



Submittal:

Models: LI009CI-270P432 / LI009CO-270P432
LI009HI-270P432 / LI009HO-270P432
LI012CI-270P432 / LI012CO-270P432
LI012HI-270P432 / LI012HO-270P432
(Refrigerant R410A)

Thank you for selecting LENNOX air conditioners.

Part I : Technical Information

1. Summary

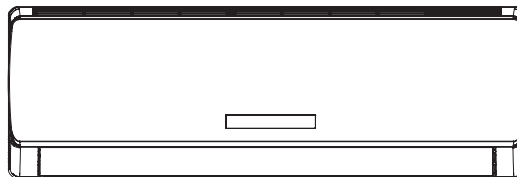
Indoor Unit:

LI009HI-270P432

LI012HI-270P432

LI018HI-270P432

LI024HI-270P432

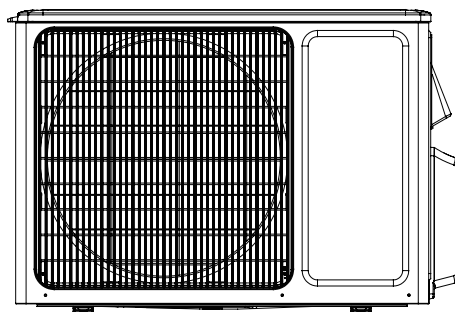


Outdoor Unit:

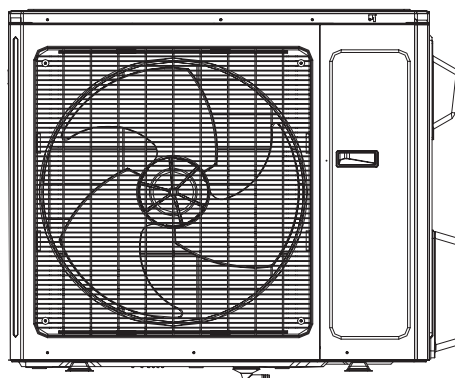
LI009HO-270P432

LI012HO-270P432

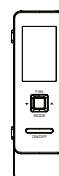
LI018HO-270P432



LI024HO-270P432



Remote Controller:



2. Specifications

2.1 Specification Sheet

Model			LI009HI-270P432/LI009HO-270P432	LI012HI-270P432/LI012HO-270P432
Product Code			Y6116/Y6117	Y6118/Y6119
Power Supply	Rated Voltage	V~	208/230	208/230
	Rated Frequency	Hz	60	60
	Phases		1	1
Power Supply Mode			Outdoor	Outdoor
Cooling Capacity(Min~Max)		Btu/h	9000(3500~9600)	12000(3100~13000)
Heating Capacity(Min~Max)		Btu/h	9800(2200~11000)	13000(2400~14000)
Cooling Power Input(Min~Max)		W	600(330~1200)	882(380~1300)
Heating Power Input(Min~Max)		W	650(100~1250)	960(100~1350)
Cooling Power Current		A	5.7	6
Heating Power Current		A	7	7.5
Rated Input		W	1300	1400
Rated Current		A	9	9
Air Flow Volume(SH/H/MH/M/ML/L/SL)		CFM	418/300/283/218/182/118/101	453/312/288/221/182/118/101
Dehumidifying Volume		Pint/h	1.9	2.96
EER		(Btu/h)/W	14.5	12.8
COP		(Btu/h)/W	13	12
SEER			27	25
SCOP			9	9
Application Area		yd ²	13.38-20.06	13.38-20.06
Indoor Unit	Model of indoor unit		LI009HI-270P432	LI012HI-270P432
	Indoor Unit Product Code		Y6116	Y6118
	Fan Type		Cross-flow	Cross-flow
	Diameter Length(DXL)		inch	Φ3 6/7X26
	Fan Motor Cooling Speed (SH/H/MH/M/ML/L/SL)		r/min	1400/1050/1000/900/800/700/500
	Fan Motor Heating Speed (SH/H/MH/M/ML/L/SL)		r/min	1400/1150/1080/1030/980/900/850
	Output of Fan Motor		W	10
	Fan Motor RLA		A	0.07
	Fan Motor Capacitor		μF	/
	Evaporator Form			Aluminum Fin-copper Tube
	Pipe Diameter		inch	Φ2/7
	Row-fin Gap		inch	2-1/17
	Coil Length (LXDXW)		inch	26 1/50X1X10 2/5
	Swing Motor Model			MP24HC
	Output of Swing Motor		W	2.4
	Fuse		A	3.15
	Sound Pressure Level (SH/H/MH/M/ML/L/SL)		dB (A)	42/38/36/34/30/26/23
	Sound Power Level (SH/H/MH/M/ML/L/SL)		dB (A)	52/48/46/44/40/36/33
	Dimension (WXHXD)		inch	34X11 1/2X8 2/9
	Dimension of Carton Box (LXWXH)		inch	37X11 1/9X14 5/7
Dimension of Package (LXWXH)		inch	37 1/8X11 2/3X14 5/6	
Net Weight		lb	24.3	
Gross Weight		lb	30.9	

Outdoor Unit	Model of Outdoor Unit		LI009HO-270P432	LI012HO-270P432
	Outdoor Unit Product Code		Y6117	Y6119
	Compressor Manufacturer/ Trademark		MITSUBISHI ELECTRIC (GUANGZHOU) COMPRESSOR CO.LTD	MITSUBISHI ELECTRIC (GUANGZHOU) COMPRESSOR CO.LTD
	Compressor Model		KNB092FTAMC	KNB092FTAMC
	Compressor Oil		FV50S	FV50S
	Compressor Type		Rotary	Rotary
	Compressor RLA	A	3.2	3.2
	Compressor Power Input	W	860	860
	Overload Protector		1NT11L-6578	1NT11L-6578
	Throttling Method		Electron expansion valve	Electron expansion valve
	Operation temp	°F	60.8~86	60.8~86
	Ambient temp (cooling)	°F	0~118.4	0~118.4
	Ambient temp (heating)	°F	-4~86	-4~86
	Condenser Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Pipe Diameter	inch	Φ1/3	Φ2/7
	Rows-fin Gap	inch	2.5-1/17	2.5-1/17
	Coil Length (LXDXW)	inch	30X2 1/5X21 7/10	30X2 1/5X21 7/10
	Fan Motor Speed	rpm	600/750/850	600/750/850
	Output of Fan Motor	W	40	40
	Fan Motor RLA	A	0.18	0.18
	Fan Motor Capacitor	μF	/	/
	Air Flow Volume of Outdoor Unit	CFM	1177	1177
	Fan Type		Axial-flow	Axial-flow
	Fan Diameter	inch	Φ17 1/2	Φ17 1/2
	Defrosting Method		Automatic Defrosting	Automatic Defrosting
	Climate Type		T1	T1
	Isolation		I	I
	Moisture Protection		IP24	IP24
	Permissible Excessive Operating Pressure for the Discharge Side	PSIG	550	550
	Permissible Excessive Operating Pressure for the Suction Side	PSIG	240	240
	Sound Pressure Level (H/M/L)	dB (A)	49/-/-	49/-/-
	Sound Power Level (H/M/L)	dB (A)	59/-/-	59/-/-
Dimension (WXHXD)	inch	35 2/5X23 1/2X14	35 2/5X23 1/2X14	
Dimension of Carton Box (LXWXH)	inch	37 1/5X16 2/5X24 4/5	37 1/5X16 2/5X24 4/5	
Dimension of Package (LXWXH)	inch	37 2/7X16 1/2X25 2/5	37 2/7X16 1/2X25 2/5	
Net Weight	lb	86.0	87.1	
Gross Weight	lb	90.4	91.5	
Refrigerant		R410A	R410A	
Refrigerant Charge	oz	45.9	45.9	
Connection Pipe	Length	ft	24.6	24.6
	Gas Additional Charge	oz/ft	0.2	0.2
	Outer Diameter Liquid Pipe	inch	1/4	1/4
	Outer Diameter Gas Pipe	inch	1/2	1/2
	Max Distance Height	ft	32.8	32.8
	Max Distance Length	ft	49.2	65.6
Note:The connection pipe applies metric diameter.				

The above data is subject to change without notice; please refer to the nameplate of the unit.

