

HEAT CONTROLLER, INC.

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

*Service Manual*

**Model: AS-W093E7Y0 [VMH09SB-1]  
AS-W123E7Y0 [VMH12SB-1]**

**CAUTION**

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

Only for authorized service personnel.

# 1. Specification

Models		AS-W093E7Y0 [VMH09SB-1]	AS-W123E7Y0 [VMH12SB-1]	
Cooling Capacity (Min-Rating-Max)		kW	0.90-2.70-3.70	
		Btu/h	3,070-9,200-12,620	
Heating Capacity (Min-Rating-Max)		kW	0.90-3.52-5.00	
		Btu/h	3,070-12,000-17,060	
Power Input	Cooling/Heating	W	690/915	
Running Current	Cooling/Heating	A	3.2/4.2	
Starting Current	Cooling/Heating	A	3.2/4.2	
EER		WW	3.91	
		Btu/h.W	13.3	
COP		WW	3.85	
Power Supply		Ø / V / Hz	1/208-230/60	
Power Factor		%	94	
Air Flow Rate	Indoor,Max	m <sup>3</sup> /min(cfm)	8.5(300)	
	Outdoor,Max	m <sup>3</sup> /min(cfm)	29(1,024)	
Moisture Removal		l/h	0.6	
Sound Level	Indoor,H/M/L	dB(A)+3	36/33/30	
	Outdoor,Max	dB(A)+3	48	
Refrigerant & Charge(at 7.5m)		g(oz)	R410A, 1,000(35.3)	
Additional Refrigerant Charge		g(m/oz/ft)	20(0.22)	
Compressor	Type		Rotary	
	Model		5RS102XAA21	
	Motor Type		BLDC	
	Oil Type		FV50S	
	Oil Charge	cc	320	
	O.L.P Name		-	
Fan(Indoor)	Type		Cross Flow Fan	
	Motor Output	W	20	
Fan(outdoor)	Type		Propeller	
	Motor Type		BLDC	
	Motor Output	W	43	
Circuit Breaker*		A	15	
Power Supply Cable		NEC	14	
Power and Transmission Cable		NEC	18	
Piping Connections	Liquid Side	mm(in)	6.35(1/4)	
	Gas Side	mm(in)	9.52(3/8)	
Drain Hose	O.D. , I.D	mm(in)	21.5,16.0(0.85,0.63)	
Dimension	Indoor(W*H*D)	mm	895*282*165	
		inch	35.2*11.1*6.5	
	Outdoor(W*H*D)	mm	770*545*245	
		inch	30.3*21.5*9.6	
Net Weight	Indoor	kg(lbs)	8(17.6)	
	Outdoor	kg(lbs)	35(77.2)	
Operation Range	Cooling(Outdoor)	°C(°F)	-10 ~ 46 (14.0-114.8)(Low Ambient)	
	Heating(Outdoor)	°C(°F)	-15 ~ 24 (5.0 ~ 75.2)	
Max. Piping Length		m(ft)	15(49)	
Max. Elevation Difference		m(ft)	7(23)	
Tool Code(Chassis)	Indoor + Outdoor		SE + UL	
Functions	Temperature Control		Thermistor	
	Plasma Filter		-	
	Prefilter(washable/anti-fungus)		O	
	Auto Clean		O	
	CHAOS Wind(Auto Wind)		O	
	Steps, Fan/Cool/Heat		-/4/4	
	Airflow Direction Control(up&down)		Auto	
	Airflow Direction Control(left&right)		Manual	
	Remoon Type		Wireless LCD	
	Setting Temperature Range	Cooling [°C(°F)]		18 ~ 30 (64-86)
		Heating [°C(°F)]		16 ~ 30 (60-86)
	Auto Operation (Micom Control)		-	
	Auto Changeover (Micom Control)		O	
	Self Diagnosis		O	
	Timer		24h On/Off	
	Sleep Operation		O	
	Soft Dry Operation		O	
	Restart Delay(minute)		2	
	Deice Control(Defrost)		O	
	Hot Start		O	
	Jet Cool / Heat		O / O	
	Low Ambient Operation		O	
	Special Function		-	
	Network Functions	Dry Contact		-
		Network Solution(LGAP)		-
		PI485		-

