

**40VMV012A-054A**  
**Vertical Air Handler Indoor Unit for**  
**Variable Refrigerant Flow (VRF) Systems**

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# Engineering Data Book



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# VERTICAL AIR HANDLING UNIT BASIC INFORMATION

## Specifications

**Table 1 —Data Table**

MODEL NAME			40VMV012A--3	40VMV018A--3
Power Source		V-Ph-Hz	208/230-1-60	
Total Cooling Capacity*1		Btu/h	12,000	18,000
Sensible Cooling Capacity*1		Btu/h	9,400	14,000
Heating Capacity*1		Btu/h	13,500	21,000
Electrical Supply	MCA	A	1.50	3.80
	MOCP	A	15	
Fan	Type		Centrifugal	
	Air flow rate (H/M/L)	cfm	400/320/320	600/510/420
	Max. External static pressure (ESP)	in. WG	0.80	
Fan Motor	Type		DC	
	Output	W	100	370
Heat Exchanger		Inner Groove Copper Tube and Hydrophilic Aluminum fin		
Refrigerant Control		Electronic Expansion Valve		
Dimensions (H x W x D)		in	46-1/2 x 19-5/8 x 21-5/8	
Net Weight		lbs	115.0	
Sound Pressure Level (H / M / L)*2		dB	37.6 / 34.5 / 34.5	41.6 / 37.1 / 34.4
Piping Connections	Gas (Low) Pressure	In	1/2	5/8
	Liquid (High) Pressure	In	1/4	3/8
	Condensate	In	3/4 NPT	
Connectable Outdoor Unit		38VMH – Heat Pump 38VMR – Heat Recovery 38VMH-1P – Single Phase Heat Pump		
Casing		Galvanized Steel		
Wiring	Power Wiring	AWG	Sized per NEC and Local Codes based on Nameplate Electrical Data	
	Control Wiring	AWG	2-core stranded shielded cable 18AWG	

- NOTES:**
- \* 1 Rated per AHRI (Air-Conditioning, Heating and Refrigeration Institute) 1230 Standard:  
Cooling: Indoor 80°F (27°C) db/67°F (20°C) wb; Outdoor 95°F (35°C) db  
Heating: Indoor 70°F (21°C) db; Outdoor 47°F (8°C) db/43°F (6°C) wb
  - \* 2 These values are measured in anechoic chamber. See page 15 for more details.

**Table 2 —Data Table**

MODEL NAME			40VMV024A--3	40VMV030A--3
Power Source		V-Ph-Hz	208/230-1-60	
Total Cooling Capacity*1		Btu/h	24,000	30,000
Sensible Cooling Capacity*1		Btu/h	18,600	22,600
Heating Capacity*1		Btu/h	27,000	34,000
Electrical Supply	MCA	A	3.80	
	MOCP	A	15	
Fan	Type		Centrifugal	
	Air flow rate (H/M/L)	cfm	800/680/560	1000/850/700
	Max. External static pressure (ESP)	in. WG	0.80	
Fan Motor	Type		DC	
	Output	W	370	
Heat Exchanger			Inner Groove Copper Tube and Hydrophilic Aluminum fin	
Refrigerant Control			Electronic Expansion Valve	
Dimensions (H x W x D)		in	46-1/2 x 19-5/8 x 21-5/8	
Net Weight		lbs	119.0	
Sound Pressure Level (H / M / L)*2		dB(A)	46.2 / 42.3 / 37.9	52.2 / 48.4 / 44.4
Piping Connections	Gas (Low) Pressure		In	5/8
	Liquid (High) Pressure		In	3/8
	Condensate		In	3/4 NPT
Connectable Outdoor Unit			38VMH – Heat Pump 38VMR – Heat Recovery 38VMH-1P – Single Phase Heat Pump	
Casing			Galvanized Steel	
Wiring	Power Wiring	AWG	Sized per NEC and Local Codes based on Nameplate Electrical Data	
	Control Wiring	AWG	2-core stranded shielded cable 18AWG	

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  - \* 2 These values are measured in anechoic chamber. See page 15 for more details.

**Table 3 —Data Table**

MODEL NAME			40VMV036A--3	40VMV048A--3
Power Source		V-Ph-Hz	208/230-1-60	
Total Cooling Capacity*1		Btu/h	36,000	48,000
Sensible Cooling Capacity*1		Btu/h	28,300	37,100
Heating Capacity*1		Btu/h	40,000	54,000
Electrical Supply	MCA	A	5.30	
	MOCP	A	15	
Fan	Type		Centrifugal	
	Air flow rate (H/M/L)	cfm	1200/1020/840	1600/1360/1120
	Max. External static pressure (ESP)	in. WG	0.80	
Fan Motor	Type		DC	
	Output		560	
Heat Exchanger			Inner Groove Copper Tube and Hydrophilic Aluminum fin	
Refrigerant Control			Electronic Expansion Valve	
Dimensions (H x W x D)		in	54-1/2 x 22 x 24	
Net Weight		lbs	157.0	
Sound Pressure Level (H / M / L)*2		dba	46.9 / 44.1 / 39.3	53.0 / 48.5 / 43.8
Piping Connections	Gas (Low) Pressure		In	5/8
	Liquid (High) Pressure		In	3/8
	Condensate		In	3/4 NPT
Connectable Outdoor Unit			38VMH – Heat Pump 38VMR – Heat Recovery 38VMH-1P – Single Phase Heat Pump	
Casing			Galvanized Steel	
Wiring	Power Wiring	AWG	Sized per NEC and Local Codes based on Nameplate Electrical Data	
	Control Wiring	AWG	2-core stranded shielded cable 18AWG	

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  - \* 2 These values are measured in anechoic chamber. See page 15 for more details.




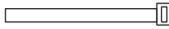
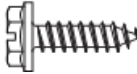


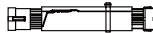
**Table 4 —Data Table**

MODEL NAME		40VMV054A--3	
Power Source		V-Ph-Hz	208/230-1-60
Total Cooling Capacity*1		Btu/h	53,500
Sensible Cooling Capacity*1		Btu/h	41,300
Heating Capacity*1		Btu/h	60,000
Electrical Supply	MCA	A	7.20
	MOCP	A	15
Fan	Type		Centrifugal
	Air flow rate (H/M/L)	cfm	1800/1530/1260
	Max. External static pressure (ESP)	in. WG	0.80
Fan Motor	Type		DC
	Output	W	560
Heat Exchanger		Inner Groove Copper Tube and Hydrophilic Aluminum fin	
Refrigerant Control		Electronic Expansion Valve	
Dimensions (H x W x D)		in	54-1/2 x 22 x 24
Net Weight		lbs	157.0
Sound Pressure Level (H x M x L)*2		dba	57.1 x 52.6 x 47.9
Piping Connections	Gas (Low) Pressure		5/8
	Liquid (High) Pressure		3/8
	Condensate		3/4 NPT
Connectable Outdoor Unit		38VMH – Heat Pump 38VMR – Heat Recovery 38VMH-1P – Single Phase Heat Pump	
Casing		Galvanized Steel	
Wiring	Power Wiring	AWG	Sized per NEC and Local Codes based on Nameplate Electrical Data
	Control Wiring	AWG	2-core stranded shielded cable 18AWG

