

AIR CONDITIONER

Wall mounted type

SERVICE MANUAL

INDOOR



ASUH30LPAS
ASUH36LPAS

OUTDOOR



AOUH30LPAS1
AOUH36LPAS1

FUJITSU GENERAL LIMITED

Notices:

- Product specifications and design are subject to change without notice for future improvement.
- For further details, please check with our authorized dealer.

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1. GENERAL INFORMATION

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1. GENERAL INFORMATION

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1. Specifications

1-1. Indoor unit

Type				Wall mounted		
				Inverter heat pump		
Model name				ASUH30LPAS	ASUH36LPAS	
Power supply				208/230 V ~ 60 Hz		
Power supply intake				Outdoor unit		
Available voltage range				187—253 V		
Capacity	Cooling	Rated	kW	8.79	9.67	
			Btu/h	30,000	33,000	
		Min.—Max.	kW	2.90—9.50	2.90—10.00	
			Btu/h	9,900—32,400	9,900—34,100	
	Heating	Rated	kW	8.79	9.96	
			Btu/h	30,000	34,000	
		Min.—Max.	kW	2.55—9.67	2.55—10.26	
			Btu/h	8,700—33,000	8,700—35,000	
	Heating (17 °F) ¹	Rated	kW	5.69	6.57	
		Btu/h	19,400	22,400		
Max.		kW	8.44	8.97		
		Btu/h	28,800	30,600		
Input power	Cooling	Rated	kW	3.07	4.08	
		Min.—Max.		0.45—4.03	0.45—4.29	
	Heating	Rated		2.46	3.1	
		Min.—Max.		0.53—3.15	0.53—3.32	
	Heating (17 °F) ¹	Rated		1.98	2.43	
		Max.		4.26	4.49	
Current	Cooling	Rated	A	13.4	17.8	
	Heating		10.9	13.5		
EER	Cooling	kW/kW	2.86	2.37		
		Btu/hW	9.8	8.1		
COP	Heating	kW/kW	3.57	3.21		
		Btu/hW	12.2	11.0		
SEER	Cooling	Btu/hW	18.0	18.0		
HSPF	Heating	Btu/hW	11.0	11.0		
Power factor	Cooling		%	99.6	99.7	
	Heating		98.1	99.8		
Moisture removal			pints/h (L/h)	9.7 (4.6)	10.1 (4.8)	
Maximum operating current ²	Cooling			A	18.9	
	Heating			A	18.9	
Fan	Airflow rate	Cooling	HIGH	CFM (m ³ /h)	812 (1,380)	812 (1,380)
			MED		665 (1,130)	665 (1,130)
			LOW		536 (910)	536 (910)
		Heating	HIGH		812 (1,380)	812 (1,380)
			MED		665 (1,130)	665 (1,130)
			LOW		536 (910)	536 (910)
		QUIET	418 (710)	418 (710)		
	Type × Q'ty	Crossflow fan × 1				
	Motor output			W	78	
	Sound pressure level ³	Cooling	HIGH	dB (A)	50	50
MED			45		45	
LOW			38		38	
QUIET			32		32	
Heating		HIGH	49		49	
		MED	44		44	
		LOW	38		38	
		QUIET	32		32	
Heat exchanger type	Dimensions (H × W × D)		in (mm)	Main 1: 18-3/16 × 35-3/8 × 1-1/16 (462 × 898 × 26.6) Sub 1: 4-15/16 × 35-3/8 × 1/2 (126 × 898 × 13.3) Sub 2: 3-5/16 × 35-3/8 × 1/2 (84 × 898 × 13.3)		
	Fin pitch		FPI (mm)	Main 1: 21 (1.2) Sub 1: 18 (1.4) Sub 2: 18 (1.4)		
	Rows × Stages			Main 1: 2 × 22 Sub 1: 1 × 6 Sub 2: 1 × 4		
	Pipe type			Copper		
	Fin type			Aluminum		
	Material			Polystyrene		
Enclosure	Color			White Approximate color of Munsell N 9.25/		
Dimensions (H × W × D)	Net			13-3/8 × 45-1/4 × 11 (340 × 1,150 × 280)		
	Gross			15-15/16 × 50 × 17-11/16 (405 × 1,270 × 450)		
Weight	Net			39 (17.5)		
	Gross			51 (23.0)		
Connection pipe	Size	Liquid	in (mm)	Ø3/8 (Ø9.52)		
		Gas		Ø5/8 (Ø15.88)		
Drain hose	Method		Flare			
	Material		PP+HDPE			
	Tip diameter		in (mm) Ø17/32 (Ø13.8) (I.D.), Ø19/32 to 21/32 (Ø15.0 to 16.8) (O.D.)			
Operation range	Cooling	°F (°C)	64 to 90 (18 to 32)			
		%RH	80 or less			
Remote controller type	Heating	°F (°C)	86 (30) or less			
				Wireless (Option: Wired, Mobile app ⁴ [FGLair™])		

Type	Wall mounted	
	Inverter heat pump	
Model name	ASUH30LPAS	ASUH36LPAS
<p>NOTES:</p> <ul style="list-style-type: none"> • Specifications are based on the following conditions: <ul style="list-style-type: none"> – Cooling: Indoor temperature of 80°FDB (26.67°CDB) /67°FWB (19.44°CWB), and outdoor temperature of 95°FDB (35°CDB) / 75°FWB (23.9°CWB). – Heating: Indoor temperature of 70°FDB (21.11°CDB) /59°FWB (15.56°CWB), and outdoor temperature of 47°FDB (8.33°CDB) /43°FWB (6.11°CWB). – *1: Heating (17°F): Indoor temperature of 70°FDB (21.11°CDB) /60°FWB (15.56°CWB), and outdoor temperature of 17°FDB (-8.33°CDB) /15°FWB (-9.44°CWB). – Pipe length: 25 ft (7.5 m), Height difference: 0 ft (0 m). (Between outdoor unit and indoor unit.) • Protective function might work when using it outside the operation range. • *2: Maximum current is maximum value when operated within the operation range. • *3: Sound pressure level: <ul style="list-style-type: none"> – Measured values in manufacturer's anechoic chamber. – Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here. • *4: Available on Google Play™ store or on App Store®. Optional WLAN adapter is also required. For details, refer to the setting manual. 		

