

RSG16**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
- Heavy-duty compressor sound blanket for quiet operation

Cabinet

- Full metal louvered panels remove for easy coil cleaning and service
- 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

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 ETLC approved and AHRI listed

Components

- Service valves positioned for quick installation and easy service
- High and low pressure switches factory installed
- Comfort Alert 2™ diagnostics is factory installed
- Trade available component
- Factory installed crank case heater
- Charged for 15 ft. of line set

Comfort-Cire®

SPLIT AIR CONDITIONER SYSTEM

16 SEER



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

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

www.marsdelivers.com

MODEL NUMBER GUIDE

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

ELECTRICAL AND PHYSICAL DATA

| Model | Voltage/Hz/Phase | Voltage Range | Min. Circuit (Amps) | Max. Fuse (Amps) ₁ | Compressor | | Fan Motor | | | Refrig. Charge (oz.) ₂ | Weight (lbs.) Louvered |
|-------------------|------------------|---------------|---------------------|-------------------------------|-------------------|---------------------|------------------|----------|----------|-----------------------------------|---------------------------|
| | | | | | Rated Load (Amps) | Locked Rotor (Amps) | Full Load (Amps) | Rated HP | Nom. RPM | | |
| RSG1624S1M | 230/60/1 | 197 - 253 | 13.9 | 20 | 11.4 | 52.0 | 1.1 | 1/5 | 1075 | 117 | 200 |
| RSG1636S1M | 230/60/1 | 197 - 253 | 21.9 | 35 | 19.0 | 82.0 | 1.1 | 1/6 | 825 | 137 | 230 |
| RSG1648S1M | 230/60/1 | 197 - 253 | 28.1 | 45 | 24.0 | 96.0 | 1.1 | 1/6 | 825 | 180 | 262 |
| RSG1660S1M | 230/60/1 | 197 - 253 | 33.8 | 55 | 26.0 | 118.0 | 1.7 | 1/4 | 825 | 214 | 310 |

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

² Weights listed are unit weights with packaging

COOLING PERFORMANCE EXTENDED RATINGS

| Outdoor Model | Indoor Temp DB/WB °F | Outdoor Temp - DB°F | | | | | | | | | | | | | | |
|-------------------|----------------------|---------------------|-----|------|--------|-----|------|--------|-----|------|--------|-----|------|--------|-----|------|
| | | 65 | | | 82 | | | 95 | | | 105 | | | 115 | | |
| | | Btuh | S/T | kW | Btuh | S/T | kW | Btuh | S/T | kW | Btuh | S/T | kW | Btuh | S/T | kW |
| RSG1624S1M | 85/72 | 27,000 | .67 | 1.43 | 26,500 | .68 | 1.70 | 25,000 | .72 | 1.93 | 23,600 | .73 | 2.38 | 22,200 | .76 | 2.59 |
| | 80/67 | 26,000 | .70 | 1.40 | 25,500 | .71 | 1.67 | 24,000 | .75 | 1.90 | 22,600 | .76 | 2.35 | 21,200 | .79 | 2.56 |
| | 75/63 | 25,000 | .73 | 1.37 | 24,500 | .74 | 1.64 | 23,000 | .78 | 1.87 | 21,600 | .79 | 2.32 | 20,200 | .82 | 2.53 |
| RSG1636S1M | 85/72 | 40,200 | .66 | 1.76 | 38,200 | .68 | 2.31 | 36,400 | .69 | 2.98 | 35,000 | .71 | 3.28 | 33,000 | .74 | 3.69 |
| | 80/67 | 39,200 | .69 | 1.73 | 37,200 | .71 | 2.28 | 35,400 | .72 | 2.95 | 34,000 | .74 | 3.25 | 32,000 | .77 | 3.66 |
| | 75/63 | 38,200 | .72 | 1.70 | 36,200 | .74 | 2.25 | 34,400 | .75 | 2.92 | 33,000 | .77 | 3.22 | 31,000 | .80 | 3.63 |
| RSG1648S1M | 85/72 | 55,400 | .68 | 2.93 | 52,000 | .71 | 3.43 | 49,500 | .72 | 3.89 | 48,000 | .73 | 4.23 | 45,800 | .75 | 5.53 |
| | 80/67 | 53,400 | .71 | 2.90 | 50,000 | .74 | 3.40 | 47,500 | .75 | 3.86 | 46,000 | .76 | 4.20 | 43,800 | .78 | 5.50 |
| | 75/63 | 51,400 | .74 | 2.87 | 48,000 | .77 | 3.37 | 45,500 | .78 | 3.83 | 44,000 | .79 | 4.17 | 41,800 | .81 | 5.47 |
| RSG1660S1M | 85/72 | 61,000 | .64 | 3.82 | 60,000 | .65 | 4.49 | 59,000 | .68 | 5.11 | 55,000 | .69 | 5.66 | 52,000 | .72 | 6.30 |
| | 80/67 | 59,000 | .67 | 3.79 | 58,000 | .68 | 4.46 | 57,000 | .71 | 5.08 | 53,000 | .72 | 5.63 | 50,000 | .75 | 6.27 |
| | 75/63 | 57,000 | .70 | 3.76 | 56,000 | .71 | 4.43 | 55,000 | .74 | 5.05 | 51,000 | .75 | 5.60 | 48,000 | .78 | 6.24 |

