

## Three Phase Models



### CONVERTIBLE SINGLE PACKAGE GAS/ELECTRIC UNIT

#### 3 THRU 5 TON, THREE PHASE

- Efficiency: - **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

- Triple-coated steel, consisting of a Polyester top coat, a urethane primer coat preceded by an oxide pretreatment. One piece weather resistant top. Access panels for easy service. Side by side supply and return. Heavy gauge base with rails.
- 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. 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. 3 to 4 ton uses reciprocating compressors, 5 ton uses a scroll.

#### 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.

#### HEAT EXCHANGER

- Aluminized serpentine clamshell heat exchanger provides corrosion resistance for longer life and 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 supplied with these units.

#### TRANSFORMER

- 65VA
- Resettable circuit breaker.

#### ECONIMIZER

- Factory wired to accept economizer.

#### WARRANTY

- Standard one (1) year limited warranty on parts.
- Five (5) year limited warranty on the compressor.
- Ten (10) year limited warranty on the gas fired heat exchanger.

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

## UNIT SPECIFICATIONS

MODEL * NUMBER	Electrical Data			Condenser Data									BELS
				Coil			Fan Motor			Fan			
	Voltage Phase - Hz	HACR Breaker / Max. Fuse	Ampacity	Total Face Area (Sq. Ft.)	Fins Per In. / Rows	Tube Diameter (In.)	HP	Full Load Amps	RPM (Max)	Size Diameter (In.)	No. Blades Pitch °	CFM (Max.)	
PGF036H	208/230-3-60	30 amps.	20.0	14.9	20 / 1	3/8	1/3	1.9	1140	20.3	3 -27	3000	7.8
PGF036L	460-3-60	15 amps.	9.6	14.9	20 / 1	3/8	1/3	.75	1140	20.3	3 -27	3000	7.8
PGF036S	575-3-60	15 amps.	7.7	14.9	20 / 1	3/8	1/3	.60	1140	20.3	3 -27	3000	7.8
PGF048H	208/230-3-60	35 amps.	22.9	10.5	20 / 2	3/8	1/3	1.9	1140	20.3	3 -27	3000	7.8
PGF048L	460-3-60	15 amps.	10.4	10.5	20 / 2	3/8	1/3	.75	1140	20.3	3 -27	3000	7.8
PGF048S	575-3-60	15 amps.	8.4	10.5	20 / 2	3/8	1/3	.60	1140	20.3	3 -27	3000	7.8
PGF060H	208/230-3-60	45 amps.	30.9	14.9	20 / 2	3/8	1/3	1.9	1140	20.3	3 -27	3000	8.0
PGF060L	460-3-60	25 amps.	13.9	14.9	20 / 2	3/8	1/3	.75	1140	20.3	3 -27	3000	8.0
PGF060S	575-3-60	15 amps.	11.9	14.9	20 / 2	3/8	1/3	.60	1140	20.3	3 -27	3000	8.0

MODEL NUMBER	Evaporator Coil									Compressor			Factory Refrigerant Charge R-22 (Oz.)	Ship Weight (Lbs.)
	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 Diam. (In.)		Full Load Amps	Locked Rotor Amps	Type & Size	RPM (Max)	CFM Rated					
PGF036H	5.33	14 / 2	3/8	1/2 / PSC / 3	4.1	7.50	DD11-9A	1000	1250	Recip	11.21	85	87	410
PGF036L	5.33	14 / 2	3/8	1/2 / PSC / 3	2.0	4.15	DD11-9A	1000	1250	Recip	5.51	42	87	410
PGF036S	5.33	14 / 2	3/8	1/2 / PSC / 3	1.5	3.60	DD11-9A	1000	1250	Recip	4.47	34	87	410
PGF048H *	5.33	14 / 3	3/8	1/2 / PSC / 3	4.1	7.50	DD11-9A	1000	1600	Recip	13.49	91	102	490
PGF048L *	5.33	14 / 3	3/8	1/2 / PSC / 3	2.0	4.50	DD11-9A	1000	1600	Recip	6.08	42	102	490
PGF048S	5.33	14 / 3	3/8	1/2 / PSC / 3	1.5	3.60	DD11-9A	1000	1600	Recip	5.04	39	102	490
PGF060H	5.33	14 / 4	3/8	1 / PSC / 4	6.0	15.0	DD12-12A	1000	1900	Scroll	18.43	124	136	510
PGF060L	5.33	14 / 4	3/8	1 / PSC / 4	2.5	7.2	DD12-12A	1000	1900	Scroll	8.93	60	136	510
PGF060S	5.33	14 / 4	3/8	1 / PSC / 1	2.4	5.80	DD12-12A	1000	1900	Scroll	7.13	49.4	136	510

