.41	4.31	4.40	4.53	4.68	4.52	4.62	4.76	4.91	4.70	4.80	4.95	5.11	4.86	4.96	5.12	5.28							
1650		MBh	46.4	47.8	51.8	55.5	45.4	46.7	50.6	54.3	44.3	45.6	49.3	53.0	43.2	44.5	48.1	51.7	41.0	42.3	45.7	49.1	38.0	39.1	42.4	45.5						
		S/T	0.85	0.76	0.57	0.37	0.88	0.79	0.60	0.38	0.90	0.81	0.61	0.39	0.93	0.83	0.63	0.41	0.97	0.86	0.65	0.42	0.98	0.87	0.66	0.42						
80		1848	MBh	48.7	49.7	53.1	56.8	47.6	48.6	51.9	55.5	46.4	47.4	50.7	54.2	45.3	46.3	49.4	52.9	43.0	44.0	47.0	50.2	39.9	40.7	43.5	46.5					
	S/T		1.00	0.92	0.75	0.56	1.00	0.95	0.77	0.58	1.00	1.00	0.79	0.59	1.00	1.00	0.82	0.61	1.00	1.00	0.85	0.63	1.00	1.00	0.86	0.64						
	KW	3.83	3.90	4.02	4.14	4.10	4.19	4.31	4.44	4.34	4.43	4.57	4.71	4.56	4.65	4.80	4.95	4.74	4.84	4.99	5.15	4.90	5.00	5.16	5.32							
	1650	MBh	47.3	48.3	51.6	55.2	46.2	47.2	50.4	53.9	45.1	46.1	49.2	52.6	44.0	44.9	48.0	51.3	41.8	42.7	45.6	48.7	38.7	39.5	42.2	45.2						
		S/T	0.93	0.87	0.71	0.53	0.97	0.91	0.74	0.55	0.99	0.93	0.76	0.56	1.00	0.96	0.78	0.58	1.00	0.99	0.81	0.61	1.00	1.00	0.82	0.61						
	85	1848	MBh	49.5	50.5	52.9	56.4	48.4	49.3	51.7	55.1	47.2	48.1	50.4	53.8	46.1	47.0	49.2	52.5	43.8	44.6	46.7	49.9	40.5	41.3	43.3	46.2					
S/T			1.00	0.99	0.89	0.72	1.00	1.00	0.92	0.75	1.00	1.00	0.95	0.77	1.00	1.00	0.98	0.79	1.00	1.00	1.00	0.82	1.00	1.00	1.00	0.83						
KW		3.86	3.93	4.05	4.17	4.13	4.22	4.34	4.48	4.38	4.47	4.61	4.75	4.59	4.69	4.84	4.99	4.78	4.88	5.03	5.19	4.94	5.04	5.20	5.37							
1650		MBh	48.1	49.0	51.3	54.8	47.0	47.9	50.1	53.5	45.9	46.7	49.0	52.2	44.7	45.6	47.8	51.0	42.5	43.3	45.4	48.4	39.4	40.1	42.0	44.8						
		S/T	0.98	0.94	0.85	0.69	1.00	0.98	0.88	0.72	1.00	1.00	0.90	0.73	1.00	1.00	0.93	0.76	1.00	1.00	0.97	0.79	1.00	1.00	0.98	0.79						
85		1650	MBh	45.7	46.6	48.8	52.0	44.6	45.5	47.6	50.8	43.4	44.4	46.5	49.6	42.5	43.3	45.4	48.4	40.4	41.2	43.1	46.0	37.4	38.1	39.9	42.6					
	S/T		0.84	0.90	0.81	0.66	0.97	0.94	0.84	0.68	0.99	0.96	0.87	0.70	1.00	0.99	0.89	0.72	1.00	1.00	0.93	0.75	1.00	1.00	0.94	0.76						
	KW	3.77	3.85	3.96	4.08	4.04	4.12	4.25	4.38	4.28	4.37	4.50	4.64	4.49	4.58	4.72	4.87	4.67	4.76	4.91	5.07	4.82	4.92	5.08	5.24							

