

Inverter Single Wall Mounted

LG

TOTAL HVAC

SOLUTION

PROVIDER

ENGINEERING PRODUCT DATA BOOK

Test Condition of International Standard

CLASSIFICATION			KSC 9306	ISO 5151		AHRI 210/240	AHAM (Window AC)	AS/NZS 3823.1	SASO 2681	
				T1	T3				T1	T3
Cooling Capacity	Indoor	DB°C(°F)	27.0	27.0	29.0	26.7 (80)	26.7 (80)	27.0	27.0	29.0
		WB°C(°F)	19.0	19.0	19.0	19.4 (67)	19.4 (67)	19.0	19.0	19.0
	Outdoor	DB°C(°F)	35.0	35.0	46.0	35.0 (95)	35.0 (95)	35.0	35.0	46.0
		WB°C(°F)	24.0	24.0	24.0	23.9 (75)	23.9 (75)	24.0	24.0	24.0
Heating Capacity	Indoor	DB°C(°F)	20.0	20.0	20.0	21.1 (70)	21.1 (70)	20.0	20.0	20.0
		WB°C(°F)	15.0	15.0	15.0	15.6 (60)	15.6 (60)	15.0	15.0	15.0
	Outdoor	DB°C(°F)	7.0	7.0	7.0	8.3 (47)	8.3 (47)	7.0	7.0	7.0
		WB°C(°F)	6.0	6.0	6.0	6.1 (43)	6.1 (43)	6.0	6.0	6.0
Maximum Cooling Operating	Indoor	DB°C(°F)	32.0	32.0	32.0	26.7 (80)	32.2 (90)	32.0	32.0	32.0
		WB°C(°F)	23.0	23.0	13.0	19.4 (67)	22.8 (73)	23.0	23.0	13.0
	Outdoor	DB°C(°F)	43.0	43.0	52.0	46.11 (115)	43.3 (110)	43.0	43.0	52.0
		WB°C(°F)	26.0	26.0	31.0	23.9 (75)	25.6 (78)	26.0	26.0	31.0
Maximum Heating Operating	Indoor	DB°C(°F)	27.0	27.0	27.0	26.7 (80)	26.7 (80)	27.0	27.0	27.0
		WB°C(°F)	15.0	-	-	-	22.8 (73)	-	-	-
	Outdoor	DB°C(°F)	21.0	24.0	24.0	23.9 (75)	23.9 (75)	24.0	24.0	24.0
		WB°C(°F)	15.0	18.0	18.0	18.3 (65)	18.3 (65)	18.0	18.0	18.0
Enclosure Sweat / Condensate Disposal	Indoor	DB°C(°F)	27.0	27.0	27.0	26.7 (80)	26.7 (80)	27.0	27.0	27.0
		WB°C(°F)	24.0	24.0	24.0	23.9 (75)	23.9 (75)	24.0	24.0	24.0
	Outdoor	DB°C(°F)	27.0	27.0	27.0	26.7 (80)	26.7 (80)	27.0	27.0	27.0
		WB°C(°F)	24.0	24.0	24.0	23.9 (75)	23.9 (75)	24.0	24.0	24.0
Freeze-up / Low Temperature	Indoor	DB°C(°F)	21.0	21.0	21.0	19.4 (67)	21.1 (70)	21.0	21.0	21.0
		WB°C(°F)	15.0	15.0	15.0	13.9 (57)	15.6 (60)	15.0	15.0	15.0
	Outdoor	DB°C(°F)	21.0	21.0	21.0	19.4 (67)	21.1 (70)	21.0	21.0	21.0
		WB°C(°F)	15.0	-	-	13.9 (57)	15.6 (60)	-	-	-

KS : Korea Standard

ISO : International Standard Organization

AHRI : Air-Conditioning, Heating, and Refrigeration Institute

AHAM : Association of Home Appliance Manufacturers

AS/NZS : Australia and New Zealand Standard

SASO : Saudi Arabian Standards Organization




Inverter Single

Wall Mounted - 50/60 Hz (R410A)

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1. Models Line Up

1.1 Indoor Unit

Category	Picture	Chassis	Nominal Capacity (kBtu/h)	Model Name
Standard		SJ	9	VS092C7.NJ0 (S4NQ09JA3WE.EC2GCOL)
Standard		SK	24	VS242C7.NK0 (S4NQ24K23WE.EC2GCOL)
Standard Plus		SK	18	VS182C7.NK0 (S4NQ18KL3WE.EC2GCOL)

1. Models Line Up

1.2 Outdoor Unit

Power Supply	Picture	Chassis	Nominal Capacity (kBtu/h)	Model Name
1 Ø , 220 V , 50/60 Hz		UA3	9	VS092C7.UJ0 (S4UQ09JA3WE.EC2GCOL)
1 Ø , 220 V , 50/60 Hz		U24A	24	VS242C7.UK0 (S4UQ24K23WE.EC2GCOL)
1 Ø , 220 V , 50/60 Hz		UL2	18	VS182C7.UK0 (S4UQ18KL3WE.EC2GCOL)

2. Nomenclature

Model Name	S	4	-	W	1	2	J	L	1	Y	1
No.	1	2	3	4	5	6	7	8	9	10	11

No.	Signification
1	Product Type S : Split
2	Refrigerant 2 : R22 3 : R32 4 : R410A
3	Supply Type - : Set N : Indoor Unit U : Outdoor Unit A : C/SKD Indoor Unit B : C/SKD Outdoor Unit M : Mock-Up
4	Model Type C : Cooling Only H : Heat Pump Q : DC Inverter Cooling Only W : DC Inverter Heat Pump M : Single and Multi Compatible
5, 6	Capacity Ex) 12 : 12,000 Btu/h
7	Indoor Unit Platform 2 : S2 H : SH 3 : S3 J : SJ 4 : S4 K : SK 5 : S5 M : SM A : SA V : SV E : SE W : SW
8	Outdoor Unit Platform A : UA3 E : UE L : UL2 P : UE1+ 2 : U24A D : UD 4 : U4

No.	Signification						
9	Look & Color						
	Platform	Look & Color	Look Name		Description		
	SA SJ SK	R	Artcool		Mirror Black		
		1	R Look		White Panel (Transparent)		
		2	Semi-R Look		White Panel (Silver Deco)		
		3	E Look		White Panel		
		4	Semi-R Look		White Panel (Red Deco)		
	SM	M	Moving Panel		White Panel (Gold Deco)		
		1	R Look		White Panel		
		2	Semi-R Look		White Panel (Transparent)		
		3	E Look		White Panel (Silver Deco)		
		4	Semi-R Look		White Panel		
	SM SM+ S2	W	Blowkiss R		White Panel (White Deco)		
		B	Blowkiss R		White Panel (Black Deco)		
		V	Blowkiss R		White Panel (Silver Deco)		
SW SH	5	E Look		White Panel			
	6	Semi-R Look		White Panel (Silver Deco)			
SV	2	Semi-R Look		White Panel (Silver Deco)			
	3	E Look		White Panel			
S3	1	-		White Panel			
	W	-		White Panel (Lighting)			
10	Function						
	Module	Airflow	Wi-Fi	Additional Filter	Gen Mode	Function Digit	
	None	2way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A	
						3	
						W	
						Q	
						B	
		4way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	F
							V
							4
							R
							Z
	Ionizer	2way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	S	
						P	
						J	
						T	
						K	
		4way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	E
							7
							6
							2
							5
	Mosquito	2way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	
						N	
						Y	
C							
7							
Air Purifying	4way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8		
					N		
					Y		
					C		
					7		
11	Standard Model No.						

3. Specifications

Buyer Model	Set (Indoor / Outdoor)		Unit	VS092C7.SJ0 (VS092C7.NJ0 / VS092C7.UJ0) S4-Q09JA3WE.EC2GCOL (S4NQ09JA3WE.EC2GCOL / S4UQ09JA3WE.EC2GCOL)		
Factory Model						
Capacity	Cooling	Min ~ Rated ~ Max	kW	0.879	2.638	3.311
			Btu/h	3,000	9,000	11,297
	Cooling (T3)	Min ~ Rated ~ Max	kW	-	-	-
			Btu/h	-	-	-
Heating	Min ~ Rated ~ Max	kW	-	-	-	
		Btu/h	-	-	-	
Heating -7°C	Max	kW	-	-	-	
Power Input	Cooling	Min ~ Rated ~ Max	W	140	790	1,270
	Cooling (T3)	Min ~ Rated ~ Max	W	-	-	-
	Heating	Min ~ Rated ~ Max	W	-	-	-
Running Current	Cooling	Min ~ Rated ~ Max	A	0.80	4.20	7.20
	Cooling (T3)	Min ~ Rated ~ Max	A	-	-	-
	Heating	Min ~ Rated ~ Max	A	-	-	-
EER			WW	-	3.34	-
			(Btu/h)W	-	11.39	-
			(kJ/h)W	-	-	-
EER (T3)			WW	-	-	-
			(Btu/h)W	-	-	-
SEER			-	-	-	
COP			WW	-	-	-
			(Btu/h)W	-	-	-
SCOP			(kJ/h)W	-	-	-
			-	-	-	-
P design C / P design H			kW	-	- / -	-
Energy Label Grade	Cooling / Heating		-	-	-	C
Monthly Energy Consumption	Cooling / Heating		kWh/month	-	-	105
Weighted EER			(Btu/h)W	-	-	-
			WW	-	-	-
Power Supply			∅, V, Hz	-	1, 220, 50/60	-
Available Voltage Range			V	-	187 ~ 276	-
Power Factor	Cooling / Heating		%	-	-	76.1
Moisture Removal			l/h	-	-	0.60
Indoor	Air Flow Rate	Cooling, SH / H / M / L	m³/min	12.5 / 9.3 / 7.2 / 5.3		
		Heating, SH / H / M / L	m³/min	-		
	Sound Pressure Level	Cooling, SH / H / M / L / SL	dB(A)	45 / 42 / 36 / 28 / 21		
		Heating, SH / H / M / L	dB(A)	-		
	Sound Power Level		dB(A)	-		
			dB(A)	-		
	Dimensions (W × H × D)	Net	mm	837 x 308 x 189		
Shipping		mm	909 x 383 x 256			
Weight	Net	kg	8.42			
	Shipping	kg	9.7			
Exterior Color Code			-	Munsell 7.5BG 10/2 (RAL 9016)		
Outdoor	Air Flow Rate	Max	m³/min	27.0		
			rpm	-		
	Fan Motor Speed	Cooling, Min ~ Max	rpm	-		
		Heating, Min ~ Max	rpm	-		
	Sound Pressure Level	Cooling, Rated	dB(A)	53		
		Heating, Rated	dB(A)	-		
	Sound Power Level		dB(A)	-		
			dB(A)	-		
	Dimensions (W × H × D)	Net	mm	717 x 495 x 230		
		Shipping	mm	837 x 536 x 332		
Weight	Net	kg	22.8			
	Shipping	kg	26			
Max. Fuse Size			A	15		
Exterior Color Code			-	Munsell 9.54Y 8.34/1.31 (RAL 9001)		
Operation Range	Cooling	°C DB	18 ~ 48			
	Heating	°C DB	- ~ -			
	Heating	°C WB	- ~ -			
Circuit Breaker			A	15		
Power Supply to Unit			-	Outdoor		
Power and Communication Cable			No. × mm²	4 × 0.75		
Piping	Size	Liquid	mm	∅ 6.35		
		Gas	mm	∅ 9.52		
Connections Method	Indoor / Outdoor		-	Flared / Flared		
Drain Hose Size	O.D, I.D		mm	21.5, 16		
Between Indoor & Outdoor	Piping Length	Min / Standard / Max	m	3 / 7.5 / 15		
		No Charge	m	7.5		
	Max. Elevation Difference			m	7	
Piping Connection Heat Insulation			-	Both liquid and gas pipes		
Note						
• - : No Relation						
• All power supply and communication cables and circuit breaker must comply with applicable local and national codes.						
• Exterior color code is approximate value.						
• It is difficult to measure air flow rate of sleep because of small values.						
• Maximum heating capacity is for heating operation without any frost.						
• Fan motor speed could vary ±20 rpm according to the operating conditions.						
• It may cause reliability, performance, noise, and vibration problem, unless meeting the range of connecting pipe length. Keep the minimum piping length by making loops, although indoor unit and outdoor unit are close.						
• This product contains fluorinated greenhouse gases.						
• Some specifications may be changed without notifications due to our policy of innovation.						
• Test conditions are based on ISO 5151.						

3. Specifications

Buyer Model	Set (Indoor / Outdoor)		Unit	VS092C7.SJ0 (VS092C7.NJ0 / VS092C7.UJ0)	
Factory Model				S4-Q09JA3WE.EC2GCOL (S4NQ09JA3WE.EC2GCOL / S4UQ09JA3WE.EC2GCOL)	
Refrigerant	Type		-	R410A	
	Pre Charge		kg	0.600	
	Additional Charge		g/m	20	
	Control		-	Capillary	
	Global Warming Potential		-	2087.5	
	I-CO ₂ eq		-	1.253	
Defrost Method			-	-	
Tool Code (Chassis)		Indoor / Outdoor	-	SJ / UA3	
Compressor	Type		-	Twin Rotary	
	Model		-	GST102MAA	
	Motor Type		-	BLDC	
	Oil Type / Maker		-	POE (RB68A) / Sun Oil or Jx Nippon, PVE (FVC68D) / IDEMITSU	
	Oil Charge		cc	280	
	O.L.P. Name		-	-	
Manufacturer / Country of Origin			-	LG Electronics / China	
Fan (Indoor)	Type		-	Cross Flow Fan	
	Motor Output		W	30	
Fan (Outdoor)	Type		-	Propeller Fan	
	Motor Type		-	AC	
	Motor Output		W	28	
	Motor Insulation		-	Class E	
	Motor Enclosure / Ingress Protection		-	TEAO / IPX4	
Heat Exchanger	Evaporator	Material, Tube / Fin		Cu / Al	
		(ϕ x Row x Column x FPI x L) x Qty.	#1	($\phi 7 \times 2 \times 15 \times 21 \times 616.8$) x 1	
		(ϕ x Row x Column x FPI x L) x Qty.	#2	-	
		(ϕ x Row x Column x FPI x L) x Qty.	#3	-	
		(ϕ x Row x Column x FPI x L) x Qty.	#4	-	
	Condenser	Corrosion Protection		-	PCM
		Fin Type		-	Slit
		Material, Tube / Fin		-	Cu / Al
		(ϕ x Row x Column x FPI x L) x Qty.	#1		($\phi 7 \times 1 \times 22 \times 21 \times 667$) x 1
		(ϕ x Row x Column x FPI x L) x Qty.	#2		-
Corrosion Protection		-	Gold		
Fin Type		-	Louver		

Note

- - : No Relation
- All power supply and communication cables and circuit breaker must comply with applicable local and national codes.
- Exterior color code is approximate value.
- It is difficult to measure air flow rate of sleep because of small values.
- Maximum heating capacity is for heating operation without any frost.
- Fan motor speed could vary ± 20 rpm according to the operating conditions.
- It may cause reliability, performance, noise, and vibration problem, unless meeting the range of connecting pipe length. Keep the minimum piping length by making loops, although indoor unit and outdoor unit are close.
- This product contains fluorinated greenhouse gases.
- Some specifications may be changed without notifications due to our policy of innovation.
- Test conditions are based on ISO 5151.

3. Specifications

Buyer Model	Set (Indoor / Outdoor)		Unit	VS242C7.SK0 (VS242C7.NK0 / VS242C7.UK0) S4-Q24K23WE.EC2GCOL (S4NQ24K23WE.EC2GCOL / S4UQ24K23WE.EC2GCOL)		
Factory Model						
Capacity	Cooling	Min ~ Rated ~ Max	kW	1.026	6.448	7.180
			Btu/h	3,500	22,000	24,500
	Cooling (T3)	Min ~ Rated ~ Max	kW	-	-	-
			Btu/h	-	-	-
Heating	Min ~ Rated ~ Max	kW	-	-	-	
		Btu/h	-	-	-	
Heating -7°C	Max	kW	-	-	-	
Power Input	Cooling	Min ~ Rated ~ Max	W	240	1,980	2,400
	Cooling (T3)	Min ~ Rated ~ Max	W	-	-	-
	Heating	Min ~ Rated ~ Max	W	-	-	-
Running Current	Cooling	Min ~ Rated ~ Max	A	1.40	8.20	10.50
	Cooling (T3)	Min ~ Rated ~ Max	A	-	-	-
	Heating	Min ~ Rated ~ Max	A	-	-	-
EER			WW	-	3.26	-
			(Btu/h)W	-	11.11	-
			(kJ/h)W	-	-	-
EER (T3)			WW	-	-	-
			(Btu/h)W	-	-	-
SEER			WW	-	-	-
COP			WW	-	-	-
			(Btu/h)W	-	-	-
SCOP			(kJ/h)W	-	-	-
			WW	-	-	-
P design C / P design H			kW	-	- / -	-
Energy Label Grade	Cooling / Heating					C
Monthly Energy Consumption	Cooling / Heating		kWh/month			262
Weighted EER			(Btu/h)W	-	-	-
			WW	-	-	-
Power Supply			∅, V, Hz			1, 220, 50/60
Available Voltage Range			V			187 ~ 276
Power Factor	Cooling / Heating		%			98.1
Moisture Removal			l/h			1.90
Indoor	Air Flow Rate	Cooling, SH / H / M / L	m ³ /min	20.0 / 15.0 / 13.5 / 10.5		
		Heating, SH / H / M / L	m ³ /min	-		
	Sound Pressure Level	Cooling, SH / H / M / L / SL	dB(A)	52 / 47 / 42 / 38 / 31		
		Heating, SH / H / M / L	dB(A)	-		
	Sound Power Level		dB(A)	-		
	Dimensions (W × H × D)	Net	mm	998 x 345 x 210		
		Shipping	mm	1063 x 420 x 271		
Weight	Net	kg	11.7			
	Shipping	kg	13.3			
Exterior Color Code				Munsell 7.5BG 10/2 (RAL 9016)		
Outdoor	Air Flow Rate	Max	m ³ /min	49.0		
	Fan Motor Speed	Cooling, Min ~ Max	rpm	550 ~ 850		
		Heating, Min ~ Max	rpm	-		
	Sound Pressure Level	Cooling, Rated	dB(A)	55		
		Heating, Rated	dB(A)	-		
	Sound Power Level		dB(A)	-		
	Dimensions (W × H × D)	Net	mm	870 x 650 x 330		
		Shipping	mm	1041 x 703 x 456		
	Weight	Net	kg	41.5		
		Shipping	kg	47		
Max. Fuse Size			A	20		
Exterior Color Code				Munsell 9.54Y 8.34/1.31 (RAL 9001)		
Operation Range	Cooling		°C DB	18 ~ 48		
	Heating		°C DB	- ~ -		
	Heating		°C WB	- ~ -		
Circuit Breaker			A	20		
Power Supply to Unit				Outdoor		
Power and Communication Cable			No. × mm ²	4 × 0.75		
Piping	Size	Liquid	mm	∅ 6.35		
		Gas	mm	∅ 15.88		
Connections Method	Indoor / Outdoor			Flared / Flared		
Drain Hose Size	O.D, I.D		mm	21.5, 16		
	Piping Length	Min / Standard / Max	m	3 / 7.5 / 20		
Between Indoor & Outdoor	No Charge		m	7.5		
	Max. Elevation Difference		m	10		
Piping Connection Heat Insulation				Both liquid and gas pipes		
<p>Note</p> <ul style="list-style-type: none"> - : No Relation All power supply and communication cables and circuit breaker must comply with applicable local and national codes. Exterior color code is approximate value. It is difficult to measure air flow rate of sleep because of small values. Maximum heating capacity is for heating operation without any frost. Fan motor speed could vary ±20 rpm according to the operating conditions. It may cause reliability, performance, noise, and vibration problem, unless meeting the range of connecting pipe length. Keep the minimum piping length by making loops, although indoor unit and outdoor unit are close. This product contains fluorinated greenhouse gases. Some specifications may be changed without notifications due to our policy of innovation. Test conditions are based on ISO 5151. 						

