

HEAT CONTROLLER, INC.

**Wall Mounted  
Mini-Split System  
Inverter Single-Zone  
Air Conditioning/Heat Pump**

*Service Manual*

**Model: AS-W1835JZ0[VMH18SB-1]  
AS-W2435JZ0[VMH24SB-1]**

**CAUTION**

Before servicing the unit, read the  
“safety precautions” in this manual.

Only for authorized service personnel.

# 1. Specification

Models		AS-W1835JZ0 [VMH18SB-1]	AS-W2435JZ0 [VMH24SB-1]
Cooling Capacity (Min~Rating~Max)		kW 1.76~5.28~5.80	3.87~7.03~7.74
		Btu/h 6,005~18,000~19,790	13,200~24,000~26,400
Heating Capacity (Min~Rating~Max)		kW 1.40~6.07~6.65	3.37~8.00~8.88
		Btu/h 4,776~20,700~22,690	11,500~27,300~30,300
Power Input	Cooling/Heating	W 1640/1770	2450/2900
Running Current	Cooling/Heating	A 7.3/8.3	11.0/13.0
Starting Current	Cooling/Heating	A 7.3/8.3	11.0/13.0
EER		W/W 3.22	2.87
		Btu/h.W 11	9.8
COP		W/W 3.43	2.76
Power Supply		Ø / V / Hz 1/208-230/60	1/208-230/60
Power Factor		% 98	97
Air Flow Rate	Indoor,Max	mm <sup>3</sup> /min(cfm) 18.5(650)	20.3(717)
	Outdoor,Max	mm <sup>3</sup> /min(cfm) 42(1,483)	58(2,048)
Moisture Removal		l/h 2.1	2.7
Sound Level	Indoor,H/M/L	dB(A)+3 40/38/34	45/40/37
	Outdoor,Max	dB(A)+3 53	54
Refrigerant & Charge(at 7.5m)		g(oz) R410A, 1,200(42)	R410A, 1,800(63)
Additional Refrigerant Charge		g/m(oz/ft) 20(0.22)	30(0.32)
Compressor	Type	Rotary	Rotary
	Model	5CS130XCA03	5KD240XCA21
	Motor Type	BLDC	BLDC
	Oil Type	RB68A	FV50S
	Oil Charge	cc 360	900
	O.L.P Name	-	-
Fan(Indoor)	Type	Cross Flow Fan	Cross Flow Fan
	Motor Output	W 20	24
Fan(outdoor)	Type	Propeller	Propeller
	Motor Type	BLDC	AC Induction
	Motor Output	W 85.3	76.5
Circuit Breaker*		A 20	25
Power Supply Cable		NEC 14	12
Power and Transmission Cable		NEC 18	18
Piping Connections	Liquid Side	mm(in) 6.35(1/4)	9.52(3/8)
	Gas Side	mm(in) 12.7(1/2)	15.88(5/8)
Drain Hose	O.D , I.D	mm(in) 21.5,16(0.85,0.63)	21.5,16(0.85,0.63)
Dimension	Indoor(W*H*D)	mm 1,090*300*178	1,090*300*178
		inch 42.9*11.8*7.0	42.9*11.8*7.0
	Outdoor(W*H*D)	mm 870*655*320	870*800*320
		inch 34.3*25.8*12.6	34.3*34.6*12.6
Net Weight	Indoor	kg(lbs) 13.0(28.7)	13.0(28.7)
	Outdoor	kg(lbs) 48(105.8)	66(145.5)
Operation Range	Cooling(Outdoor)	°C -10 ~ 46 (14.0/114.8)(Low Ambient)	-10 ~ 46 (14.0~114.8)(Low Ambient)
	Heating(Outdoor)	°C -10 ~ 24 (14.0 ~ 75.2)	-10 ~ 24 (14.0 ~ 75.2)
Max. Piping Length		m(ft) 15(49)	30(98)
Max. Elevation Difference		m(ft) 7(23)	15(49)
Tool Code(Chassis)	Indoor + Outdoor	S8 + UE	S8 + UE1
Functions	Temperature Control	Thermistor	Thermistor
	Plasma Filter	-	-
	Prefilter(washable/anti-fungus)	○	○
	Auto Clean	○	○
	CHAOS Wind(Auto Wind)	○	○
	Steps, Fan/Cool/Heat	-/4/4	-/4/4
	Airflow Direction Control(up&down)	Auto	Auto
	Airflow Direction Control(left&right)	Auto	Auto
	Remocon Type	Wireless LCD	Wireless LCD
	Setting Temperature	Cooling 18 ~ 30 (64/86)	18 ~ 30 (64~86)
	Range	Heating 16 ~ 30 (60~86)	16 ~ 30 (60~86)
	Auto Operation (Micom Control)	-	-
	Auto Changeover (Micom Control)	○	○
	Self Diagnosis	○	○
	Timer	24h On/Off	24h On/Off
	Sleep Operation	○	○
	Soft Dry Operation	○	○
	Restart Delay(minute)	2	2
	Deice Control(Defrost)	○	○
	Hot Start	○	○
	Jet Cool / Heat	○ / ○	○ / ○
	Low Ambient Operation	○	○
	Special Function	-	-
Network Functions	Dry Contact	-	-
	Network Solution(LGAP)	-	-
	PI485	-	-

