

MSB SVB

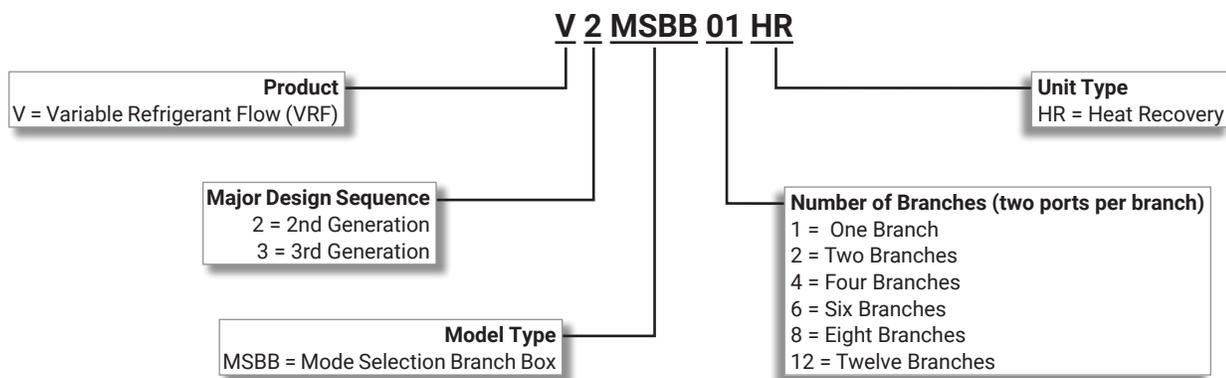
Mode Selection Boxes | Shut-Off Valve Boxes | 208/230V | R-32 | 60Hz

COMMERCIAL PRODUCT SPECIFICATIONS (EHB)

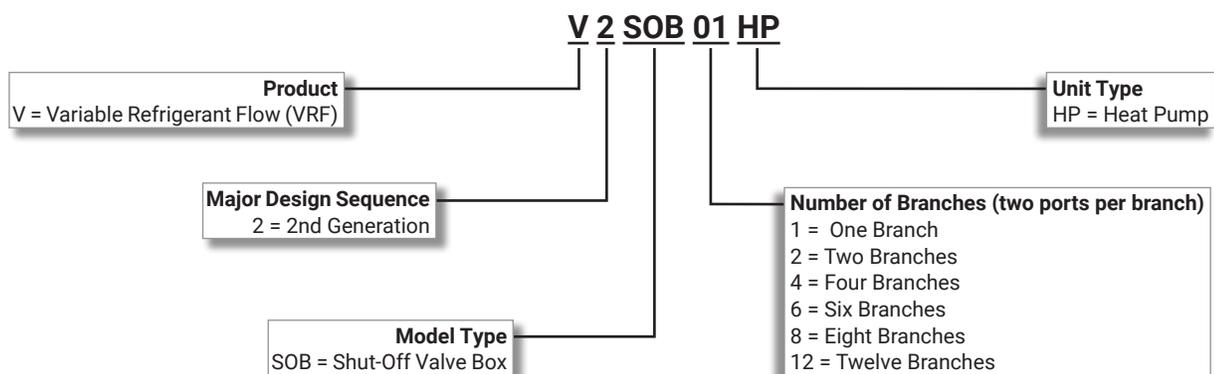


MODEL NUMBER IDENTIFICATION

MODE SELECTION BOX



SHUT-OFF VALVE BOX



CONTENTS

Model Number Identification.	1
MSB - Dimensions	5
MSB - Piping Diagram	14
MSB - Sound Pressure Level.	12
MSB - Specifications	3
MSB - Wiring Diagram	11
SVB - Dimensions.	20
SVB - Piping Diagram.	29
SVB - Sound Pressure Level	27
SVB - Specifications	18
SVB - Wiring Diagram.	26

1. MSB (Mode Selection Box)

Specification

Type				MSB			
Model				V2MSBB01HR	V2MSBB02HR	V2MSBB04HR	
Power Supply			Φ # V Hz	1 2 208-230 60	1 2 208-230 60	1 2 208-230 60	
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery	
Power	Current	MCA	A	1.5	0.5	0.5	
		MFA	A	-	-	-	
		MOP	A	15	15	15	
Maximum number of connectable indoor units			EA	8	16	32	
Maximum number of connectable indoor unit per branch			EA	8	8	8	
Number of branches			EA	1	2	4	
Maximum capacity of connectable indoor units			kW	16	32	61.6	
			Btu/h	54,000	108,000	216,000	
			MBH	54	108	216	
Maximum capacity of connectable indoor units per branch			-	kW	16	16	
				Btu/h	54,000	54,000	54,000
				MBH	54	54	54
			Y-Joint	kW	-	32	32
				Btu/h	-	108,000	108,000
				MBH	-	108	108
Piping Connections	Outdoor unit	Liquid Pipe	Φ, mm	15.88	15.88	15.88	
			Φ, inch	5/8	5/8	5/8	
		Gas Pipe	Φ, mm	22.22	22.22	22.22	
			Φ, inch	7/8	7/8	7/8	
	Indoor unit	High Pressure Gas Pipe	Φ, mm	22.22	22.22	22.22	
			Φ, inch	7/8	7/8	7/8	
		Liquid Pipe	Φ, mm	9.52	9.52	9.52	
			Φ, inch	3/8	3/8	3/8	
Gas Pipe	Φ, mm	15.88	15.88	15.88			
	Φ, inch	5/8	5/8	5/8			
Wiring Connection	Power Source Wire		mm ²	2.5	2.5	2.5	
	Transmission Cable		mm ²	0.75	0.75	0.75	
Refrigerant Calculation		Additional	kg	0.3	0.3	0.3	
Sound Pressure	Stable cooling Operation		dB(A)	30	30	32	
	Heating-to-Cooling Change over		dB(A)	45	45	45	
External Dimension	Net Weight		kg	24	26	30	
			lbs	52.91	57.32	66.14	
	Shipping Weight		kg	31	33	37	
			lbs	68.34	72.75	81.57	
	Net Dimensions	W	mm	492	492	492	
			in	19.37	19.37	19.37	
		H	mm	271	271	271	
			in	10.67	10.67	10.67	
	Shipping Dimensions	D	mm	780	780	780	
			in	30.71	30.71	30.71	
		W	mm	1,022	1,022	1,022	
			in	40.24	40.24	40.24	
	H	mm	353	353	353		
		in	13.90	13.90	13.90		
D	mm	982	982	982			
	in	38.66	38.66	38.66			
Installation	-15 °C operation	1 port	Max.	kW	5	5	
			MBH	17	17	17	
		2 port	Min.	kW	-	5	5
			MBH	-	17	17	
		Max.	kW	-	16	16	
			MBH	-	54	54	

※ If the sum of the connected indoor unit capacity connected to the MSB is greater than 67.2kW, performance may vary depending on operating conditions.

※ The incoming pipe diameters supplying refrigerant to the MSB are determined based on the sum of the connected indoor units.

If these pipe diameters are different than the MSB pipe diameters, use the provided reducers to connect to the MSB.

If the provided reducers are not the correct size, field supplied reducers must be used.

1. MSB (Mode Selection Box)

Specification

Type				MSB			
Model				V3MSBB06HR	V2MSBB08HR	V2MSBB12HR	
Power Supply			Φ # V Hz	1 2 208-230 60	1 2 208-230 60	1 2 208-230 60	
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery	
Power	Current	MCA	A	0.5	1	1.5	
		MFA	A	-	-	15	
		MOP	A	15	15	-	
Maximum number of connectable indoor units			EA	32	64	64	
Maximum number of connectable indoor unit per branch			EA	8	8	8	
Number of branches			EA	6	8	12	
Maximum capacity of connectable indoor units			kW	61.6	85	85	
			Btu/h	216,000	290,000	290,000	
			MBH	216	290	290	
Maximum capacity of connectable indoor units per branch			-	kW	16	16	
				Btu/h	54,000	54,000	54,000
				MBH	54	54	54
			Y-Joint	kW	32	32	32
				Btu/h	108,000	108,000	108,000
				MBH	108	108	108
Piping Connections	Outdoor unit	Liquid Pipe	Φ, mm	15.88	15.88	15.88	
			Φ, inch	5/8	5/8	5/8	
		Gas Pipe	Φ, mm	22.22	22.22	22.22	
			Φ, inch	7/8	7/8	7/8	
		High Pressure Gas Pipe	Φ, mm	22.22	22.22	22.22	
			Φ, inch	7/8	7/8	7/8	
	Indoor unit	Liquid Pipe	Φ, mm	9.52	9.52	9.52	
			Φ, inch	3/8	3/8	3/8	
Gas Pipe		Φ, mm	15.88	15.88	15.88		
		Φ, inch	5/8	5/8	5/8		
Wiring Connection	Power Source Wire		mm ²	2.5	2.5	2.5	
	Transmission Cable		mm ²	0.75	0.75	0.75	
Refrigerant Calculation		Additional	kg	0.65	0.65	1	
Sound Pressure	Stable cooling Operation		dB(A)	32	35	35	
	Heating-to-Cooling Change over		dB(A)	45	45	45	
External Dimension	Net Weight		kg	48.5	53	75.5	
			lbs	106.92	116.85	166.45	
	Shipping Weight		kg	57	61.5	86	
			lbs	125.66	135.58	189.60	
	Net Dimensions	W	mm	937	937	1382	
			in	36.89	36.89	54.41	
		H	mm	271	271	271	
			in	10.67	10.67	10.67	
		D	mm	780	780	780	
			in	30.71	30.71	30.71	
	Shipping Dimensions	W	mm	1,457	1,457	1,902	
			in	57.36	57.36	74.88	
		H	mm	353	360	353	
			in	13.90	14.17	13.90	
D		mm	982	982	982		
		in	38.66	38.66	38.66		
Installation	-15 °C operation	1 port	Max.	kW	5	5	
			MBH	17	17	17	
		2 port	Min.	kW	5	5	5
			MBH	17	17	17	
		Max.	kW	16	16	16	
			MBH	54	54	54	

※ If the sum of the connected indoor unit capacity connected to the MSB is greater than 67.2kW, performance may vary depending on operating conditions.

※ The incoming pipe diameters supplying refrigerant to the MSB are determined based on the sum of the connected indoor units.

If these pipe diameters are different than the MSB pipe diameters, use the provided reducers to connect to the MSB.

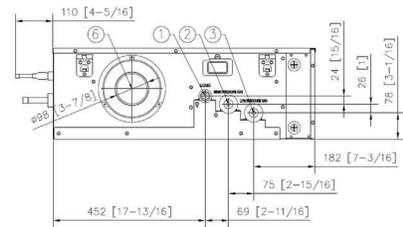
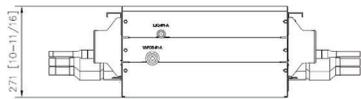
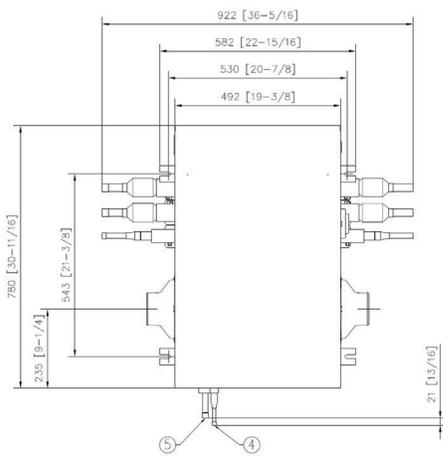
If the provided reducers are not the correct size, field supplied reducers must be used.

