



CONFIDENTIAL

Multi Air Conditioner

SVC MANUAL(Exploded View)

**MODEL : A3UW24GFA1 [LMU240HV]
A2UW18GFA1 [LMU180HV]**

CAUTION

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

1. Specification

Outdoor unit				A3UW24GFA1 [LMU240HV]	A2UW18GFA1 [LMU180HV]
Testing Combination (Non Ducted)				LSN090HSV5 x 1EA LMN079HVT x 2EA	LSN090HSV5 x 2EA
Testing Combination (Ducted)				LDN127HV4 x 2EA	LDN097HV4 x 2EA
Power Supply			V, Ø, Hz	208/230, 1, 60	208/230, 1, 60
Capacity (Non Ducted)	Cooling	Min.~Rated~Max.	kW	2.46 / 6.92 / 7.33	2.46 / 5.28 / 6.33
		Min.~Rated~Max.	Btu/h	8,400 / 23,600 / 25,000	8,400 / 18,000 / 21,600
	Heating	Min.~Rated~Max.	kW	2.95 / 7.21 / 8.50	2.95 / 6.45 / 7.33
		Min.~Rated~Max.	Btu/h	10,080 / 24,600 / 29,000	10,080 / 22,000 / 25,000
Capacity (Ducted)	Cooling	Min.~Rated~Max.	kW	3.17 / 6.45 / 7.03	3.02 / 5.04 / 5.98
		Min.~Rated~Max.	Btu/h	10,800 / 22,000 / 24,000	10,320 / 17,200 / 20,400
	Heating	Min.~Rated~Max.	kW	3.80 / 6.74 / 8.09	3.52 / 5.86 / 7.03
		Min.~Rated~Max.	Btu/h	12,960 / 23,000 / 27,600	12,000 / 20,000 / 24,000
Power Input (Non Ducted)	Cooling	Min.~Rated~Max.	kW	0.47 / 1.75 / 2.45	0.47 / 1.33 / 2.01
	Heating	Min.~Rated~Max.	kW	0.59 / 1.72 / 2.81	0.59 / 1.79 / 2.42
Power Input (Ducted)	Cooling	Min.~Rated~Max.	kW	0.72 / 1.76 / 2.31	0.68 / 1.38 / 2.03
	Heating	Min.~Rated~Max.	kW	0.98 / 1.94 / 2.85	0.88 / 1.79 / 2.65
Efficiency (Non Ducted)	EER / COP		W/W	3.96 / 4.20	3.96 / 3.60
	SEER / HSPF		-	22.5 / 11.0	22.5 / 11.0
Efficiency (Ducted)	EER / COP		W/W	3.66 / 3.47	3.66 / 3.27
	SEER / HSPF		-	18.5 / 9.8	18.5 / 9.6
Running Current (Non Ducted)	Cooling	Min.~Rated~Max.	A	2.1 / 7.9 / 11.1	2.1 / 6.0 / 9.1
	Heating	Min.~Rated~Max.	A	2.7 / 7.8 / 12.7	2.7 / 8.1 / 11.0
Running Current (Ducted)	Cooling	Min.~Rated~Max.	A	3.3 / 8.0 / 10.4	3.1 / 6.2 / 9.2
	Heating	Min.~Rated~Max.	A	4.4 / 8.8 / 12.9	4.0 / 8.1 / 12.0

Note:

- All data are based on the following conditions:
 - Cooling Temperature : Indoor 26.7°C(80°F) DB / 19.4°C(67°F) WB
Outdoor 35°C(95°F) DB / 23.9°C(75°F) WB
 - Heating Temperature : Indoor 21.1°C(70°F) DB / 15.6°C(60°F) WB
Outdoor 8.3°C(47°F) DB / 6.1°C(43°F) WB
 - Piping Length : Interconnected Pipe Length = 7.5m
 - 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 1 dB(A)) owing to ambient conditions during operation.

