

AIR CONDITIONER

Duct type

SERVICE MANUAL



INDOOR

ARXG24KMLA
ARXG30KMLA
ARXG36KMLA
ARXG45KMLA

OUTDOOR



AOYG24KATA



AOYG30KATA
AOYG36KATA



AOYG45KATA

FUJITSU GENERAL LIMITED

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- 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				Inverter heat pump				
Model name				ARXG24KMLA	ARXG30KMLA	ARXG36KMLA	ARXG45KMLA	
Power supply				230 V ~ 50 Hz				
Power supply intake				Outdoor unit				
Available voltage range				198—264 V				
Capacity	Cooling	Rated	kW	6.8	8.5	9.5	12.1	
			Btu/h	23,200	29,000	32,400	41,300	
		Min.—Max.	kW	0.9—7.4	2.8—9.6	2.8—10.6	4.0—12.6	
	Heating	Rated	kW	3,100—25,200	9,600—32,700	9,600—36,100	13,600—43,000	
			Btu/h	7.5	10.0	10.8	13.5	
		Min.—Max.	kW	25,600	34,100	36,900	46,100	
Input power	Cooling	Rated	kW	2.19	2.78	3.13	4.84	
			Max.	2.69	3.83	4.29	5.03	
		Heating	Rated	2.00	2.77	3.03	4.18	
	Current	Cooling	Rated	A	9.7	12.3	13.8	21.3
				Max.	8.8	12.3	13.4	18.3
		Heating	Rated	2.65	4.37	4.66	4.79	
Power factor	Cooling		%	98.5	98.1	98.3	99.0	
	Heating		%	98.7	97.7	98.2	99.1	
EER	Cooling		kW/kW	3.11	3.06	3.04	2.50	
COP	Heating		kW/kW	3.75	3.61	3.56	3.23	
Moisture removal			L/h (pints/h)	2.5 (4.4)		3.0 (5.3)	4.0 (7.0)	
Maximum operating current *1		Cooling	A	12.6	22.5		28.1	
		Heating	A	12.6	22.5		28.1	
Fan	Airflow rate	Cooling	m ³ /h	HIGH	1,100	1,900	2,100	
				MED	910	1,620	1,750	
				LOW	750	1,270	1,350	
				QUIET	580	980	1,070	
		Heating	HIGH	1,100	2,100			
			MED	910	1,620		1,750	
			LOW	750	1,270		1,350	
			QUIET	580	980		1,070	
	Type × Q'ty		Sirocco × 2					
	Motor output		W	106	197			
Static pressure range			Pa	30 to 150				
Sound pressure level *2		Cooling	dB (A)	HIGH	31	39	42	
				MED	29	35	38	
				LOW	27	30	32	
				QUIET	25	26	28	
		Heating	HIGH	31	42			
			MED	29	35		38	
			LOW	27	30		32	
			QUIET	25	26		28	
Sound power level		Cooling	dB (A)	60	65		68	
		Heating	dB (A)	62	69	70		
Heat exchanger type		Dimensions (H × W × D)		mm		294 × 1,000 × 39.9		
		Fin pitch		mm		1.40		
		Rows × Stages		mm		3 × 14		
		Pipe type		mm		Copper		
		Fin type		mm		Aluminum		
Enclosure		Material		mm		Steel sheet		
		Color		mm		—		
Dimensions (H × W × D)		Net		mm		270 × 1,135 × 700		
		Gross		mm		300 × 1,320 × 790		
Weight		Net		kg		35		
		Gross		kg		43		
Connection pipe		Liquid	mm (in)	Ø 6.35 (Ø 1/4)		Ø 9.52 (Ø 3/8)		
		Gas	mm (in)	Ø 12.70 (Ø 1/2)		Ø 15.88 (Ø 5/8)		
Drain port		Method		mm		Flare		
		Material		mm		Steel		
		Size		mm		Ø 35.7 (I.D.), Ø 38.1 (O.D.)		
Operation range		Cooling		°C		18 to 32		
		Heating		°C		80 or less		
		Cooling		%RH		16 to 30		
		Heating		%RH		16 to 30		
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.
 - Standard static pressure; 24 type: 35 Pa, 30 and 36 types: 47 Pa, 45 type: 60 Pa
 - 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.
- This data is based on EN 14511 standard.

Specifications for ErP Lot10					
Model name		ARXG24KMLA	ARXG30KMLA	ARXG36KMLA	
Energy efficiency class	Cooling	A ⁺			
	Heating (Average)	A			
Pdesign	Cooling	kW	6.8 (35°C)	8.5 (35°C)	9.5 (35°C)
	Heating (Average)		5.4 (-10°C)	8.0 (-10°C)	8.7 (-10°C)
SEER	Cooling	kWh/kWh	5.90	5.80	5.60
SCOP	Heating (Average)		3.90		
Annual energy consumption	QCE	kWh/a	403	513	594
	QHE (Average)		1,935	2,871	3,122

1-2. Outdoor unit

Type				Inverter heat pump			
Model name				AOYG24KATA			
Power supply				230 V ~ 50 Hz			
Power supply intake				Outdoor unit			
Available voltage range				198–264 V			
Starting current				9.7			
Fan	Airflow rate	Cooling	m ³ /h	2,885			
		Heating		2,350			
	Type × Q'ty		Propeller × 1				
	Motor output		W	49			
Sound pressure level *1		Cooling	dB (A)	54			
		Heating		55			
Sound power level		Cooling	dB (A)	66			
		Heating		67			
Heat exchanger type		Dimensions (H × W × D)	mm	Main1: 588 × 881 × 18.19 Main2: 588 × 851 × 18.19			
		Fin pitch		Main1: 1.3 Main2: 1.3			
		Rows × Stages		Main1: 1 × 28 Main2: 1 × 28			
		Pipe type		Copper			
		Fin	Type (Material)		Aluminum		
			Surface treatment		PC fin		
Compressor	Type × Q'ty		DC Twin rotary × 1				
	Motor output		W	1,060			
Refrigerant		Type (Global warming potential)		R32 (675)			
		Factory charge	g	1,250			
Refrigerant oil		Type		RmM68AF			
		Amount	cm ³	400			
Enclosure		Material		Steel sheet			
		Color		Beige Approximate color of Munsell 10YR 7.5/1.0			
Dimensions (H × W × D)		Net		mm	632 × 799 × 290		
		Gross			692 × 940 × 375		
Weight		Net		kg	38		
		Gross			42		
Connection pipe		Size	Liquid	mm (in)	Ø 6.35 (Ø 1/4)		
			Gas		Ø 12.70 (Ø 1/2)		
		Method		Flare			
		Pre-charge length		m	20		
		Max. length			25		
		Max. height difference			20		
Operation range		Cooling	°C	-10 to 46			
		Heating		-15 to 24			
Drain hose		Material		PP			
		Size		mm		Ø13.0 (I. D.), Ø16.0 to Ø16.8 (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.
- This data is based on EN 14511 standard.

Type			Inverter heat pump		
Model name			AOYG30KATA		AOYG36KATA
Power supply			230 V ~ 50 Hz		
Power supply intake			Outdoor unit		
Available voltage range			198–264 V		
Starting current			12.3		13.8
Fan	Airflow rate	Cooling	m ³ /h	3,750	
		Heating		3,750	
	Type × Q'ty	Propeller × 1			
Motor output			W	100	
Sound pressure level *1		Cooling	dB (A)	53	55
		Heating		55	
Sound power level		Cooling	dB (A)	68	70
		Heating		70	
Heat exchanger type	Dimensions (H × W × D)		mm	Main1: 756 × 905 × 18.19 Main2: 756 × 905 × 18.19	
	Fin pitch			Main1: 1.45 Main2: 1.45	
	Rows × Stages		Main1: 1 × 36 Main2: 1 × 36		
	Pipe type		Copper		
	Fin		Type (Material)	Aluminum	
			Surface treatment	Blue fin	
Compressor	Type × Q'ty		DC Twin rotary × 1		
	Motor output		W	1,500	
Refrigerant	Type (Global warming potential)		R32 (675)		
	Factory charge		g	1,900	
Refrigerant oil	Type		FW68D		
	Amount		cm ³	600	
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	52	
	Gross			61	
Connection pipe	Size	Liquid	mm (in)	Ø 9.52 (Ø 3/8)	
		Gas		Ø 15.88 (Ø 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.
- This data is based on EN 14511 standard.

Type				Inverter heat pump
Model name				AOYG45KATA
Power supply				230 V ~ 50 Hz
Power supply intake				Outdoor unit
Available voltage range				198–264 V
Starting current				21.3
Fan	Airflow rate	Cooling	m ³ /h	4,450
		Heating		4,450
	Type × Q'ty			Propeller × 1
	Motor output		W	120
Sound pressure level *1	Cooling	Heating	dB (A)	58
				59
Sound power level	Cooling	Heating	dB (A)	72
				73
Heat exchanger type	Dimensions (H × W × D)		mm	Main1: 966 × 905 × 18.19 Main2: 966 × 905 × 18.19
				Fin pitch
	Rows × Stages			
	Pipe type			Copper
	Fin	Type (Material)		Aluminum
		Surface treatment		Blue fin
Compressor	Type × Q'ty			DC Twin rotary × 1
	Motor output		W	1,830
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	61
	Gross			71
Connection pipe	Size	Liquid	mm (in)	∅ 9.52 (∅ 3/8)
		Gas		∅ 15.88 (∅ 5/8)
	Method			Flare
	Pre-charge length		m	30
	Max. length			30
	Max. height difference			30
Operation range	Cooling	Heating	°C	-10 to 46
				-15 to 24
Drain hose	Material			LDPE
	Size		mm	∅ 13.0 (I. D.), ∅ 16.0 to ∅ 16.7 (O. D.)

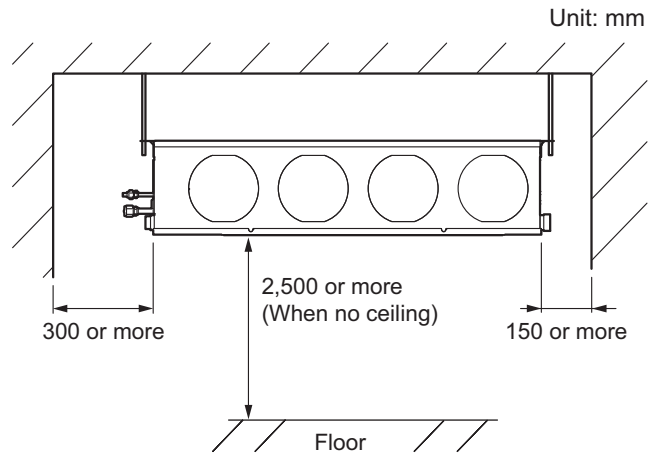
NOTES:

- 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.
- This data is based on EN 14511 standard.

■ Installation space requirement

Provide sufficient installation space for product safety.

