

AIR CONDITIONER

Cassette type

SERVICE MANUAL

INDOOR



AUXG36KRLB
AUXG45KRLB
AUXG54KRLB

OUTDOOR



AOYG36KQTA



AOYG45KQTA
AOYG54KQTA

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				Cassette		
				Inverter heat pump		
Model name				AUXG36KRLB	AUXG45KRLB	AUXG54KRLB
Power supply				3N 400 V ~ 50 Hz		
Power supply intake				Outdoor unit		
Available voltage range				342—457 V		
Capacity	Cooling	Rated	kW	9.5	12.1	13.4
			Btu/h	32,400	41,300	45,700
		Min.—Max.	kW	2.8—11.2	4.0—14.0	4.5—14.5
	Heating	Rated	Btu/h	9,600—38,200	13,600—47,800	15,400—49,500
			kW	10.8	13.5	15.5
		Min.—Max.	Btu/h	36,850	46,000	52,900
Input power	Cooling	Rated	kW	2.91	3.61	4.41
			Max.	4.19	5.00	5.23
		Heating	Rated	2.45	3.21	4.16
	Heating	Rated	kW	4.48	4.69	4.77
			Max.	5.6	6.8	8.0
		Heating	Rated	4.8	6.1	7.6
Current	Cooling	Rated	A	5.6	6.8	8.0
	Heating	Rated	A	4.8	6.1	7.6
Power factor	Cooling		%	75.2	77.4	80.3
	Heating		%	73.8	76.1	79.4
EER	Cooling		kW/kW	3.26	3.35	3.04
COP	Heating		kW/kW	4.40	4.20	3.73
Moisture removal			L/h (pints/h)	3.3 (5.8)	4.5 (7.9)	5.0 (8.8)
Maximum operating current *1	Cooling		A	10.5	14.0	14.0
	Heating		A	10.5	14.0	14.0
Fan	Airflow rate	Cooling	HIGH	1,870	2,000	2,100
			MED	1,560	1,650	1,780
			LOW	1,410	1,460	1,600
			QUIET	1,160	1,300	1,320
		Heating	HIGH	1,870	2,000	2,100
			MED	1,560	1,650	1,780
			LOW	1,410	1,460	1,600
			QUIET	1,160	1,300	1,320
	Type × Q'ty		Turbo fan × 1			
	Motor output		W			
		81				
Sound pressure level *2	Cooling	HIGH	44	46	47	
		MED	41	42	43	
		LOW	38	39	40	
		QUIET	34	35	36	
	Heating	HIGH	44	46	47	
		MED	41	42	43	
		LOW	38	39	40	
		QUIET	34	35	36	
Dimensions (H × W × D)		mm				
Fin pitch		Main1: 252 × 2,131 × 13.3, Main2: 252 × 2,064 × 13.3, Main3: 252 × 1,999 × 13.3				
Rows × Stages		Main 1: 1.3, Main 2: 1.3, Main 3: 1.3				
Pipe type		Main 1: 1 × 12, Main 2: 1 × 12, Main 3: 1 × 12				
Pipe type		Copper tube				
Fin type		Aluminum				
Dimensions (H × W × D)	Net	mm				
	Gross	288 × 840 × 840				
Weight	Net	kg				
	Gross	340 × 960 × 950				
Connection pipe	Size	Liquid	mm (in)			
	Gas	Ø 9.52 (3/8)				
Drain hose	Method	Flare				
	Material	PVC				
Operation range	Size	mm				
		Ø 25 (I.D.), Ø 32 (O.D.)				
Cassette grille (Option)	Cooling	°C	18 to 32			
	Heating	%RH	80 or less			
Remote control (Option)	Heating	°C	16 to 30			
	Model name		UTG-UKYC-W			
	Material		Polystyrene			
	Color		White			
	Approximate color of MUNSELL N 9.25/					
	Dimensions (H × W × D)		Net	mm		
Weight	Gross	53 × 950 × 950				
	Net	110 × 1,000 × 1,010				
Weight	Net	kg				
	Gross	6.0				
		10.0				
Remote control (Option)				Wired remote controller, Wireless remote controller, Mobile app*3 (FGLair™)		

NOTES:

- Specifications are based on the following conditions:
 - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
 - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
 - Pipe length: 5.0 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Maximum operating current is the total current of the indoor unit and the outdoor unit.
- *2: Sound pressure level:
 - 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.
- *3: Available on Google Play™ store or on App Store®. Optional WLAN adapter is also required. For details, refer to the setting manual.

Specifications for ErP Lot10			
Model name		AUXG36KRLB	
Energy efficiency class	Cooling		A ⁺⁺
	Heating (Average)		A ⁺
Pdesign	Cooling	kW	9.5 (35°C)
	Heating (Average)		8.7 (-10°C)
SEER	Cooling	kWh/kWh	6.55
SCOP	Heating (Average)		4.3
Annual energy consumption	QCE	kWh/a	507
	QHE (Average)		2,828
Sound power level	Cooling	HIGH	dB (A)
	Heating		

1-2. Specifications

Type				Inverter heat pump	
Model name				AOYG36KQTA	
Power supply				3N 400 V ~ 50 Hz	
Power supply intake				Outdoor unit	
Available voltage range				342—457 V	
Starting current				5.9	
Fan	Airflow rate	Cooling	m ³ /h	3,750	
		Heating		3,750	
	Type × Q'ty		Propeller × 1		
	Motor output		W		
Sound pressure level *1		Cooling	dB (A)	55	
		Heating		55	
Sound power level		Cooling	dB (A)	70	
		Heating		70	
Heat exchanger type	Dimensions (H × W × D)		mm	Main 1: 756 × 905 × 18.19	
	Fin pitch			Main 2: 756 × 905 × 18.19	
	Rows × Stages		Main 1: 1.45		
			Main 2: 1.45		
	Pipe type		Main 1: 1 × 36		
			Main 2: 1 × 36		
Fin		Type (Material)	Copper		
		Surface treatment	Aluminum		
		Blue fin			
Compressor	Type × Q'ty		DC Twin rotary × 1		
	Motor output		W		
Refrigerant	Type (Global warming potential)		R32 (675)		
	Factory charge		g		
Refrigerant oil	Type		FW68D		
	Amount		cm ³		
Enclosure	Material		Steel sheet		
	Color		Beige		
		Approximate color of Munsell 10YR 7.5/1.0			
Dimensions (H × W × D)	Net		mm	788 × 940 × 320	
	Gross			966 × 1,027 × 445	
Weight	Net		kg	53	
	Gross			62	
Connection pipe	Size	Liquid	mm (in)	Ø 9.52 (3/8)	
		Gas		Ø 15.88 (5/8)	
	Method		Flare		
	Pre-charge length		m	30	
	Max. length			30	
	Max. height difference			30	
Operation range	Cooling		°C	-10 to 46	
	Heating			-15 to 24	
Drain hose	Material		LDPE		
	Size		mm		
		Ø 13.0 (I. D.), Ø 16.0 to Ø 16.7 (O. D.)			

NOTES:

- Specifications are based on the following conditions:
 - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
 - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
 - Pipe length: 5.0 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Sound pressure level
 - 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.

Type				Inverter heat pump			
Model name				AOYG45KQTA		AOYG54KQTA	
Power supply				3N 3N 400 V ~ 50 Hz			
Power supply intake				Outdoor unit			
Available voltage range				342—457 V			
Starting current				A		7.8	
Fan	Airflow rate	Cooling	m ³ /h	4,450		4,450	
		Heating		4,450		4,780	
	Type × Q'ty		Propeller × 1				
	Motor output		W		120		
Sound pressure level *1	Cooling	Heating	dB (A)	58		58	
				59		61	
Sound power level	Cooling	Heating	dB (A)	72		74	
				73		75	
Heat exchanger type	Dimensions (H × W × D)		mm	Main 1: 966 × 905 × 18.19 Main 2: 966 × 905 × 18.19			
	Fin pitch			Main 1: 1.45 Main 2: 1.45			
	Rows × Stages		Main 1: 1 × 46 Main 2: 1 × 46				
	Pipe type		Copper				
	Fin	Type (Material)		Aluminum			
		Surface treatment		Blue fin			
Compressor	Type × Q'ty		DC Twin rotary × 1				
	Motor output		W		1,830		2,180
Refrigerant	Type (Global warming potential)		R32 (675)				
	Factory charge		g		2,400		
Refrigerant oil	Type		RmM68AF				
	Amount		cm ³		800		
Enclosure	Material		Steel sheet				
	Color		Beige Approximate color of Munsell 10YR 7.5/1.0				
Dimensions (H × W × D)	Net		mm	998 × 940 × 320			
	Gross			1,176 × 1,027 × 445			
Weight	Net		kg	62		63	
	Gross			72		73	
Connection pipe	Size	Liquid	mm (in)	Ø 9.52 (3/8)			
		Gas		Ø 15.88 (5/8)			
	Method		Flare				
	Pre-charge length		30				
	Max. length		m	30			
Max. height difference		30					
Operation range	Cooling	Heating	°C	-10 to 46			
				-15 to 24			
Drain hose	Material		LDPE				
	Size		mm		Ø 13.0 (I. D.), Ø 16.0 to Ø 16.7 (O. D.)		

NOTES:

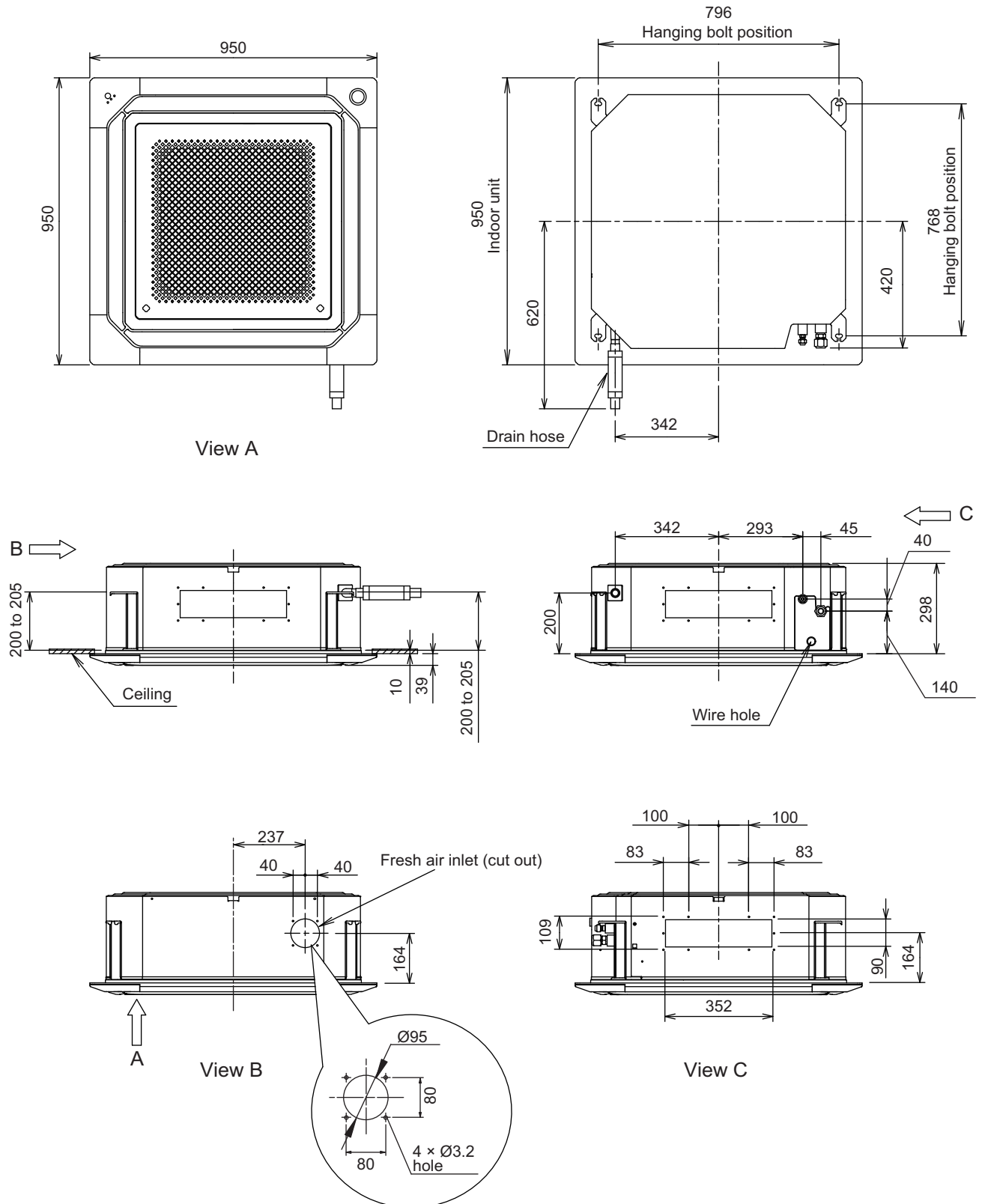
- Specifications are based on the following conditions:
 - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
 - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
 - Pipe length: 5.0 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Sound pressure level
 - 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

