



FRIEDRICH

1883

SVC Manual(Exploded View)

DUCTLESS SPLIT SYSTEMS



Model : M18YJ
M18CJ
M24CJ

THE EXPERTS IN ROOM AIR CONDITIONING

Product Specifications

System			18k	18k	24k	
FAC Model Name	System		M18YJ	M18CJ	M24CJ	
	Outdoor Unit		MR18Y3J	MR18C3J	MR24C3J	
	Indoor Unit		MW18Y3J	MW18C3J	MW24C3J	
Cooling Capacity		kW	0.900 ~ 5.200 ~ 6.000	0.900 ~ 5.200 ~ 6.000	0.900 ~ 6.443~ 8.644	
		Btu/h.	3,070 ~ 17,000 ~ 20,473	3,070 ~ 17,000 ~ 20,473	3,070 ~22,000~ 29,515	
Heating Capacity		kW	0.900 ~ 6.300 ~ 9.000	-	-	
		Btu/h.	3,070 ~ 20,200 ~ 30,709	-	-	
Power Input	Cooling	W	1417/ 1680	1417	2040	
Running Current	Cooling	A	6.3/7.3	6.3	9	
Starting Current	Cooling	A	6.3/7.3	6.3	9	
Cooling COP		-	3.52	3.52	3.16	
EER		-	12.0	12.0	10.8	
SEER		-	18.0	18.0	20.0	
HSPF			9.7	-	-	
Power Supply		Ø/ V / Hz	1/208-230/60	1/208-230/60	1/208-230/60	
Power Factor		%	97	97	98	
Air Flow Rate	Indoor (QUIET, LOW, MED, HIGH)	m³/min(CFM)	8.5(300)/11(389)/14.5(512)/17.0(600)	8.5(300)/11(389)/14.5(512)/17.0(600)	8.5(300)/11(389)/14.5(512)/17.0(600)	
	Outdoor,Max	m³/min(CFM)	50(1,766)	50(1,766)	60(2,119)	
Moisture Removal		l/h.	2	2	2.6	
Sound Level	Indoor,H/ML/Sleep	dB(A)±3	45 / 40 / 35 / 29	45 / 40 / 35 / 29	46 / 40 / 35 / 29	
	Outdoor,Max	dB(A)±3	53	53	54	
Refrigerant & Charge (at 7.5 m/24.6ft)		g(oz)	R410A, 1,350(47.6)	R410A, 1,350(47.6)	R410A, 1,800(63.5)	
Additional Refrigerant charge		g/m(oz/ft)	20(0.22)	20(0.22)	35(0.38)	
Compressor	Type		Twin Rotary	Twin Rotary	Twin Rotary	
	Model		GKT141MB	GKT141MB	GJT240MBA	
	Motor Type		Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	
	Oil Type		PVE(FVC68D)	PVE(FVC68D)	PVE(FVC68D)	
	Oil Charge	cc	470	470	900	
	O.L.P. name		-	-	-	
Fan(Indoor)	Type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	
	Motor Output	W	30	30	76.1	
Fan(Outdoor)	Type		Propeller	Propeller	Propeller	
	Motor Type		BLDC	BLDC	BLDC	
	Motor Output	W	85	85	124	
Circuit Breaker*		A	20	20	25	
Power Supply Cable		No.*mm² (AWG)	3*2.0(14)	3*2.0(14)	3*2.5(12)	
Power and Transmission Cable		No.*mm² (AWG)	4*1.0 (18)	4*1.0 (18)	4*1.0 (18)	
Piping Connections	Liquid Side	mm(in)	6.35(1/4)	6.35(1/4)	9.52(3/8)	
	Gas Side	mm(in)	12.7(1/2)	12.7(1/2)	15.88(5/8)	
Drain Hose(O.D / I.D.)		mm(in)	21.5 / 16.0(0.85 / 0.63)	21.5 / 16.0(0.85 / 0.63)	21.5 / 16.0(0.85 / 0.63)	
Dimensions	Indoor (W*H*D)	mm	1,030*325*245	1,030*325*245	1,030*325*245	
		inch	40.6*12.8*9.64	40.6*12.8*9.64	40.6*12.8*9.64	
	Outdoor (W*H*D)	mm	870*655*320	870*655*320	870*800*320	
		inch	34.3*25.8*12.6	34.3*25.8*12.6	34.3*31.5*12.6	
Net Weight	Indoor	kg(lbs)	14.5(31.96)	14.5(31.96)	15(33.1)	
	Outdoor	kg(lbs)	44(97)	44(97)	55(121.25)	
Gross Weight	Indoor	kg(lbs)	18.2(40.1)	18.2(40.1)	18.7(41.23)	
	Outdoor	kg(lbs)	46(101.4)	46(101.4)	58.5(128.97)	
Operation Range	Cooling(Outdoor)	°C(°F)DB	-10(-18)*~48(14.0(0)*~118.4)	-10(-18)*~48(14.0(0)*~118.4)	-10(-18)*~48(14.0(0)*~118.4)	
	Heating(Outdoor)	°C(°F)WB	-20(-4)~24(75.2)	-	-	
Piping Length (Min/Max)		m(ft)	3(9.84) / 20(65.6)	3(9.84) / 20(65.6)	3(9.84) / 30(98.4)	
Chargeless		m(ft)	7.5(24.6)	7.5(24.6)	7.5(24.6)	
Max. Elevation Difference		m(ft)	10(32.8)	10(32.8)	15(49.2)	
Tool Code(Chassis)	Indoor + Outdoor		SC + UE	SC + UE	SC + UE1+	
Functions	Temperature Control		o	o	o	
	Allergy free filter		-	-	-	
	Plasma Filter		-	-	-	
	Prefilter(washable/anti-fungus)		o	o	o	
	Auto Clean		o	o	o	
	CHAOS Wind(Auto Wind)		o	o	o	
	Steps, Fan/Cool/Heat		6/6/6	6/6	6/6	
	Airflow Direction Control(Up& Down)		Auto	Auto	Auto	
	Airflow Direction Control(Left & Right)		Auto	Auto	Auto	
	Remote Controller Type		Wireless LCD	Wireless LCD	Wireless LCD	
	Setting Temperature	Cooling	18°C~30°C	18°C~30°C	18°C~30°C	
	Range	Heating	16°C~30°C	-	-	
	Auto Operation (MicomControl)		-	-	-	
	Auto Changeover (MicomControl)		o	o	o	
	Self Diagnosis		o	o	o	
	Timer		24h, On/off	24h, On/off	24h, On/off	
	Sleep Operation		o	o	o	
	Soft Dry Operation		o	o	o	
	Restart Delay(minute)		3	3	3	
	Deice Control(Defrost)		o	-	-	
	Hot Start		o	-	-	
	Jet Cool(Surge)		o	o	o	
	Low Ambient Operation		o	o	o	
	Special Function			Water Level Sensor	Water Level Sensor	Water Level Sensor
				Wind Baffle kit	Wind Baffle kit	Wind Baffle kit

Note:

O : Applied, - : No relation

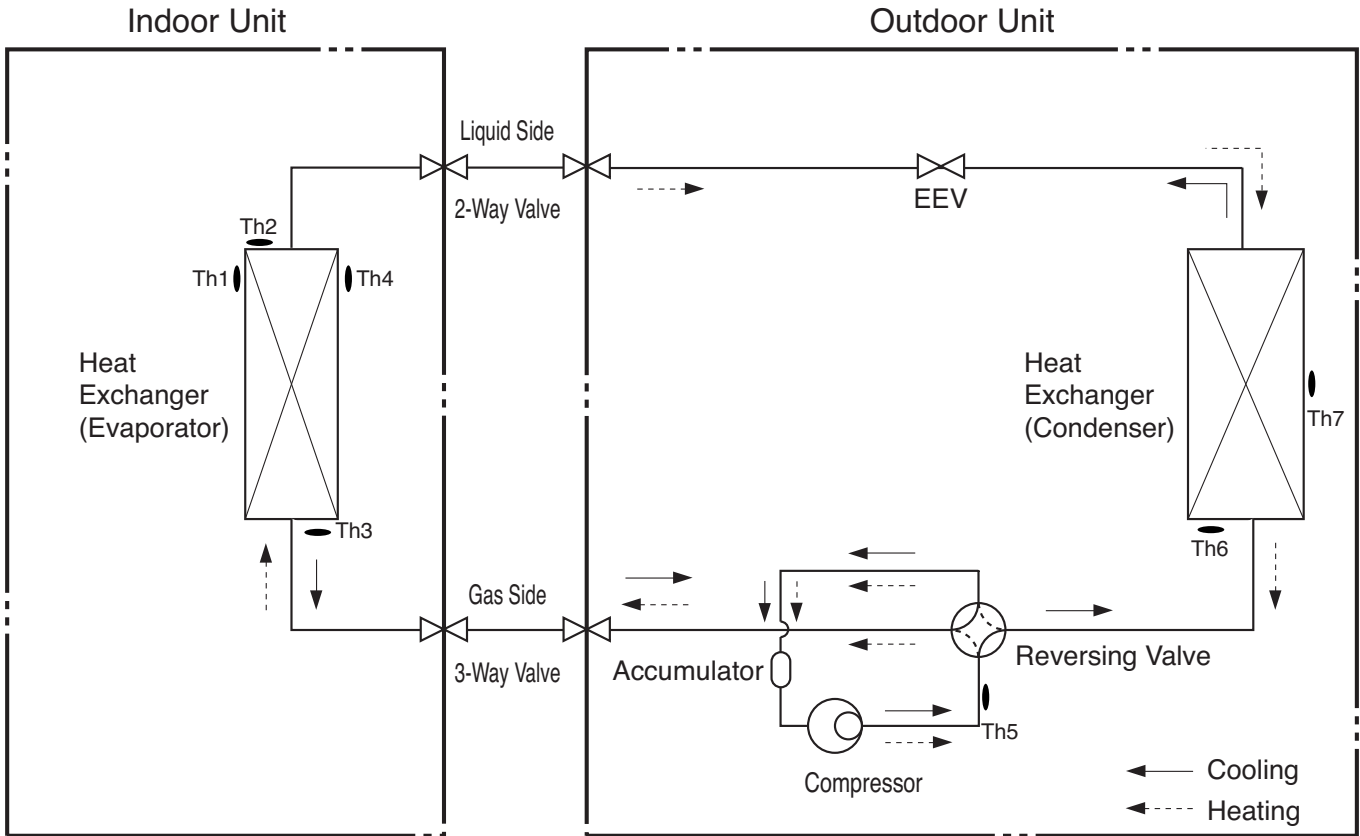
* For circuit breaker rating, please conform to local standards wherever necessary.

* Some of functions are slightly different depending upon models.

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

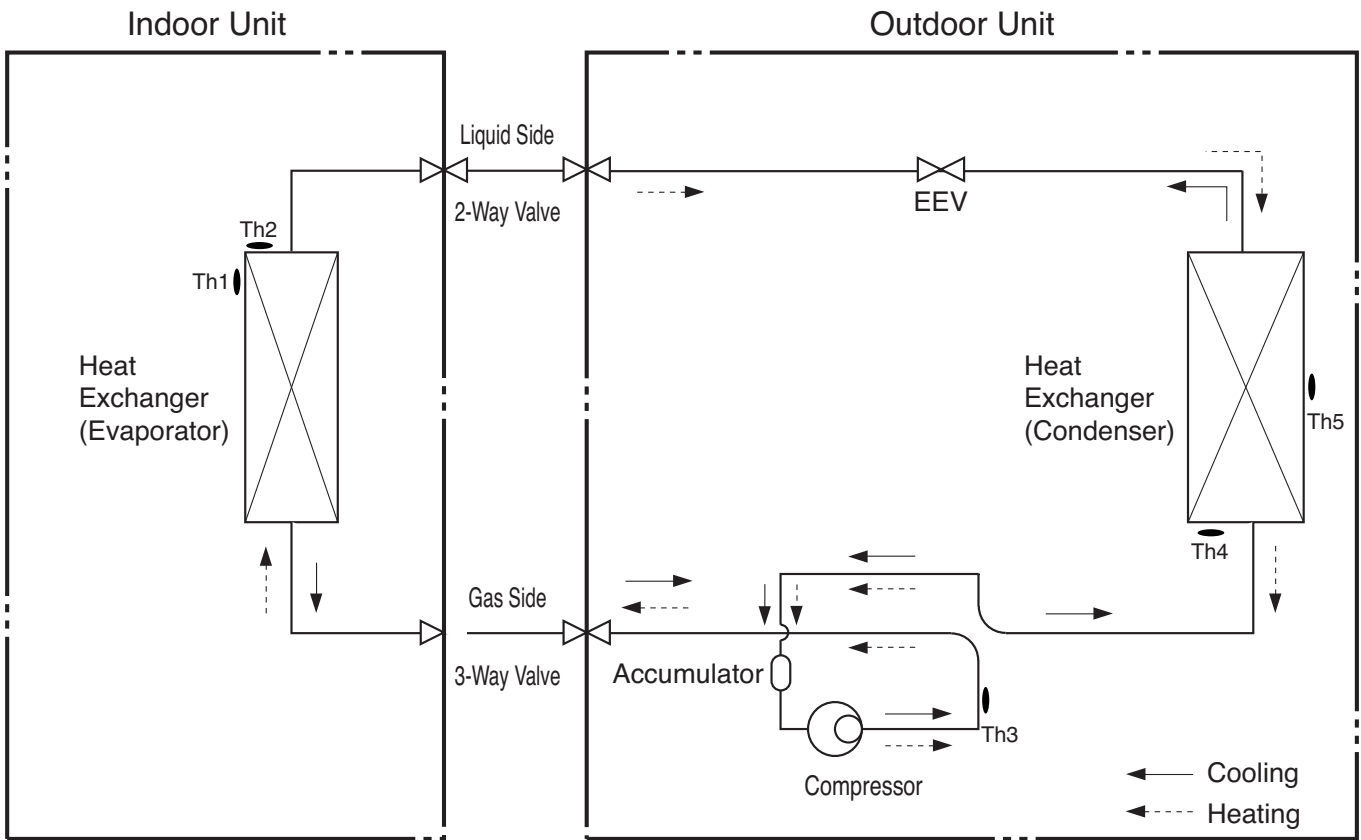
Piping Diagrams

Model : M18YJ



LOC.	Description	PCB Connector
Th1	Thermistor for suction air temperature	CN-TH1(Indoor)
Th2	Thermistor for evaporator inlet temperature	
Th3	Thermistor for evaporator outlet temperature	CN-TH2(Indoor)
Th4	Thermistor for evaporator middle temperature	CN-TH3(Indoor)
Th5	Thermistor for discharge pipe temperature	CN-TH2(OUTDOOR)
Th6	Thermistor for condensing temperature	CN-TH1(OUTDOOR)
Th7	Thermistor for outdoor air temperature	