- NOTES:**
- \* 1 Rated per AHRI (Air-Conditioning, Heating and Refrigeration Institute) 1230 Standard:  
Cooling: Indoor 80°F (27°C) db/67°F (20°C) wb; Outdoor 95°F (35°C) db  
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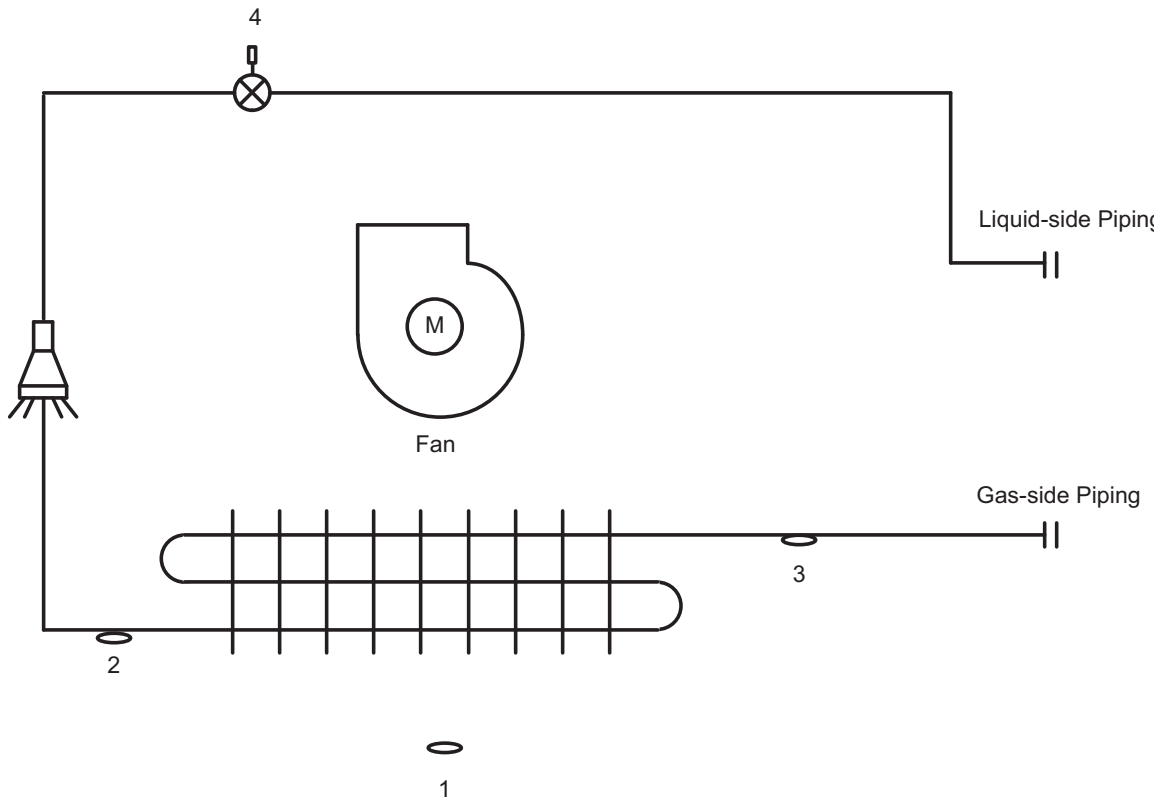
## Accessories

**Table 5 —Table of Accessories**

NAME of ACCESSORIES	QUANTITY	OUTLINE	USAGE
Copper pipe	2		Reducer for smaller pipe diameter (sizes 012A and 018A only)
Drain plug	2		Plug for drain pan outlet
Wire grommet	2		For wire routing
Tie rope	3		-----
Screw	4		-----
PQE connection wire	2		To connect the outdoor unit, indoor unit, and sub MDC
Connection wire	1		For occupancy sensor
No beep harness	1		Prevent beeping noise

MDC: Multiport Distribution Controller

# PIPING DIAGRAM



**Fig. 1 —Piping**  
**Table 6 —Piping**

NUMBER	SYMBOL	NAME
1	T1	Room temperature sensor
2	T2A	Inlet pipe temperature sensor
3	T2B	Outlet pipe temperature sensor
4	EEV	Electronic expansion valve