3. Specifications

Buyer Model	Set (Indoor / Outdoor)		Unit	VS242C7.SK0 (VS242C7.NK0 / VS242C7.UK0)	
Factory Model				S4-Q24K23WE.EC2GCOL (S4NQ24K23WE.EC2GCOL / S4UQ24K23WE.EC2GCOL)	
Refrigerant	Type		-	R410A	
	Pre Charge		kg	1.400	
	Additional Charge		g/m	20	
	Control		-	Capillary	
	Global Warming Potential		-	2087.5	
	I-CO ₂ eq		-	2.923	
Defrost Method			-	-	
Tool Code (Chassis)		Indoor / Outdoor	-	SK / U24A	
Compressor	Type		-	Twin Rotary	
	Model		-	GAT156MAD	
	Motor Type		-	BLDC	
	Oil Type / Maker		-	POE (RB68A) / Sun Oil or Jx Nippon, PVE (FVC68D) / IDEMITSU	
	Oil Charge		cc	400	
	O.L.P. Name		-	-	
Manufacturer / Country of Origin		-	-	LG Electronics / China	
Fan (Indoor)	Type		-	Cross Flow Fan	
	Motor Output		W	58	
Fan (Outdoor)	Type		-	Propeller Fan	
	Motor Type		-	BLDC	
	Motor Output		W	85	
	Motor Insulation		-	Class E	
	Motor Enclosure / Ingress Protection		-	TEAO / IPX4	
Heat Exchanger	Evaporator	Material, Tube / Fin	-	Cu / Al	
		(ϕ x Row x Column x FPI x L) x Qty.	#1	($\phi 7$ x 2 x 16 x 20 x 744) x 1	
		(ϕ x Row x Column x FPI x L) x Qty.	#2	-	
		(ϕ x Row x Column x FPI x L) x Qty.	#3	-	
		(ϕ x Row x Column x FPI x L) x Qty.	#4	-	
	Condenser	Corrosion Protection	-	-	PCM
		Fin Type	-	-	Slit
		Material, Tube / Fin	-	-	Cu / Al
		(ϕ x Row x Column x FPI x L) x Qty.	#1	($\phi 7$ x 2 x 28 x 18 x 940) x 1	
		(ϕ x Row x Column x FPI x L) x Qty.	#2	-	
Corrosion Protection	-	-	Gold		
Fin Type	-	-	Louver		

Note

- - : No Relation
- All power supply and communication cables and circuit breaker must comply with applicable local and national codes.
- Exterior color code is approximate value.
- It is difficult to measure air flow rate of sleep because of small values.
- Maximum heating capacity is for heating operation without any frost.
- Fan motor speed could vary ± 20 rpm according to the operating conditions.
- It may cause reliability, performance, noise, and vibration problem, unless meeting the range of connecting pipe length. Keep the minimum piping length by making loops, although indoor unit and outdoor unit are close.
- This product contains fluorinated greenhouse gases.
- Some specifications may be changed without notifications due to our policy of innovation.
- Test conditions are based on ISO 5151.

3. Specifications

Buyer Model	Set (Indoor / Outdoor)		Unit	VS182C7.SK0 (VS182C7.NK0 / VS182C7.UK0) S4-Q18KL3WE.EC2GCOL (S4NQ18KL3WE.EC2GCOL / S4UQ18KL3WE.EC2GCOL)		
Factory Model						
Capacity	Cooling	Min ~ Rated ~ Max	kW	1.080	5.275	5.840
			Btu/h	3,685	18,000	19,925
	Cooling (T3)	Min ~ Rated ~ Max	kW	-	-	-
			Btu/h	-	-	-
Heating	Min ~ Rated ~ Max	kW	-	-	-	
		Btu/h	-	-	-	
Heating -7°C	Max	kW	-	-	-	
Power Input	Cooling	Min ~ Rated ~ Max	W	300	1,620	1,710
	Cooling (T3)	Min ~ Rated ~ Max	W	-	-	-
	Heating	Min ~ Rated ~ Max	W	-	-	-
Running Current	Cooling	Min ~ Rated ~ Max	A	1.10	7.00	8.10
	Cooling (T3)	Min ~ Rated ~ Max	A	-	-	-
	Heating	Min ~ Rated ~ Max	A	-	-	-
EER			WW	3.26		
			(Btu/h)W	11.11		
			(kJ/h)W	-		
EER (T3)			WW	-		
			(Btu/h)W	-		
SEER			-	-		
COP			WW	-		
			(Btu/h)W	-		
			(kJ/h)W	-		
SCOP			-	-		
P design C / P design H			kW	-	-	-
Energy Label Grade	Cooling / Heating			-		
Annual Energy Consumption	Cooling / Heating		kWh/year	-		
Weighted EER			(Btu/h)W	-		
			WW	-		
Power Supply			∅, V, Hz	1, 220, 50/60		
Available Voltage Range			V	187 ~ 253		
Power Factor	Cooling / Heating		%	96.0		
Moisture Removal			l/h	1.30		
Indoor	Air Flow Rate	Cooling, SH / H / M / L	m³/min	18.0 / 12.7 / 10.2 / 8.4		
		Heating, SH / H / M / L	m³/min	-		
	Sound Pressure Level	Cooling, SH / H / M / L / SL	dB(A)	- / 45 / 43 / 38 / 32		
		Heating, SH / H / M / L	dB(A)	-		
	Sound Power Level		dB(A)	-		
				-		
	Dimensions (W × H × D)	Net	mm	998 x 345 x 210		
Shipping		mm	1080 x 422 x 281			
Weight	Net	kg	11.5			
	Shipping	kg	13.4			
Exterior Color Code				Munsell 7.5BG 10/2 (RAL 9016)		
Outdoor	Air Flow Rate	Max	m³/min	38.0		
		Cooling, Min ~ Max	rpm	650 ~ 900		
	Fan Motor Speed	Heating, Min ~ Max	rpm	-		
				-		
	Sound Pressure Level	Cooling, Rated	dB(A)	54		
		Heating, Rated	dB(A)	-		
	Sound Power Level		dB(A)	-		
				-		
	Dimensions (W × H × D)	Net	mm	770 x 545 x 288		
		Shipping	mm	920 x 593 x 388		
Weight	Net	kg	29.8			
	Shipping	kg	34.5			
Max. Fuse Size		A	15			
Exterior Color Code				Munsell 9.54Y 8.34/1.31 (RAL 9001)		
Operation Range	Cooling	°C DB	18 ~ 48			
	Heating	°C DB	- ~ -			
	Heating	°C WB	- ~ -			
Circuit Breaker			A	20		
Power Supply to Unit			-	Outdoor		
Power and Communication Cable			No. × mm²	4 × 0.75		
Piping	Size	Liquid	mm	ø 6.35		
		Gas	mm	ø 12.7		
Connections Method	Indoor / Outdoor			Flared / Flared		
Drain Hose Size			mm	21.5, 16		
Between Indoor & Outdoor	Piping Length	Min / Standard / Max	m	3 / 7.5 / 20		
		No Charge	m	7.5		
	Max. Elevation Difference		m	10		
Piping Connection Heat Insulation			-	Both liquid and gas pipes		
Note						
• - : No Relation						
• All power supply and communication cables and circuit breaker must comply with applicable local and national codes.						
• Exterior color code is approximate value.						
• It is difficult to measure air flow rate of sleep because of small values.						
• Maximum heating capacity is for heating operation without any frost.						
• Fan motor speed could vary ±20 rpm according to the operating conditions.						
• It may cause reliability, performance, noise, and vibration problem, unless meeting the range of connecting pipe length. Keep the minimum piping length by making loops, although indoor unit and outdoor unit are close.						
• This product contains fluorinated greenhouse gases.						
• Some specifications may be changed without notifications due to our policy of innovation.						
• Test conditions are based on ISO 5151.						

3. Specifications

Buyer Model	Set (Indoor / Outdoor)		Unit	VS182C7.SK0 (VS182C7.NK0 / VS182C7.UK0)
Factory Model				S4-Q18KL3WE.EC2GCOL (S4NQ18KL3WE.EC2GCOL / S4UQ18KL3WE.EC2GCOL)
Refrigerant	Type		-	R410A
	Pre Charge		kg	0.800
	Additional Charge		g/m	20
	Control		-	Capillary
	Global Warming Potential		-	2087.5
	I-CO ₂ eq		-	1.670
Defrost Method				-
Tool Code (Chassis)		Indoor / Outdoor	-	SK / UL2
Compressor	Type		-	Twin Rotary
	Model		-	GAT156MAD
	Motor Type		-	BLDC
	Oil Type / Maker		-	POE (RB68A) / Sun Oil or Jx Nippon
	Oil Charge		cc	400
	O.L.P. Name		-	-
	Manufacturer / Country of Origin		-	LG Electronics / China
Fan (Indoor)	Type		-	Cross Flow Fan
	Motor Output		W	58
Fan (Outdoor)	Type		-	Propeller Fan
	Motor Type		-	BLDC
	Motor Output		W	43
	Motor Insulation		-	Class E
	Motor Enclosure / Ingress Protection		-	TEAO / IPX4
Heat Exchanger	Evaporator	Material, Tube / Fin	-	Cu / Al
		(ϕ x Row x Column x FPI x L) x Qty.	#1	($\phi 7$ x 2 x 16 x 20 x 744) x 1
		(ϕ x Row x Column x FPI x L) x Qty.	#2	-
		(ϕ x Row x Column x FPI x L) x Qty.	#3	-
		(ϕ x Row x Column x FPI x L) x Qty.	#4	-
	Corrosion Protection		-	PCM
	Fin Type		-	Slit
	Condenser	Material, Tube / Fin	-	Cu / Al
		(ϕ x Row x Column x FPI x L) x Qty.	#1	($\phi 6$ x 2 x 25 x 21 x 823) x 1
		(ϕ x Row x Column x FPI x L) x Qty.	#2	-
Corrosion Protection		-	Gold	
Fin Type		-	Louver	

Note

- - : No Relation
- All power supply and communication cables and circuit breaker must comply with applicable local and national codes.
- Exterior color code is approximate value.
- It is difficult to measure air flow rate of sleep because of small values.
- Maximum heating capacity is for heating operation without any frost.
- Fan motor speed could vary ± 20 rpm according to the operating conditions.
- It may cause reliability, performance, noise, and vibration problem, unless meeting the range of connecting pipe length. Keep the minimum piping length by making loops, although indoor unit and outdoor unit are close.
- This product contains fluorinated greenhouse gases
- Some specifications may be changed without notifications due to our policy of innovation.
- Test conditions are based on ISO 5151.

4. Function List

Category	Function	Description
Air Flow	Air Supply Outlet	The number of air outlet from the indoor unit
	Airflow Direction Control (Left & Right)	Controlling a left-right direction of the indoor air flow
	Airflow Direction Control (Up & Down)	Controlling a up-down direction of the indoor air flow
	Auto Swing (Left & Right)	Auto swing air flow right and left for quick-cooling & Heating
	Auto Swing (Up & Down)	Auto swing air flow up and down for quick-cooling & Heating
	Fan Speed Steps (Fan / Cool / Heat)	Step adjustable wind strength at each mode
	Natural Wind (Auto Wind)	Wind strength changes at regular intervals automatically
	Jet Cool / Jet Heat (Power Wnd)	Wind strength is set to the maximum for 30 minutes
	Comfort Air	Set the vane to a preset position in order to make an indirect wind
Air Purifying	Prefilter (Washable)	Capture dust particles over 10µm in size
	Deodorizing Filter	Deodorizing filter of the three techniques
	Micro Dust Filter	Capture dust particles over 0.3µm in size
	Allergy Filter	Capture all allergy-causing substances such as house dust and mites floating in the air
Installation	Plasma Air Purifier (Ionizer)	Reduce harmful microscopic particles and odor
	Drain Pump	Water drain pump for indoor unit
Reliability	Hot Start	In the heating mode, the hot wind from the beginning
	Self Diagnosis	Self-diagnostic for product protection
	De-ice Control (Defrost)	In the heating mode, de-icing of the outdoor heat exchanger automatically
	Dry (Dehumidification) Operation	Prevent the growth of mold by removing excess moisture from an area with high humidity
Convenience	Auto Changeover	Change the operation mode(cooling & heating) automatically to maintain the set temperature
	Auto Operation (Artificial Intelligence)	The fan and setting temperature adjust automatically, base on room temperature
	Auto Cleaning (Coil Dry)	Prevent the formation of bacteria and mold on the heat exchanger
	Auto Restart Operation	If power is resupplied after blackout, product restart automatically
	Child Lock ¹	Only for wired-remote controller. Lock the buttons to prevent children control
	Forced Operation	Use the forced switch of the indoor unit to operate the air conditioner when the remote control is unavailable
	Group Control ¹	Only for wired-remote controller. Control multiple indoor units at the same time
	Sleep Mode	Set the off timer and fan speed is decreasing to make quiet environment for comfort sleep
	Timer 24hr (On/Off) / 7hr (Off)	Set the on/off timer
	Timer (Weekly) ¹	Only for wired-remote controller. Set the on/off timer
	Two Thermistor Control ¹	If there is a temperature difference between room temperature and desired temperature, you can use this function in other to prevent insufficient cooling and insufficient heating
	Low Ambient Operation	The cooling operation is possible even in conditions of extreme cold
	Overheating Protection	If there is a temperature difference between room temperature and desired temperature, you can use this function in other to prevent over-heating
	Low Heating	Using less energy helps keep the room warm when going out
	Voice Control	Customer can control the aircon by voice without wireless remote controller
	Outdoor Silent Mode	The overall sound level of the outdoor unit drops by up to 3dB
	Mosquito Away	An ultrasonic sound that mosquitoes detest is emitted to drives away mosquitoes
	Smart Diagnosis	Check the your AC's operational information for quick-service and self-diagnosis by sound from indoor unit
	Indoor Unit Display Type	-
	Indoor Unit Display Light	Set the brightness of the display on the indoor unit
Energy Display	Show the power consumption	
Air Quality Indicator (Dust Sensor)	Sense microscopic dusts in the room and let the air purifying system work without additional maneuver	
Energy Saving	Energy Saving	Control the optimal desired temperature to save energy
	Energy Control	The customer can control the power consumption or current directly to save energy
	Gen Mode	In areas where electricity is limited, customer can continue to use household appliances with the air-conditioner by reducing power consumption
Individual Control	Wired Remote Controller ²	-
	Handheld Wireless Controller	-
	General Central Controller (Non LGAP)	-
CAC Network Function	Network Solution (LGAP)	-
	Dry Contact ²	-
	PDI (Power Distribution Indicator) ²	-
	Outdoor Unit PI 485 ²	-
Special Function Kit	Wi-Fi ²	Easily access and control an air conditioner's functions from anywhere
	Water Level Sensor Connection ²	Detect the water level in drain pan
	Wind Baffle Kit ²	With wind baffle installed, the minimum temperature will be -18 °C (0 °F) D.B. in cooling
	Sump Heater	Prevent the accumulation of freezing on the outdoor-heat-exchanger during winter (Flexible Type)
	Sheath Heater ²	Prevent the accumulation of freezing on the outdoor-heat-exchanger during winter (Hard Type)
	Crank Case Heater	Pre-heating the compressor during winter
	Smart Inverter Monitoring System (SIMs) ²	Help you to easily monitor, diagnose the air conditioner and get a quick resolution
Others	Mode Lock	Set up the unit available to use only cooling or heating mode in the heat pump model
	DRED (Demand Response Enabling Device)	-
	UV Nano	This function reduces various bacteria inside the air conditioner

Note

- These functions must be applied according to the model. Please refer to the following function list for each model.
- ¹ : This function can be operated only when the wired remote controller is connected. The applicability of each function depends on the above table.
- ² : Optional accessories must be purchased separately. If shown as "Embedded", this function is included in product.
- The function Wi-Fi is only compatible with 2.4 GHz band. (802.11 b/g/n)
- Some specifications may be changed without notifications due to our policy of innovation.

4. Function List

Category	Function	VS092C7.SJ0 S4-Q09JA3WE.EC2GCOL	
Air Flow	Air Supply Outlet	1	
	Airflow Direction Control (Left & Right)	Manual	
	Airflow Direction Control (Up & Down)	6 Steps	
	Auto Swing (Left & Right)	X	
	Auto Swing (Up & Down)	O	
	Fan Speed Steps (Fan / Cool / Heat)	6 / 6 / X	
	Natural Wind (Auto Wind)	O	
	Jet Cool / Jet Heat (Power Wind)	O / X	
Air Purifying	Comfort Air	X	
	Prefilter (Washable)	O	
	Deodorizing Filter	X	
	Micro Dust Filter	X	
	Allergy Filter	O	
Installation	Plasma Air Purifier (Ionizer)	X	
	Drain Pump	X	
Reliability	Hot Start	X	
	Self Diagnosis	O	
	De-ice Control (Defrost)	X	
	Dry (Dehumidification) Operation	O	
Convenience	Dry (Dehumidification) Operation	O	
	Auto Changeover	X	
	Auto Operation (Artificial Intelligence)	O	
	Auto Cleaning (Coil Dry)	O	
	Auto Restart Operation	O	
	Child Lock ¹	X	
	Forced Operation	O	
	Group Control ¹	X	
	Sleep Mode	Comfort Sleep (7hr)	
	Timer 24hr (On/Off) / 7hr (Off)	O / X	
	Timer (Weekly) ¹	X	
	Two Thermistor Control ¹	X	
	Low Ambient Operation	X	
	Overheating Protection	X	
	Low Heating	X	
	Voice Control	X	
	Outdoor Silent Mode	X	
Mosquito Away	X		
Smart Diagnosis	O		
Energy Saving	Indoor Unit Display Type	Number Display	
	Indoor Unit Display Light	On/Off	
	Energy Display	O	
	Air Quality Indicator (Dust Sensor)	X	
	Energy Saving	O	
	Energy Control	X	
	Gen Mode	X	
	Individual Control	Wired Remote Controller (Premium) ²	X
		Wired Remote Controller (Standard) ²	X
		Wired Remote Controller (Simple with Mode Selection) ²	X
Wired Remote Controller (Simple without Mode Selection) ²		X	
Handheld Wireless Controller		(See Remote Controller Section) AKB75215401	
		Setting Temperature Range (Cooling) 18~30 °C (64~86 °F) Setting Temperature Range (Heating) X	
CAC Network Function	General Central Controller (Non LGAP)	X	
	Network Solution (LGAP)	X	
	Dry Contact ²	X	
	PDI (Power Distribution Indicator) ²	X	
Special Function Kit	Outdoor Unit PI 485 ²	X	
	Wi-Fi ²	X	
	Water Level Sensor Connection ²	X	
	Wind Baffle Kit ²	X	
	Sump Heater	X	
	Sheath Heater ²	X	
Others	Crank Case Heater	X	
	Smart Inverter Monitoring System (SIMS) ²	X	
	Mode Lock	X	
	DRED (Demand Response Enabling Device)	X	
	UV Nano	X	

Note

- O : Applied, X : Not applied
- Filters are optional in some specific areas.
- ¹ : This function can be operated only when the wired remote controller is connected. The applicability of each function depends on the above table.
- ² : Optional accessories must be purchased separately. If shown as "Embedded", this function is included in product.
- The function Wi-Fi is only compatible with 2.4 GHz band. (802.11 b/g/n)
- Some specifications may be changed without notifications due to our policy of innovation.

