

SPLIT TYPE
AIR CONDITIONER
DUCT TYPE (50Hz)

SERVICE MANUAL



Indoor unit	Outdoor unit
ARYG36LHTBP	AOYG36LBTA

CONTENTS

SPECIFICATIONS	1
DIMENSIONS	2
REFRIGERANT SYSTEM DIAGRAM ...	4
CIRCUIT DIAGRAM	5
PCB CIRCUIT DIAGRAM	6
ERROR DETECTION	8
PARTS (INDOOR UNIT)	9
PARTS (OUTDOOR UNIT)	14
ACCESSORIES	18

SPECIFICATIONS

ELECTRICAL DATA

INDOOR UNIT		ARYG36LHTBP
OUTDOOR UNIT		AOYG36LBTA
TYPE		Cooling & Heating
POWER SOURCE		Single phase 230V 50Hz
COOLING	Capacity	9.40 kW
	Power consumption	2.83 kW
	EER	3.32 kW/kW
	Rated operating current	12.4 A
	Max operating current	20.0 A
	Moisture removal	2.0 L/h
HEATING	Capacity	11.2 kW
	Power consumption	3.07 kW
	COP	3.65 kW/kW
	Rated operating current	13.4 A
	Max operating current	20.0 A

FAN MOTOR AND FAN REVOLUTION

INDOOR UNIT	Discrimination	MFG-ZC8KB2P
	High cooling	980 rpm
	High heating	900 rpm
	Medium	800 rpm
	Low	660 rpm
	Quiet	560 rpm
OUTDOOR UNIT	Discrimination	MFE-60TVT
	Cooling	900 rpm
	Heating	900 rpm

AIR CIRCULATION

INDOOR UNIT	High	2,050 m ³ /h
	Medium	1,640 m ³ /h
	Low	1,330 m ³ /h
	Quiet	1,070 m ³ /h
OUTDOOR UNIT	Cooling	3,800 m ³ /h
	Heating	3,800 m ³ /h

NOISE LEVEL

INDOOR UNIT	High cooling	36 dB
	High heating	33 dB
	Medium	31 dB
	Low	28 dB
	Quiet	26 dB
OUTDOOR UNIT	Cooling	54 dB
	Heating	55 dB

Static pressure : 47Pa

Duct length : Inlet 1m, Outlet 2m

COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE	Hermetic type, Inverter, 6 poles, DC motor, Twin Rotary		
DISCRIMINATION	N-TF30ND1A		
WEIGHT (with oil)	15.3 kg		
PRECHARGED REFRIGERANT	2,100 g		
REFRIGERANT TYPE	R410A		
FULL CHARGE	Pipe length	20 m	2,100 g
		30 m	2,500 g
		40 m	2,900 g
		50 m	3,300 g
ADDITIONAL CHARGE	40 g/m		
MAX PIPING HEIGHT DIFFERENCE	30 m		

DIMENSIONS

INDOOR UNIT	H x W x D	300 x 1,400 x 700 mm
OUTDOOR UNIT	H x W x D	830 x 900 x 330 mm

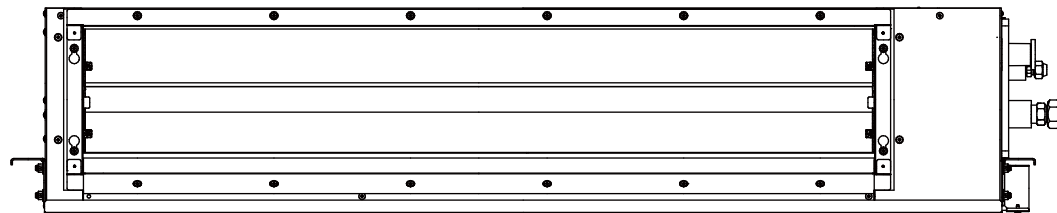
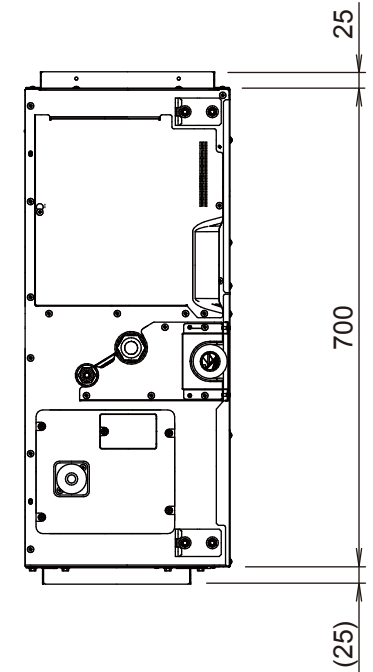
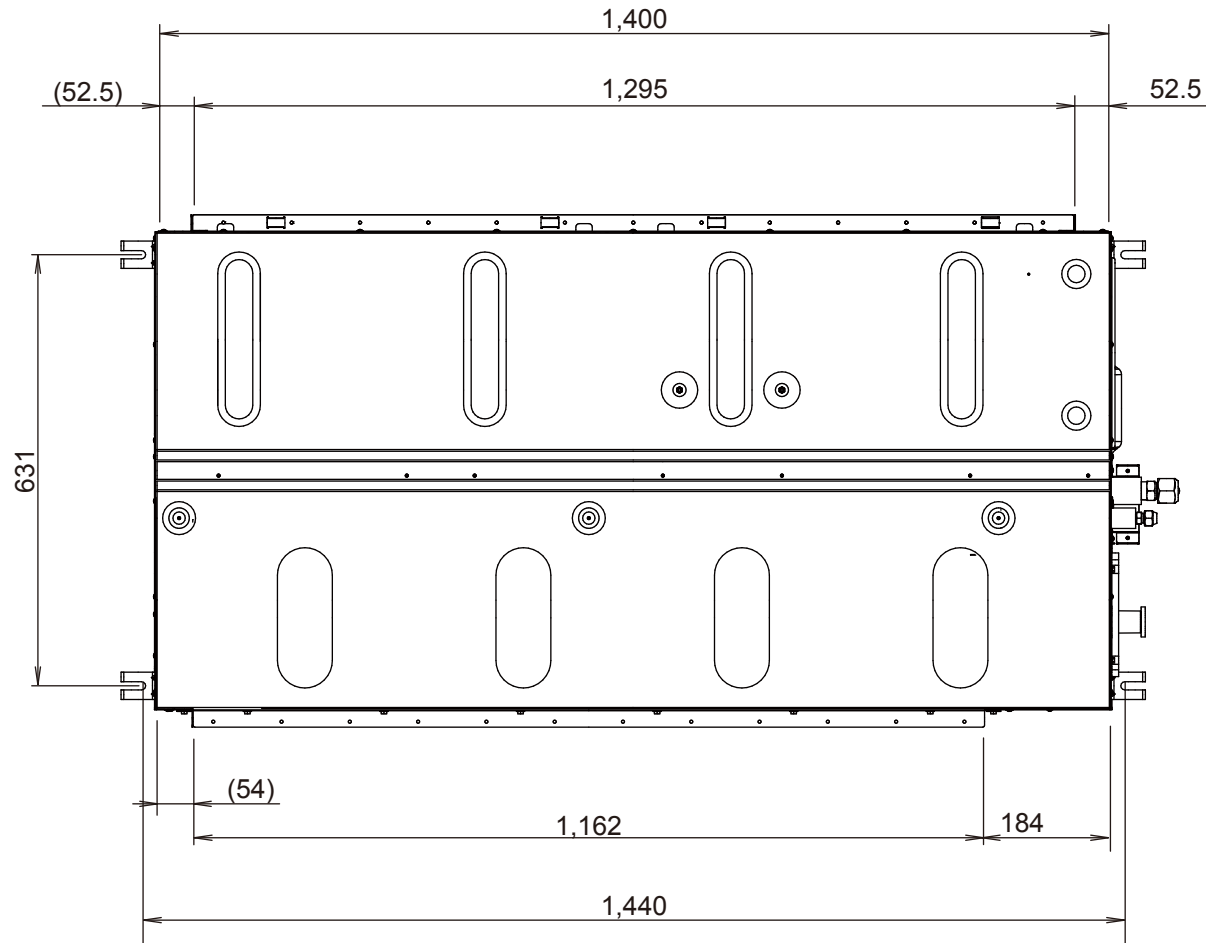
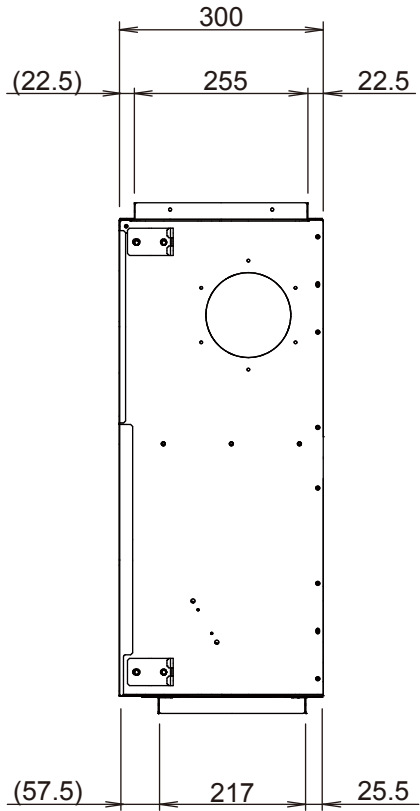
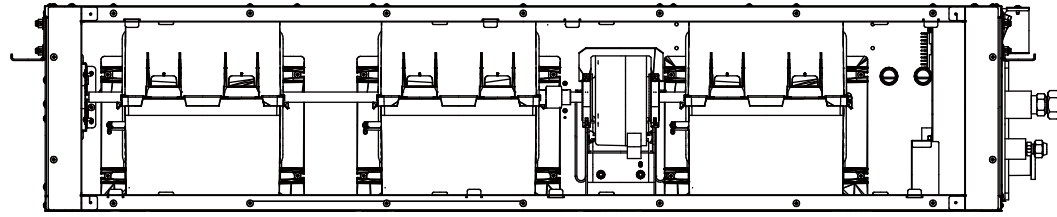
WEIGHT

