



TECHNICAL GUIDE

SINGLE PACKAGE

AIR CONDITIONER / GAS HEAT

14 SEER – R-410A – 3 PHASE

3 THRU 5 NOMINAL TONS - 460V

50 THRU 125 MBH HEAT INPUT

MODELS: PCG4*36 THRU 60



Due to continuous product improvement, specifications are subject to change without notice.

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www.upgnet.com and www.york.com

Additional rating information can be found at:

www.ahridirectory.org

WARRANTY SUMMARY*

Standard 1-Year limited parts warranty.

Standard 5-Years limited compressor warranty.

Lifetime gas heat exchanger warranty with registration.

See limited warranty certificate in User's Information Manual for details.

DESCRIPTION

These packaged cooling/heating air conditioners are designed for outdoor installation. Only utility and duct connections are required at the point of installation.

FEATURES

- **Operating Efficiency** - All PCG4 model gas units provide a minimum AFUE of 81.0% in heating and 14.0 SEER, 11.0 EER rating for cooling operation. All models meet California Low-Nox requirements of 40 ng/joule emission level for Air Quality Management Districts.
- **On Site Flexibility** - All model sizes use a compact design cabinet in one of two footprints. This provides installer flexibility for placing the proper capacity unit on curbs or pads with the smallest footprint after the internal load has been determined. Field convertible duct connections from side shot to down shot allows the installer to have greater flexibility with less inventory.
- **Lower Installation Cost** - Installation time and costs are reduced by easy power and control wiring connections. The small base dimension means less space is required on the ground or roof. All units are completely wired, charged with R-410A and tested prior to shipment. Test stations using a state-of-the-art computerized process system are used to insure product quality. Refrigerant charge and component part numbers are verified via computers during assembly. Vital run test statistics such as system pressure, motor currents, air velocity and temperature, unit vibration, and gas system safeties are monitored and recorded by the system to insure unit performance. Equal size side supply and return duct connections allow easy connection of ducts to match low crawl spaces without transition pieces.
- **Utility Connections Made Easy** - Gas and electric utility access provided through the bottom or the side of the unit. Utility connections can be made quickly and with a minimum amount of field labor. A field supplied and field installed electrical disconnect switch must be installed.
- **Convertible Airflow Design** - The bottom duct openings are covered when they leave the factory, ready to be used for a side supply/side return application. If a bottom supply/bottom return application is desired, simply remove the two panels from the bottom of the unit and place them in the side supply/side return duct openings. No panel cutting is required and no accessory panel is necessary. Convertible airflow design allows maximum field flexibility and minimum inventory.
- **Condensate Pan** - A corrosion-resistant, long-lasting, water-tight pan is positioned below the evaporator coil to collect and drain all condensate, preventing build-up of stagnant condensate. The condensate pan conforms to ASHRAE 62-89 standards (Ventilation for Acceptable Indoor Air Quality).
- **Condensate Drain** - The 3/4 inch NPT female connection is rigidly mounted to assure proper fit and leak tight seal.
- **Durable Finish** - The cabinet is made of G90 galvanized steel with a powder paint coating for appearance and protection. The pre-treated galvanized steel provides a better paint-to-steel bond, which resists corrosion and rust creep. Powder paint finish insure less fading when exposed to sunlight, and provides superior corrosion resistance (1000 hour salt spray tested).

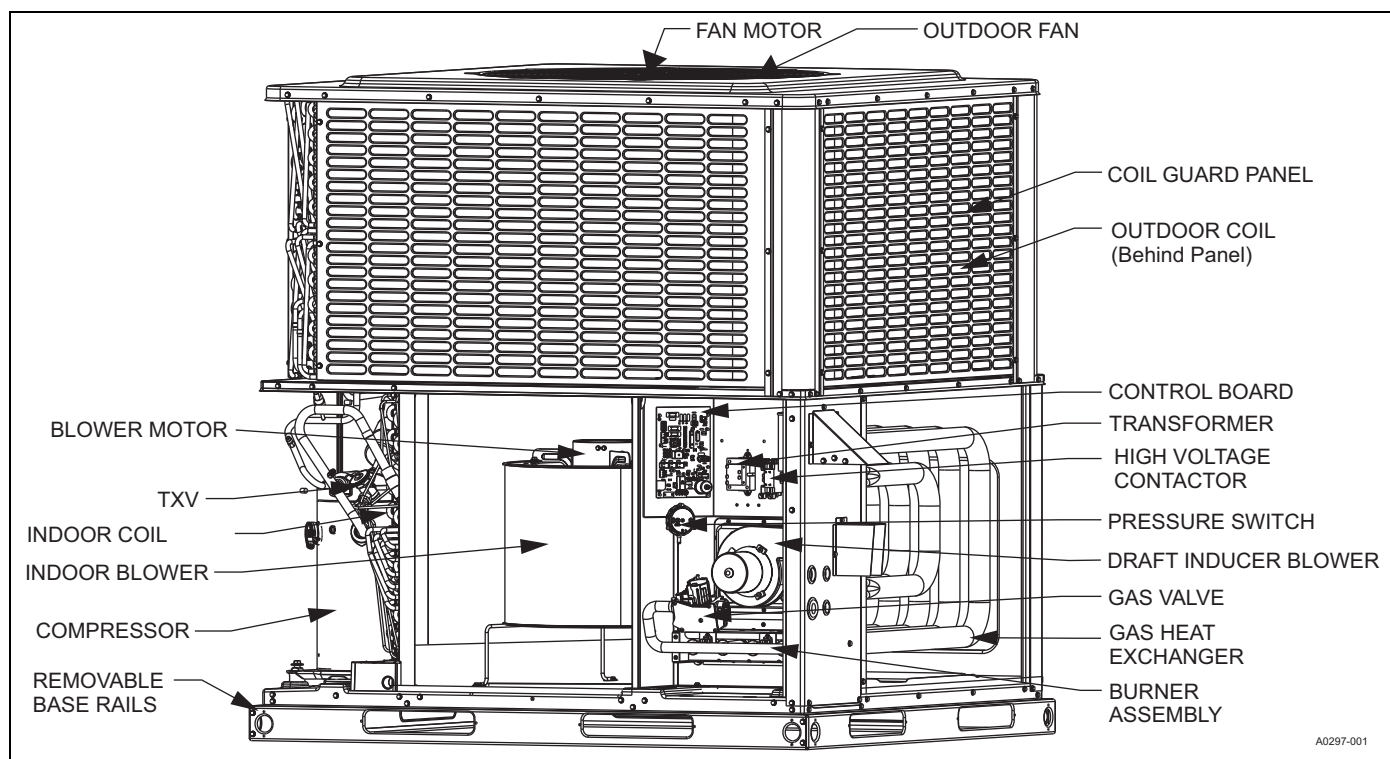
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- **Outdoor Coil Grille** - All models utilize a stamped slotted design which provides superior impact protection against small objects during transit and after installation.
- **Full Perimeter Base Rails** - The easily removable base rails provide a solid foundation for the entire unit and protects the unit during shipment. The rails provide fork lift access from all sides, and rigging holes are also provided so that an overhead crane can be used to place the units on a roof. On applications where the unit is placed on a pad, the base will keep the unit off the pad to deter corrosion. On applications where height is limited, the base rails may be removed by removing 2 screws in each corner.
- **More Attractive Appearance** - A single-piece top cover containing a top-discharge outdoor fan arrangement requires less square footage on installation and provides a wider variety of installations. The one-piece design adds greater water integrity. Rounded corners with water drip edges add to the attractive appearance.
- **Top Discharge** - The top-discharge outdoor fan does not disrupt neighboring areas or dry out vegetation surrounding the unit. The warm air from the top mounted fan is blown up and away from the structure and any landscaping. This allows compact location on multi-unit applications.
- **Low Operating Sound Level** - The upward air flow carries the normal operating noise up and away from the living area. The rigid top panel effectively isolates noise. Isolator mounted compressor and the rippled fins of the outdoor coil muffle the normal fan motor and compressor operating sounds. The unique formed base pan also aids in sound attenuation with its structural design. This design strategically places embossments in the pan for optimum strength and rigidity.
- **Fan System** - All models operate over a wide range of design conditions with a standard ECM indoor fan motor. These units easily match all types of applications and provide greater on-site flexibility to match comfort requirements. The cooling speed is factory-set and can be field-adjusted to a second speed. The heating speed is factory set to maintain mid point rise at the units heating input, but can be field adjusted. This allows maximum comfort conditions.
- **Simple Control Circuit** - A low voltage gas heat printed circuit board contains a status/diagnostic indicator light. Field thermostat wiring connects to color coded wire leads using twist on wire connections. Cooling controls use contactor and relays for simple application and troubleshooting. Mate-n-lock plug connectors are used. The electrical control box is not located in the compressor compartment. The controls are mounted to allow the separate access panel to be removed for trouble shooting and maintenance without affecting the normal system operating pressures. All wiring internal to the unit is color/number coded.
- **Protected Compressor** - The compressor is internally protected against high pressure and temperature. This is accomplished by the simultaneous operation of high pressure relief valve and a temperature sensor which protect the compressor if undesirable operating conditions occur.
- **Pressure Switches** - A high pressure switch is standard in all units. When abnormal conditions are sensed through the pressure switch, the unit will lock out preventing any further operation until reset or problem is corrected.
- **Exclusive Coil Design** - Grooved copper tubes and enhanced aluminum fin construction improves heat transfer for maximum efficiency and durability for long-lasting durability and efficient operation. Indoor coils use tin-coated copper tubing with aluminum fins for effective heat transfer.
- **Heat Exchangers** - Gas heat exchangers use corrosion-resistant, stainless-steel tubular construction to provide long-life, trouble-free operation. Gas heat exchangers are offered with lifetime warranties as standard with registration.
- **Post Purge Induced Draft Combustion** - Exhausts combustion products from the heat exchanger upon completion of the heating cycle to prolong the heat exchanger life.
- **Spark To Burner Ignition** - No pilot assembly required, which provides more consistent ignition in gas heating mode. This ignition is highly reliable, durable and eliminates nuisance lockouts.
- **Multi Port In-shot Burners** - No field adjustment is required to mix the air and gas for natural gas or propane use. These burners are constructed of high-grade corrosion-resistant, aluminized steel.
- **Low Maintenance** - Long life, permanently lubricated outdoor and evaporator fan motor bearings need no annual maintenance, adding greater reliability to the unit. Slide-out blower assembly can be easily removed for cleaning.
- **Easy Service Access** - Individual access panels covering the electrical and gas controls makes servicing easy. Removing this panel will allow easy removal of the blower assembly for maintenance and ease of troubleshooting.
- **Replacement Parts** - The installer requires no special training to replace any of the components of these units and the number of new components have been reduced to minimize the inventory of unique parts.
- **Loss of Charge Sensor (S1-2LC00024)** - Kit provides Loss of Charge sensor and wiring to provide safe shutdown of compressor.
- **Transition Curb Kits (S1-1TC01*)** - Adapter kits to allow field use of pre-existing installed roof curbs to match PCG4 footprint to Affinity roof curbs, Carrier, Trane, or Goodman curb footprints. Curb adapters are optional for current generation Carrier replacements but are recommended for previous generation applications. Refer to the PCG4 price pages for more details.

