

10 SEER



CONVERTIBLE SINGLE PACKAGE GAS/ELECTRIC UNIT

SINGLE PACKAGE

- Efficiency: PGAA - 10 SEER.
- Combination gas heating and electric cooling, self-contained for year-round comfort. Systems install on rooftop or at ground level. Units are shipped complete in one carton; with only the flue gas vent requiring mounting at time of installation.

CONSTRUCTION

- Pre-painted galvanized steel cabinet with one piece weather resistant top. Galvanized steel 18 gauge base rails are integral to unit and have fork lift access holes on three sides plus holes for lifting lugs for rooftop installation.
- Coil Guard to protect condenser coil.

ACCESS PANELS

- Located to provide easy serviceability. The gas and electrical controls are behind the same exterior panel.

CONVERTIBLE DISCHARGE

- Units have side-by-side supply and return air openings for either horizontal or downflow applications. Convertible duct openings provides flexibility of installation. Simply relocate duct cover panels.

COMPRESSOR

- The high efficiency compressor has external rubber mounts to help minimize system noise and features an automatic reset current / temperature sensing overload protection system. Selected models feature scroll compressors.

COILS

- Both the condenser and evaporator coils have aluminum fins and copper tubes to promote efficient heat transfer. The refrigerant flow is controlled with capillary tubes. The refrigerant circuit is sealed, tested, and fully charged at the factory.

EXTERNALLY-MOUNTED GAUGE PORTS

- Provides easier servicing and allows for more accurate reading of operating conditions.

INDUCED DRAFT COMBUSTION

- An induced draft combustion blower is used to provide air for combustion. A safety switch is used to prove that air for combustion is being delivered to the main burners before ignition takes place.

HOT SURFACE PILOT (HSP) ELECTRONIC INTERMITTENT IGNITION DEVICE

- The hot surface pilot ignition (HSP) is more energy efficient and provides added safety of operation.

ELECTRONIC FAN CONTROL

- Adjustable electronic fan control with optional low speed continuous fan feature responds quickly to circulate heated air and provide maximum comfort.

IN-SHOT BURNERS

- New design delivers more complete, efficient combustion.

STAINLESS STEEL TUBULAR HEAT EXCHANGER

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

EVAPORATOR BLOWER

- All model sizes are equipped with multiple speed direct drive blower motors to provide proper air flow for both heating and cooling requirements.

AIR FILTERS

- Air filters are not supplied with these units. Air filters, provided by the installer, can be used in the return air duct system. Accessory filter kits are available for downflow and horizontal applications.

WARRANTY

- Standard five (5) year limited warranty on parts.
- Five (5) year limited warranty on the compressor.
- Ten (10) year limited warranty on the gas fired heat exchanger.

OPTIONAL FIELD INSTALLED ACCESSORIES

- Roof Curb
- Low ambient kit
- LP Kits
- Economizer
- Air filter rack
- Hail guard

