

HEAT CONTROLLER, INC.

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

*Service Manual*

**Model: AS-W303DPZ0[VMH30SB-1]  
AS-Q303DPZ0[VMC30SB-1]**

**CAUTION**

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

Only for authorized service personnel.

# 1. Specification

Models		AS-W303DPZ0[VMH30SB-1]	AS-Q303DPZ0[VMC30SB-1]
Cooling Capacity (Min~Rating~Max)	kW	3.5~7.9~7.9	3.5~7.9~7.9
	Btu/h	12000~27000~27000	-
Heating Capacity (Min~Rating~Max)	kW	3.5~8.5~8.5	-
	Btu/h	12000~29000~29000	12000~29000~29000
Power Input	Cooling/Heating	W	3100/3200
Running Current	Cooling/Heating	A	13.6/14.0
Starting Current	Cooling/Heating	A	13.1/14.0
EER	W/W	2.55	2.55
	Btu/h.W	8.71	8.71
COP	W/W	2.66	-
Power Supply	Ø / V / Hz	1/208~230/60	1/208~230/60
Power Factor	%	97	97
Air Flow Rate	Indoor,Max	m³/min(cfm)	21(742)
	Outdoor,Max	m³/min(cfm)	58(2048)
Moisture Removal		l/h	2.8
Sound Level	Indoor,H/M/L	dB(A)+3	47/43/41
	Outdoor,Max	dB(A)+3	58
Refrigerant & Charge(at 7.5m)		g(oz)	R410A 1830(64.6)
Additional Refrigerant Charge		g/m(oz/ft)	20(0.22)
Compressor	Type		SCROLL + ROTARY
	Model		5CS130XCC03 + GK141KAA
	Motor Type		BLDC + AC
	Oil Type		POE
	Oil Charge	cc	480 + 350
	O.L.P Name		-
Fan(Indoor)	Type		Cross Flow Fan
	Motor Output	W	91
Fan(outdoor)	Type		Propeller
	Motor Type		AC
	Motor Output	W	140
Circuit Breaker*		A	30
Power Supply Cable	No.*mm²		3*2.08
Power and Transmission Cable	No.*mm²+No.*mm²		4*0.82
Piping	Liquid Side	mm(in)	6.35(1/4)
Connections	Gas Side	mm(in)	15.88(5/8)
Drain Hose	O.D , I.D	mm(in)	21.5,16(0.85,0.63)
Dimension	Indoor(W*H*D)	mm	1209*346*205
		inch	47.6*13.6*8.1
	Outdoor(W*H*D)	mm	800*870*320
		inch	31.5*34.3*12.6
Net Weight	Indoor	kg(lbs)	17(37.5)
	Outdoor	kg(lbs)	67(147.7)
Operation Range	Cooling(Outdoor)	°C(°F)	-5°C~43°C (23~109.4)
	Heating(Outdoor)	°C(°F)	-5°C~27°C(23~80.6)
Max. Piping Length		m(ft)	30(98.4)
Max. Elevation Difference		m(ft)	15(49)
Tool Code(Chassis)	Indoor + Outdoor		SD+UE1
Functions	Temperature Control		Thermistor
	Plasma Filter		-
	Prefilter(washable/anti-fungus)		○
	Auto Clean		○
	CHAOS Wind(Auto Wind)		○(-)
	Steps, Fan/Cool/Heat		3/4/4
	Airflow Direction Control(up&down)		Auto
	Airflow Direction Control(left&right)		Auto
	Remocon Type		Wireless LCD
	Setting Temperature	Cooling	18 ~ 30(64~86)
	Range	Heating	16 ~ 30
	Auto Operation (Micom Control)		-
	Auto Changeover (Micom Control)		○
	Self Diagnosis		○
	Timer		24h, On/Off
	Sleep Operation		○
	Soft Dry Operation		○
	Restart Delay (minute)		2
	Deice Control(Defrost)		○
	Hot Start		○
	Jet Cool		○
	Low Ambient Operation		○
	Special Function		-
Network Functions	Dry Contact		-
	Network Solution(LGAP)		-
	PI485		-

