

SPLIT TYPE  
ROOM AIR CONDITIONER  
WALL MOUNTED TYPE

# SERVICE MANUAL

Indoor unit	Outdoor unit
ASYG14LMCB	AOYG14LMCBN



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# SPECIFICATIONS

## ELECTRICAL DATA

TYPE		Cool & heat inverter
INDOOR UNIT		ASYG14LMCB
OUTDOOR UNIT		AOYG14LMCBN
COOLING CAPACITY		4.20 kW
HEATING CAPACITY		5.40 kW
POWER SOURCE		230 V
FREQUENCY		50 Hz
RUNNING CURRENT	Cooling	5.6 A
	Heating	7.1 A
INPUT WATTS	Cooling	1.205 kW
	Heating	1.560 kW
EER	Cooling	3.49 kW/kW
COP	Heating	3.46 kW/kW
MOISTURE REMOVAL		2.1 L/h
AIR CIRCULATION HIGH		770 m <sup>3</sup> /h
MAXIMUM CURRENT	Cooling	9.0 A
	Heating	11.5 A

## FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT Discrimination		MFD-12CYN
INDOOR UNIT Cooling	High	1,280 r.p.m.
	Medium	1,090 r.p.m.
	Low	1,000 r.p.m.
	Quiet	750 r.p.m.
INDOOR UNIT Heating	High	1,280 r.p.m.
	Medium	1,120 r.p.m.
	Low	1,050 r.p.m.
	Quiet	770 r.p.m.
OUTDOOR UNIT Discrimination		MFE-71TVAL
OUTDOOR UNIT Cooling		870 r.p.m.
OUTDOOR UNIT Heating		780 r.p.m.

## NOISE LEVEL

INDOOR UNIT Cooling	High	44 dB
	Medium	40 dB
	Low	33 dB
	Quiet	25 dB
OUTDOOR UNIT Heating	High	44 dB
	Medium	40 dB
	Low	35 dB
	Quiet	27 dB
OUTDOOR UNIT Cooling		49 dB
OUTDOOR UNIT Heating		49 dB

## COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE	Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary	
DISCRIMINATION	808-884-80	
WEIGHT (with oil)	9.3 kg	
PRECHARGED REFRIGERANT	1,200 g	
REFRIGERANT TYPE	R410A	
FULL CHARGE	Pipe length 15 m	1,200 g
	20 m	1,300 g
ADDITIONAL CHARGE		20 g/m
MAXIMUM PIPING HEIGHT		15m

## DIMENSIONS

INDOOR UNIT	H x W x D	268 x 840 x 203 mm
OUTDOOR UNIT	H x W x D	620 x 790 x 290 mm

## WEIGHT

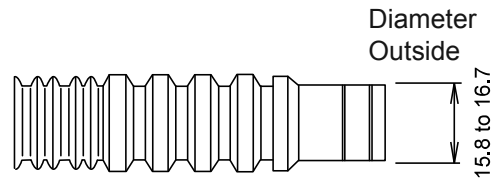
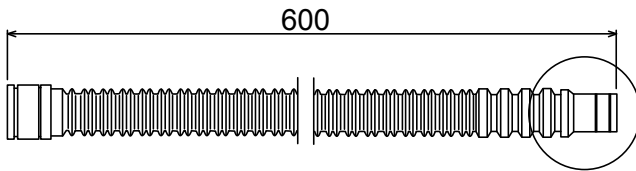
INDOOR UNIT	Shipping / Net	10.5 kg / 8.5 kg
OUTDOOR UNIT	Shipping / Net	44 kg / 40 kg