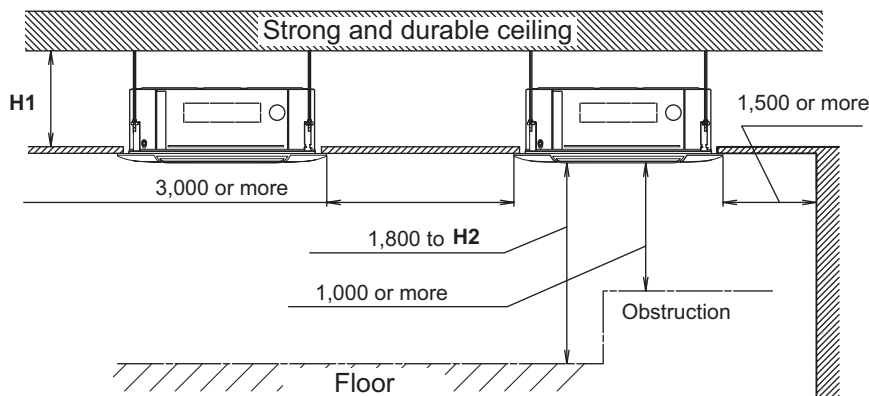
■ Models: AUXG36KRLB, AUXG45KRLB, and AUXG54KRLB

Unit: mm



■ Installation space requirement

Unit: mm



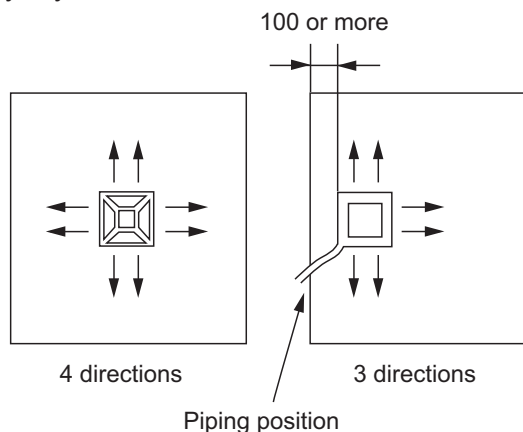
Model name	H1: Attic height
AUXG36-54KRLB	298 or more

Be sure to make function setting with the remote controller according to the installed ceiling height.

H2: The maximum height from floor to ceiling	
Ceiling height	Model name
	AUXG36-54KRLB
Standard	3,200
High ceiling	4,200

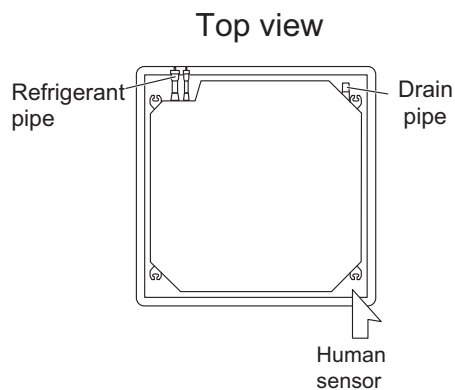
● Installation notices

- When installing the indoor unit, be careful about the maintenance space.
- To set "3-direction", Air outlet shutter plate (option) must be installed, and the "outlet-direction" need to be switched to "3-way" by the remote controller.

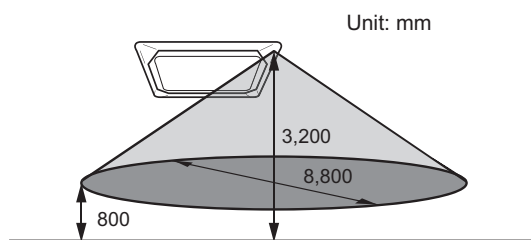


- In 3-way outlet mode, changing of ceiling height setting by function setting 20 is prohibited. (Ceiling height setting [function setting 20] is allowed to be changed only in 4-way outlet mode.)
- Use the Insulation kit for high humidity (option), when the condition under the roof is over 80% in humidity and over 30°C in temperature. Otherwise, there is a risk of condensation on the ceiling.

- Human sensor (Option)



Example of sensitivity range:



Equal sensitivity range of temperature	Ceiling height	3,200 mm
	Detecting position	800 mm from floor surface

NOTE: When the installation height gets higher, the temperature sensitivity decreases.

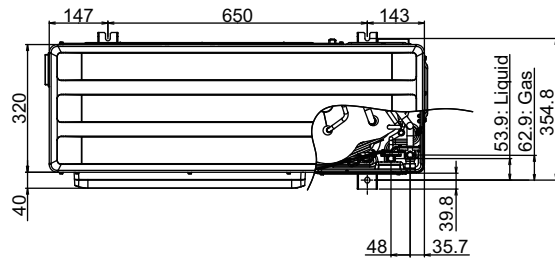
⚠ CAUTION

- Do not place large objects near the human sensor.
- Keep any other heating units outside the sensor's detection area.

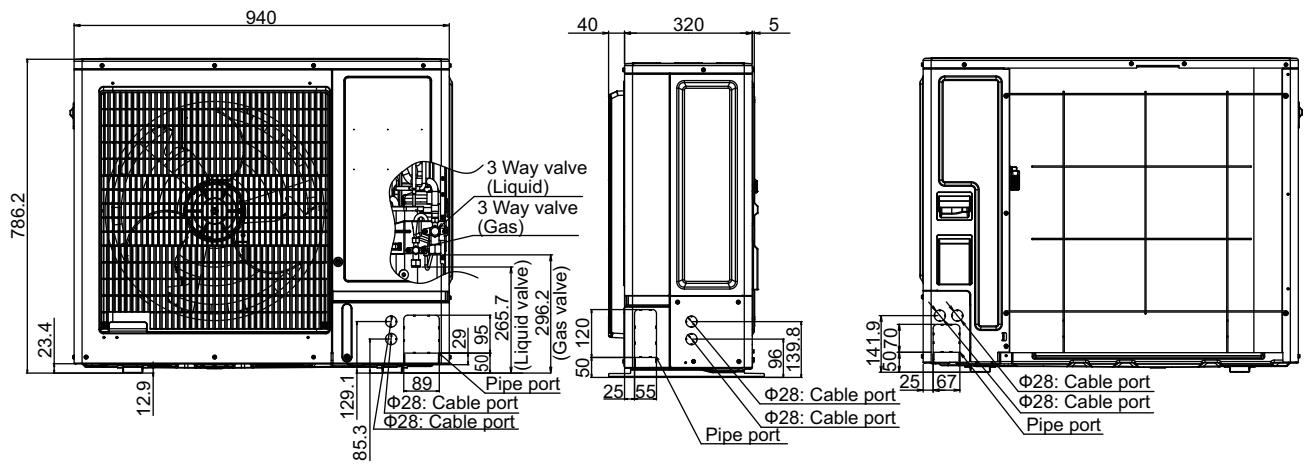
2-2. Outdoor unit

Model: AOYG36KQTA

Unit: mm



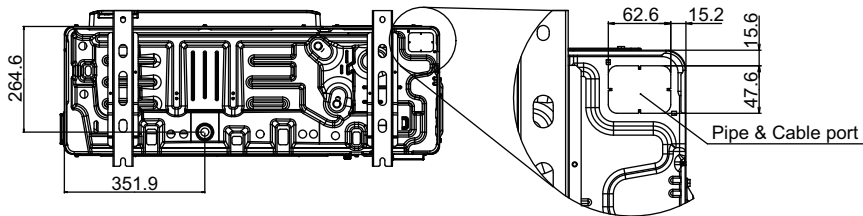
Top view



Front view

Side view

Rear view



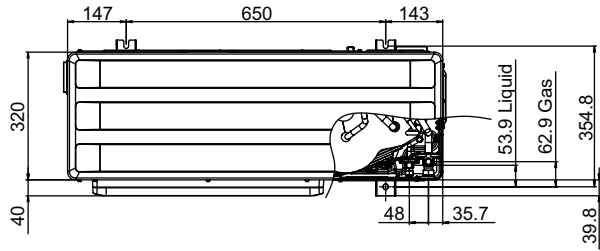
Bottom view

Models: AOYG45KQTA and AOYG54KQTA

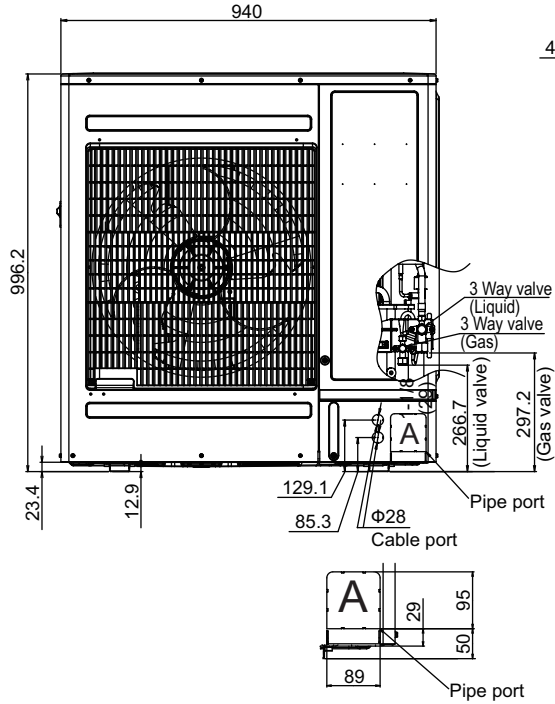
Unit: mm

GENERAL INFORMATION

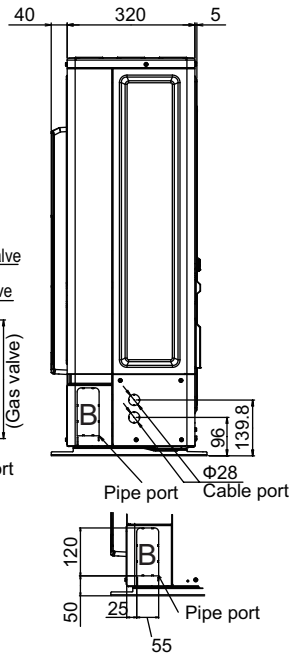
GENERAL INFORMATION



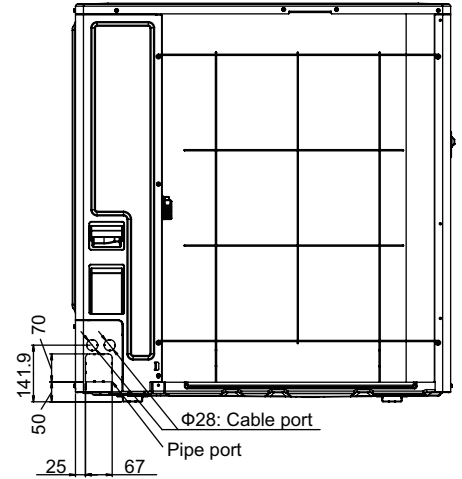
Top view



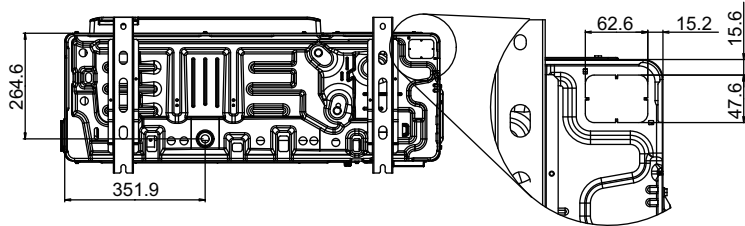
Front view



Side view



Rear view



Bottom view

Pipe & Cable port

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.

