

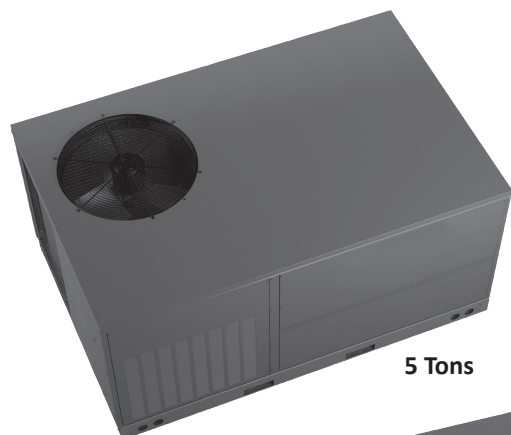


Air Conditioning & Heating

GPG16M

COOLING CAPACITY: 22,800 – 58,500 BTU/H
HEATING CAPACITY: 60,000 – 140,000 BTU/H

**SINGLE-PHASE, SELF-CONTAINED
PACKAGED GAS / ELECTRIC
UP TO 16 SEER / 81% AFUE**



5 Tons



2 - 4 Tons

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Standard Features

- High-efficiency compressor
- Durable, corrosion-resistant T-140 aluminized steel tubular heat exchanger
- Multi-speed ECM indoor blower motor
- Copper tube/aluminum fin condenser coil
- All-aluminum evaporator coil on 2- to 4-ton units
- Aluminum-copper evaporator coil on 5-ton units
- Power-assisted combustion
- Loss-of-charge protection & high-pressure switch
- AHRI Certified; ETL Listed
- Two-stage gas valve; natural gas with easy conversion to propane
- Direct spark ignition system includes a microprocessor-based control for the entire ignition sequence
- All blower operation and all safety circuits complete with self-diagnostics
- All models comply with California Low NOx emission standards




Cabinet Features

- Fully insulated heavy-gauge, zinc-coated steel cabinet with UV-resistant powder-paint finish
- Aluminum foil-facing internal insulation reinforced with fiberglass scrim
- Horizontal or downflow application
- Convenient access panels
- One roof curb fits all units
- Bottom, 2" high base rails for easier handling
- All models fit a standard-size pick-up truck
- When properly anchored, meets the 2010 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kits available.)



* Complete warranty details available from your local dealer or at www.goodmanmfg.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec.

	G	P	G	16	36	090	M	4	1	**		
	1	2	3	4,5	6,7	8,9,10	11	12	13	14,15		
Brand	G Goodman® brand										Engineering	
											Major/ Minor Revisions	
Product Category	P Packaged Unit									Electrical		
										1 208-230/1/60		
Unit Type	G Gas/Electric									Refrigerant		
	D Dual-Fuel									4 R-410A		
Efficiency	14 14 SEER									Airflow		
	16 16 SEER									M Multi-Position		
Nominal Capacity										Heat Input		
	24 2 Tons	36 3 Tons	42 3½ Tons								60 60 MBTU/h	100 100 MBTU/h
	30 2½ tons	37 3 Tons	48 4 Tons								70 69 MBTU/h	115 115 MBTU/h
											80 80 MBTU/h	120 120 MBTU/h
											90 92 MBTU/h	140 138 MBTU/h