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 21 1002 00

3/15/05

UNIT SPECIFICATIONS

MODEL NUMBER	Electrical Data					Condenser Data								
	208 / 230 Voltage Phase - Hz	Wire Size / Max Length (Ft)	Time Delay Fuse Size	HACR Breaker / Max. Fuse	Ampacity	Coil			Fan Motor			Fan		
						Total Face Area (Sq. Ft.)	Fins Per In. / Rows	Tube Diameter (In.)	HP	Full Load Amps	Locked Rotor Amps	Size Diameter (In.)	RPM (Max.)	CFM (Max.)
PGAA18B1KE	1-60	#12 / 66	20 amps.	20 amps.	14.00	8.35	20 / 1	3/8	1/5	1.3	2.36	20.375	1145	2250
PGAA18C1KE	1-60	#12 / 66	20 amps.	20 amps.	14.00				1/5	1.3	2.36	20.375	1145	2250
PGAA24B1KE	1-60	#12 / 57	20 amps.	25 amps.	16.50	11.47	20 / 1	3/8	1/3	1.4	3.57	20.375	1145	2250
PGAA24C1KE	1-60	#12 / 57	20 amps.	25 amps.	16.50				1/3	1.4	3.57	20.375	1145	2250
PGAA24D1KE	1-60	#12 / 56	20 amps.	25 amps.	16.70				1/3	1.4	3.57	20.375	1145	2250
PGAA30C1KE	1-60	#12 / 42	25 amps.	30 amps.	20.90	11.47	20 / 1	3/8	1/3	1.4	3.70	20.375	1135	3000
PGAA30D1KE	1-60	#12 / 42	25 amps.	30 amps.	20.90				1/3	1.4	3.70	20.375	1135	3000
PGAA36C1KE	1-60	#10 / 53	30 amps.	35 amps.	24.80	11.47	20 / 1	3/8	1/3	1.4	3.70	20.375	1135	3000
PGAA36D1KE	1-60	#10 / 53	30 amps.	35 amps.	24.80				1/3	1.4	3.70	20.375	1135	3000
PGAA36E1KE	1-60	#10 / 50	35 amps.	40 amps.	24.80				1/3	1.4	3.70	20.375	1135	3000
PGAA42C1KE	1-60	#8 / 61	40 amps.	50 amps.	33.30	11.47	20 / 2	3/8	1/3	1.4	3.70	20.375	1135	3000
PGAA42E1KE	1-60	#8 / 61	40 amps.	50 amps.	33.30				1/3	1.4	3.70	20.375	1135	3000
PGAA48D1KE	1-60	#8 / 60	40 amps.	60 amps.	34.10	17.2	20 / 1	3/8	1/2	1.8	6.20	22	1155	4000
PGAA48F1KE	1-60	#8 / 60	40 amps.	60 amps.	34.30				1/2	1.8	6.20	22	1155	4000
PGAA60D1KE	1-60	#6 / 72	60 amps.	60 amps.	46.20	17.2	20 / 2	3/8	3/4	2.6	9.52	22	1155	4500
PGAA60E1KE	1-60	#6 / 72	60 amps.	60 amps.	46.20				3/4	2.6	9.52	22	1155	4500
PGAA60G1KE	1-60	#6 / 70	60 amps.	60 amps.	47.20				3/4	2.6	9.52	22	1155	4500

MODEL NUMBER	Evaporator Coil									Compressor			Factory Refrigerant Charge R-22 (Oz.)	Shipping Weight (Lbs.)	Sound Rating
	Coil			Blower H.P. / Type / Speeds	Motor		Blower			Type	Rated 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						
PGAA18B1KE	3.56	14 / 2	3/8	1/6 / PSC / 3	1.5	1.81	DD10-6A	900	600	RECIP.	7.2	48	64	410	7.6
PGAA18C1KE					1.5	1.81	DD10-6A	900	600		7.2	48	64	410	
PGAA24B1KE	3.56	14 / 3	3/8	1/4 / PSC / 4	2.1	3.08	DD10-6A	1050	800	RECIP.	10.7	56	78	410	7.8
PGAA24C1KE					2.1	3.08	DD10-6A	1050	800		10.7	56	78	410	
PGAA24D1KE	3.56	14 / 3	3/8	1/3 / PSC / 3	2.3	4.10	DD10-8A	1100	800	RECIP.	10.7	56	78	410	
PGAA30C1KE	3.56	15 / 3	3/8	1/3 / PSC / 3	2.3	4.10	DD10-8A	1100	900	RECIP.	13.7	75	74	425	7.8
PGAA30D1KE					2.3	4.10	DD10-8A	1100	900		13.7	75	74	425	
PGAA36C1KE	3.56	14 / 4	3/8	1/2 / PSC / 3	4.0	7.50	DD10-8AT	1075	1200	SCROLL	15.5	93	64	435	7.6
PGAA36D1KE					4.0	7.50	DD10-8AT	1075	1200		15.5	93	64	435	
PGAA36E1KE	3.56	14 / 3	3/8	1/2 / PSC / 4	4.0	7.50	DD10-8AT	1075	1200	SCROLL	15.5	93	64	435	
PGAA42C1KE	3.56	14 / 4	3/8	3/4 / PSC / 4	5.6	12.85	DD11-9AT	1145	1400	SCROLL	21.0	127	99	455	7.6
PGAA42E1KE					5.6	12.85	DD11-9AT	1145	1400		21.0	127	99	455	
PGAA48D1KE	8.22	15 / 2	3/8	1/2 / PSC / 4	4.4	8.63	DD10-9A	1140	1600	SCROLL	22.3	131	104	600	7.8
PGAA48F1KE				1 / PSC / 3	4.6	7.94	DD11-11A	1125	1600		22.3	131	104	600	
PGAA60D1KE	8.22	14 / 3	3/8	1 / PSC / 4	5.0	8.75	DD11-11A	1125	2000	SCROLL	30.9	144	180	625	8.0
PGAA60E1KE					5.0	8.75	DD11-11A	1125	2000		30.9	144	180	625	
PGAA60G1KE					6.0	8.75	DD11-11A	1150	2000		30.9	144	180	630	

