



# Multi Air Conditioner

## SVC MANUAL(Exploded View)

**MODEL : A8UW54GFA0 [LMU540HV]**

### **CAUTION**

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

# 1. Specification

Model Name				A8UW54GFA0 [LMU540HV]
Capacity		Nominal	Btu/h Class	54,000
Capacity	Cooling	Min.~Rated~Max.	Btu/h	14,000 ~ 52,500 ~ 63,200
	Heating	Min.~Rated~Max.	Btu/h	15,467 ~ 58,000 ~ 64,000
Power Input	Cooling	Min.~Rated~Max.	kW	1.0 ~ 5.10 ~ 5.86
	Heating	Min.~Rated~Max.	kW	1.49 ~ 5.34 ~ 6.19
EER / COP			kBbu/h.W	10.3 / 3.2
SEER / SCOP			Non Ducted	18.4 / 8.7
			Mixed	17.1 / 8.7
			Ducted	15.8 / 8.7
Power Supply			V, Ø, Hz	208/230, 1, 60
Running Current	Cooling	Min.~Rated~Max.	A	4.6 ~ 23.7 ~ 27.2
	Heating	Min.~Rated~Max.	A	6.9 ~ 24.8 ~ 28.7
Starting Current	Cooling	Max.	A	-
	Heating	Max.	A	-
Wiring Connections	Power Supply Cable (included Earth)		No. x AWG	3C x 4.0
	Power and Communication Cable (included Earth)		Outdoor ~ BD unit	No. x AWG
Combination	Sum of Indoor Units Capacity		kBtu/h	73
	Number of Indoor Units		EA	8
	Number of BD Units		EA	2
Casing Color				Warm Gray
Dimensions		W x H x D	mm	950 x 1380 x 330
		W x H x D	inch	37.4 x 54.3 x 13.0
Net Weight			kg (lbs)	97(213.8)
Compressor	Type			Twin Rotary
	Model		Model x No.	GPT442MAA x 1
	Motor type			BLDC
	Motor Output		W x No.	4,000 (at 60Hz) x 1
Refrigerant	Type			R410A
	Precharged Amount		g (oz)	4,400 (155.2)
	Chargeless-Pipe Length		m (ft)	40 (131.2)
	Additional Charging Volume		g/m (oz/ft)	20 (0.22)
	Control			Electronic Expansion Valve
Refrigerant Oil	Type			FVC68D
	Charged volume		cc x No.	1,300 x 1
Heat Exchanger	(Row x Column x Fins per inch) x No.			(2 x 32 x 14) x2
Fan	Type			Propeller
	Air Flow Rate		m³/min(ft³/min) x No.	60 x 2
Fan Motor	Type			BLDC
	Output		W x No.	124.2 x 2
Sound Pressure Level	Cooling	Rated	dB(A)	53
	Heating	Rated	dB(A)	54
Sound Power Level	Cooling	Rated	dB(A)	69
Piping Connections	Liquid	Outer Dia.	mm(inch) x No.	Ø 9.52 (3/8)
	Gas	Outer Dia.	mm(inch) x No.	Ø 19.05 (3/4)
Piping Length	Total Piping	Max.	m (ft)	145 (475.7)
	Main Piping	Max.	m (ft)	55 (180.4)
	Total Branch Piping	Max.	m (ft)	90 (295.3)
	Each Branch Piping	Max.	m (ft)	15 (49.2)
Maximum Height Difference	Outdoor Unit ~ Indoor Unit	Max.	m (ft)	30 (98.4)
	Indoor Unit ~ Indoor Unit	Max.	m (ft)	15 (49.2)
Operation Range (Outdoor Temperature)	Cooling	Min. ~ Max.	°C DB (°F DB)	-10 (14.0) ~ 48 (118.4)
	Heating	Min. ~ Max.	°C WB (°F WB)	-18 (-0.4) ~ 18 (64.4)

**Note:**

- All data are based on the following conditions:
  - Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB  
Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
  - Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB  
Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
  - Piping Length : Interconnected Pipe Length = 5m
  - Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.
- Wiring cable size must comply with the applicable local and national code.
- Due to our policy of innovation some specifications may be changed without notification.
- Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased(maximum 3dB(A)) owing to ambient conditions during operation.