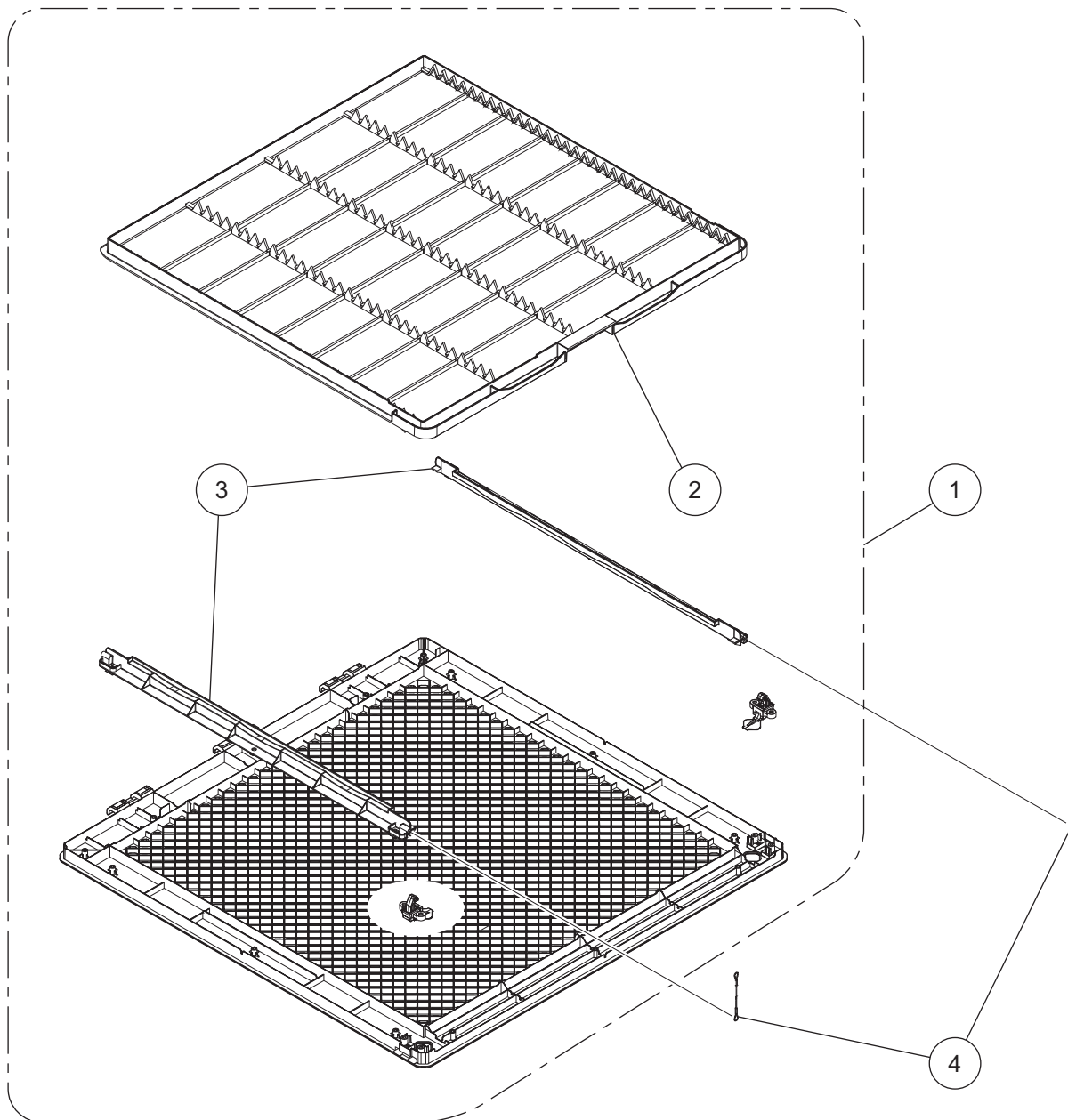
⚠ CAUTION

-
- 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
 - Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. When repairing the refrigerant system, refer to the precautions written in the installation manual of the products before you start servicing.
 - Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed.
 - All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out.
 - Work in confined spaces shall be avoided.
 - The area around the workspace shall be sectioned off.
 - Ensure that the conditions within the area have been made safe by control of flammable material.
 - Checking for presence of refrigerant
 - The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres.
 - Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.
-
- 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. Cassette grille parts list

2-1. Model: UTG-UKYC-W

■ Intake grille

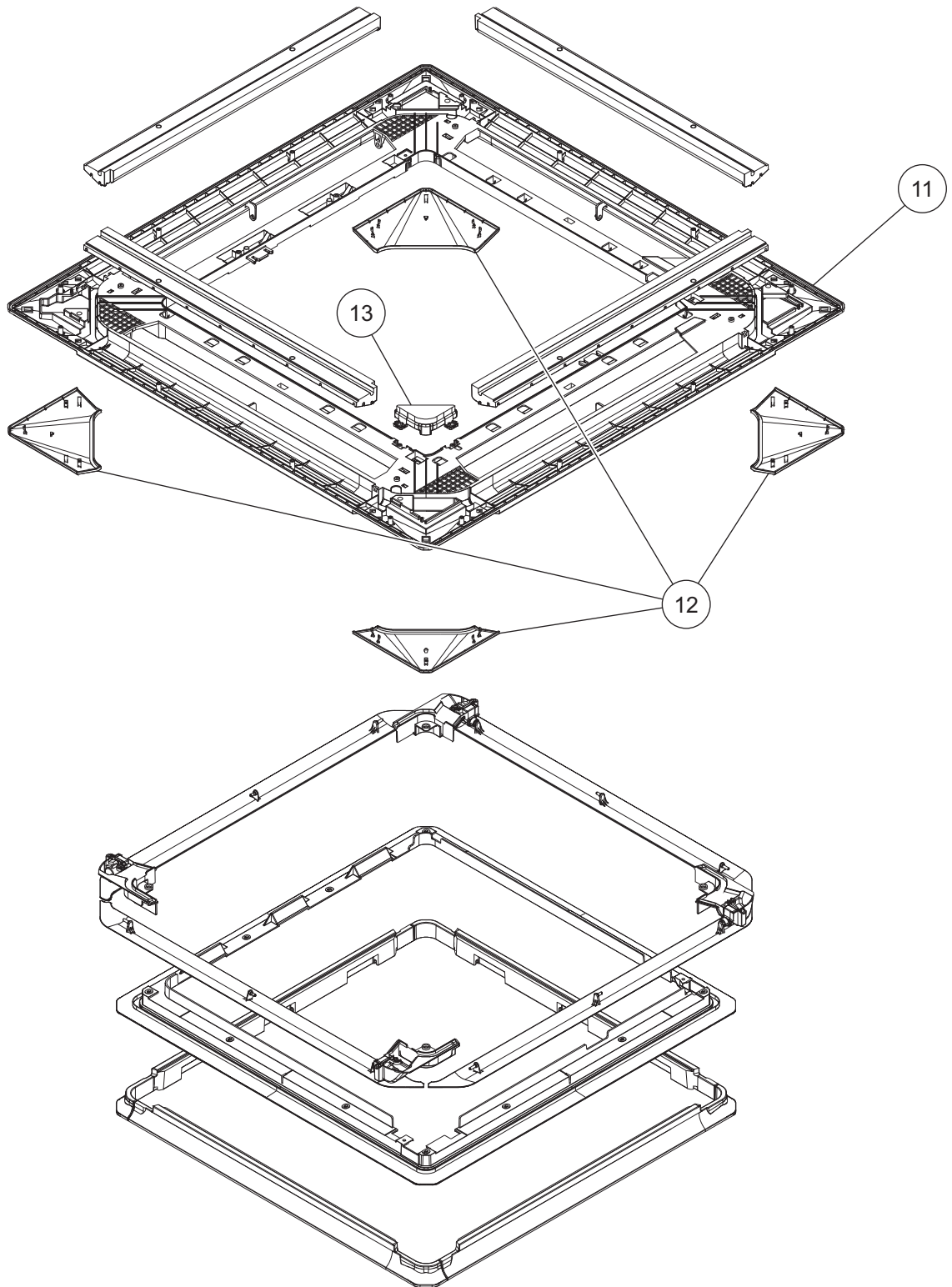


Ref No.	Description	Parts No.
1	Intake Grille Assy	9381691005
2	Long Life Filter	9378252028
3	Filter Guide	9378253018
4	Hook Wire	9378597020

■ Panels

TECHNICAL DATA
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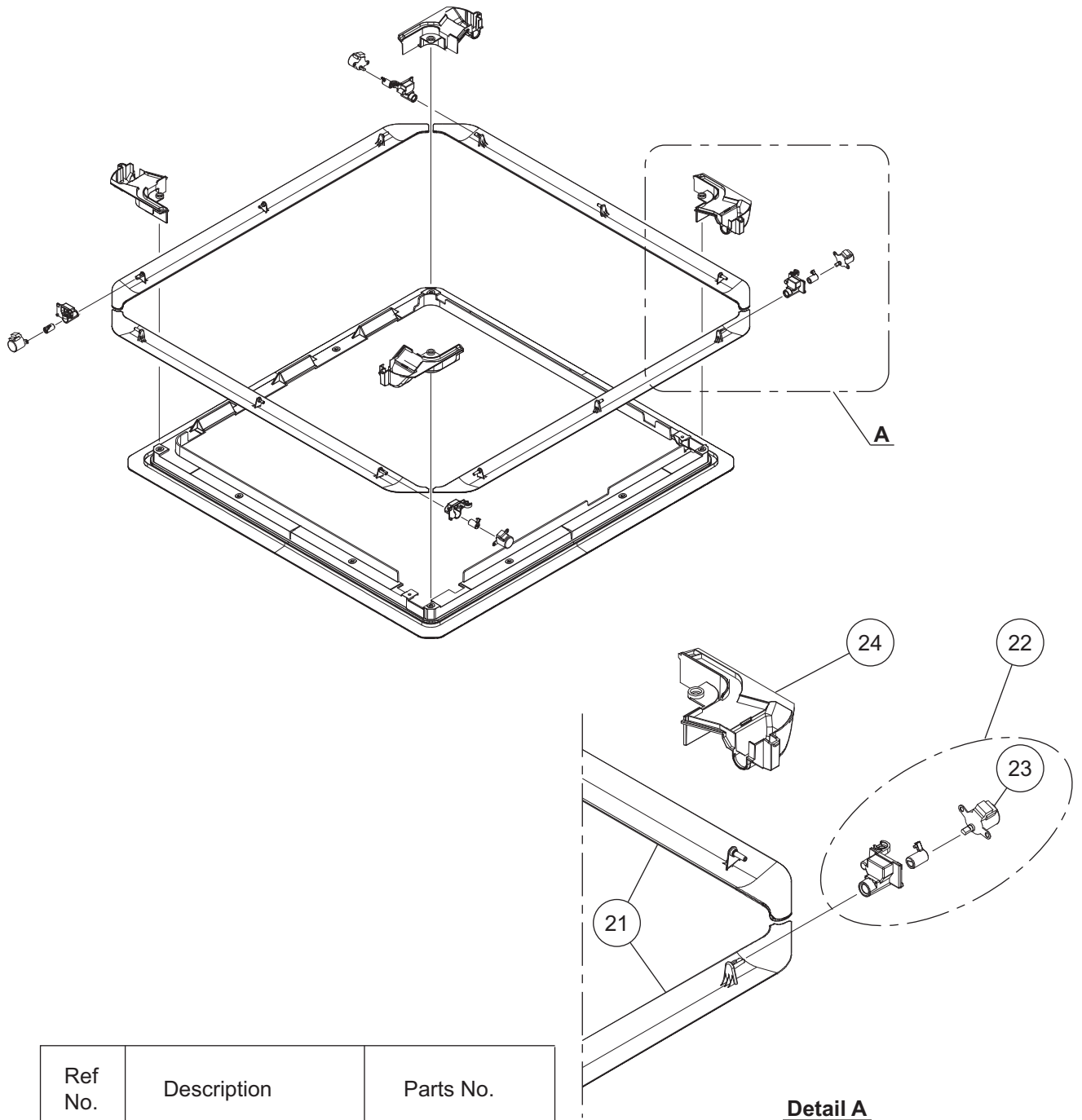


Ref No.	Description	Parts No.
11	Decoration Panel	9381352005
12	Corner Panel Assy	9381711000
13	Drain Cover Assy	9381713004