NOMENCLATURE

PCG	4	A	24	050	3	X	1	A
1	2	3	4	5	6	7	8	9
1. Model Family PCG - packaged A/C with gas heat, PCE - packaged A/C with electric heat, PHE - packaged heat pump with electric heat PHG - packaged heat pump with gas heat.					5. Gas Heating Input BTU/Hr x 1000 050 = 50,000 BTU/Hr. input, blank = electric heat			
2. Nominal Cooling Efficiency 4 = 14 SEER, 6 = 16 SEER, etc.					6. Voltage-Phase-Frequency 2 = 208/230-1-60, 3=208/230-3-60, 4 = 460-3-60			
3. Cabinet Size A = small 35 x 51, B = large 45 x 51					7. NOx Approval X = low-NOx, blank = not low-NOx			
4. Nominal Air Conditioning Cooling Capacity 24 = Nominal Capacity, etc.					8. Generation Level 1 = first generation			
Examples: PCG4B421003X1A is a packaged A/C with gas heat, 14 SEER, 3-1/2 ton, large cabinet, single-stage heat, 100,000 BTU gas heat, 230 volt, 3-phase, low-NOx model (first generation, first release).					9. Revision Level A = original release, B = second release			

COMPONENT LOCATION



UNIT LIMITATIONS

Model	Unit Voltage	Unit Limitations		
		Applied Voltage		Outdoor DB Temp
		Min	Max	Max (°F)
PCG4A36	460-3-60	432	504	125
PCG4B48				
PCG4B60				

ACCESSORIES

- **Propane Conversion Kit (S1-1NP0702, S1-1NP0701)** - Kit includes burner orifices, gas valve conversion and installation instructions necessary to field convert unit from natural gas to propane.
- **Economizer for Downflow Applications (S1-2EE04708424, S1-2EE04708524)** - Modulating integrated economizer provides simultaneous operation between the mechanical cooling and economizer operation. Independent blade design insures proper control and less than 1% leak rate. Includes hood and mesh bird screen filter integrated into the hood, dry bulb sensor and relief damper. Separate field accessories of single enthalpy and dual enthalpy are also available.
- **Economizer for Horizontal Applications (S1-2EE04708624, S1-2EE04708724)** - Modulating integrated economizer provides simultaneous operation between the mechanical cooling and economizer operation. Independent blade design insures proper control and less than 1% leak rate. Includes hood and mesh bird screen filter integrated into the hood, dry bulb sensor and relief damper. Separate field accessories of single enthalpy and dual enthalpy are also available.
- **Single/Dual Enthalpy Sensor (S1-2EC04700624)** - Sensor replaces dry bulb sensor standard in economizer kit. Provides improved economizer operation by sensing the dry bulb temperature from outdoors plus the enthalpy content of the outdoor air.
- **CO2 Sensor Kit (S1-2AQ04700824)** - Sensor kit detects CO2 levels automatically and overrides the economizer when CO2 levels rise above the preset limits.
- **Outdoor Temp. Sensor Kit (S1-2EC04700724S1-2EC04700724v)** - Additional outdoor air temp sensor kit used with economizers.
- **Filter/Frame Kit (Kit provided) (S1-1FF0602, S1-1FF0601)** - Kit contains the necessary hardware to field install return air filters into the base unit. The filter rack is suitable for either 1" or 2" filters. (filters not supplied).
- **Motorized Fresh Air Damper (S1-2MD04705224, S1-2MD04705124)** - Designed for duct mounted side supply/return and unit mounted down supply/return applications. Damper capable of providing 0% through 50% of outdoor air (field supplied). Closes on power loss, includes hood and screen assembly.
- **Rectangle to Round (Horizontal) Adapter (S1-1AK0110, S1-1AK0111)** - Kit includes one supply and one return air rectangle to round duct adapter. Adapters are preformed and designed to fit over current horizontal duct openings on the base unit. Transition is from rectangle to 12" round for the 1AK0110 kit and from rectangle to 14" round for the 1AK0111 kit.
- **Rectangle to Round (Downflow) Adapter (S1-1AK0108, S1-1AK0109)** - Kit includes one supply and one return air rectangle to round duct adapter. Adapters are preformed and designed to fit into current downflow duct openings on the roof curb. Transition is from rectangle to 16" round for the 1AK0108 kit and from rectangle to 18" round for the 1AK0109 kit.
- **Roof Curbs (S1-1RC0503, S1-1RC0501)** - NRCA approved curbs provide proper fit to base unit for rooftop installations. Curbs are designed to be assembled through hinge pins in each corner. Kit also provides seal strip to assure an air tight seal. These are 8 inch high roof curbs.
- **Roof Curbs (S1-1RC0504, S1-1RC0502)** - NRCA approved curbs provide proper fit to base unit for rooftop installations. Curbs are designed to be assembled through hinge pins in each corner. Kit also provides seal strip to assure an air tight seal. These are 14 inch high roof curbs.
- **Manual Outdoor Damper (S1-1FA0502, S1-1FA0501)** - Provides 0% through 50% outdoor air capability (field adjustable). Designed for duct mounted side supply/return applications. Includes hood and screen assembly.
- **Thermostat** - Compatible thermostat controls are available through accessory sourcing. For optimum performance, these outdoor units are fully compatible with our York touch screen thermostat with proprietary (patent-pending) hexagon interface. For more information, see the thermostat section of the Product Equipment Catalog.
- **Wall Thermostat** - The units are designed to operate with standard, 24-volt electronic and electro-mechanical thermostats. All units can operate with single stage heat/single stage cool thermostats - with or without the economizer.
- **Low Ambient Kit (S1-2LA04700824)** - Kit provides necessary hardware to convert unit to operate in cooling cycle down to 0° F. Standard unit operation 45° F.
- **Base Rail Hole Cover Kit (S1-1HC0101)** - Kit provides necessary hardware to close off openings in base rails to block off openings, i.e. prevent animal entrance.

GUIDE SPECIFICATIONS

GENERAL

Units shall be manufactured by Unitary Products in an ISO 9001 certified facility. Package units give you the flexibility and choices you need in today's market. These packaged cooling/heating air conditioners are designed for outdoor installation. Only utility and duct connections are required at the point of installation. The single-stage gas fired heaters have stainless steel tubular heat exchangers and spark to burner ignition. They are available in natural gas with field conversion to propane.

DESCRIPTION

Units shall be factory-assembled, single packaged, Electric Cooling/Gas Heating units, designed for outdoor installation. For SEER ratings, refer to technical literature. They shall have built in, equal size, field convertible duct connections for supply/return or horizontal supply/return. The units shall be factory wired, piped, charged with R-410A Refrigerant and factory tested prior to shipment. All unit wiring shall be both numbered and color coded. All models shall be rated in accordance with DOE and AHRI test procedures for both heating and cooling operation. Units shall be CSA listed and classified to ANSI Z21.47/CAN/ CSA 2.3 standards and UL 1995/CAN/CSA No. 236-M90 standards.