1-2. Outdoor unit

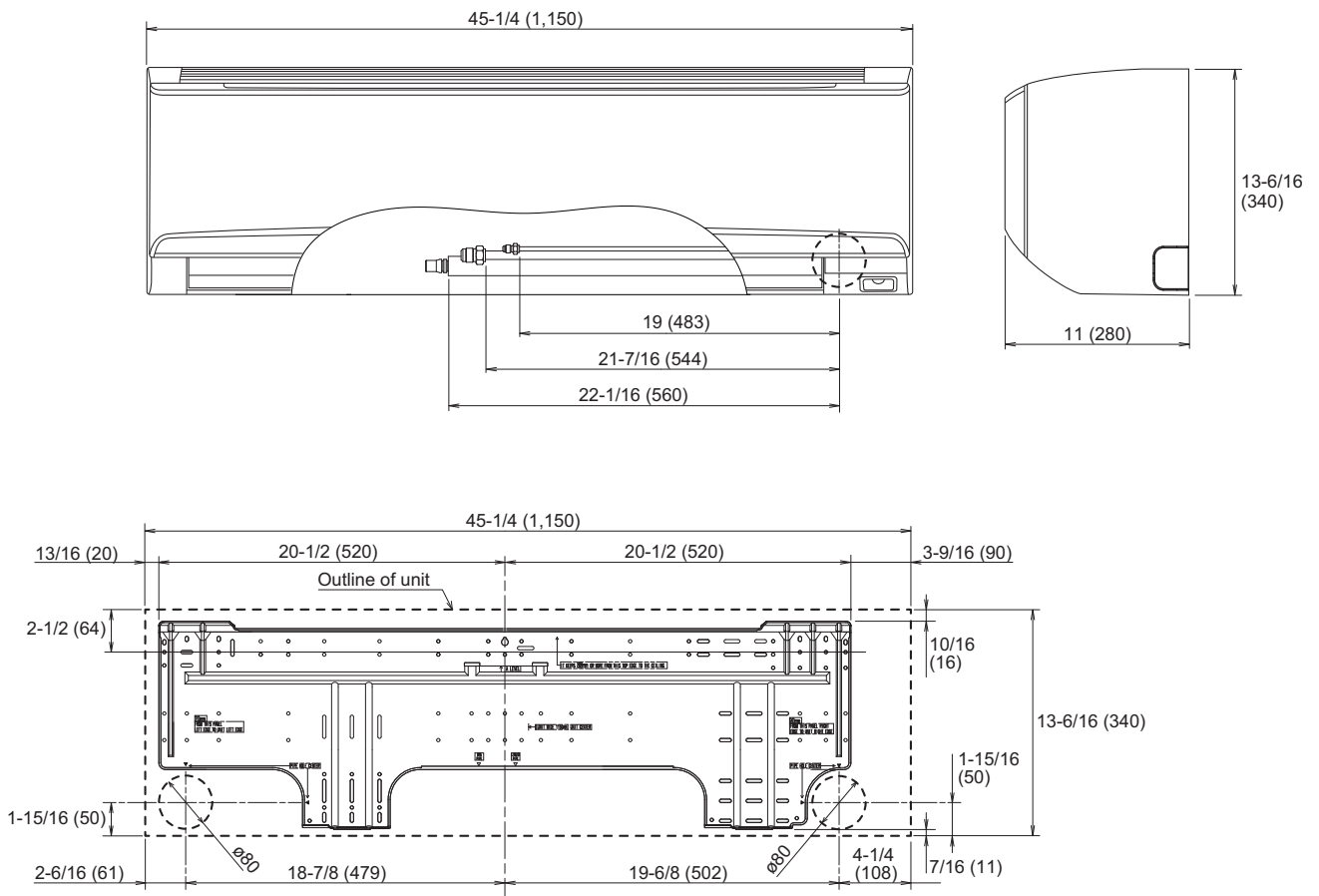
Type			Inverter heat pump	
Model name			AOUH30LPAS1	AOUH36LPAS1
Power supply			208/230 V ~ 60 Hz	
Power supply intake			Outdoor unit	
Available voltage range			187—253 V	
Starting current			A	13.4
Fan	Airflow rate	Cooling	CFM (m ³ /h)	2,187 (3,715)
		Heating		
	Type × Q'ty	Propeller fan × 1		
Motor output			W	100
Sound pressure level *1	Cooling		dB (A)	52
	Heating			54
Heat exchanger type	Dimensions (H × W × D)		in (mm)	Main 1: 29-3/4 × 35-5/8 × 11/16 (756 × 905 × 18.19) Main 2: 29-3/4 × 35-5/8 × 11/16 (756 × 905 × 18.19)
	Fin pitch		FPI	Main 1: 18 (1.45) Main 2: 18 (1.45)
	Rows × Stages			Main 1: 1 × 36 Main 2: 1 × 36
	Pipe type			Copper
	Fin type		Type (Material)	Aluminum
			Surface treatment	Blue fin
Compressor	Type		DC twin rotary	
	Motor output		W	1,360
Refrigerant	Type		R410A	
	Charge	lb oz	4 lb 10 oz	
		g	2,100	
Refrigerant oil	Type		POE (RB68)	
	Amount	in ³ (cm ³)	48.8 (800)	
Enclosure	Material		Steel sheet	
	Color		Beige Approximate color of Munsell 10YR 7.5/1.0	
Dimensions (H × W × D)	Net		in (mm)	31 × 37 × 12-5/8 (788 × 940 × 320)
	Gross			38-1/16 × 40-7/16 × 17-1/2 (966 × 1,027 × 445)
Weight	Net		lb (kg)	117 (53)
	Gross			134 (61)
Connection pipe	Size	Liquid	in (mm)	Ø3/8 (Ø9.52)
		Gas		Ø5/8 (Ø15.88)
	Method		Flare	
	Pre-charge length		ft (m)	66 (20)
	Max. length			164 (50)
	Max. height difference			98 (30)
Drain hose	Material		LDPE	
	Tip diameter		in (mm)	Ø1/2 (Ø13.0) (I.D.), Ø5/8 to 11/16 (Ø16.0 to 16.7) (O.D.)
Operation range	Cooling		14 to 115 (-10 to 46)	
	Heating		5 to 75 (-15 to 24)	
NOTES:				
<ul style="list-style-type: none"> • Specifications are based on the following conditions: <ul style="list-style-type: none"> – Cooling: Indoor temperature of 80 °FDB (26.67 °CDB) / 67 °FWB (19.44 °CWB), and outdoor temperature of 95 °FDB (35 °CDB) / 75 °FWB (23.9 °CWB). – Heating: Indoor temperature of 70 °FDB (21.11 °CDB) / 59 °FWB (15 °CWB), and outdoor temperature of 47 °FDB (8.33 °CDB) / 43 °FWB (6.11 °CWB). – Pipe length: 25 ft (7.5 m), Height difference: 0 ft (0 m). (Between outdoor unit and indoor unit.) • Protective function might work when using it outside the operation range. • *1: Sound pressure level <ul style="list-style-type: none"> – Measured values in manufacturer's anechoic chamber. – Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here. 				

2. Dimensions

2-1. Indoor unit

■ Models: ASUH30LPAS and ASUH36LPAS

Unit: in (mm)



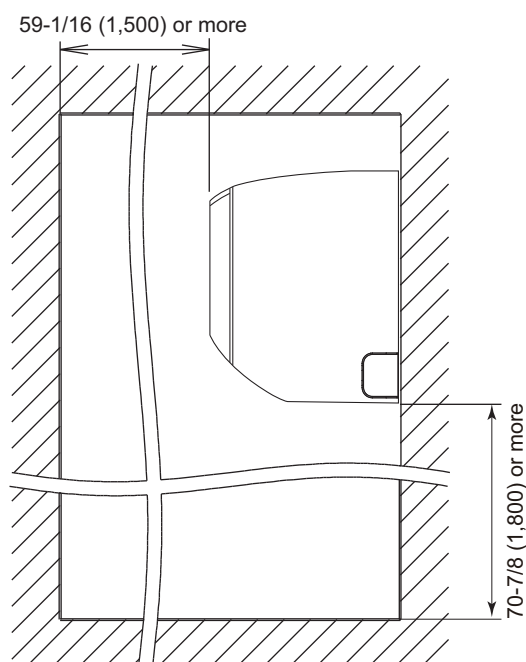
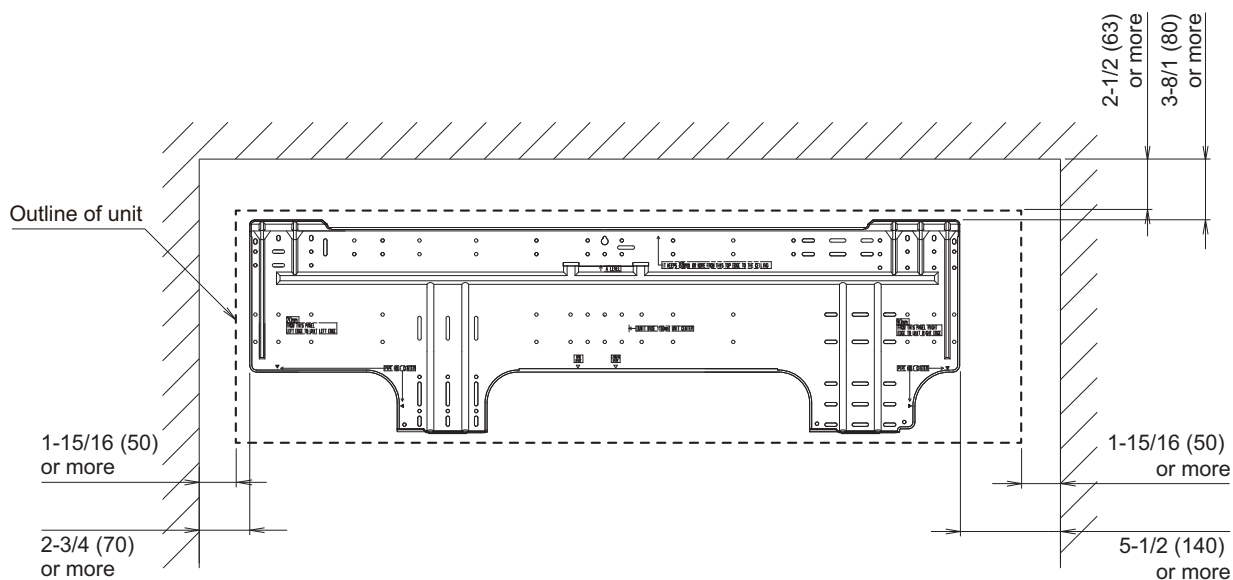
● Installation space requirement