Model			LI018HI-270P432/LI018HO-270P432	LI024HI-270P432/LI024HO-270P432	
Product Code			Y6120/Y6121	Y6122/Y6123	
Power Supply	Rated Voltage	V~	208/230	208/230	
	Rated Frequency	Hz	60	60	
	Phases		1	1	
Power Supply Mode			Outdoor	Outdoor	
Cooling Capacity(Min~Max)		Btu/h	17999(4606~22178)	24000(6800~29300)	
Heating Capacity(Min~Max)		Btu/h	19000(3412~24907)	25000(7500~34000)	
Cooling Power Input(Min~Max)		W	1500(180~2450)	2000(450~3050)	
Heating Power Input(Min~Max)		W	1580(232~2500)	2090(450~3300)	
Cooling Power Current		A	7.36	9.10	
Heating Power Current		A	7.75	11.36	
Rated Input		W	2500	3200	
Rated Current		A	11.1	16.0	
Air Flow Volume(SH/H/MH/M/ML/L/SL)		CFM	589/512/465/371/330/283/-	706/647/589/530/471/412/353	
Dehumidifying Volume		Pint/h	3.8	5.3	
EER		(Btu/h)/W	12	12	
COP		(Btu/h)/W	12	12	
SEER			21	21	
SCOP			8.5	10	
Application Area		yd ²	19.24-34	26.76-41.81	
Indoor Unit	Model of indoor unit		LI018HI-270P432	LI024HI-270P432	
	Indoor Unit Product Code		Y6120	Y6122	
	Fan Type		Cross-flow	Cross-flow	
	Diameter Length(DXL)		inch	Φ4X30 1/8	Φ4 1/6X35
	Fan Motor Cooling Speed (SH/H/MH/M/ML/L/SL)		r/min	1250/1150/1050/950/850/750/650	1400/1300/1200/1100/1000/900/800
	Fan Motor Heating Speed (SH/H/MH/M/ML/L/SL)		r/min	1400/1200/1100/1000/900/800/700	1350/1350/1250/1150/1050/900/800
	Output of Fan Motor		W	25	30
	Fan Motor RLA		A	0.1	/
	Fan Motor Capacitor		μF	/	/
	Evaporator Form			Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Pipe Diameter		inch	Φ2/7	Φ2/7
	Row-fin Gap		inch	2-1/17	2-1/17
	Coil Length (LXDXW)		inch	30 1/9X1X13 1/2	35 3/5X1X15
	Swing Motor Model			MP28VC/MP35DA/MP24AA	MP35CJ/MP24HB/MP24HC
	Output of Swing Motor		W	2/2.5/1.5	2.5/1.5/1.5
	Fuse		A	/	/
	Sound Pressure Level (SH/H/MH/M/ML/L/SL)		dB (A)	48/46/43/41/38/35/32	52/49/47/45/43/41/38
	Sound Power Level (SH/H/MH/M/ML/L/SL)		dB (A)	58/56/53/51/48/45/42	62/59/57/55/53/51/48
	Dimension (WXHXD)		inch	40X12 5/9X9	46 3/8X12 5/6X10 2/5
	Dimension of Carton Box (LXWXH)		inch	43X15 1/2X12 4/5	49X16 1/6X13 3/4
Dimension of Package (LXWXH)		inch	43 1/5X15 5/8X13 2/5	49 1/2X16 2/7X14 1/3	
Net Weight		lb	33.1	39.7	
Gross Weight		lb	44.1	52.9	

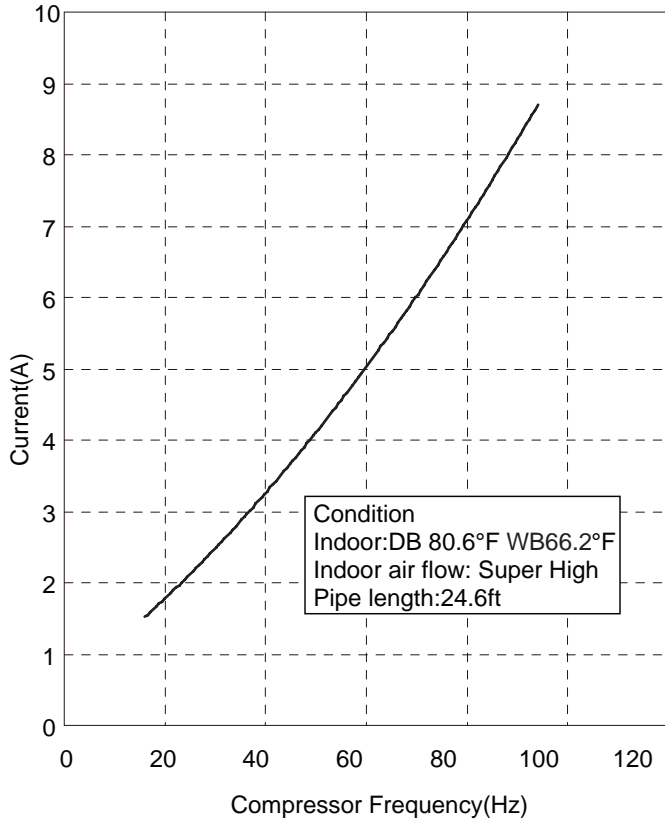
Outdoor Unit	Model of Outdoor Unit		LI018HO-270P432	LI024HO-270P432
	Outdoor Unit Product Code		Y6121	Y6123
	Compressor Manufacturer/ Trademark		MITSUBISHI ELECTRIC (GUANGZHOU)COMP	ZHUHAI LANDA COMPRESSOR CO.,LTD
	Compressor Model		SNB130FGYMC-L1	QXAS-D23zX090
	Compressor Oil		FV50S	FV50S
	Compressor Type		Rotary	Rotary
	Compressor RLA	A	8.4	12.0
	Compressor Power Input	W	1245	2450
	Overload Protector		1NT11L-6578	1NT11L-6233
	Throttling Method		Electron expansion valve	Electron expansion valve
	Operation temp	°F	60.8~86	60.8~86
	Ambient temp (cooling)	°F	50~118.4	50~118.4
	Ambient temp (heating)	°F	5~75.2	5~75.2
	Condenser Form		Aluminum Fin-copper Tube	Aluminum Fin-copper Tube
	Pipe Diameter	inch	Φ3/8	Φ1/3
	Rows-fin Gap	inch	2-1/18	3-1/18
	Coil Length (LXD _X W)	inch	32X1 2/3X26	37 1/2X2 1/4X30
	Fan Motor Speed	rpm	700	780/390
	Output of Fan Motor	W	60	90
	Fan Motor RLA	A	0.28	/
	Fan Motor Capacitor	μF	/	/
	Air Flow Volume of Outdoor Unit	CFM	1883	2354
	Fan Type		Axial-flow	Axial-flow
	Fan Diameter	inch	Φ20 1/2	Φ21 3/4
	Defrosting Method		Automatic Defrosting	Automatic Defrosting
	Climate Type		T1	T1
	Isolation		I	I
	Moisture Protection		IP24	IP24
	Permissible Excessive Operating Pressure for the Discharge Side	PSIG	550	550
	Permissible Excessive Operating Pressure for the Suction Side	PSIG	240	240
	Sound Pressure Level (H/M/L)	dB (A)	56/-/-	56/-/-
	Sound Power Level (H/M/L)	dB (A)	66/-/-	66/-/-
Dimension (WXHXD)	inch	38X27 5/9X15 3/5	38 3/8X31 1/9X16 4/5	
Dimension of Carton Box (LXWXH)	inch	40 2/5X18X29	42 1/2X19X33	
Dimension of Package (LXWXH)	inch	40 1/2X18 1/32X29 1/2	42 2/3X19 1/5X33 2/3	
Net Weight	lb	110.3	154.3	
Gross Weight	lb	121.3	165.3	
Refrigerant		R410A	R410A	
Refrigerant Charge	oz	56.5	88.2	
Connection Pipe	Length	ft	24.6	24.6
	Gas Additional Charge	oz/ft	0.5	0.5
	Outer Diameter Liquid Pipe	inch	1/4	1/4
	Outer Diameter Gas Pipe	inch	5/8	5/8
	Max Distance Height	ft	32.8	32.8
	Max Distance Length	ft	82.0	82.0
Note:The connection pipe applies metric diameter.				

The above data is subject to change without notice; please refer to the nameplate of the unit.