**Note:**

O : Applied, - : No relation

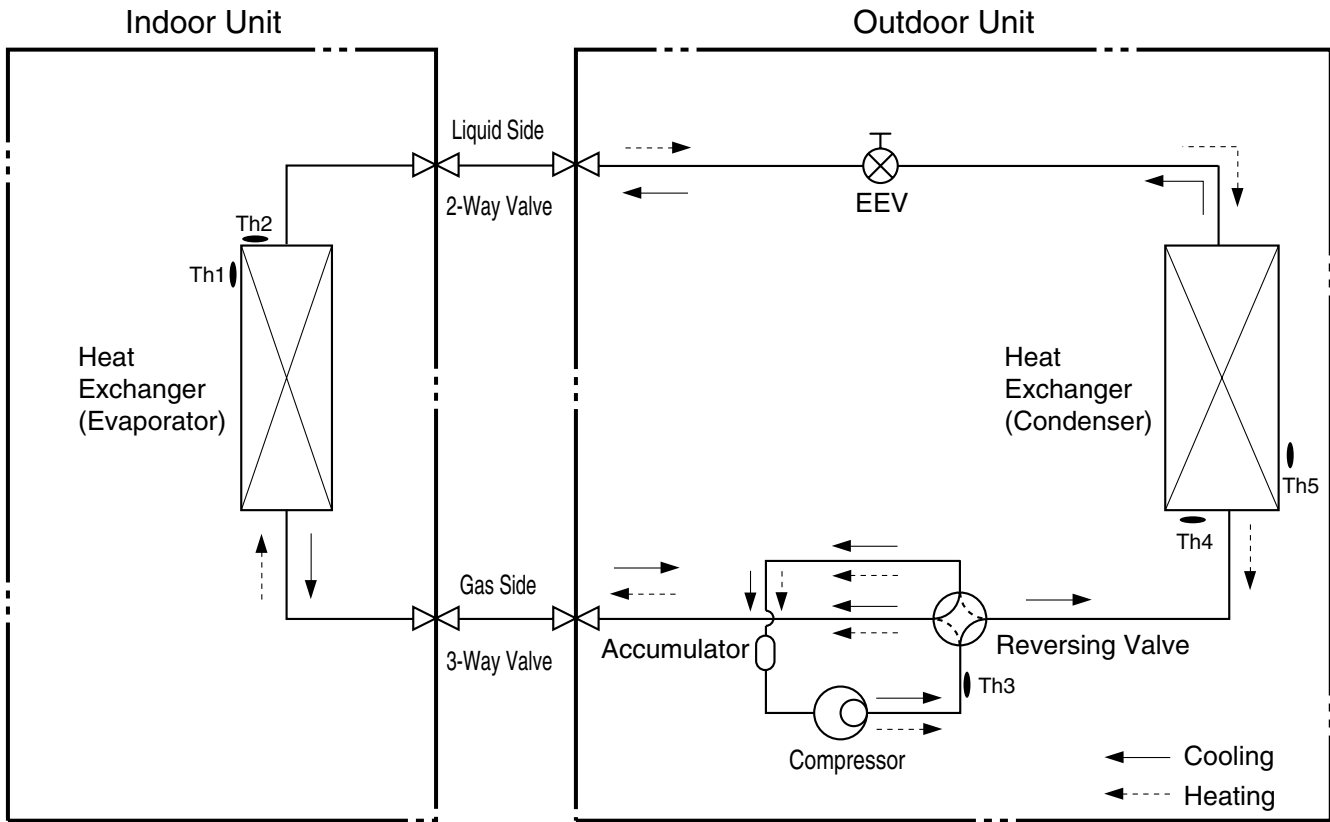
\* For circuit breaker rating, please conform to local standards wherever necessary.

