

LG

North America
Inverter Single Wall Mounted

(60Hz/R410A)

6RMI0-05A

TOTAL HVAC SOLUTION PROVIDER

ENGINEERING PRODUCT DATA BOOK

AjMadison
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800-570-3355



Inverter Single-60Hz (R410A)

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Publication history

Plb.No	Applied model	Notes	Publication in
6RMI0-04A	LSN090HYV / LSN120HYV LAN090HSV2 / LAN120HSV2 LAN180HSV2 / LAN240HSV2 LSN091HSV2 / LSN121HSV2 LSN181HSV2 / LSN240HSV2 LSN307HV2 / LSN360HV2 LAN090HVP / LAN120HVP	Add '12 New Models	April. 2012
6RMI0-05A	LSN090HEV LSN120HEV LSN180HEV LSN240HEV	Add '13 New Models	Jan, 2013



Test condition of international standard

CLASSIFICATION			KSC 9306	ISO 5151	ARI 210/240	AHAM	AS 1861.1	SSA 385
Cooling Capacity	Indoor	DB°C(°F)	27.0	27.0	26.7(80)	26.7(80)	27.0	29.0
		WB°C(°F)	19.5	19.0	19.4(67)	19.4(67)	19.0	19.0
	Outdoor	DB°C(°F)	35.0	35.0	35.0(95)	35.0(95)	35.0	46.0
		WB°C(°F)	24.0	24.0	23.9(75)	23.9(75)	24.0	24.0
Heating Capacity	Indoor	DB°C(°F)	20.0	20.0	21.1(70)	21.1(70)	21.0	21.0
		WB°C(°F)	15.0	15.0	15.6(60)	15.6(60)	15.0	15.5
	Outdoor	DB°C(°F)	7.0	7.0	8.3(47)	8.3(47)	7.0	7.0
		WB°C(°F)	6.0	6.0	6.1(43)	6.1(43)	6.0	6.0
Maximum Cooling Operating	Indoor	DB°C(°F)	32.0	32.0	26.7(80)	32.2(90)	32.0	29.0
		WB°C(°F)	23.0	23.0	19.4(67)	22.8(73)	23.0	19.0
	Outdoor	DB°C(°F)	43.0	43.0	46.1(115)	43.3(110)	43.0	54.0
		WB°C(°F)	26.0	26.0	23.9(75)	25.6(78)	26.0	24.0
Maximum Heating Operating	Indoor	DB°C(°F)	27.0	27.0	26.7(80)	26.7(80)	-	-
		WB°C(°F)	19.0	19.0	19.4(67)	22.8(73)	-	-
	Outdoor	DB°C(°F)	21.0	24.0	23.9(75)	23.9(75)	-	-
		WB°C(°F)	15.0	18.0	18.3(65)	18.3(65)	-	-
Enclosure Sweat / Condensate Disposal	Indoor	DB°C(°F)	27.0	27.0	26.7(80)	26.7(80)	27.0	27.0
		WB°C(°F)	24.0	24.0	23.9(75)	23.9(75)	24.0	24.0
	Outdoor	DB°C(°F)	27.0	27.0	26.7(80)	26.7(80)	27.0	27.0
		WB°C(°F)	24.0	24.0	23.9(75)	23.9(75)	24.0	24.0
Freeze-up/ Low Temperature	Indoor	DB°C(°F)	21.0	21.0	19.4(67)	21.1(70)	21.0	21.0
		WB°C(°F)	15.0	15.0	13.9(57)	15.6(60)	16.0	16.0
	Outdoor	DB°C(°F)	21.0	21.0	19.4(67)	21.1(70)	21.0	21.0
		WB°C(°F)	15.0	15.0	13.9(57)	15.6(60)	16.0	16.0

KS : Korea Standard

AS : Australia Standard

ISO : International Standard Organization

SSA : Saudi Arabian Standard

ARI : Airconditioning and Refrigeration Institute

AHAM : Association of Home Appliance Manufacturers

General Description

Split system type air conditioners are known by the category name of Wall Mounted Type systems. The indoor and outdoor unit can be easily installed in a small space and have exceptional cooling capacity. Designed for low-noise operation, these systems ensure a pleasant air conditioned environment.

LG offers various types of units to its customers to satisfy various applications and requirements. The following are the important categories offered by LG :

- 1) Art Cool Units : A new concept of cooling introduced by LG in the field of Air Conditioning.
- 2) Inverter Units : These units are capable of minimising the power consumption with unique inverter technology.

Some of the important features of these units are listed below :

- 1) Long Term Money Saving : By providing the features such as Gold Fin, Auto Clean etc. to maintain the same performance for years.
- 2) Best Comfort : With features such as Sleep Mode, Timer, Auto Restart etc.

The units are available with many standard and optional features which give our customers the choice to select the unit of their own desire. For more information refer to the detailed specification following this description.



1. Models Line up

1.1 Indoor Unit

Type	Model names					
	kW(kBtu/h)					
	2.64(9)	3.28(12)	5.33(18)	6.45(24)	8.79(30)	9.67(36)
Art Cool Premier 	ASNW093MMM9 (LSN090HYV)	ASNW123MMM9 (LSN120HYV)				
Art Cool Gallery 	ASNW093F2B2 (LAN090HVP)	ASNW123F2B2 (LAN120HVP)				
Art Cool Mirror 	ASNW093BRM9 (LAN090HSV2)	ASNW123BRM9 (LAN120HSV2)	ASNW183CRM9 (LAN180HSV2)	ASNW243CRM9 (LAN240HSV2)		
Wall Mounted 	ASNW093B1Y9 (LSN091HSV2)	ASNW123B1Y9 (LSN121HSV2)	ASNW183C2Y9 (LSN181HSV2)			
Wall Mounted 				ASNW243DGY9 (LSN240HSV2)	ASNW303DGY9 (LSN307HV2)	ASNW363DGY9 (LSN360HV2)
Mega 	ASNW093WSA7 (LSN090HEV)	ASNW123BSA7 (LSN120HEV)	ASNW183CSA7 (LSN180HEV)	ASNW243CSA7 (LSN240HEV)		

1.2 Outdoor Unit

Heat pump		ASUW093B1Y9(LSU091HSV2) ASUW093BRM9(LAU090HSV2) ASUW093F2B2(LAU090HVP)	ASUW123B1Y9(LSU121HSV2) ASUW123BRM9(LAU120HSV2) ASUW123F2B2(LAU120HVP)	ASUW183CSA7(LSU180HEV)
Total capacity index of connectable indoor units	kW	2.64	3.28	5.33
	kBtu/h	9	12	18
Power supply		1Ø, 208~230V, 60Hz		
Chassis		INVERTER V UL2 		

Heat pump		ASUW093MMM9(LSU090HYV)	ASUW123MMM9(LSU120HYV)	ASUW243CSA7(LSU240HEV)
Total capacity index of connectable indoor units	kW	2.64	3.51	6.45
	kBtu/h	9	12	24
Power supply		1Ø, 208~230V, 60Hz		
Chassis		INVERTER V UE 		

Heat pump		ASUW183C2Y9(LSU181HSV2) ASUW183CRM9(LAU180HSV2)	ASUW243DGY9(LSU240HSV2) ASUW243CRM9(LAU240HSV2)
Total capacity index of connectable indoor units	kW	5.33	6.45
	kBtu/h	18	24
Power supply		1Ø, 208~230V, 60Hz	
Chassis		INVERTER V UE1+ 	

Heat pump		ASUW303DGY9(LSU307HV2)	ASUW363DGY9(LSU360HV2)
Total capacity index of connectable indoor units	kW	8.79	9.67
	kBtu/h	30	36
Power supply		1Ø, 208~230V, 60Hz	
Chassis		INVERTER V UE1+ 	

Heat pump		ASUW093WSA7(LSU090HEV)	ASUW123BSA7(LSU120HEV)
Total capacity index of connectable indoor units	kW	2.64	3.28
	kBtu/h	9	12
Power supply		1Ø, 208~230V, 60Hz	
Chassis		INVERTER V UA3+ 	

2. Nomenclature

• Model Number

A S - W 0 9 3 B 1 Y 9

Serial Number

Function

A : Non Plasma + 2Way

H : Plasma + (A/chageove) + A/Clean + 4Way + Low A

U : Plasma + Allergy Filter + 4Way

Z : Basic + (A/clean) + 4Way + Low A

Look/Color

Chassis	Look	Classification
SB	1	White + Silver deco
	R	Mirror
	S	Wite Panel : 1 piece
SC	2	White + Silver deco
	R	Mirror
	S	Wite Panel : 1 piece
SW	S	Wite Panel : 1 piece
SE	R	Mirror
S8	R	Mirror
SD	G	Grill Type
SM	M	White
SF	2	Gallary

Electric Ratings

3 : 10, 208-230V, 60Hz

Capacity

Ex) '09' → 9,000 Btu/h Class

Model Type

C : Cooling Only

H : Heat Pump

Q : DC Inverter C/O

W : DC Inverter H/P

Supply method dividing and Type

- : SET

N : Indoor Unit

U : Outdoor Unit

Product type

S: Split

Refrigerant type & code

L: R22

A: R410A

3. Specifications

Wall Mount Inverter

Sales Model			LSN091HSV2/LSU091HSV2	LSN121HSV2/LSU121HSV2
Models			AS-W093B1Y9	AS-W123B1Y9
Cooling Capacity		Unit		
		kW	0.89~2.64~3.70	0.89~3.28~4.30
Heating Capacity		Btu/h.	3,070~9,000~12,620	3,070~11,200~14,660
		kW	0.89~3.17~5.00	0.89~3.90~6.00
Power Input	Cooling/Heating	W	677 / 700	896 / 1,000
		A	3.0 / 3.7	4.2 / 4.9
Running Current	Cooling/Heating	A	3.0 / 3.7	4.2 / 4.9
Starting Current	Cooling/Heating	A	3.0 / 3.7	4.2 / 4.9
Cooling COP			3.90	3.66
EER			13.3	12.5
SEER			20	20
HSPF			11.0	11.0
Power Supply		Ø / V / Hz	1/208-230/60	1/208-230/60
Power Factor		%	93	97.1
Air Flow Rate	Indoor, Max/H/M/L	m³/min(CFM)	11.0(388)/9.5(335)/7.7(272)/6.0(212)	12.0(423)/10.0(353)/7.7(272)/6.0(212)
	Outdoor, Max	m³/min(CFM)	33(1,165)	33(1,165)
Moisture Removal		l/h.(pts/hr)	1.1(2.6)	1.3(3.0)
Sound Level	Indoor, H/M/L	dB(A)±3	38 / 33 / 24	39 / 33 / 24
	Outdoor, Max	dB(A)±3	45	45
Refrigerant & Charge (at 7.5 m(24.6 ft))		g(oz)	R410A, 1,000(35.3)	R410A, 1,000(35.3)
Additional Refrigerant charge		g/m(oz/ft)	20(0.22)	20(0.22)
Compressor	Type		Rotary	Rotary
	Model		5RS102XAA21	5RS102XAA21
	Motor Type		Brushless DC Motor	Brushless DC Motor
	Oil Type		PVE(FV50S)	PVE(FV50S)
	Oil Charge	cc	320	320
	O.L.P. name		-	-
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output	W	20	20
Fan(Outdoor)	Type		Propeller	Propeller
	Motor Type		BLDC	BLDC
	Motor Output	W	43	43
Circuit Breaker*		A	15	15
Power Supply Cable		No. *mm²(AWG)	3*1.0(18)	3*1.0(18)
Power and Transmission Cable		No. *mm²(AWG)	4*1.0(18)	4*1.0(18)
Piping Connections	Liquid Side	mm(in)	6.35(1/4)	6.35(1/4)
	Gas Side	mm(in)	9.52(3/8)	9.52(3/8)
Drain Hose(O.D. / I.D.)		mm(in)	21.5 / 16.0(27/32 / 5/8)	21.5 / 16.0(27/32 / 5/8)
Dimensions	Indoor (W*H*D)	mm	885*285*210	885*285*210
		inch	34 13/16* 11 1/4* 8 1/4	34 13/16* 11 1/4* 8 1/4
	Outdoor (W*H*D)	mm	770*545*288	770*545*288
		inch	30 5/16*21 1/2*11 5/16	30 5/16*21 1/2*11 5/16
Net Weight	Indoor	kg(lbs)	10(22.1)	10(22.1)
	Outdoor	kg(lbs)	35(77.2)	35(77.2)
Gross Weight	Indoor	kg(lbs)	12(26.5)	12(26.5)
	Outdoor	kg(lbs)	37(81.6)	37(81.6)
Operation Range	Cooling(Outdoor)	°C(°F)	-10(-18)~48(14.0(0)~118)	-10(-18)~48(14.0(0)~118)
	Heating(Outdoor)	°C(°F)	-15~24(5.0~75)	-15~24(5.0~75)
Piping Length (Min/Max)		m(ft)	2(6.6) / 20(65.6)	2(6.6) / 20(65.6)
Chargeless		m(ft)	12.5(41.0)	12.5(41.0)
Max. Elevation Difference		m(ft)	10(32.8)	10(32.8)
Tool Code(Chassis)	Indoor + Outdoor		SB + UL2	SB + UL2
Functions	Temperature Control		Thermistor	Thermistor
	Allergy free filter		-	-
	Plasma Filter		O	O
	Prefilter(washable/anti-fungus)		O	O
	Auto Clean		O	O
	CHAOS Wind(Auto Wind)		O	O
	Steps, Fan/Cool/Heat		5/6/5	5/6/5
	Airflow Direction Control(up& Down)		Auto	Auto
	Airflow Direction Control(left & right)		Auto	Auto
	Remote Controller Type		Wireless Remote Controller	Wireless Remote Controller
	Setting Temperature Range	Cooling	18°C(64.4°F)~ 30°C(86°F)	18°C(64.4°F)~ 30°C(86°F)
		Heating	16°C(60.8°F)~ 30°C(86°F)	16°C(60.8°F)~ 30°C(86°F)
	Auto Operation (Micom Control)		-	-
	Auto Changeover (Micom Control)		O	O
	Self Diagnosis		O	O
	Timer		24h, On/Off	24h, On/Off
	Sleep Operation		O	O
	Soft Dry Operation		O	O
	Restart Delay(minute)		3	3
	Deice Control(Defrost)		O	O
	Hot Start		O	O
	Jet Cool		O	O
	Low Ambient Operation		O	O
	Optional Function		WATER LEVEL SENSOR WIND BAFFLE KIT	WATER LEVEL SENSOR WIND BAFFLE KIT

Note : O : Applied, X : Not applied, - : No relation

• Filters are optional in some specific areas.

• For Circuit Breaker Rating, please conform to local standards whenever necessary.

* With wind baffle accessory installed. with out wind baffle installed, the minimum temperature will be 14°F D.B.

Sales Model			LSN181HSV2/LSU181HSV2	LSN240HSV2/LSU240HSV2
Models		Unit	AS-W183C2Y9	AS-W243DGY9
Cooling Capacity		kW	0.90 ~ 5.33 ~ 8.65	0.90 ~ 6.45 ~ 8.80
		Btu/h.	3,070~18,200~29,515	3,070~22,000~30,030
Heating Capacity		kW	0.90 ~ 6.45 ~ 11.40	0.90 ~ 8.09 ~ 11.40
		Btu/h.	3,070~22,000~38,898	3,070~27,600~38,898
Power Input	Cooling/Heating	W	1,447 / 1,760	1,760/2,380
Running Current	Cooling/Heating	A	6.3 / 8.2	7.9 / 10.7
Starting Current	Cooling/Heating	A	6.3 / 8.2	7.9 / 10.7
Cooling COP			3.69	3.66
EER			12.6	12.5
SEER			20.5	18.9
HSPF			9.7	10.2
Power Supply		Ø / V / Hz	1/208-230/60	1/208-230/60
Power Factor		%	98.2	96.9
Air Flow Rate	Indoor, Max/H/M/L	m³/min(CFM)	20.8(735)/17.6(622)/14.4(509)/11.3(399)	25.0(883)/21.0(742)/17.8(629)/12.0(424)
	Outdoor,Max	m³/min(CFM)	60(2,119)	60(2,119)
Moisture Removal		l/h.(pts/hr)	2.6(5.5)	2.8(6.0)
Sound Level	Indoor,H/M/L	dB(A)±3	45 / 40 / 35	46/43/39
	Outdoor,Max	dB(A)±3	53	54
Refrigerant & Charge (at 7.5 m(24.6 ft))		g(oz)	R410A, 1,800(63.5)	R410A, 2,000(70.5)
Additional Refrigerant charge		g/m(oz/ft)	35(0.38)	35(0.38)
Compressor	Type		Twin Rotary	Twin Rotary
	Model		GJT240DAA	GJT240DAA
	Motor Type		Brushless DC Motor	Brushless DC Motor
	Oil Type		PVE(FVC68D)	PVE(FVC68D)
	Oil Charge	cc	900	900
	O.L.P. name		-	-
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output	W	76.1	76.1
Fan(Outdoor)	Type		Propeller	Propeller
	Motor Type		BLDC	BLDC
	Motor Output	W	124	124
Circuit Breaker*		A	25	25
Power Supply Cable		No.*mm²(AWG)	3*2.5(12)	3*2.5(12)
Power and Transmission Cable		No.*mm²(AWG)	4*1.0(18)	4*1.0(18)
Piping Connections	Liquid Side	mm(in)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(in)	15.88(5/8)	15.88(5/8)
Drain Hose(O.D / I.D.)		mm(In)	21.5 / 16.0(27/32 / 5/8)	21.5 / 16.0(27/32 / 5/8)
Dimensions	Indoor (W*H*D)	mm	1,030*325*245	1209*346*205
		inch	40 9/16*12 13/16*9 11/16	47 19/32*13 5/8*8 1/16
	Outdoor (W*H*D)	mm	870*800*320	870*800*320
		inch	34 1/4*31 1/2*12 19/32	34 1/4*31 1/2*12 19/32
Net Weight	Indoor	kg(lbs)	14(30.9)	15(33.1)
	Outdoor	kg(lbs)	60(132.3)	64(141.1)
Gross Weight	Indoor	kg(lbs)	18.2(40.1)	20(44.1)
	Outdoor	kg(lbs)	64(141.1)	69(152.1)
Operation Range	Cooling(Outdoor)	°C(°F)	-10(-18)*~48(14.0(0)*~118)	-10(-18)*~48(14.0(0)*~118)
	Heating(Outdoor)	°C(°F)	-15~24(5.0~75)	-15~24(5.0~75)
Piping Length (Min/Max)		m(ft)	3(9.84) / 30(98.4)	3(9.84)/30(98.4)
Chargeless		m(ft)	7.5(24.6)	7.5(24.6)
Max. Elevation Difference		m(ft)	15(49.2)	15(49.2)
Tool Code(Chassis)		Indoor + Outdoor	SC + UE1+	SD + UE1+
Functions	Temperature Control		Thermistor	Thermistor
	Allergy free filter		-	-
	Plasma Filter		O	O
	Prefilter(washable/anti-fungus)		O	O
	Auto Clean		O	O
	CHAOS Wind(Auto Wind)		O	O
	Steps, Fan/Cool/Heat		5/6/6	3/4/3
	Airflow Direction Control(up& Down)		Auto	Auto
	Airflow Direction Control(left & right)		Auto	Auto
	Remote Controller Type		Wireless Remote Controller	Wireless Remote Controller
	Setting Temperature Range	Cooling	18°C(64.4°F)~ 30°C(86°F)	18°C(64.4°F)~ 30°C(86°F)
		Heating	16°C(60.8°F)~ 30°C(86°F)	16°C(60.8°F)~ 30°C(86°F)
	Auto Operation (Micom Control)		-	-
	Auto Changeover (Micom Control)		O	O
	Self Diagnosis		O	O
	Timer		24h, On/Off	24h, On/Off
	Sleep Operation		O	O
	Soft Dry Operation		O	O
	Restart Delay(minute)		3	3
	Deice Control(Defrost)		O	O
	Hot Start		O	O
	Jet Cool		O	O
	Low Ambient Operation		O	O
	Optional Function		WATER LEVEL SENSOR WIND BAFFLE KIT	

Note :

O : Applied, X : Not applied, — : No relation

• Filters are optional in some specific areas.

• For Circuit Breaker Rating, please conform to local standards whenever necessary.

* With wind baffle accessory installed. with out wind baffle installed, the minimum temperature will be 14°F D.B.

Sales Model			LSN307HV2 / LSU307HV2	LSN360HV2 / LSU360HV2
Models			AS-W303DGY9	AS-W363DGY9
Cooling Capacity		Unit	AS-W303DGY9	AS-W363DGY9
		kW	0.90 ~ 8.79 ~ 9.96	0.90 ~ 9.67 ~ 9.96
Heating Capacity		Btu/h.	3,070 ~ 30,000 ~ 34,000	3,070 ~ 33,000 ~ 34,000
		kW	0.90 ~ 9.38 ~ 11.40	0.90 ~ 10.32 ~ 11.40
		Btu/h.	3,070 ~ 32,000 ~ 38,900	3,070 ~ 35,200 ~ 38,900
Power Input	Cooling/Heating	W	3,000 / 3,100	4,035 / 3,840
Running Current	Cooling/Heating	A	13.4/13.9	17.0/16.2
Starting Current	Cooling/Heating	A	13.4/13.9	17.0/16.2
Cooling COP			2.93	2.4
EER			10.0	8.2
SEER			18.0	16.1
HSPF			9.5	9.9
Power Supply		Ø / V / Hz	1/208-230/60	1/208-230/60
Power Factor		%	97.3	98.2
Air Flow Rate	Indoor, Max/H/M/L	m³/min(CFM)	25.0(883)/21.8(770)/17.8(629)/12.0(424)	25.0(883)/22.5(795)/17.8(629)/12.0(424)
	Outdoor,Max	m³/min(CFM)	60(2,119)	60(2,119)
Moisture Removal		l/h.(pts/hr)	4.8(9.5)	4.8(10.6)
Sound Level	Indoor,H/M/L	dB(A)±3	49/44/39	49/44/39
	Outdoor,Max	dB(A)±3	55	55
Refrigerant & Charge (at 7.5 m(24.6 ft))		g(oz)	R410A, 2,000(70.5)	R410A, 2,000(70.5)
Additional Refrigerant charge		g/m(oz/ft)	35(0.38)	35(0.38)
Compressor	Type		Twin Rotary	Twin Rotary
	Model		GJT240DAA	GJT240DAA
	Motor Type		Brushless DC Motor	Brushless DC Motor
	Oil Type		PVE(FVC68D)	PVE(FVC68D)
	Oil Charge	cc	900	900
	O.L.P. name		-	-
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output	W	76.1	76.1
Fan(Outdoor)	Type		Propeller, Fan	Propeller, Fan
	Motor Type		BLDC	BLDC
	Motor Output	W	124	124
Circuit Breaker*		A	25	25
Power Supply Cable		No.*mm²(AWG)	3*2.5(12)	3*2.5(12)
Power and Transmission Cable		No.*mm²(AWG)	4*1.0(18)	4*1.0(18)
Piping Connections	Liquid Side	mm(in)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(in)	15.88(5/8)	15.88(5/8)
Drain Hose(O.D / I.D.)		mm(in)	21.5 / 16.0(27/32 / 5/8)	21.5 / 16.0(27/32 / 5/8)
Dimensions	Indoor (W*H*D)	mm	1209*346*205	1209*346*205
		inch	47 19/32*13 5/8*8 1/16	47 19/32*13 5/8*8 1/16
	Outdoor (W*H*D)	mm	870*800*320	870*800*320
		inch	34 1/4*31 1/2*12 19/32	34 1/4*31 1/2*12 19/32
Net Weight	Indoor	kg(lbs)	15(33.1)	15(33.1)
	Outdoor	kg(lbs)	64(141.1)	64(141.1)
Gross Weight	Indoor	kg(lbs)	20(44.1)	20(44.1)
	Outdoor	kg(lbs)	69(152.1)	69(152.1)
Operation Range	Cooling(Outdoor)	°C(°F)	-10(-18)*~48(14.0(0)*~118)	-10(-18)*~48(14.0(0)*~118)
	Heating(Outdoor)	°C(°F)	-15~24(5.0~75)	-15~24(5.0~75)
Piping Length (Min/Max)		m(ft)	3(9.84)/30(98.4)	3(9.84)/30(98.4)
Chargeless		m(ft)	7.5(24.6)	7.5(24.6)
Max. Elevation Difference		m(ft)	15(49.2)	15(49.2)
Tool Code(Chassis)			SD + UE1+	SD + UE1+
Functions	Indoor + Outdoor		SD + UE1+	SD + UE1+
	Temperature Control		Thermistor	Thermistor
	Allergy free filter		-	-
	Plasma Filter		O	O
	Prefilter(washable/anti-fungus)		O	O
	Auto Clean		O	O
	CHAOS Wind(Auto Wind)		O	O
	Steps, Fan/Cool/Heat		3/4/3	3/4/3
	Airflow Direction Control(up & Down)		Auto	Auto
	Airflow Direction Control(left & right)		Auto	Auto
	Remote Controller Type		Wireless Remote Controller	Wireless Remote Controller
	Setting Temperature Range	Cooling	18°C(64.4°F)~ 30°C(86°F)	18°C(64.4°F)~ 30°C(86°F)
		Heating	16°C(60.8°F)~ 30°C(86°F)	16°C(60.8°F)~ 30°C(86°F)
	Auto Operation (Micom Control)		-	-
	Auto Changeover (Micom Control)		O	O
	Self Diagnosis		O	O
	Timer		24h, On/Off	24h, On/Off
	Sleep Operation		O	O
	Soft Dry Operation		O	O
	Restart Delay(minute)		3	3
	Deice Control(Defrost)		O	O
	Hot Start		O	O
	Jet Cool		O	O
	Low Ambient Operation		O	O
	Optional Function		WATER LEVEL SENSOR WIND BAFFLE KIT	WATER LEVEL SENSOR WIND BAFFLE KIT

Note :

O : Applied, X : Not applied, — : No relation

• Filters are optional in some specific areas.

• For Circuit Breaker Rating, please conform to local standards whenever necessary.

* With wind baffle accessory installed. with out wind baffle installed, the minimum temperature will be 14°F D.B.

Art Cool Mirror Inverter

Sales Model			LAN090HSV2/LAU090HSV2	LAN120HSV2/LAU120HSV2
Models			AS-W093BRM9	AS-W123BRM9
Cooling Capacity		Unit	kW	kW
			0.89~2.64~3.70	0.89~3.28~4.30
Heating Capacity		Btu/h.	3,070~9,000~12,620	3,070~11,200~14,660
		kW	0.89~3.17~5.00	0.89~3.90~6.00
Power Input	Cooling/Heating	Btu/h.	3,070~10,800~17,060	3,070~13,300~20,470
		W	677 / 700	896 / 1,000
Running Current	Cooling/Heating	A	3.0 / 3.7	4.2 / 4.9
Starting Current	Cooling/Heating	A	3.0 / 3.7	4.2 / 4.9
Cooling COP			3.90	3.66
EER			13.3	12.5
SEER			20	20
HSPF			11	11
Power Supply		Ø / V / Hz	1/208-230/60	1/208-230/60
Power Factor		%	97.1	97.1
Air Flow Rate	Indoor, Max/H/M/L	m³/min(CFM)	12.0(423)/9.5(335)/7.7(272)/6.0(212)	12.0(423)/10.0(353)/7.7(272)/6.0(212)
	Outdoor, Max	m³/min(CFM)	33(1,165)	33(1,165)
Moisture Removal		l/h.(pts/hr)	1.1(2.6)	1.3(3.0)
Sound Level	Indoor, H/M/L	dB(A)±3	38 / 33 / 24	39 / 33 / 24
	Outdoor, Max	dB(A)±3	45	45
Refrigerant & Charge (at 7.5 m(24.6 ft))		g(oz)	R410A, 1,000(35.3)	R410A, 1,000(35.3)
Additional Refrigerant charge		g/m(oz/ft)	20(0.22)	20(0.22)
Compressor	Type		Rotary	Rotary
	Model		5RS102XAA21	5RS102XAA21
	Motor Type		Brushless DC Motor	Brushless DC Motor
	Oil Type		PVE(FV50S)	PVE(FV50S)
	Oil Charge	cc	320	320
	O.L.P. name		-	-
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output	W	20	20
Fan(Outdoor)	Type		Propeller	Propeller
	Motor Type		BLDC	BLDC
	Motor Output	W	43	43
Circuit Breaker*		A	15	15
Power Supply Cable		No.*mm²(AWG)	3*1.0(18)	3*1.0(18)
Power and Transmission Cable		No.*mm²(AWG)	4*1.0(18)	4*1.0(18)
Piping Connections	Liquid Side	mm(in)	6.35(1/4)	6.35(1/4)
	Gas Side	mm(in)	9.52(3/8)	9.52(3/8)
Drain Hose(O.D / I.D.)		mm(in)	21.5 / 16.0(27/32 / 5/8)	21.5 / 16.0(27/32 / 5/8)
Dimensions	Indoor (W*H*D)	mm	885*285*205	885*285*205
		inch	34 13/16" 11 1/4" 8 1/16	34 13/16" 11 1/4" 8 1/16
	Outdoor (W*H*D)	mm	770*545*288	770*545*288
		inch	30 5/16" 21 1/2" 11 5/16	30 5/16" 21 1/2" 11 5/16
Net Weight	Indoor	kg(lbs)	11(24.3)	11(24.3)
	Outdoor	kg(lbs)	35(77.2)	35(77.2)
Gross Weight	Indoor	kg(lbs)	13.5(29.7)	13.5(29.7)
	Outdoor	kg(lbs)	37(81.6)	37(81.6)
Operation Range	Cooling(Outdoor)	°C(°F)	-10~48(14~118)	-10~48(14~118)
	Heating(Outdoor)	°C(°F)	-15~24(5.0~75)	-15~24(5.0~75)
Piping Length (Min/Max)		m(ft)	2(6.6) / 20(65.6)	2(6.6)/20(65.6)
Chargeless		m(ft)	12.5(41.0)	12.5(41.0)
Max. Elevation Difference		m(ft)	10(32.8)	10(32.8)
Tool Code(Chassis)	Indoor + Outdoor		SB + UL2	SB + UL2
Functions	Temperature Control		Thermistor	Thermistor
	Allergy free filter		-	-
	Plasma Filter		O	O
	Prefilter(washable/anti-fungus)		O	O
	Auto Clean		O	O
	CHAOS Wind(Auto Wind)		O	O
	Steps, Fan/Cool/Heat		5/6/5	5/6/5
	Airflow Direction Control(up& Down)		Auto	Auto
	Airflow Direction Control(left & right)		Auto	Auto
	Remote Controller Type		Wireless Remote Controller	Wireless Remote Controller
	Setting Temperature	Cooling	18°C(64.4°F)~ 30°C(86°F)	18°C(64.4°F)~ 30°C(86°F)
	Range	Heating	16°C(60.8°F)~ 30°C(86°F)	16°C(60.8°F)~ 30°C(86°F)
	Auto Operation (Micom Control)		-	-
	Auto Changeover (Micom Control)		O	O
	Self Diagnosis		O	O
	Timer		24h, On/Off	24h, On/Off
	Sleep Operation		O	O
	Soft Dry Operation		O	O
	Restart Delay(minute)		3	3
	Deice Control(Defrost)		O	O
	Hot Start		O	O
	Jet Cool		O	O
	Low Ambient Operation		O	O
	Optional Function		WATER LEVEL SENSOR	WATER LEVEL SENSOR

Note:

O : Applied, X : Not applied, - : No relation

• Filters are optional in some specific areas.

• For Circuit Breaker Rating, please conform to local standards whenever necessary.

Sales Model			LAN180HSV2/LAU180HSV2	LAN240HSV2/LAU240HSV2
Models		Unit	AS-W183CRM9	AS-W243CRM9
Cooling Capacity		kW	0.90 ~ 5.33 ~ 8.65	0.90 ~ 6.45 ~ 8.80
		Btu/h.	3,070~18,200~29,515	3,070~22,000~30,030
Heating Capacity		kW	0.90 ~ 6.45 ~ 11.40	0.90 ~ 8.09 ~ 11.40
		Btu/h.	3,070~22,000~38,898	3,070~27,600~38,898
Power Input	Cooling/Heating	W	1,447 / 1,760	2,040 / 1,670
Running Current	Cooling/Heating	A	6.3 / 8.2	7.9 / 10.7
Starting Current	Cooling/Heating	A	6.3 / 8.2	7.9 / 10.7
Cooling COP			3.69	3.16
EER			12.6	10.8
SEER			20.5	20.0
HSPF			9.7	10.0
Power Supply		Ø / V / Hz	1/208-230/60	1/208-230/60
Power Factor		%	98.2	98.2
Air Flow Rate	Indoor, Max/H/M/L	m³/min(CFM)	22.0(777)/17.6(622)/14.4(509)/11.3(399)	22.0(777)/17.9(632)/14.9(526)/11.3(399)
	Outdoor,Max	m³/min(CFM)	60(2,119)	60(2,119)
Moisture Removal		l/h.(pts/hr)	2.6(5.5)	2.6(5.5)
Sound Level	Indoor,H/M/L	dB(A)±3	45 / 40 / 35	45 / 40 / 35
	Outdoor,Max	dB(A)±3	53	53
Refrigerant & Charge (at 7.5 m(24.6 ft))		g(oz)	R410A, 1,800(63.5)	R410A, 1,800(63.5)
Additional Refrigerant charge		g/m(oz/ft)	35(0.38)	35(0.38)
Compressor	Type		Twin Rotary	Twin Rotary
	Model		GJT240DAA	GJT240DAA
	Motor Type		Brushless DC Motor	Brushless DC Motor
	Oil Type		PVE(FVC68D)	PVE(FVC68D)
	Oil Charge	cc	900	900
	O.L.P. name		-	-
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output	W	76.1	76.1
Fan(Outdoor)	Type		Propeller	Propeller
	Motor Type		BLDC	BLDC
	Motor Output	W	124	124
Circuit Breaker*		A	25	25
Power Supply Cable		No.*mm²(AWG)	3*2.5(12)	3*2.5(12)
Power and Transmission Cable		No.*mm²(AWG)	4*1.0(18)	4*1.0(18)
Piping Connections	Liquid Side	mm(in)	9.52(3/8)	9.52(3/8)
	Gas Side	mm(in)	15.88(5/8)	15.88(5/8)
Drain Hose(O.D / I.D.)		mm(in)	21.5 / 16.0(27/32 / 5/8)	21.5 / 16.0(27/32 / 5/8)
Dimensions	Indoor (W*H*D)	mm	1,030*325*245	1,030*325*245
		inch	40 9/16*12 13/16*9 11/16	40 9/16*12 13/16*9 11/16
	Outdoor (W*H*D)	mm	870*800*320	870*800*320
		inch	34 1/4*31 1/2*12 19/32	34 1/4*31 1/2*12 19/32
Net Weight	Indoor	kg(lbs)	17(37.5)	17(37.5)
	Outdoor	kg(lbs)	60(132.3)	60(132.3)
Gross Weight	Indoor	kg(lbs)	19(41.9)	19(41.9)
	Outdoor	kg(lbs)	64(141.1)	64(141.1)
Operation Range	Cooling(Outdoor)	°C(°F)	-10~48(14~118)	-10~48(14~118)
	Heating(Outdoor)	°C(°F)	-15~24(5.0~75)	-15~24(5.0~75)
Piping Length (Min/Max)		m(ft)	3(9.84)/30(98.4)	3(9.84)/30(98.4)
Chargeless		m(ft)	7.5(24.6)	7.5(24.6)
Max. Elevation Difference		m(ft)	15(49.2)	15(49.2)
Tool Code(Chassis)			SC + UE1+	SC + UE1+
Functions	Indoor + Outdoor		SC + UE1+	SC + UE1+
	Temperature Control		Thermistor	Thermistor
	Allergy free filter		-	-
	Plasma Filter		O	O
	Prefilter(washable/anti-fungus)		O	O
	Auto Clean		O	O
	CHAOS Wind(Auto Wind)		O	O
	Steps, Fan/Cool/Heat		5/6/6	5/6/6
	Airflow Direction Control(up& Down)		Auto	Auto
	Airflow Direction Control(left & right)		Auto	Auto
	Remote Controller Type		Wireless Remote Controller	Wireless Remote Controller
	Setting Temperature Range	Cooling	18°C(64.4°F)~ 30°C(86°F)	18°C(64.4°F)~ 30°C(86°F)
		Heating	16°C(60.8°F)~ 30°C(86°F)	16°C(60.8°F)~ 30°C(86°F)
	Auto Operation (Micom Control)		-	-
	Auto Changeover (Micom Control)		O	O
	Self Diagnosis		O	O
	Timer		24h, On/Off	24h, On/Off
	Sleep Operation		O	O
	Soft Dry Operation		O	O
	Restart Delay(minute)		3	3
	Deice Control(Defrost)		O	O
	Hot Start		O	O
	Jet Cool		O	O
	Low Ambient Operation		O	O
	Optional Function		WATER LEVEL SENSOR	WATER LEVEL SENSOR

Note:

O : Applied, X : Not applied, - : No relation

• Filters are optional in some specific areas.

• For Circuit Breaker Rating, please conform to local standards whenever necessary.

Art Cool Premier Inverter

Sales Model			LSN090HYV/LSU090HYV	LSN120HYV/LSU120HYV
Models			AS-W093MMM9	AS-W123MMM9
Cooling Capacity		Unit	kW	0.30~2.63~3.80
			Btu/h.	1,023~9,000~12,966
Heating Capacity		kW	0.30~3.22~6.50	0.30~3.98~6.50
		Btu/h.	1,023~11,000~20,472	1,023~13,600~22,178
Power Input	Cooling/Heating	W	550 / 740	850 / 960
Running Current	Cooling/Heating	A	2.5/3.4	3.8 / 4.3
Starting Current	Cooling/Heating	A	2.5/3.4	3.8 / 4.3
Cooling COP			4.81	4.13
EER			16.4	14.1
SEER			28.0	26.0
HSPF			12.0	11.5
Power Supply		Ø / V / Hz	1/208-230/60	1/208-230/60
Power Factor		%	98.7	97.7
Air Flow Rate	Indoor, Max/H/M/L	m³/min(CFM)	15.5(547)/14.0(494)/11.8(417)/8.0(283)	15.5(547)/14.5(512)/11.8(417)/8.0(283)
	Outdoor, Max	m³/min(CFM)	33(1,165)	33(1,165)
Moisture Removal		l/h.(pts/hr)	1.5(3.3)	1.7(3.7)
Sound Level	Indoor, H/M/L	dB(A)±3	39 / 34 / 26 / 17	39 / 34 / 26 / 17
	Outdoor, Max	dB(A)±3	51	51
Refrigerant & Charge (at 7.5 m(24.6 ft))		g(oz)	R410A, 1,250(44.1)	R410A, 1,250(44.1)
Additional Refrigerant charge		g/m(oz/ft)	20(0.22)	20(0.22)
Compressor	Type		Twin Rotary	Twin Rotary
	Model		GKT128MAA	GKT128MAA
	Motor Type		Brushless DC Motor	Brushless DC Motor
	Oil Type		FVC68D	FVC68D
	Oil Charge	cc	450	450
	O.L.P. name		-	-
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output	W	20	20
Fan(Outdoor)	Type		Propeller, Fan	Propeller, Fan
	Motor Type		BLDC	BLDC
	Motor Output	W	85	85
Circuit Breaker*		A	15	15
Power Supply Cable		No.*mm²(AWG)	3*1.0(18)	3*1.0(18)
Power and Transmission Cable		No.*mm²(AWG)	4*1.0(18)	4*1.0(18)
Piping Connections	Liquid Side	mm(in)	6.35(1/4)	6.35(1/4)
	Gas Side	mm(in)	9.52(3/8)	9.52(3/8)
Drain Hose(O.D / I.D.)		mm(in)	21.5 / 16.0(27/32 / 5/8)	21.5 / 16.0(27/32 / 5/8)
Dimensions	Indoor (W*H*D)	mm	875*295*235	875*295*235
		inch	34 7/16" 11 5/8" 9 1/4"	34 7/16" 11 5/8" 9 1/4"
	Outdoor (W*H*D)	mm	870*655*320	870*655*320
		inch	34 1/4" 25 13/16" 12 19/32"	34 1/4" 25 13/16" 12 19/32"
Net Weight	Indoor	kg(lbs)	11.5(25.3)	11.5(25.3)
	Outdoor	kg(lbs)	43(94.8)	43(94.8)
Gross Weight	Indoor	kg(lbs)	13.0(28.6)	13.0(28.6)
	Outdoor	kg(lbs)	45(99.2)	45(99.2)
Operation Range	Cooling(Outdoor)	°C(°F)	-10~48(14~118)	-10~48(14~118)
	Heating(Outdoor)	°C(°F)	-10~24(14.0~75)	-10~24(14.0~75)
Piping Length (Min/Max)		m(ft)	3(9.84) / 15(49.2)	3(9.84) / 15(49.2)
Chargeless		m(ft)	7.5(24.6)	7.5(24.6)
Max. Elevation Difference		m(ft)	7(22.9)	7(22.9)
Tool Code(Chassis)			SM + UE	SM + UE
Functions	Indoor + Outdoor		SM + UE	SM + UE
	Temperature Control		Thermistor	Thermistor
	Allergy free filter		-	-
	Plasma Filter		-	-
	Prefilter(washable/anti-fungus)		-	-
	Auto Clean		O	O
	CHAOS Wind(Auto Wind)		O	O
	Steps, Fan/Cool/Heat		5/6/6	5/6/6
	Airflow Direction Control(up& Down)		Auto	Auto
	Airflow Direction Control(left & right)		Auto	Auto
	Remote Controller Type		Wireless Remote Controller	Wireless Remote Controller
	Setting Temperature Range	Cooling	18°C(64.4°F) ~ 30°C(86°F)	18°C(64.4°F) ~ 30°C(86°F)
		Heating	16°C(60.8°F) ~ 30°C(86°F)	16°C(60.8°F) ~ 30°C(86°F)
	Auto Operation (Micom Control)		-	-
	Auto Changeover (Micom Control)		O	O
	Self Diagnosis		O	O
	Timer		24h, On/Off	24h, On/Off
	Sleep Operation		O	O
	Soft Dry Operation		O	O
	Restart Delay(minute)		3	3
	Deice Control(Defrost)		O	O
	Hot Start		O	O
	Jet Cool		O	O
	Low Ambient Operation		O	O
	Optional Function		WATER LEVEL SENSOR	WATER LEVEL SENSOR

Note:

O : Applied, - : No relation

* For circuit breaker rating, please conform to local standards wherever necessary.

Art Cool Gallery Inverter

Sales Model			LAN090HVP/LAU090HVP	LAN120HVP/LAU120HVP
Models		Unit	AS-W093F2B2	AS-W123F2B2
Cooling Capacity		kW	1.3~2.64~3.5	1.30~3.28~4.00
		Btu/h.	4,436~9,000~11,942	4,436~11,200~13,648
Heating Capacity		kW	1.3~3.17~4.2	1.30~3.90~5.00
		Btu/h.	4,436~10,800~14,330	4,436~13,300~17,060
Power Input	Cooling/Heating	W	720/850	933/1250
Running Current	Cooling/Heating	A	3.3/3.8	4.3/5.7
Starting Current	Cooling/Heating	A	3.3/3.8	4.3/5.7
Cooling COP			3.66	3.52
EER			12.5	12
SEER			16	16
HSPF			8.2	8.2
Power Supply		Ø / V / Hz	1/208-230/60	1/208-230/60
Power Factor		%	95.6	95.6
Air Flow Rate	Indoor, Max/H/M/L	m³/min(CFM)	10.5(370)/9.5(335)/8.8(311)/7.0(247)	10.5(370)/9.8(346)/8.8(311)/7.0(247)
	Outdoor,Max	m³/min(CFM)	33(1165)	33(1165)
Moisture Removal		l/h.(pts/hr)	1.2(2.54)	1.5(3.17)
Sound Level	Indoor,H/M/L	dB(A)±3	42 / 36 / 32	42 / 36 / 32
	Outdoor,Max	dB(A)±3	45	45
Refrigerant & Charge (at 7.5 m(24.6 ft))		g(oz)	R410A, 1,000(35.3)	R410A, 1,000(35.3)
Additional Refrigerant charge		g/m(oz/ft)	20(0.22)	20(0.22)
Compressor	Type		Single Rotary	Single Rotary
	Model		GA102MFB	GA102MFB
	Motor Type		Brushless DC Motor	Brushless DC Motor
	Oil Type		FVC68D	FVC68D
	Oil Charge	cc	310	310
	O.L.P. name		-	-
Fan(Indoor)	Type		Turbo Fan	Turbo Fan
	Motor Output	W	14.7	14.7
Fan(Outdoor)	Type		Propeller	Propeller
	Motor Type		BLDC	BLDC
	Motor Output	W	43	43
Circuit Breaker*		A	15	15
Power Supply Cable		No.*mm²(AWG)	3*1.0(18)	3*1.0(18)
Power and Transmission Cable		No.*mm²(AWG)	4*1.0(18)	4*1.0(18)
Piping Connections	Liquid Side	mm(in)	6.35(1/4)	6.35(1/4)
	Gas Side	mm(in)	9.52(3/8)	9.52(3/8)
Drain Hose(O.D / I.D.)		mm(in)	21.5 / 16.0(27/32 / 5/8)	21.5 / 16.0(27/32 / 5/8)
Dimensions	Indoor (W*H*D)	mm	600*600*146	600*600*146
		inch	23 5/8* 23 5/8* 5 3/4	23 5/8* 23 5/8* 5 3/4
	Outdoor (W*H*D)	mm	770*545*288	770*545*288
		inch	30 5/16*21 1/2*11 5/16	30 5/16*21 1/2*11 5/16
Net Weight	Indoor	kg(lbs)	14(30.9)	14(30.9)
	Outdoor	kg(lbs)	35(77.2)	35(77.2)
Gross Weight	Indoor	kg(lbs)	15(33.07)	15(33.07)
	Outdoor	kg(lbs)	37(81.6)	37(81.6)
Operation Range	Cooling(Outdoor)	°C(°F)	-10 ~ 48 (14 ~ 118)	-10 ~ 48 (14 ~ 118)
	Heating(Outdoor)	°C(°F)	-10 ~ 24 (14 ~ 75)	-10 ~ 24 (14 ~ 75)
Piping Length (Min/Max)		m(ft)	3(9.84) / 15(49.2)	3(9.84) / 15(49.2)
Chargeless		m(ft)	7.5(24.6)	7.5(24.6)
Max. Elevation Difference		m(ft)	7(22.9)	7(22.9)
Tool Code(Chassis)	Indoor + Outdoor		SF + UL2	SF + UL2
Functions	Temperature Control		Thermistor	Thermistor
	Allergy free filter		-	-
	Plasma Filter		-	-
	Prefilter(washable/anti-fungus)		O	O
	Auto Clean		O	O
	CHAOS Wind(Auto Wind)		O	O
	Steps, Fan/Cool/Heat		4/5/5	4/5/5
	Airflow Direction Control(up& Down)		Auto	Auto
	Airflow Direction Control(left & right)		Auto	Auto
	Remote Controller Type		Wireless Remote Controller	Wireless Remote Controller
	Setting Temperature	Cooling	18°C(64.4°F)~ 30°C(86°F)	18°C(64.4°F)~ 30°C(86°F)
	Range	Heating	16°C(60.8°F)~ 30°C(86°F)	16°C(60.8°F)~ 30°C(86°F)
	Auto Operation (Micom Control)		-	-
	Auto Changeover (Micom Control)		O	O
	Self Diagnosis		O	O
	Timer		24h, On/Off	24h, On/Off
	Sleep Operation		O	O
	Soft Dry Operation		O	O
	Restart Delay(minute)		3	3
	Deice Control(Defrost)		O	O
	Hot Start		O	O
	Jet Cool		O	O
	Low Ambient Operation		O	O
	Optional Function		WATER LEVEL SENSOR	WATER LEVEL SENSOR

Note:

O : Applied, - : No relation

* For circuit breaker rating, please conform to local standards wherever necessary.

