

40VMH
High Static Duct Indoor Unit for
Variable Refrigerant Flow (VRF) Systems

Engineering Data Book



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I. High Static Duct Basic information

1. External Appearance



Figure 1 - 40VMH024/030/036---3



Figure 2 - 40VMH048/054---3



Figure 3 - 40VMH072/096---3

2. Specifications

Table 1 – Data Table

Model			40VMH024---3	40VMH030---3
Power supply		V/Ph/Hz	208/230-1-60	208/230-1-60
Cooling capacity *		Btu/h	24,000	30,000
Heating capacity *		Btu/h	27,000	34,000
Electrical Supply	MCA	A	5.7	7.1
	MOCP	A	15.0	15.0
Casing			Galvanized Steel	
Filter			Included	
Dimensions (H x W x D)		in.	16-1/2 x 37-1/2 x 27-3/16	16-1/2 x 37-1/2 x 27-3/16
Net Weight		lbs	110.0	114.6
Heat Exchanger Type			Inner Groove Copper Tube and Hydrophilic Aluminum fin	
Blower / Motor	Fan Type		Centrifugal fan	
	Motor Type		DC motor	
	Air Flow Rate (H/M/L)	CFM	735/600/524	971/753/647
	Motor Output	W	750	750
Min. External Static Pressure (Factory setting)		in. WG	0.20	0.20
Max. External Static Pressure		in. WG	0.80	0.80
Piping connections	Gas side	in.	5/8	5/8
	Liquid side	in.	3/8	3/8
	Drain port	in.	1	1
Condensate Lift		in.	27-9/16	27-9/16
Refrigerant Control			Electronic Expansion Valve	
Connectable Outdoor Unit			38VMH – Heat Pump 38VMR – Heat Recovery 38VMH-1P – Single Phase Heat Pump	
Wiring	Power Wiring	AWG	Sized per NEC and Local Codes based on Nameplate Electrical Data	
	Control Wiring	AWG	2-core shielded twisted pair cable 16AWG or 18AWG	

NOTES:

- * 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

Table 2 – Data Table

Model			40VMH036---3	40VMH048---3
Power supply		V/Ph/Hz	208/230-1-60	208/230-1-60
Cooling capacity *		Btu/h	36,000	48,000
Heating capacity *		Btu/h	40,000	54,000
Electrical Supply	MCA	A	7.3	7.6
	MOC	A	15.0	15.0
Casing			Galvanized Steel	
Filter			Included	
Dimensions (H x W x D)		in.	16-1/2 x 37-1/2 x 27-3/16	16-1/2 x 51-3/16 x 27-3/16
Net Weight		lbs	114.6	159.2
Heat Exchanger Type			Inner Groove Copper Tube and Hydrophilic Aluminum fin	
Blower / Motor	Fan Type		Centrifugal fan	
	Motor Type		DC motor	
	Air Flow Rate (H/M/L)	CFM	1188/1029/882	1429/1200/1041
	Motor Output	W	750	750
Min. External Static Pressure (Factory setting)		in. WG	0.20	0.20
Max. External Static Pressure		in. WG	0.80	0.80
Piping connections	Gas side	in.	5/8	5/8
	Liquid side	in.	3/8	3/8
	Drain port	in.	1	1
Condensate Lift		in.	27-9/16	27-9/16
Refrigerant Control			Electronic Expansion Valve	
Connectable Outdoor Unit			38VMH – Heat Pump 38VMR – Heat Recovery 38VMH-1P – Single Phase Heat Pump	
Wiring	Power Wiring	AWG	Sized per NEC and Local Codes based on Nameplate Electrical Data	
	Control Wiring	AWG	2-core shielded twisted pair cable 16AWG or 18AWG	

NOTES:

- * 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

Table 3 – Data Table

Model			40VMH054---3	40VMH072---3
Power supply		V/Ph/Hz	208/230-1-60	208/230-1-60
Cooling capacity *		Btu/h	53,500	72,000
Heating capacity *		Btu/h	60,000	81,000
Electrical Supply	MCA	A	7.8	9.7
	MOCP	A	15.0	15.0
Casing			Galvanized Steel	
Filter			Included	
Dimensions (H x W x D)		in.	16-1/2 x 51-3/16 x 27-3/16	20 x 56-11/16 x 36-3/8
Net Weight		lbs	159.2	254.2
Heat Exchanger Type			Inner Groove Copper Tube and Hydrophilic Aluminum fin	
Blower / Motor	Fan Type		Centrifugal fan	
	Motor Type		DC motor	
	Air Flow Rate (H/M/L)	CFM	1835/1618/1412	2235/1794/1559
	Motor Output	W	750	750 + 750
Min. External Static Pressure (Factory setting)		in. WG	0.20	0.20
Max. External Static Pressure		in. WG	0.80	1.00
Piping connections	Gas side	in.	5/8	7/8
	Liquid side	in.	3/8	3/8
	Drain port	in.	1	1-5/8
Condensate Lift		in.	27-9/16	-
Refrigerant Control			Electronic Expansion Valve	
Connectable Outdoor Unit			38VMH – Heat Pump 38VMR – Heat Recovery 38VMH-1P – Heat Pump	38VMH – Heat Pump 38VMR – Heat Recovery
Wiring	Power Wiring	AWG	Sized per NEC and Local Codes based on Nameplate Electrical Data	
	Control Wiring	AWG	2-core shielded twisted pair cable 16AWG or 18AWG	

NOTES:

- * 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

Table 4 – Data Table

Model			40VMH096---3
Power supply		V/Ph/Hz	208/230-1-60
Cooling capacity *		Btu/h	96,000
Heating capacity *		Btu/h	108,000
Electrical Supply	MCA	A	10.2
	MOCP	A	15.0
Casing			Galvanized Steel
Filter			Included
Dimensions (H x W x D)		in.	20 x 56-11/16 x 36-3/8
Net Weight		lbs	254.2
Heat Exchanger Type			Inner Groove Copper Tube and Hydrophilic Aluminum fin
Blower / Motor	Fan Type		Centrifugal fan
	Motor Type		DC motor
	Air Flow Rate (H/M/L)	CFM	2824/2400/2076
	Motor Output	W	750 + 750
Min. External Static Pressure (Factory setting)		in. WG	0.20
Max. External Static Pressure		in. WG	1.00
Piping connections	Gas side	in.	7/8
	Liquid side	in.	3/8
	Drain port	in.	1-5/8
Condensate Lift		in.	-
Refrigerant Control			Electronic Expansion Valve
Connectable Outdoor Unit			38VMH – Heat Pump 38VMR – Heat Recovery
Wiring	Power Wiring	AWG	Sized per NEC and Local Codes based on Nameplate Electrical Data
	Control Wiring	AWG	2-core shielded twisted pair cable 16AWG or 18AWG

NOTES:

- * 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

3. Accessories

Table 5 – Table of Accessories

Name of Accessories		Quantity	Outline	Usage
PQ connection wire		2		Connects the outdoor unit, indoor unit, and sub MDC.
Connecting Wire		1		For occupy sensor
Pipe Insulation material		2		Heat insulation
Condensate Connection	024-054	1		For Drainage
Clamp		1		Connects the drain hose to the condensate connection
Copper Nut		1		Use for Pipe connection
LED Display Panel		1		Operation and error display
Copper Pipe	024-054	2		Use for inlet and outlet connection
	072-096	1		
Condensate Connection	072-096	1		For drainage