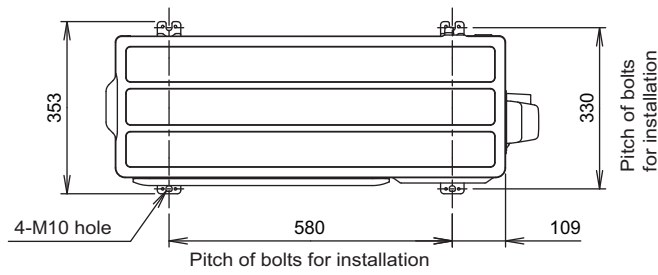
- **Models: ARXG24KMLA, ARXG30KMLA, ARXG36KMLA, and ARXG45KMLA**



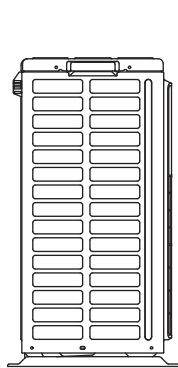
2-2. Outdoor unit

■ Model: AOYG24KATA

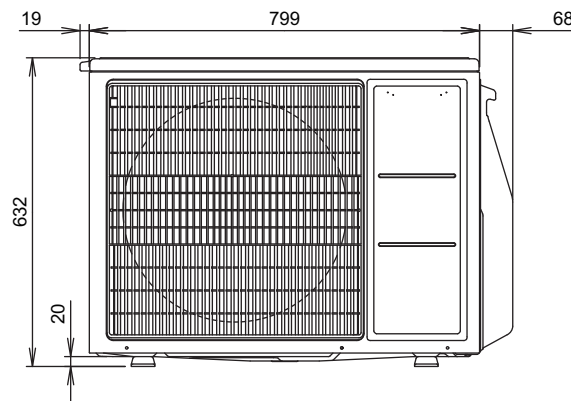
Unit: mm



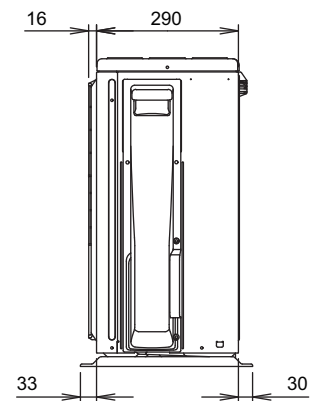
Top view



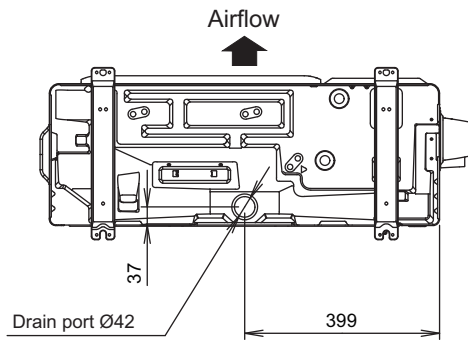
Side view



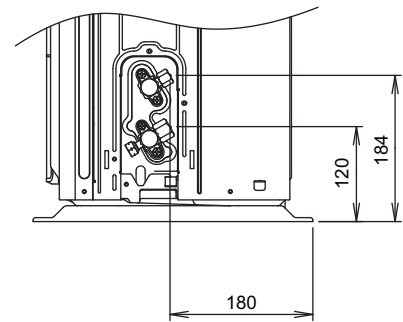
Front view



Side view



Bottom view



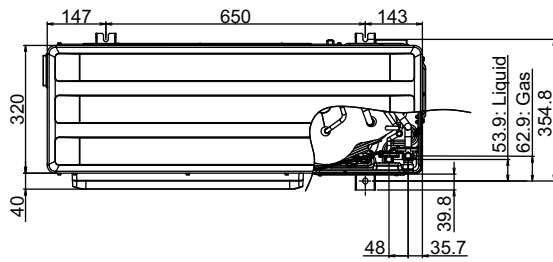
Side view (Valve part)

Models: AOYG30KATA and AOYG36KATA

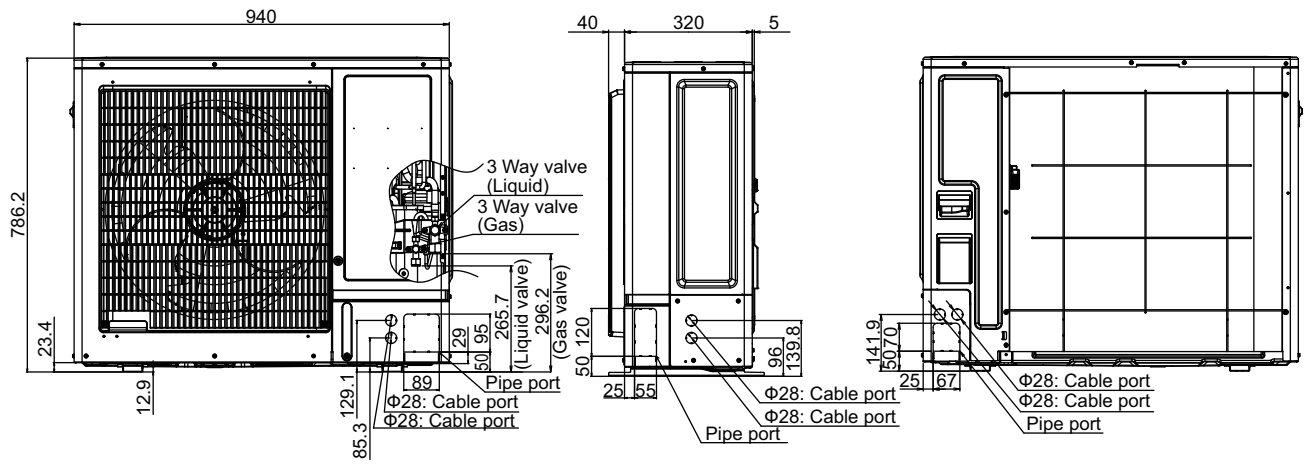
Unit: mm

GENERAL INFORMATION

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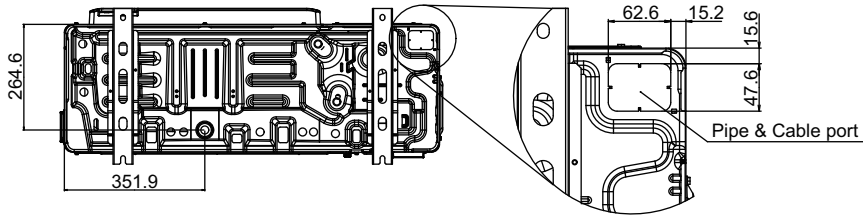
Top view



Front view

Side view

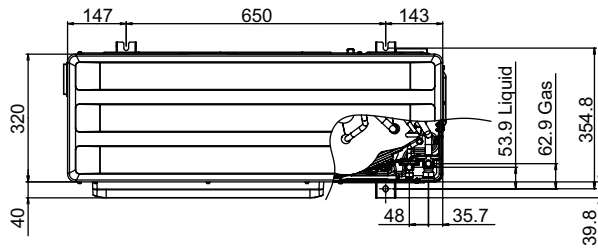
Rear view



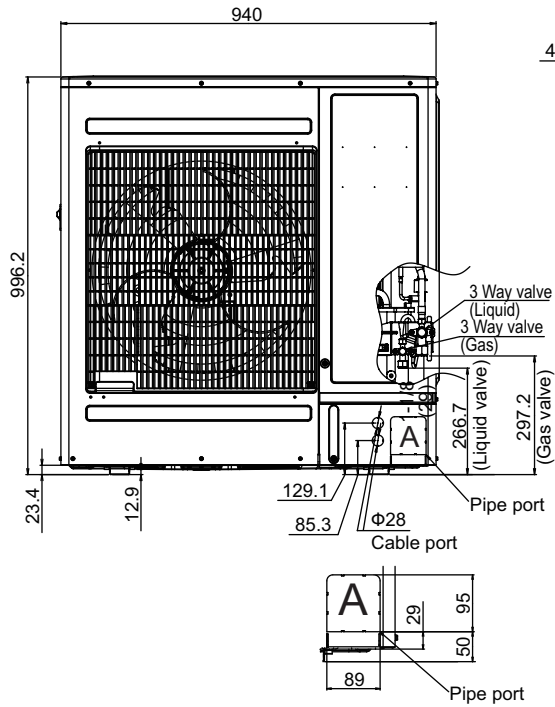
Bottom view

Model: AOYG45KATA

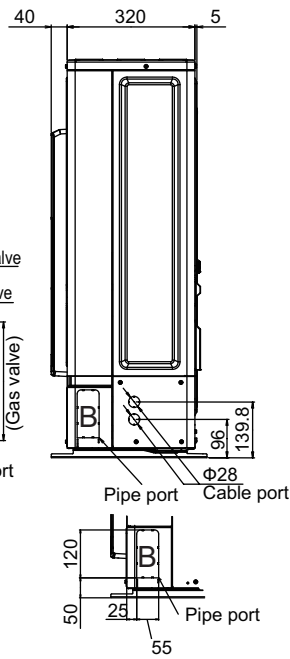
Unit: mm



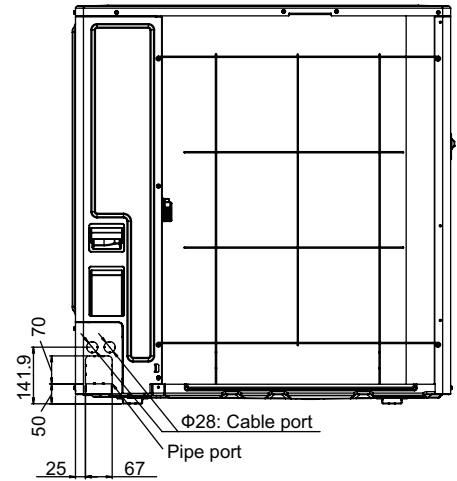
Top view



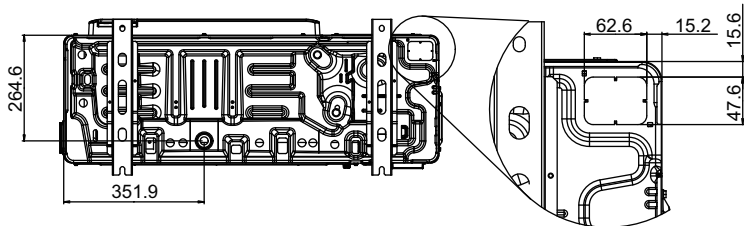
Front view



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.

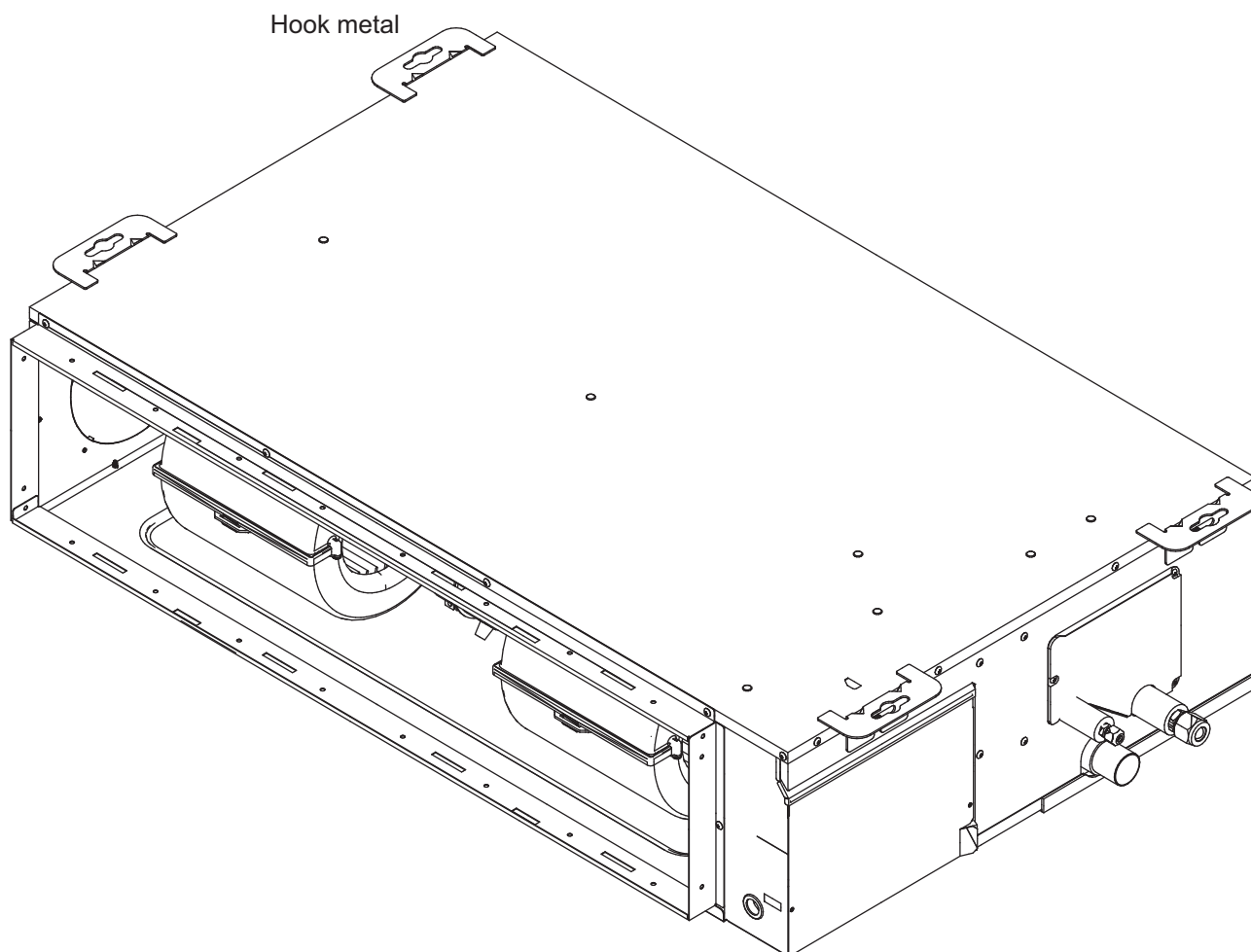
⚠ CAUTION

- 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.
 - 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.
 - 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.