Provide sufficient installation space for product safety.

⚠ CAUTION

Do not place any other electrical products or household belongings under the product. Condensation dripping from the product might get them wet, and may cause damage or malfunction to the property.

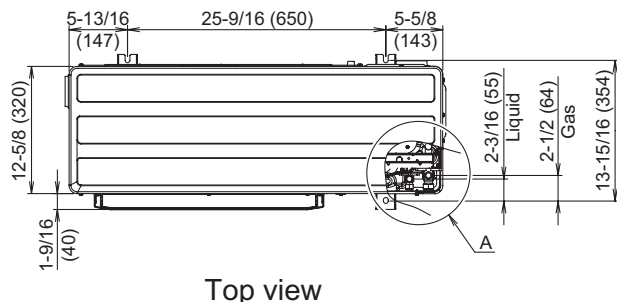
Unit: in (mm)



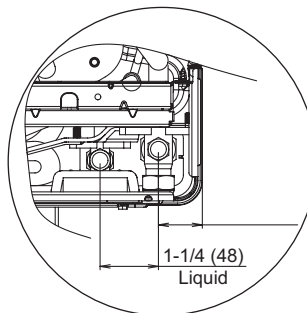
2-2. Outdoor unit

■ Models: AOUH30LPAS1 and AOUH36LPAS1

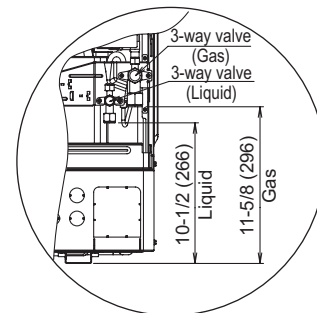
Unit: in (mm)



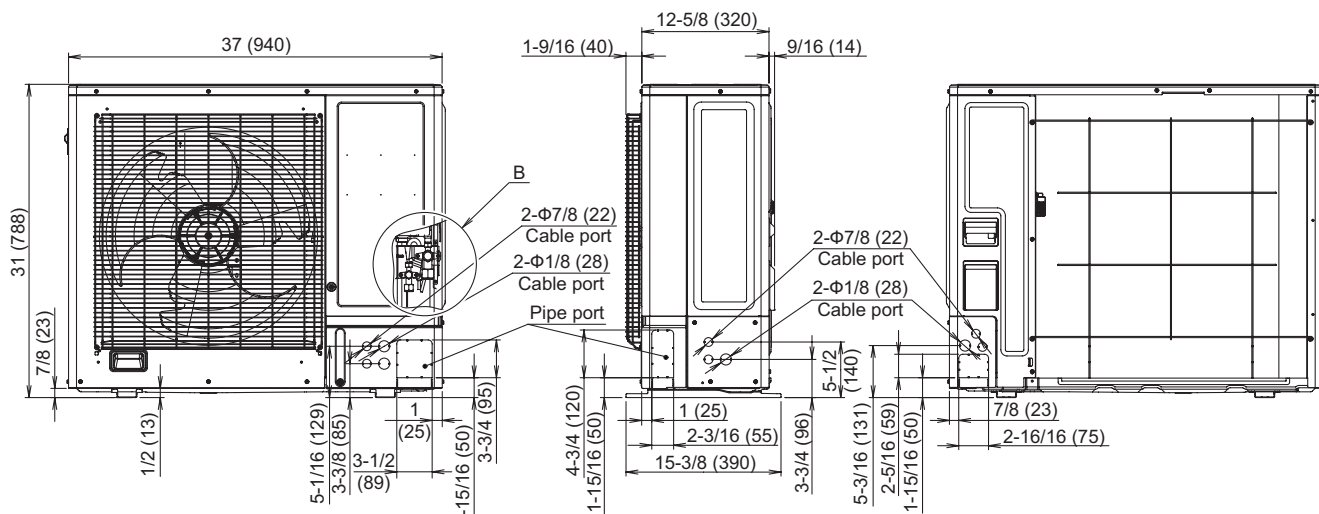
Top view



Detail A



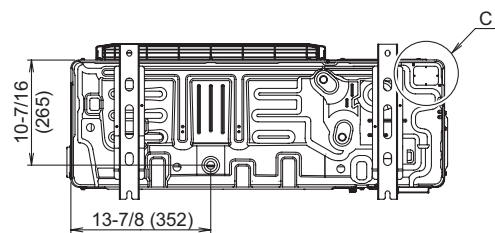
Detail B



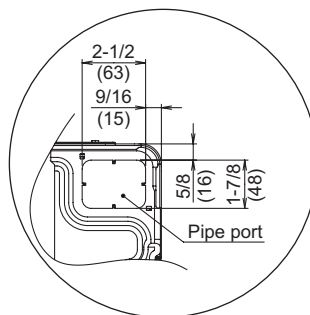
Front view

Side view

Rear view



Bottom view



Detail C

2. TECHNICAL DATA AND PARTS LIST

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2. TECHNICAL DATA AND PARTS LIST

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1. Precautions

When you start servicing, pay attention to the following points. For detailed precautions, refer to the installation manual of the products.

⚠ CAUTION

- Service personnel
 - Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry recognized assessment specification.
 - Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
 - Servicing shall be performed only as recommended by the manufacturer.
 - Work
 - Work in confined spaces shall be avoided.
 - The area around the workspace shall be sectioned off.
 - Electric shock may occur. After turning off the power, always wait 5 minutes before touching electrical components.
 - Do not touch the fins of the heat exchanger. Touching the heat exchanger fins could result in damage to the fins or personal injury such as skin rupture.
 - Do not place any other electrical products or household belongings under the product.
 - Condensation dripping from the product might get them wet, and may cause damage or malfunction to the property.
-
- Service parts information and design are subject to change without notice for product improvement.
 - For the latest information of the service parts, refer to our Service Portal.
<https://fujitsu-general.force.com/portal/>
 - Precise figure of the service parts listed in this manual may differ from the actual service parts.