4. Function List

Category	Function	VS242C7.SK0 S4-Q24K23WE.EC2GCOL	
Air Flow	Air Supply Outlet	1	
	Airflow Direction Control (Left & Right)	Manual	
	Airflow Direction Control (Up & Down)	6 Steps	
	Auto Swing (Left & Right)	X	
	Auto Swing (Up & Down)	O	
	Fan Speed Steps (Fan / Cool / Heat)	6 / 6 / X	
	Natural Wind (Auto Wind)	O	
	Jet Cool / Jet Heat (Power Wind)	O / X	
Air Purifying	Comfort Air	X	
	Prefilter (Washable)	O	
	Deodorizing Filter	X	
	Micro Dust Filter	X	
	Allergy Filter	O	
Installation	Plasma Air Purifier (Ionizer)	X	
	Drain Pump	X	
Reliability	Hot Start	X	
	Self Diagnosis	O	
	De-ice Control (Defrost)	X	
	Dry (Dehumidification) Operation	O	
Convenience	Auto Changeover	X	
	Auto Operation (Artificial Intelligence)	X	
	Auto Cleaning (Coil Dry)	O	
	Auto Restart Operation	O	
	Child Lock ¹	X	
	Forced Operation	O	
	Group Control ¹	X	
	Sleep Mode	Comfort Sleep (7hr)	
	Timer 24hr (On/Off) / 7hr (Off)	O / X	
	Timer (Weekly) ¹	X	
	Two Thermistor Control ¹	X	
	Low Ambient Operation	X	
	Overheating Protection	X	
	Low Heating	X	
	Voice Control	X	
	Outdoor Silent Mode	X	
	Mosquito Away	X	
Smart Diagnosis	O		
Energy Saving	Indoor Unit Display Type	Number Display	
	Indoor Unit Display Light	On/Off	
	Energy Display	O	
	Air Quality Indicator (Dust Sensor)	X	
	Energy Saving	O	
	Energy Control	X	
	Gen Mode	X	
	Individual Control	Wired Remote Controller (Premium) ²	X
		Wired Remote Controller (Standard) ²	X
		Wired Remote Controller (Simple with Mode Selection) ²	X
Wired Remote Controller (Simple without Mode Selection) ²		X	
Handheld Wireless Controller		(See Remote Controller Section) AKB75215401	
		Setting Temperature Range (Cooling) 18~30 °C (64~86 °F) Setting Temperature Range (Heating)	
CAC Network Function	General Central Controller (Non LGAP)	X	
	Network Solution (LGAP)	X	
	Dry Contact ²	X	
	PDI (Power Distribution Indicator) ²	X	
	Outdoor Unit PI 485 ²	X	
Special Function Kit	Wi-Fi ²	X	
	Water Level Sensor Connection ²	X	
	Wind Baffle Kit ²	X	
	Sump Heater	X	
	Sheath Heater ²	X	
	Crank Case Heater	X	
Others	Smart Inverter Monitoring System (SIMS) ²	X	
	Mode Lock	X	
	DRED (Demand Response Enabling Device)	X	
	UV Nano	X	

Note

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- ¹ : This function can be operated only when the wired remote controller is connected. The applicability of each function depends on the above table.
- ² : Optional accessories must be purchased separately. If shown as "Embedded", this function is included in product.
- The function Wi-Fi is only compatible with 2.4 GHz band. (802.11 b/g/n)
- Some specifications may be changed without notifications due to our policy of innovation.

4. Function List

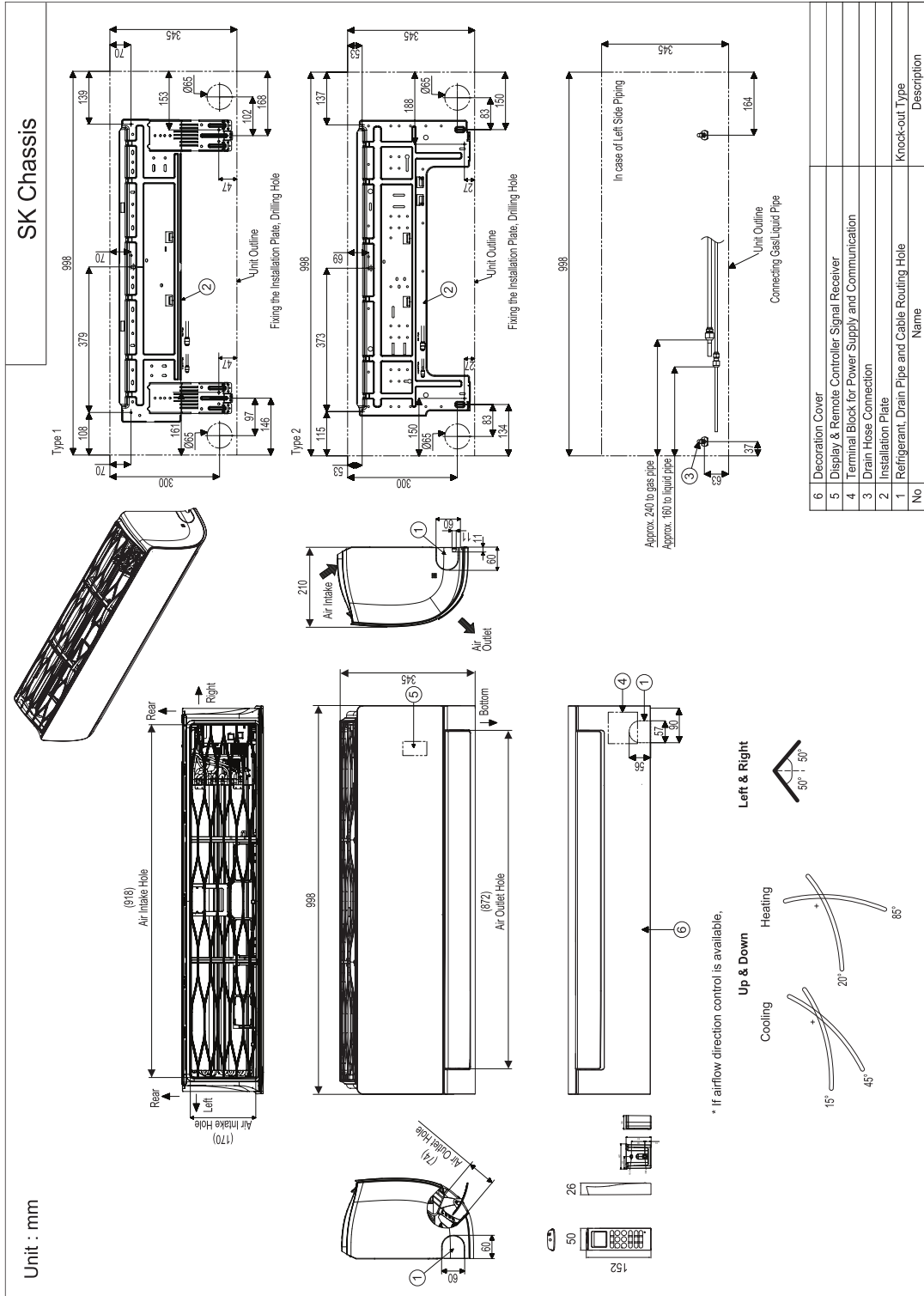
Category	Function	VS182C7.SK0 S4-Q18KL3WE.EC2GCOL	
Air Flow	Air Supply Outlet	1	
	Airflow Direction Control (Left & Right)	Manual	
	Airflow Direction Control (Up & Down)	6 Steps	
	Auto Swing (Left & Right)	X	
	Auto Swing (Up & Down)	O	
	Fan Speed Steps (Fan / Cool / Heat)	6 / 6 / X	
	Natural Wind (Auto Wind)	O	
	Jet Cool / Jet Heat (Power Wind)	O / X	
Air Purifying	Comfort Air	X	
	Prefilter (Washable)	O	
	Deodorizing Filter	X	
	Micro Dust Filter	X	
	Allergy Filter	O	
Installation	Plasma Air Purifier (Ionizer)	X	
	Drain Pump	X	
Reliability	Hot Start	X	
	Self Diagnosis	O	
	De-ice Control (Defrost)	X	
	Dry (Dehumidification) Operation	O	
Convenience	Dry (Dehumidification) Operation	O	
	Auto Changeover	X	
	Auto Operation (Artificial Intelligence)	O	
	Auto Cleaning (Coil Dry)	O	
	Auto Restart Operation	O	
	Child Lock ¹	X	
	Forced Operation	O	
	Group Control ¹	X	
	Sleep Mode	Comfort Sleep (7hr)	
	Timer 24hr (On/Off) / 7hr (Off)	O / X	
	Timer (Weekly) ¹	X	
	Two Thermistor Control ¹	X	
	Low Ambient Operation	X	
	Overheating Protection	X	
	Low Heating	X	
	Voice Control	X	
	Outdoor Silent Mode	X	
Mosquito Away	X		
Smart Diagnosis	O		
Energy Saving	Indoor Unit Display Type	Number Display	
	Indoor Unit Display Light	On/Off	
	Energy Display	O	
	Air Quality Indicator (Dust Sensor)	X	
	Energy Saving	O	
	Energy Control	X	
	Gen Mode	X	
	Individual Control	Wired Remote Controller (Premium) ²	X
		Wired Remote Controller (Standard) ²	X
		Wired Remote Controller (Simple with Mode Selection) ²	X
Wired Remote Controller (Simple without Mode Selection) ²		X	
Handheld Wireless Controller		(See Remote Controller Section)	
		AKB75215401	
CAC Network Function	Setting Temperature Range (Cooling)	18~30 °C (64~86 °F)	
	Setting Temperature Range (Heating)	X	
	General Central Controller (Non LGAP)	X	
	Network Solution (LGAP)	X	
	Dry Contact ²	X	
Special Function Kit	PDI (Power Distribution Indicator) ²	X	
	Outdoor Unit PI 485 ²	X	
	Wi-Fi ²	X	
	Water Level Sensor Connection ²	X	
	Wind Baffle Kit ²	X	
	Sump Heater	X	
Others	Sheath Heater ²	X	
	Crank Case Heater	X	
	Smart Inverter Monitoring System (SIMS) ²	X	
	Mode Lock	X	
	DRED (Demand Response Enabling Device)	X	
	UV Nano	X	

Note

- O : Applied, X : Not applied
- Filters are optional in some specific areas.
- ¹ : This function can be operated only when the wired remote controller is connected. The applicability of each function depends on the above table.
- ² : Optional accessories must be purchased separately. If shown as "Embedded", this function is included in product.
- The function Wi-Fi is only compatible with 2.4 GHz band. (802.11 b/g/n)
- Some specifications may be changed without notifications due to our policy of innovation.

5. Dimensional Drawings

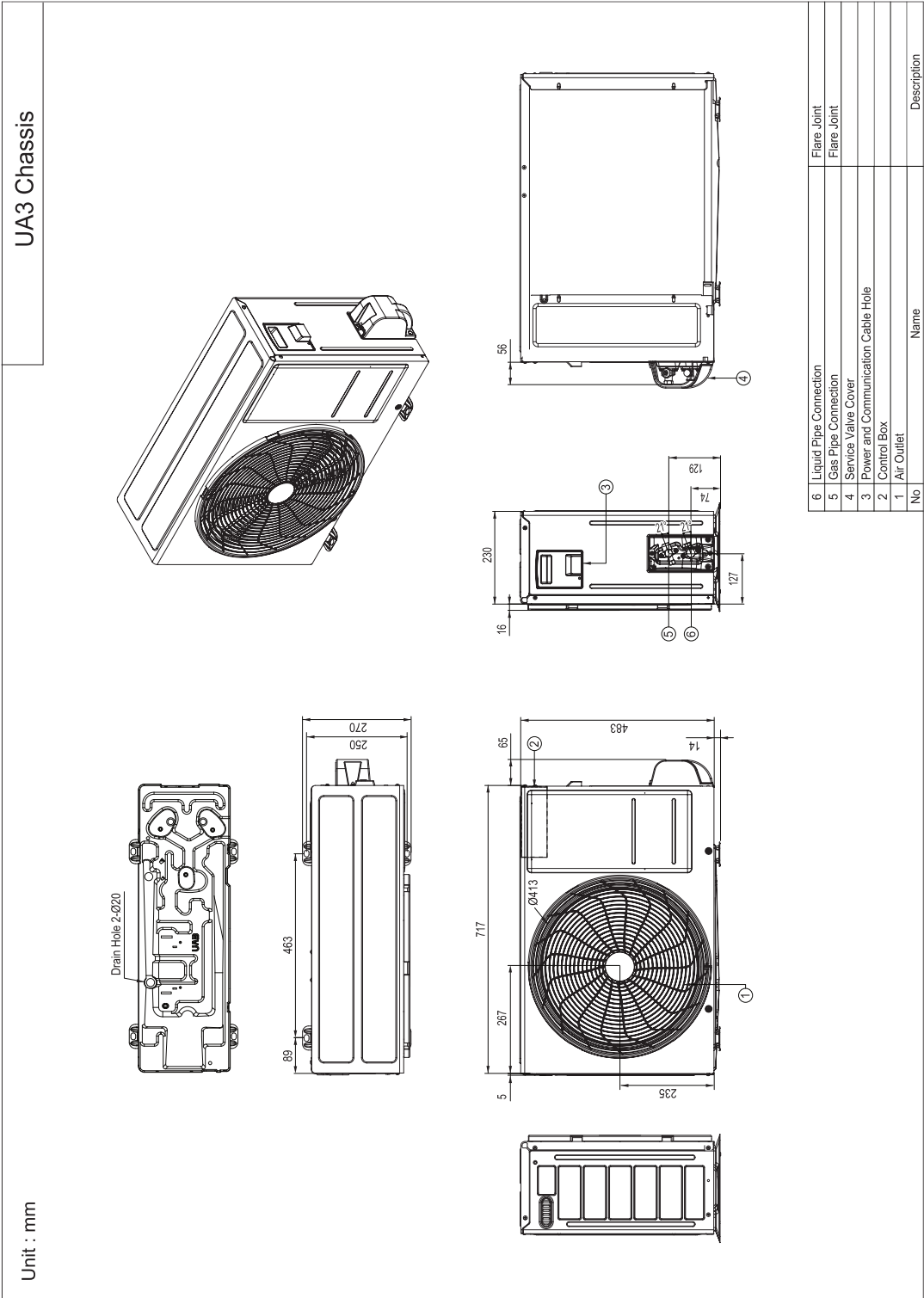
VS182C7.NK0 (S4NQ18KL3WE.EC2GCOL)



5. Dimensional Drawings

5.2 Outdoor Unit

VS092C7.UJ0 (S4UQ09JA3WE.EC2GCOL)

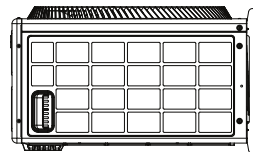
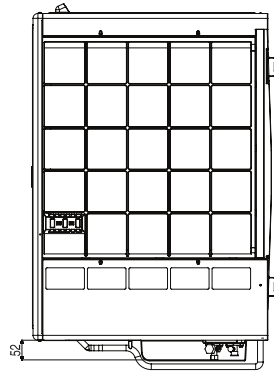
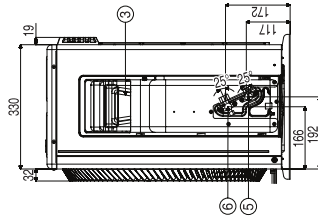
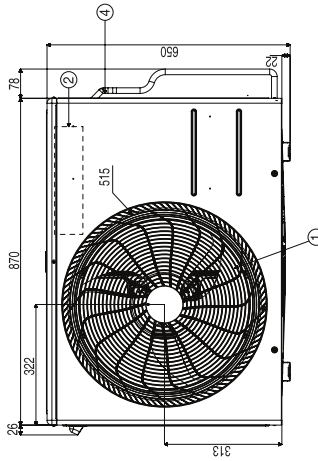
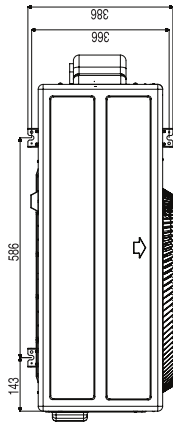
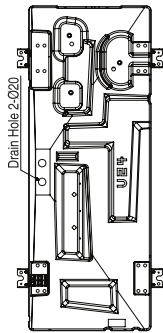
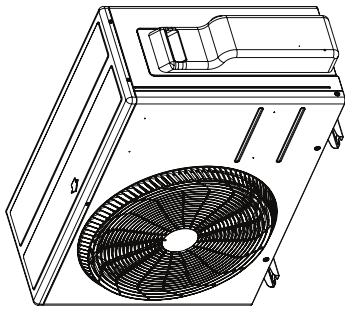


5. Dimensional Drawings

VS242C7.UK0 (S4UQ24K23WE.EC2GCOL)