Outdoor unit				A3UW24GFA1 [LMU240HV]	A2UW18GFA1 [LMU180HV]
Wiring Connections	Power Supply Cable (included Earth)		No. x mm ² (AWG)	3C x 3.3 (12)	3C x 3.3 (12)
	Power and Communication Cable (included Earth)	Outdoor ~ BD unit	No. x mm ² (AWG)	4C x 0.82 (18)	4C x 0.82 (18)
Combination	Sum of Indoor Units Capacity		kBtu/h	33	24
	Number of Indoor Units		EA	2 ~ 3	2
	Number of BD Units		EA	-	-
Casing Color (RAL, Munsell)			-	Warm Gray RAL 7044 Munsell 2.5Y 7.5/1	Warm Gray RAL 7044 Munsell 2.5Y 7.5/1
Dimensions	W x H x D		mm	870 x 650 x 330	870 x 650 x 330
	W x H x D		inch	34-1/4 x 25-19/32 x 13	34-1/4 x 25-19/32 x 13
Net Weight			kg (lbs)	46 (101.4)	45.8 (101.0)
Compressor	Type		-	Twin Rotary	Twin Rotary
	Model		Model x No.	GKT208MAB x 1	GKT208MAB x 1
	Motor type		-	BLDC	BLDC
	Motor Output		W x No.	1,500(at 60 Hz) x 1	1,500(at 60 Hz) x 1
Refrigerant	Type		-	R410A	R410A
	Precharged Amount		g (oz)	1,800 (63.5)	1,800 (63.5)
	Chargeless-Pipe Length		m (ft)	30 (98.4)	30 (98.4)
	Additional Charging Volume		g/m (oz/ft)	20 (0.22)	20 (0.22)
Refrigerant Oil	Control		-	Electronic Expansion Valve	Electronic Expansion Valve
	Type		-	FVC68D	FVC68D
Heat Exchanger	Charged volume		cc x No.	670 x 1	670 x 1
	(Row x Column x Fins per inch) x No.		-	(2 x 28 x 14) x 1	(2 x 28 x 14) x 1
Fan	Type		-	Propeller	Propeller
	Air Flow Rate		ft ³ /min x No.	1765.8 x 1	1765.8 x 1
Fan Motor	Type		-	BLDC	BLDC
	Output		W x No.	85.4 x 1	85.4 x 1
Sound Pressure Level	Cooling	Rated	dB(A)	50	49
	Heating	Rated	dB(A)	54	54
Piping Connections	Liquid	Outer Dia.	mm(inch) x No.	Ø 6.35(1/4) x 3	Ø 6.35(1/4) x 2
	Gas	Outer Dia.	mm(inch) x No.	Ø 9.52(3/8) x 3	Ø 9.52(3/8) x 2
Piping Length	Total Piping	Max.	m (ft)	70 (229.7)	50 (164.0)
	Main Piping	Max.	m (ft)	-	-
	Total Branch Piping	Max.	m (ft)	-	-
	Each Branch Piping	Max.	m (ft)	25 (82.0)	25 (82.0)
Maximum Height Difference	Outdoor Unit ~ Indoor Unit	Max.	m (ft)	15 (49.2)	15 (49.2)
	Indoor Unit ~ Indoor Unit	Max.	m (ft)	7.5 (24.6)	7.5 (24.6)
Continuous Operation Range (Outdoor Temperature)	Cooling	Min. ~ Max.	°C DB (°F DB)	-10 (14) ~ 48 (118.4)	-10 (14) ~ 48 (118.4)
	Heating	Min. ~ Max.	°C WB (°F WB)	-20 (-4.0) ~ 18 (64.4)	-20 (-4.0) ~ 18 (64.4)
Operative Range (Outdoor Temperature)	Cooling	Min. ~ Max.	°C DB (°F DB)	-10 (14) ~ 48 (118.4)	-10 (14) ~ 48 (118.4)
	Heating	Min. ~ Max.	°C WB (°F WB)	-22.8 (-9.0) ~ 18 (64.4)	-22.8 (-9.0) ~ 18 (64.4)

Note:

- All data are based on the following conditions:
 - Cooling Temperature : Indoor 26.7°C(80°F) DB / 19.4°C(67°F) WB
Outdoor 35°C(95°F) DB / 23.9°C(75°F) WB
 - Heating Temperature : Indoor 21.1°C(70°F) DB / 15.6°C(60°F) WB
Outdoor 8.3°C(47°F) DB / 6.1°C(43°F) WB
 - Piping Length : Interconnected Pipe Length = 7.5m
 - 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 1 dB(A)) owing to ambient conditions during operation.