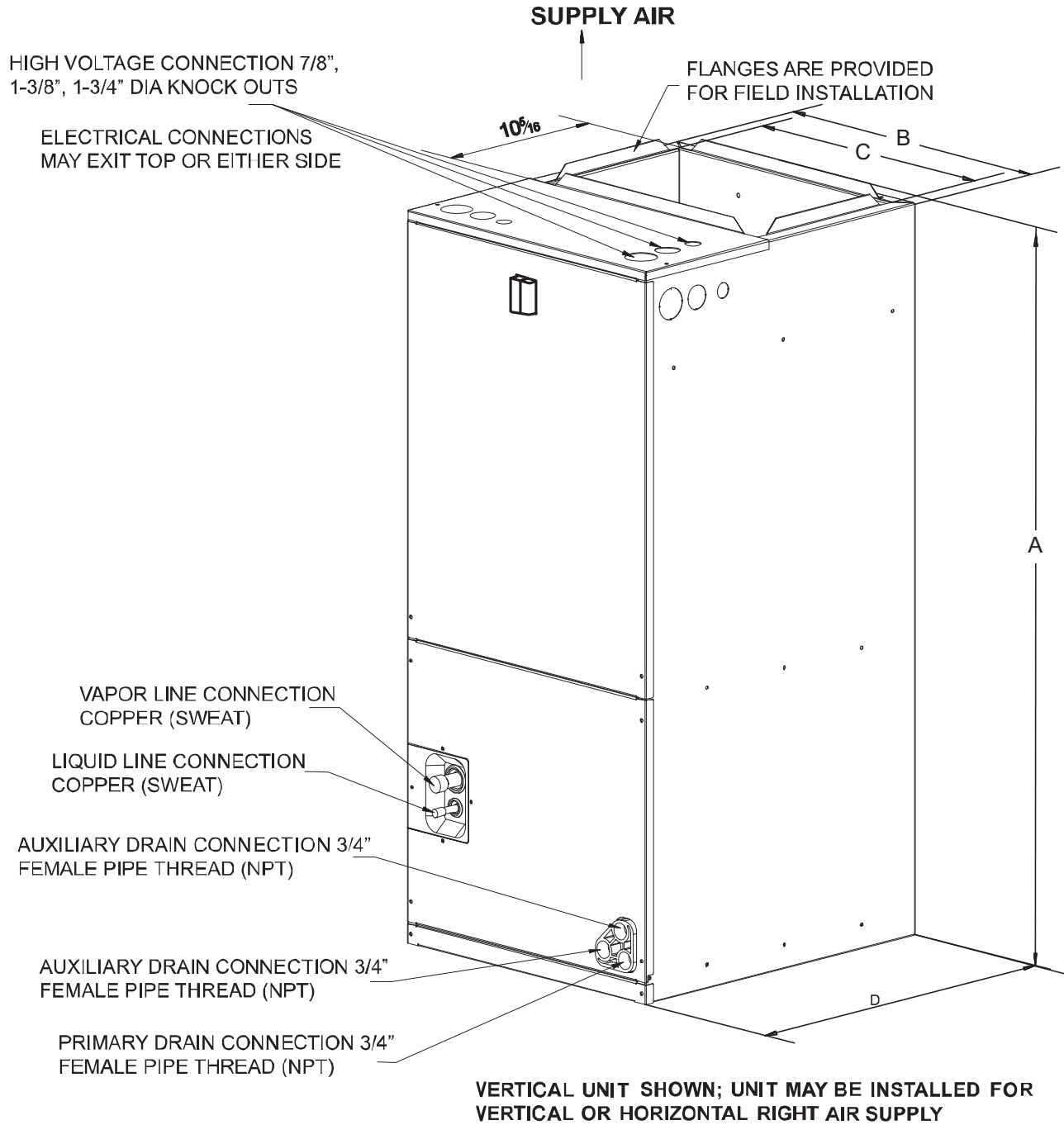
**Table 7 —Gas / Liquid Line Sizes**

MODEL	GAS	LIQUID
40VMV012A--3	1/2	1/4
40VMV018A-054A--3	5/8	3/8



**DIMENSIONS**

**NOTE: 25" CLEARANCE IS REQUIRED IN THE FRONT OF THE UNIT FOR FILTER AND COIL MAINTENANCE.**



**NOTE:** All dimensions are shown in inches.

**Fig. 2 —40VMV012A-054A--3**

**Table 8 —Dimensions (40VMV012A-054A--3)**

MODEL	A	B	C	D
40VMV012A-30A--3	46-1/2	19-5/8	18	21-5/8
40VMV036A-054A--3	54-1/2	22	19-1/2	24

# WIRING DIAGRAM

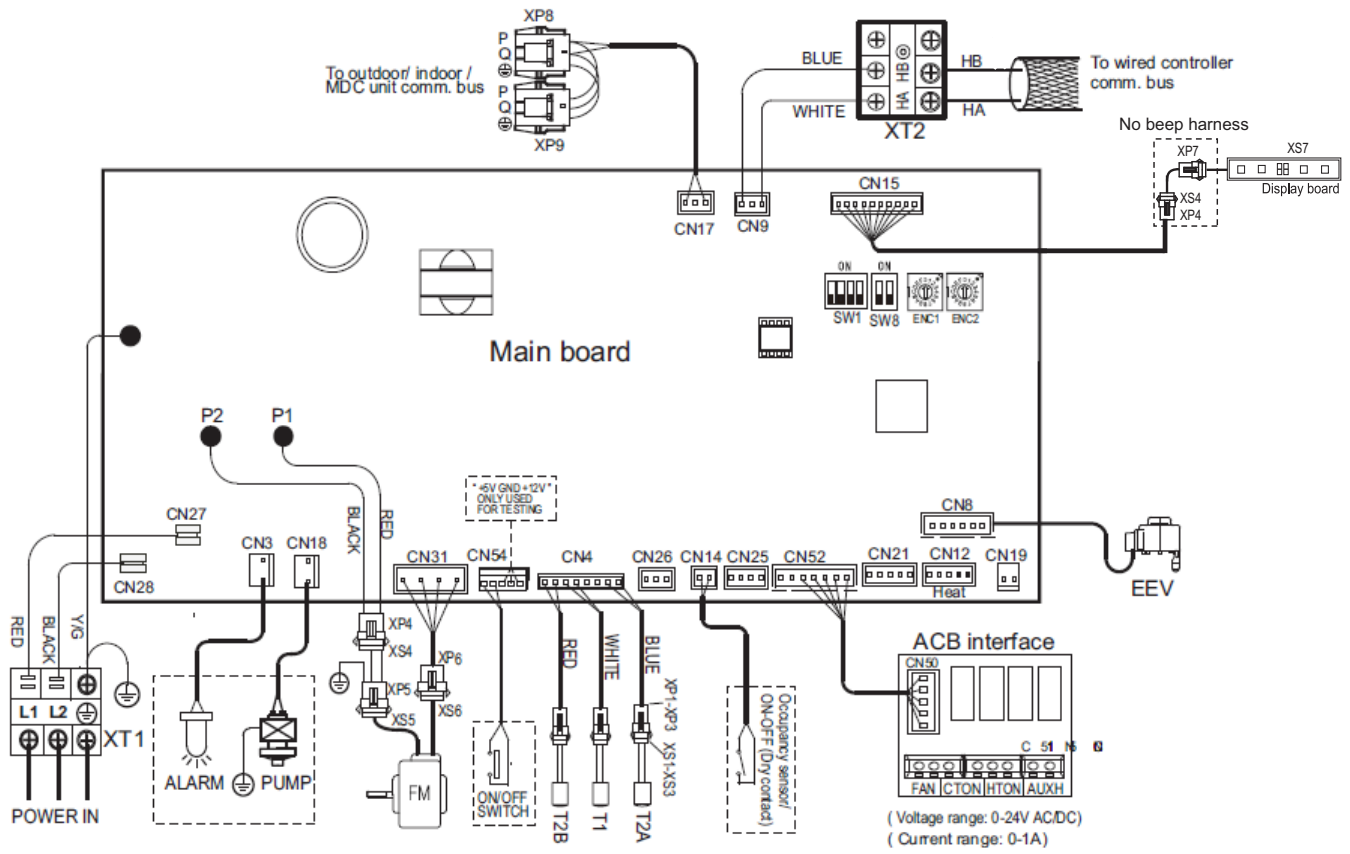


Fig. 3 —Wiring Diagram (40VMV012A-054A--3)

## Wiring Diagram Definitions and Settings (40VMV012A-054A--3)


**Table 9 —Code/Title**

CODE	TITLE
FM	Indoor fan motor
T1/T0	Room temperature sensor
T2A	Inlet pipe temperature sensor
T2B	Outlet pipe temperature sensor
ALARM	Warning lamp
EEV	Electronic expansion valve
XP1-9	Connectors
XS1-7	
XT1-2	Terminal
PUMP	Pump motor
CS	Condensate switch



