

Up to 14.0 SEER, 11.5 EER, PACKAGE GAS / ELECTRIC UNIT
208/230-1-60, Single Phase, 2-5 Nominal Tons (Sizes 24-60)
208/230-3-60 & 460-3-60, Three Phase, 3-5 Nominal Tons (Sizes 36-60)

REFRIGERATION CIRCUIT

- Environmentally balanced R-410A refrigerant
- Copper tube/aluminum fin condenser and evaporator coils
- Dehumidification mode (airflow reduction) on all models

EASY TO INSTALL AND SERVICE

- Installs easily on a rooftop or at ground level
- Easy three-panel accessibility for maintenance and installation
- Easily converts to down discharge applications
- Combination gas heating and electric cooling
- Low NOx units available

BUILT TO LAST

- Induced-draft combustion and venting
- Pre-painted steel cabinet
- Direct spark ignition
- High efficiency ECM indoor blower motor on all models
- Vertical condenser fan discharge
- Full perimeter steel base rails
- High pressure switch provides added reliability for the compressor
- Cabinet air leakage of 2.0% or less at 0.5 in. W.C. when tested in accordance with ASHRAE standard 193 (Low cabinet air leakage FIOP models only) Models with factory installed options are identified with letters in the 11th and 12th positions in the model number
- Aluminized steel tubular heat exchanger and 2" spacing wire grilles on PGD4 models (00), Stainless Steel tubular heat exchanger and hail guard (3/8" spacing) wire grilles on PGS4 models
- Single phase models with factory installed tin-plated copper evaporator main tubes PGD4 (TP), PGS4 (GP), 3-phase models with standard evaporator tubes PGS4 (GP)
- Single and 3-phase models with factory installed option for low cabinet air leakage and tin-plated copper evaporator main tubes PGD4 (LC), PGS4 (GC)

LIMITED WARRANTY*

- 1 Phase PGS4 "G" Models
 - 3 year No Hassle Replacement™ limited warranty
 - 10 year parts limited warranty (including compressor and coils) with timely registration
 - 5 year parts limited warranty and 20 year heat exchanger limited warranty if not registered within 90 days of original installation.
- 1-Phase PGD4 "G" Models
 - 15 year heat exchanger limited warranty
 - 10 year parts limited warranty (including compressor and coils) with timely registration
 - 5 year parts limited warranty and 15 year heat exchanger limited warranty if not registered within 90 days of original installation.
- 3-Phase PGS4, PGD4 "E" Models
 - 10 year heat exchanger limited warranty
 - 5 year compressor limited warranty
 - 1 year parts limited warranty

* See warranty certificate for complete details and restrictions



PGD4 – Representative model only, some models may vary in appearance.



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.

