



CONFIDENTIAL

Room Air Conditioner

SVC MANUAL (Exploded View)

MODEL : S4-W24KE1Z1.EC6GERU (B24TS.SSK)

CAUTION

Before Servicing the unit, read the safety precautions in General SVC manual.
Only for authorized service personnel.

1. Specification

Buyer Model	Set (Indoor / Outdoor)		Unit	B24TS.SSK (B24TS.NSK / B24TS.UE) S4-W24KE1Z1 (S4NW24KE1Z1 / S4UW24KE1Z1)		
Factory Model						
Capacity	Cooling	Min ~ Rated ~ Max	kW	1.26	6.45	7.18
			Btu/h	3,500	22,000	24,500
			kcal/h	-	-	-
	Cooling (T3)	Min ~ Rated ~ Max	kW	-	-	-
			Btu/h	-	-	-
			kcal/h	-	-	-
Heating	Min ~ Rated ~ Max	kW	1.26	6.45	7.32	
		Btu/h	3,500	22,000	24,500	
		kcal/h	-	-	-	
Cooling / Heating	Rated	kW	-	-	-	
		Btu/h	-	-	-	
		kcal/h	-	-	-	
Power Input	Cooling	Min ~ Rated ~ Max	W	240	2,010	2,420
	Cooling (T3)	Min ~ Rated ~ Max	W	-	-	-
	Heating	Min ~ Rated ~ Max	W	240	1,890	2,500
	Cooling / Heating	Rated, Cooling(50%) ~ Heating(50%) ~ Heating(Low Temp.)	W	-	-	-
	Cooling	Min ~ Rated ~ Max	A	1.14	9.60	11.46
Running Current	Cooling (T3)	Min ~ Rated ~ Max	A	-	-	-
	Heating	Min ~ Rated ~ Max	A	1.14	9.10	11.84
	EER		W/W	-	3.21	-
EER (T3)		(Btu/h)/W	-	10.95	-	
		W/W	-	-	-	
		(Btu/h)/W	-	-	-	
EER Test (SR)		(Btu/h)/W	-	-	-	
SEER		(Btu/h)/W	-	-	-	
P design C			kW	-	-	-
COP			W/W	-	3.41	-
SCOP			(Btu/h)/W	-	11.64	-
P design H			-	-	-	-
APF			kW	-	-	-
Energy Label Grade	Cooling		-	-	-	-
	Heating		-	-	-	-
Annual Energy Consumption	Cooling		kWh/year	-	-	-
	Heating		kWh/year	-	-	-
Operating Wattage			kWh	-	-	-
Standby Wattage			Wh	-	-	-
Annual Energy Cost			\$	-	-	-
Annual Power Fee			THB	-	-	-
Power Supply			Ø, V, Hz	1	220~240	50
Available Voltage Range			V	-	187 ~ 276	-
Power Factor	Cooling		%	-	96.0	-
	Heating		%	-	96.0	-
Moisture Removal			l/h	-	2.0	-
Indoor	Air Flow Rate	Cooling, Max / H / M / L	m³/min	21 / 15 / 12 / 9		
			CFM	741.6 / 529.7 / 423.8 / 317.8		
	Heating, Max / H / M / L	m³/min	21 / 16 / 13 / 9.5			
		CFM	741.6 / 565.0 / 459.1 / 335.5			
	Fan Motor Speed	Cooling, Max/H/M/M/ML/SL	rpm	1750/1350/1250/1150/1050/950/770		
			rpm	1700/1430/1330/1230/1080/930/840		
	Sound Pressure Level	Cooling, Max / H / M / L / SL	dB(A)	55 / 47 / 42 / 37 / 31		
			dB(A)	55 / 47 / 42 / 37		
	Sound Power Level	Cooling, Max / H / M / L	dB(A)	-		
			dB(A)	-		
	Dimensions (W × H × D)	Net	mm	998	330	210
			in.	39.3	13.0	8.3
		Shipping	mm	1145	395	300
			in.	45.1	15.5	11.8
	Weight	Net	kg	-	11.7	-
		Shipping	kg	-	14.1	-
	Exterior Color Code		-	Munsell 7.5BG 10/2		
			-	RAL 9016		
	Operation Range	Cooling	°C DB	18 ~ 32		
			°F DB	64.4 ~ 89.6		
		Cooling	°C WB	12 ~ 23		
			°F WB	53.6 ~ 73.4		
		Heating	°C DB	16 ~ 30		
			°F DB	60.8 ~ 86		
Outdoor	Air Flow Rate	Max	m³/min	50.0	-	
	Fan Motor Speed	Cooling, Min ~ Max	rpm	190	-	
			rpm	190	-	
	Sound Pressure Level	Cooling, Rated	dB(A)	-	55	
			dB(A)	-	57	
	Sound Power Level	Cooling, Rated	dB(A)	-	-	
			dB(A)	-	-	
	Dimensions (W × H × D)	Net	mm	870	655	320
in.			34.3	25.8	12.6	
Shipping		mm	1017	718.6	432	
		in.	40.3	28.3	17.0	
Weight	Net	kg	-	42.7	-	
	Shipping	kg	-	50.0	-	
Max. Fuse Size		A	-	20	-	
		A	-	20	-	
Exterior Color Code		-	Munsell 9.54Y 8.34/1.31			
		-	RAL 9001			
Operation Range	Cooling		°C DB	18 ~ 48		
			°F DB	64.4 ~ 118.4		
	Heating		°C DB	-5 ~ 24		
			°F DB	23 ~ 75.2		
	Heating		°C WB	-5 ~ 18		
			°F WB	23 ~ 65		
Circuit Breaker			A	20	-	
Power Supply Cable			No.	3	-	
			mm	1.5	-	
			AWG	14	-	
Power Supply to Unit			No.	Outdoor	4	
Power and Communication Cable			No.	0.75	-	
			mm	18	-	
			AWG	18	-	
Piping	Size	Liquid	mm	Ø 6.35	-	
	Connections Method	Gas	mm	Ø 15.88	-	
Drain Hose Size		Indoor / Outdoor	mm	Flared / Flared	-	
		O.D. I.D	mm	28.0, 16.4	-	
Between Indoor & Outdoor	Piping Length	Min / Standard / Max	m	3.6	7.5	
		No Charge	m	-	7.5	
	Max. Elevation Difference		m	-	10	-
Refrigerant	Piping Connection Heat Insulation		-	Both liquid and gas pipes		
			-	R410A		
	Type		Pre Charge	g	1400	-
			Additional Charge	g/m	20	-
			Control	-	Capillary	-
			Global Warming Potential	-	2087.5	-
Defrost Method		t-CO ₂ , eq	-	2.92	-	
Tool Code (Chassis)			-	Reverse Cycle	-	
			-	SK / UE	-	