※ 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

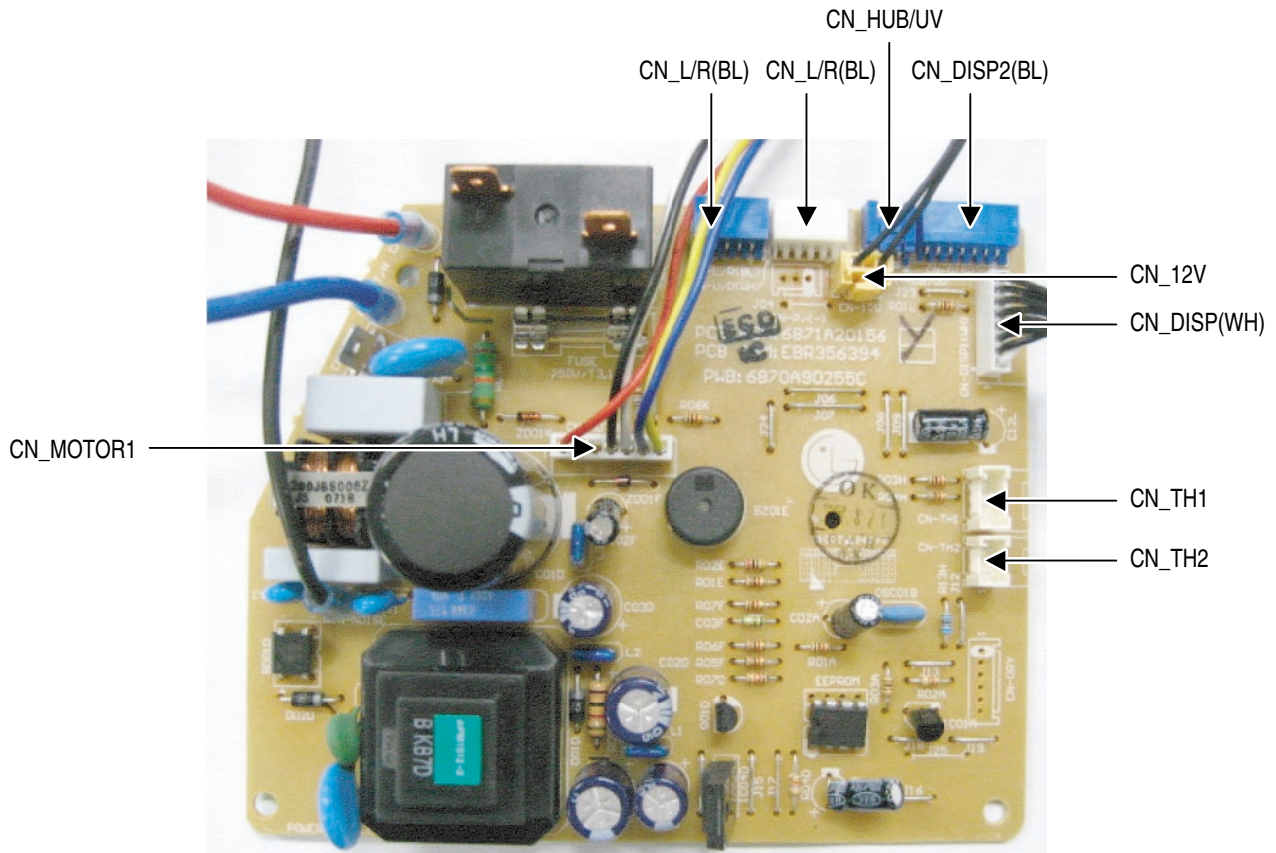
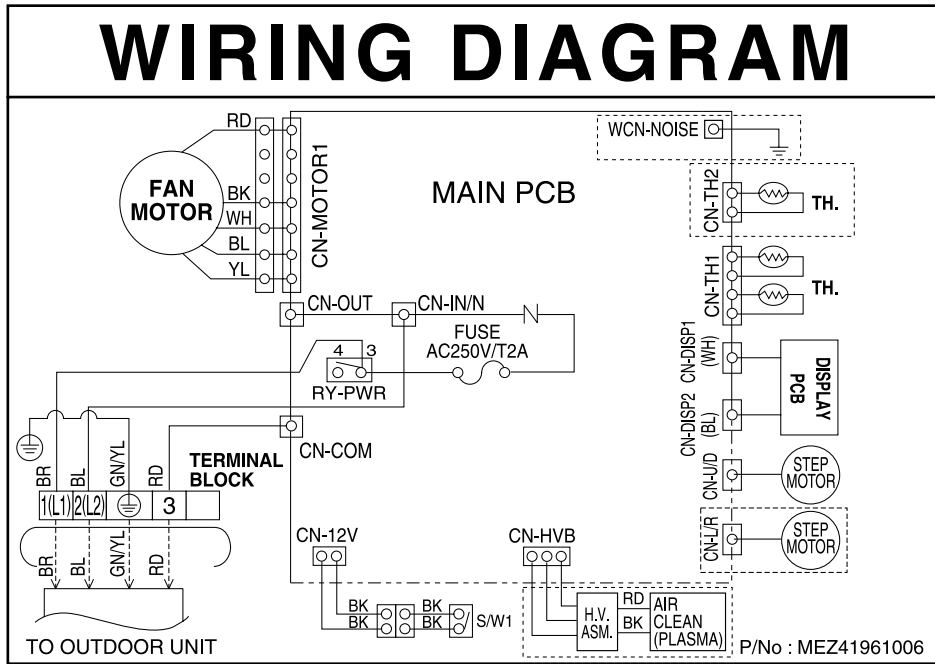