Mega Inverter

Sales Model			LSN090HEV/LSU090HEV	LSN120HEV/LSU120HEV
Model		Unit	AS-W093WSA7	AS-W123BSA7
Cooling Capacity		kW	1.03~2.49~2.80	1.03~3.52~3.81
		Btu/h.	3,515~8,500~9,554	3,515~12,000~13,000
Heating Capacity		kW	1.03~2.64~2.90	1.03~3.52~4.0
		Btu/h.	3,515~9,000~9,895	3,515~12,000~13,649
Power Input	Cooling/Heating	W	780/ 780	1,170/980
Running Current	Cooling/Heating	A	3.6/3.6	5.2/4.4
Starting Current	Cooling/Heating	A	3.6/3.6	5.2/4.4
Cooling COP			3.19	3.00
EER			10.90	10.26
SEER			16.3	16.3
HSPF			8.5	8.5
Power Supply		Ø / V / Hz	1/208-230/60	1/208-230/60
Power Factor		%	94	95
Air Flow Rate	Indoor,Max/H/M/L	m³/min(CFM)	9(318)/8(276)/6(226)/5(177)	12(424)/10(353)/8(272)/6(212)
	Outdoor,Max	m³/min(CFM)	27(953)	27(953)
Moisture Removal		l/h.(pts/hr)	1.0(2.12)	1.3(2.76)
Sound Level	Indoor,H/M/L/Sleep	dB(A)+3	39 / 33 / 25 / 19	39 / 33 / 25 / 19
	Outdoor,Max	dB(A)+3	47	47
Refrigerant & Charge (at 7.5 m)		g(oz)	R410A, 750(26.5)	R410A, 750(26.5)
Additional Refrigerant Charge		g/m(oz/ft)	20(0.22)	20(0.22)
Compressor	Type		Rotary	Rotary
	Model		GA092MMA	GA092MAB
	Motor Type		Brushless DC Motor	Brushless DC Motor
	Oil Type		FVC68D	FVC68D
	Oil Charge	cc	310	310
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan
	Motor Type		BLDC	BLDC
	Motor Output	W	20	20
Fan(outdoor)	Type		Propeller	Propeller
	Motor Type		AC	AC
	Motor Output	W	75	75
Circuit Breaker*		A	15	15
Power Supply Cable		No.*mm²(AWG)	3*1.0(18)	3*1.0(18)
Power and Transmission Cable		No.*mm²(AWG)	4*1.0(18)	4*1.0(18)
Piping Connections	Liquid Side	mm(in)	6.35(1/4)	6.35(1/4)
	Gas Side	mm(in)	9.52(3/8)	9.52(3/8)
Drain Hose(O.D. / I.D.)		mm(in)	21.5 / 16.0(0.85 / 0.63)	21.5 / 16.0(0.85 / 0.63)
Dimension	Indoor(W*H*D)	mm	756 x 265 x 184	885 x 285 x 210
		inch	29 3/4*10 7/16*7 1/4	34 13/16*11 1/4* 8 1/4
	Outdoor(W*H*D)	mm	717 x 483 x 230	717 x 483 x 230
		inch	28 1/4*19 1/32*9 1/16	28 1/4*19 1/32*9 1/16
Net Weight	Indoor	kg(lbs)	7.2(15.9)	9(19.8)
	Outdoor	kg(lbs)	23.2(51.1)	22.0(48.5)
Gross Weight	Indoor	kg(lbs)	9.1(20.1)	11(24.2)
	Outdoor	kg(lbs)	25.4(55.3)	23.6(52.1)
Operation Range	Cooling(Outdoor)	°C(°F)	18~48(64.4~118.4)	18~48(64.4~118.4)
	Heating(Outdoor)	°C(°F)	-5~24(23.0~75.2)	-5~24(23.0~75.2)
Piping Length (Min/Max)		m(ft)	3 (9.8) / 15 (49.2)	3 (9.8) / 15 (49.2)
Chargeless		m(ft)	7.5(24.6)	7.5(24.6)
Max. Elevation Difference		m(ft)	7(22.9)	7(22.9)
Tool Code(Chassis)	Indoor + Outdoor		SW + UA3+	SB + UA3+
Functions	Temperature Control		Thermistor	Thermistor
	Allergy free filter		-	-
	Plasma Filter		-	-
	Prefilter(washable/anti-fungus)		O	O
	Auto Clean		O	O
	CHAOS Wind(Auto Wind)		O	O
	Steps, Fan/Cool/Heat		3/3/3	3/3/3
	Airflow Direction Control(up& Down)		Auto	Auto
	Airflow Direction Control(left & right)		Manual	Manual
	Remote Controller Type		Wireless Remote Controller	Wireless Remote Controller
	Setting Temperature Range	Cooling	18°C(64.4°F)~ 30°C(86°F)	18°C(64.4°F)~ 30°C(86°F)
		Heating	16°C(60.8°F)~ 30°C(86°F)	16°C(60.8°F)~ 30°C(86°F)
	Auto Operation (Micom Control)		-	-
	Auto Changeover (Micom Control)		O	O
	Self Diagnosis		O	O
	Timer		24h, On/Off	24h, On/Off
	Sleep Operation		O	O
	Soft Dry Operation		O	O
	Restart Delay(minute)		3	3
	Deice Control(Defrost)		O	O
	Hot Start		O	O
	Jet Cool		O	O
	Low Ambient Operation		-	-
	Special Function		WATER LEVEL SENSOR	WATER LEVEL SENSOR

Note : O : Applied, X : Not applied, - : No relation

• Filters are optional in some specific areas.

• For Circuit Breaker Rating, please conform to local standards whenever necessary.

Sales Model			LSN180HEV/LSU180HEV	LSN240HEV/LSU240HEV
Model		Unit	AS-W183CSA7	AS-W243CSA7
Cooling Capacity		kW	1.08 ~ 4.98 ~ 5.42	1.08~6.45~7.03
		Btu/h.	3,685~17,000~18,493	3,685~22,000~24,000
Heating Capacity		kW	1.08 ~ 5.57 ~ 6.74	1.08~6.45~7.10
		Btu/h.	3,685~19,000~22,997	3,685~22,000~24,226
Power Input	Cooling/Heating	W	1,550 / 1,590	2,045 / 1,935
Running Current	Cooling/Heating	A	7.2 / 7.1	9.1 / 8.7
Starting Current	Cooling/Heating	A	7.2 / 7.1	9.1 / 8.7
Cooling COP			3.21	3.15
EER			10.95	10.75
SEER			17.0	17.0
HSPF			8.7	8.5
Power Supply		Ø / V / Hz	1/208-230/60	1/208-230/60
Power Factor		%	93.6	95
Air Flow Rate	Indoor,Max/H/M/L	m³/min(CFM)	18(629)/14(512)/12(441)/10(353)	20(689)/17(600)/14(494)/11(388)
	Outdoor,Max	m³/min(CFM)	38 (1342)	50(1,766)
Moisture Removal		l/h.(pts/hr)	1.6(3.39)	2.3(4.88)
Sound Level	Indoor,H/M/L/Sleep	dB(A)+3	42 / 40 / 35 / 29	45 / 40 / 35 / 29
	Outdoor,Max	dB(A)+3	51	53
Refrigerant & Charge (at 7.5 m)		g(oz)	R410A, 1,060(37.4)	R410A, 1,170(41.3)
Additional Refrigerant Charge		g/m(oz/ft)	30(0.33)	30(0.33)
Compressor	Type		Twin Rotary	Twin Rotary
	Model		GKT141MBA	GKT176MF
	Motor Type		Brushless DC Motor	Brushless DC Motor
	Oil Type		FVC68D	FVC68D
	Oil Charge	cc	470	470
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan
	Motor Type		BLDC	BLDC
	Motor Output	W	30	30
Fan(outdoor)	Type		Propeller	Propeller
	Motor Type		BLDC	BLDC
	Motor Output	W	43	124
Circuit Breaker*		A	20	20
Power Supply Cable		No.*mm²(AWG)	3*1.0(18)	3*1.5(16)
Power and Transmission Cable		No.*mm²(AWG)	4*1.0(18)	4*1.0(18)
Piping Connections	Liquid Side	mm(in)	6.35(1/4)	6.35(1/4)
	Gas Side	mm(in)	12.7(1/2)	15.88(5/8)
Drain Hose(O.D / I.D.)		mm(in)	21.5 / 16.0(0.85 / 0.63)	21.5 / 16.0(0.85 / 0.63)
Dimension	Indoor(W*H*D)	mm	1,030*325*250	1,030*325*250
		inch	40 9/16*12 13/16*9 13/16	40 9/16*12 13/16*9 13/16
	Outdoor(W*H*D)	mm	770*545*288	870*655*320
		inch	30 5/16*21 1/2*11 5/16	34 1/4*25 13/16*12 19/32
Net Weight	Indoor	kg(lbs)	12.4(27.3)	12.6(27.8)
	Outdoor	kg(lbs)	32.4(71.4)	41.7(91.9)
Gross Weight	Indoor	kg(lbs)	13.4(29.5)	15(33.1)
	Outdoor	kg(lbs)	34.5(76.1)	47(103.6)
Operation Range	Cooling(Outdoor)	°C(°F)	18~48(64.4~118.4)	18~48(64.4~118.4)
	Heating(Outdoor)	°C(°F)	-5~24(23.0~75.2)	-5~24(23.0~75.2)
Piping Length (Min/Max)		m(ft)	3(9.8)/20(65.6)	3(9.8)/20(65.6)
Chargeless		m(ft)	7.5(24.6)	7.5(24.6)
Max. Elevation Difference		m(ft)	10(32.8)	10(32.8)
Tool Code(Chassis)	Indoor + Outdoor		SC + UL2	SC + UE
Functions	Temperature Control		Thermistor	Thermistor
	Allergy free filter		-	-
	Plasma Filter		-	-
	Prefilter(washable/anti-fungus)		O	O
	Auto Clean		O	O
	CHAOS Wind(Auto Wind)		O	O
	Steps, Fan/Cool/Heat		3/3/3	3/3/3
	Airflow Direction Control(up& Down)		Auto	Auto
	Airflow Direction Control(left & right)		Manual	Manual
	Remote Controller Type		Wireless Remote Controller	Wireless Remote Controller
	Setting Temperature Range	Cooling	18°C(64.4°F)~ 30°C(86°F)	18°C(64.4°F)~ 30°C(86°F)
		Heating	16°C(60.8°F)~ 30°C(86°F)	16°C(60.8°F)~ 30°C(86°F)
	Auto Operation (Micom Control)		-	-
	Auto Changeover (Micom Control)		O	O
	Self Diagnosis		O	O
	Timer		24h, On/Off	24h, On/Off
	Sleep Operation		O	O
	Soft Dry Operation		O	O
	Restart Delay(minute)		3	3
	Deice Control(Defrost)		O	O
	Hot Start		O	O
	Jet Cool		O	O
	Low Ambient Operation		-	-
	Special Function		WATER LEVEL SENSOR	WATER LEVEL SENSOR

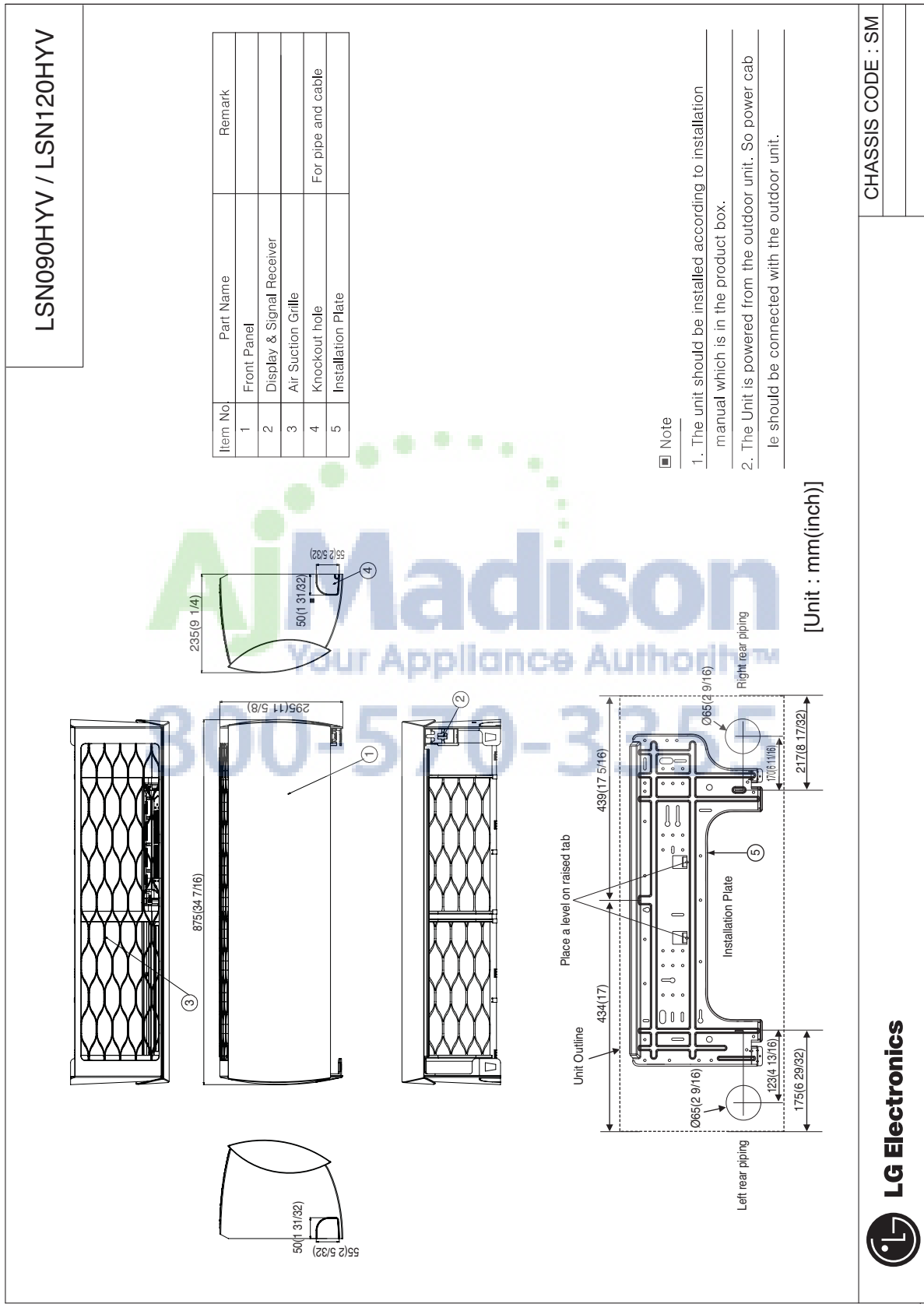
Note : O : Applied, X : Not applied, - : No relation

• Filters are optional in some specific areas.

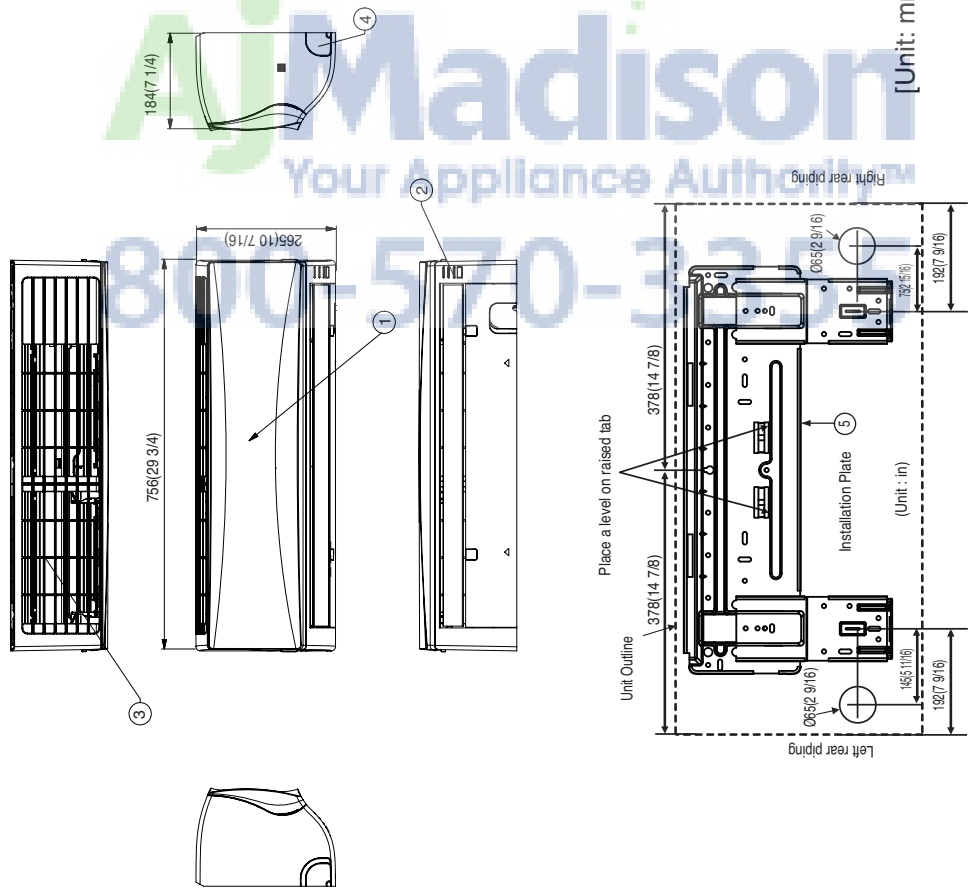
• For Circuit Breaker Rating, please conform to local standards whenever necessary.

4. Dimensional drawings

4.1 Indoor Units



LSN090HEV



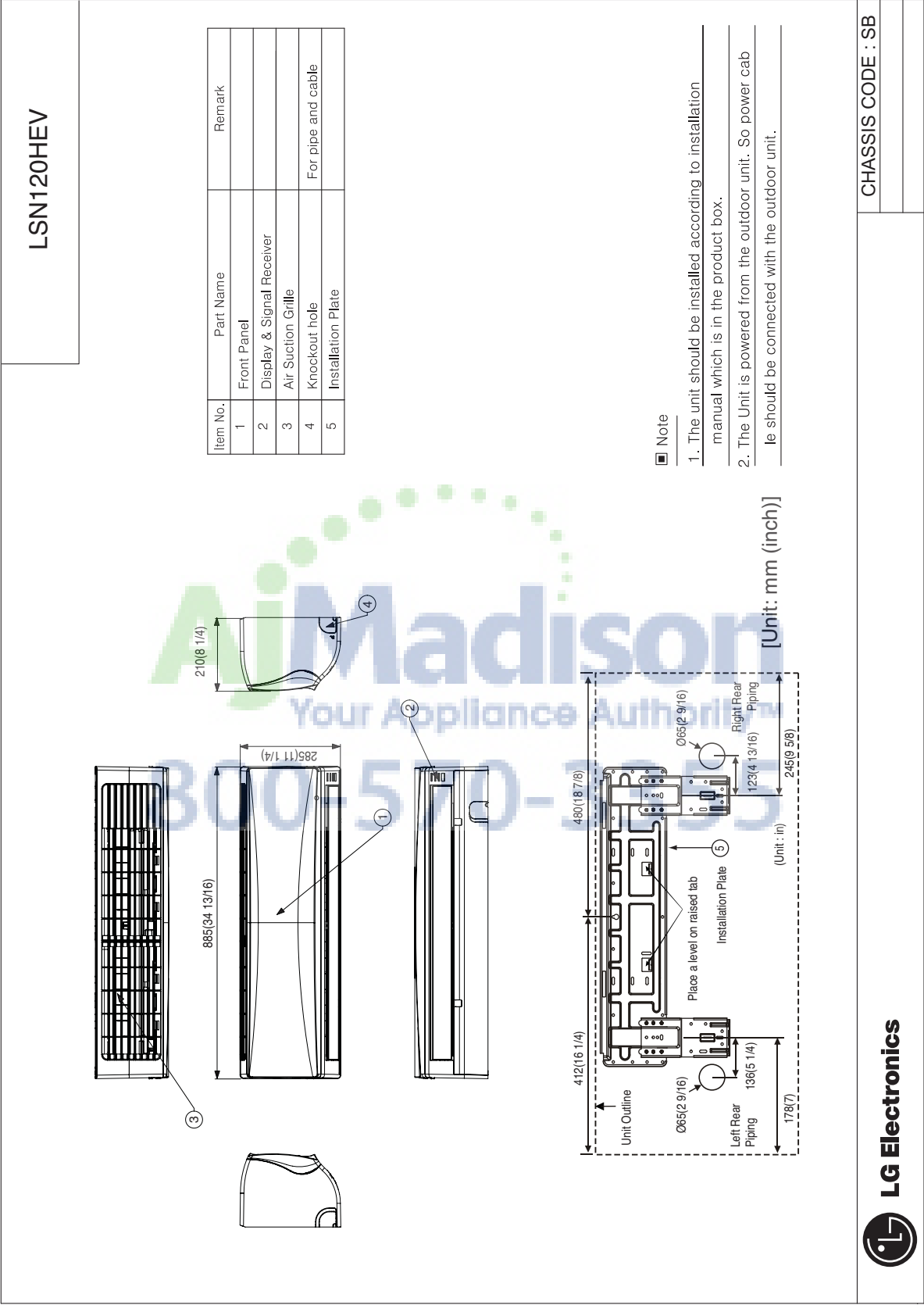
Item No.	Part Name	Remark
1	Front Panel	
2	Display & Signal Receiver	
3	Air Suction Grille	
4	Knockout hole	For pipe and cable
5	Installation Plate	

Note

1. The unit should be installed according to installation manual which is in the product box.
2. The Unit is powered from the outdoor unit. So power cable should be connected with the outdoor unit.

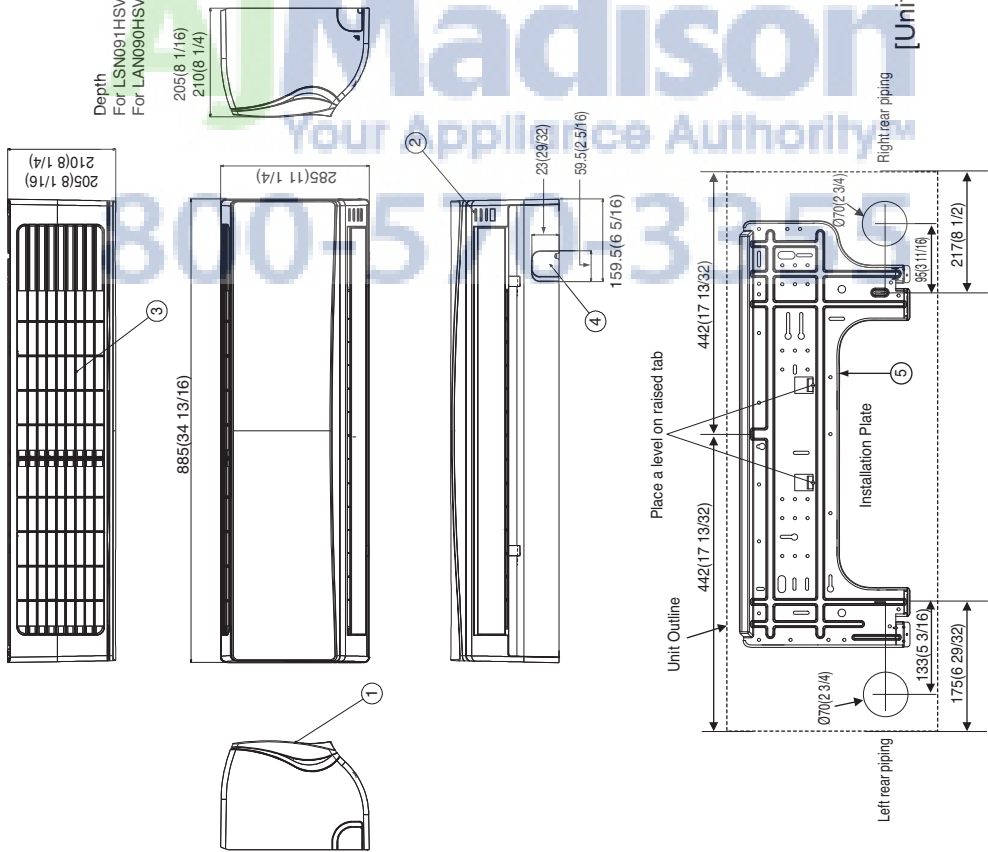
CHASSIS CODE : SW





LAN090HSV2 / LAN120HSV2
LSN091HSV2 / LSN121HSV2

Depth
For LSN091HSV2, LSN121HSV2 : 210(8 1/4)
For LAN090HSV2, LAN120HSV2 : 205(8 1/16)



Item No.	Part Name	Remark
1	Front Panel	
2	Display & Signal Receiver	
3	Air Suction Grille	
4	Knockout hole	For pipe and cable
5	Installation Plate	

Note

1. The unit should be installed according to installation manual which is in the product box.
2. The Unit is powered from the outdoor unit. So power cable should be connected with the outdoor unit.



LG Electronics

CHASSIS CODE : SB

LSN181HSV2
LAN180HSV2
LAN240HSV2

Item No.	Part Name	Remark
1	Front Panel	
2	Display & Signal Receiver	
3	Air Suction Grille	
4	Installation Plate	

245(9 11/16)

1030(40 9/16)

325(12 13/16)

245(9 11/16)

1

2

3

4

570(22 13/32)

460(18 3/32)

165(6 3/32)

207(8 3/32)

070(2 13/16)

070(2 13/16)

82(3 1/8)

82(3 1/8)

Unit Outline

Place a level on raised tab

Installation Plate

Measuring Tape

Measuring Tape Hanger

Left rear piping

Right rear piping

[Unit: mm (inch)]

Note

1. The unit should be installed according to installation manual which is in the product box.

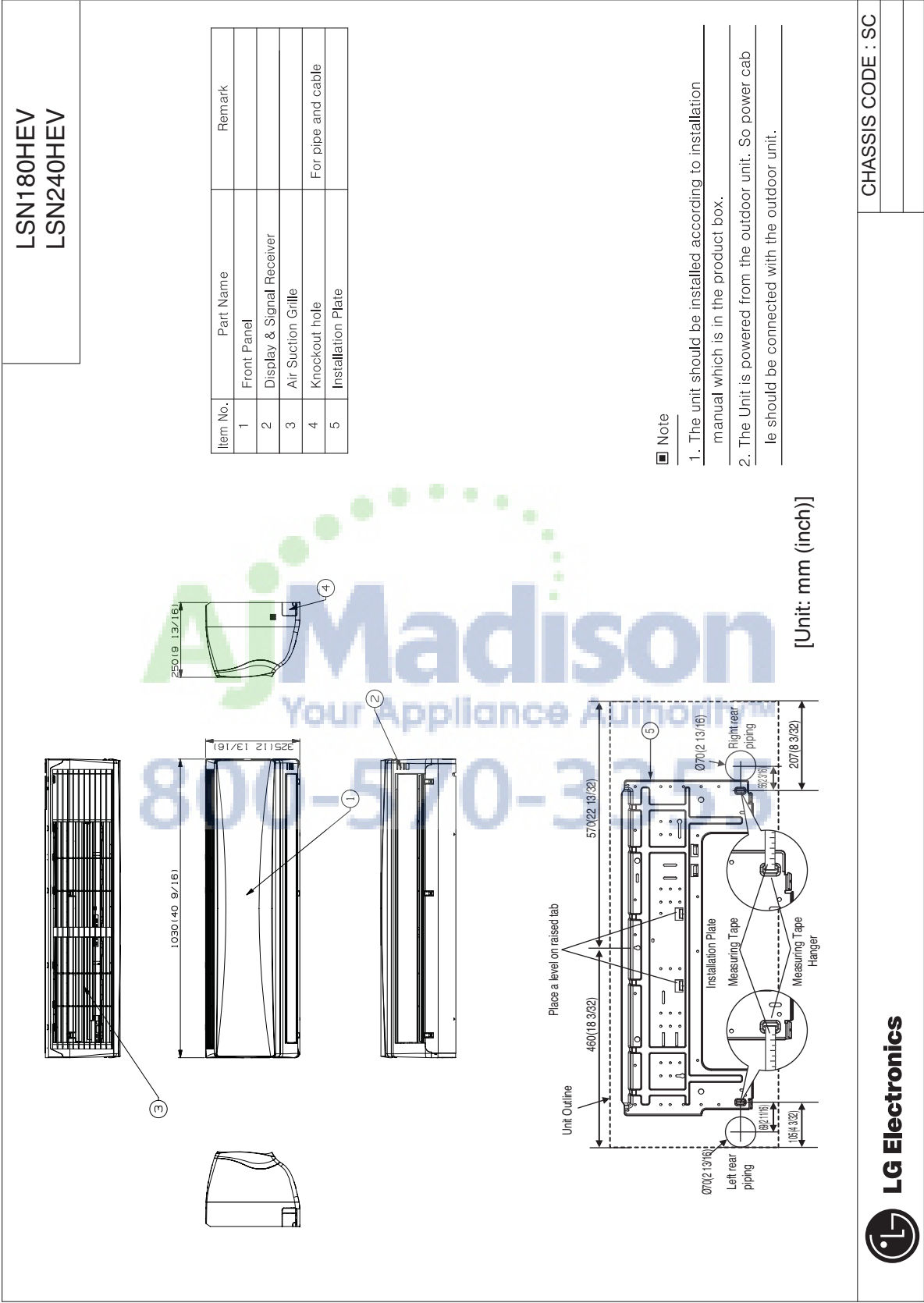
2. The Unit is powered from the outdoor unit. So power cable should be connected with the outdoor unit.

LG Electronics

CHASSIS CODE : SC

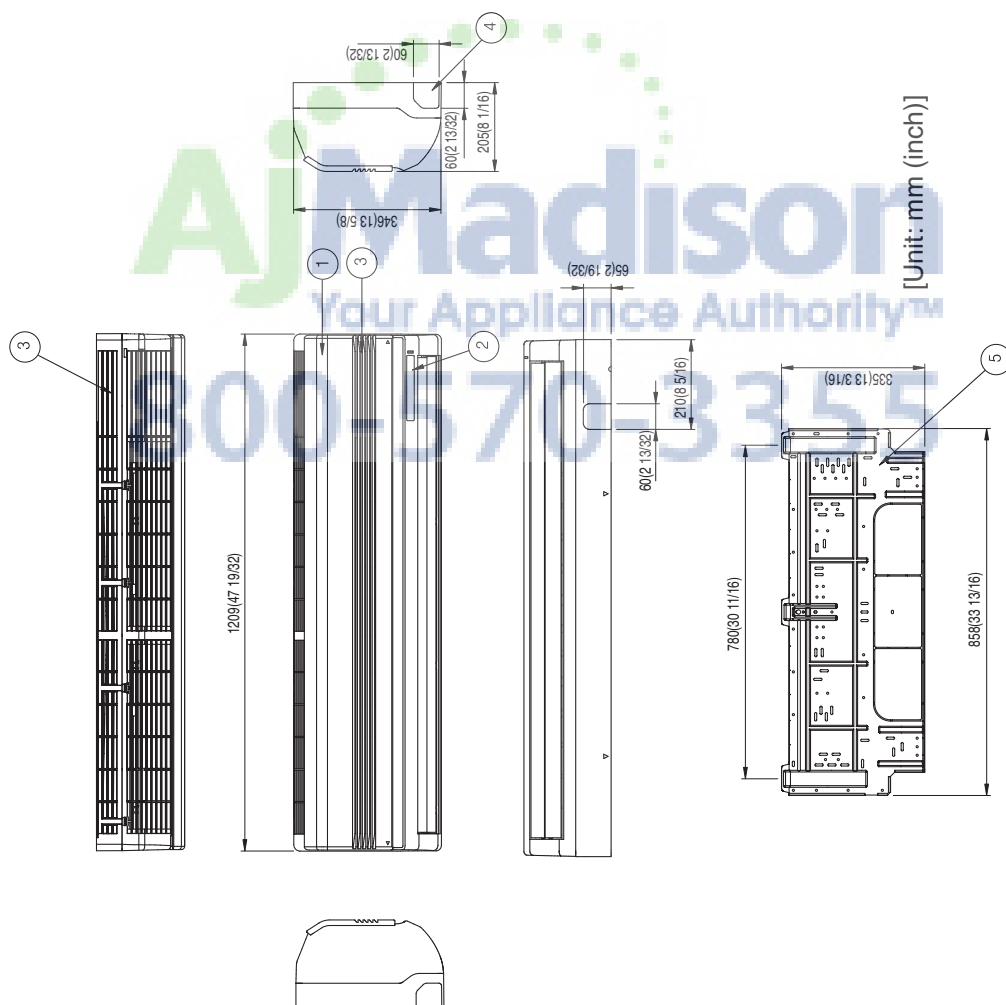
23

Inverter Single



LSN240HSV2
LSN307HV2
LSN360HV2

Item No	Part Name	Remark
1	Front panel	
2	Display & signal receiver	
3	Air suction grille	
4	Knockout hole	For pipe and cable
5	Installation plate	



Note

1. The unit is not allowed to be installed in closed area.
2. In an area or a space having no proper air circulation, an air guide should be installed in the outdoor unit.

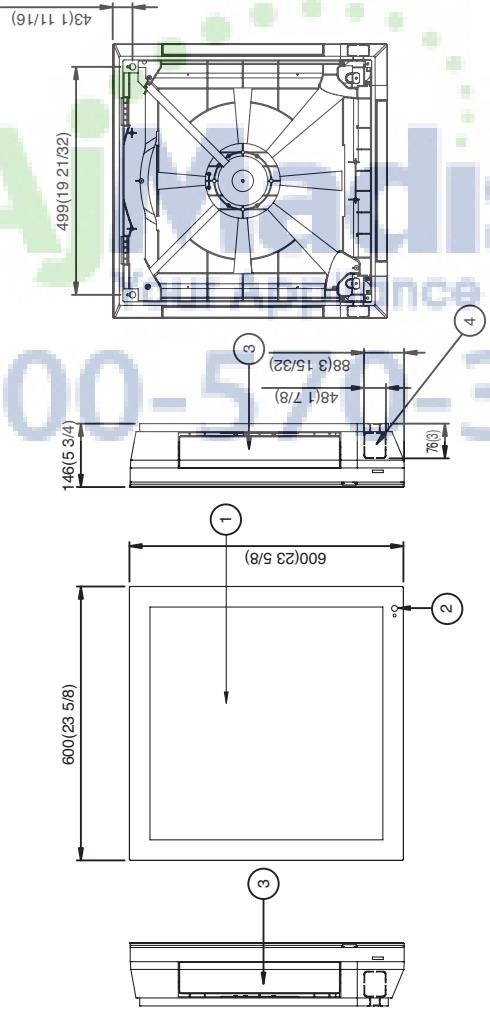
CHASSIS CODE : SD



LG Electronics

LAN090HVP
LAN120HVP

Item No.	Part Name	Remark
1	Front panel	
2	Display & signal receiver	
3	Air discharge grille	
4	Knockout hole	For pipe and cable



[Unit: mm (inch)]

Note

1. The unit is not allowed to be installed in closed area.
2. In an area or a space having no proper air circulation, an air guide should be installed in the outdoor unit.

CHASSIS CODE : SF

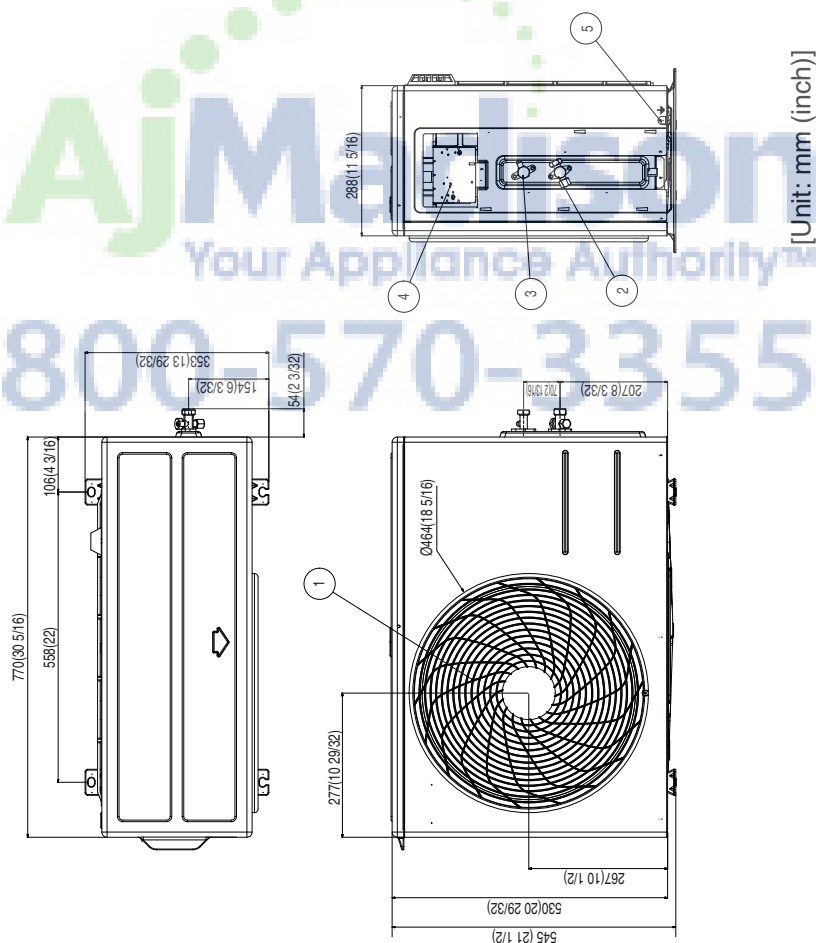


LAU090HSV2 / LAU120HSV2
LSU091HSV2 / LSU121HSV2
LAU090HVP / LAU120HVP
LSU180HEV

Item No	Part Name	Remark
1	Air Discharge Grille	
2	Gas Pipe Connection Port	
3	Liquid Pipe Connection Port	
4	Control Box	
5	Earth Screw	

□ Note

1. The unit is not allowed to be installed in closed area.
2. In an area or a space having no proper air circulation, an air guide should be installed in the outdoor unit.



[Unit: mm (inch)]

CHASSIS CODE : UL2



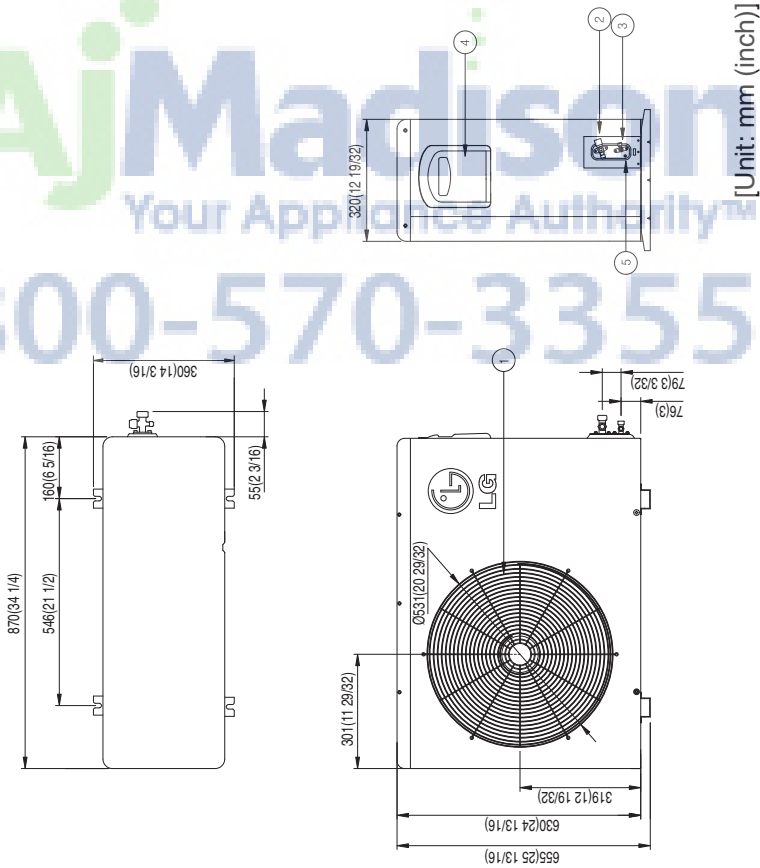
LG Electronics

LSU090HYV
LSU120HYV
LSU240HEV

Item No	Part Name	Remark
1	Air Discharge Grille	
2	Gas Pipe Connection Port	
3	Liquid Pipe Connection Port	
4	Control Box	
5	Earth Screw	

Note

1. The unit is not allowed to be installed in closed area.
2. In an area or a space having no proper air circulation, an air guide should be installed in the outdoor unit.



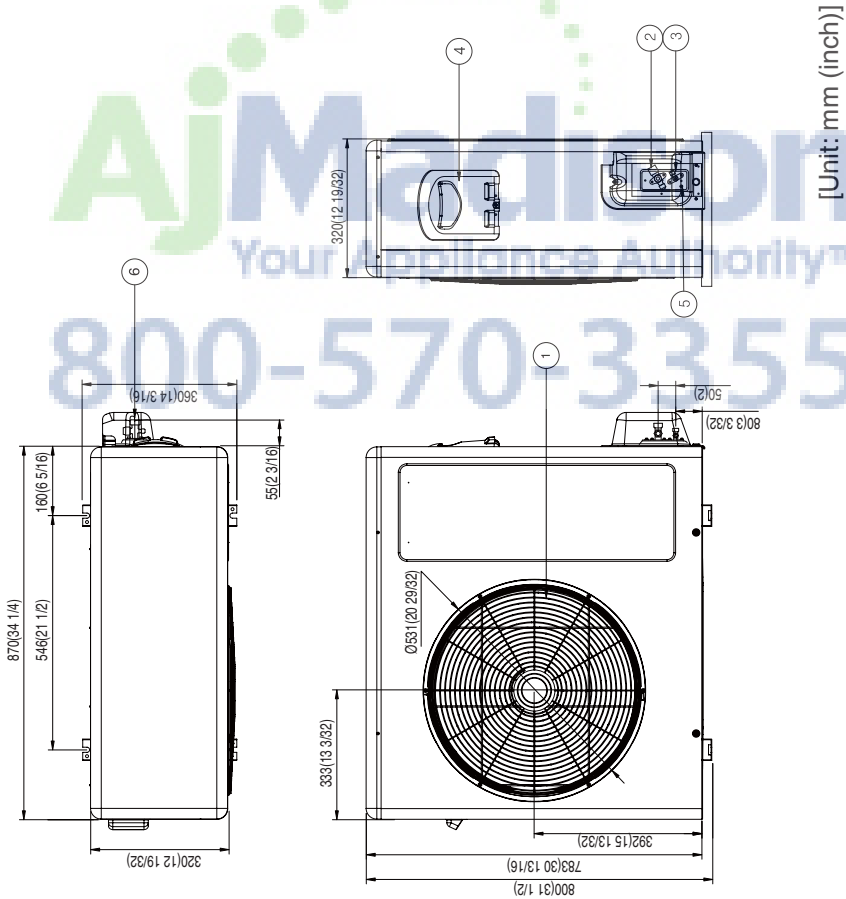
CHASSIS CODE : UE

LSU240HSV2 / LSU307HV2
LSU360HV2 / LSU181HSV2
LAU180HSV2 / LAU240HSV2

Item No.	Part Name	Remark
1	Air discharge grille	
2	Gas pipe connection	
3	Liquid pipe connection	
4	Power & Transmission connection	
5	Earth screw	
6	SVC valve cover	

Note

1. The unit is not allowed to be installed in closed area.
2. In an area or a space having no proper air circulation, an air guide should be installed in the outdoor unit.