**Note:**

○ : Applied, - : No relation

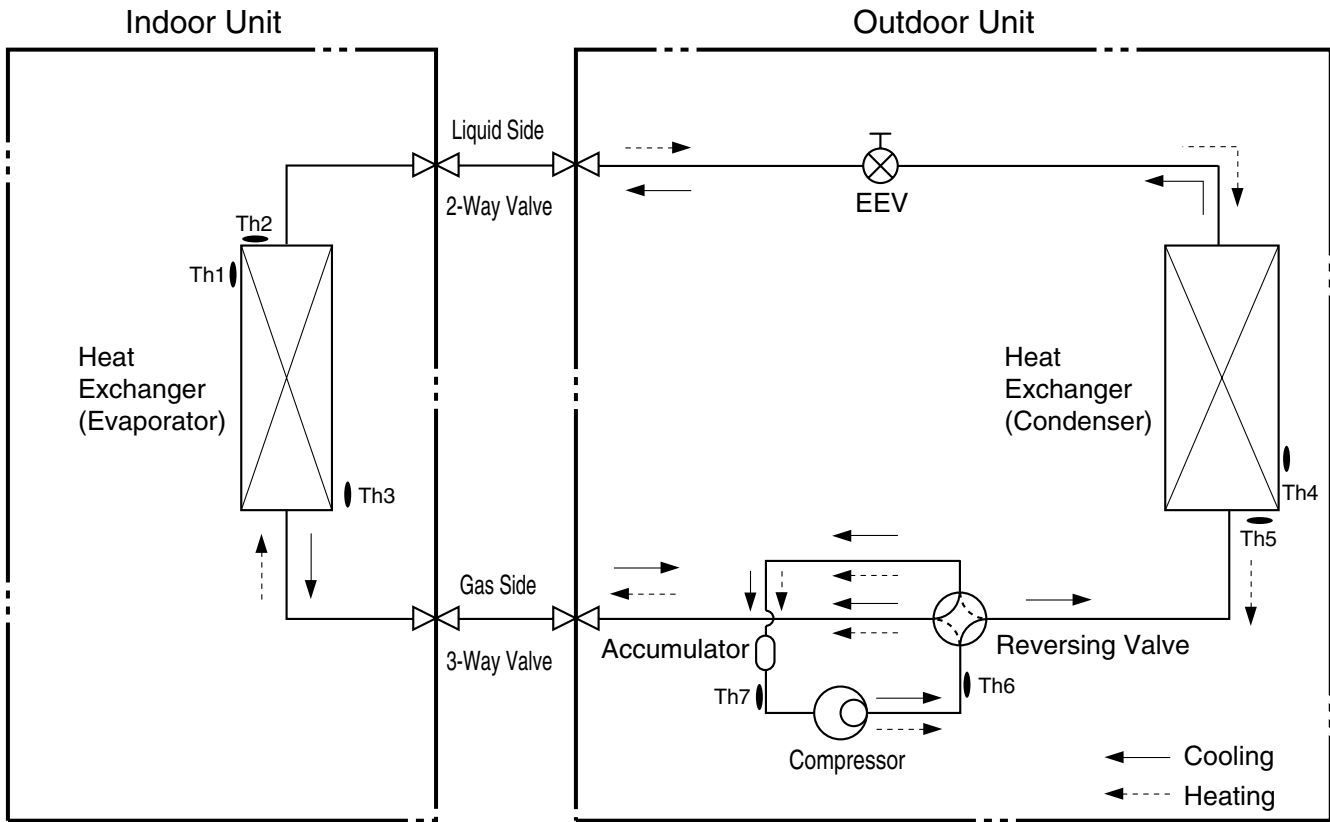
\* For circuit breaker rating, please conform to local standards wherever necessary.