\* PGF048\*120 have DD11-11 blower.

Air Filters are supplied with these units, 3 to 5 ton use 14 x 25 x 1 (2)

### PERFORMANCE DATA: HEATING

MODEL NUMBER	Input (MBTUH)	Output (MBTUH)	Efficiency **		Temperature Rise ° F	Gas Piping Size (In.)	Transformer Size Va.
	Standard	Standard	DOE (AFUE)	Calif. (CSE)			
			Std.	Std.			
PGF036*080	80	64	80.0	76.0	35-65	1/2	65
PGF036*100	100	80	80.0	76.0	35-65	1/2	65
PGF048*080	80	64	80.0	76.0	35-65	1/2	65
PGF048*120	120	96	80.0	76.0	40-70	1/2	65
PGF060*100	100	80	80.0	76.0	25-55	1/2	65
PGF060*140	140	112	80.0	76.0	35-65	1/2	65

\*\* 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. All models meet California C.S.E. and NOx standards.

### PERFORMANCE DATA: COOLING

MODEL NUMBER	Rated Capacity <sup>1</sup> BTUH	S / T Ratio	S.E.E.R.	E.E.R. <sup>3</sup>	Power Input Watts	Evaporator Rated Airflow (SCFM)	Ext. Static Pressure Drop <sup>2</sup> Wet
PGF036*080	38,000	.75	10.0	8.7	4000	1250	.15
PGF036*100							
PGF048*080	45,500	.79	10.0	9.1	5115	1600	.15
PGF048*120							
PGF060*100	58,000	.75	10.0	8.8	6480	1900	.15
PGF060*140							

<sup>1</sup> Rated Capacity @ ARI standard conditions, 95° Amb, 80° DB/67° WB, 230 Volts. For applications at 208 volts deduct 1000 BTU.

<sup>2</sup> Includes a .08 drop for a filter

<sup>3</sup> For reference only

## ACCESSORIES

### ROOF CURBS, TRANSITION AND DUCT KITS

Used on (Unit Size)	8" Curb	14" Curb	24" Curb	Square to Round Transition Kit	Round Duct Size (Inches)	Concentric Grill Flush Mount	Concentric Grill Step Down
3 - 5 Ton	ACL02FB0A *	ACM02FB0A *	ACH02FB0A *	ACT02FB0A	18	AXB030CFA	AXB030CSA
	AXB020CLA **	AXB020CMA **	AXB020CHA **	ACT22FB0A	18	AXB030CFA	AXB030CSA

#### ROOF CURB DIMENSIONS (AC SERIES)

Model No.	A	B	C	D	E	F	G	H	K (ACL)	K (ACM)	K (ACH)
AC(L,M,H)02FB0A	44-3/4	41-3/4	18-7/8	20-7/8	2	45-3/4	42-3/4	22	8	14	24

#### ROOF CURB DIMENSIONS (AX SERIES)

Model No.	A	B	C	D	E	F	G	H	K (CLA)	K (CMA)	K (CHA)
AXB020C(L,M,H)A**	42-3/4	39-3/4	18	18	3-3/4	42-3/4	39-3/4	18	8	14	24

\* Full Perimeter Curbs

\*\* AXB curbs are not full perimeter curbs. The units will have a 3 to 4 inch overhang on the back and sides. There will be some supply air blockage but it does not affect the performance of the unit.