UNIT CABINET

Unit cabinet shall be constructed of G-90 galvanized, powder-painted steel, certified at 1000 hours salt spray test per ASTM-B117 standards. The unit top shall be a single piece design, with drip edges and no-seam corners to provide optimum water integrity. Unit shall have a rigidly mounted outdoor coil guard to provide protection from objects and personnel after installation. Indoor blower section shall be insulated with foil-faced or foam insulation, fastened to prevent insulation from entering the air stream. Cabinet panels shall be separate, easily removable for servicing and maintenance. Unit shall be built on a formed, design base pan, with embossments at critical points to add strength and rigidity and to aid in minimizing sound. Full perimeter base rails shall be provided to assure reliable transit of equipment, overhead rigging, for truck access and proper sealing on roof curb applications. Base rails shall be easily removable, when required to lower unit height. Filters shall be field installed, furnished and be accessible through a removable access door, sealed airtight. Units vertical discharge and return duct configuration shall be designed to fit between standard 24" O.C. beams without modification to building structure, duct work and base unit. Condensate pan shall be internally sloped and conform to ASHRAE 62-89 self-draining standards, with 3/4" NPT female ridged mount connection.

Indoor Blower Assembly - Fan shall be direct drive design. Fan wheel shall be double-inlet type with forward-curved blades, dynamically balanced to operate smoothly throughout the entire range of operation. Airflow design shall be constant air volume. Bearings shall be sealed and permanently lubricated for longer life and no maintenance. Fan assembly shall be a slide-out design for easy removal and cleaning. Indoor blower motors shall be equipped with a standard high efficiency brushless DC motor (constant torque) also known as a standard ECM motor.

Outdoor Fan Assembly - The outdoor fan shall be of the direct-driven propeller type, discharge air vertically, have aluminum blades riveted to corrosion resistant steel spider bracket and shall be statically balanced for smooth operation. The outdoor fan motor shall be totally enclosed with permanently lubricated bearings and internally protected against overload conditions.

REFRIGERANT COMPONENTS

Compressors:

- Shall be fully hermetic type, direct drive, internally protected with internal high-pressure relief and over temperature protection. The hermetic motor shall be suction gas cooled and have a voltage range of +/- 10% of the unit nameplate voltage.
- Shall have internal isolation and sound muffling to minimize vibration and noise, and be externally isolated on a dedicated, independent mounting.

Coils:

- Indoor coils shall have aluminum plate fins mechanically bonded to seamless internally enhanced tin-coated copper tubes with all joints brazed.
- Indoor coil shall be of the direct expansion, draw through design.
- Outdoor coils shall have aluminum plate fins mechanically bonded to seamless internally enhanced copper tubes with all joints brazed.
- Outdoor coil shall be draw through design.

Refrigerant Circuit and Refrigerant Safety Components shall include:

- Thermal expansion devices (TXV's) shall be factory mounted and provided.
- Filter/strainer to eliminate any foreign matter.

GAS HEATING SECTION

Heat exchanger and exhaust system shall be constructed of corrosion-resistant materials and shall be designed with induced draft combustion with post purge logic and redundant main gas valve. The heat exchanger shall be of the tubular type, constructed of stainless steel for corrosion resistance and allowing minimum mixed air entering temperature of 40 °F. Burners shall be of the in-shot type, constructed of aluminumized steel. All gas piping shall enter the unit cabinet at a single location through either the side or bottom, without any field modifications. An integrated control board shall provide timed control of indoor fan functioning and burner ignition. Heating section shall be provided with the following minimum protection:

- Primary high-temperature limit switch.
- Induced draft pressure switch.
- Flame roll out switch(s) (manual reset).
- Flame proving controls.

All gas heat models will meet the California requirement for emissions of less than 40 nanograms per Joule.

PHYSICAL DATA

COMPONENT	MODELS								
	PCG4A36			PCG4B48			PCG4B60		
NOMINAL TONNAGE	3.0			4.0			5.0		
Filters									
AHRI Cooling Performance									
Gross Capacity @ AHRI A point (MBH)	37.2			47.7			55.0		
AHRI net capacity (MBH)	34.6			45.5			52.5		
EER	11.0			11.0			11.0		
SEER	14.0			14.0			14.0		
Nominal CFM	1200			1600			2000		
System power (KW)	3.2			4.2			4.8		
Refrigerant type	R410A			R410A			R410A		
Refrigerant charge (lb-oz)	8-3			14-4			14-2		
AHRI Gas Heat Performance									
Heating model	50	75	100	65	100	125	65	100	125
Heat input (K Btu)	50.0	75.0	100.0	65.0	100.0	125.0	65.0	100.0	125.0
Heat output (K Btu)	40	60	80	52	80	100	52	80	100
AFUE%	81.0			81.0			81.0		
No. burners	2	3	4	2	3	4	2	3	4
No. stages	1			1			1		
Temperature Rise Range (°F)	35-65	40-70	40-70	40-70			40-70		
Max. Static Pressure w.c.	0.5			0.5			0.5		
Max. Outlet Air Temp. (°F)	180			180			180		
Gas piping connection (in.)	1/2			1/2			1/2		
Dimensions (inches)									
Length	51-1/4			51-1/4			51-1/4		
Width	35-3/4			45-3/4			45-3/4		
Height	47			53			55		
Operating WT. (lbs.)	420	427	431	515	523	528	532	536	543
Compressors									
Type	Recip			Scroll			Scroll		
Outdoor Coil Data									
Face area (Sq. Ft.)	15.1			23.8			25.9		
Rows	2			2			2		
Fins per inch	22			22			22		
Tube diameter	3/8			3/8			3/8		
Circuitry Type	Interlaced			Interlaced			Interlaced		
Indoor Coil Data									
Face area (Sq. Ft.)	4.6			6.3			6.3		
Rows	3			3			3		
Fins per inch	16			16			16		
Tube diameter	3/8			3/8			3/8		
Circuitry Type	Interlaced			Interlaced			Interlaced		
Refrigerant control	TXV			TXV			TXV		
Outdoor Fan Data									
Fan diameter (Inch)	24			26			26		
Type	Prop			Prop			Prop		
Drive type	Direct			Direct			Direct		
No. speeds	1			1			1		
Motor HP each	1/4			1/3			1/3		
RPM	850			850			850		
Nominal total CFM	2400			3200			3200		
Direct Drive Indoor Fan Data									
Fan Size (Inch)	11 x 10			11 x 10			11 x 10		
Type	Centrifugal			Centrifugal			Centrifugal		
Motor HP each	1/2	1/2	1	1			1		
RPM	1200 Max			1200 Max			1200 Max		
Frame size	48			48			48		
Filters									
Quantity - Size	Field-supplied external filters must be sized so as not to exceed 300 FPM air velocity through disposable filters. All 3-phase models are shipped with an internal filter rack kit. Consult the instructions supplied with that kit for replacement filter sizes. Filter sizes: A=20x20, B=20x30.								