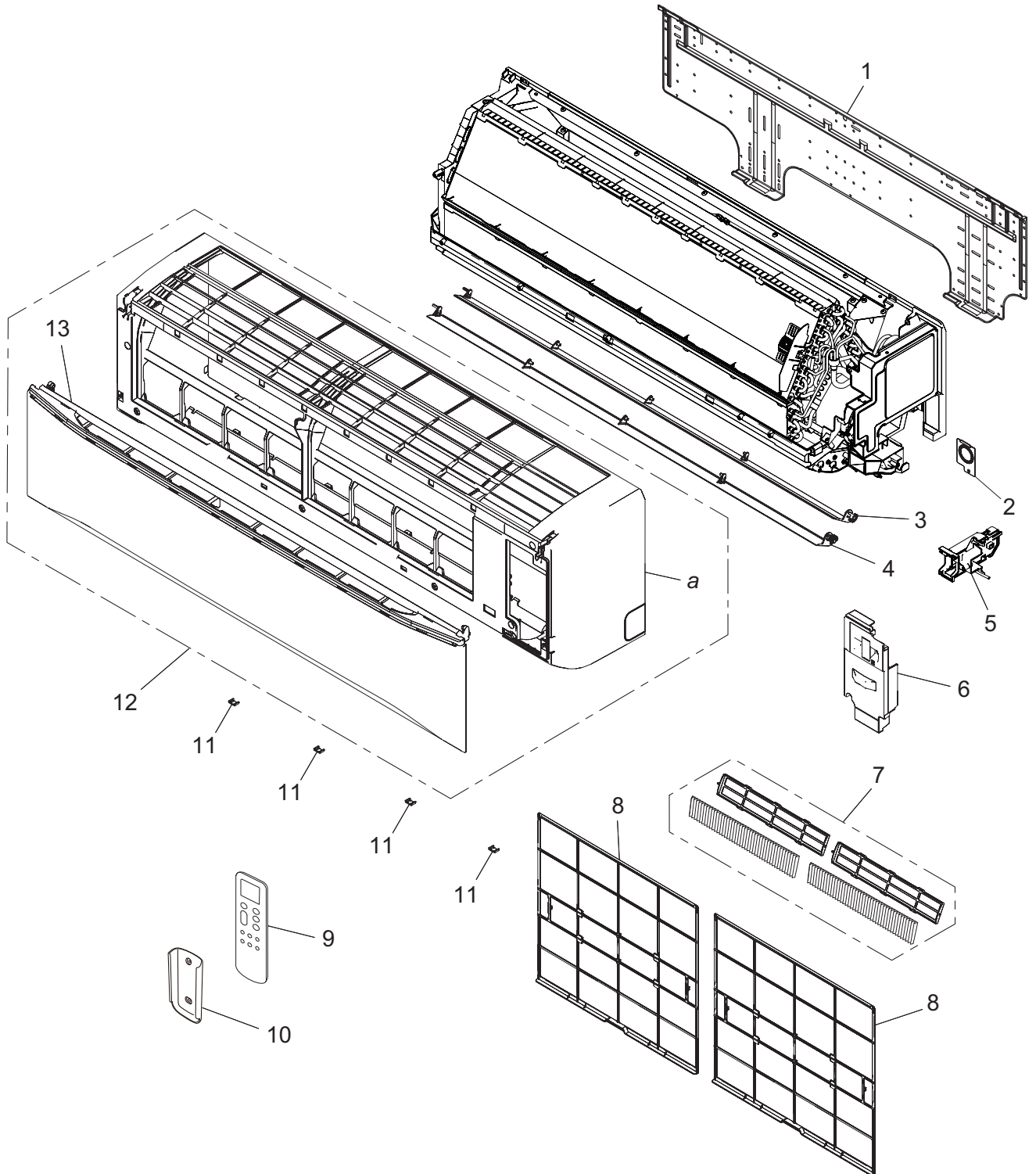
2. Indoor unit parts list

2-1. Models: ASUH30LPAS and ASUH36LPAS

■ Exterior parts

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST

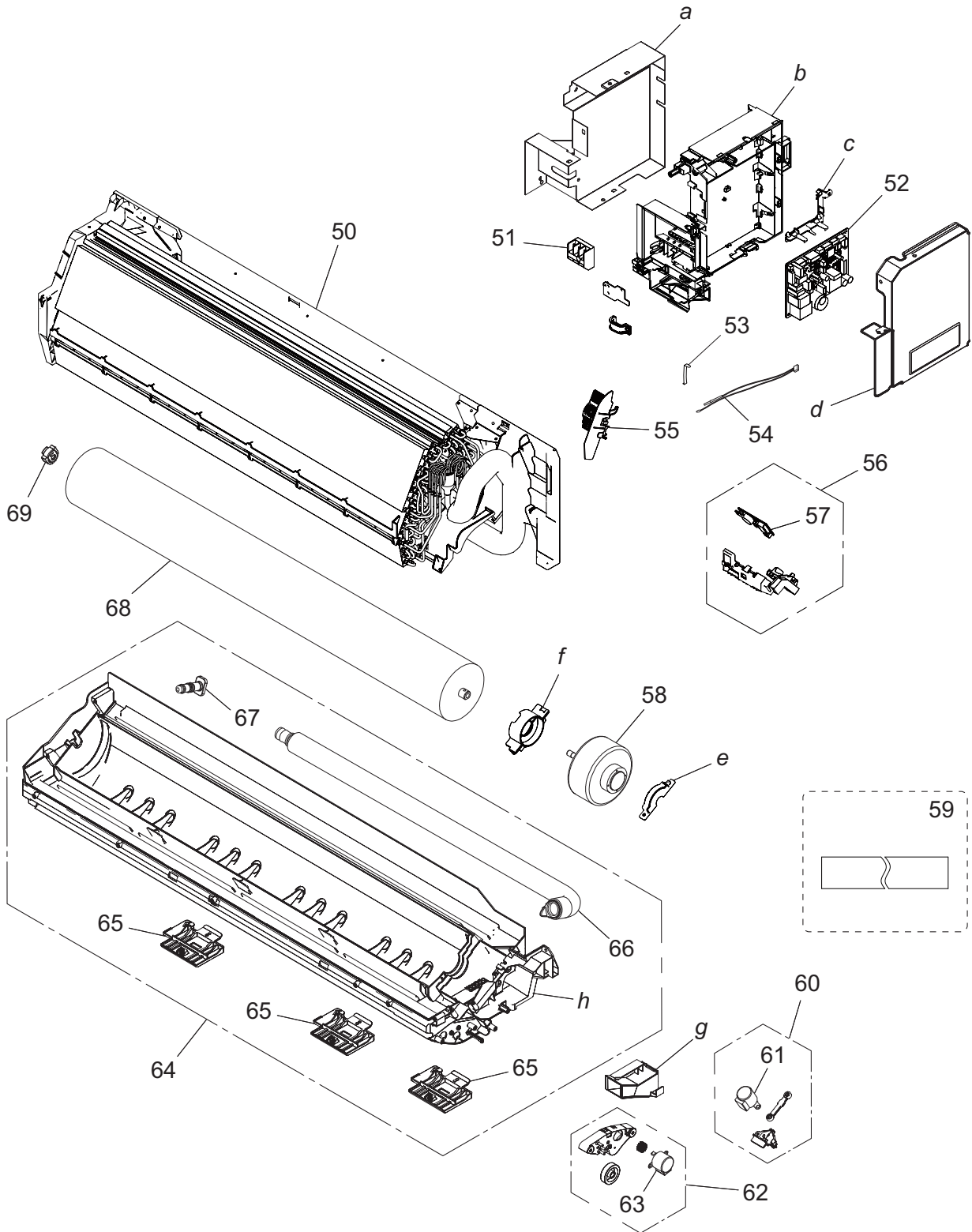


Item no.	Part no.	Part name	Service part
1	9386990004	Bracket panel	◆
2	9313951047	Conduit holder	◆
3	9386958011	Louver U	◆
4	9386959018	Louver Z	◆
5	9383765063	WLAN adapter holder assy	◆
6	9387074017	Wire cover assy	◆
7	9315212016	Air clean filter assy	◆
8	9386960007	Air filter	◆
9	9334139011	Wireless remote controller	◆
10	9334098004	Remote controller holder	◆
11	9386986007	Screw cap	◆
12	9387072211	Front panel total assy	◆
13	9382114039	Intake grille assy	◆
a	—	Front panel	—