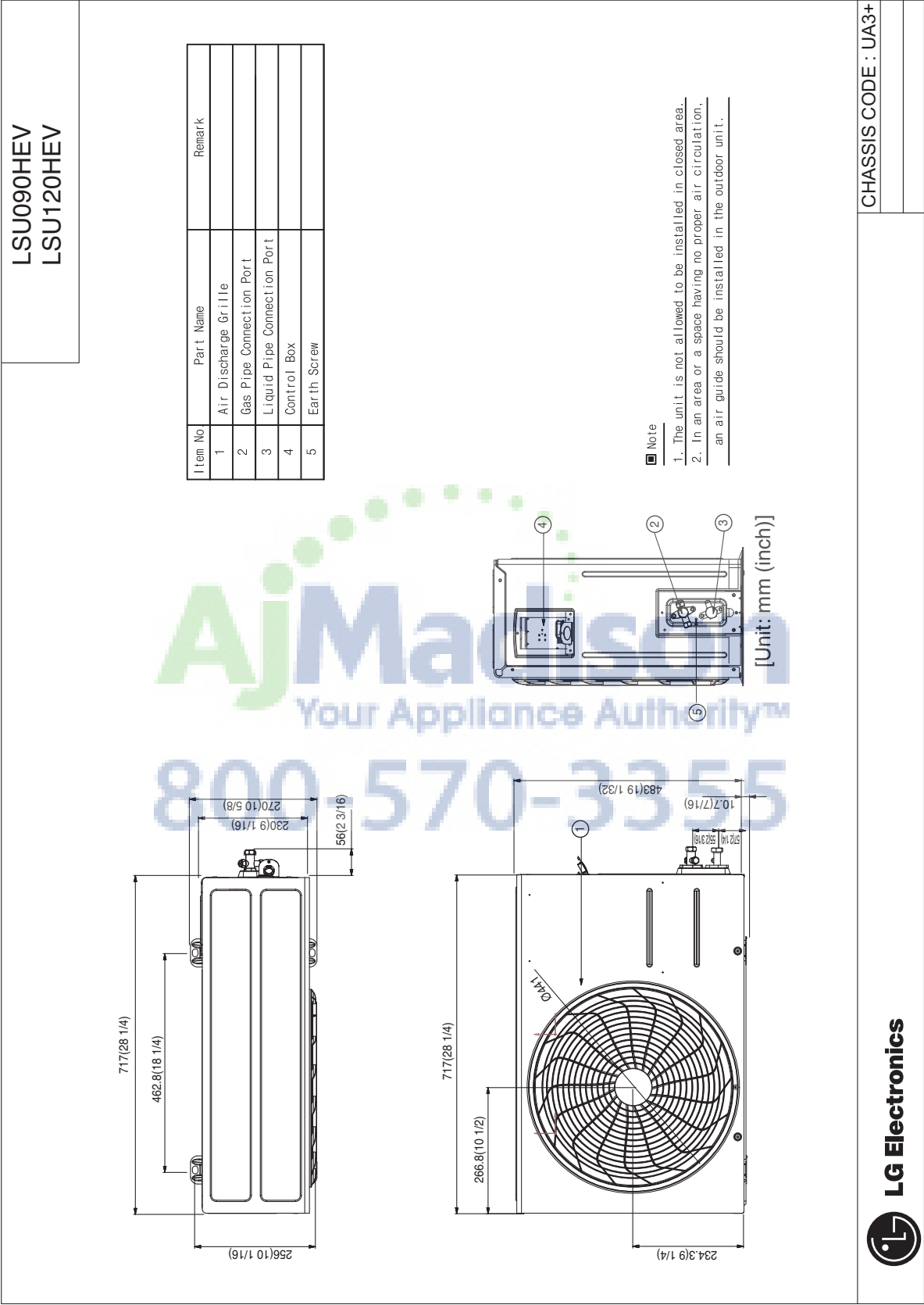


[Unit: mm (inch)]



LG Electronics

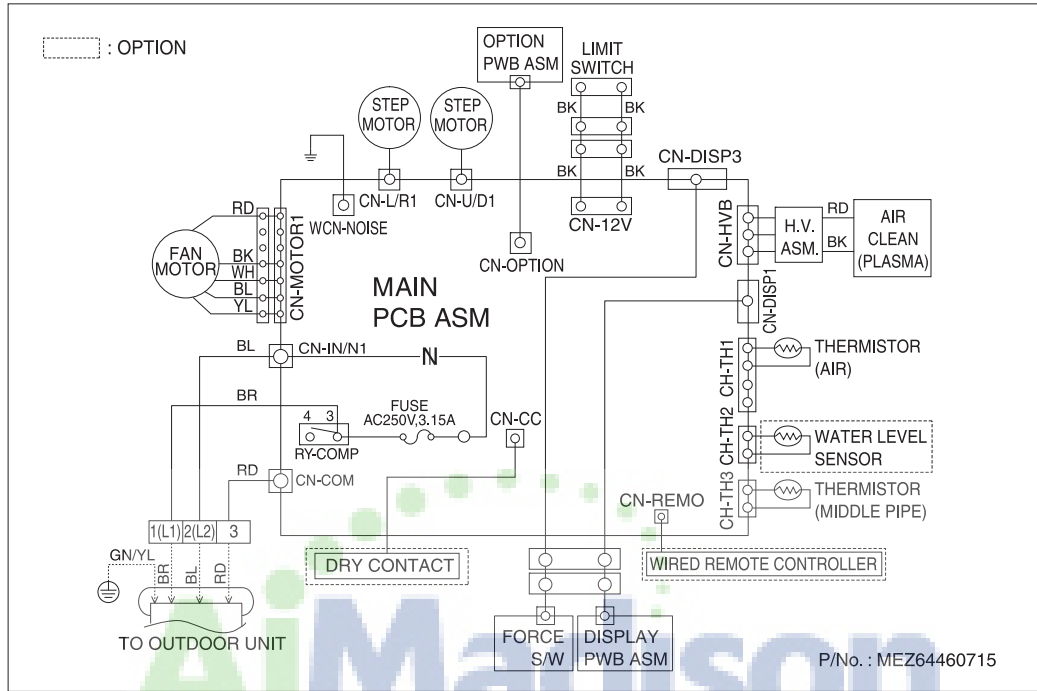
CHASSIS CODE : UE1+



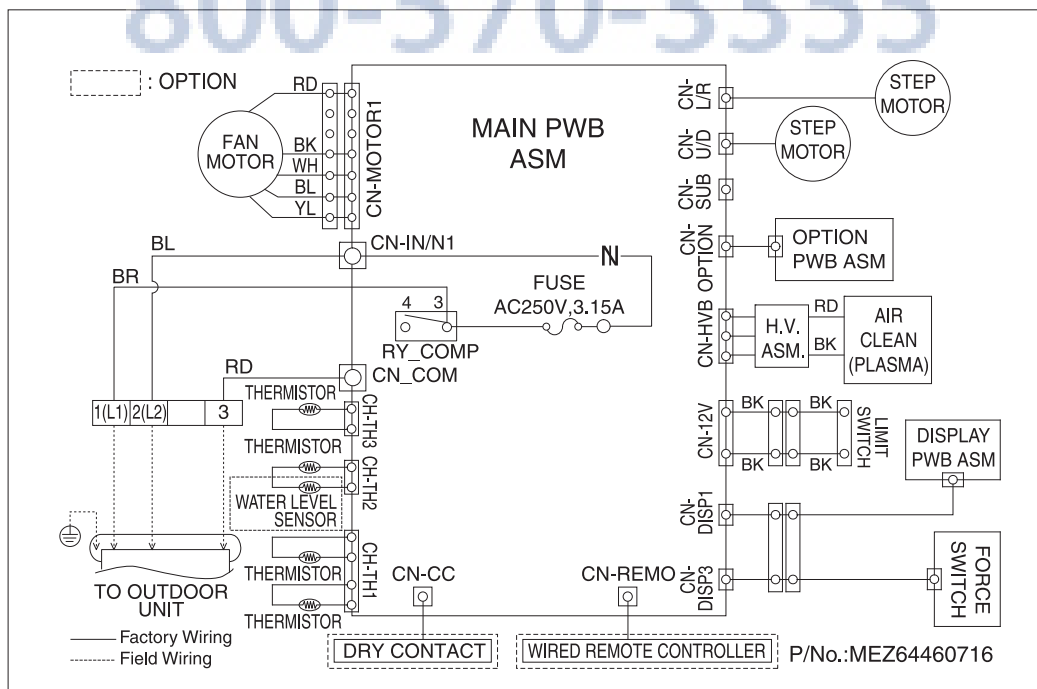
5. Wiring diagrams

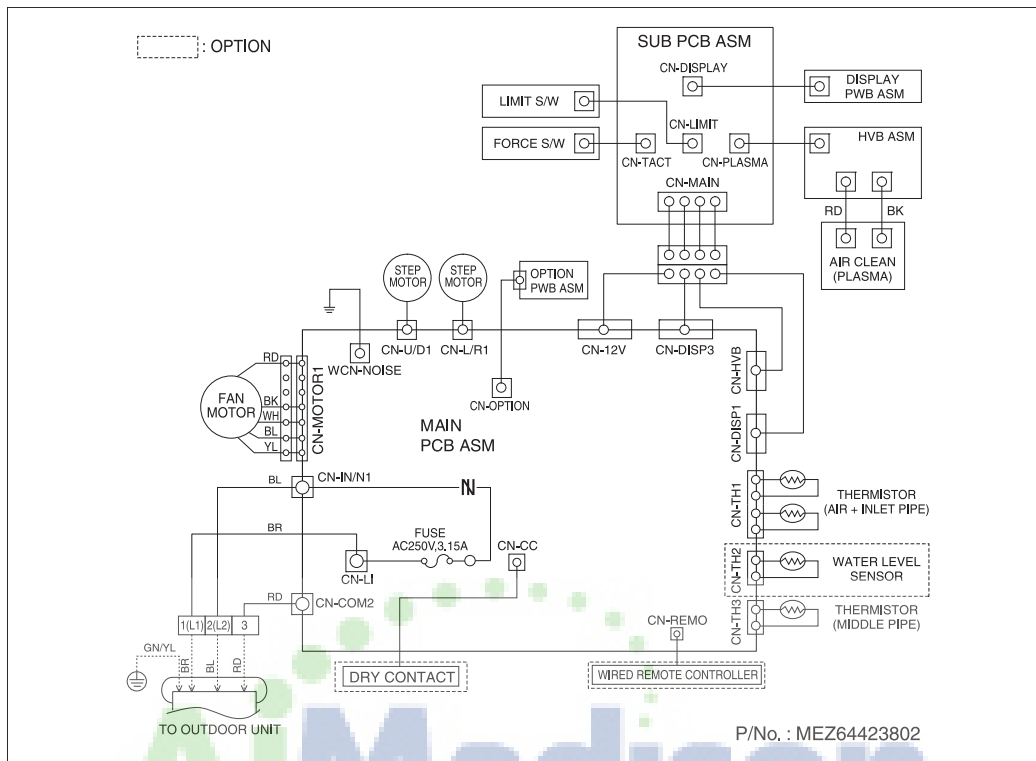
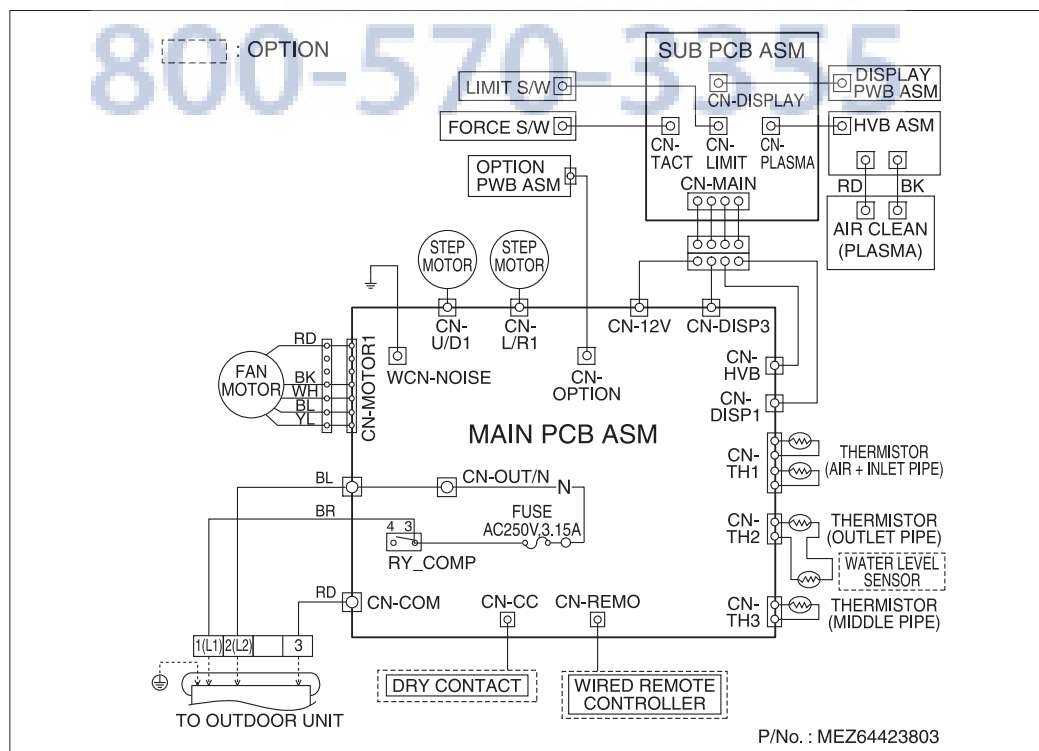
5.1 Indoor units

Models: ASNW093B1Y9(LSN091HSV2), ASNW123B1Y9(LSN121HSV2)

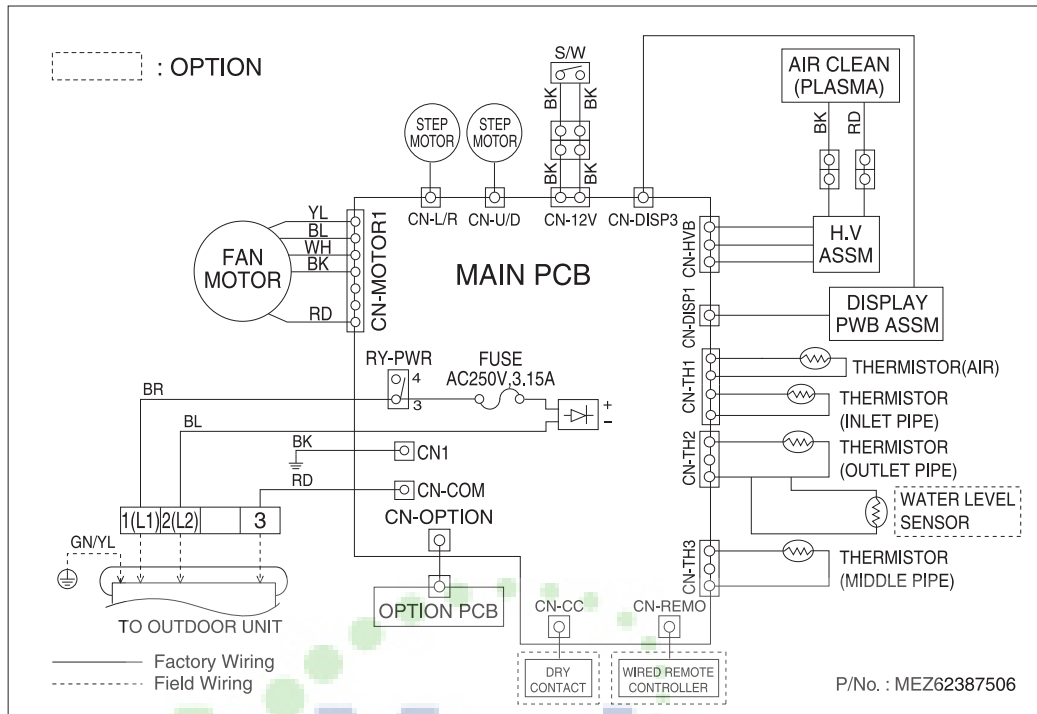


Models: ASNW183C2Y9(LSN181HSV2)

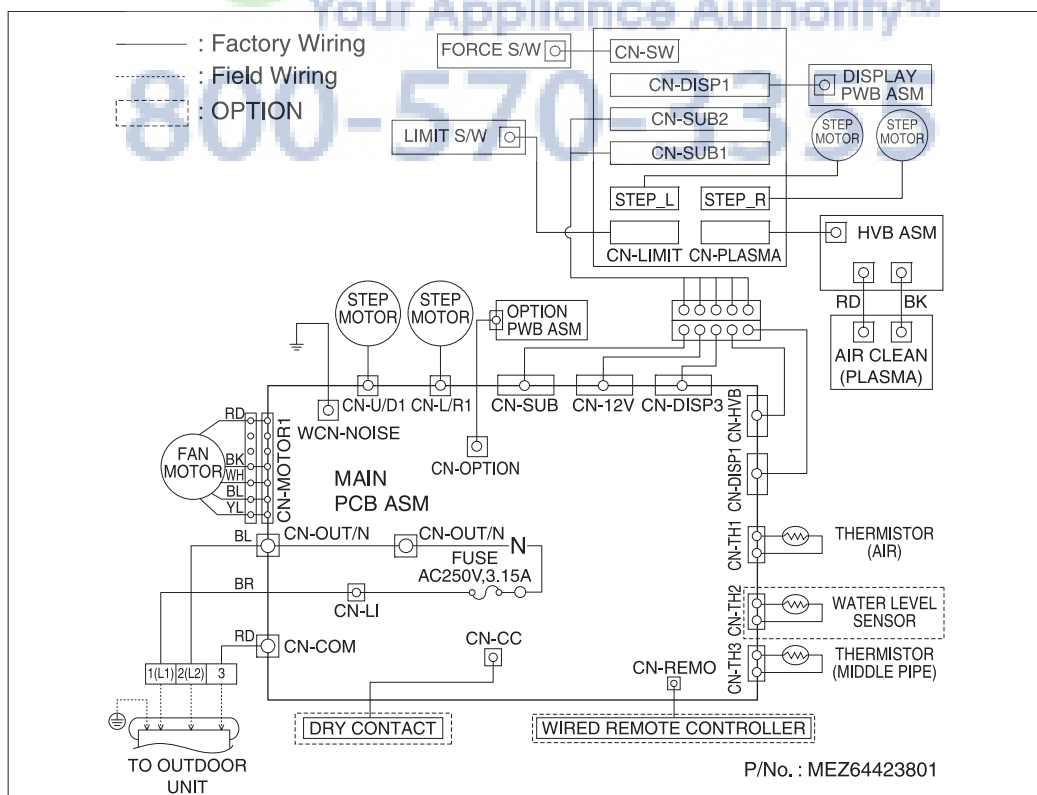


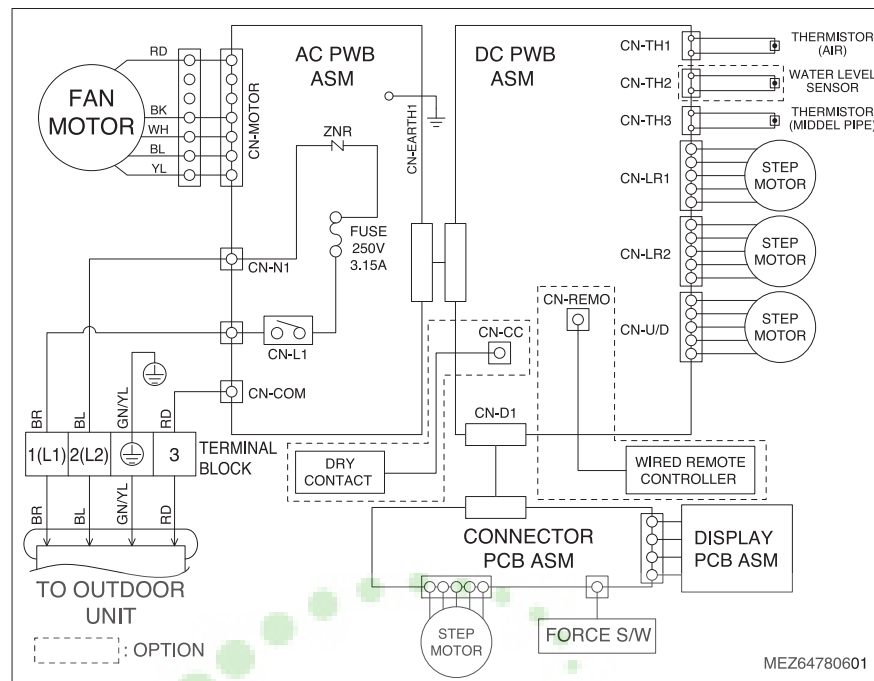
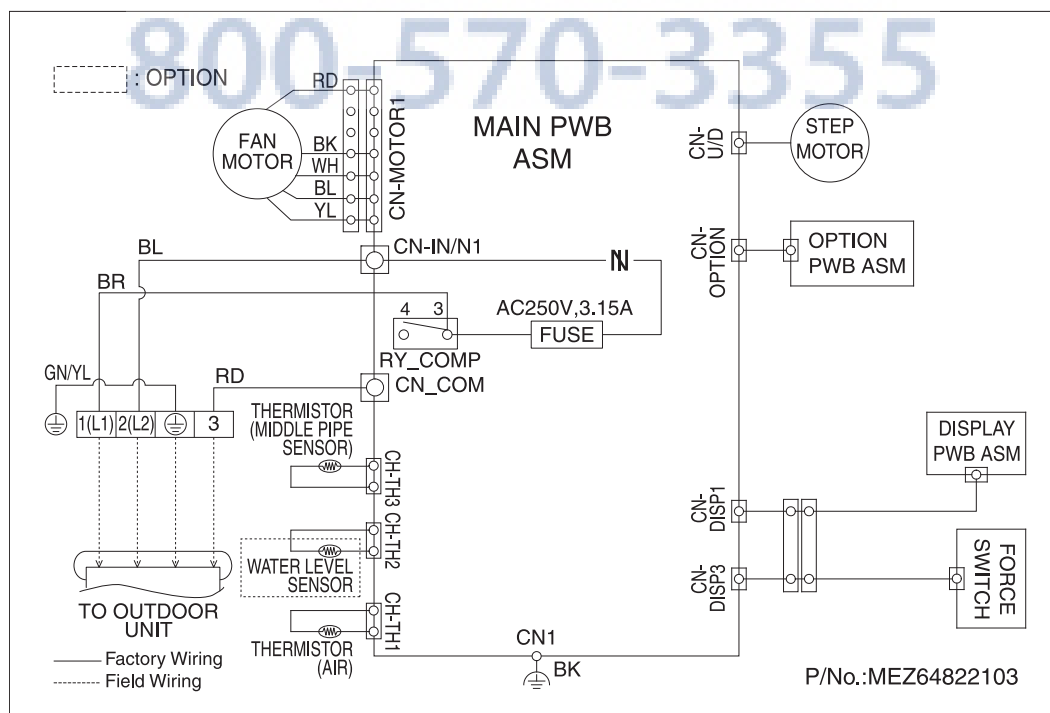
Models: ASNW093BRM9(LAN090HSV2), ASNW123BRM9(LAN120HSV2)

Models: ASNW183CRM9(LAN180HSV2), ASNW243CRM9(LAN240HSV2)


Models: ASNW243DGY9(LSN240HSV2), ASNW303DGY9(LSN307HV2), ASNW363DGY9(LSN360HV2)



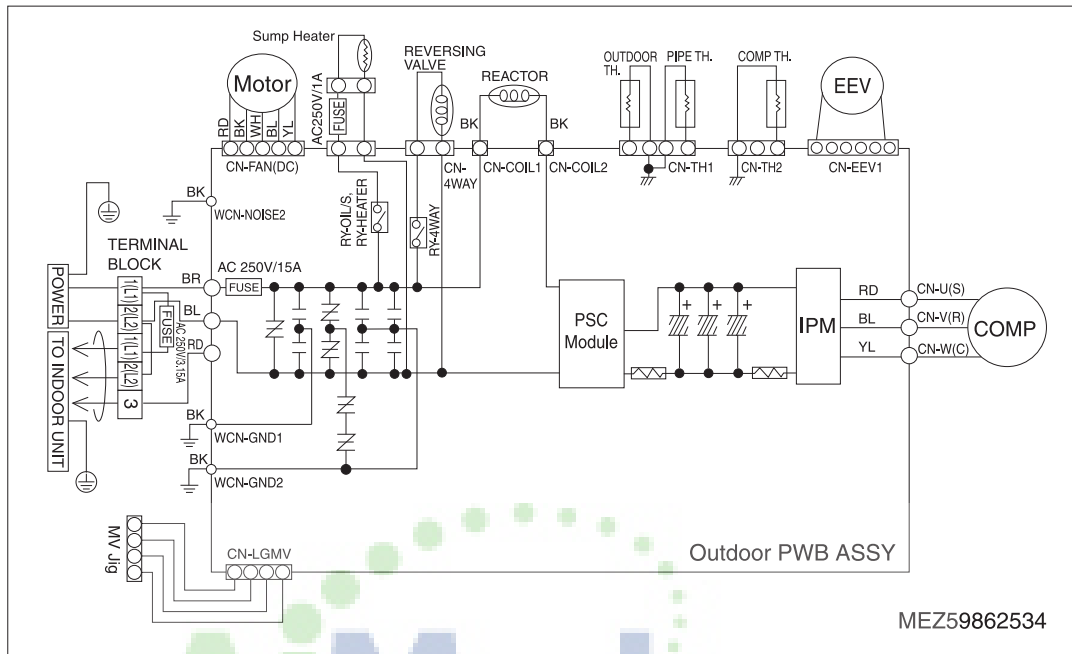
Models: ASNW093MMM9 (LSN090HYV), ASNW123MMM9 (LSN120HYV)



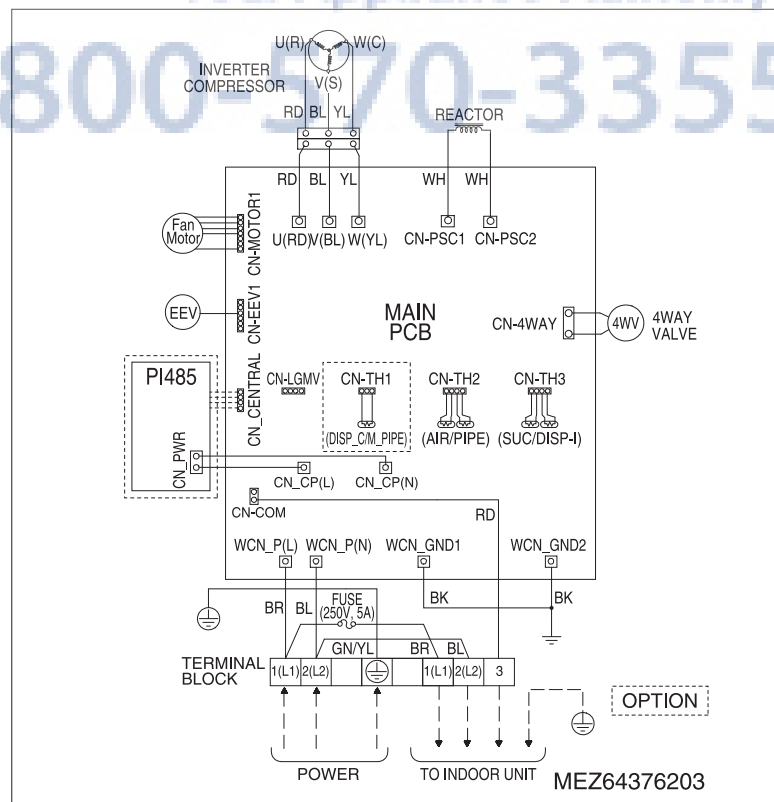
Models: ASNW093F2B2(LAN090HVP), ASNW123F2B2(LAN120HVP)

Models: ASNW093WSA7 (LSN090HEV), ASNW123BSA7 (LSN120HEV), ASNW183CSA7 (LSN180HEV), ASNW243CSA7 (LSN240HEV)


5.2 Outdoor units

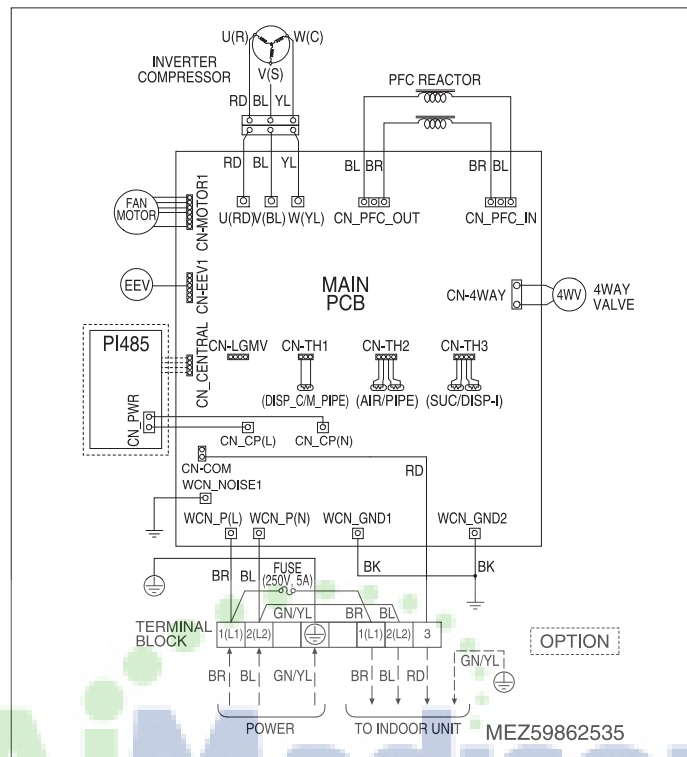
**Models: ASUW093B1Y9(LSU091HSV2), ASUW123B1Y9(LSU121HSV2)
ASUW093BRM9(LAU090HSV2), ASUW123BRM9(LAU120HSV2)**



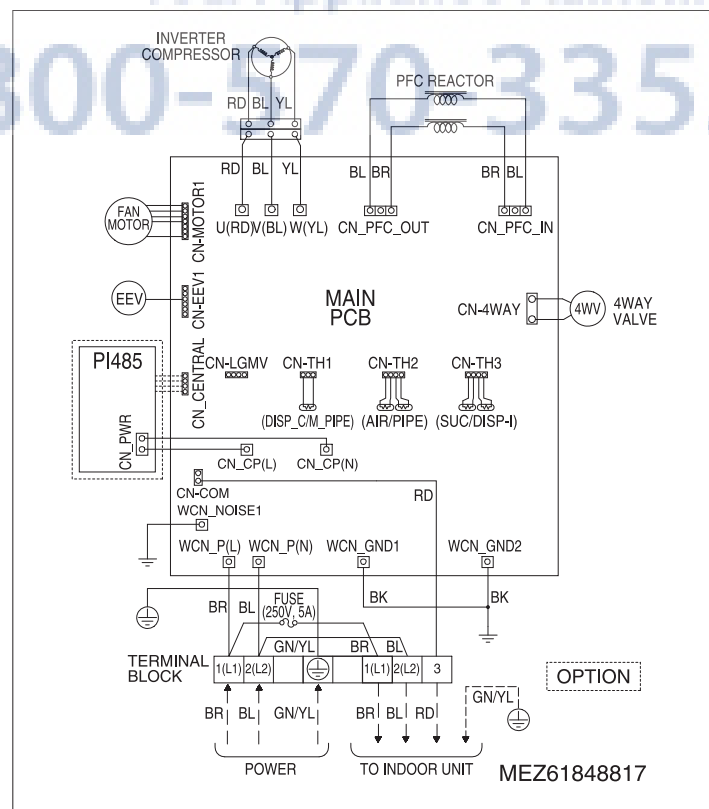
Models: ASUW093MMM9 (LSU090HYV), ASUW123MMM9 (LSU120HYV)

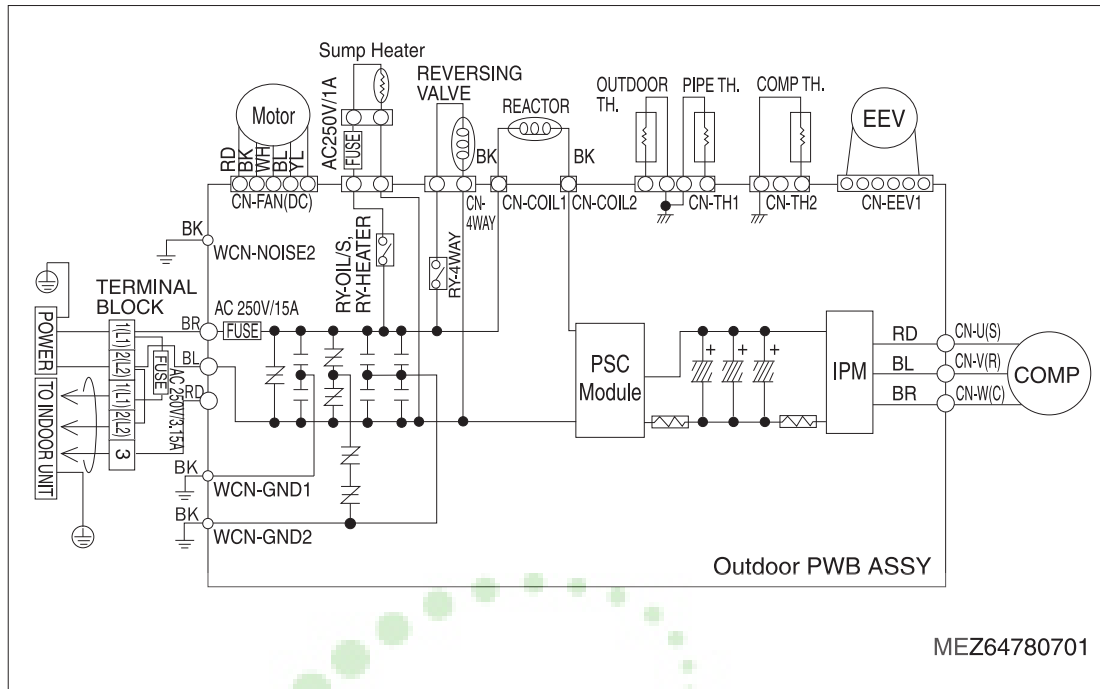
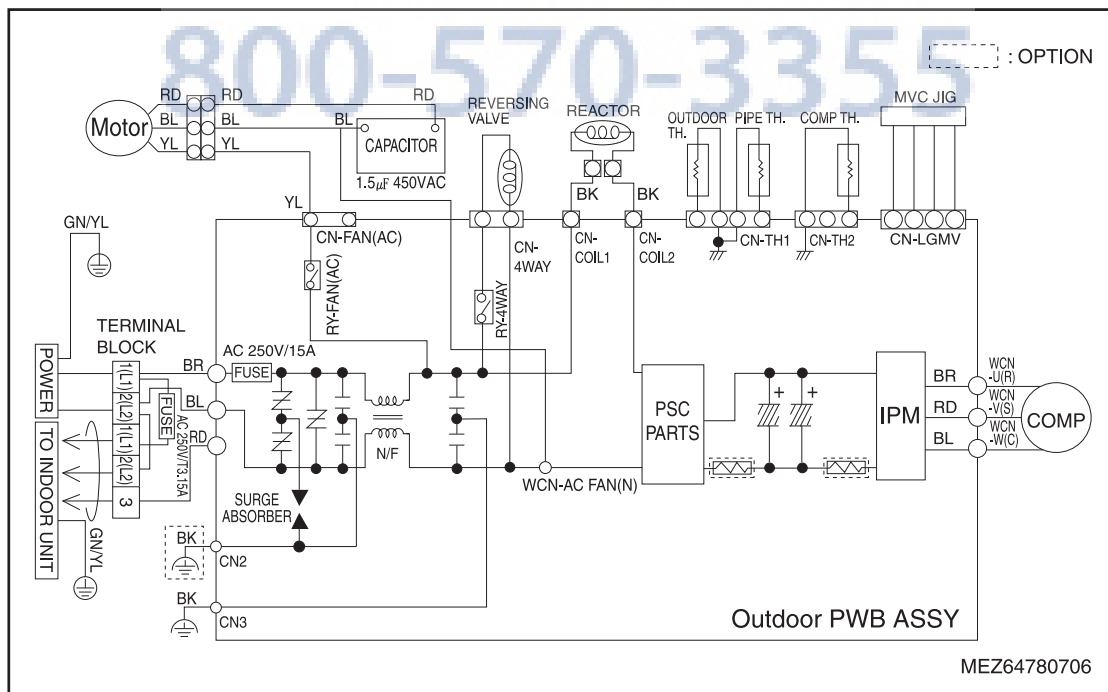


Models: ASUW183C2Y9(LSU181HSV2), ASUW183CRM9(LAU180HSV2), ASUW243CRM9(LAU240HSV2)

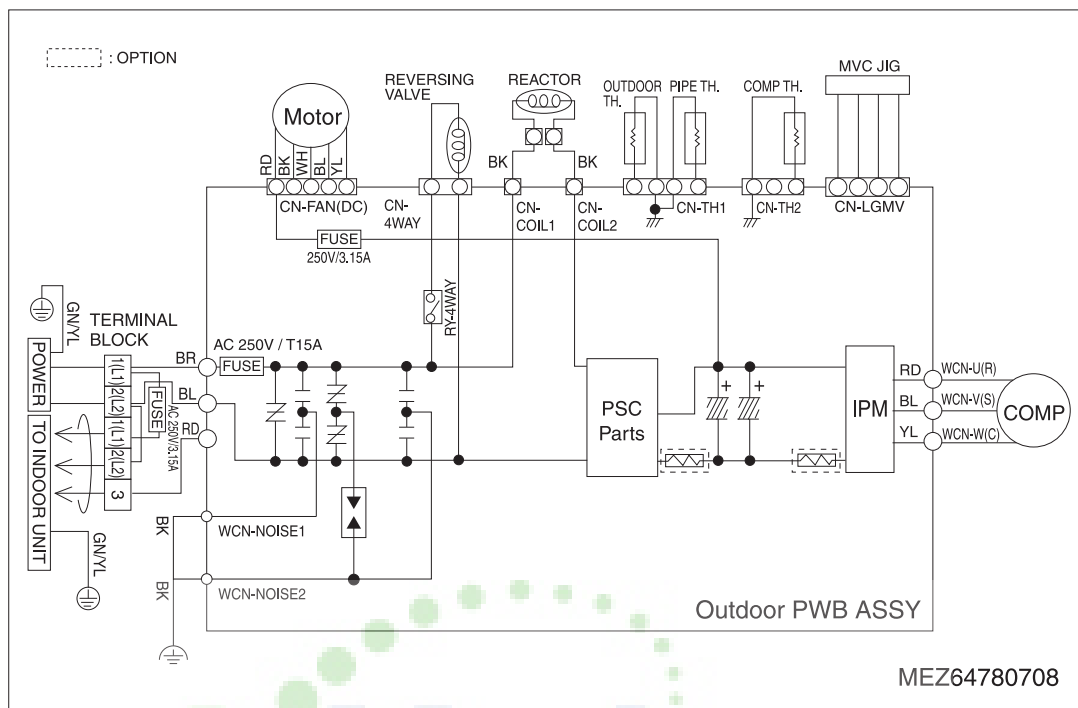


Models: ASUW243DGY9(LSU240HSV2), ASUW303DGY9(LSU307HV2), ASUW363DGY9(LSU360HV2)

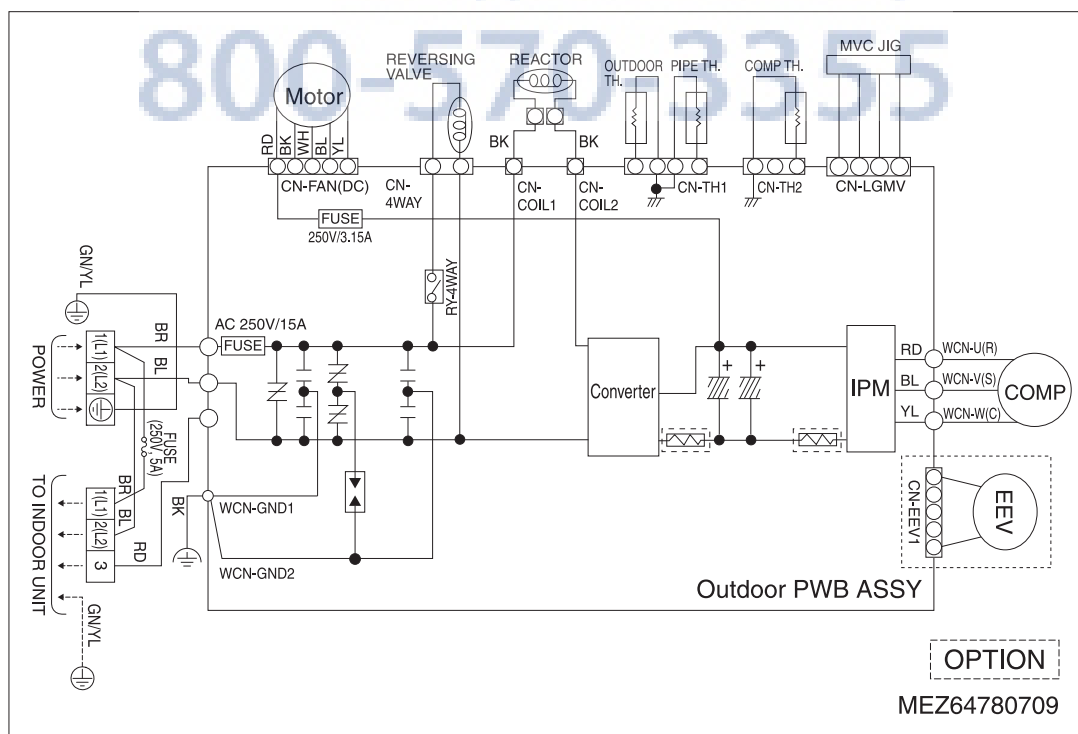


Models: ASUW093F2B2(LAU090HVP), ASUW123F2B2(LAU120HVP)

Models : ASUW093WSA7 (LSU090HEV), ASUW123BSA7 (LSU120HEV)


Model : ASUW183CSA7 (LSU180HEV)

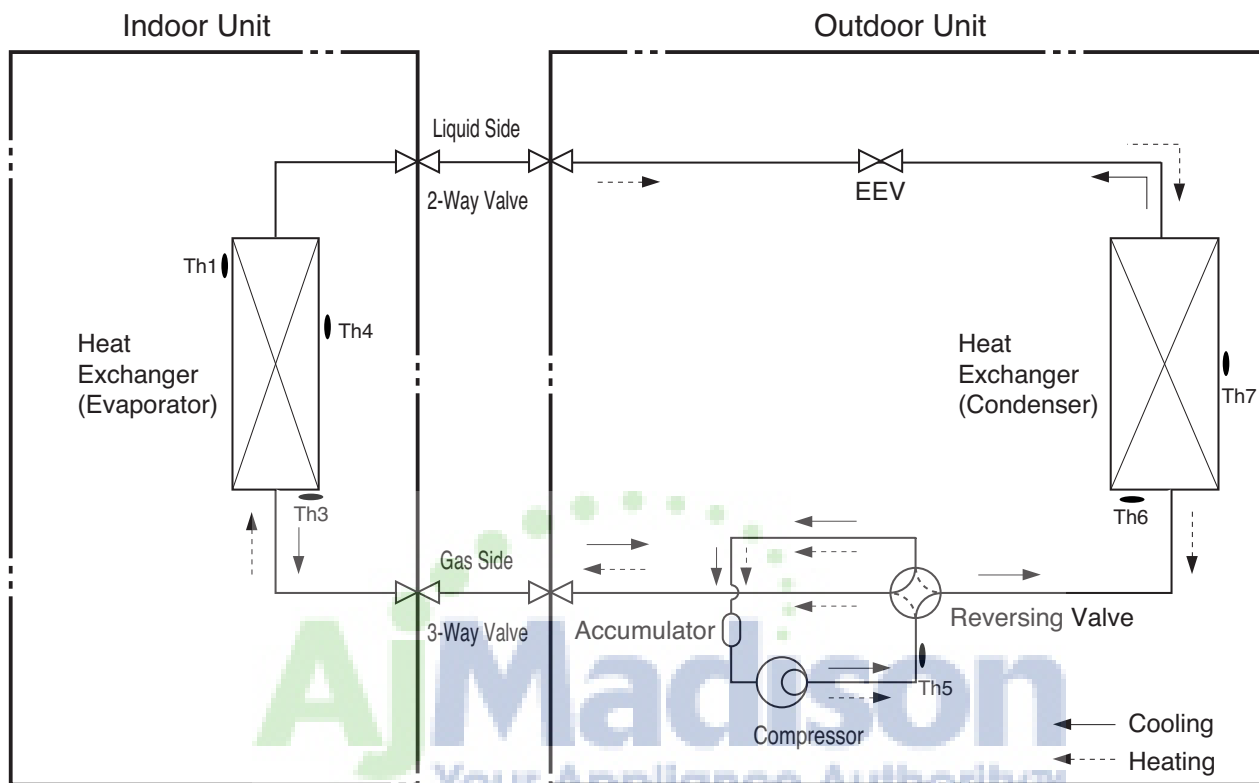


Model : ASUW243CSA7 (LSU240HEV)



6. Refrigerant cycle diagram

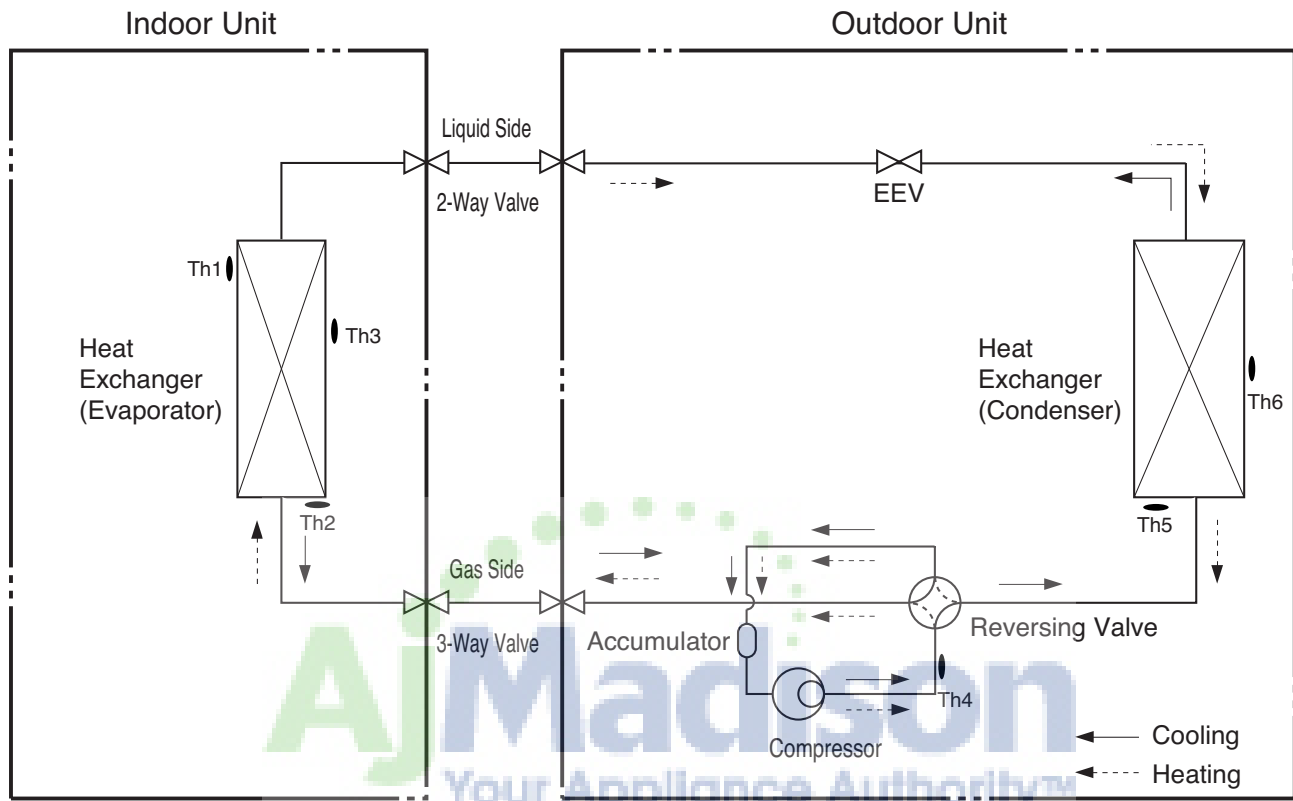
Models: AS-W093MMM9(LSN090HYV/LSU090HYV), AS-W123MMM9(LSN120HYV/LSU120HYV)



LOC.	Description	PCB Connector
Th1	Thermistor for suction air temperature	CN-TH1(Indoor)
Th3	Water level sensor (Option)	CN-TH2(Indoor)
Th4	Thermistor for evaporator middle temperature	CN-TH3(Indoor)
Th5	Thermistor for discharge pipe temperature	CN-TH2(OUTDOOR)
Th6	Thermistor for condensing temperature	CN-TH1(OUTDOOR)
Th7	Thermistor for outdoor air temperature	CN-TH1(OUTDOOR)

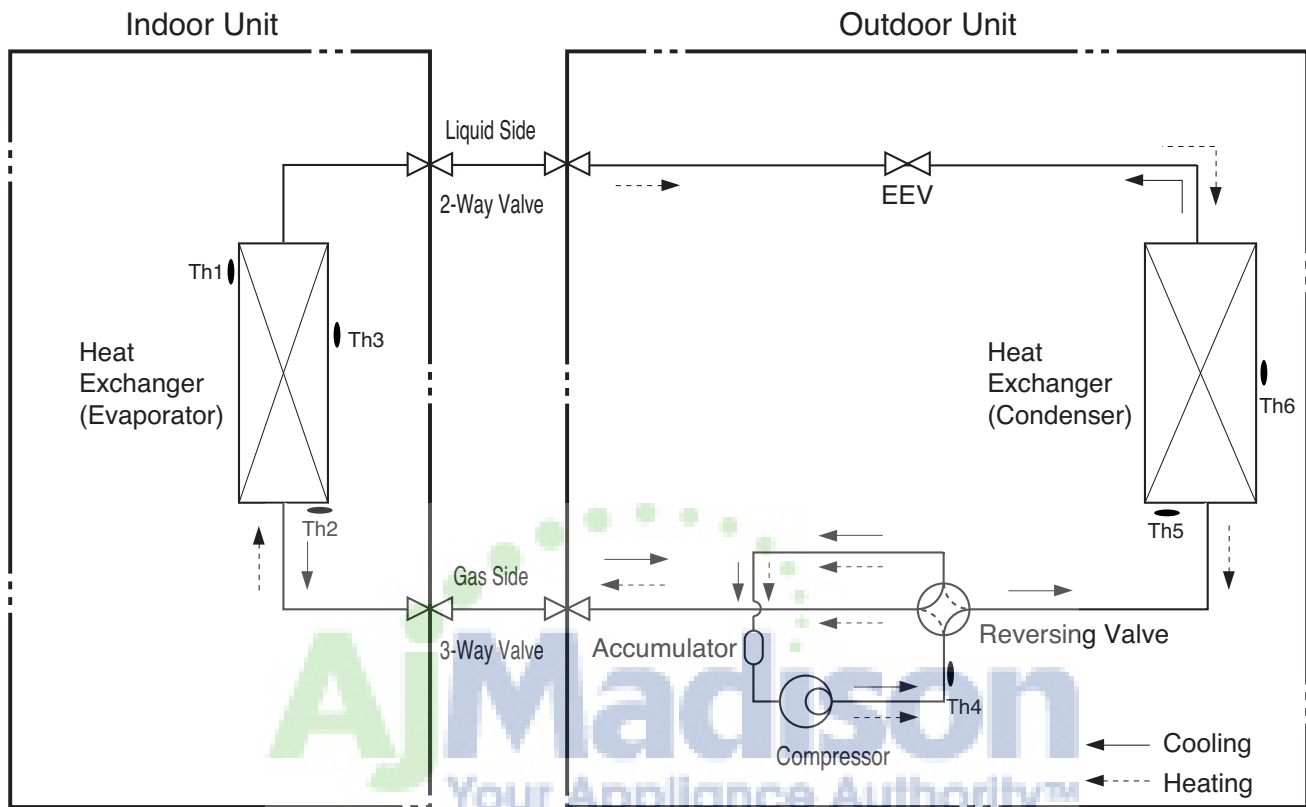
※ EEV : Electronic Expansion Valve

Models : AS-W093BRM9(LAN090HSV2/LAU090HSV2), AS-W123BRM9(LAN120HSV2/LAU120HSV2)
 AS-W093B1Y9(LSN091HSV2/LSU091HSV2), AS-W123B1Y9(LSN121HSV2/LSU121HSV2)



LOC.	Description	PCB Connector
Th1	Thermistor for suction air temperature	CN-TH1(Indoor)
Th2	Water Level Sensor (Option)	CN-TH2(Indoor)
Th3	Thermistor for evaporator middle temperature	CN-TH3(Indoor)
Th4	Thermistor for discharge pipe temperature	CN-TH2(Outdoor)
Th5	Thermistor for condensing temperature	CN-TH1(Outdoor)
Th6	Thermistor for outdoor air temperature	