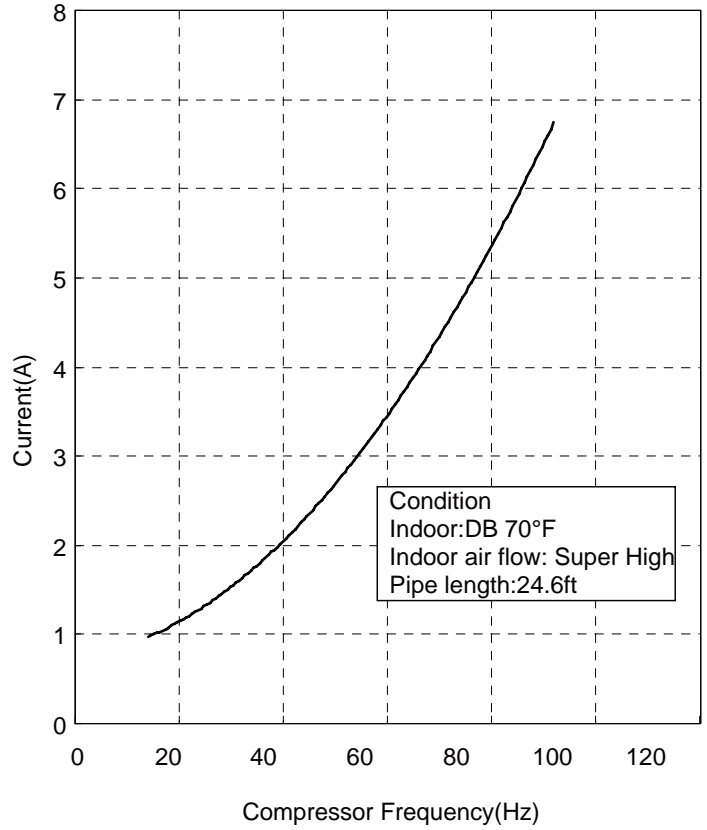
2.2 Operation Characteristic Curve

LI009HI-270P432/LI009HO-270P432 LI012HI-270P432/LI012HO-270P432

Cooling

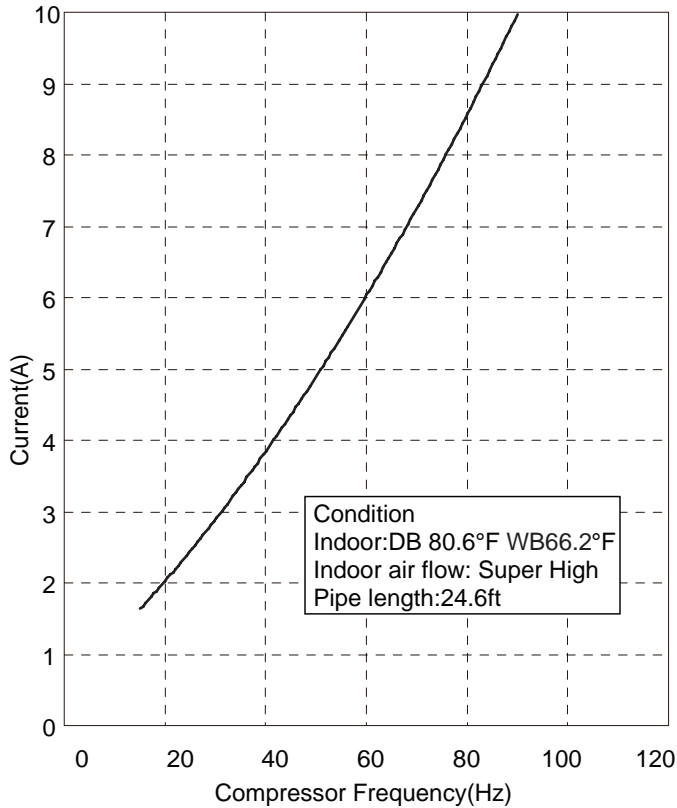


Heating

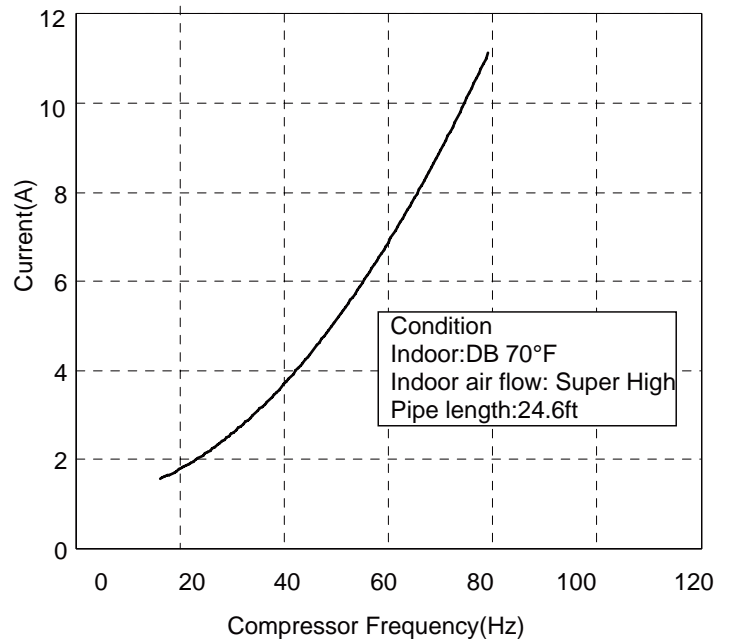


LI018HI-270P432/LI018HO-270P432

Cooling

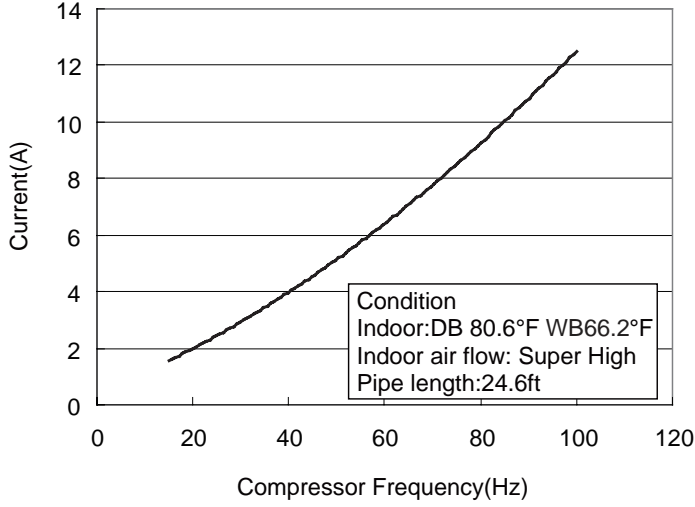


Heating

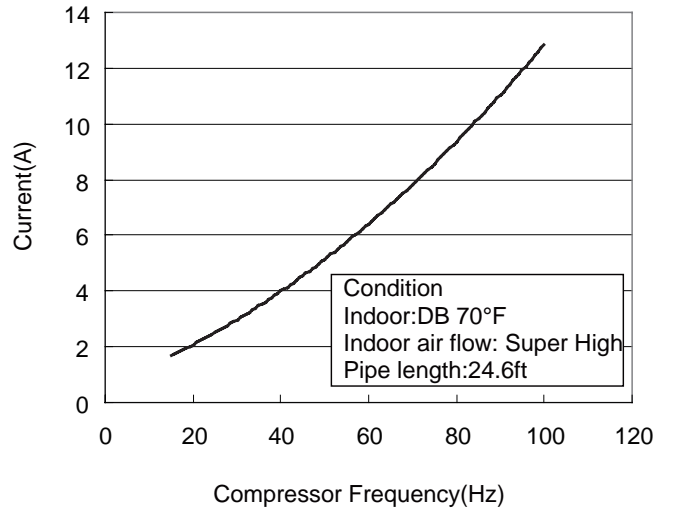


LI024HI-270P432/LI024HO-270P432

Cooling



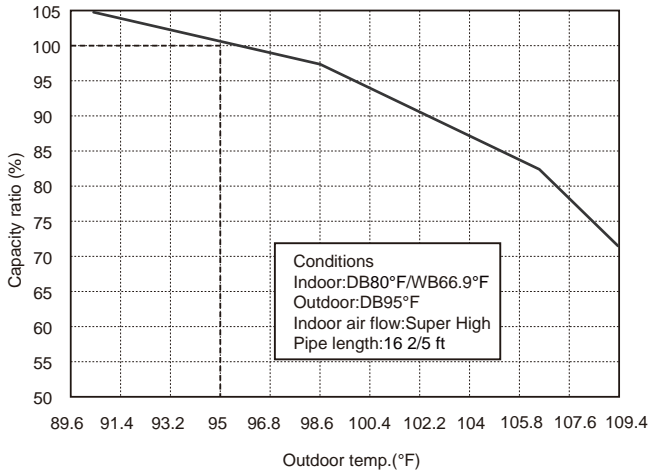
Heating



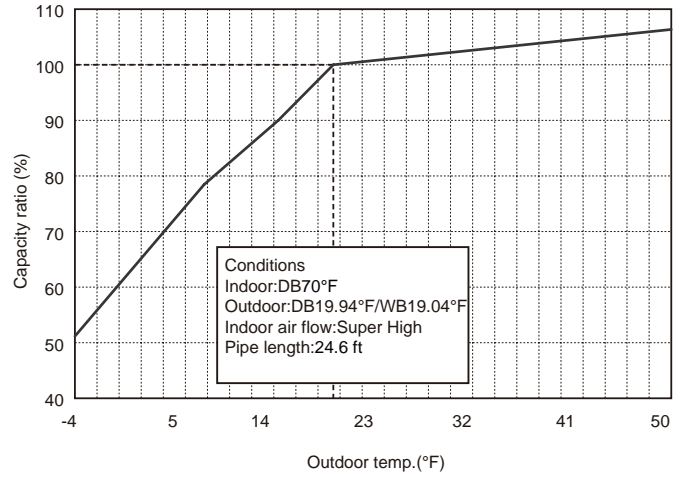
2.3 Capacity Variation Ratio According to Temperature