#### ECONOMIZERS

Description	Mainline Model Number	Used on
Fully Modulating Horizontal	AHE02FB0A	3 to 5 Ton
Fully Modulating Downflow	AEM03FB0A	3 to 5 Ton
3 Position Horizontal	AHP02FB0A	3 to 5 Ton
3 Position Downflow	AEP03FB0A	3 to 5 Ton

#### FRESH AIR DAMPERS

Description	Mainline Model Number	Used on
35% Manual Fresh Air Damper	AFA02FB0A	3 to 5 Ton
35% Motorized Fresh Air Damper	AFM02FB0A	3 to 5 Ton

#### RETURN AIR FILTER KIT

Description	Mainline Model Number	Used on
Return Air Filter Kit	AKF12FBOA	ALL

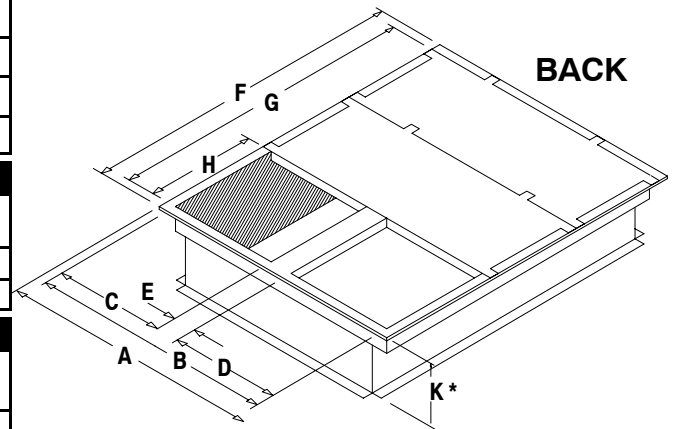
Filters not included in kit, uses 14 x 25 x 1 (2 ea)

#### HAIL GUARD

Description	Mainline Model Number	Used on
Hail Guard	AGH02FB0A	3 to 5 Ton

#### CONVERSION KITS

MODEL	Natural to L.P.		L.P. to Natural	
	KIT 1097389 ORIFICE #56	KIT 1160991 ORIFICE #54	KIT 1098574 ORIFICE #45	KIT 1098575 ORIFICE #41,42
PGF036*080		X	X	
PGF036*100		X		X
PGF048*080	X		X	
PGF048*120		X		X
PGF060*100		X		X
PGF060*140		X		X



**Curb Dimensions**

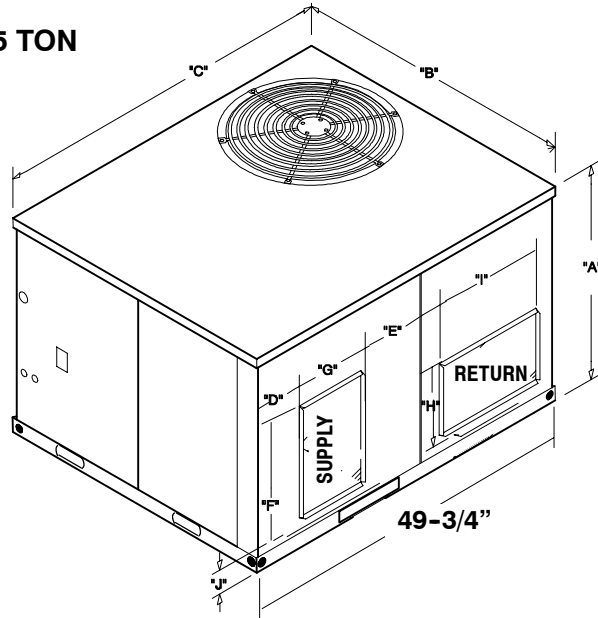
Roof Curbs available in 8", 14" and 24" Heights (K Dimensions)