II. Piping Diagram

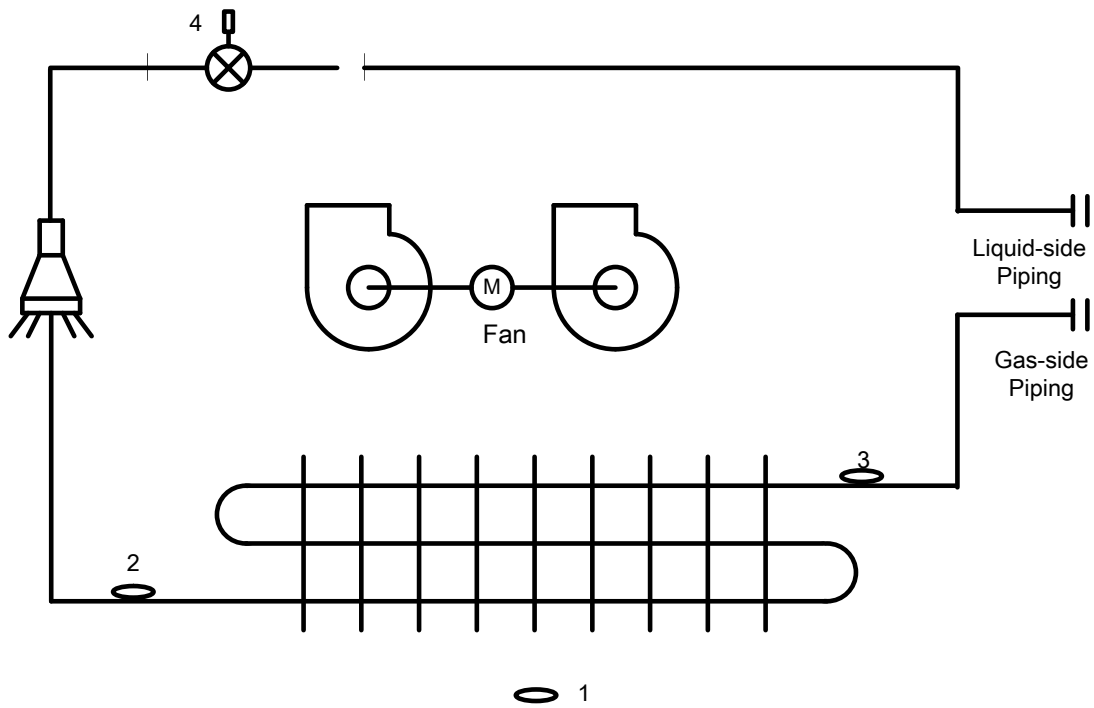


Figure 4 – Piping

Table 6 – Piping

NO.	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
40VMH024/030/036/048/054	5/8	3/8
40VMH072/096	7/8	3/8

III. Dimensions

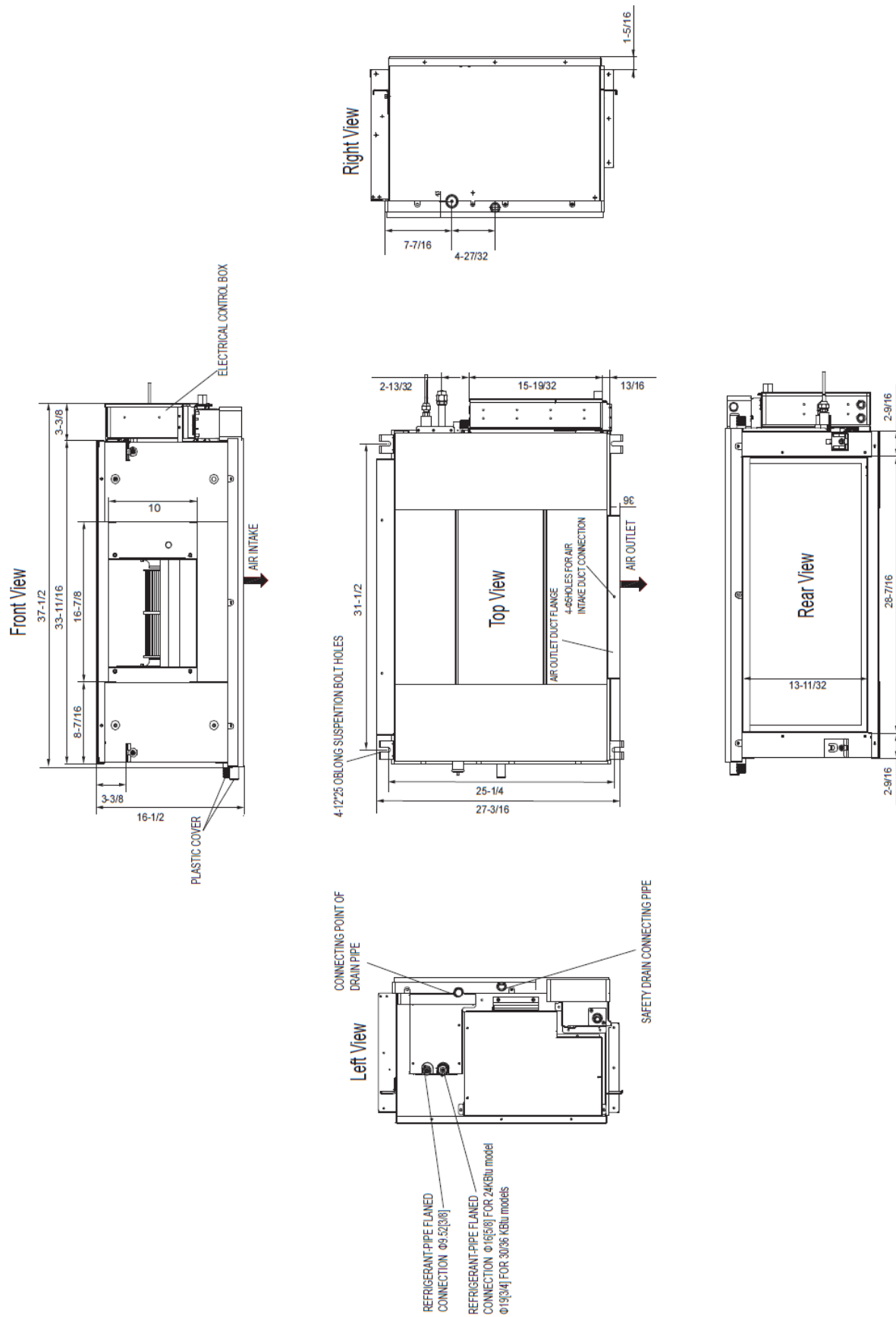


Figure 5 - 40VMH024/030/036---3

NOTE: All dimensions are shown in inches.

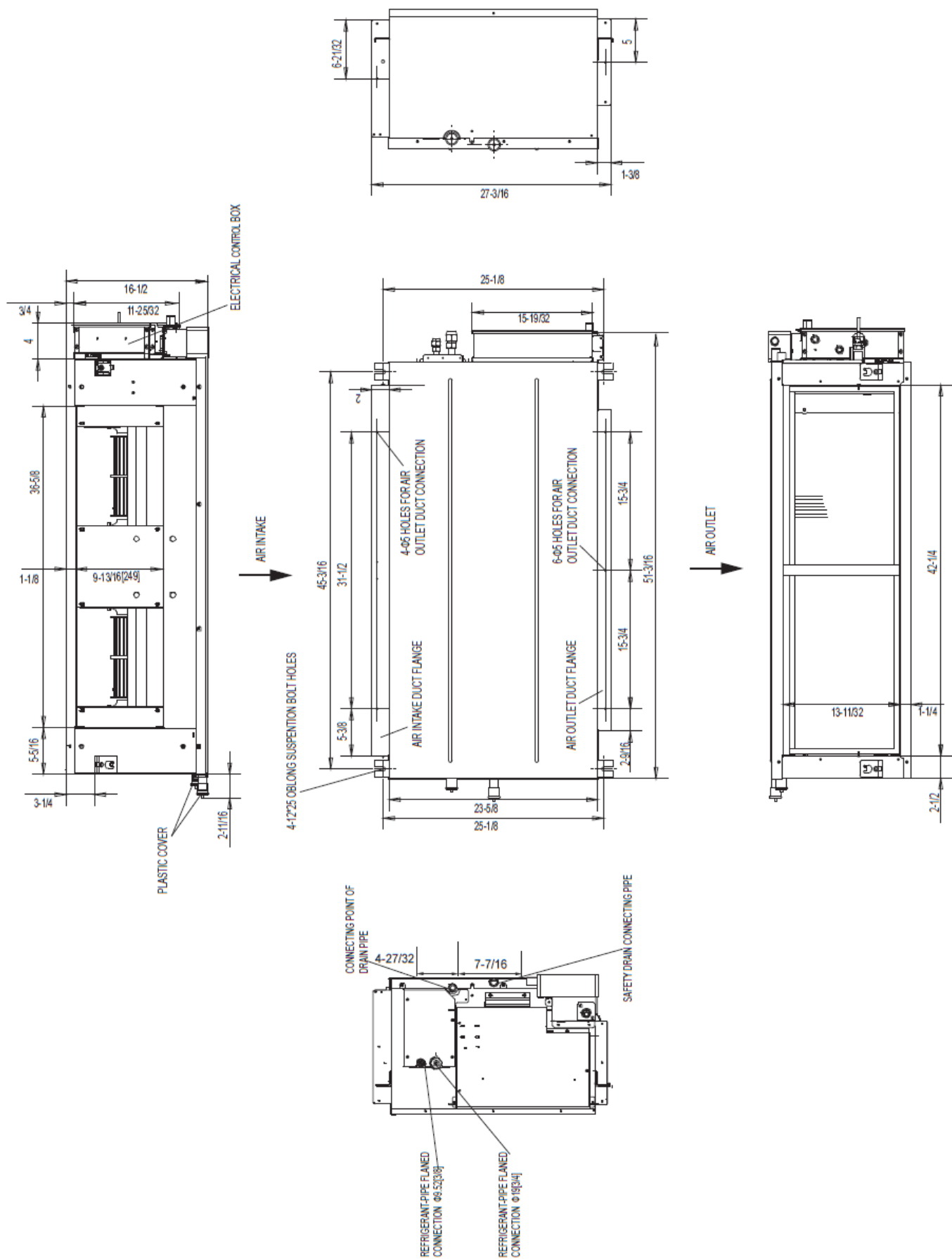


Figure 6 - 40VMH048/054---3

NOTE: All dimensions are shown in inches.