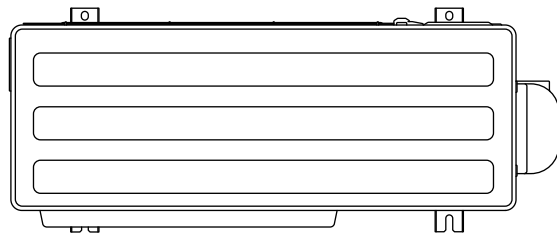
INDOOR UNIT	Net / Shipping	46 kg / 55 kg
OUTDOOR UNIT	Net / Shipping	61 kg / 68 kg

DIMENSIONS

INDOOR UNIT

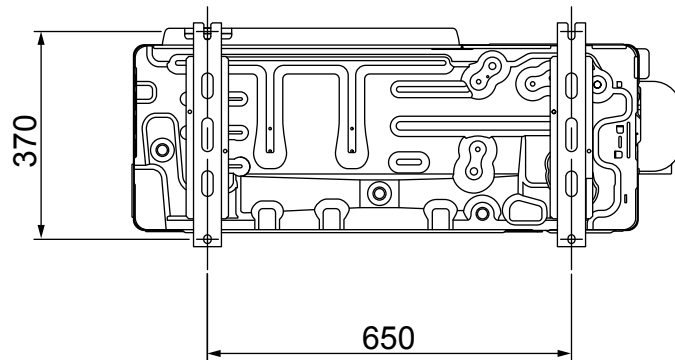
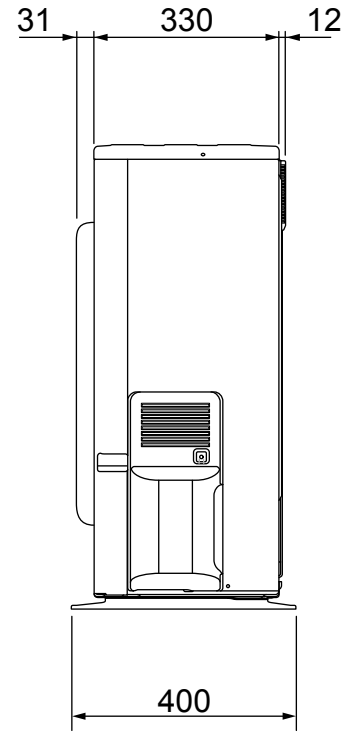
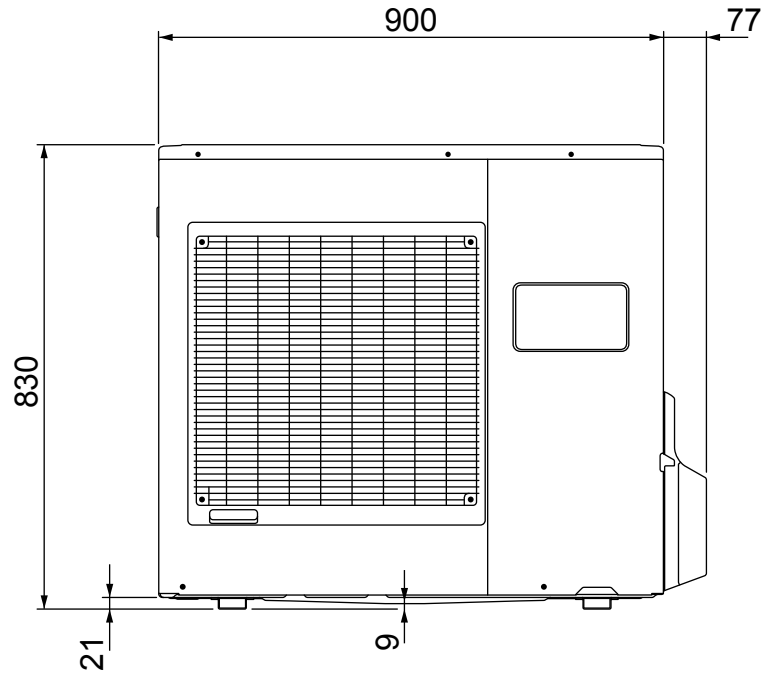
Unit : mm