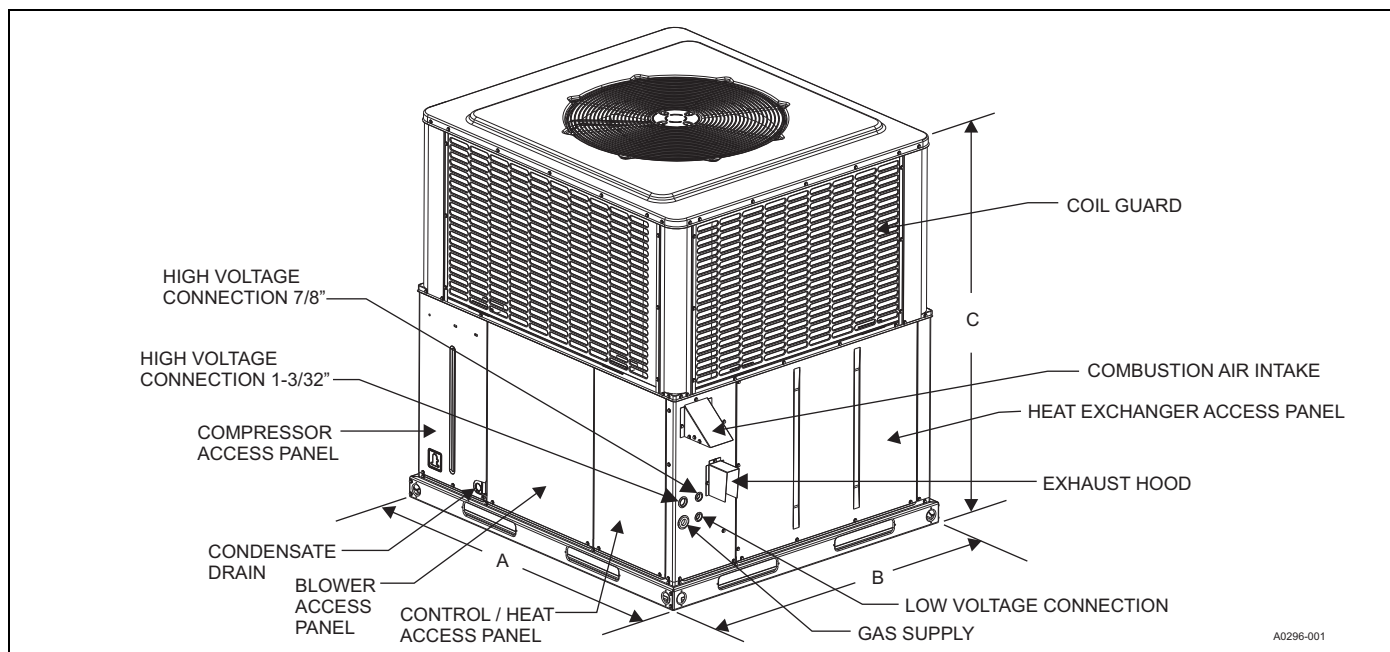
COOLING PERFORMANCE DATA - 3 TON

PACKAGED UNIT MODEL NO.		PCG4A36														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1400					1200					1000				
	IDDB	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	IDWB	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
55 / 45	T.C.	45.3	48.1	48.0	53.1	54.6	42.2	46.3	46.2	51.3	53.5	39.2	44.6	44.5	49.5	52.4
	S.C.	45.3	43.2	36.0	36.5	27.9	42.2	39.5	33.3	33.4	26.1	39.2	35.8	30.6	30.4	24.4
	K.W.	2.15	2.16	2.16	2.15	2.15	2.07	2.07	2.07	2.06	2.05	1.99	1.99	1.99	1.97	1.95
65 / 55	T.C.	42.0	43.7	43.8	48.6	52.4	39.4	42.5	42.4	47.1	51.0	36.8	41.2	41.0	45.6	49.5
	S.C.	42.0	40.3	34.1	34.5	26.6	39.4	36.9	31.3	31.5	24.9	36.8	33.5	28.6	28.5	23.1
	K.W.	2.39	2.41	2.40	2.41	2.40	2.30	2.31	2.31	2.32	2.31	2.20	2.22	2.22	2.22	2.21
75 / 63	T.C.	38.7	39.3	39.6	44.1	50.1	36.6	38.6	38.5	42.9	48.4	34.5	37.9	37.4	41.7	46.7
	S.C.	38.7	37.4	32.1	32.4	25.4	36.6	34.3	29.3	29.5	23.6	34.5	31.1	26.6	26.7	21.8
	K.W.	2.63	2.66	2.64	2.67	2.65	2.52	2.55	2.54	2.57	2.56	2.41	2.45	2.44	2.47	2.46
85 / 69	T.C.	35.3	35.4	35.5	39.4	45.0	33.6	34.8	34.8	38.7	43.8	31.9	34.2	34.0	38.0	42.7
	S.C.	35.3	34.4	30.0	30.1	23.6	33.6	32.0	27.5	27.5	21.9	31.9	29.5	25.0	25.0	20.2
	K.W.	2.87	2.90	2.88	2.93	2.93	2.75	2.79	2.77	2.83	2.83	2.64	2.68	2.67	2.72	2.73
95 / 75	T.C.	31.9	31.5	31.5	34.8	39.8	30.5	31.0	31.0	34.6	39.2	29.2	30.5	30.6	34.3	38.6
	S.C.	31.9	31.5	28.0	27.8	21.8	30.5	29.7	25.7	25.5	20.2	29.2	27.9	23.4	23.3	18.7
	K.W.	3.11	3.14	3.12	3.20	3.21	2.99	3.02	3.00	3.08	3.10	2.87	2.91	2.89	2.97	2.99
105 / 83	T.C.	26.5	26.8	26.3	29.0	33.7	26.0	26.5	26.2	29.1	33.5	25.5	26.3	26.0	29.2	33.4
	S.C.	26.5	26.8	24.0	24.4	19.3	26.0	25.7	22.6	22.8	18.0	25.5	24.5	21.2	21.3	16.7
	K.W.	3.43	3.39	3.35	3.43	3.48	3.27	3.27	3.23	3.32	3.37	3.11	3.14	3.11	3.20	3.25
115 / 89	T.C.	21.4	22.3	21.3	23.4	27.7	21.6	22.2	21.4	23.8	28.0	21.8	22.2	21.5	24.2	28.3
	S.C.	21.4	22.3	20.2	21.1	17.0	21.6	21.8	19.7	20.2	15.9	21.8	21.3	19.1	19.3	14.8
	K.W.	3.74	3.65	3.57	3.67	3.75	3.54	3.50	3.44	3.54	3.63	3.34	3.36	3.32	3.42	3.50
125 / 95	T.C.	16.2	17.7	16.3	17.7	21.7	17.2	17.9	16.7	18.5	22.5	18.2	18.0	17.0	19.2	23.2
	S.C.	16.2	17.7	16.3	17.7	14.6	17.2	17.9	16.7	17.6	13.8	18.2	18.0	17.0	17.4	13.0
	K.W.	4.05	3.90	3.79	3.90	4.01	3.81	3.74	3.66	3.77	3.88	3.57	3.58	3.53	3.65	3.76

COOLING PERFORMANCE DATA - 4 TON

PACKAGED UNIT MODEL NO.		PCG4B48														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1800					1600					1400				
	IDDB	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	IDWB	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
55 / 45	T.C.	58.1	61.5	60.2	66.8	70.0	55.6	59.5	58.7	65.1	70.0	53.1	57.5	57.2	63.4	69.9
	S.C.	57.1	53.6	44.4	44.1	33.9	54.5	49.9	42.1	41.9	33.5	51.9	46.3	39.7	39.6	33.0
	K.W.	2.21	2.21	2.20	2.23	2.25	2.20	2.21	2.20	2.23	2.24	2.18	2.20	2.19	2.22	2.23
65 / 55	T.C.	54.4	56.8	55.7	62.2	66.3	52.1	55.1	54.4	60.9	65.7	49.8	53.4	53.1	59.5	65.1
	S.C.	54.0	51.5	42.4	42.4	32.4	51.6	48.0	40.1	40.2	31.5	49.2	44.5	37.9	38.0	30.6
	K.W.	2.46	2.47	2.46	2.49	2.50	2.44	2.46	2.45	2.49	2.49	2.43	2.46	2.45	2.48	2.49
75 / 63	T.C.	50.8	52.2	51.2	57.6	62.5	48.7	50.7	50.1	56.6	61.4	46.5	49.3	49.0	55.6	60.3
	S.C.	50.8	49.5	40.4	40.6	30.9	48.7	46.0	38.2	38.5	29.5	46.5	42.6	36.0	36.3	28.2
	K.W.	2.71	2.73	2.72	2.75	2.76	2.69	2.72	2.71	2.75	2.75	2.68	2.71	2.70	2.74	2.74
85 / 69	T.C.	46.5	47.2	46.2	52.4	57.6	44.6	46.0	45.1	51.5	56.8	42.8	44.9	44.1	50.6	56.0
	S.C.	46.5	45.8	37.7	38.1	28.7	44.6	42.9	35.5	35.9	27.5	42.8	40.0	33.3	33.8	26.3
	K.W.	3.05	3.06	3.05	3.08	3.09	3.04	3.05	3.04	3.08	3.09	3.02	3.05	3.03	3.07	3.08
95 / 75	T.C.	42.2	42.2	41.2	47.2	52.7	40.6	41.3	40.2	46.4	52.2	39.0	40.5	39.2	45.5	51.7
	S.C.	42.2	42.2	35.0	35.6	26.5	40.6	39.8	32.9	33.4	25.4	39.0	37.4	30.7	31.2	24.3
	K.W.	3.39	3.38	3.38	3.41	3.42	3.38	3.38	3.38	3.41	3.42	3.36	3.38	3.37	3.40	3.42
105 / 83	T.C.	37.2	37.0	35.3	40.9	46.8	36.1	36.2	35.0	40.6	46.5	34.9	35.4	34.8	40.3	46.2
	S.C.	37.2	37.0	31.2	33.3	24.7	36.1	35.2	30.1	31.3	23.7	34.9	33.4	28.9	29.4	22.7
	K.W.	3.85	3.85	3.85	3.88	3.89	3.85	3.85	3.85	3.88	3.89	3.84	3.86	3.84	3.87	3.88
115 / 89	T.C.	32.4	31.9	29.6	34.9	41.1	31.7	31.2	30.1	35.1	41.0	30.9	30.5	30.6	35.3	41.0
	S.C.	32.4	31.9	27.5	31.0	23.0	31.7	30.7	27.3	29.3	22.0	30.9	29.5	27.1	27.6	21.0
	K.W.	4.31	4.31	4.30	4.33	4.35	4.30	4.31	4.30	4.33	4.34	4.30	4.31	4.30	4.33	4.34
125 / 95	T.C.	27.6	26.9	23.9	28.8	35.5	27.3	26.2	25.1	29.6	35.6	27.0	25.5	26.4	30.3	35.7
	S.C.	27.6	26.9	23.9	28.8	21.2	27.3	26.2	24.6	27.4	20.3	27.0	25.5	25.4	25.9	19.4
	K.W.	4.76	4.76	4.76	4.79	4.80	4.76	4.77	4.76	4.79	4.80	4.76	4.77	4.76	4.79	4.79

