

HRG16**S1M

SPECIFICATIONS

Compressor

- High-efficiency 2 stage Copeland UltraTech™ scroll compressor
- R410a refrigerant
- Grommet-mounted compressor for quiet operation
- Internally protected against high temperature motor overload conditions

Cabinet

- Full metal louvered panel coil guard protection
- Controls located in corner post for easy installation and service
- Rounded corners for safety and attractive, clean appearance
- Baked polyester paint finish over galvanized steel for maximum durability
- PVC coated wire fan discharge grill
- External gauge ports for easy service
- Raised base pan with ports allows for excellent water and debris drainage

Coils

- Enhanced aluminum fins and copper tubing for higher efficiency and capacity
- Raised coil prevents debris from collecting in bottom of coil and causing loss of airflow

Design

- Designed for ambients up to 125°F
- All units ETL and ETL approved and AHRI listed

Components

- Full metal louvered panels remove for easy coil cleaning and service
- Bi-directional filter drier for long-lasting durability and system protection
- Discharge muffler for quiet operation
- Factory installed crank case heater
- Advanced design defrost system featuring a smart logic for power consumption savings
- 45 - degree offset valves for easy service
- Comfort Alert 2 diagnostics factory installed
- Reliable, solid state defrost control
- Units are capable of reducing noise during defrost

Factory Installed Accessories

- Crank case heater
- Compressor sound cover for quiet operation
- High pressure switch
- Low pressure switch for loss of charge protection

Comfort-Cire®

SPLIT SYSTEM HEAT PUMP

16 SEER



For the latest AHRI system matches,
please visit www.marsdeliversratings.com
or AHRI.directory.org

Warranty—12 years on compressor, 6 years on parts
(Some limitations apply; see printed warranty for details.)

www.marsdelivers.com

MODEL NUMBER GUIDE

| H | R | G | 16 | 24 | S | 1 | M |
|-----------|-------------------|-----------------------|------------|-------------------------|--------------------------|---------------------------|---------------------|
| Heat Pump | Residential Split | 'Green' Gas R-410A | SEER 16 | Capacity BTUH x 1000 | S = Scroll Compressor | Power 1 = 208/230-1-60 | Series/ Revision |

PHYSICAL AND ELECTRICAL DATA

| Model | Voltage/ Hz/ Phase | Voltage Range | Min. Circuit Amp. | Max. Over Current Device (amps) | Compressor | | Outdoor Fan Motor | | | Refrig. Charge ¹ (oz.) | Sound Rating dBA |
|------------|-----------------------|------------------|-------------------------|--|-------------------------|---------------------------|-------------------------|-------------|-------------|---|---------------------|
| | | | | | Rated Load (amps) | Locked Rotor (amps) | Rated Load (amps) | Rated HP | Nom. RPM | | |
| HRG1624S1M | 208-230-60/1 | 197-253 | 13.5 | 20 | 11.4 | 52 | 0.7 | 1/10 | 1075 | 146 | 73 |
| HRG1636S1M | 208-230-60/1 | 197-253 | 22.5 | 35 | 19.0 | 82 | 1.7 | 1/4 | 825 | 192 | 75 |
| HRG1648S1M | 208-230-60/1 | 197-253 | 28.2 | 45 | 24.0 | 96 | 1.8 | 1/3 | 825 | 236 | 75 |
| HRG1660S1M | 208-230-60/1 | 197-253 | 35.1 | 60 | 26.0 | 118 | 2.8 | 1/3 | ECM | 244 | 74 |

Note:

¹ Factory charged for 15 feet of line set. Adjust per installation instructions.

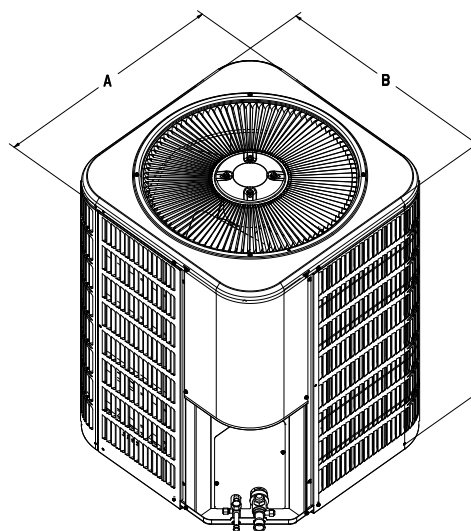
UNIT DIMENSIONS & WEIGHT

| Model | Dimensions (inch) ¹ | | | Shipping Weight (lbs.) ² |
|------------|--------------------------------|-----------|------------|--|
| | A - Width | B - Depth | C - Height | |
| HRG1624S1M | 24-3/4 | 26-3/4 | 33-3/4 | 207 |
| HRG1636S1M | 29-3/8 | 31-1/4 | 37-3/4 | 253 |
| HRG1648S1M | 35-3/4 | 37-3/4 | 37-3/4 | 288 |
| HRG1660S1M | 35-3/4 | 37-3/4 | 43-3/4 | 313 |

Note:

¹ Dimensions listed are unit sizes w/o packaging

² Weights listed are unit weights with packaging



ACCESSORIES

| Description | Where Used | Kit Number |
|-----------------------------|---|------------|
| Hard Start Kit | 24 & 36 | 10J42 |
| | 48 & 60 | 81J69 |
| Compressor Low Ambient Kit | All Models | 45F08 |
| Freezestat | All Models | 93G35 |
| Outdoor Thermostat | All Models | 1.841188 |
| Fossil Fuel Kit | All Models | 1.841185 |
| Low Pressure Switch | Factory installed; see spare parts list | |
| High Pressure Switch | | |
| Sound Blanket | | |
| Crankcase Heater | | |
| Relay Kit - Constant Torque | All Constant Torque Furnaces | 85W66 |
| TXV | 18, 24, 30 | H4TXV01 |
| | 36, 42, 48 | H4TXV02 |
| | 60 | H4TXV03 |
| | 18, 24, 30, 36 | 4200 |
| | 42, 48, 60 | 4202 |

PERFORMANCE WITH COILS, AIR HANDLERS AND FURNACES

| Outdoor Model | Indoor Model | Cooling | | | | Heating | | |
|-------------------|--------------------------------------|---------|------|----------------------------|------------------------|---------|--------|--------|
| | Evap. Coil Air Handlers ¹ | SEER | EER | AHRI Capacity ² | AHRI Reference Numbers | HSPF | 47° | 17° |
| | | | | | | | Btuh | Btuh |
| HRG1624S1M | HCG36V1M | 14 | 12.2 | 22,800 | 202120938 | 8.2 | 23,000 | 14,000 |
| | HMG30X1P | 14.6 | 12.5 | 24,000 | 205730507 | 8.2 | 22,200 | 14,000 |
| | HCG30V1P | 15.5 | 12.5 | 24,000 | 205730508 | 8.2 | 22,200 | 14,000 |
| | HCG6V1P | 15.5 | 12.5 | 24,000 | 205730510 | 8.2 | 21,800 | 13,800 |
| 36 | HCG42V1M | 15 | 12.5 | 36,000 | 202120939 | 8.5 | 36,000 | 22,000 |
| | HCG48V1P | 15.5 | 12.2 | 36,000 | 205730511 | 8.2 | 33,600 | 21,800 |
| HRG1648S1M | HCG48V1M | 15 | 12.2 | 47,000 | 202120940 | 8.2 | 46,000 | 30,000 |
| | HCG60V1M | 15 | 12.2 | 47,000 | 202120941 | 8.2 | 46,000 | 30,000 |
| | HCG48V1P | 16 | 12.5 | 47,000 | 205730514 | 8.5 | 42,000 | 27,000 |
| | HMG60X1P | 15.5 | 12.2 | 46,500 | 205730513 | 8.5 | 43,000 | 28,000 |
| | HCG60V1P | 15.5 | 12.2 | 47,000 | 205730516 | 8.5 | 43,00 | 28,000 |
| 60 | HCG60V1M | 16 | 12.2 | 58,000 | 202120942 | 8.5 | 53,000 | 33,000 |

Note:

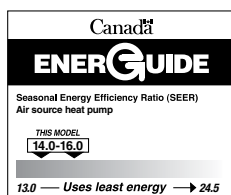
¹ A blower time delay relay is required to achieve AHRI rating. This feature is standard on all furnaces and AH products.

² Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240.

³ Required to achieve AHRI rating.

HEATING PERFORMANCE EXTENDED RATINGS

| Outdoor Model | Indoor Model | Indoor Temp | Outdoor Temp - DB/WB °F | | | | | | | | | |
|---------------|--------------|-------------|-------------------------|------|--------|------|--------|------|--------|------|--------|------|
| | | | 0/0 | | 17/15 | | 35/33 | | 47/43 | | 62/56 | |
| | | | Btuh | kW | Btuh | kW | Btuh | kW | Btuh | kW | Btuh | kW |
| HRG1624S1M | HCG24V1M | 70 | 12,361 | 1.64 | 15,100 | 1.83 | 18,000 | 2.03 | 24,500 | 2.17 | 29,200 | 2.34 |
| HRG1636S1M | HCG36V1M | 70 | 15,811 | 2.04 | 22,800 | 2.49 | 30,200 | 2.97 | 40,600 | 3.55 | 49,500 | 4.08 |
| HRG1648S1M | HCG48V1M | 70 | 28,561 | 3.32 | 31,300 | 3.49 | 34,200 | 3.67 | 46,900 | 3.59 | 54,700 | 3.64 |
| HRG1660S1M | HCG60V1M | 70 | 36,783 | 4.04 | 39,900 | 4.17 | 43,200 | 4.31 | 60,300 | 4.73 | 70,500 | 5.01 |



Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product prior to beginning any installation preparations.

Third party incentive and rebate programs have precise requirements as to product performance and certification. All products meet applicable regulations in effect on date of manufacture; however, certifications are not necessarily granted for the life of a product. Therefore, it is the responsibility of the applicant to determine whether a specific model qualifies for these incentive/rebate programs.

"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."