OUTDOOR UNIT

Unit : mm

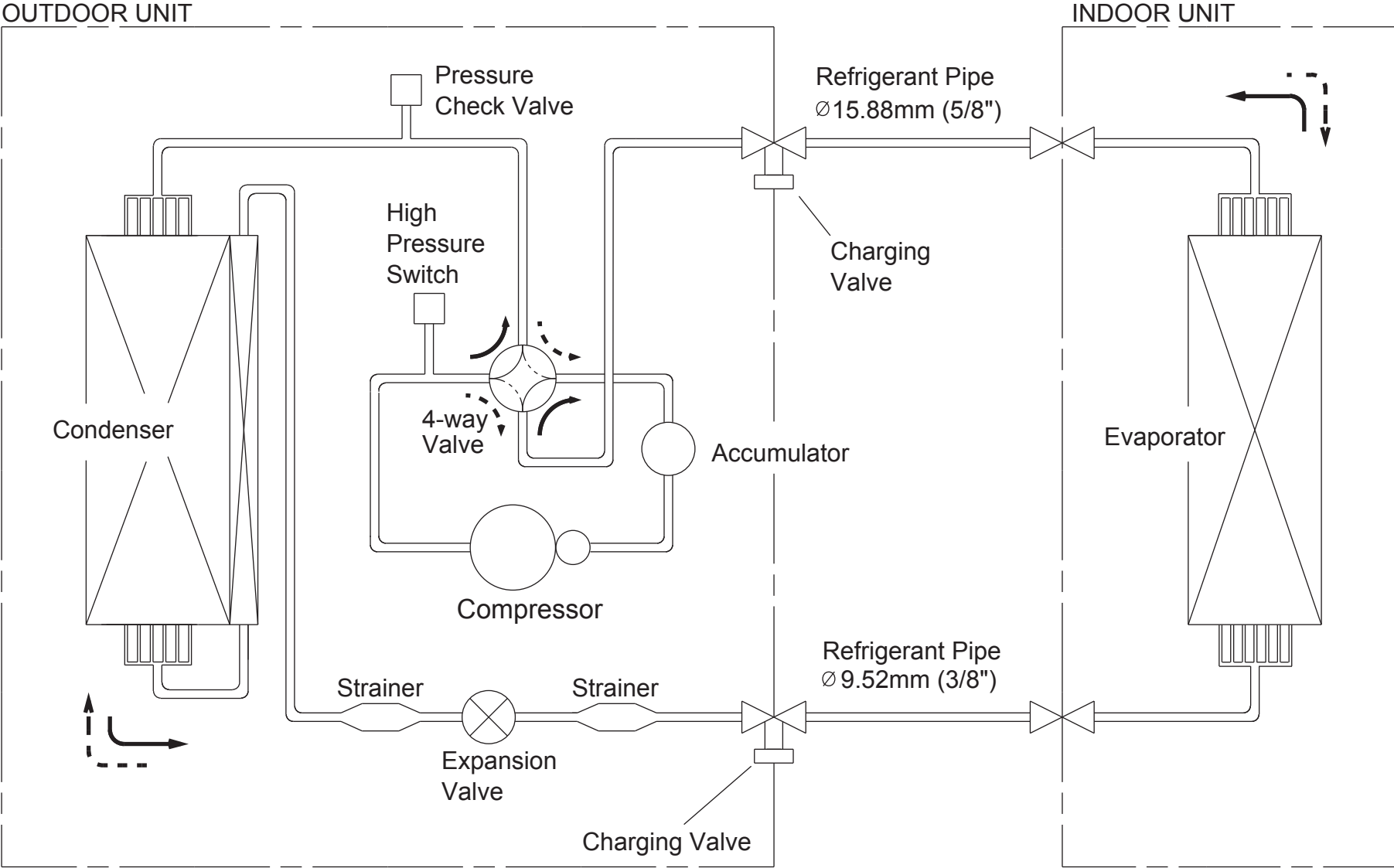


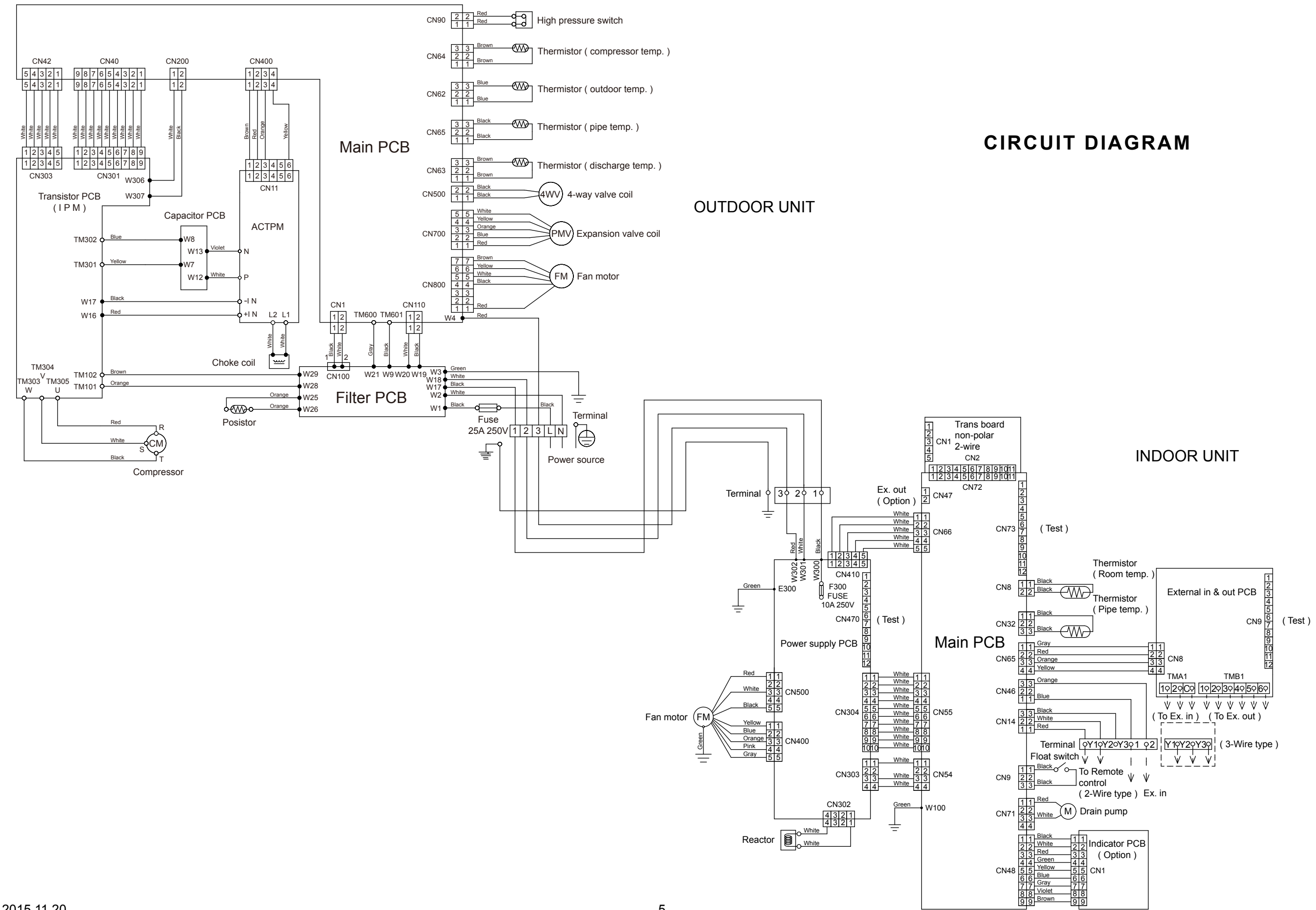
REFRIGERANT SYSTEM DIAGRAM

Refrigerant direction

—▶ : Cool

- - -▶ : Heat





CIRCUIT DIAGRAM

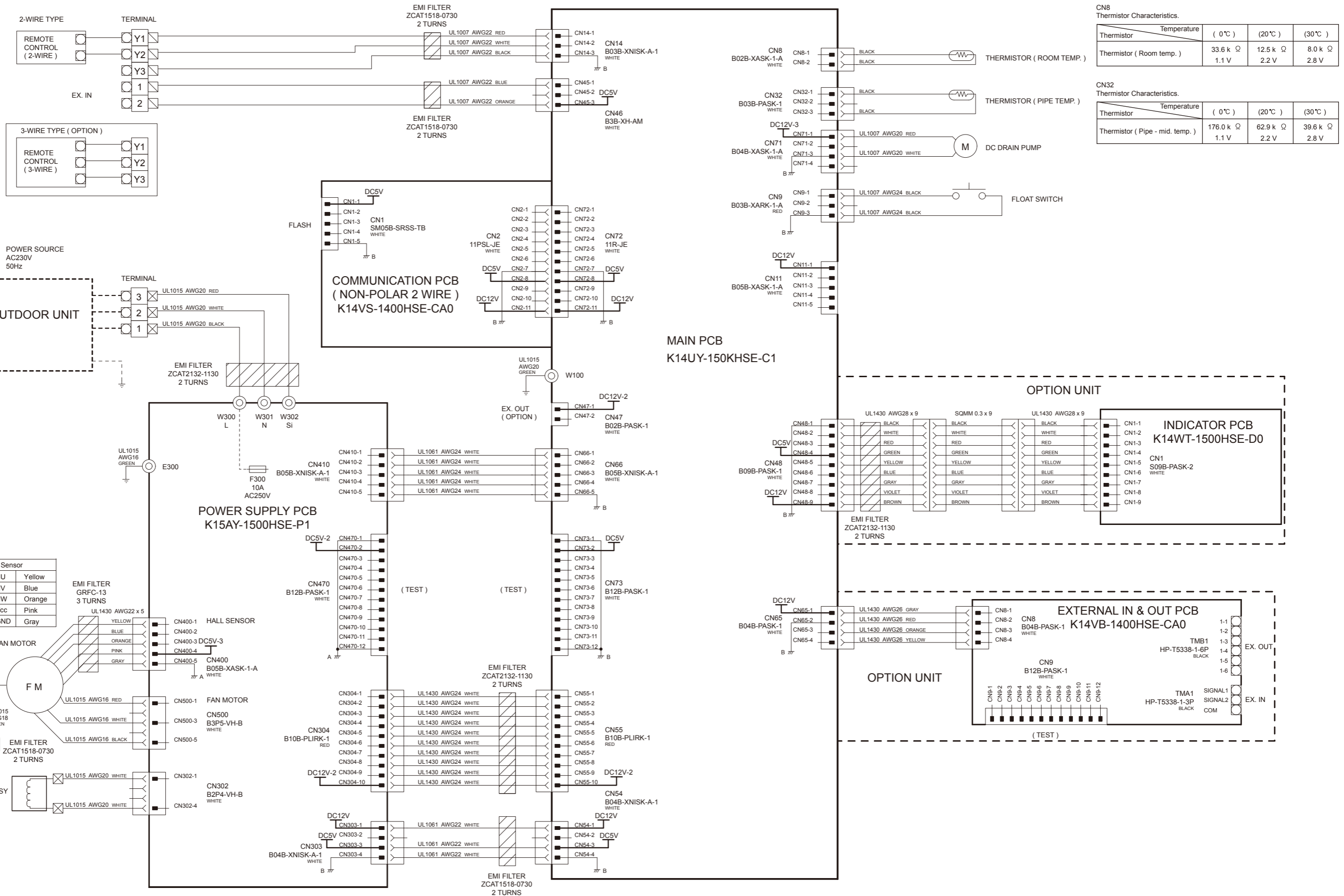
OUTDOOR UNIT

INDOOR UNIT

PCB CIRCUIT DIAGRAM

INDOOR UNIT

CONTROL UNIT : EZ-01507HSE



CN8 Thermistor Characteristics.

Thermistor	Temperature	(0°C)	(20°C)	(30°C)
Thermistor (Room temp.)		33.6 k Ω	12.5 k Ω	8.0 k Ω
		1.1 V	2.2 V	2.8 V

CN32 Thermistor Characteristics.

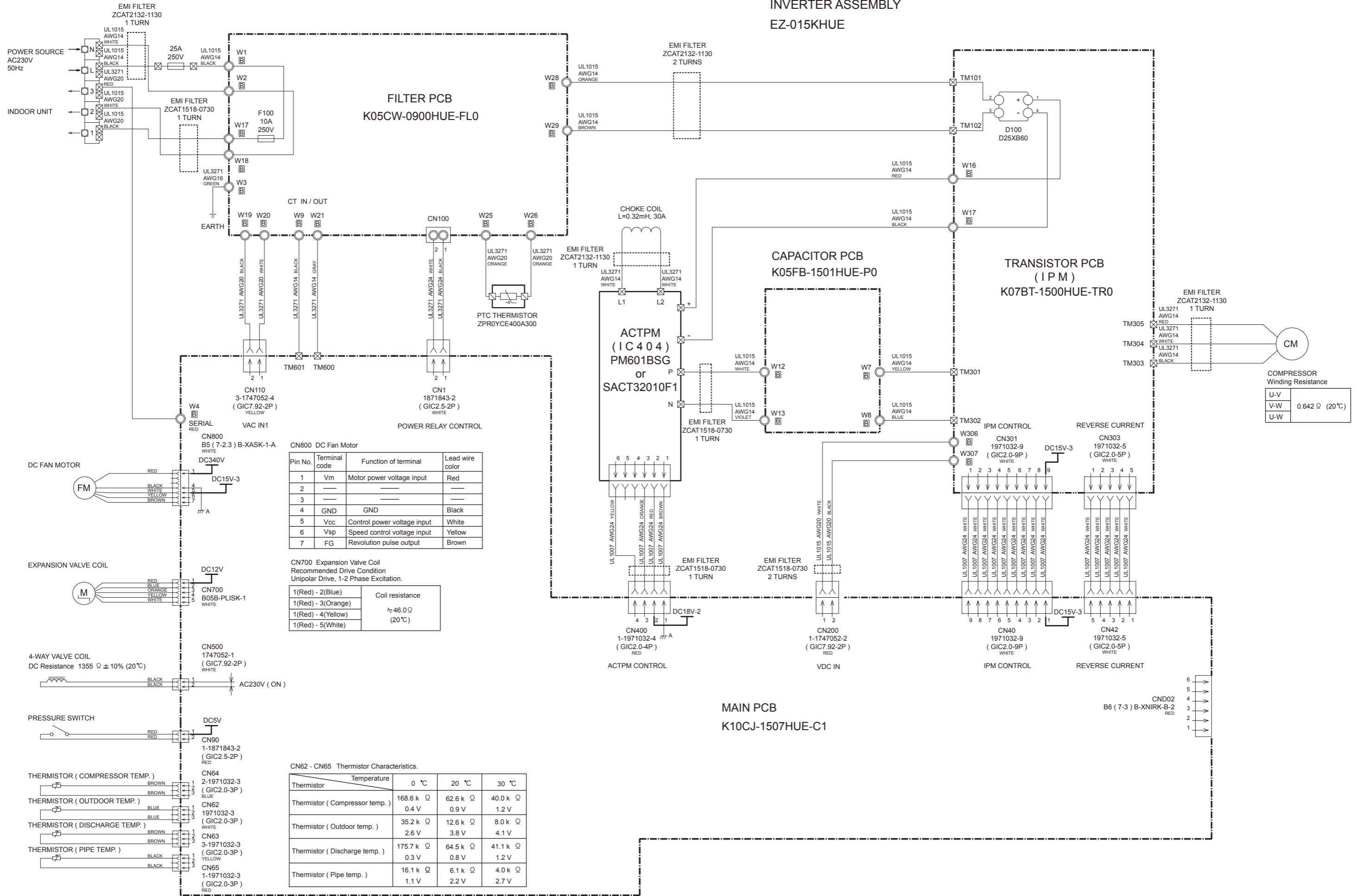
Thermistor	Temperature	(0°C)	(20°C)	(30°C)
Thermistor (Pipe - mid. temp.)		176.0 k Ω	62.9 k Ω	39.6 k Ω
		1.1 V	2.2 V	2.8 V

CN400, CN500 DC Fan motor

Power	Sensor
1 U Red	1 HU Yellow
2 —	2 HV Blue
3 V White	3 HW Orange
4 —	4 Vcc Pink
5 W Black	5 GND Gray

OUTDOOR UNIT

INVERTER ASSEMBLY EZ-015KHUE



ERROR DETECTION

INDOOR UNIT

If you use a wired type remote control, error codes will appear on the remote control display. If you use a wireless remote control, the lamps on the IR receiver unit will output error codes by way of blinking patterns. See the lamp blinking patterns and error codes in the table below. An error display is displayed only during operation. For more details, refer to the installation manual of the remote control.