COOLING PERFORMANCE DATA - 5 TON																
PACKAGED UNIT MODEL NO.		PCG4B60														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	2050					1800					1550				
	IDDB	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	IDWB	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
55 / 45	T.C.	63.1	65.4	65.2	68.7	72.9	60.4	64.1	64.4	68.0	71.8	57.6	62.7	63.6	67.2	70.6
	S.C.	63.1	58.0	49.1	46.2	34.9	60.4	54.7	46.3	44.2	33.9	57.6	51.4	43.4	42.2	32.8
	K.W.	3.44	3.44	3.43	3.43	3.41	3.28	3.29	3.33	3.34	3.32	3.12	3.14	3.23	3.24	3.23
65 / 55	T.C.	59.1	61.9	28.9	32.9	36.7	56.7	60.5	28.4	32.2	36.0	54.3	59.1	27.9	31.6	35.4
	S.C.	59.1	57.3	23.1	23.1	17.6	56.7	53.5	21.5	21.6	16.8	54.3	49.7	20.0	20.0	16.0
	K.W.	3.74	3.75	3.74	3.76	3.76	3.57	3.59	3.61	3.63	3.64	3.41	3.43	3.48	3.50	3.52
75 / 63	T.C.	55.1	58.3	57.7	65.7	73.2	53.0	56.9	56.7	64.4	72.0	51.0	55.5	55.7	63.1	70.7
	S.C.	55.1	56.5	46.1	46.2	35.2	53.0	52.3	43.0	43.1	33.6	51.0	48.1	40.0	40.0	32.0
	K.W.	4.03	4.05	4.05	4.09	4.11	3.87	3.88	3.89	3.92	3.96	3.70	3.72	3.73	3.76	3.80
85 / 69	T.C.	27.6	53.5	52.8	60.0	60.4	26.5	52.5	52.2	59.2	63.2	25.5	51.5	51.6	58.4	65.9
	S.C.	27.6	52.6	43.8	44.0	41.4	26.5	49.3	40.9	41.1	35.7	25.5	46.0	38.0	38.1	30.1
	K.W.	4.42	4.44	4.45	4.48	4.47	4.26	4.28	4.29	4.31	4.33	4.11	4.12	4.13	4.15	4.19
95 / 75	T.C.	47.5	48.7	47.9	54.3	47.5	46.0	48.1	47.8	54.0	54.3	44.4	47.5	47.6	53.6	61.1
	S.C.	47.5	48.7	41.5	41.8	47.5	46.0	46.3	38.8	39.0	37.9	44.4	43.9	36.1	36.3	28.2
	K.W.	4.80	4.84	4.84	4.86	4.83	4.66	4.68	4.69	4.71	4.70	4.51	4.52	4.53	4.55	4.57
105 / 83	T.C.	43.0	44.0	39.9	46.0	44.7	41.5	42.6	40.0	46.1	49.5	40.0	41.1	40.1	46.2	54.3
	S.C.	43.0	44.0	35.7	37.8	39.3	41.5	41.4	34.1	35.6	32.5	40.0	38.7	32.5	33.3	25.7
	K.W.	5.37	5.40	5.41	5.42	5.41	5.23	5.25	5.26	5.26	5.27	5.10	5.09	5.11	5.11	5.13
115 / 89	T.C.	38.6	39.6	32.1	38.0	42.0	37.1	37.2	32.5	38.5	44.8	35.6	34.9	32.9	39.0	47.6
	S.C.	38.6	39.6	30.0	33.9	31.3	37.1	36.6	29.5	32.2	27.4	35.6	33.7	29.1	30.5	23.4
	K.W.	5.92	5.96	5.97	5.96	5.98	5.79	5.80	5.82	5.81	5.83	5.66	5.64	5.67	5.66	5.67
125 / 95	T.C.	34.2	35.1	24.4	30.0	39.3	32.7	31.9	25.0	31.0	40.1	31.2	28.7	25.6	31.9	41.0
	S.C.	34.2	35.1	24.4	30.0	23.4	32.7	31.9	25.0	28.8	22.2	31.2	28.7	25.6	27.6	21.0
	K.W.	6.47	6.51	6.53	6.49	6.55	6.35	6.35	6.38	6.35	6.38	6.23	6.19	6.24	6.21	6.21



UNIT DIMENSIONS

Model	Dimensions		
	A	B	C
PCG4A36	51-1/4	35-3/4	47
PCG4B48		45-3/4	53
PCG4B60		45-3/4	55

UNIT CLEARANCES^{1,2}

Direction	Distance (in.)	Direction	Distance (in.)
Top ³	36	Power Entry (Right Side)	36
Side Opposite Ducts	36	Left Side	24
Duct Panel	0	Bottom ⁴	1

1. A 1" clearance must be provided between any combustible material and the supply air duct work.
2. The products of combustion must not be allowed to accumulate within a confined space and recirculate.
3. Units must be installed outdoors. Over hanging structure or shrubs should not obstruct condenser air discharge outlet.
4. Units may be installed on combustible floors made from class A, B or C roof covering materials only if factory base rails are left in place as shipped.

INDOOR BLOWER SPECIFICATIONS

Model	Motor				
	HP	RPM	EFF.	SF	Frame
36050	1/2	Variable	0.8	1.0	48
36075	1/2				
36100	1				
48065	1				
48100	1				
48125	1				
60065	1				
60100	1				
60125	1				

SOUND PERFORMANCE

Model (Tons)	Sound Rating ¹ dB (A)	Octave Band Centerline Frequency (Hz)						
		125	250	500	1000	2000	4000	8000
PCG4A36	74	58.5	61.8	65.4	66.5	60.7	54.8	49.8
PCG4B48	74	63.5	63.9	62.3	65.0	64.0	54.1	46.6
PCG4B60	76	72.3	65.0	63.9	64.0	60.0	55.5	49.0

1. Rated in accordance with AHRI Standard 270.

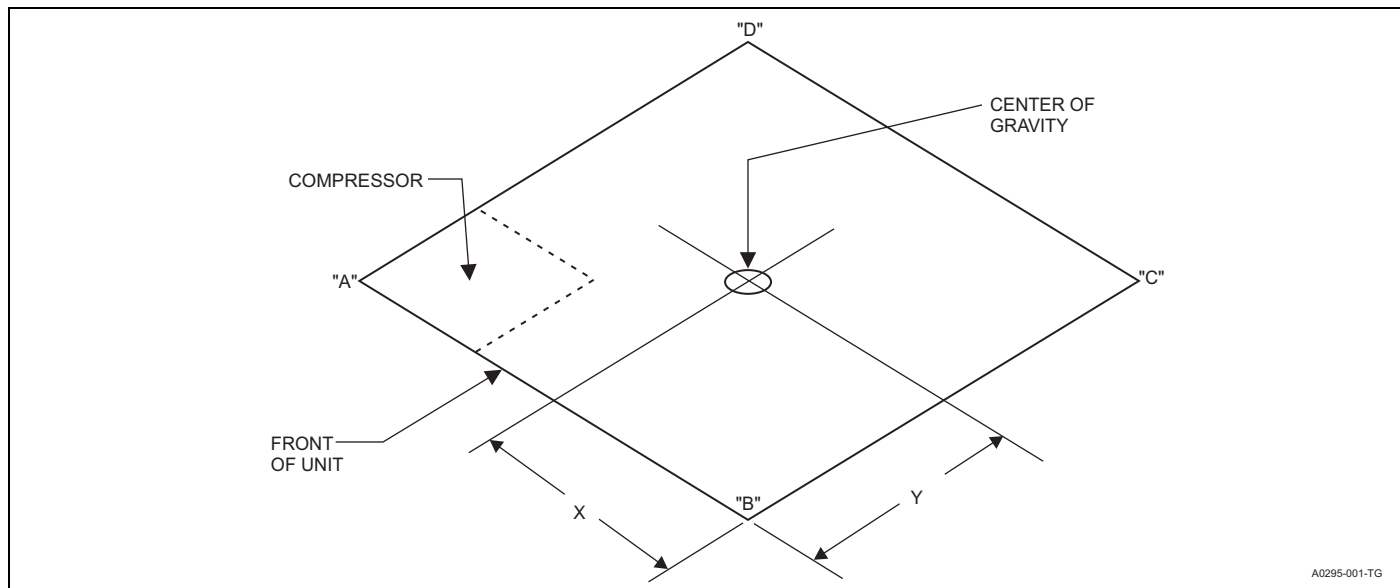
ELECTRICAL DATA - 460-3-60

Model	Voltage	Compressor			OD Fan Motor	Supply Blower Motor	MCA ¹ (Amps)	Max Fuse ² / Breaker ³ Size (Amps)
		RLA	LRA	MCC	FLA	FLA		
36050, 36075	460-3-60	4.1	34.0	7.6	0.70	1.95	7.8	15
36100		4.1	34.0	7.6	0.70	3.15	9.0	15
48065, 48100, 48125		6.2	41.0	9.7	0.87	3.15	11.8	15
60065, 60100, 60125		7.8	52.0	12.1	0.87	3.15	13.8	20

1. Minimum Circuit Ampacity.

2. Maximum Over Current Protection per standard UL 1995.

3. Fuse or HACR circuit breaker size.

**WEIGHTS AND DIMENSIONS**

Model	Weight (lbs.)		Center of Gravity		4 Point Load Location (lbs.)			
	Shipping	Operating	X	Y	A	B	C	D
36050	425	420	28	15	141	107	94	78
36075	432	427	28		135	115	103	74
36100	436	431	28		139	113	99	80
48065	520	515	28		189	116	93	117
48100	528	523	28		169	139	115	100
48125	533	528	28		164	145	124	95
60065	537	532	29		174	142	124	92
60100	541	536	28		177	140	117	102
60125	548	543	27		151	167	141	84