■ Chassis

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST

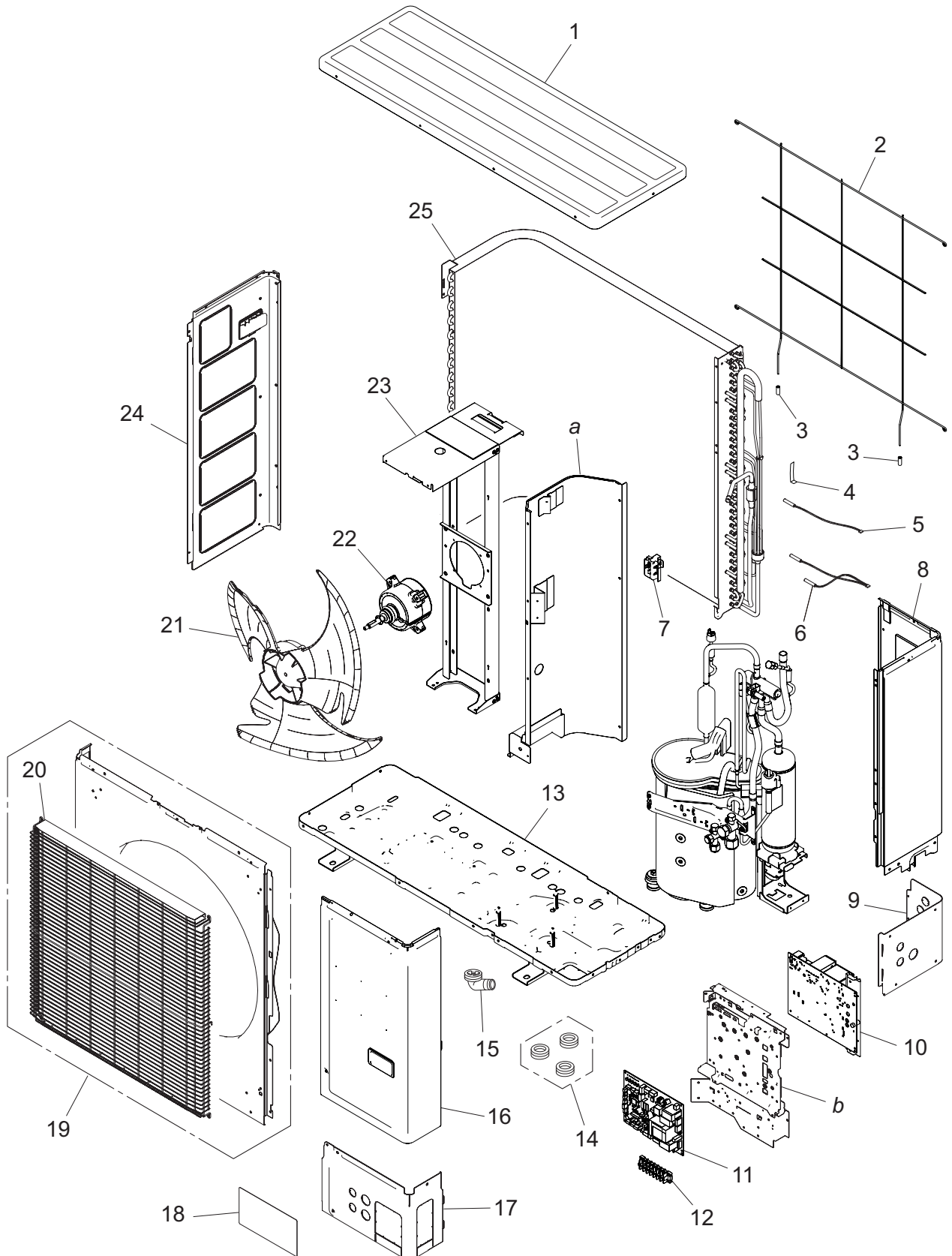


Item no.	Part no.	Part name	Service part
50	9382185077	Evaporator total assy	◆
51	9901013010	Terminal	◆
52	9711732156	Main PCB (30 model)	◆
	9711732163	Main PCB (36 model)	◆
53	9316577008	Thermistor spring B	◆
54	9900627027	Thermistor assy	◆
55	9386988001	Room thermistor holder	◆
56	9711146090	Display assy	◆
57	9711147035	Indicator PCB	◆
58	9603933005	DC fan motor	◆
59	9361756007	Drain hose insulation T	◆
60	9387063004	Link holder assy	◆
61	9900139186	Step motor	◆
62	9387062007	Gear cover assy	◆
63	9900384234	Step motor	◆
64	9387060034	Casing assy	◆
65	9318743012	Pipe bracket	◆
66	9388540009	Drain hose assy	◆
67	9316177017	Drain cap	◆
68	9387055009	Crossflow fan assy	◆
69	9306628017	Bearing C assy	◆
<i>a</i>	—	Box shield assy	—
<i>b</i>	—	Control box	—
<i>c</i>	—	PCB holder A	—
<i>d</i>	—	Control cover	—
<i>e</i>	—	Motor cover	—
<i>f</i>	—	Motor cover	—
<i>g</i>	—	Cable guide	—
<i>h</i>	—	Casing	—