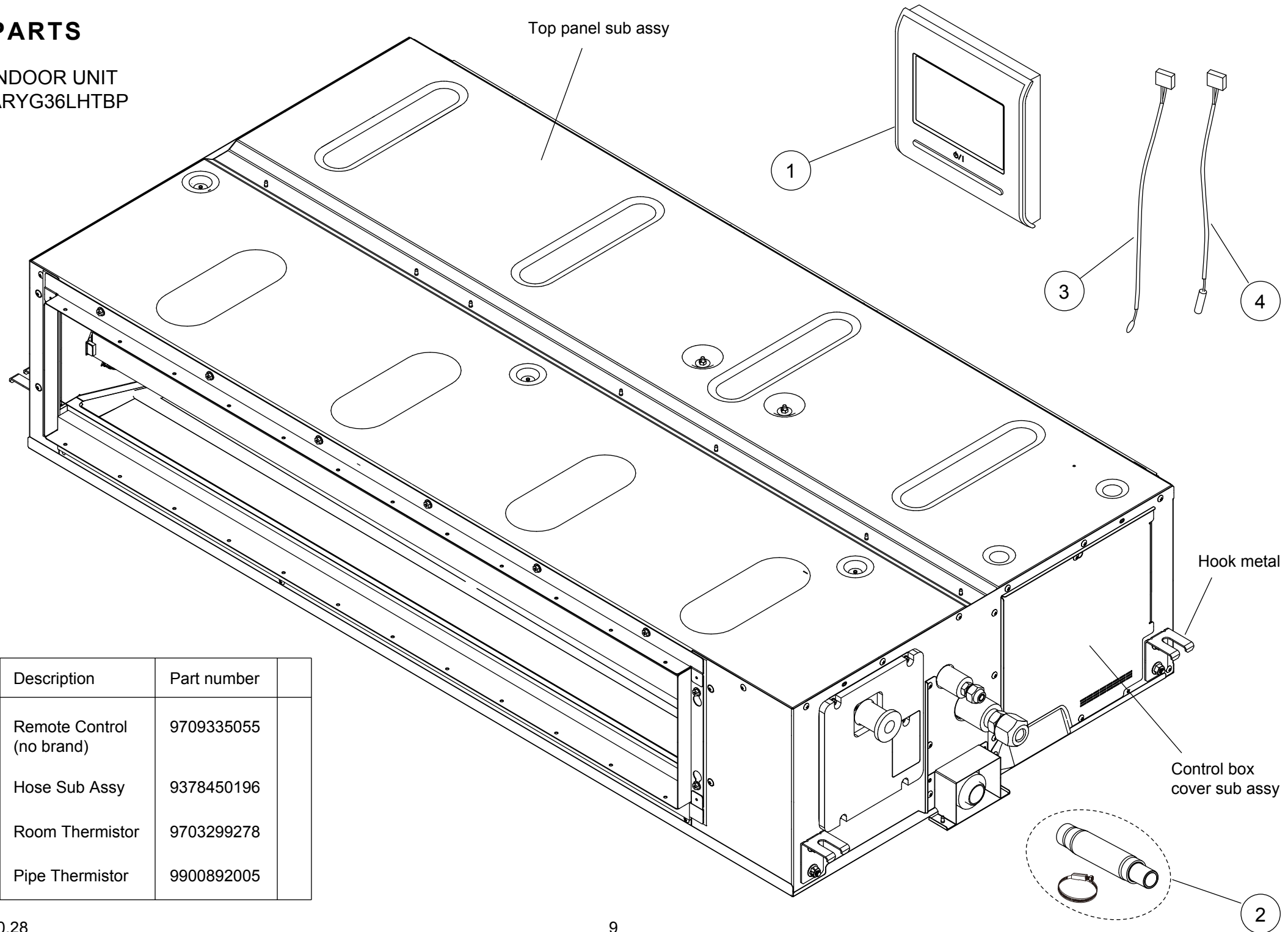
Error display			Wired remote control Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(1)	●(1)	◇	11	Serial communication error
●(1)	●(2)	◇	12	Wired remote control communication error
●(1)	●(5)	◇	15	Check run unfinished Automatic airflow adjustment error
●(1)	●(6)	◇	16	Peripheral unit transmission PCB connection error
●(1)	●(8)	◇	18	External communication error
●(2)	●(1)	◇	21	Unit number or Refrigerant circuit address setting error [Simultaneous Multi]
●(2)	●(2)	◇	22	Indoor unit capacity error
●(2)	●(3)	◇	23	Combination error
●(2)	●(4)	◇	24	• Connection unit number error (indoor secondary unit) [Simultaneous Multi] • Connection unit number error (indoor unit or branch unit) [Flexible Multi]
●(2)	●(6)	◇	26	Indoor unit address setting error
●(2)	●(7)	◇	27	Primary unit, secondary unit setup error [Simultaneous Multi]
●(2)	●(9)	◇	29	Connection unit number error in wired remote controller system
●(3)	●(1)	◇	31	Power supply interruption error
●(3)	●(2)	◇	32	Indoor unit PCB model information error
●(3)	●(3)	◇	33	Indoor unit motor electricity consumption detection error
●(3)	●(5)	◇	35	Manual auto switch error
●(3)	●(9)	◇	39	Indoor unit power supply error for fan motor
●(3)	●(10)	◇	3A	Indoor unit communication circuit (wired remote controller) error
●(4)	●(1)	◇	41	Room temp. sensor error
●(4)	●(2)	◇	42	Indoor unit heat ex. middle temp. sensor error
●(4)	●(4)	◇	44	Human sensor error
●(5)	●(1)	◇	51	Indoor unit fan motor error
●(5)	●(3)	◇	53	Drain pump error
●(5)	●(7)	◇	57	Damper error
●(5)	●(15)	◇	5U	Indoor unit error
●(6)	●(1)	◇	61	Outdoor unit reverse/missing phase and wiring error
●(6)	●(2)	◇	62	Outdoor unit main PCB model information error or communication error
●(6)	●(3)	◇	63	Inverter error
●(6)	●(4)	◇	64	Active filter error, PFC circuit error
●(6)	●(5)	◇	65	Trip terminal L error

Error display			Wired remote control Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(6)	●(8)	◇	68	Outdoor unit rush current limiting resistor temp. rise error
●(6)	●(10)	◇	6A	Display PCB microcomputers communication error
●(7)	●(1)	◇	71	Discharge temp. sensor error
●(7)	●(2)	◇	72	Compressor temp. sensor error
●(7)	●(3)	◇	73	Outdoor unit Heat Ex. liquid temp. sensor error
●(7)	●(4)	◇	74	Outdoor temp. sensor error
●(7)	●(5)	◇	75	Suction Gas temp. sensor error
●(7)	●(6)	◇	76	• 2-way valve temp. sensor error • 3-way valve temp. sensor error
●(7)	●(7)	◇	77	Heat sink temp. sensor error
●(8)	●(2)	◇	82	• Sub-cool Heat Ex. gas inlet temp. sensor error • Sub-cool Heat Ex. gas outlet temp. sensor error
●(8)	●(3)	◇	83	Liquid pipe temp. sensor error
●(8)	●(4)	◇	84	Current sensor error
●(8)	●(6)	◇	86	• Discharge pressure sensor error • Suction pressure sensor error • High pressure switch error
●(9)	●(4)	◇	94	Trip detection
●(9)	●(5)	◇	95	Compressor rotor position detection error (permanent stop)
●(9)	●(7)	◇	97	Outdoor unit fan motor 1 error
●(9)	●(8)	◇	98	Outdoor unit fan motor 2 error
●(9)	●(9)	◇	99	4-way valve error
●(9)	●(10)	◇	9A	Coil (expansion valve) error
●(10)	●(1)	◇	A1	Discharge temp. error
●(10)	●(3)	◇	A3	Compressor temp. error
●(10)	●(4)	◇	A4	High pressure error
●(10)	●(5)	◇	A5	Low pressure error
●(13)	●(2)	◇	J2	Branch boxes error [Flexible Multi]