**Table 10 —Error Codes**

ERROR CODE	ERROR CONTENT
dd	Heating/cooling conflict
E1	Communication error with outdoor unit
E2	Temperature sensor (T1/T0) error
E4	Temperature sensor (T2B) error
E5	Temperature sensor (T2A) error
E6	DC fan error
E7	EEPROM error (data storage)
UU	MDC error in auto system-check mode
E9	Communication error between indoor unit and wired controller
Eb	EEV error
EC	Indoor fan error in auto system-check mode
Ed	Outdoor unit error
EE	Condensate error
FE	No address when first powered on








**Table 11 —ENC1 Definition**

	(Reserved)
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**Table 12 —J1 Definition**

	Without jumper "J1" for auto restart function
	With jumper "J1" for manual restart function

**Table 13 —SW1 Definition**

	0 means auto addressing mode (Default)
	1 means factory test mode (Default)
	0 means normal mode (Default)
	1 means factory self-checking mode (Reserved)
	Reserved
	0 means standard indoor unit (Default)
	1 means main indoor unit (Must be addressed #63)



**Table 14 —SW8 Definitions**

	Reserved
	Reserved

**Table 15 —ENC2 Definitions**

	Reserved
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**Table 16 —0/1 Definition**

	Means 0
	Means 1

# ELECTRICAL CHARACTERISTICS

**Table 17 —Electrical Characteristics**

MODEL	POWER SUPPLY				IFM		
	HZ	VOLTZ	VOLTAGE RANGE	MCA	MOCP	KW	FLA
40VMV012A--3	60	208/230V	Max.253V Min.187V	1.50	15	0.10	1.20
40VMV018A--3				3.80	15	0.37	3.00
40VMV024A--3				3.80	15	0.37	3.00
40VMV030A--3				3.80	15	0.37	3.00
40VMV036A--3				5.30	15	0.56	4.20
40VMV048A--3				5.30	15	0.56	4.20
40VMV054A--3				7.20	15	0.56	5.70

MCA: Minimum Circuit Amps (A)  
 MOCP: Maximum Overcurrent Protection (A)  
 Kw: Fan Motor Rated Output (kW)  
 FLA: Full Load Amps (A)  
 IFM: Indoor Fan Motor

SYMBOLS:

## FAN PERFORMANCE

The Air Handling Unit has constant CFM motors that automatically regulate the rotating speed if the actual air flow deviates beyond 10% of the set CFM.

The following figures show fan characteristics at High-speed, Medium-speed, and Low-speed.

The unit can automatically adjust the external static pressure (ESP) between 0 – 0.8 inches. When the ESP is over 0.8 inches WG, the air flow drastically decreases.