UNIT PERFORMANCE DATA									
Aluminized Steel Heat Exchanger	Stainless Steel Heat Exchanger	COOLING			HEATING			Unit Dimensions Height x Width x Depth in (mm)	Operating Weight lbs (kg)
		Capacity BTU/h	SEER	EER	Input BTU/h	Efficiency AFUE %			
						1Ø	3Ø		
PGD424040K**^#	PGS424040K**^#	23,600	14.0	11.5	40,000	81.0	-	43 ³ / ₄ x 48 ³ / ₁₆ x 32 ⁵ / ₈ (1111 x 1224 x 829)	304 (138)
PGD424060K**^#	PGS424060K**^#	23,600	14.0	11.5	60,000	81.0	-		304 (138)
PGD430040K**^#	PGS430040K**^#	28,600	14.0	11.5	40,000	81.0	-	45 ³ / ₄ x 48 ³ / ₁₆ x 32 ⁵ / ₈ (1162 x 1224 x 829)	320 (145)
PGD430060K**^#	PGS430060K**^#	28,600	14.0	11.5	60,000	81.0	-		320 (145)
PGD436060†**^#	PGS436060†**^#	34,800	14.0	11.5	60,000	81.0	80.0	51 ³ / ₄ x 48 ³ / ₁₆ x 32 ⁵ / ₈ (1315 x 1224 x 829)	349 (158)
PGD436090†**^#	PGS436090†**^#	34,800	14.0	11.5	90,000	81.0	79.3		349 (158)
PGD442060†**^#	PGS442060†**^#	40,000	14.0	11.5	60,000	81.0	78.5	44 ³ / ₄ x 48 ³ / ₁₆ x 44 ¹ / ₈ (1137 x 1224 x 1123)	413 (187)
PGD442090†**^#	PGS442090†**^#	40,000	14.0	11.5	90,000	81.0	80.4		413 (187)
PGD448090†**^#	PGS448090†**^#	48,000	14.0	11.5	90,000	81.0	80.4		438 (199)
PGD448115†**^#	PGS448115†**^#	48,000	14.0	11.5	115,000	81.0	80.3	52 ³ / ₄ x 48 ³ / ₁₆ x 44 ¹ / ₈ (1340 x 1224 x 1123)	438 (199)
PGD448130†**^#	PGS448130†**^#	48,000	14.0	11.5	127,000	81.0	-		438 (199)
PGD460090†**^#	PGS460090†**^#	56,000	14.0	11.5	90,000	81.0	80.4		455 (206)
PGD460115†**^#	PGS460115†**^#	56,000	14.0	11.5	115,000	81.0	80.3	54 ³ / ₄ x 48 ³ / ₁₆ x 44 ¹ / ₈ (1391 x 1224 x 1123)	455 (206)
PGD460130†**^#	PGS460130†**^#	56,000	14.0	11.5	127,000	81.0	-		455 (206)

† K = 208/230-1-60, H = 208/230-3-60, L = 460-3-60

** PGD4 - 00 = Standard, LC = Low cabinet air leakage plus Tin-Plated Copper Evaporator Main Tubes, TP = Tin-Plated Copper Evaporator Main Tubes (single phase)

PGS4 - GC = Low cabinet air leakage plus Tin-Plated Copper Evaporator Main Tubes plus Stainless Steel Heat Exchanger, GP(1-phase) or GP(3-phase) = Tin-Plated Evaporator Main Tubes plus Stainless Steel Heat Exchanger

^ 0 = Standard, 1 = Low Nox

G = 1-phase series, E = 3-phase series

MODEL NUMBER NOMENCLATURE

MODEL NOMENCLATURE											
MODEL SERIES	1	2	3	4	5,6	7,8,9	10	11,12	13	14	15
	P	G	D	4	36	090	K	00	0	E	1
P = Package											
G = Gas/Electric											
D = Standard											
S = Mainline w/ SS HX											
3 = 13											
4 = 14											
5 = 15											
24 = 24,000 BTUH = 2 Tons											
30 = 30,000 BTUH = 2.5 Tons											
36 = 36,000 BTUH = 3 Tons											
42 = 42,000 BTUH = 3.5 Tons											
48 = 48,000 BTUH = 4 Tons											
60 = 60,000 BTUH = 5 Tons											
000 = no factory heat											
040 = 40,000 BTU/hr											
060 = 60,000 BTU/hr											
090 = 90,000 BTU/hr											
115 = 115,000 BTU/hr											
130 = 127,000 or 130,000 BTU/hr											
K = 208/230-1-60											
H = 208/230-3-60											
L = 460-3-60											
00 = No options											
TP = Tin Coated Copper Evap Main Tubes (single phase)											
GC = Low Cabinet Air Leakage plus Tin Coated Copper Evap Main Tubes (PGS4)											
GP = Tin Coated Copper Evap Main Tubes plus Stainless Steel Heat Exchanger (single phase)											
LC = Low Cabinet Air Leakage plus Tin Coated Copper Evap Main Tubes (PGD4)											
0 = Standard											
1 = Low NOx											
Sales Model Digit											
Engineering Digit											