PERFORMANCE DATA: HEATING

MODEL NUMBER	Input (MBTUH)	Output (MBTUH)	Efficiency *	Temperature Rise ° F	Gas Piping Size (In.)	Transformer Size Va.
	Standard	Standard	AFUE			
			Std.			
PGAA18B1KE	40	31	78.0	35-65	1/2	40
PGAA18C1KE	60	48	78.0	35-65	1/2	40
PGAA24B1KE	40	31	78.0	35-65	1/2	40
PGAA24C1KE	60	48	78.0	35-65	1/2	40
PGAA24D1KE	80	62	78.0	35-65	1/2	40
PGAA30C1KE	60	48	78.0	35-65	1/2	40
PGAA30D1KE	80	62	78.0	35-65	1/2	40
PGAA36C1KE	60	48	78.0	35-65	1/2	40
PGAA36D1KE	80	62	78.0	35-65	1/2	40
PGAA36E1KE	100	79	78.0	35-65	1/2	40
PGAA42C1KE	60	48	78.0	35-65	1/2	40
PGAA42E1KE	100	78	78.0	35-65	1/2	40
PGAA48D1KE	80	62	78.0	35-65	1/2	40
PGAA48F1KE	120	95	78.0	35-65	1/2	40
PGAA60D1KE	80	62	78.0	35-65	1/2	40
PGAA60E1KE	100	78	78.0	35-65	1/2	40
PGAA60G1KE	140	110	78.0	35-65	1/2	40

* As determined by D.O.E. 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
PGAA18B1KE	17,000	.76	10.0	8.95	1899	600	.15
PGAA18C1KE							
PGAA24B1KE	22,800	.78	10.05	8.85	2567	800	.15
PGAA24C1KE							
PGAA24D1KE							
PGAA30C1KE	27,200	.72	10.0	8.60	3168	900	.23
PGAA30D1KE							
PGAA36C1KE	34,000	.77	10.0	8.85	3841	1200	.20
PGAA36D1KE							.20
PGAA36E1KE							.30
PGAA42C1KE	40,000	.76	10.0	8.50	4705	1400	.20
PGAA42E1KE							
PGAA48D1KE	45,000	.78	10.05	8.85	5085	1600	.30
PGAA48F1KE							.20
PGAA60D1KE	58,500	.76	10.0	8.25	7090	2000	.30
PGAA60E1KE							
PGAA60G1KE							