2. List of Functions & Accessory

2.1 List of Functions

Category	Function	A3UW24GFA1 [LMU240HV]	A2UW18GFA1 [LMU180HV]
Reliability	Defrost / Deicing	O	O
	High Pressure Switch	X	X
	Low Pressure Switch	X	X
	Phase Protection	X	X
	Restart Delay (Three [3] Minutes)	O	O
	Self Diagnosis	O	O
	Soft Start	O	O
	Test Function	O	O
Convenience	Night Silent Operation	O	O
	Wiring Error Check	O	O
	Peak Control	O	O
	Mode Lock	O	O
	Forced Cooling Operation (Outdoor Unit)	O	O
	Compatibility w / prior generation of Multi F	O	O

2.2 List of Accessory

Category	Device	A3UW24GFA1 [LMU240HV]	A2UW18GFA1 [LMU180HV]
Central Controllers	AC Smart 5	PACS5A000	PACS5A000
	ACP 5	PACP5A000	PACP5A000
	PI-485	PMNFP14A1	PMNFP14A1
Remote Controllers	MultiSITE CRC1	PREMTBVC0	PREMTBVC0
	MultiSITE CRC1+	PREMTBVC1	PREMTBVC1
Integration Solution	MultiSITE Communications Manager	PBACNBTR0A	PBACNBTR0A
Building Network Unit	LonWorks™ Gateway	PLNWKB100	PLNWKB100
Installation	Y-Branch	X	X
	Header Branch	X	X
	Air Guide	X	X
Other	Power Distribution Indication (PDI) Standard	PPWRDB000	PPWRDB000
	Power Distribution Indication (PDI) Premium	PQNUD1S41	PQNUD1S41
	Dry Contact	X	X
	Low Ambient Wind Baffle Kit	ZLABGP03A (Logical Operation)	ZLABGP03A (Logical Operation)
	Accessory Drain Pan Heater	PQSH1203	PQSH1203
	Computer LG Monitoring View (LGMV)	PRCTIL0	PRCTIL0
	Mobile LGMV for Android Smartphones / Tablets	PLGMVW100	PLGMVW100
	Mobile LGMV for iOS Tablet	PLGMVW100	PLGMVW100

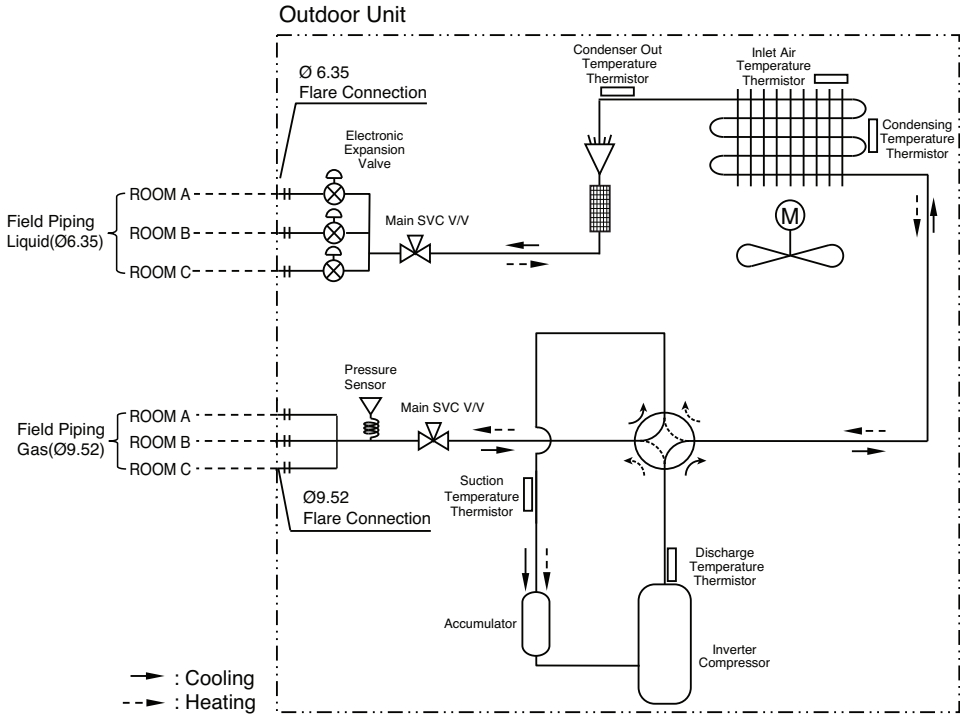
Note :