LOC.	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CN_TH1(INDOOR)
Th2	Thermistor for evaporating temperature	
Th3	Thermistor for discharge pipe temperature	CN_D_PIPE(Outdoor)
Th4	Thermistor for condensing temperature	CN_TH1(OUTDOOR)
Th5	Thermistor for outdoor air temperature	

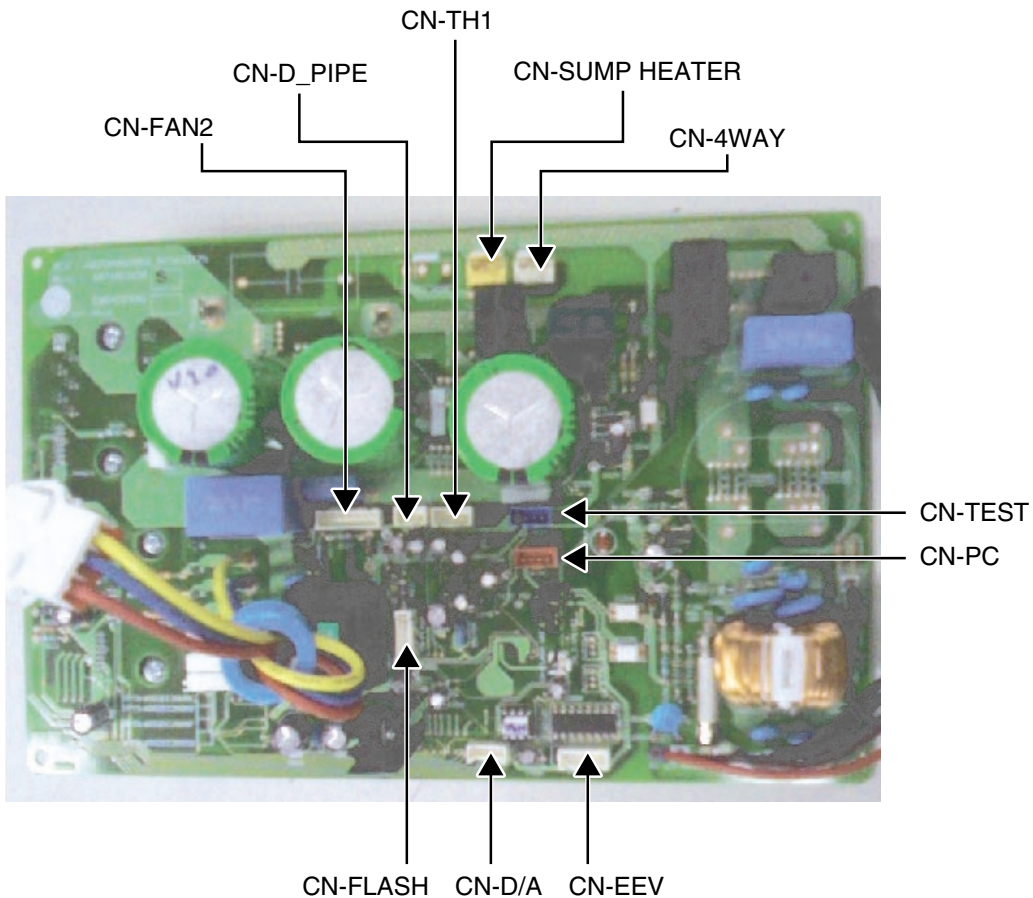
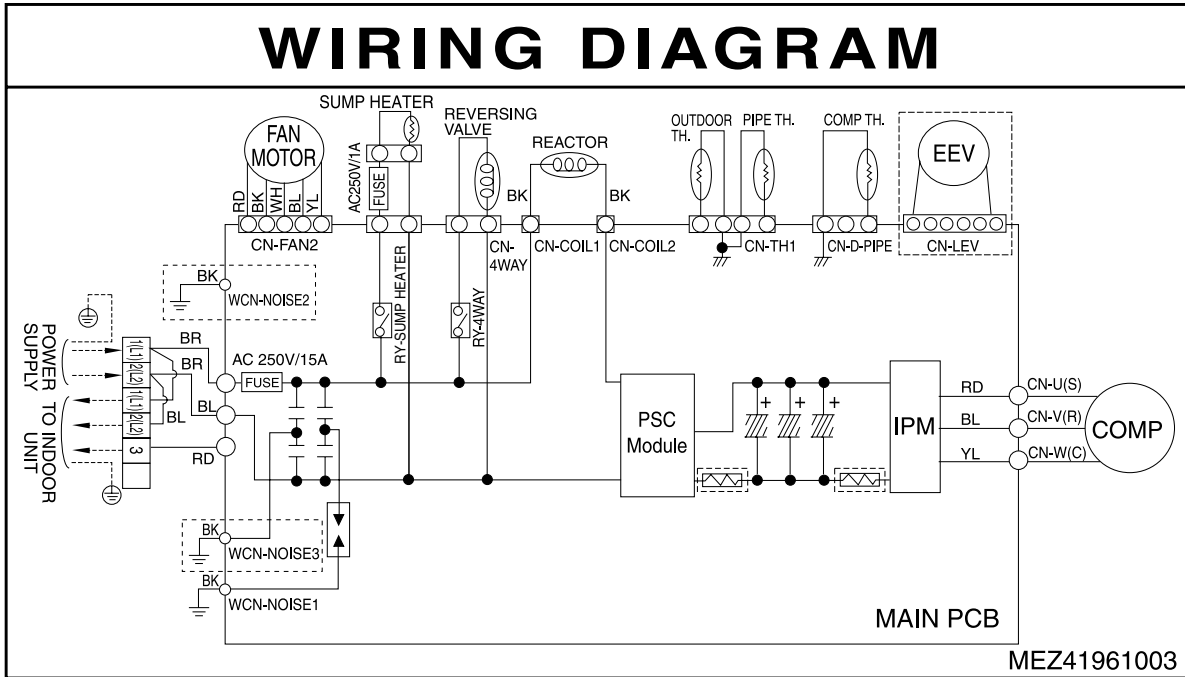
\* EEV : Electronic Expansion Valve.