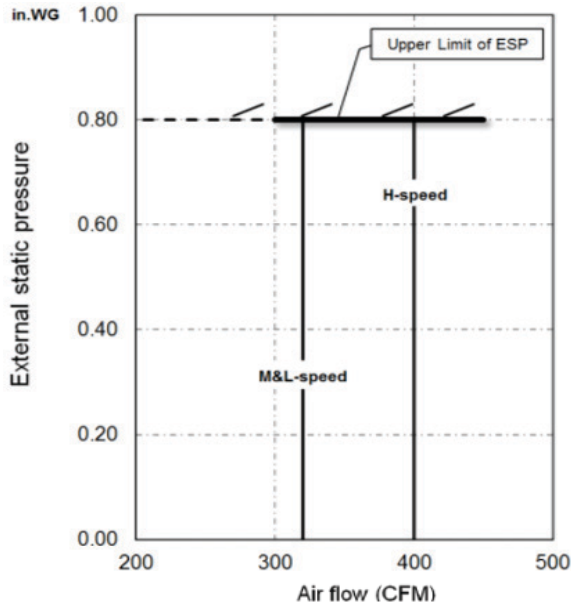


Fig. 4 —40VMV012A--3

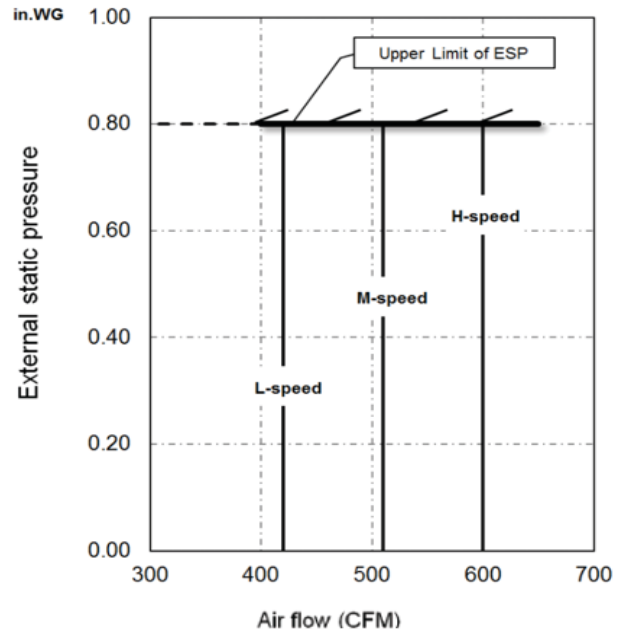


Fig. 5 —40VMV018A--3

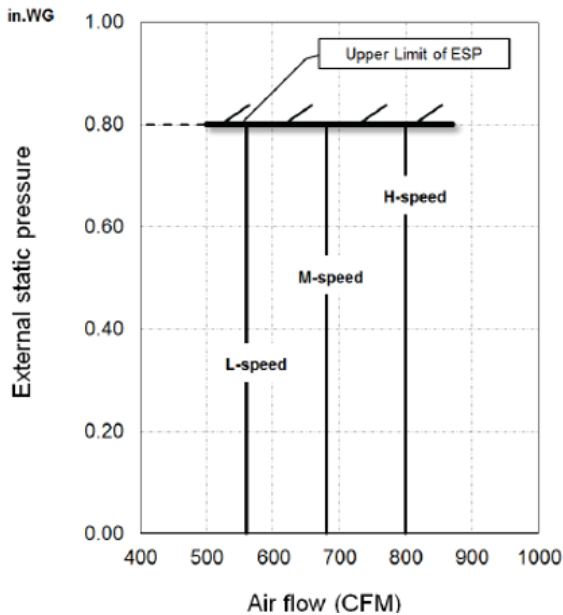


Fig. 6 —40VMV024A--3

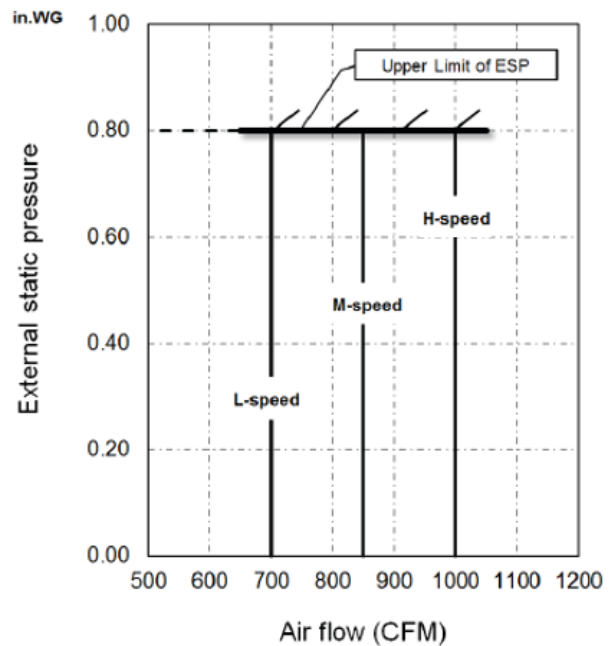
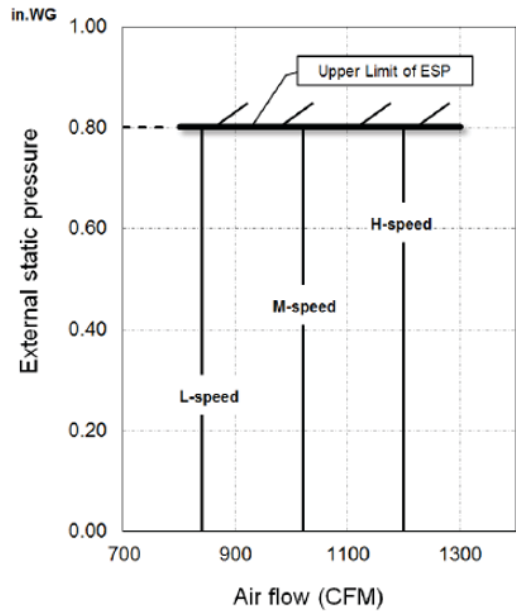
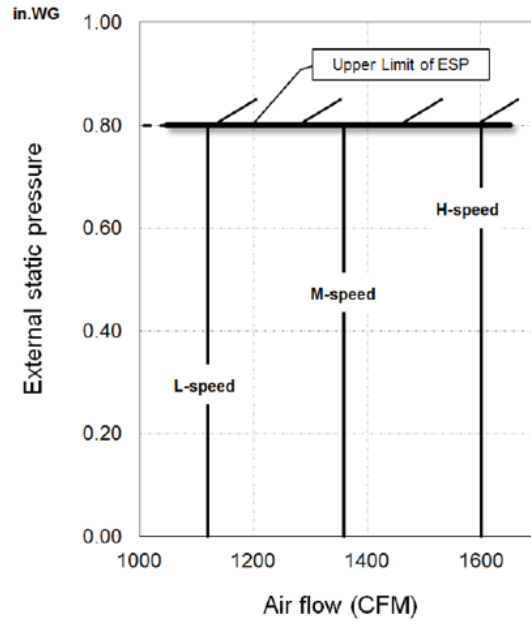


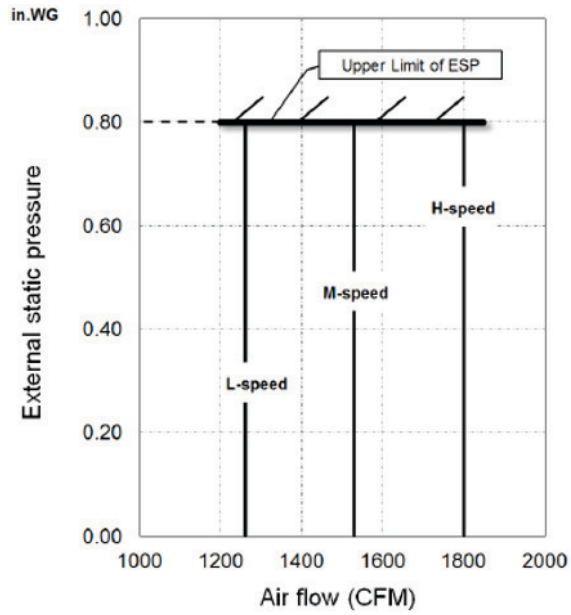
Fig. 7 —40VMV030A--3



**Fig. 8 —40VMV036A--3**



**Fig. 9 —40VMV048A--3**



**Fig. 10 —40VMV054A--3**

## SOUND DATA

### Sound Pressure Levels

Two installation types are available for 40VMV series. The following table shows the maximum noise data in High/Medium/Low speed respectively under different modes (i.e. Heating, Cooling and Fan).



**Fig. 11 —Overall Sound Levels**

**Table 18 —Fan Speed**

MODEL	H	M	L
40VMV012A--3	37.6	34.5	34.5
40VMV018A--3	41.6	37.1	34.4
40VMV024A--3	46.2	42.3	37.9
40VMV030A--3	52.2	48.4	44.4
40VMV036A--3	46.9	44.1	39.3
40VMV048A--3	53.0	48.5	43.8
40VMV054A--3	57.1	52.6	47.9

Units are dB(A)