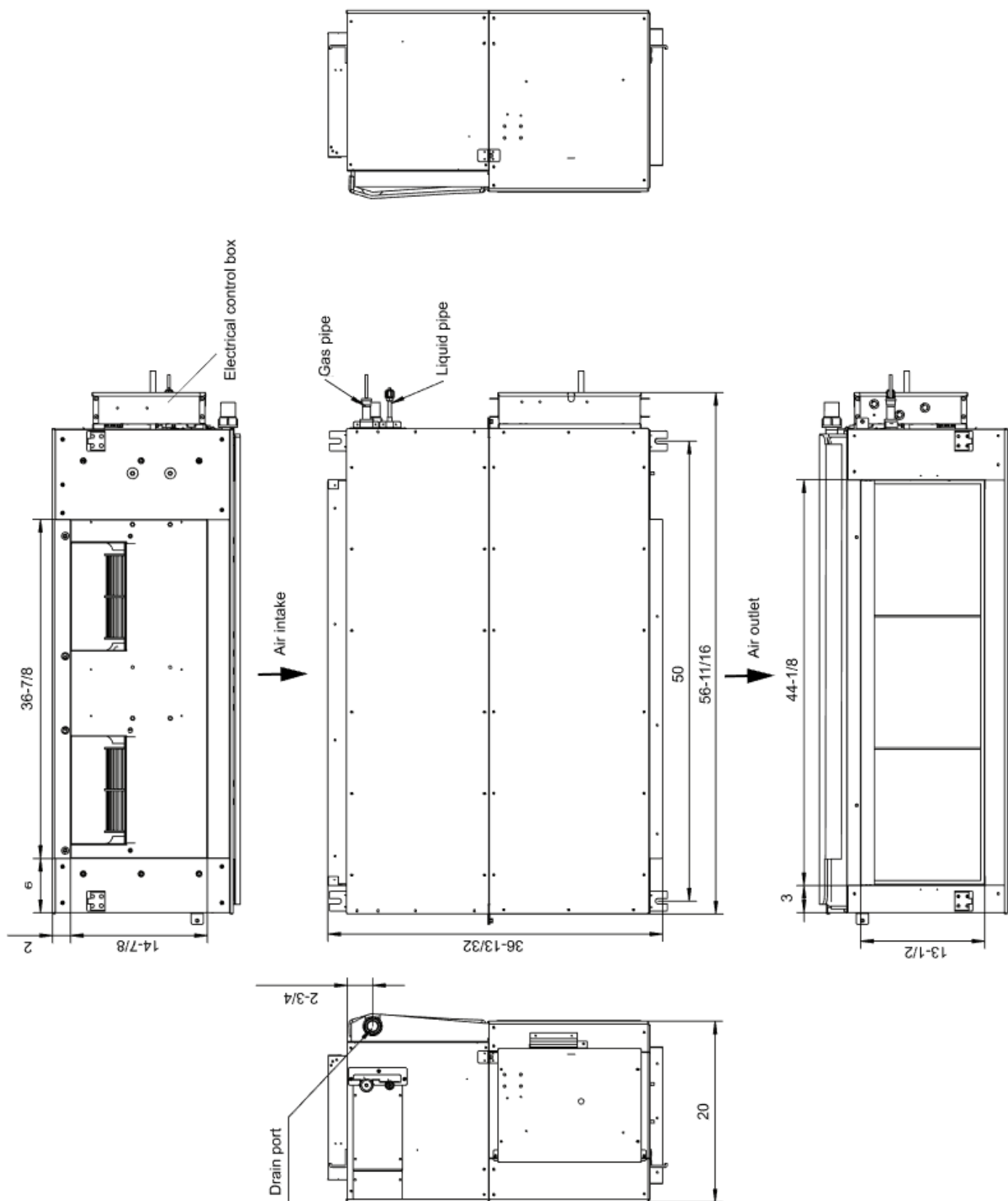


Figure 7 - 40VMH072/096---3

NOTE: All dimensions are shown in inches.

IV. Wiring Diagrams

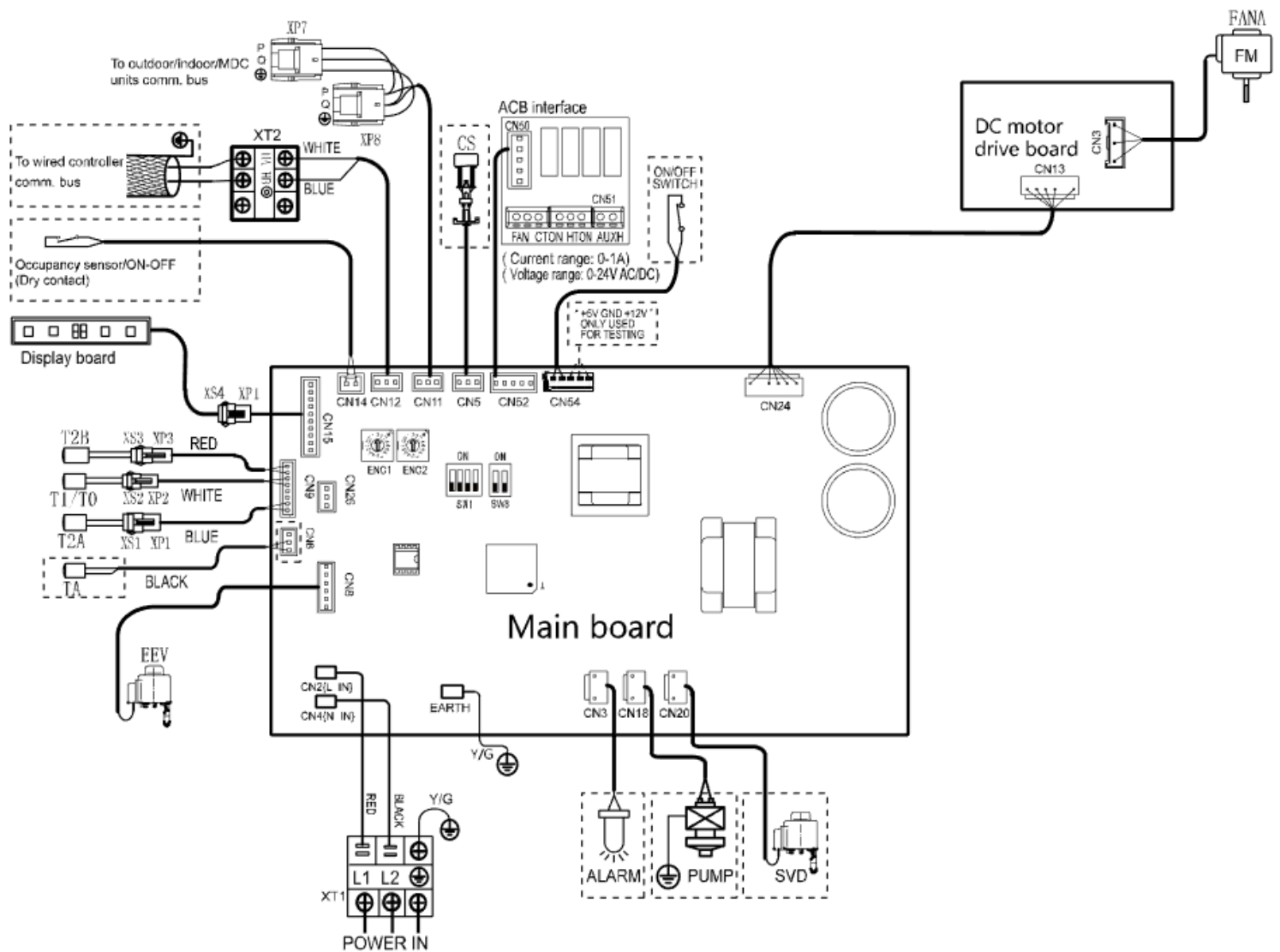


Figure 8 – 40VMH024/030/036/040/048/054---3

a. 40VMH024 – 054 Wiring Diagram Definitions and Settings

Table 8 – Code / Title

Code	Title
FM	Indoor Fan Motor
T1/T0	Room Temperature Sensor
T2A	Inlet Pipe Temperature Sensor
T2B	Outlet Pipe Temperature Sensor
TA	Room Temperature Sensor
XP1-8	Connectors
XS1-4	Connectors
XT1-2	Terminal
PUMP	Pump Motor
GM	Swing Motor
CS	Condensate Switch
ALARM	Warning Lamp
EEV	Electronic Extension Valve
SVD	Solenoid Valve