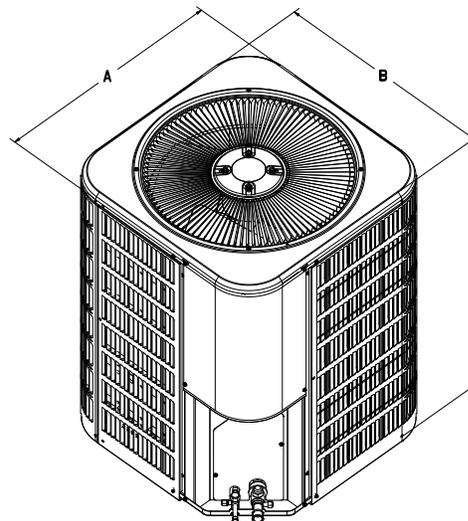
All ratings are with required indoor variable speed matches.

Extended data shown is actual for models listed and typical for all AHRI matches.

UNIT DIMENSIONS & SOUND RATINGS

| Model | Dimensions | | | Sound Ratings (dBa) |
|-------------------|-----------------|-----------------|------------------|---------------------|
| | A - width (in.) | B - depth (in.) | C - height (in.) | |
| RSG1624S1M | 26-3/4 | 24-3/4 | 29-3/4 | 74 |
| RSG1636S1M | 31-1/4 | 29-3/8 | 29-3/4 | 74 |
| RSG1648S1M | 31-1/4 | 29-3/8 | 37-3/4 | 76 |
| RSG1660S1M | 31-1/4 | 29-3/8 | 43-3/4 | 76 |

Note: Dimensions listed are unit sizes w/o packaging



PERFORMANCE WITH COILS, AIR HANDLERS AND FURNACES

| Outdoor Model | Indoor Model | Cooling | | | |
|-------------------|--------------------------------------|---------|------|----------------------------|------------------------|
| | Evap. Coil Air Handlers ¹ | SEER | EER | AHRI Capacity ² | AHRI Reference Numbers |
| RSG1624S1M | HMG24X1P | 14.5 | 12.2 | 24,000 | 204580604 |
| | HMG30X1P | 15.5 | 12.5 | 24,000 | 204580605 |
| | HCG24V1P | 15.1 | 12.2 | 24,000 | 204580503 |
| | HCG30V1P | 15.5 | 12.5 | 24,000 | 204580504 |
| | HCG24V1M | 15 | 12.2 | 24,000 | 202120919 |
| RSG1636S1M | HMG36X1P | 15.1 | 12.2 | 36,000 | 204580606 |
| | HMG42X1P | 15.5 | 12.5 | 36,000 | 204580611 |
| | HCG36V1P | 15.5 | 12.2 | 36,000 | 204580501 |
| | HCG42V1P | 16 | 13 | 36,000 | 204580502 |
| | HCG36V1M | 15 | 12.2 | 34,000 | 202120921 |
| | HCG42V1M | 15 | 12.2 | 34,000 | 202120923 |
| RSG1648S1M | HMG48X1P | 15.5 | 11.7 | 46,500 | 204580607 |
| | HMG60X1P | 16 | 12.2 | 47,000 | 204580608 |
| | HCG48V1P | 16 | 12 | 46,500 | 204580506 |
| | HCG60V1P | 16 | 12.2 | 47,500 | 204580507 |
| | HCG60V1M | 15 | 12.2 | 47,000 | 202120925 |
| RSG1660S1M | HMG60X1P | 15.1 | 12.2 | 59,000 | 204580609 |
| | HCG60V1P | 16 | 12 | 59,000 | 204580505 |
| | HCG60V1M | 15 | 12.2 | 56,500 | 202120927 |

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

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

ACCESSORIES

| DESCRIPTION | WHERE USED | KIT NUMBER |
|--------------------------------|----------------|------------|
| Compressor Low Ambient Cut-off | All RSG16**S1M | 45F08 |
| Freezestats (3/8") | All RSG16**S1M | 93G35 |
| Freezestats (1/2") | All RSG16**S1M | 39H29 |
| Freezestats (5/8") | All RSG16**S1M | 50A93 |
| Time Off Control | All RSG16**S1M | 47J27 |
| Crank Case Heater | All RSG16**S1M | 93M06 |
| Hard Start Kit 2 - 3 ton | RSG24**S1M | 63W22 |
| | RSG36**S1M | 63W23 |
| Hard Start Kit 4 - 5 ton | RSG48**S1M | 81J69 |
| | RSG60**S1M | 63W24 |
| Low Ambient | All RSG16**S1M | 34M72 |

REFRIGERATION DATA

| Model | Refrig. Charge (oz.) * | Refrigerant Line Size | | Outdoor Unit Connection | |
|------------|------------------------|-----------------------|--------|-------------------------|--------|
| | | Suction | Liquid | Suction | Liquid |
| RSG1624S1M | 117 | 3/4 | 3/8 | 3/4 | 3/8 |
| RSG1636S1M | 137 | 7/8 | 3/8 | 7/8 | 3/8 |
| RSG1648S1M | 180 | 7/8 | 3/8 | 7/8 | 3/8 |
| RSG1660S1M | 214 | 1-1/8 | 3/8 | 7/8 | 3/8 |

*Factory charged for 15 feet of line set

** Indoor Unit Connection size is based on which coil or air handler you are using



"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."

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.