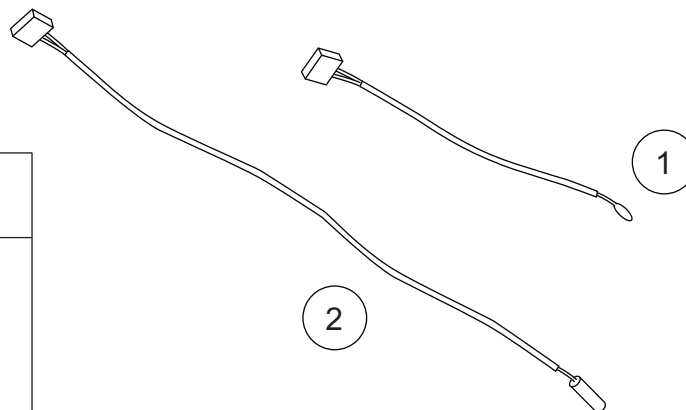
2. Indoor unit parts list

2-1. Models: ARXG24KMLA, ARXG30KMLA, ARXG36KMLA, and ARXG45KMLA

■ Thermistors



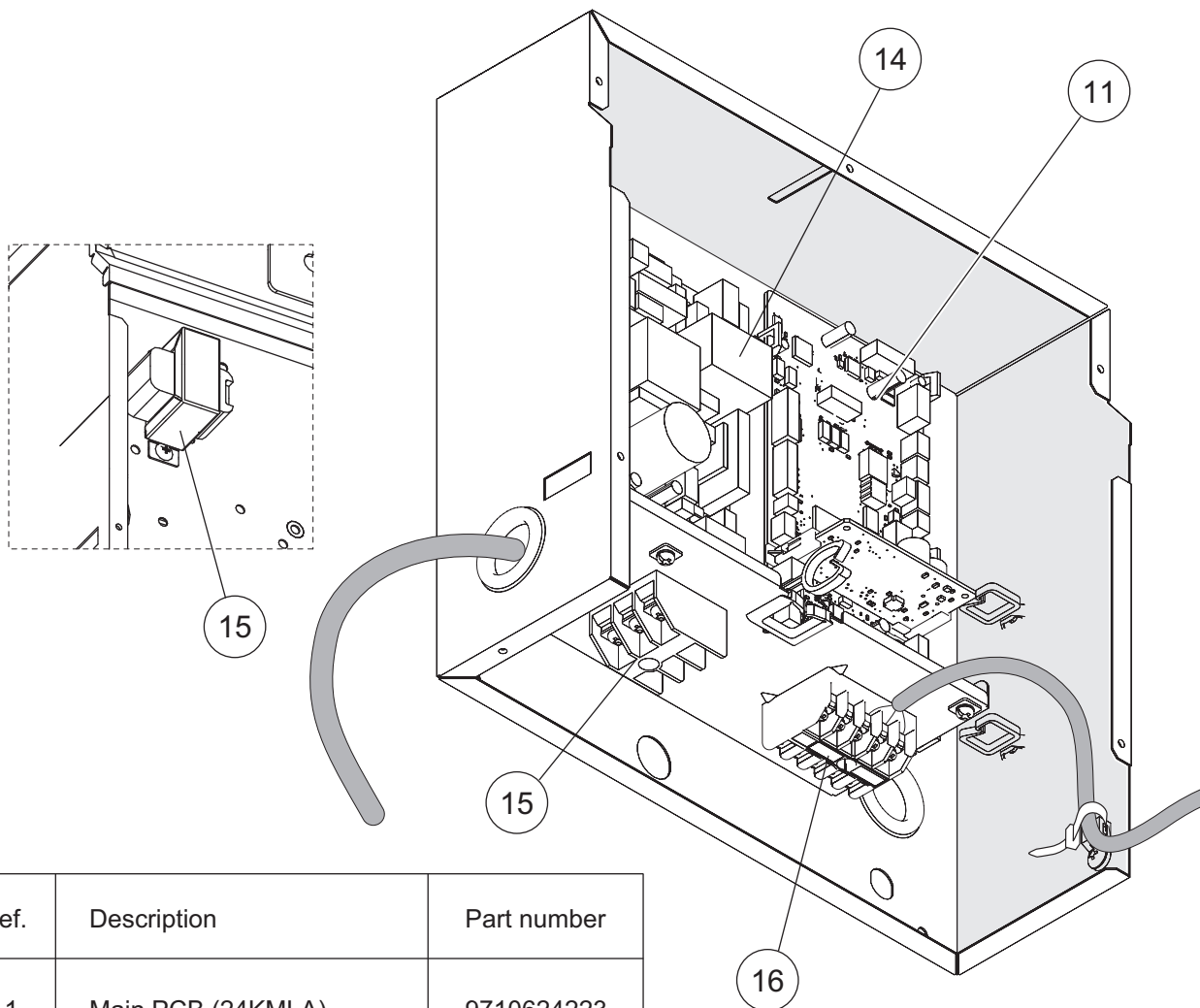
Ref.	Description	Part number
1	Room thermistor	9900826048
2	Pipe thermistor	9900942045



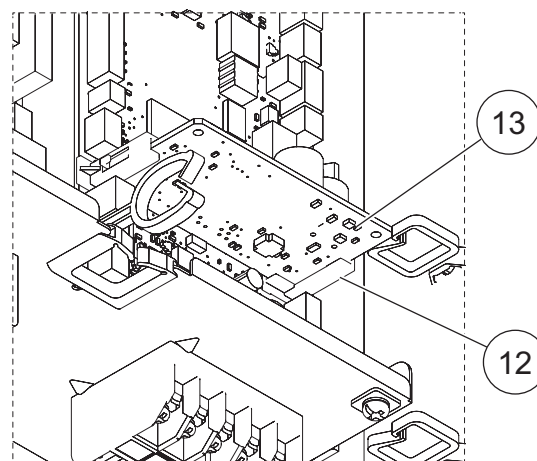
■ Main PC board

TECHNICAL DATA
AND PARTS LIST

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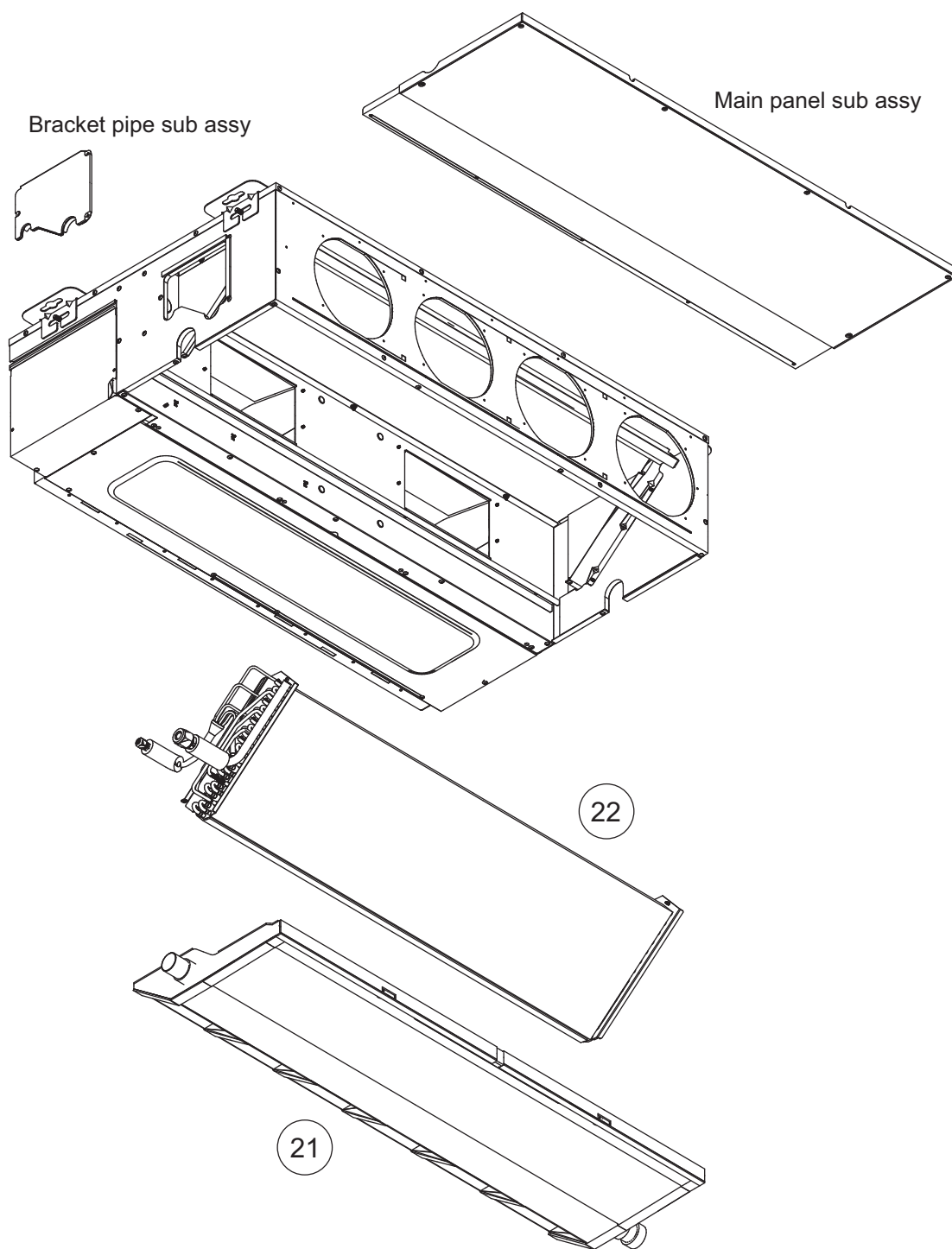
Ref.	Description	Part number
11	Main PCB (24KMLA)	9710624223
11	Main PCB (30KMLA)	9710624230
11	Main PCB (36KMLA)	9710624247
11	Main PCB (45KMLA)	9710624254
12	Holder	0600063023
13	Communication PCB	9710019005
14	Power supply PCB	9710661013
15	Terminal 3P	9306489045
16	Terminal 5P	9900896003
17	Reactor assy	9707457049