■ Louvers and motors

TECHNICAL DATA
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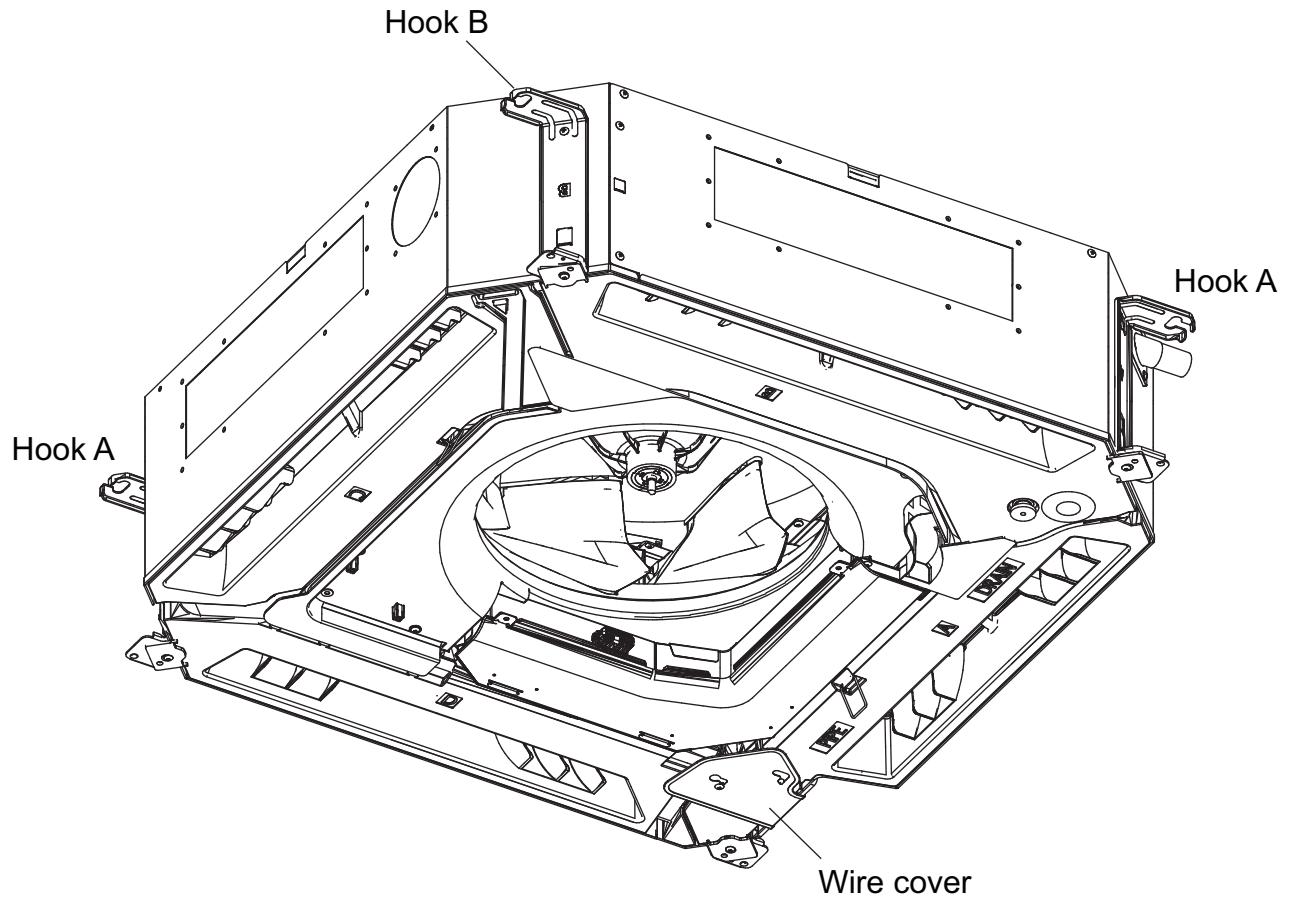
Ref No.	Description	Parts No.
21	Louver Assy	9381693009
22	Motor Case Assy	9381712007
23	Step Motor	9900885007
24	Motor Cover	9381354009
	Wire (Step Motor)	9710175008

Detail A

3. Indoor unit parts list

3-1. Models: AUXG36KRLB, AUXG45KRLB, and AUXG54KRLB

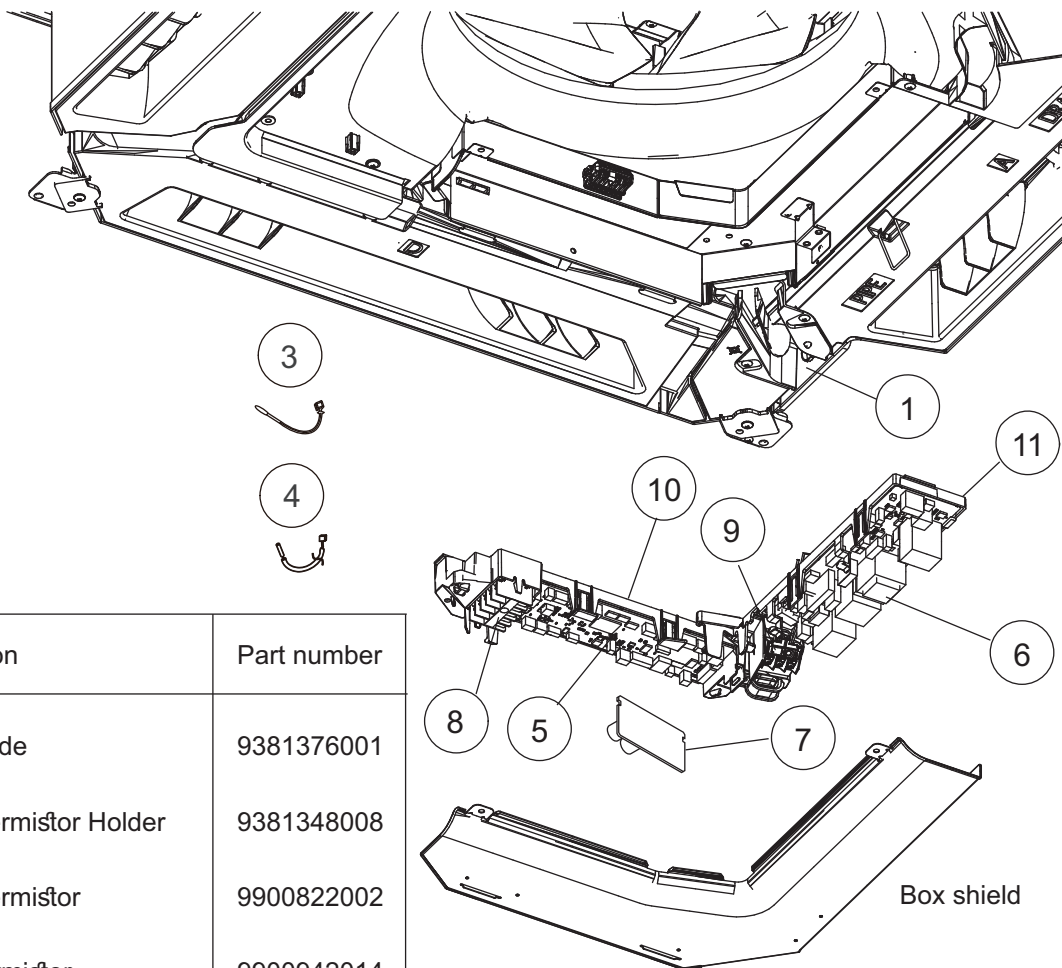
■ Miscellaneous parts



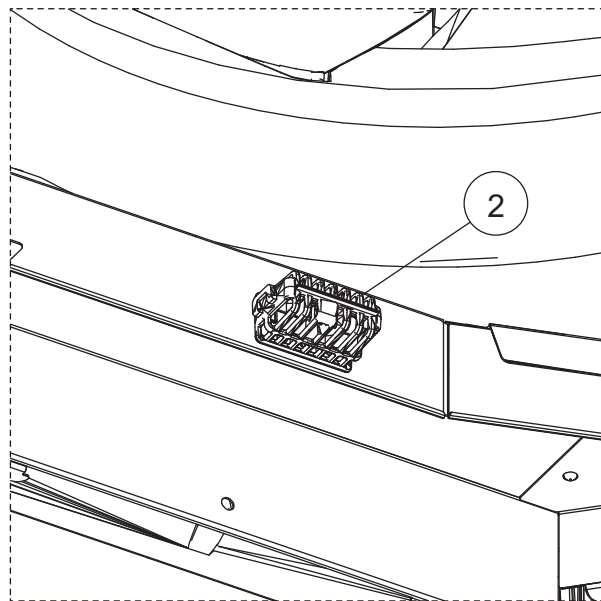
Main PC board

TECHNICAL DATA
AND PARTS LIST

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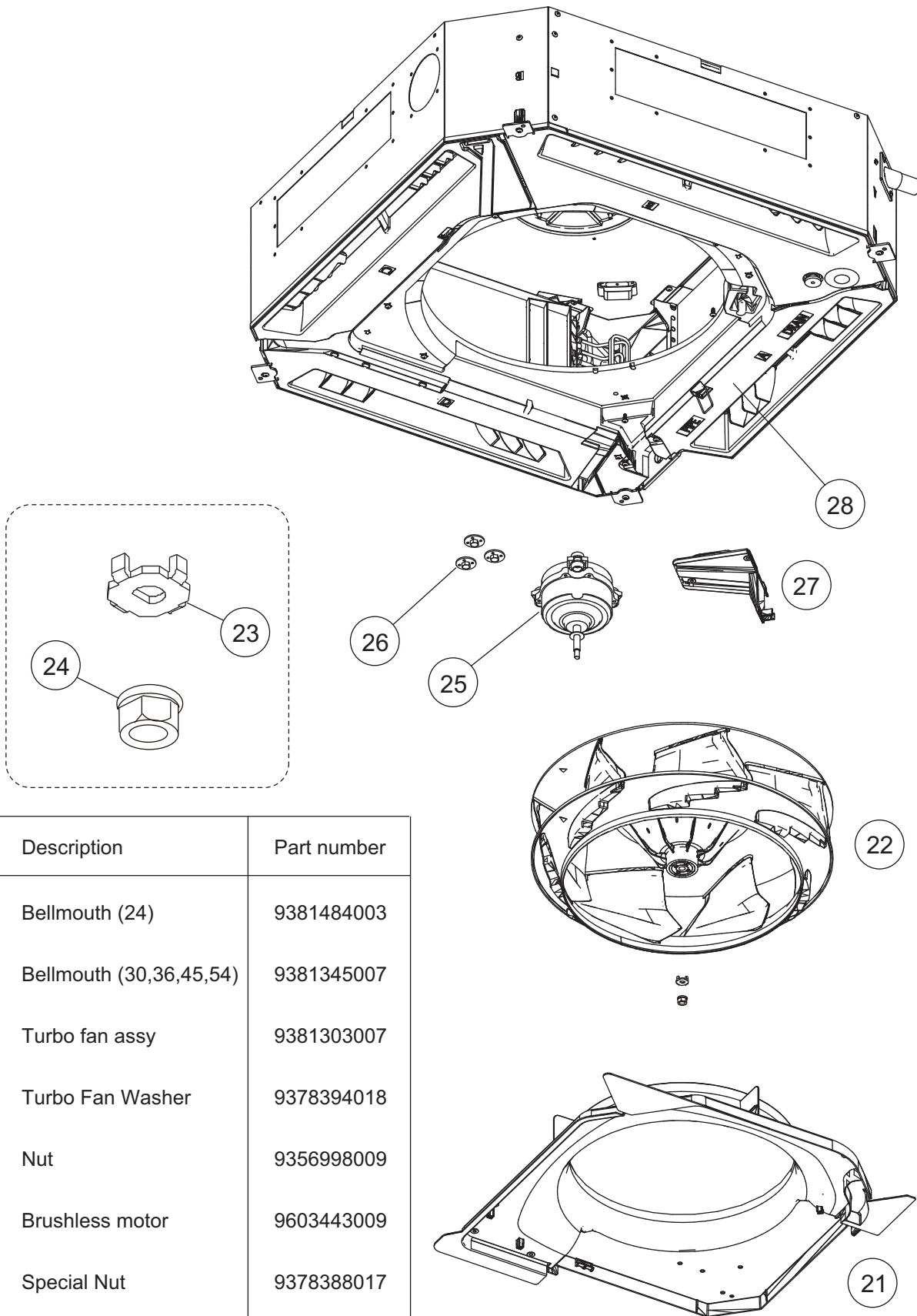
Ref.	Description	Part number
1	Cable guide	9381376001
2	Room thermistor Holder	9381348008
3	Room thermistor	9900822002
4	Pipe Thermistor	9900942014
5	Main PCB (AUXG24KRLB)	9710995873
5	Main PCB (AUXG30KRLB)	9710995880
5	Main PCB (AUXG36KRLB)	9710995897
5	Main PCB (AUXG45KRLB)	9710995903
5	Main PCB (AUXG54KRLB)	9710995910
6	Power PCB	9710022005
7	PCB (Non-polar 2-wire)	9710019005
8	Remote terminal 5P	9900896003
9	Power Terminal 3P	9900720032
10	Main PCB holder	9381350001
11	Power PCB Holder	9381349005