U24A Chassis

Unit : mm



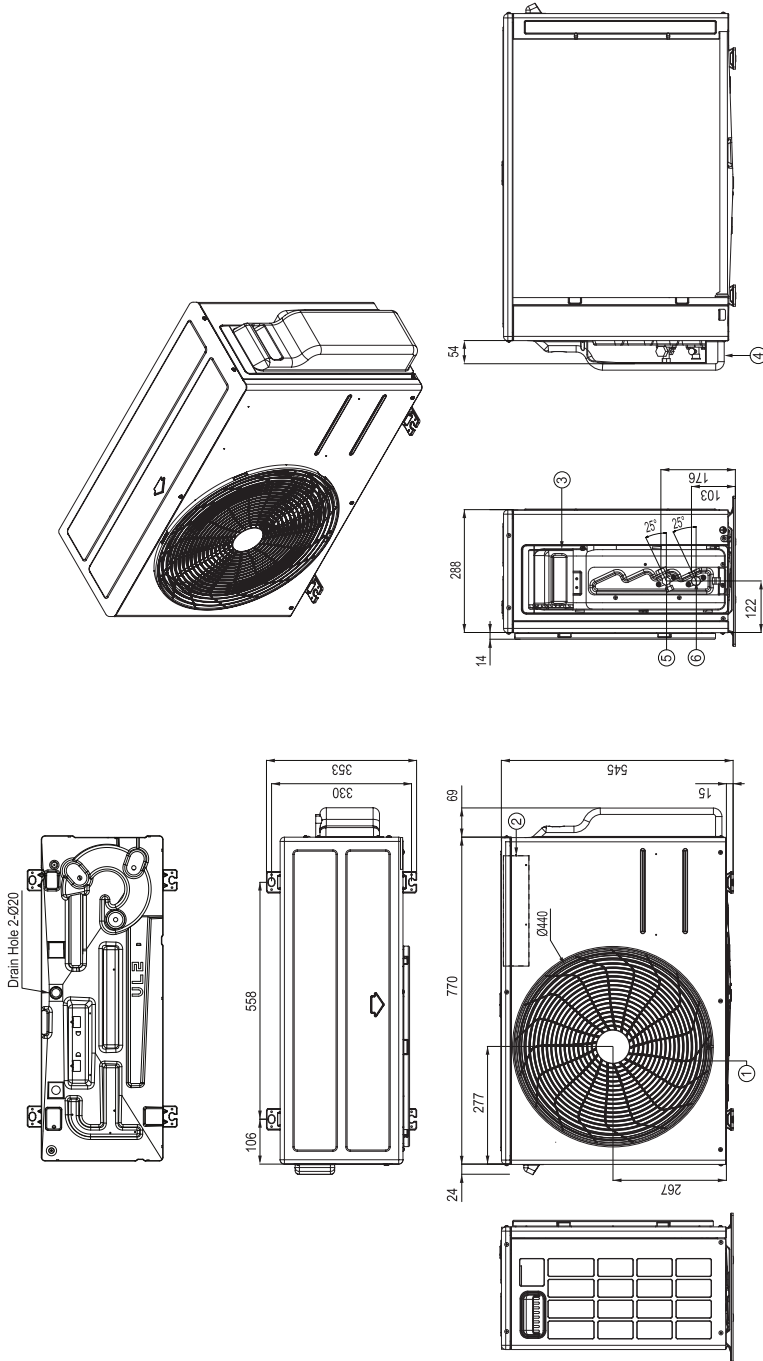
No	Name	Description
6	Liquid Pipe Connection	Flare Joint
5	Gas Pipe Connection	Flare Joint
4	Service Valve Cover	
3	Power and Communication Cable Hole	
2	Control Box	
1	Air Outlet	

5. Dimensional Drawings

VS182C7.UK0 (S4UQ18KL3WE.EC2GCOL)

UL2 Chassis

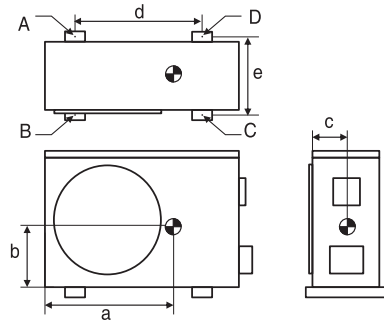
Unit : mm



No	Name	Description
6	Liquid Pipe Connection	Flare Joint
5	Gas Pipe Connection	Flare Joint
4	Service Valve Cover	
3	Power and Communication Cable Hole	
2	Control Box	
1	Air Outlet	

5. Dimensional Drawings

5.3 Corner Weight and Center of Gravity Dimension for Outdoor Unit



Model	Tool	Weight (kg)		Center of Gravity (mm)			Leg (mm)		Corner Weight (kg)			
		Shipping	Net	a	b	c	d	e	A	B	C	D
VS092C7.UJ0	UA3	26.0	22.8	475	219	113	463	256	1.7	2.1	9.7	9.3
VS242C7.UK0	U24A	47.0	41.5	565	260	150	586	366	4.9	6.7	15.9	14.1
VS182C7.UK0	UL2	34.5	29.8	507	237	143	558	330	4.1	4.3	10.8	10.6

Model	Tool	Weight (lb.)		Center of Gravity (in.)			Leg (in.)		Corner Weight (lb.)			
		Shipping	Net	a	b	c	d	e	A	B	C	D
VS092C7.UJ0	UA3	57.3	50.3	18-11/16	8-5/8	4-7/16	18-7/32	10-3/32	3.7	4.7	21.4	20.5
VS242C7.UK0	U24A	103.6	91.5	22-1/4	10-1/4	5-29/32	23-1/16	14-13/32	10.8	14.7	35.0	31.0
VS182C7.UK0	UL2	76.1	65.7	19-31/32	9-11/32	5-5/8	21-31/32	13	9.0	9.4	23.8	23.4

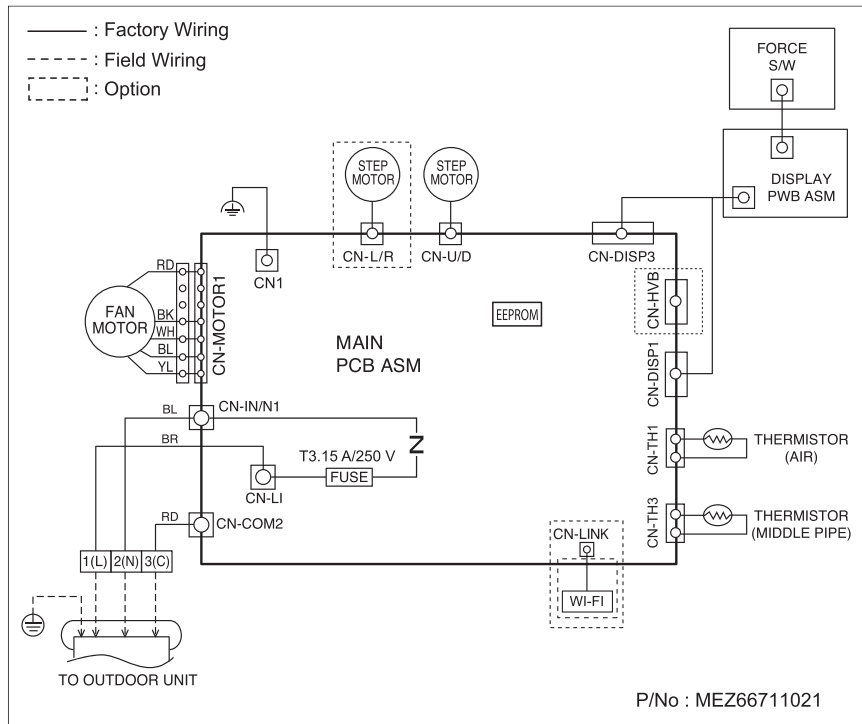
Note

- Design features and information of indoor and outdoor unit may be changed without notifications due to our policy of innovation.
- The center of gravity and corner weight may be different from the actual values because these are simulation results.

6. Wiring Diagrams

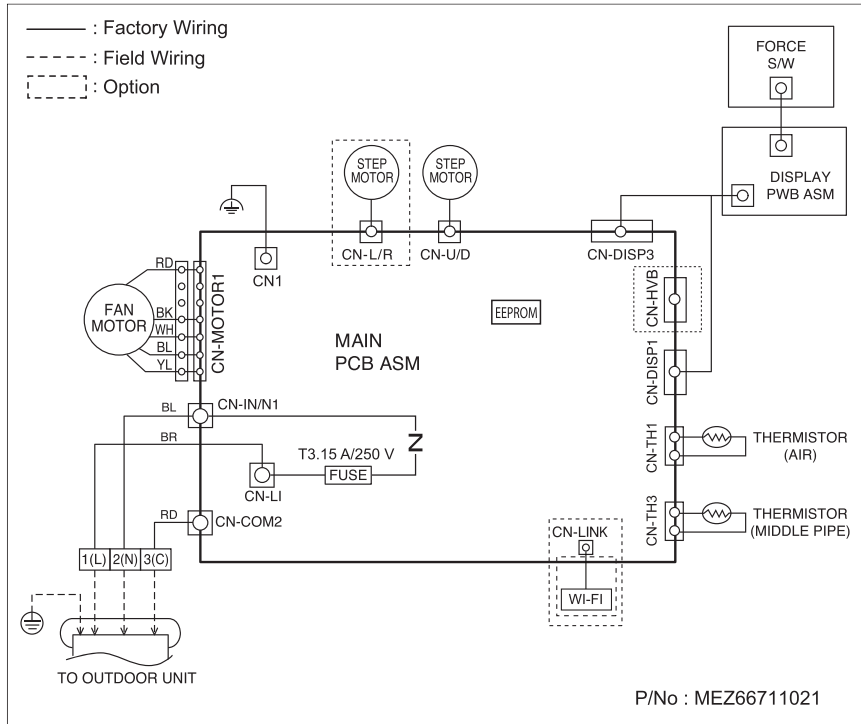
6.1 Indoor Unit

VS092C7.NJ0 (S4NQ09JA3WE.EC2GCOL)



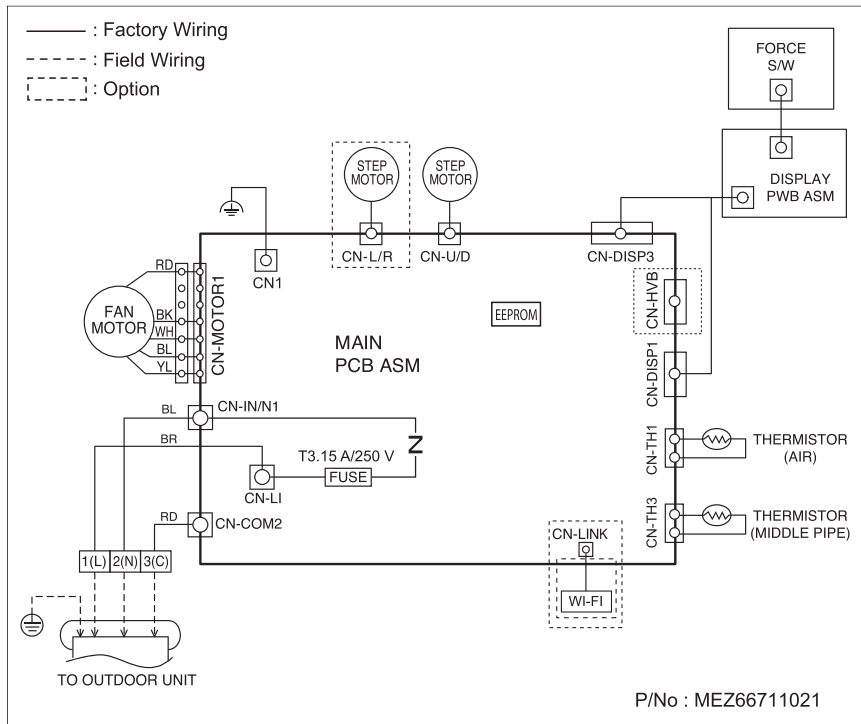
6. Wiring Diagrams

VS242C7.NK0 (S4NQ24K23WE.EC2GCOL)



6. Wiring Diagrams

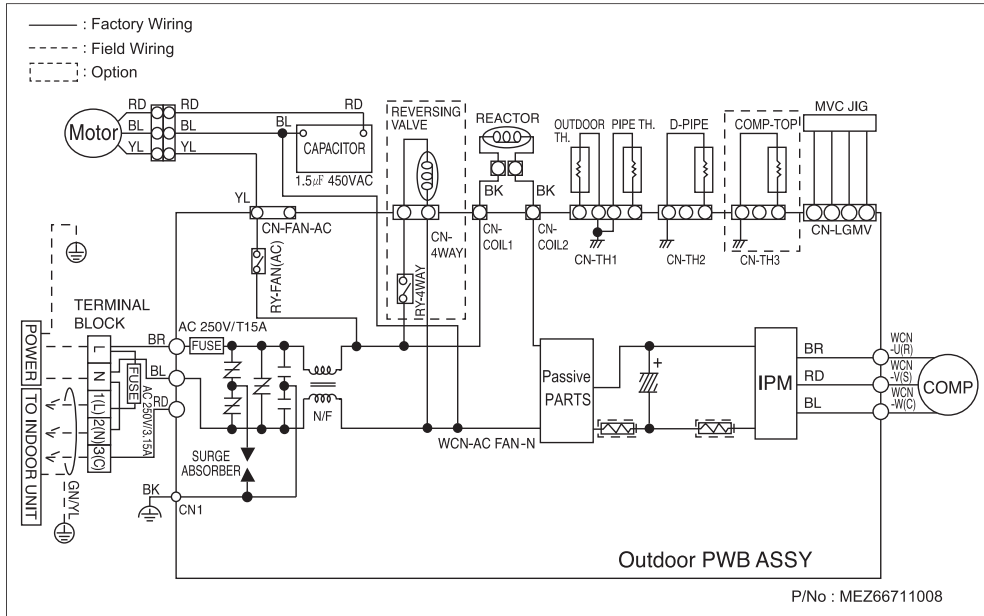
VS182C7.NK0 (S4NQ18KL3WE.EC2GCOL)



6. Wiring Diagrams

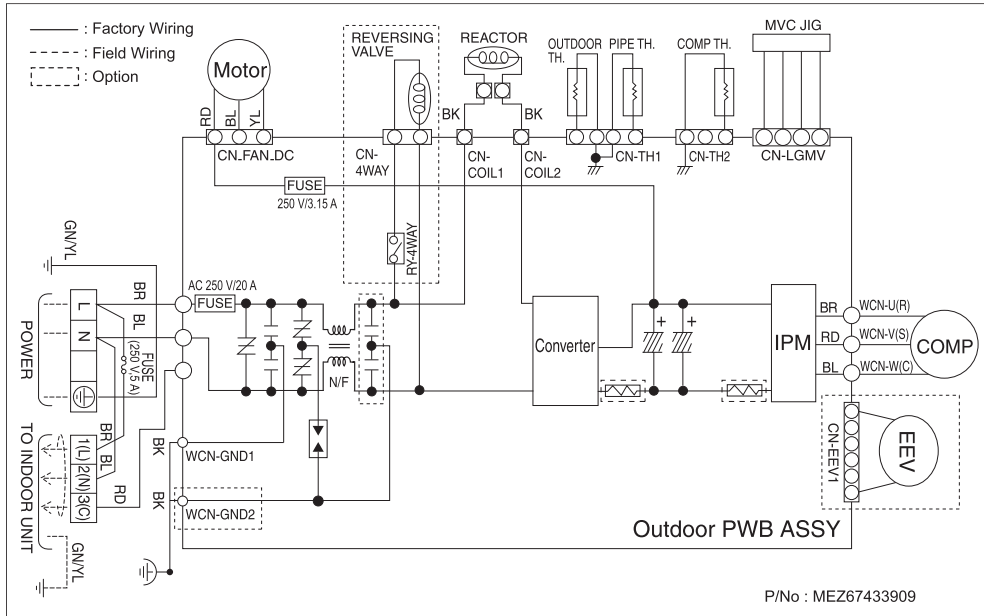
6.2 Outdoor Unit

VS092C7.UJ0 (S4UQ09JA3WE.EC2GCOL)



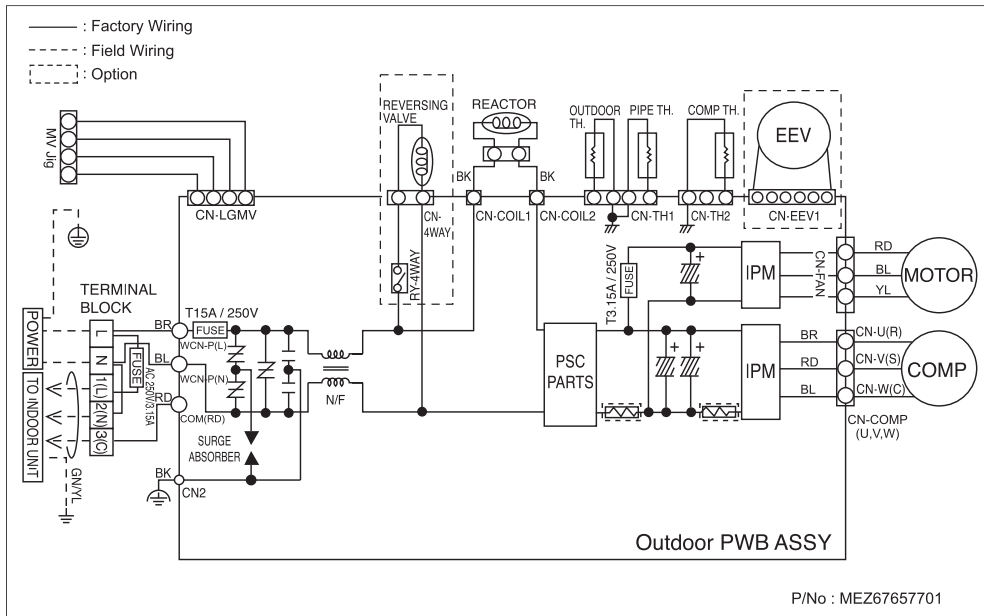
6. Wiring Diagrams

VS242C7.UK0 (S4UQ24K23WE.EC2GCOL)



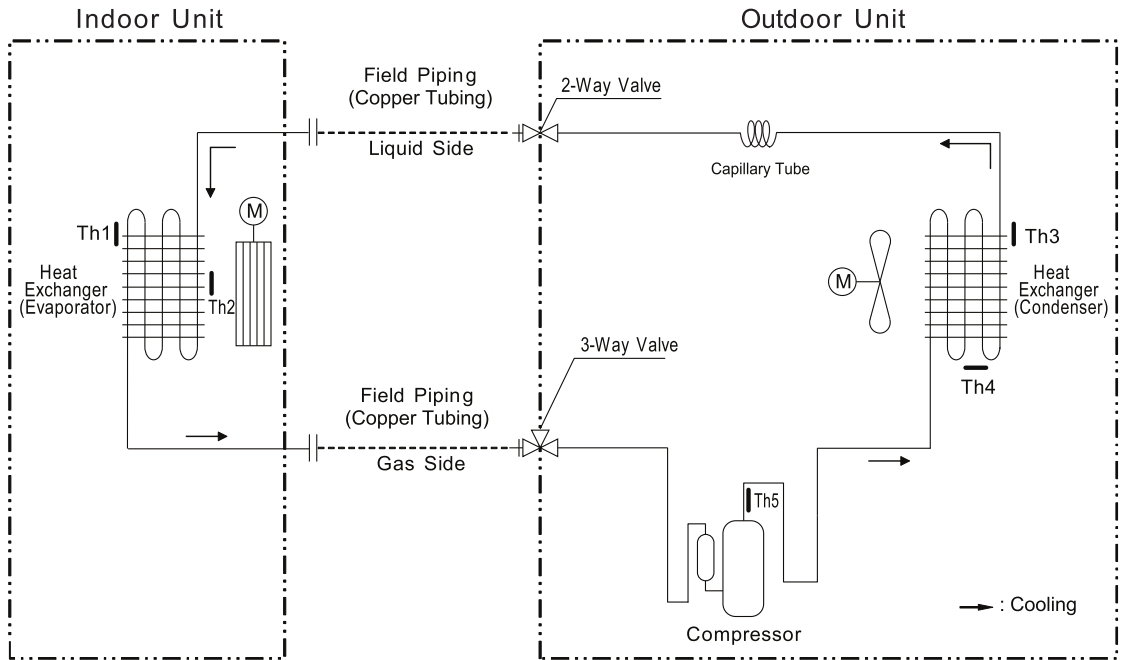
6. Wiring Diagrams

VS182C7.UK0 (S4UQ18KL3WE.EC2GCOL)