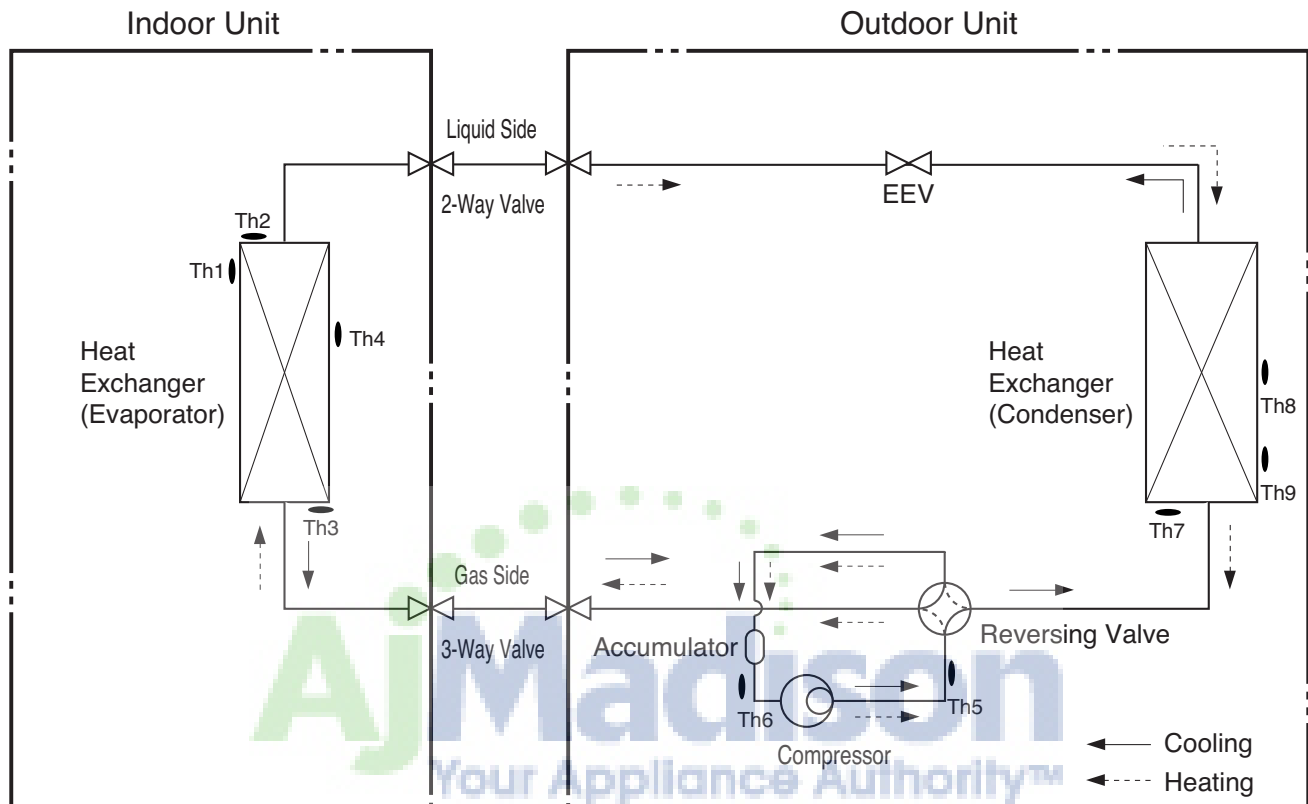
Models : AS-W183CRM9(LAN180HSV2/LAU180HSV2), AS-W243CRM9(LAN240HSV2/LAU240HSV2), AS-W183C2Y9(LSN181HSV2/LSU181HSV2)



LOC.	Description	PCB Connector
Th1	Thermistor for suction air temperature	CN-TH1(Indoor)
Th2	Thermistor for evaporator inlet temperature	
Th3	Thermistor for evaporator outlet temperature + Water level sensor	CN-TH2(Indoor)
Th4	Thermistor for evaporator middle temperature	CN-TH3(Indoor)
Th5	Thermistor for discharge pipe temperature	CN-TH3(Outdoor)
Th6	Thermistor for suction pipe temperature	
Th7	Thermistor for condensing temperature	CN-TH2(Outdoor)
Th8	Thermistor for outdoor air temperature	
Th9	Thermistor for condensing middle temperature	CN-TH4(Outdoor)

※ EEV : Electronic Expansion Valve

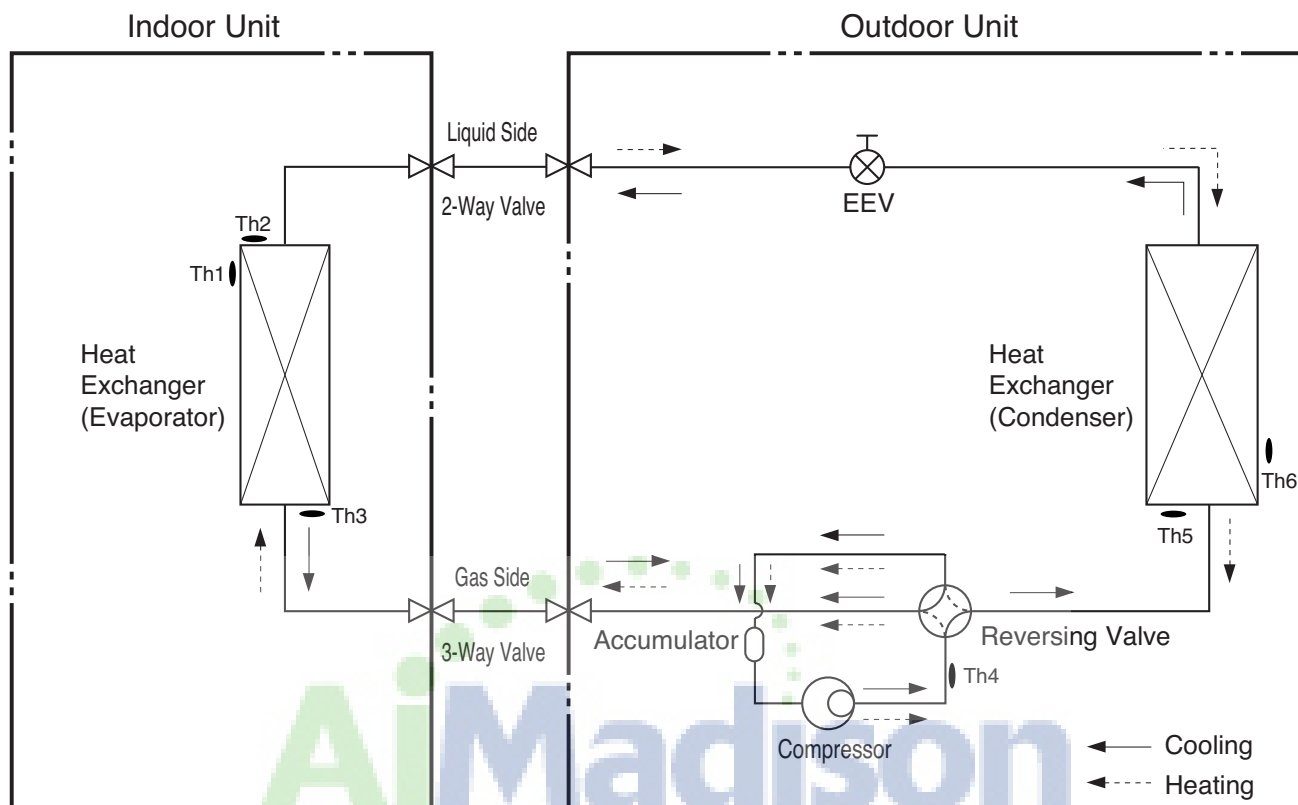
**Models : AS-W243DGY9(LSN240HSV2/LSU240HSV2), AS-W303DGY9(LSN307HV2/LSU307HV2)
AS-W363DGY9(LSN360HV2/LSU360HV2)**



LOC.	Description	PCB Connector
Th1	Thermistor for suction air temperature	CN-TH1(Indoor)
Th2	Thermistor for evaporator inlet temperature	
Th3	Thermistor for evaporator outlet temperature + Water level sensor	
Th4	Thermistor for evaporator middle temperature	CN-TH3(Indoor)
Th5	Thermistor for discharge pipe temperature	CN-TH3(OUTDOOR)
Th6	Thermistor for suction pipe temperature	
Th7	Thermistor for condensing temperature	CN-TH2(OUTDOOR)
Th8	Thermistor for outdoor air temperature	
Th9	Thermistor for condensing middle temperature	CN-TH4(OUTDOOR)

* EEV : Electronic Expansion Valve

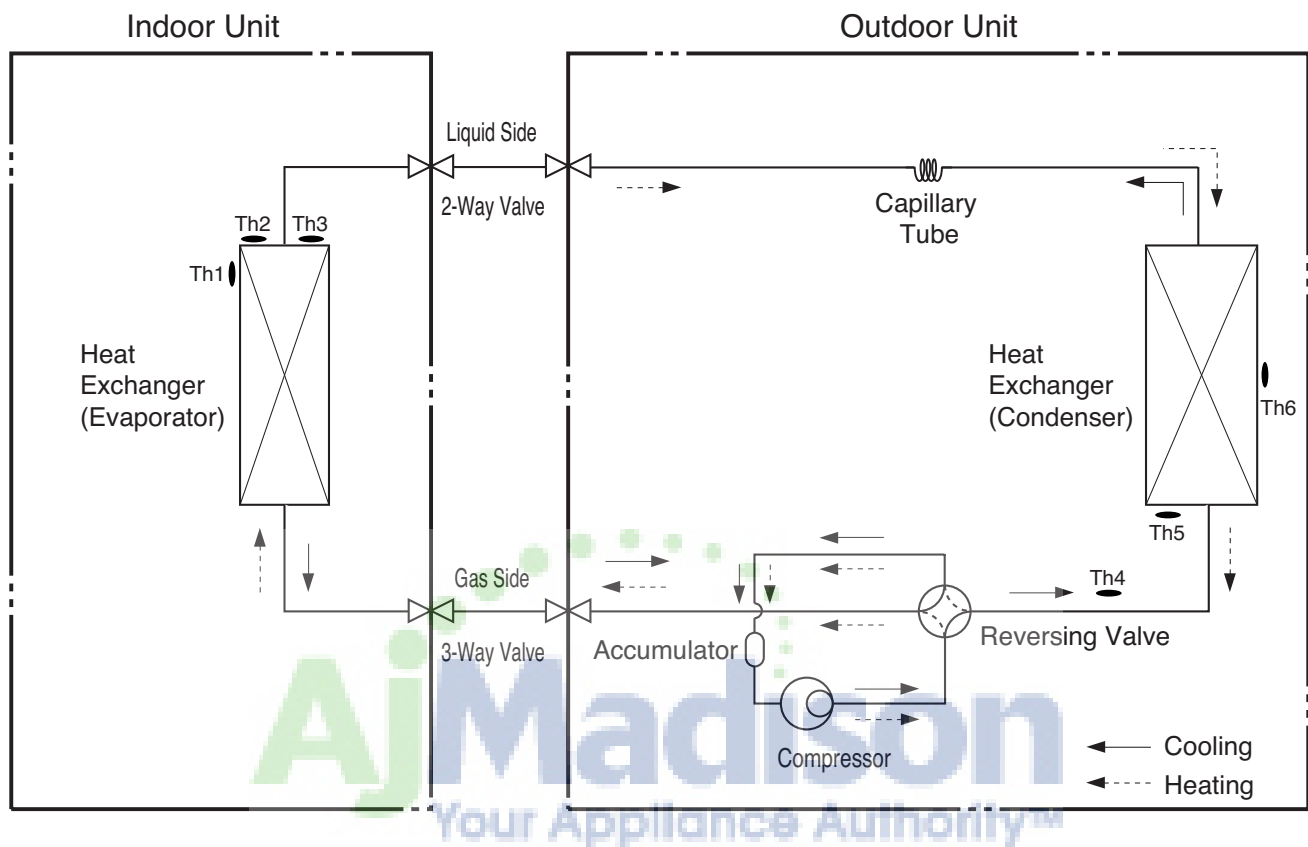
Models : AS-W093F2B2(LAN090HVP/LAU090HVP), AS-W123F2B2(LAN120HVP/LAU120HVP)



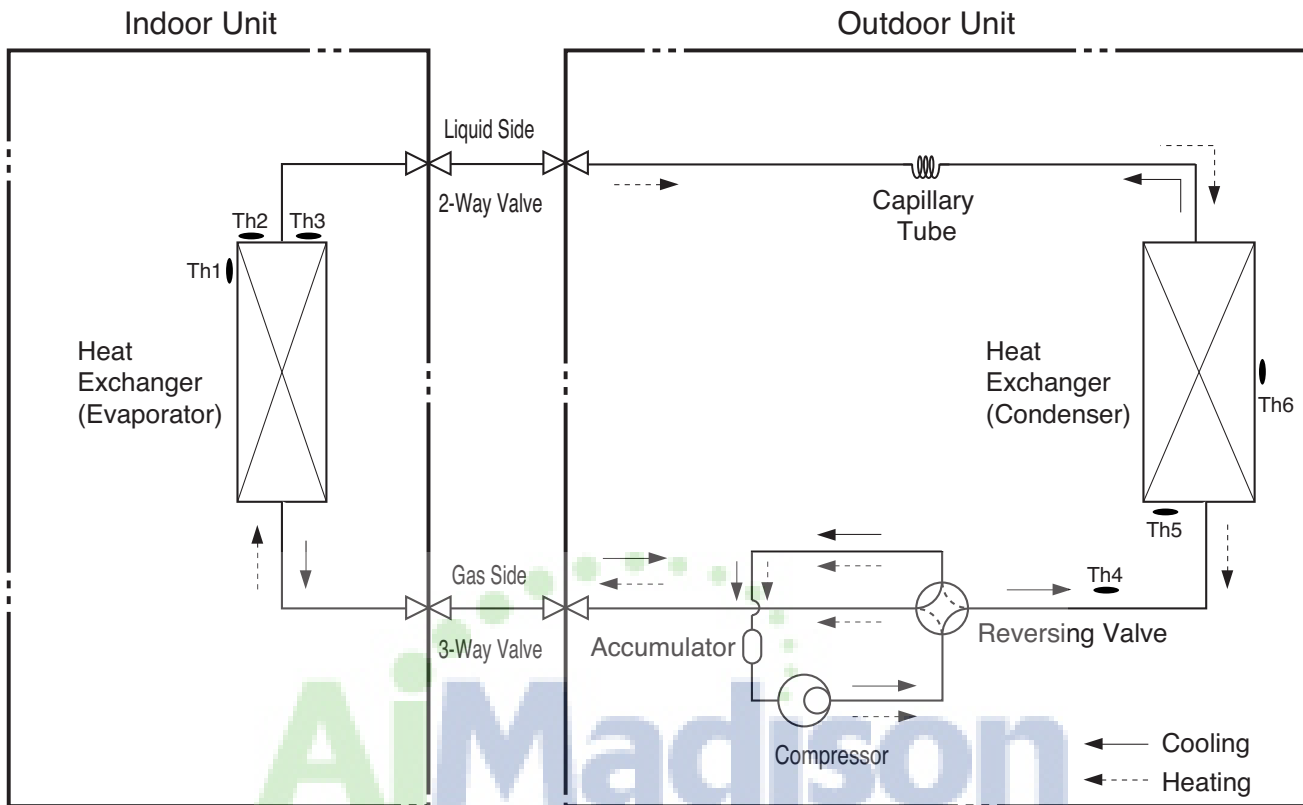
LOC	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CN_TH1(Indoor)
Th2	Water level sensor (Option)	CN_TH2(Indoor)
Th3	Thermistor for evaporating temperature	CN_TH3(Indoor)
Th4	Thermistor for discharge pipe temperature	CN_TH2(Outdoor)
Th5	Thermistor for condensing temperature	CN_TH1(Outdoor)
Th6	Thermistor for outdoor air temperature	

※ EEV : Electronic Expansion Valve.

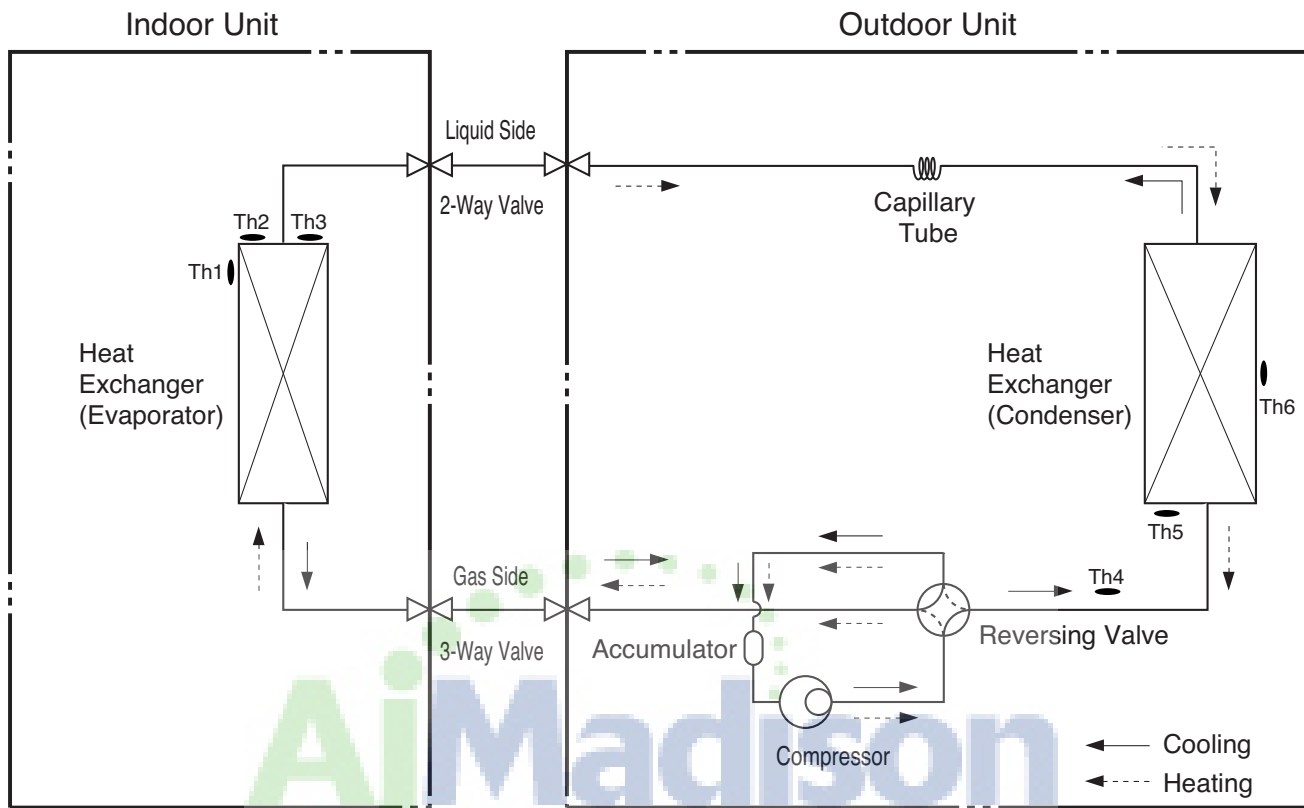
Models: AS-W093WSA7 (LS090HEV), AS-W123BSA7 (LS120HEV)



LOC	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CH-TH1(Indoor)
Th2	Water level sensor (Option)	CH-TH2(Indoor)
Th3	Thermistor for evaporating temperature	CH-TH3(INDOOR)
Th4	Thermistor for discharge pipe temperature	CN-TH2(OUTDOOR)
Th5	Thermistor for condensing temperature	CN-TH1(OUTDOOR)
Th6	Thermistor for outdoor air temperature	CN-TH1(OUTDOOR)

Model : AS-W183CSA7 (LS180HEV)

LOC	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CH-TH1(Indoor)
Th2	Water level sensor (Option)	CH-TH2(Indoor)
Th3	Thermistor for evaporating temperature	CH-TH3(Indoor)
Th4	Thermistor for discharge pipe temperature	CN-TH2(Outdoor)
Th5	Thermistor for condensing temperature	CN-TH1(Outdoor)
Th6	Thermistor for outdoor air temperature	CN-TH1(Outdoor)

Model : AS-W243CSA7 (LS240HEV)

LOC	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CH-TH1(Indoor)
Th2	Water level sensor (Option)	CH-TH2(Indoor)
Th3	Thermistor for evaporating temperature	CH-TH3(Indoor)
Th4	Thermistor for discharge pipe temperature	CN-TH2(Outdoor)
Th5	Thermistor for condensing temperature	CN-TH1(Outdoor)
Th6	Thermistor for outdoor air temperature	CN-TH1(Outdoor)

7. Capacity tables

7.1 Cooling Capacity

AS-W093MMM9(LSN090HYV/LSU090HYV)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	8.80	8.89	0.30	8.42	8.60	0.32	7.90	8.25	0.43	7.66	7.98	0.48
16(60.8)	22(71.6)	9.34	9.01	0.41	8.96	8.73	0.42	8.44	8.41	0.50	8.20	8.14	0.54
18(64.4)	25(77.0)	9.88	9.08	0.45	9.49	8.83	0.45	8.98	8.53	0.53	8.73	8.27	0.55
19(66.2)	27(80.6)	10.15	9.16	0.45	9.76	8.91	0.45	9.24	8.63	0.53	8.97	8.35	0.55
22(71.6)	30(86.0)	10.97	9.35	0.45	10.57	9.12	0.46	10.05	8.85	0.55	9.80	8.60	0.58
24(75.2)	32(89.6)	11.51	9.52	0.45	11.11	9.30	0.47	10.58	9.05	0.56	10.33	8.81	0.59

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	7.33	7.73	0.52	7.12	7.46	0.51	6.92	7.23	0.46	6.72	7.16	0.46
16(60.8)	22(71.6)	7.86	7.92	0.56	7.66	7.65	0.54	7.46	7.43	0.46	7.25	7.38	0.45
18(64.4)	25(77.0)	8.39	8.06	0.57	8.19	7.81	0.53	7.99	7.59	0.45	7.79	7.54	0.43
19(66.2)	27(80.6)	8.66	8.17	0.57	8.46	7.91	0.53	8.26	7.70	0.45	8.05	7.66	0.42
22(71.6)	30(86.0)	9.46	8.43	0.58	9.26	8.18	0.54	9.06	7.98	0.45	8.86	7.95	0.42
24(75.2)	32(89.6)	9.99	8.64	0.59	9.79	8.40	0.55	9.59	8.20	0.46	9.39	8.17	0.43

AS-W123MMM9(LSN120HYV/LSU120HYV)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	11.74	11.86	0.47	11.23	11.48	0.49	10.55	11.02	0.66	10.23	10.64	0.73
16(60.8)	22(71.6)	12.47	12.02	0.64	11.95	11.66	0.64	11.26	11.23	0.78	10.94	10.87	0.83
18(64.4)	25(77.0)	13.19	12.12	0.69	12.67	11.78	0.69	11.98	11.38	0.82	11.65	11.03	0.85
19(66.2)	27(80.6)	13.55	12.23	0.70	13.03	11.90	0.70	12.34	11.51	0.82	11.98	11.14	0.85
22(71.6)	30(86.0)	14.64	12.47	0.70	14.11	12.17	0.71	13.41	11.82	0.84	13.07	11.48	0.89
24(75.2)	32(89.6)	15.36	12.71	0.69	14.83	12.41	0.72	14.13	12.08	0.86	13.79	11.75	0.91

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	9.78	10.32	0.81	9.51	9.96	0.79	9.24	9.65	0.71	8.99	9.56	0.67
16(60.8)	22(71.6)	10.49	10.57	0.87	10.22	10.22	0.83	9.95	9.92	0.72	9.70	9.84	0.66
18(64.4)	25(77.0)	11.20	10.76	0.88	10.93	10.42	0.83	10.66	10.13	0.70	10.42	10.07	0.63
19(66.2)	27(80.6)	11.56	10.90	0.88	11.29	10.56	0.82	11.02	10.28	0.69	10.77	10.22	0.62
22(71.6)	30(86.0)	12.63	11.24	0.90	12.36	10.92	0.83	12.09	10.65	0.69	11.84	10.60	0.61
24(75.2)	32(89.6)	13.34	11.53	0.92	13.07	11.21	0.85	12.80	10.95	0.71	12.55	10.91	0.63

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

SHC : Sensible Heating Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

[kBtu/h]

[kW]

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.

AS-W093B1Y9(LSN091HSV2/LSU091HSV2), AS-W093BRM9(LAN090HSV2/LAU090HSV2)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	8.83	8.35	0.37	8.45	8.08	0.39	7.93	7.75	0.52	7.69	7.49	0.59
16(60.8)	22(71.6)	9.38	8.46	0.51	8.99	8.20	0.51	8.47	7.90	0.62	8.23	7.65	0.66
18(64.4)	25(77.0)	9.92	8.53	0.55	9.53	8.29	0.55	9.01	8.01	0.65	8.76	7.76	0.68
19(66.2)	27(80.6)	10.19	8.61	0.55	9.80	8.37	0.56	9.28	8.10	0.66	9.01	7.84	0.68
22(71.6)	30(86.0)	11.01	8.78	0.55	10.61	8.56	0.57	10.09	8.31	0.67	9.83	8.08	0.71
24(75.2)	32(89.6)	11.55	8.94	0.55	11.15	8.73	0.57	10.62	8.50	0.68	10.37	8.27	0.72

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	7.35	7.26	0.64	7.15	7.01	0.63	6.95	6.79	0.57	6.75	6.73	0.55
16(60.8)	22(71.6)	7.89	7.44	0.69	7.69	7.19	0.66	7.48	6.98	0.57	7.28	6.93	0.54
18(64.4)	25(77.0)	8.43	7.57	0.70	8.22	7.33	0.66	8.02	7.13	0.56	7.82	7.08	0.52
19(66.2)	27(80.6)	8.69	7.67	0.70	8.49	7.43	0.66	8.29	7.23	0.55	8.09	7.19	0.51
22(71.6)	30(86.0)	9.50	7.91	0.72	9.29	7.68	0.66	9.09	7.49	0.55	8.89	7.46	0.50
24(75.2)	32(89.6)	10.03	8.11	0.73	9.83	7.89	0.68	9.63	7.70	0.57	9.42	7.68	0.51

AS-W123B1Y9(LSN121HSV2/LSU121HSV2), AS-W123BRM9(LAN120HSV2/LAU120HSV2)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	10.97	9.54	0.49	10.50	9.23	0.52	9.86	8.86	0.69	9.56	8.56	0.77
16(60.8)	22(71.6)	11.65	9.66	0.67	11.17	9.37	0.68	10.52	9.03	0.82	10.22	8.74	0.88
18(64.4)	25(77.0)	12.33	9.75	0.73	11.84	9.47	0.73	11.19	9.15	0.86	10.89	8.87	0.90
19(66.2)	27(80.6)	12.66	9.83	0.73	12.18	9.56	0.74	11.53	9.25	0.87	11.19	8.95	0.90
22(71.6)	30(86.0)	13.68	10.03	0.73	13.19	9.78	0.75	12.53	9.50	0.89	12.22	9.23	0.94
24(75.2)	32(89.6)	14.35	10.21	0.73	13.86	9.98	0.76	13.20	9.71	0.91	12.88	9.45	0.96

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	9.14	8.30	0.85	8.88	8.00	0.84	8.63	7.76	0.75	8.40	7.69	0.71
16(60.8)	22(71.6)	9.80	8.49	0.92	9.55	8.21	0.88	9.30	7.97	0.76	9.06	7.91	0.70
18(64.4)	25(77.0)	10.47	8.65	0.93	10.22	8.37	0.87	9.97	8.14	0.74	9.73	8.09	0.67
19(66.2)	27(80.6)	10.80	8.76	0.94	10.55	8.49	0.87	10.30	8.26	0.74	10.06	8.22	0.65
22(71.6)	30(86.0)	11.80	9.04	0.95	11.55	8.78	0.88	11.30	8.56	0.74	11.06	8.52	0.65
24(75.2)	32(89.6)	12.46	9.27	0.97	12.21	9.01	0.90	11.96	8.80	0.75	11.73	8.77	0.66

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

SHC : Sensible Heating Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

[kBtu/h]

[kW]

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.

AS-W183C2Y9(LSN181HSV2/LSU181HSV2), AS-W183BRM9(LAN180HSV2/LAU180HSV2)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	17.83	15.69	0.80	17.06	15.18	0.83	16.02	14.57	1.12	15.53	14.08	1.25
16(60.8)	22(71.6)	18.93	15.90	1.08	18.15	15.42	1.09	17.10	14.85	1.32	16.61	14.37	1.42
18(64.4)	25(77.0)	20.03	16.03	1.17	19.24	15.58	1.18	18.19	15.06	1.39	17.69	14.59	1.45
19(66.2)	27(80.6)	20.58	16.18	1.19	19.79	15.74	1.20	18.73	15.23	1.40	18.19	14.73	1.45
22(71.6)	30(86.0)	22.22	16.50	1.18	21.43	16.09	1.22	20.36	15.63	1.44	19.85	15.19	1.52
24(75.2)	32(89.6)	23.32	16.80	1.18	22.52	16.41	1.23	21.45	15.98	1.46	20.94	15.54	1.55

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	14.85	13.65	1.37	14.44	13.17	1.35	14.03	12.76	1.21	13.69	12.65	1.10
16(60.8)	22(71.6)	15.93	13.98	1.48	15.52	13.51	1.41	15.11	13.12	1.22	14.77	13.02	1.08
18(64.4)	25(77.0)	17.01	14.23	1.50	16.60	13.78	1.41	16.19	13.40	1.19	15.85	13.32	1.03
19(66.2)	27(80.6)	17.55	14.42	1.50	17.14	13.97	1.40	16.73	13.60	1.18	16.39	13.52	1.02
22(71.6)	30(86.0)	19.17	14.87	1.53	18.76	14.44	1.42	18.36	14.09	1.18	18.02	14.02	1.00
24(75.2)	32(89.6)	20.25	15.25	1.56	19.85	14.82	1.45	19.44	14.48	1.21	19.10	14.43	1.03

AS-W243BRM9(LAN240HSV2/LAU240HSV2)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	21.58	18.52	1.13	20.64	17.92	1.18	19.38	17.20	1.58	18.79	16.62	1.76
16(60.8)	22(71.6)	22.91	18.76	1.53	21.96	18.20	1.54	20.70	17.53	1.86	20.10	16.96	2.00
18(64.4)	25(77.0)	24.24	18.92	1.65	23.29	18.39	1.66	22.01	17.77	1.96	21.41	17.22	2.04
19(66.2)	27(80.6)	24.90	19.09	1.67	23.95	18.57	1.69	22.67	17.97	1.98	22.01	17.39	2.04
22(71.6)	30(86.0)	26.89	19.47	1.67	25.93	18.99	1.71	24.64	18.45	2.03	24.03	17.92	2.14
24(75.2)	32(89.6)	28.22	19.83	1.66	27.25	19.37	1.73	25.96	18.86	2.06	25.33	18.35	2.18

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	17.97	16.11	1.94	17.47	15.54	1.90	16.98	15.06	1.70	16.58	14.93	1.53
16(60.8)	22(71.6)	19.28	16.50	2.09	18.78	15.95	1.99	18.29	15.48	1.72	17.89	15.37	1.50
18(64.4)	25(77.0)	20.58	16.79	2.12	20.09	16.26	1.98	19.60	15.82	1.68	19.20	15.72	1.43
19(66.2)	27(80.6)	21.24	17.01	2.12	20.74	16.49	1.98	20.25	16.05	1.67	19.85	15.96	1.41
22(71.6)	30(86.0)	23.20	17.55	2.16	22.71	17.04	2.00	22.21	16.62	1.67	21.82	16.55	1.39
24(75.2)	32(89.6)	24.51	18.00	2.20	24.02	17.50	2.04	23.52	17.09	1.71	23.13	17.03	1.43

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

SHC : Sensible Heating Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

[kBtu/h]

[kW]

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.

AS-W243DGY9(LSN240HSV2/LSU240HSV2))

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	21.58	19.46	0.97	20.64	18.83	1.02	19.38	18.07	1.36	18.79	17.46	1.52
16(60.8)	22(71.6)	22.91	19.71	1.32	21.96	19.12	1.33	20.70	18.41	1.61	20.10	17.82	1.73
18(64.4)	25(77.0)	24.24	19.88	1.43	23.29	19.32	1.43	22.01	18.67	1.69	21.41	18.10	1.76
19(66.2)	27(80.6)	24.90	20.06	1.44	23.95	19.51	1.45	22.67	18.88	1.71	22.01	18.27	1.76
22(71.6)	30(86.0)	26.89	20.46	1.44	25.93	19.95	1.48	24.64	19.38	1.75	24.03	18.83	1.84
24(75.2)	32(89.6)	28.22	20.84	1.43	27.25	20.35	1.49	25.96	19.82	1.78	25.33	19.27	1.88

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	17.97	16.93	1.67	17.47	16.33	1.64	16.98	15.82	1.47	16.58	15.68	1.33
16(60.8)	22(71.6)	19.28	17.33	1.80	18.78	16.75	1.71	18.29	16.27	1.49	17.89	16.14	1.30
18(64.4)	25(77.0)	20.58	17.64	1.83	20.09	17.08	1.71	19.60	16.62	1.45	19.20	16.51	1.24
19(66.2)	27(80.6)	21.24	17.87	1.83	20.74	17.32	1.71	20.25	16.86	1.44	19.85	16.76	1.22
22(71.6)	30(86.0)	23.20	18.44	1.86	22.71	17.91	1.72	22.21	17.47	1.44	21.82	17.39	1.21
24(75.2)	32(89.6)	24.51	18.91	1.90	24.02	18.38	1.76	23.52	17.95	1.47	23.13	17.89	1.24

AS-W303DGY9(LSN307HV2/LSU307HV2)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	29.41	21.72	1.66	28.13	21.02	1.73	26.41	20.17	2.32	25.61	19.49	2.59
16(60.8)	22(71.6)	31.22	22.01	2.25	29.93	21.35	2.27	28.20	20.56	2.74	27.39	19.9	2.94
18(64.4)	25(77.0)	33.03	22.20	2.43	31.73	21.57	2.44	30.00	20.85	2.88	29.17	20.20	3.00
19(66.2)	27(80.6)	33.93	22.39	2.46	32.63	21.79	2.48	30.89	21.08	2.91	29.99	20.40	3.00
22(71.6)	30(86.0)	36.65	22.84	2.46	35.34	22.28	2.52	33.58	21.64	2.98	32.74	21.03	3.14
24(75.2)	32(89.6)	38.46	23.26	2.44	37.14	22.72	2.54	35.38	22.12	3.03	34.53	21.52	3.21

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	24.48	18.90	2.85	23.81	18.23	2.79	23.14	17.67	2.50	22.62	17.67	2.22
16(60.8)	22(71.6)	26.27	19.35	3.07	25.59	18.70	2.92	24.92	18.16	2.53	24.40	18.02	2.18
18(64.4)	25(77.0)	28.05	19.70	3.11	27.38	19.07	2.92	26.70	18.55	2.47	26.19	18.55	2.08
19(66.2)	27(80.6)	28.94	19.96	3.12	28.27	19.34	2.91	27.60	18.82	2.45	27.08	18.82	2.04
22(71.6)	30(86.0)	31.62	20.59	3.17	30.94	19.99	2.94	30.27	19.50	2.45	29.75	19.50	2.02
24(75.2)	32(89.6)	33.40	21.11	3.24	32.73	20.52	3.00	32.06	20.04	2.51	31.54	20.04	2.07

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

SHC : Sensible Heating Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

[kBtu/h]

[kW]

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.

AS-W363DGY9(LSN360HV2/LSU360HV2)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	32.35	24.07	2.23	30.95	23.29	2.33	29.06	22.36	3.13	28.17	21.60	3.49
16(60.8)	22(71.6)	34.34	24.39	3.03	32.93	23.66	3.05	31.03	22.78	3.69	30.13	22.05	3.97
18(64.4)	25(77.0)	36.34	24.60	3.27	34.91	23.91	3.29	33.00	23.10	3.88	32.10	22.39	4.04
19(66.2)	27(80.6)	37.33	24.82	3.31	35.90	24.14	3.34	33.99	23.36	3.92	33.00	22.60	4.04
22(71.6)	30(86.0)	40.32	25.31	3.31	38.87	24.69	3.40	36.94	23.98	4.01	36.02	23.30	4.24
24(75.2)	32(89.6)	42.31	25.78	3.29	40.86	25.18	3.43	38.92	24.52	4.09	37.98	23.85	4.32

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	26.94	20.94	3.84	26.19	20.21	3.76	25.45	19.58	3.37	24.89	19.40	2.97
16(60.8)	22(71.6)	28.90	21.44	4.13	28.16	20.73	3.93	27.42	20.13	3.41	26.85	19.97	2.91
18(64.4)	25(77.0)	30.86	21.83	4.19	30.12	21.14	3.93	29.38	20.56	3.33	28.82	20.43	2.78
19(66.2)	27(80.6)	31.84	22.12	4.20	31.10	21.43	3.92	30.36	20.86	3.30	29.80	20.74	2.73
22(71.6)	30(86.0)	34.79	22.82	4.27	34.04	22.15	3.96	33.30	21.61	3.30	32.74	21.52	2.70
24(75.2)	32(89.6)	36.75	23.40	4.36	36.01	22.74	4.04	35.27	22.21	3.38	34.70	22.14	2.77

AS-W093F2B2(LAN090HVP/LAU090HVP)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	8.83	7.20	0.40	8.45	6.96	0.42	7.93	6.68	0.56	7.69	6.46	0.62
16(60.8)	22(71.6)	9.38	7.29	0.54	8.99	7.07	0.54	8.47	6.81	0.66	8.23	6.59	0.71
18(64.4)	25(77.0)	9.92	7.35	0.58	9.53	7.15	0.59	9.01	6.91	0.69	8.76	6.69	0.72
19(66.2)	27(80.6)	10.19	7.42	0.59	9.80	7.22	0.59	9.28	6.98	0.70	9.01	6.76	0.72
22(71.6)	30(86.0)	11.01	7.57	0.59	10.61	7.38	0.61	10.09	7.17	0.71	9.83	6.96	0.75
24(75.2)	32(89.6)	11.55	7.71	0.59	11.15	7.53	0.61	10.62	7.33	0.73	10.37	7.13	0.77

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	7.35	6.26	0.64	7.15	6.04	0.63	6.95	5.85	0.57	6.75	5.80	0.55
16(60.8)	22(71.6)	7.89	6.41	0.69	7.69	6.2	0.66	7.48	6.02	0.57	7.28	5.97	0.54
18(64.4)	25(77.0)	8.43	6.53	0.70	8.22	6.32	0.66	8.02	6.15	0.56	7.82	6.11	0.52
19(66.2)	27(80.6)	8.69	6.61	0.70	8.49	6.41	0.66	8.29	6.24	0.55	8.09	6.20	0.51
22(71.6)	30(86.0)	9.50	6.82	0.72	9.29	6.62	0.66	9.09	6.46	0.55	8.89	6.43	0.50
24(75.2)	32(89.6)	10.03	6.99	0.73	9.83	6.80	0.68	9.63	6.64	0.57	9.42	6.62	0.51

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

SHC : Sensible Heating Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

[kBtu/h]

[kW]

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.

AS-W123F2B2(LAN120HVP/LAU120HVP)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	10.97	8.94	0.52	10.50	8.65	0.54	9.86	8.30	0.72	9.56	8.02	0.81
16(60.8)	22(71.6)	11.65	9.06	0.70	11.17	8.79	0.70	10.52	8.46	0.85	10.22	8.19	0.92
18(64.4)	25(77.0)	12.33	9.14	0.76	11.84	8.88	0.76	11.19	8.58	0.90	10.89	8.32	0.93
19(66.2)	27(80.6)	12.66	9.22	0.76	12.18	8.97	0.77	11.53	8.68	0.90	11.19	8.39	0.93
22(71.6)	30(86.0)	13.68	9.40	0.76	13.19	9.17	0.78	12.53	8.91	0.93	12.22	8.65	0.98
24(75.2)	32(89.6)	14.35	9.57	0.76	13.86	9.35	0.79	13.20	9.11	0.94	12.88	8.86	1.00

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	9.14	7.78	0.89	8.88	7.50	0.87	8.63	7.27	0.78	8.40	7.21	0.73
16(60.8)	22(71.6)	9.80	7.96	0.95	9.55	7.70	0.91	9.30	7.47	0.79	9.06	7.42	0.72
18(64.4)	25(77.0)	10.47	8.11	0.97	10.22	7.85	0.91	9.97	7.64	0.77	9.73	7.59	0.69
19(66.2)	27(80.6)	10.80	8.21	0.97	10.55	7.96	0.90	10.3	7.75	0.76	10.06	7.70	0.68
22(71.6)	30(86.0)	11.80	8.47	0.99	11.55	8.23	0.91	11.3	8.03	0.76	11.06	7.99	0.67
24(75.2)	32(89.6)	12.46	8.69	1.01	12.21	8.45	0.93	11.96	8.25	0.78	11.73	8.22	0.69

AS-W093WSA7 (LS090HEV)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	8.33	7.15	0.43	7.97	6.92	0.45	7.48	6.64	0.60	7.25	6.41	0.67
16(60.8)	22(71.6)	8.84	7.24	0.58	8.48	7.02	0.59	7.99	6.77	0.71	7.76	6.55	0.77
18(64.4)	25(77.0)	9.36	7.31	0.63	8.99	7.10	0.64	8.50	6.86	0.75	8.26	6.65	0.78
19(66.2)	27(80.6)	9.61	7.37	0.64	9.24	7.17	0.64	8.75	6.94	0.76	8.50	6.71	0.78
22(71.6)	30(86.0)	10.38	7.52	0.64	10.01	7.33	0.66	9.51	7.12	0.77	8.46	6.31	0.82
24(75.2)	32(89.6)	10.89	7.66	0.63	10.52	7.48	0.66	10.02	7.28	0.79	8.50	6.15	0.83

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	6.94	6.22	0.74	6.74	6.00	0.73	6.55	5.81	0.65	6.36	5.81	0.62
16(60.8)	22(71.6)	7.44	6.37	0.80	7.25	6.16	0.76	7.06	5.98	0.66	6.86	5.93	0.61
18(64.4)	25(77.0)	7.95	6.48	0.81	7.76	6.28	0.76	7.56	6.11	0.64	7.37	6.11	0.58
19(66.2)	27(80.6)	8.20	6.57	0.81	8.01	6.36	0.76	7.82	6.19	0.64	7.62	6.19	0.57
22(71.6)	30(86.0)	8.96	6.78	0.82	8.77	6.58	0.76	8.58	6.42	0.64	8.38	6.42	0.57
24(75.2)	32(89.6)	9.46	6.95	0.84	9.27	6.75	0.78	9.08	6.60	0.65	8.89	6.60	0.58

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

SHC : Sensible Heating Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

[kBtu/h]

[kW]

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.

AS-W123BSA7 (LS120HEV)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	11.78	10.62	0.65	11.26	10.27	0.67	10.58	9.86	0.91	10.25	9.53	1.01
16(60.8)	22(71.6)	12.50	10.76	0.88	11.99	10.43	0.88	11.29	10.05	1.07	10.97	9.73	1.15
18(64.4)	25(77.0)	13.23	10.85	0.95	12.71	10.55	0.95	12.01	10.19	1.12	11.68	9.88	1.17
19(66.2)	27(80.6)	13.59	10.95	0.96	13.07	10.65	0.97	12.37	10.30	1.13	12.00	9.97	1.17
22(71.6)	30(86.0)	14.68	11.16	0.96	14.15	10.89	0.98	13.45	10.58	1.16	8.46	6.63	1.23
24(75.2)	32(89.6)	15.40	11.37	0.95	14.87	11.11	0.99	14.17	10.81	1.18	8.50	6.46	1.25

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	9.80	9.24	1.11	9.53	8.91	1.09	9.27	8.64	0.98	9.02	8.64	0.90
16(60.8)	22(71.6)	10.52	9.46	1.20	10.25	9.14	1.14	9.98	8.88	0.99	9.73	8.81	0.89
18(64.4)	25(77.0)	11.23	9.63	1.21	10.96	9.32	1.14	10.69	9.07	0.97	10.45	9.07	0.85
19(66.2)	27(80.6)	11.59	9.75	1.22	11.32	9.45	1.13	11.05	9.20	0.96	10.80	9.20	0.83
22(71.6)	30(86.0)	12.66	10.06	1.24	12.39	9.77	1.15	12.12	9.53	0.96	11.87	9.53	0.82
24(75.2)	32(89.6)	13.38	10.32	1.26	13.11	10.03	1.17	12.84	9.80	0.98	12.59	9.80	0.84

AS-W183CSA7 (LS180HEV)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	16.66	13.94	0.86	15.94	13.48	0.89	14.96	12.94	1.20	14.51	12.50	1.34
16(60.8)	22(71.6)	17.69	14.12	1.16	16.96	13.69	1.17	15.98	13.19	1.42	15.52	12.76	1.52
18(64.4)	25(77.0)	18.71	14.24	1.26	17.98	13.84	1.26	16.99	13.37	1.49	16.53	12.96	1.55
19(66.2)	27(80.6)	19.23	14.37	1.27	18.49	13.98	1.28	17.50	13.52	1.50	17.00	13.08	1.55
22(71.6)	30(86.0)	20.76	14.65	1.27	20.02	14.29	1.30	19.03	13.88	1.54	8.46	6.15	1.62
24(75.2)	32(89.6)	21.79	14.92	1.26	21.04	14.58	1.31	20.04	14.19	1.57	8.50	6.00	1.66

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	13.87	12.12	1.47	13.49	11.70	1.44	13.11	11.33	1.29	12.79	11.33	1.17
16(60.8)	22(71.6)	14.88	12.41	1.59	14.50	12.00	1.51	14.12	11.65	1.31	13.80	11.56	1.15
18(64.4)	25(77.0)	15.89	12.64	1.61	15.51	12.24	1.51	15.13	11.90	1.28	14.81	11.90	1.10
19(66.2)	27(80.6)	16.40	12.80	1.61	16.02	12.41	1.50	15.63	12.08	1.27	15.31	12.08	1.08
22(71.6)	30(86.0)	17.91	13.21	1.64	17.53	12.82	1.52	17.15	12.51	1.27	16.83	12.51	1.07
24(75.2)	32(89.6)	18.92	13.54	1.67	18.54	13.17	1.55	18.16	12.86	1.30	17.84	12.86	1.10

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

SHC : Sensible Heating Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

[kBtu/h]

[kW]

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.

AS-W243CSA7 (LS240HEV)

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		20(68)			25(77)			32(89.6)			35(95)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	21.58	17.11	1.13	20.64	16.56	1.18	19.38	15.89	1.59	18.79	15.35	1.77
16(60.8)	22(71.6)	22.91	17.34	1.54	21.96	16.81	1.55	20.70	16.19	1.87	20.10	15.67	2.01
18(64.4)	25(77.0)	24.24	17.49	1.66	23.28	16.99	1.67	22.01	16.42	1.97	21.41	15.92	2.05
19(66.2)	27(80.6)	24.90	17.64	1.68	23.95	17.16	1.69	22.67	16.60	1.99	17.00	16.07	2.05
22(71.6)	30(86.0)	26.89	17.99	1.68	25.93	17.55	1.72	24.64	17.04	2.04	2.49	1.72	2.15
24(75.2)	32(89.6)	28.22	18.33	1.67	27.25	17.90	1.74	25.96	17.43	2.07	8.50	5.68	2.19

Indoor Air Temperature		Outdoor Air Temperature : DB°C(°F)											
		40(104)			43(109.4)			46(114.8)			48(118.4)		
WB°C(°F)	DB°C(°F)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14(57.2)	20(68.0)	17.97	14.89	1.95	17.47	14.36	1.91	16.98	13.92	1.71	16.58	13.92	1.53
16(60.8)	22(71.6)	19.27	15.24	2.10	18.78	14.73	2.00	18.29	14.31	1.73	17.89	14.20	1.51
18(64.4)	25(77.0)	20.58	15.52	2.13	20.09	15.03	1.99	19.60	14.61	1.69	19.20	14.61	1.44
19(66.2)	27(80.6)	21.24	15.72	2.13	20.74	15.23	1.99	20.25	14.83	1.68	19.85	14.83	1.41
22(71.6)	30(86.0)	23.20	16.22	2.17	22.71	15.75	2.01	22.21	15.36	1.68	21.82	15.36	1.40
24(75.2)	32(89.6)	24.51	16.63	2.21	24.02	16.17	2.05	23.52	15.79	1.72	23.12	15.79	1.43

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

SHC : Sensible Heating Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

[kBtu/h]

[kW]

Notes

1. All capacities are net, evaporator fan motor heat is deducted.

2. Indicates nominal maximum capacity.

3. Direct interpolation is permissible. Do not extrapolate

4. Capacities are based on the following conditions:

- Interconnecting Piping Length 7.5m(24.6 ft)

- Level Difference of Zero.