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

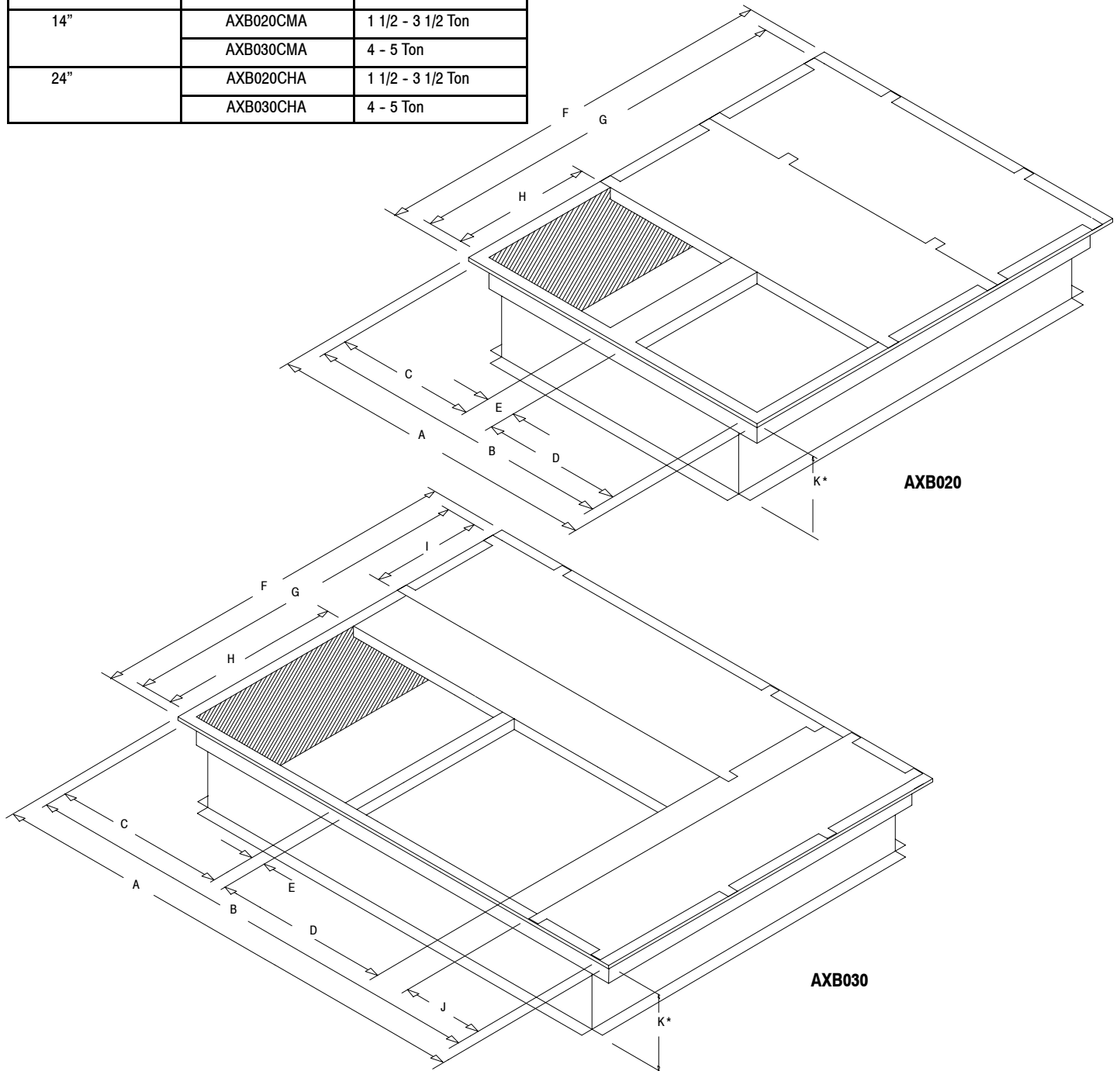
² Includes a .08 drop for a filter

³ For reference only

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	1 1/2 - 3 1/2 Ton
	AXB030CLA	4 - 5 Ton
14"	AXB020CMA	1 1/2 - 3 1/2 Ton
	AXB030CMA	4 - 5 Ton
24"	AXB020CHA	1 1/2 - 3 1/2 Ton
	AXB030CHA	4 - 5 Ton



ROOF CURB DIMENSIONS (INCHES)