7. Refrigerant Cycle Diagrams

VS092C7.SJ0 (S4-Q09JA3WE.EC2GCOL)



Loc.	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CN-TH1 (Indoor)
Th2	Thermistor for evaporator middle temperature	CN-TH3 (Indoor)
Th3	Thermistor for outdoor air temperature	CN-TH1 (Outdoor)
Th4	Thermistor for condenser temperature	CN-TH1 (Outdoor)
Th5	Thermistor for discharge pipe temperature	CN-TH2 (Outdoor)

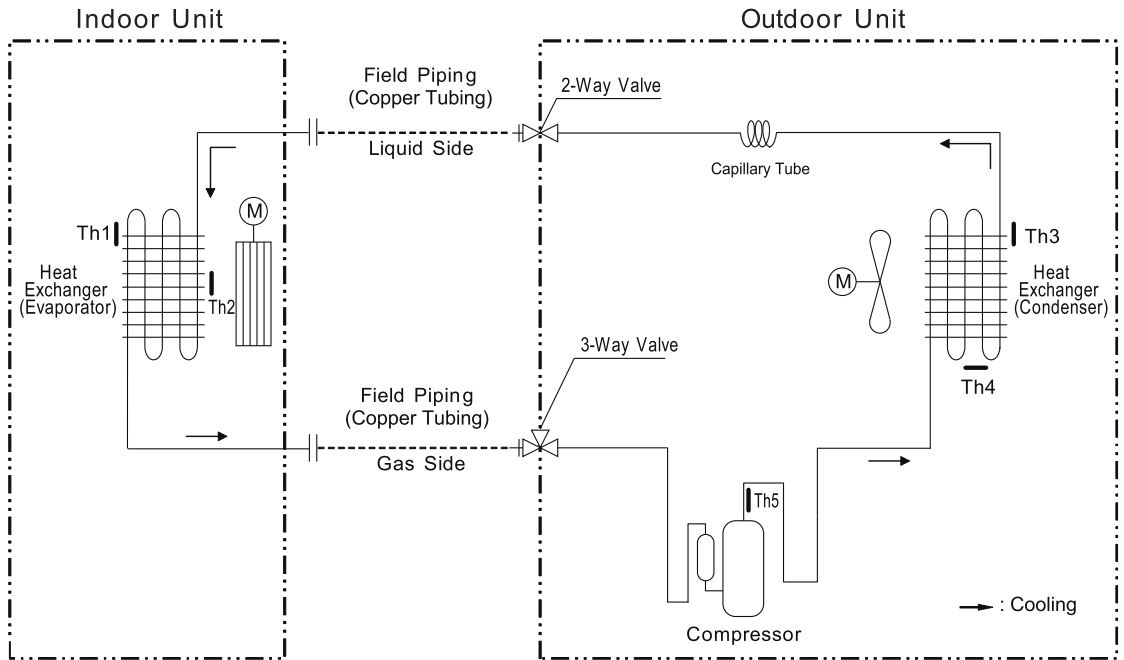
◆ Refrigerant Pipe Connection Port Diameters

Model	Gas		Liquid		Capillary Tube (OD - x ID - x mm) x -EA
	mm	inch	mm	inch	
VS092C7.SJ0	ø 9.52	ø 3/8	ø 6.35	ø 1/4	

Appendix	Heat Exchanger	Propeller Fan	Cross Flow Fan	Compressor	Accumulator	Reversing Valve (4 Way Valve)
	EEV (Electronic Expansion Valve)	Capillary Tube	2-Way Valve 3-Way Valve	Temperature Sensor	Pressure Sensor	Pressure Switch
	Check Valve	Flare Joint	Muffler	Strainer		

7. Refrigerant Cycle Diagrams

VS242C7.SK0 (S4-Q24K23WE.EC2GCOL)



Loc.	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CN-TH1 (Indoor)
Th2	Thermistor for evaporator middle temperature	CN-TH3 (Indoor)
Th3	Thermistor for outdoor air temperature	CN-TH1 (Indoor)
Th4	Thermistor for condenser temperature	CN-TH1 (Indoor)
Th5	Thermistor for discharge pipe temperature	CN-TH2 (Outdoor)

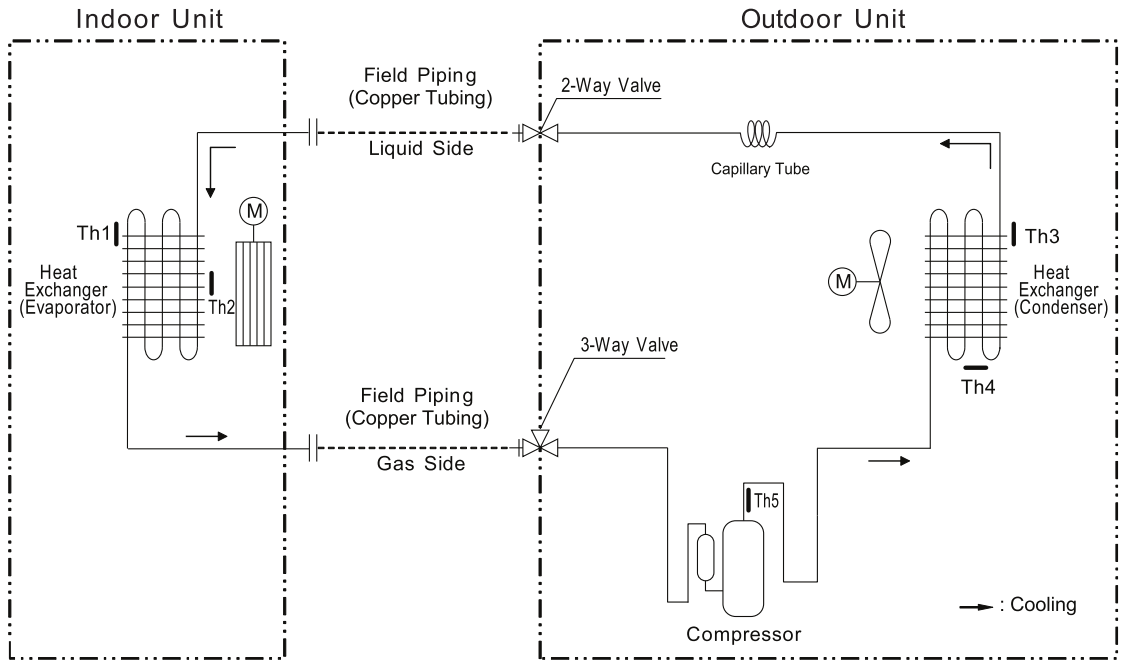
◆ Refrigerant Pipe Connection Port Diameters

Model	Gas		Liquid		Capillary Tube (OD - x ID - x mm) x -EA
	mm	inch	mm	inch	
VS242C7.SK0	ø 15.88	ø 5/8	ø 6.35	ø 1/4	

Appendix	Heat Exchanger	Propeller Fan	Cross Flow Fan	Compressor	Accumulator	Reversing Valve (4 Way Valve)
	EEV (Electronic Expansion Valve)	Capillary Tube	2-Way Valve 3-Way Valve	Temperature Sensor	Pressure Sensor	Pressure Switch
	Check Valve	Flare Joint	Muffler	Strainer		

7. Refrigerant Cycle Diagrams

VS182C7.SK0 (S4-Q18KL3WE.EC2GCOL)



Loc.	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CN-TH1 (Indoor)
Th2	Thermistor for evaporator inlet temperature	CN-TH3 (Indoor)
Th3	Thermistor for outdoor air temperature	CN-TH1 (Outdoor)
Th4	Thermistor for condenser temperature	CN-TH1 (Outdoor)
Th5	Thermistor for discharge pipe temperature	CN-TH2 (Outdoor)

◆ Refrigerant Pipe Connection Port Diameters

Model	Gas		Liquid		Capillary Tube (OD - x ID - x mm) x -EA
	mm	inch	mm	inch	
VS182C7.SK0	ø 12.7	ø 1/2	ø 6.35	ø 1/4	

Appendix	Heat Exchanger	Propeller Fan	Cross Flow Fan	Compressor	Accumulator	Reversing Valve (4 Way Valve)
	EEV (Electronic Expansion Valve)	Capillary Tube	2-Way Valve 3-Way Valve	Temperature Sensor	Pressure Sensor	Pressure Switch
	Check Valve	Flare Joint	Muffler	Strainer		

8. Capacity Tables

8.1 Rated Cooling Capacity

VS092C7.SJ0 (S4-Q09JA3WE.EC2GCOL)

Outdoor Air Temperature	Indoor Air Temperature : °C DB / °C WB																				
	18 / 12			20 / 14			22 / 16			25 / 18			27 / 19			29 / 19			32 / 23		
°C DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
18	2.07	2.07	0.37	2.26	2.26	0.39	2.45	2.45	0.41	2.68	2.68	0.44	2.83	2.83	0.45	2.98	2.98	0.47	3.20	3.20	0.50
20	2.06	2.06	0.38	2.24	2.24	0.40	2.43	2.43	0.42	2.65	2.65	0.44	2.79	2.79	0.46	2.95	2.95	0.48	3.17	3.17	0.50
25	2.07	2.07	0.48	2.24	2.24	0.50	2.40	2.40	0.53	2.61	2.61	0.55	2.74	2.74	0.57	2.90	2.90	0.59	3.12	3.12	0.62
30	2.08	2.08	0.59	2.23	2.23	0.61	2.38	2.38	0.63	2.57	2.57	0.66	2.69	2.69	0.68	2.85	2.85	0.70	3.08	3.08	0.73
35	2.09	2.09	0.70	2.23	2.23	0.72	2.37	2.37	0.75	2.54	2.54	0.77	2.64	2.64	0.79	2.81	2.81	0.81	3.04	3.04	0.85
41	2.13	2.13	0.91	2.28	2.28	0.94	2.43	2.43	0.97	2.63	2.63	1.01	2.74	2.74	1.03	2.91	2.91	1.06	3.14	3.14	1.10
46	2.06	2.06	1.09	2.21	2.21	1.12	2.37	2.37	1.16	2.56	2.56	1.20	2.68	2.68	1.23	2.84	2.84	1.27	3.06	3.06	1.32
48	2.00	2.00	1.10	2.16	2.16	1.13	2.31	2.31	1.17	2.50	2.50	1.21	2.61	2.61	1.24	2.77	2.77	1.28	2.99	2.99	1.33

Symbol

DB : Dry Bulb Temperature [°C]
 WB : Wet Bulb Temperature [°C]
 TC : Total Capacity [kW]
 SHC : Sensible Heating Capacity [kW]
 PI : Power Input [kW]
 (Comp.+ Indoor Fan Motor + Outdoor Fan Motor)

Note

1. All capacities are net, evaporator fan motor heat is deducted.
2. Direct interpolation is permissible. Do not extrapolate.
3. Capacities are based on the following conditions.
 - Interconnecting Piping Length 5 m (16.4 ft.)
 - Level Difference of Zero.

8. Capacity Tables

VS242C7.SK0 (S4-Q24K23WE.EC2GCOL)

Outdoor Air Temperature	Indoor Air Temperature : °C DB / °C WB																				
	18 / 12			20 / 14			22 / 16			25 / 18			27 / 19			29 / 19			32 / 23		
°C DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
18	4.52	4.52	1.34	4.94	4.94	1.42	5.35	5.35	1.50	5.86	5.86	1.59	6.17	6.17	1.65	6.51	6.51	1.72	6.99	6.99	1.81
20	4.50	4.50	1.38	4.90	4.90	1.46	5.29	5.29	1.53	5.79	5.79	1.62	6.09	6.09	1.68	6.43	6.43	1.75	6.91	6.91	1.84
25	4.69	4.69	1.51	5.07	5.07	1.57	5.45	5.45	1.64	5.93	5.93	1.73	6.21	6.21	1.78	6.57	6.57	1.85	7.08	7.08	1.94
30	4.90	4.90	1.63	5.26	5.26	1.69	5.61	5.61	1.75	6.06	6.06	1.83	6.33	6.33	1.88	6.71	6.71	1.94	7.25	7.25	2.03
35	5.12	5.12	1.75	5.45	5.45	1.81	5.78	5.78	1.87	6.20	6.20	1.94	6.45	6.45	1.98	6.86	6.86	2.04	7.42	7.42	2.13
41	4.72	4.72	1.40	5.06	5.06	1.45	5.40	5.40	1.49	5.82	5.82	1.55	6.08	6.08	1.59	6.45	6.45	1.63	6.96	6.96	1.70
46	4.13	4.13	1.03	4.45	4.45	1.06	4.76	4.76	1.10	5.15	5.15	1.14	5.39	5.39	1.16	5.71	5.71	1.20	6.16	6.16	1.25
48	4.03	4.03	1.04	4.34	4.34	1.07	4.64	4.64	1.10	5.03	5.03	1.15	5.26	5.26	1.17	5.57	5.57	1.21	6.01	6.01	1.26

Symbol

DB : Dry Bulb Temperature [°C]
 WB : Wet Bulb Temperature [°C]
 TC : Total Capacity [kW]
 SHC : Sensible Heating Capacity [kW]
 PI : Power Input [kW]
 (Comp.+ Indoor Fan Motor + Outdoor Fan Motor)

Note

1. All capacities are net, evaporator fan motor heat is deducted.
2. Direct interpolation is permissible. Do not extrapolate.
3. Capacities are based on the following conditions.
 - Interconnecting Piping Length 5 m (16.4 ft.)
 - Level Difference of Zero.

8. Capacity Tables

VS182C7.SK0 (S4-Q18KL3WE.EC2GCOL)

Outdoor Air Temperature	Indoor Air Temperature : °C DB / °C WB																				
	18 / 12			20 / 14			22 / 16			25 / 18			27 / 19			29 / 19			32 / 23		
°C DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
18	4.33	4.33	0.90	4.72	4.46	0.95	5.12	4.58	1.00	5.61	4.73	1.06	5.90	4.82	1.10	6.23	5.35	1.15	6.69	6.09	1.21
20	4.31	4.31	0.92	4.69	4.45	0.97	5.07	4.58	1.02	5.54	4.75	1.09	5.83	4.85	1.12	6.16	5.36	1.17	6.61	6.07	1.23
25	4.27	4.10	1.09	4.61	4.26	1.14	4.96	4.43	1.19	5.39	4.64	1.25	5.64	4.77	1.29	5.98	5.21	1.34	6.43	5.82	1.40
30	4.23	3.89	1.26	4.53	4.09	1.31	4.84	4.29	1.36	5.23	4.53	1.42	5.46	4.68	1.45	5.79	5.06	1.50	6.25	5.58	1.57
35	4.19	3.69	1.44	4.46	3.92	1.48	4.73	4.15	1.53	5.07	4.43	1.59	5.28	4.60	1.62	5.61	4.91	1.67	6.07	5.35	1.74
41	3.66	3.19	1.42	3.92	3.41	1.46	4.19	3.64	1.51	4.51	3.92	1.57	4.71	4.09	1.60	5.00	4.34	1.65	5.40	4.70	1.71
46	3.01	2.59	1.36	3.24	2.79	1.40	3.47	2.99	1.45	3.75	3.24	1.50	3.92	3.39	1.53	4.16	3.59	1.58	4.49	3.87	1.64
48	2.93	2.53	1.37	3.16	2.72	1.41	3.38	2.92	1.46	3.66	3.16	1.51	3.83	3.30	1.54	4.06	3.50	1.59	4.38	3.77	1.66

Symbol

DB : Dry Bulb Temperature [°C]
 WB : Wet Bulb Temperature [°C]
 TC : Total Capacity [kW]
 SHC : Sensible Heating Capacity [kW]
 PI : Power Input [kW]
 (Comp.+ Indoor Fan Motor + Outdoor Fan Motor)

Note

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

9. Capacity Coefficient Factor

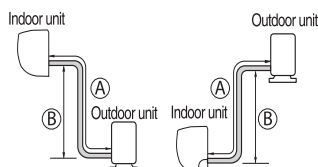
9.1 Capacity Change Rate (%)

Model	Refrigerant Pipe Length											
	m	5	7.5	10	15	20	25	30	35	40	45	50
	ft	16.4	24.6	32.8	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0
VS092C7.SJ0 (S4-Q09JA3WE.EC2GCOL)	Cooling	100	100	98.0	94.0	-	-	-	-	-	-	-
VS242C7.SK0 (S4-Q24K23WE.EC2GCOL)	Cooling	100	100	98.8	96.4	94.0	-	-	-	-	-	-
VS182C7.SK0 (S4-Q18KL3WE.EC2GCOL)	Cooling	100	100	100.0	100.0	100.0	-	-	-	-	-	-

9. Capacity Coefficient Factor

9.2 Pipe Size, Length and Elevation

Model	Pipe Size				Standard Pipe Length [m (ft.)]	Min. / Max. Pipe Length A [m (ft.)]	Max. Elevation B [m (ft.)]	Additional Refrigerant [g/m (oz./ft.)]	No Charge Pipe Length [m (ft.)]
	Gas		Liquid						
	mm	inch	mm	inch					
VS092C7.SJ0 (S4-Q09JA3WE.EC2GCOL)	ø 9.52	ø 3/8	ø 6.35	ø 1/4	7.5 (24.6)	3 / 15 (9.8 / 49.2)	7 (23)	20 (0.22)	7.5 (24.6)
VS242C7.SK0 (S4-Q24K23WE.EC2GCOL)	ø 15.88	ø 5/8	ø 6.35	ø 1/4	7.5 (24.6)	3 / 20 (9.8 / 65.6)	10 (32.8)	20 (0.22)	7.5 (24.6)
VS182C7.SK0 (S4-Q18KL3WE.EC2GCOL)	ø 12.7	ø 1/2	ø 6.35	ø 1/4	7.5 (24.6)	3 / 20 (9.8 / 65.6)	10 (32.8)	20 (0.22)	7.5 (24.6)



⚠ WARNING

- It may cause reliability, performance, noise, and vibration problem, if piping limitations are not met. Keep minimum piping length by making loops, although indoor unit and outdoor unit are close.