\* Some of functions are slightly different depending upon models.

\* The specification may be subject to change without prior notice for purpose of improvement.

\* Capacity : based on 203V.

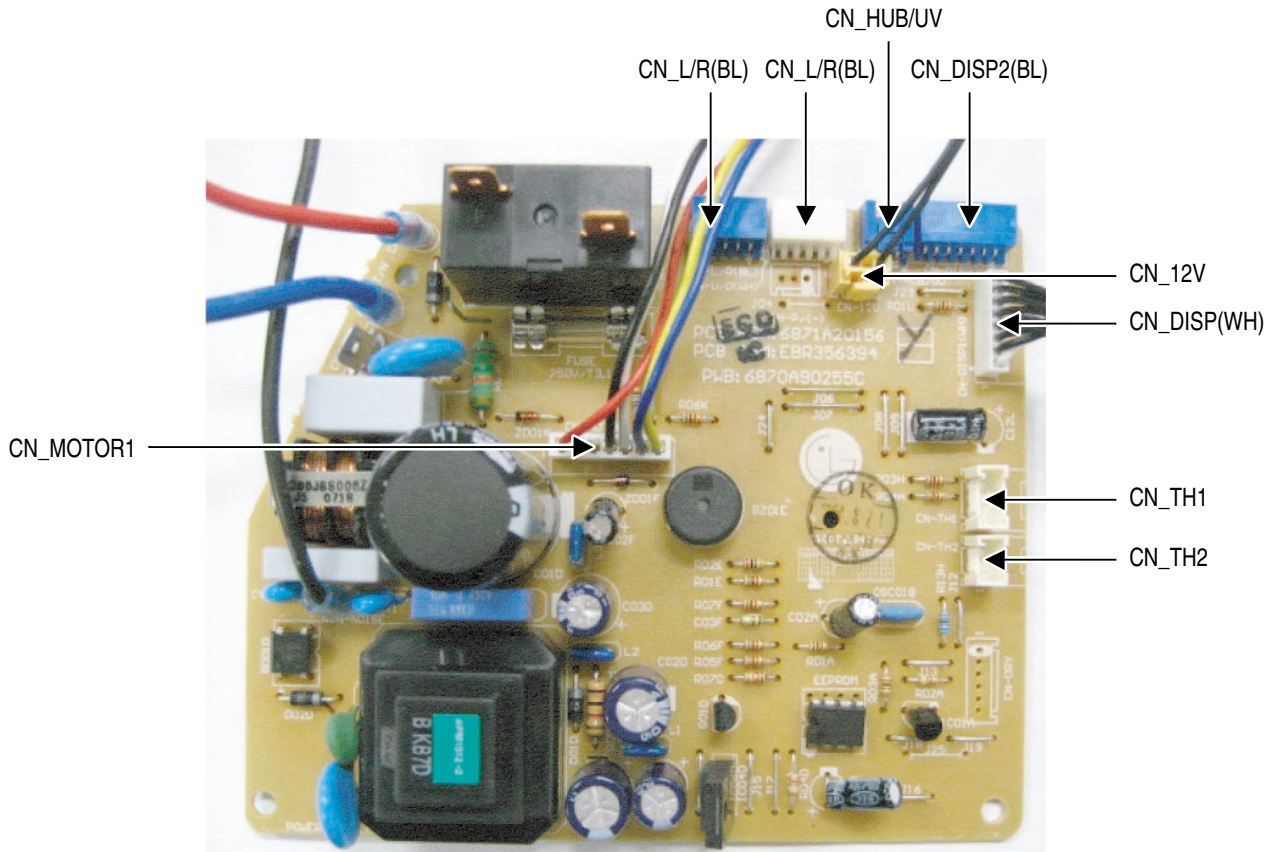
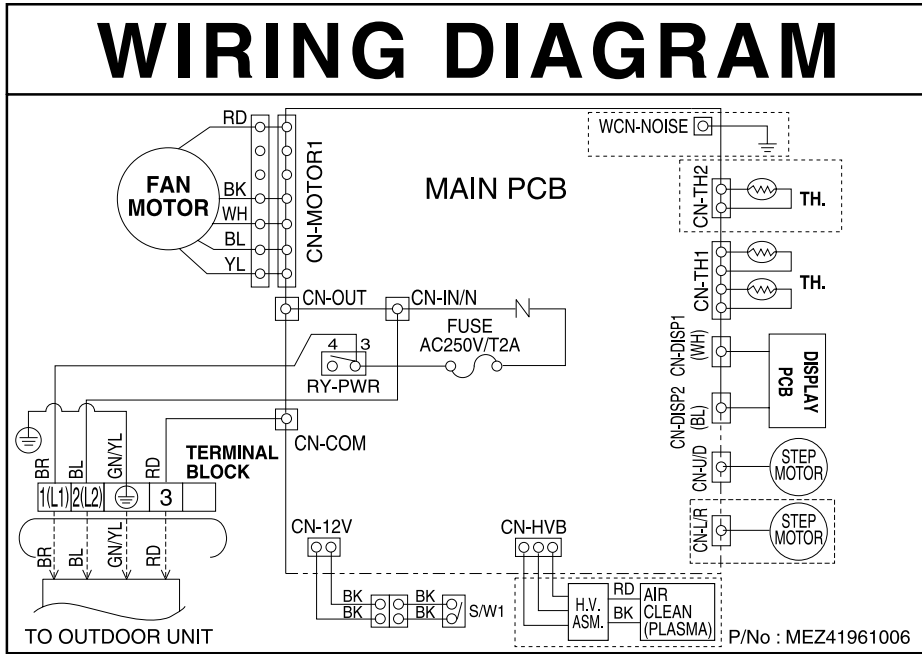
## 2. Piping Diagrams