### 3. Wiring Diagrams

#### Indoor Unit

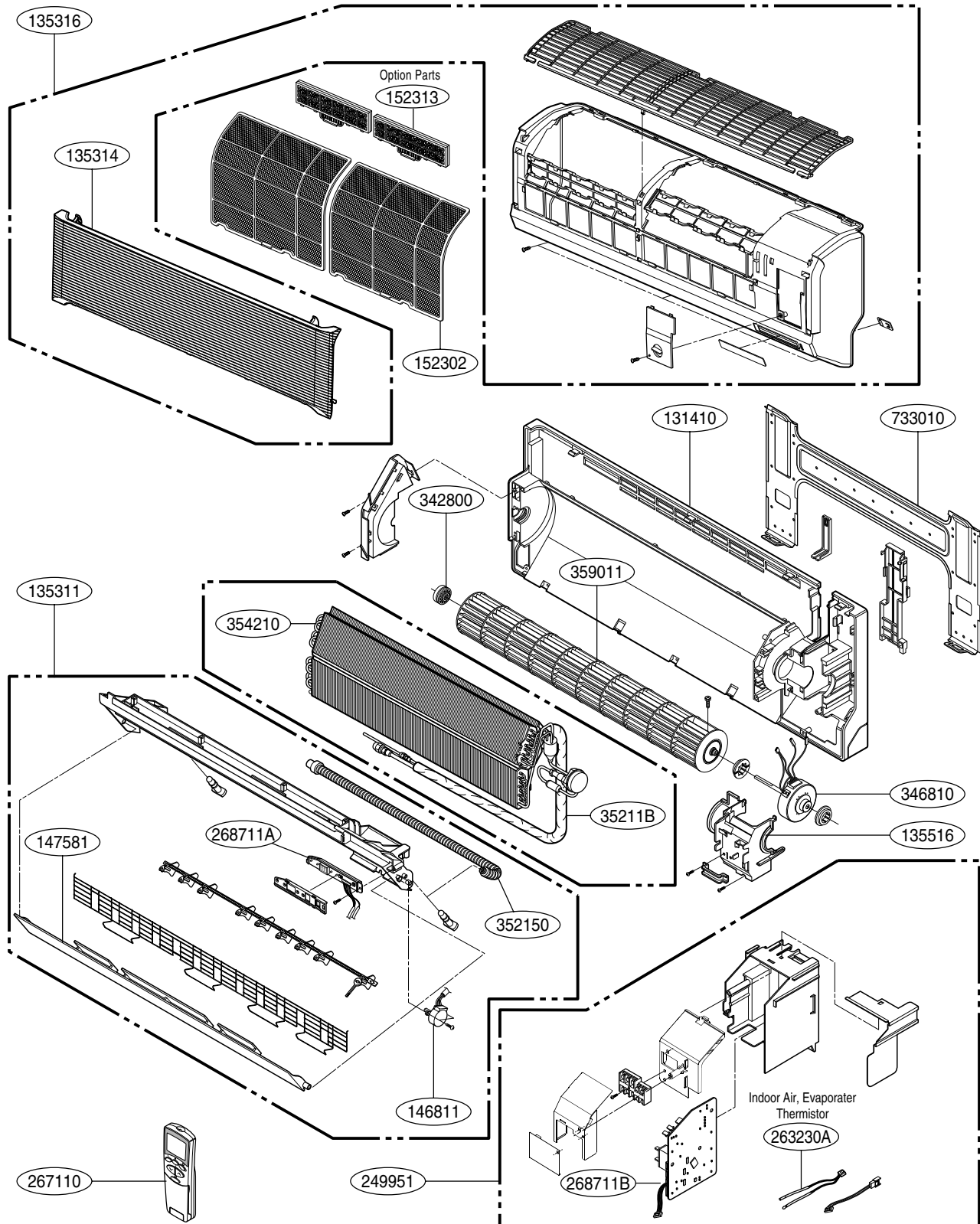


Outdoor Unit



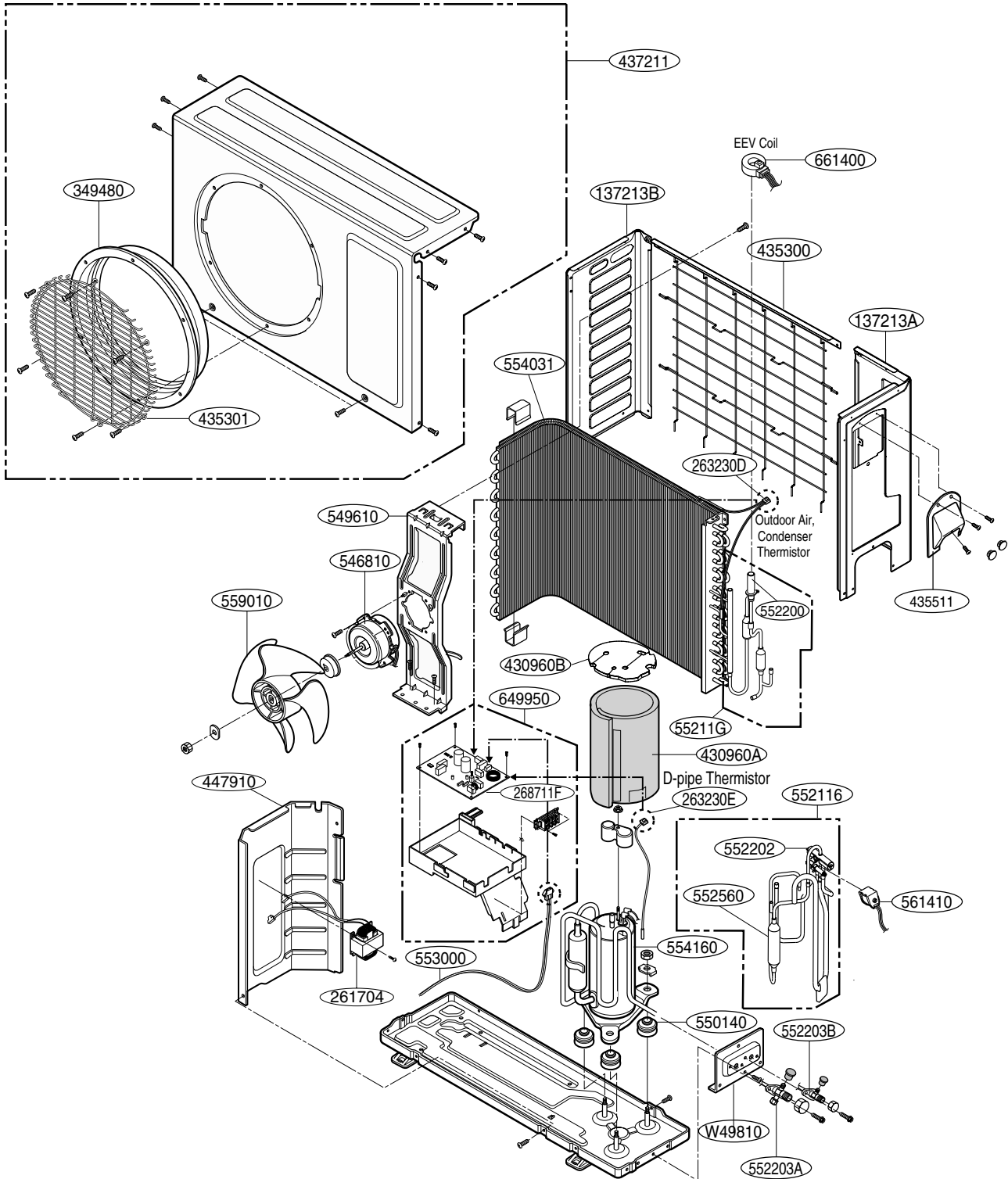
## 4. Exploded View

### 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



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 (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***

**MFL42286408**