Table 9 – SW1 Definition

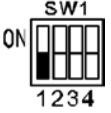
	0 means auto addressing mode (Default)
	1 means factory test mode
	0 means normal mode (Default)
	1 means factory self-checking mode
	Reserved
	0 means standard indoor unit (Default)
	1 means main indoor unit (must be addressed #63)

Table 10 – ENC1 / ENC2 / SW8 Definition

	Reserved		Reserved		Reserved
					Reserved

Table 11 – J1 Definition

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

Table 12 – 0/1 Definition

	Means 0
	Means 1

Table 13 – Error Code / Content

dd	Heating / Cooling Conflict
E1	Communication Error with Outdoor Unit
E2	Temperature Sensor (T1) Error
E4	Temperature Sensor (T2B) Error
E5	Temperature Sensor (T2A) Error
E6	DC Fan Error
E7	EEPROM Error
UU	MDC Error in Auto System-Check Mode
E9	Communication Error with Wired Controller
Eb	EEV Error
Ed	Outdoor Unit Error
EE	Condensate Error
FE	No Address when First Time Powered On

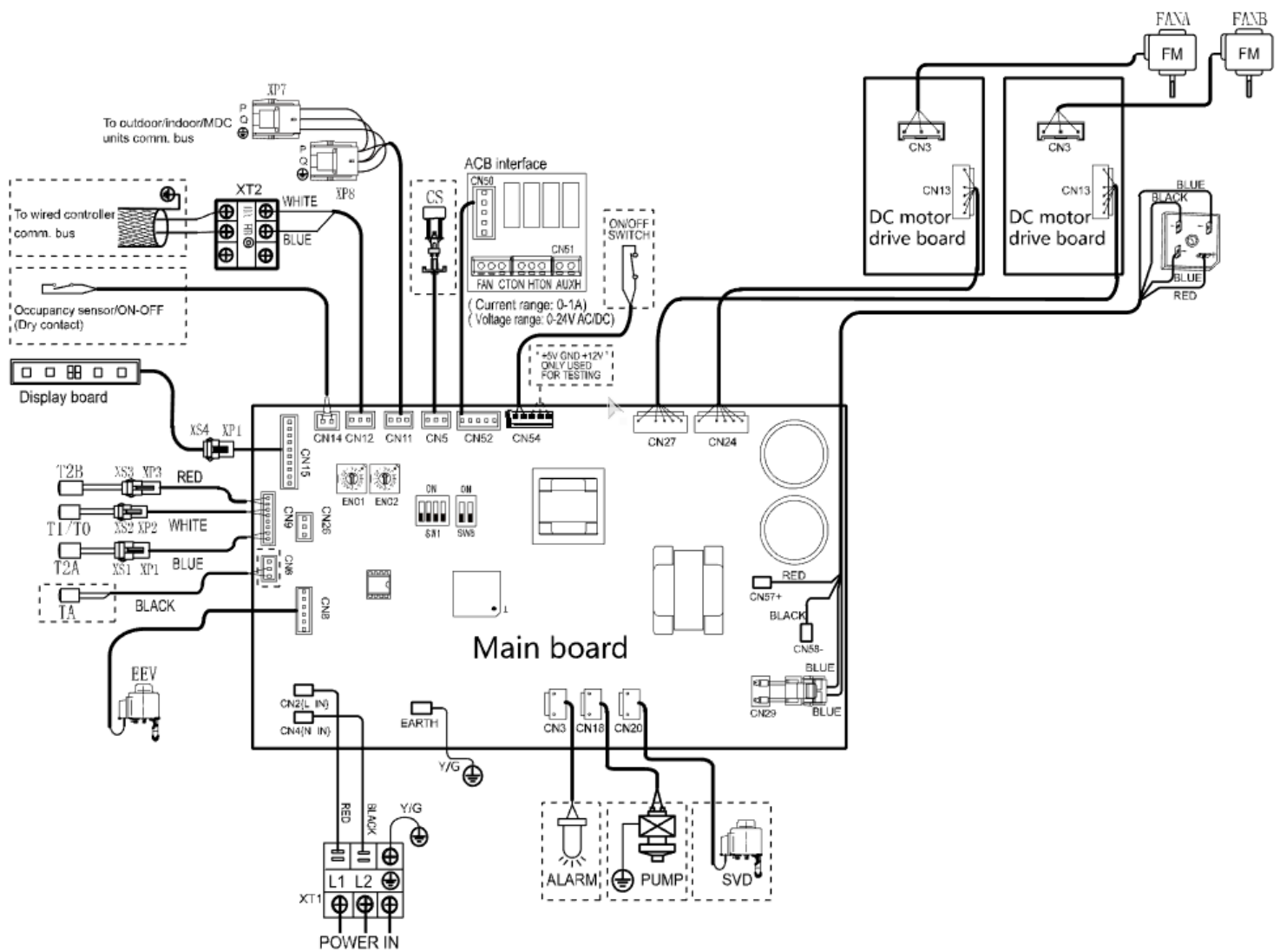


Figure 9 – Wiring Diagram 40VMH072/096---3

b. 40VMH072 – 096 Wiring Diagram Definitions and Settings

Table 14 – Code / Title

FM	Indoor Fan Motor
T1/T0	Room Temperature Sensor
T2A	Inlet Pipe Temperature Sensor
T2B	Outlet Pipe Temperature Sensor
TA	Room Temperature Sensor
XP1-8	Connectors
XS1-4	Connectors
XT1-2	Terminal
PUMP	Pump Motor
GM	Swing Motor
CS	Condensate Switch
ALARM	Warning Lamp
EEV	Electronic Extension Valve
SVD	Solenoid Valve

Table 15 – SW1 Definition

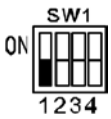
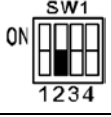
	0 means auto addressing mode (Default)
	1 means factory test mode
	0 means normal mode (Default)
	1 means factory self-checking mode
	Reserved
	0 means standard indoor unit (Default)
	1 means main indoor unit (must be addressed #63)

Table 16 – ENC1 Definition ENC2 Definition SW8 Definition

 ENC1	Reserved	 ENC2	Reserved	 SW8	Reserved
				 SW8	Reserved

Table 17 – J1 Definition

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

Table 18 – 0/1 Definition

 ON	Means 0
 ON	Means 1

Table 19 – Error Code / Content

dd	Heating / Cooling Conflict
E1	Communication Error with Outdoor Unit
E2	Temperature Sensor (T1) Error
E4	Temperature Sensor (T2B) Error
E5	Temperature Sensor (T2A) Error
E6	DC Fan Error
E7	EEPROM Error
UU	MDC Error in Auto System-Check Mode
E9	Communication Error with Wired Controller
Eb	EEV Error
Ed	Outdoor Unit Error
EE	Condensate Error
FE	No Address when First Time Powered On

V.Electrical Characteristics

Table 8 – Electrical Characteristics

Model	Power supply					IFM	
	Hz	Volts	Voltage range	MCA	MFA	KW	FLA
40VMH024---3	60	208/230V	Max.253V Min.187V	5.7	15	0.75	4.5
40VMH030---3				7.1	15	0.75	5.6
40VMH036---3				7.3	15	0.75	5.8
40VMH048---3				7.6	15	0.75	6.0
40VMH054---3				7.8	15	0.75	6.2
40VMH072---3				9.7	15	0.75*2	4.2 + 4.3
40VMH096---3				10.2	15	0.75*2	4.5 + 4.5

MCA: Min. Circuit Amps (A)

MFA: Max. Fuse Amps (See Note 5)

Symbols: KW : Fan Motor Rated Output (KW)

FLA : Full Load Amps (A)

IFM : Indoor Fan Motor

VI. Fan Performance

There are 16 external static pressure (ESP) settings for 40VMH024, 030, 036, 048, 054; and 21 external static pressure for the 072 and 096 models.