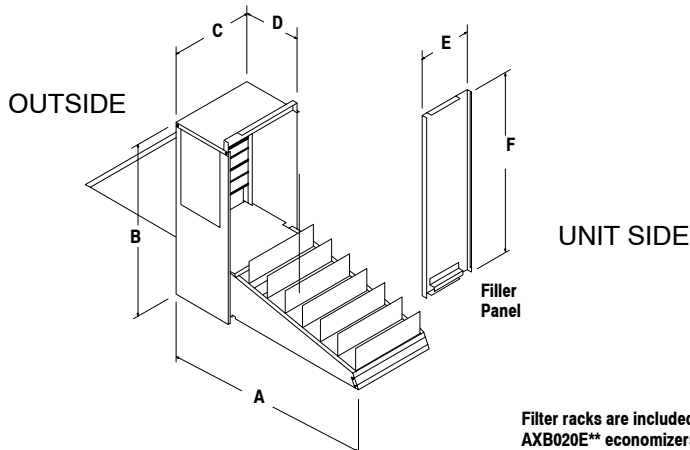
Model No.	A	B	C	D	E	F	G	H	I	J	K (L)	K (M)	K (H)
AXB020C*A	42-3/4	39-3/4	18	18	3-3/4	42-3/4	39-3/4	18	-	-	8	14	24
AXB030C*A	67-3/4	64-3/4	23	23	2-1/2	42-3/4	39-3/4	23	12	12	8	14	24

* ROOF CURBS AVAILABLE IN 8", 14" and 24" HEIGHTS (K DIMENSIONS)

ACCESSORIES

ECONOMIZER FEATURES: DOWNFLOW AND HORIZONTAL

- Provides outdoor air ventilation, automatic free cooling when favorable outside conditions exist, with pressure relief for proper air balance on selected models.
- Interconnecting wiring furnished
- 24 volt system
- Center mounted, dual action, dampers with gasketing ensure proper seal.
- Barometric pressure relief damper is standard on some models.
- Enthalpy controls on selected models.



Modulating & Three Position Economizers

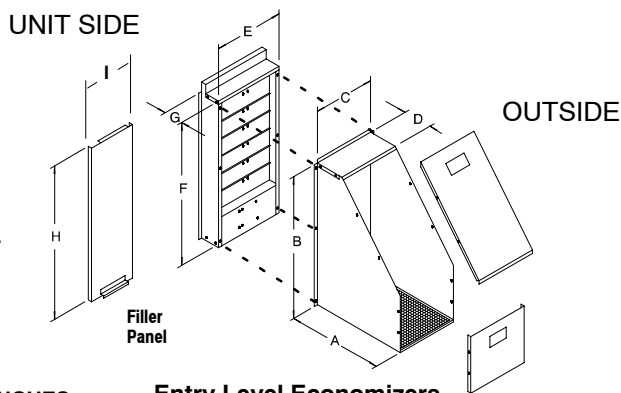
Filter racks are included with AXB020E** economizers. Requires 18 X 25 X 1 or 2 Filter, Field Supplied.

ECONOMIZERS - DOWNFLOW

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

Description	Model Number	Used on
Fully Modulating	AXB030EMC (1)	4 - 5 Ton
Three Position	AXB030EPD (2)	4 - 5 Ton
Three Position (Entry Level)	AXB030ECA (3)	4 - 5 Ton

- (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.



Entry Level Economizers

80-00-54

ALL DIMENSIONS IN INCHES

Economizer Model No.	A	B	C	D	E	F
AXB020E**	29	27-1/2	12-3/4	10-7/8	7-1/2	29-1/2
AXB030E**	35	31	14-3/4	10-7/8	9-3/8	32-1/2

Economizer Model No.	A	B	C	D	E	F	G	H	I
AXB020ECA	20 ¹ / ₄	26-1/2	11	6	12 ³ / ₄	27 ¹ / ₂	4 ¹ / ₈	29 ¹ / ₂	7-1/2
AXB030ECA	20 ¹ / ₄	30	13	6	12 ³ / ₄	31	4 ¹ / ₈	32 ¹ / ₂	9-3/8