O : Applied, x : Not applied

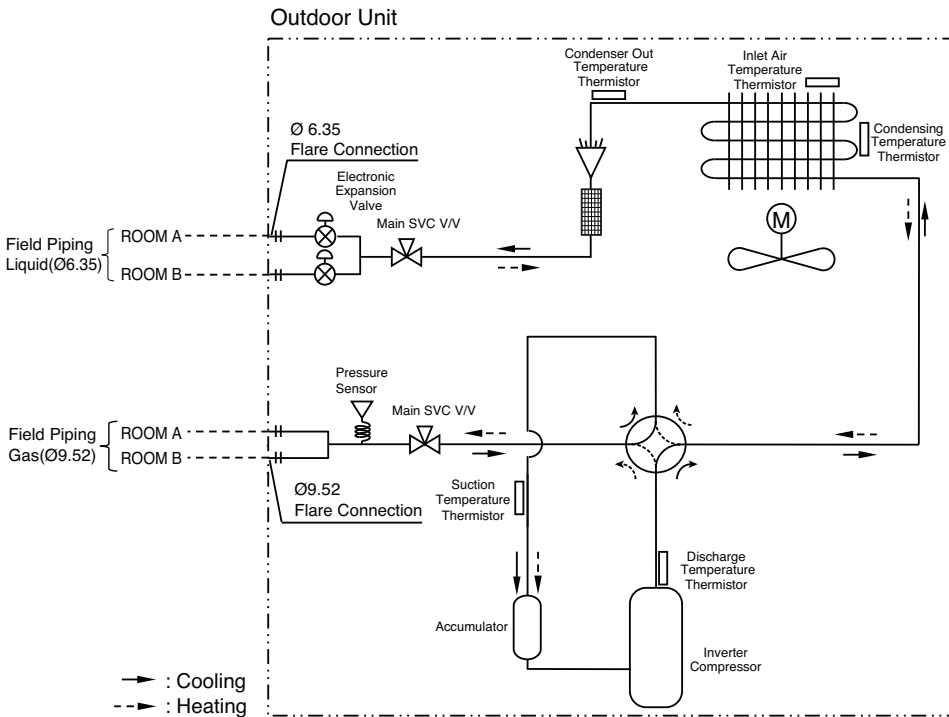
Accessory model name : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