3. Outdoor unit parts list

3-1. Models: AOUH30LPAS1 and AOUH36LPAS1

■ Exterior parts and chassis



TECHNICAL DATA
AND PARTS LIST

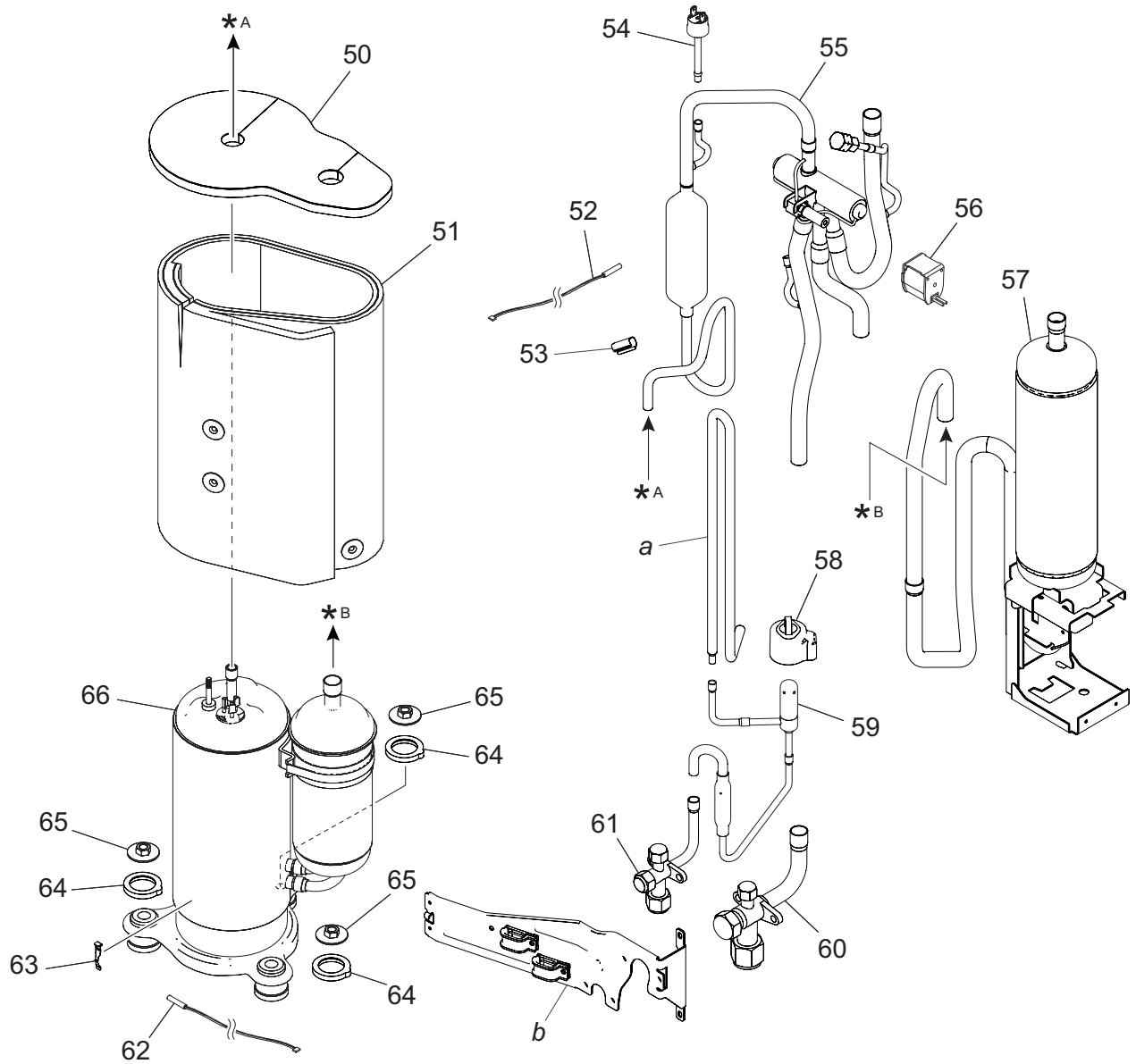
TECHNICAL DATA
AND PARTS LIST

Item no.	Part no.	Part name	Service part
1	9383880001	Top panel assy	◆
2	9383779008	Protective net	◆
3	9375361013	Net rubber	◆
4	313728262708	Thermistor spring A	◆
5	9900984038	Thermistor (Heat exchanger temp.)	◆
6	9900727154	Thermistor assy (Evaporator and Compressor temp.)	◆
7	9383607004	Thermo holder	◆
8	9383874000	Right panel sub assy	◆
9	9384997005	Rear pipe cover	◆
10	9709686317	Inverter PCB	◆
11	9711431738	Main PCB (30 model)	◆
	9711431745	Main PCB (36 model)	◆
12	9900203085	Terminal	◆
13	9383871016	Base assy	◆
14	313166024302	Drain cap	◆
15	9303029015	Drain assy	◆
16	9383876004	Service panel sub assy	◆
17	9384196019	Front pipe cover	◆
18	9380114000	Emblem rear	◆
19	9383863035	Front panel assy	◆
20	9350680009	Fan guard assy	◆
21	9383336003	Propeller fan	◆
22	9603732011	DC fan motor	◆
23	9383862007	Motor bracket assy	◆
24	9383882005	Left panel sub assy	◆
25	9374420711	Condenser sub assy	◆
—	9711198006	Wire with connector (P108 on Main PCB—Terminal)	◆
—	9711203038	Wire with connector (P660 on Main PCB—P662 on Inverter PCB)	◆
—	9711204004	Wire with connector (P661 on Main PCB—P663 on Inverter PCB)	◆
—	9711205001	Wire with connector (P350 on Main PCB—P351 on Inverter PCB)	◆
—	9711212009	Wire with connector (P650 on Inverter PCB—DC fan motor)	◆
—	9711213006	Wire with connector (P770 on Inverter PCB)	◆
—	9711214003	Wire with connector (Pressure switch)	◆
<i>a</i>	—	Separate wall assy	—
<i>b</i>	—	Control box unit	—

Compressor

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST





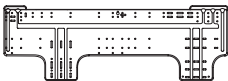

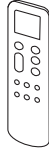


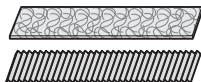

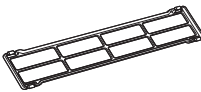


Item no.	Part no.	Part name	Service part
50	9380516064	Sound insulator (Top)	◆
51	9379647243	Sound insulator (Body)	◆
52	9900565091	Thermistor (Outdoor temp.)	◆
53	9357804002	Thermostat holder	◆
54	9900186029	Pressure switch	◆
55	9374425723	4-way valve assy	◆
56	9970194016	Solenoid	◆
57	9383855115	Refrigerant volume adjustment unit	◆
58	9970209000	Expansion valve coil	◆
59	9370947328	Expansion valve assy	◆
60	9379079013	3-way valve assy	◆
61	9377958037	3-way valve assy	◆
62	9900985035	Thermistor (Compressor temp.)	◆
63	9810028006	Thermistor stopper	◆
64	9379179096	Rubber washer G	◆
65	9377973016	Special nut	◆
66	9810666000	Compressor assy	◆
<i>a</i>	—	Joint pipe D	—
<i>b</i>	—	Wiring fixation unit	—

4. Accessories




4-1. Indoor unit

■ Models: ASUH30LPAS and ASUH36LPAS

Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Operating manual		1	Drain hose insulation		1
Installation manual		1	Cloth tape		1
Wall hook bracket		1	Tapping screw (large)		8
Remote controller		1	Tapping screw (small)		2
Battery		2	Air cleaning filters		1
Remote controller holder		1	Filter holder		2