1. MSB (Mode Selection Box)

Dimensional drawings

V2MSBB01HR

Unit: mm [inch]



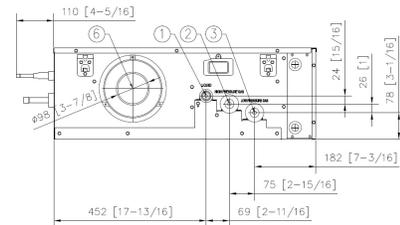
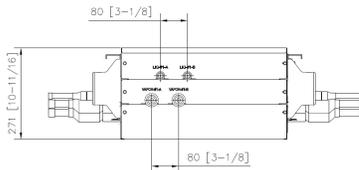
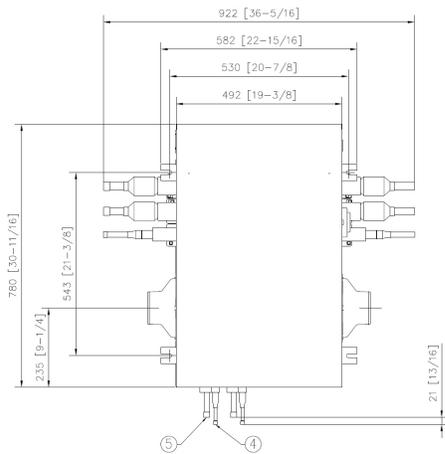
No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant High Pressure Gas Pipe	-
3	Refrigerant Low Pressure Gas Pipe	-
4	LIQ (Indoor)	-
5	VAPOR (Indoor)	-
6	Duct	Φ100 [4]

1. MSB (Mode Selection Box)

Dimensional drawings

V2MSBB02HR

Unit: mm [inch]



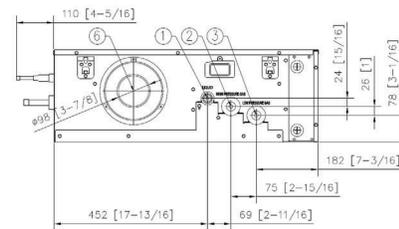
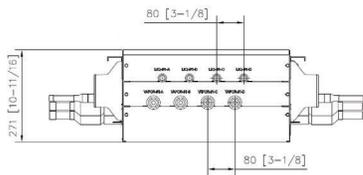
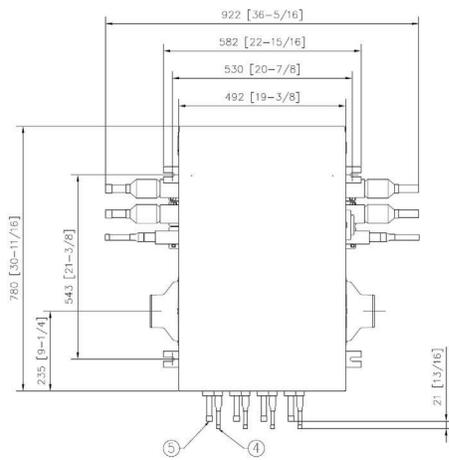
No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant High Pressure Gas Pipe	-
3	Refrigerant Low Pressure Gas Pipe	-
4	LIQ (Indoor)	-
5	VAPOR (Indoor)	-
6	Duct	Φ100 [4]

1. MSB (Mode Selection Box)

Dimensional drawings

V2MSBB04HR

Unit: mm [inch]



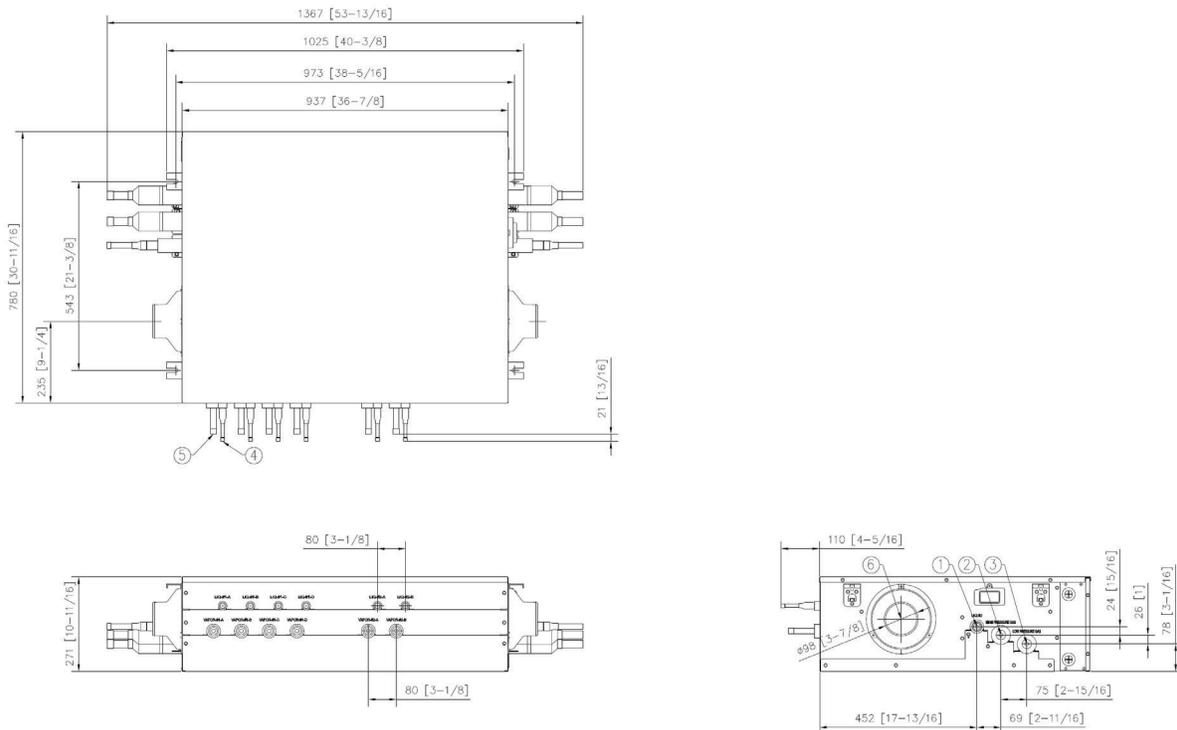
No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant High Pressure Gas Pipe	-
3	Refrigerant Low Pressure Gas Pipe	-
4	LIQ (Indoor)	-
5	VAPOR (Indoor)	-
6	Duct	Φ100 [4]

1. MSB (Mode Selection Box)

Dimensional drawings

V3MSBB06HR

Unit: mm [inch]



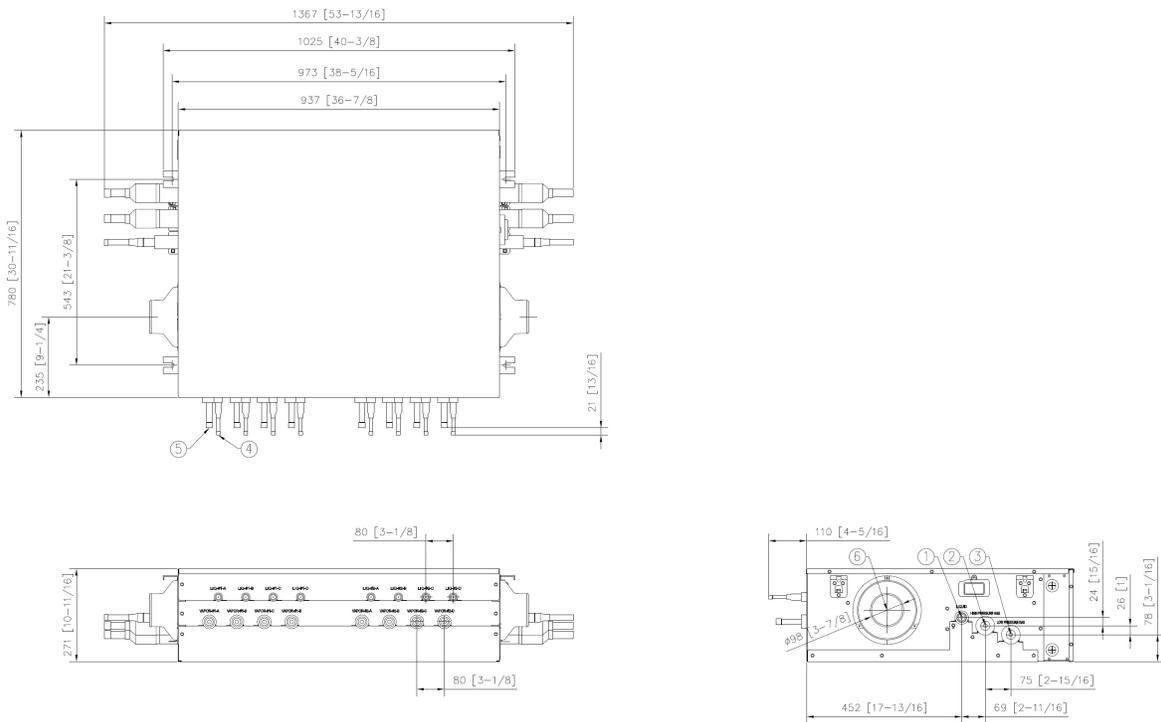
No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant High Pressure Gas Pipe	-
3	Refrigerant Low Pressure Gas Pipe	-
4	LIQ (Indoor)	-
5	VAPOR (Indoor)	-
6	Duct	Φ100 [4]

1. MSB (Mode Selection Box)

Dimensional drawings

V2MSBB08HR

Unit: mm [inch]



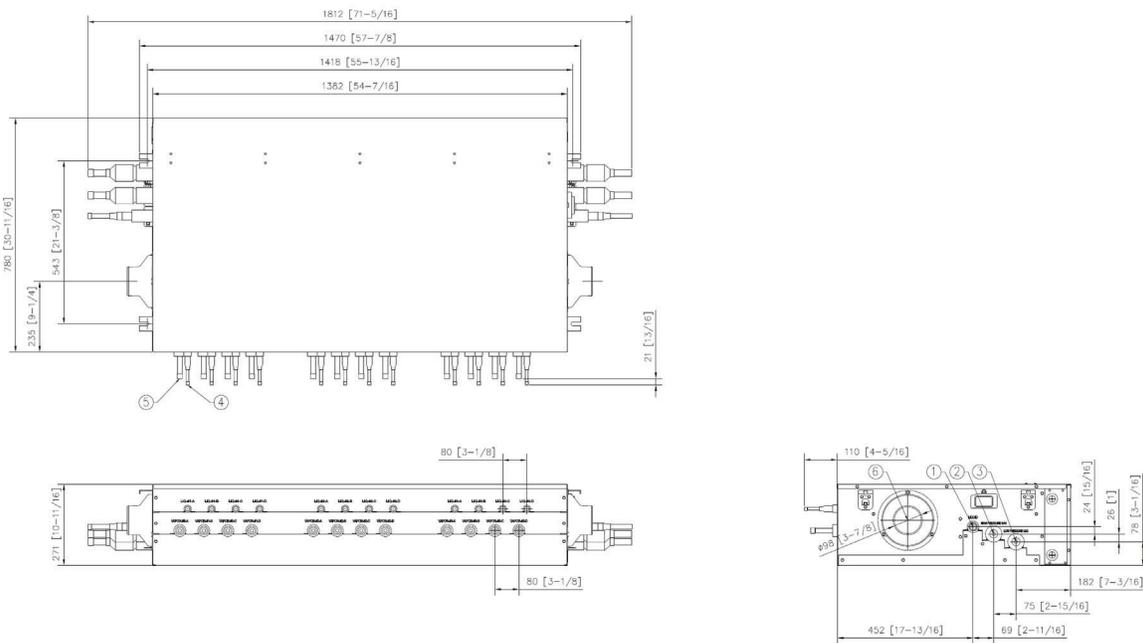
No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant High Pressure Gas Pipe	-
3	Refrigerant Low Pressure Gas Pipe	-
4	LIQ (Indoor)	-
5	VAPOR (Indoor)	-
6	Duct	Φ100 [4]