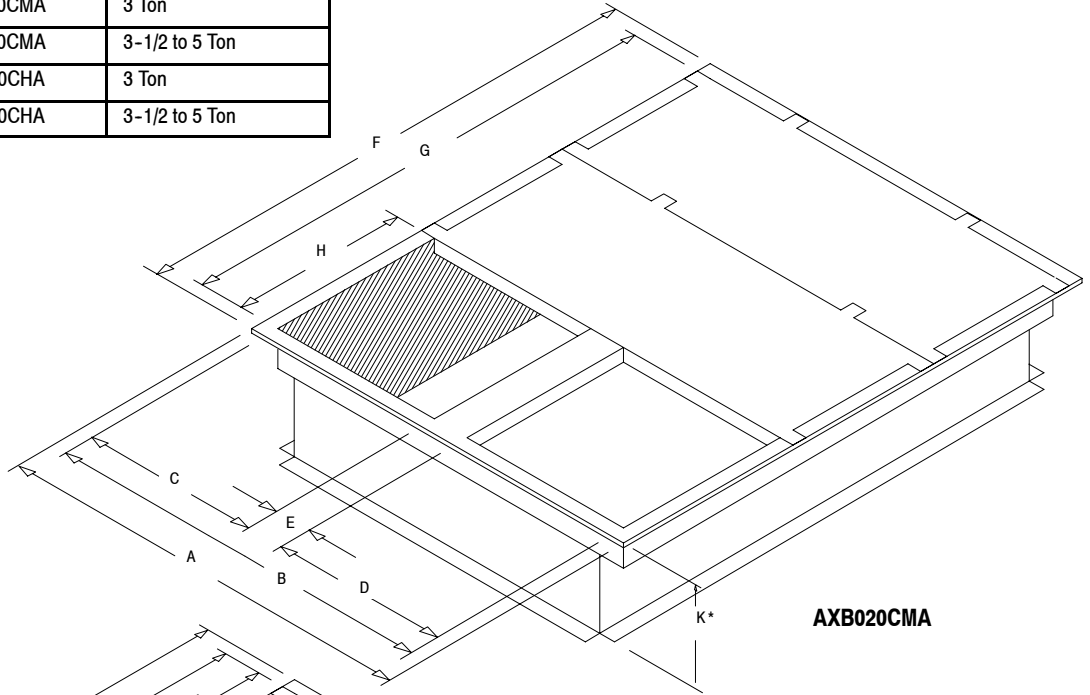
EXPANDED PERFORMANCE DATA (COOLING) - PGAD60E1HE, PGAD60G1HE, PGAD60E1LE, PGAD60G1LE - Net Capacities