Note

- : No Relation
- For Circuit Breaker Rating, please conform to local standards whenever necessary.
- External 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.
- Due to our policy of innovation some specifications may be changed without notifications.

Conversion Formula
kW = Btu/h x 0.0002931
CFM = CMM x 35.3

2. Function

Category	Function	S4-W24KE1Z1
		B24TS
	Air Supply Outlet	1
	Airflow Direction Control (Left & Right)	5 Steps
	Airflow Direction Control (Up & Down)	6 Steps
	Auto Swing (Left & Right)	○
	Auto Swing (Up & Down)	○
	Fan Speed Steps (Fan / Cool / Heat)	5 / 6 / 6
	Natural Wind (Auto Wind)	○
	Jet Cool / Jet Heat (Power Wind)	○ / ○
	Comfort Air	○
	Prefilter (Washable / Anti-Bacteria)	○
	Deodorizing Filter	X
	3M Micro Dust Filter	○
	3M Multi Protection Filter	X
	Plasma Air Purifier (Ionizer)	○
Installatio	Drain Pump	X
	Hot Start	○
Reliability	Self Diagnosis	○
	De-ice Control (Defrost)	○
	Dry (Dehumidification) Operation	○
	Auto Changeover	○
	Auto Operation (Artificial Intelligence)	X
	Auto Cleaning (Coil Dry)	○
	Auto Restart Operation	○
	Child Lock ¹	X
	Forced Operation	○
	Group Control ¹	X
	Sleep Mode	7hr
	Timer 24hr (On/Off) / 7hr (Off)	○ / X
	Timer (Weekly) ¹	X
	Two Thermistor Control ¹	X
	Low Ambient Operation	○
	Overheating Protection	X
	Low Heating	○
	Voice Control	X
	Smart Scan (PIR)	X
	LG AC Tag On (NFC)	X
	Outdoor Silent Mode	○
	Mosquito Away	X
	Smart Diagnosis	○
	Indoor Unit Display Type	Number Display
	Indoor Unit Display Light	On/Off
	Energy Display	○
Energy Saving	Energy Saving	X
	Active Energy Control (Watt Option)	○
	Gen Mode	X
	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)
		AKB74955603
		Setting Temperature Range (Cooling)
		18~30 °C (64~86 °F)
		Setting Temperature Range (Heating)
		16~30 °C (60~86 °F)
	General Central Controller (Non LGAP)	X
	Network Solution (LGAP)	○
	Dry Contact ²	X
	PDI (Power Distribution Indicator) ²	X
	Outdoor Unit PI 485 ²	X
	Wi-Fi ²	PCRCUDT*
	Water Level Sensor Connection ²	X
	Wind Baffle Kit ²	X
	Sump Heater	X
	Sheath Heater ²	X
	Crank Case Heater	X
	Smart Inverter Monitoring System (SIMs) ²	X
	Mode Lock	X
Others	Temperature Control	Wireless Controller
	DRED (Demand Response Enabling Device)	X