## 2. List of Functions & Accessory

### 2.1 List of Functions

Category	Function	A8UW54GFA0 [LMU540HV]
Reliability	Defrost / Deicing	O
	High Pressure Switch	X
	Low Pressure Switch	X
	Phase protection	O
	Restart Delay (3-minutes)	O
	Self Diagnosis	O
	soft start	O
	Test Function	O
Convenience	Auto operation(Artificial intelligence)	O
	Wiring Error Check	O
	Night Quiet Mode	O
	Peak Control	O
	Mode Lock	O
	Forced Operation	O
	Auto Restart Operation	O
	Central control(LGAP)	O
CAC Network Function	Dry contact	O
	PDI(Power Distribution Indicator)	O
	PI485	O
		O

**Note :**

O : Applied, X : Not applied

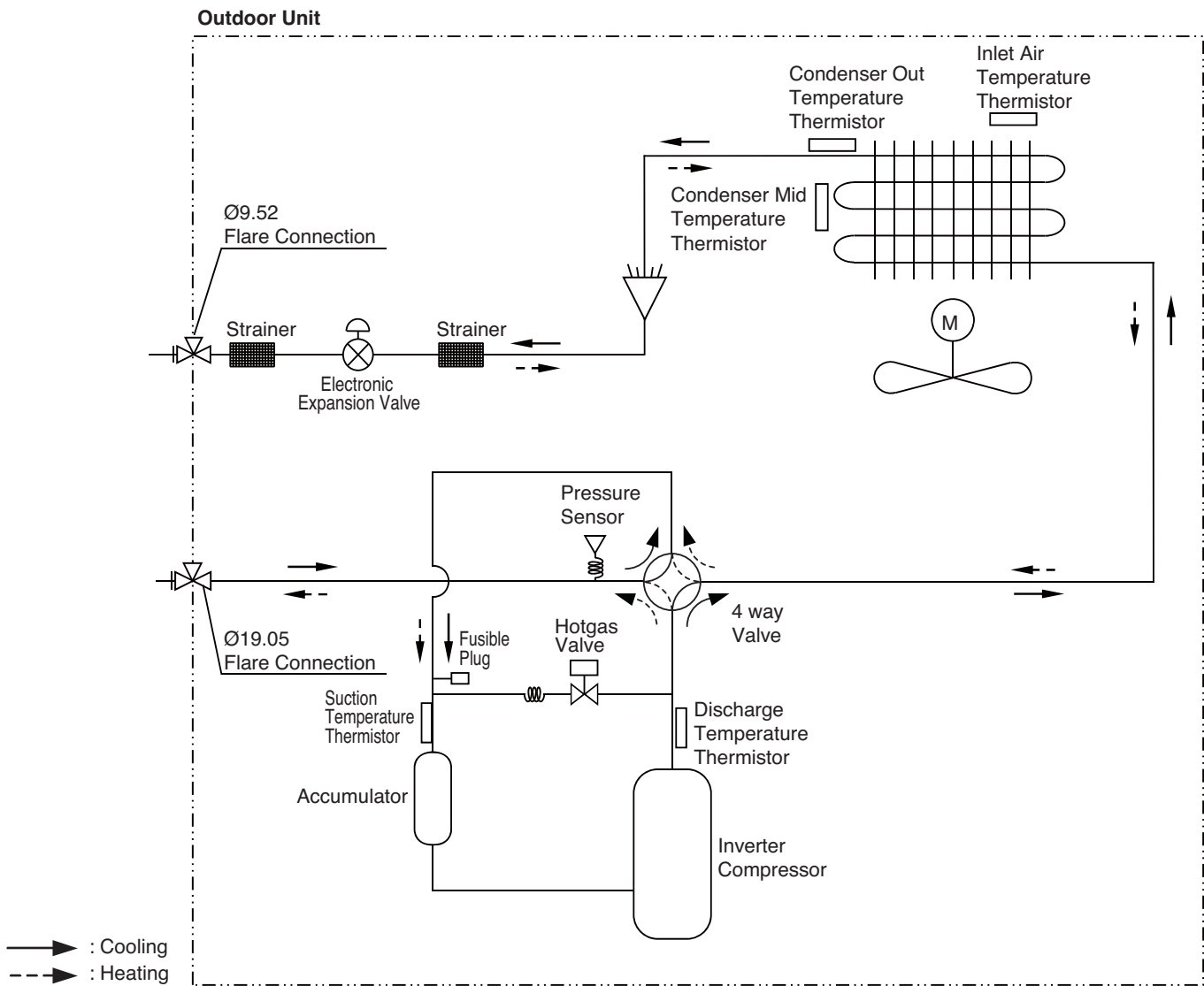
\* Option : Model name & price are different according to options, and assembled in factory with main unit.