# DIMENSIONS

## INDOOR UNIT

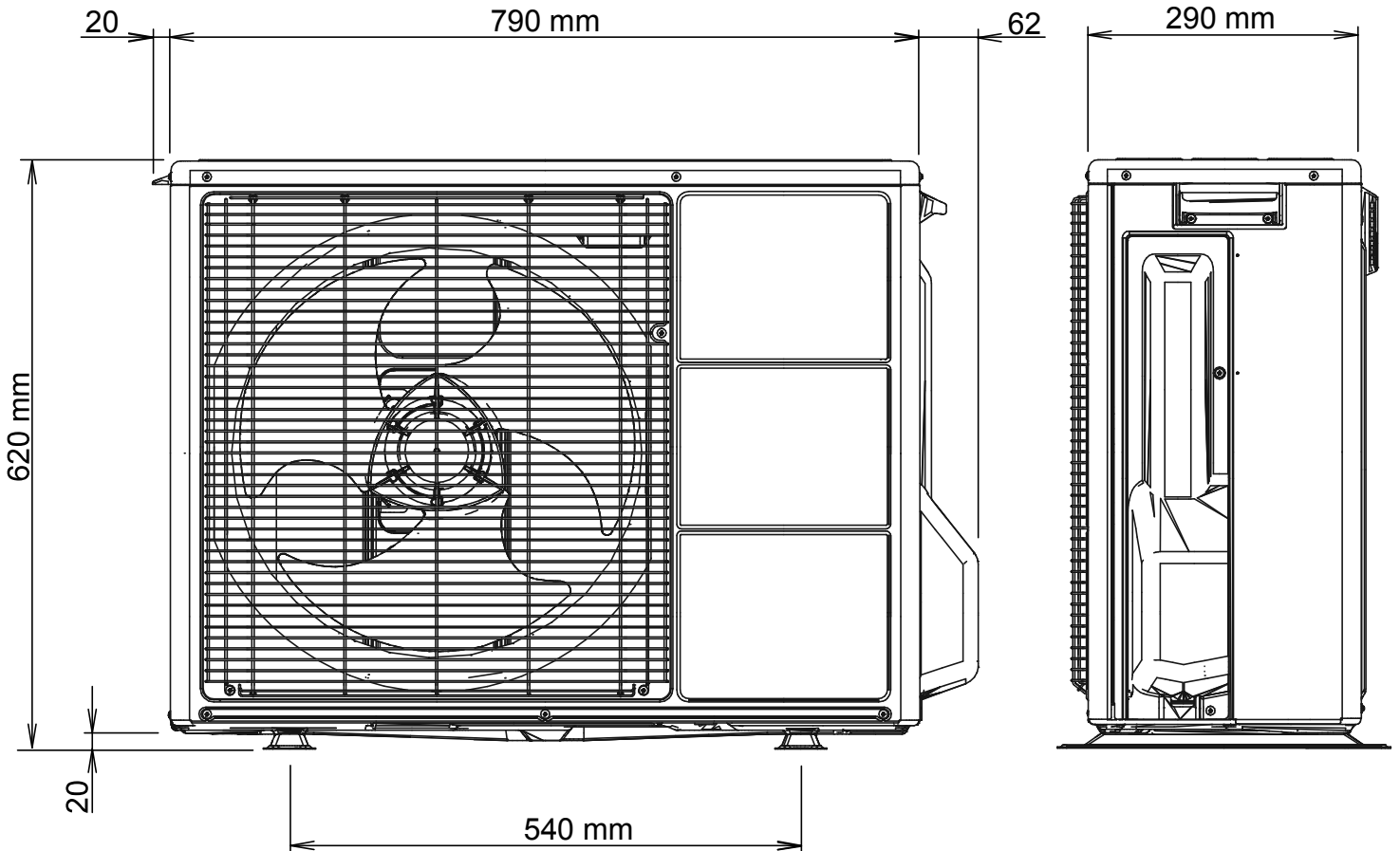


Drain hose

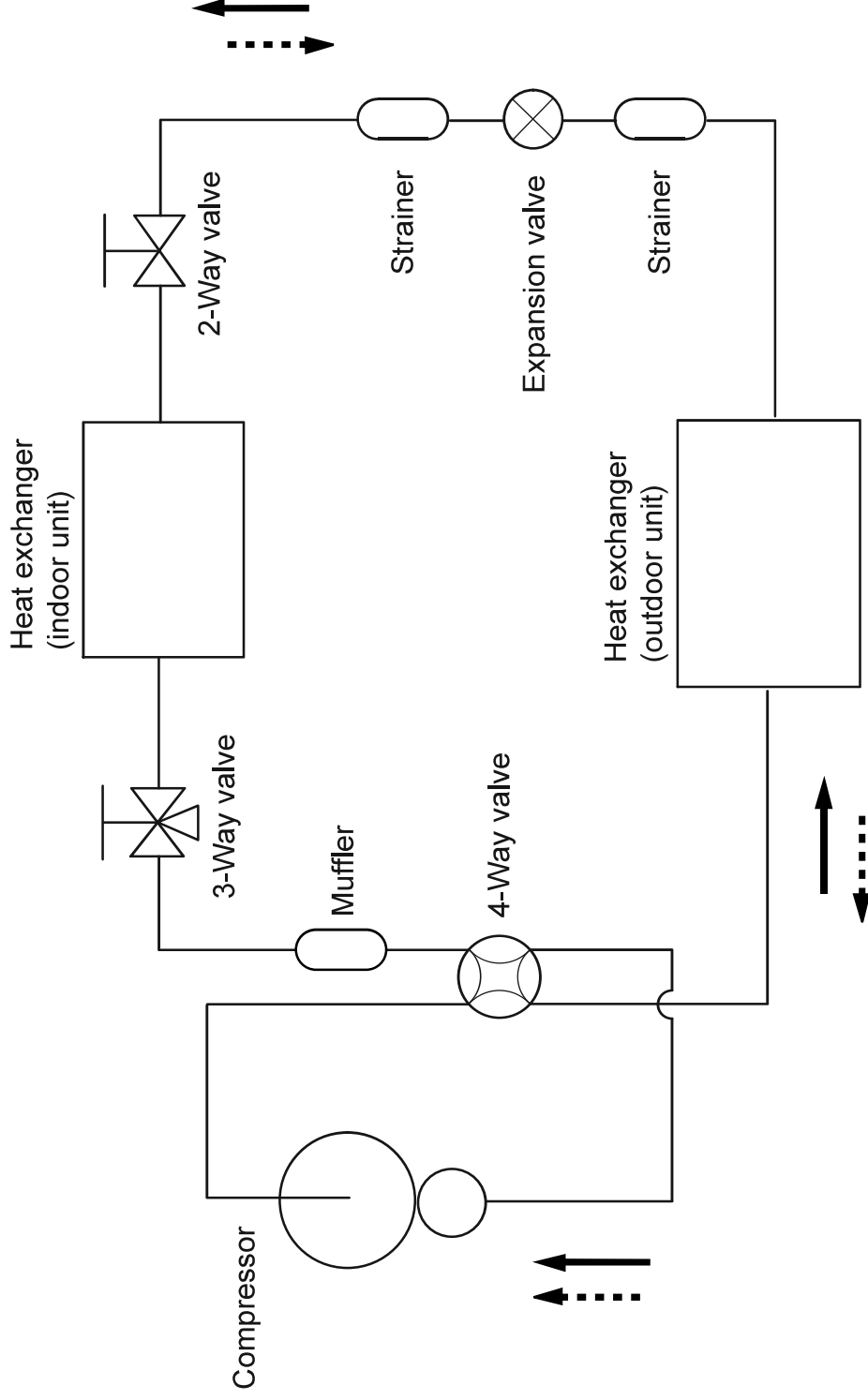


Inside : 13.8 mm

## OUTDOOR UNIT



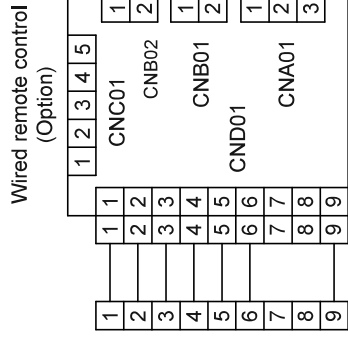
# REFRIGERANT SYSTEM DIAGRAM



Refrigerant pipe diameter  