AIRFLOW PERFORMANCE - SIDE DUCT APPLICATION

Model	Motor Speed	External Static Pressure (Inches WC)								
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.0
		SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM
36050	Low (1)	1003	952	904	851	790	730	674	633	551
	Low/Medium (2)	1180	1133	1085	1042	995	942	889	834	724
	Medium (3)	1259	1209	1166	1126	1084	1032	980	928	824
	Medium/High (4)	1314	1271	1229	1186	1144	1097	1049	998	896
	High (5)	1506	1471	1403	1389	1345	1305	1262	1216	1124
36075	Low (1)	1225	1174	1131	1090	1046	993	941	888	782
	Low/Medium (2)	1259	1209	1166	1126	1084	1032	980	928	824
	Medium (3)	1314	1271	1229	1186	1144	1097	1049	998	896
	Medium/High (4)	1348	1306	1259	1222	1179	1133	1086	1036	936
	High (5)	1506	1471	1403	1389	1345	1305	1262	1216	1124
36100	Low (1)	1342	1302	1260	1217	1178	1134	1082	1034	938
	Low/Medium (2)	1425	1368	1332	1293	1251	1208	1163	1113	1013
	Medium (3)	1554	1503	1465	1423	1386	1346	1302	1257	1167
	Medium/High (4)	1658	1599	1588	1530	1495	1454	1414	1373	1291
	High (5)	1966	1914	1862	1810	1757	1705	1653	1600	1496
48065	Low (1)	1046	1009	980	946	915	878	844	779	649
	Low/Medium (2)	1295	1250	1213	1172	1133	1087	1045	964	802
	Medium (3)	1620	1564	1517	1466	1418	1360	1308	1206	1002
	Medium/High (4)	1798	1722	1669	1620	1572	1527	1480	1413	1280
	High (5)	2146	2085	2025	1960	1872	1862	1798	1735	1609
48100	Low (1)	1620	1564	1517	1466	1418	1360	1308	1206	1002
	Low/Medium (2)	1694	1630	1580	1530	1482	1430	1380	1292	1116
	Medium (3)	1798	1722	1669	1620	1572	1527	1480	1413	1280
	Medium/High (4)	1835	1758	1703	1653	1604	1558	1511	1442	1304
	High (5)	2146	2085	2025	1960	1872	1862	1798	1735	1609
48125	Low (1)	1620	1564	1517	1466	1418	1360	1308	1206	1002
	Low/Medium (2)	1798	1722	1669	1620	1572	1527	1480	1413	1280
	Medium (3)	1922	1863	1804	1754	1724	1658	1612	1559	1453
	Medium/High (4)	2001	1952	1890	1839	1820	1742	1696	1651	1561
	High (5)	2146	2085	2025	1960	1872	1862	1798	1735	1609
60065	Low (1)	1073	1043	1009	988	963	941	917	892	842
	Low/Medium (2)	1329	1292	1250	1223	1192	1165	1136	1105	1043
	Medium (3)	2054	1998	1934	1890	1843	1801	1757	1710	1616
	Medium/High (4)	2195	2144	2098	2049	2003	1955	1883	1868	1838
	High (5)	2445	2388	2306	2293	2235	2178	2129	2077	1973
60100	Low (1)	1730	1682	1628	1592	1552	1517	1479	1439	1359
	Low/Medium (2)	1858	1807	1749	1710	1667	1629	1589	1546	1460
	Medium (3)	2054	1998	1934	1890	1843	1801	1757	1710	1616
	Medium/High (4)	2195	2144	2098	2049	2003	1955	1883	1868	1838
	High (5)	2445	2388	2306	2293	2235	2178	2129	2077	1973
60125	Low (1)	2063	2008	1943	1899	1851	1809	1763	1717	1625
	Low/Medium (2)	2130	2084	2032	1983	1927	1951	1860	1815	1725
	Medium (3)	2195	2144	2098	2049	2003	1955	1883	1868	1838
	Medium/High (4)	2275	2252	2169	2154	2112	2065	1989	1976	1950
	High (5)	2445	2388	2306	2293	2235	2178	2129	2077	1973

1. Airflow tested with dry coil conditions, without air filters, at 460 volts

2. Applications above 0.8" w.c. external static pressure are not recommended.

3. Brushless DC high efficiency standard ECM blower motor used for all indoor blower assemblies.

4. Heating applications tested at 0.50" w.c. esp, and cooling applications tested at 0.30" w.c. esp per standards.

AIRFLOW PERFORMANCE - BOTTOM DUCT APPLICATION

Model	Motor Speed	External Static Pressure (Inches WC)								
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.0
		SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM
36050	Low (1)	1008	962	916	861	807	757	700	650	550
	Low/Medium (2)	1190	1148	1106	1055	1008	955	914	863	761
	Medium (3)	1262	1223	1181	1137	1091	1044	994	952	868
	Medium/High (4)	1324	1282	1245	1202	1161	1112	1067	1018	920
	High (5)	1517	1475	1447	1400	1357	1318	1275	1232	1146
36075	Low (1)	1231	1186	1146	1103	1069	1030	977	912	781
	Low/Medium (2)	1270	1225	1189	1140	1098	1046	1008	960	866
	Medium (3)	1317	1286	1245	1198	1151	1110	1064	1024	943
	Medium/High (4)	1358	1317	1275	1238	1197	1148	1105	1057	961
	High (5)	1517	1475	1447	1400	1357	1318	1275	1232	1146
36100	Low (1)	1340	1299	1264	1224	1182	1182	1097	1049	953
	Low/Medium (2)	1409	1368	1334	1291	1253	1201	1173	1128	1038
	Medium (3)	1527	1492	1470	1419	1385	1343	1299	1250	1152
	Medium/High (4)	1663	1585	1594	1601	1521	1480	1440	1400	1320
	High (5)	1930	1892	1853	1805	1760	1696	1625	1553	1409
48065	Low (1)	1032	999	970	938	910	879	843	808	737
	Low/Medium (2)	1272	1236	1204	1165	1129	1081	1037	968	829
	Medium (3)	1611	1574	1518	1494	1439	1405	1357	1266	1083
	Medium/High (4)	1892	1777	1771	1701	1639	1617	1565	1489	1336
	High (5)	2131	2058	1998	1949	1892	1840	1788	1728	1608
48100	Low (1)	1598	1548	1502	1454	1410	1362	1307	1251	1139
	Low/Medium (2)	1663	1612	1568	1522	1476	1422	1370	1297	1152
	Medium (3)	1789	1733	1670	1650	1596	1578	1535	1483	1379
	Medium/High (4)	1931	1814	1808	1736	1673	1650	1597	1519	1362
	High (5)	2131	2058	1998	1949	1892	1840	1788	1728	1608
48125	Low (1)	1598	1548	1502	1454	1410	1362	1307	1251	1139
	Low/Medium (2)	1766	1703	1656	1611	1566	1518	1469	1419	1319
	Medium (3)	1912	1875	1805	1787	1750	1713	1672	1636	1564
	Medium/High (4)	2105	2014	2006	1931	1898	1845	1793	1739	1631
	High (5)	2131	2058	1998	1949	1892	1840	1788	1728	1608
60065	Low (1)	1026	999	989	950	907	907	886	862	816
	Low/Medium (2)	1263	1230	1192	1165	1167	1101	1099	1071	1015
	Medium (3)	1987	1933	1861	1817	1820	1715	1725	1651	1504
	Medium/High (4)	2114	2050	2047	1974	1899	1889	1920	1866	1758
	High (5)	2369	2308	2249	2183	2126	2088	2034	1990	1902
60100	Low (1)	1655	1612	1596	1531	1461	1462	1429	1391	1316
	Low/Medium (2)	1766	1720	1667	1629	1632	1539	1537	1498	1421
	Medium (3)	1987	1933	1861	1817	1820	1715	1725	1651	1504
	Medium/High (4)	2114	2050	2047	1974	1899	1889	1920	1866	1758
	High (5)	2369	2308	2249	2183	2126	2088	2034	1990	1902
60125	Low (1)	1973	1924	1905	1826	1743	1744	1703	1660	1574
	Low/Medium (2)	2024	1983	1937	1889	1886	1843	1799	1759	1679
	Medium (3)	2123	2075	2019	1970	1978	1862	1849	1804	1714
	Medium/High (4)	2191	2154	2117	2075	2002	1995	2028	1974	1866
	High (5)	2369	2308	2249	2183	2126	2088	2034	1990	1902