1. MSB (Mode Selection Box)

Dimensional drawings

V2MSBB12HR

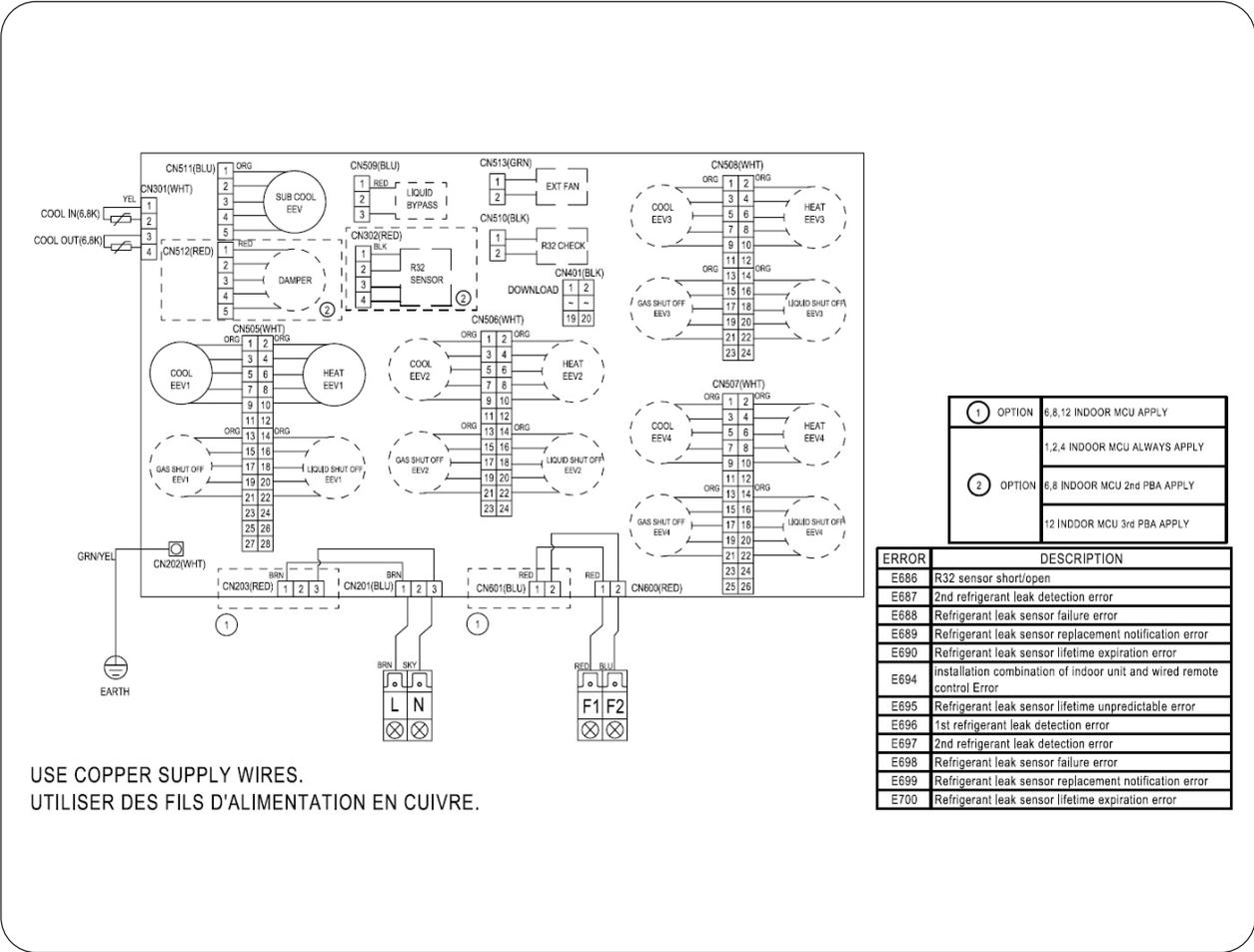
Unit: mm [inch]



No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant High Pressure Gas Pipe	-
3	Refrigerant Low Pressure Gas Pipe	-
4	LIQ (Indoor)	-
5	VAPOR (Indoor)	-
6	Duct	Φ100 [4]

1. MSB (Mode Selection Box)

Electrical Wiring Diagram

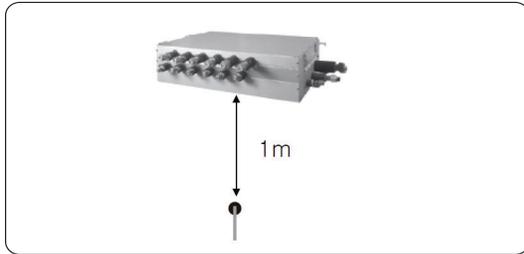


NOTE

- This wiring diagram applies only to the MCU kits.
- Symbols show as follow : BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, SKY: skyblue: GRN: green
- For connection wiring indoor-outdoor transmission F1-F2.
- Protective earth(screw), CN* : connector, : The wire quantity

1. MSB (Mode Selection Box)

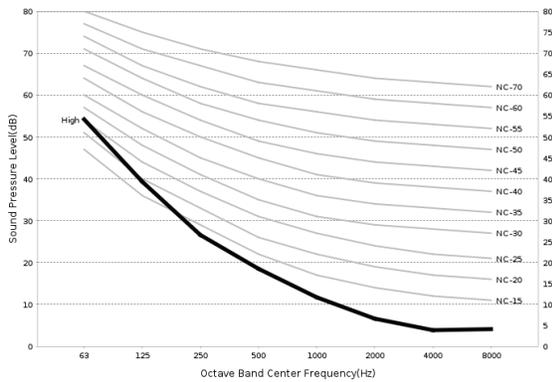
Sound pressure level



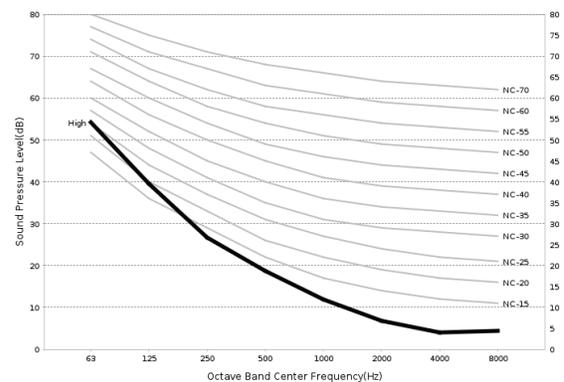
Model	Sound Level (dBA)
V2MSBB01HR	30
V2MSBB02HR	30
V2MSBB04HR	32
V3MSBB06HR	32

• NC Curve

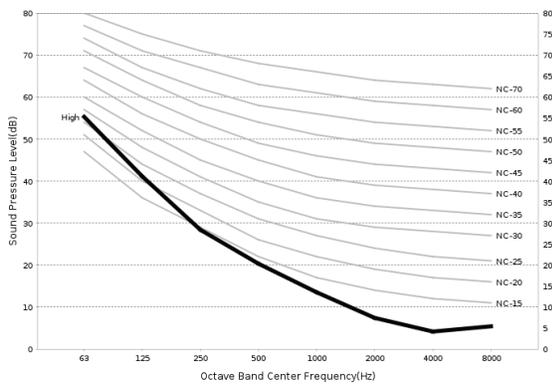
1) V2MSBB01HR



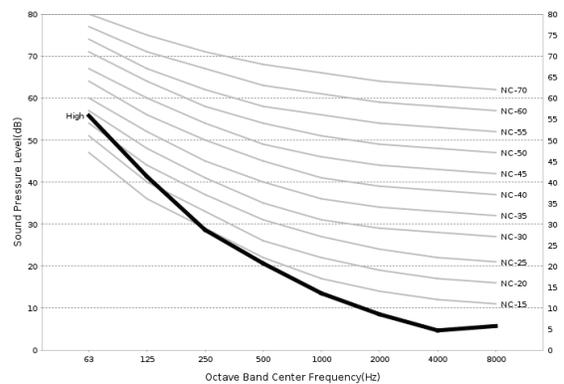
2) V2MSBB02HR



3) V2MSBB04HR



4) V3MSBB06HR

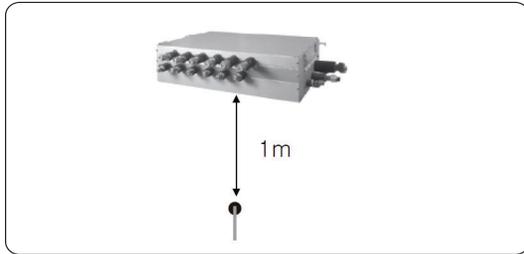


NOTE

- This value was measured at steady state in anechoic chamber and may vary depending on operating condition.
- Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

1. MSB (Mode Selection Box)

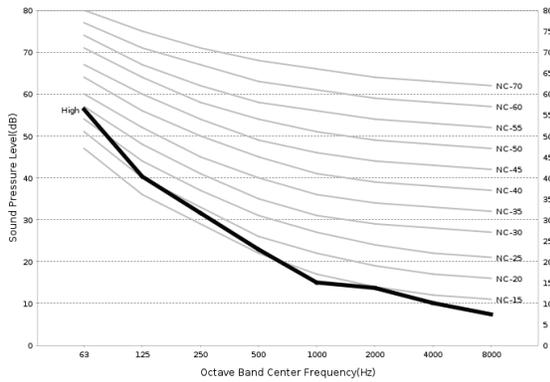
Sound pressure level



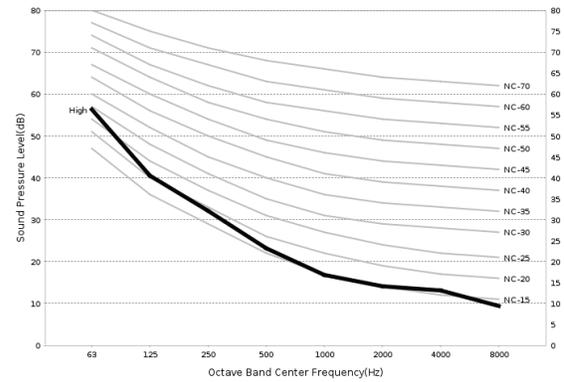
Model	Sound Level (dBA)
V2MSBB08HR	35
V2MSBB12HR	35