**Note:**

○ : Applied, - : No relation

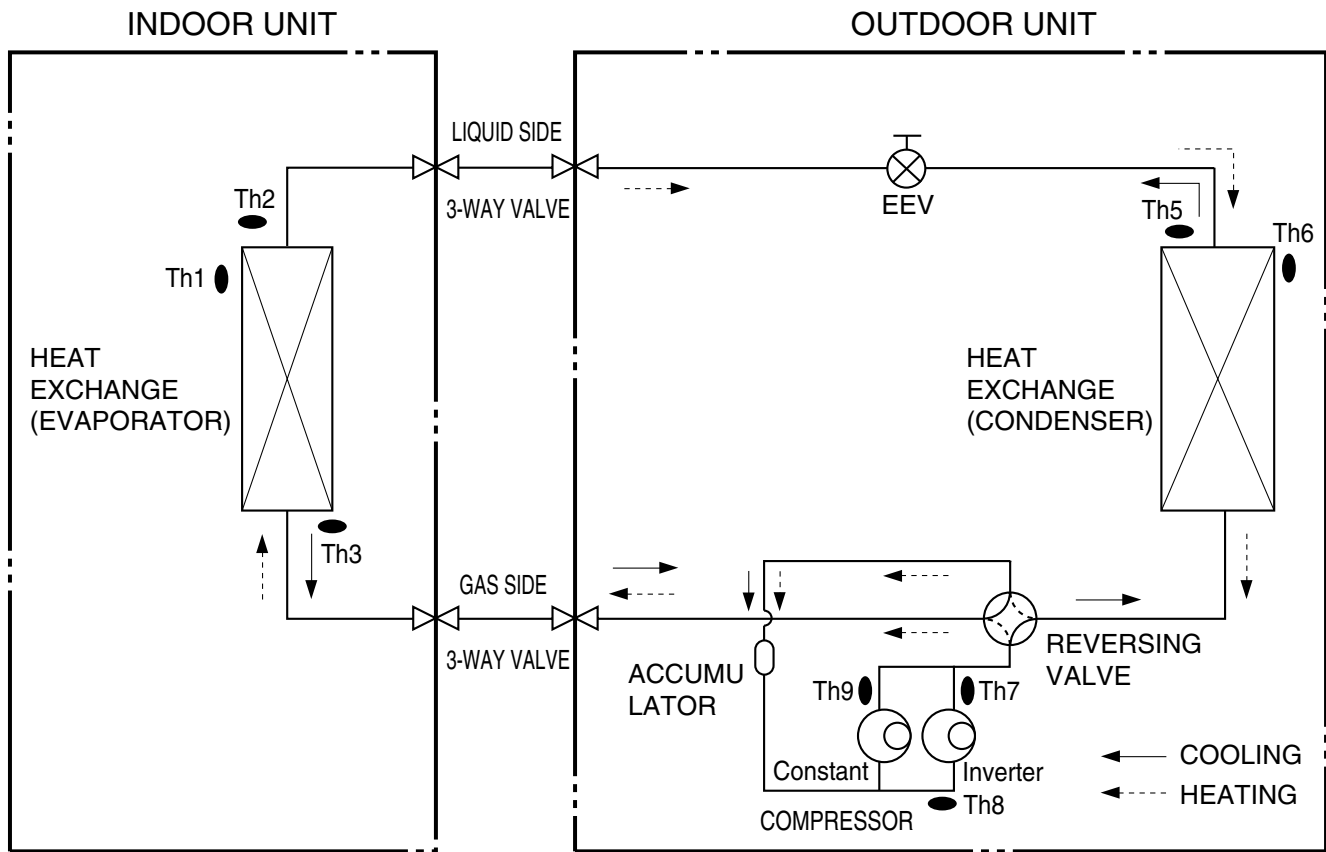
\* For circuit breaker rating, please conform to local standards wherever necessary.

\* 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 230V.