LI009HI-270P432/LI009HO-270P432 LI012HI-270P432/LI012HO-270P432

Cooling

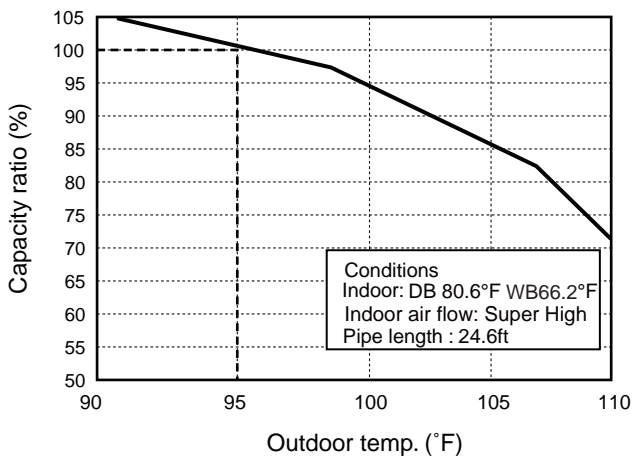


Heating

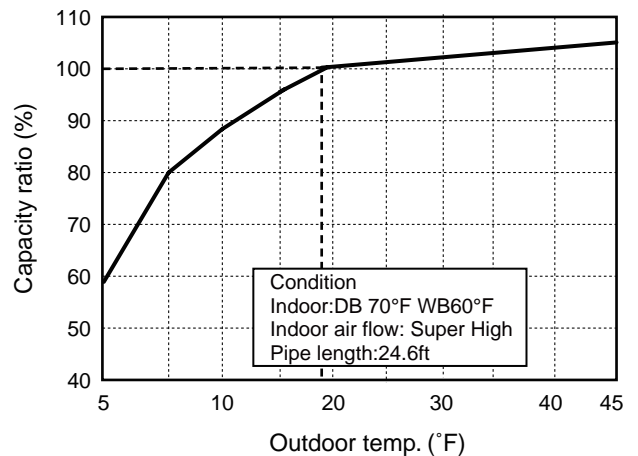


LI018HI-270P432/LI018HO-270P432 LI024HI-270P432/LI024HO-270P432

Cooling

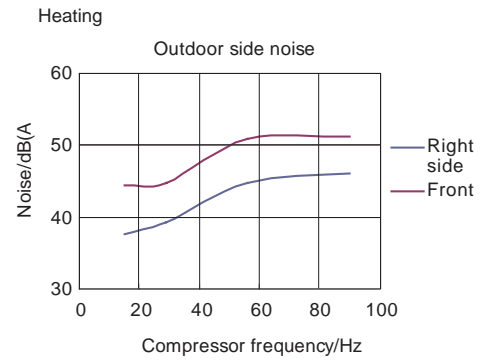
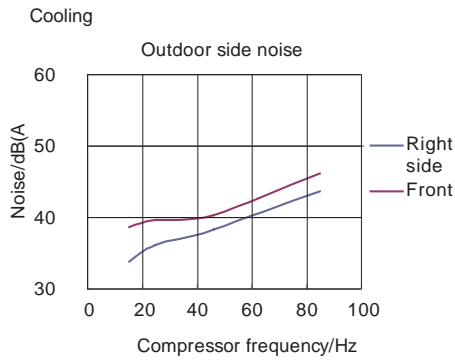
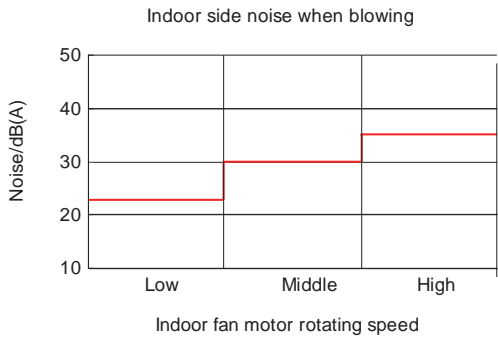


Heating

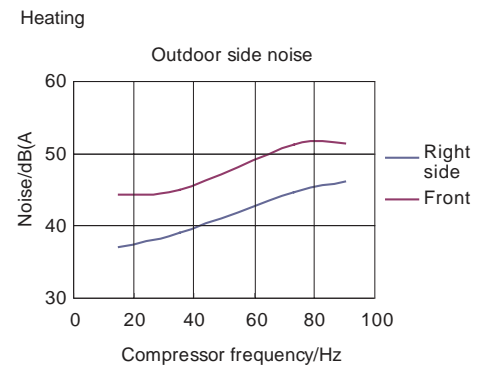
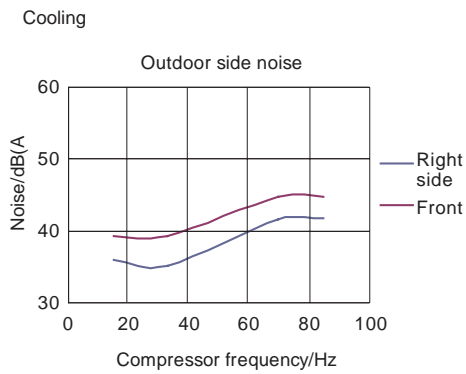
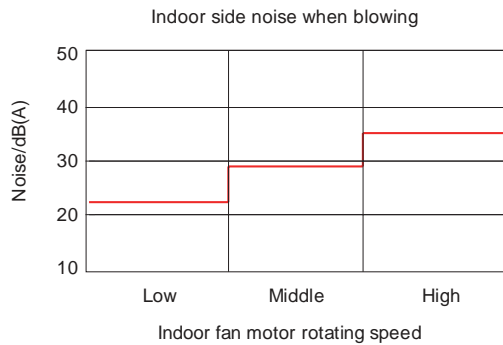


2.4 Noise Curve

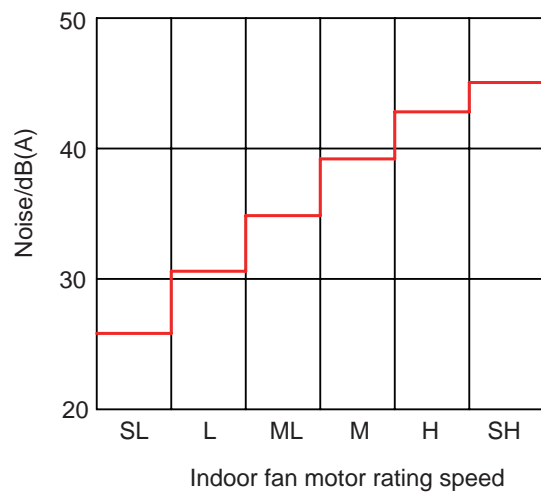
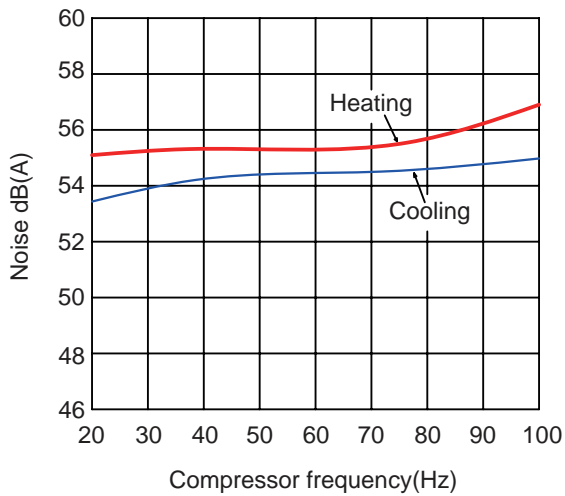
LI009HI-270P432/LI009HO-270P432



LI012HI-270P432/LI012HO-270P432



LI018HI-270P432/LI018HO-270P432 LI024HI-270P432/LI024HO-270P432



Cooling:

Rated cooling condition(°F) (DB/WB)		Model	Pressure of gas pipe connecting indoor and outdoor unit	Inlet and outlet pipe temperature of heat exchanger		Fan speed of indoor unit	Fan speed of outdoor unit	Compressor frequency (Hz)
Indoor	Outdoor			P (MPa)	T1 (°F)			
80.6/66.2	95/75	LI009HI-270P432/ LI009HO-270P432	0.9 to 1.1	53.6 to 57.2	158 to 104	Super High	High	46
80.6/66.2	95/75	LI012HI-270P432/ LI012HO-270P432	0.9 to 1.1	53.6 to 57.2	158 to 104	Super High	High	70
80.6/66.2	95/75	LI018HI-270P432/ LI018HO-270P432 LI024HI-270P432/ LI024HO-270P432	0.9 to 1.1	53.6 to 57.2	176 to 104	Super High	High	75

Heating:

Rated heating condition(°F) (DB/WB)		Model	Pressure of gas pipe connecting indoor and outdoor unit	Inlet and outlet pipe temperature of heat exchanger		Fan speed of indoor unit	Fan speed of outdoor unit	Compressor frequency (Hz)
Indoor	Outdoor			P (MPa)	T1 (°F)			
70/-	19.94/19.04	LI009HI-270P432/ LI009HO-270P432	2.2 to 2.4	158 to 95	35.6 to 39.2	Super High	High	56
70/-	19.94/19.04	LI012HI-270P432/ LI012HO-270P432	2.2 to 2.4	158 to 95	35.6 to 39.2	Super High	High	73
70/60	17/15.8	LI018HI-270P432/ LI018HO-270P432 LI024HI-270P432/ LI024HO-270P432	2.5 to 2.7	158 to 104	33.8 to 41.0	Super High	High	75

Instruction:

T1: Inlet and outlet pipe temperature of evaporator

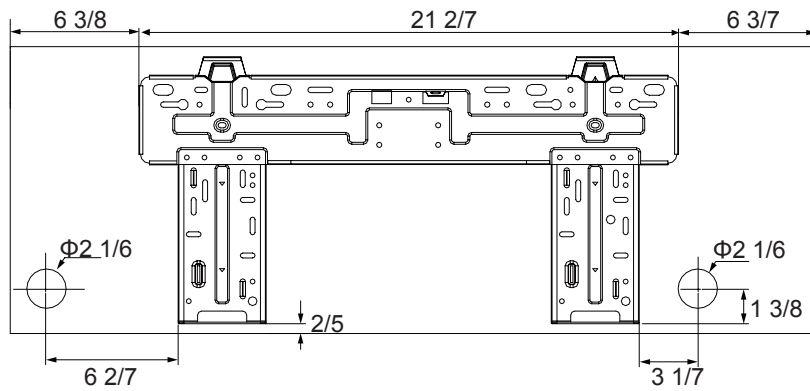
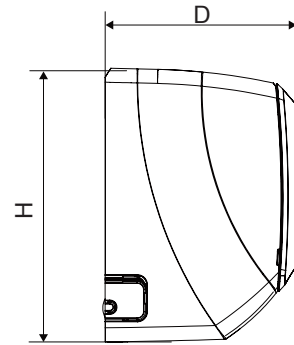
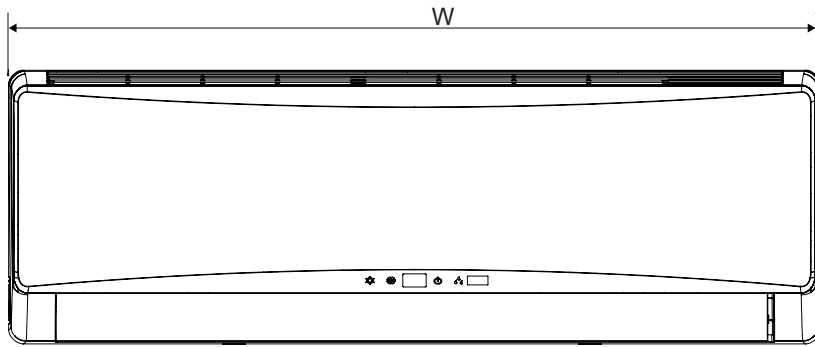
T2: Inlet and outlet pipe temperature of condenser

P: Pressure at the side of big valve

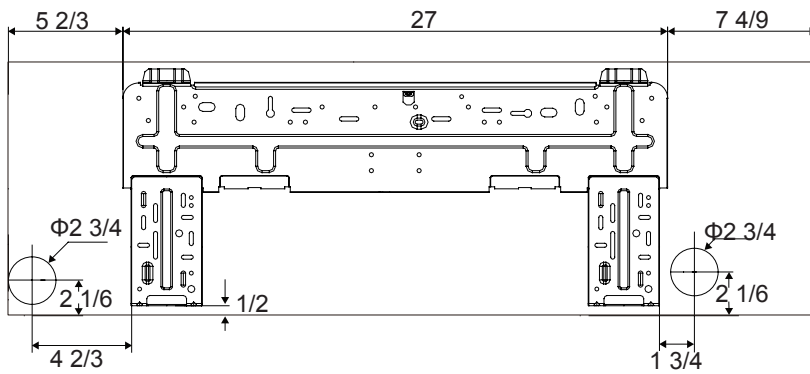
Connection pipe length: 24.6ft.

3. Outline Dimension Diagram

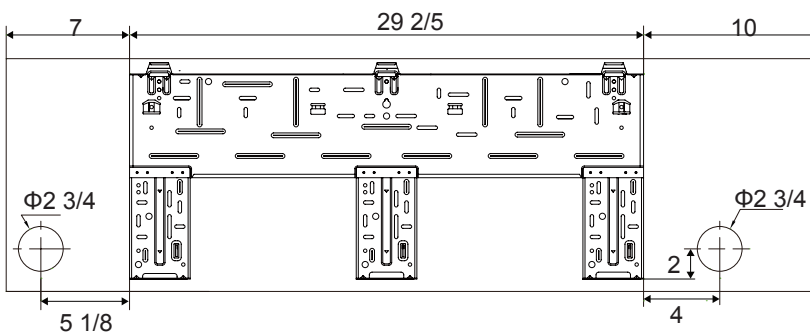
3.1 Indoor Unit



LI009HI-270P432
LI012HI-270P432



LI018HI-270P432



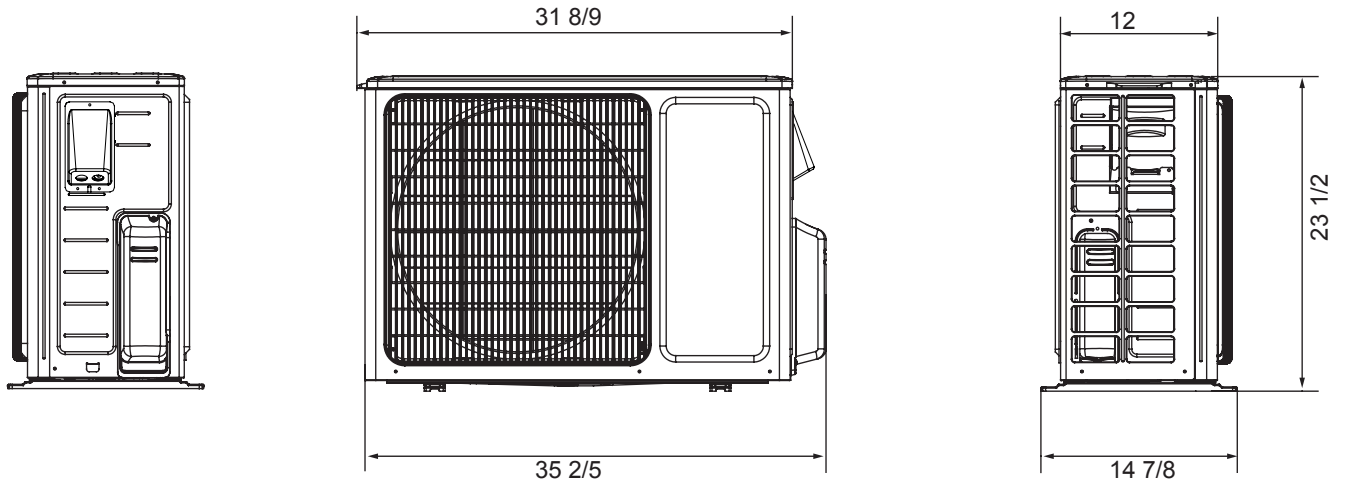
LI024HI-270P432

Model	W	H	D
LI009HI-270P432 LI012HI-270P432	34	11 1/2	8 2/9
LI018HI-270P432	40	12 5/9	9
LI024HI-270P432	46 3/8	12 5/6	10 2/5

