# **QUICK REFERENCE DATA**

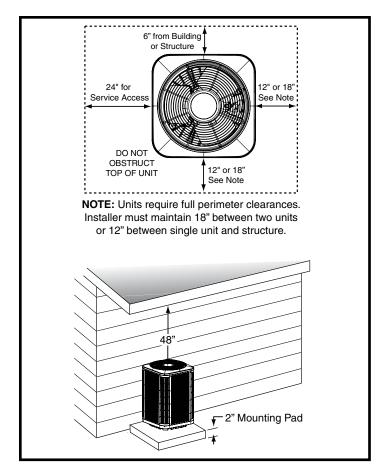
## SA1QD4M1S SERIES SPLIT SYSTEM AIR CONDITIONER WITH QUICK CONNECT COUPLINGS

**13 SEER** 

| MODEL NUMBER *SA1QD4M1SN  |                        |           | 24K           | 30K  | 36K      | 42K   | 48K   | 60K       |
|---|------------------------|-----------|---------------|------|----------|-------|-------|-----------|
|   | Volts-Cycles-Phase (1) |           | 208/230-60-1  |      |          |       |       |           |
| ELECTRICAL<br>DATA  | Total Amps             |           | 13.5          | 14.8 | 18.0     | 19.4  | 23.2  | 27.8      |
|   | Delay Fuse Max. (2)    |           | 25            | 30   | 35       | 40    | 50    | 60        |
|   | Min. Circuit Ampacity  |           | 16.7          | 18.3 | 22.2     | 23.9  | 28.7  | 34.4      |
|   | Coil                   | Area      | 8.3           | 10.0 | 10.0     | 15.3  | 15.3  | 17.9      |
|   |                        | Rows-FPI  | 1-18          |      |          |       |       |           |
|   |                        | Tube Dia  | Micro-Channel |      |          |       |       |           |
| CONDENSER   | Fan Motor              | Туре      | PSC           |      |          |       |       |           |
| DATA  |                        | Amps      | 0.7           | 0.7  | 1.4      | 1.5   | 1.5   | 1.5       |
|   |                        | HP        | 0.1           | 0.1  | 0.25     | 0.25  | 0.25  | 0.25      |
|   | Compressor Data        | RLA       | 12.8          | 14.1 | 16.6     | 17.9  | 21.8  | 26.4      |
|   |                        | LRA       | 58.3          | 73.0 | 79.0     | 112.0 | 117.0 | 134.0     |
| 0-24 ft.  |                        |           | 3/4"          | 3/4" | 3/4"     | 7/8"  | 7/8"  | 7/8"      |
| RECOMMENDED REFRIGERANT SUCTION LINE O.D* NOTE: Liquid line is 3/8" O.D. for entire length. |                        | 25-39 ft. | 3/4"          | 3/4" | 7/8" (3) | 7/8"  | 7/8"  | 1 1/8 (4) |
|   |                        | 40-75 ft. | 3/4"          | 3/4" | 7/8" (3) | 7/8"  | 7/8"  | 1 1/8 (4) |
| REFRIGERANT CHARGE: R-410A in ounces for outdoor unit, indoor unit, & 15' Lineset           |                        | 50        | 51            | 51   | 81       | 76    | 111.6 |           |
| APPROXIMATE WEIGHT (LBS.)  Net Ship   |                        | Net       | 111           | 118  | 123      | 172   | 172   | 186       |
|   |                        | Ship      | 124           | 133  | 137      | 193   | 193   | 208       |

- (1) Operating Voltage Range: 187v min. 253v max.
- (2) HACR Type Circuit Breakers may be used.
- (3) Requires 7/8" to 1-1/8" adapter from unit to line.
- \* For other line set dimensions, refer to the Application Guidelines for Refrigerant Lines Addendum.