Evaporator

TECHNICAL DATA
AND PARTS LIST

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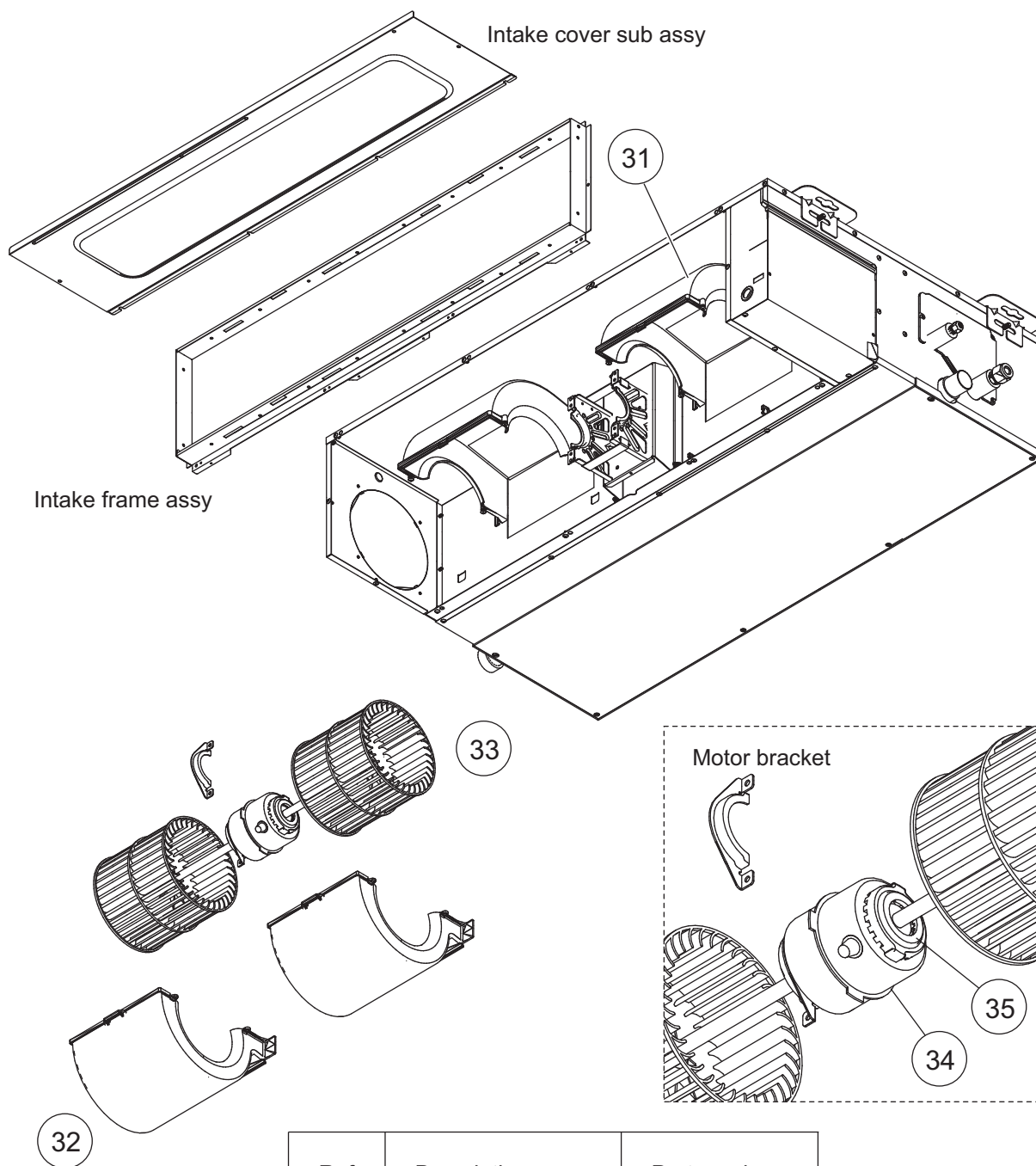


Ref.	Description	Part number
21	Drain pan sub assy	9374513017
22	Evaporator Total Assy (24KMLA)	9374517978
22	Evaporator Total Assy (30, 36KMLA)	9383816048
22	Evaporator Total Assy (45KMLA)	9383816031

■ Casing and fan (for 24 model)

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST

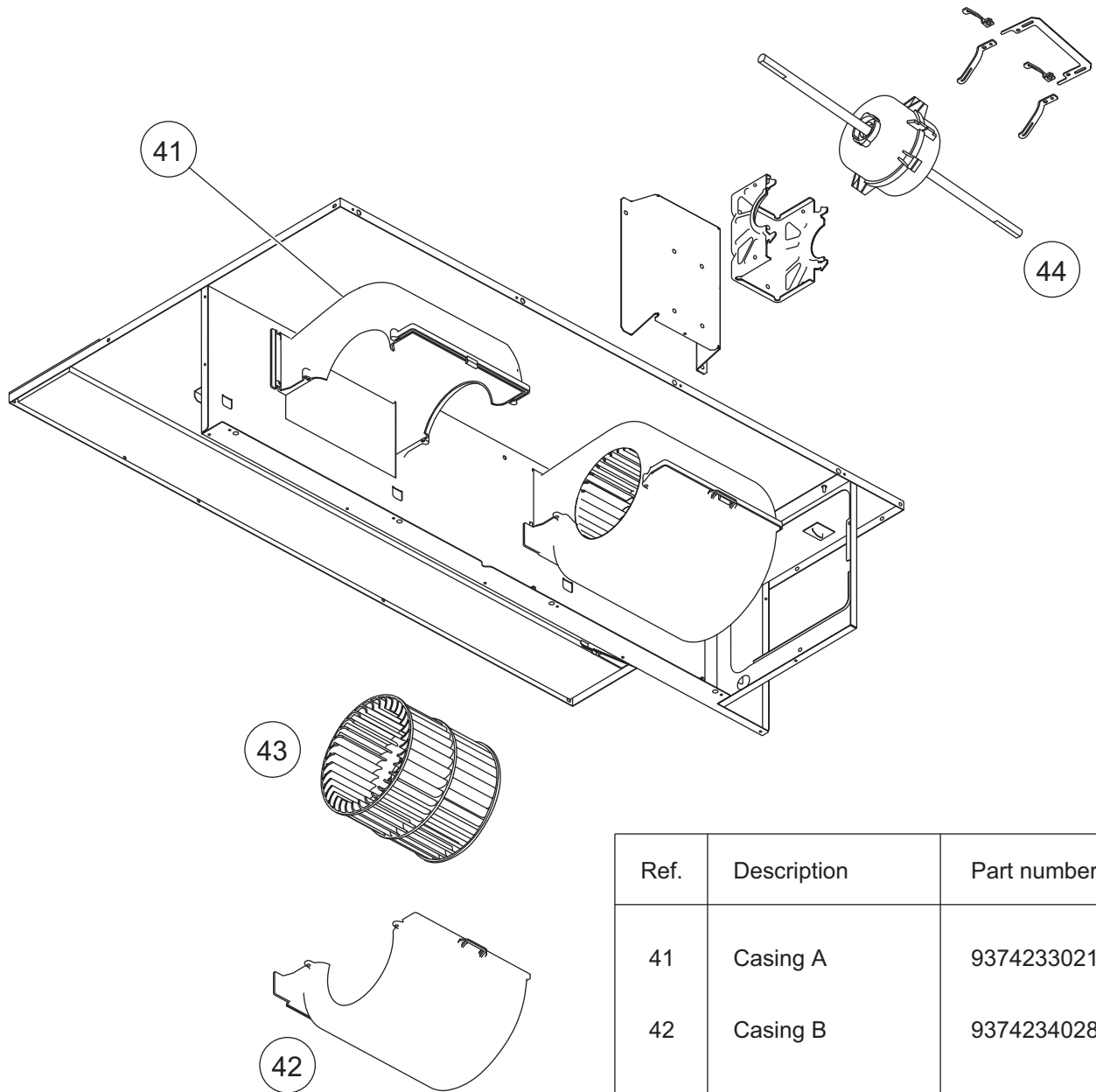


Ref.	Description	Part number
31	Casing A	9374233021
32	Casing B	9374234028
33	Sirocco fan assy	9356531060
34	Fan motor assy	9380718031
35	Rubber	9385102002

■ Casing and fan (for 30, 36, and 45 models)

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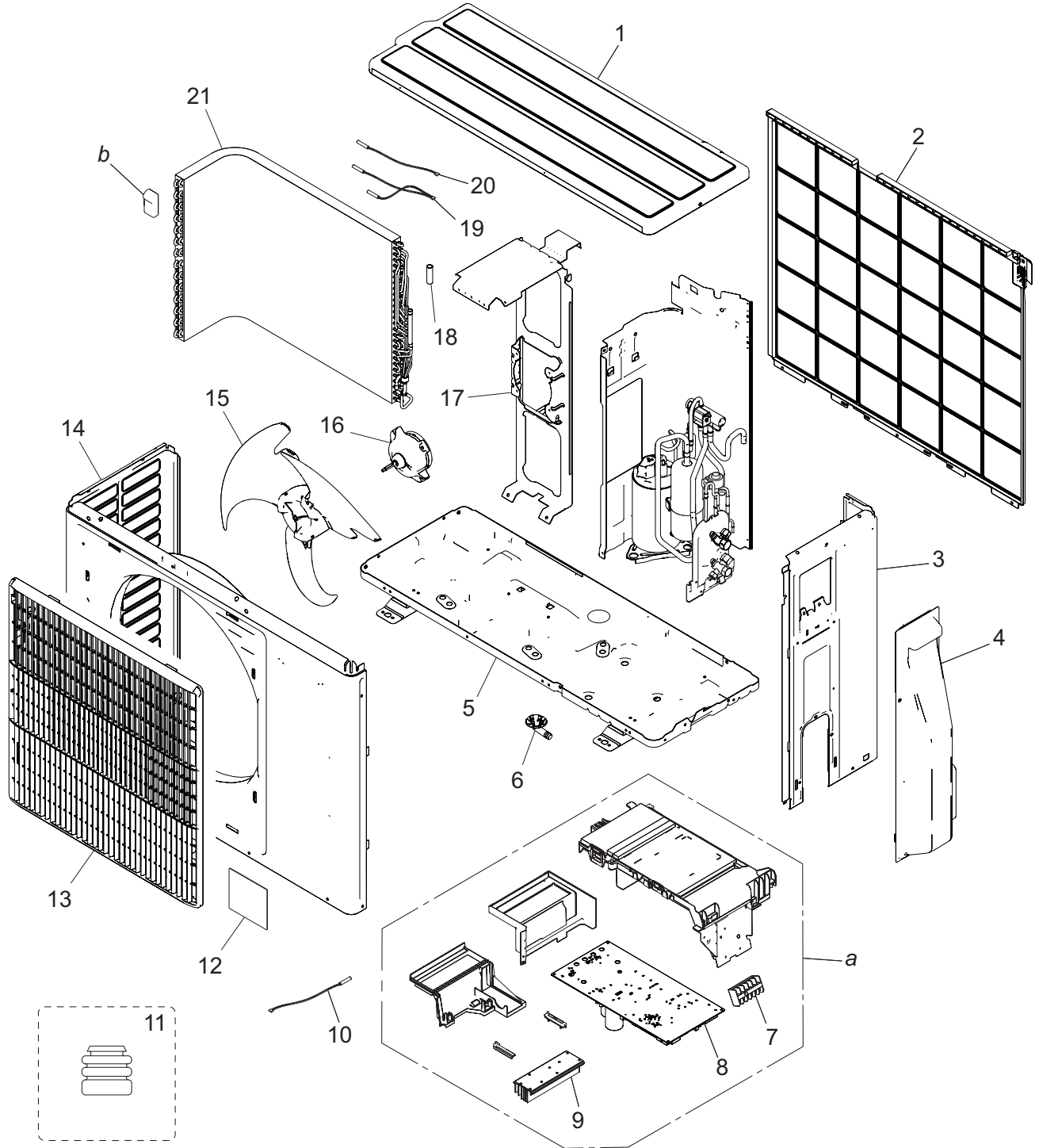


Ref.	Description	Part number
41	Casing A	9374233021
42	Casing B	9374234028
43	Sirocco Fan Assy	9356531046
44	Fan Motor	9603213015