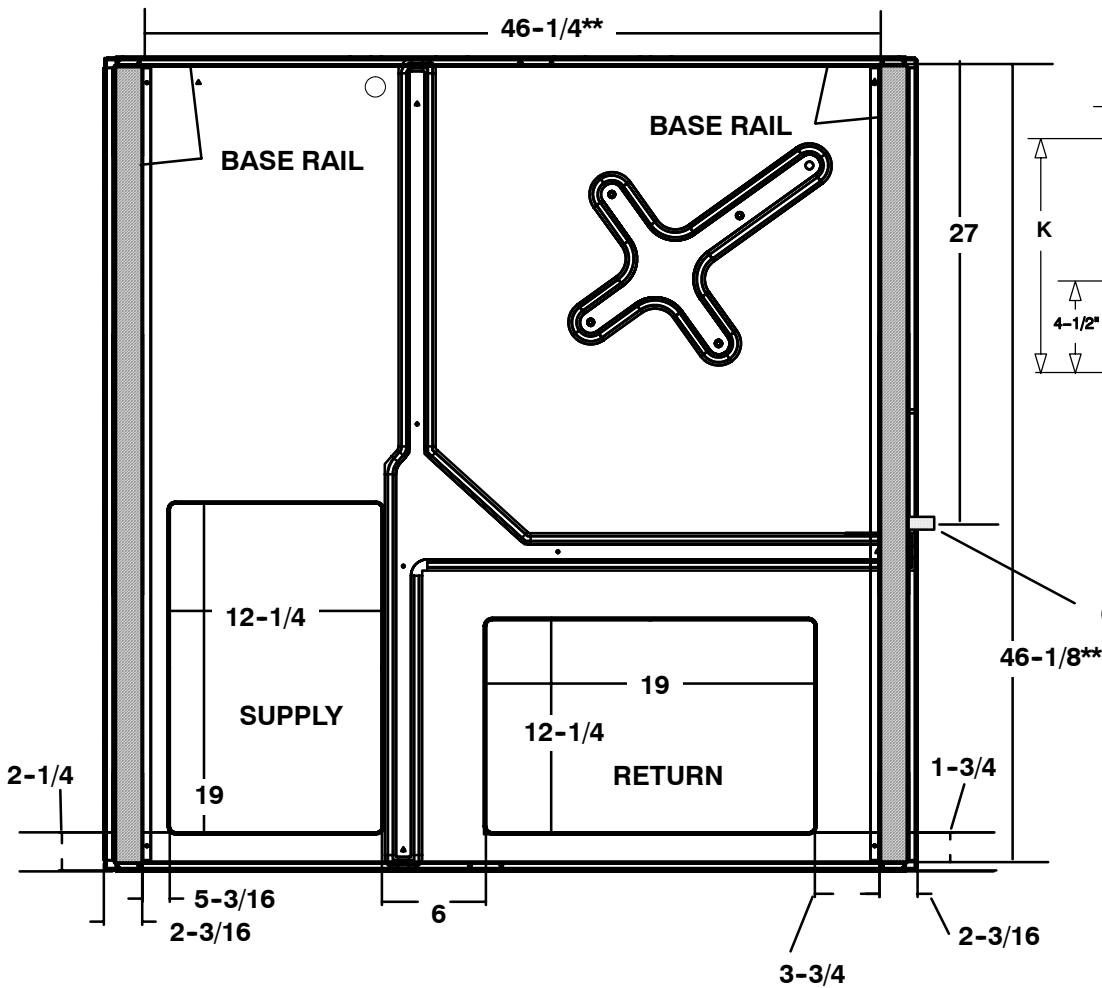


**UNIT DIMENSIONS**

**3 TO 5 TON**

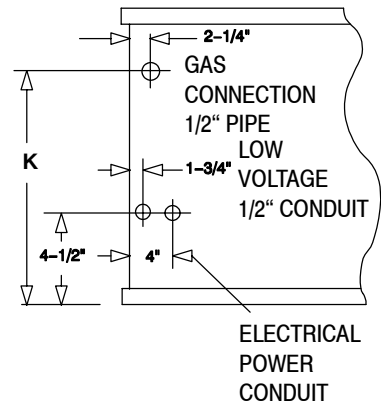


**BASE PAN**



ALL DIMENSIONS IN INCHES

**Connections Detail**



**Condensate Drain**

46-1/8\*\*

UNIT SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M
3 TO 5 Ton	37-1/2	47-1/2	51-1/2	7-1/2	6-1/2	19	12	12	19	4-1/2	22	46-1/4	5-3/16

\*\* Measured from inside to inside on base rails.