9. Capacity Coefficient Factor

9.3 Additional Refrigerant Charge

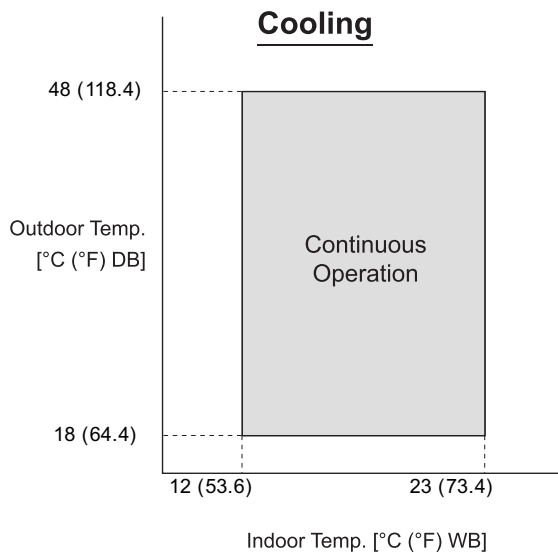
Model	Refrigerant Pipe Length												
	m	5	7.5	10	12.5	15	20	25	30	35	40	45	50
	ft	16.4	24.6	32.8	41.0	49.2	65.6	82.0	98.4	114.8	131.2	147.6	164.0
VS092C7.SJ0 (S4-Q09JA3WE.EC2GCOL)	Additional Charge [g (oz.)]	0	0	50 (1.8)	100 (3.6)	150 (5.4)	-	-	-	-	-	-	-
VS242C7.SK0 (S4-Q24K23WE.EC2GCOL)	Additional Charge [g (oz.)]	0	0	50 (1.8)	100 (3.6)	150 (5.4)	250 (9.0)	-	-	-	-	-	-
VS182C7.SK0 (S4-Q18KL3WE.EC2GCOL)	Additional Charge [g (oz.)]	0	0	50 (1.8)	100 (3.6)	150 (5.4)	250 (9.0)	-	-	-	-	-	-

Note

- Capacity is based on standard length and maximum allowance length is on the basis of reliability.
- Equivalent Pipe Length = Actual Pipe Length + Number of Bends x 0.3
- Calculation : X g (oz.) = [(Refrigerant Pipe Length) - (No Charge Pipe Length)] × (Additional Refrigerant)
- There is no need to charge refrigerant till no charge pipe length based on reliability

10. Operation Range

VS092C7.SJ0 (S4-Q09JA3WE.EC2GCOL)

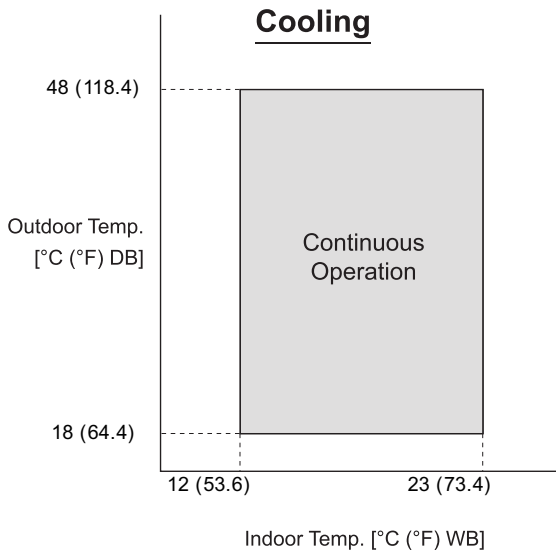


Note

- The figures are based on the following conditions :
- Equivalent Piping Length : 7.5 m (24.6 ft.)
 - Level Difference : 0 m (0 ft.)

10. Operation Range

VS242C7.SK0 (S4-Q24K23WE.EC2GCOL)

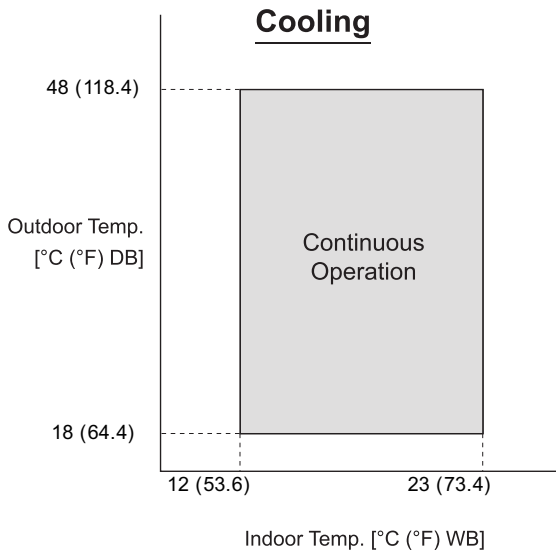


Note

- The figures are based on the following conditions :
- Equivalent Piping Length : 7.5 m (24.6 ft.)
 - Level Difference : 0 m (0 ft.)

10. Operation Range

VS182C7.SK0 (S4-Q18KL3WE.EC2GCOL)



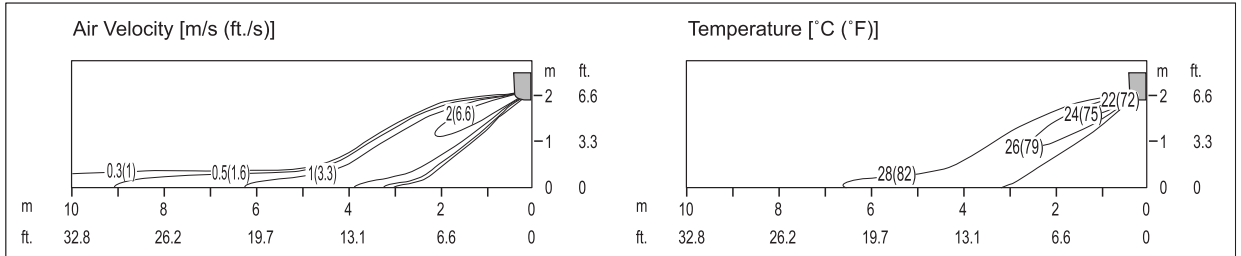
Note

- The figures are based on the following conditions :
- Equivalent Piping Length : 7.5 m (24.6 ft.)
 - Level Difference : 0 m (0 ft.)

11. Air Flow and Temperature Distributions (Reference Data)

VS092C7.SJ0 (S4-Q09JA3WE.EC2GCOL)

Cooling

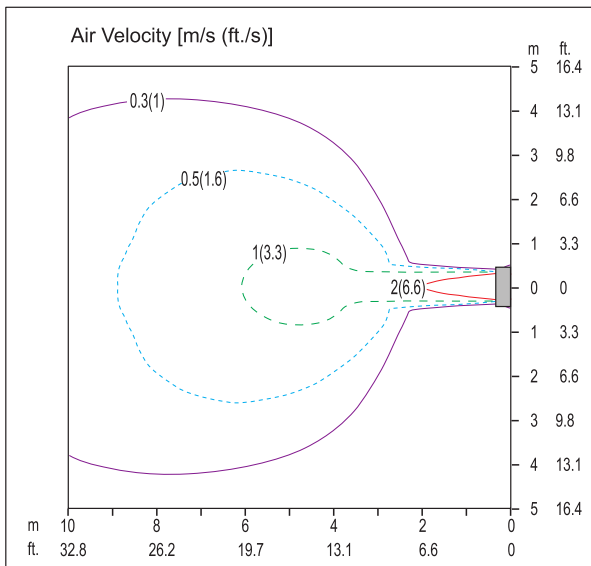


Side View

Discharge Angle : 35° (From the floor ▾)

Vertical Louver : Center

Fan Speed : Power



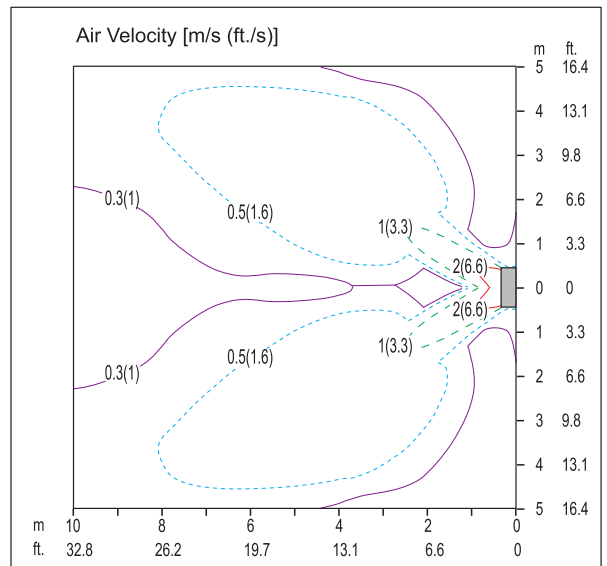
Top View

Discharge Angle : 35° (From the floor ▾)

Vertical Louver : Center

Fan Speed : Power

Air Speed 0.3 m/s (1 ft./s) Range : 11.5 m (37.7 ft.)



Top View

Discharge Angle : 35° (From the floor ▾)

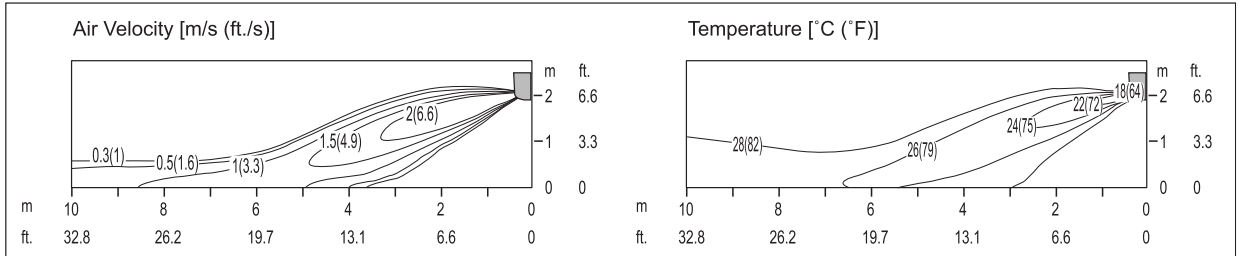
Vertical Louver : Left & Right

Fan Speed : Power

11. Air Flow and Temperature Distributions (Reference Data)

VS242C7.SK0 (S4-Q24K23WE.EC2GCOL)

Cooling

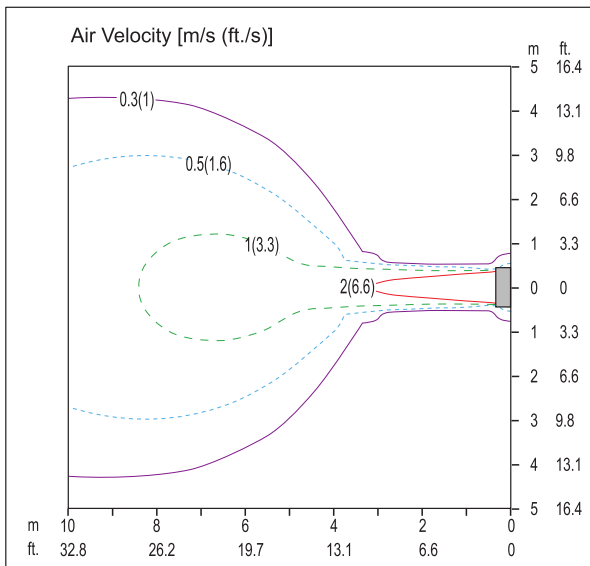


Side View

Discharge Angle : 25° (From the floor ▾)

Vertical Louver : Center

Fan Speed : Power



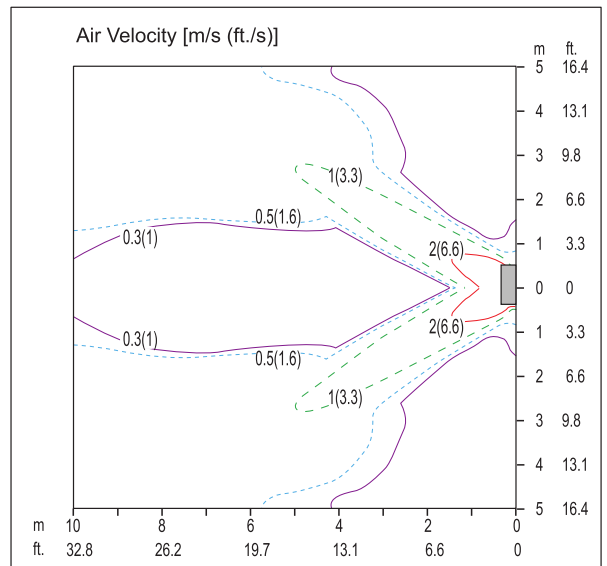
Top View

Discharge Angle : 25° (From the floor ▾)

Vertical Louver : Center

Fan Speed : Power

Air Speed 0.3 m/s (1 ft./s) Range : 15.7 m (51.5 ft.)



Top View

Discharge Angle : 25° (From the floor ▾)

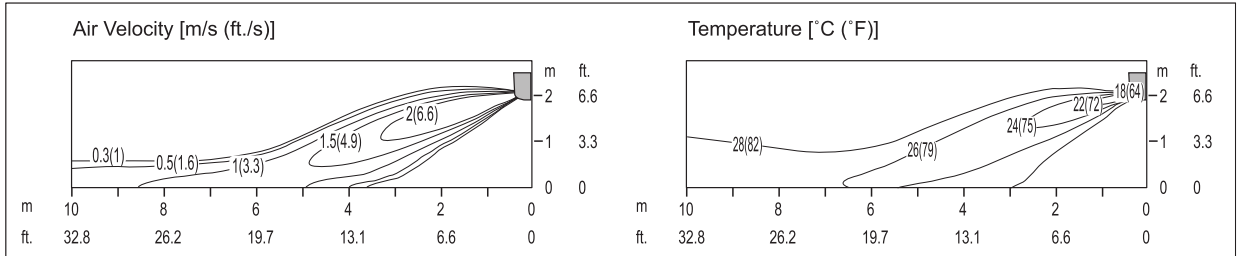
Vertical Louver : Left & Right

Fan Speed : Power

11. Air Flow and Temperature Distributions (Reference Data)

VS182C7.SK0 (S4-Q18KL3WE.EC2GCOL)

Cooling

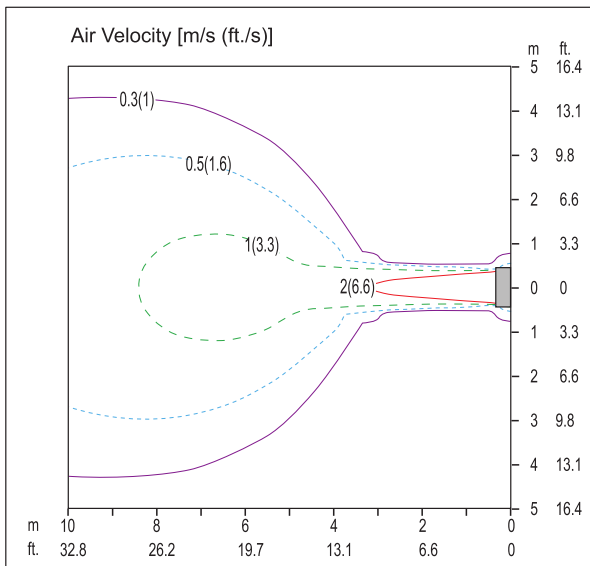


Side View

Discharge Angle : 25° (From the floor ▾)

Vertical Louver : Center

Fan Speed : Power



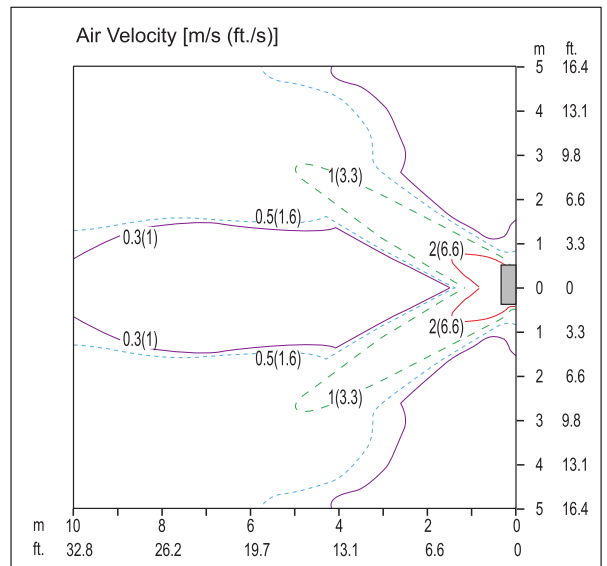
Top View

Discharge Angle : 25° (From the floor ▾)

Vertical Louver : Center

Fan Speed : Power

Air Speed 0.3 m/s (1 ft./s) Range : 15.7 m (51.5 ft.)



Top View

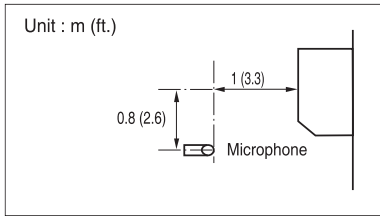
Discharge Angle : 25° (From the floor ▾)

Vertical Louver : Left & Right

Fan Speed : Power

12. Sound Levels (Reference Data)

12.1 Sound Pressure Level (Indoor Unit)



Note

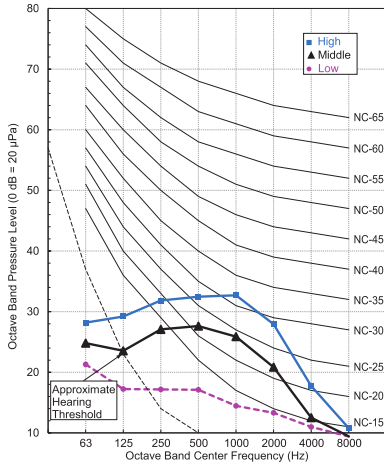
- Sound measured at 1 m (3.3 ft.) away from the unit.
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- Reference acoustic pressure 0 dB=20 μ Pa.
- Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.
- The operating conditions are assumed to be standard.
- Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.
- Sound level is measured in an anechoic room and may be different according to the test condition or equipment.

Model	Sound Levels [dB (A)]					
	Cooling			Heating		
	H	M	L	H	M	L
VS092C7.NJ0 (S4NQ09JA3WE.EC2GCOL)	42	36	28	-	-	-
VS242C7.NK0 (S4NQ24K23WE.EC2GCOL)	47	42	38	-	-	-
VS182C7.NK0 (S4NQ18KL3WE.EC2GCOL)	45	43	38	-	-	-

12. Sound Levels (Reference Data)

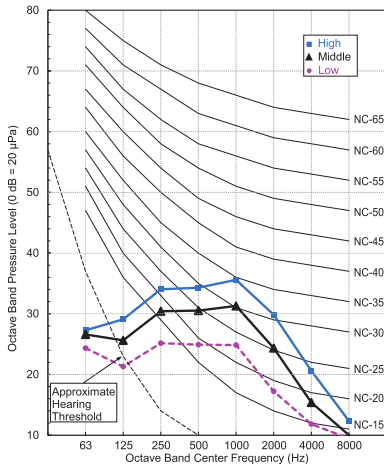
VS092C7.NJ0 (S4NQ09JA3WE.EC2GCOL)

Cooling



VS242C7.NK0 (S4NQ24K23WE.EC2GCOL)

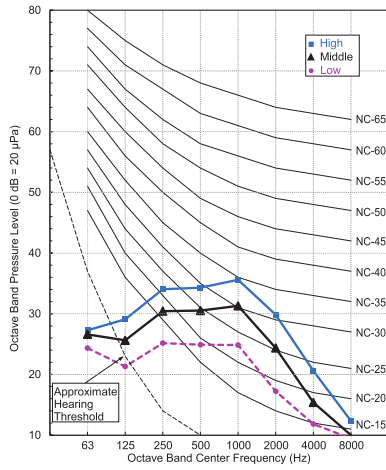
Cooling



12. Sound Levels (Reference Data)

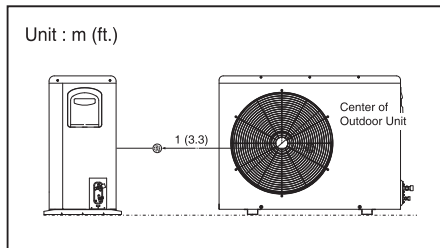
VS182C7.NK0 (S4NQ18KL3WE.EC2GCOL)

Cooling



12. Sound Levels (Reference Data)

12.2 Sound Pressure Level (Outdoor Unit)



Note

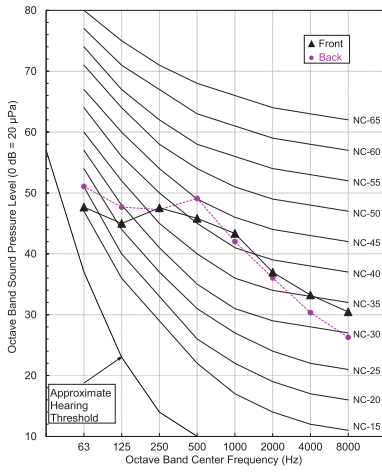
- Sound measured at 1 m (3.3 ft.) away from the unit.
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- Reference acoustic pressure 0 dB=20 μPa.
- Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.
- The operating conditions are assumed to be standard.
- Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.
- Sound level is measured in an anechoic room and may be different according to the test condition or equipment.