- NC Curve

5) V2MSBB08HR



6) V2MSBB12HR



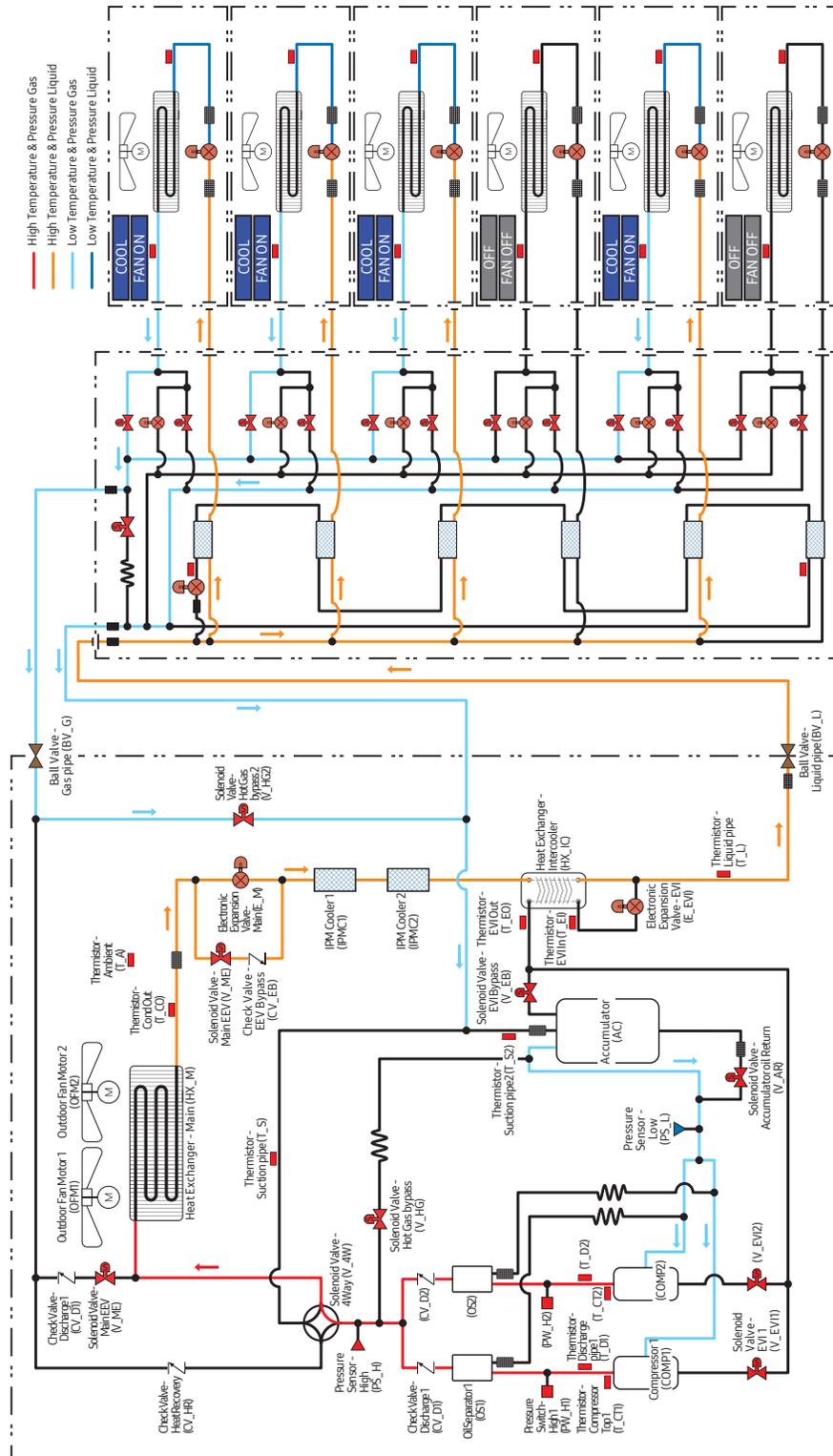
NOTE

- This value was measured at steady state in anechoic chamber and may vary depending on operating condition.
- Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