**Model : M18CJ
M24CJ**



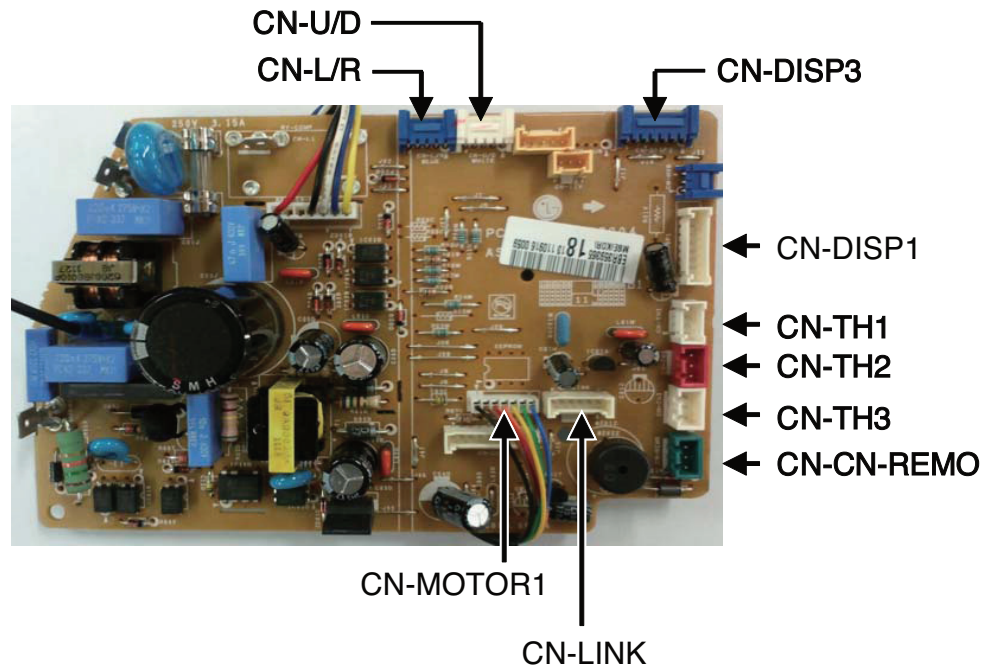
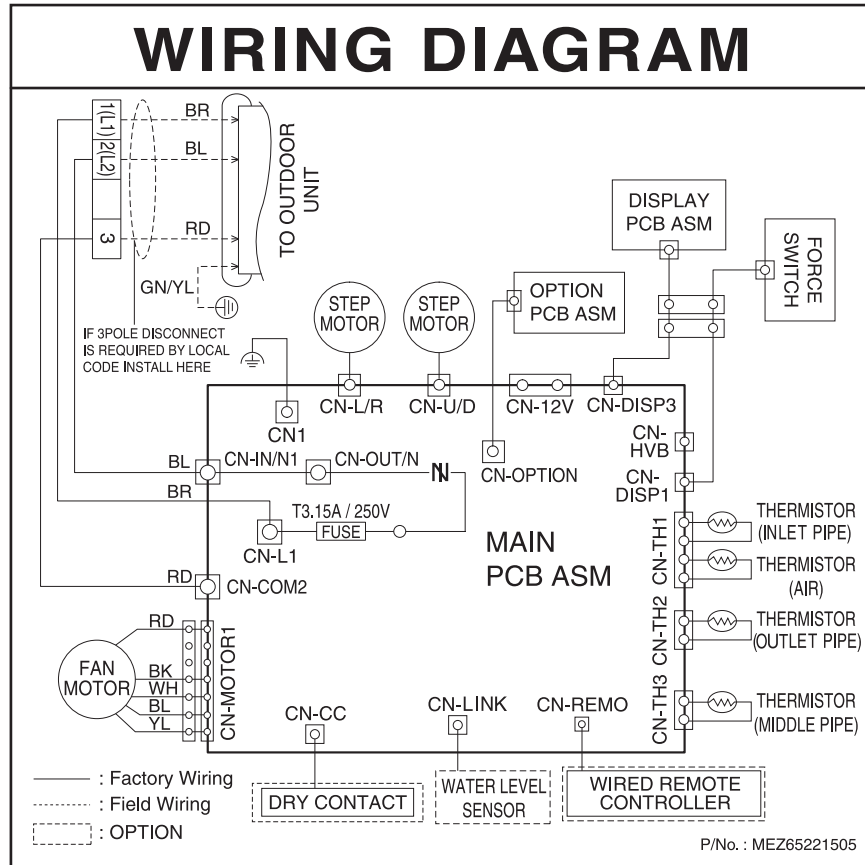
LOC.	Description	PCB Connector
Th1	Thermistor for suction air temperature	CN-TH1(Indoor)
Th2	Thermistor for evaporator middle temperature	CN-TH3(Indoor)
Th3	Thermistor for discharge pipe temperature	CN-TH2(OUTDOOR)
Th4	Thermistor for condensing temperature	CN-TH1(OUTDOOR)
Th5	Thermistor for outdoor air temperature	

※ EEV : Electronic Expansion Valve

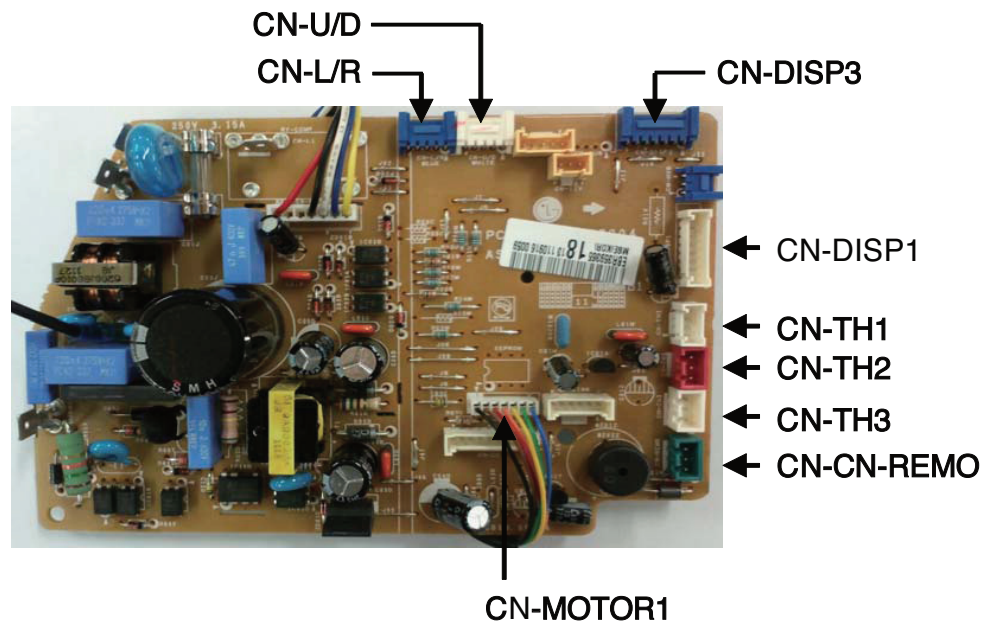
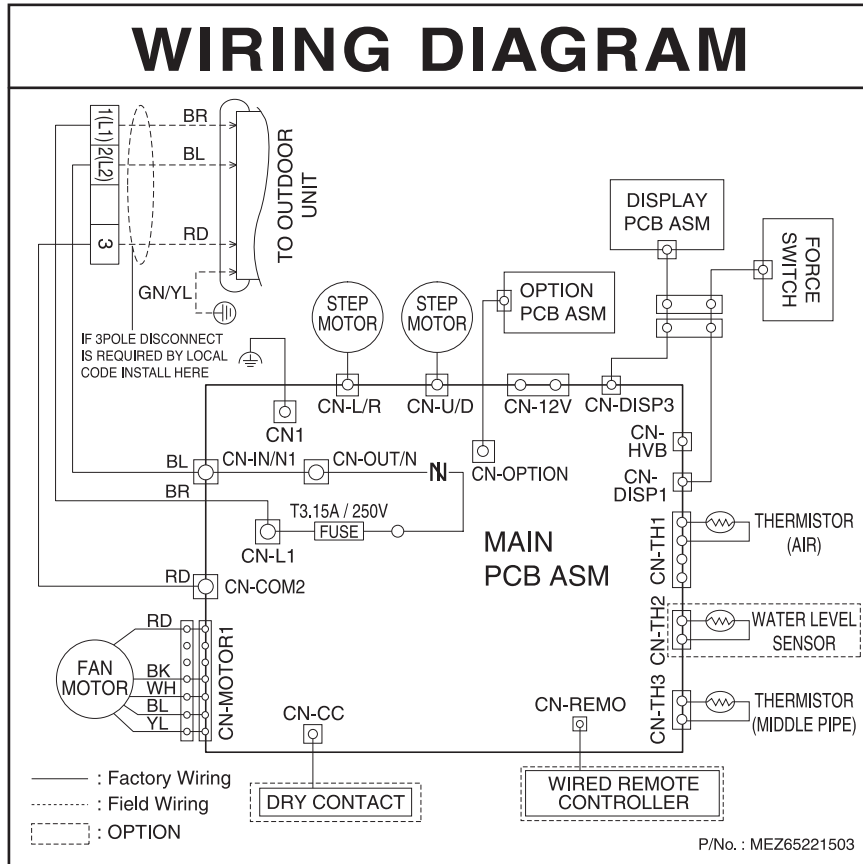
Wiring Diagrams