3. Outdoor unit parts list

3-1. Model: AOYG24KATA

■ Exterior parts and Chassis



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AND PARTS LIST

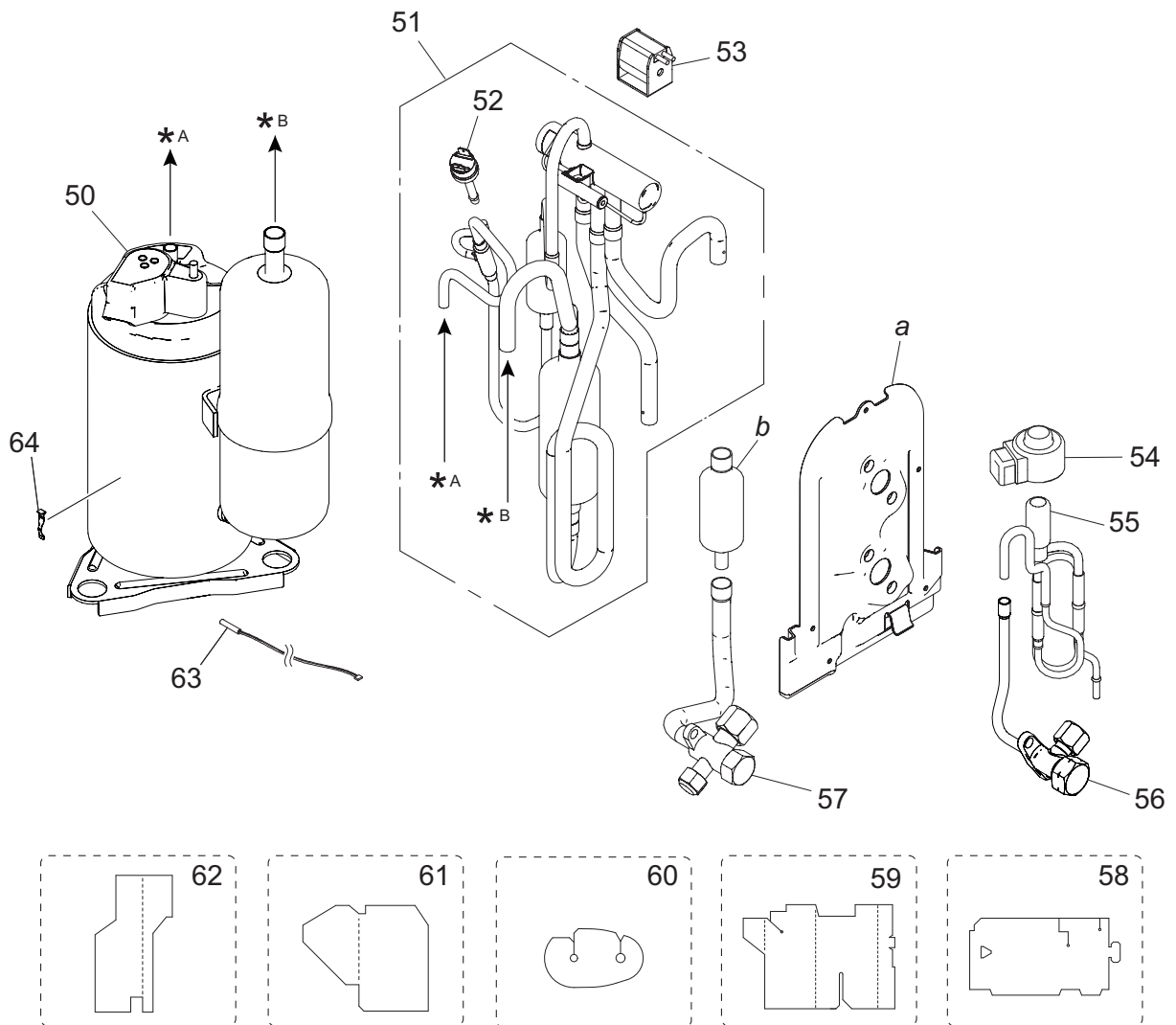
TECHNICAL DATA
AND PARTS LIST

Item no.	Part no.	Part name	Service part
1	9322556028	Top panel assy	◆
2	9322811028	Protective net assy	◆
3	9322552099	Cabinet right assy	◆
4	9322570024	Switch cover assy	◆
5	9322314024	Base assy	◆
6	9322144003	Drain pipe	◆
7	9900435028	Terminal	◆
8	9709683842	Main PCB (for 22 model)	◆
	9709683859	Main PCB (for 24 model)	◆
9	9322420039	Heat sink	◆
10	9900565060	Thermistor assy (Outdoor temp.)	◆
11	9322386007	Cushion rubber	◆
12	9319151007	Emblem	◆
13	9322149008	Blow grille	◆
14	9322555021	Front panel assy	◆
15	9322150004	Propeller fan	◆
16	9603601003	Brushless motor	◆
17	9322553027	Motor bracket assy	◆
18	9331404006	Thermistor holder pipe	◆
19	9900984014	Heat exchanger thermistor	◆
20	9900727079	Thermistor assy	◆
21	9317089616	Condenser total assy (for 22 model)	◆
	9317089654	Condenser total assy (for 24 model)	◆
<i>a</i>	—	Inverter assy	—
<i>b</i>	—	Hair pin cushion	—

Compressor

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST



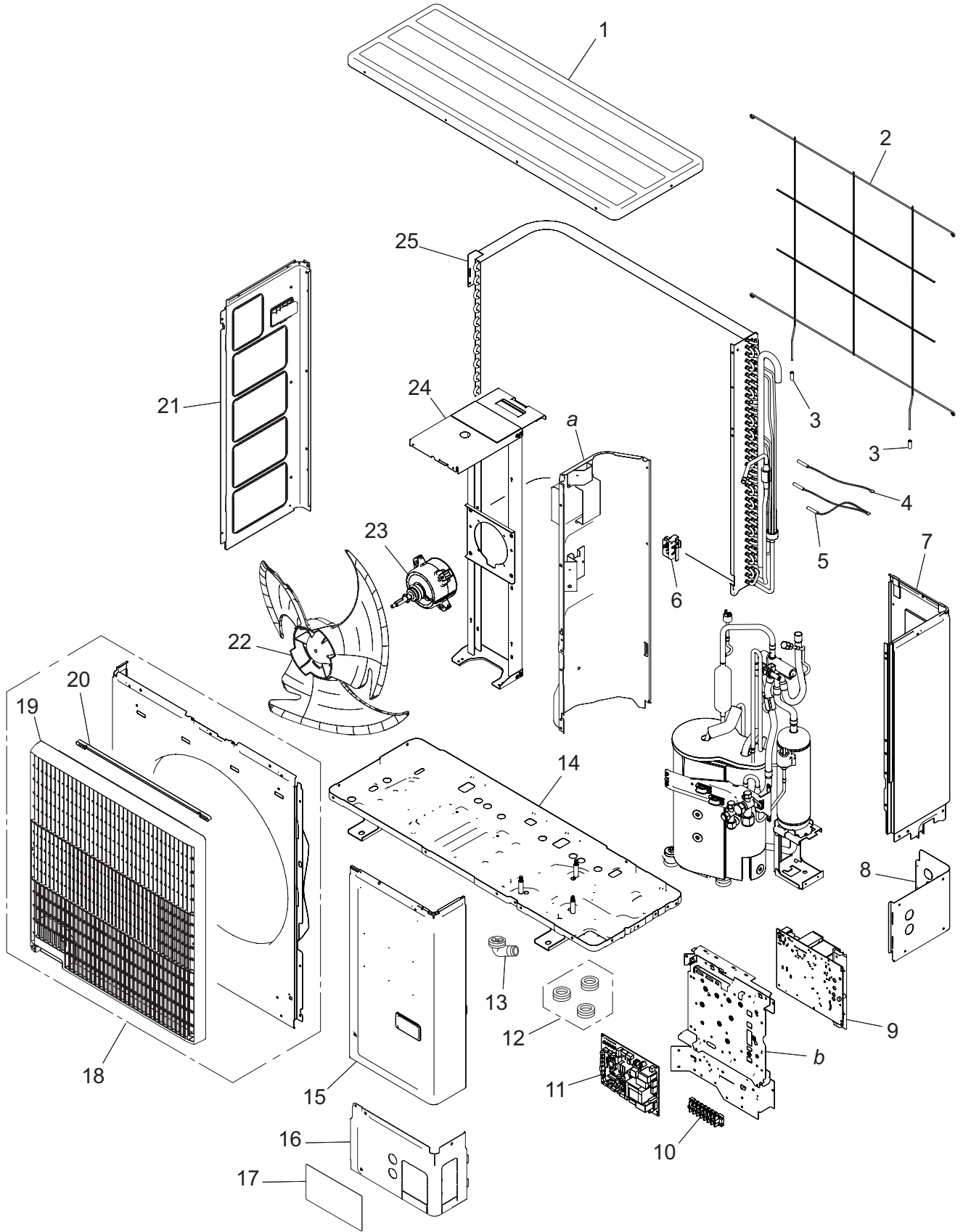
Item no.	Part no.	Part name	Service part
50	9810523006	Compressor (for 22 model)	◆
	9810521002	Compressor (for 24 model)	◆
51	9322783028	4-way valve assy (for 22 model)	◆
	9383129032	4-way valve assy (for 24 model)	◆
52	9900186029	Pressure switch (only for 24 model)	◆
53	9970110160	Solenoid	◆
54	9970173028	Expansion valve coil	◆
55	9322463029	Pulse motor valve assy	◆
56	9322474001	2-way valve assy	◆
57	9387831016	3-way valve assy	◆
58	9322500007	S-insulator B (for 22 model)	◆
	9322503008	S-insulator B (for 24 model)	◆
59	9322847003	S-insulator F	◆
60	9322501004	S-insulator H	◆
61	9323045002	S-insulator V	◆
62	9322824004	S-insulator K (only for 24 model)	◆
63	9900985011	Thermistor (Compressor temp.) (only for 24 model)	◆
64	9810028006	Thermistor stopper (only for 24 model)	◆
<i>a</i>	—	Valve bracket	—
<i>b</i>	—	Muffler	—

3-2. Models: AOYG30KATA and AOYG36KATA

■ Exterior parts and chassis

TECHNICAL DATA
AND PARTS LIST

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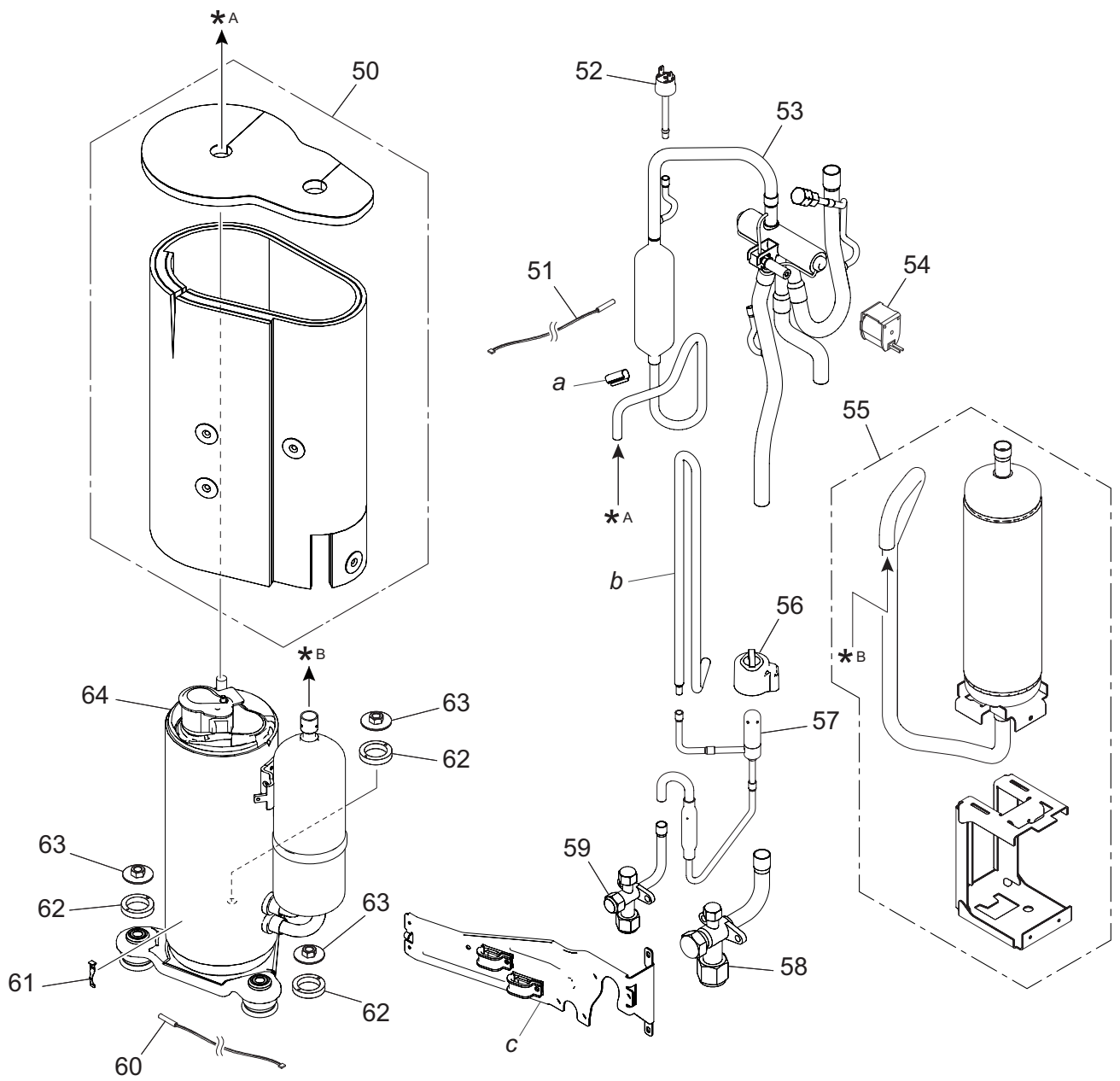