For California Residents:

For installation in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 14 ng/J NOx emission limit, and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com

AHRI* CAPACITIES

Cooling Capacities and Efficiencies

UNIT SIZE	NOMINAL TONS	STANDARD CFM	COOLING CAPACITY	EER	SEER
24	2	800	23000	11.5	14.0
30	2.5	1000	28600	11.5	14.0
36	3	1150	34800	11.5	14.0
42	3.5	1350	40000	11.5	14.0
48	4	1550	46000	11.5	14.0
60	5	1750	56000	11.5	14.0

LEGEND

dB—Sound Levels (decibels)

db—Dry Bulb

SEER—Seasonal Energy Efficiency Ratio

wb—Wet Bulb

COP—Coefficient of Performance

* Air Conditioning, Heating & Refrigeration Institute.

**At "A" conditions—80°F (26.7°C) indoor db/67°F (19.4°C) indoor wb & 95°F (35°C) outdoor db.

† Rated in accordance with U.S. Government DOE Department of Energy) test procedures and/or AHRI Standards 210/240.

Notes:

1. Ratings are net values, reflecting the effects of circulating fan heat.

Ratings are based on:

Cooling Standard: 80°F (26.7°C) db, 67°F wb (19.4°C) indoor entering—air temperature and 95°F db (35°C) outdoor entering—air temperature.

2. Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.

Gas Heating Capacities and Efficiencies, Single Phase Models

UNIT SIZE	HEATING INPUT (Btuh)	OUTPUT CAPACITY (Btuh)	TEMPERATURE RISE RANGE °F (°C)	AFUE (%)
24040 30040	40,000	33,000	25-55 (14-31)	81.0
24060 30060 36060 42060	60,000	49,000	25-55 (14-31)	81.0
36090 42090 48090 60090	90,000	73,000 74,000 74,000 74,000	35-65 (19-36)	81.0
48115 60115	115,000	94,000	30-60 (17-33)	81.0
48130 60130	127,000	104,000	35-65 (19-36)	81.0

LEGEND

AFUE—Annual Fuel Utilization Efficiency

NOTE: Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.

Gas Heating Capacities and Efficiencies, Three Phase Models

UNIT SIZE	HEATING INPUT (Btuh)	OUTPUT CAPACITY (Btuh)	TEMPERATURE RISE RANGE °F (°C)	AFUE (%)
36060 42060	60,000	48,000 47,000	25-55 (14-31)	80.0 78.5
36090 42090 48090 60090	90,000	72,000 73,000 73,000 73,000	35-65 (19-36)	79.3 80.4 80.4 80.4
48115 60115	115,000	93,000	30-60 (17-33)	80.3
48130 60130	130,000	103,000	35-65 (19-36)	78.9

LEGEND

AFUE—Annual Fuel Utilization Efficiency

NOTE: Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.

A-Weighted Sound Power Level (dBA)

UNIT SIZE	SOUND RATING	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
24	73	54.3	61.3	55.2	54.8	57.1	53.6	43.1
30	72	61.1	57.3	60.2	61.0	57.5	53.7	47.1
36	74	58.7	62.8	65.7	67.8	63.7	58.9	51.7
42	74	54.4	59.0	61.2	62.1	58.9	53.5	46.7
48	73	57.1	57.6	60.5	62.7	58.2	56.4	50.7
60	76	64.4	59.7	59.6	60.6	59.8	55.5	47.8

NOTE: Tested in accordance with AHRI Standard 270-1995 (not listed in AHRI).