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7.2 Heating Capacity

AS-W093MMM9(LSN090HYV/LSU090HYV)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)											
	-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	8.69	0.59	9.42	0.62	10.06	0.66	11.17	0.71	11.80	0.74	12.81	0.78
18(64.4)	8.68	0.60	9.43	0.63	10.06	0.68	11.10	0.72	11.66	0.75	12.77	0.79
20(68.0)	8.68	0.62	9.44	0.65	10.03	0.70	10.99	0.74	11.58	0.76	12.79	0.80
21(69.8)	8.68	0.63	9.44	0.66	10.01	0.71	10.92	0.75	11.58	0.77	12.71	0.80
22(71.6)	8.68	0.64	9.43	0.67	9.98	0.72	10.84	0.75	11.56	0.77	12.60	0.80
24(75.2)	8.59	0.65	9.32	0.69	9.90	0.73	10.75	0.77	11.37	0.78	12.46	0.81

AS-W123MMM9(LSN120HYV/LSU120HYV)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)											
	-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	10.74	0.76	11.64	0.80	12.44	0.86	13.80	0.92	14.59	0.96	15.83	1.02
18(64.4)	10.73	0.78	11.66	0.82	12.43	0.88	13.71	0.94	14.41	0.97	15.78	1.03
20(68.0)	10.72	0.80	11.67	0.85	12.40	0.91	13.58	0.96	14.31	0.99	15.81	1.04
21(69.8)	10.72	0.81	11.66	0.86	12.37	0.92	13.49	0.97	14.31	1.00	15.71	1.04
22(71.6)	10.73	0.83	11.66	0.87	12.34	0.93	13.40	0.98	14.29	1.00	15.57	1.04
24(75.2)	10.62	0.85	11.52	0.89	12.24	0.95	13.29	0.99	14.05	1.01	15.40	1.05

AS-W093B1Y9(LSN091HSV2/LSU091HSV2), AS-W093BRM9(LAN090HSV2/LAU090HSV2)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	8.13	0.57	8.56	0.56	9.27	0.58	9.91	0.63	10.99	0.67	11.62	0.70	12.61	0.74
18(64.4)	8.05	0.58	8.54	0.57	9.29	0.60	9.90	0.64	10.92	0.69	11.47	0.71	12.57	0.75
20(68.0)	8.00	0.59	8.54	0.59	9.29	0.62	9.88	0.66	10.82	0.70	11.40	0.72	12.59	0.76
21(69.8)	7.98	0.60	8.54	0.59	9.29	0.63	9.85	0.67	10.75	0.71	11.40	0.73	12.51	0.76
22(71.6)	7.96	0.60	8.54	0.60	9.29	0.63	9.83	0.68	10.67	0.71	11.38	0.73	12.40	0.76
24(75.2)	7.87	0.62	8.46	0.62	9.17	0.65	9.75	0.69	10.58	0.72	11.19	0.74	12.26	0.76

Symbol

DB : Dry Bulb Temperature [°C(°F)]
 WB : Wet Bulb Temperature [°C(°F)]
 TC : Total Capacity [kBtu/h]
 PI : Power Input [kW]
 (Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.
 - Outdoor air : 85%RH. However, the condition on nominal capacity is 7°C(44.6°F)DB / 6°C(42.8°F)WB

AS-W123B1Y9(LSN121HSV2/LSU121HSV2), AS-W123BRM9(LAN120HSV2/LAU120HSV2)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	10.01	0.82	10.53	0.80	11.41	0.83	12.19	0.89	13.53	0.96	14.29	1.00	15.51	1.06
18(64.4)	9.91	0.83	10.51	0.82	11.42	0.86	12.18	0.92	13.44	0.98	14.12	1.01	15.46	1.07
20(68.0)	9.84	0.84	10.51	0.84	11.43	0.88	12.15	0.94	13.31	1.00	14.02	1.03	15.49	1.08
21(69.8)	9.81	0.85	10.51	0.85	11.43	0.89	12.12	0.96	13.22	1.01	14.02	1.04	15.39	1.08
22(71.6)	9.80	0.86	10.51	0.86	11.42	0.91	12.09	0.97	13.13	1.02	14.00	1.04	15.26	1.08
24(75.2)	9.68	0.88	10.41	0.88	11.29	0.93	11.99	0.99	13.02	1.03	13.77	1.05	15.09	1.09

AS-W183C2Y9(LSN181HSV2/LSU181HSV2), AS-W183BRM9(LAN180HSV2/LAU180HSV2)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	16.55	1.43	17.41	1.40	18.87	1.47	20.16	1.57	22.37	1.68	23.64	1.75	25.65	1.87
18(64.4)	16.38	1.46	17.38	1.43	18.89	1.51	20.14	1.62	22.23	1.72	23.35	1.79	25.57	1.89
20(68.0)	16.27	1.48	17.38	1.47	18.90	1.55	20.09	1.66	22.01	1.76	23.19	1.81	25.62	1.90
21(69.8)	16.23	1.50	17.38	1.49	18.90	1.57	20.05	1.68	21.87	1.78	23.19	1.83	25.45	1.90
22(71.6)	16.20	1.51	17.38	1.51	18.89	1.59	19.99	1.70	21.71	1.79	23.16	1.84	25.24	1.90
24(75.2)	16.01	1.55	17.21	1.56	18.66	1.64	19.84	1.74	21.54	1.82	22.77	1.85	24.95	1.92

AS-W243BRM9(LAN240HSV2/LAU240HSV2)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	20.76	1.36	21.84	1.33	23.67	1.39	25.28	1.49	28.06	1.60	29.65	1.66	32.18	1.77
18(64.4)	20.55	1.38	21.8	1.36	23.70	1.43	25.27	1.54	27.88	1.64	29.28	1.69	32.08	1.79
20(68.0)	20.41	1.41	21.8	1.40	23.71	1.47	25.20	1.58	27.60	1.67	29.09	1.72	32.13	1.80
21(69.8)	20.36	1.42	21.8	1.42	23.71	1.49	25.15	1.60	27.43	1.69	29.08	1.73	31.92	1.80
22(71.6)	20.32	1.44	21.8	1.44	23.70	1.51	25.08	1.62	27.23	1.70	29.05	1.74	31.66	1.81
24(75.2)	20.08	1.47	21.59	1.48	23.41	1.56	24.88	1.66	27.01	1.73	28.56	1.76	31.30	1.82

Symbol

DB : Dry Bulb Temperature

[°C(°F)]

WB : Wet Bulb Temperature

[°C(°F)]

TC : Total Capacity

[kBtu/h]

PI : Power Input

[kW]

(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.
 - Outdoor air : 85%RH. However, the condition on nominal capacity is 7°C(44.6°F)DB / 6°C(42.8°F)WB

AS-W243DGY9(LSN240HSV2/LSU240HSV2)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	20.76	1.94	21.84	1.89	23.67	1.98	25.28	2.13	28.06	2.28	29.65	2.37	32.18	2.52
18(64.4)	20.55	1.97	21.80	1.94	23.70	2.04	25.27	2.19	27.88	2.33	29.28	2.42	32.08	2.55
20(68.0)	20.41	2.00	21.80	1.99	23.71	2.10	25.20	2.25	27.60	2.38	29.09	2.45	32.13	2.57
21(69.8)	20.36	2.02	21.80	2.02	23.71	2.13	25.15	2.28	27.43	2.40	29.08	2.47	31.92	2.57
22(71.6)	20.32	2.05	21.80	2.05	23.70	2.16	25.08	2.30	27.23	2.42	29.05	2.48	31.66	2.57
24(75.2)	20.08	2.10	21.59	2.10	23.41	2.22	24.88	2.36	27.01	2.46	28.56	2.50	31.30	2.59

AS-W303DGY9(LSN307HV2/LSU307HV2)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	24.07	2.53	25.32	2.47	27.44	2.58	29.31	2.77	32.53	2.97	34.38	3.09	37.31	3.29
18(64.4)	23.82	2.56	25.28	2.53	27.48	2.66	29.30	2.85	32.32	3.04	33.95	3.15	37.19	3.32
20(68.0)	23.66	2.61	25.27	2.59	27.49	2.73	29.22	2.93	32.01	3.10	33.72	3.19	37.26	3.35
21(69.8)	23.60	2.64	25.27	2.63	27.49	2.77	29.16	2.96	31.80	3.13	33.72	3.22	37.01	3.35
22(71.6)	23.56	2.67	25.28	2.66	27.48	2.81	29.08	3.00	31.57	3.16	33.68	3.23	36.71	3.35
24(75.2)	23.28	2.73	25.03	2.74	27.14	2.89	28.85	3.07	31.32	3.21	33.12	3.26	36.29	3.38

AS-W363DGY9(LSN360HV2 /LSU360HV2)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	26.48	3.13	27.86	3.05	30.19	3.2	32.25	3.43	35.79	3.67	37.83	3.82	41.05	4.07
18(64.4)	26.21	3.18	27.81	3.13	30.23	3.29	32.23	3.53	35.56	3.76	37.35	3.90	40.92	4.12
20(68.0)	26.03	3.23	27.80	3.21	30.25	3.38	32.15	3.63	35.21	3.84	37.10	3.96	40.99	4.14
21(69.8)	25.97	3.27	27.81	3.26	30.24	3.43	32.08	3.67	34.99	3.88	37.10	3.98	40.72	4.15
22(71.6)	25.92	3.30	27.81	3.30	30.23	3.48	31.99	3.72	34.74	3.91	37.06	4.00	40.38	4.15
24(75.2)	25.61	3.38	27.54	3.40	29.86	3.58	31.74	3.81	34.46	3.97	36.43	4.04	39.92	4.18

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

[kW]

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.
 - Outdoor air : 85%RH. However, the condition on nominal capacity is 7°C(44.6°F)DB / 6°C(42.8°F)WB

AS-W093F2B2(LAN090HVP/LAU090HVP)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)											
	-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	8.56	0.68	9.27	0.71	9.91	0.76	10.99	0.81	11.62	0.85	12.61	0.90
18(64.4)	8.54	0.69	9.29	0.73	9.90	0.78	10.92	0.83	11.47	0.86	12.57	0.91
20(68.0)	8.54	0.71	9.29	0.75	9.88	0.80	10.82	0.85	11.40	0.88	12.59	0.92
21(69.8)	8.54	0.72	9.29	0.76	9.85	0.81	10.75	0.86	11.40	0.88	12.51	0.92
22(71.6)	8.54	0.73	9.29	0.77	9.83	0.82	10.67	0.87	11.38	0.89	12.40	0.92
24(75.2)	8.46	0.75	9.17	0.79	9.75	0.84	10.58	0.88	11.19	0.89	12.26	0.93

AS-W123F2B2(LAN120HVP/LAU120HVP)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)											
	-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	10.53	0.99	11.41	1.04	12.19	1.12	13.53	1.20	14.29	1.24	15.51	1.33
18(64.4)	10.51	1.02	11.42	1.07	12.18	1.15	13.44	1.22	14.12	1.27	15.46	1.34
20(68.0)	10.51	1.05	11.43	1.10	12.15	1.18	13.31	1.25	14.02	1.29	15.49	1.35
21(69.8)	10.51	1.06	11.43	1.12	12.12	1.20	13.22	1.26	14.02	1.30	15.39	1.35
22(71.6)	10.51	1.07	11.42	1.13	12.09	1.21	13.13	1.27	14.00	1.30	15.26	1.35
24(75.2)	10.41	1.11	11.29	1.16	11.99	1.24	13.02	1.29	13.77	1.32	15.09	1.36

AS-W093WSA7 (LS090HEV)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	6.77	0.64	7.12	0.62	7.72	0.65	8.24	0.70	9.15	0.75	9.67	0.78	10.49	0.83
18(64.4)	6.70	0.65	7.11	0.64	7.73	0.67	8.24	0.72	9.09	0.76	9.55	0.79	10.46	0.84
20(68.0)	6.65	0.66	7.11	0.65	7.73	0.69	8.22	0.74	9.00	0.78	9.48	0.80	10.48	0.84
21(69.8)	6.64	0.66	7.11	0.66	7.73	0.70	8.20	0.75	8.94	0.79	9.48	0.81	10.41	0.84
22(71.6)	6.63	0.67	7.11	0.67	7.73	0.71	8.18	0.76	8.88	0.79	9.47	0.81	10.32	0.84
24(75.2)	6.55	0.69	7.04	0.69	7.63	0.73	8.11	0.77	8.81	0.81	9.31	0.82	10.20	0.85

Symbol

DB : Dry Bulb Temperature

[°C(°F)]

WB : Wet Bulb Temperature

[°C(°F)]

TC : Total Capacity

[kBtu/h]

PI : Power Input

[kW]

(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.
 - Outdoor air : 85%RH. However, the condition on nominal capacity is 7°C(44.6°F)DB / 6°C(42.8°F)WB

AS-W123BSA7 (LS120HEV)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	9.02	0.80	9.49	0.78	10.29	0.82	10.99	0.88	12.20	0.94	12.89	0.98	13.99	1.04
18(64.4)	8.93	0.81	9.48	0.80	10.30	0.84	10.98	0.90	12.12	0.96	12.73	0.99	13.94	1.05
20(68.0)	8.87	0.83	9.47	0.82	10.31	0.86	10.96	0.93	12.00	0.98	12.64	1.01	13.97	1.06
21(69.8)	8.85	0.83	9.48	0.83	10.31	0.88	10.93	0.94	11.92	0.99	12.64	1.02	13.88	1.06
22(71.6)	8.83	0.84	9.48	0.84	10.30	0.89	10.90	0.95	11.84	1.00	12.63	1.02	13.76	1.06
24(75.2)	8.73	0.86	9.39	0.87	10.18	0.91	10.82	0.97	11.74	1.01	12.42	1.03	13.60	1.07

AS-W183CSA7 (LS180HEV)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	14.29	1.30	15.03	1.26	16.29	1.32	17.40	1.42	19.31	1.52	20.41	1.58	22.15	1.69
18(64.4)	14.14	1.32	15.01	1.30	16.31	1.36	17.39	1.46	19.19	1.56	20.16	1.61	22.08	1.71
20(68.0)	14.05	1.34	15.00	1.33	16.32	1.40	17.35	1.50	19.00	1.59	20.02	1.64	22.12	1.72
21(69.8)	14.01	1.35	15.00	1.35	16.32	1.42	17.31	1.52	18.88	1.60	20.02	1.65	21.97	1.72
22(71.6)	13.99	1.37	15.01	1.37	16.31	1.44	17.26	1.54	18.74	1.62	19.99	1.66	21.79	1.72
24(75.2)	13.82	1.40	14.86	1.41	16.11	1.48	17.12	1.58	18.59	1.65	19.66	1.67	21.54	1.73

AS-W243CSA7 (LS240HEV)

Indoor Air Temperature	Outdoor Air Temperature : WB°C(°F)													
	-15(5.0)		-10(14.0)		-5(23.0)		0(32.0)		6(42.8)		10(50.0)		15(59.0)	
DB°C(°F)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16(60.8)	16.54	1.58	17.40	1.54	18.86	1.61	20.15	1.74	22.36	1.86	23.63	1.93	25.64	2.06
18(64.4)	16.38	1.61	17.38	1.58	18.89	1.66	20.14	1.78	22.22	1.90	23.34	1.97	25.56	2.08
20(68.0)	16.26	1.63	17.37	1.62	18.90	1.71	20.09	1.83	22.00	1.94	23.18	2.00	25.61	2.09
21(69.8)	16.23	1.65	17.37	1.64	18.90	1.73	20.04	1.86	21.86	1.96	23.18	2.01	25.44	2.10
22(71.6)	16.20	1.67	17.38	1.67	18.89	1.76	19.99	1.88	21.70	1.98	23.15	2.02	25.23	2.10
24(75.2)	16.00	1.71	17.21	1.72	18.66	1.81	19.83	1.92	21.53	2.01	22.76	2.04	24.94	2.11

Symbol

DB : Dry Bulb Temperature

WB : Wet Bulb Temperature

TC : Total Capacity

PI : Power Input

(Comp.+ indoor fan motor + outdoor fan motor)

[°C(°F)]

[°C(°F)]

[kBtu/h]

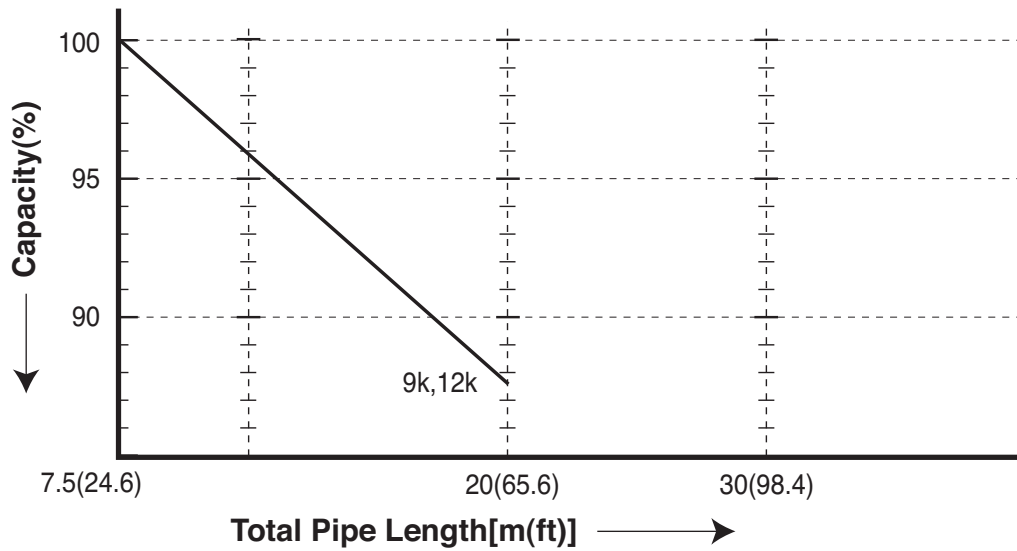
[kW]

Notes

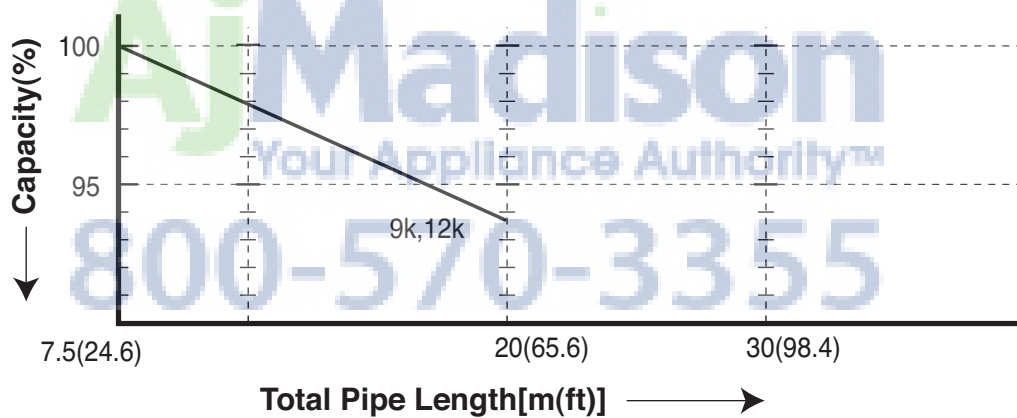
1. All capacities are net, evaporator fan motor heat is deducted.
2. ■ Indicates nominal maximum capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length 7.5m(24.6 ft)
 - Level Difference of Zero.
 - Outdoor air : 85%RH. However, the condition on nominal capacity is 7°C(44.6°F)DB / 6°C(42.8°F)WB

8. Capacity coefficient factor

Cooling



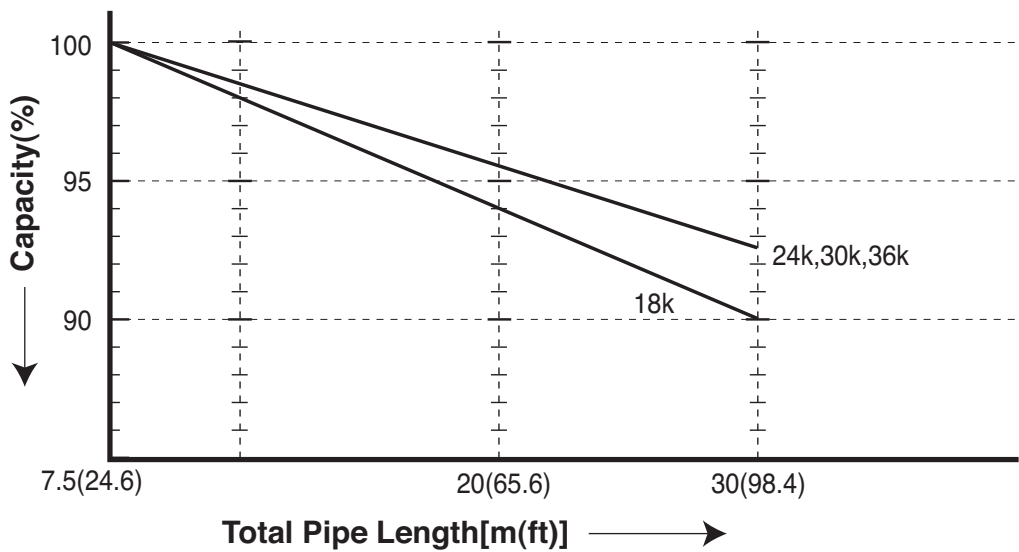
Heating



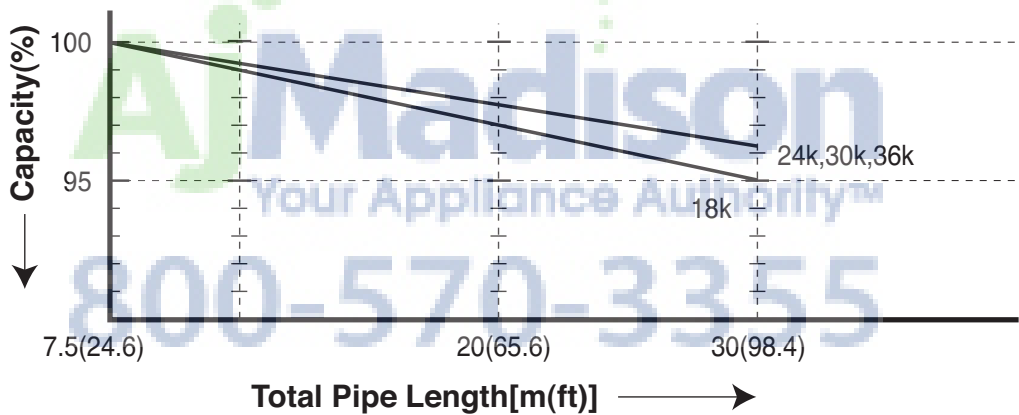
- **Applied Model**

: LS091HSV2 / LS121HSV2 / LA090HSV2 / LA120HSV2

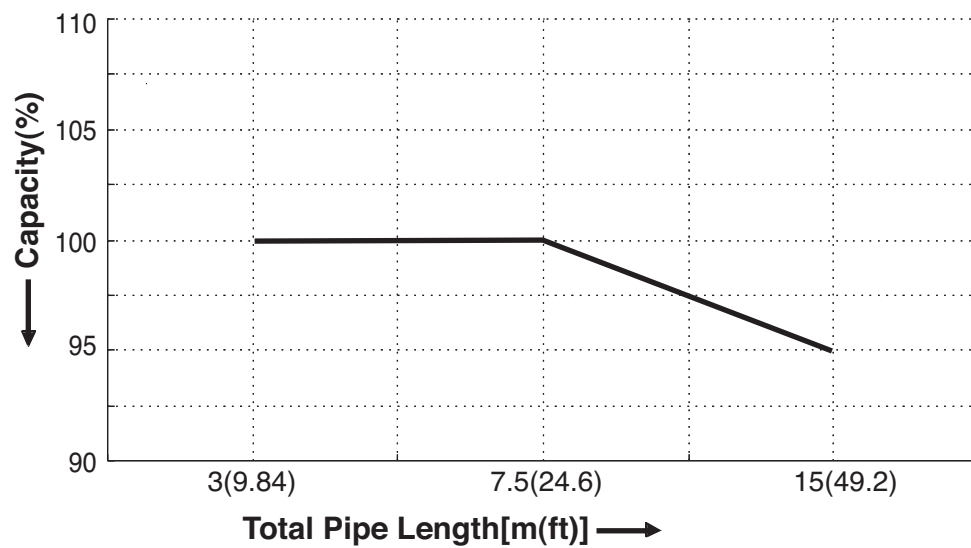
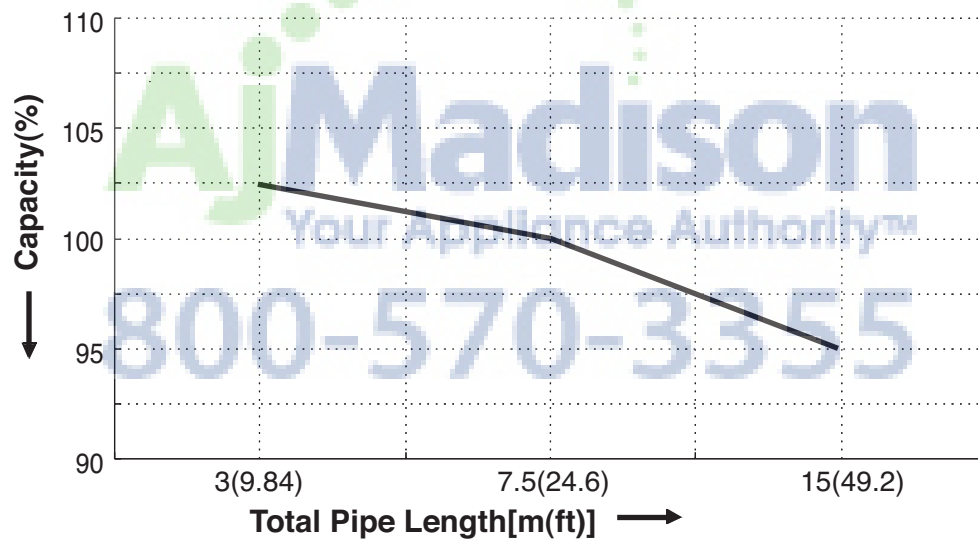
Cooling



Heating

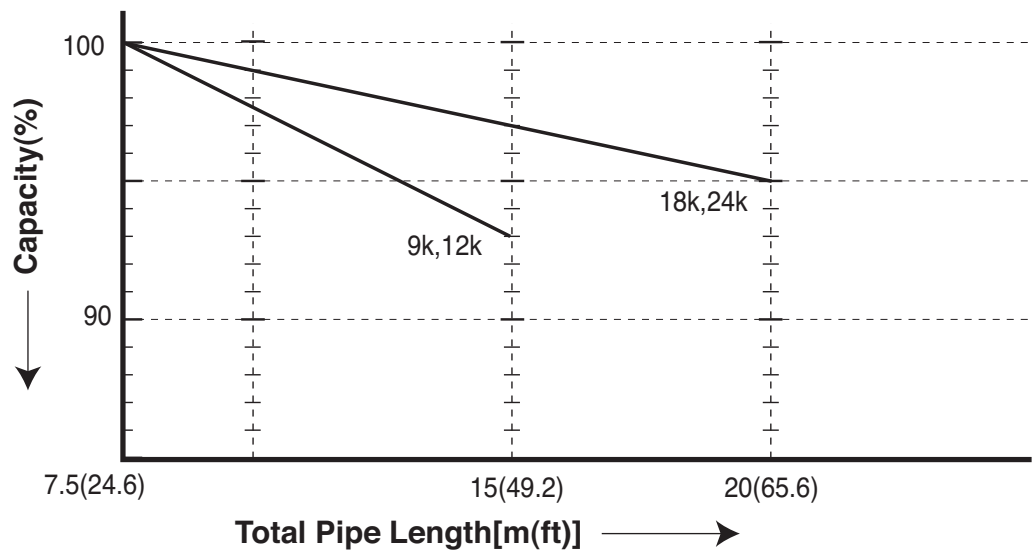


- **Applied Model**
: LS181HSV2 / LA180HSV2 / LA240HSV2 / LS240HSV2 / LS307HV2 / LS360HV2

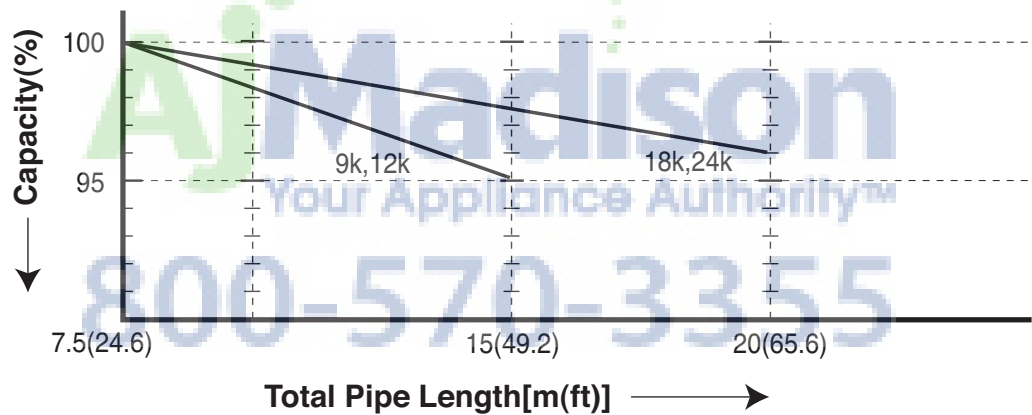
Cooling**Heating****• Applied Model**

: LS090HYV / LS120HYV / LA090HVP / LA120HVP

Cooling

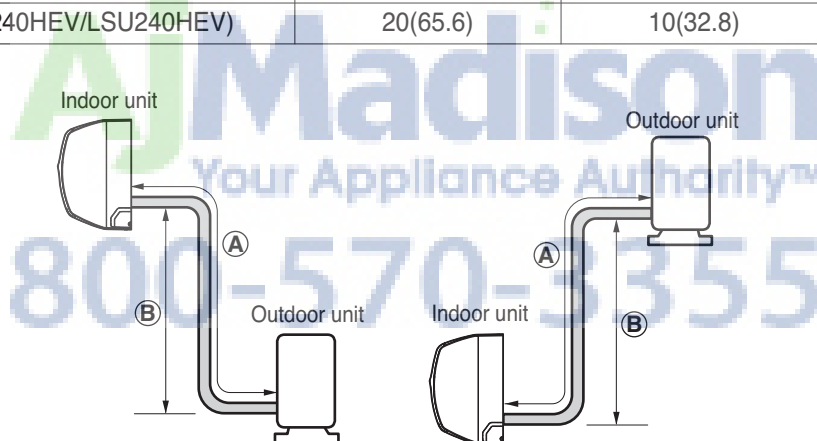


Heating



• **Applied Model**
: LS090HEV / LS120HEV / LS180HEV / LS240HEV

Models	Max. Pipe Length [m(ft)]	Max. Elevation [m(ft)]	Additional Refrigerant[g/m(oz/ft)]
AS-W093F2B2(LAN090HVP/LAU090HVP)	15(49.2)	7(22.9)	20(0.22)
AS-W123F2B2(LAN120HVP/LAU120HVP)	15(49.2)	7(22.9)	20(0.22)
AS-W093MMM9(LSN090HYV/LSU090HYV)	15(49.2)	7(22.9)	20(0.22)
AS-W123MMM9(LSN120HYV/LSU120HYV)	15(49.2)	7(22.9)	20(0.22)
AS-W093B1Y9(LSN091HSV2/LSU091HSV2)	20(65.6)	10(32.8)	20(0.22)
AS-W093BRM9(LAN090HSV2/LAU090HSV2)	20(65.6)	10(32.8)	20(0.22)
AS-W123B1Y9(LSN121HSV2/LSU121HSV2)	20(65.6)	10(32.8)	20(0.22)
AS-W123BRM9(LAN120HSV2/LAU120HSV2)	20(65.6)	10(32.8)	20(0.22)
AS-W183C2Y9(LSN181HSV2/LSU181HSV2)	30(98.4)	15(49.2)	35(0.38)
AS-W183CRM9(LAN180HSV2/LAU180HSV2)	30(98.4)	15(49.2)	35(0.38)
AS-W243DGY9(LSN240HSV2/LSU240HSV2)	30(98.4)	15(49.2)	35(0.38)
AS-W243CRM9(LAN240HSV2/LAU240HSV2)	30(98.4)	15(49.2)	35(0.38)
AS-W303DGY9(LSN307HV2/LSU307HV2)	30(98.4)	15(49.2)	35(0.38)
AS-W363DGY9(LSN360HV2/LSU360HV2)	30(98.4)	15(49.2)	35(0.38)
AS-W093WSA7(LSN090HEV/LSU090HEV)	15(49.2)	7(22.9)	20(0.22)
AS-W123BSA7(LSN120HEV/LSU120HEV)	15(49.2)	7(22.9)	20(0.22)
AS-W183CSA7(LSN180HEV/LSU180HEV)	20(65.6)	10(32.8)	30(0.33)
AS-W243CSA7(LSN240HEV/LSU240HEV)	20(65.6)	10(32.8)	30(0.33)

**CAUTION:**

• Capacity is based on standard length and maximum allowance length is on the basis of reliability.

Notes

* Equivalent pipe length = actual pipe length + number of bends x 0.3

* Additional Refrigerant Charge

Example : For LS121HSV2 having 20m(65.6ft) pipe length, additional refrigerant to be charged is
 $(20\text{m}(65.6\text{ft}) - 12.5\text{m}(41.0\text{ft})) \times 20\text{g/m}(0.22\text{ oz/ft}) = 150\text{g}(5.41\text{oz})$

* Refer to the specification for the maximum pipe length of each model.

* Specially LS091HSV2 / LS121HSV2 / LA090HSV2 / LA120HSV2

Additional refrigerant must be charged after 12.5m(41.0ft) (there is no need to charge till 12.5m(41.0ft) based on reliability)

9. Electric characteristics

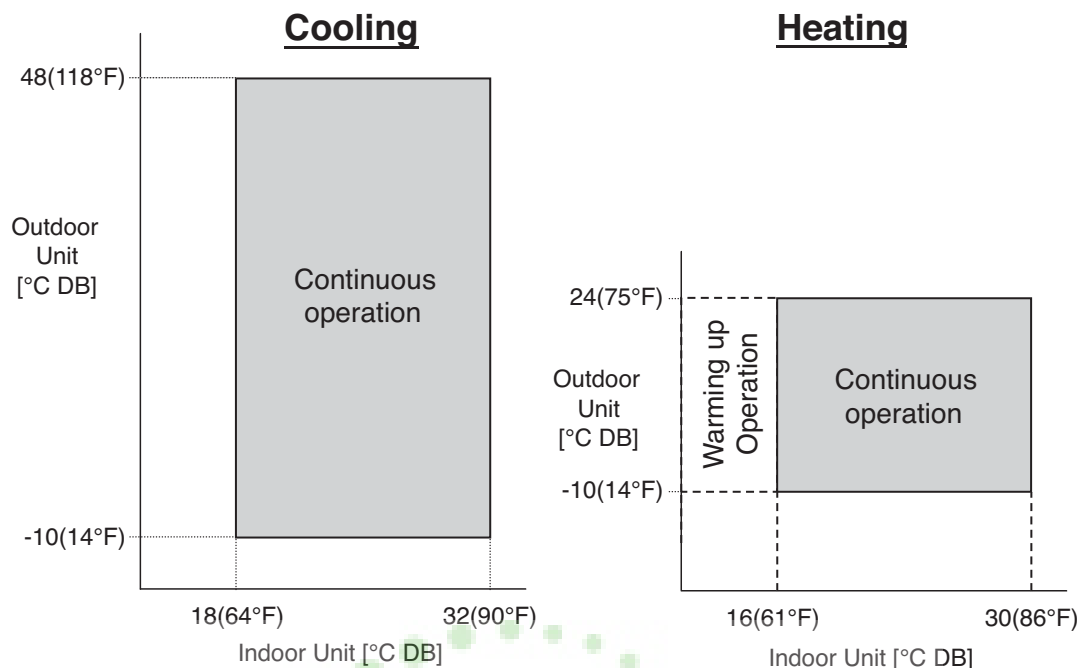
Unit					Power		Compressor		OFM	
Model	Type	Hz	Voltage	Voltage range	MCA	MOP	MSC	RLA	kW	FLA
ASUW093F2B2(LAU090HVP)	Inverter	60	208~230	MIN : 187 MAX : 253	10	15	-	7.6	0.08	0.25
ASUW123F2B2(LAU120HVP)					10	15	-	7.6	0.08	0.25
ASUW093MMM9(LSU090HYV)					10	15	-	7.6	0.12	1.04
ASUW123MMM9(LSU120HYV)					10	15	-	7.6	0.12	1.04
ASUW093BRM9(LAU090HSV2)					10	15	-	7.6	0.08	0.45
ASUW123BRM9(LAU120HSV2)					10	15	-	7.6	0.08	0.45
ASUW183CRM9(LAU180HSV2)					19	30	-	14.6	0.12	0.75
ASUW243CRM9(LAU240HSV2)					19	30	-	14.6	0.12	0.75
ASUW093B1Y9(LSU091HSV2)					10	15	-	7.6	0.08	0.25
ASUW123B1Y9(LSU121HSV2)					10	15	-	7.6	0.08	0.25
ASUW183C2Y9(LSU181HSV2)					19	30	-	14.6	0.12	0.25
ASUW243DGY9(LSU240HSV2)					19	30	-	14.6	0.12	0.75
ASUW303DGY9(LSU307HV2)					19	30	-	14.6	0.12	0.75
ASUW363DGY9(LSU360HV2)					19	30	-	14.6	0.12	0.75
ASUW093WSA7(LS090HEV)					9	15	-	6.8	0.075	0.5
ASUW123BSA7(LS120HEV)					9	15	-	6.8	0.075	0.5
ASUW183CSA7(LS180HEV)					12	20	-	9.28	0.04	0.4
ASUW243CSA7(LS240HEV)					14	20	-	10.8	0.08	0.48

Notes :

1. Voltage range
Voltage supplied to the unit terminals should be within the minimum and maximum range.
2. Maximum allowable voltage unbalance between phase is 2 %.
3. Select wire spec. based on the larger value of MCA.
4. RLA is measured during each individual compressor test condition.
5. OFM is measured as the outdoor unit test condition
6. Recommended circuit breaker is ELCB (Earth Leakage circuit breaker)

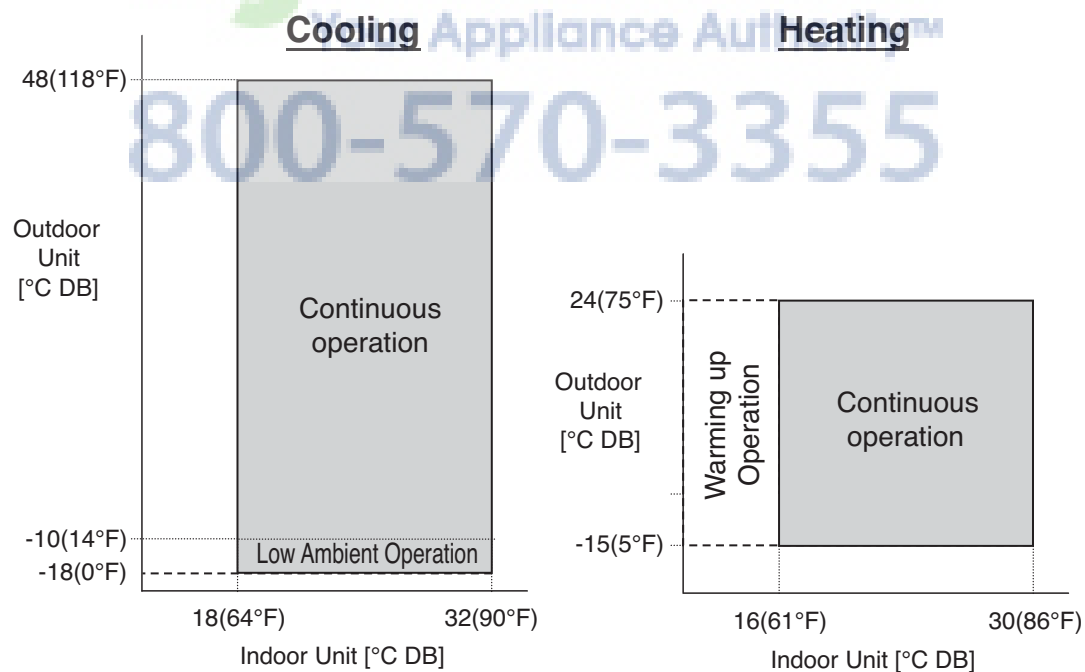
MCA : Minimum Circuit Amperes (A)
 MOP : Maximum rating over current protective device.(A)
 MSC : Maximum Starting Current)(A)
 RLA : Rated Load Amperes (A)
 OFM : Outdoor Fan Motor
 kW : Fan Motor rated output (kW)
 FLA : Full Load Amperes (A)

10. Operation range



Operative: Intermittent operation due to the operational conditions (indoor/outdoor temperature, humidity, load etc.) can cause the heating capacity to decrease.

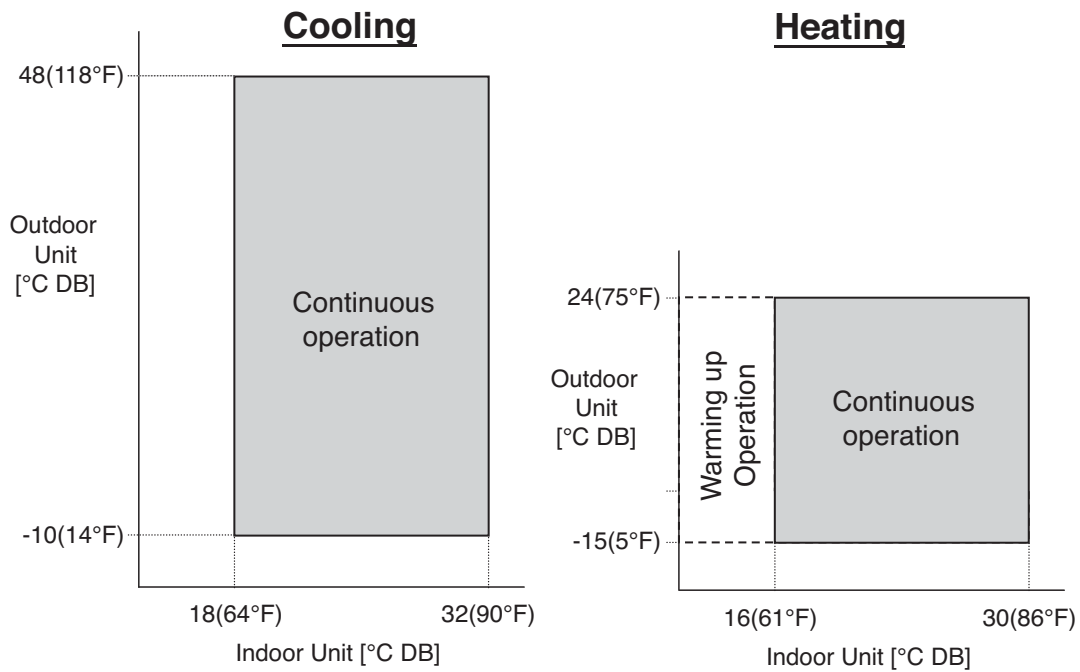
* Applied Model : LS090HYV, LS120HYV, LA090HVP, LA120HVP



Operative: Intermittent operation due to the operational conditions (indoor/outdoor temperature, humidity, load etc.) can cause the heating capacity to decrease.

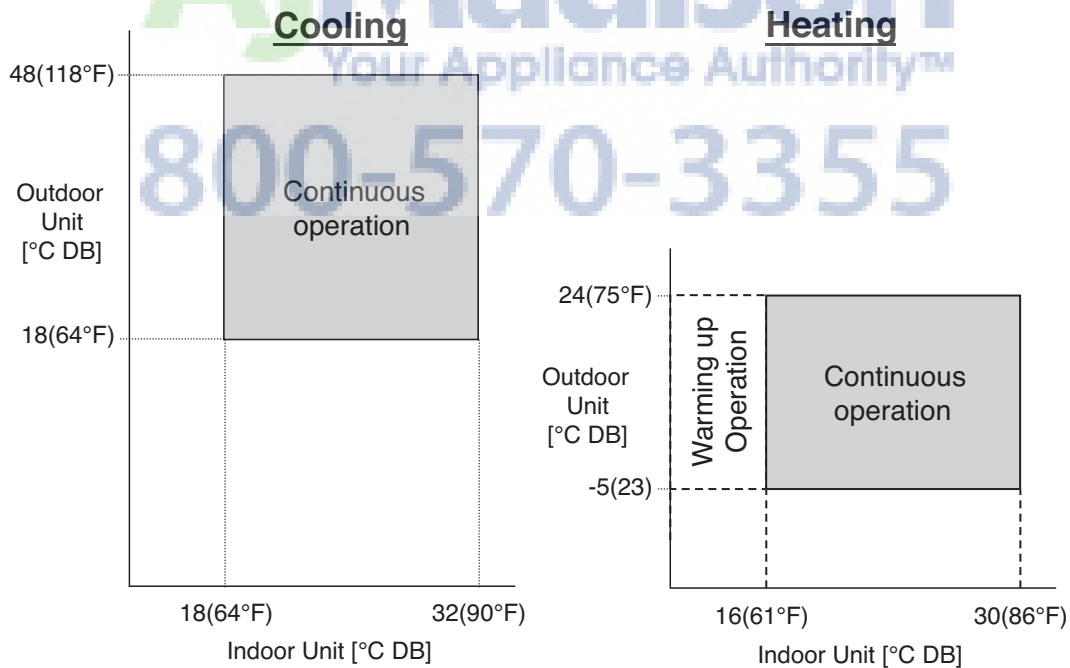
* With wind baffle accessory installed. With wind baffle installed, the minimum temperature will be below 14°F D.B.

* Applied Model : LS091HSV2, LS121HSV2, LS181HSV2, LS240HSV2, LS307HV2, LS360HV2



Operative: Intermittent operation due to the operational conditions (indoor/outdoor temperature, humidity, load etc.) can cause the heating capacity to decrease.