# NC Curves

## NOTES:

External Static Pressure: 0.18 in. (45Pa)  
Power source: 208/230V-1Ph-60Hz

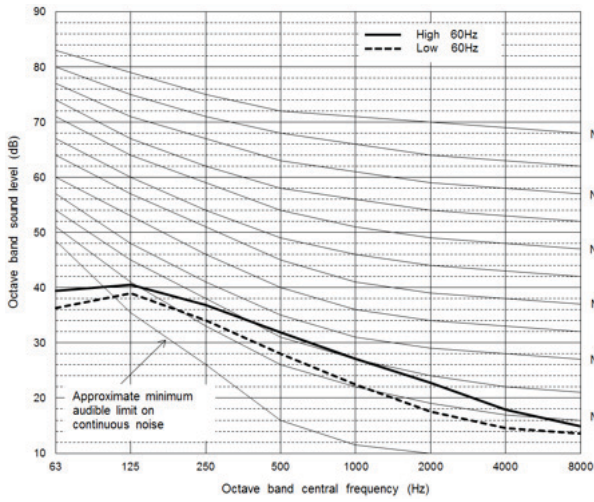


Fig. 12 —40VMV012A--3

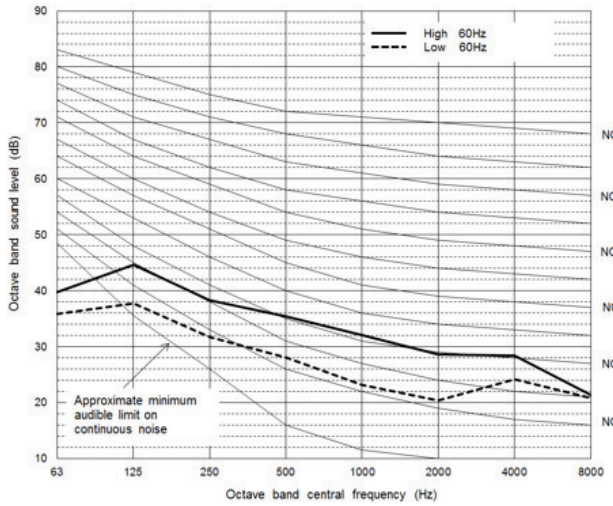


Fig. 13 —40VMV018A--3

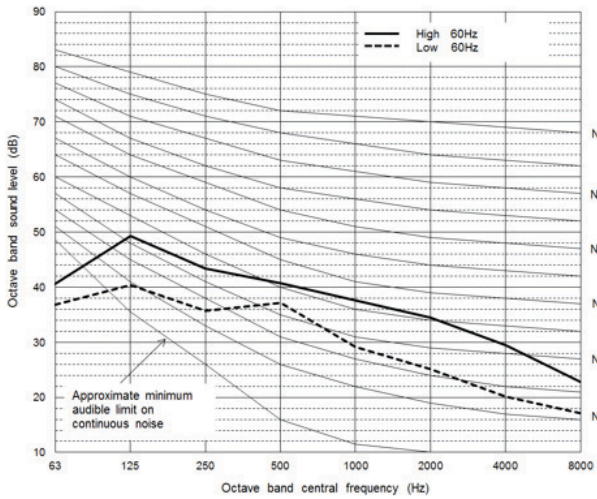


Fig. 14 —40VMV024A--3

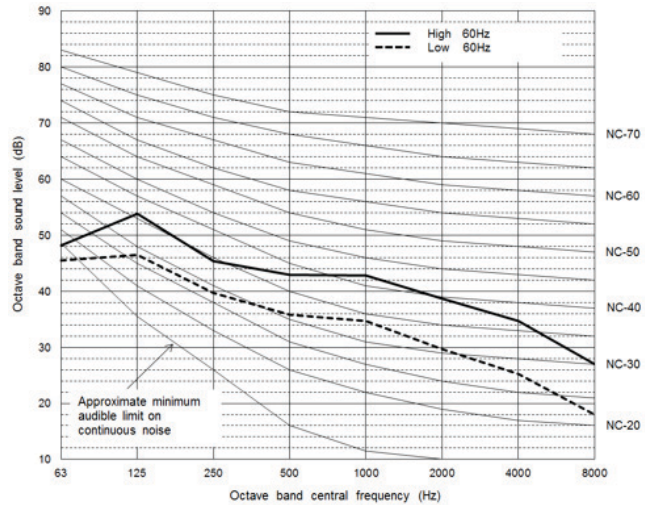
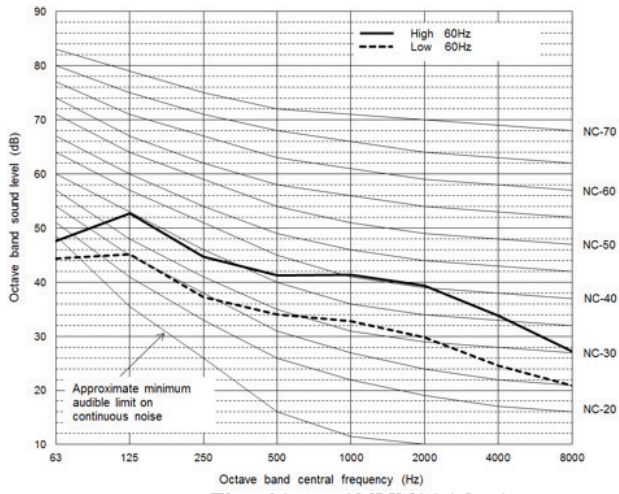
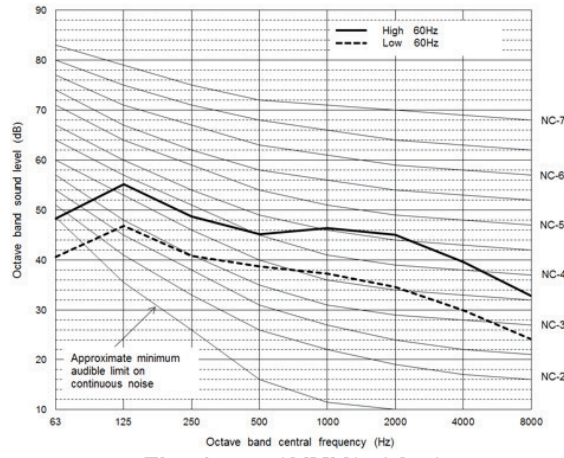