PHYSICAL DATA

UNIT SIZE	24040	24060	30040	30060	36060	36090	42060	42090
NOMINAL CAPACITY (ton)	2	2	2-1/2	2-1/2	3	3	3-1/2	3-1/2
SHIPPING WEIGHT lb.	329	329	361	361	390	390	455	455
SHIPPING WEIGHT (kg)	149	149	164	164	177	177	206	206
COMPRESSOR / QUANTITY	Rotary / 1				Scroll / 1			
REFRIGERANT (R-410A)								
Quantity lb.	5.3	5.3	6.4	6.4	8.2	8.2	6.2	6.2
Quantity (kg)	2.4	2.4	2.9	2.9	3.7	3.7	2.8	2.8
REFRIGERANT METERING DEVICE	Orifice				TXV		Orifice	
ORIFICE ID in. / mm	.059 / 1.5		.063 / 1.60		N/A		.073 / 1.85	
OUTDOOR COIL								
Rows...Fins/in.	1..21	1...21	1...21	1...21	1...21	1...21	1...21	1...21
Face Area (sq ft)	11.9	11.9	13.6	13.6	18.8	18.8	13.6	13.6
OUTDOOR FAN								
Nominal CFM	2500	2500	2700	2700	3200	3200	3600	3600
Diameter in.	24	24	24	24	24	24	26	26
Diameter (mm)	609.6	609.6	609.6	609.6	609.6	609.6	660.4	660.4
Motor Hp (Rpm)	1/10 (810)	1/10 (810)	1/10 (810)	1/10 (810)	1/5 (810)	1/5 (810)	1/5 (810)	1/5 (810)
INDOOR COIL								
Rows...Fins/in.	3...17	3...17	3...17	3...17	3...17	3...17	3...17	3...17
Face Area (sq ft)	3.7	3.7	3.7	3.7	3.7	3.7	4.7	4.7
INDOOR BLOWER								
Nominal Cooling Airflow (Cfm)	800	800	1000	1000	1150	1150	1350	1350
Size in.	10x10	10x10	10x10	10x10	11x10	11x10	11x10	11x10
Size (mm.)	254x254	254x254	254x254	254x254	279.4x254	279.4x254	279.4x254	279.4x254
Motor HP (RPM)	1/2 (1050)	1/2 (1050)	1/2 (1050)	1/2 (1050)	3/4 (1000)	3/4 (1000)	1/2 (1050)	1/2 (1050)
FURNACE SECTION*								
Burner Orifice No. (Qty...Drill Size)								
1 Phase Natural Gas (Factory Installed)	2...44	3...44	2...44	3...44	3...44	3...38	3...44	3...38
1 Phase Propane Gas	2...55	3...55	2...55	3...55	3...55	3...53	3...55	3...53
3 Phase Natural Gas (Factory Installed)			2...44	2...38	2...38	3...38	2...38	3...38
3 Phase Propane Gas			2...55	2...53	2...53	3...53	2...53	3...53
HIGH-PRESSURE SWITCH (psig) Cut-out Reset (Auto)	650 +/- 15 420 +/- 25							
LOSS-OF-CHARGE / LOW-PRESSURE SWITCH (Liquid Line) (psig) cut-out Reset (auto)	20 +/- 5 45 +/- 10		N/A					
RETURN-AIR FILTERS†‡							1 each 24x14x1 610x356x25	
Throwaway Size in. (mm)	2 each 20x12x1 508x305x25						24x15x1 610x406x25	

*Based on altitude of 0 to 2000 ft (0-610 m).

† Required filter sizes shown are based on the larger of the AHRI (Air Conditioning Heating and Refrigeration Institute) rated cooling airflow or the heating airflow velocity of 300 to 350 ft/minute for throwaway type. Air filter pressure drop for non-standard filters must not exceed 0.08 IN. W.C.

‡ If using accessory filter rack refer to the filter rack installation instructions for correct filter sizes and quantity.