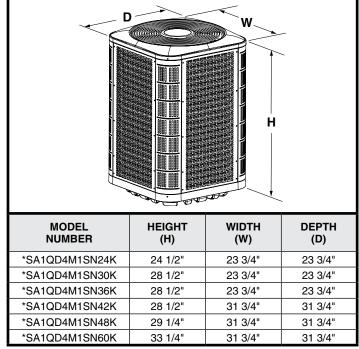
**Table 1. Electrical Specifications & Physical Data** 



**Figure 1. Clearance Requirements** 

| WIRE GAUGE | RECOMMENDED MAXIMUM<br>WIRE LENGTH (FT) FROM UNIT<br>TO THERMOSTAT |  |  |  |  |
|------------|--|--|--|--|--|
| 22         | 45   |  |  |  |  |
| 20         | 70   |  |  |  |  |
| 18         | 115  |  |  |  |  |
| 16         | 180  |  |  |  |  |

**Table 2. Control Wiring (24V)** 



**Table 3. Unit Dimensions** 

#### **Instructions:**

- 1. Find the column for the model of outdoor unit that is being installed.
- 2. Find the row for the model of the indoor unit that is being installed.
- Find the cell in the table in which this row and column meet. In this cell the appropriate orifice / TXV and charge addition for this match are listed. If the text in this cell is BOLD, then a change of orifice is necessary.
- 4. If a change in restrictor is necessary, then the appropriate restrictor will already be supplied with the outdoor unit.

#### **Examples:**

- For the \*SA1QD4M1SN24K / C8QAM024U-B match, the appropriate restrictor is the 0.055" and no additional charge needs to be added. (NO CHANGES REQUIRED)
- For the \*SA1QD4M1SN48K / CM4Q-54U match, the correct TXV is supplied with the indoor unit and no additional refrigerant needs to be added to the system (NO CHANGES REQUIRED).

|                                      | MODEL NO. *SA             | 24K  | 30K                | 36K                | 42K                 | 48K                      | 60K                      |                   |  |  |
|--------------------------------------|---------------------------|--|--------------------|--------------------|---------------------|--------------------------|--------------------------|-------------------|--|--|
|                                      | TOTAL SYSTEM CHARGE (OZ.) |  | 50                 | 51                 | 51                  | 81                       | 76                       | 111.6             |  |  |
|                                      | MODELS                    | MODELS  SUPPLIED WITH ID  REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW - SCFM) |                    |                    |                     |                          |                          |                   |  |  |
| Ι.                                   | C8                        |  |                    |                    |                     |                          |                          |                   |  |  |
| ID RESTRICTOR INSTALLED WITH ID UNIT | C8QAM024U-B               | 0.055  | 0.055<br>(0 / 705) |                    |                     |                          |                          |                   |  |  |
|                                      | C8QAM030U-B               | 0.061  |                    | 0.061<br>(0 / 960) |                     |                          |                          |                   |  |  |
|                                      | C8QAM036U-B               | 0.067  |                    |                    | 0.067<br>(0 / 1190) |                          |                          |                   |  |  |
|                                      | C8-X                      |  |                    |                    |                     |                          |                          |                   |  |  |
|                                      | C8QVMX42U-C               | 669567   |                    |                    |                     | 669567<br>(-20 / 1265) ‡ |                          |                   |  |  |
|                                      | C8QVMX48U-C               | 669568   |                    |                    |                     |                          | 669568<br>(-15 / 1275) ‡ |                   |  |  |
|                                      | СМ4                       |  |                    |                    |                     |                          |                          |                   |  |  |
|                                      | CM4Q-53U                  | TXV  |                    |                    |                     | TXV<br>(0 / 1250)        |                          |                   |  |  |
|                                      | CM4Q-54U                  | TXV  |                    |                    |                     |                          | TXV<br>(0 / 1450)        | TXV<br>(0 / 1450) |  |  |
|                                      | CM4Q-55U                  | TXV  |                    |                    |                     |                          | TXV<br>(0 / 1500)        |                   |  |  |
|                                      | CM4Q-56U                  | TXV  |                    |                    |                     |                          |                          | TXV<br>(0 / 1600) |  |  |

### NOTES:

- The charges listed are only valid for the standard 15' lineset.
- Numbers listed as 0.\*\*\* are restrictor diameters, while numbers listed as 669\*\*\* are TXV part numbers.
- ‡ Requires REMOVAL of refrigerant from unit.

Table 4. Restrictor or TXV / Charge Addition (Oz)

THE CHARGE ADDITIONS PROVIDED IN THIS DOCUMENT ARE ESTIMATES BASED ON TEST DATA AND SHOULD ONLY BE A STARTING POINT. AFTER FOLLOWING THESE DIRECTIONS PLEASE ADJUST THE REFRIGERANT AMOUNT BASED ON THE APPROPRIATE CHARGING TABLES OR CHARTS IN THE INSTALLATION INSTRUCTIONS OR CHARGING LABEL.