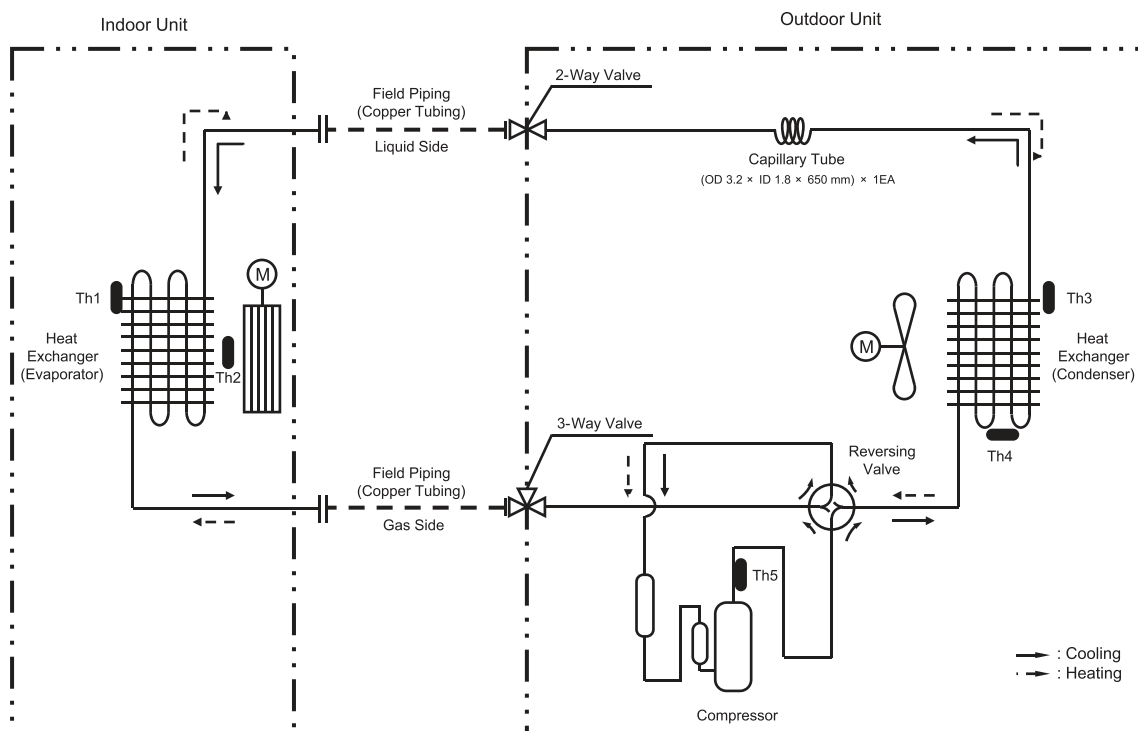
Note

○ : Applied, X : Not available

- When you want to change from Wi-Fi mode to Dry Contact mode, normal operation is applied after 3 minutes.
- For LS***HSV3 and LS***HV3 model when Dry Contact mode is operated, Wi-Fi function can not be used.
- Some specifications may be changed without notifications due to our policy of innovation.