PHYSICAL DATA

UNIT SIZE	48090	48115	48130	60090	60115	60130
NOMINAL CAPACITY (ton)	4	4	4	5	5	5
SHIPPING WEIGHT lb	480	480	480	497	497	497
SHIPPING WEIGHT kg	218	218	218	225	225	225
COMPRESSOR / QUANTITY	Scroll / 1					
REFRIGERANT (R-410A)						
Quantity lb	9.2	9.2	9.2	9.8	9.8	9.8
Quantity (kg.)	4.2	4.2	4.2	4.4	4.4	4.4
REFRIGERANT METERING DEVICE	Orifice					
ORIFICE ID in./mm	.080 / 2.03			.084 / 2.14		
OUTDOOR COIL						
Rows...Fins/in.	1...21	1...21	1...21	1...21	1...21	1...21
Face Area (sq ft)	21.4	21.4	21.4	23.3	23.3	23.3
OUTDOOR FAN						
Nominal Cfm	3600	3600	3600	4200	4200	4200
Diameter in.	26	26	26	26	26	26
Diameter (mm)	660.4	660.4	660.4	660.4	660.4	660.4
Motor Hp (Rpm)	1/5 (810)	1/5 (810)	1/5 (810)	1/5 (810)	1/5 (810)	1/5 (810)
INDOOR COIL						
Rows...Fins/in.	3...17	3...17	3...17	3...17	3...17	3...17
Face Area (sq ft)	4.7	4.7	4.7	5.6	5.6	5.6
INDOOR BLOWER						
Nominal Cooling Airflow (Cfm)	1550	1550	1550	1750	1750	1750
Size in.	11x10	11x10	11x10	11x10	11x10	11x10
Size (mm)	279.4x254	279.4x254	279.4x254	279.4x254	279.4x254	279.4x254
Motor HP (RPM)	1.0 (1075)	1.0 (1075)	1.0 (1075)	1.0 (1040)	1.0 (1040)	1.0 (1040)
FURNACE SECTION*						
Burner Orifice No. (Qty...Drill Size)						
1 & 3 Phase Natural Gas (Factory Installed)	3...38	3...33	3...31	3...38	3...33	3...31
1 & 3 Phase Propane Gas	3...53	3...51	3...49	3...53	3...51	3...49
HIGH-PRESSURE SWITCH (psig) Cut-out Reset (Auto)	650 +/- 15 420 +/- 25					
LOSS-OF CHARGE / LOW-PRESSURE SWITCH (Liquid Line) (psig) cut-out Reset (auto)	N/A					
RETURN-AIR FILTERS Throwaway†‡ in. mm	1 each 24x14x1 610x356x25 24x15x1 610x406x25			1 each 24x16x1 610x406x25 24x18x1 610x457x25		

*Based on altitude of 0 to 2000 ft (0-610 m).

† Required filter sizes shown are based on the larger of the AHRI (Air Conditioning Heating and Refrigeration Institute) rated cooling airflow or the heating airflow velocity of 300 to 350 ft/minute for throwaway type. Air filter pressure drop for non-standard filters must not exceed 0.08 IN. W.C.

‡ If using accessory filter rack refer to the filter rack installation instructions for correct filter sizes and quantity.

APPLICATION DATA

Condensate trap — A 2-in. (50.8 mm) condensate trap must be field supplied.

Ductwork — Secure downflow discharge ductwork to roof curb. For horizontal discharge applications, attach ductwork to unit with flanges.

To convert a unit to downflow discharge — Units are equipped with factory-installed inserts in the down-flow openings. Removal of the inserts is similar to removing an electrical knock-out. Use the duct cover to seal the horizontal discharge openings in the unit. Units installed in horizontal discharge orientation do not require duct covers.

Airflow — Units are draw-thru in the cooling mode and blow-thru in the heating mode.

Maximum cooling airflow — To minimize the possibility of condensate blow-off from the evaporator, airflow through the units should not exceed 450 cfm per ton.

Minimum cooling airflow — Minimum cooling airflow is 350 cfm per ton.