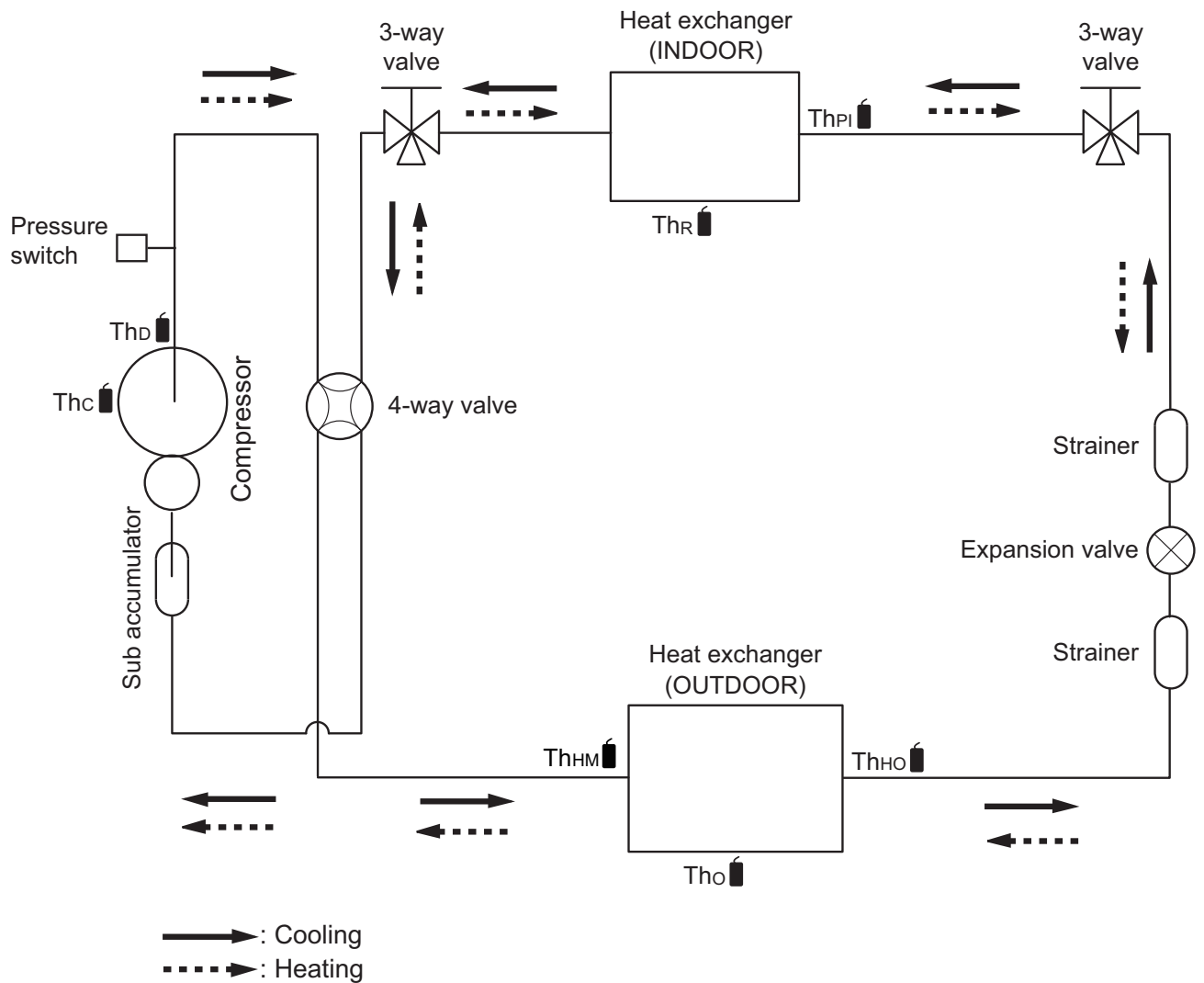
4-2. Outdoor unit

■ Models: AOUH30LPAS1 and AOUH36LPAS1

Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Installation manual		1	Drain cap		3
Drain pipe		1			

5. Refrigerant system diagrams

5-1. Models: AOUH30LPAS1 and AOUH36LPAS1



Th_c : Thermistor (Compressor temperature)

Th_d : Thermistor (Discharge temperature)

Th_{HM} : Thermistor (Heat Exchanger Med temperature)

Th_o : Thermistor (Outdoor temperature)

Th_{HO} : Thermistor (Heat Exchanger Out temperature)

Th_{PI} : Thermistor (Pipe temperature)

Th_R : Thermistor (Room temperature)