Item no.	Part no.	Part name	Service part
1	9383880001	Top panel assy	◆
2	9383779008	Protective net	◆
3	9375361013	Net rubber	◆
4	9900984038	Thermistor (Heat exchanger)	◆
5	9900727154	Thermistor assy	◆
6	9383607004	Thermo holder	◆
7	9383874000	Right panel sub assy	◆
8	9383879005	Rear pipe cover	◆
9	9709684108	Inverter PCB	◆
10	9900203061	Terminal	◆
11	9711431042	Main PCB (Service) (for 30 model)	◆
	9711431059	Main PCB (Service) (for 36 model)	◆
12	313166024302	Drain cap	◆
13	9303029015	Drain assy	◆
14	9350255009	Base assy (Service)	◆
15	9383876004	Service panel sub assy	◆
16	9383878008	Front pipe cover	◆
17	9351355005	Emblem rear	◆
18	9383863004	Front panel assy	◆
19	9383604003	Blow grille	◆
20	9383689000	Blow grille insulation	◆
21	9383882005	Left panel sub assy	◆
22	9383336003	Propeller fan	◆
23	9603732011	Brushless motor	◆
24	9383862007	Motor bracket assy	◆
25	9374420612	Condenser sub assy	◆
—	9711332004	Wire with terminal (Power wire L)	◆
—	9711332011	Wire with terminal (Power wire N)	◆
—	9711205001	Wire with connector (P350 on Main PCB—P351 on Inverter PCB)	◆
—	9711203007	Wire with connector (P660 on Main PCB—P662 on Inverter PCB)	◆
—	9711204004	Wire with connector (P661 on Main PCB—P663 on Inverter PCB)	◆
—	9711214003	Wire with connector (Pressure switch)	◆
—	9711213006	Wire with connector (P770 on Inverter PCB [for Pressure switch])	◆
—	9711212009	Wire with connector (P650 on Inverter PCB—Fan motor)	◆
—	9711206015	Wire with terminal (P400 [U], P401 [V], P402 [W] on Inverter PCB— Compressor)	◆
<i>a</i>	—	Separate wall assy	—
<i>b</i>	—	Control box unit	—

Compressor

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST



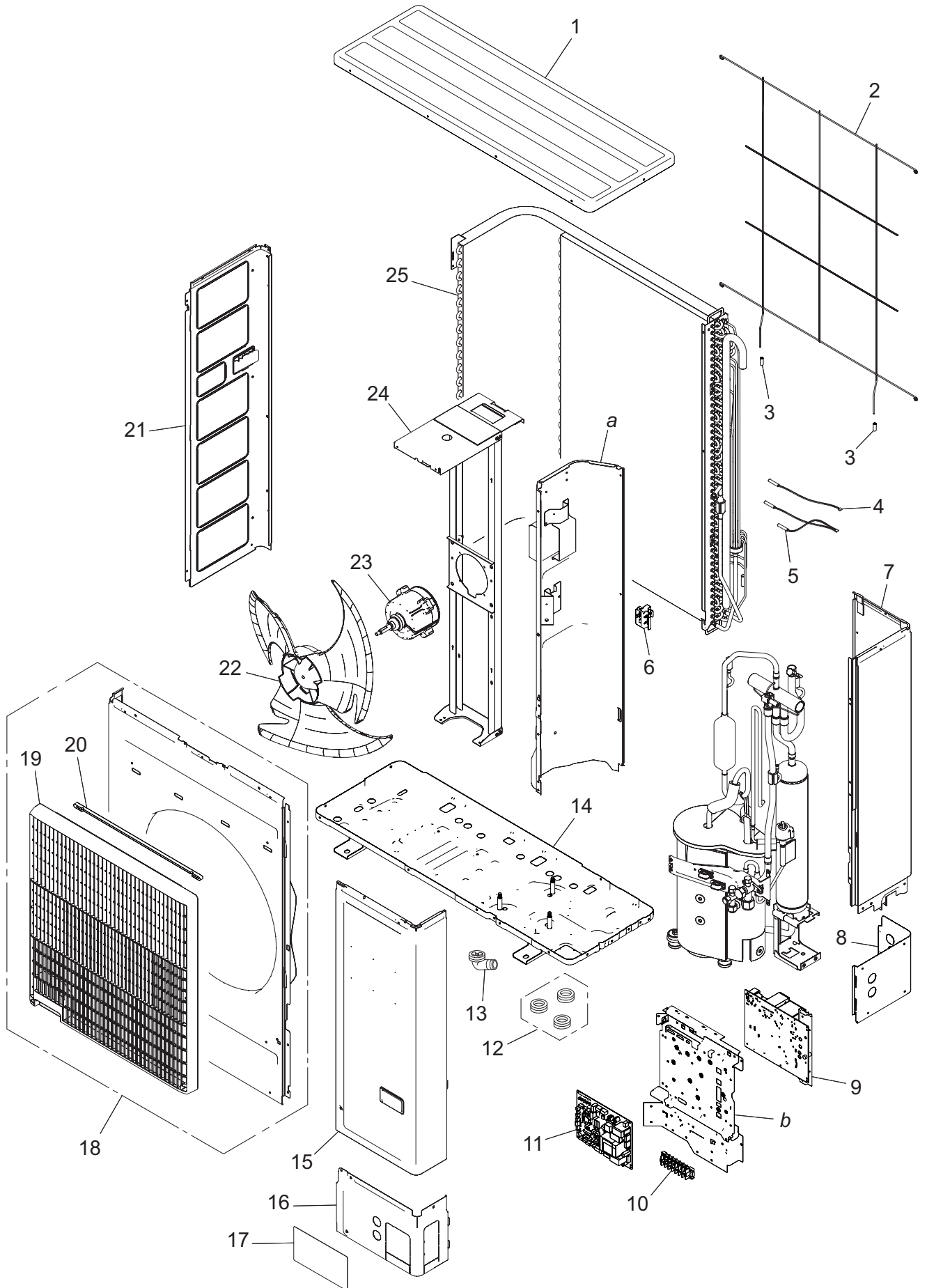
Item no.	Part no.	Part name	Service part
50	9383858000	Sound insulation unit	◆
51	9900565091	Thermistor (Outdoor temp.)	◆
52	9900186029	Pressure switch	◆
53	9374425648	4-way valve assy	◆
54	9970194016	Solenoid	◆
55	9384848017	Accumulator assy (service)	◆
56	9970209000	Expansion valve coil	◆
57	9370947328	Expansion valve assy	◆
58	9379079013	3-way valve assy	◆
59	9377958037	3-way valve assy	◆
60	9900985035	Thermistor (Compressor)	◆
61	9810028006	Thermistor stopper	◆
62	9379179072	Rubber washer E	◆
63	9377973016	Special nut	◆
64	9383821004	Compressor assy	◆
a	—	Thermostat holder	—
b	—	Joint pipe D	—
c	—	Wiring fixation unit	—

3-3. Model: AOYG45KATA

■ Exterior parts and chassis

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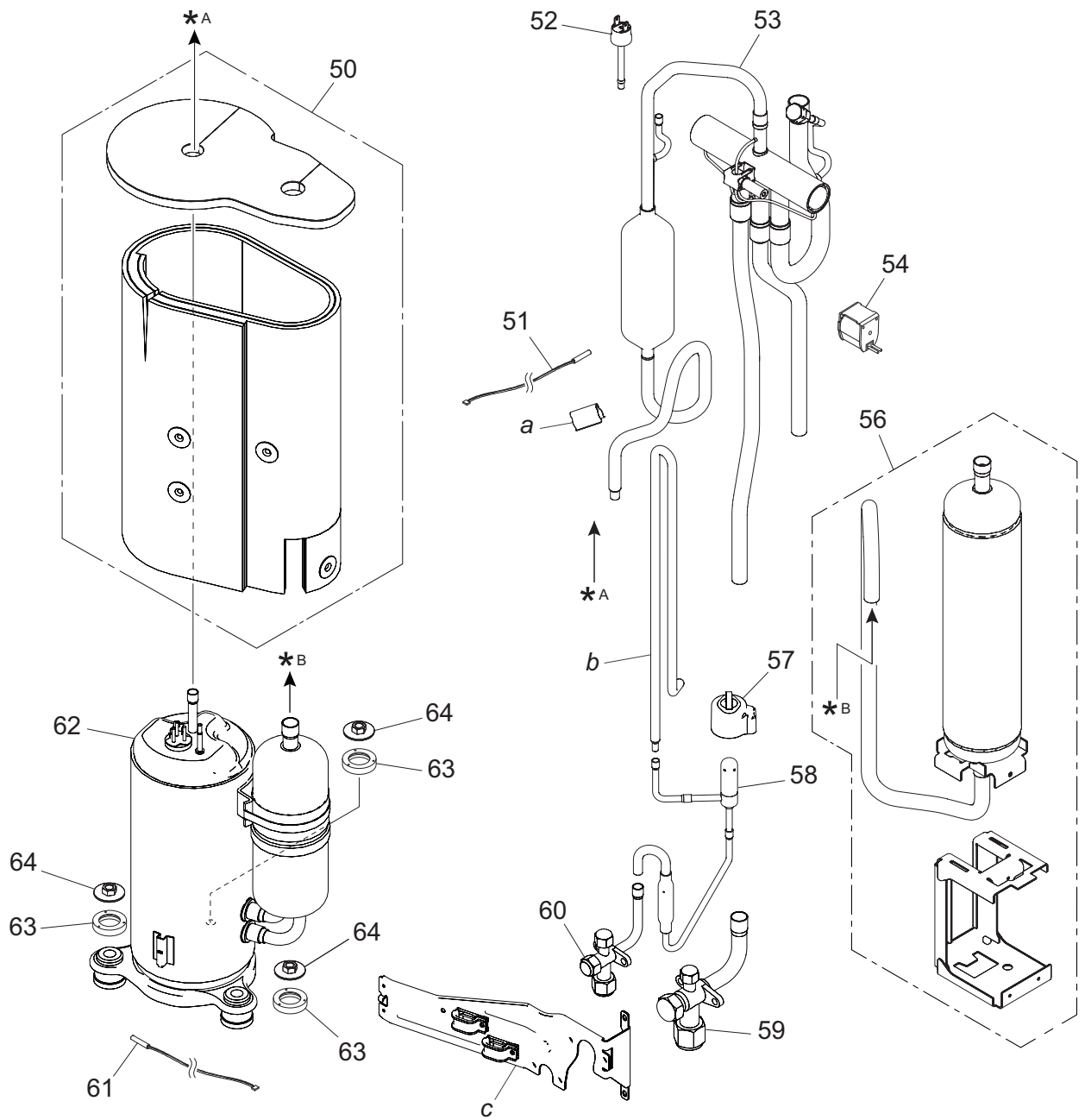