■ Fan and motor

TECHNICAL DATA
AND PARTS LIST

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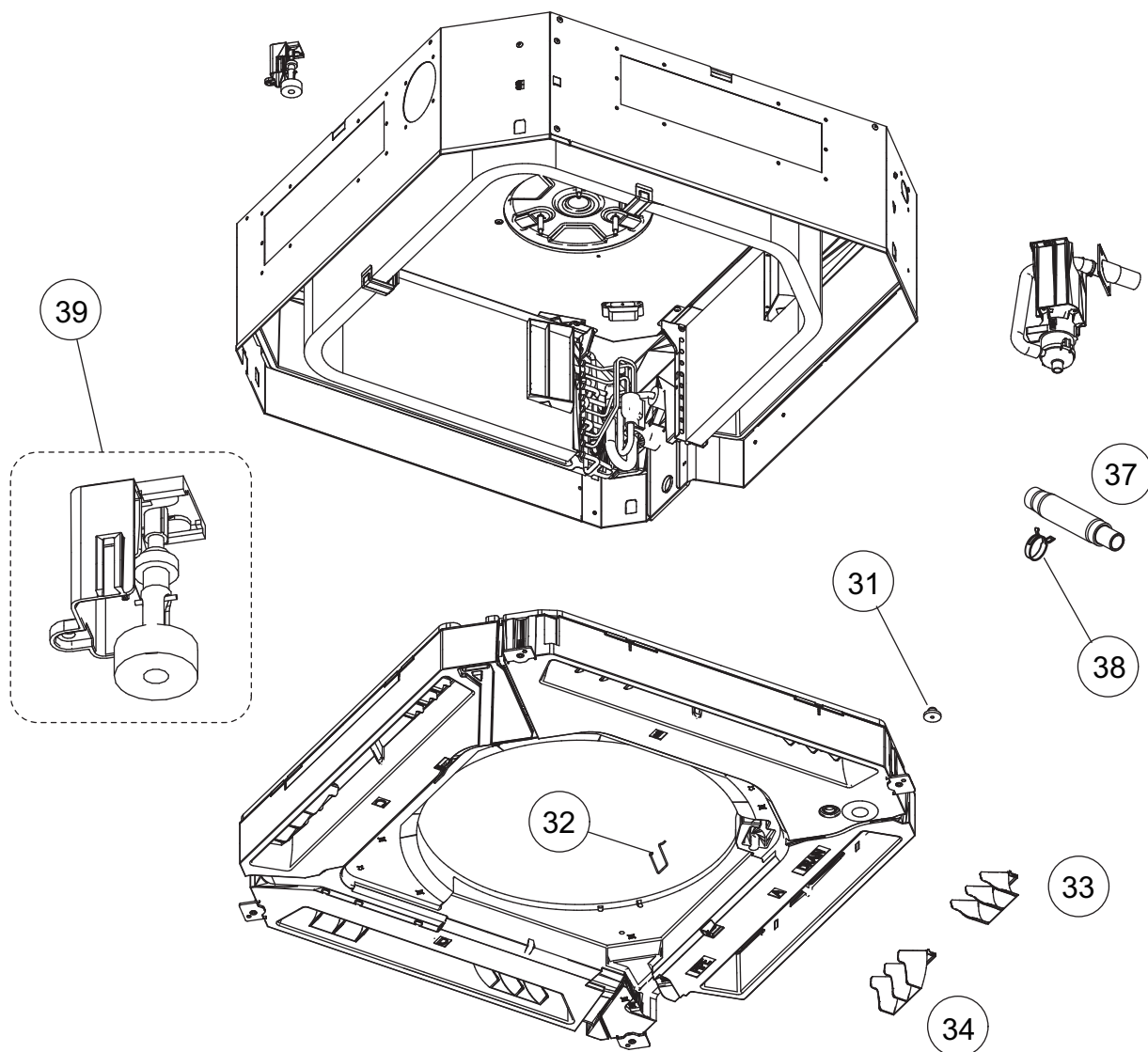


Ref.	Description	Part number
21	Bellmouth (24)	9381484003
21	Bellmouth (30,36,45,54)	9381345007
22	Turbo fan assy	9381303007
23	Turbo Fan Washer	9378394018
24	Nut	9356998009
25	Brushless motor	9603443009
26	Special Nut	9378388017
27	Motor Wire Holder	9381351008
28	Drain pan sub assy	9381789009

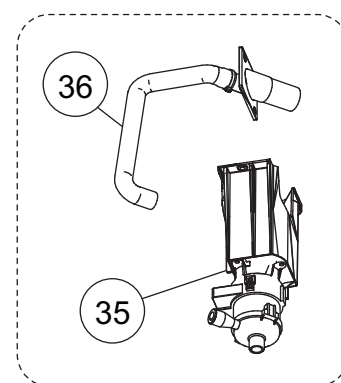
■ Drain pump

TECHNICAL DATA
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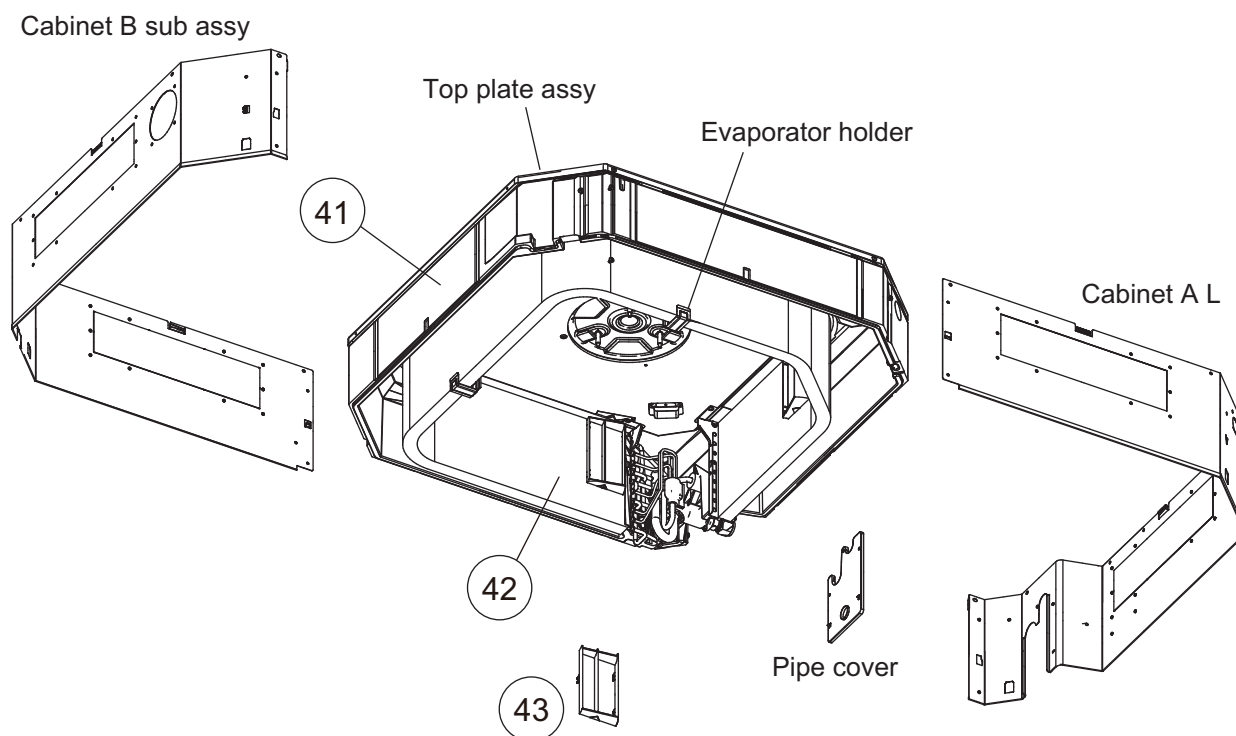
Ref.	Description	Part number
31	Drain Cap	9375502010
32	Panel Hook	9375671013
33	Vane L	9381745012
34	Vane R	9381744008
35	Drain Pump Sub Assy	9381793006
36	Drain Port Sub Assy	9381788002
37	Drain Hose	9379665001
38	Hose Band	9379757010
39	Float Switch Sub Assy	9381794003



Evaporator

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST



Ref.	Description	Part number
41	Insulation Box Sub Assy (24)	9381787012
41	Insulation Box Sub Assy (30,36,45,54)	9381787005
42	Evaporator Total Assy (24)	9378580664
42	Evaporator Total Assy (30)	9378580671
42	Evaporator Total Assy (36,45,54)	9378580688
43	Wind Guide Board	9382125004