2. Piping Diagrams

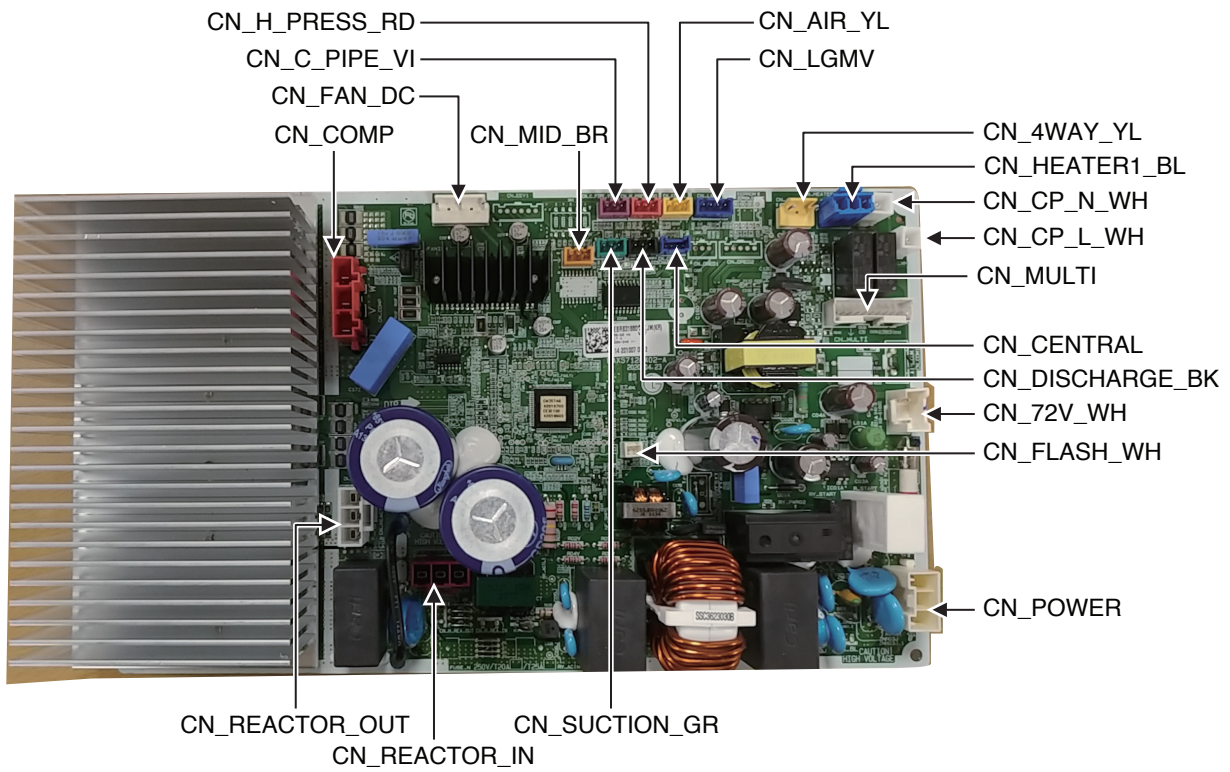
24k



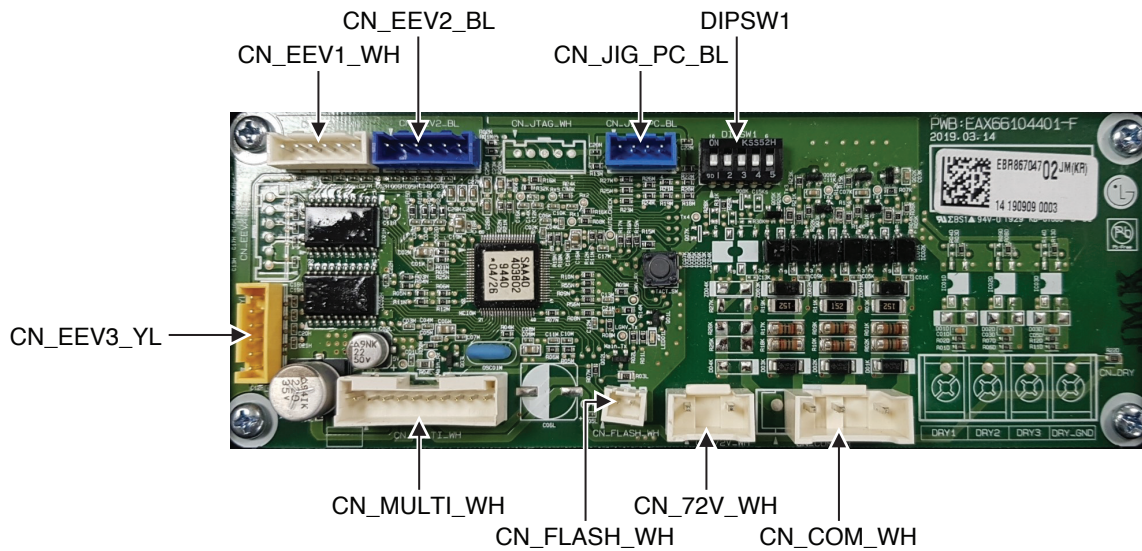
18k



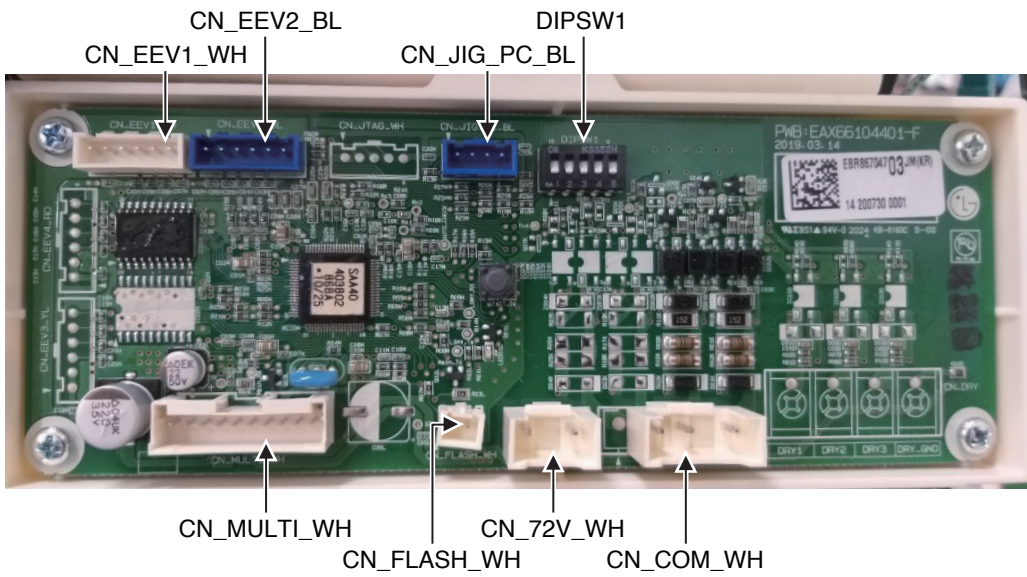