Indoor Unit

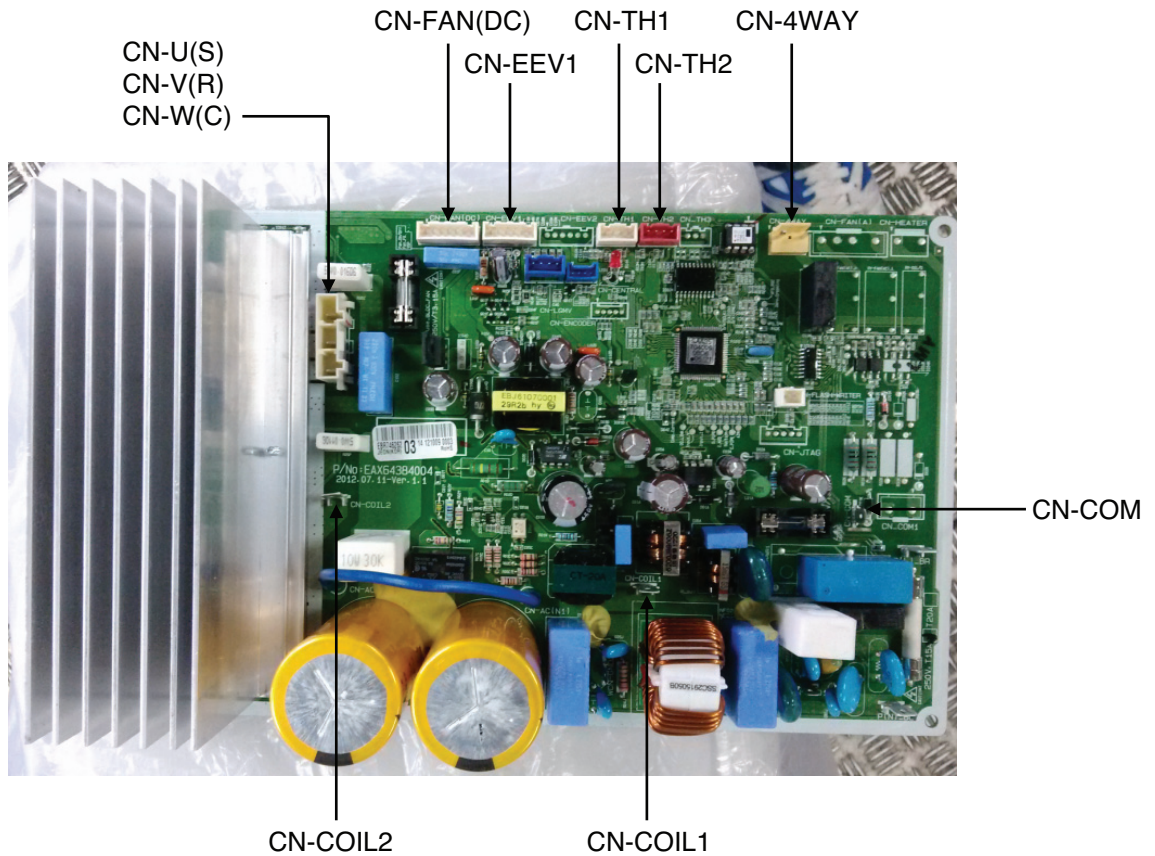
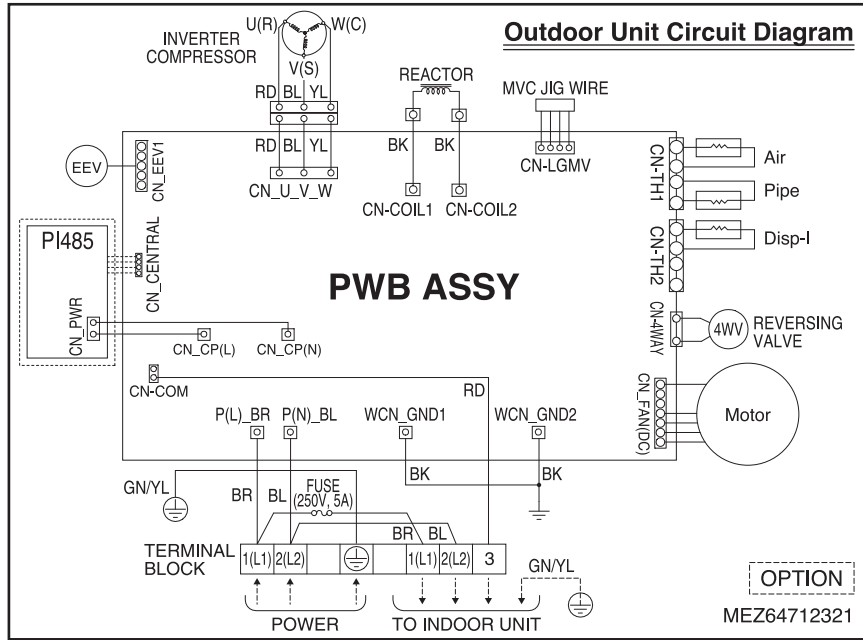
Model : MW18Y3J