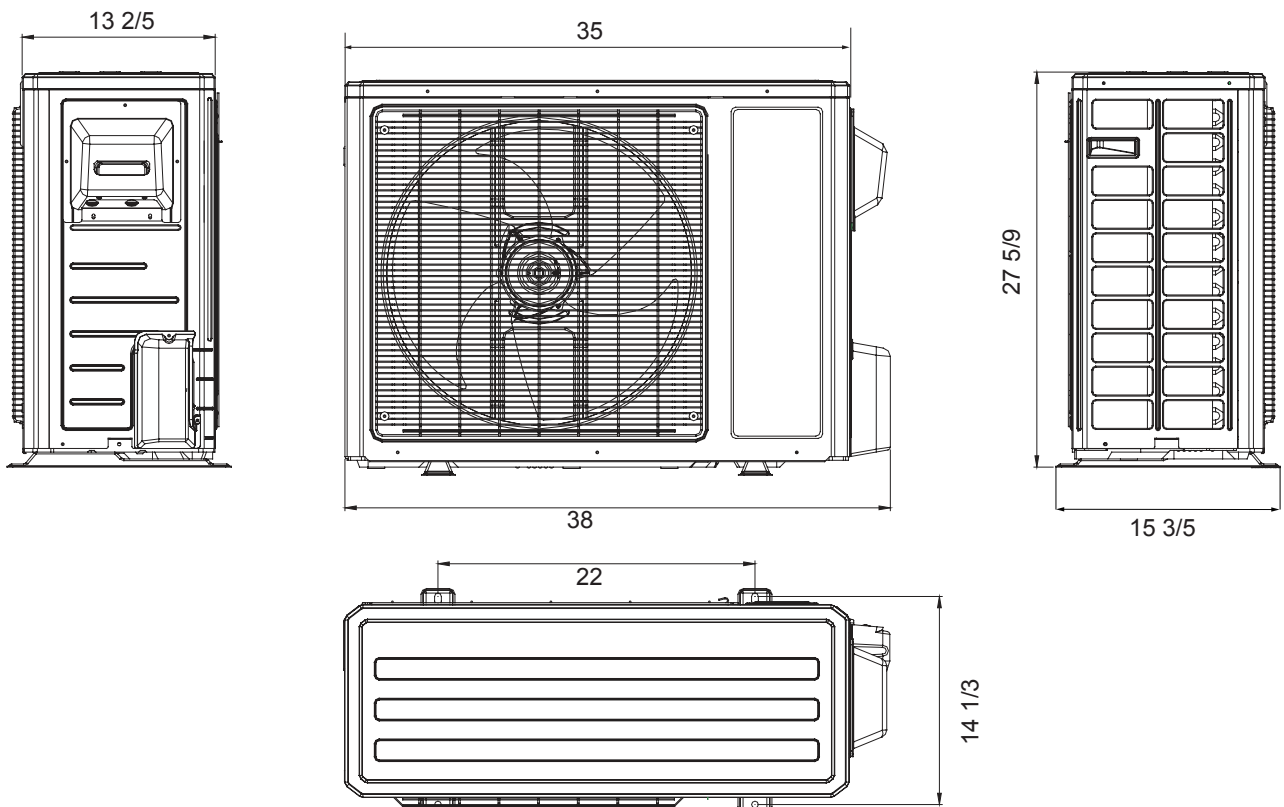
Unit:inch

3.2 Outdoor Unit

LI009HO-270P432 LI012HO-270P432

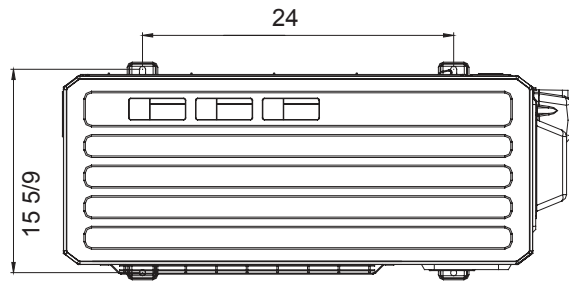
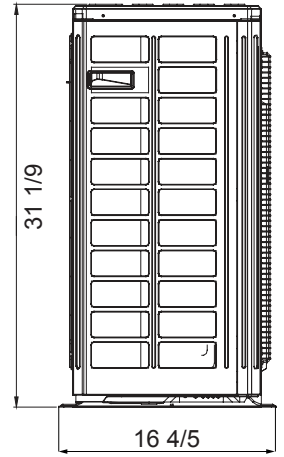
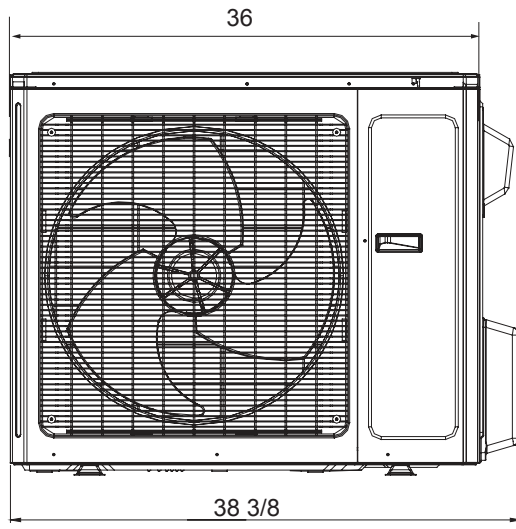
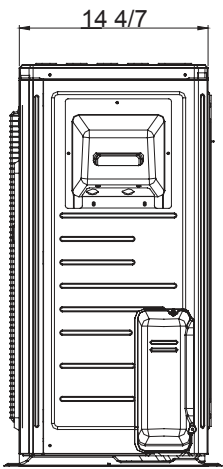