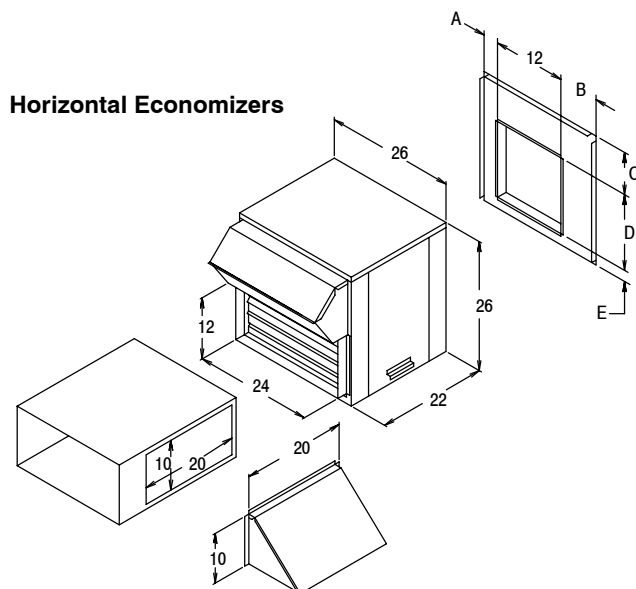
ECONOMIZERS - HORIZONTAL

Description	Model Number	Used on
Fully Modulating	AXB020HEC (1)	1 1/2 - 3 1/2 Ton
	AXB030HEC (1)	4 - 5 Ton
Three Position	AXB020HPD (2)	1 1/2 - 3 1/2 Ton
	AXB030HPD (2)	4 - 5 Ton

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

Economizer Model No.	A	B	C	D	E
AXB020H**	5	8-3/4	8-1/2	14-1/4	3
AXB030H**	9-3/4	4	6	18-3/4	1

ALL DIMENSIONS IN INCHES



Horizontal Economizers

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ACCESSORIES (CONT...)

OUTDOOR AIR DAMPERS

Description	Model Number	Used on
Manual 0 - 25%	AXB020FAC	1 1/2 - 3 1/2 Ton
	AXB030FAC	4 - 5 Ton
Motorized 0 - 25%	AXB020FMC	1 1/2 - 3 1/2 Ton
	AXB030FMC	4 - 5 Ton

FILTER RACK - must use with outdoor air dampers

Description	Model Number	Used on
* Downflow	AXB020FKA	1 1/2 - 3 1/2 Ton
* Horizontal	AXB020FHC	1 1/2 - 3 1/2 Ton

* Requires 1 field supplied 18 x 25" filter.

COIL PROTECTION

Description	Mainline Part Number / Service Parts Number *	Used on
Coil Guard (Black, 1 piece)	1149591	1 1/2 to 2 Ton
Coil Guard (Black, 2 pieces)	AXB020CGB / 1149485	1 1/2 - 3 1/2 Ton
Coil Guard (Black, 3 pieces)	AXB030CGB / 1149486	4 - 5 Ton
Coil Guard (Black, 2 pieces)	AXB020HGB / 1068133	1 1/2 - 3 1/2 Ton
Coil Guard (Black, 3 pieces)	AXB030HGB / 1068134	4 - 5 Ton

* Available through Service Parts only.

FOSSIL FUEL CONVERSION (0' - 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 KIT

Description	Mainline Model Number	Used on
Roof Curb Transition (For Round Duct)	AXB020CTA	1 1/2 - 3 1/2 Ton
	AXB030CTA	4 - 5 Ton
Grille, Flush Mount *	AXB020CFA	1 1/2 - 3 1/2 Ton
	AXB030CFA	4 - 5 Ton
Grille, Step Down *	AXB020CSA	1 1/2 - 3 1/2 Ton
	AXB030CSA	4 - 5 Ton

* Includes grille and diffuser / transition box.