- The air conditioner which DRED is available is capable of DRM1, DRM2 and DRM3 and complies with standard AS/NZS 4755.3.1.

3. Refrigerant Cycle Diagram

Model : S4-W24KE1Z1



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 condensing temperature	
Th5	Thermistor for discharge pipe temperature	CN-TH2 (Outdoor)

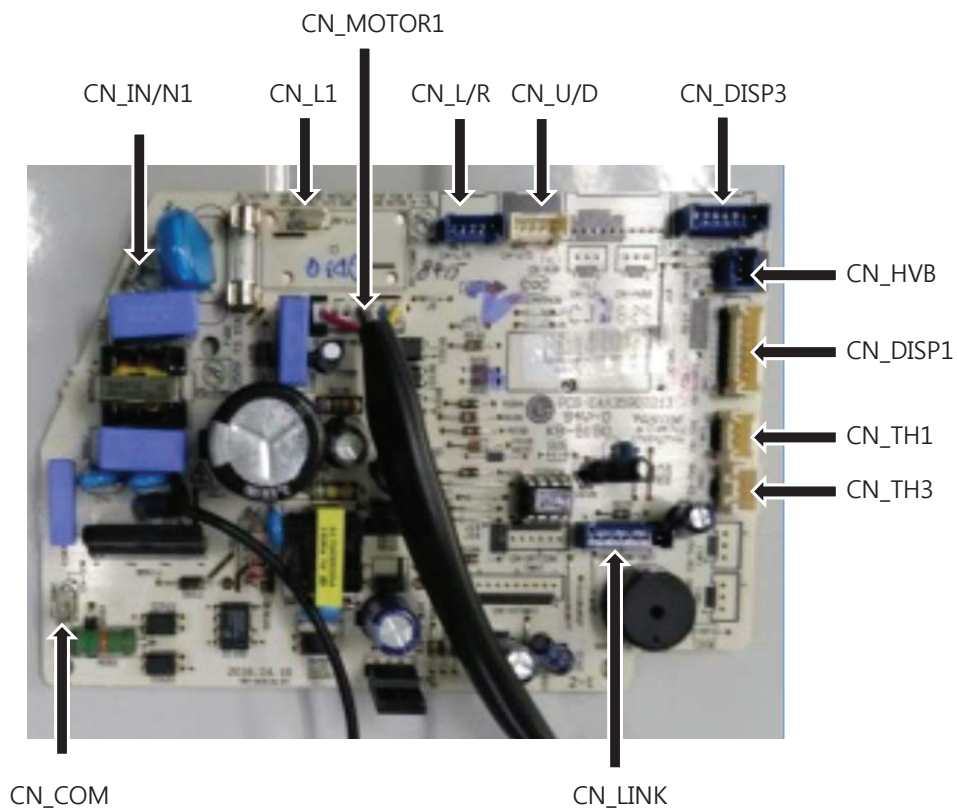
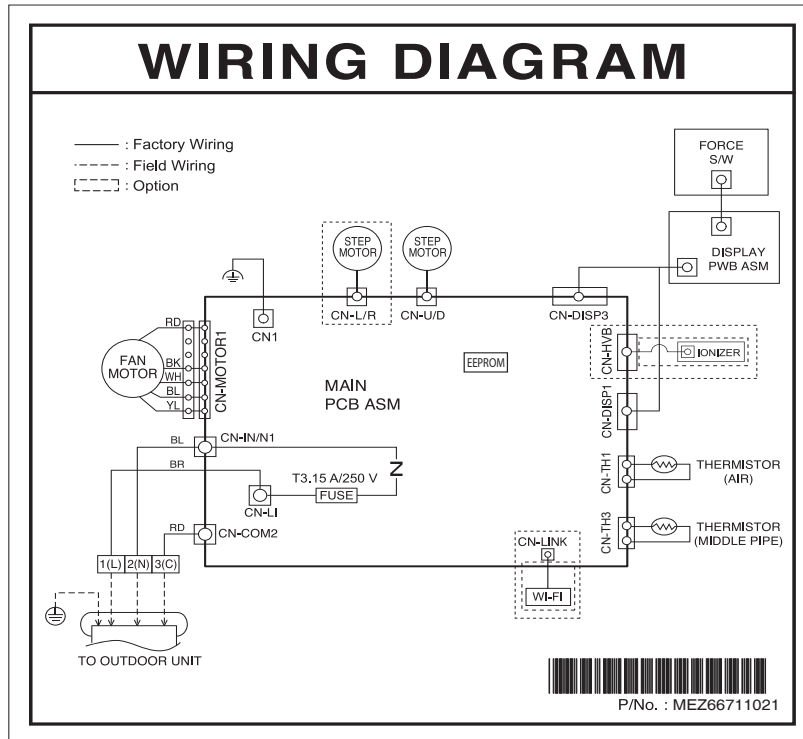
■ Refrigerant Pipe Connection Port Diameters