 Liquid : 1/4" (6.35 mm)  
 Gas : 3/8" (9.52 mm)

Refrigerant direction  
 ———→ Cooling  
 - - - - -→ Heating

UTY-TWBXF  
Communication PCB

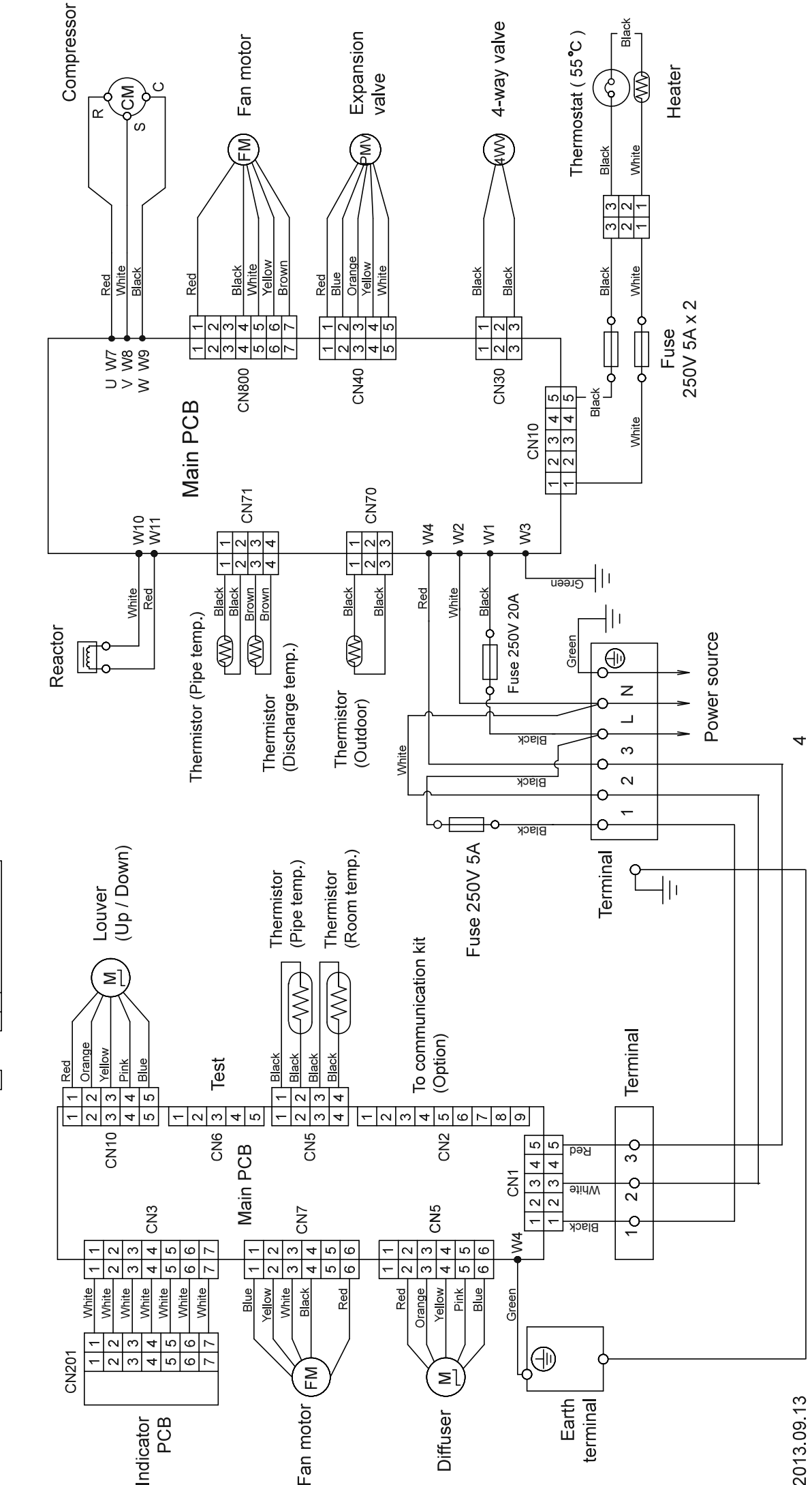


Ex. out (Option) Error status  
Ex. out (Option) Operation status  
Ex. in (Option)