LOW AMBIENT CONTROLS

Description	Service Parts Number *	Used on
To 0° F	1148232	1 1/2 - 3 1/2 Ton
To 0° F	1148233	4 - 5 Ton

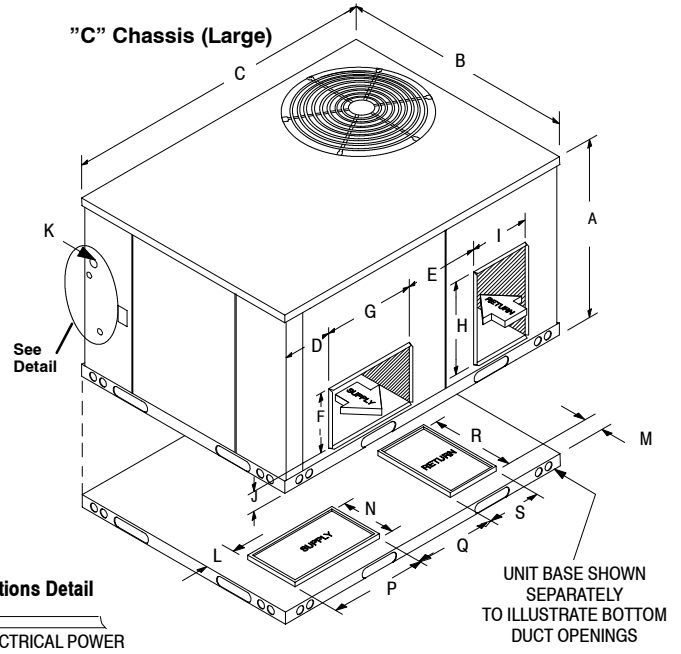
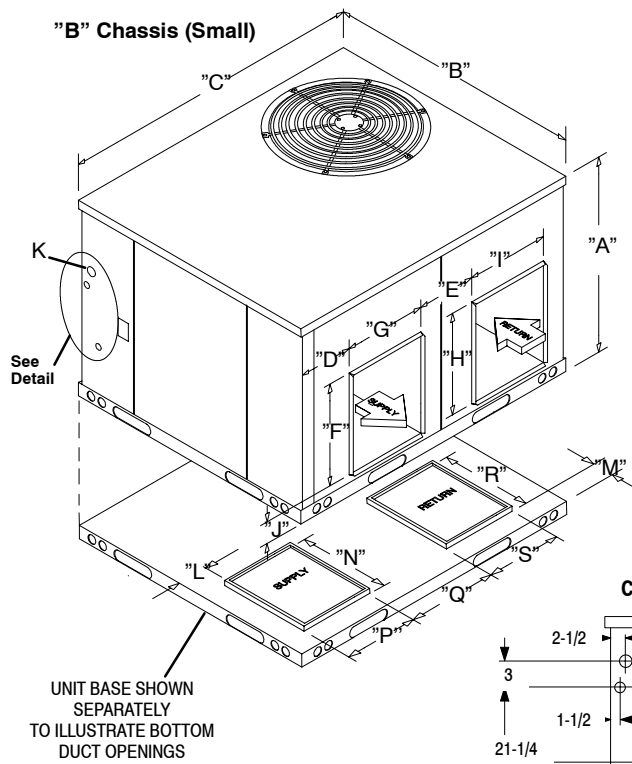
* Available through Service Parts only.

INTERNAL FILTERS AND ACCESSORIES

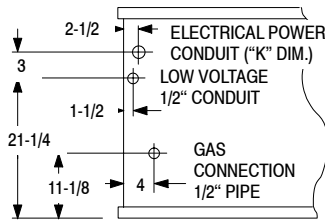
Description	Service Parts Number *	Used on
Filter Retainer (2 Req.)	1054517	4 - 5 Ton
Filter (2 Req.)	1054503	4 - 5 Ton
Handle, Filter Access Panel	1068209	4 - 5 Ton

* Available through Service Parts only.

UNIT DIMENSIONS



Connections Detail



ALL DIMENSIONS IN INCHES

Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N**	P**	Q	R	S	Inside Base Rail
PGAA18-42	32-1/2	47-3/8	47-3/8	3-1/8	11-1/8	12	14-1/4	14-1/4	12	4	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
PGAA48-60	36	47-3/8	73	4-5/8	15	12	18-3/4	18-3/4	12	4	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	A	18	B	1	K	E	SALES CODE
PRODUCT FAMILY P = Single Package										ELECTRICAL K = 208 / 230-1-60
FUEL (Heating) G = Gas										BLOWER OPTIONS 1 = Standard Direct Drive
DESIGN SERIES										GAS HEAT INPUT B = 40,000 E = 100,000 C = 60,000 F = 120,000 D = 80,000 G = 140,000
RESIDENTIAL UNIT INDICATOR A = Standard Efficiency										COOLING CAPACITY (NOMINAL BTUH) 18 = 1-1/2 Ton 42 = 3-1/2 Ton 24 = 2 Ton 48 = 4 Ton 30 = 2-1/2 Ton 60 = 5 Ton 36 = 3 Ton