1. MSB (Mode Selection Box)

Piping diagram

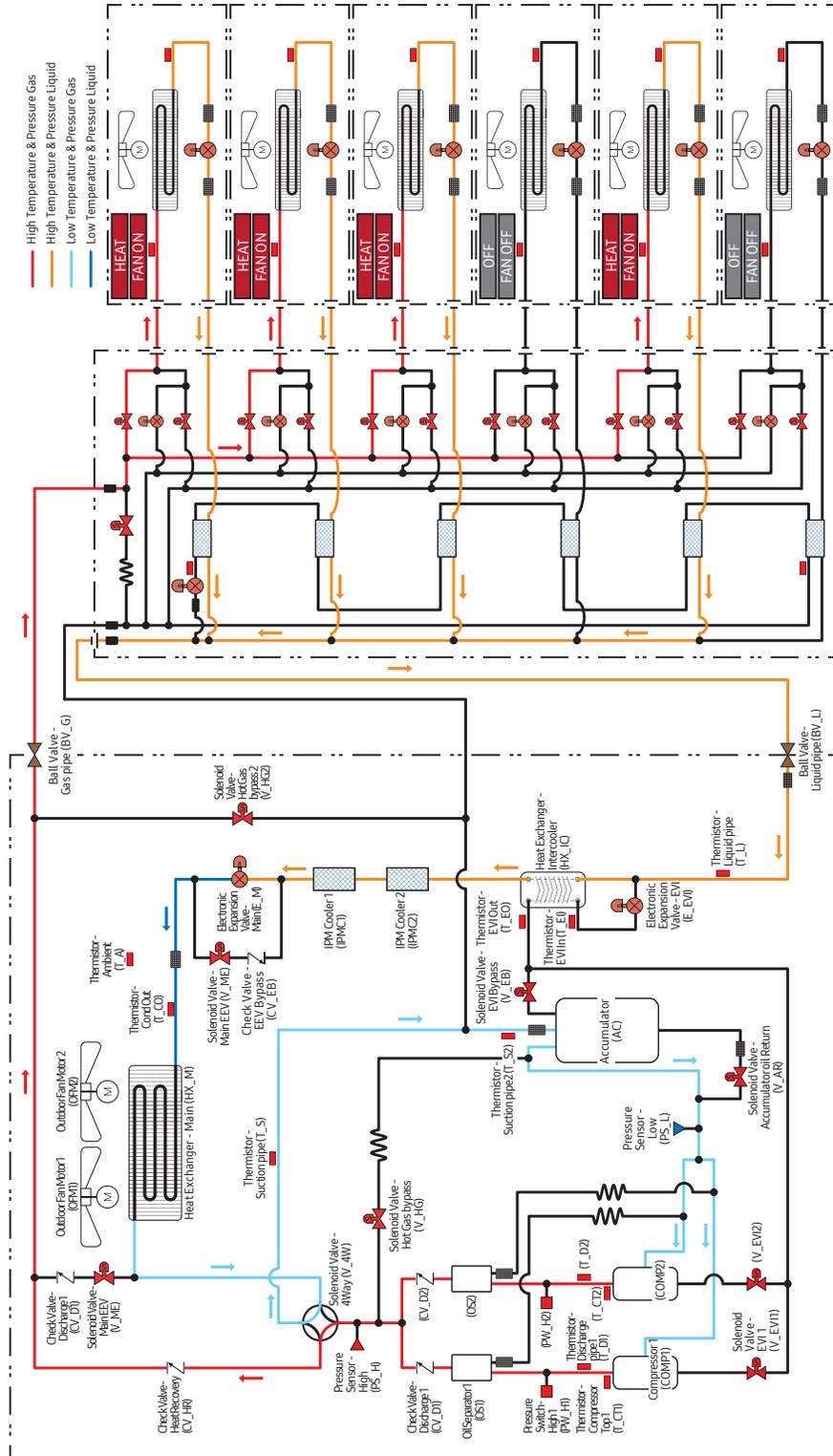
Cooling mode



1. MSB (Mode Selection Box)

Piping diagram

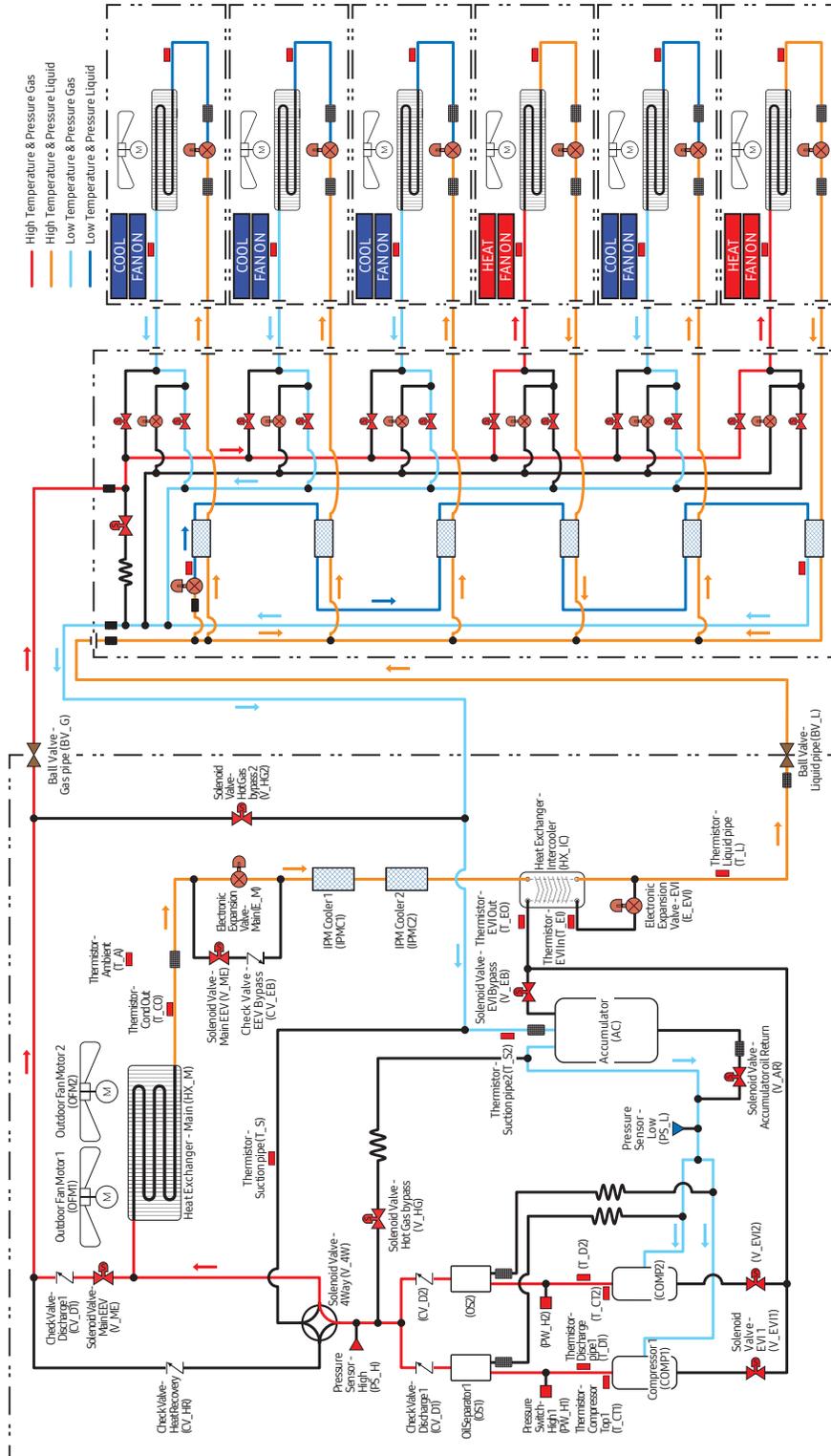
Heating mode



1. MSB (Mode Selection Box)

Piping diagram

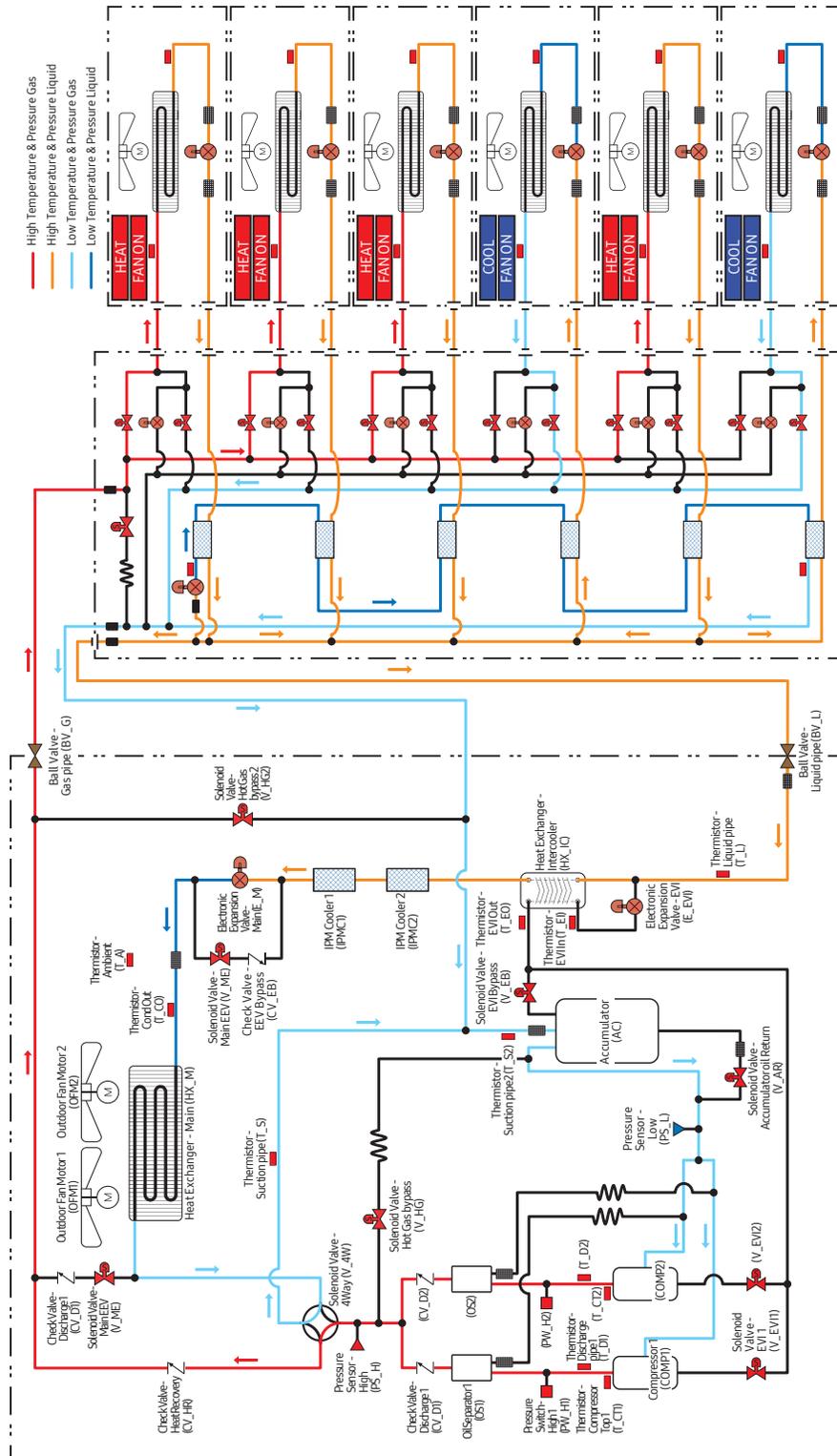
Main Cooling mode



1. MSB (Mode Selection Box)

Piping diagram

Main Heating mode



2. SVB (Shut off Valve Box)

Specification

Type			SVB				
Model			V2SOB01HP	V2SOB02HP	V2SOB04HP		
Power Supply			Φ # V Hz	1 2 208-230 60	1 2 208-230 60	1 2 208-230 60	
Mode			-	Heat Pump	Heat Pump	Heat Pump	
Power	Current	MCA	A	0.5	0.5	0.5	
		MFA	A	-	-	-	
		MOP	A	15	15	15	
Maximum number of connectable indoor units			EA	8	16	32	
Maximum number of connectable indoor unit per branch			EA	8	8	8	
Number of branches			EA	1	2	4	
Maximum capacity of connectable indoor units			kW	16	32	61.6	
			Btu/h	54,000	108,000	216,000	
			MBH	54	108	216	
Maximum capacity of connectable indoor units per branch			-	kW	16	16	
				Btu/h	54,000	54,000	54,000
				MBH	54	54	54
			Y-Joint	kW	-	32	32
				Btu/h	-	108,000	108,000
				MBH	-	108	108
Piping Connections	Outdoor unit	Liquid Pipe	Φ, mm	15.88	15.88	15.88	
			Φ, inch	5/8	5/8	5/8	
		Gas Pipe	Φ, mm	22.22	22.22	22.22	
			Φ, inch	7/8	7/8	7/8	
	Indoor unit	Liquid Pipe	Φ, mm	9.52	9.52	9.52	
			Φ, inch	3/8	3/8	3/8	
Gas Pipe		Φ, mm	15.88	15.88	15.88		
		Φ, inch	5/8	5/8	5/8		
Wiring Connection	Power Source Wire		mm ²	2.5	2.5	2.5	
			AWG	12	12	12	
	Transmission Cable		mm ²	0.75	0.75	0.75	
			AWG	18	18	18	
Refrigerant Calculation		Additional	kg	0.3	0.3	0.3	
Sound Pressure Level			dB(A)	30	30	31	
External Dimension	Net Weight		kg	21.5	22.5	25	
			lbs	47.40	49.60	55.12	
	Shipping Weight		kg	28.5	29.5	32	
			lbs	62.83	65.04	70.55	
	Net Dimensions	W	mm	492	492	492	
			in	19.37	19.37	19.37	
		H	mm	271	271	271	
			in	10.67	10.67	10.67	
		D	mm	780	780	780	
			in	30.71	30.71	30.71	
	Shipping Dimensions	W	mm	1,022	1,022	1,022	
			in	40.24	40.24	40.24	
		H	mm	353	353	353	
			in	13.9	13.9	13.9	
D		mm	982	982	982		
		in	38.66	38.66	38.66		

※ If the sum of the connected indoor unit capacity connected to the MSB is greater than 67.2kW, performance may vary depending on operating conditions.

※ The incoming pipe diameters supplying refrigerant to the MSB are determined based on the sum of the connected indoor units.

If these pipe diameters are different than the MSB pipe diameters, use the provided reducers to connect to the MSB.

If the provided reducers are not the correct size, field supplied reducers must be used.

2. SVB (Shut off Valve Box)

Specification

Type			SVB				
Model			V2SOB06HP	V2SOB08HP	V2SOB12HP		
Power Supply			Φ # V Hz	1 2 208-230 60	1 2 208-230 60	1 2 208-230 60	
Mode			-	Heat Pump	Heat Pump	Heat Pump	
Power	Current	MCA	A	1	1	1.5	
		MFA	A	-	-	-	
		MOP	A	15	15	15	
Maximum number of connectable indoor units			EA	32	64	64	
Maximum number of connectable indoor unit per branch			EA	8	8	8	
Number of branches			EA	6	8	12	
Maximum capacity of connectable indoor units			kW	61.6	85	85	
			Btu/h	216,000	290,000	290,000	
			MBH	216	290	290	
Maximum capacity of connectable indoor units per branch			-	kW	16	16	
				Btu/h	54,000	54,000	54,000
				MBH	54	54	54
			Y-Joint	kW	32	32	32
				Btu/h	108,000	108,000	108,000
				MBH	108	108	108
Piping Connections	Outdoor unit	Liquid Pipe	Φ, mm	15.88	15.88	15.88	
			Φ, inch	5/8	5/8	5/8	
		Gas Pipe	Φ, mm	22.22	22.22	22.22	
			Φ, inch	7/8	7/8	7/8	
	Indoor unit	Liquid Pipe	Φ, mm	9.52	9.52	9.52	
			Φ, inch	3/8	3/8	3/8	
Gas Pipe		Φ, mm	15.88	15.88	15.88		
		Φ, inch	5/8	5/8	5/8		
Wiring Connection	Power Source Wire		mm ²	2.5	2.5	2.5	
			AWG	12	12	12	
	Transmission Cable		mm ²	0.75	0.75	0.75	
			AWG	18	18	18	
Refrigerant Calculation		Additional	kg	0.65	0.65	1	
Sound Pressure Level			dB(A)	32	34	35	
External Dimension	Net Weight		kg	41	44	62	
			lbs	90.39	97.00	136.69	
	Shipping Weight		kg	49.5	52.5	72.5	
			lbs	109.13	115.74	159.83	
	Net Dimensions	W	mm	937	937	1,382	
			in	36.89	36.89	54.41	
		H	mm	271	271	271	
			in	10.67	10.67	10.67	
		D	mm	780	780	780	
			in	30.71	30.71	30.71	
	Shipping Dimensions	W	mm	1,457	1,467	1,902	
			in	57.36	57.76	74.88	
		H	mm	353	353	353	
			in	13.9	13.9	13.9	
D		mm	982	982	982		
		in	38.66	38.66	38.66		

※ If the sum of the connected indoor unit capacity connected to the MSB is greater than 67.2kW, performance may vary depending on operating conditions.

※ The incoming pipe diameters supplying refrigerant to the MSB are determined based on the sum of the connected indoor units.

If these pipe diameters are different than the MSB pipe diameters, use the provided reducers to connect to the MSB.

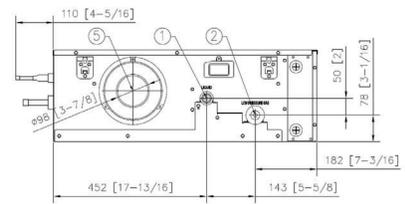
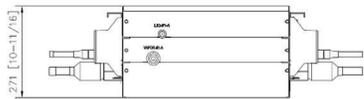
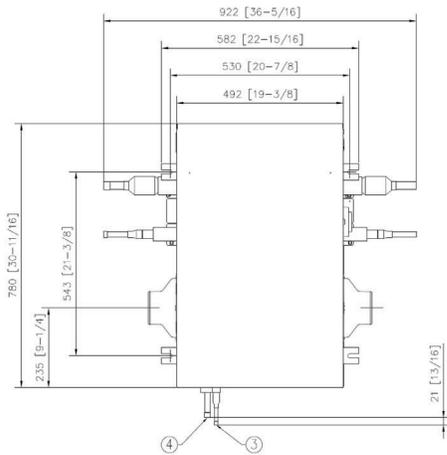
If the provided reducers are not the correct size, field supplied reducers must be used.

2. SVB (Shut off Valve Box)

Dimensional drawings

V2SOB01HP

Unit: mm [inch]