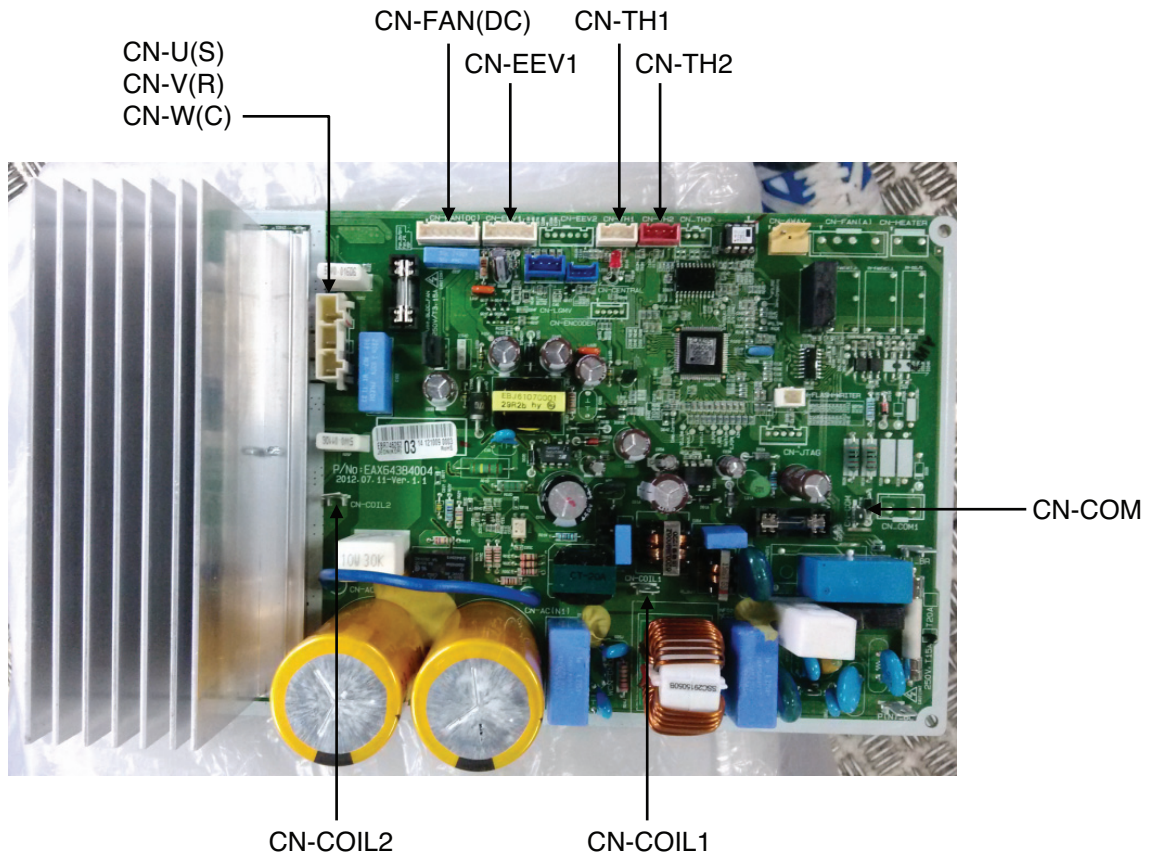
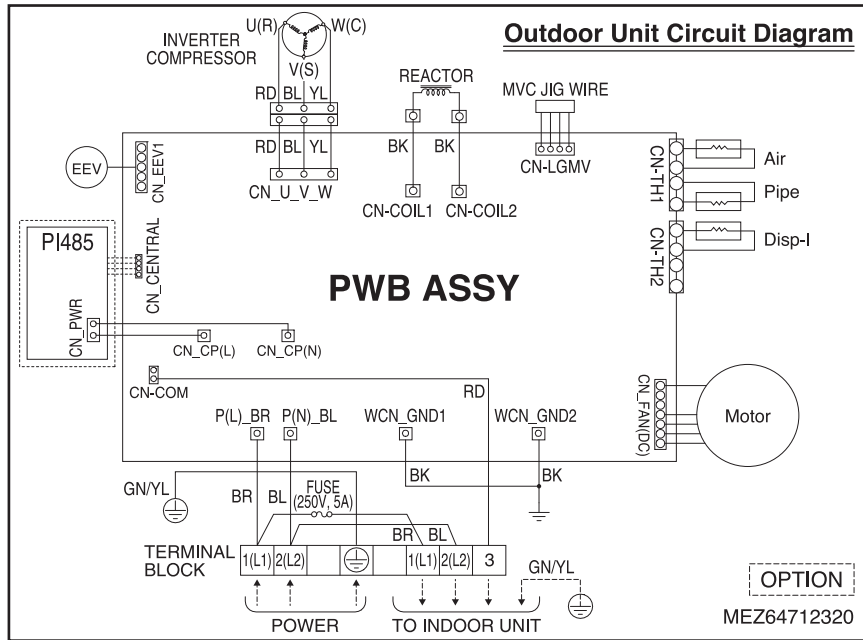
Indoor Unit
 Model : MW18C3J
 MW24C3J



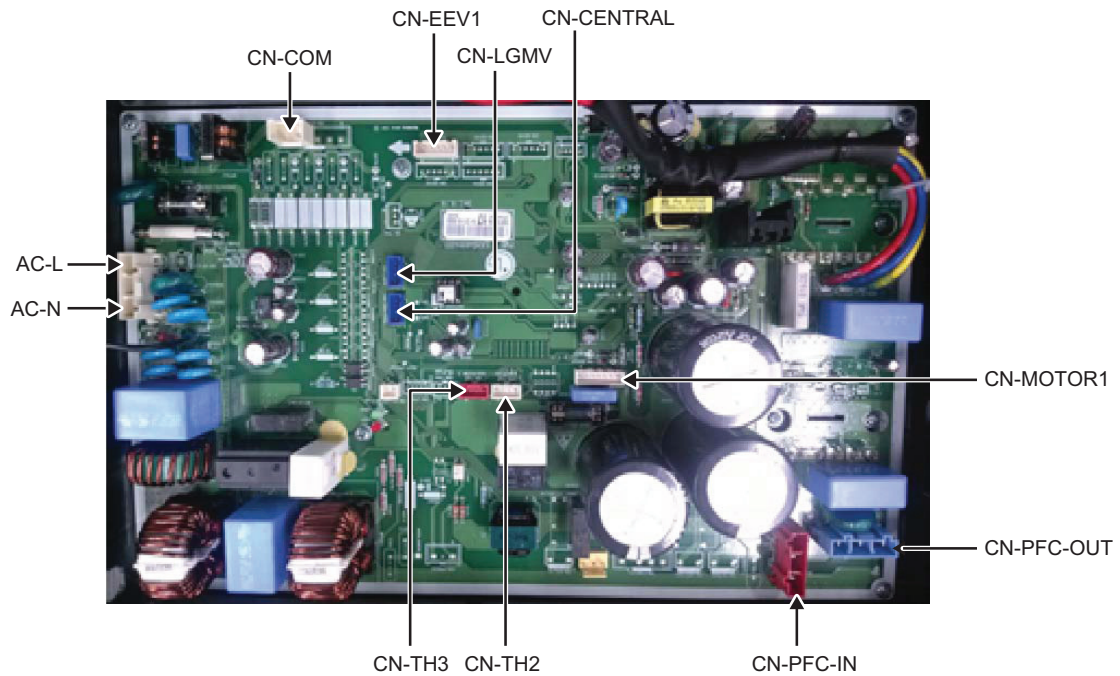
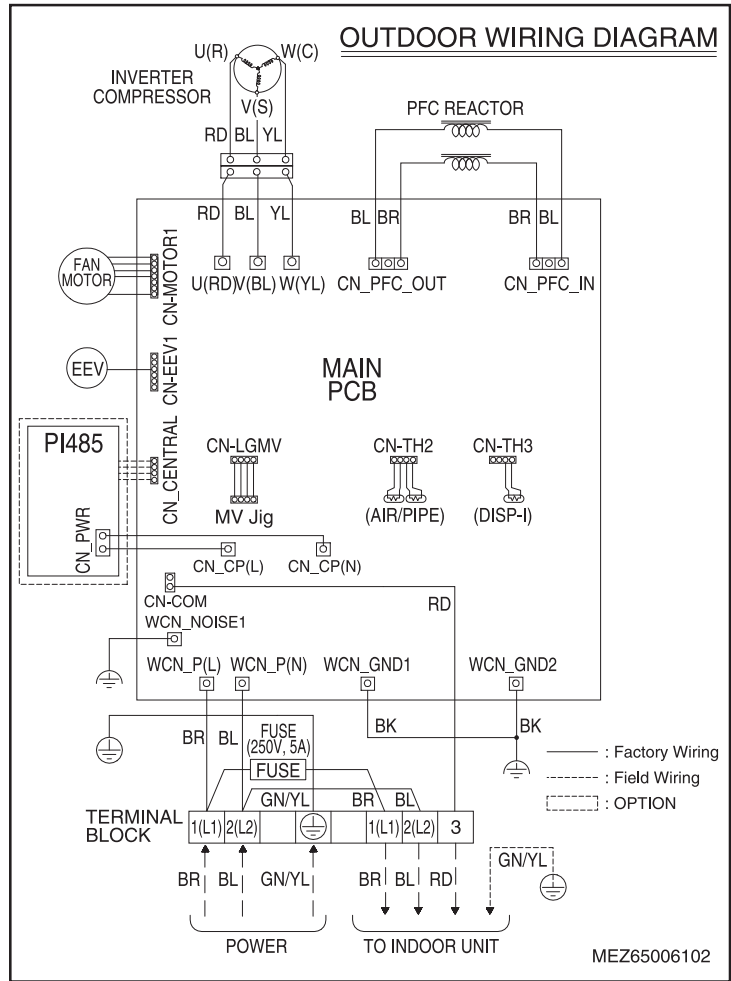
Outdoor Unit
Model : MR18Y3J