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

GUIDE SPECIFICATION

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 re-locating 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

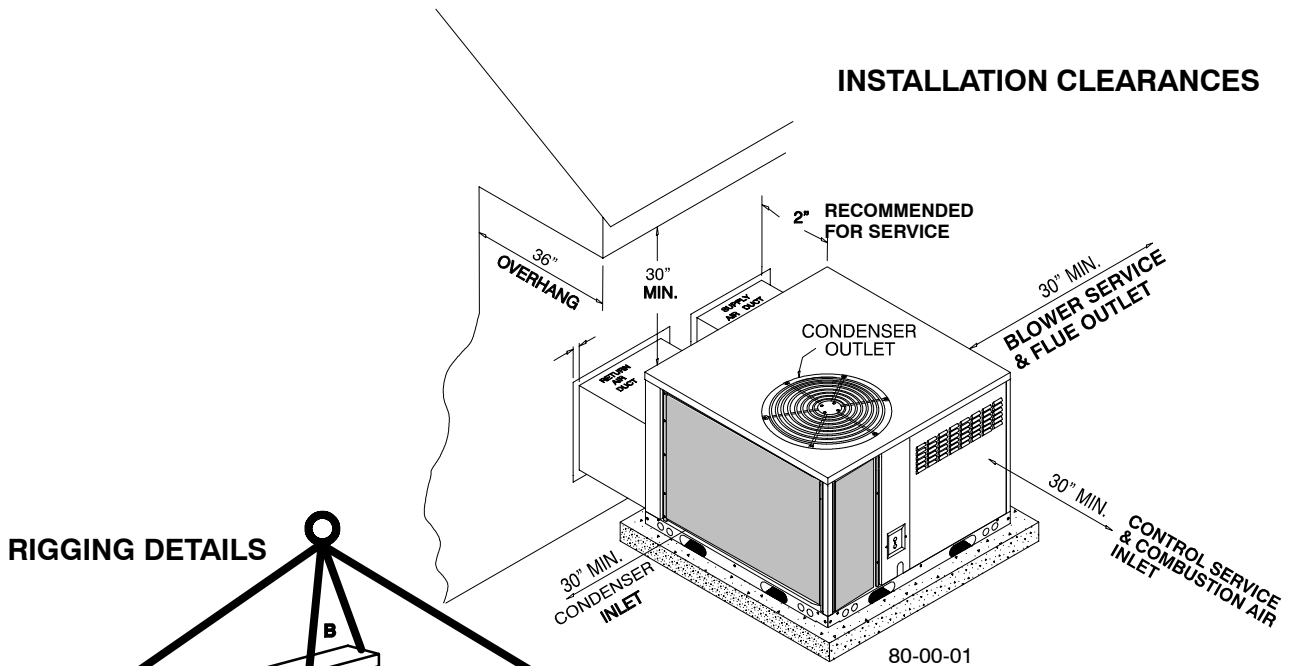
The unit has a single direct-drive propeller-fan / motor assembly. The assembly is mounted directly to a vertical-discharge grille that is easily removed for service. Motors are 1100 RPM with sleeve or ball bearings and internal overload protection.

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 an 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.



CORNER WEIGHTS (LBS)

MODEL	A	B	C	D	OPERATING WEIGHT TOTAL
PGAA18	82	113	110	81	386
PGAA24	85	116	112	83	396
PGAA30	87	119	119	87	412
PGAA36	88	110	125	99	422
PGAA42	90	103	129	114	436
PGAA48	130	161	161	130	582
PGAA60	137	169	169	137	612