Airflow IDB* CFM			Outdoor Ambient Temperature - Degrees F. Dry Bulb																													
			65					75					85					95					105					115				
			Entering Indoor Temperature - Degrees F. Wet Bulb																													
			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	2016	MBh	55.9	57.9	63.4	-	57.5	59.6	65.7	-	56.2	58.2	63.7	-	54.8	56.7	62.2	-	52.0	53.9	59.1	-	48.2	50.0	54.7	-						
		S/T	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.78	0.65	0.45	-	0.80	0.67	0.47	-	0.83	0.70	0.48	-	0.84	0.70	0.49	-						
	KW	3.93	4.03	4.17	-	5.14	5.26	5.45	-	5.50	5.64	5.84	-	5.82	5.96	6.19	-	6.10	6.25	6.48	-	6.34	6.49	6.73	-							
	1800	MBh	54.2	56.2	61.6	-	53.75	58.29	62.54	-	51.90	55.99	60.45	-	49.63	53.48	57.85	-	47.18	50.94	55.05	-	44.67	48.23	52.14	-						
		S/T	0.70	0.58	0.40	-	0.77	0.60	0.44	-	0.79	0.61	0.44	-	0.80	0.62	0.45	-	0.82	0.63	0.45	-	0.85	0.64	0.45	-						
	75	1800	MBh	3.90	3.99	4.13	-	5.28	5.37	5.44	-	5.77	5.86	5.94	-	6.31	6.39	6.48	-	6.89	6.99	7.07	-	7.53	7.63	7.72	-					
KW			53.7	55.6	61.0	-	55.3	57.3	62.7	-	54.0	56.0	61.3	-	52.6	54.6	59.8	-	50.0	51.8	56.7	-	46.4	48.0	54.6	-						
1584		MBh	0.69	0.58	0.40	-	0.72	0.60	0.42	-	0.74	0.61	0.43	-	0.76	0.63	0.44	-	0.79	0.66	0.46	-	0.79	0.66	0.65	-						
		KW	3.85	3.94	4.09	-	5.03	5.15	5.34	-	5.39	5.52	5.72	-	5.70	5.84	6.06	-	5.98	6.12	6.35	-	6.20	6.36	6.80	-						
2016		MBh	56.8	58.5	63.3	68.0	58.5	60.2	65.2	70.0	57.0	58.8	63.6	68.3	55.7	57.3	62.0	66.6	52.9	54.5	59.0	63.3	49.0	50.5	53.0	56.9						
		S/T	0.83	0.75	0.56	0.36	0.86	0.77	0.58	0.38	0.89	0.79	0.60	0.39	0.91	0.82	0.62	0.40	0.95	0.85	0.64	0.41	0.96	0.86	0.62	0.40						
80	1800	MBh	3.97	4.06	4.21	4.37	5.18	5.30	5.50	5.70	5.56	5.69	5.89	6.12	5.88	6.02	6.25	6.48	6.16	6.31	6.54	6.79	6.40	6.55	6.73	6.98						
		S/T	55.1	56.8	61.5	65.9	53.79	57.89	62.73	67.65	51.68	55.90	60.26	64.99	49.46	53.47	57.59	62.13	47.32	50.85	54.88	59.22	45.21	48.22	51.97	56.21						
	KW	0.79	0.71	0.54	0.35	0.92	0.74	0.58	0.43	0.94	0.76	0.59	0.44	0.96	0.78	0.60	0.44	0.97	0.80	0.62	0.45	0.97	0.83	0.63	0.46							
	1584	MBh	3.93	4.03	4.17	4.33	5.26	5.36	5.45	5.54	5.75	5.86	5.94	6.03	6.28	6.39	6.49	6.58	6.86	6.98	7.08	7.17	7.50	7.62	7.72	7.82						
		S/T	52.4	53.9	58.4	62.7	53.9	55.6	60.1	64.5	52.6	54.2	58.7	63.0	51.4	52.9	57.2	61.4	48.8	50.3	54.4	58.4	45.2	46.6	50.4	54.1						
	85	2016	MBh	0.76	0.68	0.52	0.33	0.79	0.71	0.53	0.34	0.81	0.72	0.55	0.35	0.84	0.75	0.57	0.36	0.87	0.78	0.59	0.38	0.87	0.78	0.59	0.38					
KW			3.86	3.95	4.10	4.25	5.04	5.16	5.35	5.54	5.40	5.53	5.74	5.95	5.72	5.86	6.07	6.30	5.99	6.13	6.36	6.60	6.22	6.37	6.61	6.85						
1800		MBh	57.8	59.1	63.1	67.5	59.5	60.9	65.0	69.5	58.1	59.4	63.4	67.8	56.6	57.9	61.8	66.2	53.8	55.0	58.8	62.8	49.9	51.0	54.5	58.2						
		S/T	0.91	0.86	0.70	0.52	0.95	0.89	0.72	0.54	1.00	0.91	0.74	0.55	1.00	0.94	0.77	0.57	1.00	1.00	0.79	0.59	1.00	1.00	0.80	0.60						
85		1584	MBh	4.00	4.10	4.25	4.41	5.23	5.36	5.56	5.76	5.60	5.75	5.95	6.17	5.94	6.08	6.30	6.54	6.22	6.37	6.60	6.85	6.46	6.62	6.86	7.12					
			S/T	56.2	57.4	61.3	65.5	54.81	57.86	62.30	67.14	53.47	55.62	60.14	64.70	51.71	53.52	57.5	61.94	49.83	51.09	54.70	59.09	47.80	48.35	51.92	56.00					
	KW	0.87	0.82	0.67	0.50	1.00	0.89	0.72	0.57	1.00	0.91	0.74	0.58	1.00	0.94	0.76	0.59	1.00	0.95	0.78	0.61	1.00	0.97	0.81	0.62							
	2016	MBh	3.97	4.07	4.21	4.37	5.25	5.35	5.45	5.54	5.76	5.84	5.94	6.04	6.31	6.37	6.48	6.58	6.91	6.95	7.08	7.18	7.56	7.59	7.72	7.82						
		S/T	53.3	54.5	58.2	62.2	54.9	56.1	59.9	64.1	53.6	54.8	58.5	62.5	52.2	53.4	57.0	61.1	49.7	50.8	54.2	57										