The figures below on the left show "MAX. ESP", "Rating ESP", "Min. ESP" as an example for fan characteristics.

The tables below on the right show air flows at "H-Speed" in each ESP for field setting. Allowable ESP selections are listed in the first column.

Select the ESP setting according to connected duct resistance.

The controller can be used to change the indoor unit fan speed "H", "M", or "L".

Table 9 – Fan Performance 024

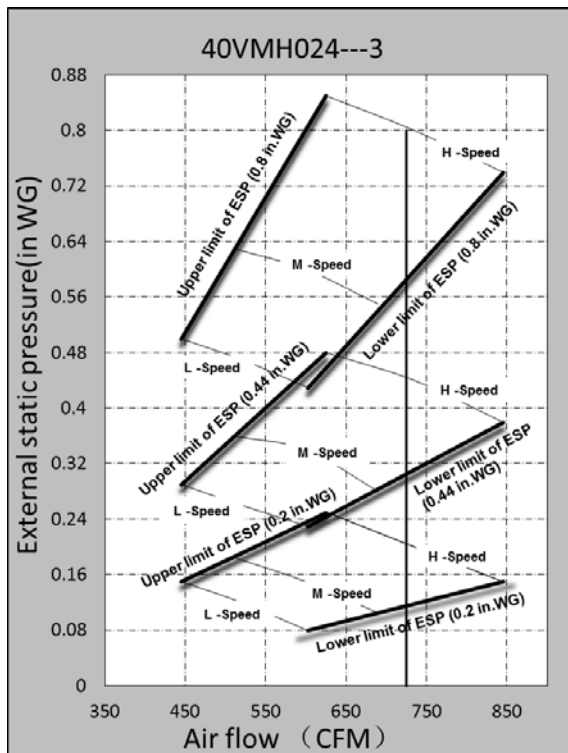


Figure 9 - Fan Performance 024

External Static Pressure	Fan Speed	Rang of available air flow rate in H-Speed					
		Max Point		Rating Point		Min Point	
		Max CFM	SP	Mid CFM	SP	Min CFM	SP
0.20	H	845	0.15	735	0.20	625	0.25
0.24	H	845	0.19	735	0.24	625	0.29
0.28	H	845	0.23	735	0.28	625	0.33
0.32	H	845	0.27	735	0.32	625	0.37
0.36	H	845	0.31	735	0.36	625	0.41
0.40	H	845	0.35	735	0.40	625	0.45
0.44	H	845	0.38	735	0.44	625	0.48
0.48	H	845	0.42	735	0.48	625	0.52
0.52	H	845	0.46	735	0.52	625	0.56
0.56	H	845	0.50	735	0.56	625	0.60
0.60	H	845	0.54	735	0.60	625	0.64
0.64	H	845	0.58	735	0.64	625	0.68
0.68	H	845	0.62	735	0.68	625	0.73
0.72	H	845	0.66	735	0.72	625	0.77
0.76	H	845	0.70	735	0.76	625	0.81
0.80	H	845	0.74	735	0.80	625	0.85

Legend:

SP – Static Pressure

Table 10 - Fan Performance 030

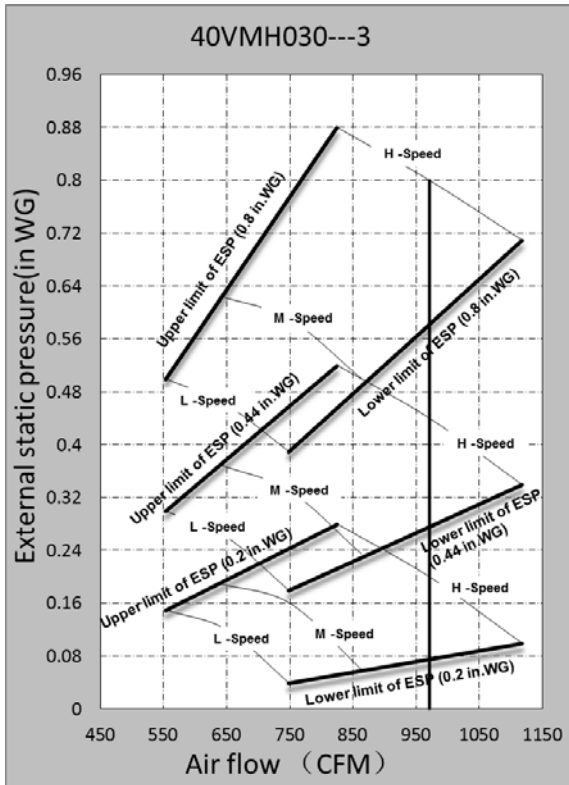


Figure 10 – Fan Performance 030

External Static Pressure	Fan Speed	Rang of available air flow rate in H-Speed					
		Max Point		Rating Point		Min Point	
		Max CFM	SP	Mid CFM	SP	Min CFM	SP
0.20	H	1117	0.10	971	0.20	825	0.28
0.24	H	1117	0.14	971	0.24	825	0.32
0.28	H	1117	0.18	971	0.28	825	0.36
0.32	H	1117	0.22	971	0.32	825	0.40
0.36	H	1117	0.26	971	0.36	825	0.28
0.40	H	1117	0.30	971	0.40	825	0.48
0.44	H	1117	0.34	971	0.44	825	0.52
0.48	H	1117	0.38	971	0.48	825	0.56
0.52	H	1117	0.42	971	0.52	825	0.60
0.56	H	1117	0.46	971	0.56	825	0.64
0.60	H	1117	0.50	971	0.60	825	0.68
0.64	H	1117	0.55	971	0.64	825	0.72
0.68	H	1117	0.59	971	0.68	825	0.76
0.72	H	1117	0.63	971	0.72	825	0.81
0.76	H	1117	0.67	971	0.76	825	0.84
0.80	H	1117	0.71	971	0.80	825	0.88

Table 11 - Fan Performance 036

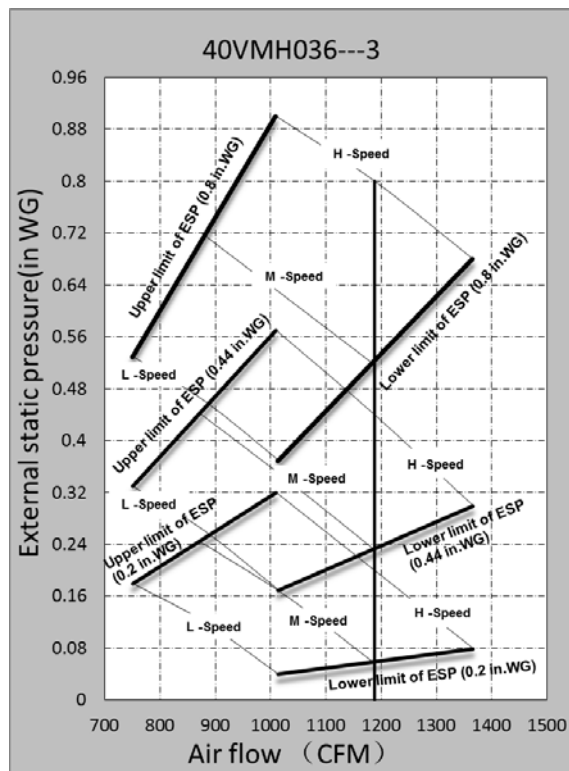


Figure 12 - Fan Performance 036

External Static Pressure	Fan Speed	Rang of available air flow rate in H-Speed					
		Max Point		Rating Point		Min Point	
		Max CFM	SP	Mid CFM	SP	Min CFM	SP
0.20	H	1366	0.08	1188	0.20	1010	0.32
0.24	H	1366	0.12	1188	0.24	1010	0.36
0.28	H	1366	0.16	1188	0.28	1010	0.40
0.32	H	1366	0.20	1188	0.32	1010	0.44
0.36	H	1366	0.24	1188	0.36	1010	0.48
0.40	H	1366	0.28	1188	0.40	1010	0.52
0.44	H	1366	0.30	1188	0.44	1010	0.57
0.48	H	1366	0.34	1188	0.48	1010	0.61
0.52	H	1366	0.38	1188	0.52	1010	0.65
0.56	H	1366	0.42	1188	0.56	1010	0.69
0.60	H	1366	0.46	1188	0.60	1010	0.73
0.64	H	1366	0.50	1188	0.64	1010	0.77
0.68	H	1366	0.56	1188	0.68	1010	0.78
0.72	H	1366	0.60	1188	0.72	1010	0.82
0.76	H	1366	0.64	1188	0.76	1010	0.86
0.80	H	1366	0.68	1188	0.80	1010	0.90