	GPG1624 060M41AA	GPG1630 080M41AA	GPG1636 080M41AA	GPG1642 100M41AA	GPG1648 100M41AA	GPG1660 140M41AA
COOLING CAPACITY						
Total BTU/h	22,800	28,600	34,200	40,000	45,500	58,500
Sensible BTU/h	18,200	21,800	27,400	29,600	32,800	43,500
SEER / EER	16.0 / 12.0	15.5 / 12.0	16.0 / 12.0	16.0 / 12.0	16.0 / 12.0	16.0 / 12.0
Decibels	76	76	76	78	78	78
AHRI Reference #s	8082387	8082383	8082384	8082385	8082386	9134477
HEATING CAPACITY (BTU/H)						
High-Fire Input / Output	60,000 / 47,000	80,000 / 62,000	80,000 / 62,000	100,000 / 78,000	100,000 / 78,000	138,000 / 112,000
Low-Fire Input / Output	45,000 / 35,000	60,000 / 47,000	60,000 / 47,000	75,000 / 58,000	75,000 / 58,000	103,000 / 84,000
AFUE	81	81	81	81	81	81
Temperature Rise Range	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65	55-105
No. of Burners	3	4	4	5	5	6
Orifice Size (Natural/Propane)	45 / 1.25MM	45 / 1.25MM	45 / 1.25MM	45 / 1.25MM	45 / 1.25MM	53 / 1.51MM
EVAPORATOR MOTOR						
Type	ECM	ECM	ECM	ECM	ECM	ECM
Wheel (D x W)	10" x 8"	10" x 9"	11" x 10"	11" x 10"	11" x 10"	11" x 10"
Indoor Nominal CFM	800	950	1,200	1,250	1,300	2,000
Motor Speed Tap (Cooling)	T3 L / T4 H	T3 L / T4 H	T3 L / T4 H	T3 L / T4 H	T3 L / T4 H	T3 L / T1 H
RPM/Amps (Cooling)	1050 / 3.8	1050 / 3.8	1050 / 3.8	1050 / 5.4	1050 / 5.4	1050 / 6.9
Horsepower	1/2	1/2	1/2	3/4	3/4	1
EVAPORATOR COIL						
Face Area (ft ²)	4.3	4.3	5.7	5.7	5.7	8.9
Rows Deep/Fins per Inch	3 / 14	3 / 14	4 / 14	4 / 14	4 / 14	4 / 16
Piston Size (Cooling)	TXV	TXV	TXV	TXV	TXV	TXV
Filter Size (ft ²)	3.5	4.3	4.3	5.6	5.6	8.9
Drain Size (NPT)	¾"	¾"	¾"	¾"	¾"	¾"
Refrigerant Charge (oz.)	70	70	158	143	100	154
CONDENSER FAN / COIL						
Horsepower - RPM	1/6 - 815	1/4 - 830	1/4 - 830	1/4 - 1,075	1/4 - 1,075	1/3 - 1,095
Diameter / # of Blades	22" / 3	22" / 3	22" / 3	22" / 3	22" / 3	22" / 4
Outdoor Nominal CFM	2,200	2,200	2,600	3,200	3,100	3,800
Face Area (ft ²)	12.3	8.7	14.9	14.9	14.4	19
Rows Deep/Fins per Inch	1 / 24	2 / 27	2 / 16	2 / 16	2 / 27	2 / 27
COMPRESSOR						
Quantity / Type / Stage	1 / Scroll / 2	1 / Scroll / 2	1 / Scroll / 2	1 / Scroll / 2	1 / Scroll / 2	1 / Scroll / 2
Compressor RLA/LRA	11.7 / 58.3	13.1 / 73.0	15.3 / 83.0	17.9 / 96.0	21.2 / 104.0	26.9 / 152.9
ELECTRICAL DATA						
Voltage-Phase (Frequency 60Hz)	208/230-1	208/230-1	208/230-1	208/230-1	208/230-1	208/230-1
Indoor Blower FLA/LRA	3.8	3.8	3.8	5.4	5.4	6.9
Outdoor Fan FLA/LRA	1.1 / 1.7	1.5 / 3.0	1.5 / 3.0	1.4 / 2.9	1.4 / 2.9	2/4.4
Total Unit Amps	16.6	18.4	20.6	24.7	28.0	35.8
Min. Circuit Ampacity ¹	19.5	21.7	24.4	29.2	33.3	42.5
Max. Overcurrent Protection ²	30 amps	30 amps	35 amps	45 amps	50 amps	60 amps
Entrance Size Power Supply	1½"	1½"	1½"	1½"	1½"	1½"
Entrance Size Control Voltage	⅞"	⅞"	⅞"	⅞"	⅞"	⅞"
OPERATING / SHIP WEIGHTS (LBS)						
	370 / 380	397 / 407	470 / 480	495 / 505	490 / 500	630 / 660
ENERGY STAR® CERTIFIED						
	NO	NO				NO

¹ Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

² Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

Note: Always check the S&R plate for electrical data on the unit being installed.

1	2	3	4	5	6	7	8
ECN: XXXXXX		REV: A	ZONE: XXXXX	DESCRIPTION		CHK: -	
DATE: -		GL: -					

MODEL	DIMENSIONS				CHASSIS SIZE	
	W"	D"	H"	A		
GPG1624***M41**	47	51	34 $\frac{3}{4}$ "	32"	16"	Medium
GPG1630***M41**	47	51	34 $\frac{3}{4}$ "	32"	16"	Medium
GPG1636***M41**	47	51	42 $\frac{3}{4}$ "	40"	18"	Large
GPG1642***M41**	47	51	42 $\frac{3}{4}$ "	40"	18"	Large
GPG1648***M41**	47	51	42 $\frac{3}{4}$ "	40"	18"	Large

Goodman Company, L.C.