* Applied Model : LA090HSV2 , LA120HSV2 , LA180HSV2 , LA240HSV2



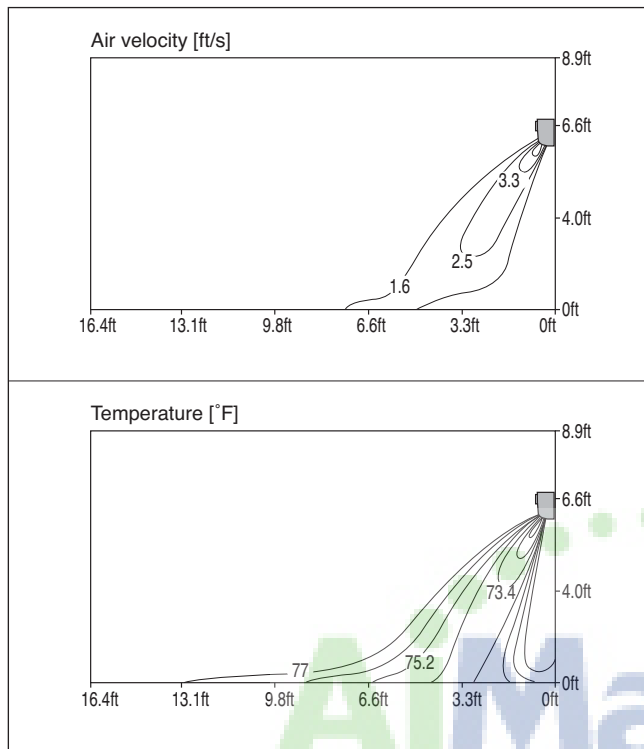
* Applied Model : LS090HEV,LS120HEV,LS180HEV,LS240HEV

11. Air flow and temperature distributions(reference data)

2.64 kW (9kBtu/h) – LAN090HSV2 / LSN091HSV2 / LSN090HEV

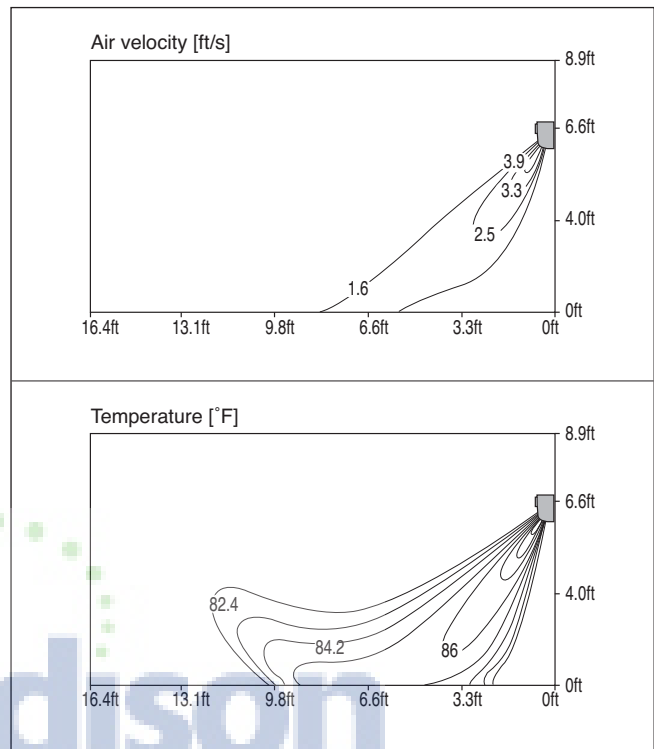
Cooling

Discharge angle:45°



Heating

Discharge angle:50°

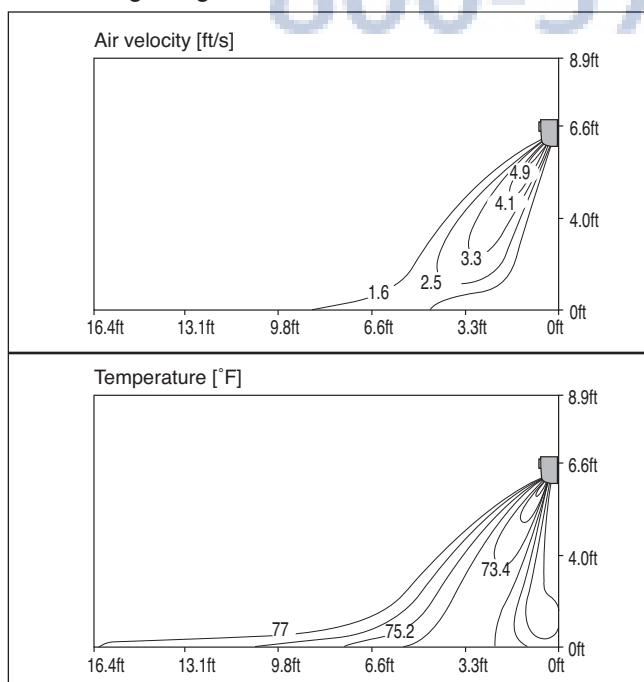


* Based on high fan speed

3.28 kW (12kBtu/h) – LAN120HSV2 / LSN121HSV2 / LSN120HEV

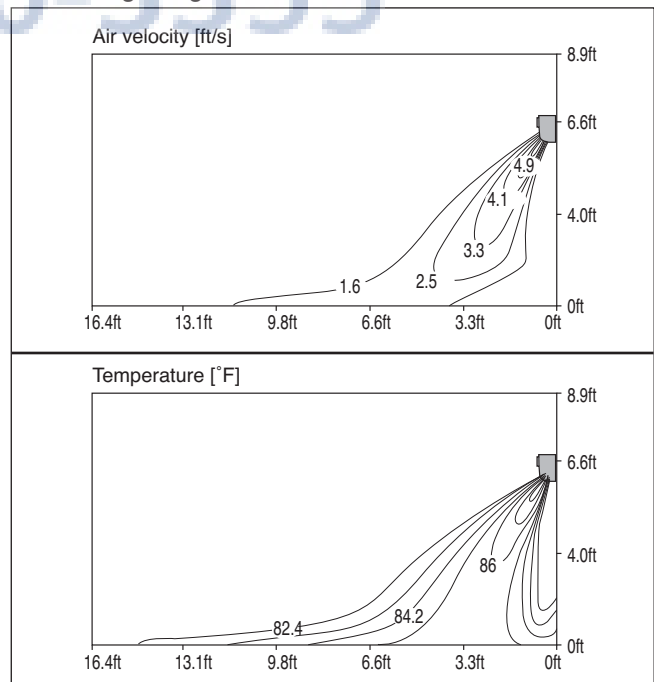
Cooling

Discharge angle:45°



Heating

Discharge angle:50°

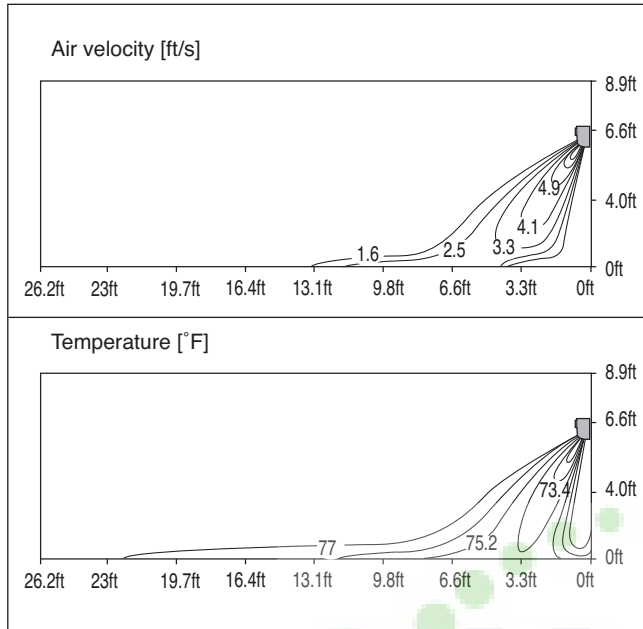


* Based on high fan speed

5.33 kW (18kBtu/h) – LAN180HSV2 / LSN181HSV2 / LSN180HEV

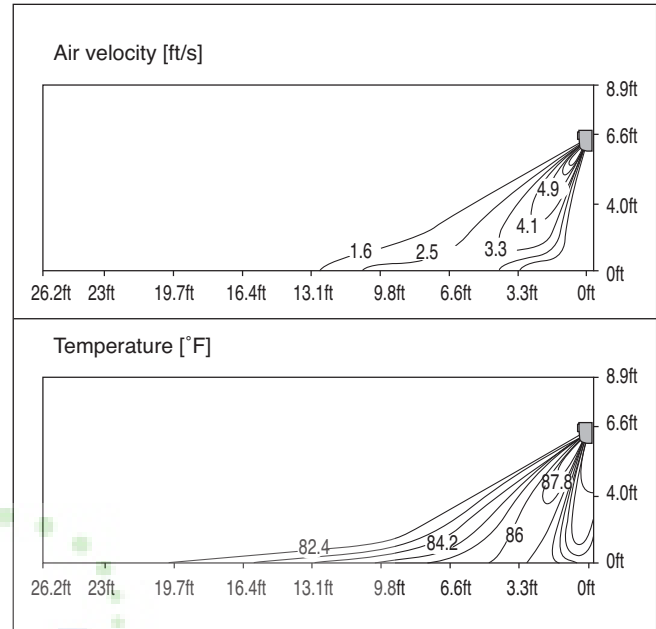
Cooling

Discharge angle:45°



Heating

Discharge angle:50°

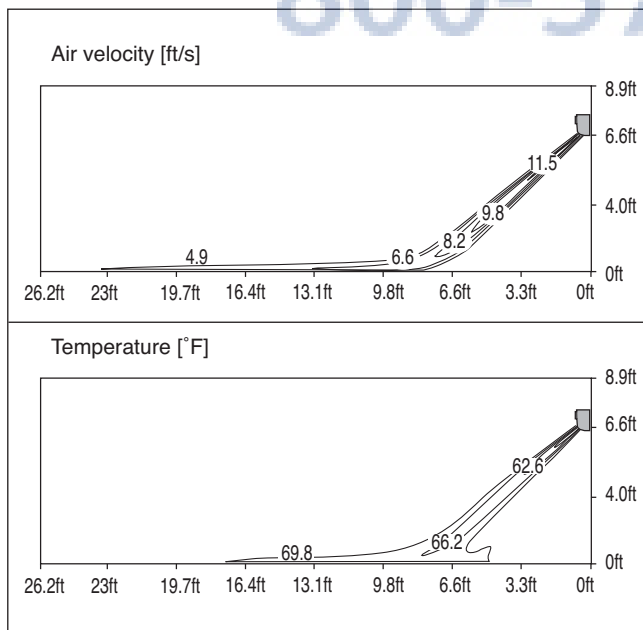


✳ Based on high fan speed

6.45 kW (24kBtu/h) – LAN240HSV2/LSN240HEV

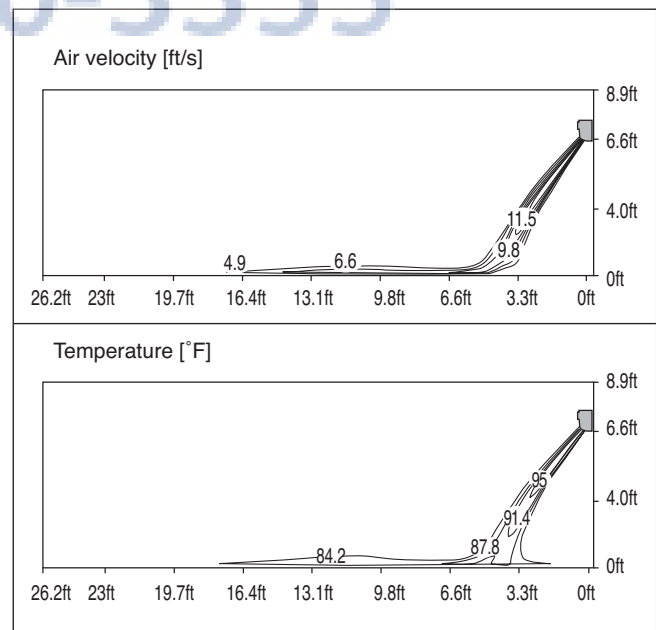
Cooling

Discharge angle:120°



Heating

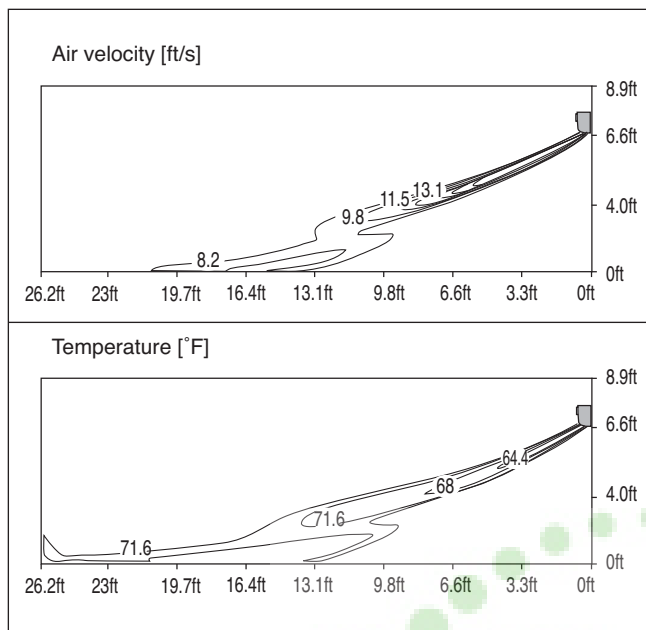
Discharge angle:105°



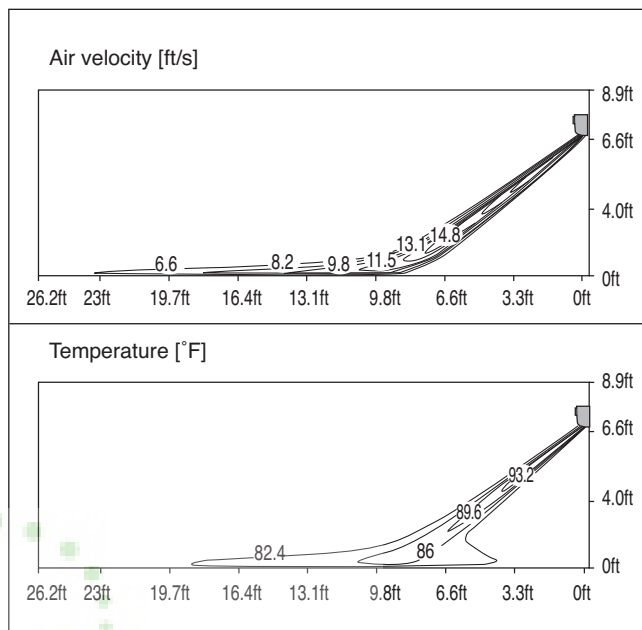
✳ Based on maximum air flow.

6.45 kW (24kBtu/h)/8.79 kW (30kBtu/h) – LSN240HSV2/LSN307HV2**Cooling**

Discharge angle:49°

**Heating**

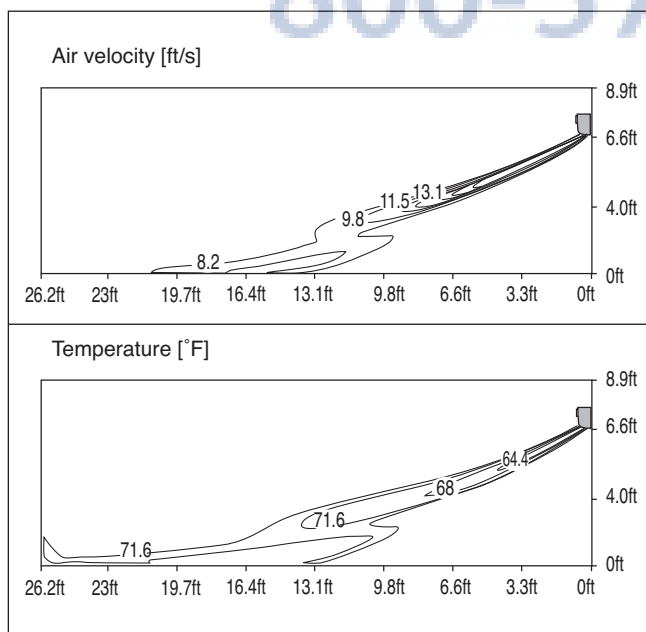
Discharge angle:65°



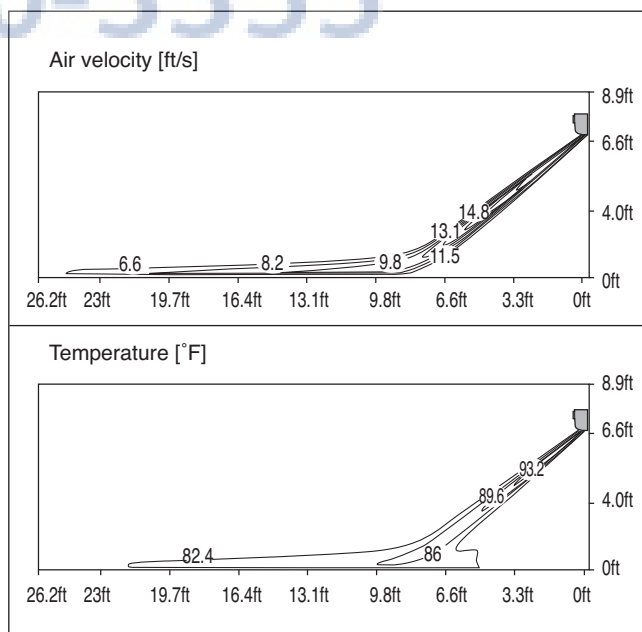
✱ Based on maximum air flow.

9.67 kW (36kBtu/h) – LSN360HV2**Cooling**

Discharge angle:49°

**Heating**

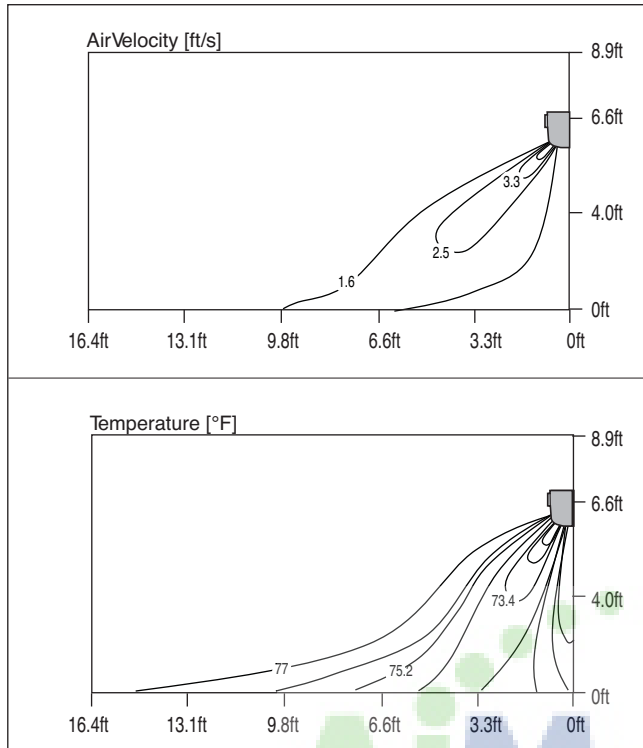
Discharge angle:65°



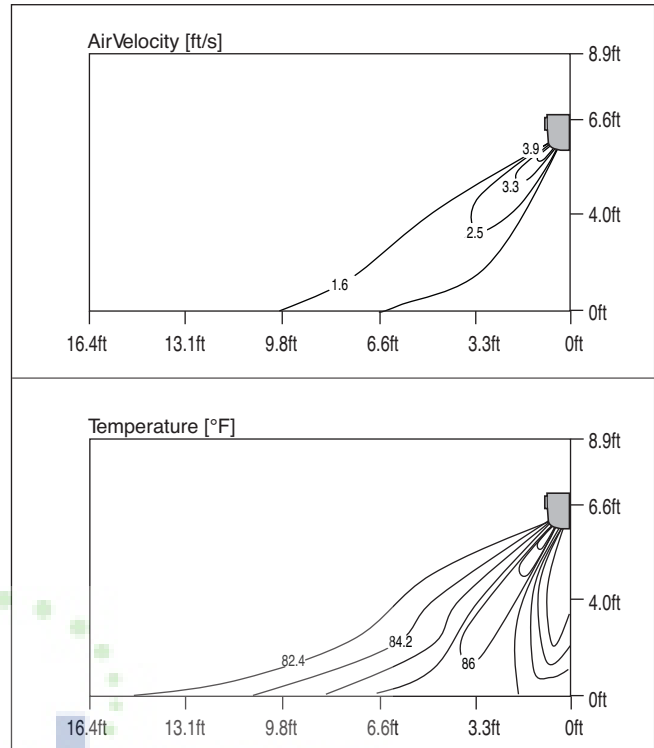
✱ Based on maximum air flow.

Art Cool Premier Inverter 2.64 kW (9kBtu/h) - LSN090HYV**Cooling**

Discharge angle:45°

**Heating**

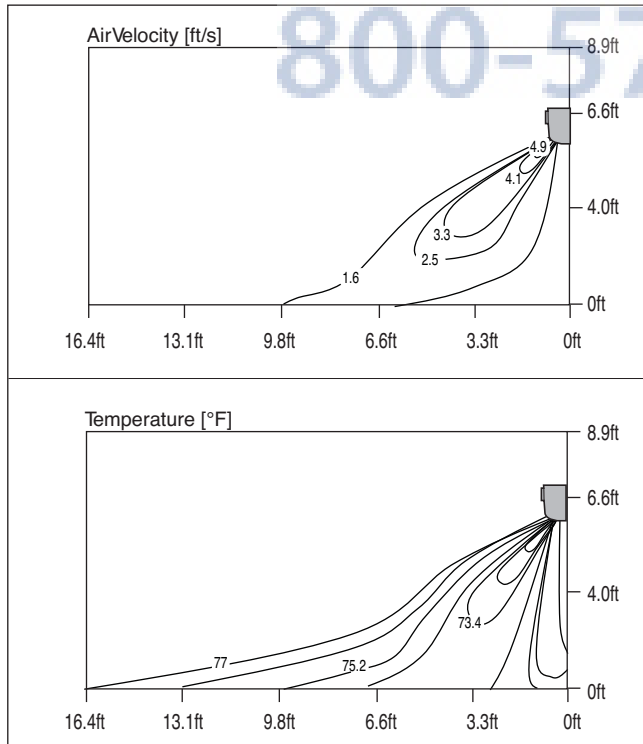
Discharge angle:50°



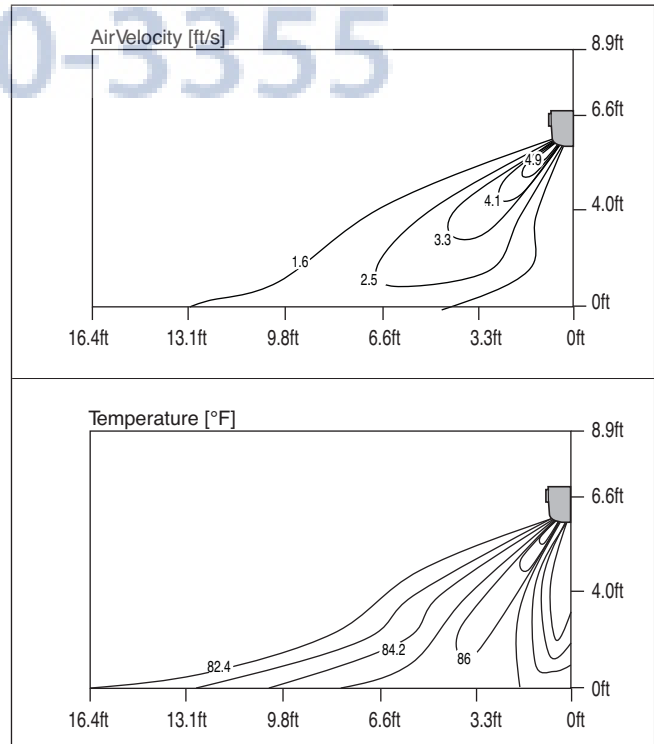
* Based on high fan speed

Art Cool Premier Inverter 3.28 kW (12kBtu/h) - LSN120HYV**Cooling**

Discharge angle:45°

**Heating**

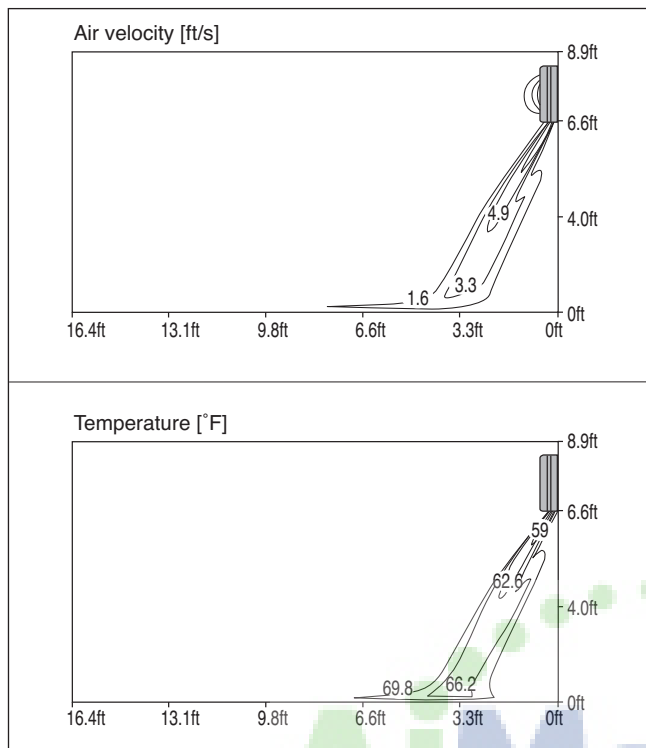
Discharge angle:50°



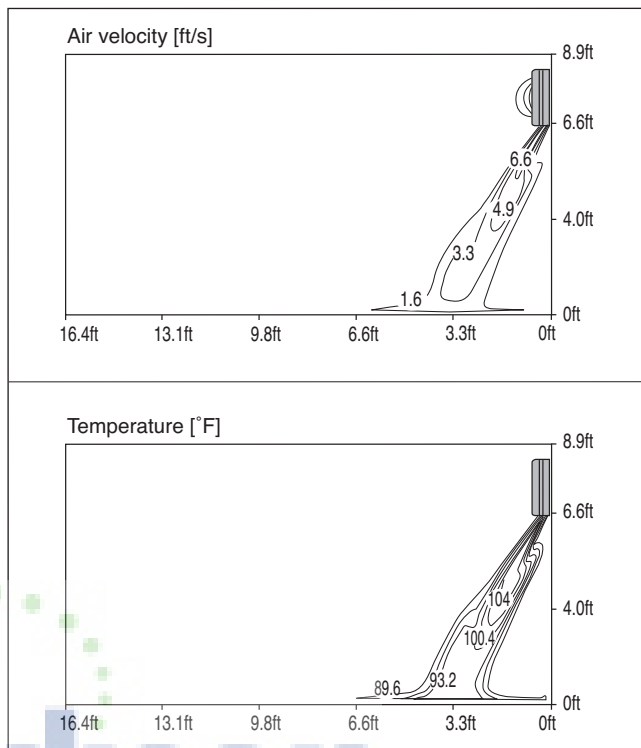
* Based on high fan speed

Art Cool Gallery 2.64kW(9kBtu/h) – LAN090HVP**Cooling**

Discharge angle:52°

**Heating**

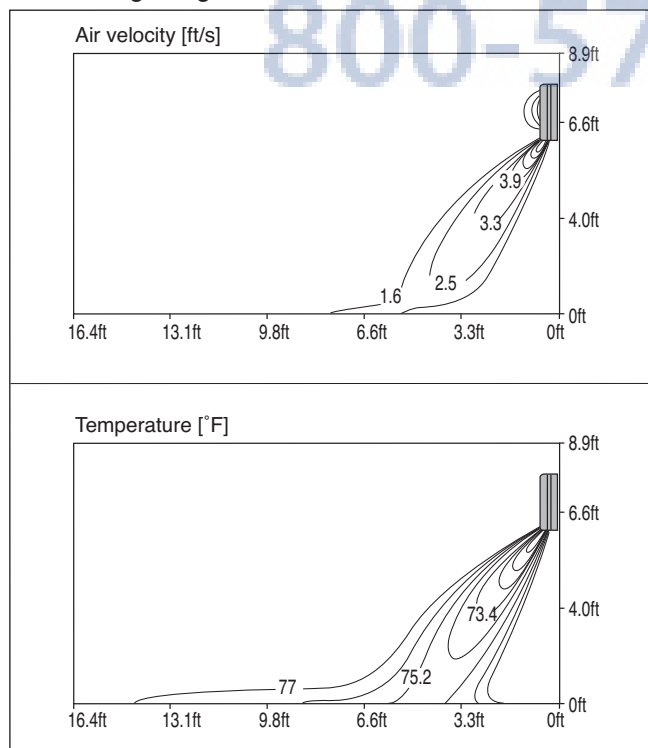
Discharge angle:52°



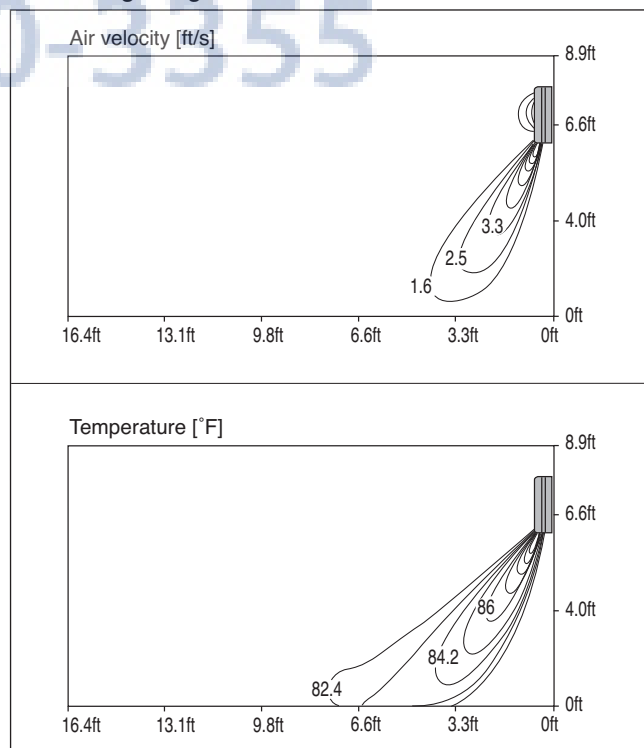
* Based on maximum air flow.

Art Cool Gallery 3.28 kW(12kBtu/h) – LAN120HVP**Cooling**

Discharge angle:45°

**Heating**

Discharge angle:50°

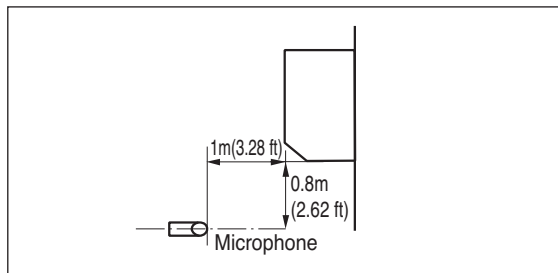


* Based on maximum air flow.

12. Sound levels (Reference data)

12.1 Indoor Units

Overall



Notes:

- Sound measured at 1m(3.28 ft) away from the center of the unit.
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- Reference acoustic pressure 0dB=20μPa.
- Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.
- The operating conditions are assumed to be standard.

Model	Sound Levels [dB(A)]		
	H	M	L
ASNW093B1Y9 (LSN091HSV2)	38	33	24
ASNW123B1Y9 (LSN121HSV2)	39	33	24
ASNW183C2Y9 (LSN181HSV2)	45	40	35
ASNW093BRM9 (LAN090HSV2)	38	33	24
ASNW123BRM9 (LAN120HSV2)	39	33	24
ASNW183CRM9 (LAN180HSV2)	45	40	35
ASNW243CRM9 (LAN240HSV2)	45	40	35
ASNW243DGY9 (LSN240HSV2)	46	43	39
ASNW303DGY9 (LSN307HV2)	49	44	39

Model	Sound Levels [dB(A)]		
	H	M	L
ASNW363DGY9 (LSN360HV2)	49	44	39
ASNW093MMM9 (LSN090HYV)	39	34	26
ASNW123MMM9 (LSN120HYV)	39	34	26
ASNW093F2B2(LAN090HVP)	42	36	32
ASNW123F2B2(LAN120HVP)	42	36	32
ASNW093WSA7(LSN090HEV)	39	33	25
ASNW123BSA7(LSN120HEV)	39	33	25
ASNW183CSA7(LSN180HEV)	42	40	35
ASNW243CSA7(LSN240HEV)	45	40	35

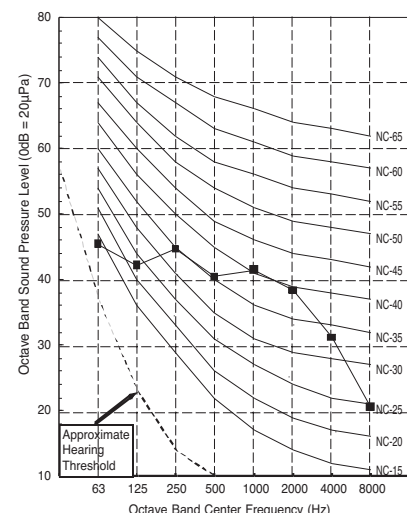
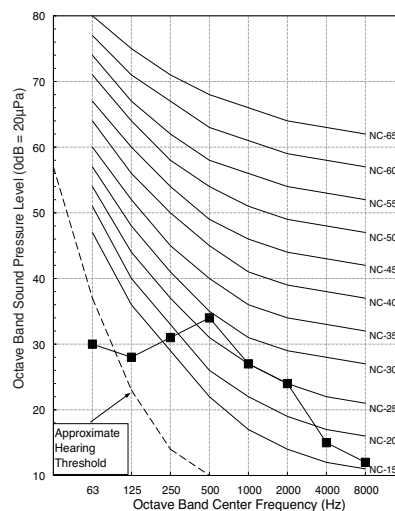
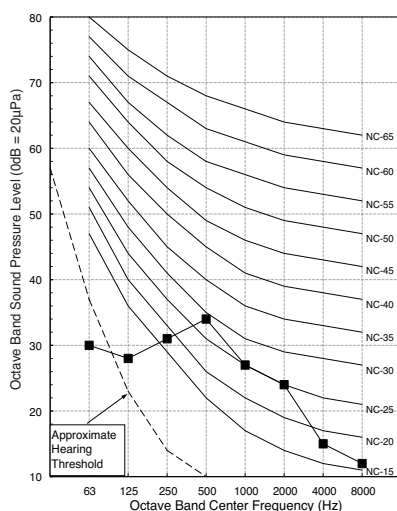
AjMadison
Your Appliance Authority™

Sound pressure level

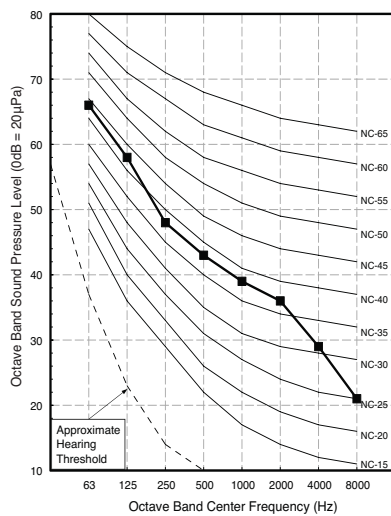
ASNW123B1Y9(LSN121HSV2)
ASNW123BRM9(LAN120HSV2)

ASNW093B1Y9(LSN091HSV2)
ASNW093BRM9(LAN090HSV2)

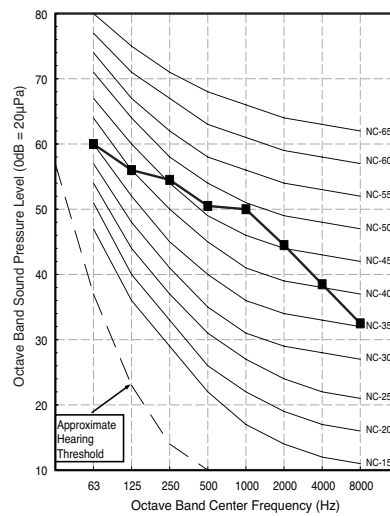
ASNW183C2Y9(LSN181HSV2)
ASNW183CRM9(LAN180HSV2)
ASNW243CRM9(LAN240HSV2)



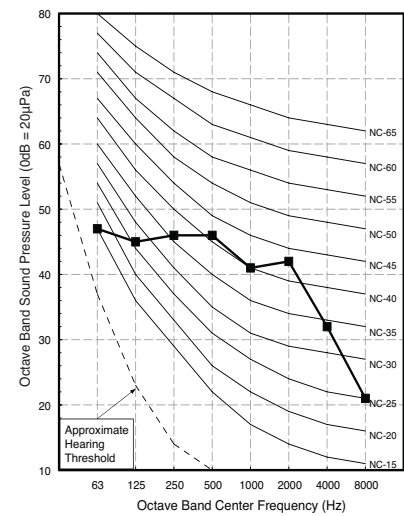
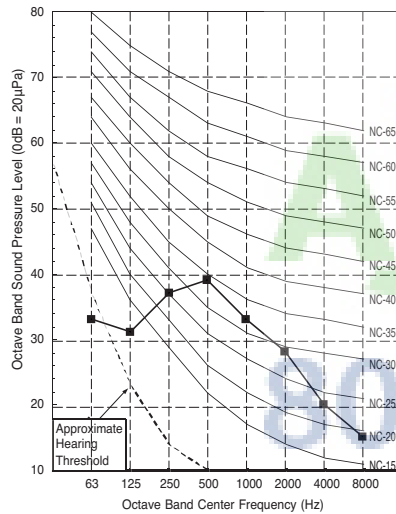
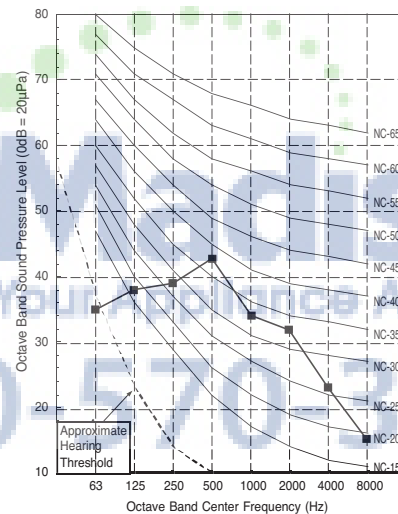
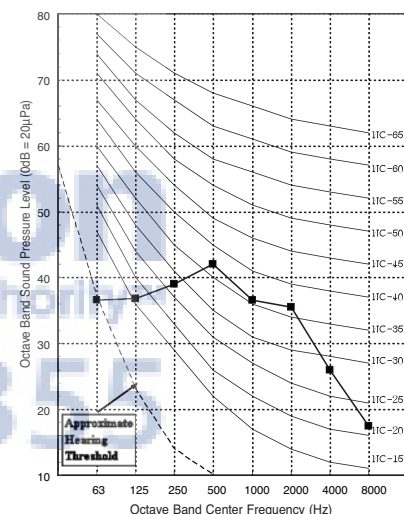
ASNW243DGY9(LSN240HSV2)



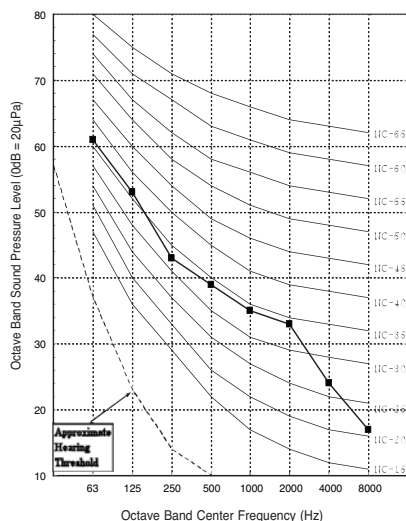
ASNW303DGY9 (LSN307HV2)



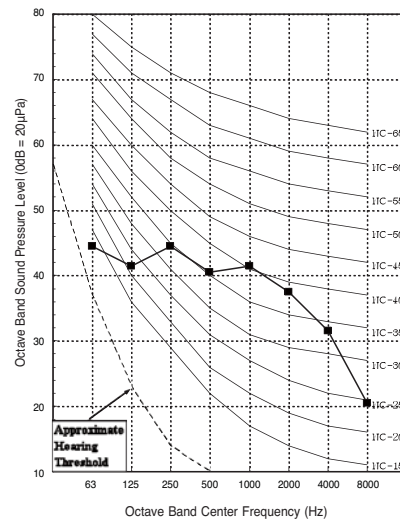
ASNW363DGY9(LSN360HV2)

ASNW093MMM9(LSN090HYV)
ASNW123MMM9(LSN120HYV)ASNW093F2B2(LAN090HVP)
ASNW123F2B2(LAN120HVP)ASNW093WSA7(LSN090HEV)
ASNW123BSA7(LSN120HEV)

ASNW183CSA7(LSN180HEV)

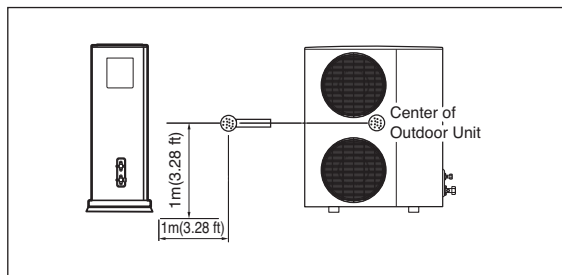


ASNW243CSA7(LSN240HEV)



12.2 Outdoor Units

Overall



Notes:

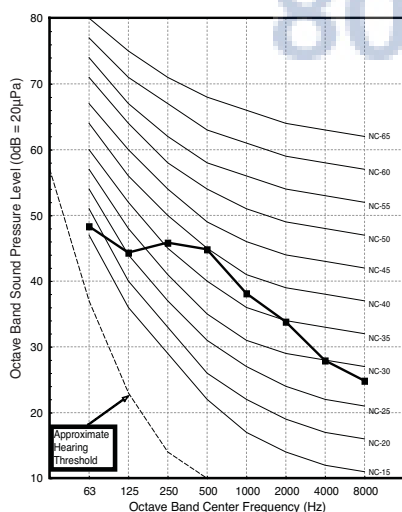
- Sound measured at 1m(3.28 ft) away from the center of the unit.
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- Reference acoustic pressure $0\text{dB}=20\mu\text{Pa}$.
- Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.
- The operating conditions are assumed to be standard.

Model	Sound Levels [dB(A)]
	H
ASUW093B1Y9 (LSU091HSV2)	45
ASUW123B1Y9 (LSU121HSV2)	45
ASUW183C2Y9 (LSU181HSV2)	53
ASUW243DGY9 (LSU240HSV2)	54
ASUW093BRM9 (LAU090HSV2)	45
ASUW123BRM9 (LAU120HSV2)	45
ASUW183CRM9 (LAU180HSV2)	53
ASUW243CRM9 (LAU240HSV2)	53
ASUW303DGY9 (LSU307HV2)	55

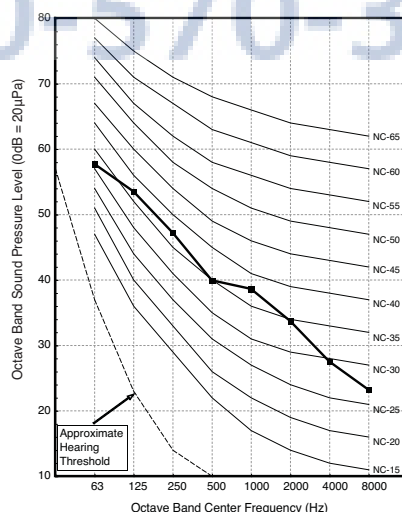
Model	Sound Levels [dB(A)]
	H
ASUW363DGY9 (LSU360HV2)	55
ASUW093MMM9 (LSU090HYV)	51
ASUW123MMM9 (LSU120HYV)	51
ASUW093F2B2 (LAU090HVP)	45
ASUW123F2B2 (LAU120HVP)	45
ASNW093WSA3 (LSN090HEV)	47
ASNW123BSA3 (LSN120HEV)	47
ASNW183CSA3 (LSN180HEV)	51
ASNW243CSA3 (LSN240HEV)	53

Sound pressure level

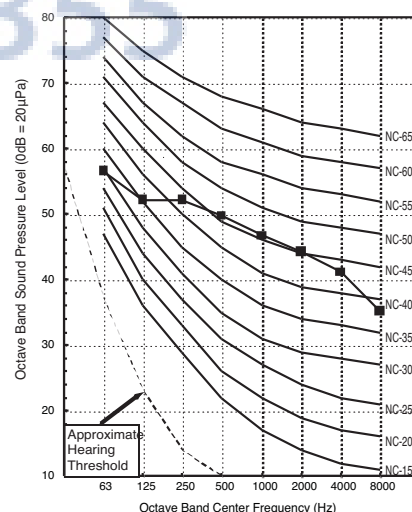
ASUW093B1Y9(LSU091HSV2)
ASUW093BRM9(LAU090HSV2)



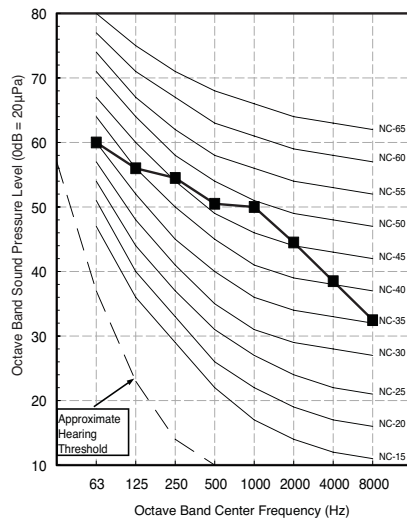
ASUW123B1Y9(LSU121HSV2)
ASUW123BRM9(LAU120HSV2)



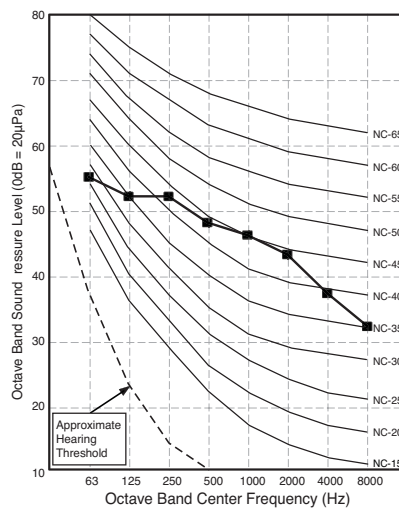
ASUW183C2Y9(LSU181HSV2)
ASUW183CRM9(LAU180HSV2)
ASUW243CRM9(LAU240HSV2)



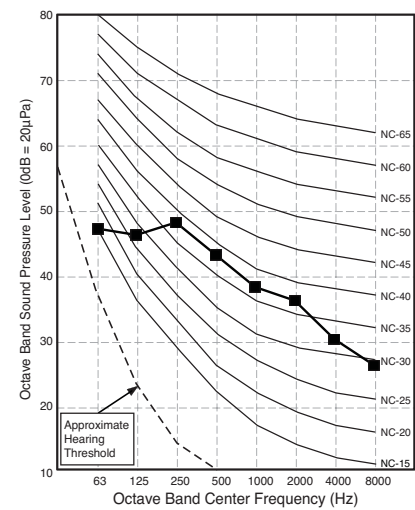
ASUW243DGY9(LSU240HSV2)
ASUW303DGY9(LSU307HV2)
ASUW363DGY9(LSU360HV2)



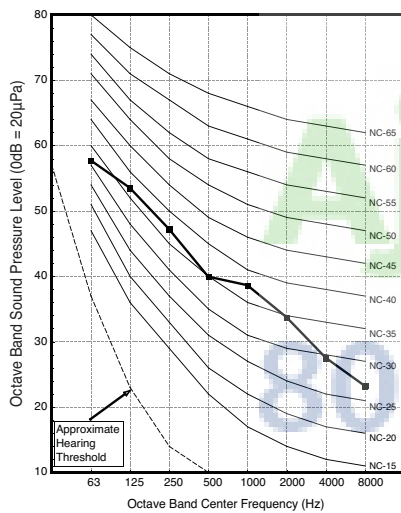
ASUW093MMM9(LSU090HYV)
ASUW123MMM9(LSU120HYV)



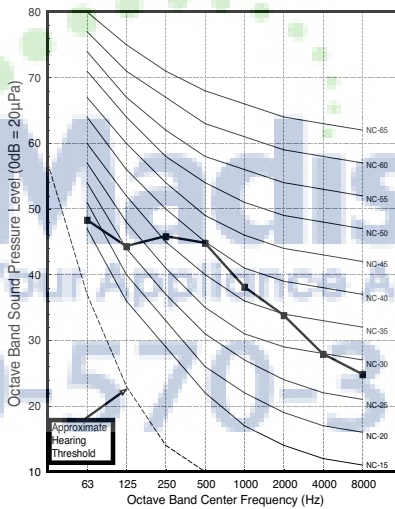
ASUW093F2B2(LAU090HVP)
ASUW123F2B2(LAU120HVP)



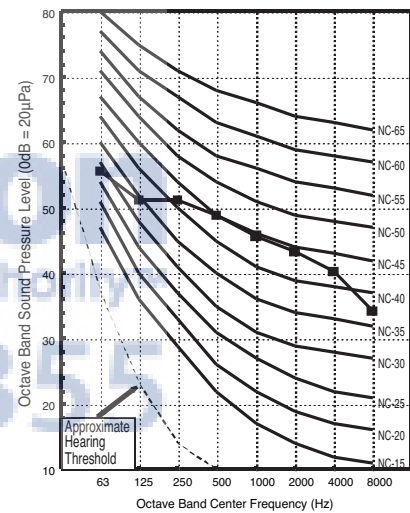
ASUW093WSA7(LSU090HEV)



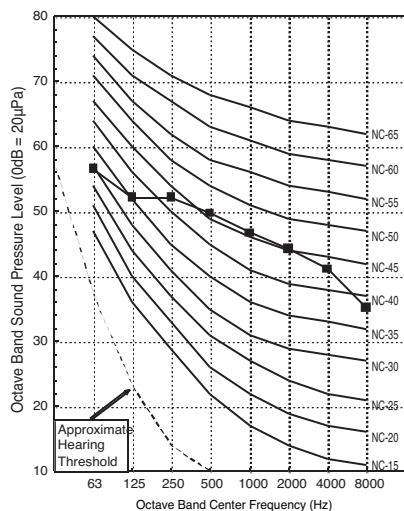
ASUW123BSA7(LSU120HEV)



ASUW183CSA7(LSU180HEV)



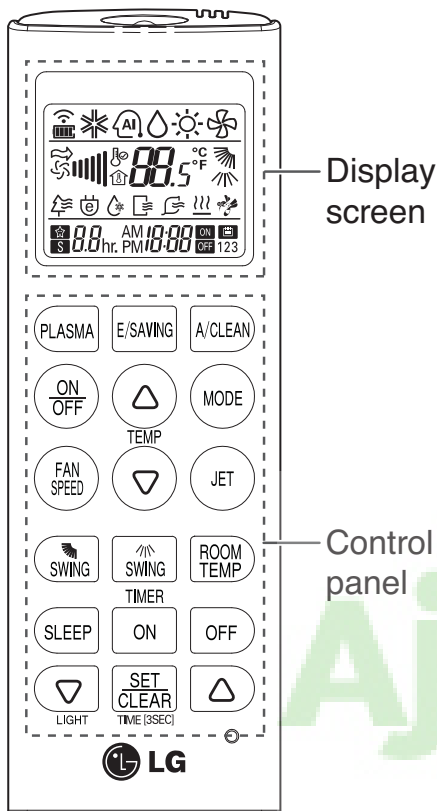
ASUW243CSA7(LSU240HEV)



13. Remote controller

Wireless Remote Controller

P/No: AKB73635606



• Applied Model

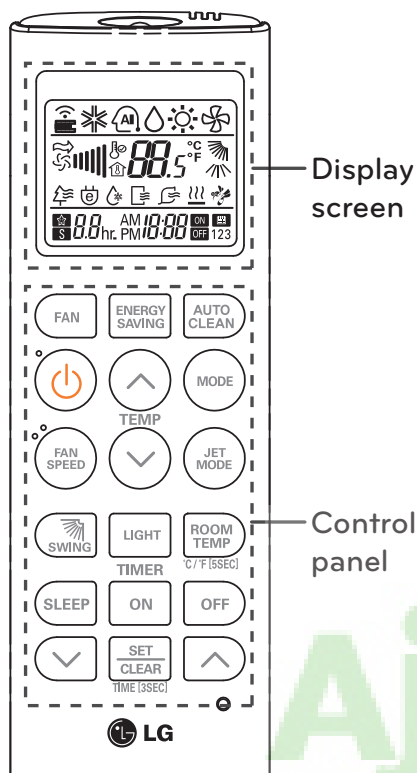
: LS090HYV / LS120HYV /
 LA090HVP / LA120HVP /
 LS091HSV2 / LS121HSV2 /
 LS181HSV2 / LA090HSV2 /
 LA120HSV2 / LA180HSV2 /
 LA240HSV2

Control panel	Display screen	Description
		Plasma button* : Purifies the air by removing particles that enter the indoor unit.
		Sleep mode auto button* : Sets the sleep mode auto operation.
		Temperature adjustment buttons : Adjusts the room temperature when cooling and heating.
	-	On/Off button : Turns the power on/off.
		Indoor fan speed button : Adjusts the fan speed.
		Operation mode selection button* : Selects the operation mode. Cooling operation (❄️) / Auto operation or auto changeover (AI) / Dehumidifying operation (💧) / Heating operation (🔥) / Air circulation (🌀)
		Jet cooling/heating button* : Warms up or cools down the indoor temperature within a short period of time.
		Air flow direction button : Adjusts the air flow direction vertically or horizontally.
		Temperature display button : Displays the room temperature. Also changes unit from °C to °F if pressed for 5 seconds.
		Timer button : Sets the current time and the start / end time.
		Navigation and functions button* : Adjusts the time and sets the special functions. 📅: Auto clean / ⏰: Operates energy saving cooling / 🌞: Adjusts the brightness of the indoor unit display
	-	Set/clear button : Sets or cancels functions.
	-	Reset button : Resets the air conditioner settings.