Accessory model name : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

### 2.2 List of Accessory

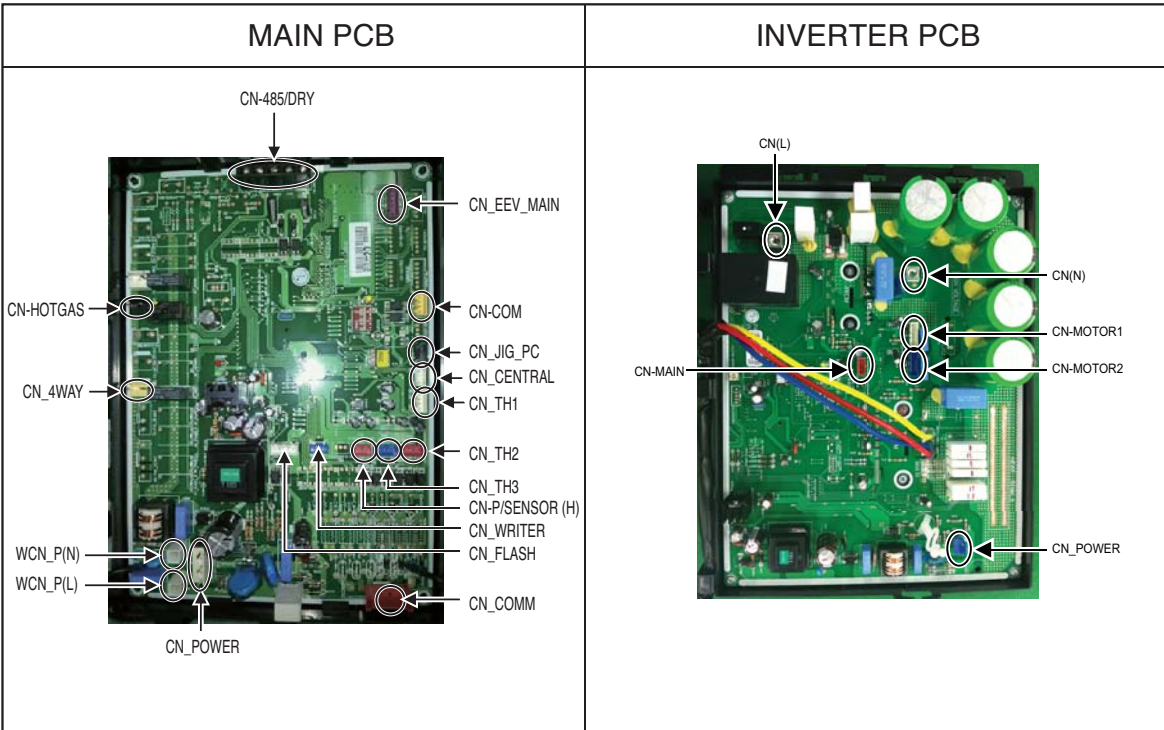
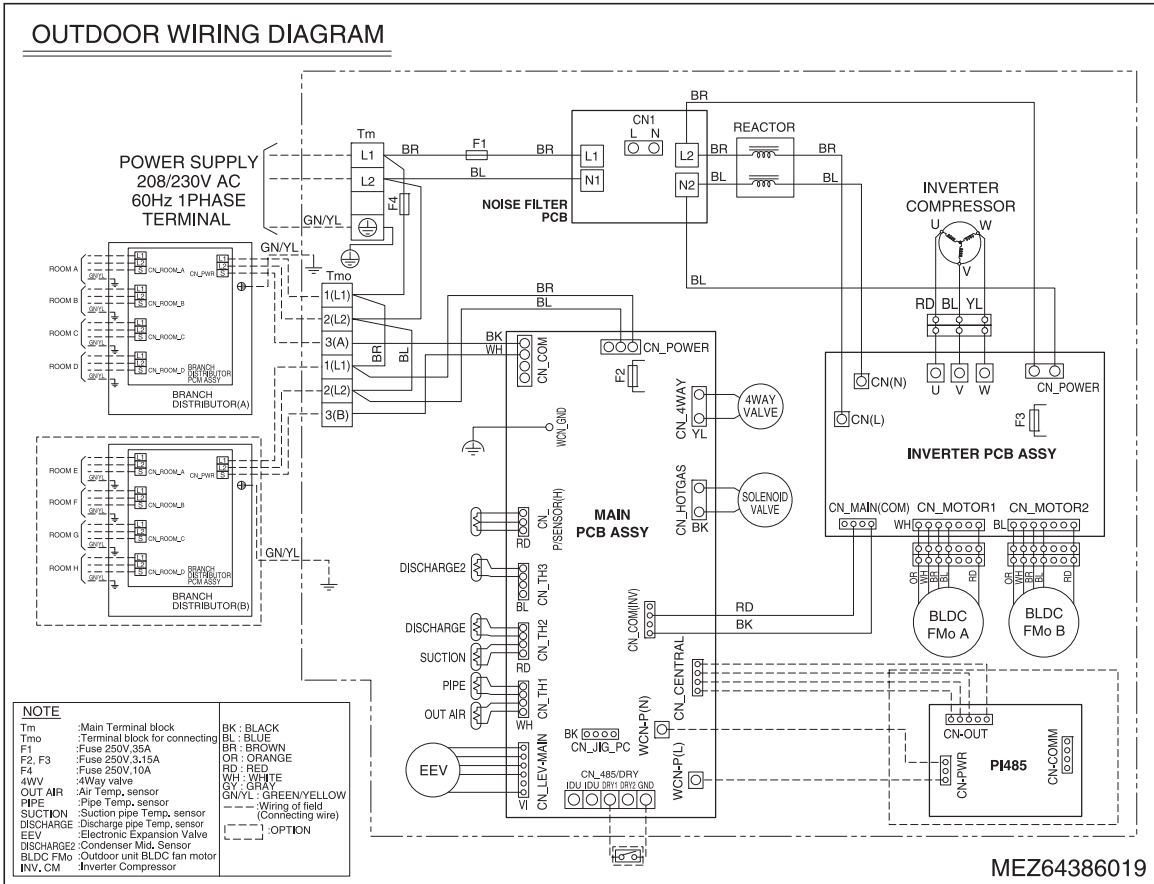
Device		A8UW54GFA0 [LMU540HV]
Central Controller	Simple Controller	PQCSB101S0
	Function controller	PQCSB101S0 + PQCSC101S0
	Function Scheduler	PQCSB101S0 + PQCSD130A0
	AC Ez	PQCSZ250S0
	AC Smart II	PQCSW320A1E
	Option Kit (SD card type)	PQCSE341A0 / PQCSE342A0
	ACP(Advanced Control Platform)	PQCPA11A0E / PQCPB11A0E
	AC Manager	PQCSS520A0E
	PI485	PMNFP14A0/PMNFP14A1
	DO(Digital Output) Kit	PQNFP00T0
BNU (Building Network Unit)	LONWORKS Gateway	PQNFB16A1
	BACnet Gateway	PQNFB17B0
Installation	Y branch	PMBL5620
	Header branch	PMBL1203F0
	Air Guide	X
	BD Unit	PMBD3620, PMBD3630, PMBD3640
ODU Dry Contact		O
Low Ambient Kit		O (Logical operation)