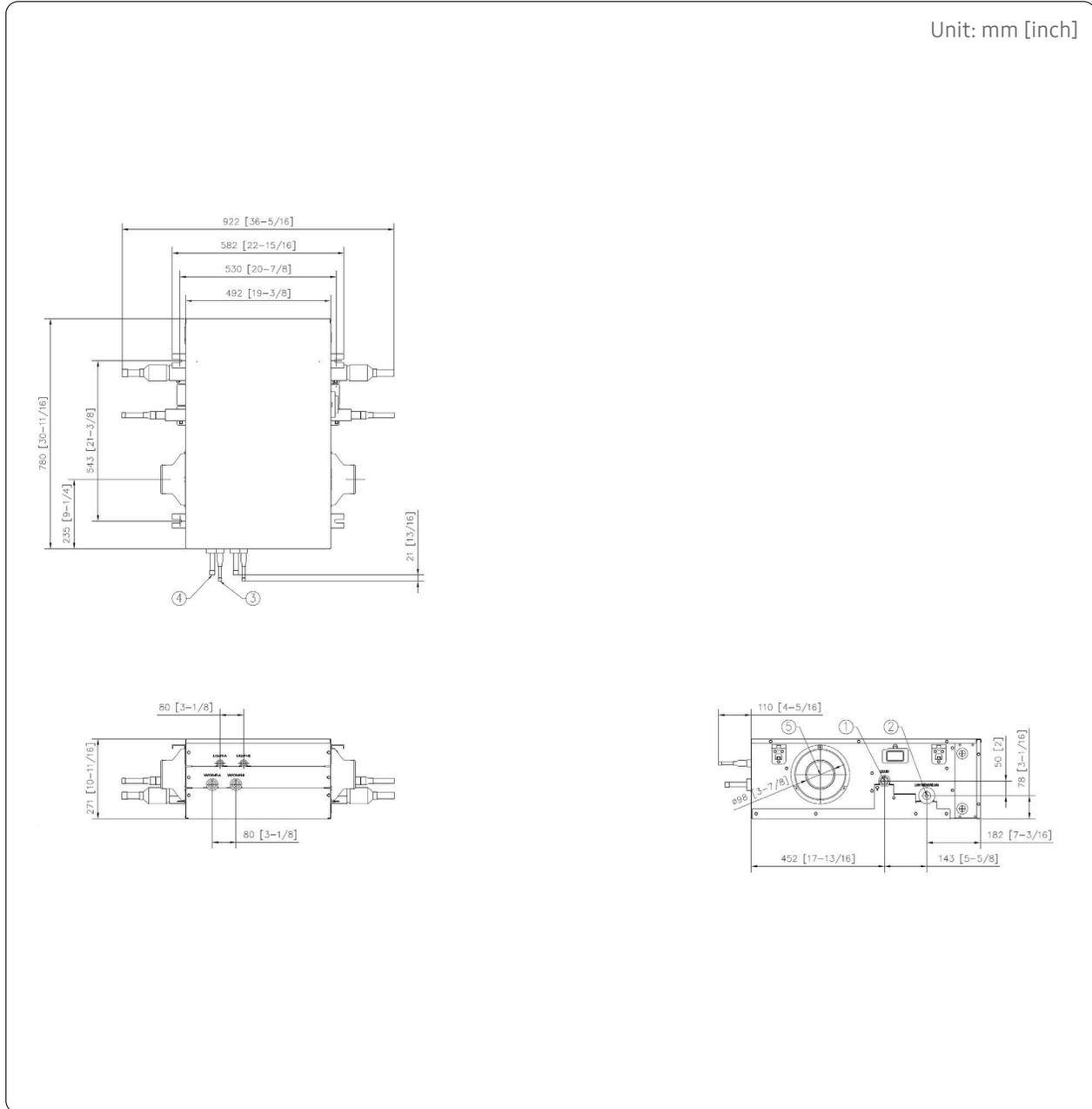


No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant Low Pressure Gas Pipe	-
3	LIQ (Indoor)	-
4	VAPOR (Indoor)	-
5	Duct	Φ100 [4]

2. SVB (Shut off Valve Box)

Dimensional drawings

V2SOB02HP



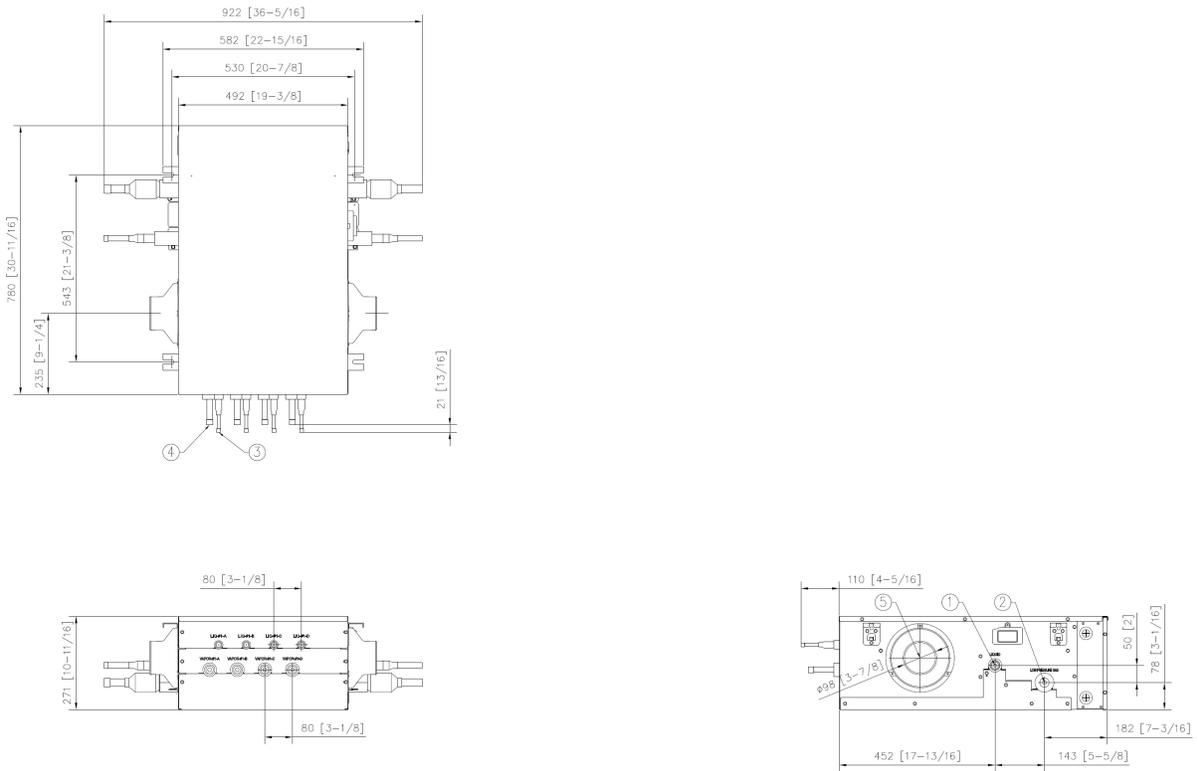
No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant Low Pressure Gas Pipe	-
3	LIQ (Indoor)	-
4	VAPOR (Indoor)	-
5	Duct	Φ100 [4]

2. SVB (Shut off Valve Box)

Dimensional drawings

V2SOB04HP

Unit: mm [inch]

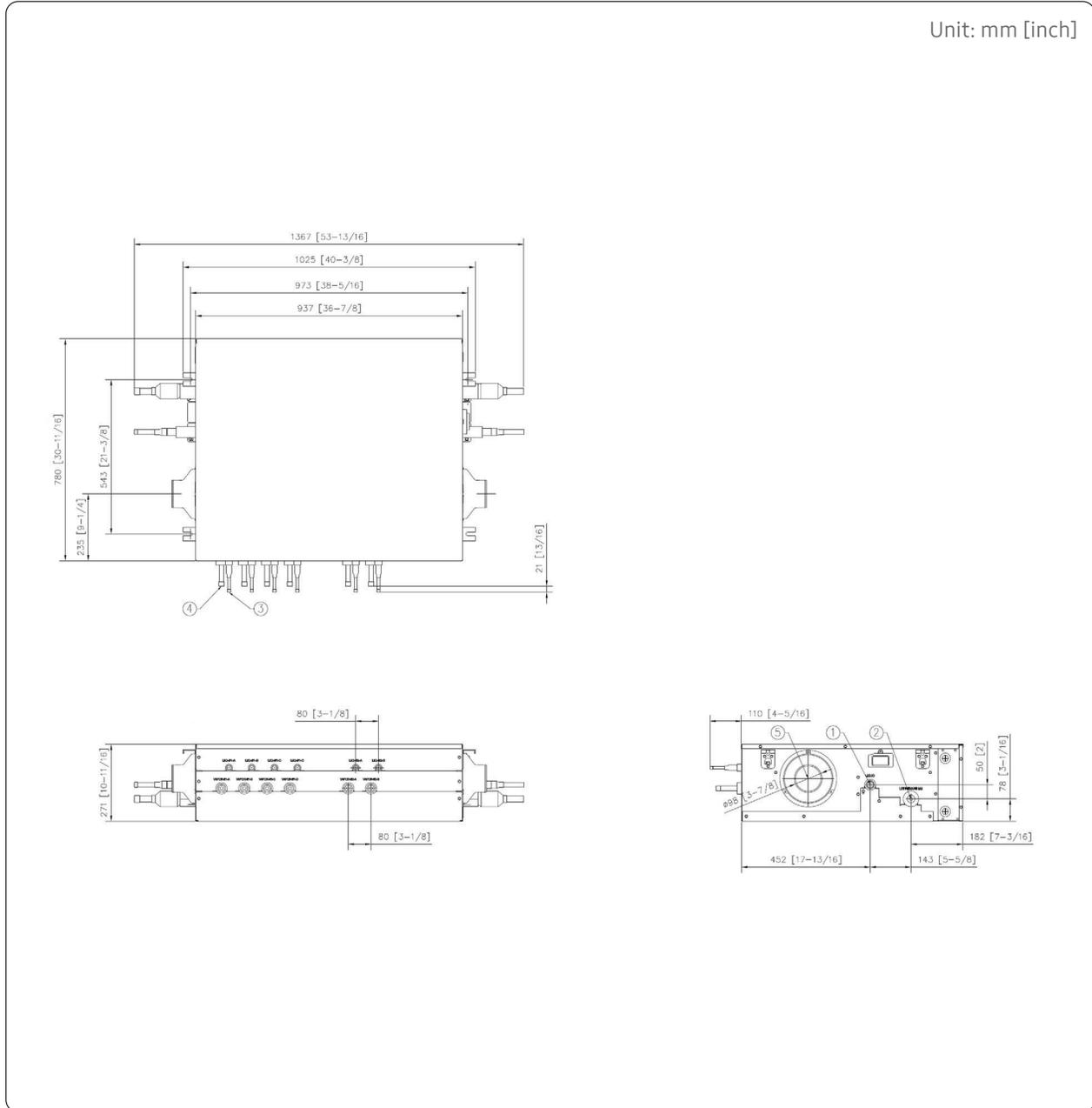


No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant Low Pressure Gas Pipe	-
3	LIQ (Indoor)	-
4	VAPOR (Indoor)	-
5	Duct	Φ100 [4]

2. SVB (Shut off Valve Box)

Dimensional drawings

V2SOB06HP



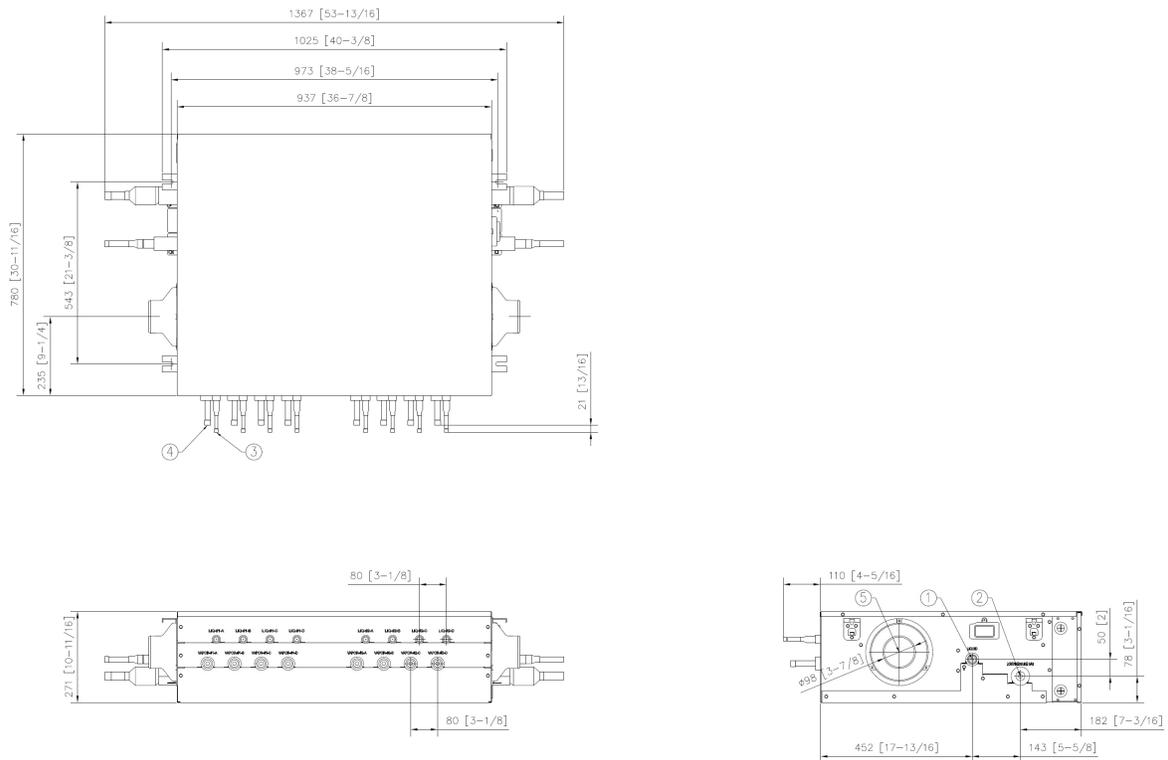
No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant Low Pressure Gas Pipe	-
3	LIQ (Indoor)	-
4	VAPOR (Indoor)	-
5	Duct	Φ100 [4]