Main PCB



Sub PCB 24k



Sub PCB 18k

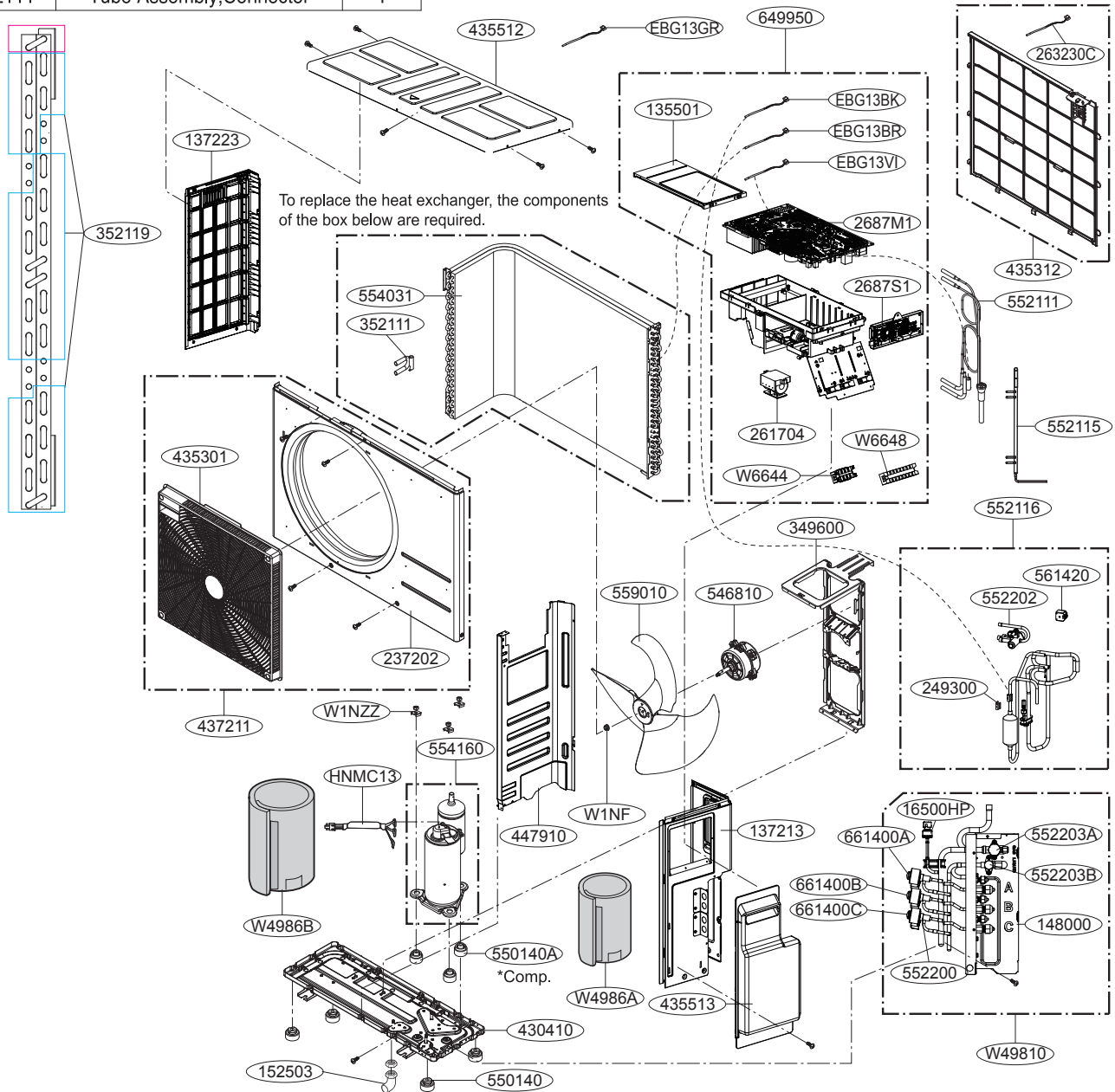


4. Exploded View

24k

• Condenser Assembly, Bending Required Parts

Svc Loc	Description	Q'ty
554031	Condenser Assembly, Bending	1
352119	Tube Assembly, Return Bending	23
352111	Tube Assembly, Connector	1