## 2. Piping Diagrams

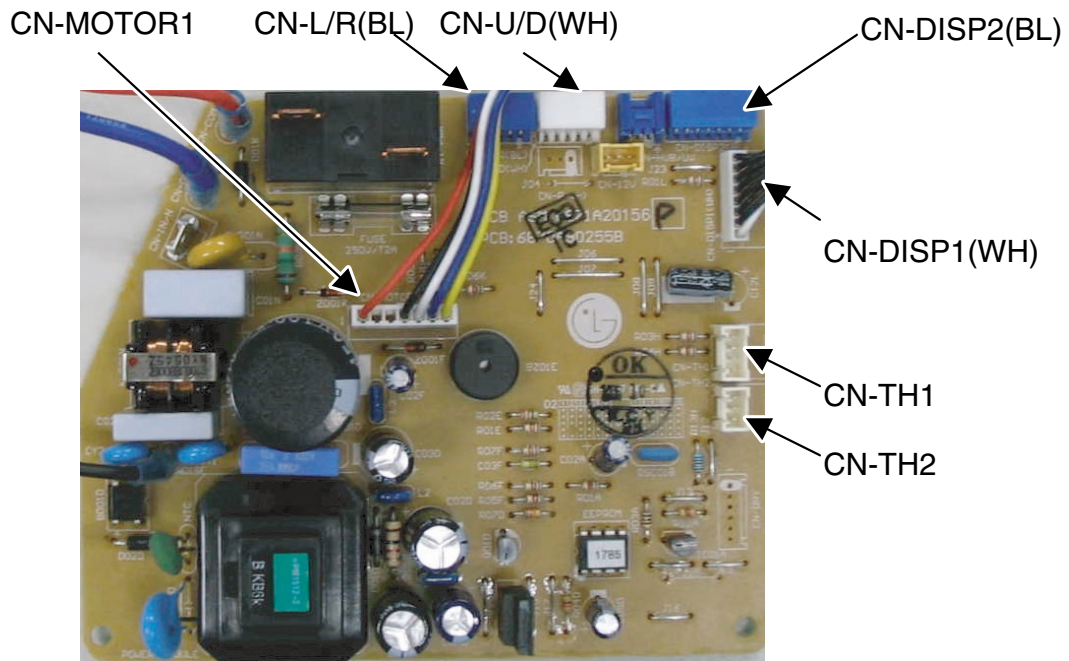
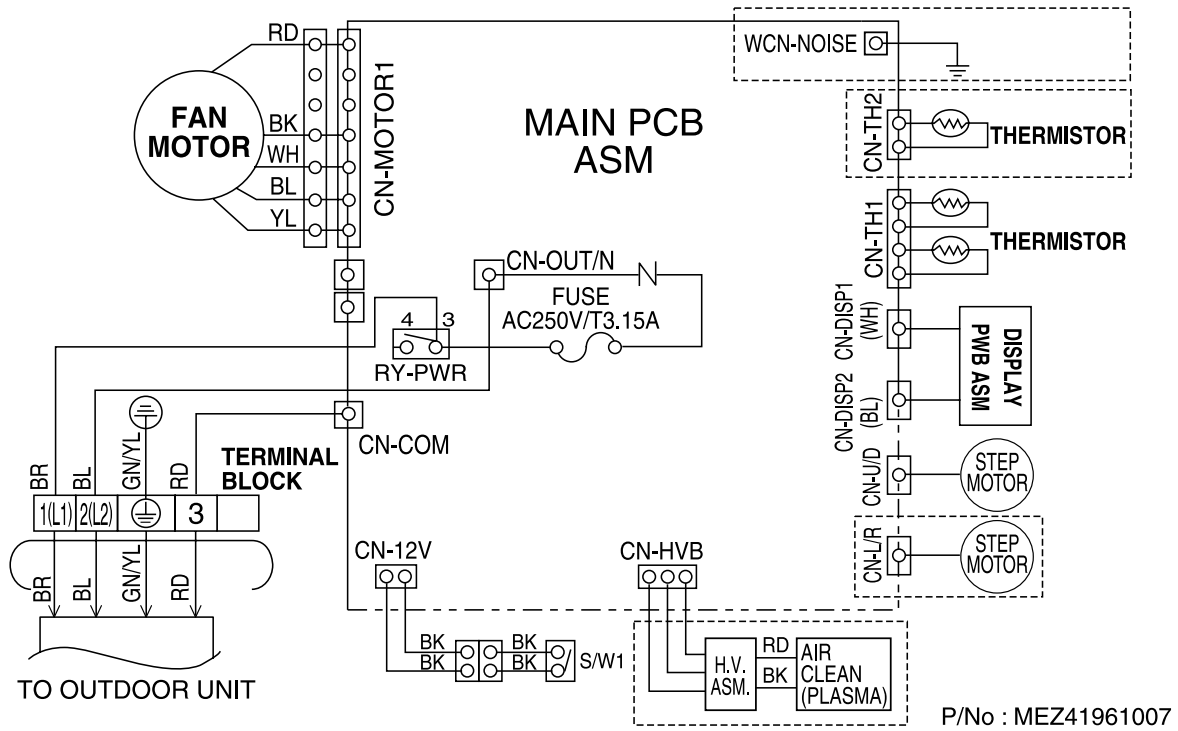