2. SVB (Shut off Valve Box)

Dimensional drawings

V2SOB08HP

Unit: mm [inch]

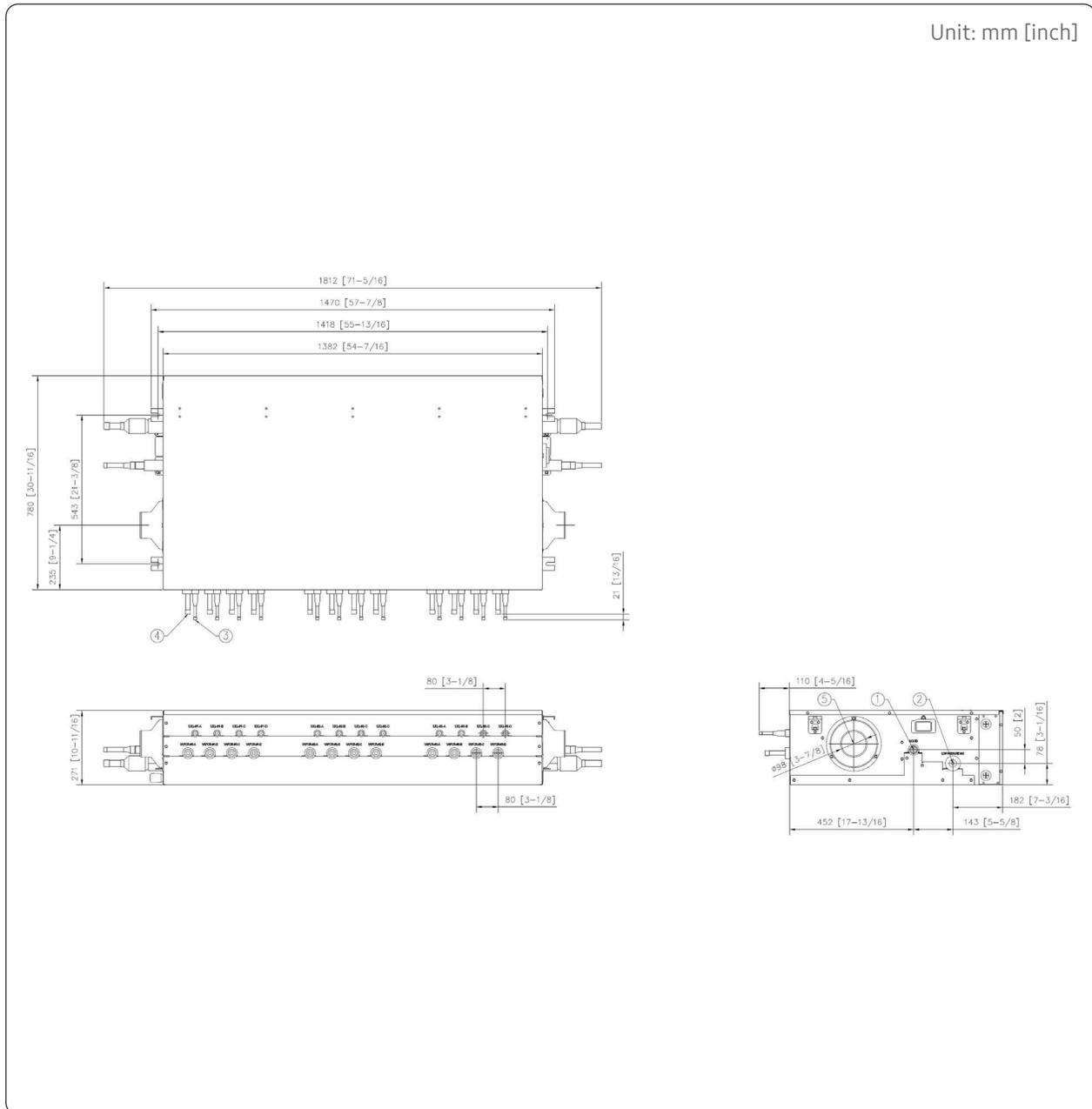


No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant Low Pressure Gas Pipe	-
3	LIQ (Indoor)	-
4	VAPOR (Indoor)	-
5	Duct	Φ100 [4]

2. SVB (Shut off Valve Box)

Dimensional drawings

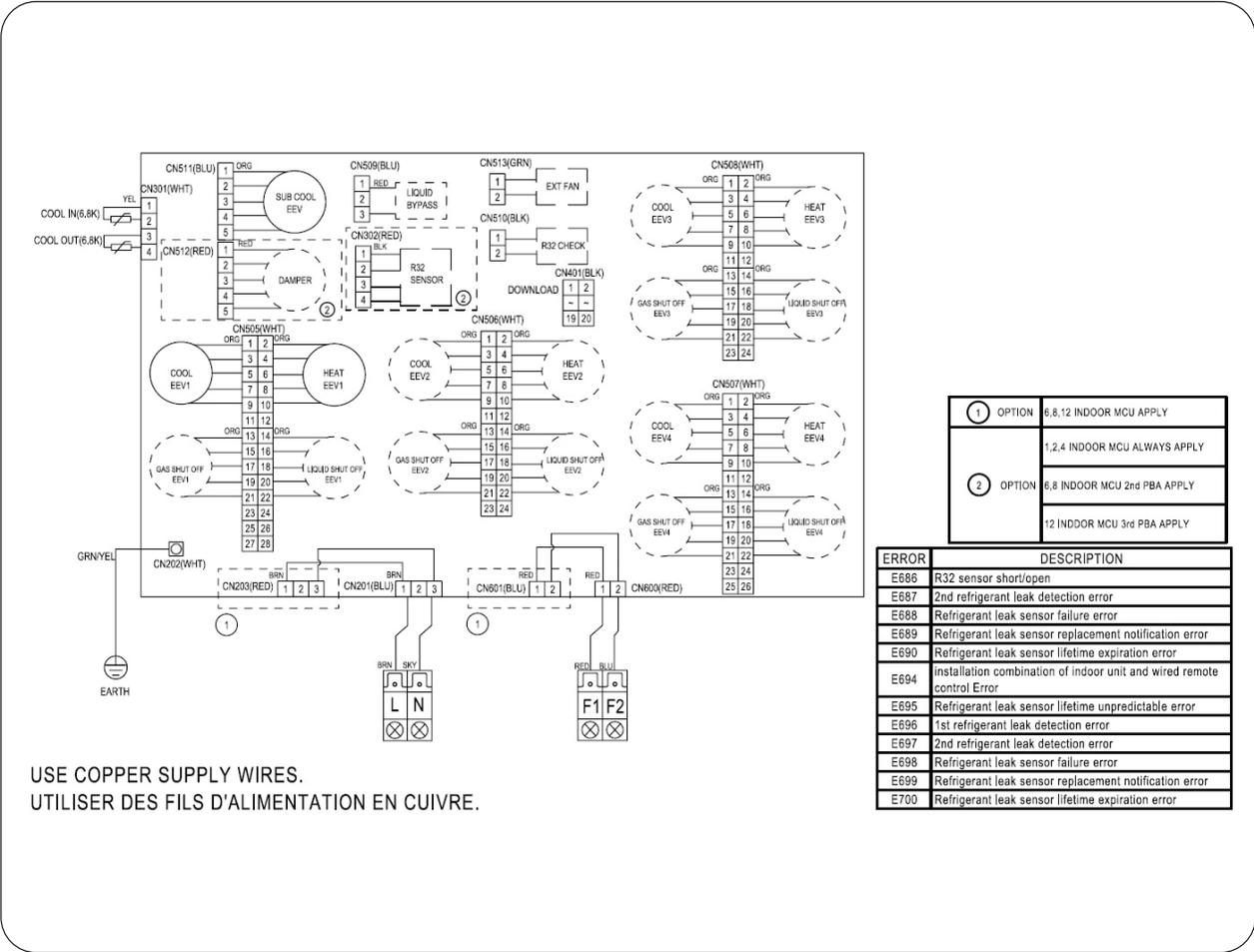
V2SOB12HP



No.	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant Low Pressure Gas Pipe	-
3	LIQ (Indoor)	-
4	VAPOR (Indoor)	-
5	Duct	Φ100 [4]

2. SVB (Shut off Valve Box)

Electrical Wiring Diagram

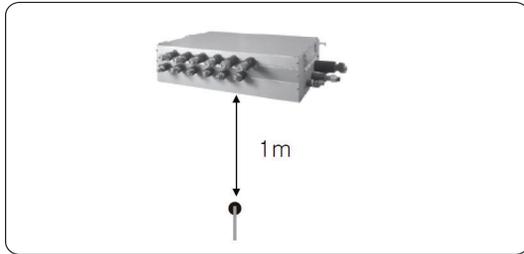


NOTE

- This wiring diagram applies only to the SVB kits.
- Symbols show as follow : BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, SKY: skyblue: GRN: green
- For connection wiring indoor-outdoor transmission F1-F2.
- Protective earth(screw), CN* : connector, : The wire quantity

2. SVB (Shut off Valve Box)

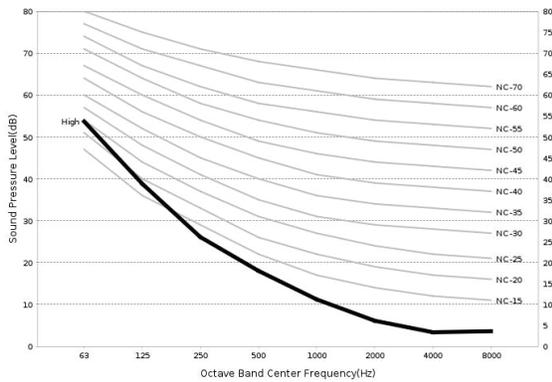
Sound pressure level



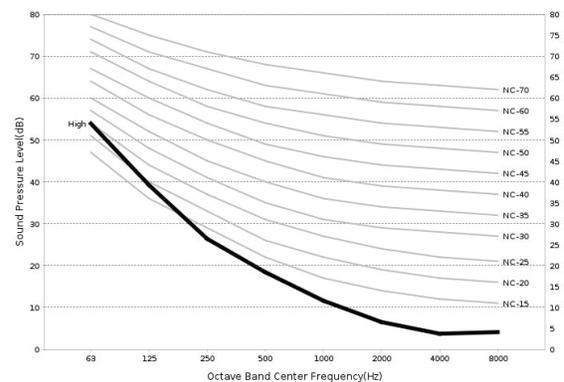
Model	Sound Level (dBA)
V2SOB01HP	30
V2SOB02HP	30
V2SOB04HP	31
V2SOB06HP	32