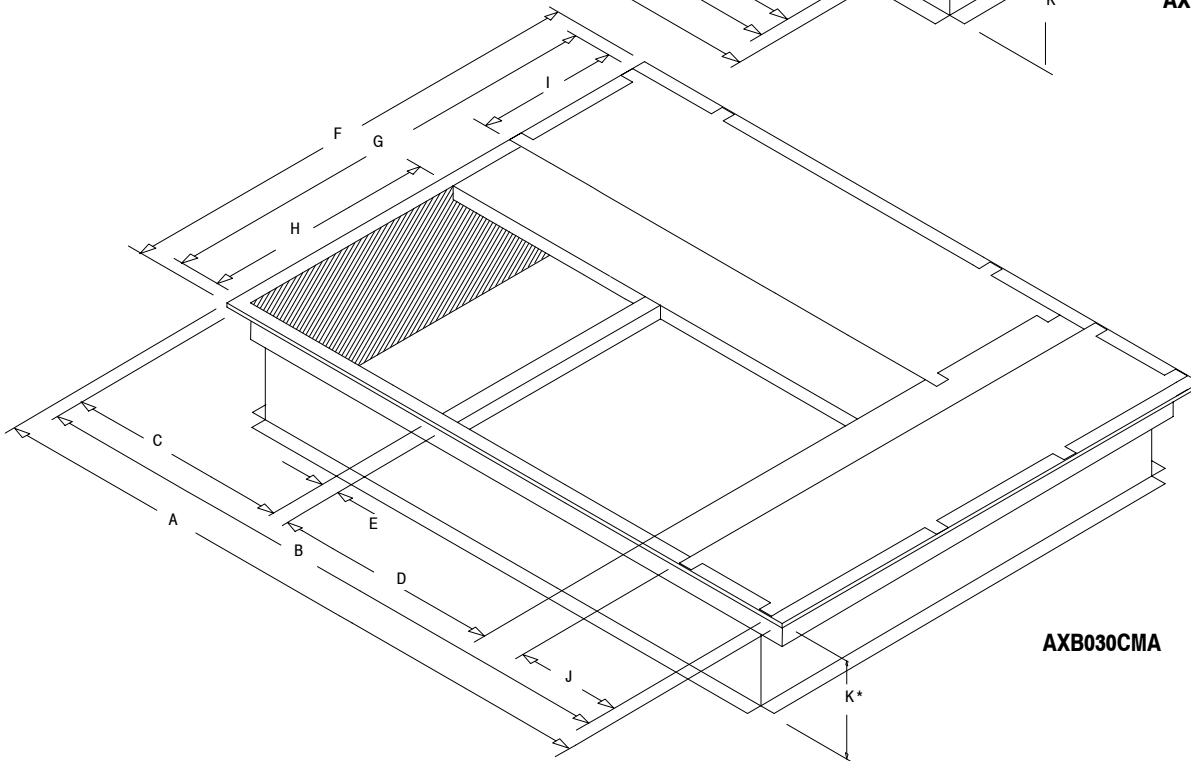
ACCESSORIES: ROOF CURBS

These curbs are designed specifically for use with our combination gas/electric units. They are constructed of heavy gauge steel and designed for water tight installation.

Description	Mainline Model Number	Used on
8"	AXB020CLA	3 Ton
	AXB030CLA	3-1/2 to 5 Ton
14"	AXB020CMA	3 Ton
	AXB030CMA	3-1/2 to 5 Ton
24"	AXB020CHA	3 Ton
	AXB030CHA	3-1/2 to 5 Ton



AXB020CMA



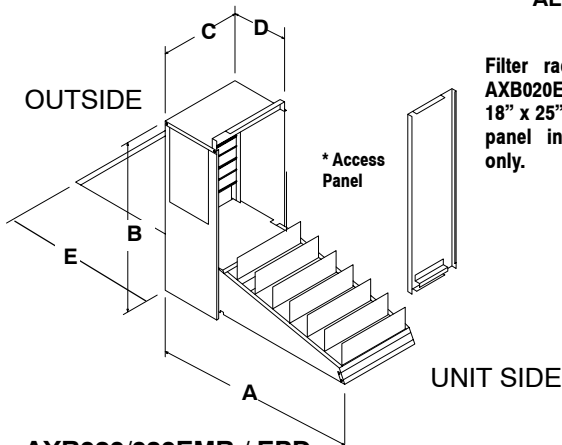
AXB030CMA

ROOF CURB DIMENSIONS (INCHES)