Fig. 15 —40VMV030A--3

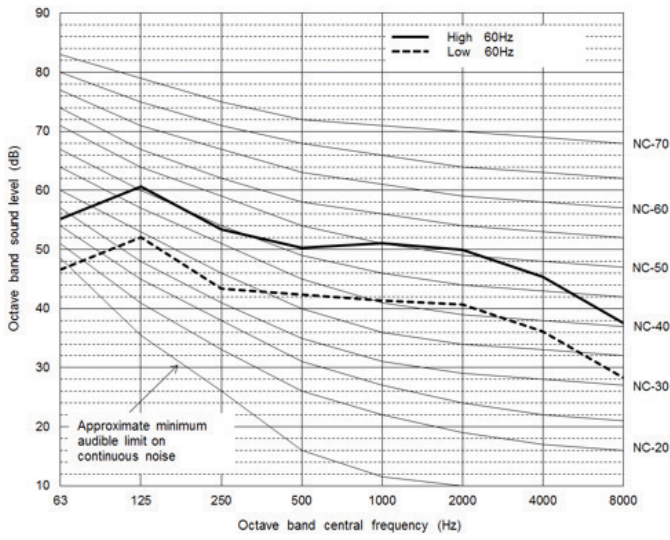




**Fig. 16 —40VMV036A--3**



**Fig. 17 —40VMV048A--3**



**Fig. 18 —40VMV054A--3**

**CAPACITY DATA TABLES**

**Table 19 —Cooling Capacity**

Model	Outdoor air temperature	Indoor air temperature													
		71 °DB/59 °WB		73 °DB/61 °WB		77 °DB/64 °WB		80 °DB/67 °WB		82 °DB/68 °WB		86 °DB/72 °WB		90 °DB/75 °WB	
		°F DB	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC
12	68	10.9	9.4	11.6	9.6	12.3	9.9	13.0	9.8	13.4	10.3	14.3	10.2	15.0	10.5
	73	10.9	9.4	11.6	9.5	12.3	9.9	13.0	9.8	13.3	10.3	14.2	10.2	14.9	10.5
	77	10.9	9.4	11.6	9.5	12.2	9.9	13.0	9.8	13.2	10.3	14.0	10.1	14.7	10.4
	82	10.8	9.4	11.4	9.4	12.0	9.8	12.7	9.6	12.9	10.1	13.7	10.0	14.4	10.3
	86	10.7	9.3	11.2	9.3	11.9	9.7	12.5	9.5	12.8	10.0	13.5	9.9	14.1	10.2
	91	10.6	9.2	11.0	9.2	11.6	9.6	12.2	9.5	12.4	9.9	13.2	9.7	13.8	10.0
	95	10.4	9.1	10.8	9.1	11.4	9.4	12.0	9.4	12.2	9.8	13.0	9.6	13.6	9.9
	100	10.2	9.0	10.6	9.0	11.2	9.3	11.8	9.2	12.0	9.7	12.7	9.5	13.2	9.8
	104	10.1	8.9	10.4	8.9	10.9	9.3	11.5	9.1	11.7	9.6	12.4	9.4	13.0	9.7
110	9.9	8.8	10.2	8.8	10.6	9.1	11.2	9.0	11.4	9.4	12.1	9.3	12.6	9.5	
18	68	16.4	14.1	17.4	14.3	18.5	14.9	19.6	14.7	20.0	15.5	21.4	15.3	22.4	15.7
	73	16.3	14.1	17.4	14.3	18.4	14.8	19.5	14.7	20.0	15.4	21.3	15.2	22.4	15.7
	77	16.3	14.0	17.4	14.2	18.4	14.8	19.4	14.6	19.9	15.4	21.0	15.1	22.0	15.5
	82	16.2	14.0	17.1	14.1	18.1	14.7	19.1	14.4	19.4	15.2	20.6	14.9	21.6	15.4
	86	16.1	13.9	16.8	14.0	17.8	14.6	18.7	14.3	19.1	15.0	20.3	14.8	21.2	15.3
	91	15.9	13.7	16.5	13.7	17.5	14.4	18.4	14.2	18.7	14.9	19.8	14.5	20.7	15.0
	95	15.6	13.6	16.2	13.6	17.1	14.1	18.0	14.0	18.3	14.6	19.5	14.4	20.4	14.8
	100	15.4	13.5	16.0	13.4	16.7	14.0	17.6	13.8	17.9	14.5	19.0	14.3	19.8	14.7
	104	15.1	13.3	15.6	13.3	16.4	13.9	17.3	13.6	17.6	14.3	18.7	14.1	19.4	14.6
110	14.9	13.2	15.2	13.2	15.9	13.6	16.8	13.5	17.1	14.1	18.2	13.9	18.8	14.3	
24	68	21.8	18.7	23.2	19.0	24.6	19.8	26.1	19.6	26.7	20.6	28.5	20.3	29.9	20.9
	73	21.8	18.7	23.2	18.9	24.6	19.7	26.0	19.5	26.6	20.5	28.5	20.2	29.9	20.8
	77	21.7	18.6	23.2	18.8	24.5	19.6	25.9	19.4	26.5	20.4	28.1	20.0	29.4	20.6
	82	21.6	18.6	22.7	18.7	24.1	19.5	25.4	19.1	25.8	20.1	27.4	19.8	28.7	20.4
	86	21.5	18.4	22.4	18.6	23.8	19.3	25.0	19.0	25.5	20.0	27.1	19.7	28.3	20.3
	91	21.2	18.2	21.9	18.2	23.3	19.1	24.5	18.8	24.9	19.8	26.5	19.3	27.6	19.9
	95	20.8	18.1	21.6	18.0	22.8	18.8	24.0	18.6	24.4	19.4	26.0	19.1	27.2	19.7
	100	20.5	17.9	21.3	17.8	22.3	18.6	23.5	18.3	23.9	19.2	25.3	18.9	26.4	19.5
	104	20.2	17.7	20.8	17.7	21.8	18.4	23.0	18.1	23.4	19.0	24.9	18.8	25.9	19.3
110	19.9	17.5	20.3	17.5	21.2	18.0	22.4	17.9	22.8	18.7	24.2	18.4	25.1	19.0	
30	68	27.3	22.6	29.0	23.0	30.8	23.9	32.6	23.7	33.4	24.9	35.7	24.6	37.4	25.3
	73	27.2	22.6	29.0	23.0	30.7	23.9	32.5	23.7	33.3	24.8	35.6	24.5	37.3	25.2
	77	27.1	22.6	28.9	22.9	30.6	23.8	32.4	23.6	33.1	24.7	35.1	24.3	36.7	25.0
	82	27.0	22.6	28.4	22.7	30.1	23.6	31.8	23.2	32.3	24.4	34.3	24.0	35.9	24.7
	86	26.8	22.3	28.0	22.5	29.7	23.4	31.2	23.0	31.9	24.2	33.9	23.8	35.4	24.5
	91	26.4	22.1	27.4	22.1	29.1	23.2	30.6	22.8	31.1	24.0	33.1	23.4	34.6	24.1
	95	26.0	21.9	27.0	21.9	28.5	22.8	30.0	22.6	30.5	23.5	32.5	23.2	34.0	23.9
	100	25.6	21.7	26.6	21.6	27.9	22.5	29.4	22.1	29.9	23.3	31.7	22.9	33.0	23.6
	104	25.2	21.5	26.0	21.4	27.3	22.3	28.8	21.9	29.3	23.1	31.1	22.7	32.4	23.4
110	24.8	21.2	25.4	21.2	26.5	21.9	28.0	21.7	28.5	22.6	30.3	22.3	31.4	23.0	
36	68	32.7	28.4	34.9	28.8	37.0	30.0	39.1	29.8	40.1	31.3	42.8	30.9	44.9	31.8
	73	32.7	28.3	34.8	28.7	36.9	29.9	39.0	29.7	40.0	31.2	42.7	30.8	44.8	31.7
	77	32.6	28.3	34.7	28.6	36.7	29.8	38.9	29.6	39.7	31.1	42.1	30.5	44.1	31.4
	82	32.5	28.3	34.1	28.5	36.1	29.6	38.2	29.1	38.8	30.7	41.1	30.2	43.1	31.2
	86	32.2	28.0	33.6	28.2	35.7	29.4	37.4	28.8	38.3	30.4	40.7	29.9	42.4	30.9
	91	31.7	27.7	32.9	27.6	34.9	29.1	36.7	28.6	37.3	30.1	39.7	29.4	41.5	30.3
	95	31.2	27.4	32.4	27.4	34.2	28.5	36.0	28.3	36.6	29.6	39.0	29.1	40.8	30.0
	100	30.8	27.2	31.9	27.1	33.5	28.3	35.3	27.8	35.9	29.3	38.0	28.8	39.6	29.8
	104	30.3	26.9	31.2	26.8	32.8	28.0	34.6	27.5	35.2	29.0	37.3	28.6	38.9	29.5
110	29.8	26.6	30.5	26.5	31.8	27.4	33.6	27.2	34.2	28.4	36.3	28.0	37.7	28.9	
48	68	43.6	37.1	46.5	37.8	49.3	39.4	52.2	39.0	53.4	41.1	57.1	40.5	59.8	41.7
	73	43.5	37.1	46.4	37.6	49.2	39.2	52.0	38.9	53.3	40.9	56.9	40.3	59.7	41.6
	77	43.4	37.1	46.3	37.5	49.0	39.1	51.8	38.7	53.0	40.7	56.1	40.0	58.8	41.2
	82	43.3	37.0	45.5	37.3	48.2	38.8	50.9	38.1	51.7	40.2	54.8	39.6	57.5	40.9
	86	43.0	36.6	44.9	36.9	47.5	38.5	49.9	37.8	51.0	39.8	54.2	39.2	56.6	40.5
	91	42.3	36.3	43.9	36.2	46.6	38.1	49.0	37.4	49.8	39.5	52.9	38.5	55.3	39.7
	95	41.7	35.9	43.2	35.8	45.6	37.4	48.0	37.1	48.8	38.7	52.0	38.2	54.4	39.4
	100	41.0	35.6	42.6	35.5	44.7	37.0	47.0	36.4	47.8	38.4	50.7	37.8	52.8	39.0
	104	40.3	35.2	41.6	35.1	43.7	36.7	46.1	36.0	46.9	38.0	49.7	37.4	51.8	38.6
110	39.7	34.8	40.7	34.8	42.4	35.9	44.8	35.7	45.6	37.3	48.5	36.7	50.2	37.9	
54	68	48.6	41.3	51.8	42.1	54.9	43.9	58.1	43.5	59.5	45.8	63.6	45.2	66.7	46.6
	73	48.5	41.3	51.7	41.9	54.8	43.7	58.0	43.3	59.4	45.6	63.4	45.0	66.6	46.4
	77	48.4	41.3	51.6	41.7	54.6	43.5	57.8	43.2	59.0	45.4	62.5	44.6	65.5	46.0
	82	48.2	41.2	50.7	41.5	53.7	43.3	56.7	42.5	57.6	44.8	61.1	44.2	64.1	45.6
	86	47.9	40.8	50.0	41.1	53.0	42.9	55.6	42.1	56.9	44.4	60.4	43.8	63.0	45.2
	91	47.2	40.4	48.9	40.3	51.9	42.5	54.6	41.7	55.5	44.0	59.0	43.0	61.6	44.4
	95	46.4	40.0	48.2	39.9	50.9	41.7	53.5	41.3	54.4	43.2	57.9	42.6	60.6	44.0
	100	45.7	39.6	47.5	39.5	49.8	41.3	52.4	40.5	53.3	42.8	56.5	42.2	58.8	43.5
	104	45.0	39.2	46.4	39.1	48.7	40.9	51.4	40.1	52.2	42.4	55.4	41.7	57.8	43.1
110	44.3	38.8	45.3	38.7	47.3	40.1	49.9	39.7	50.8	41.6	54.0	40.9	56.0	42.3	