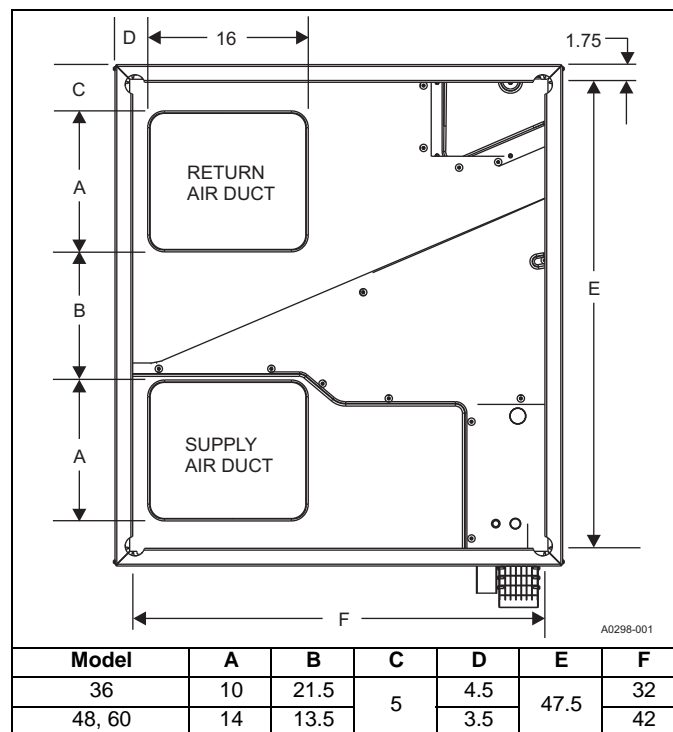
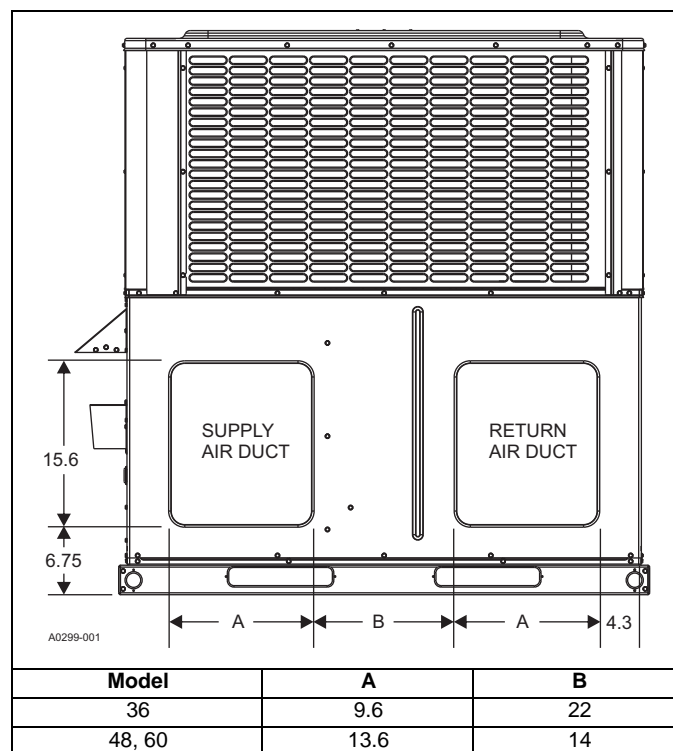
1. Airflow tested with dry coil conditions, without air filters, at 460 volts
2. Applications above 0.8" w.c. external static pressure are not recommended.
3. Brushless DC high efficiency standard ECM blower motor used for all indoor blower assemblies.
4. Heating applications tested at 0.50" w.c. esp, and cooling applications tested at 0.30" w.c. esp per standards.

ADDITIONAL STATIC RESISTANCE

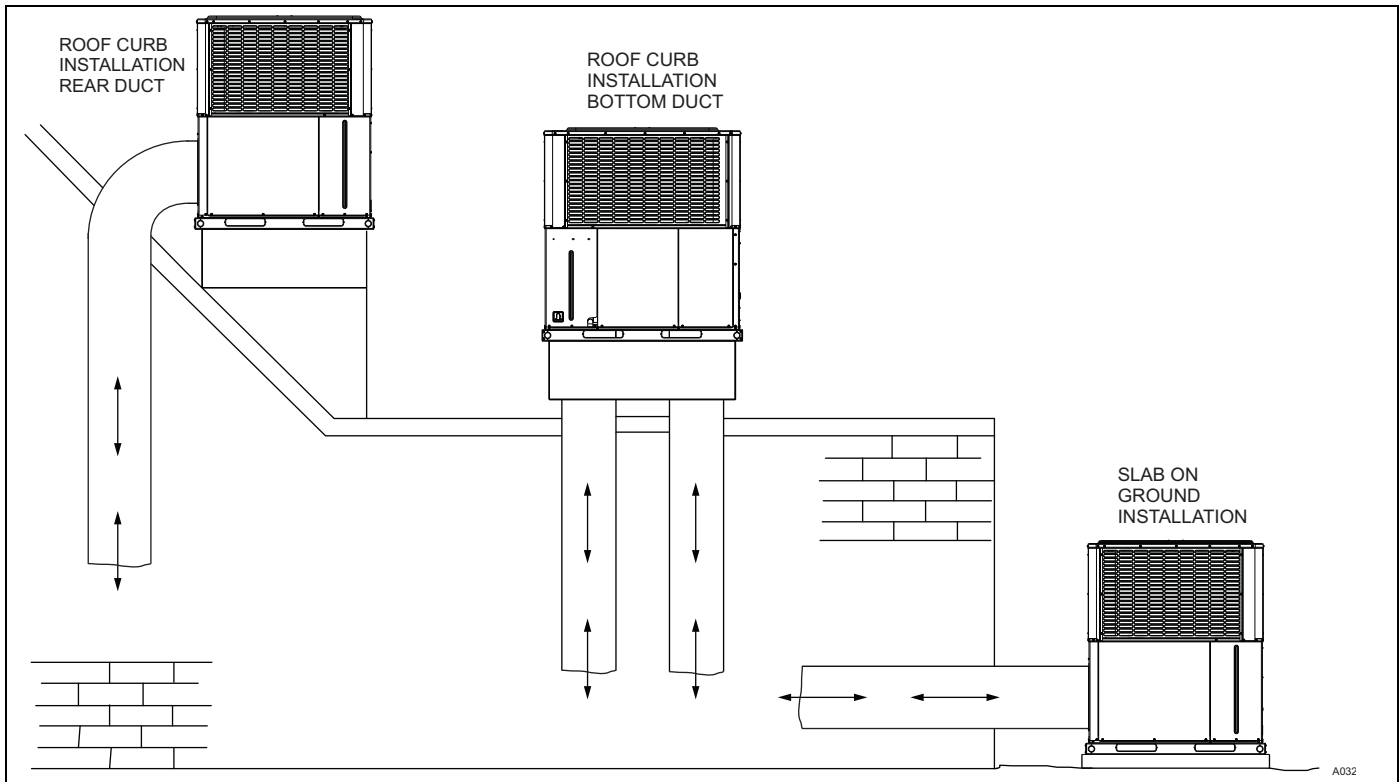
Size (Tons)	CFM	Wet Indoor Coil ¹	Economizer	Filter/Frame Kit
A36 (3.0)	700	0.01	0.00	0.04
	800	0.02	0.01	0.06
	900	0.03	0.01	0.08
	1000	0.04	0.01	0.10
	1100	0.05	0.01	0.13
	1200	0.06	0.02	0.16
	1300	0.07	0.03	0.17
	1400	0.08	0.04	0.18
B48 (4.0)	1100	0.02	0.02	0.04
	1200	0.03	0.02	0.04
	1300	0.04	0.02	0.05
	1400	0.05	0.03	0.05
	1500	0.06	0.04	0.06
	1600	0.07	0.04	0.07
	1700	0.07	0.04	0.08
	1800	0.08	0.04	0.09
B60 (5.0)	1900	0.09	0.05	0.10
	2000	0.09	0.05	0.11
	1100	0.02	0.02	0.04
	1200	0.03	0.02	0.04
	1300	0.04	0.02	0.05
	1400	0.05	0.03	0.05
	1500	0.06	0.04	0.06
	1600	0.07	0.04	0.07
	1700	0.07	0.04	0.08
	1800	0.08	0.04	0.09
	1900	0.09	0.05	0.10
	2000	0.09	0.05	0.11

NOTE: Filter pressure drop based on standard filter media tested at velocities not to exceed 300 ft/min.