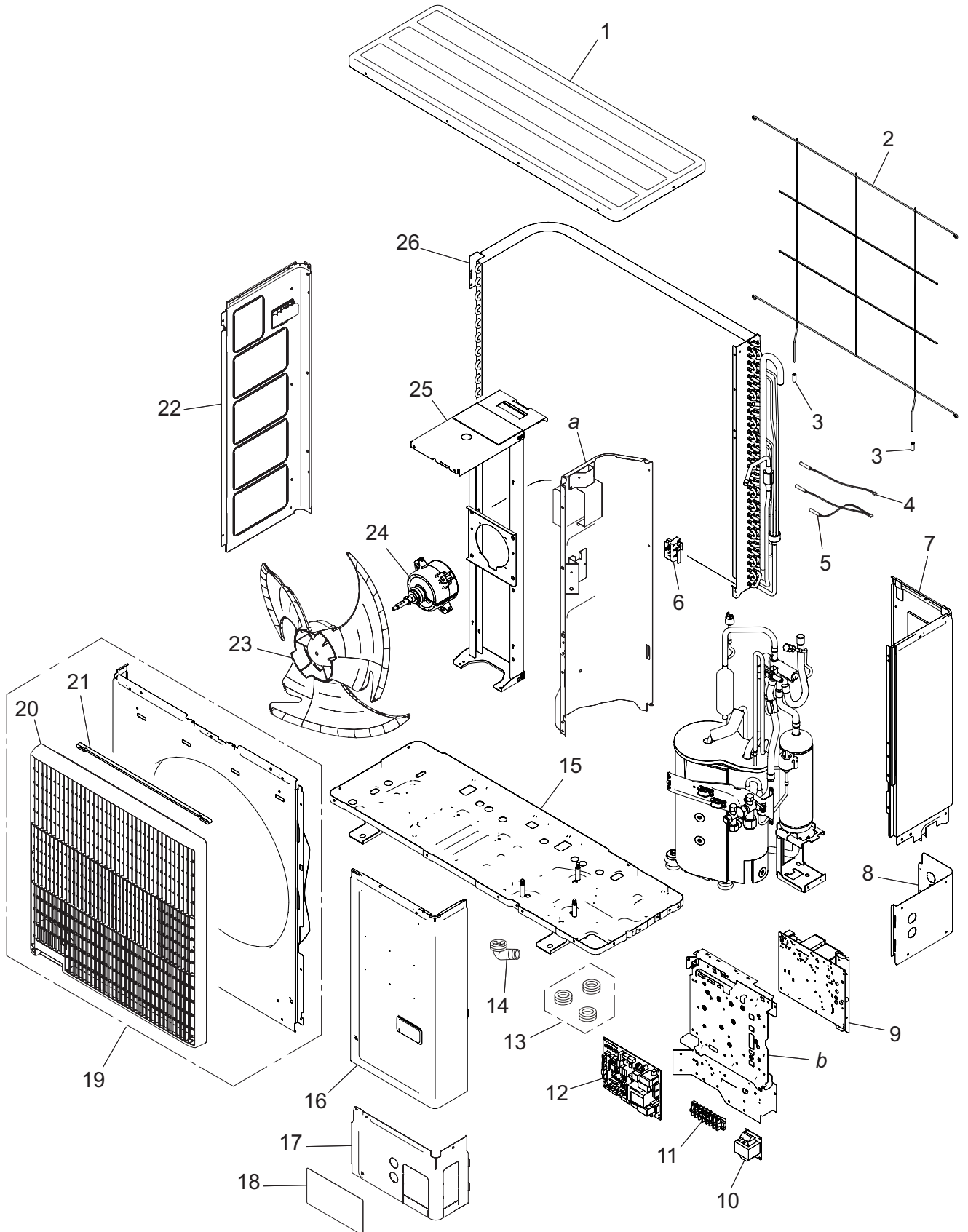
4. Outdoor unit parts list

4-1. Model: AOYG36KQTA

■ Exterior parts and chassis

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST

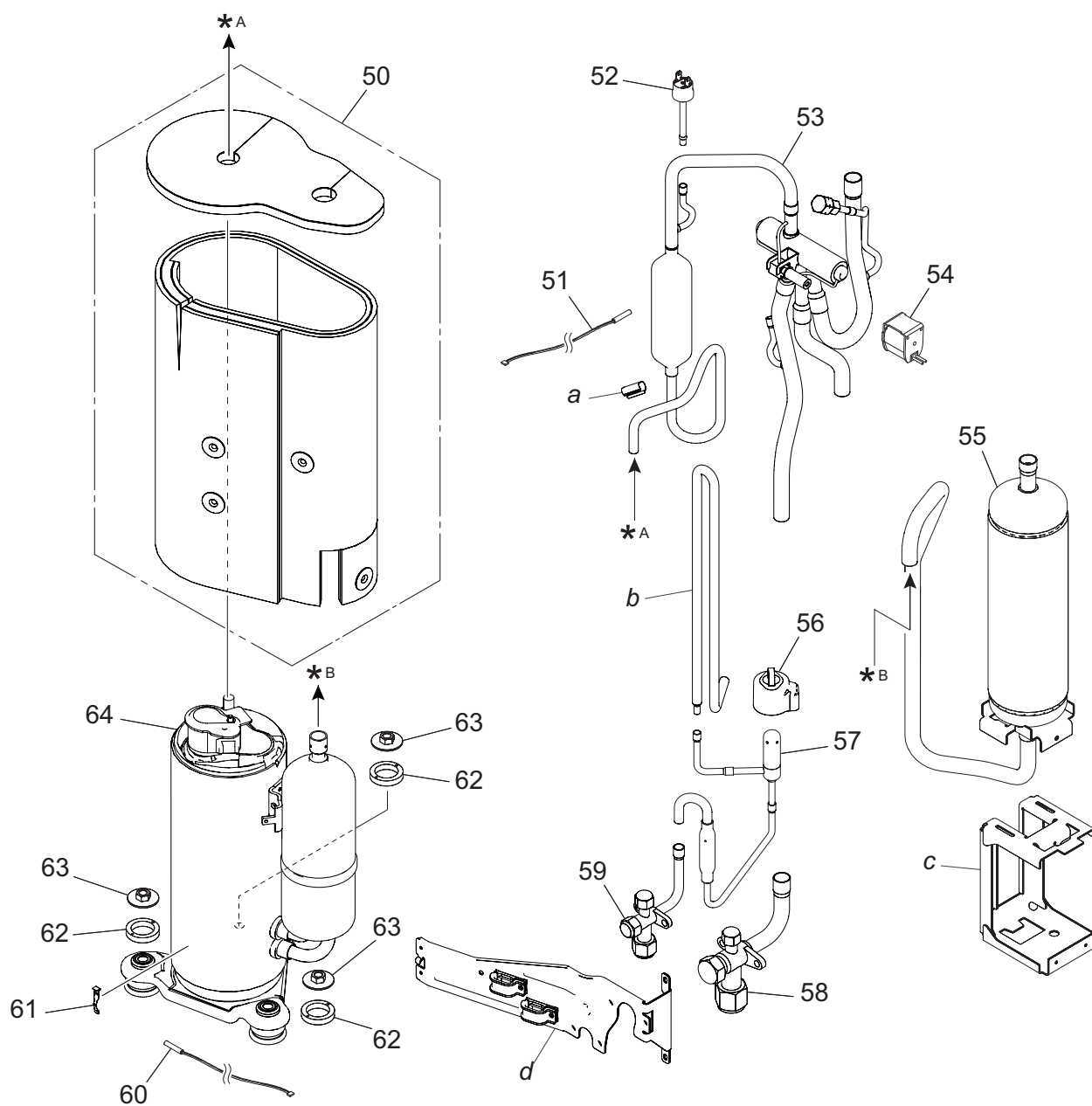


Item no.	Part no.	Part name	Service part
1	9383880001	Top panel assy	◆
2	9383779008	Protective net	◆
3	9375361013	Net rubber	◆
4	9900984038	Thermistor (Heat exchanger)	◆
5	9900727154	Thermistor assy	◆
6	9383607004	Thermo holder	◆
7	9383874000	Right panel assy	◆
8	9383879005	Rear pipe cover	◆
9	9711424006	Inverter PCB	◆
10	9900634025	Reactor assy	◆
11	9901053016	Terminal	◆
12	9711431110	Main PCB (Service)	◆
13	313166024302	Drain cap	◆
14	9303029015	Drain assy	◆
15	9383871009	Base assy	◆
16	9383876004	Service panel assy	◆
17	9383878008	Front pipe cover	◆
18	9351355005	Emblem rear	◆
19	9383863004	Front panel assy	◆
20	9383604003	Blow grille	◆
21	9383689000	Blow grille insulation	◆
22	9383882005	Left panel assy	◆
23	9383336003	Propeller fan	◆
24	9603732011	Brushless motor	◆
25	9383862007	Motor bracket assy	◆
26	9374420612	Condenser sub assy	◆
<i>a</i>	—	Separate wall assy	—
<i>b</i>	—	Control box unit	—

Compressor

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST



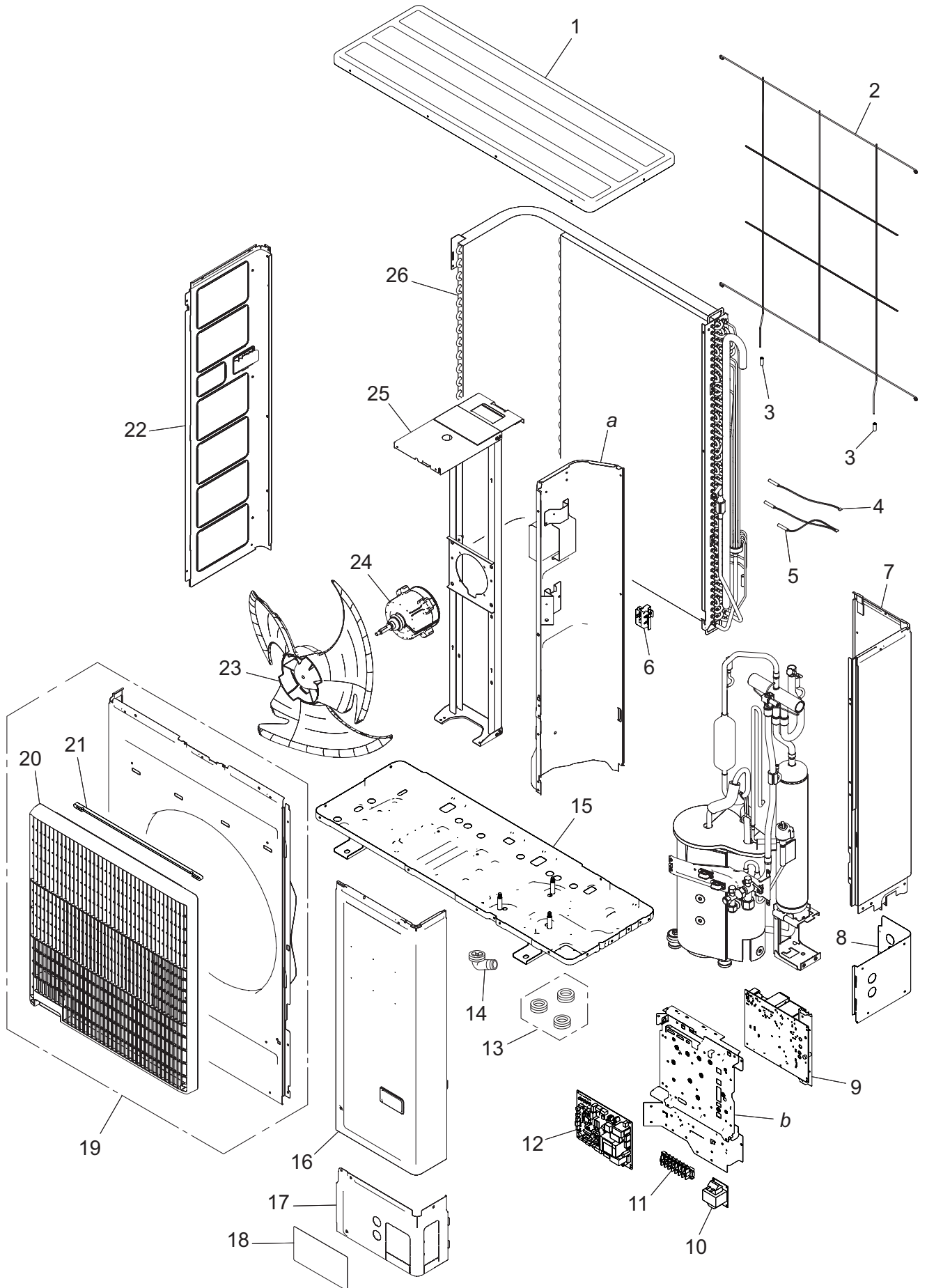
Item no.	Part no.	Part name	Service part
50	9383858000	Sound insulation unit	◆
51	9900565091	Thermistor (Outdoor temp.)	◆
52	9900186029	Pressure switch	◆
53	9374425648	4-way valve assy	◆
54	9970194016	Solenoid	◆
55	9375250140	Accumulator assy	◆
56	9970209000	Expansion valve coil	◆
57	9370947328	Expansion valve assy	◆
58	9379079013	3-way valve assy	◆
59	9377958037	3-way valve assy	◆
60	9900985035	Thermistor (Compressor)	◆
61	9810028006	Thermistor stopper	◆
62	9379179065	Rubber washer C	◆
63	9377973016	Special nut	◆
64	9383821011	Compressor assy	◆
<i>a</i>	—	Thermostat holder	—
<i>b</i>	—	Joint pipe D	—
<i>c</i>	—	Accumulator holder A	—
<i>d</i>	—	Wiring fixation unit	—

4-2. Models: AOYG45KQTA and AOYG54KQTA

■ Exterior parts and chassis

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST

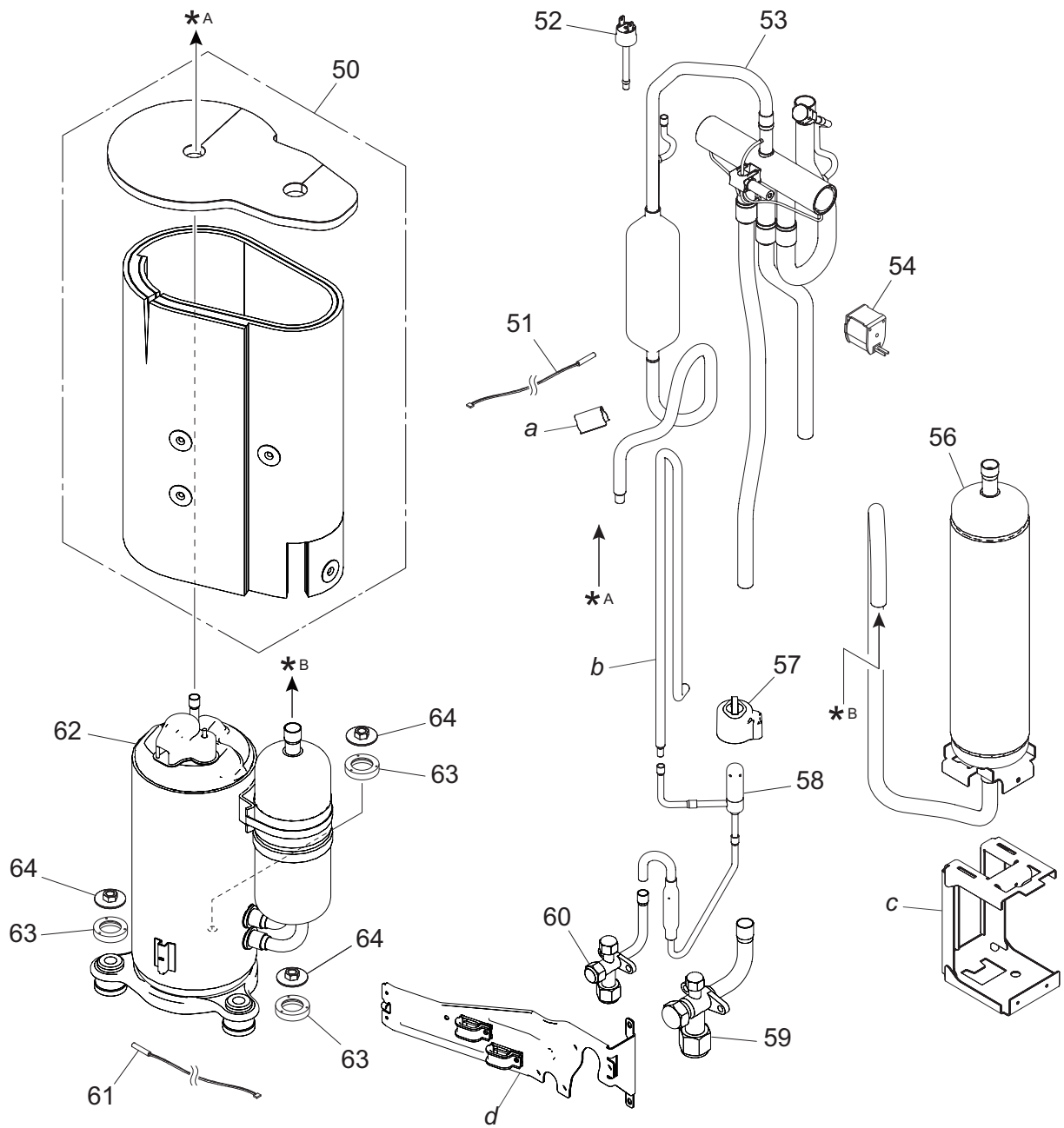


Item no.	Part no.	Part name	Service part
1	9383880001	Top panel assy	◆
2	9381013005	Protective net	◆
3	9375361013	Net rubber	◆
4	9900984038	Thermistor (Heat exchanger)	◆
5	9900727154	Thermistor assy	◆
6	9383607004	Thermo holder	◆
7	9383874017	Right panel sub assy	◆
8	9383879005	Rear pipe cover	◆
9	9711424020	Inverter PCB (for 45 model)	◆
	9711424013	Inverter PCB (for 54 model)	◆
10	9900634025	Reactor assy	◆
11	9901053016	Terminal	◆
12	9711431127	Main PCB (Service) (for 45 model)	◆
	9711431141	Main PCB (Service) (for 54 model)	◆
13	313166024302	Drain cap	◆
14	9303029015	Drain assy	◆
15	9383871009	Base assy	◆
16	9383876011	Service panel sub assy	◆
17	9383878008	Front pipe cover	◆
18	9351355005	Emblem rear	◆
19	9383863011	Front panel assy	◆
20	9383604003	Blow grille	◆
21	9383689000	Blow grille insulation	◆
22	9383882012	Left panel sub assy	◆
23	9383336003	Propeller fan	◆
24	9603733018	Brushless motor	◆
25	9383862021	Motor bracket assy	◆
26	9374420636	Condenser sub assy	◆
<i>a</i>	—	Separate wall assy	—
<i>b</i>	—	Control box unit	—