Item no.	Part no.	Part name	Service part
1	9383880001	Top panel assy	◆
2	9381013005	Protective net	◆
3	9375361013	Net rubber	◆
4	9900984038	Thermistor (Heat exchanger)	◆
5	9900727154	Thermistor assy	◆
6	9383607004	Thermo holder	◆
7	9383874017	Right panel sub assy	◆
8	9383879005	Rear pipe cover	◆
9	9709684122	Inverter PCB (for 45 model)	◆
	9709684115	Inverter PCB (for 54 model)	◆
10	9900203061	Terminal	◆
11	9711431066	Main PCB (Service) (for 45 model)	◆
	9711431158	Main PCB (Service) (for 54 model)	◆
12	313166024302	Drain cap	◆
13	9303029015	Drain assy	◆
14	9350255009	Base assy (Service)	◆
15	9383876011	Service panel sub assy	◆
16	9383878008	Front pipe cover	◆
17	9351355005	Emblem rear	◆
18	9383863011	Front panel assy	◆
19	9383604003	Blow grille	◆
20	9383689000	Blow grille insulation	◆
21	9383882012	Left panel sub assy	◆
22	9383336003	Propeller fan	◆
23	9603733018	Brushless motor	◆
24	9383862021	Motor bracket assy	◆
25	9374420636	Condenser sub assy	◆
—	9711332004	Wire with terminal (Power wire L)	◆
—	9711332011	Wire with terminal (Power wire N)	◆
—	9711205001	Wire with connector (P350 on Main PCB—P351 on Inverter PCB)	◆
—	9711203007	Wire with connector (P660 on Main PCB—P662 on Inverter PCB)	◆
—	9711204004	Wire with connector (P661 on Main PCB—P663 on Inverter PCB)	◆
—	9711214003	Wire with connector (Pressure switch)	◆
—	9711213006	Wire with connector (P770 on Inverter PCB [for Pressure switch])	◆
—	9711212009	Wire with connector (P650 on Inverter PCB—Fan motor)	◆
—	9711206008	Wire with terminal (P400 [U], P401 [V], P402 [W] on Inverter PCB— Compressor)	◆
<i>a</i>	—	Separate wall assy	—
<i>b</i>	—	Control box unit	—

Compressor

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


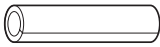

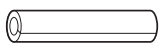
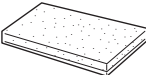





Item no.	Part no.	Part name	Service part
50	9383858017	Sound insulation unit	◆
51	9900565091	Thermistor (Outdoor temp.)	◆
52	9900186029	Pressure switch	◆
53	9374425662	4-way valve assy (for 45 model)	◆
	9374425655	4-way valve assy (for 54 model)	◆
54	9970194016	Solenoid	◆
56	9384848024	Accumulator assy (Service)	◆
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	9383851032	Compressor (for 45 model)	◆
	9383851018	Compressor (for 54 model)	◆
63	9379179089	Rubber washer F	◆
64	9377973016	Special nut	◆
<i>a</i>	—	Thermistor spring	—
<i>b</i>	—	Joint pipe D	—
<i>c</i>	—	Wiring fixation unit	—

4. Accessories



4-1. Indoor unit

■ Models: ARXG24KMLA, ARXG30KMLA, ARXG36KMLA, and ARXG45KMLA





Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Operating manual		1	Cable tie (medium)		1
Operating manual (CD-ROM)		1	Cable tie (small)		1
Installation manual		1	Coupler heat insulation (large)		1
Hanger		4	Coupler heat insulation (small)		1
Drain hose insulation		1	M10 nut A (with flange)		4
Cable tie (large)		1	M10 nut B (with spring lock washer)		4

4-2. Outdoor unit

■ Model: AOYG24KATA

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

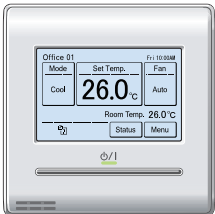
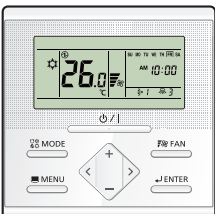
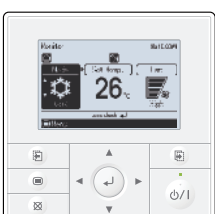
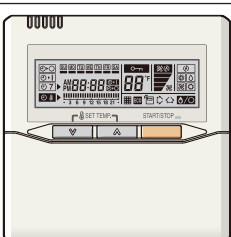

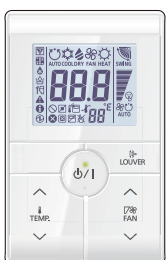
■ Models: AOYG30KATA, AOYG36KATA, and AOYG45KATA


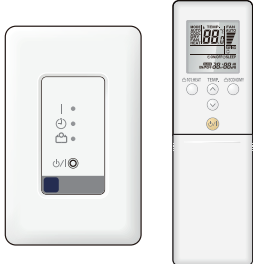
Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Installation manual		1	Drain cap		3
Drain pipe		1	One-touch bush		2

5. Optional parts

5-1. Indoor unit


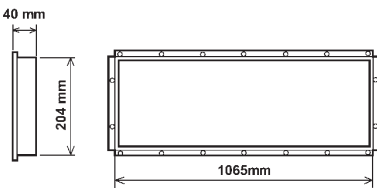
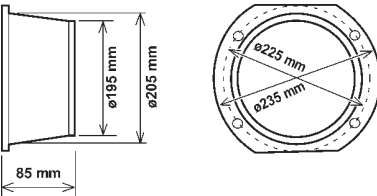


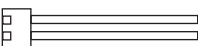
■ Controllers





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-LBTYM	Unit control is performed by wireless remote controller.

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

Others

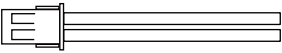
Exterior	Part name	Model name	Summary
	Remote sensor unit	UTY-XSZX	Thermo-sensor for sensing the temperature of arbitrary place in the room.
	Square flange	UTD-SF045T	Both the Square flange and the Round flange can be selected.
	Round flange	UTD-RF204	Round flange is used when the fresh-air duct is installed.
	Long-life filter	UTD-LF25NA	Long-life filter can be mounted to the indoor unit.
	Drain pump unit	UTZ-PX1NBA	Optional drain lift up mechanism allows more flexible installation.
	External connect kit	UTY-XWZXZG	Use to connect with various peripheral devices and air conditioner PCB. For control output port.

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.

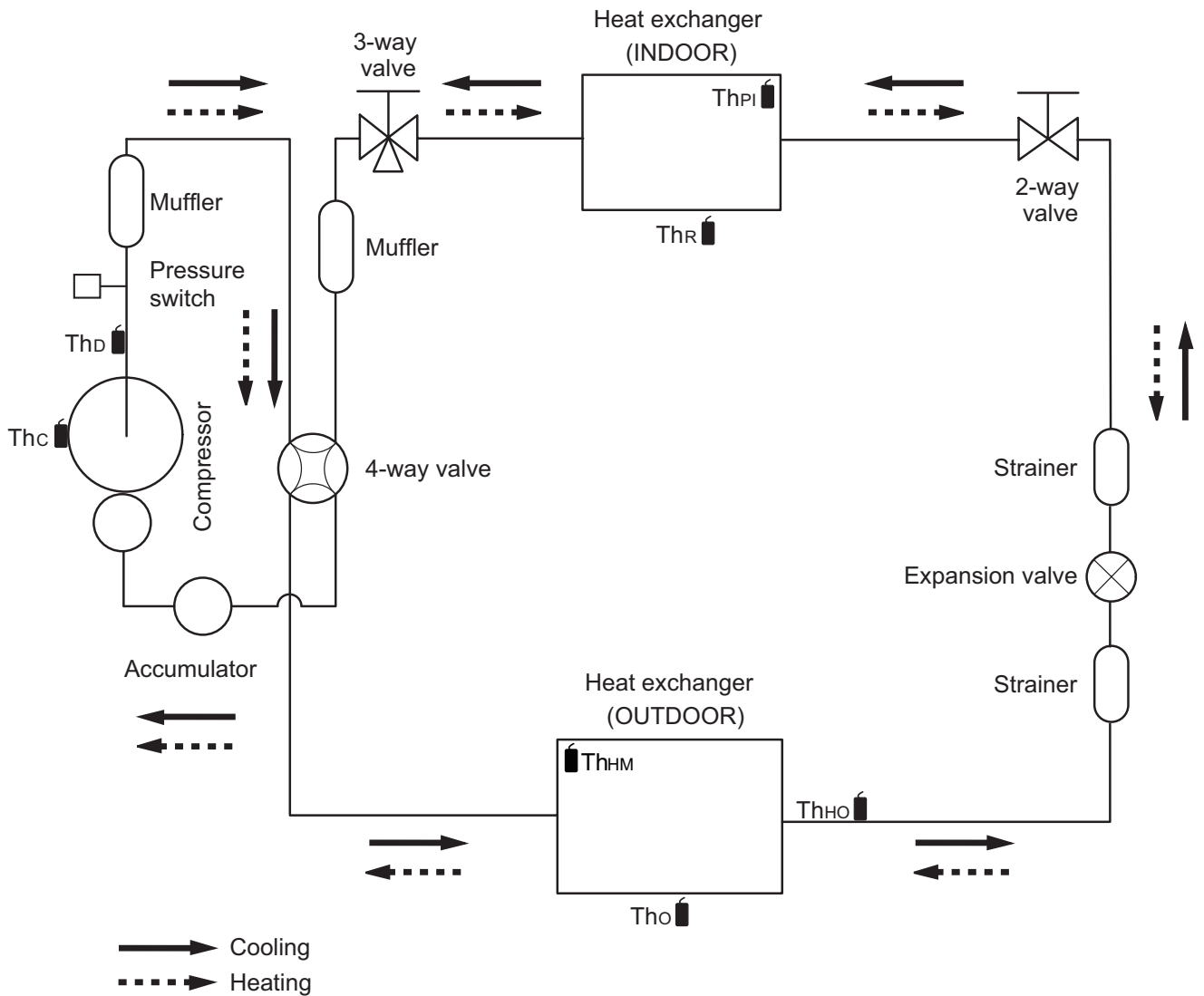
- Modbus converter
- KNX converter

5-2. 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.

6. Refrigerant system diagrams

6-1. Model: AOYG24KATA

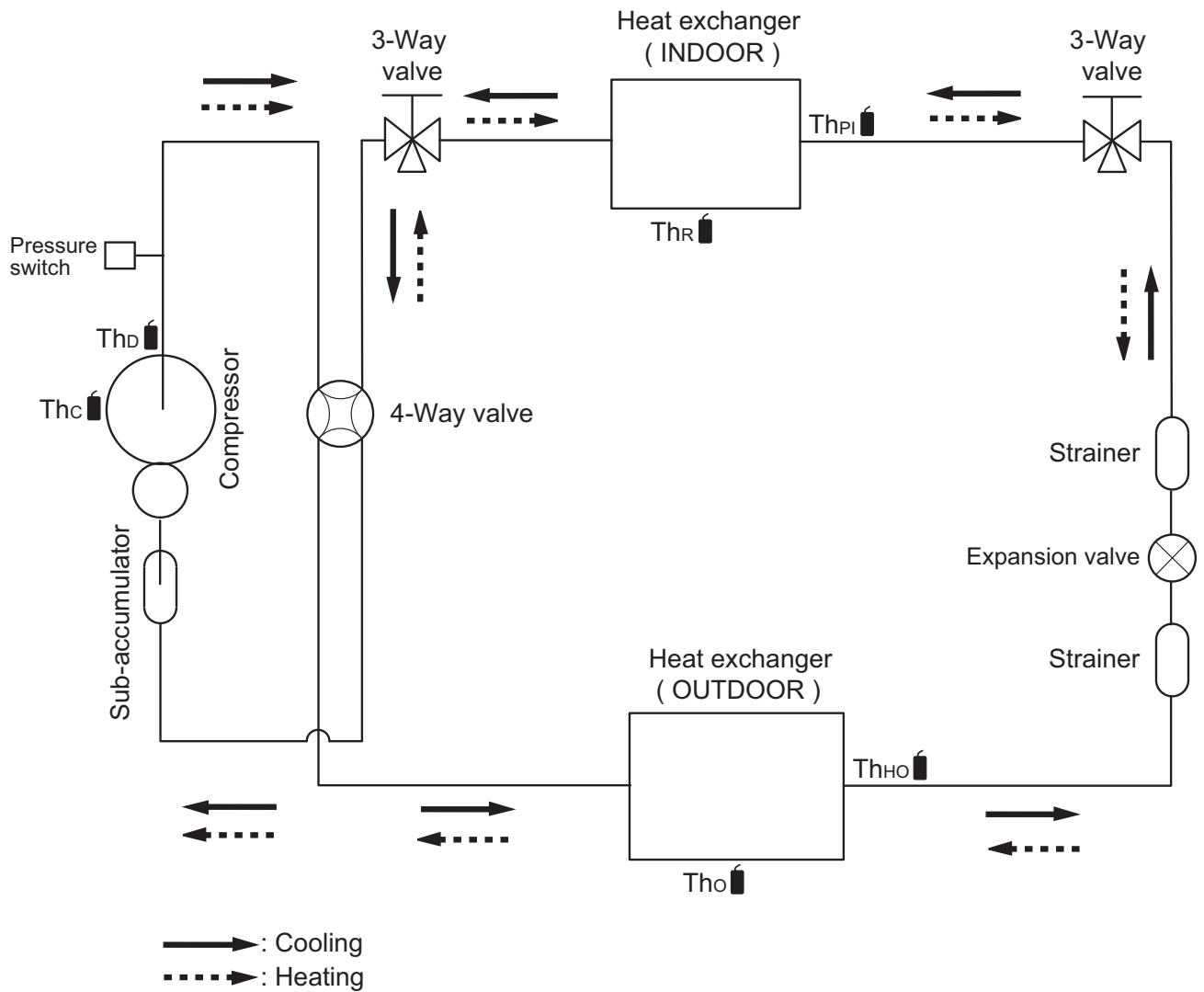


- Th_C : Thermistor (Compressor temperature)
- Th_D : Thermistor (Discharge temperature)
- Th_O : Thermistor (Outdoor temperature)
- Th_{HO} : Thermistor (Heat exchanger out temperature)
- Th_{HM} : Thermistor (Heat exchanger middle temperature)
- Th_R : Thermistor (Room temperature)
- Th_{PI} : Thermistor (Pipe temperature)