• NC Curve

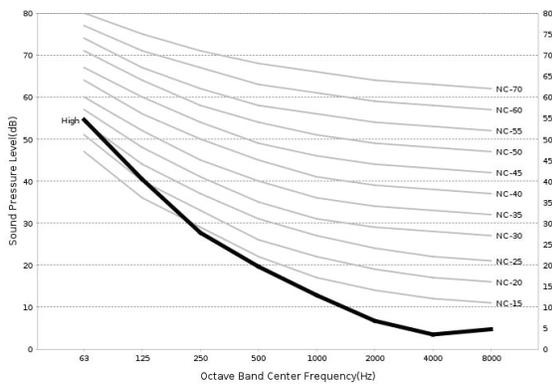
1) V2SOB01HP



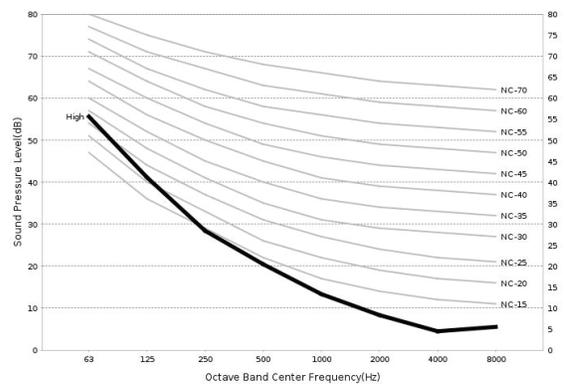
2) V2SOB02HP



3) V2SOB04HP



4) V2SOB06HP

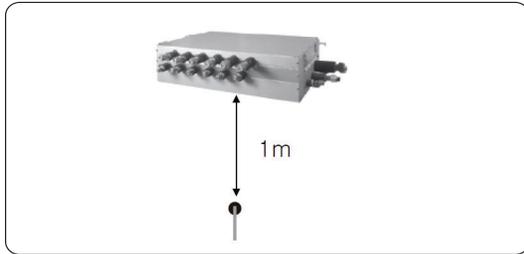


NOTE

- This value was measured at steady state in anechoic chamber and may vary depending on operating condition.
- Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

2. SVB (Shut off Valve Box)

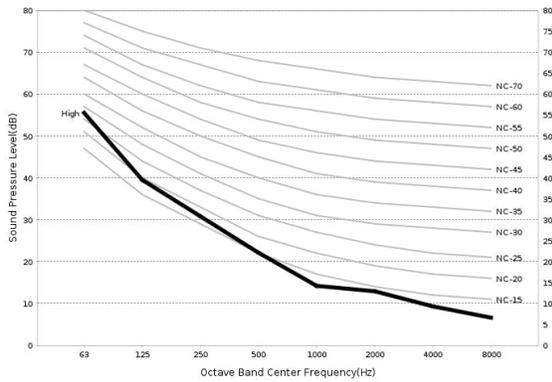
Sound pressure level



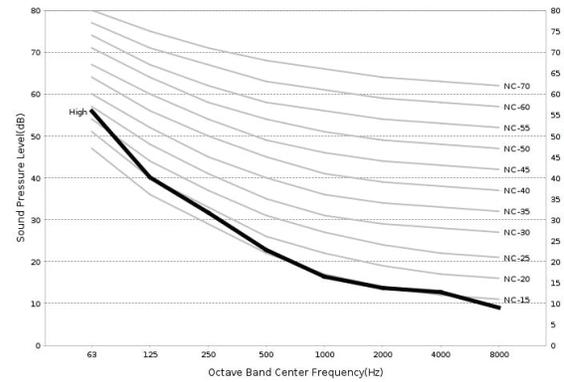
Model	Sound Level (dBA)
V2SOB08HP	34
V2SOB12HP	35

- NC Curve

5) V2SOB08HP



6) V2SOB12HP



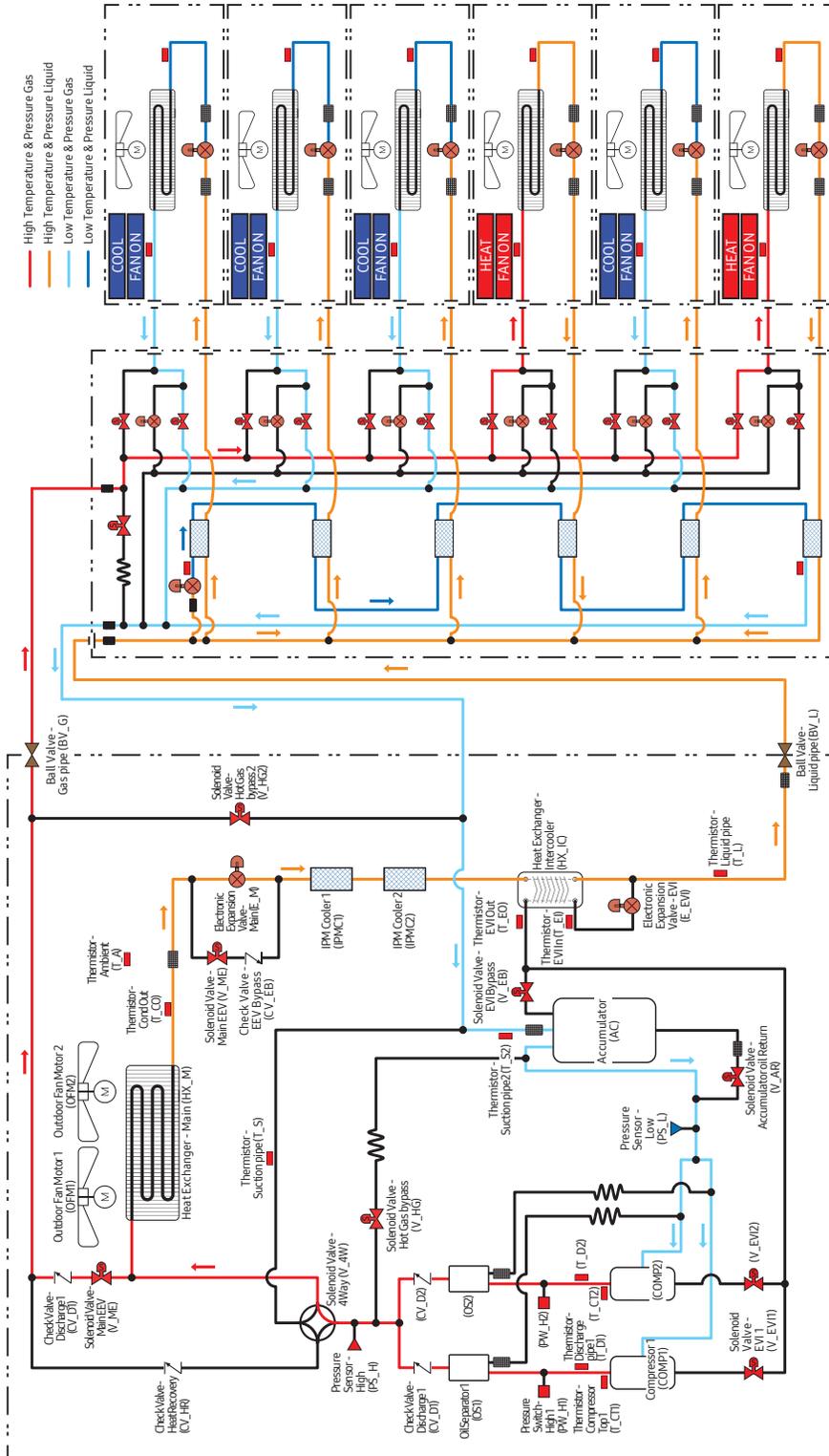
NOTE

- This value was measured at steady state in anechoic chamber and may vary depending on operating condition.
- Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

2. SVB (Shut off Valve Box)

Piping diagram

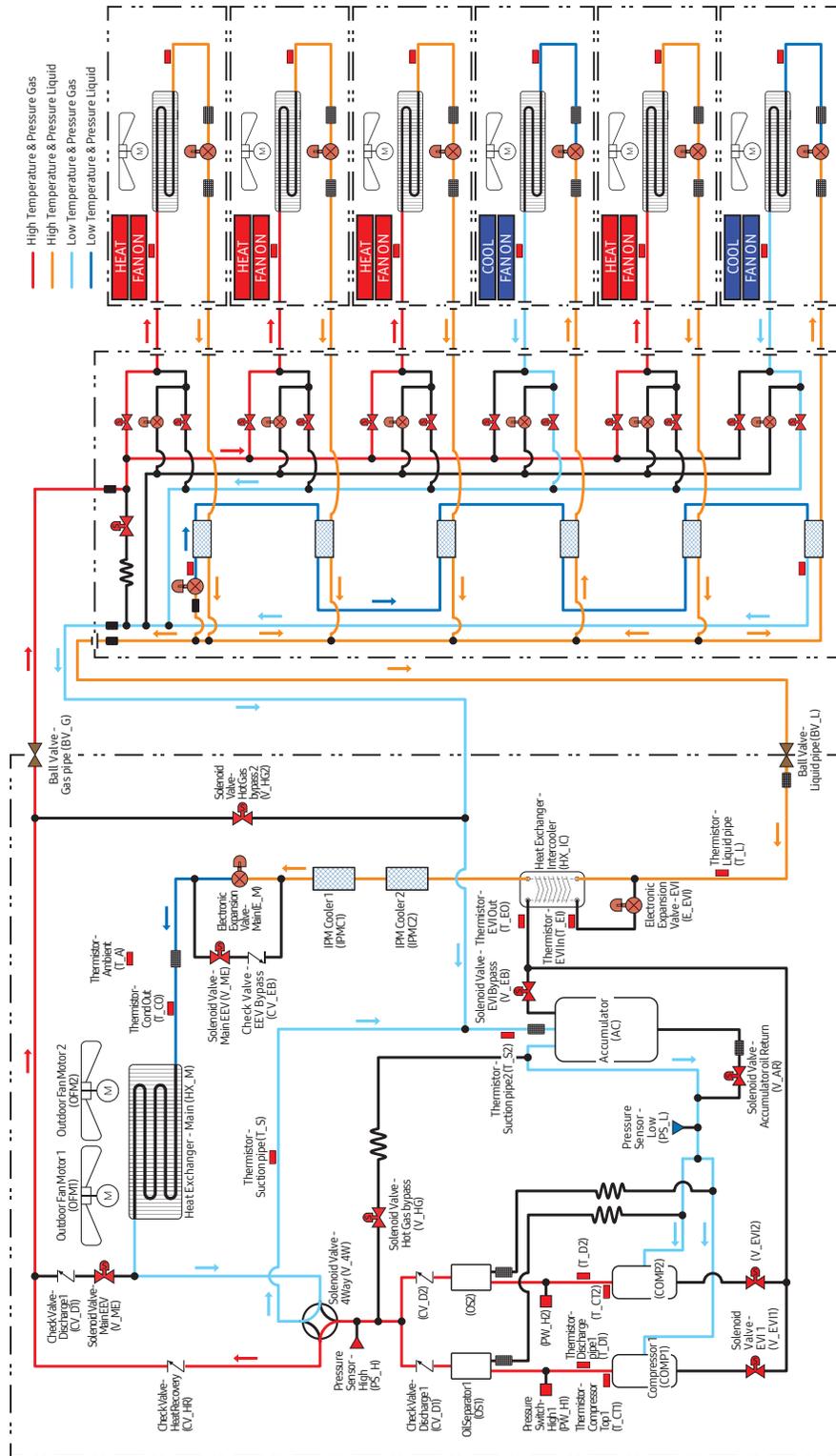
Main Cooling mode



2. SVB (Shut off Valve Box)

Piping diagram

Main Heating mode





Visit us at www.lennox.com

For the latest technical information, www.lennoxcommercial.com

Contact us at 1-800-4-LENNOX

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.

©2026 Lennox Industries, Inc.