Display mode ● : 0.5s ON / 0.5s OFF
◇ : 0.1s ON / 0.1s OFF
) (of flashing Number

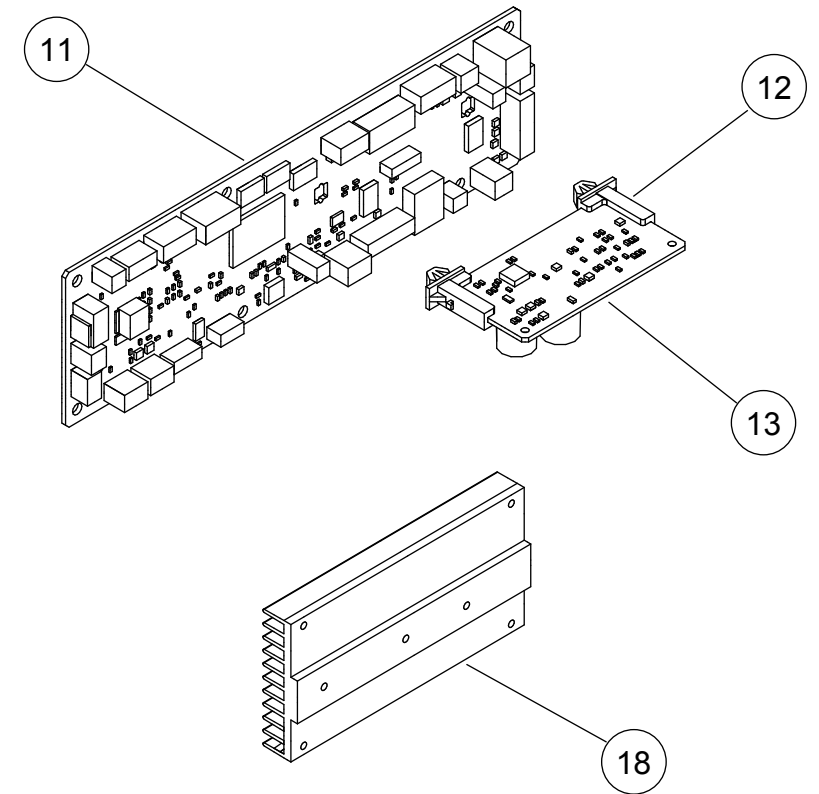
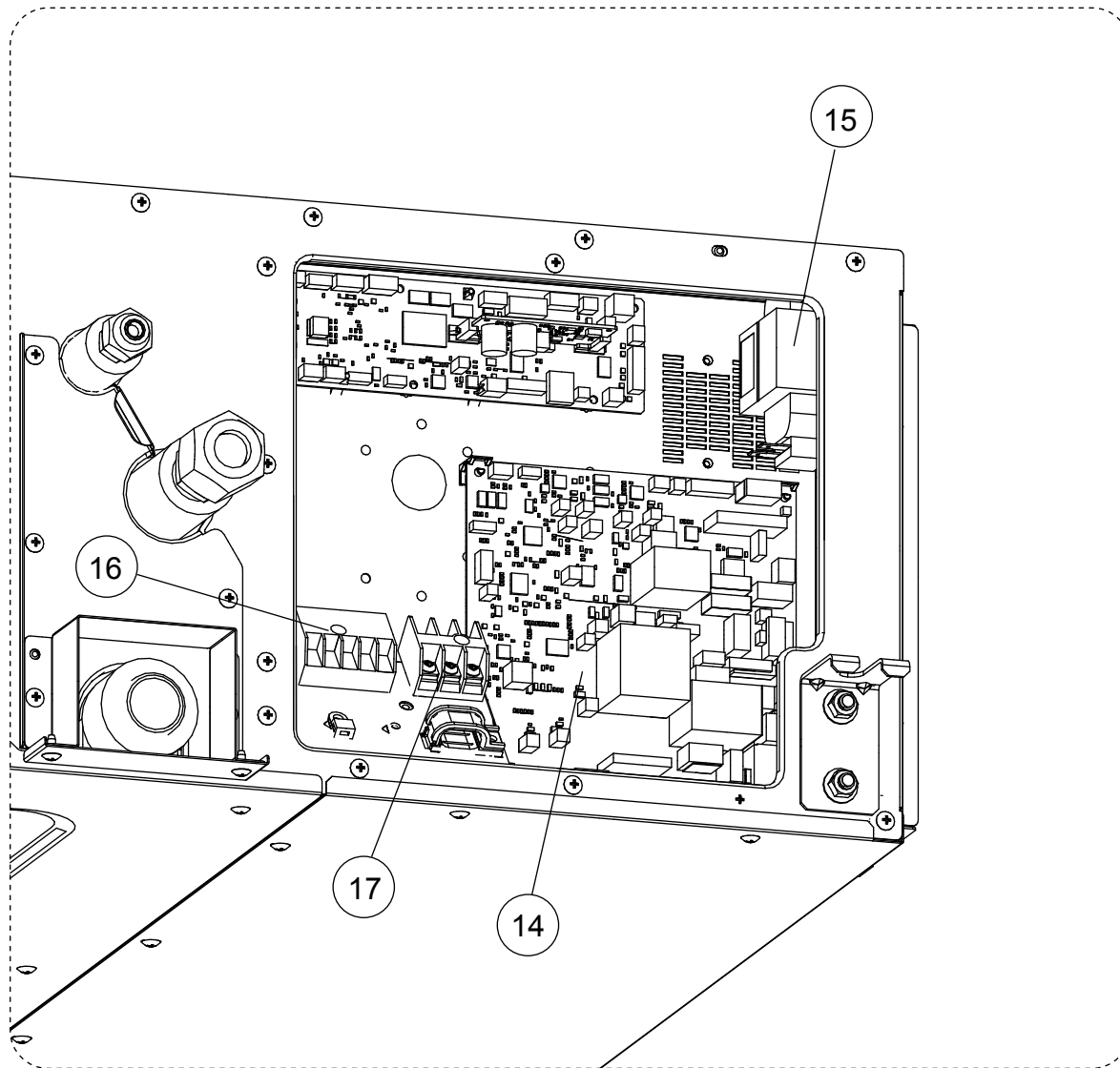
PARTS

INDOOR UNIT
ARYG36LHTBP



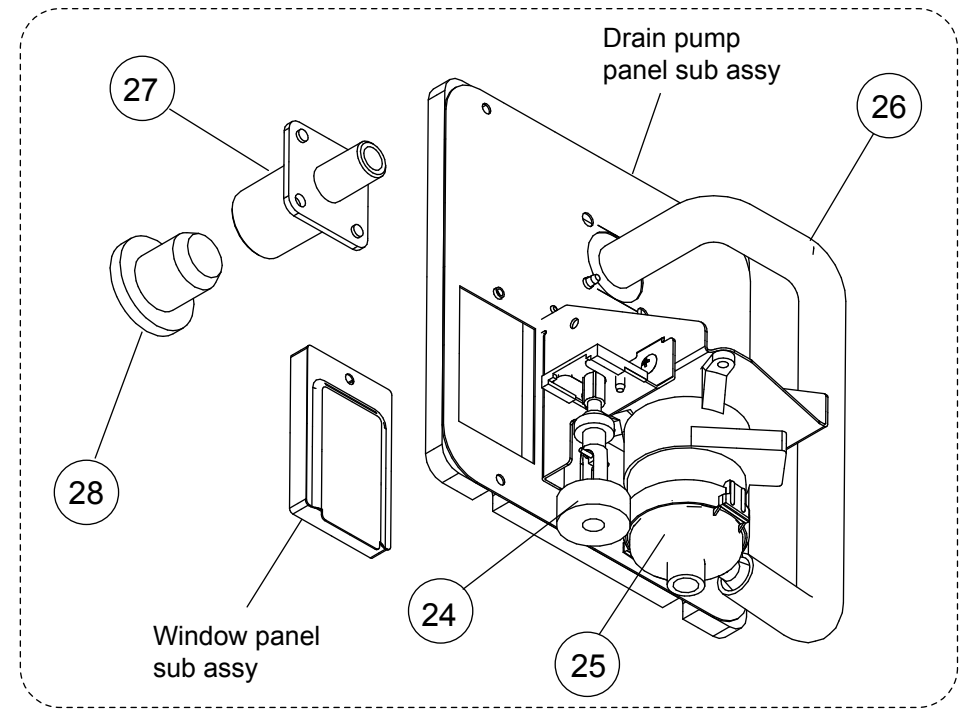
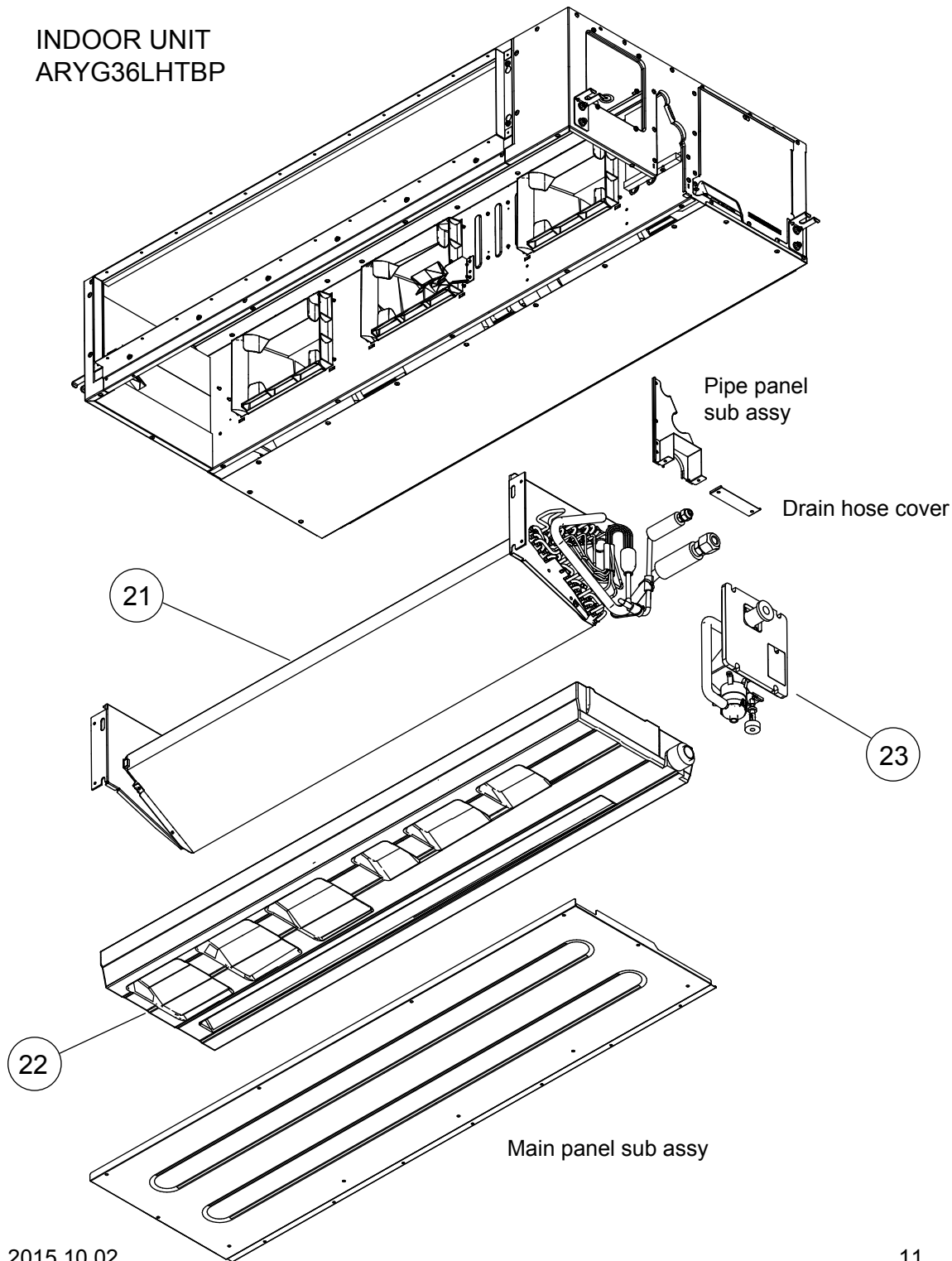
Ref.	Description	Part number
1	Remote Control (no brand)	9709335055
2	Hose Sub Assy	9378450196
3	Room Thermistor	9703299278
4	Pipe Thermistor	9900892005