Minimum ambient cooling operation temperature — All standard units have a minimum ambient operating temperature of 40°F (4°C). With accessory low ambient temperature kit, units can operate at temperatures down to 0°F (-17°C).

Minimum temperature — Air entering the heat exchanger in heating mode must be a minimum of 50°F (10°C) continuous and/or 45°F (7°C) intermittent.

ELECTRICAL DATA

MODEL	NOMINAL V-PH-HZ	VOLTAGE RANGE		COMPRESSOR		OFM	IFM	IDM	POWER SUPPLY	
		MIN	MAX	RLA	LRA	FLA	FLA	FLA	MCA	MOCP
24040	208/230-1-60	197	253	8.7	46	0.6	3.9	0.65	15.4	20
24060	208/230-1-60	197	253	8.7	46	0.6	3.9	0.65	15.4	20
30040	208/230-1-60	197	253	13.5	72.5	0.7	3.9	0.65	21.5	30
30060	208/230-1-60	197	253	13.5	72.5	0.7	3.9	0.65	21.5	30
36060	208/230-1-60	197	253	16.7	79	1.05	5.8	0.65	27.8	40
36060	208/230-3-60	197	253	10.4	73	1.05	6	1.65	20.1	30
36060	460-3-60	414	506	5.8	38	0.53	3.2	0.65	11.0	15
36090	208/230-1-60	197	253	16.7	79	1.05	5.8	.75	27.8	40
36090	208/230-3-60	197	253	10.4	73	1.05	6	0.52	20.1	30
36090	460-3-60	414	506	5.8	38	0.53	3.2	0.3	11.0	15
42060	208/230-1-60	197	253	16.7	109	1.05	3.8	0.65	25.8	40
42060	208/230-3-60	197	253	11.2	88	1.05	4.1	1.65	19.2	30
42060	460-3-60	414	506	5.6	44	0.53	3.2	0.65	10.7	15
42090	208/230-1-60	197	253	16.7	109	1.05	3.8	0.65	25.8	40
42090	208/230-3-60	197	253	11.2	88	1.05	4.1	0.65	19.2	30
42090	460-3-60	414	506	5.6	44	0.53	3.2	0.33	10.7	15
48090	208/230-1-60	197	253	19.6	130	1.05	6.9	0.65	32.5	50
48090	208/230-3-60	197	253	13.7	83.1	1.05	7.6	0.65	25.8	35
48090	460-3-60	414	506	6.2	41	0.53	4.0	0.33	12.3	15
48115	208/230-1-60	197	253	19.6	130	1.05	6.9	0.65	32.5	50
48115	208/230-3-60	197	253	13.7	83.1	1.05	7.6	1.65	25.8	35
48115	460-3-60	414	506	6.2	41	0.53	4.0	0.65	12.3	15
48130	208/230-1-60	197	253	19.6	130	1.05	6.9	.75	32.5	50
48130	208/230-3-60	197	253	13.7	83.1	1.05	7.6	0.52	25.8	35
48130	460-3-60	414	506	6.2	41	0.53	4.0	0.3	12.3	15
60090	208/230-1-60	197	253	23.7	152.5	1.05	6.9	0.65	37.6	60
60090	208/230-3-60	197	253	15.9	110	1.05	7.6	0.65	28.6	40
60090	460-3-60	414	506	7.1	52	0.53	4.0	0.33	13.4	20
60115	208/230-1-60	197	253	23.7	152.5	1.05	6.9	0.65	37.6	60
60115	208/230-3-60	197	253	15.9	110	1.05	7.6	1.65	28.6	40
60115	460-3-60	414	506	7.1	52	0.53	4.0	0.65	13.4	20
60130	208/230-1-60	197	253	23.7	152.5	1.05	6.9	.75	37.6	60
60130	208/230-3-60	197	253	15.9	110	1.05	7.6	0.52	28.6	40
60130	460-3-60	414	506	7.1	52	0.53	4.0	0.3	13.4	20