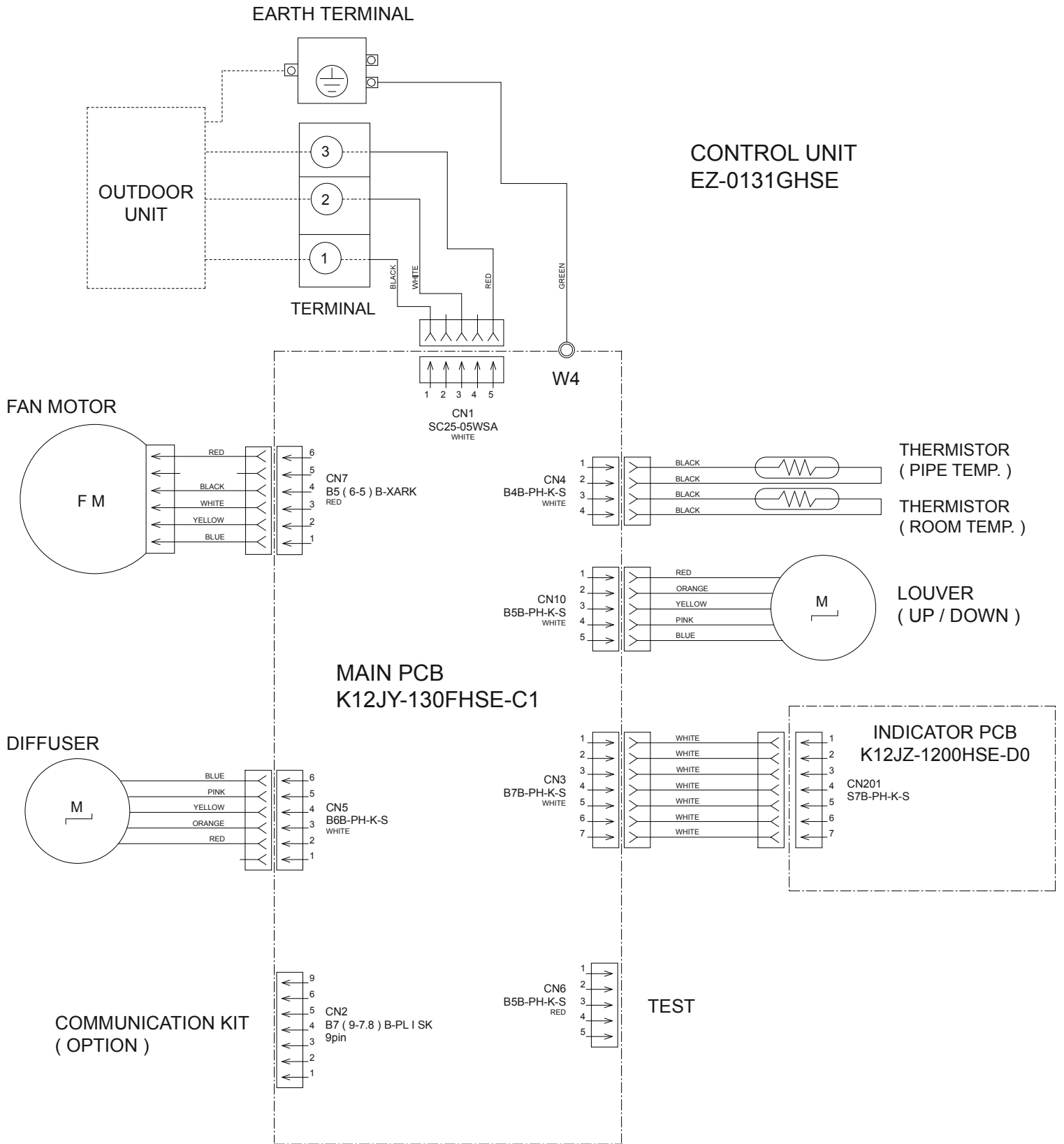
# CIRCUIT DIAGRAM

## INDOOR UNIT

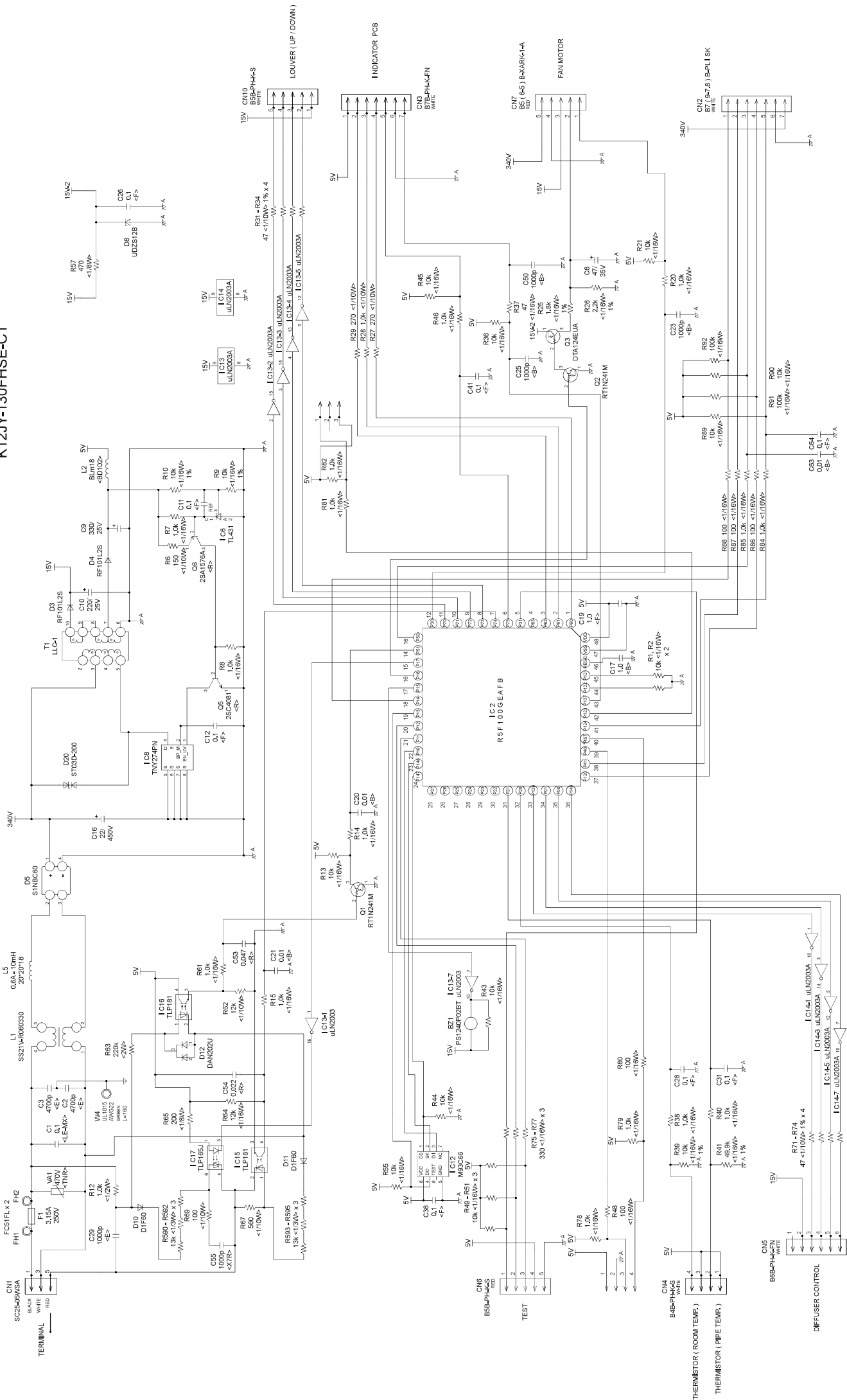
## OUTDOOR UNIT



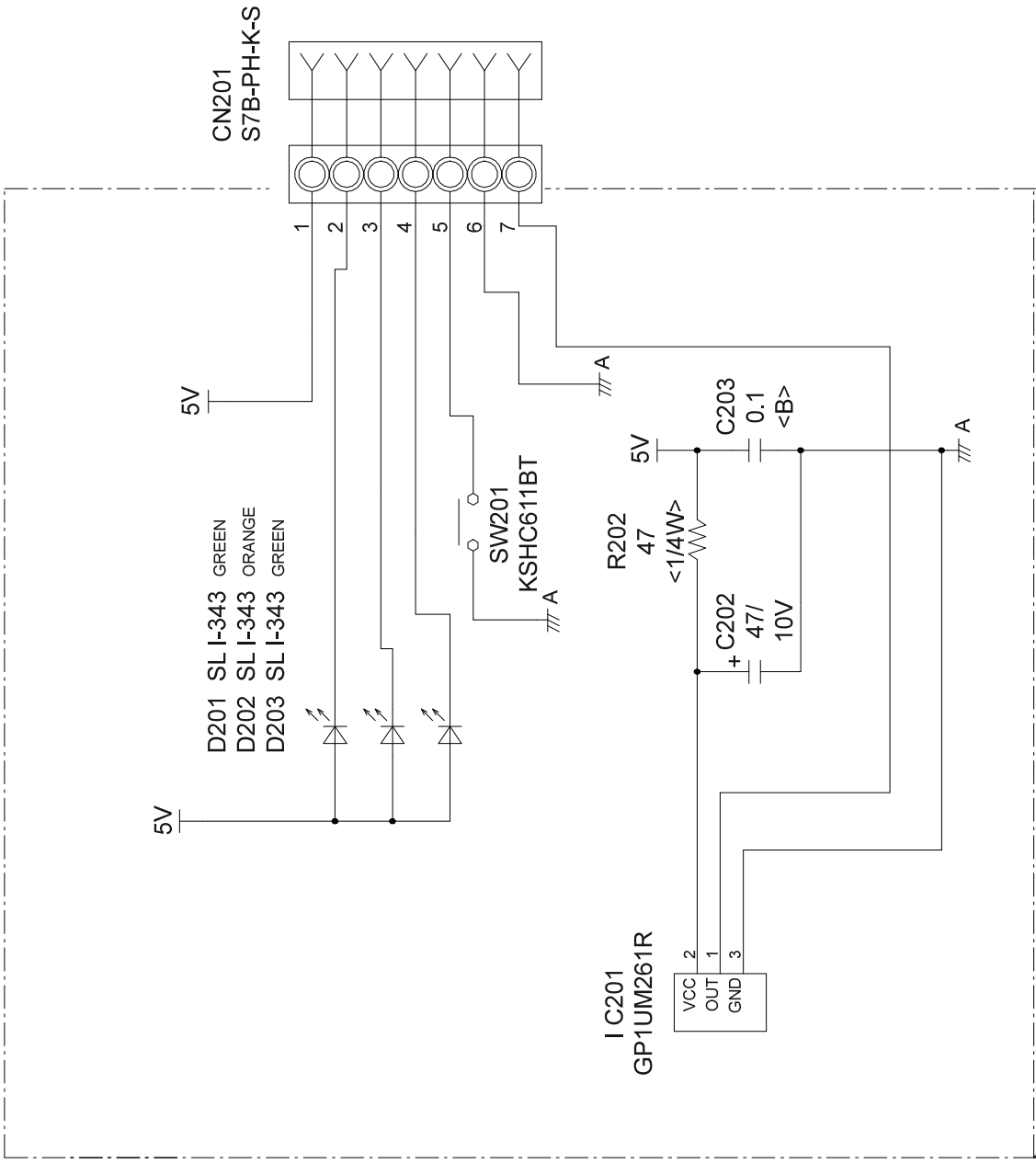
# INDOOR PCB CIRCUIT DIAGRAM



# INDOOR UNIT MAIN PCB K12JY-130FHSE-C1



INDOOR UNIT  
 INDICATOR PCB  
 K12JZ-1200HSE-D0