6-2. Models: AOYG30KATA, AOYG36KATA, and AOYG45KATA

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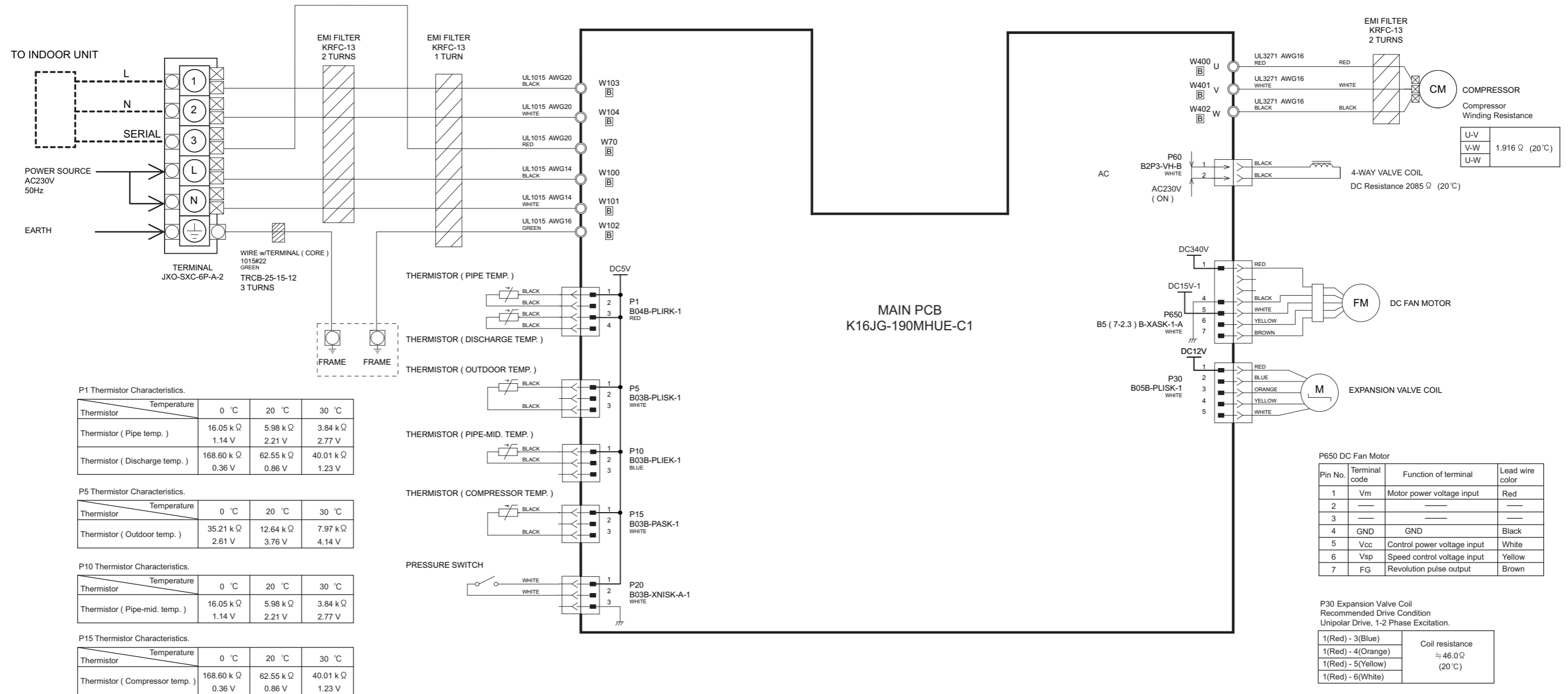
- Th_c : Thermistor (Compressor temperature)
- Th_d : Thermistor (Discharge temperature)
- Th_o : Thermistor (Outdoor temperature)
- Th_{HO} : Thermistor (Heat Exchanger Out temperature)
- Th_R : Thermistor (Room temperature)
- Th_{PI} : Thermistor (Pipe temperature)

7-2. Model: AOYG24KATA

INVERTER ASSEMBLY EZ-019FHUE

TECHNICAL DATA
AND PARTS LIST

TECHNICAL DATA
AND PARTS LIST



P1 Thermistor Characteristics.

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

P5 Thermistor Characteristics.

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

P10 Thermistor Characteristics.

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

P15 Thermistor Characteristics.

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

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

P30 Expansion Valve Coil
Recommended Drive Condition
Unipolar Drive, 1-2 Phase Excitation.

1(Red) - 3(Blue)	Coil resistance ≈ 46.0Ω (20 °C)
1(Red) - 4(Orange)	
1(Red) - 5(Yellow)	
1(Red) - 6(White)	

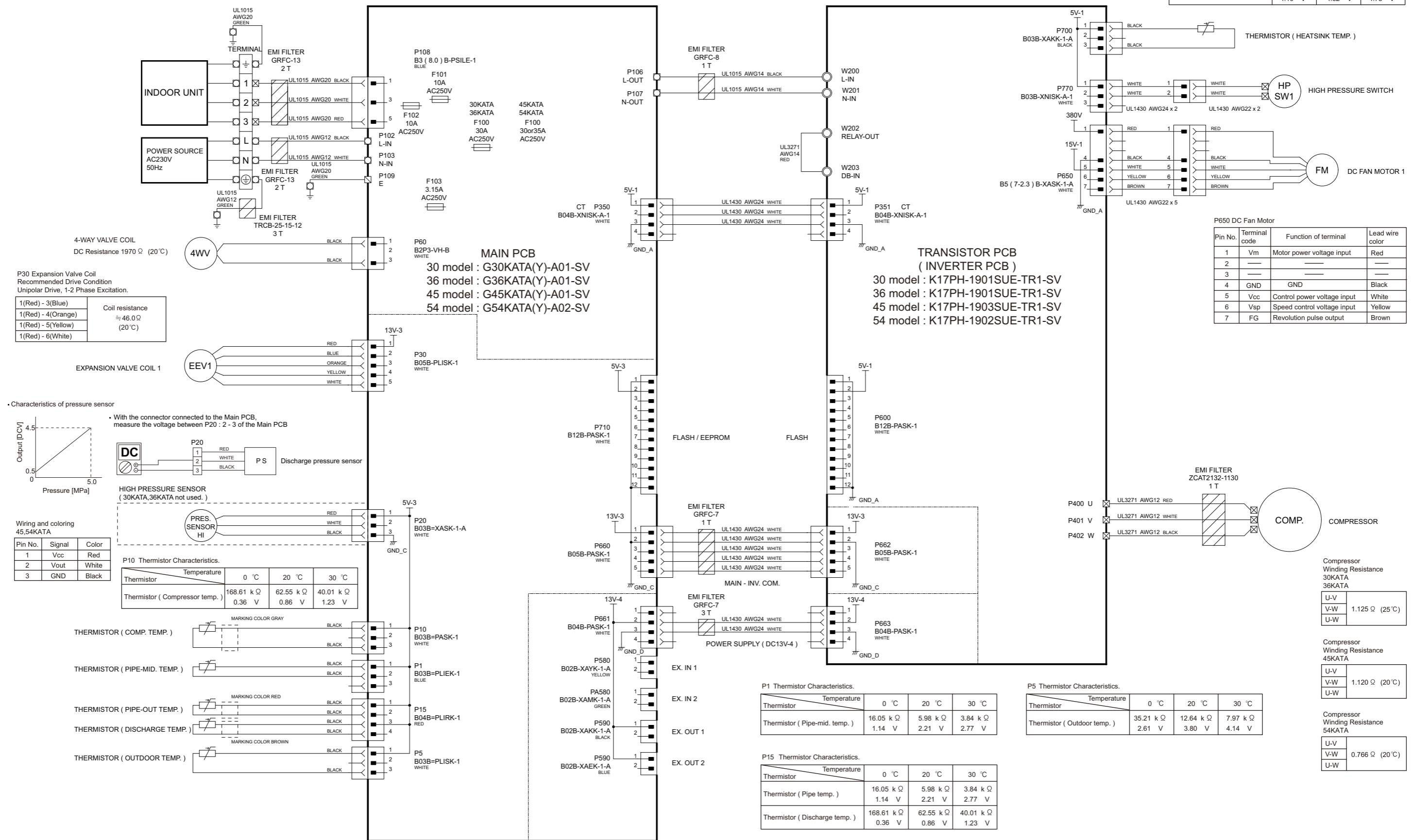
7-3. Models: AOYG30KATA, AOYG36KATA, and AOYG45KATA

INVERTER ASSEMBLY

30 model : EZ-0190DHUE 45 model : EZ-0192HUE
 36 model : EZ-0190DHUE 54 model : EZ-01907HUE

TECHNICAL DATA
AND PARTS LIST

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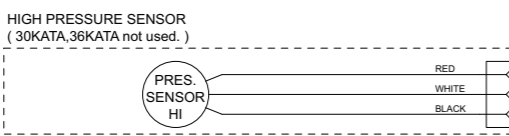
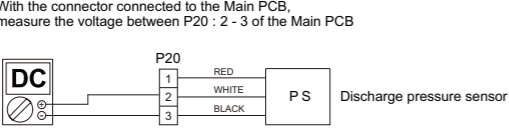
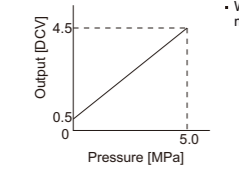
P700 Thermistor Characteristics.

Thermistor	Temperature	0 °C	20 °C	30 °C
Thermistor		0.33 k Ω	0.12 k Ω	0.08 k Ω
Thermistor (Heatsink temp.)		4.10 V	4.62 V	4.75 V

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

Characteristics of pressure sensor



Wiring and coloring 45,54KATA

Pin No.	Signal	Color
1	Vcc	Red
2	Vout	White
3	GND	Black

P10 Thermistor Characteristics.

Thermistor	Temperature	0 °C	20 °C	30 °C
Thermistor		168.61 k Ω	62.55 k Ω	40.01 k Ω
Thermistor (Compressor temp.)		0.36 V	0.86 V	1.23 V

P1 Thermistor Characteristics.

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

P5 Thermistor Characteristics.

Thermistor	Temperature	0 °C	20 °C	30 °C
Thermistor		35.21 k Ω	12.64 k Ω	7.97 k Ω
Thermistor (Outdoor temp.)		2.61 V	3.80 V	4.14 V

P15 Thermistor Characteristics.

Thermistor	Temperature	0 °C	20 °C	30 °C
Thermistor		16.05 k Ω	5.98 k Ω	3.84 k Ω
Thermistor (Pipe temp.)		1.14 V	2.21 V	2.77 V
Thermistor (Discharge temp.)		168.61 k Ω	62.55 k Ω	40.01 k Ω
		0.36 V	0.86 V	1.23 V