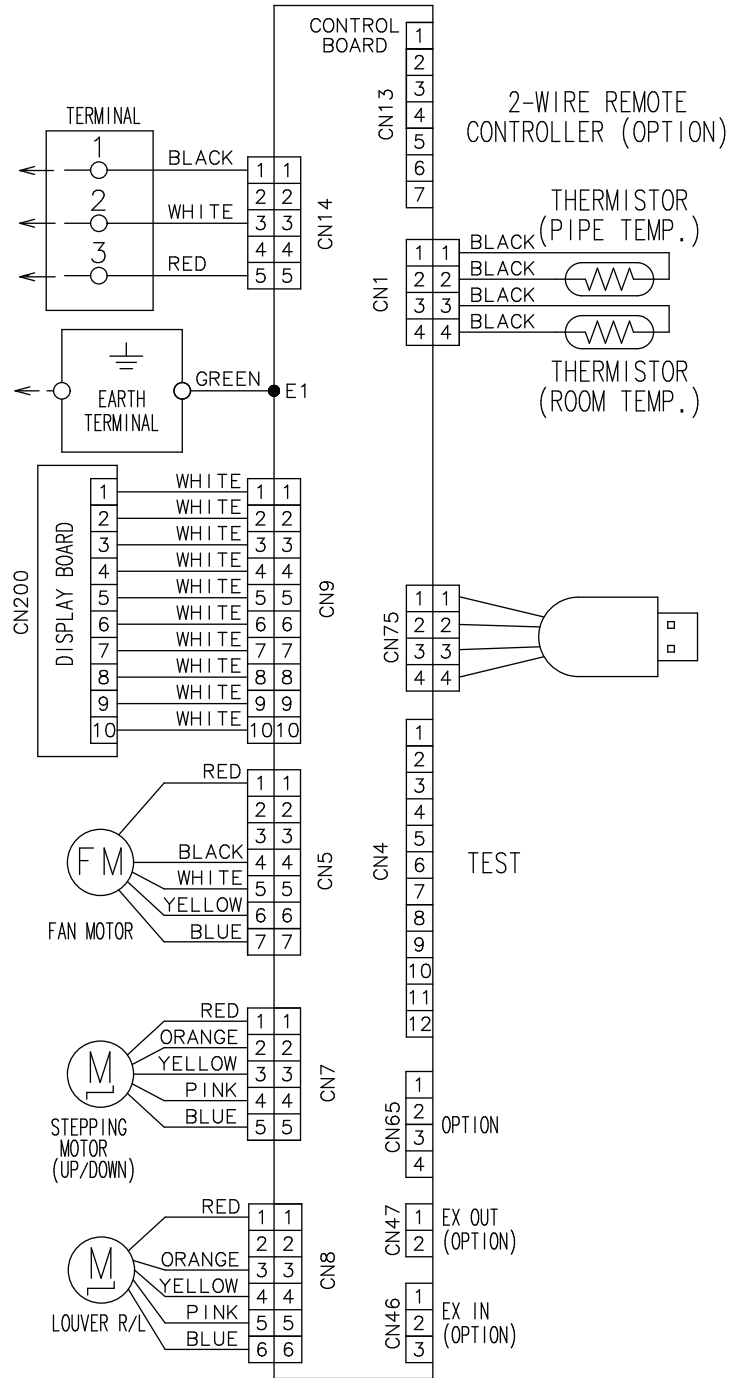
6. Wiring diagrams

6-1. Indoor unit

Models: ASUH30LPAS and ASUH36LPAS

TECHNICAL DATA AND PARTS LIST

TECHNICAL DATA AND PARTS LIST

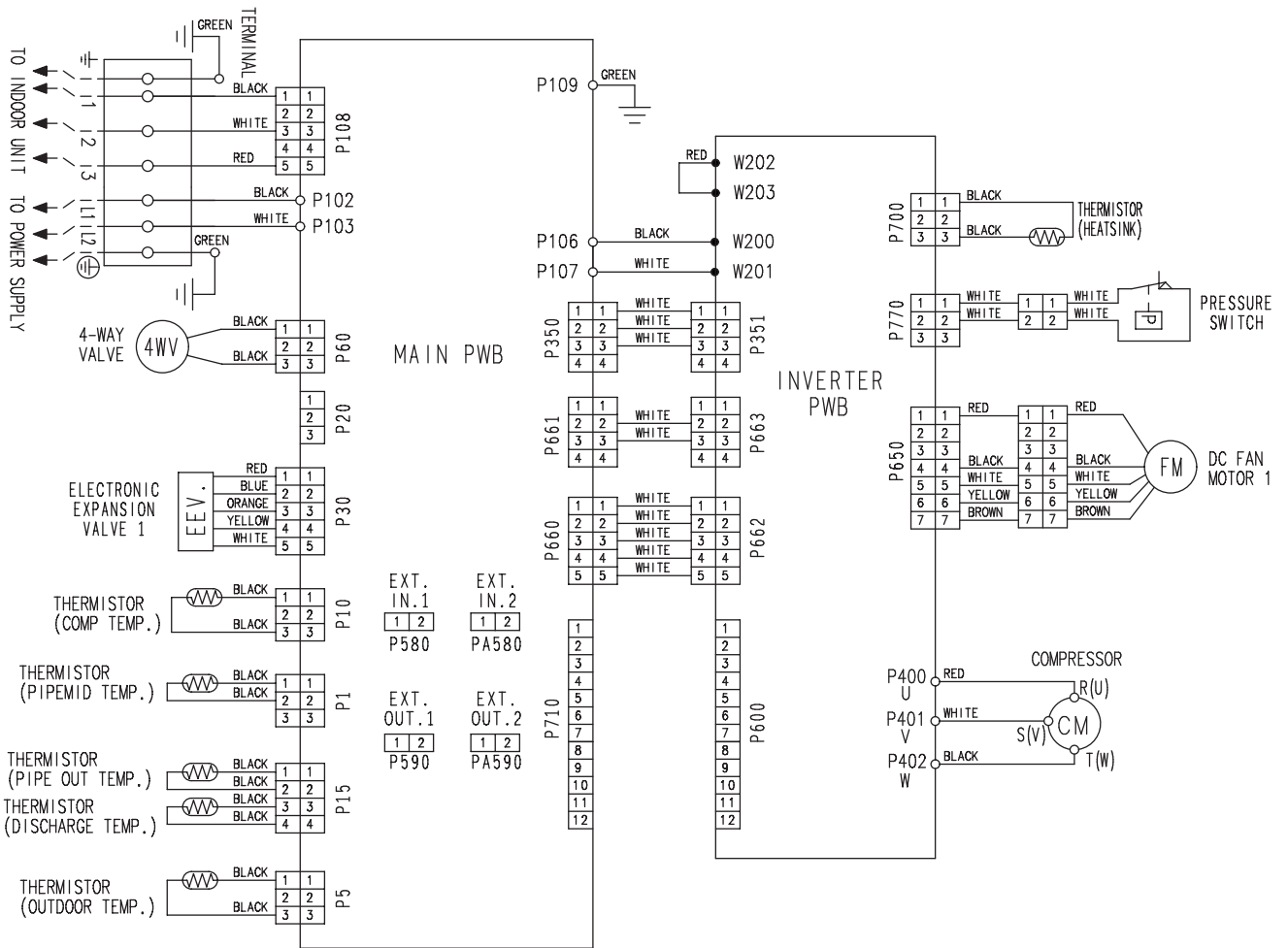


6-2. Outdoor unit

Models: AOUH30LPAS1 and AOUH36LPAS1

TECHNICAL DATA AND PARTS LIST

TECHNICAL DATA AND PARTS LIST

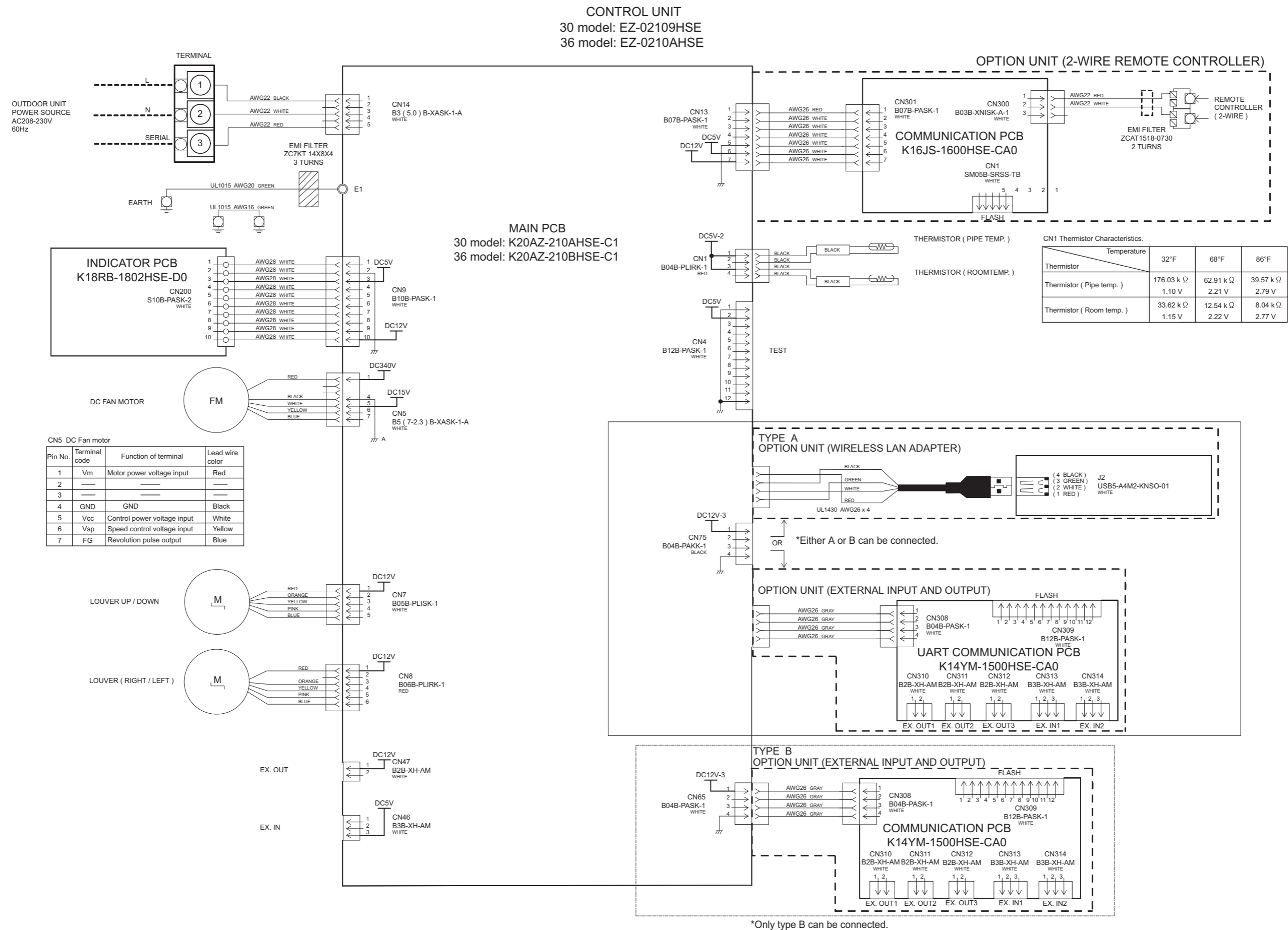


7. PC board diagrams

7-1. Models: ASUH30LPAS and ASUH36LPAS

TECHNICAL DATA AND PARTS LIST

TECHNICAL DATA AND PARTS LIST



7-2. Models: AOUH30LPAS1 and AOUH36LPAS1

INVERTER ASSEMBLY
30 model : EZ-0210HUE
36 model : EZ-0210HUE

P700 Thermistor Characteristics.

Thermistor	Temperature	32°F	68°F	86°F
Thermistor		15.83 kΩ	5.90 kΩ	3.78 kΩ
Thermistor (Heatsink temp.)		0.43 V	1.01 V	1.42 V

TECHNICAL DATA AND PARTS LIST

TECHNICAL DATA AND PARTS LIST