Legend:

SP – Static Pressure

Table 12 - Fan Performance 048

External Static Pressure	Fan Speed	Range of available air flow rate in H-Speed					
		Max Point		Rating Point		Min Point	
		Max CFM	SP	Mid CFM	SP	Min CFM	SP
0.20	H	1643	0.08	1429	0.20	1215	0.28
0.24	H	1643	0.12	1429	0.24	1215	0.32
0.28	H	1643	0.16	1429	0.28	1215	0.36
0.32	H	1643	0.20	1429	0.32	1215	0.40
0.36	H	1643	0.24	1429	0.36	1215	0.44
0.40	H	1643	0.28	1429	0.40	1215	0.48
0.44	H	1643	0.30	1429	0.44	1215	0.50
0.48	H	1643	0.34	1429	0.48	1215	0.54
0.52	H	1643	0.38	1429	0.52	1215	0.58
0.56	H	1643	0.42	1429	0.56	1215	0.62
0.60	H	1643	0.46	1429	0.60	1215	0.66
0.64	H	1643	0.50	1429	0.64	1215	0.70
0.68	H	1643	0.55	1429	0.68	1215	0.76
0.72	H	1643	0.59	1429	0.72	1215	0.80
0.76	H	1643	0.63	1429	0.76	1215	0.84
0.80	H	1643	0.67	1429	0.80	1215	0.88

Table 13 - Fan Performance 054

External Static Pressure	Fan Speed	Range of available air flow rate in H-Speed					
		Max Point		Rating Point		Min Point	
		Max CFM	SP	Mid CFM	SP	Min CFM	SP
0.20	H	1959	0.00	1835	0.20	1560	0.34
0.24	H	2110	0.03	1835	0.24	1560	0.38
0.28	H	2110	0.07	1835	0.28	1560	0.42
0.32	H	2110	0.11	1835	0.32	1560	0.46
0.36	H	2110	0.15	1835	0.36	1560	0.50
0.40	H	2110	0.19	1835	0.40	1560	0.54
0.44	H	2110	0.26	1835	0.44	1560	0.60
0.48	H	2110	0.30	1835	0.48	1560	0.64
0.52	H	2110	0.34	1835	0.52	1560	0.68
0.56	H	2110	0.38	1835	0.56	1560	0.72
0.60	H	2110	0.42	1835	0.60	1560	0.76
0.64	H	2110	0.45	1835	0.64	1560	0.80
0.68	H	2110	0.47	1835	0.68	1560	0.83
0.72	H	2110	0.51	1835	0.72	1560	0.87
0.76	H	2110	0.55	1835	0.76	1560	0.91
0.80	H	2110	0.59	1835	0.80	1560	0.95

Legend:

SP – Static Pressure

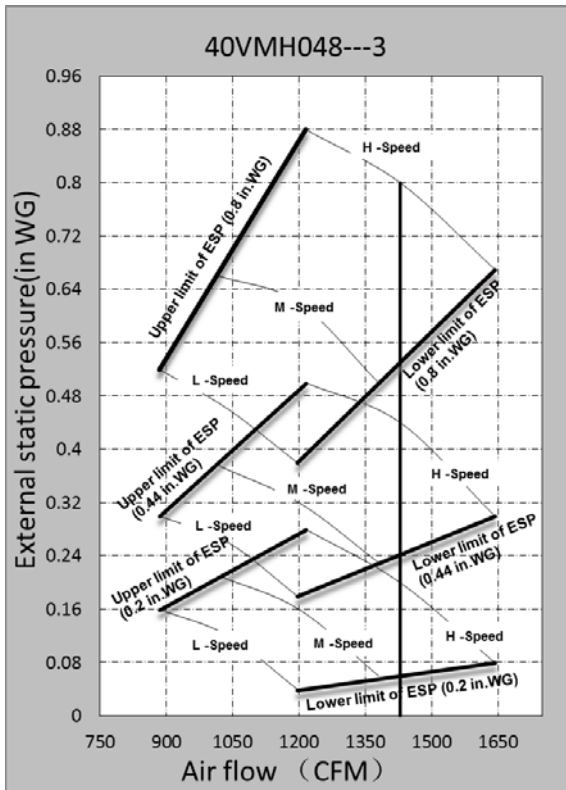


Figure 13 - Fan Performance 048

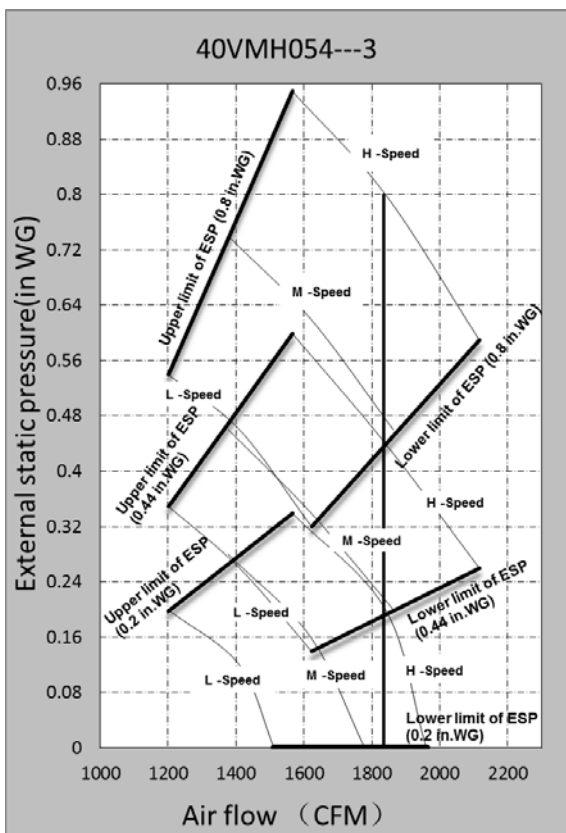


Figure 14 - Fan Performance 054

Table 14 - Fan Performance 072

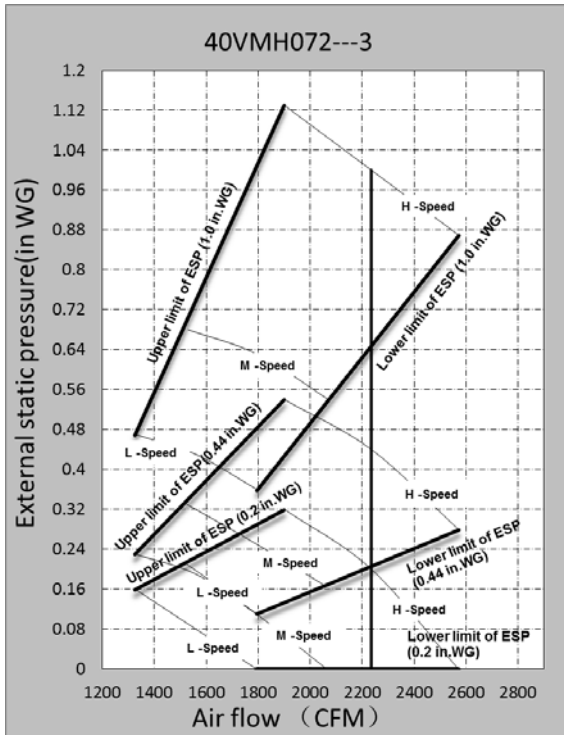


Figure 15 - Fan Performance 072

External Static Pressure	Fan Speed	Range of available air flow rate in H-Speed					
		Max Point		Rating Point		Min Point	
		Max CFM	SP	Mid CFM	SP	Min CFM	SP
0.20	H	2570	0.00	2235	0.20	1900	0.32
0.24	H	2570	0.09	2235	0.24	1900	0.36
0.28	H	2570	0.13	2235	0.28	1900	0.40
0.32	H	2570	0.17	2235	0.32	1900	0.44
0.36	H	2570	0.21	2235	0.36	1900	0.48
0.40	H	2570	0.25	2235	0.40	1900	0.52
0.44	H	2570	0.28	2235	0.44	1900	0.54
0.48	H	2570	0.32	2235	0.48	1900	0.58
0.52	H	2570	0.36	2235	0.52	1900	0.62
0.56	H	2570	0.40	2235	0.56	1900	0.66
0.60	H	2570	0.44	2235	0.60	1900	0.70
0.64	H	2570	0.48	2235	0.64	1900	0.74
0.68	H	2570	0.52	2235	0.68	1900	0.78
0.72	H	2570	0.59	2235	0.72	1900	0.85
0.76	H	2570	0.63	2235	0.76	1900	0.89
0.80	H	2570	0.67	2235	0.80	1900	0.93
0.84	H	2570	0.71	2235	0.84	1900	0.97
0.88	H	2570	0.75	2235	0.88	1900	1.01
0.92	H	2570	0.79	2235	0.92	1900	1.05
0.96	H	2570	0.83	2235	0.96	1900	1.09
1.00	H	2570	0.87	2235	1.00	1900	1.13

