

# QUICK REFERENCE DATA

## \*SH3ME4M Series Residential Split System Air Conditioner

14.3 SEER2

MODEL NUMBER SH3ME4M		1RP24K	1RP30K	1SP36K	1SP42K	1SP48K
REFRIGERANT SUCTION LINE O.D. NOTE: Liquid line is 3/8" O.D.	0-24 Ft.	3/4"	3/4"	3/4"	7/8"	7/8"
	25-39 Ft.	3/4"	3/4"	3/4"	7/8"	7/8"
	40-75 Ft.	3/4"	3/4"	7/8" (3)	7/8"	7/8"
FACTORY R-410A REFRIGERANT CHARGE in ounces for outdoor unit, C84-X indoor & 20' Lineset. (2)		103	106	108	119	130

(1) Always use good piping practices when configuring unit line-sets.

- (a) For longer line-sets or those with more than 10 feet of rise, refer to Nortek Document #044B, Application Guidelines for Refrigerant Lines.
- (b) Locate and anchor linesets per local codes, or at least every 42 inches for annealed (soft) tubing, and every 8 feet for drawn.
- (c) Always purge piping and use nitrogen or another inert gas during brazing operations.
- (d) Always insulate the suction line between units.

(2) Additional Charge Per Foot Guidance:

- (a) Always calculate the ideal unit charge based on the actual piping length. Use equivalent length for unit capacity and line losses, plus SH/SC adjustments.
- (b) For these restrictor units, always weight-in slightly less charge than calculated, then finalize the unit charge by Superheat.
- (c) For configurations with the indoor unit located above the outdoor, always ensure that a sub-cooled liquid exists at the indoor unit.
- (d) Units using 1-1/8" suction lines may use 1/2" liquid lines. Requires 3/8" to 1/2" reducer from line to unit.

OUNCES OF R-410A PER FOOT OF LINE-SET		
ACR Suct. Size	3/8" Liquid	1/2" Liquid
5/8	0.59	- na -
3/4	0.62	- na -
7/8	0.66	1.13
1 1/8	0.75	1.23

(3) Requires 7/8" to 3/4" reducer from line to unit.

Table 1. Physical Data

### 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.
3. 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 \*SH3ME4M1SN36K/C84(D,Q)AMX36U-B unit match the appropriate TXV is 669566 and zero ounces of refrigerant needs to be added to the system when a 20 foot line-set is utilized. Charge Adjustment for alternate line-set lengths should be calculated per the instructions provided with table 1 and the data contained within it.

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.

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**14.3 SEER2**

MODEL NUMBER: *SH3ME4M		1RP24K	1RP30K	1SP36K	1SP42K	1SP48K
ID RESTRICTOR SUPPLIED WITH OD UNIT:		0.046	0.048	0.051	0.057	0.060
OUTDOOR UNIT, FACTORY CHARGE (OZ.)		103	106	108	119	130
MODELS	SUPPLIED WITH ID	REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW - SCFM)				
<b>C84(D,Q)-X</b>						
C84(D,Q)AMX24U-B	669564	669564 (0 / 840)	--	--	--	--
C84(D,Q)AMX30U-B	669565	--	669565 (0 / 980)	--	--	--
C84(D,Q)AMX36U-B	669566	--	--	669566 (0 / 1250)	--	--
C84(D,Q)AMX42U-B	669567	--	--	--	--	--
C84(D,Q)AMX43U-B	669567	--	--	--	669567 (0 / 1225)	--
C84(D,Q)AMX48U-B	669568	--	--	--	--	--
C84(D,Q)AMX49U-B + E7 + Blower Kit	669568	--	--	--	--	669568 (0 / 1550)

**NOTES:**

‡ Requires **REMOVAL** of refrigerant from unit.

The charges listed are only valid for the standard 20' lineset. Calculate Additions for other lengths after making the adjustments noted in this table.

Restrictors are shown by the size indicated, TXV's are shown with part numbers. PN's typically begin with 669\*\*\*.

**Table 2. Restrictor or TXV / Charge Addition (Oz)**