Model No.	A	B	C	D	E	F	G	H	I	J	K(CLA)	K(CMA)	K(CHA)
AXB020	42-3/4	39-3/4	18	18	3-3/4	42-3/4	39-3/4	18	-	-	8	14	24
AXB030	67-3/4	64-3/4	23	23	2-1/2	42-3/4	39-3/4	23	12	12	8	14	24

ECONOMIZERS/DOWNFLOW

ALL DIMENSIONS IN INCHES



Filter racks are included with AXB020E**. Economizers require 18" x 25" x 1" or 2" filters. Access panel included with AXB030E** only.

**AXB020/030EMB / EPD
(Modulating or Three Position)**

Economizer Model No.	A	B	C	D	E
AXB020EMC/PD	29	27-1/2	12-3/4	10-7/8	22
AXB030EMC/PD	35	31	14-3/4	10-7/8	22

Description	Model Number	Used on
Fully Modulating	AXB020EMC (1)	3 Ton
Three Position	AXB020EPD (2)	
Entry Level Three Position	AXB020ECA (3)	

NOTES:

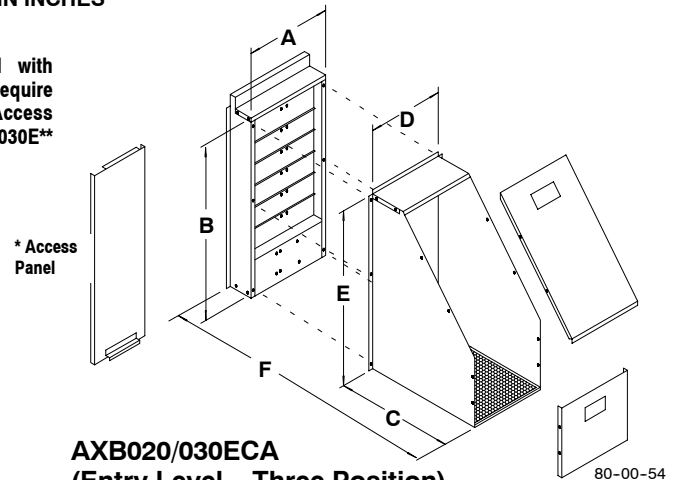
- (1) - Ambient/Enthalpy Control; Includes Return Air Damper & Relief Damper.
- (2) - Ambient Control Only; Includes Return Air Damper & Relief Damper.
- (3) - Ambient Control Only; No Return Air Damper; No Relief Damper.

All Economizers Feature Enthalpy and/or ambient temperature control providing outdoor air ventilation and "free cooling" when outdoor conditions are favorable.

Return Air and Pressure Relief dampers for proper air balance, on most models.

Interconnecting wiring furnished.

Center controlled dual action dampers with gaskets to provide proper seal.



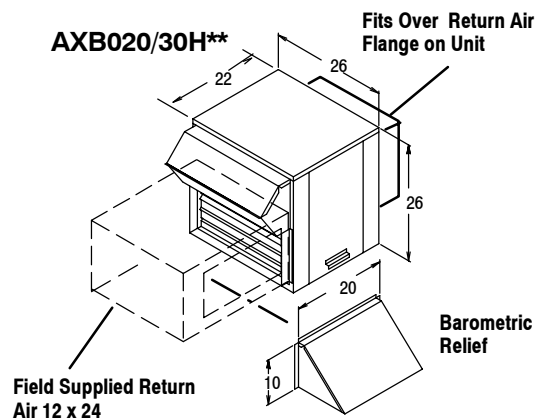
**AXB020/030ECA
(Entry Level - Three Position)**

Economizer Model No.	A	B	C	D	E	G
AXB020ECA	12-3/4	27-1/2	20-1/4	11	28-1/2	24
AXB030ECA	14-3/4	31	20-1/4	13	30	24

Description	Model Number (*)	Used on
Fully Modulating	AXB030EMC (1)	3-1/2 to 5 Ton
Three Position	AXB030EPD (2)	
Entry Level Three Position	AXB030ECA (3)	

- * On AXB030, Filters not supplied. Filter retainers and filters can be ordered thru Service Parts, retainer part number 1054517.t Filters (20x30x2) part number 1054503.