Outdoor Unit
Model : MR18C3J

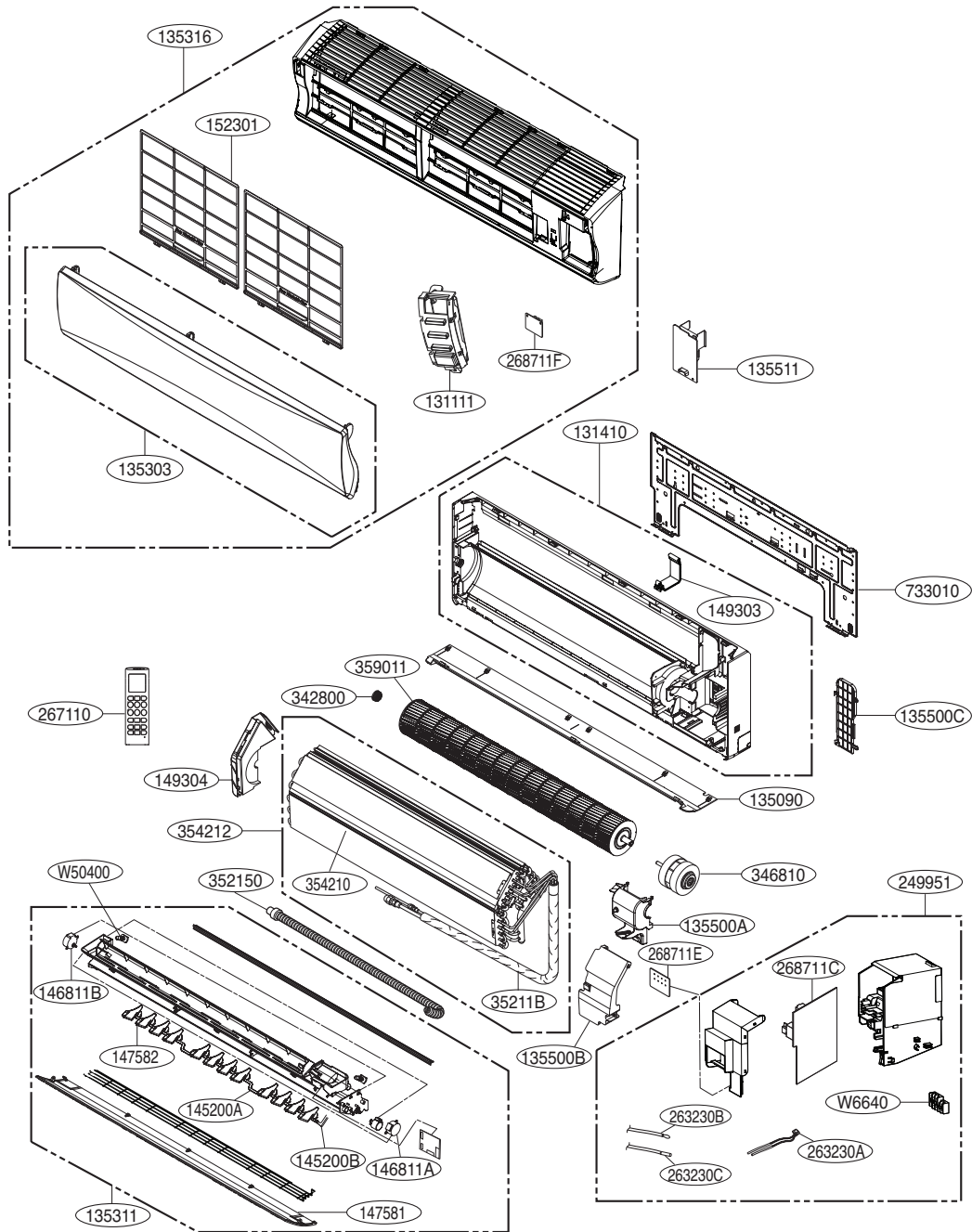


Outdoor Unit
Model : MR24C3J



Exploded View

Indoor Unit
Model : MW18Y3J

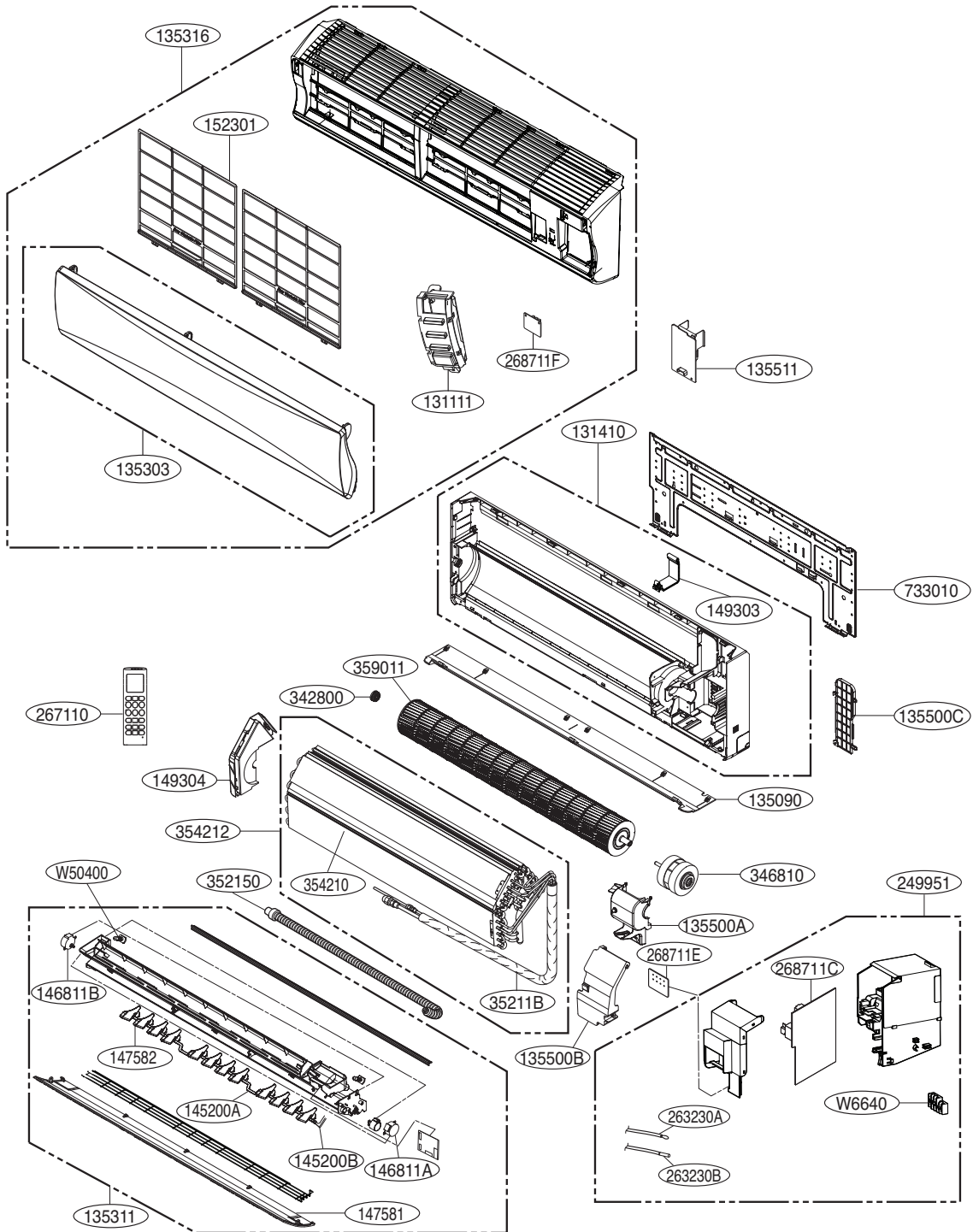


LOC	Description
263230A	Thermistor for suction air temperature
	Thermistor for evaporator inlet temperature
	Thermistor for evaporator outlet temperature
263230B	Thermistor for evaporator middle temperature
263230C	Thermistor for evaporator middle temperature