# 3. Piping Diagrams

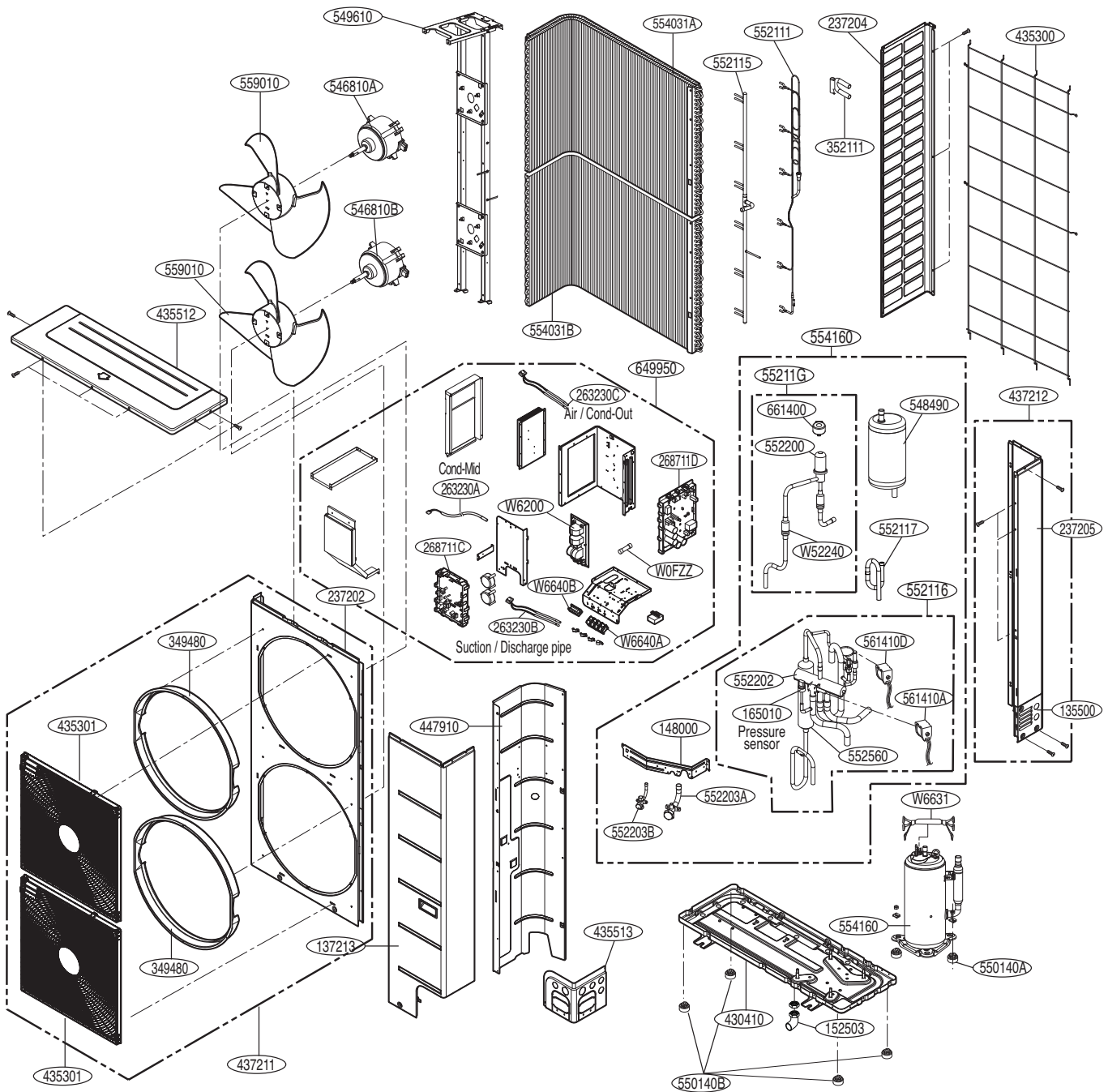


PCB Connector	Description
CN-TH1	Air / Cond Out
CN-TH2	Suction / Discharge
CN-TH3	Cond Mid
CN-P/SENSOR(H)	Pressure Sensor
CN-EEV-MAIN	Electronic Expansion Valve
CN-HOTGAS	Hotgas Valve

# 4. Wiring Diagrams



# 5. Exploded View



Location No.	PCB Connector	Description	Housing Color
263230C	CN-TH1	Air / Cond Out	White
263230B	CN-TH2	Suction / Discharge	Red
263230A	CN-TH3	Cond Mid	Blue
165010A	CN-P/SENSOR(H)	Pressure Sensor	Red



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