LI018HO-270P432



Unit: inch

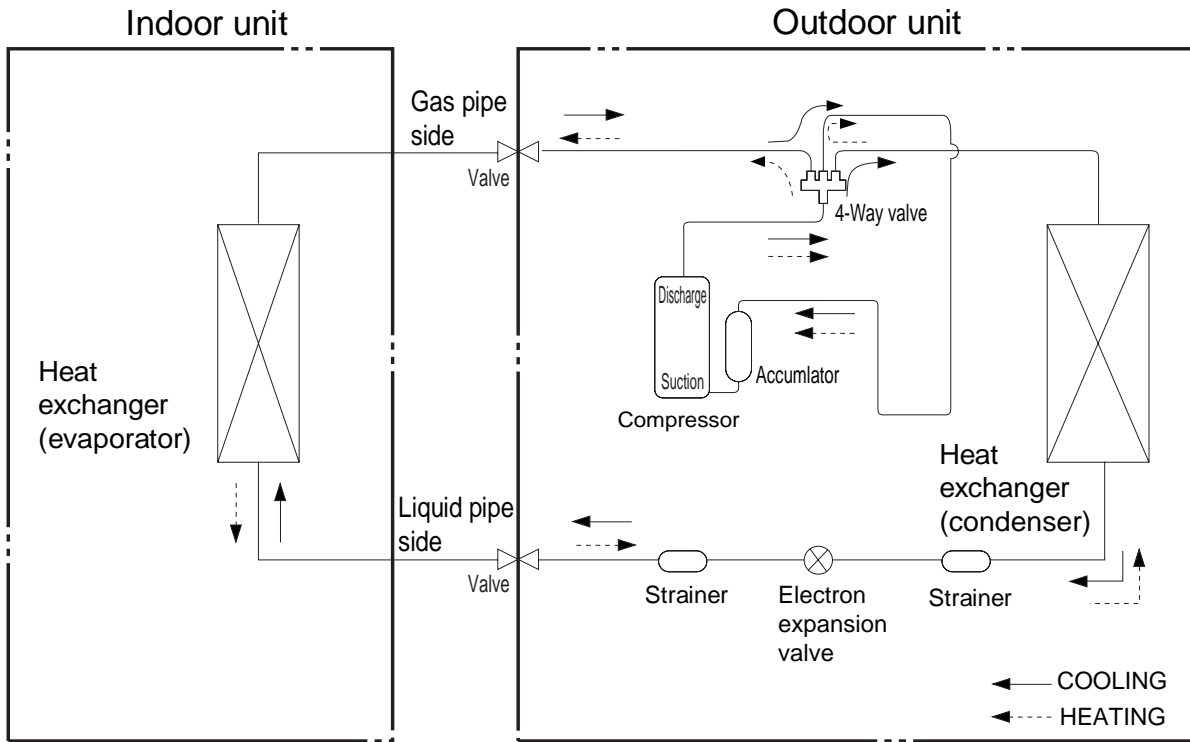
LI024HO-270P432



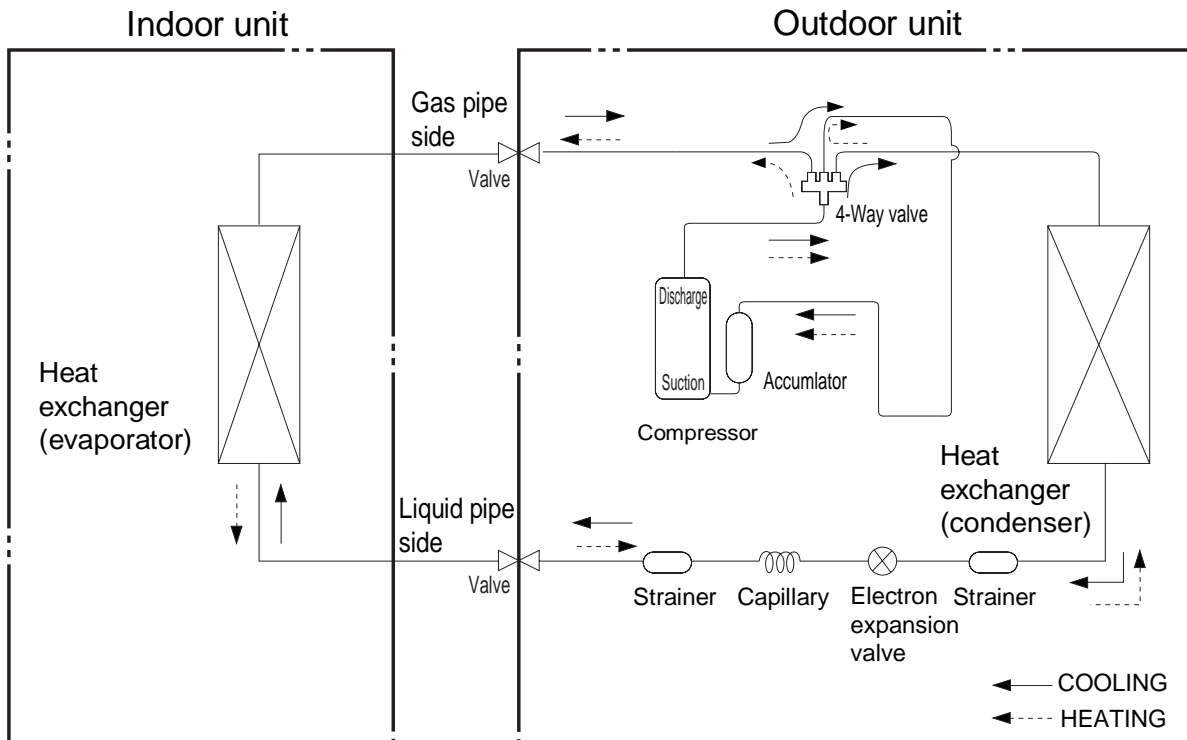
Unit:inch

4. Refrigerant System Diagram

LI018HI-270P432/LI018HO-270P432



LI009HI-270P432/LI009HO-270P432 LI012HI-270P432/LI012HO-270P432 LI024HI-270P432/LI024HO-270P432



Connection pipe specification:

Liquid pipe: 1/4" inch

Gas pipe: 1/2" inch (LI009HI-270P432/LI009HO-270P432 LI012HI-270P432/LI012HO-270P432)

Gas pipe: 5/8" inch (LI018HI-270P432/LI018HO-270P432 LI024HI-270P432/LI024HO-270P432)

5. Electrical Part

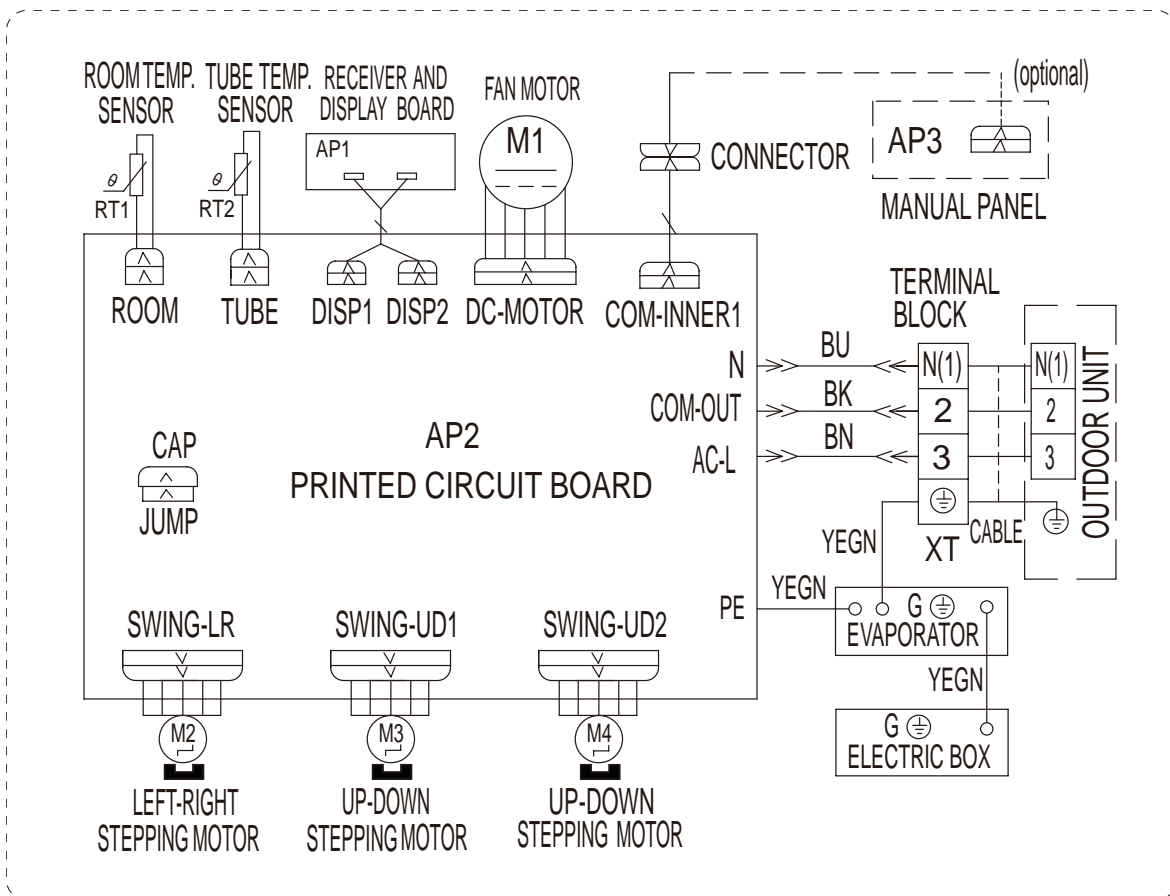
5.1 Wiring Diagram

- Instruction

Symbol	Symbol Color	Symbol	Symbol Color	Symbol	Name
WH	White	GN	Green	CAP	Jumper cap
YE	Yellow	BN	Brown	COMP	Compressor
RD	Red	BU	Blue		Grounding wire
YEGN	Yellow/Green	BK	Black	/	/
VT	Violet	OG	Orange	/	/

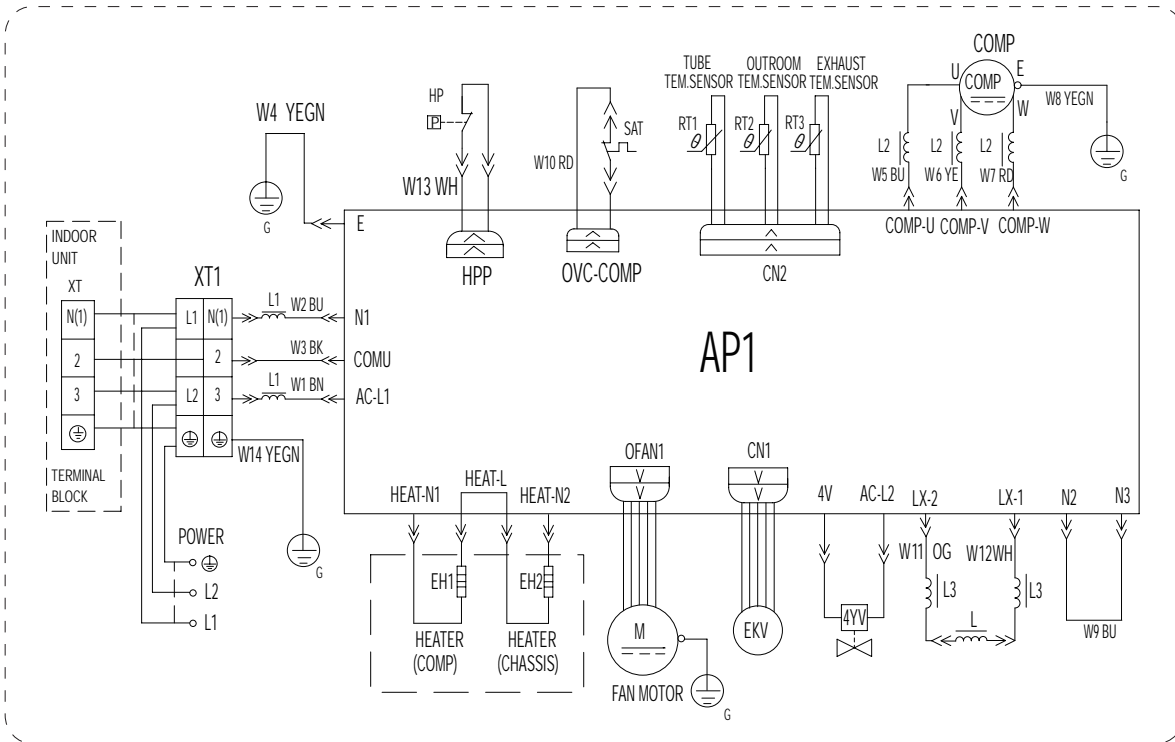
Note: Jumper cap is used to determine fan speed and the swing angle of horizontal lover for this model.