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>.)

Indoor Unit

Model : MW18C3J, MW24C3J

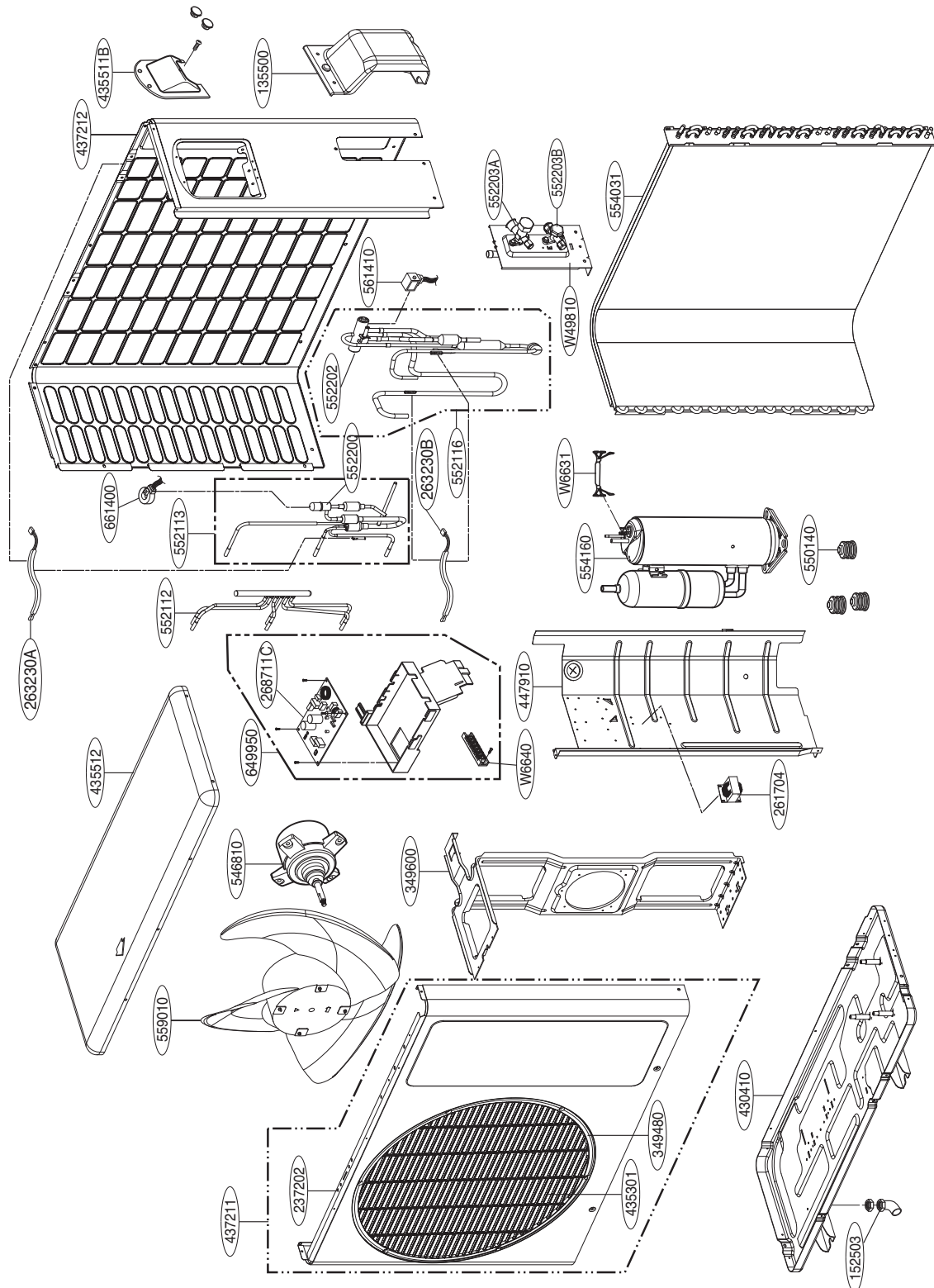


LOC	Description
263230A	Thermistor for suction air temperature
263230B	Thermistor for evaporator middle temperature

Note) * Please ensure GCSC since the replacement parts may be changed depending upon the buyer's request.
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Outdoor Unit