Model	Gas		Liquid	
	mm	inch	mm	inch
S4-W24KE1Z1	Ø 15.88	Ø 5/8	Ø 6.35	Ø 1/4

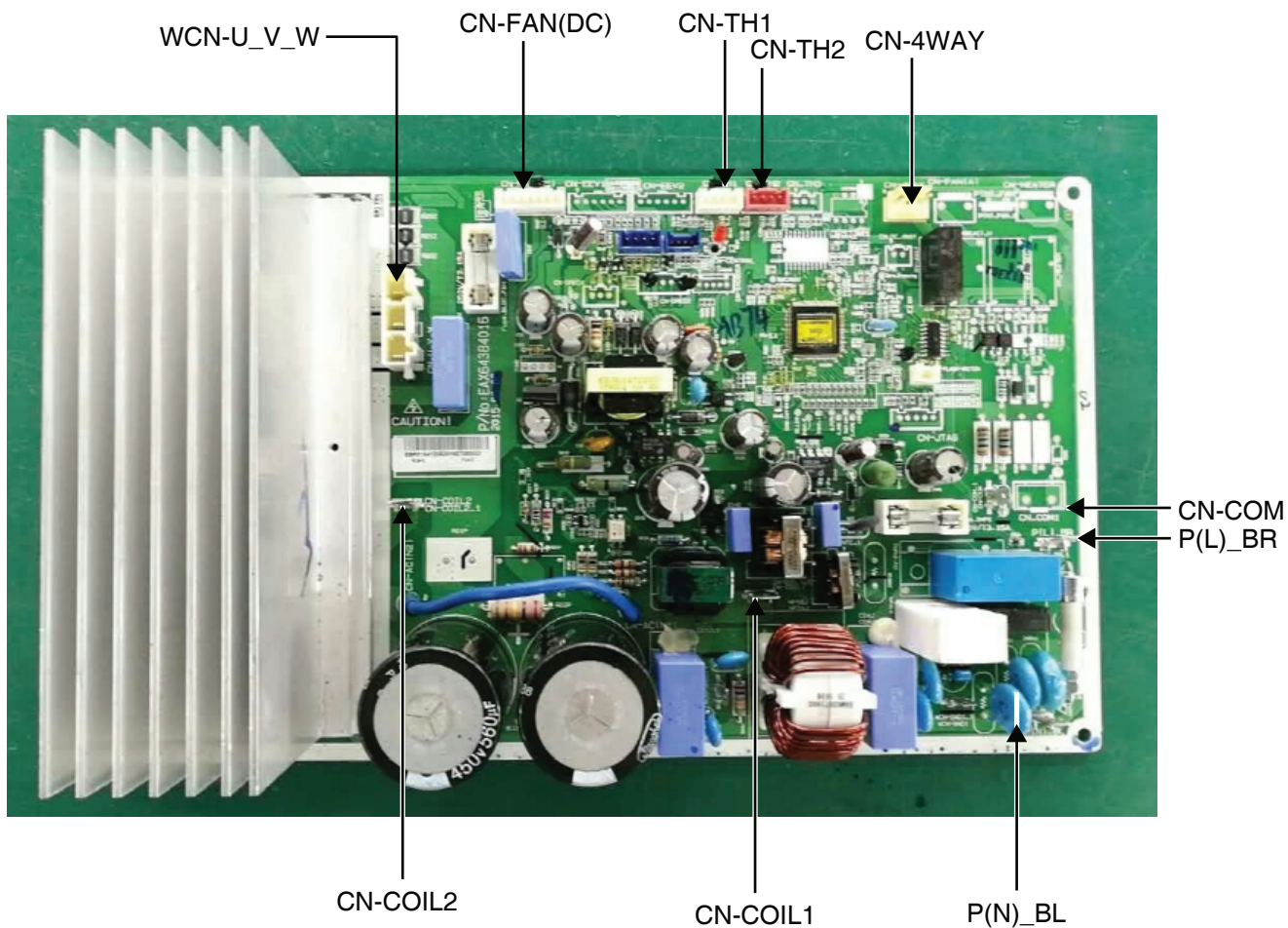
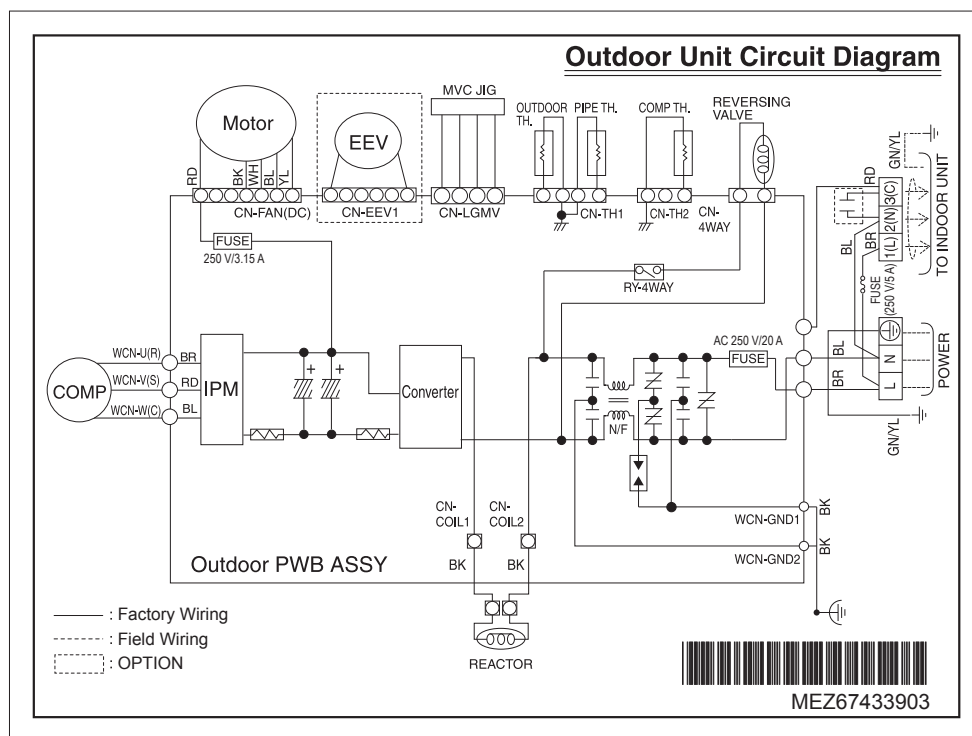
Appendix	Heat Exchanger	Propeller Fan	Cross Flow Fan	Compressor	Accumulator	4 Way Valve
	EEV (Electronic Expansion Valve)	Capillary Tube	2-Way Valve 3-Way Valve	Temperature Sensor	Pressure Sensor	Pressure Switch
	Check Valve	Flare Joint	Muffler	Strainer		