ECONOMIZERS/HORIZONTAL



Description	Model Number	Used on
Fully Modulating (1)	AXB020HEC	3 Ton
Three Position (2)	AXB020HPD	

Description	Model Number	Used on
Fully Modulating (1)	AXB030HEC	3-1/2 to 5 Ton
Three Position (2)	AXB030HPD	

NOTES:

- (1) - Ambient/Enthalpy Control; Includes Return Air Damper & Relief Damper.
- (2) - Ambient Control Only; Includes Return Air Damper & Relief Damper.

ACCESORIES (CONT...)

OUTDOOR AIR DAMPERS

Description	Model Number	Used on
Manual - 25%	AXB020FAC	3 TON
	AXB030FAC	3-1/2 to 5 TON
Motorized - 25%	AXB020FMC	3 TON
	AXB030FMC	3-1/2 to 5 TON

FILTER RACK - must use with 3 ton, for horizontal duct applications only.

Description	Model Number	Used on
* Horizontal	AXB020FHC	3 TON

* Requires 1 field supplied 18 x 25" filter.

COIL PROTECTION

Description	Mainline Part Number / Service Parts Number *	Used on
Coil Guard (Black, 2 pieces)	AXB020CGB / 1149485	3 Ton
Coil Guard (Black, 3 pieces)	AXB030CGB / 1149486	3 1/2 - 5 Ton
Coil Guard (Black, 2 pieces)	AXB020HGB / 1068133	3 Ton
Coil Guard (Black, 3 pieces)	AXB030HGB / 1068134	3 1/2 - 5 Ton

* Available through Service Parts only.

FOSSIL FUEL CONVERSION (0' to 2000')

Description	Service Parts Number *	Used on Heat Input
Natural to LP Gas	1172663	40, 60, 80, 100, 120, 140 MBTUH
LP to Natural Gas	1172664	40, 60, 80, 100, 120, 140 MBTUH

* Available through Service Parts only. For High Altitude conversions, see installation instructions.

CONCENTRIC DUCT KITS

Description	Mainline Model Number	Used on
Transition	AXB020CTA	3 TON
	AXB030CTA	3-1/2 to 5 TON
Grille, Flush Mount *	AXB020CFA	3 TON
	AXB030CFA	3-1/2 to 5 TON
Grille, Step Down *	AXB020CSA	3 TON
	AXB030CFA	3-1/2 to 5 TON

* Includes grille and diffuser / transition box.

LOW AMBIENT CONTROLS

Description	Model Number *	Used on
To 0° F	1148232	3 TON
To 0° F	1148233	3-1/2 to 5 TON