INDOOR UNIT
ARYG36LHTBP



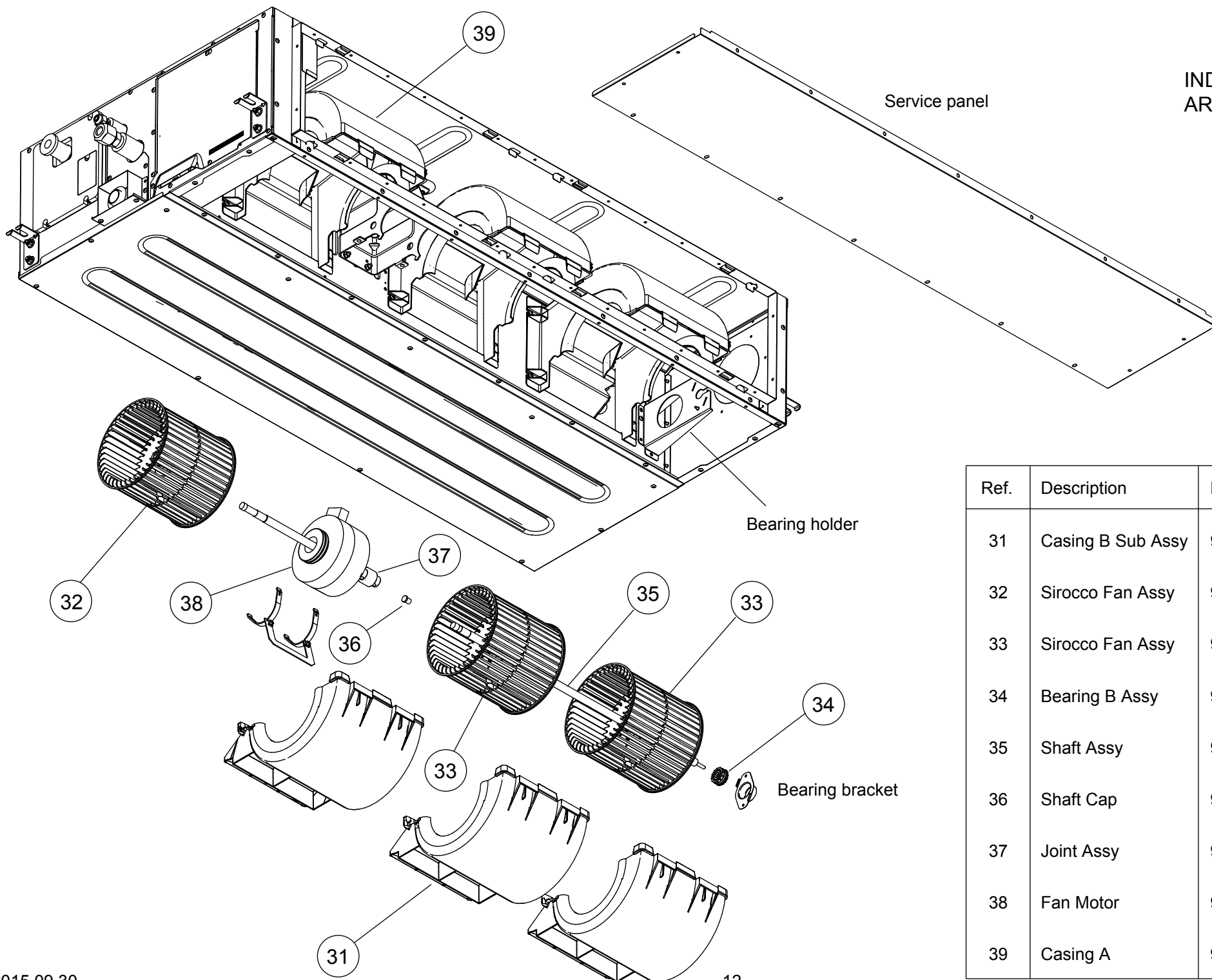
Ref.	Description	Part number
11	Main PCB	9710016257
12	Holder	0600063023
13	Communication PCB	9710019005
14	Power Supply PCB	9710261008
15	Reactor Assy	9900898014
16	Terminal (Remote)	9900896003
17	Terminal (Power)	9900568009
18	Heatsink	9381518005

INDOOR UNIT
ARYG36LHTBP



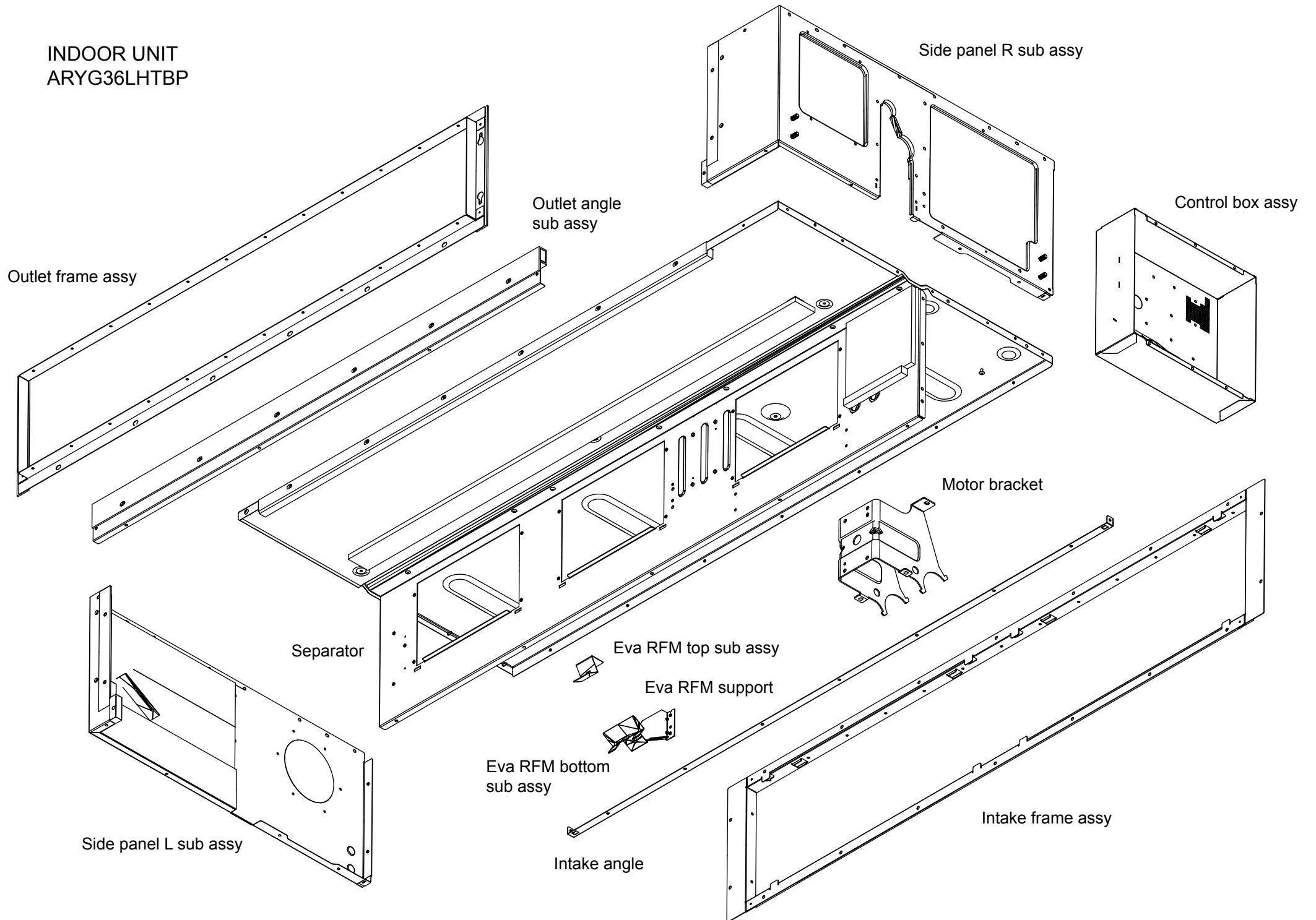
Ref.	Description	Part number
21	Evaporator Total Assy	9374517381
22	Drain Pan Sub Assy	9381752003
23	Drain Pump Sub Assy	9381766017
24	Float Switch	9900465070
25	Pump Assy	9900890018
26	Drain Hose	9381576005
27	Drain Port	9381565009
28	Drain Cap	9381578009