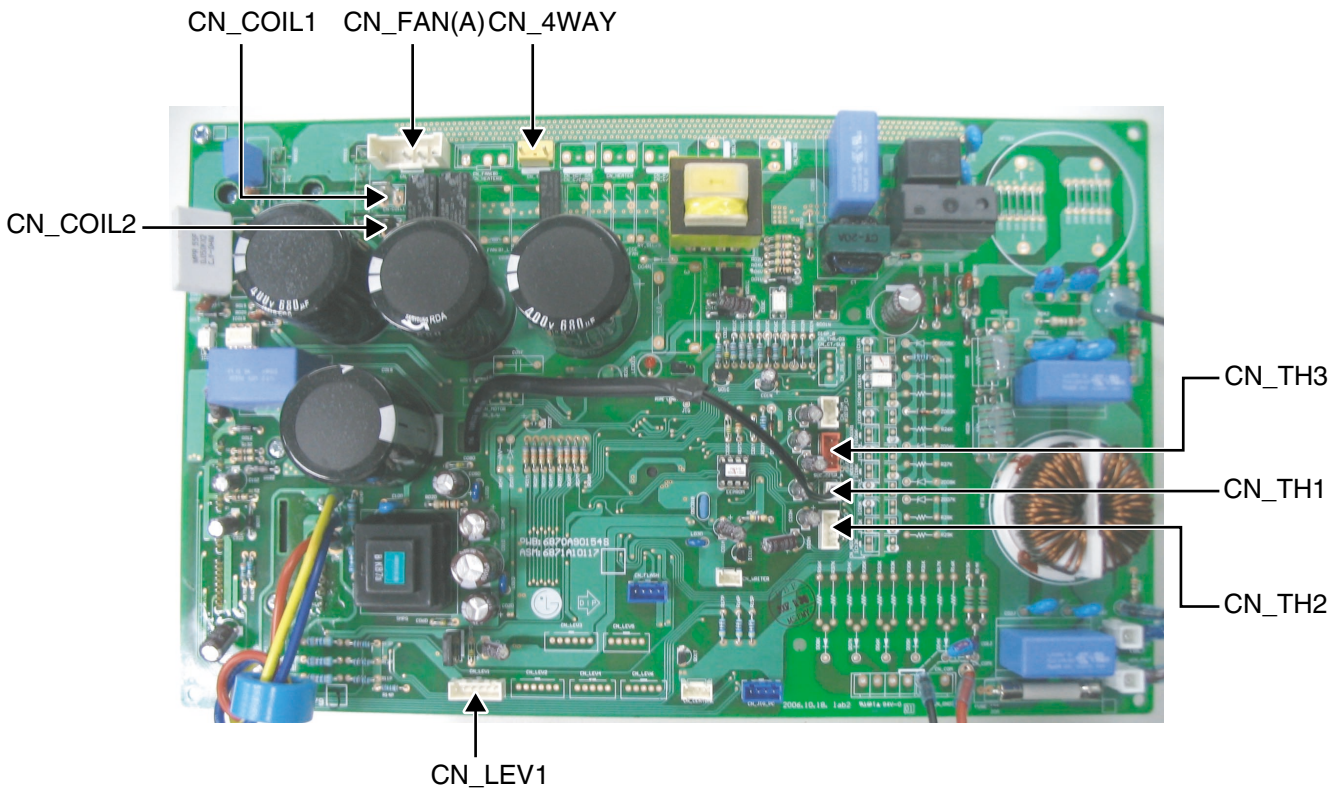
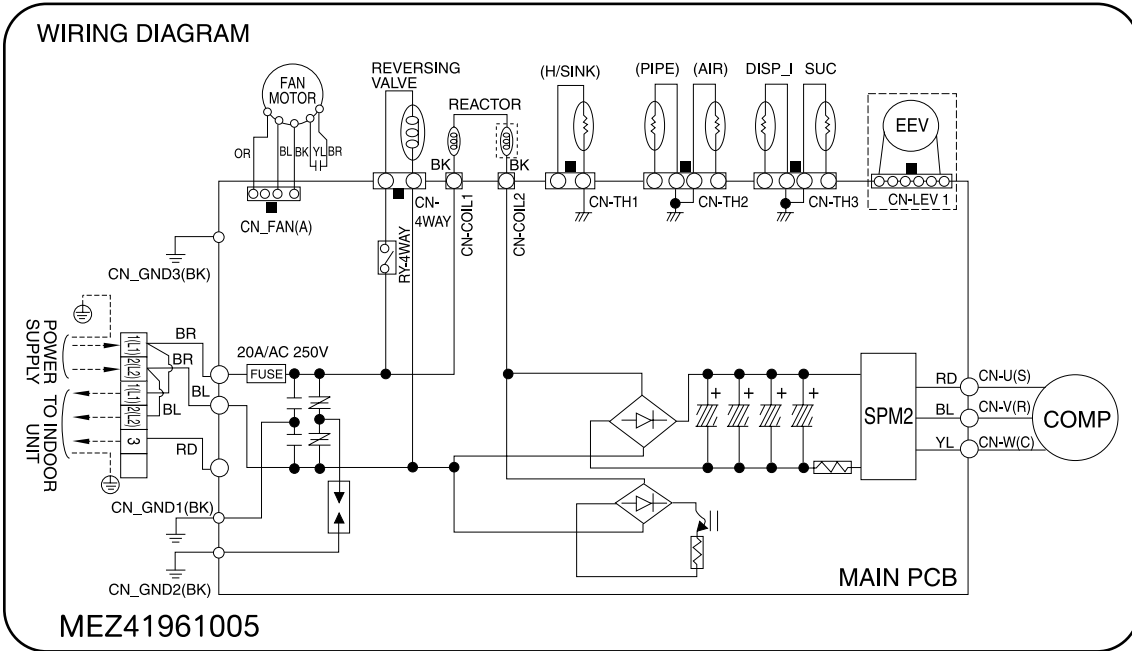
LOC.	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CN_TH1(INDOOR)
Th2	Thermistor for evaporating temperature	CN_TH2(INDOOR)
Th3		CN_TH3(INDOOR)
Th4	Thermistor for outdoor air temperature	CN_TH2(OUTDOOR)
Th5	Thermistor for condensing temperature	
Th6	Thermistor for discharge pipe temperature	CN_TH3(OUTDOOR)
Th7	Thermistor for suction pipe temperature	