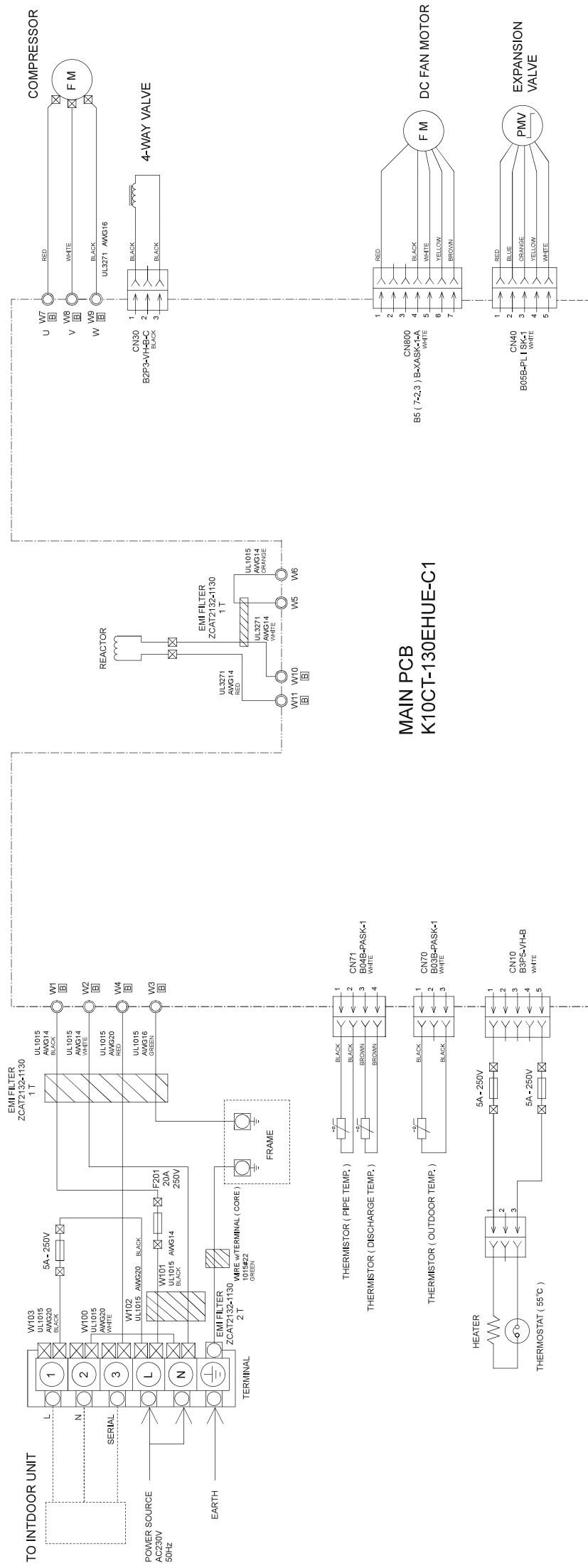






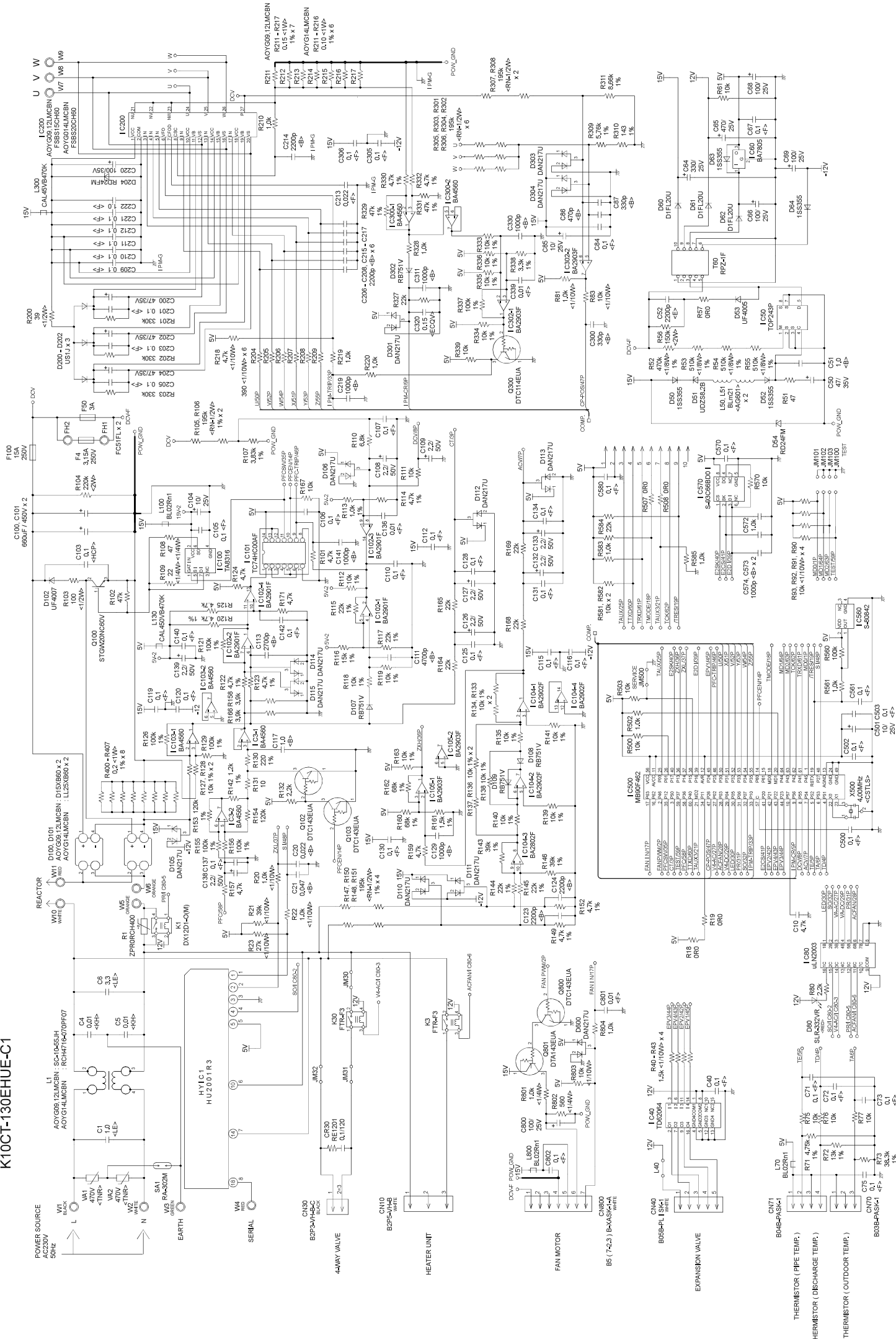
# OUTDOOR PCB CIRCUIT DIAGRAM

## INVERTER ASSEMBLY EZ-01317HUE



## MAIN PCB K10CT-130EHUE-C1

**OUTDOOR UNIT  
MAIN PCB  
K10CT-130EHUE-C1**



# ERROR DETECTION

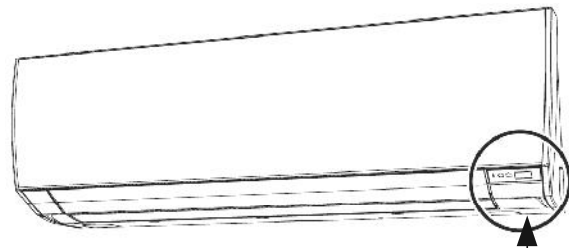
## INDOOR UNIT REMOTE CONTROL

If you use a wireless remote control, the lamp on the photo detector unit will output error codes by way of blinking patterns.

If you use a wired remote control, error codes will appear on the remote control display.

See the lamp blinking patterns and error codes in the table.

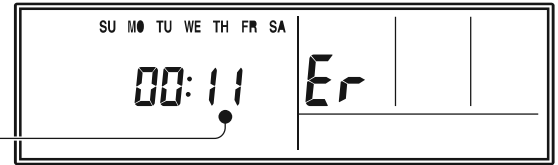
An error display is displayed only during operation.



OPERATION indicator lamp (green) —┐  
 TIMER indicator lamp (orange) —┐  
 ECONOMY indicator lamp (green) —┘

Wired remote control display (Option)

If an error occurs, the following display will be shown. ("Er" will appear in the set room temperature display.)