GPG14M

APPROVED FOR CONSTRUCTION BY: [Signature]
 DIMENSIONS ARE IN INCHES
 UNLESS OTHERWISE NOTED
 DIMENSIONS ARE IN INCHES
 UNLESS OTHERWISE NOTED
 TOLERANCES: ±0.005
 X: ±1.188, Y: ±1.03
 ANGLE: ±1.5°
 HOLE: ±0.005
 TUBE CUT: ±0.005

COMPONENTS AND MATERIALS SPECIFIED HEREIN WILL ALSO CONFORM TO THE APPLICABLE SECTION OF GOODMAN MSP 624.01 WORKMANSHIP STANDARD FOR FIT, FEEL AND FINISH.
 CONSENT OF THE GOODMAN MANUFACTURING COMPANY IS NOT TO BE USED FOR REUSE, COPY, OR REPRODUCTION EXCEPT AS AUTHORIZED IN WRITING. MUST BE RETURNED UPON DEMAND, ON COMPLETION OF ORDER, OR OTHER BUSINESS FOR WHICH IT WAS LENT.

SPECIAL CHARACTERISTICS:
 ⊕ = 6SIGMA
 ⊕ = CRITICAL CHARACTERISTIC
 ⊕ = SIGNIFICANT CHARACTERISTIC

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Provisions for forks have been included in the unit base frame. No other fork locations are approved.

- Unit must be lifted by the four lifting holes located at the base frame corners.
- Lifting cables should be attached to the unit with shackles.
- The distance between the crane hook and the top of the unit must not be less than 60”.
- Two spreader bars must span over the unit to prevent damage to the cabinet by the lift cables. Spreader bars must be of sufficient length so that cables do not come in contact with the unit during transport. Remove wood struts mounted beneath unit base frame before setting unit on roof curb. These struts are intended to protect unit base frame from fork lift damage. To remove the struts, extract the sheet metal retainers and pull the struts through the base of the unit. Refer to rigging label on the unit.

Important: If using bottom discharge with roof curb, duct-work should be attached to the curb prior to installing the unit. Duct-work dimensions are shown in Roof Curb Installation Instructions Manual.

Refer to the Roof Curb Installation Instructions for proper curb installation. Curbing must be installed in compliance with the National Roofing Contractors Association Manual.

Lower unit carefully onto roof mounting curb. While rigging the unit, the center of gravity will cause the condenser end to be lower than the supply air end.

Bring condenser end of unit into alignment with the curb. With condenser end of the unit resting on curb member and using curb as a fulcrum, lower opposite end of the unit until entire unit is seated on the curb. When a rectangular cantilever curb is used, take care to center the unit. Check for proper alignment and orientation of supply and return openings with duct.

To assist in determining rigging requirements, unit weights are shown on the following page.

Curb installations must comply with local codes and should follow the established guidelines of the National Roofing Contractors Association.

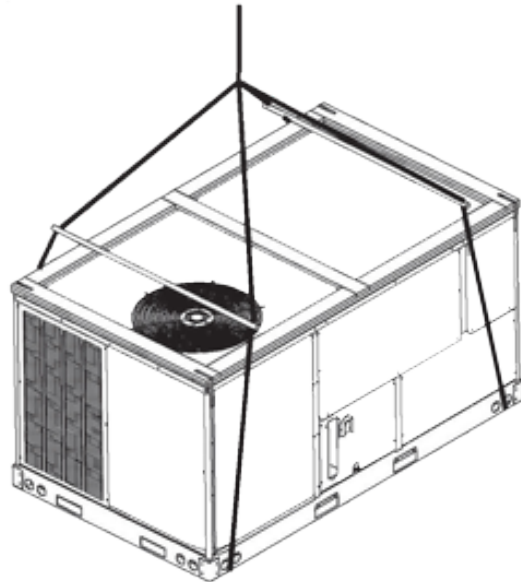
Proper unit installation requires that the roof curb be firmly and permanently attached to the roof structure. Check for adequate fastening method prior to setting the unit on the curb.

Full perimeter roof curbs are available from the factory and are shipped unassembled. The installing contractor is responsible for field assembly, squaring, leveling, and mounting on the roof structure. All required hardware necessary for the assembly of the sheet metal curb is included in the curb accessory package.