* Some functions may not be supported, depending on the model.

Wireless Remote Controller

P/No: AKB73835305



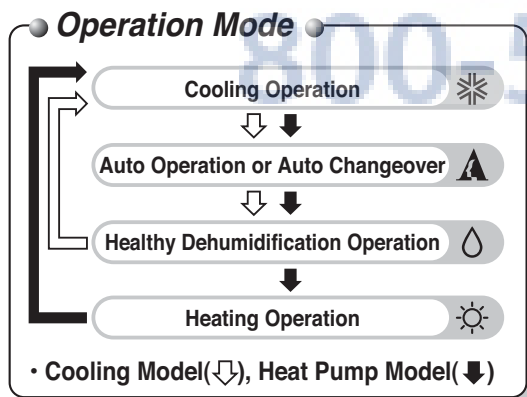
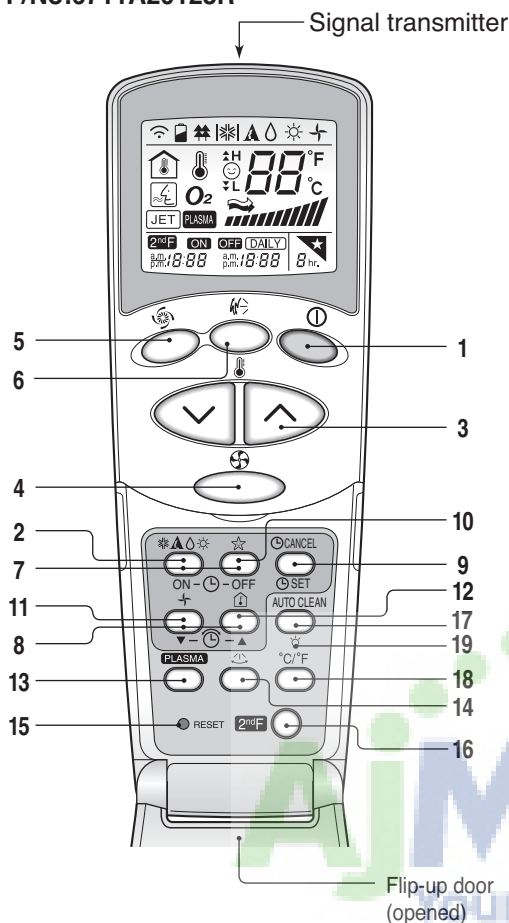
- **Applied Model**
LS090HEV, LS120HEV
LS180HEV, LS240HEV

Control panel	Display screen	Description
		Fan button : Air come out from the indoor unit below to the room without air temperature change.
 	 	Functions button* : Sets the special functions. : Auto clean / : Operates energy saving cooling
	-	On/Off button : Turns the power on/off.
		Temperature adjustment buttons : Adjusts the room temperature when cooling and heating.
	 	Operation mode selection button* : Selects the operation mode. Cooling operation () / Auto operation or auto changeover () / Dehumidifying operation () / Heating operation ()
		Indoor fan speed button : Adjusts the fan speed.
		Jet cooling/heating button* : Warms up or cools down the indoor temperature within a short period of time.
		Air flow direction button : Adjusts the air flow direction vertically.
	-	LIGHT button : Adjusts the brightness of the indoor unit display.
		Temperature display button : Displays the room temperature. Press for 5 sec, conversion °C / °F
	 	Sleep mode auto button* : Sets the sleep mode auto operation.
 		Timer button : Sets the current time and the start / end time.
		Time adjustment buttons* : Adjusts the time
	-	Set/clear button : Sets or cancels functions.
	-	Reset button : Resets the remote control settings.

* Some functions may not be supported, depending on the model.

The controls will look like the following.

P/No:6711A20128R



• **Applied Model**

: LS240HSV2 / LS307HV2 / LS360HV2

NOTICE

- To use the functions printed in blue at the bottom of the buttons press 2nd F button first and then the required function button.

Pressing the 2ndF button activates the blue printed function of the respective button. To cancel the function press the 2nd F button again else it will automatically cancel if remains idle after 10 seconds.

1. START/STOP BUTTON

Used to turn off/on the unit.

2. OPERATION MODE SELECTION BUTTON

Used to select the operation mode.

3. ROOM TEMPERATURE SETTING BUTTONS

Used to select the room temperature.

4. INDOOR FAN SPEED SELECTOR BUTTON

Used to select fan speed in four steps low, medium, high and CHAOS.

5. JET COOL/HEAT BUTTON

Used to start or stop the speed cooling/heating. (It operates fan in super high speed)

6. CHAOS SWING BUTTON

Used to stop or start louver movement and set the desired up/down airflow direction.

7. ON/OFF TIMER BUTTONS

Used to set the time of starting and stopping operation.

8. TIME SETTING BUTTONS

Used to adjust the time.

9. TIMER SET/CANCEL BUTTON

Used to set and to cancel the timer operation.

10. SLEEP MODE AUTO BUTTON

Used to set sleep mode auto operation.

11. AIR CIRCULATION BUTTON(OPTIONAL)

Used to circulate the room air without cooling or heating.

ENERGY-SAVING COOLING MODE BUTTON (OPTIONAL) For inverter type models

12. ROOM TEMPERATURE CHECKING BUTTON

Used to check the room temperature.

13. PLASMA BUTTON(OPTIONAL)

Used to start or stop the plasma-purification function.

14. HORIZONTAL AIRFLOW DIRECTION CONTROL BUTTON (OPTIONAL)

Used to set the desired horizontal airflow direction.

15. RESET BUTTON

Used prior to resetting time.

16. 2nd F BUTTON

Used prior to using modes printed in blue at the bottom of buttons.

17. AUTO CLEAN BUTTON(OPTIONAL)

Used to set auto clean mode.

In some models this button has a 2nd function of LED luminosity control.

18. °C TO °F SWITCHING BUTTON

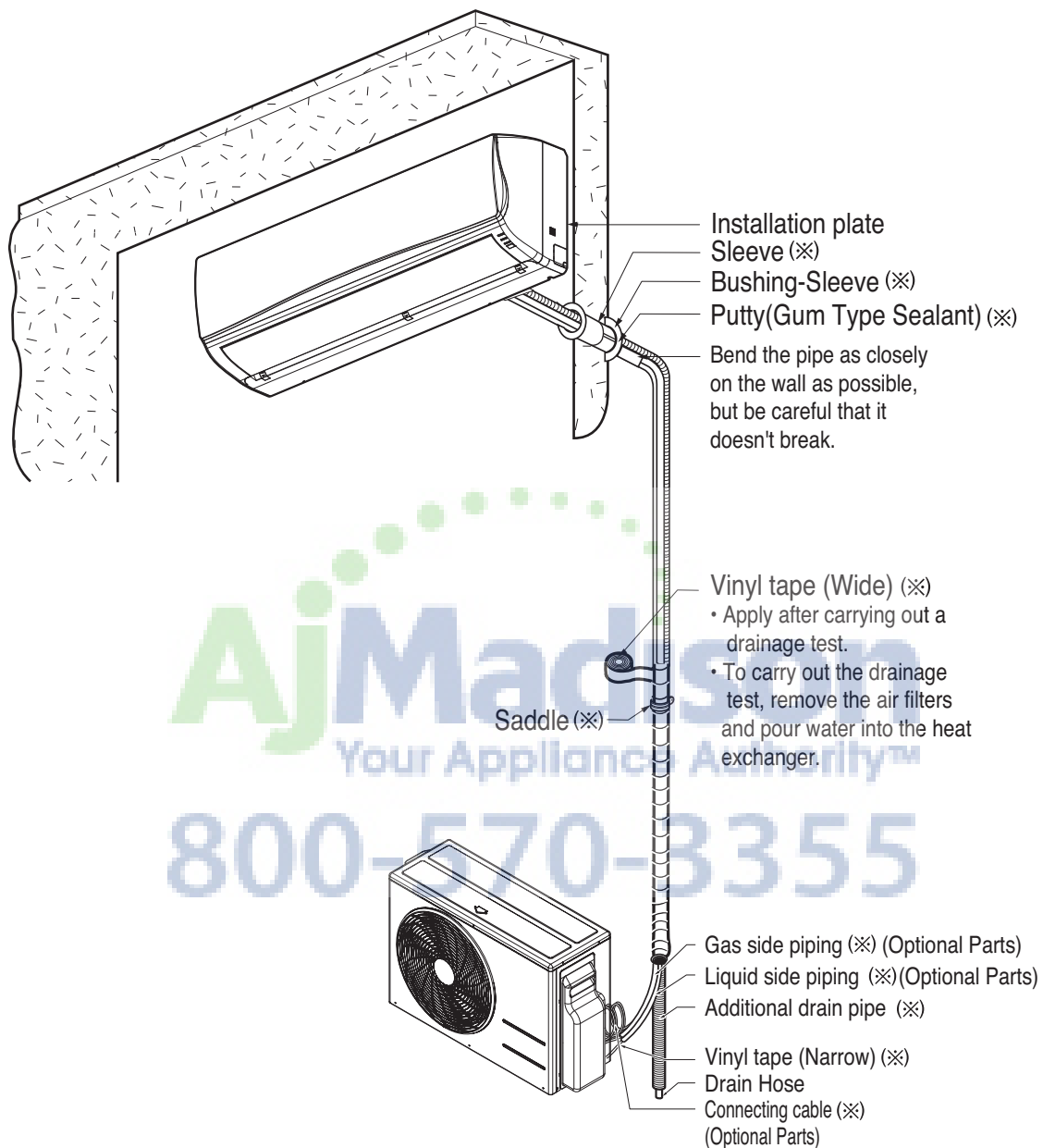
Used to switch temperature reading from Centigrade to Fahrenheit.

19. LCD LUMINOSITY BUTTON(OPTIONAL)

Used to adjust LCD luminosity.

14. Installation

Installation Map



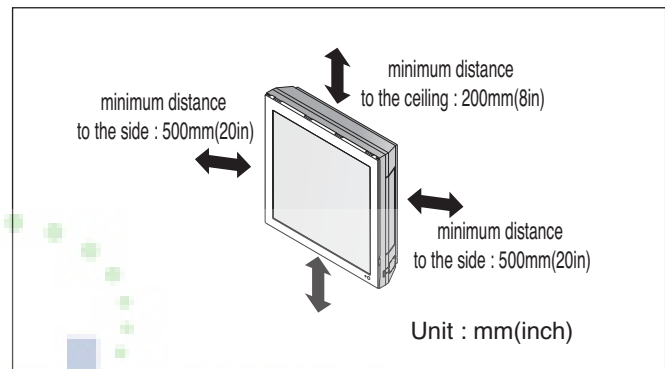
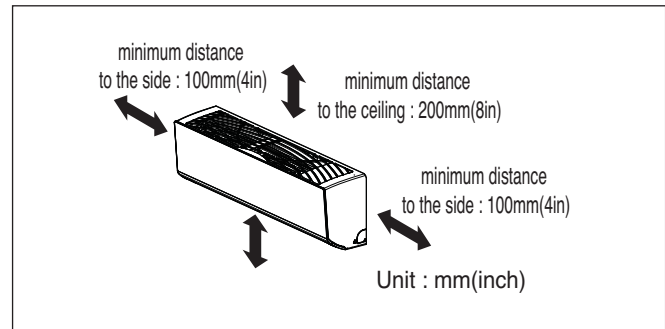
NOTICE

- You should purchase the installation parts.

Select the best Location

Indoor unit

1. There should not be any heat or steam near the unit.
2. Select a place where there are no obstacles around of the unit.
3. Make sure that condensation drainage can be conveniently routed away.
4. Do not install near a doorway.
5. Ensure that the interval between a wall and the left(or right) of the unit is more than 100mm(4in) for wall mounted model, more than 500mm(20in) for Artcool Gallery model.
The unit should be installed as high as possible on the wall, allowing a minimum of 200mm(8in) for ceiling.
6. Use a metal detector to locate studs to prevent unnecessary damage to the wall.
7. Recommended height 2m(6.5ft) from the floor.

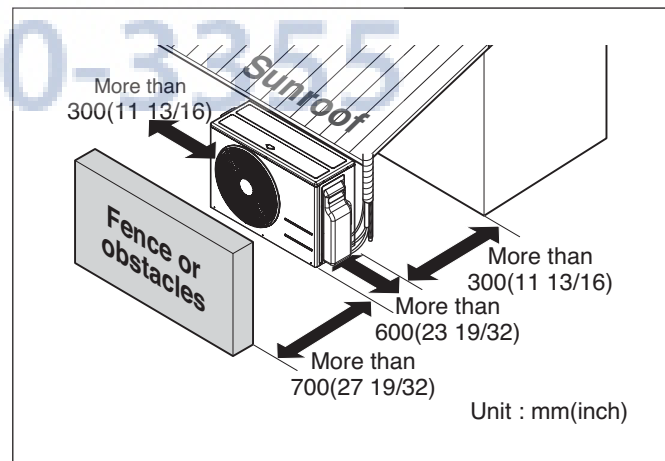


NOTICE

- Remove obstructions to prevent blockage of airflow path.

Outdoor unit

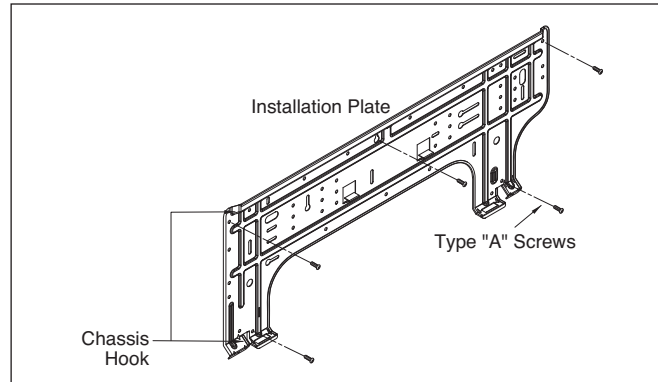
1. If an awning is built over the unit to prevent direct sunlight or rain exposure, make sure that heat radiation from the condenser is not restricted.
2. Ensure that the space around the back and sides is more than 300mm(11 13/16 inch). The space in front of the unit should be more than 700mm(27 19/32 inch) of space.
3. Do not place animals and plants in the path of the warm air.
4. Take the weight of the air conditioner into account and select a place where noise and vibration are minimum.
5. Select a place where the warm air and noise from the air conditioner do not disturb neighbors.



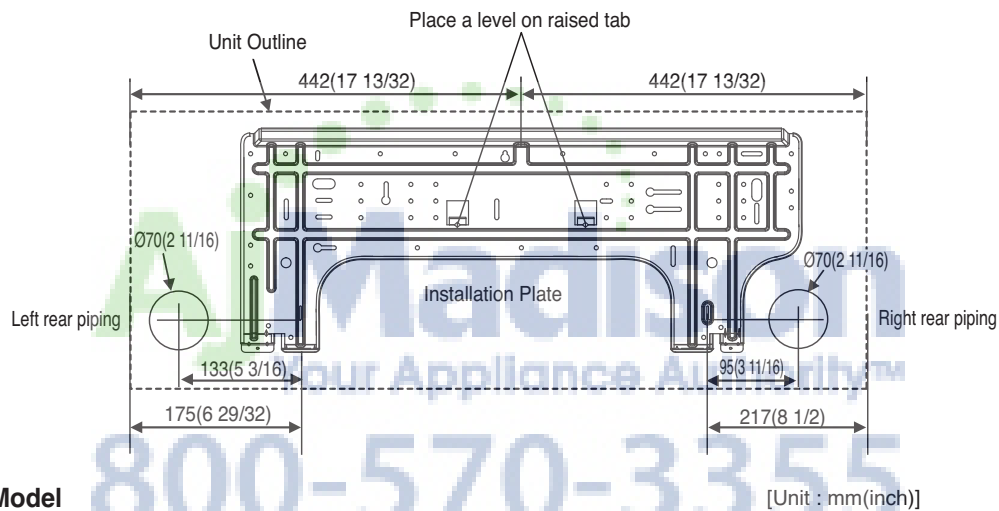
Fixing Installation Plate

The wall you select should be strong and solid enough to prevent vibration

1. Mount the installation plate on the wall with type "A" screws. If mounting the unit on a concrete wall, use anchor bolts.
 - Mount the installation plate horizontally by aligning the centerline using Horizontal meter .
2. Measure the wall and mark the centerline. It is also important to use caution concerning the location of the installation plate. Routing of the wiring to power outlets is through the walls typically. Drilling the hole through the wall for piping connections must be done safely.



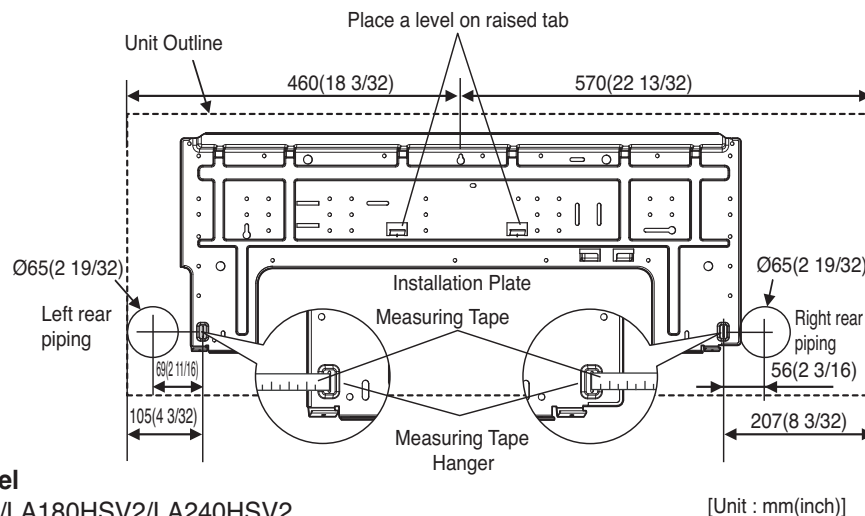
Type 1



• **Applied Model**

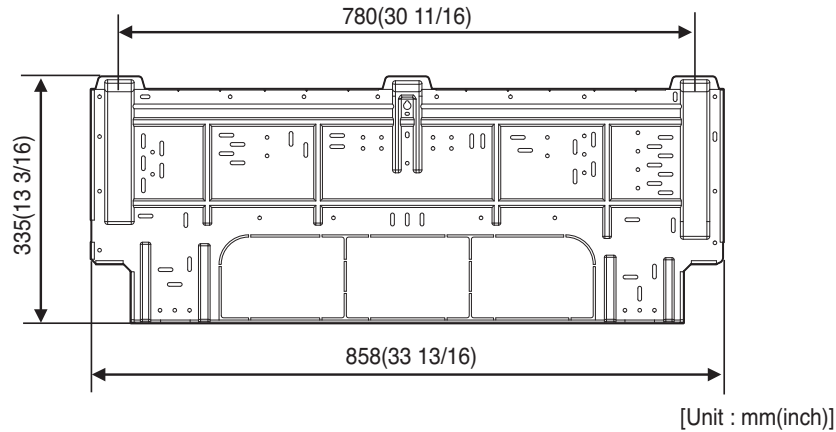
: LS091HSV2/LS121HSV2/LA090HSV2/LA120HSV2

Type 2

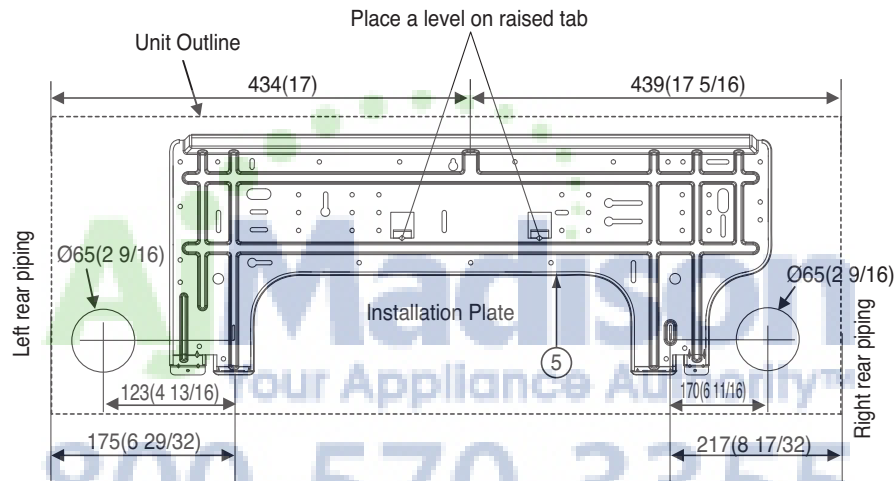


• **Applied Model**

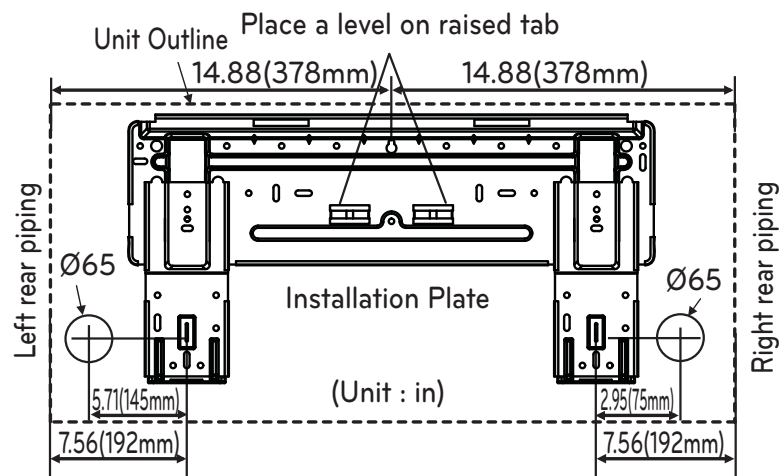
: LS181HSV2/LA180HSV2/LA240HSV2

Type 3

• **Applied Model** : LS240HSV2/LS307HV2/LS360HV2

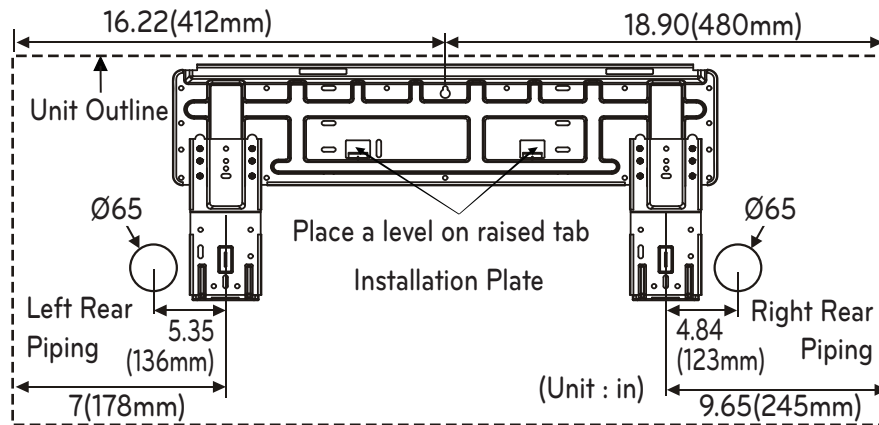
Type 4

• **Applied Model** : LS090HYV, LS120HYV

Type 5

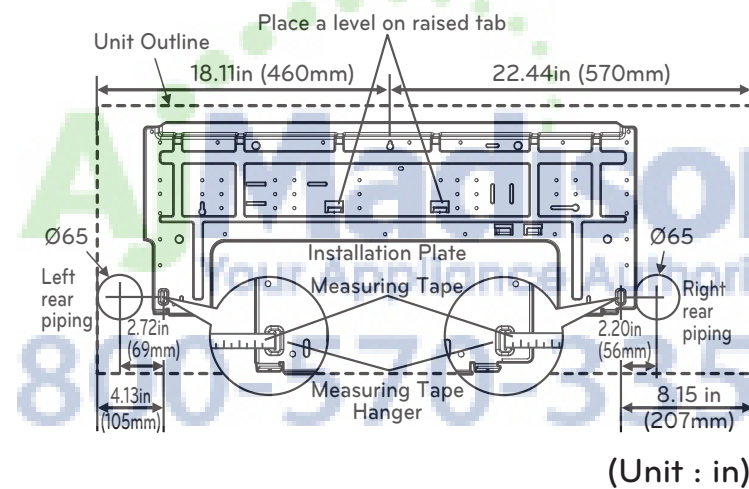
• **Applied Model** : LSN090HEV

Type 6



• Applied Model : LSN120HEV

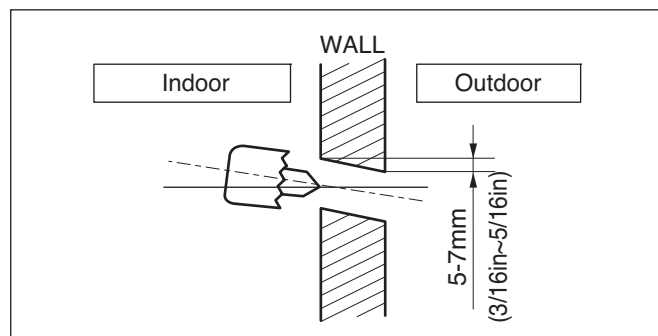
Type 7



• Applied Model : LSN180HEV , LSN240HEV

Drill a Hole in the Wall

- Drill the piping hole with a $\varnothing 70\text{mm}$ (2 13/16 inch) hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.

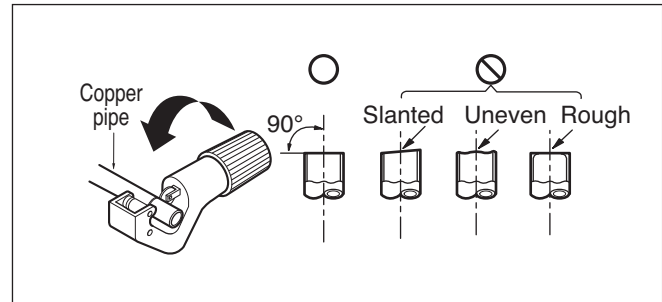


Flaring Work

One cause of gas leakage is improper workmanship in flaring. Carry out correct flaring work in the following procedure.

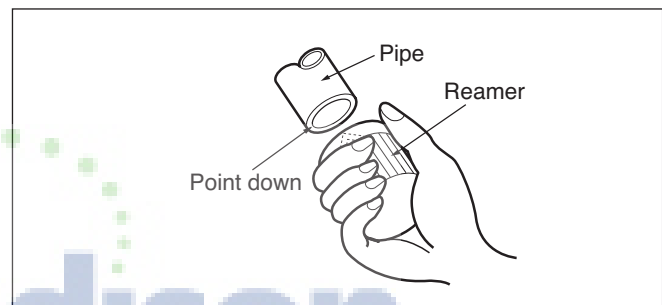
Cut the pipes and the cable.

1. Use the piping kit accessory or the pipes purchased locally.
2. Measure the distance between the indoor and the outdoor unit.
3. Cut the pipes a little longer than measured distance.
4. Cut the cable 1.5m(59 3/32 inch) longer than the pipe length.



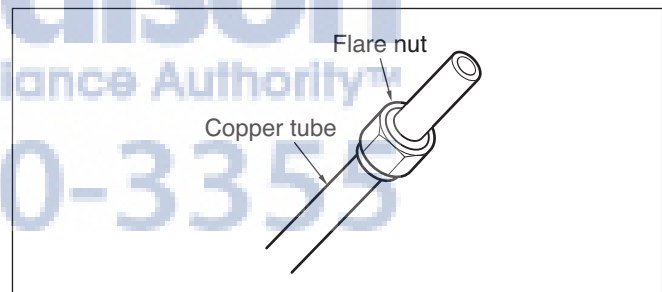
Burrs removal

1. Completely remove all burrs from the cut cross section of pipe/tube.
2. While removing burrs put the end of the copper tube/pipe in a downward direction while removing burrs location is also changed in order to avoid dropping burrs into the tubing.



Putting nut on

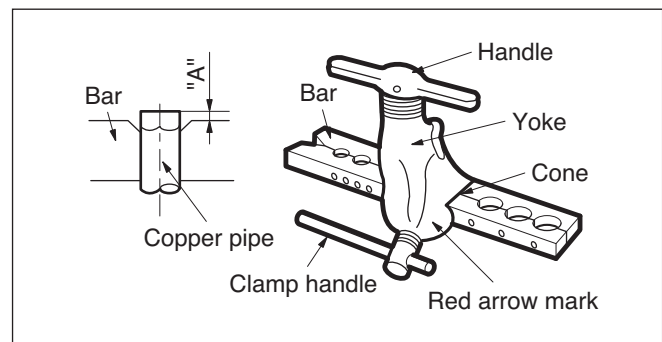
- Remove flare nuts attached to indoor and outdoor unit, then put them on pipe/tube having completed burr removal.
(not possible to put them on after finishing flare work)



Flaring work

1. Firmly hold copper pipe in a bar with the dimension shown in table below.

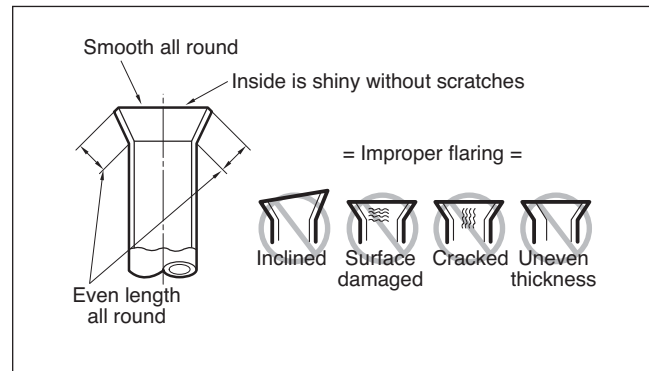
Outside diameter		A	
mm	inch	mm	inch
Ø6.35	1/4	1.1~1.3	0.043~0.051
Ø9.52	3/8	1.5~1.7	0.059~0.067
Ø12.7	1/2	1.6~1.8	0.063~0.071
Ø15.88	5/8	1.6~1.8	0.063~0.071
Ø19.05	3/4	1.9~2.1	0.075~0.083



2. Carry out flaring work with the flaring tool.

Check

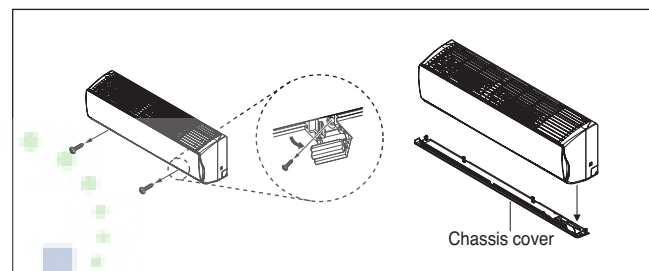
1. Compare the flared work with the figure by.
2. If a section is improperly flared, cut it off and perform flaring work again.



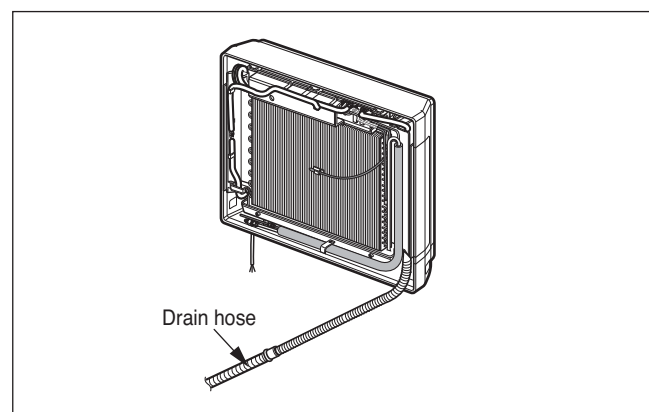
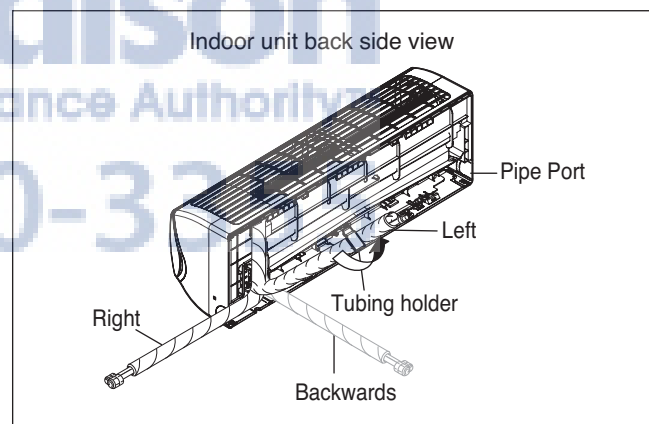
Connecting the Piping

Indoor unit

1. Pull the screw cap at the bottom of the indoor unit
2. Remove the chassis cover from the unit by loosening 2 screws



3. Pull back the tubing holder.
4. Remove pipe port cover and positioning the tubing

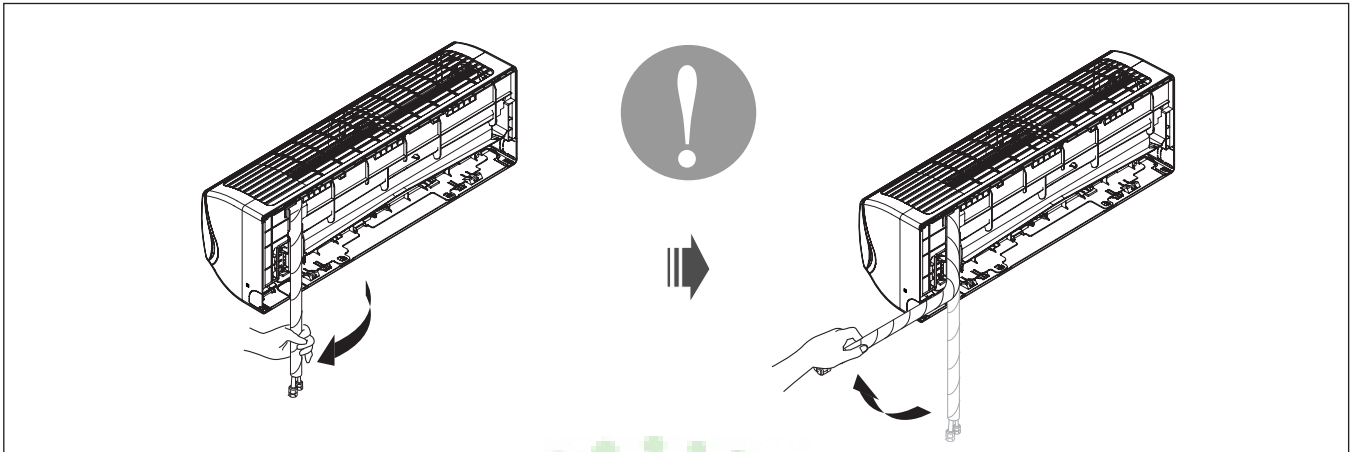


⚠ CAUTION

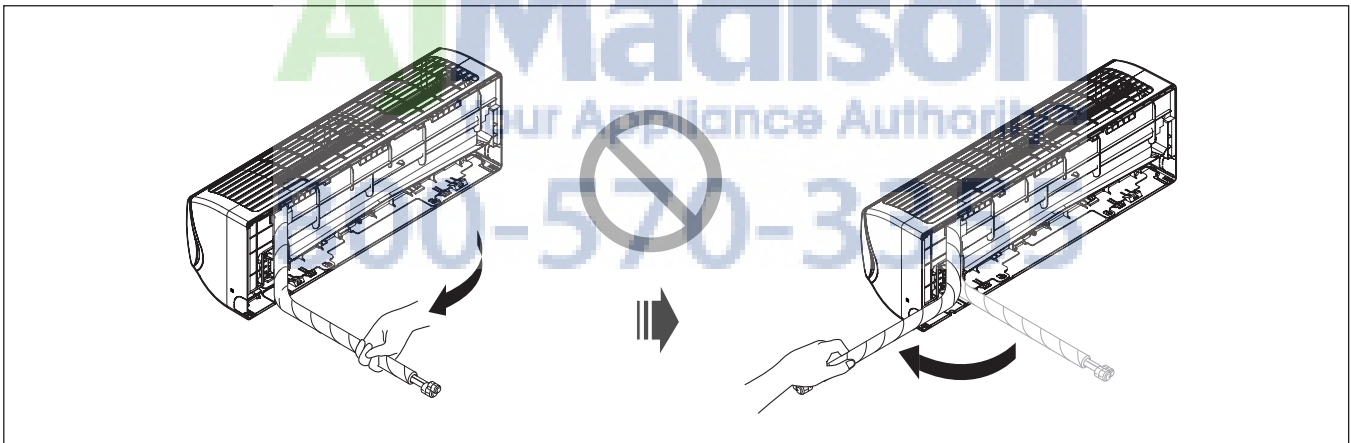
Installation Information. For right piping. Follow the instruction below.

Good case

- Press on the tubing cover and unfold the tubing to downward slowly. And then bend to the left side slowly.

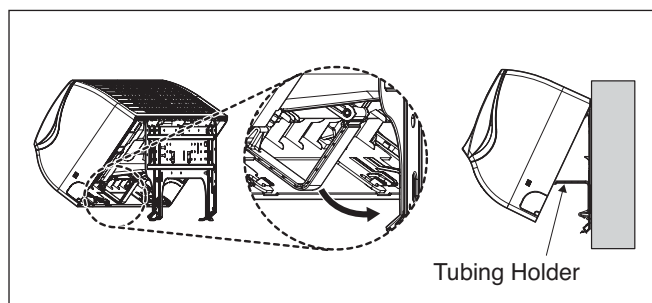
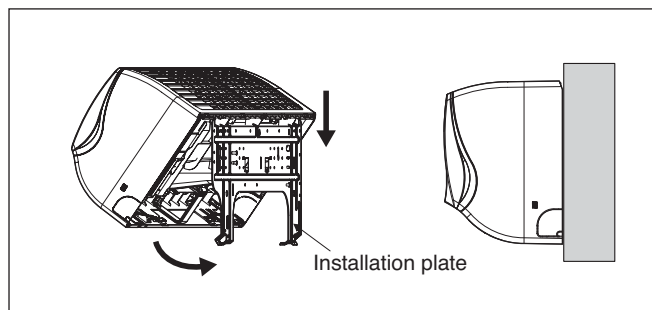
**Bad case**

- Following bending case from right to left directly may cause damage to the tubing.



Installation of Indoor Unit

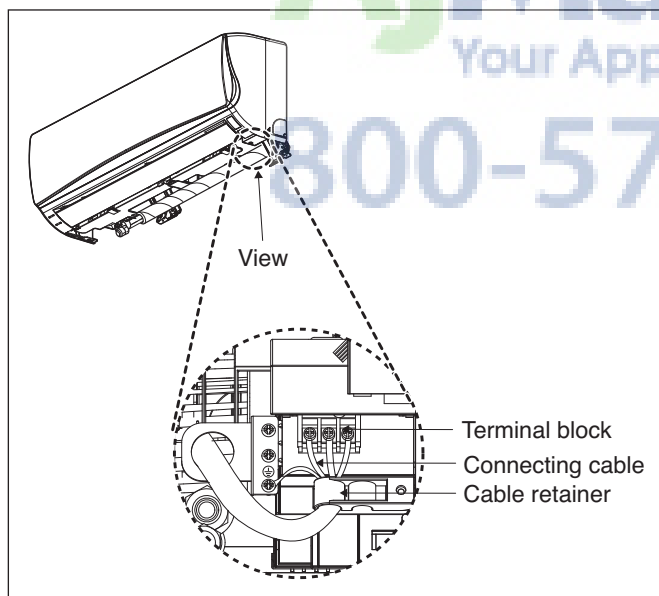
1. Hook the indoor unit onto the upper portion of the installation plate.(engage the three hooks at the top of the indoor unit with the upper edge of the installation plate) Ensure that the hooks are properly seated on the installation plate by moving it left and right
2. Unlock the tubing holder from the chassis and mount between the chassis and installation plate in order to separate the bottom side of the indoor unit from the wall



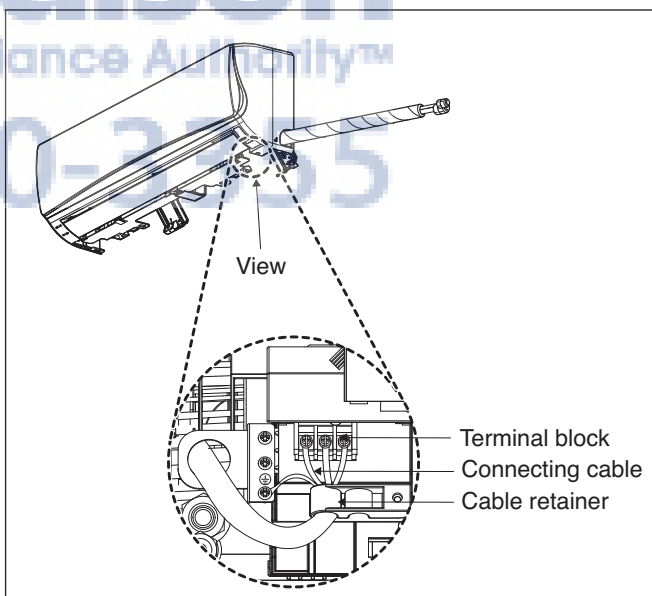
Piping

1. Insert the connecting cable through the bottom side of indoor unit and connect the cable (You can see detail contents in 'Connecting the cables' section)

<Left side piping>



<Right side piping>



2. Secure the cable onto the control board with the cable retainer.
3. Tape the tubing pipe, drain hose and the connection cable. Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause overflow from the drain pan through the inside of the unit.

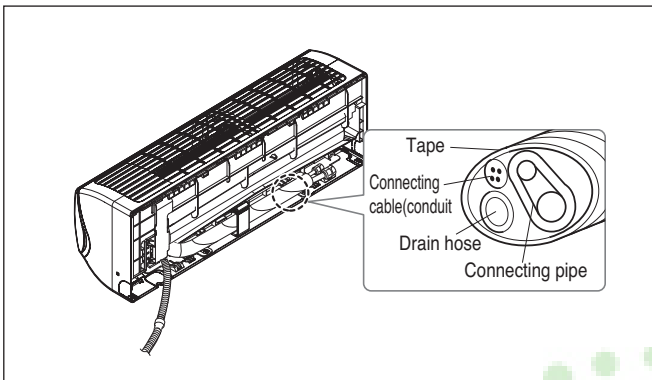
⚠ CAUTION

If the drain hose is routed inside the room insulate the hose with an insulation material* so that dripping from sweating (condensation) will not damage furniture or floors.

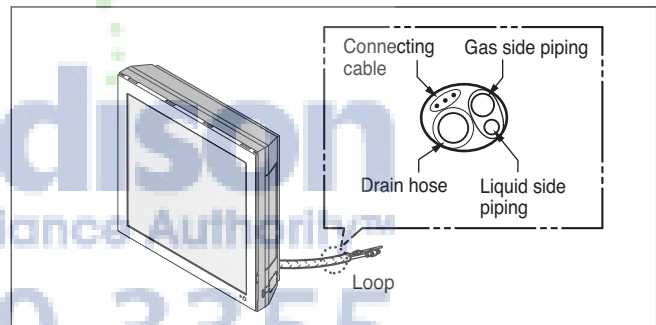
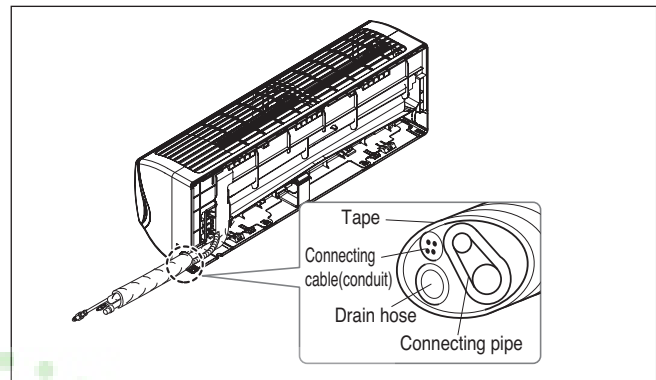
Be sure to install in the sequence of Connecting cable (Conduit), Drain hose and Connecting pipe as the picture below describes.