Model	Sound Levels [dB (A)]	
	Cooling	Heating
	H	H
VS092C7.UJ0 (S4UQ09JA3WE.EC2GCOL)	53	-
VS242C7.UK0 (S4UQ24K23WE.EC2GCOL)	55	-
VS182C7.UK0 (S4UQ18KL3WE.EC2GCOL)	54	-

12. Sound Levels (Reference Data)

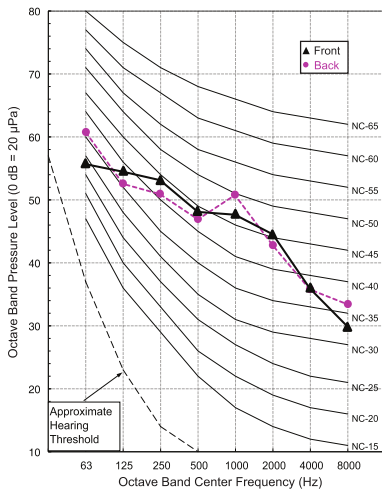
VS092C7.UJ0 (S4UQ09JA3WE.EC2GCOL)

Cooling



VS242C7.UK0 (S4UQ24K23WE.EC2GCOL)

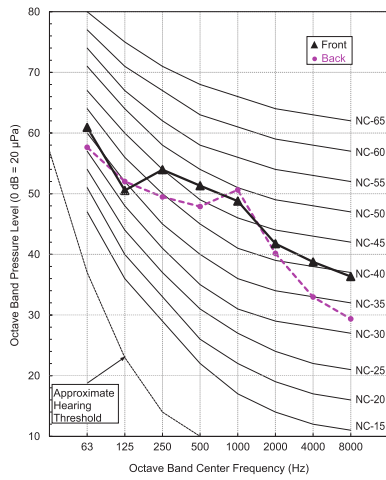
Cooling



12. Sound Levels (Reference Data)

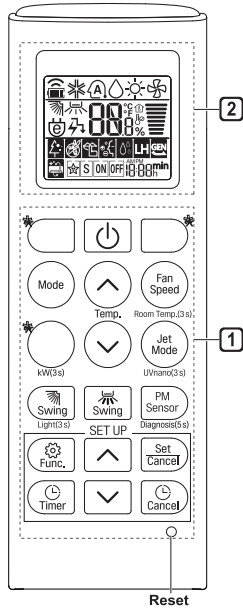
VS182C7.UK0 (S4UQ18KL3WE.EC2GCOL)

Cooling



13. Remote Controller

Wireless Remote Controller



1 Button	2 Display Screen	Description
	-	To turn on/off the air conditioner.
	88 °	To adjust the desired room temperature in cooling, heating or auto changeover mode.
Mode		To select the cooling mode.
		To select the heating mode.
		To select the dehumidification mode.
		To select the fan mode.
Jet Mode		To change room temperature quickly.
Fan Speed		To adjust the fan speed.
		To adjust the air flow direction vertically or horizontally.

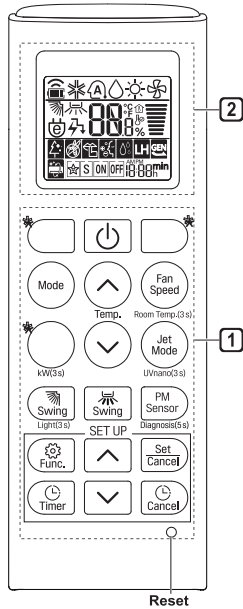
NOTE

- * buttons may be changed according to the type of model.
- When connected to the Multi Outdoor unit, the Energy Display, Energy Control, Silent and Smart Diagnosis function may not be supported.
- Some functions may not be supported, depending on the model.
- Press the **Set/Cancel** button to operate the selected **Func.**

1 Button	2 Display Screen	Description
		To turn on/off air conditioner automatically at desired time.
Set/Cancel	-	To set/cancel the special functions and timer.
	-	To cancel the timer settings.
	-	To adjust time.
Light(3 s)	-	To set the brightness of the display on the indoor unit.
Room Temp.(3 s)		To display the room temperature.
*Energy Saving		To minimize power consumption.
*Comfort Air		To adjust the air flow to deflect wind.
kW(3 s)	-	To set whether or not to display information regarding energy.
*Energy Ctrl.		To bring the effect of the power saving.
*Comfort Sleep		To make a comfortable sleeping environment.
Diagnosis (5 s)	-	To conveniently check maintenance information of a product.
PM Sensor	-	To check indoor dust status.
*Air Purify		The Ion generator uses millions of ions to help improve indoor air quality.
UVnano(3 s)	-	To keep the fan clean.
		To reduce noise from outdoor units.
		To keep your skin moisturized by generating ion clusters.
		To lower indoor humidity quickly.
		To maintain a minimum room temperature and prevent objects in the room from freezing.
		To scare away a mosquito.
		To remove moisture generated inside the indoor unit.
Reset	-	To initialize the remote control settings.

P/No	Applied Model
AKB75215401	VS092C7.NJ0 (S4NQ09JA3WE.EC2GCOL)

13. Remote Controller



1 Button	2 Display Screen	Description
	-	To turn on/off the air conditioner.
	88 °	To adjust the desired room temperature in cooling, heating or auto changeover mode.
Mode		To select the cooling mode.
		To select the heating mode.
		To select the dehumidification mode.
		To select the fan mode.
Jet Mode		To select the auto changeover/auto operation mode.
Fan Speed		To change room temperature quickly.
		To adjust the fan speed.
		To adjust the air flow direction vertically or horizontally.

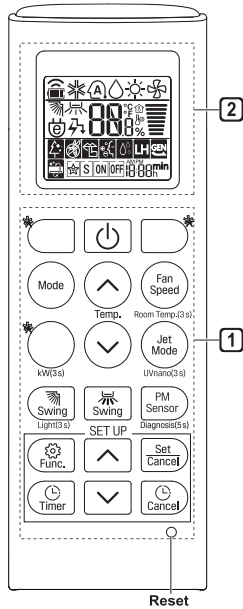
NOTE

- * buttons may be changed according to the type of model.
- When connected to the Multi Outdoor unit, the Energy Display, Energy Control, Silent and Smart Diagnosis function may not be supported.
- Some functions may not be supported, depending on the model.
- Press the **Set/Cancel** button to operate the selected **Func.**

1 Button	2 Display Screen	Description
		To turn on/off air conditioner automatically at desired time.
Set/Cancel	-	To set/cancel the special functions and timer.
	-	To cancel the timer settings.
	-	To adjust time.
Light(3 s)	-	To set the brightness of the display on the indoor unit.
Room Temp.(3 s)		To display the room temperature.
*Energy Saving		To minimize power consumption.
*Comfort Air		To adjust the air flow to deflect wind.
kW(3 s)	-	To set whether or not to display information regarding energy.
*Energy Ctrl.		To bring the effect of the power saving.
*Comfort Sleep		To make a comfortable sleeping environment.
Diagnosis (5 s)	-	To conveniently check maintenance information of a product.
PM Sensor	-	To check indoor dust status.
*Air Purify		The Ion generator uses millions of ions to help improve indoor air quality.
UVnano(3 s)	-	To keep the fan clean.
		To reduce noise from outdoor units.
		To keep your skin moisturized by generating ion clusters.
		To lower indoor humidity quickly.
		To maintain a minimum room temperature and prevent objects in the room from freezing.
		To scare away a mosquito.
		To remove moisture generated inside the indoor unit.
		To make a comfortable sleeping environment.
Reset	-	To initialize the remote control settings.

P/No	Applied Model
AKB75215401	VS242C7.NK0 (S4NQ24K23WE.EC2GCOL)

13. Remote Controller



1 Button	2 Display Screen	Description
	-	To turn on/off the air conditioner.
	88 °	To adjust the desired room temperature in cooling, heating or auto changeover mode.
Mode		To select the cooling mode.
		To select the heating mode.
		To select the dehumidification mode.
		To select the fan mode.
Jet Mode		To select the auto changeover/auto operation mode.
Fan Speed		To change room temperature quickly.
		To adjust the fan speed.
		To adjust the air flow direction vertically or horizontally.

NOTE

- * buttons may be changed according to the type of model.
- When connected to the Multi Outdoor unit, the Energy Display, Energy Control, Silent and Smart Diagnosis function may not be supported.
- Some functions may not be supported, depending on the model.
- Press the **Set/Cancel** button to operate the selected **Func.**

1 Button	2 Display Screen	Description
		To turn on/off air conditioner automatically at desired time.
Set/Cancel	-	To set/cancel the special functions and timer.
	-	To cancel the timer settings.
	-	To adjust time.
Light(3 s)	-	To set the brightness of the display on the indoor unit.
Room Temp.(3 s)		To display the room temperature.
*Energy Saving		To minimize power consumption.
*Comfort Air		To adjust the air flow to deflect wind.
kW(3 s)	-	To set whether or not to display information regarding energy.
*Energy Ctrl.		To bring the effect of the power saving.
*Comfort Sleep		To make a comfortable sleeping environment.
Diagnosis (5 s)	-	To conveniently check maintenance information of a product.
PM Sensor	-	To check indoor dust status.
*Air Purify		The Ion generator uses millions of ions to help improve indoor air quality.
UVnano(3 s)	-	To keep the fan clean.
		To reduce noise from outdoor units.
		To keep your skin moisturized by generating ion clusters.
		To lower indoor humidity quickly.
		To maintain a minimum room temperature and prevent objects in the room from freezing.
		To scare away a mosquito.
		To remove moisture generated inside the indoor unit.
		To make a comfortable sleeping environment.
Reset	-	To initialize the remote control settings.

P/No	Applied Model
AKB75215401	VS182C7.NK0 (S4NQ18KL3WE.EC2GCOL)

14. Installation

14.1 Important Safety Instructions

The following safety guidelines are intended to prevent unforeseen risks or damage from unsafe or incorrect operation of the appliance.

The guidelines are separated into 'WARNING' and 'CAUTION' as described below.



- ⚠ This symbol is displayed to indicate matters and operations that can cause risk. Read the part with this symbol carefully and follow the instructions in order to avoid risk.

⚠ WARNING

This indicates that the failure to follow the instructions can cause serious injury or death.

⚠ CAUTION

This indicates that the failure to follow the instructions can cause the minor injury or damage to the product.

⚠ WARNING

To reduce the risk of explosion, fire, death, electric shock, injury or scalding to persons when using this product, follow basic precautions, including the following :

- The information contained in the manual is intended for use by a qualified service technician who is familiar with the safety procedures and equipped with the proper tools and test instruments.
- The appliance shall be installed in accordance with local and national wiring regulations.
- Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
- If the supply cord is damaged, it must be replaced by the manufacturer or its service agents or similarly qualified person in order to avoid a hazard.
- Appliance shall be disconnected from its power source during service and when replacing parts.
- Failure to read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.
- Check that the appliance's voltage level is 90 % or higher than the rated voltage. To check it, refer to the label attached to the side of the appliance.
- Do not install the appliance on an unstable surface or in a place where there is danger of it falling.
- This appliance must be grounded. In the event of malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for electric current.
- Improper connection of the equipment-grounding conductor can result in risk of electric shock. Check with a qualified electrician or service personnel if you are in doubt as to whether the appliance is properly grounded.
- If the power supply cable is damaged or the cable connection is loose, do not use the power supply cable and contact an authorized service center.
- Do not connect the ground wire to a gas pipe, a lightning rod, or a telephone ground wire.
- Do not share the power supply for this unit with other with other products or devices, it must be a dedicated power source for this this appliance.
- Do not modify or extend the power cable.
- Ensure the power cable is secure so that it does not come out while the appliance is operating.
- Do not touch the power cable or the appliance controls with wet hands.
- Cut the power during a severe thunderstorm or lightning or when not in use for a long period of time.
- Do not grab the power cable when removing the plug, but rather hold the power plug tightly.
- Do not bend the power cable excessively or place a heavy object on it.
- Do not turn on the circuit breaker or power when covers are removed or opened.
- Make sure that the pipe and the power cable connecting the indoor and outdoor units are not pulled too tight when installing the appliance.
- Install dedicated electric outlet and circuit breaker for the appliance.
- Make sure to close the cover of the control box after connecting the wiring to the appliance.
- Loose connections may cause electrical sparks, injury, and death.

14. Installation

- Do not install the appliance in a place where flammable liquids or gases such as gasoline, propane, paint thinner, etc., are stored.
- Only use the refrigerant designated on the label, do not put any foreign substances into the appliance.
- Use non-flammable gas (nitrogen) to check for leak and to purge air.
- Inert gas (oxygen free nitrogen) should be used when you checking for leaks, cleaning or repairs of pipes etc. If you are using combustible gases including oxygen, appliance may have the risk of fires and explosions.
- Do not use copper pipes which are deformed. Otherwise, the expansion valve or capillary tube may become blocked with contaminants.
- When installing or relocating the appliance, consult with a qualified technician to set up the appliance. The appliance should not be installed by someone without proper qualifications.
- Operating the appliance while it is disconnected to the pipe could result in explosion and damage. Use the appliance after connecting it to the pipe once the appliance has been relocated and the refrigerant circuit repaired.
- Do not place a heater or other heating appliances near the power cable.
- Keep any required ventilation openings clear of obstruction.
- Use only refrigerant grade pipe specific for R410A refrigerant. Do not use R22 products, which have lower pressure ratings and can result in excessive pressure, explosion and injury.

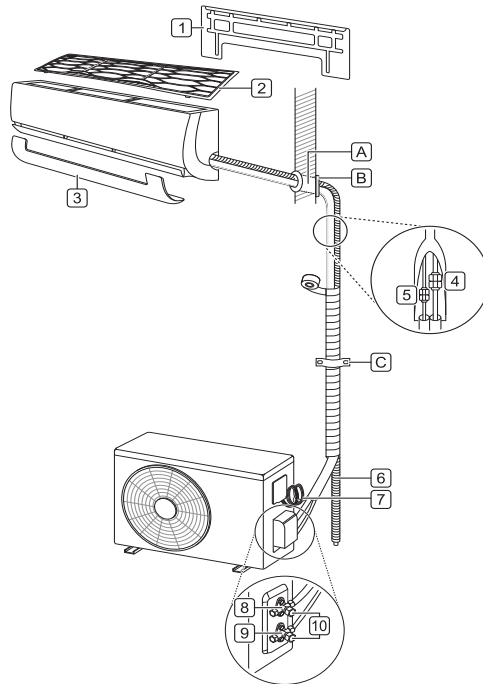
CAUTION

To reduce the risk of minor injury to persons, malfunction, or damage to the product or property when using this product, follow basic precautions, including the following :

- Install at places where it can endure the weight and vibration/noise of the outdoor unit.
- Install the appliance in a place where the noise from the outdoor unit or the exhaust air will not inconvenience the neighbors. Failure to do so may result in conflict with the neighbors.
- Ensure the appliance is installed level. Otherwise, it may cause vibration or water leakage.
- Install the drain hose properly for the smooth drainage of water condensation.
- Do not touch the leaking refrigerant during installation or repair.
- Always check for gas (refrigerant) leakage after installation or repair of appliance.
- Be cautious not to get injured by the sharp edges while installing the appliance or taking it out of its packaging.
- Ensure that you carry by the chassis when you lift the unit.
- This appliance should only be transported by two or more people holding the appliance securely.
- Safely dispose of packing materials such as screws, nails or batteries using proper packaging after installation or repair.
- 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.
- Do not use the appliance for special purposes, such as preserving foods, works of art, and etc. It is an appliance for consumer purposes, not a precision refrigeration system. There is risk of damage or loss of property.

14. Installation

14.2 Product Overview



Parts

1	Installation Plate	6	Drain Hose
2	Air Filter	7	Power Supply Cable
3	Decor	8	Gas Service Valve
4	Gas Pipe (Larger Pipe)	9	Liquid Service Valve
5	Liquid Pipe (Smaller Pipe)	10	(Gas/Liquid) Service Valve Cap

Local Purchases

It is highly recommended that you install the following parts.

A	Sleeve
B	Sealant
C	Clamp

Note

- This feature could be different depending on models.
- If needed, additional pipes, drain hoses, and power cables must be purchased separately.

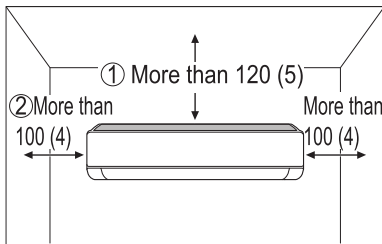
14. Installation

14.3 Installation Place

Indoor Unit

- Install the indoor unit on a strong and hard wall.
- Install the indoor unit in a spot with good drainage and good accessibility to the pipe connected to the outdoor unit.
- Maintain a clearance of at least ① from the right and left sides of the indoor unit.
- Maintain a clearance of at least ② between the top of the indoor unit and the ceiling.
- Maintain a clearance of at least 2 m (6.5 ft.) from the floor for adequate clearance.
- Do not install the indoor unit near heaters or heating apparatuses.
- Do not install the indoor unit near an obstacle that hinders airflow.
- Do not install the indoor unit near an exit.
- Do not install the indoor unit where it can be exposed to direct sunlight.