LOC.	Description	PCB Connector
Th1	Thermister for indoor air temperature	CN-TH1(Indoor)
Th2	Thermister for indoor pipe(in) temperature	
Th3	Thermister for Indoor pipe(out) temperature	
Th4	Thermister for outdoor heat sink temperature	CN-TH1(Outdoor)
Th5	Thermister for outdoor pipe temperature	CN-TH2(Outdoor)
Th6	Thermister for outdoor air temperature	
Th7	Thermister for outdoor discharge pipe temperature(Inverter)	CN-TH3(Outdoor)
Th8	Thermister for outdoor suction pipe temperature (Inverter)	
Th9	Thermister for outdoor discharge pipe temperature(Constant)	CN-TH4 (Outdoor)

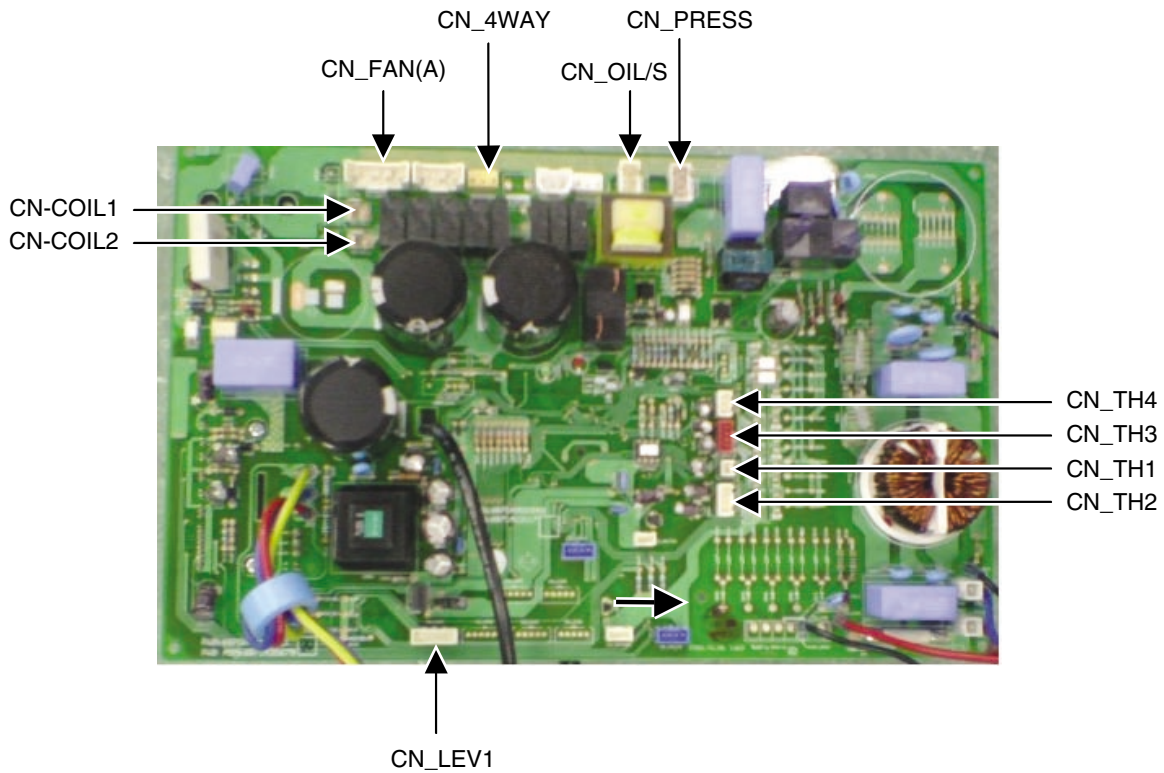
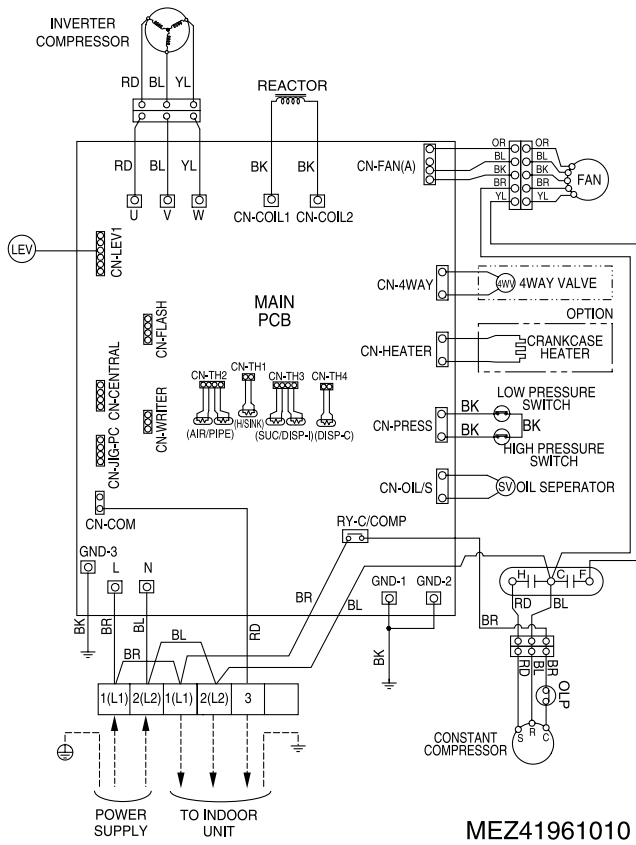
\* EEV : Electronic Expansion Valve