Rated Condition: Evaporation temperature is 42.8°F with high speed airflow.

SC = Sensible capacity; KBTU/h

TC = Total capacity; KBTU/h

**Table 20 —Heating Capacity**

Model	Outdoor air temperature		Indoor air temperature			
	°F DB	59° DB	70° DB	77° DB	81° DB	
		TC	TC	TC	TC	
12	5	7.9	8.6	8.2	7.9	
	14	9.4	10.0	9.6	9.2	
	23	10.8	11.4	11.0	10.2	
	32	12.2	12.7	11.4	10.2	
	37	13.0	13.5	11.4	10.2	
	43	13.9	13.5	11.4	10.2	
	47	14.5	13.5	11.4	10.2	
	50	15.1	13.5	11.4	10.2	
	55	15.7	13.5	11.4	10.2	
	60	15.7	13.5	11.4	10.2	
	65	15.7	13.5	11.4	10.2	
18	5	12.3	13.4	12.8	12.2	
	14	14.6	15.5	14.9	14.3	
	23	16.7	17.7	17.1	15.8	
	32	19.0	19.8	17.7	15.8	
	37	20.3	21.0	17.7	15.8	
	43	21.6	21.0	17.7	15.8	
	47	22.6	21.0	17.7	15.8	
	50	23.5	21.0	17.7	15.8	
	55	24.4	21.0	17.7	15.8	
	60	24.4	21.0	17.7	15.8	
	65	24.4	21.0	17.7	15.8	
24	5	15.8	17.3	16.4	15.7	
	14	18.7	20.0	19.2	18.4	
	23	21.5	22.7	22.0	20.4	
	32	24.4	25.4	22.8	20.4	
	37	26.1	27.0	22.8	20.4	
	43	27.8	27.0	22.8	20.4	
	47	29.0	27.0	22.8	20.4	
	50	30.2	27.0	22.8	20.4	
	55	31.3	27.0	22.8	20.4	
	60	31.3	27.0	22.8	20.4	
	65	31.3	27.0	22.8	20.4	
30	5	19.9	21.8	20.7	19.8	
	14	23.6	25.2	24.2	23.1	
	23	27.1	28.6	27.7	25.7	
	32	30.8	32.0	28.7	25.7	
	37	32.8	34.0	28.7	25.7	
	43	35.0	34.0	28.7	25.7	
	47	36.5	34.0	28.7	25.7	
	50	38.0	34.0	28.7	25.7	
	55	39.4	34.0	28.7	25.7	
	60	39.4	34.0	28.7	25.7	
	65	39.4	34.0	28.7	25.7	
36	5	23.4	25.6	24.4	23.3	
	14	27.7	29.6	28.5	27.2	
	23	31.9	33.7	32.5	30.2	
	32	36.2	37.6	33.8	30.2	
	37	38.6	40.0	33.8	30.2	
	43	41.2	40.0	33.8	30.2	
	47	43.0	40.0	33.8	30.2	
	50	44.7	40.0	33.8	30.2	
	55	46.4	40.0	33.8	30.2	
	60	46.4	40.0	33.8	30.2	
	65	46.4	40.0	33.8	30.2	
48	5	31.6	34.5	32.9	31.4	
	14	37.4	40.0	38.4	36.8	
	23	43.0	45.5	43.9	40.7	
	32	48.9	50.8	45.6	40.7	
	37	52.2	54.0	45.6	40.7	
	43	55.7	54.0	45.6	40.7	
	47	58.0	54.0	45.6	40.7	
	50	60.3	54.0	45.6	40.7	
	55	62.6	54.0	45.6	40.7	
	60	62.6	54.0	45.6	40.7	
	65	62.6	54.0	45.6	40.7	
54	5	35.1	38.4	36.6	34.9	
	14	41.6	44.4	42.7	40.9	
	23	47.8	50.6	48.8	45.3	
	32	54.3	56.5	50.6	45.3	
	37	58.0	60.0	50.6	45.3	
	43	61.8	60.0	50.6	45.3	
	47	64.4	60.0	50.6	45.3	
	50	67.0	60.0	50.6	45.3	
	55	69.6	60.0	50.6	45.3	
	60	69.6	60.0	50.6	45.3	
	65	69.6	60.0	50.6	45.3	

TC = Total capacity; KBTU/h