Compressor

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST


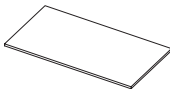
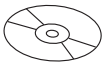
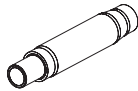






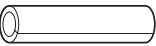

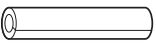


Item no.	Part no.	Part name	Service part
50	9383858017	Sound insulation unit	◆
51	9900565091	Thermistor (Outdoor temp.)	◆
52	9900186029	Pressure switch	◆
53	9374425662	4-way valve assy (for 45 model)	◆
	9374425655	4-way valve assy (for 54 model)	◆
54	9970194016	Solenoid	◆
56	9375250157	Accumulator assy	◆
57	9970209000	Expansion valve coil	◆
58	9370947311	Expansion valve assy	◆
59	9379079013	3-way valve assy	◆
60	9377958037	3-way valve assy	◆
61	9900985028	Thermistor (Compressor)	◆
62	9810627001	Compressor (for 45 model)	◆
	9810626004	Compressor (for 54 model)	◆
63	9379179058	Rubber washer D	◆
64	9377973016	Special nut	◆
<i>a</i>	—	Thermistor spring	—
<i>b</i>	—	Joint pipe D	—
<i>c</i>	—	Accumulator holder A	—
<i>d</i>	—	Wiring fixation unit	—

5. Accessories





5-1. Indoor unit

■ Models: AUXG36KRLB, AUXG45KRLB, and AUXG54KRLB

Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Operating manual		1	Insulation		1
Operating manual (CD-ROM)		1	Drain hose		1
Installation manual		1	Hose band		1
Template (Carton top)		1	Drain hose heat insulation		1
Washer		8	Cable tie (large)		4
Coupler heat insulation (large)		1	Cable tie (small)		2
Coupler heat insulation (small)		1			

5-2. Outdoor unit

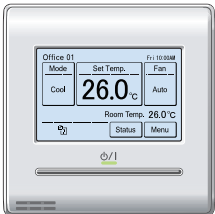
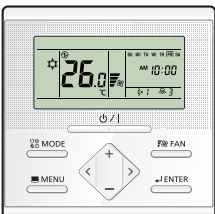
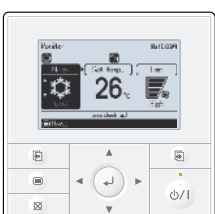
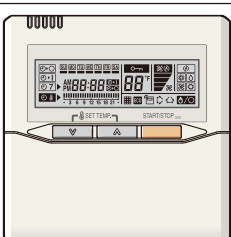

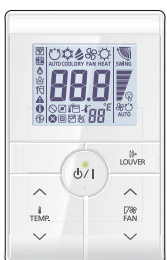
■ Models: AOYG36KQTA, AOYG45KQTA, and AOYG54KQTA


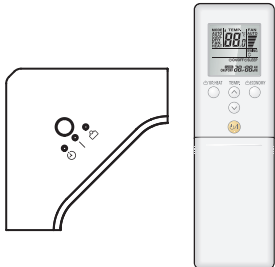
Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Installation manual		1	Drain cap		3
Drain pipe		1	One-touch bush		2

6. Optional parts

6-1. Indoor unit

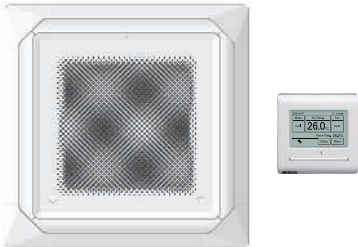

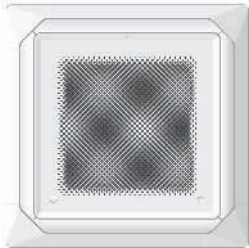
■ Controllers

Exterior	Part name	Model name	Summary
	Wired remote controller	UTU-RNRYZ*	Easy finger touch operation with LCD panel. Backlit LCD enables easy operation in a dark room. Wire type: Non-polar 2-wire
	Wired remote controller	UTU-RLRY	High visibility and easy operation. Room temperature can be accurately controlled using the built-in thermo sensor. Wire type: Non-polar 2-wire
	Wired remote controller	UTU-RVNYM	Large and full-dot liquid crystal screen, wide and large keys easy to press, user-intuitive arrow key. Wire type: Polar 3-wire
	Wired remote controller	UTU-RNNYM	Room temperature can be controlled by detecting the temperature accurately with built-in thermo sensor. Wire type: Polar 3-wire
	Simple remote controller	UTU-RSRY	Compact remote controller concentrates on the basic functions such as Start/Stop, fan control, temperature setting, and operation mode. Wire type: Non-polar 2-wire
	Simple remote controller	UTU-RHRY	Compact remote controller concentrates on the basic functions such as Start/Stop, fan control, and temperature setting. Wire type: Non-polar 2-wire

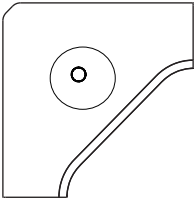
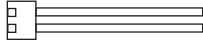

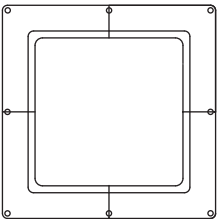
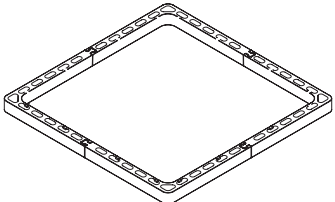

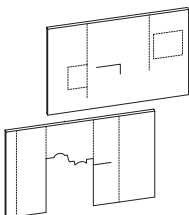
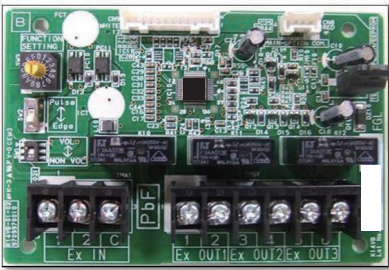
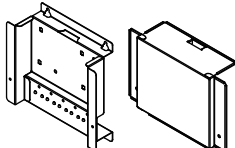
Exterior	Part name	Model name	Summary
	Simple remote controller	UTY-RSNYM	Compact remote controller concentrates on the basic functions such as Start/Stop, fan control, temperature setting, and operation mode. Wire type: Polar 3-wire
	IR receiver kit with wireless remote controller	UTY-LBTYC	Unit control is performed by wireless remote controller.





NOTE: Available functions may differ by the remote controller. For details, refer to the operation manual.

■ Cassette grille

Exterior	Part name	Model name	Summary
	Cassette grille	UTG-UKYA-W	This cassette grille to blow airflow in 360° direction by unique seamless airflow louver design. Wired remote controller (UTY-RNRYZ*) is included.
	Cassette grille	UTG-UKYA-B	This cassette grille to blow airflow in 360° direction by unique seamless airflow louver design. Black color model.
	Cassette grille	UTG-UKYC-W	This cassette grille to blow airflow in 360° direction by unique seamless airflow louver design.

Others

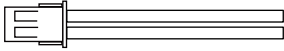
Exterior	Part name	Model name	Summary
	Human sensor kit	UTY-SHZXC	For circular flow cassette type.
	External connect kit	UTY-XWZXZG	Use to connect with various peripheral devices and air conditioner PCB. For control output port.
	Air outlet shutter plate	UTR-YDZK	Installed at the air outlet when 3-directions mode is performed.
	Wide panel	UTG-AKXA-W	Hides the gap between the ceiling hole and the cassette grille.
	Panel spacer	UTG-BKXA-W	If there is not enough height in the ceiling space, by inserting this spacer between the cassette grille and the ceiling surface, the height of the unit body goes into the ceiling space become 50-mm lower.
	Fresh-air intake kit	UTZ-VXRA	By attaching Fresh-air intake kit to the indoor unit, it can be taken in fresh air of up to 10% of "high" air volume of the indoor unit.
	Insulation for high humidity	UTZ-KXRA	Install when the under-roof condition is expected to be the humidity of over 80% and the temperature of over 30 °C.
	External input and output PCB	UTY-XCSX	Use to connect with external devices and air conditioner PCB.
	External input and output PCB box	UTZ-GXRA	For installing the External input and output PCB.

Exterior	Part name	Model name	Summary
	Wireless LAN adapter	UTY-TFSXZ1	Remotely manage an air conditioning system using mobile devices such as smartphones and tablets. For connection indoor unit with UART interface.
	Modbus converter	UTY-VMSX	For connection between indoor unit with UART interface and a Modbus open network.
	KNX converter	UTY-VKSX	For connection between indoor unit with UART interface and a KNX open network.
	External switch controller	UTY-TERX	Air conditioner switching can be controlled by connecting other external sensor switches.

NOTE: Combined use of following optional parts and Wireless LAN adapter (UTY-TFSXZ1) is not allowed.

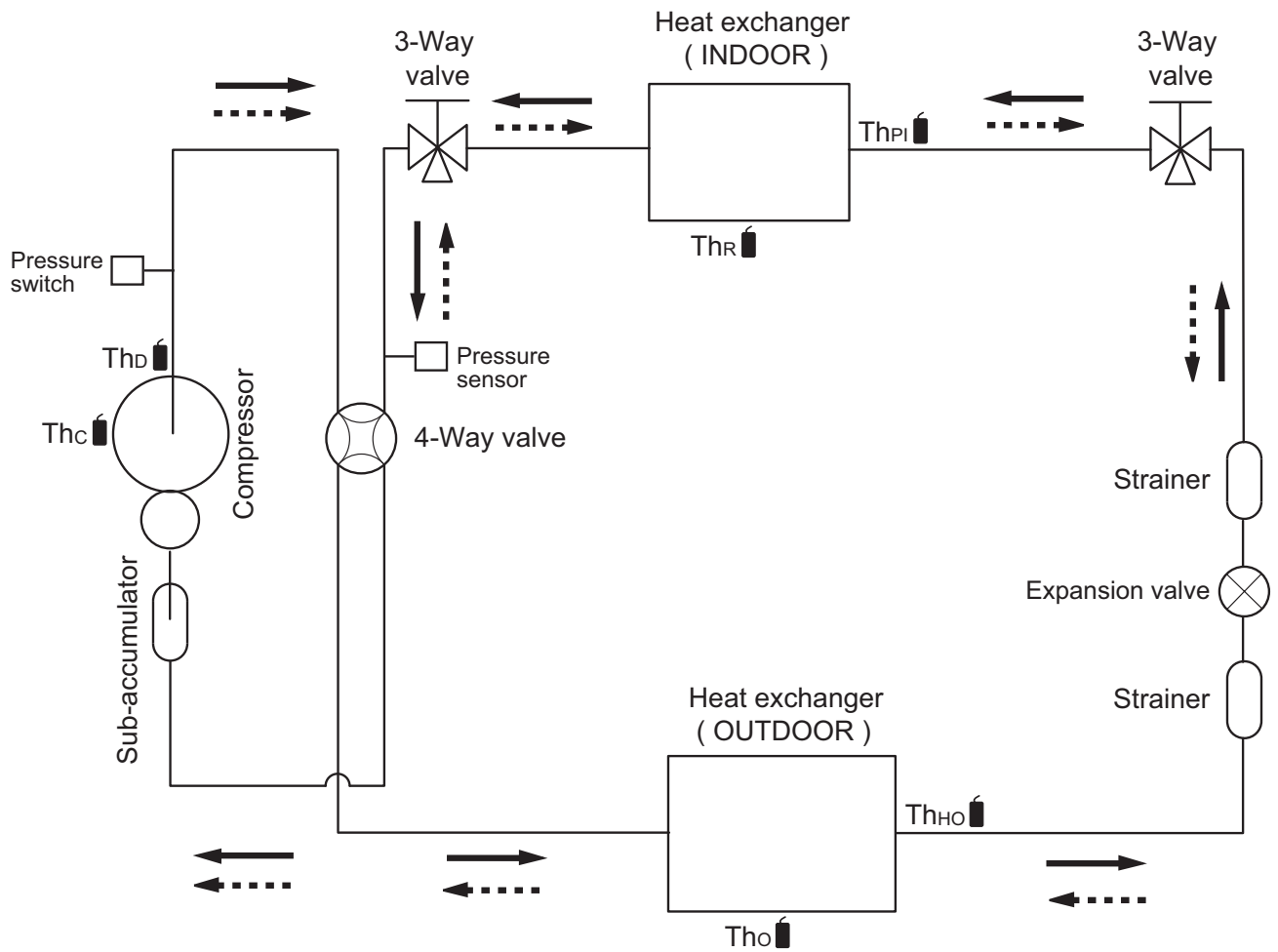
- External input and output PCB (UTY-XCSX)
- Modbus converter
- KNX converter

6-2. Outdoor unit

Exterior	Part name	Model name	Summary
	External connect kit	UTY-XWZXZ3	Use to operate the external input and output functions of outdoor unit.