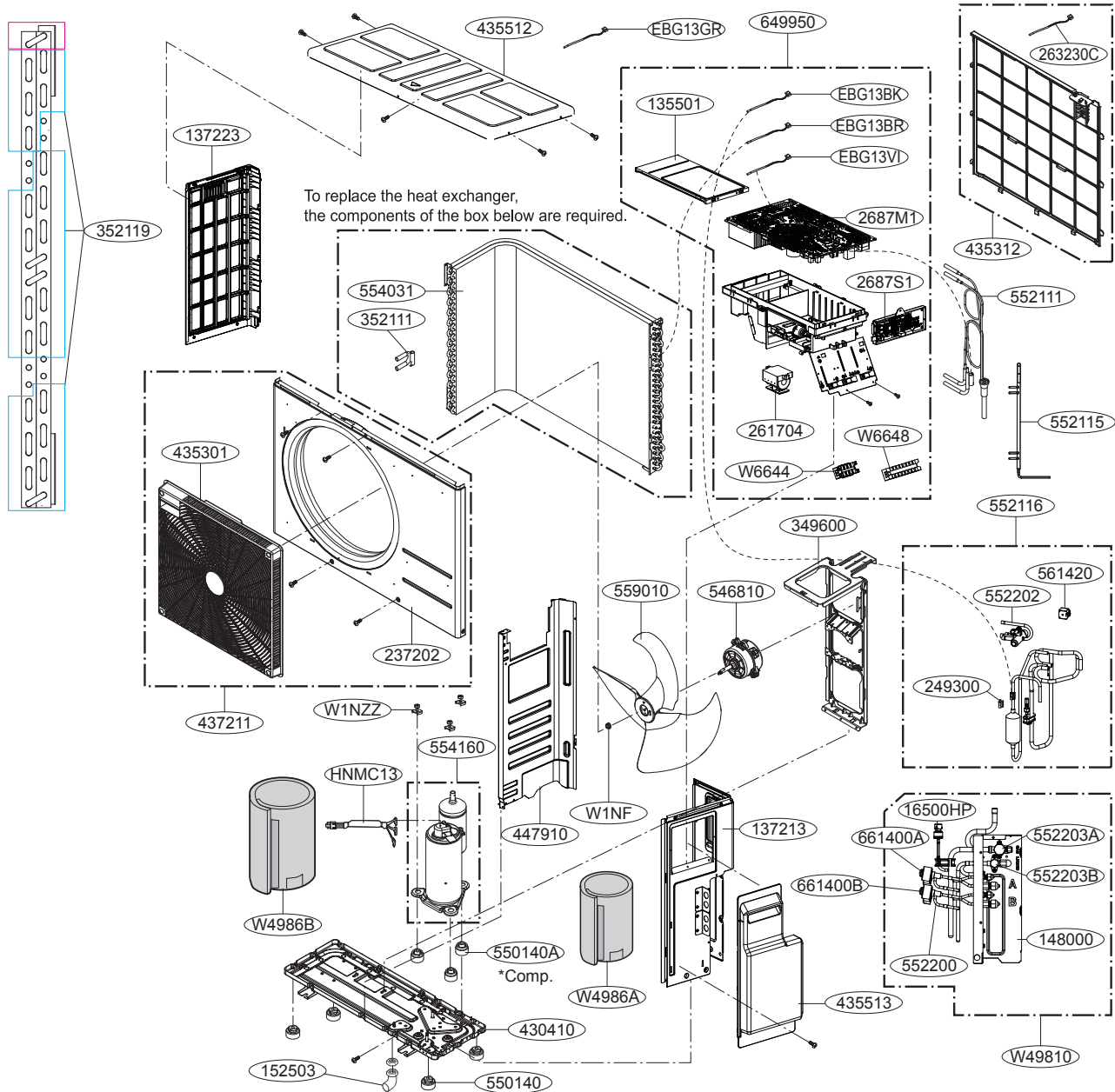
Location No.	Description	Sensor Information	Housing Color
EBG13BK	Thermister1(CN-DISCHARGE)	Discharge Pipe	Black
EBG13GR	Thermister2(CN-SUCTION)	Suction Pipe	Green
EBG13VI	Thermister3(CN-C/PIPE)	Cond Out Pipe	Violet
EBG13BR	Thermister4(CN-MID)	Cond Middle Pipe	Brown
263230C	Thermister5(CN-AIR)	Air	Yellow
16500HP	Pressure Sensor(CN-H/PRESS)	Pressure Sensor	Red

Location No.	Description	P.no	Q'ty	Remark
W1NF	Nut, Comon	4H00947C	1	For Motor and Fan Assebmly

18k

• Condenser Assembly, Bending Required Parts

Svc Loc	Description	Q'ty
554031	Condenser Assembly, Bending	1
352119	Tube Assembly, Return Bending	23
352111	Tube Assembly, Connector	1



Location No.	Description	Sensor Information	Housing Color
EBG13BK	Thermisther1(CN-DISCHARGE)	Discharge Pipe	Black
EBG13GR	Thermisther2(CN-SUCTION)	Suction Pipe	Green
EBG13VI	Thermisther3(CN-C/PIPE)	Cond Out Pipe	Violet
EBG13BR	Thermisther4(CN-MID)	Cond Middle Pipe	Brown
263230C	Thermisther5(CN-AIR)	Air	Yellow
16500HP	Pressure Sensor(CN-H/PRESS)	Pressure Sensor	Red

Location No.	Description	P.no	Q'ty	Remark
W1NF	Nut,Comon	4H00947C	1	For Motor and Fan Assebmly



P/NO : MFL68280007