Legend:

SP – Static Pressure

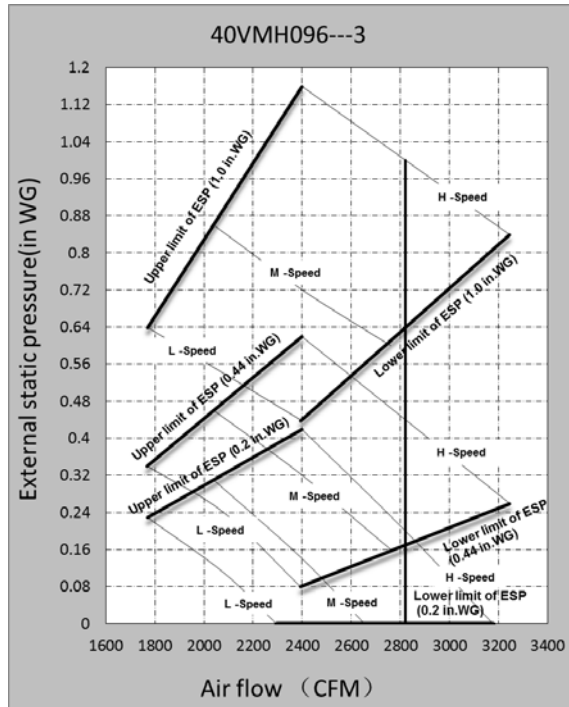


Figure 16 - Fan Performance 096

Table 15 - Fan Performance 096

External Static Pressure	Fan Speed	Range of available air flow rate in H-Speed					
		Max Point		Rating Point		Min Point	
		Max CFM	SP	Mid CFM	SP	Min CFM	SP
0.20	H	3176	0.00	2824	0.20	2400	0.42
0.24	H	3248	0.04	2824	0.24	2400	0.45
0.28	H	3248	0.08	2824	0.28	2400	0.49
0.32	H	3248	0.12	2824	0.32	2400	0.52
0.36	H	3248	0.16	2824	0.36	2400	0.55
0.40	H	3248	0.20	2824	0.40	2400	0.59
0.44	H	3248	0.26	2824	0.44	2400	0.62
0.48	H	3248	0.30	2824	0.48	2400	0.66
0.52	H	3248	0.34	2824	0.52	2400	0.70
0.56	H	3248	0.38	2824	0.56	2400	0.74
0.60	H	3248	0.42	2824	0.60	2400	0.78
0.64	H	3248	0.46	2824	0.64	2400	0.82
0.68	H	3248	0.50	2824	0.68	2400	0.86
0.72	H	3248	0.54	2824	0.72	2400	0.90
0.76	H	3248	0.58	2824	0.76	2400	0.94
0.80	H	3248	0.64	2824	0.80	2400	0.96
0.84	H	3248	0.68	2824	0.84	2400	1.00
0.88	H	3248	0.72	2824	0.88	2400	1.04
0.92	H	3248	0.76	2824	0.92	2400	1.08
0.96	H	3248	0.80	2824	0.96	2400	1.12
1.00	H	3248	0.84	2824	1.00	2400	1.16

Legend:

SP – Static Pressure

VII. Sound Data

1. Sound Pressure Levels

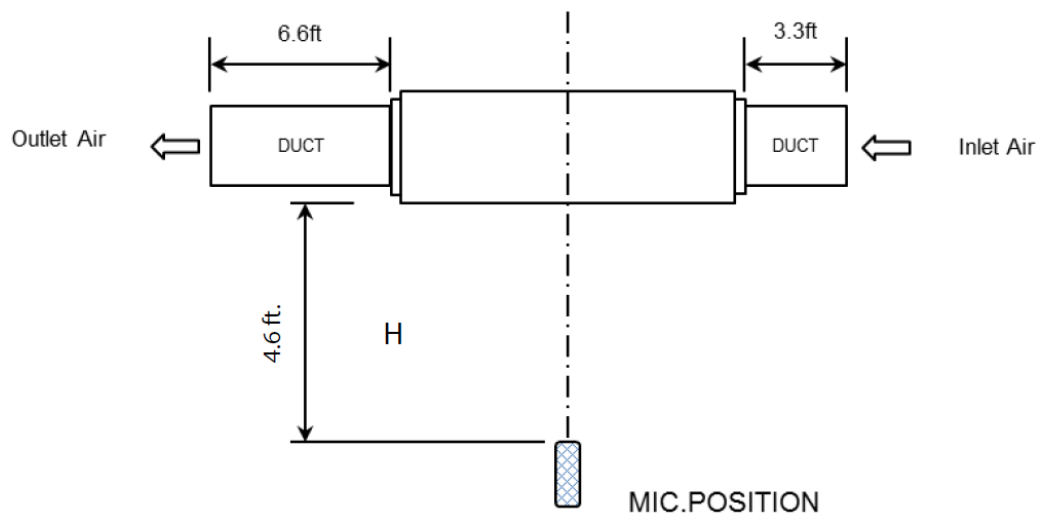


Figure 17 – Overall Sound Levels

Table 16 – Cooling Mode

Model	H	M	L
40VMH024---3	50.9	47.8	44.7
40VMH030---3	51.2	46.9	43.3
40VMH036---3	55.5	52.8	49.1
40VMH048---3	54.9	51.8	48.3
40VMH054---3	58.1	55.8	52.0
40VMH072---3	55.9	52.2	48.7
40VMH096---3	56.4	54.7	52.4

Table 17 – Heating Mode

Model	H	M	L
40VMH024---3	49.3	45.6	42.7
40VMH030---3	50.3	46.2	42.0
40VMH036---3	55.0	52.1	48.7
40VMH048---3	54.9	51.3	47.6
40VMH054---3	57.2	54.7	50.5
40VMH072---3	55.2	51.8	47.1
40VMH096---3	55.3	53.7	51.8

NOTE:

1. Units are dBA.

2. NC Curves

NOTES:

External Static Pressure: 0.8 in. (200 Pa)