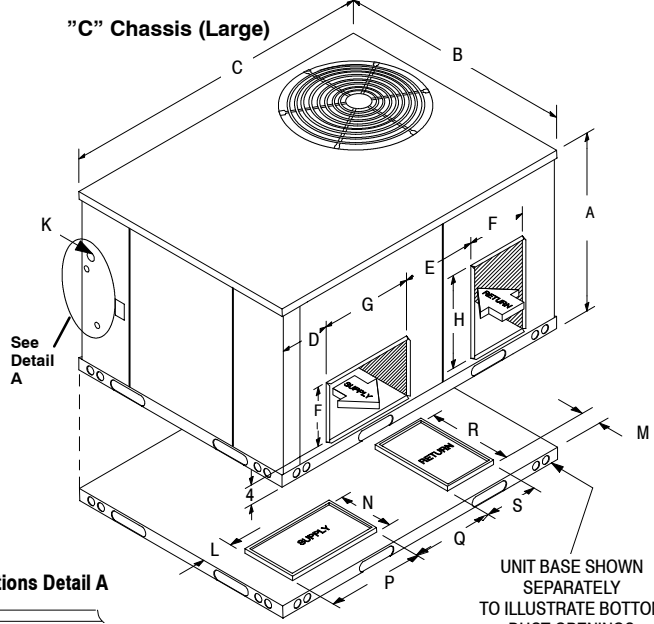
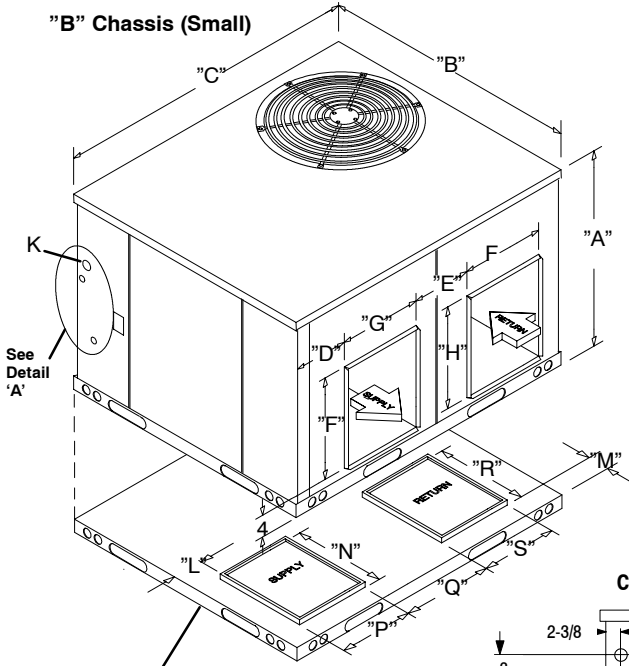
* Available through Service Parts only.

INTERNAL FILTERS AND ACCESSORIES

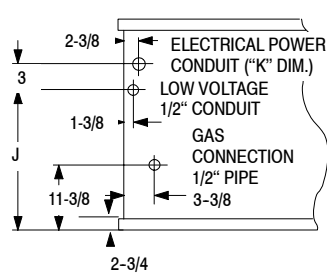
Description	Model Number *	Used on
Filter Retainer (2 Req.)	1054517	3-1/2 to 5 TON
Filter (2 Req.)	1054503	3-1/2 to 5 TON
Handle, Filter Access Panel	1068209	3-1/2 to 5 TON

* Available through Service Parts only.

UNIT DIMENSIONS



Connections Detail A



Detail 'A'

NOTE: All condensate drains are 3/4" NPT.

ALL DIMENSIONS IN INCHES

Model No.	A	B	C	D	E	F	G	H	J	K	L	M	N**	P**	Q	R	S	Inside Base Rail
3 Ton	32-1/2	47-3/8	47-3/8	3-1/8	11-1/8	12	14-1/4	14-1/4	21-1/2	3/4 - 1	4-1/4	4-3/8	14-1/2	12-1/4	12-1/8	14-1/4	12-1/4	43-1/8 x 43-1/8
3-1/2 to 5 Ton	36	47-3/8	73	4-5/8	15	12	18-3/4	18-3/4	25-1/2	1 - 1-1/4	4-1/4	5-1/4	12-1/4	19	15	19	12-1/4	68-3/4 x 43-1/8

* NOTE: The base rail width is 2-1/8 inches, all around base of unit.

MODEL NUMBER IDENTIFICATION GUIDE

MODEL NUMBER	P	G	A	D	36	D	1	H	E Sales Code
PRODUCT FAMILY P = Single Package									ELECTRICAL CHARACTERISTICS H = 208 / 230-3-60 L = 460-3-60
FUEL (Heating) G = Gas									BLOWER OPTIONS 1 = Standard Direct Drive
DESIGN SERIES									GAS HEAT INPUT F = 120,000 D = 80,000 G = 140,000 E = 100,000
RESIDENTIAL UNIT INDICATOR D = Ultra-High Efficiency									COOLING CAPACITY (NOMINAL BTUH) 36 = 3 Ton 42 = 3-1/2 Ton 48 = 4 Ton 60 = 5 Ton

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.