### 3. Wiring Diagrams

#### Indoor Unit

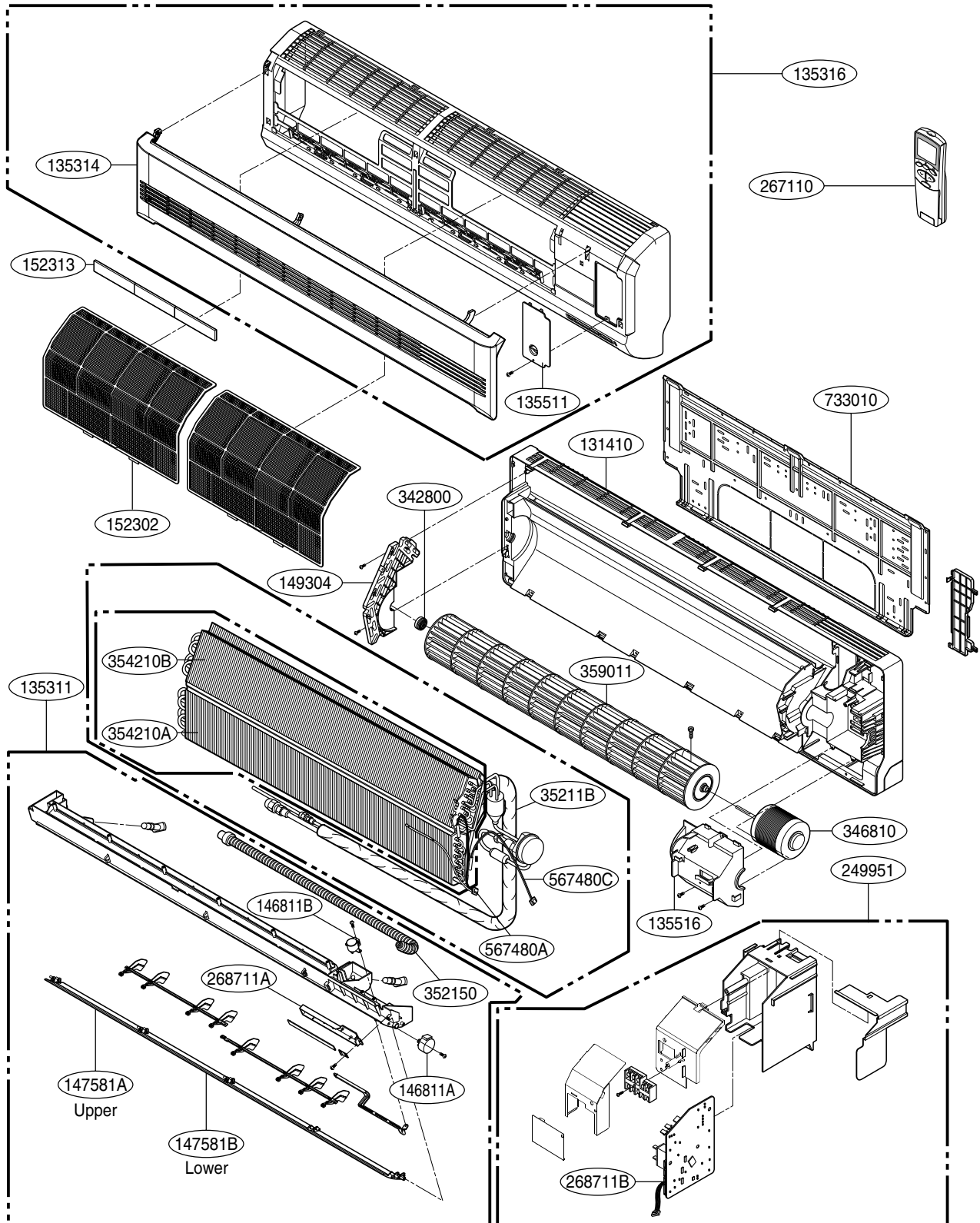


# Outdoor Unit



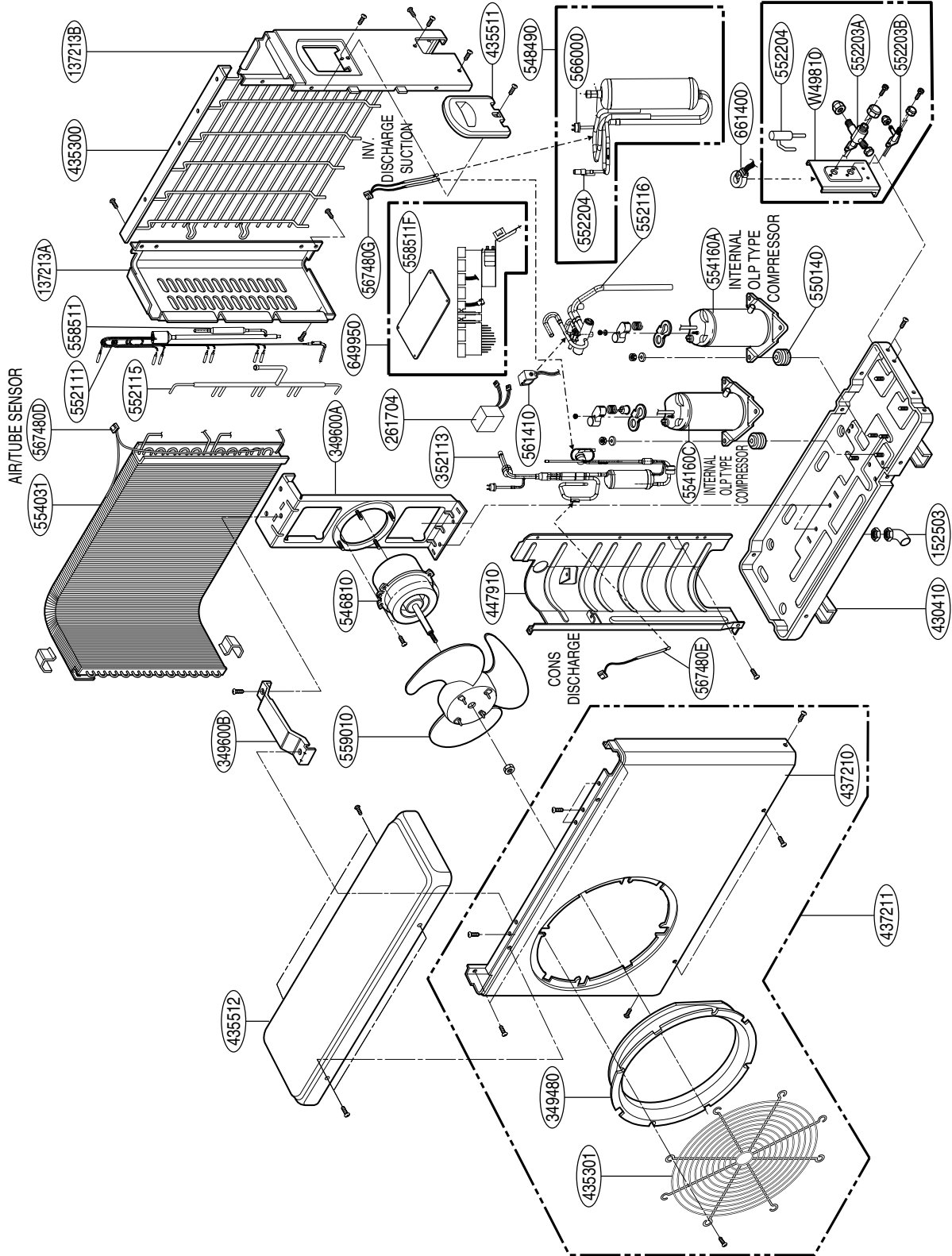
## 4. Exploded View

### 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



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.**

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*THE QUALITY LEADER IN CONDITIONING AIR*

P/No.:MFL42286416