## MODEL NUMBER IDENTIFICATION GUIDE

<b>MODEL NUMBER</b>	<b>P</b>	<b>G</b>	<b>F</b>	<b>036</b>	<b>H</b>	<b>100</b>
P = Single Package						
<b>GAS ELECTRIC</b>						
						<b>GAS HEAT INPUT</b>
						060 = 60,000
						100 = 100,000    120 = 120,000
						080 = 80,000    140 = 140,000
						<b>ELECTRICAL CHARACTERISTICS</b>
						H = 208 / 230-3-60
						L = 460-3-60
						S = 575-3-60
<b>F = STANDARD SERIES</b>						<b>COOLING CAPACITY (NOMINAL BTUH)</b>
						36 = 3 ton
						48 = 4 Ton    60 = 5 Ton

## GUIDE SPECIFICATION

### CABINET

The cabinet is made of triple-coated steel, consisting of a Polyester top coat, a urethane primer coat preceded by an oxide pretreatment. One piece weather resistant top. The base rails are 16 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 1/2" 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 (5 ton has scroll 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.

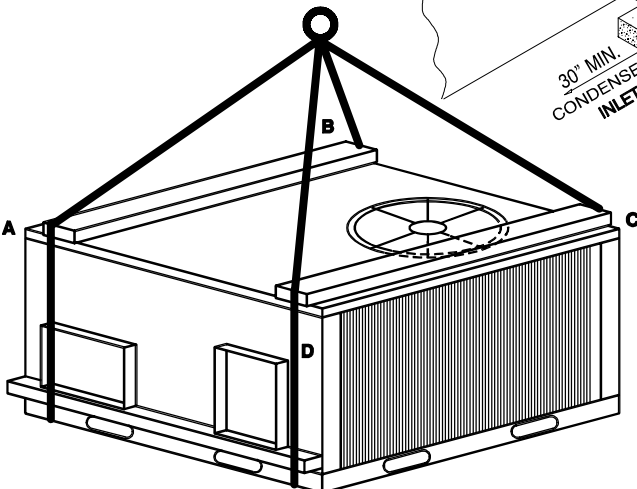
### EVAPORATOR BLOWER

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.

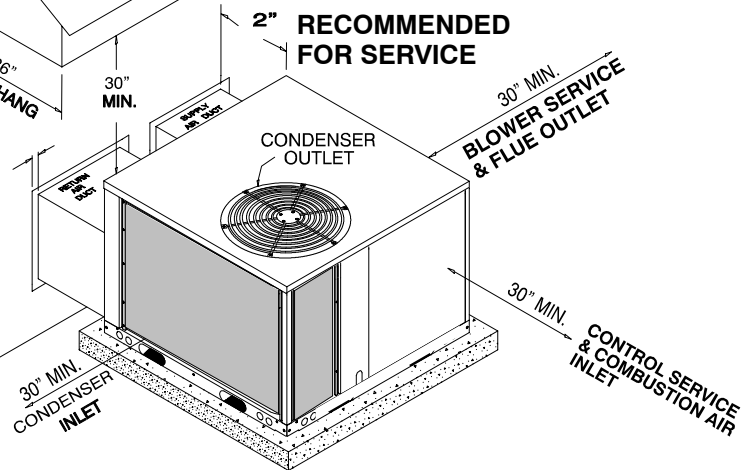
### HEATING SECTION

The gas-fired heating section features an induced draft blower for combustion air. The unit has an aluminized steel serpentine clamshell 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.

### RIGGING DETAILS



### INSTALLATION CLEARANCES



### CORNER WEIGHTS (LBS)

UNIT SIZE	A	B	C	D	OPERATING WEIGHT TOTAL
3 TON	82	103	143	82	410
4 TON	98	123	171	98	490
5 TON	100	125	175	100	500