Power source: 208/230V-1Ph-60Hz

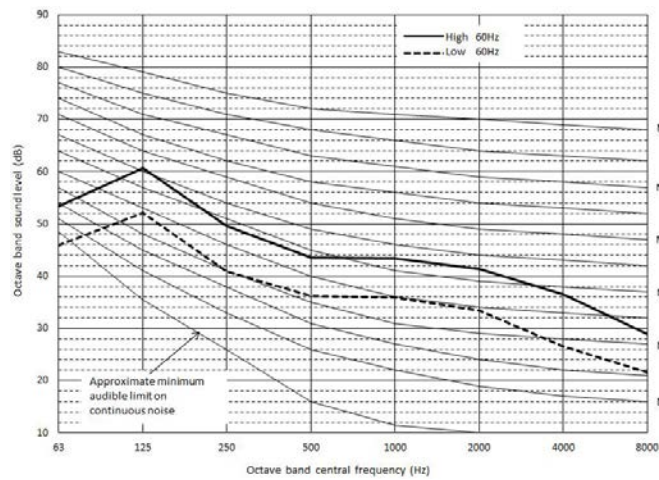


Figure 18 – 40VMH024---3

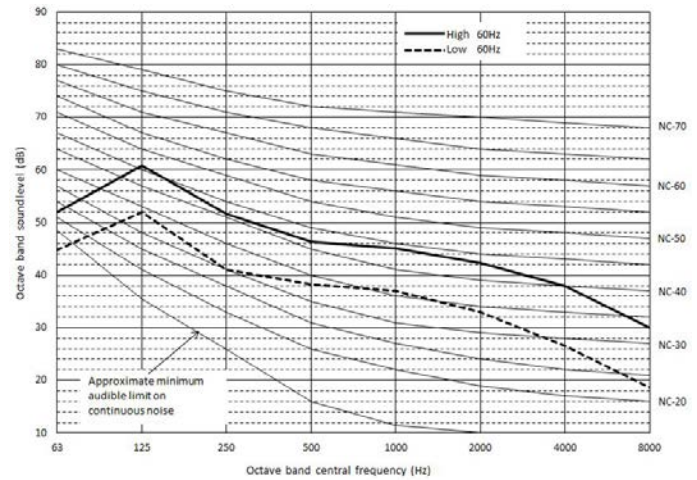


Figure 21 – 40VMH030---3

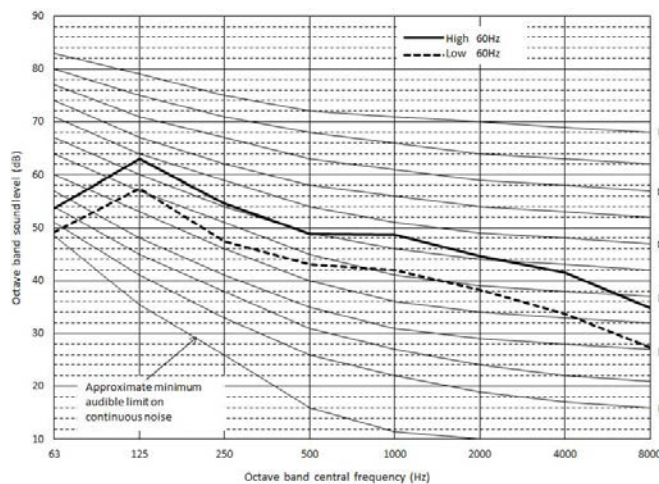


Figure 19 – 40VMH036---3

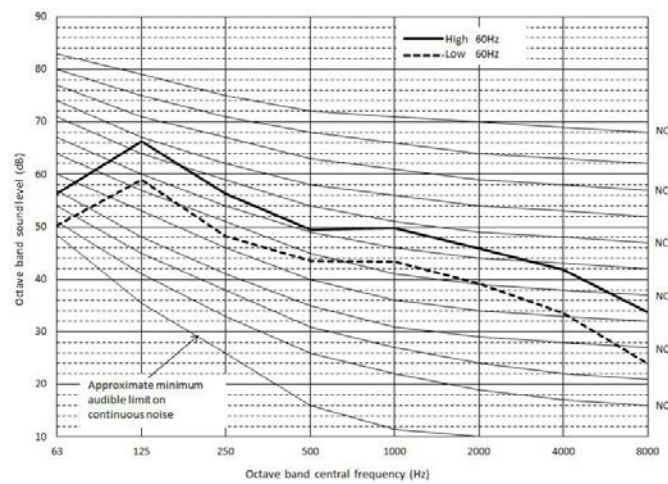


Figure 22 – 40VMH048---3

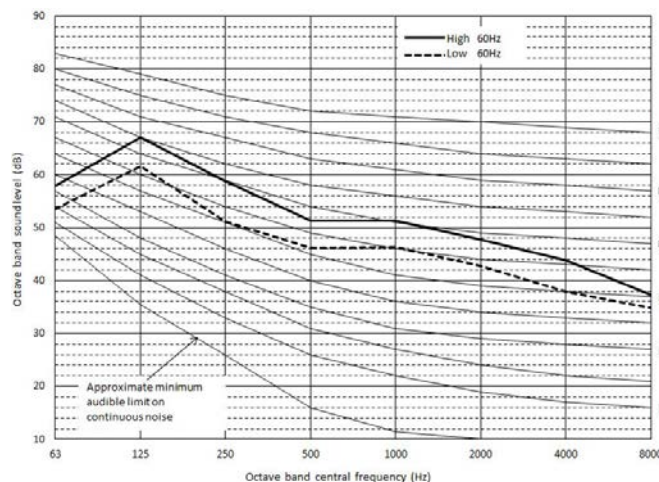


Figure 20 – 40VMH054---3

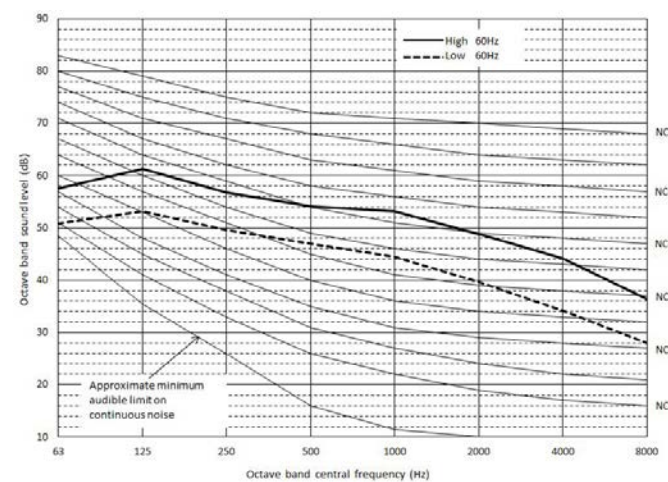


Figure 23 – 40VMH072---3

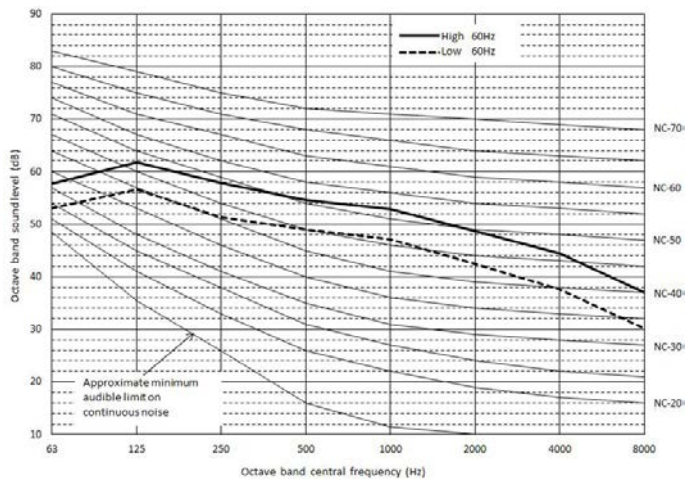


Figure 24 – 40VMH096---3

VIII. Capacity Data Tables

Table 18 – Cooling Capacity

Model	Unit Size	Indoor air temp.											
		68 °FDB/57		71 °FDB/60 °FWB		75 °FDB/63 °FWB		80 °FDB/67 °FWB		85 °FDB/71 °FWB		90 °FDB/75 °FWB	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
40VMH	24	14.08	12.	17.06	13.33	20.03	14.88	24.00	16.52	25.59	16.98	27.17	17.36
	30	17.60	15.	21.32	16.51	25.04	18.44	30.00	20.50	31.98	21.07	33.97	21.56
	36	21.12	18.	25.59	19.63	30.05	21.95	36.00	24.42	38.38	25.11	40.76	25.69
	48	28.17	24.	34.12	26.22	40.07	29.31	48.00	32.60	51.17	33.51	54.35	34.28
	54	31.39	29.	38.02	31.26	44.66	34.94	53.50	38.79	57.04	40.12	60.57	41.25
	72	42.25	38.	51.17	40.87	60.10	45.76	72.00	50.92	76.76	52.62	81.52	54.08
	96	56.33	47.	68.23	51.63	80.13	57.92	96.00	64.57	102.35	66.54	108.69	68.21

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

Table 19 – Heating Capacity

Model	Unit Size	Indoor air temp.					
		62 °FDB	64 °FDB	67 °FDB	70 °FDB	73 °FDB	75 °FDB
		TC	TC	TC	TC	TC	TC
40VMH	24	31.34	30.25	28.63	27.00	25.19	23.99
	30	39.46	38.10	36.05	34.00	31.72	30.21
	36	46.43	44.82	42.41	40.00	37.32	35.54
	48	62.68	60.51	57.25	54.00	50.38	47.97
	54	69.64	67.23	63.62	60.00	55.98	53.30
	72	94.02	90.76	85.88	81.00	75.58	71.96
	96	125.36	121.02	114.51	108.00	100.77	95.95

Rated Condition: Condensation temperature is 114.8°F.

TC = Total capacity; KBTU/h

SC = Sensible capacity; KBTU/h