7. Refrigerant system diagrams

7-1. Models: AOYG36KQTA, AOYG45KQTA, and AOYG54KQTA



: Cooling
 : Heating

- Thc : Thermistor (Compressor temperature)
- ThD : Thermistor (Discharge temperature)
- Tho : Thermistor (Outdoor temperature)
- ThHO : Thermistor (Heat Exchanger Out temperature)
- ThR : Thermistor (Room temperature)
- ThPI : Thermistor (Pipe temperature)

TECHNICAL DATA
AND PARTS LIST

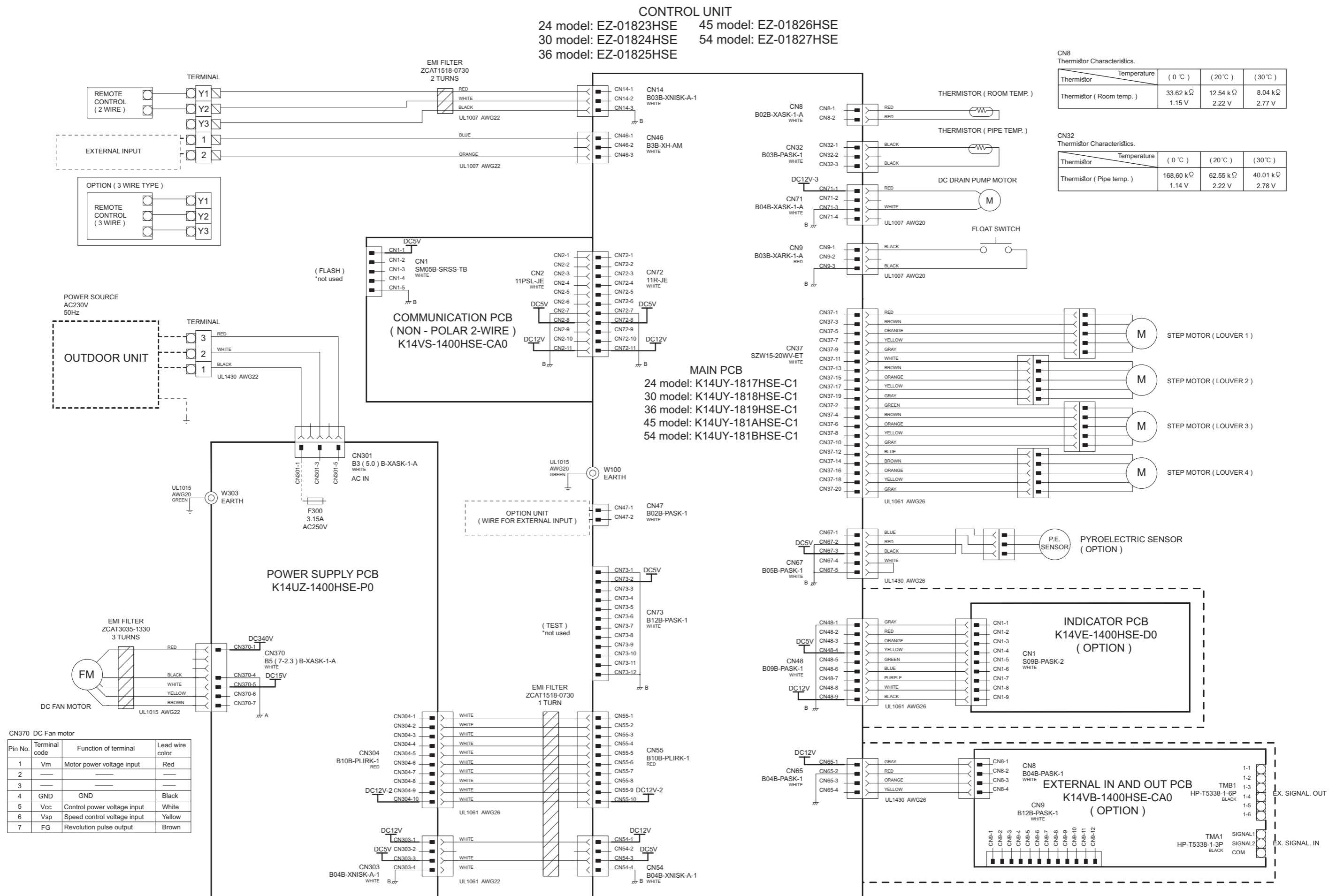
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8. PC board diagrams

8-1. Models: AUXG36KRLB, AUXG45KRLB, and AUXG54KRLB

TECHNICAL DATA AND PARTS LIST

TECHNICAL DATA AND PARTS LIST

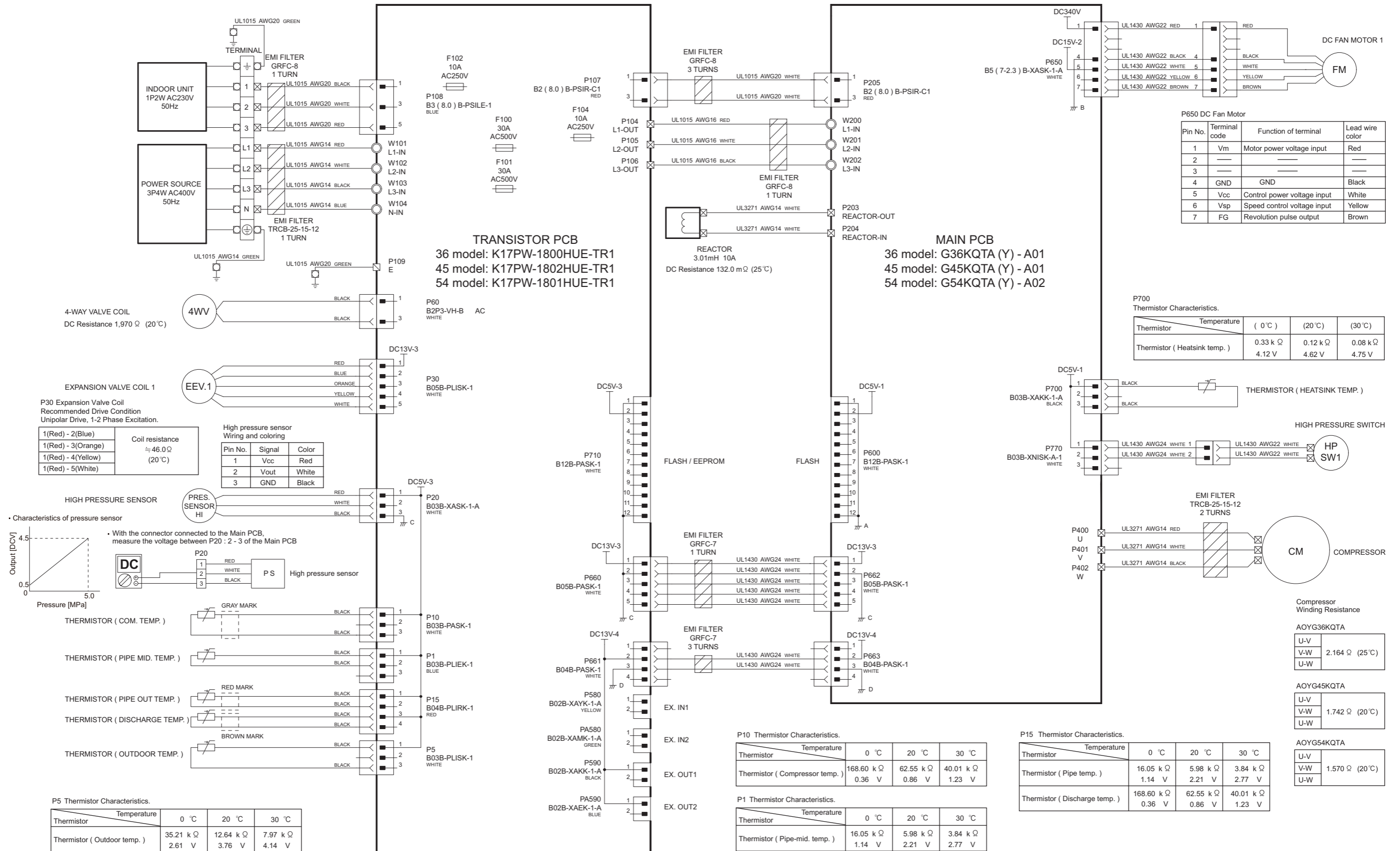


8-2. Models: AOYG36KQTA, AOYG45KQTA, and AOYG54KQTA

TECHNICAL DATA AND PARTS LIST

TECHNICAL DATA AND PARTS LIST

INVERTER ASSEMBLY
 36 model: EZ-0190HUE
 45 model: EZ-0193HUE
 54 model: EZ-0191HUE

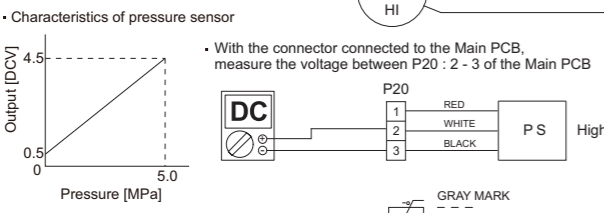


P650 DC Fan Motor

Pin No.	Terminal code	Function of terminal	Lead wire color
1	Vm	Motor power voltage input	Red
2	---	---	---
3	---	---	---
4	GND	GND	Black
5	Vcc	Control power voltage input	White
6	Vsp	Speed control voltage input	Yellow
7	FG	Revolution pulse output	Brown

P700 Thermistor Characteristics.

Thermistor	Temperature (0°C)	(20°C)	(30°C)
Thermistor	0.33 k Ω	0.12 k Ω	0.08 k Ω
Thermistor (Heatsink temp.)	4.12 V	4.62 V	4.75 V



P5 Thermistor Characteristics.

Thermistor	Temperature	0 °C	20 °C	30 °C
Thermistor (Outdoor temp.)		35.21 k Ω	12.64 k Ω	7.97 k Ω
		2.61 V	3.76 V	4.14 V

P10 Thermistor Characteristics.

Thermistor	Temperature	0 °C	20 °C	30 °C
Thermistor (Compressor temp.)		168.60 k Ω	62.55 k Ω	40.01 k Ω
		0.36 V	0.86 V	1.23 V

P1 Thermistor Characteristics.

Thermistor	Temperature	0 °C	20 °C	30 °C
Thermistor (Pipe-mid. temp.)		16.05 k Ω	5.98 k Ω	3.84 k Ω
		1.14 V	2.21 V	2.77 V

P15 Thermistor Characteristics.

Thermistor	Temperature	0 °C	20 °C	30 °C
Thermistor (Pipe temp.)		16.05 k Ω	5.98 k Ω	3.84 k Ω
		1.14 V	2.21 V	2.77 V
Thermistor (Discharge temp.)		168.60 k Ω	62.55 k Ω	40.01 k Ω
		0.36 V	0.86 V	1.23 V

AOYG36KQTA

U-V	
V-W	2.164 Ω (25°C)
U-W	

AOYG45KQTA

U-V	
V-W	1.742 Ω (20°C)
U-W	

AOYG54KQTA

U-V	
V-W	1.570 Ω (20°C)
U-W	