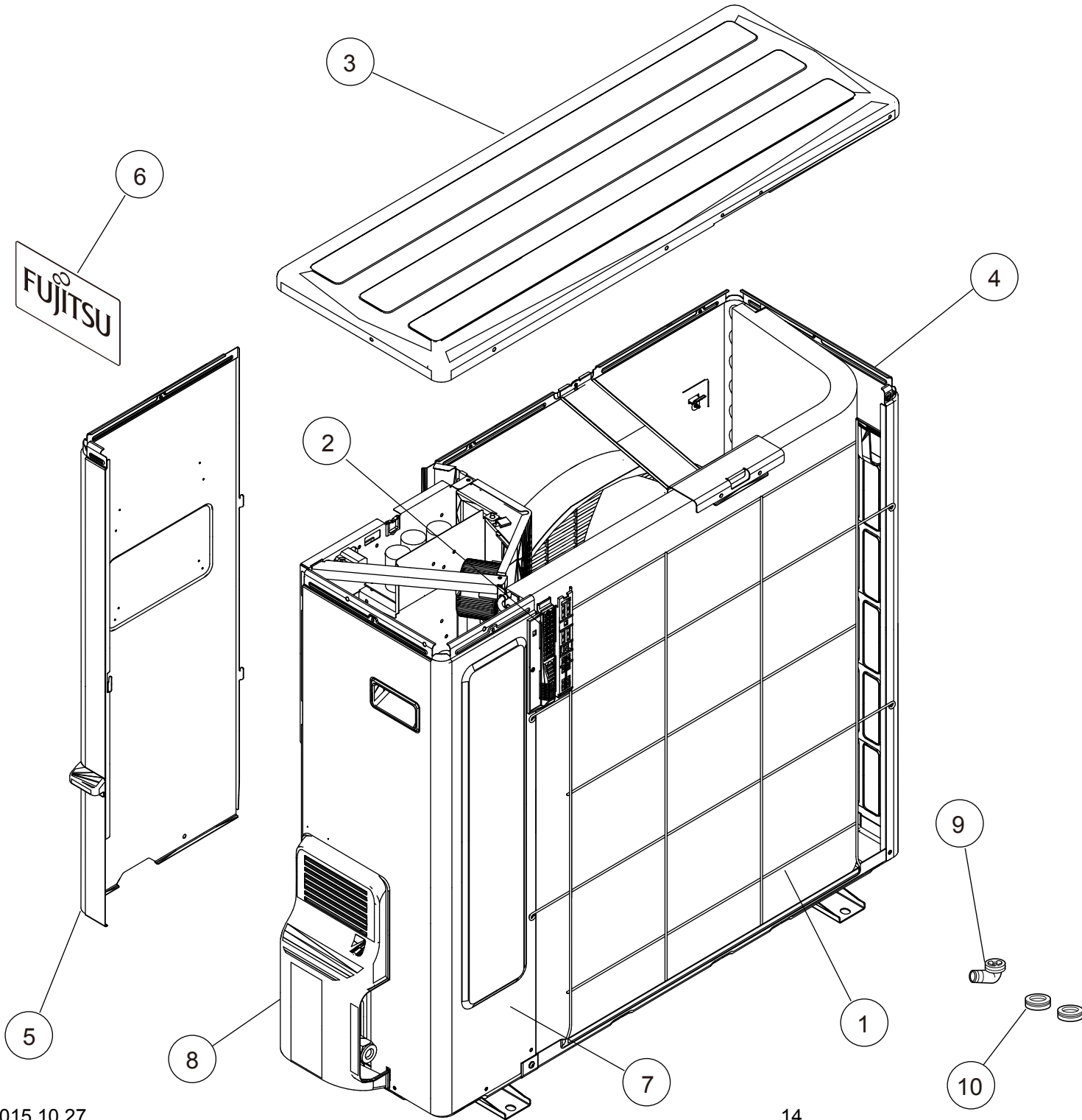
INDOOR UNIT
ARYG36LHTBP



Ref.	Description	Part number
31	Casing B Sub Assy	9381829002
32	Sirocco Fan Assy	9381302000
33	Sirocco Fan Assy	9381302017
34	Bearing B Assy	9357921006
35	Shaft Assy	9381052028
36	Shaft Cap	9381814015
37	Joint Assy	9378038035
38	Fan Motor	9603480011
39	Casing A	9381587001

INDOOR UNIT
ARYG36LHTBP





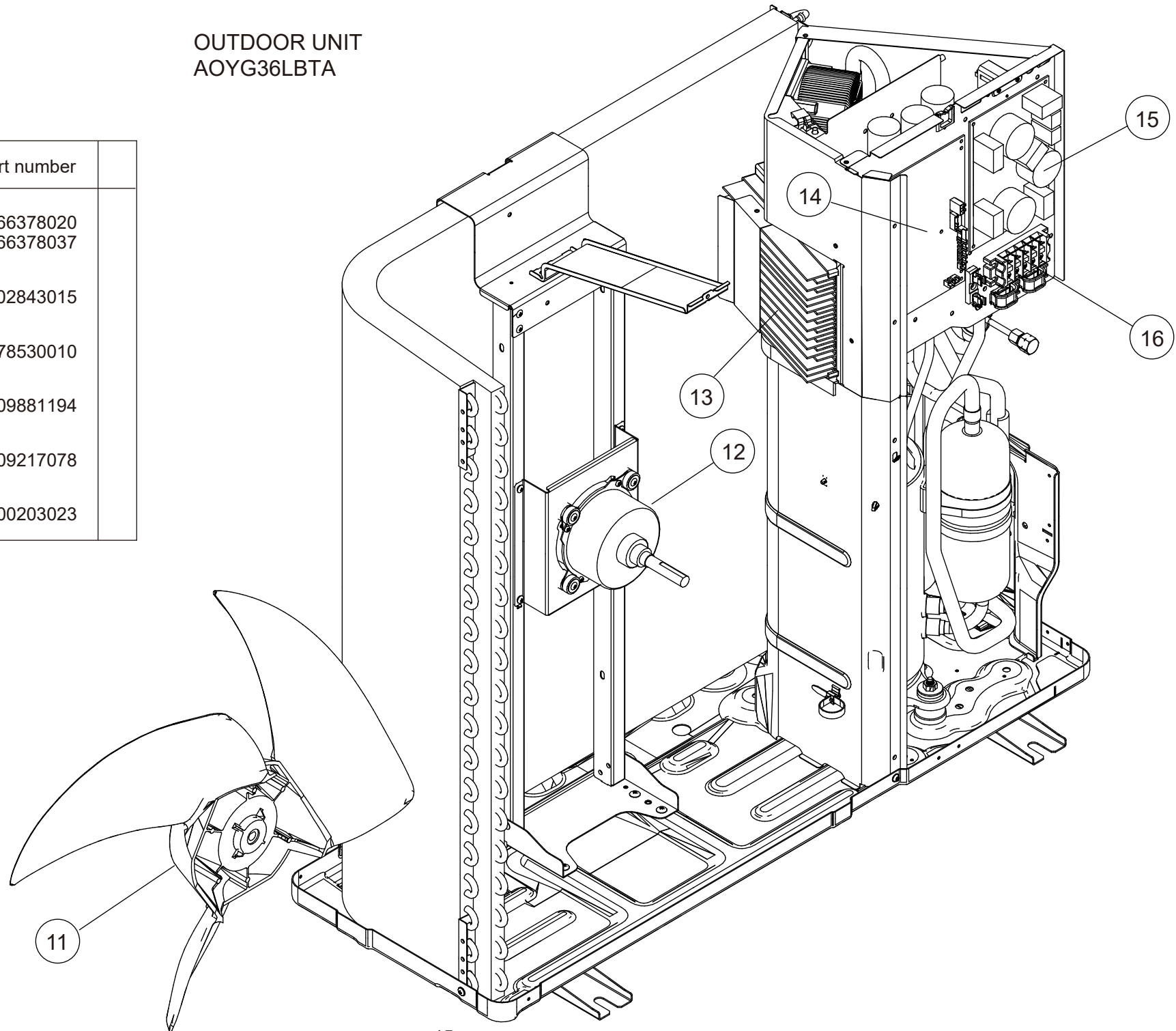
PARTS

OUTDOOR UNIT
AOYG36LBTA

Ref.	Description	Part number
1	Protective Net	9375381011
2	Thermo Holder	9375211011
3	Top Panel Sub Assy	9374417032
4	Front Panel Sub Assy	9374414079
5	Service Panel Sub Assy	9374415052
6	Emblem Rear	9351355005
7	Right Panel Sub Assy	9374416127
8	Valve Cover	9374174010
9	Drain Assy	9303029015
10	Drain Cap	313166024302