* Foamed polyethylene or equivalent is recommended.

<Left side piping>



<Right side piping>



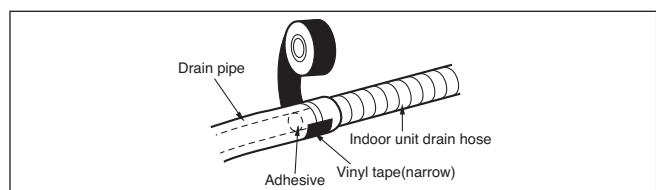
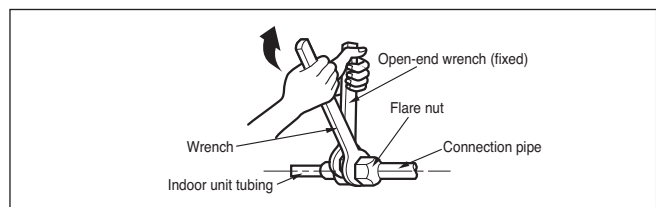
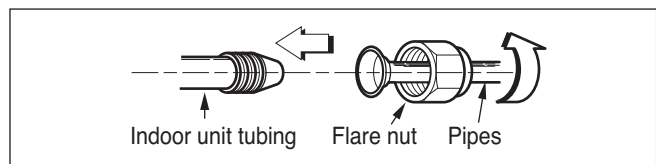
Connecting the installation pipe and drain hose to the indoor unit.

1. Align the center of the pipes and sufficiently tighten the flare nut by hand

2. Tighten the flare nut with a wrench

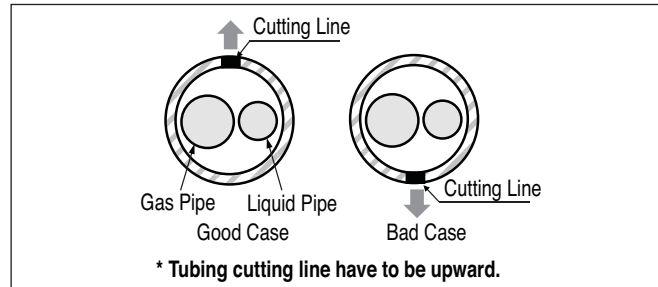
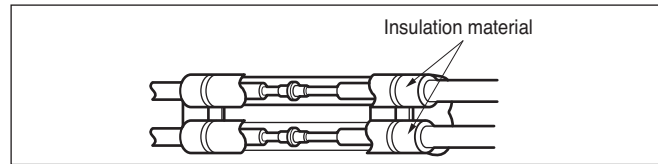
Outside diameter		Torque	
mm	inch	kgf·m	lbf·ft
Ø6.35	1/4	1.8~2.5	13~18
Ø9.52	3/8	3.4~4.2	24.6~30.4
Ø12.7	1/2	5.5~6.6	39.8~47.7
Ø15.88	5/8	6.3~8.2	45.6~59.3

3. When needed to extend the drain hose of indoor unit, assembly the drain pipe as shown on the drawing

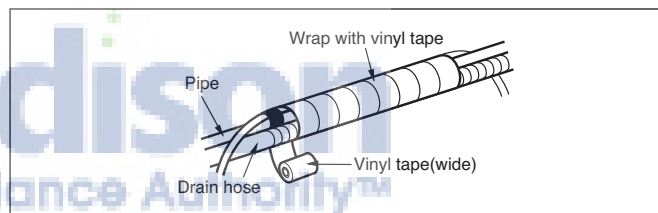
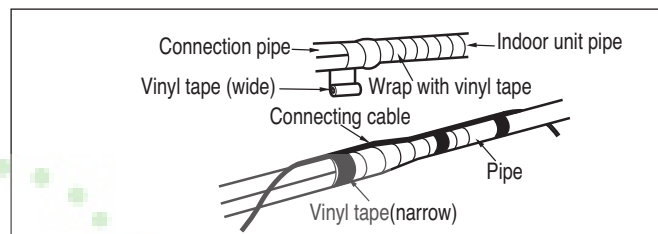


Wrap the insulation material around the connecting portion.

1. Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there may be no gap.
2. Set the tubing cutting line upward.
Wrap the area which accommodates the rear piping housing section with vinyl tape.

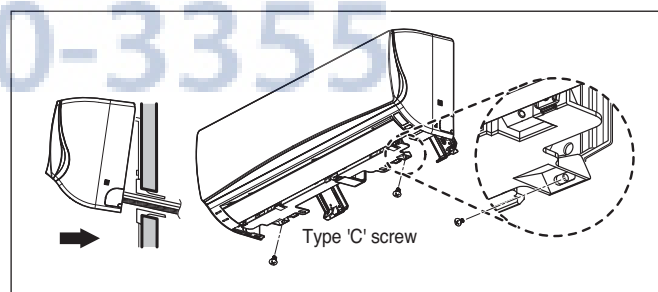


3. Bundle the piping and drain hose together by wrapping them with vinyl tape sufficient enough to cover where they fit into the rear piping housing section.



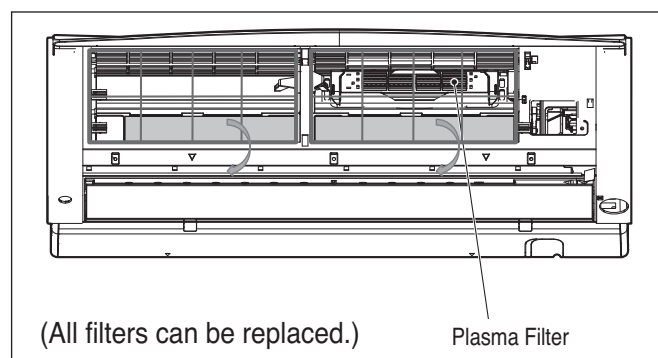
Finishing the indoor unit installation

1. Mount the tubing holder in the original position.
2. Ensure that the hooks are properly seated on the installation plate by moving it left and right.
3. Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots (clicking sound).
4. Finish the assembly by screwing the unit to the installation plate by using two pieces of type "C" screws. And assemble a chassis cover.



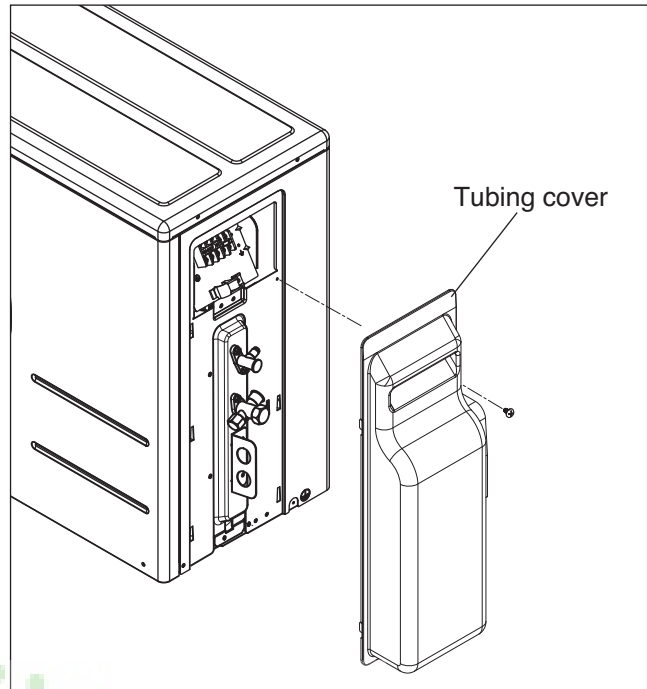
Installation of filters

1. Detach two attached tapes from the plasma filter.
 - Applied Model with Plasma Filter :
LS091HSV2/LS121HSV2/LS181HSV2/
LA090HSV2/LA120HSV2/LA180HSV2/LA240HSV2/
LS240HSV2/LS307HV2/LS360HV2

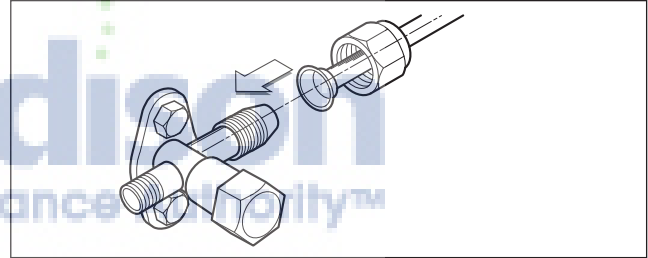


Outdoor unit

1. Remove the tubing cover from the unit by loosening the screw.

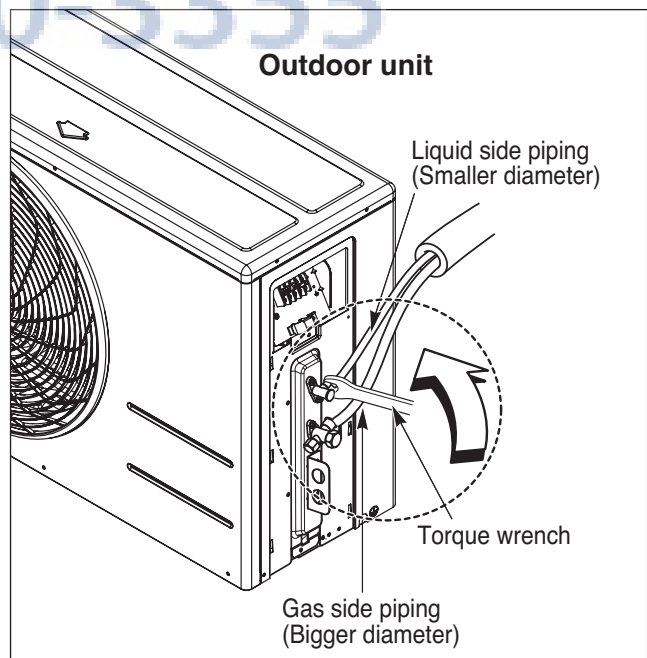


2. Align the center of the pipings and sufficiently tighten the flare nut by hand.



3. Finally, tighten the flare nut with torque wrench until the wrench clicks.
 - When tightening the flare nut with torque wrench, ensure the direction for tightening follows the arrow on the wrench.

Outside diameter		Torque	
mm	inch	kgf·m	lbf·ft
Ø6.35	1/4	1.8~2.5	13~18
Ø9.52	3/8	3.4~4.2	24.6~30.4
Ø12.7	1/2	5.5~6.6	39.8~47.7
Ø15.88	5/8	6.3~8.2	45.6~59.3
Ø19.05	3/4	9.9~12.1	71.6~87.5



Connecting the Cables

Indoor

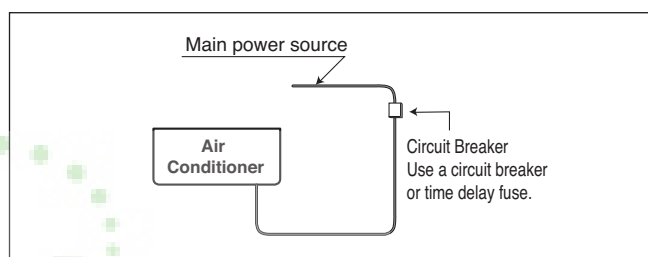
Connect the cable to the indoor unit by connecting the wires to the terminals on the control board individually according to the outdoor unit connection. (Ensure that the color of the wires of the outdoor unit and the terminal No. are the same as those of the indoor unit.)

⚠ CAUTION

- The circuit diagram is a subject to change without notice.
- The earth wire should be longer than the common wires.
- When installing, refer to the circuit diagram on the chassis cover.
- Connect the wires firmly so that they may not be pulled out easily.
- Connect the wires according to color codes, referring to the wiring diagram.
- Connect the wires should be sized per local code.

⚠ CAUTION

For the circuit breaker between power source and the outdoor units refer to specification pages.

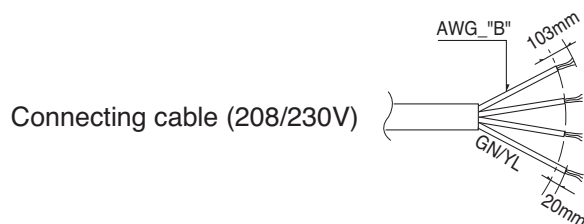


⚠ CAUTION

For the power cord connected to the outdoor units refer to specification pages (UL recognized or CAS certified).



The power connecting cable connected to the indoor and outdoor unit should be complied with the following specifications (UL recognized or CAS certified).



Power	Capacity(Btu/h)
	9k/12k/16k/18k/24k/30k/36k
"B"	18

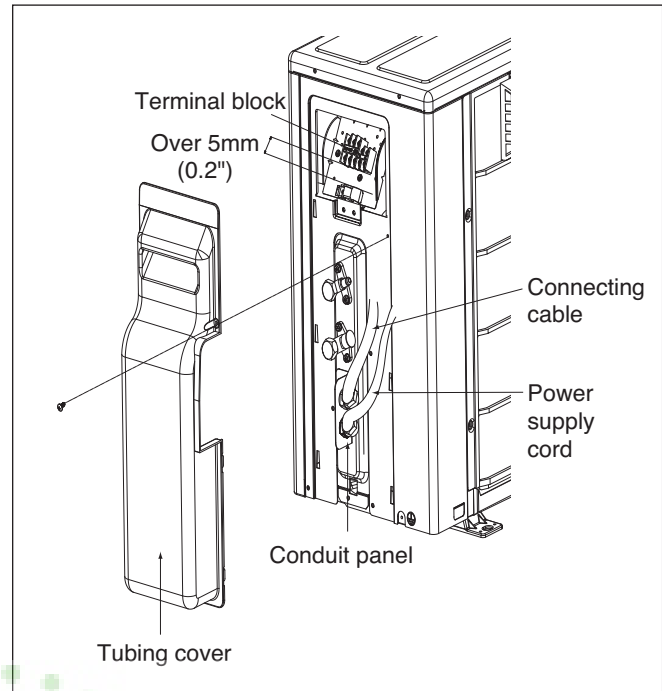
* Field wiring shall be done such that the current carrying conductors become taut before the earthing conductor if the cord slips out of the cord anchorage.

⚠ CAUTION

When using the separate wire as the power cord, please fix the separate wire into the control box panel by using tie wrap as the fixture.

Outdoor

1. Remove the cover control from the unit by loosening the screw.
Connect the wires to the terminals on the control board individually as the following.
2. Secure the cable onto the control board with the holder (clammer).
3. Refix the cover control to the original position with the screw.



NOTICE

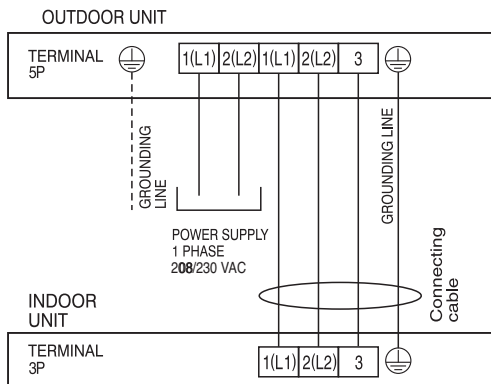
1. Separately wire power supply cord and connecting cable.
2. Use heat-proof electrical wiring capable of withstanding temperature up to 75°C(167°F).
3. Use outdoor and waterproof connection cable rated up to 300V for the connection between indoor and outdoor unit.
(For example, Type SJO-WA)

⚠ WARNING

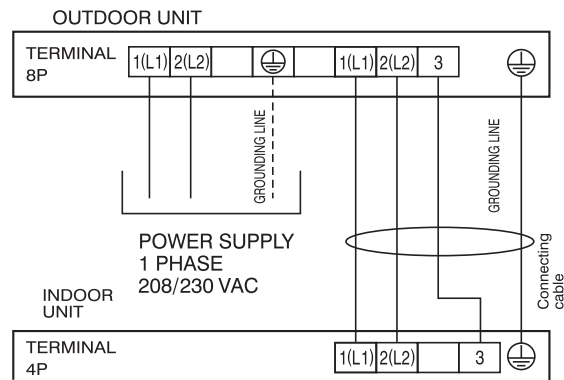
- Be sure to comply with local codes while running the wire from the indoor unit to the outdoor unit(size of wire and wiring method, etc).
- Every wire must be connected firmly.
- No wire should be allowed to touch refrigerant tubing, the compressor or any moving parts.

Wiring Diagram

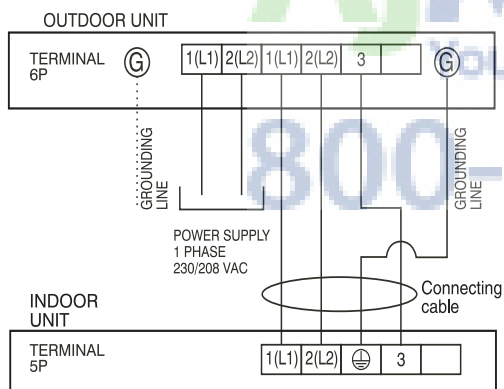
ASUW093B1Y9(LSU091HSV2)
 ASUW093BRM9(LAU090HSV2)
 ASUW123B1Y9(LSU121HSV2)
 ASUW123BRM9(LAU120HSV2)
 ASUW093F2B2 (LAU090HVP)
 ASUW123F2B2 (LAU120HVP)



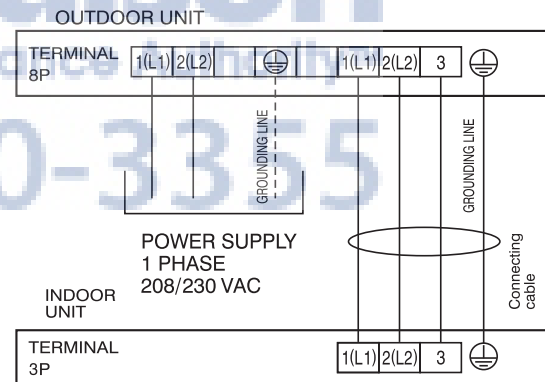
ASUW183C2Y9(LSU181HSV2)
 ASUW183CRM9(LAU180HSV2)
 ASUW243CRM9(LAU240HSV2)
 ASUW243DGY9(LSU240HSV2)
 ASUW363DGY9(LSU360HV2)



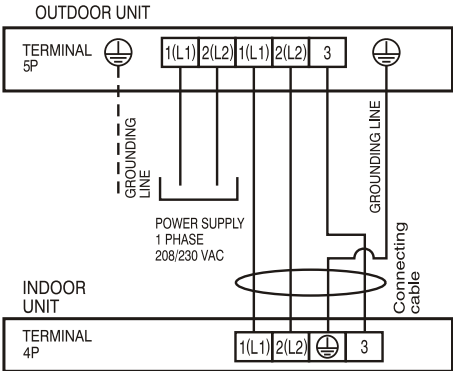
ASUW303DGY9 (LSU307HV2)



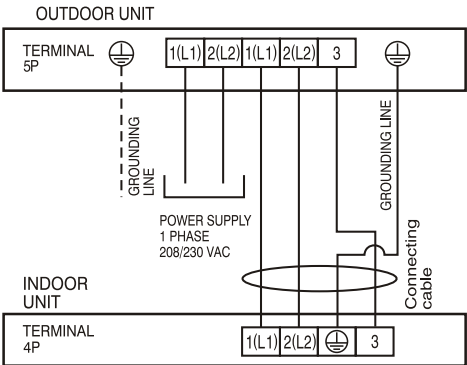
ASUW093MMM9(LSU090HYV)
 ASUW123MMM9(LSU120HYV)



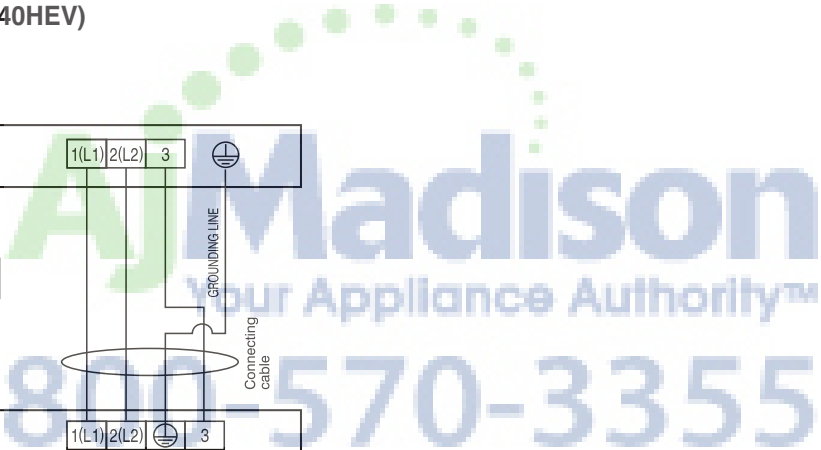
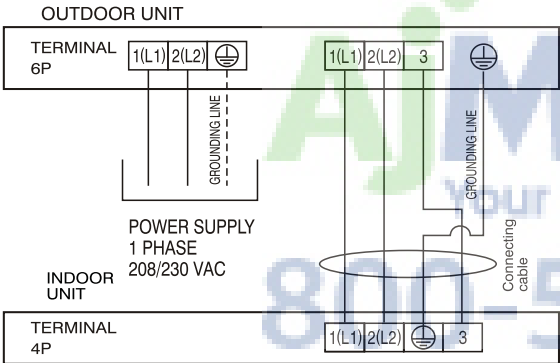
ASUW093WSA7(LSU090HEV)
ASUW123BSA7(LSU120HEV)



ASUW183CSA7(LSU180HEV)



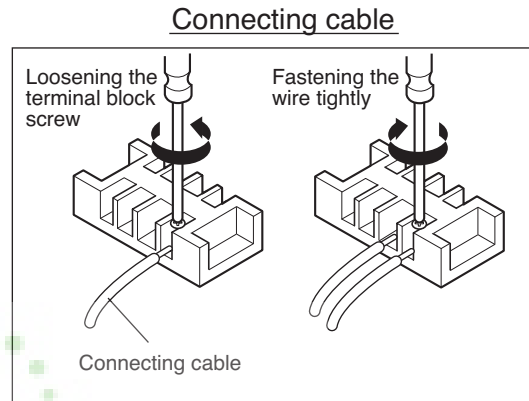
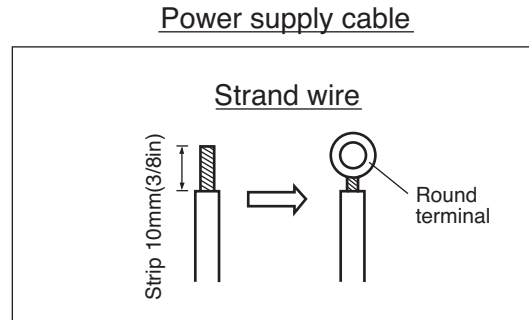
ASUW243CSA7(LSU240HEV)



How to connect wiring to the terminals

■ For strand wiring

- (1) Cut the wire end with a wire cutter or wire-cutting pliers, then strip the insulation to expose the strand wiring about 10mm(3/8in).
- (2) Using a screwdriver, remove the terminal screw(s) on the terminal plate.
- (3) Using a round terminal fastener or pliers, securely clamp each stripped wire end with a round terminal.
- (4) Position the round terminal wire, and replace and tighten the terminal screw using a screwdriver.



⚠ CAUTION

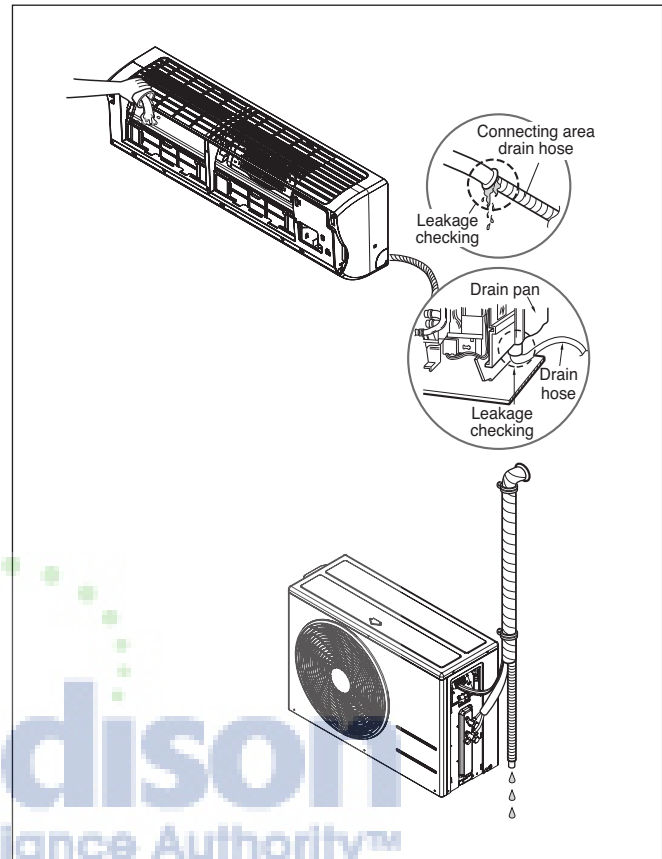
According to the confirmation of the above conditions, prepare the wiring as follows.

1. Never fail to have an individual power circuit specifically for the air conditioner. As for the method of wiring, be guided by the circuit diagram posted on the inside of control cover.
2. The screw which fasten the wiring in the casing of electrical fittings are liable to come loose from vibrations to which the unit is subjected during the course of transportation. Check them and make sure that they are all tightly fastened. (If they are loose, it could cause burn-out of the wires.)
3. Specification of power source.
4. Confirm that electrical capacity is sufficient.
5. See that the starting voltage is maintained at more than 90 percent of the rated voltage marked on the name plate.
6. Confirm that the cable thickness is as specified in the power source specification. (Particularly note the relation between cable length and thickness.)
7. Always install an earth leakage circuit breaker in a wet or moist area.
8. The following would be caused by voltage drop.
 - Vibration of a magnetic switch, which will damage the contact point, fuse breaking, disturbance of the normal function of the overload.
9. The means for disconnection from a power supply shall be incorporated in the fixed wiring and have an air gap contact separation of at least 3mm in each active(phase) conductors.

Checking the Drainage

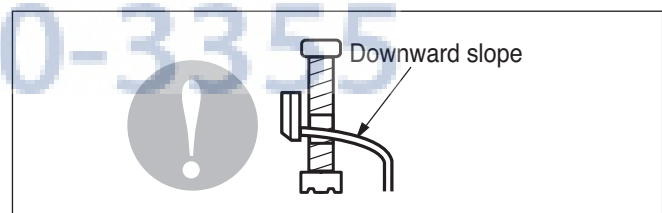
To check the drainage.

1. Pour a glass of water on the evaporator.
2. Ensure the water flows through the drain hose of the indoor unit without any leakage and goes out the drain exit.

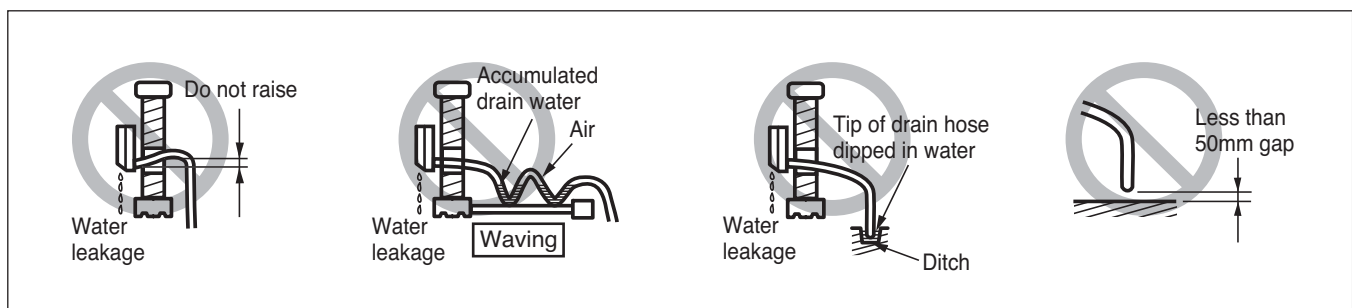


Drain piping

1. The drain hose should point downward for easy drain flow.



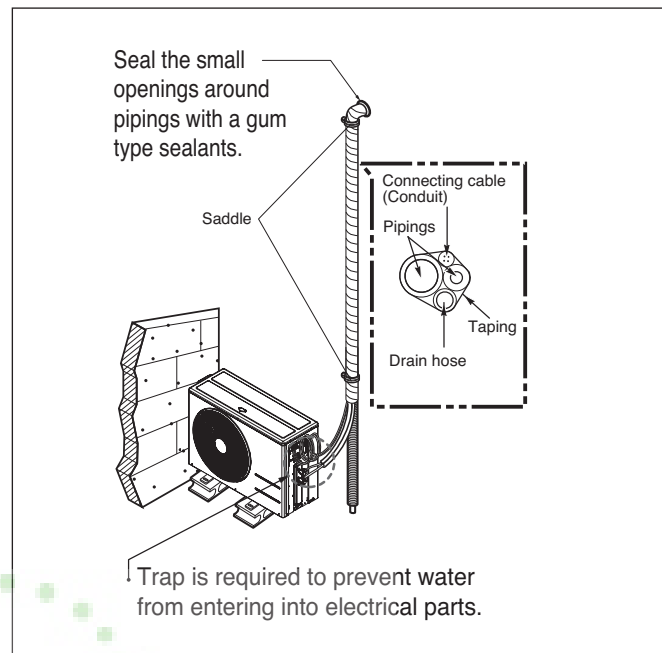
2. Do not make drain piping like the following.



Forming the Piping

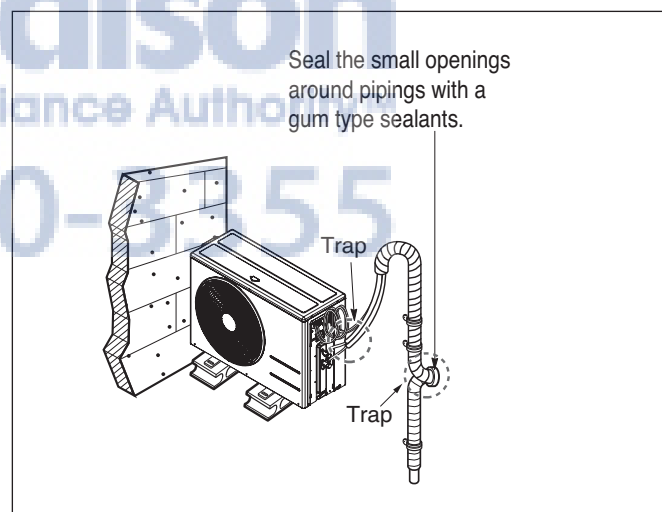
In cases where the outdoor unit is installed below the indoor unit perform the following.

1. Tape the piping, drain hose and connecting cable from down to up.
2. Secure the tapped piping along the exterior wall using saddle or equivalent.



In cases where the Outdoor unit is installed above the Indoor unit perform the following.

1. Tape the piping and connecting cable from down to up.
2. Secure the taped piping along the exterior wall. Form a trap to prevent water entering the room.
3. Fix the piping onto the wall using saddle or equivalent.



Air Purging

The air and moisture remaining in the refrigerant system have undesirable effects as indicated below.

1. Pressure in the system rises.
2. Operating current rises.
3. Cooling(or heating) efficiency drops.
4. Moisture in the refrigerant circuit may freeze and block capillary tubing.
5. Water may lead to corrosion of parts in the refrigeration system.

Therefore, after evacuating the system, take a leak test for the piping and tubing between the indoor and outdoor unit.

Air purging with vacuum pump

1. Preparation

- Check that each tube(both liquid and gas side tubes) between the indoor and outdoor units have been properly connected and all wiring for the test run has been completed. Remove the service valve caps from both the gas and the liquid side on the outdoor unit. Note that both the liquid and the gas side service valves on the outdoor unit are kept closed at this stage.

2. Leak test

- Connect the manifold valve(with pressure gauges) and dry nitrogen gas cylinder to this service port with charge hoses.

⚠ CAUTION

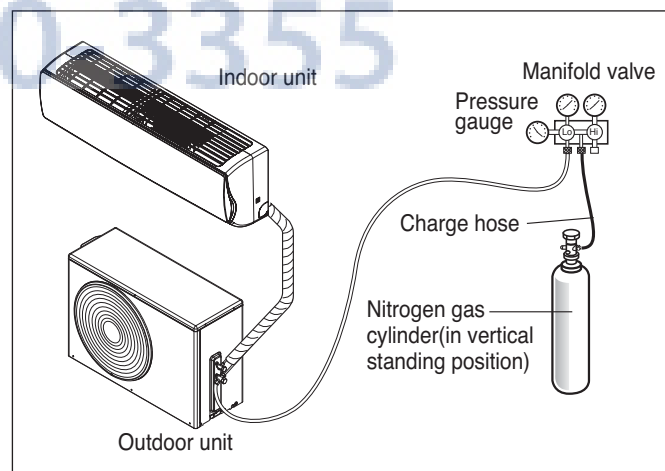
Be sure to use a manifold valve for air purging. If it is not available, use a stop valve for this purpose. The knob of the 3-way valve must always be kept close.

- Pressurize the system to maximum 250 P.S.I.G. (R-22 model) or 400 P.S.I.G. (R-410A model) with dry nitrogen gas and close the cylinder valve when the gauge reading reaches 250 P.S.I.G. (R-22 model) or 400 P.S.I.G. (R-410A model). Next step is leak test with liquid soap.

⚠ CAUTION

To avoid nitrogen entering the refrigerant system in a liquid state, the top of the cylinder must be higher than its bottom when you pressurize the system. Usually, the cylinder is used in a vertical standing position.

1. Do a leak test of all joints of the tubing(both indoor and outdoor) and both gas and liquid side service valves. Bubbles indicate a leak. Be sure to wipe off the test solution with a clean cloth.
2. After the system is found to be free of leaks, relieve the nitrogen pressure by loosening the charge hose connector at the nitrogen cylinder. When the system pressure is reduced to normal, disconnect the hose from the cylinder.



Soap water method

1. Remove the caps from the 2-way and 3-way valves.
2. Remove the service-port cap from the 3-way valve.
3. Apply a soap water or a liquid neutral detergent on the indoor unit connection or outdoor unit connections by a soft brush to check for leakage of the connecting points of the piping.
4. If bubbles come out, the pipes have leakage.

Evacuation

1. Connect the charge hose end described in the preceding steps to the vacuum pump to evacuate the tubing and indoor unit.

Confirm the "Lo" knob of the pressure Gauge is open.
Then, run the vacuum pump.

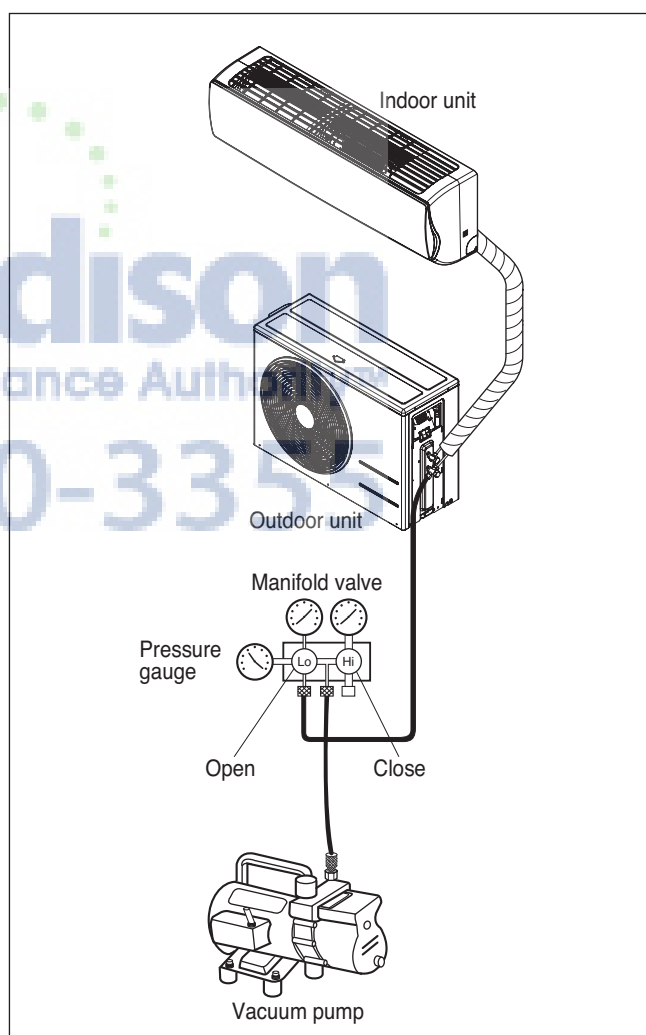
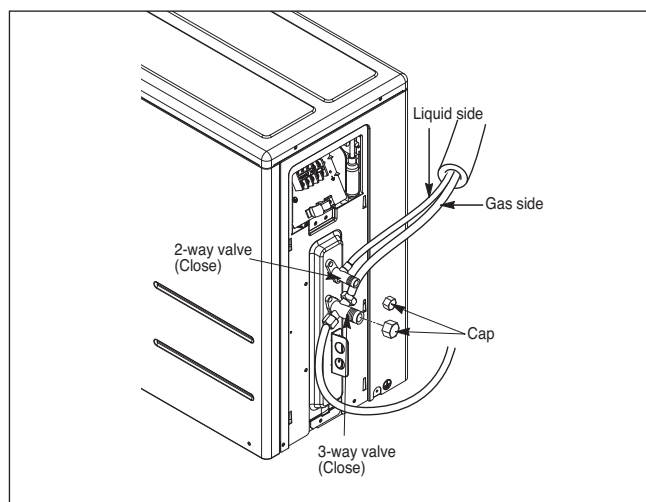
The operation time for evacuation varies with tubing length and capacity of the pump. The following table shows the time required for evacuation.

Required time for evacuation when 30 gal/h vacuum pump is used	
If tubing length is less than 10m (33 ft)	If tubing length is longer than 10m (33 ft)
10 min. or more	15 min. or more

2. When the desired vacuum is reached, close the knob of the 3-way valve and stop the vacuum pump.

Finishing the Job

1. With a service valve wrench, turn the valve of liquid side counter-clockwise to fully open the valve
2. Turn the valve of gas side counter clockwise to fully open the valve
3. Loosen the charge hose connected to the gas side service port slightly to release the pressure, then remove the hose.
4. Replace the flare nut and its bonnet on the gas side service port and fasten the flare nut securely with an adjustable wrench. This process is very important to prevent leakage from the system
5. Replace the valve caps at both gas and liquid side service valves and fasten them tight.
This completes air purging with a vacuum pump.
6. Replace the pipe cover to the outdoor unit by one screw.
Now the air conditioner is ready for test run.



Test Running

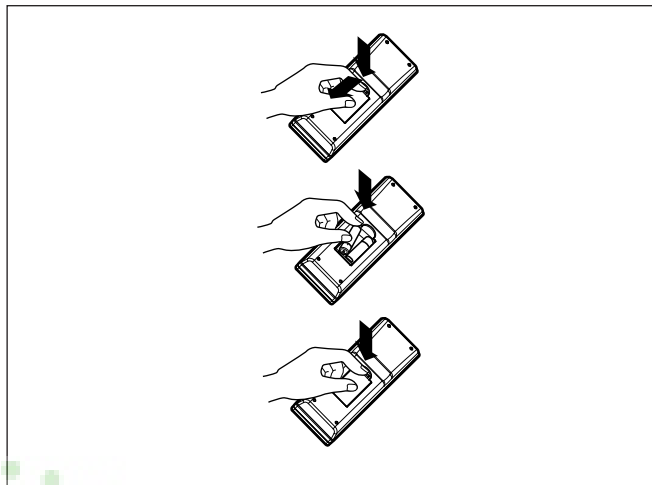
1. Check that all tubing and wiring are properly connected.
2. Check that the gas and liquid side service valves are fully open.

Prepare remote controller

1. Remove the battery cover by pulling it according to the arrow direction.
2. Insert new batteries making sure that the (+) and (-) of battery are installed correctly.
3. Reattach the cover by pushing it back into position.

NOTICE

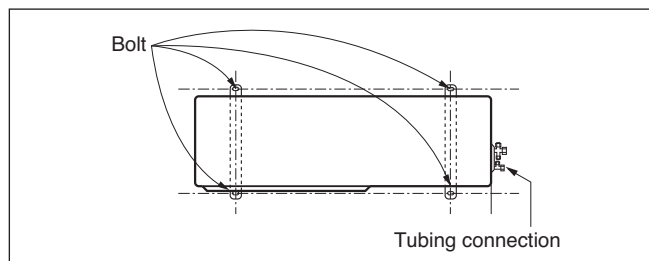
- Use 2 AAA(1.5volt) batteries. Do not use rechargeable batteries.
- Remove the batteries from the remote controller if the system is not used for a long time.



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Settlement of outdoor unit

1. Fix the outdoor unit with a bolt and nut($\phi 10\text{mm}$) tightly and horizontally on a concrete or rigid mount.
2. When installing on the wall, roof or rooftop, anchor the mounting base securely with a nail or wire assuming the influence of wind and earthquake.
3. If the vibration of the unit is transmitted to the pipe, secure the unit with an anti-vibration rubber.



Evaluation of the performance

Operate the unit for 15~20 minutes, then check the system refrigerant charge:

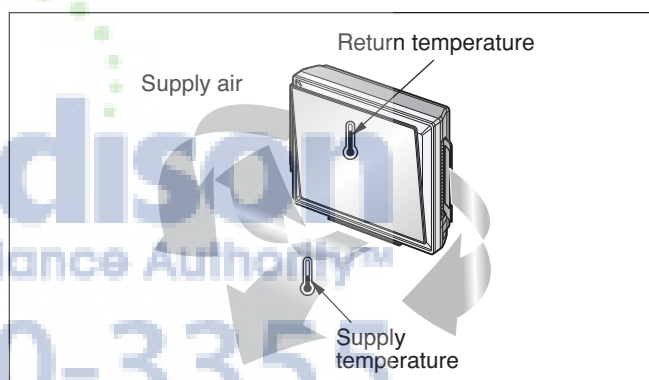
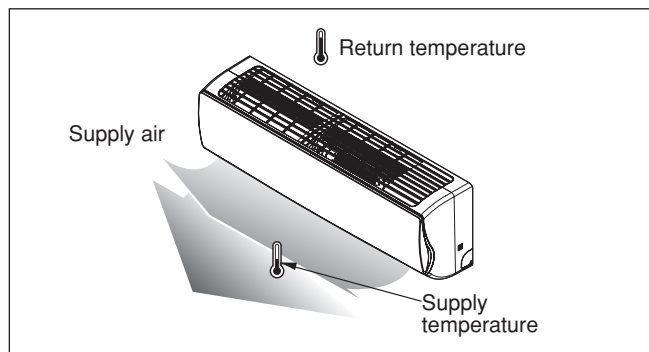
1. Measure the pressure of the gas side service valve.
2. Measure the air temperature from inlet and outlet of air conditioner.
3. Ensure the difference between the inlet and outlet temperature is more than $8^{\circ}\text{C}(46.4^{\circ}\text{F})$.
4. For reference; the gas side pressure at optimum condition is shown on table (cooling)

The air conditioner is now ready to use.

Refrigerant	Outside ambient TEMP.	The pressure of the gas side
R-410A	$35^{\circ}\text{C}(95^{\circ}\text{F})$	$8.5\sim 9.5\text{kg}/\text{cm}^2\text{G}(120\sim 135\text{ P.S.I.G.})$

NOTICE

If the actual pressure is higher than shown, the system is most likely over-charged, and charge should be removed.
If the actual pressure are lower than shown, the system is most likely undercharged, and charge should be added.



Pump Down

This is performed when the unit is relocated or the refrigerant circuit is serviced.

Pump Down means collecting all refrigerant into the outdoor unit without the loss of refrigerant.

CAUTION

Be sure to perform Pump Down procedure in the cooling mode.

Pump Down Procedure

1. Connect a low-pressure gauge manifold hose to the charge port on the gas side service valve.
2. Open the gas side service valve halfway and purge the air in the manifold hose using the refrigerant.
3. Close the liquid side service valve(all the way).
4. Turn on the unit's operating switch and start the cooling operation.
5. When the low-pressure gauge reading becomes 1 to $0.5\text{kg}/\text{cm}^2\text{ G}(14.2\text{ to }7.1\text{ P.S.I.G.})$, fully close the gas side valve and then quickly turn off the unit. Now Pump Down procedure is completed, and all refrigerant is collected into the outdoor unit.

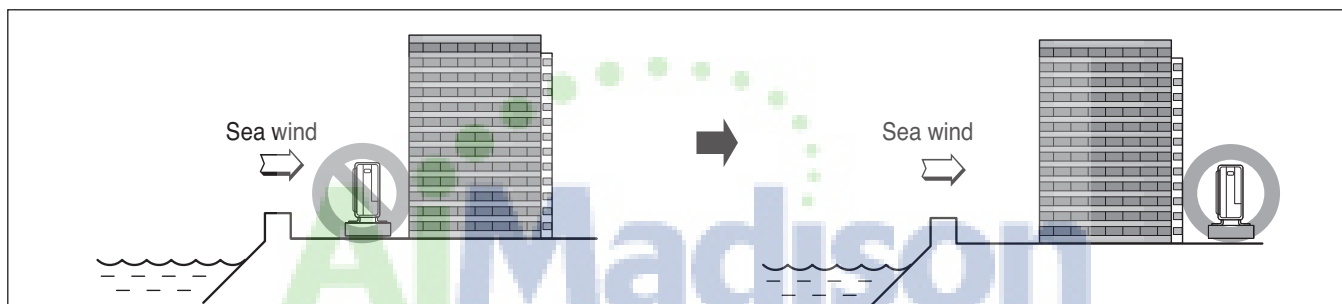
Installation Guide for Areas Exposed to Sea Wind

⚠ CAUTION

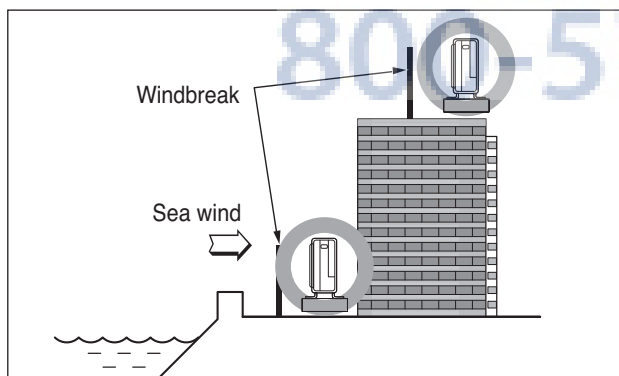
1. Air conditioners should not be installed in areas where corrosive gases, such as acid or alkaline gas, are produced.
2. Do not install the product where it could be exposed to sea wind (salty wind) directly. It can result corrosion on the product. Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient performance.
3. If outdoor unit is installed close to the seaside, it should avoid direct exposure to the sea wind. Otherwise it needs additional anticorrosion treatment on the heat exchanger.

Selecting the location(Outdoor Unit)

- 1) If the outdoor unit is to be installed close to the seaside, direct exposure to the sea wind should be avoided. Install the outdoor unit on the opposite side of the sea wind direction.



- 2) In case, to install the outdoor unit on the seaside, set up a windbreak not to be exposed to the sea wind.



- It should be strong enough like concrete to prevent the sea wind from the sea.
- The height and width should be more than 150% of the outdoor unit.
- Keep more than 70 cm of space between outdoor unit and the windbreak for easy air flow.

- 3) Select a well-drained place.

1. If you can't meet above guide line in the seaside installation, please contact LG Electronics for the additional anticorrosion.
2. Periodic (more than once/year) cleaning of the dust or salt particles stuck on the heat exchanger by using water



P/No.: 3828A20892Z



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The air conditioners manufactured by LG have received ISO9001 certificate for
quality assurance and ISO14001 certificate for environmental management system.