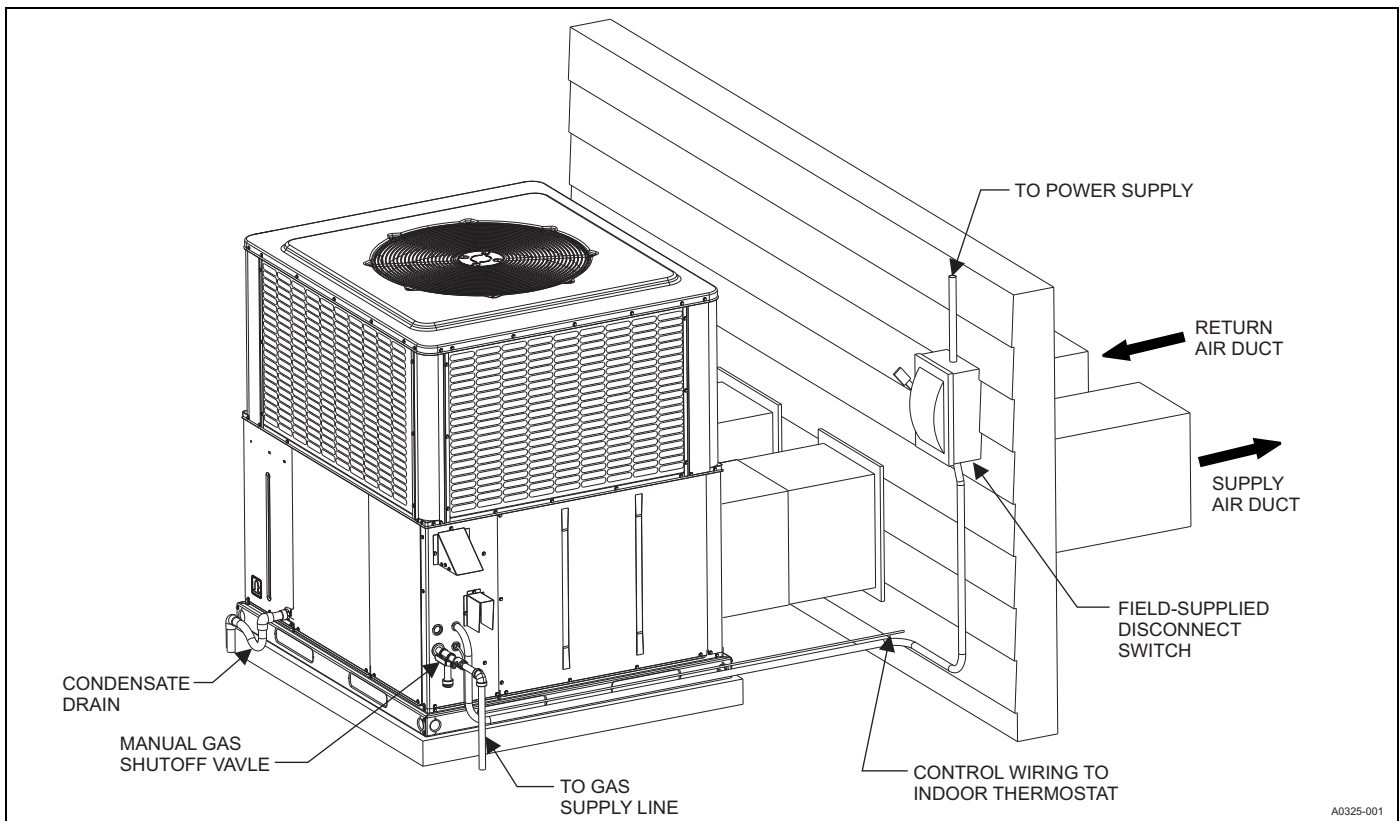
1. The pressure drop through the economizer is greater for 100% outdoor air than for 100% return air. If the resistance of the return air duct is less than 0.25 IWG, the unit will deliver less CFM during full economizer operation.

BOTTOM DUCT DIMENSIONS (Inches)**REAR DUCT DIMENSIONS (Inches)**

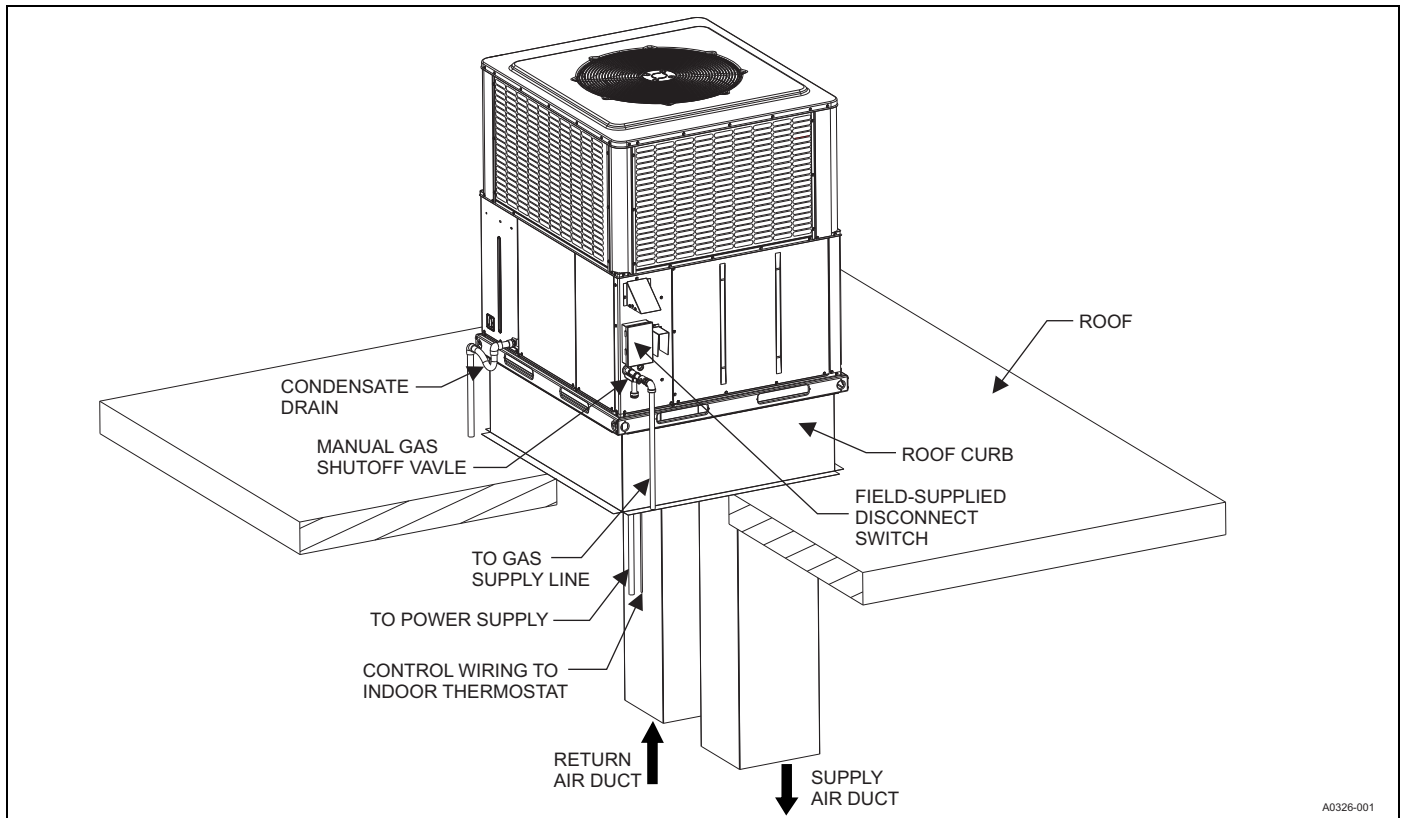
UNIT TYPICAL DUCT APPLICATIONS



UNIT TYPICAL SLAB ON GROUND INSTALLATION



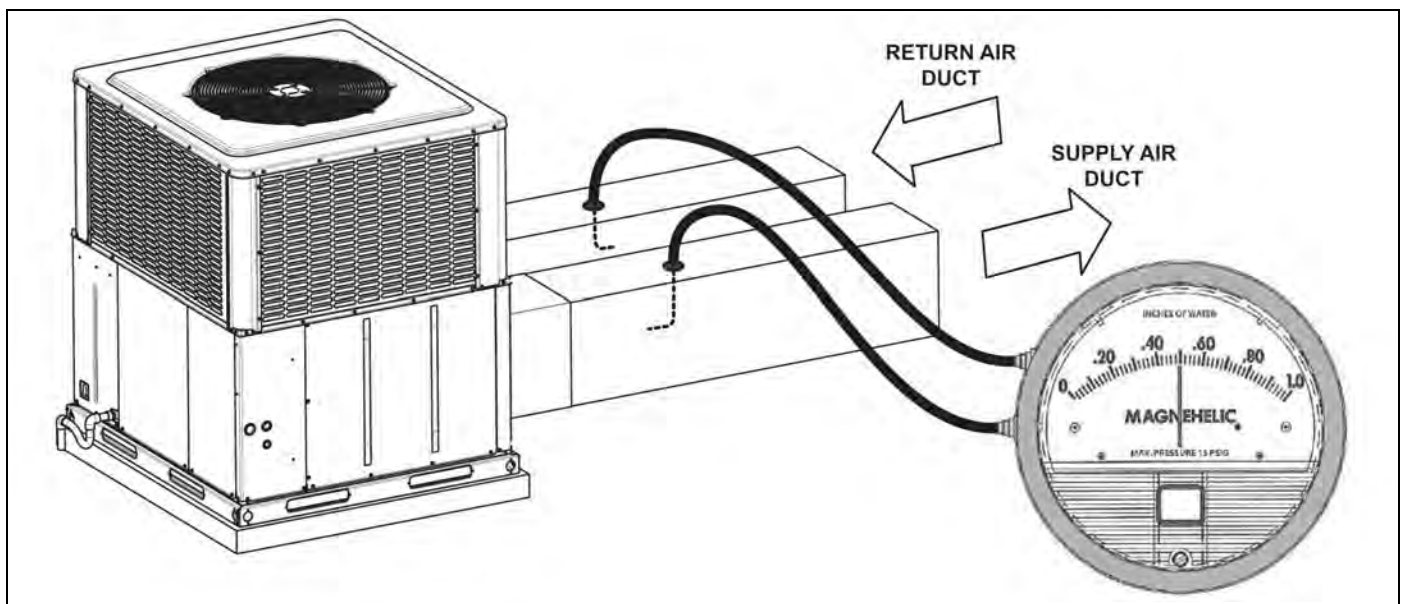
UNIT TYPICAL ROOF CURB INSTALLATION



EXTERNAL STATIC PRESSURE SETUP

To measure external static pressure:

- Measure the supply air static pressure
- Record this positive number
- Measure the return air static pressure
- Record this negative number
- Treat the negative number as a positive and add the two numbers together
- This is total system static



NOTES