4. Wiring Diagrams

Indoor Unit

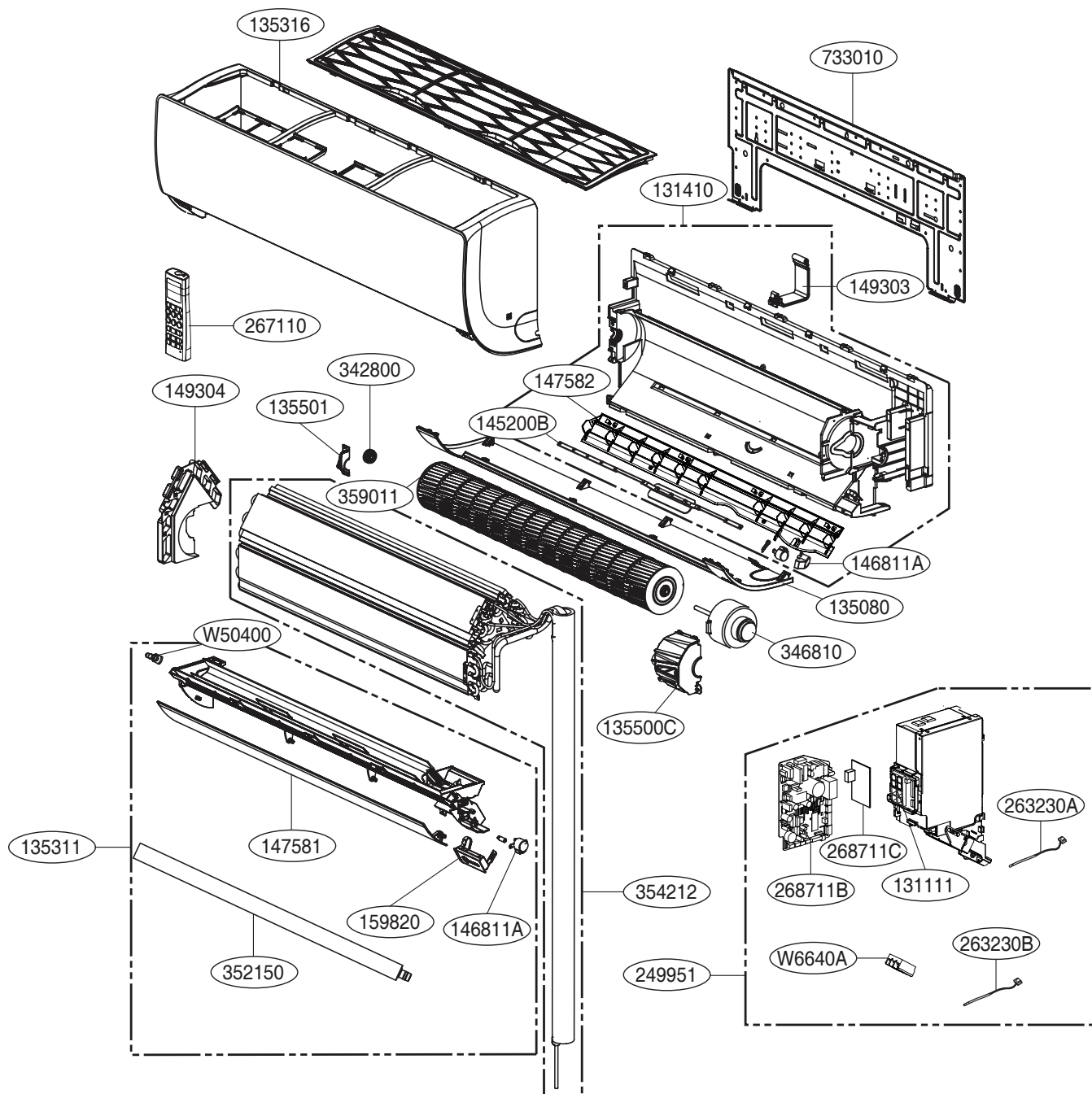


Outdoor Unit



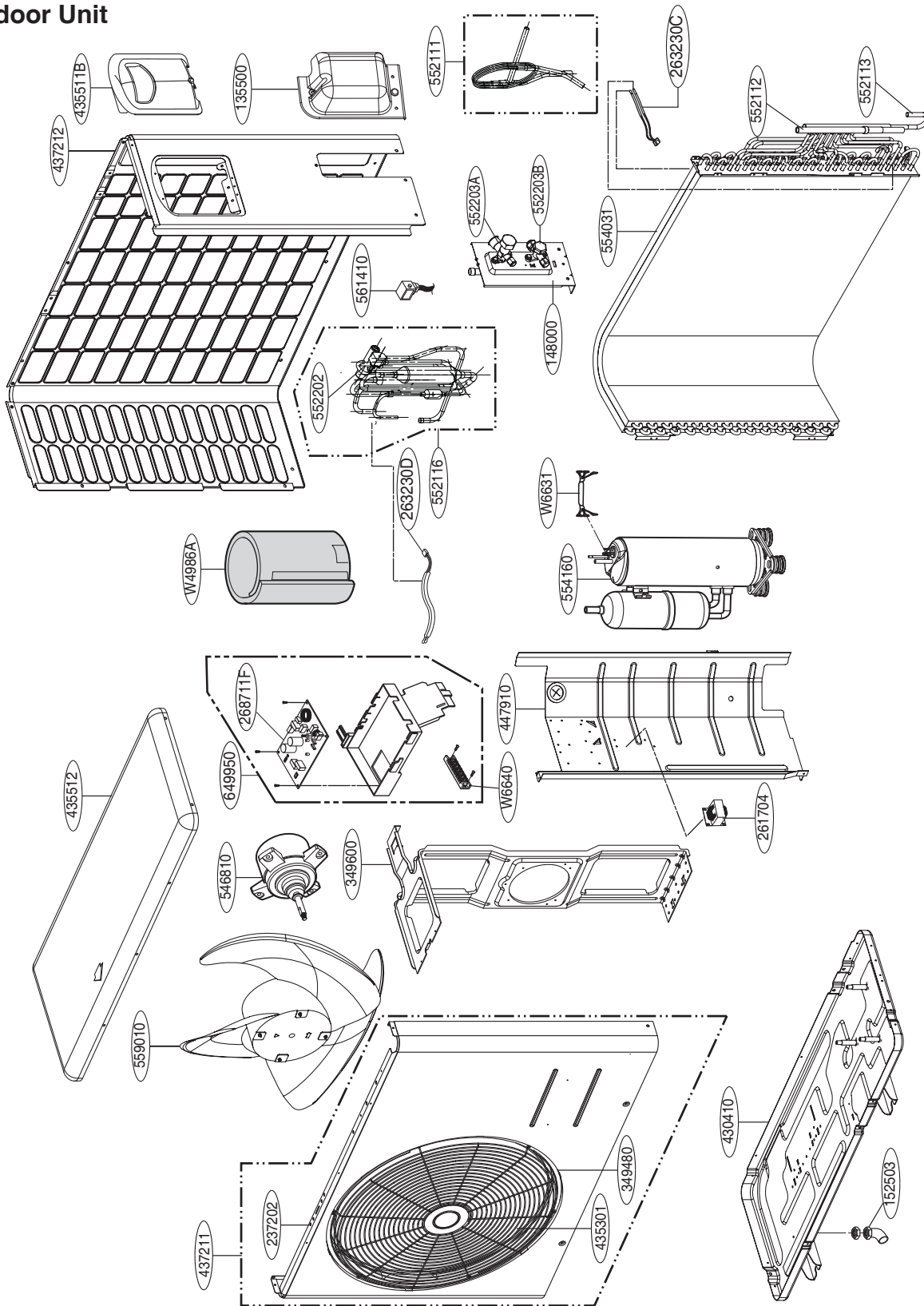
5. Exploded View

Indoor Unit



LOC.	Description	PCB Connector
263230A	Thermistor for indoor air temperature	CN-TH1 (INDOOR)
263230B	Thermistor for evaporator middle temperature	CN-TH3 (INDOOR)

Outdoor Unit



LOC.	Description	PCB Connector
263230C	Thermistor for condensing temperature	CN-TH1 (OUTDOOR)
	Thermistor for outdoor air temperature	
263230D	Thermistor for discharge pipe temperature	CN-TH2 (OUTDOOR)



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