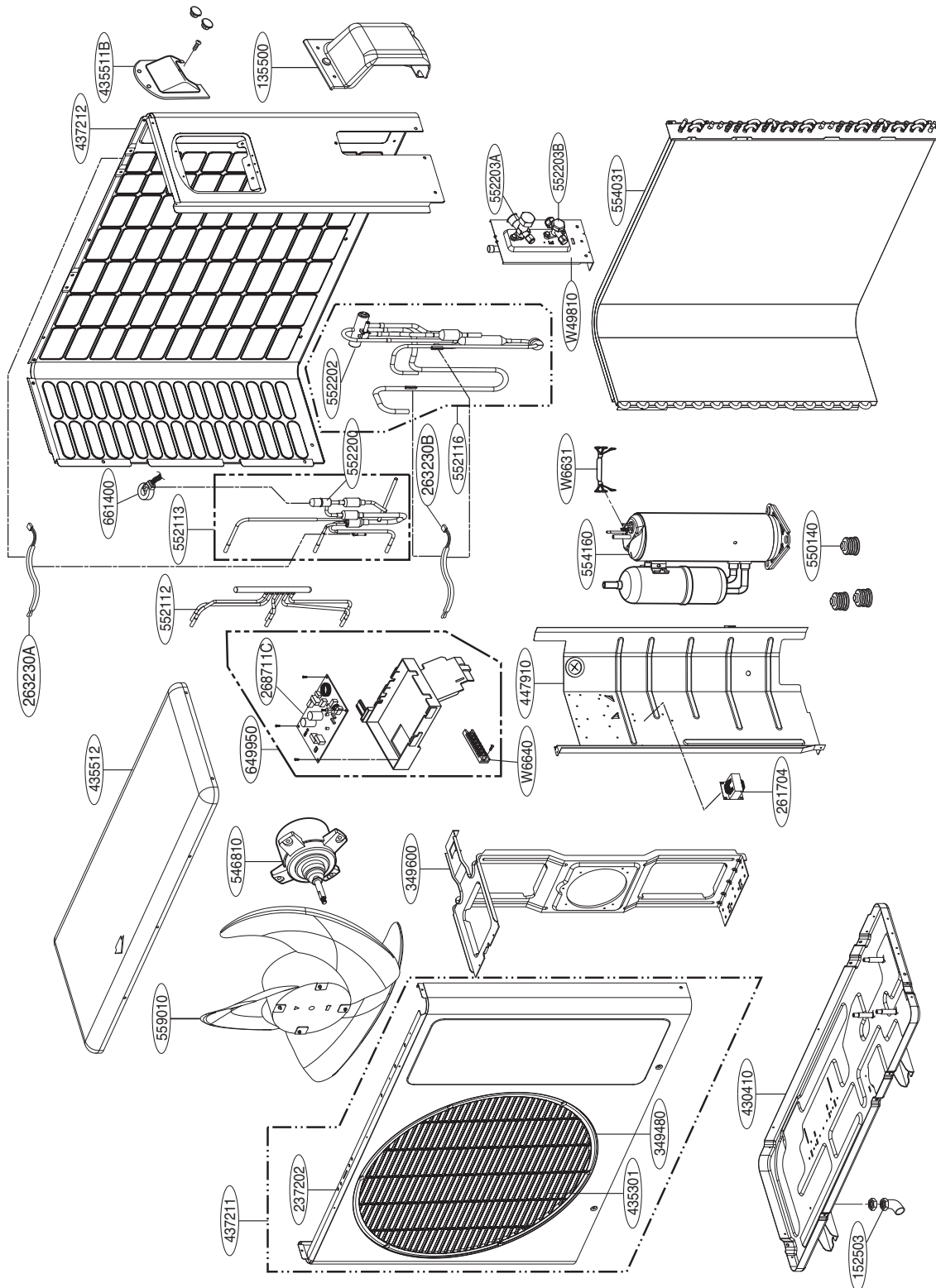
Model : MR18Y3J



LOC	Description
263230A	Thermistor for suction air temperature
263230B	Thermistor for condense middle temperature
	Thermistor for discharge pipe temperature

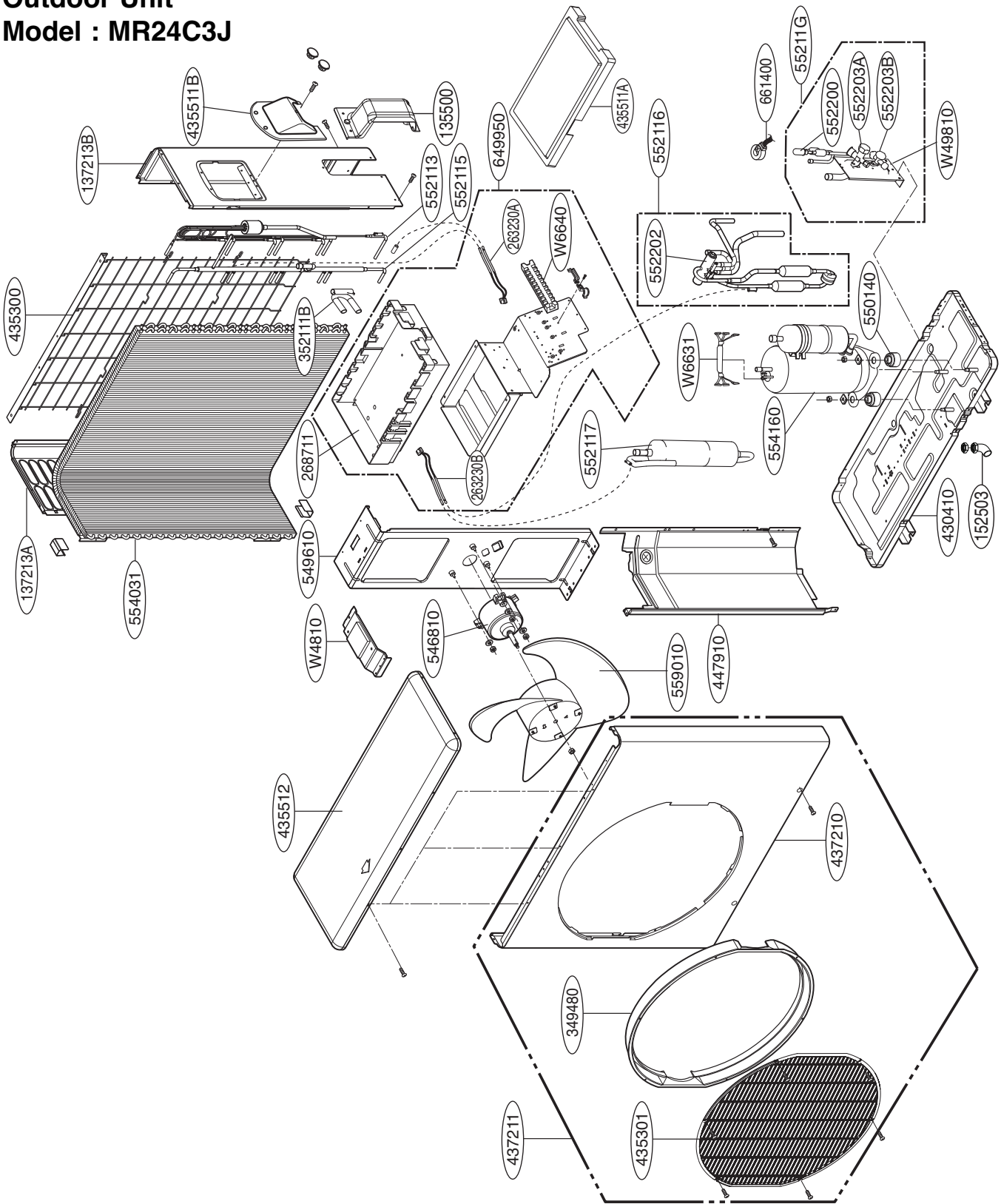
Outdoor Unit

Model : MR18C3J



LOC	Description
263230A	Thermistor for suction air temperature
263230B	Thermistor for condense middle temperature
	Thermistor for discharge pipe temperature

Outdoor Unit
Model : MR24C3J



LOC	Description
263230A	Thermistor for suction air temperature
	Thermistor for condense middle temperature
263230B	Thermistor for discharge pipe temperature



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Friedrich Air Conditioning Co. | 10001 Reunion Place, Suite 500 | San Antonio, TX 78216 | 877.599.5665
www.friedrich.com

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