### 3. Wiring Diagrams

#### Indoor Unit

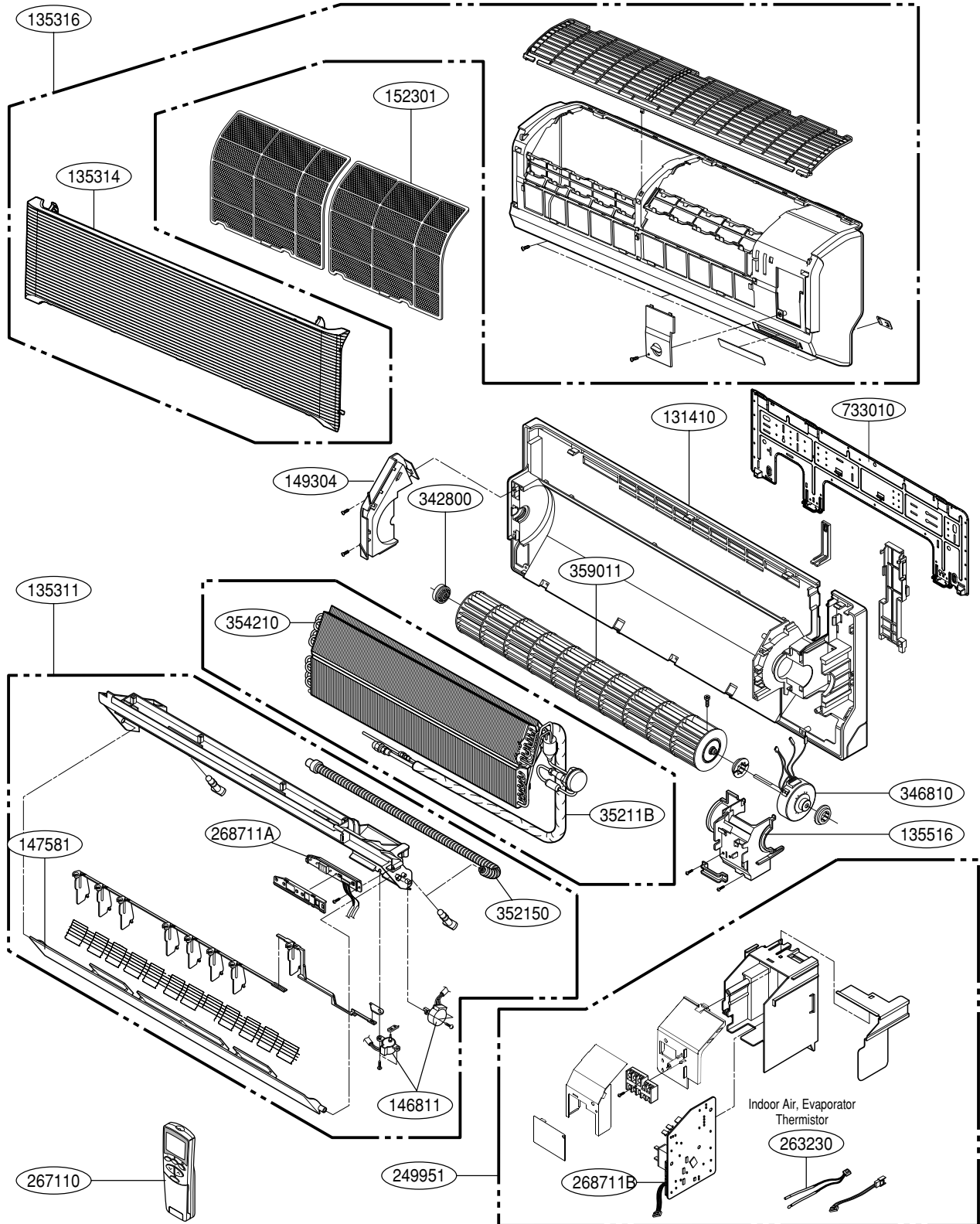


# Outdoor Unit



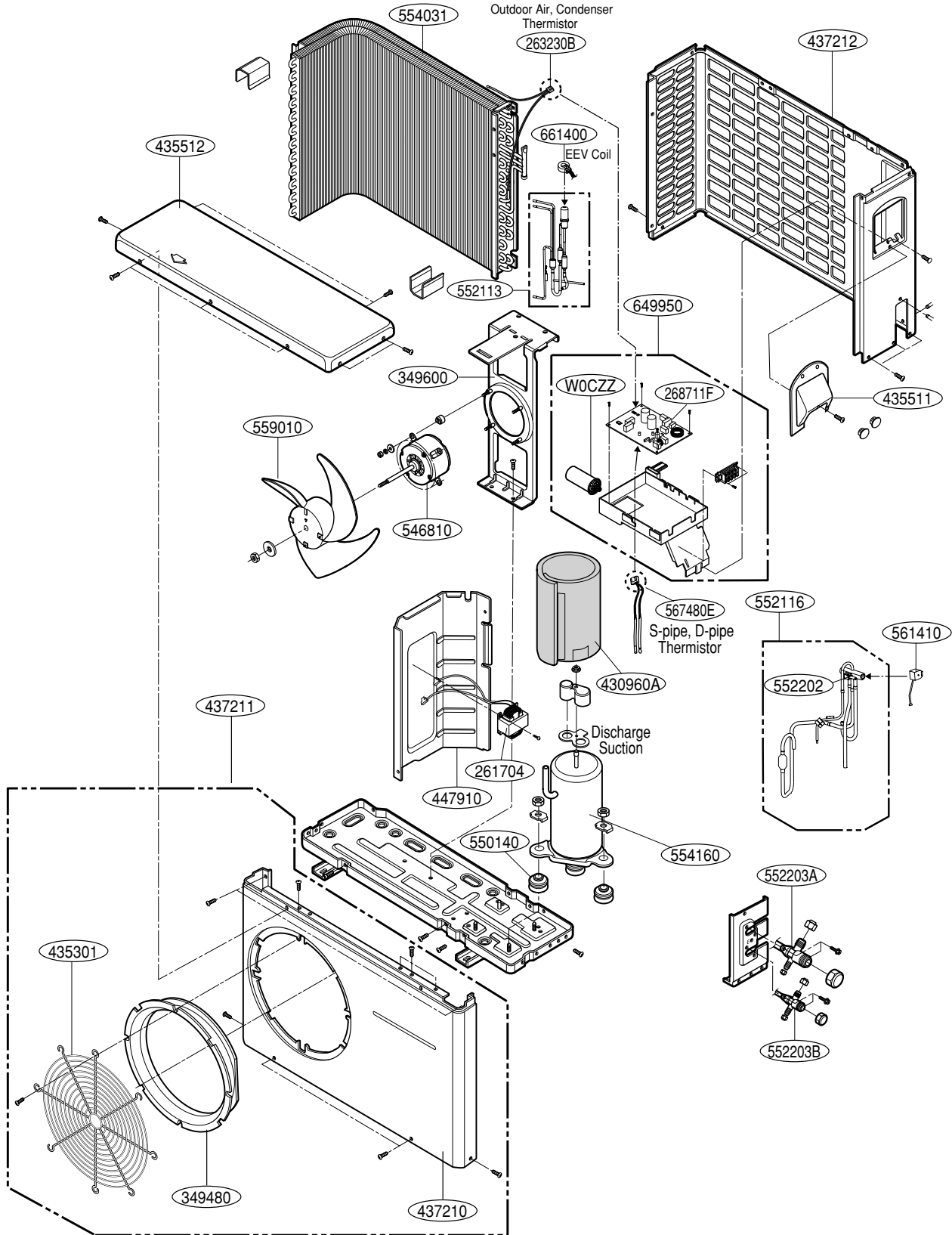
## 4. Exploded View

### Indoor Unit



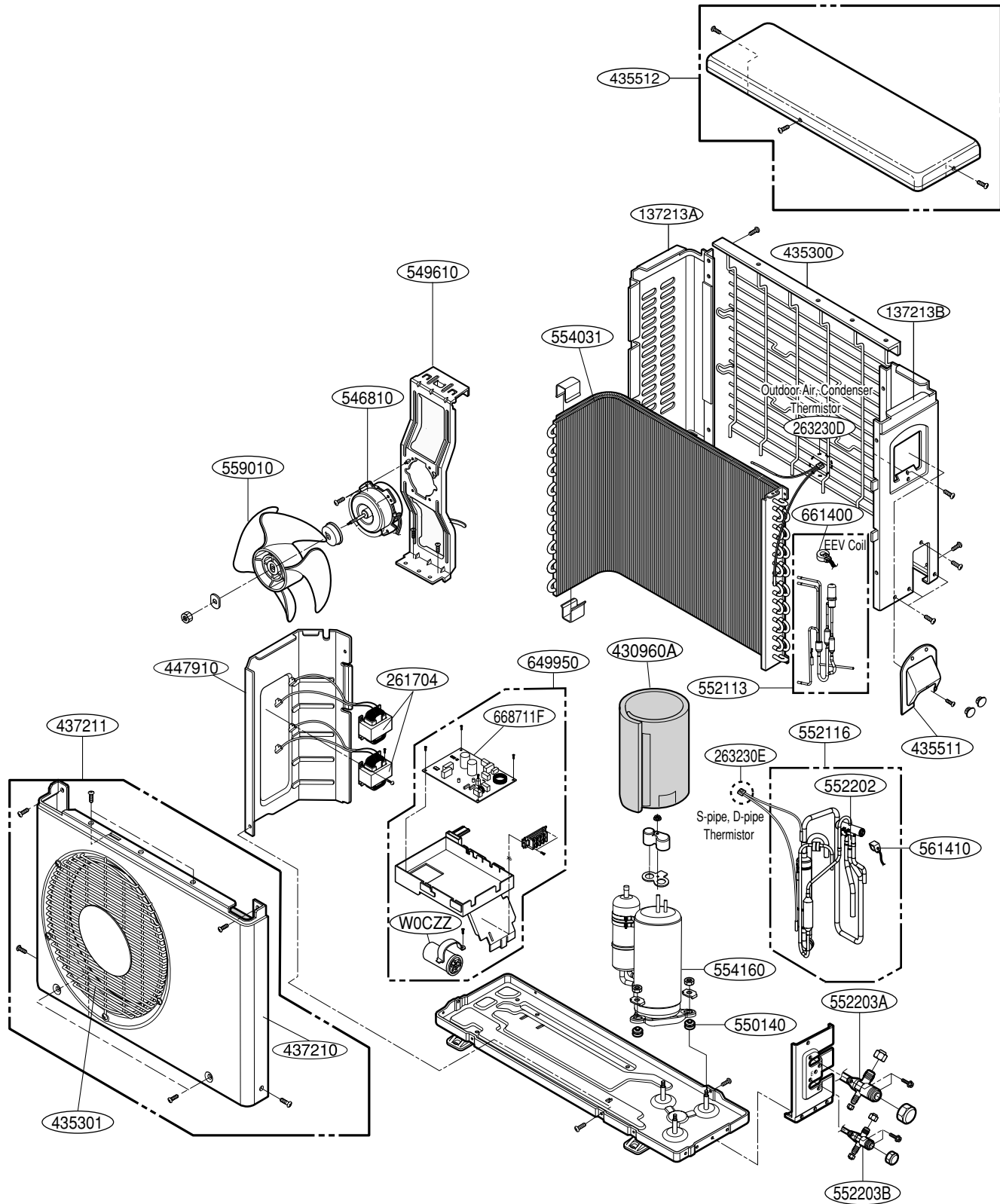
Note) \* Please ensure GCSC since the replacement parts may be changed depending upon the buyer's request.  
 Please check the correct parts in View RPL(Replacement Part List) on GCSC.  
 (GCSC Website <http://biz.Lgservice.com>.)

# Outdoor Unit 18k



Note) \* Please ensure GCSC since the replacement parts may be changed depending upon the buyer's request.  
Please check the correct parts in View RPL(Replacement Part List) on GCSC.  
(GCSC Website <http://biz.Lgservice.com>,)

# Outdoor Unit 24k



Note) \* Please ensure GCSC since the replacement parts may be changed depending upon the buyer's request.  
 Please check the correct parts in View RPL(Replacement Part List) on GCSC.  
 (GCSC Website <http://biz.Lgservice.com>.)



**Specifications and performance data subject to change without notice.**

## **HEAT CONTROLLER, INC.**

1900 WELLWORTH AVENUE • JACKSON, MICHIGAN 49203

*THE QUALITY LEADER IN CONDITIONING AIR*

P/No.:MFL42286409