Unit: mm (inch)



14. Installation

Outdoor Unit

- Install the outdoor unit in a location where the floor is firm and even.
- When placing the outdoor unit under an overhang, awning, sunroof or other “roof-like structure”, ensures that heat radiation from the condenser is not restricted around the unit.
- Do not place the unit where animals and/or plants will be in the path of the warm air, or where the warm air and/or noise will disturb neighbors.
- Sunroof is recommended for installations that are exposed to direct sunlight and for installations in cold climates with heavy snow which can accumulate on top of outdoor unit.
- Take the weight of the air conditioner into account and select a place where noise and vibration are minimum.
- Install the outdoor unit somewhere the technician can easily access it for repairs or maintenance.
- Do not install the outdoor unit in a location exposed to saline conditions, such as coastal areas, or sulfuric steam, such as near a hot spring.
- Do not install the outdoor unit in a location exposed to high winds.
- Observe the below clearance requirements.

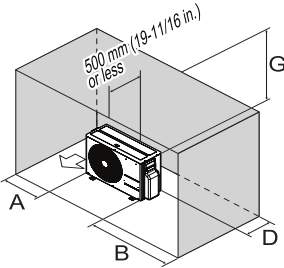
Note

- Normal clearances are recommended for service and cleaning access.
- If you do not meet the minimum clearances for installation, the unit does not guarantee the reliability of the unit.
- If the outdoor unit is installed between normal and minimum clearances, capacity can be decreased about 10%.

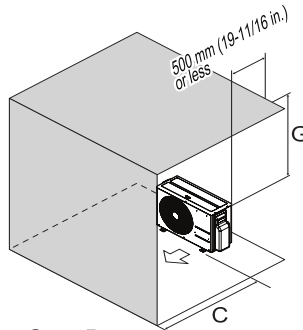
14. Installation

Outdoor unit service access and allowable clearances

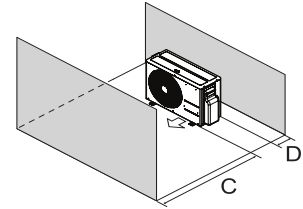
Case 1



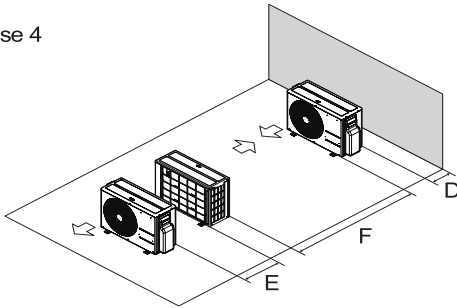
Case 2



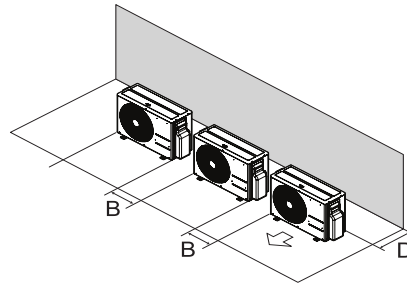
Case 3



Case 4



Case 5



Unit : mm		A	B	C	D	E	F	G
Case1	Normal	300	600	-	300	-	-	-
	Minimum	100	250	-	100	-	-	1000
Case2	Normal	-	-	500	-	-	-	-
	Minimum	-	-	350	-	-	-	1000
Case3	Normal	-	-	500	300	-	-	-
	Minimum	-	-	350	100	-	-	-
Case4	Normal	-	-	-	300	600	-	-
	Minimum	-	-	-	100	200	2000	-
Case5	Normal	-	600	-	300	-	-	-
	Minimum	-	250	-	100	-	-	-

Unit : inch		A	B	C	D	E	F	G
Case1	Normal	11-13/16	23-19/32	-	11-13/16	-	-	-
	Minimum	3-15/16	9-27/32	-	3-15/16	-	-	39-3/8
Case2	Normal	-	-	19-11/16	-	-	-	-
	Minimum	-	-	13-25/32	-	-	-	39-3/8
Case3	Normal	-	-	19-11/16	11-13/16	-	-	-
	Minimum	-	-	13-25/32	3-15/16	-	-	-
Case4	Normal	-	-	-	11-13/16	23-19/32	-	-
	Minimum	-	-	-	3-15/16	7-7/8	78-3/4	-
Case5	Normal	-	23-19/32	-	11-13/16	-	-	-
	Minimum	-	9-27/32	-	3-15/16	-	-	-

14. Installation

Precautions about installation in regions with extreme snowfall and cold temperatures

To ensure the outdoor unit operates properly, certain measures are required in locations where there is a possibility of heavy snowfall or severe wind chill or cold :

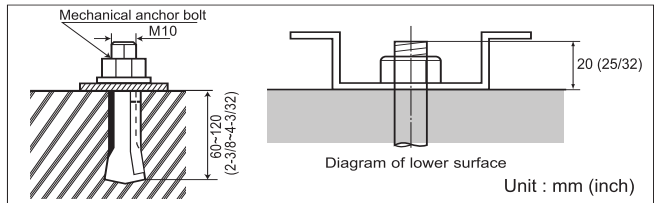
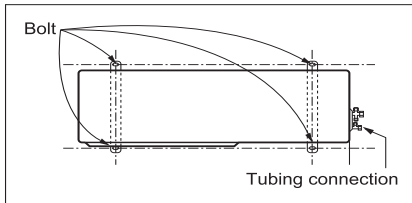
- Prepare for severe winter wind chills and heavy snowfall, even in areas of the country where these are unusual phenomena.
- Position the outdoor unit so that its airflow fans are not buried by direct, heavy snowfall. If snow piles up and blocks the airflow, the system may malfunction.
- Remove any snow that has accumulated 100 mm (4 in.) or more on the top of the outdoor unit.
- Place the outdoor unit on a raised platform at least 500 mm (20 inches) higher than the average annual snowfall for the area. If the frame width is wider than the outdoor unit, snow may accumulate.
- Install a snow protection hood.
- To prevent snow and heavy rain from entering the outdoor unit, install the suction and discharge ducts facing away from direct winds.
- Additionally, the following conditions should be taken into consideration when the unit operates in defrost mode :
If the outdoor unit is installed in a highly humid environment (near an ocean, lake, etc.), ensure that the site is well ventilated and has a lot of natural light. (Example : Install on a rooftop.)

14. Installation

14.4 Installing the Outdoor Unit

Fixing the Outdoor Unit with Bolt Construction Work

Fix the outdoor unit firmly to prevent it from falling and dropping.

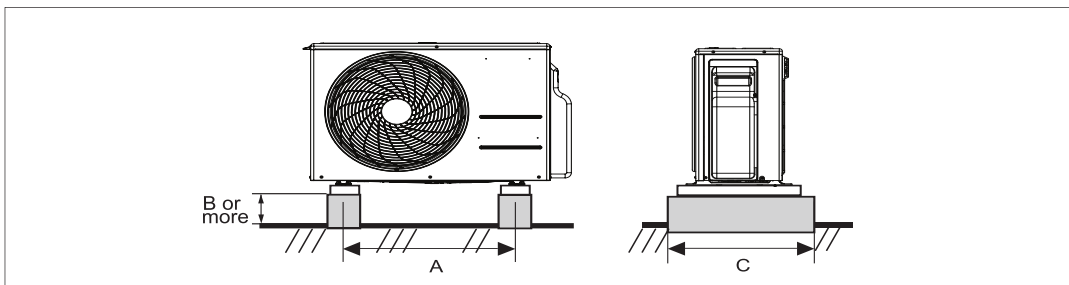


Note

- If you install the outdoor unit on a wall, roof, or rooftop, make sure it's mounted on a suitable frame.
- If the outdoor unit vibrates excessively, secure it using anti-vibration rubber between the unit's feet and the mounting frame.

Foundation

For good drain of outdoor unit, keep the bottom height from icing upward.



Unit : mm		Foundation			Leg	
Model	Tool	A	B	C	Material	Thickness
VS092C7.UJ0	UA3	463	100	280	SGCC	1
VS242C7.UK0	U24A	586	100	400	SGCC	1
VS182C7.UK0	UL2	558	100	370	SGCC	1.2

Unit : inch		Foundation			Leg	
Model	Tool	A	B	C	Material	Thickness
VS092C7.UJ0	UA3	18-7/32	3-15/16	11-1/32	SGCC	1/32
VS242C7.UK0	U24A	23-1/16	3-15/16	15-3/4	SGCC	1/32
VS182C7.UK0	UL2	21-31/32	3-15/16	14-9/16	SGCC	1/16

14. Installation

Connecting the Drain Plug

If you need to install a drain hose onto an outdoor unit, connect the drain hose after inserting the drain plug with drain washer through the drain hole on the bottom of the outdoor unit.



A : Drain Plug



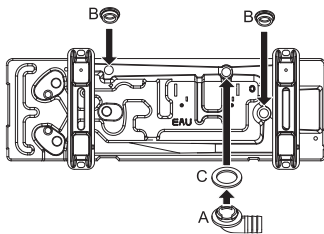
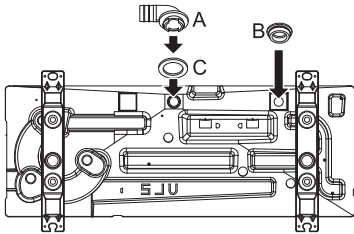
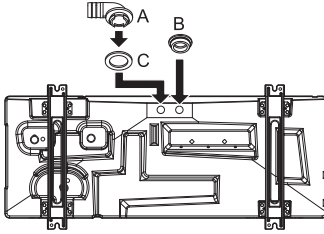
B : Drain Cap



C : Drain Washer

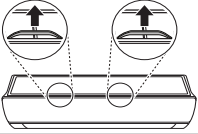
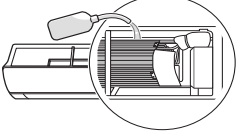
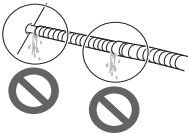
Note

- If the hole is not in use, block it with the drain cap.
- The quantity and position of the drain cap could be different depending on models.
- In cold areas, do not use the drain hose on the outdoor unit because the water drained out from the drain hose can freeze, which may cause malfunctioning by damaging the heat exchanger.

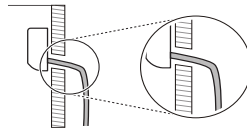
VS092C7.UJ0	VS182C7.UK0
	
	

14. Installation

14.5 Checking the Drainage

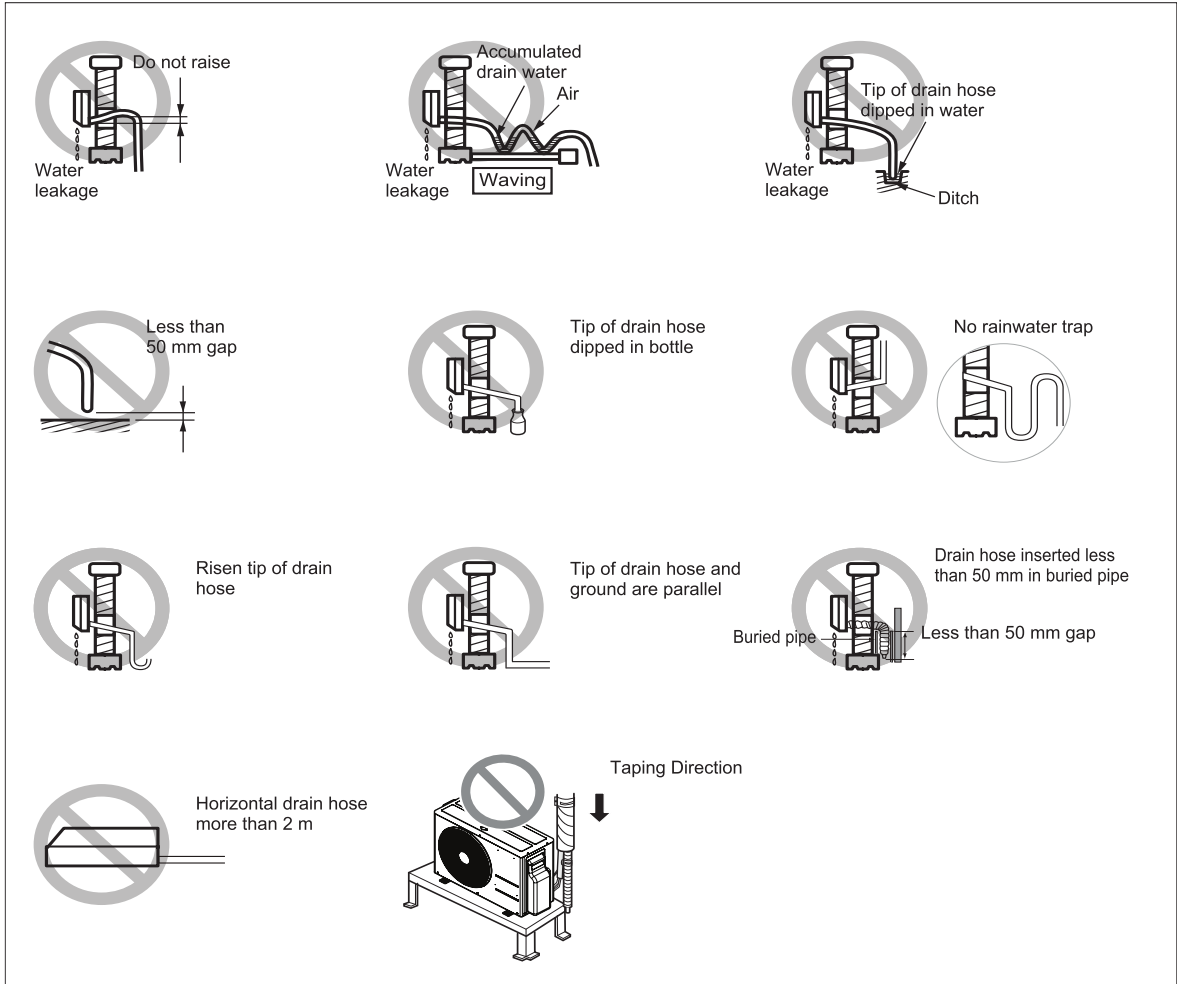
<p>1. Remove the filter.</p> <ul style="list-style-type: none">• Pull the filter up and out towards you.• Do not touch the metal part of the appliance when removing the filter.	
<p>2. Pour a cup of water into the back of the evaporator.</p>	
<p>3. Check the drainage condition.</p> <ul style="list-style-type: none">• Check whether there is any leakage from either the drain hose joint or the extended hose joint.• Check the water is flowing out through the drain hose.• If there is no leakage, but no water is flowing, pour a proper amount of water again.	
<p>4. Insert the filter again.</p>	

Example of Correct Drain Hose Installation



14. Installation

Example of Incorrect Drain Hose Installation



Note

- If the drain hose is not installed properly, water can leak indoors.
 - If the drain hose is installed at a higher position than the indoor unit
 - If the drain hose is entangled or kinked
 - If the end of the drain hose is dipped in water
 - If the gap between the end of the drain hose and the bottom is lower than 50 mm

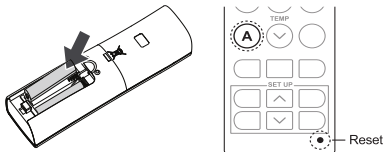


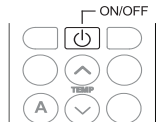
14. Installation

14.6 Check List and Installer Code

Check test item after installation

No.	Test Items	Check
1	Indoor unit is hooked to the installation plate properly.	
2	The gas and liquid service valves are fully opened.	
3	There is no refrigerant gas leakage.	
4	System is properly grounded. (No electrical leakage)	
5	The connection cable is clamped firmly.	
6	Indoor unit receives remote control commands and operates properly.	
7	Cooling/Heating operation is normal.	
8	There is no abnormal sound.	
9	There is no water leakage.	

How to set the installer code

1	Supply the power to the appliance which is turned off.	-
2	(Method I) Insert a battery with pressing (A) button. (Method II) Press “Reset” with pressing (A) button.	
3	Release (A) button. Then, a display of remote controller change to “00” .	
4	You can set a code by pressing the “TEMP” button.	
5	Press “ON/OFF” button to set a code to the appliance. Check buzzer beep.	
6	(Method I) Take out a battery and insert it again. (Method II) Press “Reset” to return to a user mode.	-
7	Cut the power to the appliance. Turn back on the power to the appliance after 30 seconds.	-

14. Installation

14.7 Outdoor Unit Cabin

Outdoor cabin louver requirement

1. Outdoor cabin type : Manual door open type
2. Louver angle : Less than 15° on the horizontal base
3. Louver interval: Over 100 mm (3-15/16 inch) (Recommend)
4. Louver shape : Wing type or plane type

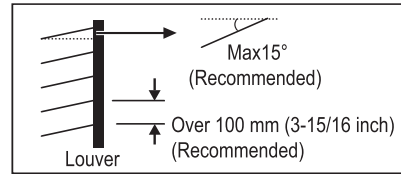
CAUTION

- Opening rate and suction should be considered for louvered outdoor room.
- Do not use 'S' type louver.

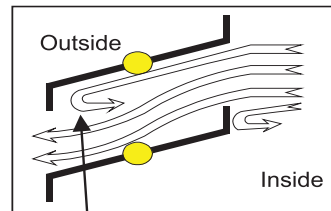
Note

The problem in case the louver opening rate is small.

- Noise can occur due to the increased velocity of the air passing through louver blade.
- Noise can occur due to the louver blade vibrations.
- Drop in outdoor fan performance (Excess static pressure damage can cause drop in the performance as well as outdoor heat exchange efficiency).
- In case the louver opening rate is small or there is insufficient air flow exchange, it might stop the air conditioner.



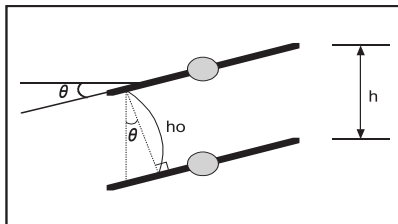
Section



Noise can occur due to the backward flow of the air passing through the louver blade



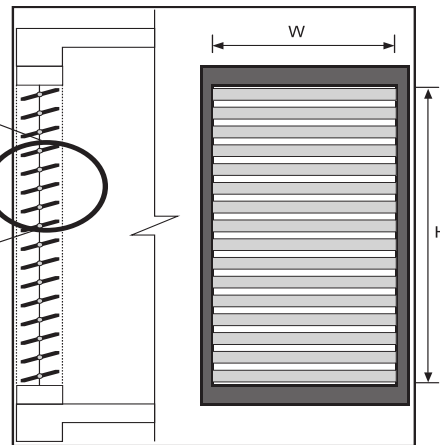
Opening rate by louver radian



$\theta \leq 15^\circ$
 $h_o = h \cdot \cos \theta$
 Total face area(A) = H * W
 Number of open space (N) = (number of louver - 1)
 Effective face area(Af) = $h_o \cdot W \cdot N$
 Louver opening rate (n) = Af/A

∴ Af = A * n

Effective face area of cross section



[Side view]

[Front view]

14. Installation

14.8 Outdoor Unit Max External Static Pressure

Model	Tool	Air Flow Rate		Static Pressure	
		CMM	CFM	N / m ²	inWG
VS092C7.UJ0	UA3	27	954	7.0760	0.0284
VS242C7.UK0	U24A	49	1730	7.0760	0.0284
VS182C7.UK0	UL2	38	1342	10.8796	0.0437



Air Solution
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The air conditioners manufactured by LG have received ISO9001 certificate for quality assurance and ISO14001 certificate for environmental management system. The specifications, designs, and information in this brochure are subject to change without notice.