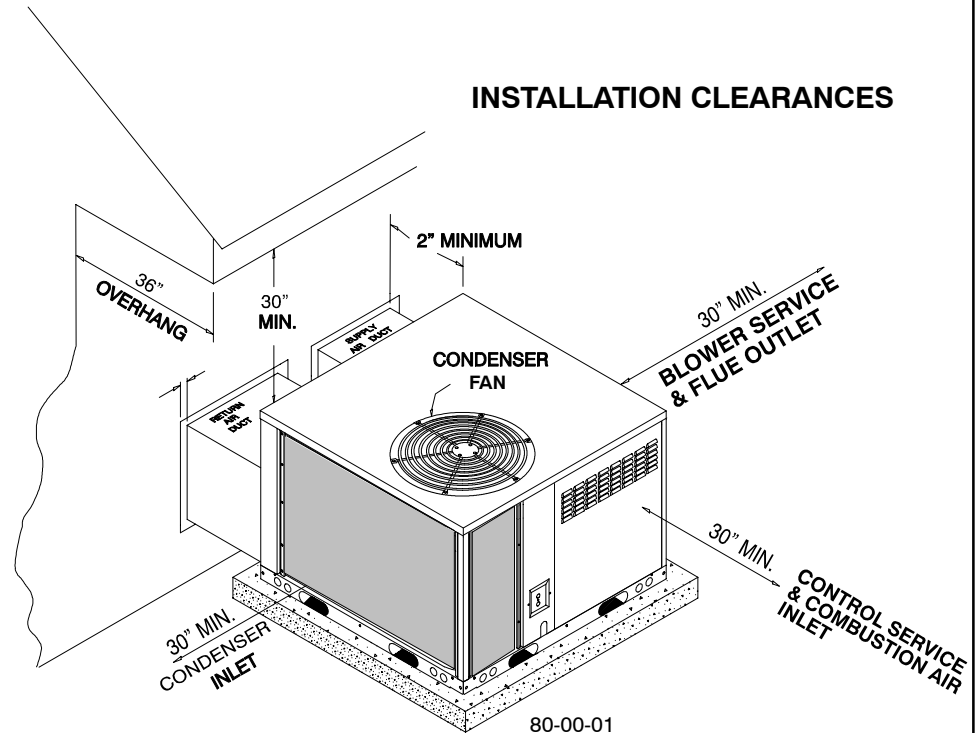
EVAPORATOR BLOWER

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.

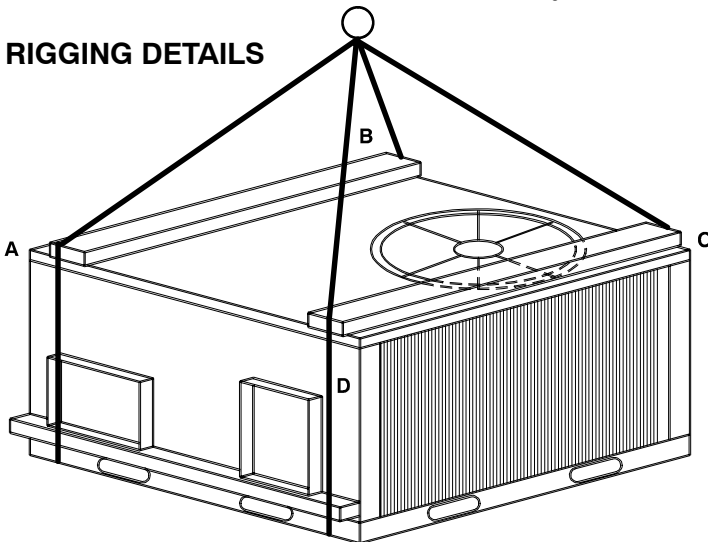
HEATING SECTION

The gas-fired heating section features an induced draft blower for combustion air. The unit has a stainless steel tubular heat exchanger located on the discharge air side of the blower. The system uses in-shot burners ignited by a hot surface pilot ignition system, protected by both a high heat limit switch and flame roll-out switch. The induced draft blower motor is interlocked with a proven air pressure safety device.

INSTALLATION CLEARANCES



RIGGING DETAILS



CORNER WEIGHTS (LBS)

MODEL	A	B	C	D	OPERATING WEIGHT TOTAL
PGAD36D	89	112	127	101	429
PGAD36E	92	114	130	103	439
PGAD42D	124	155	155	125	559
PGAD42E	125	155	155	125	560
PGAD48D	135	166	166	136	603
PGAD48F	141	174	174	141	630
PGAD60E	140	173	173	140	626
PGAD60G	142	176	176	142	636

SPECIFICATION SUBJECT TO CHANGE WITHOUT NOTICE