- Determine sufficient structural support before locating and mounting the curb and package unit.
- Duct-work must be constructed using industry guidelines. The duct-work must be placed into the roof curb before mounting the package unit. Our full perimeter curbs include duct connection frames to be assembled with the curb. Cantilevered-type curbs are not available from the factory.
- Contractor furnishes curb insulation, cant strips, flashing, and general roofing material.
- Support curbs on parallel sides with roof members. To prevent damage to the unit, the roof members cannot penetrate supply and return duct openings.

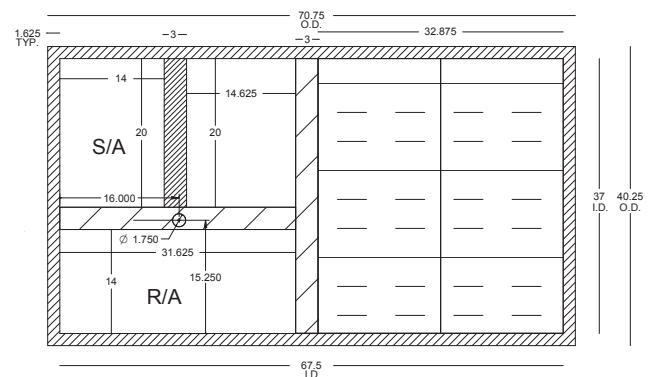
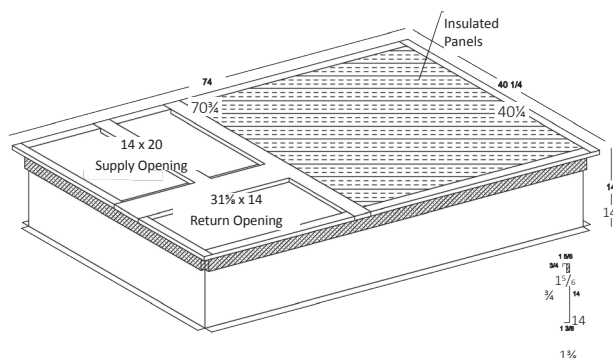
Note: The unit and curb accessories are designed to allow vertical duct installation before unit placement. Duct installation after unit placement is not recommended.

See the manual shipped with the roof curb for assembly and installation instructions.

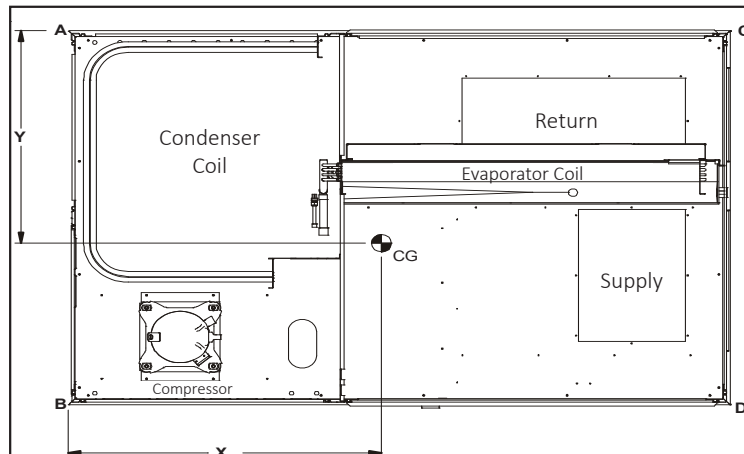


3-D VIEW

TOP VIEW



CORNER & CENTER-OF-GRAVITY LOCATIONS



MODEL	X (IN)	Y (IN)	SHIPPING WEIGHT (LBS)	OPERATING WEIGHT (LBS)	CORNER WEIGHTS (LBS.)			
					A	B	C	D
GPG1660***M41**	46.4	28.1	655	629	186	204	65	174

UNIT CLEARANCES

Maintain an adequate clearance around the unit for safety, service, maintenance, and proper unit operation. Leave a total clearance of 75" on the main control panel side of the unit for possible removal of fan shaft, coil, electric heat, and gas furnace. Leave a clearance of 48" on all other sides of the unit for possible compressor removal or service access, and to ensure proper ventilation and condenser airflow. Do not install the unit beneath any obstruction. Install the unit away from all building exhausts to inhibit ingestion of exhaust air into the unit's fresh-air intake.