- Indoor Unit

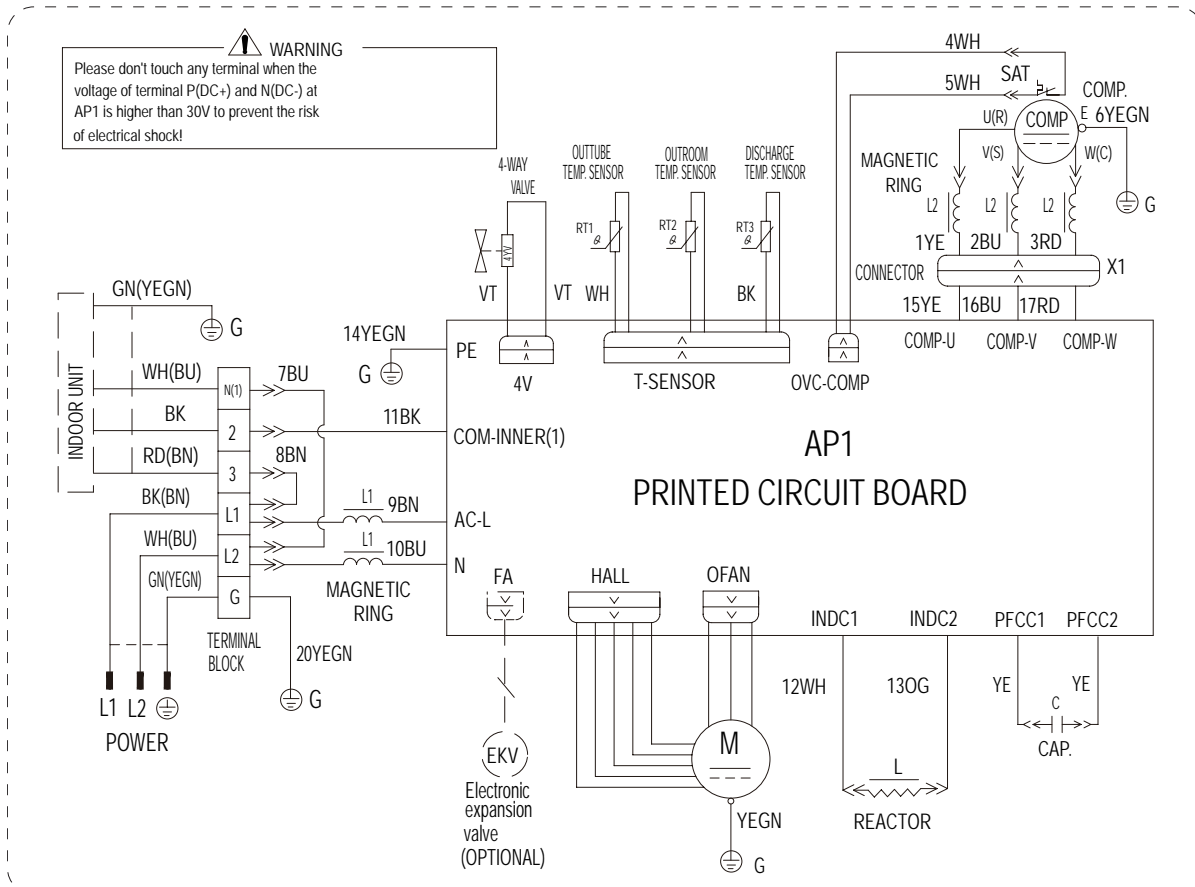


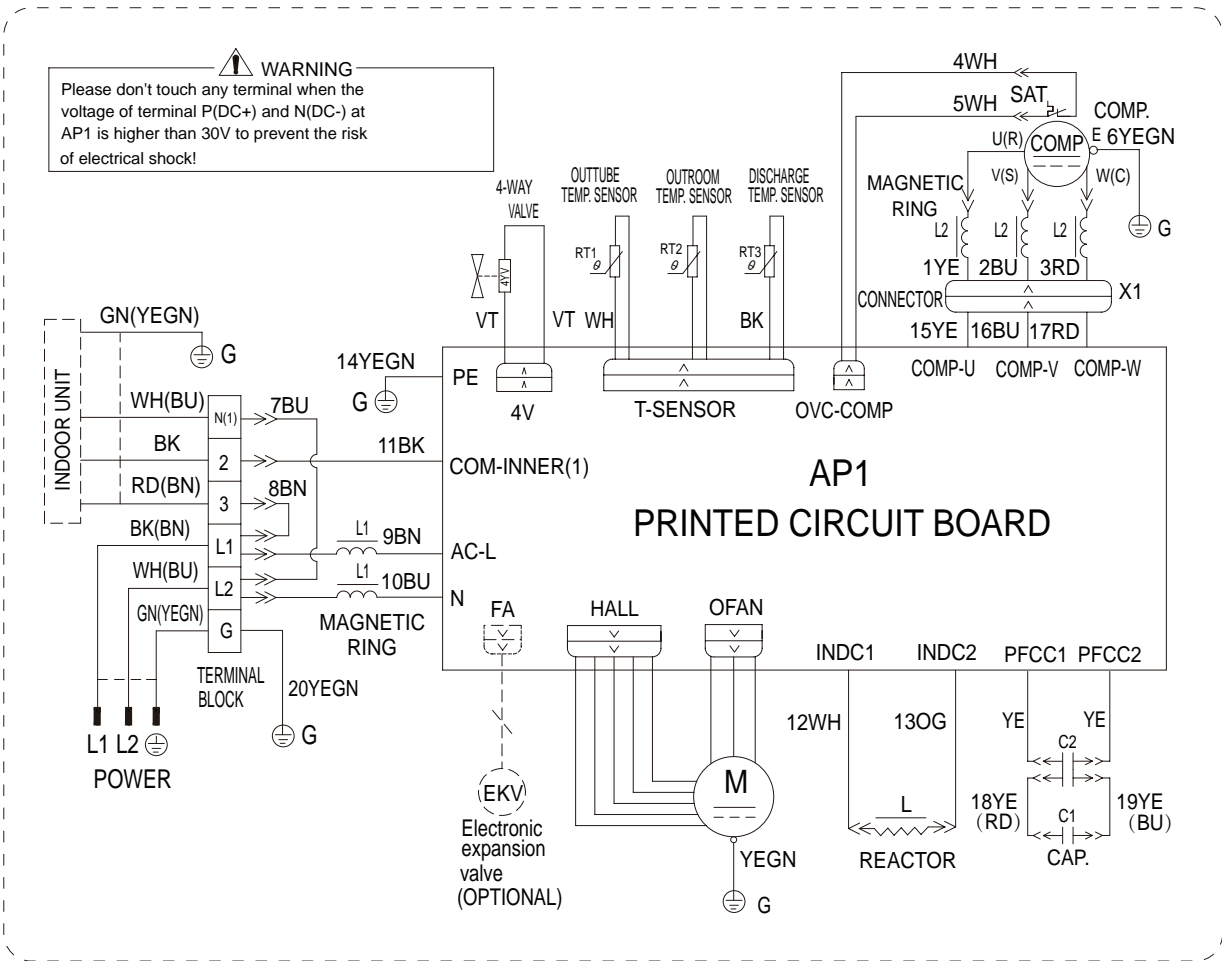
• Outdoor Unit

LI009HO-270P432 LI012HO-270P432



LI018HO-270P432





The above data is subject to change without notice. Please refer to the nameplate of the unit.