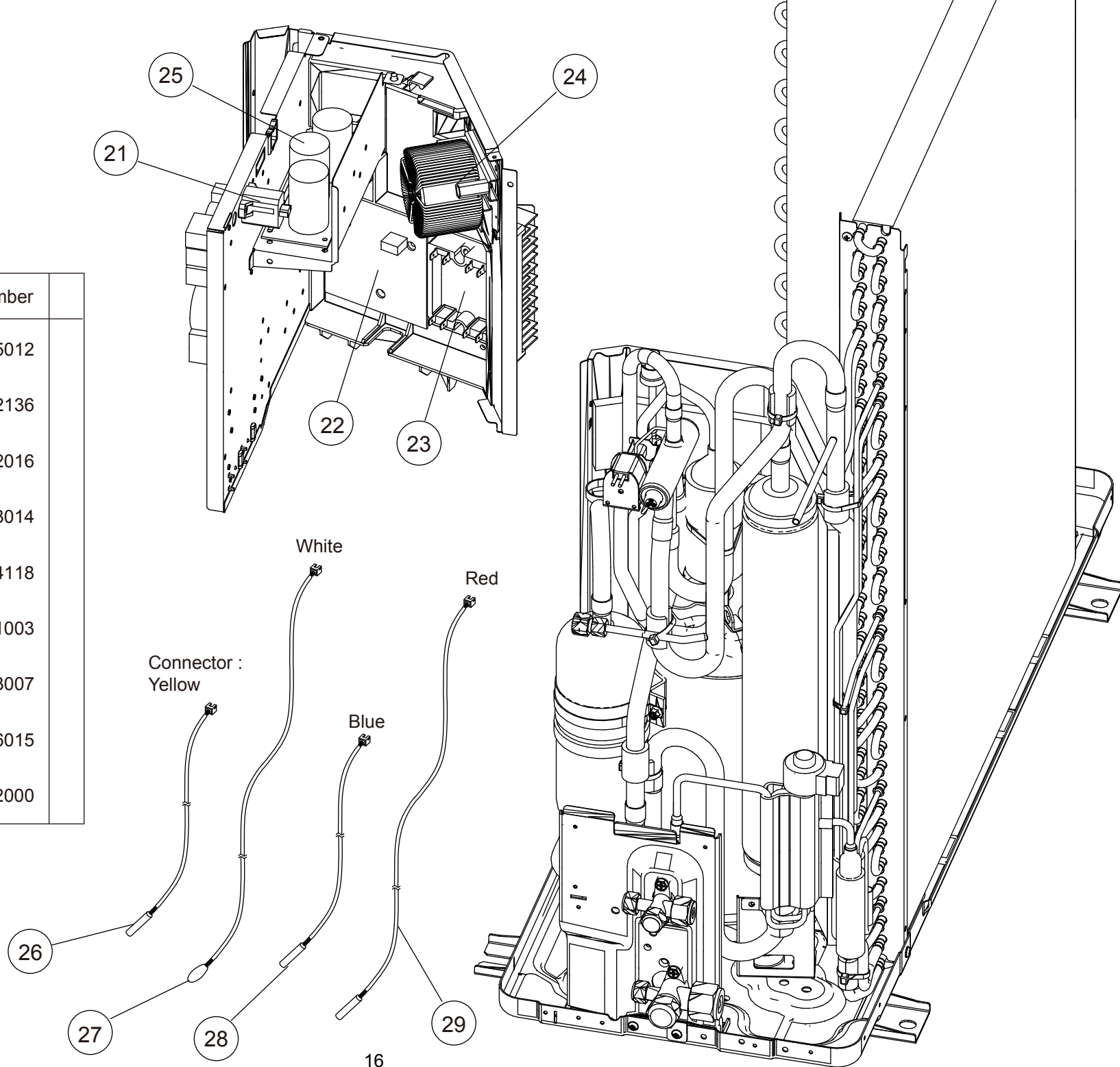
OUTDOOR UNIT
AOYG36LBTA

Ref.	Description	Part number
11	Propeller Fan Assy	9366378020 9366378037
12	Fan Motor	9602843015
13	Heatsink	9378530010
14	Main PCB	9709881194
15	Filter PCB	9709217078
16	Terminal 5P	9900203023

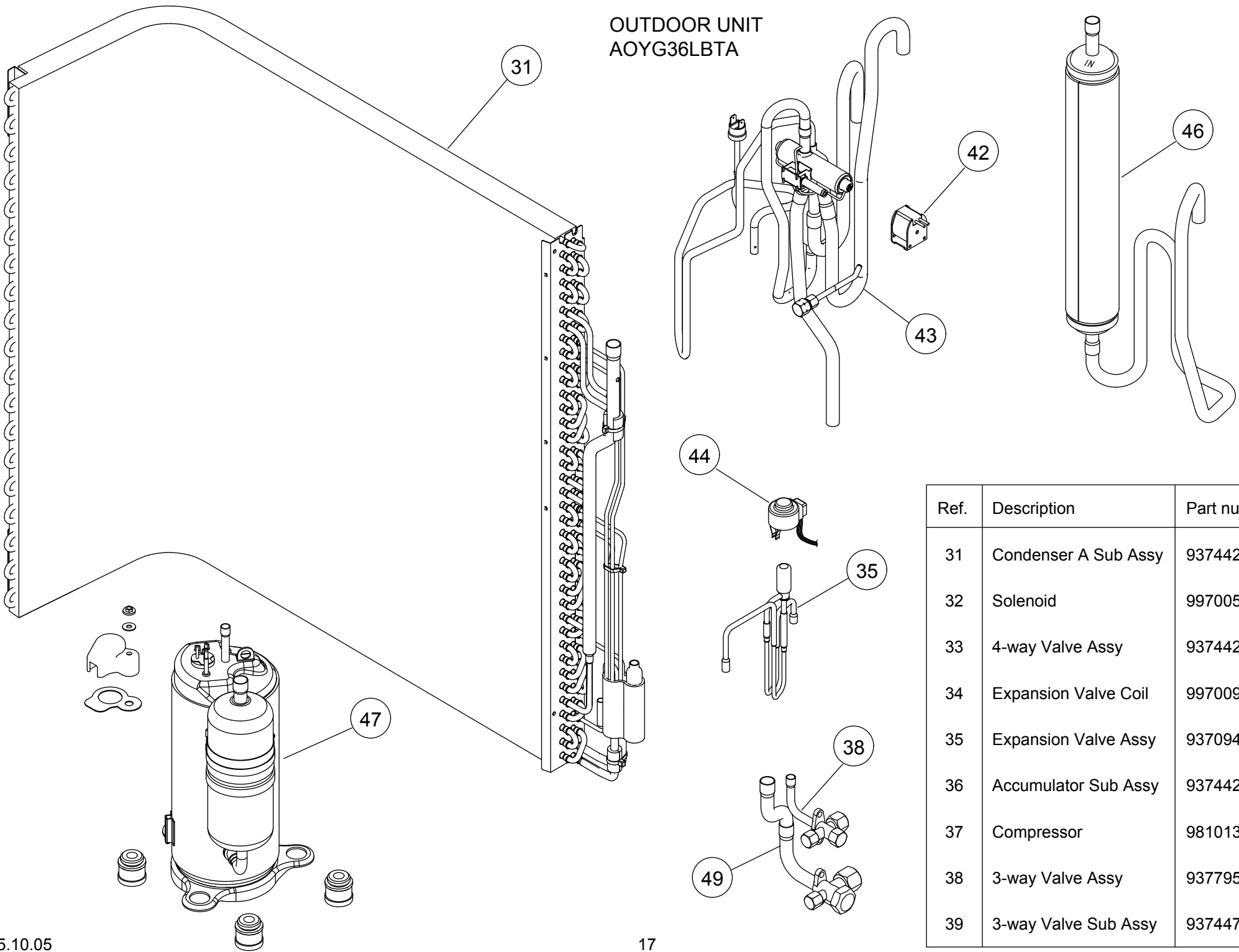


OUTDOOR UNIT
AOYG36LBTA

Ref.	Description	Part number
21	PTC Thermistor	9704265012
22	Transistor PCB	9708512136
23	ACTPM	9707592016
24	Choke Coil	9900223014
25	Capacitor PCB	9709894118
26	Discharge Thermistor	9900461003
27	Thermistor (Outdoor)	9900463007
28	Compressor Thermistor	9900466015
29	Heat Exchanger Thermistor	9900462000













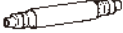

OUTDOOR UNIT
AOYG36LBTA





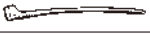



Ref.	Description	Part number
31	Condenser A Sub Assy	9374420308
32	Solenoid	9970055034
33	4-way Valve Assy	9374425198
34	Expansion Valve Coil	9970095030
35	Expansion Valve Assy	9370947144
36	Accumulator Sub Assy	9374426133
37	Compressor	9810135001
38	3-way Valve Assy	9377958013
39	3-way Valve Sub Assy	9374470044

ACCESSORIES



INDOOR UNIT

Name and Shape	Q'ty	Description
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling
Special nut B (small flange) 	4	
Washer 	8	
Coupler heat insulation (large) 	1	For indoor side pipe joint (gas pipe)
Coupler heat insulation (small) 	1	For indoor side pipe joint (liquid pipe)
Cable tie (large) 	4	For fixing the heat insulation
Cable tie (medium) 	1	For fixing the remote control cable
Cable tie (small) 	1	For fixing the remote control cable
Remote control 	1	For air conditioner operation
Remote control accessories	1 set	See Installation manual for remote control
Drain hose insulation 	1	Insulates the drain hose and vinyl hose
Drain hose 	1	For installing drain pipe VP25 (O.D.32, I.D.25)
Hose Band 	1	For installing drain hose

REMOTE CONTROL

Name and Shape	Q'ty	Application
Screw (M4 × 16 mm) 	2	For installing the remote controller
Cable tie (medium) 	1	For fixing the remote controller cable
Cable tie (small) 	1	For fixing the remote controller cable
Tube 	1	To protect wiring
Screw (M4 × 14 mm) 	1	For installing the remote controller cable to the indoor unit
Cable clamber 	1	For installing the remote controller cable to the indoor unit

OUTDOOR UNIT

Name and shape	Q'ty	Description
Drain pipe 	1	For outdoor unit drain piping work
Drain cap 	2	

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