● : 0.5s ON / 0.5s OFF

◇ : 0.1s ON / 0.1s OFF

( ) : Number of flashing

Indoor unit lamps			Wired remote control	Description
OPERATION (green)	TIMER (orange)	ECONOMY (green)		
● (1)	● (1)	◇	11	Serial communication error
● (1)	● (2)	◇	12	Wired remote control communication error
● (1)	● (5)	◇	15	Check run unfinished
● (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 unit) [Simultaneous Multi] •Connection unit number error (indoor unit or branch unit) [Flexible Multi]
● (2)	● (7)	◇	27	Master unit, slave unit set-up error [Simultaneous Multi]
● (3)	● (2)	◇	32	Indoor unit PCB model information error
● (3)	● (5)	◇	35	Manual auto switch error
● (4)	● (1)	◇	41	Room temp. sensor error
● (4)	● (2)	◇	42	Indoor unit Heat Ex. Middle temp. sensor error
● (5)	● (1)	◇	51	Indoor unit fan motor error
● (5)	● (3)	◇	53	Drain pump error
● (5)	● (7)	◇	57	Damper error
● (5)	● (8)	◇	58	Intake grill error
● (5)	● (15)	◇	5U	Indoor unit 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

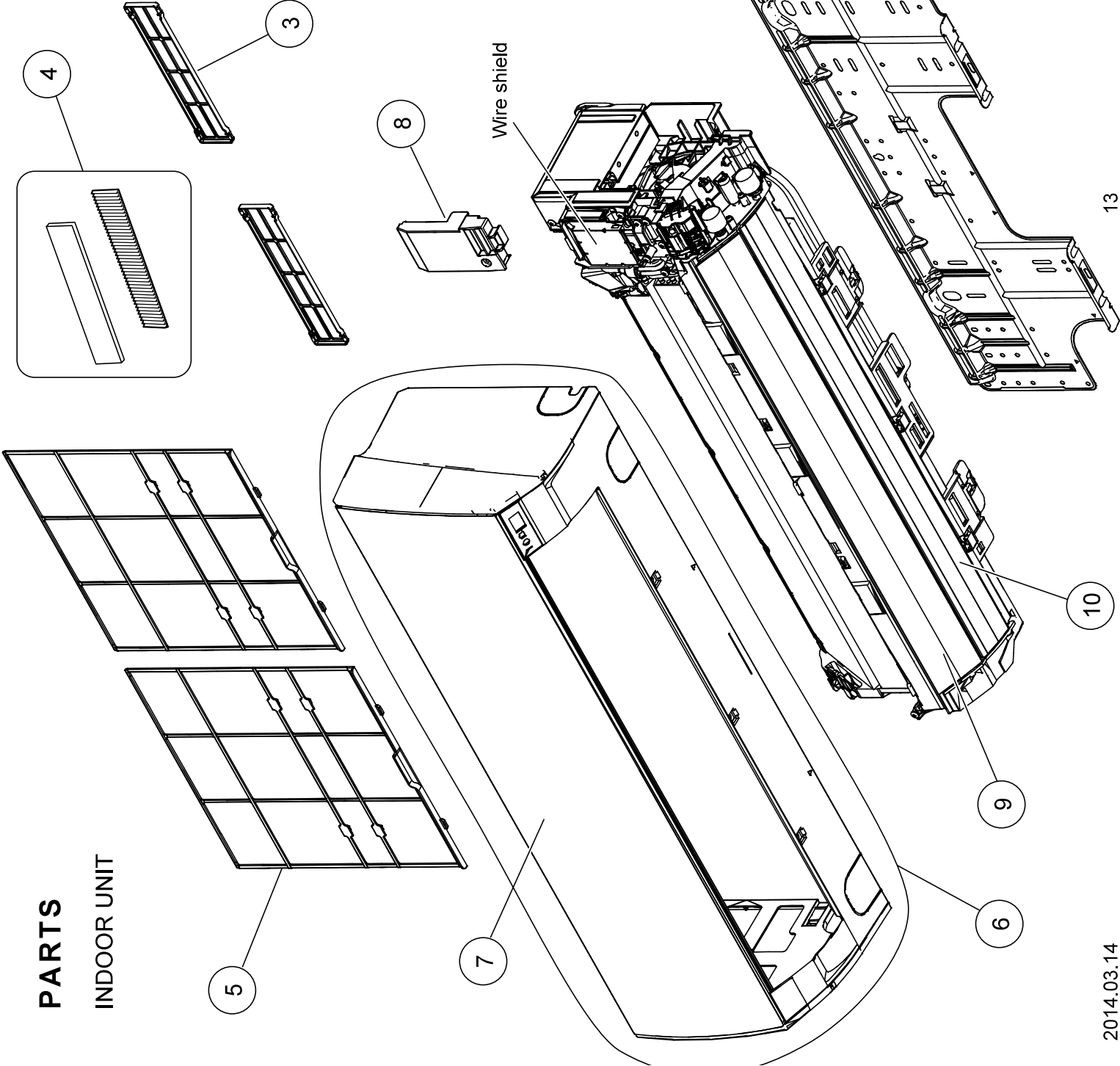
Indoor unit lamps			Wired remote control	Description
OPERATION (green)	TIMER (orange)	ECONOMY (green)		
● (6)	● (10)	◇	6A	Display PCB microcomputers communication error
● (7)	● (1)	◇	71	Discharge temp. sensor error
● (7)	● (2)	◇	72	Compressor temp. sensor error
● (7)	● (3)	◇	73	Outdoor unit Heat Ex. 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 error
● (9)	● (9)	◇	99	4-way 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

#### OUTDOOR UNIT

Indicator lamp	Error
on	Discharge temperature error
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor error
2.0 second on / 2.0 second off	CT error
0.1 second on / 2.0 second off	Compressor location error
5.0 second on / 5.0 second off	Fan error

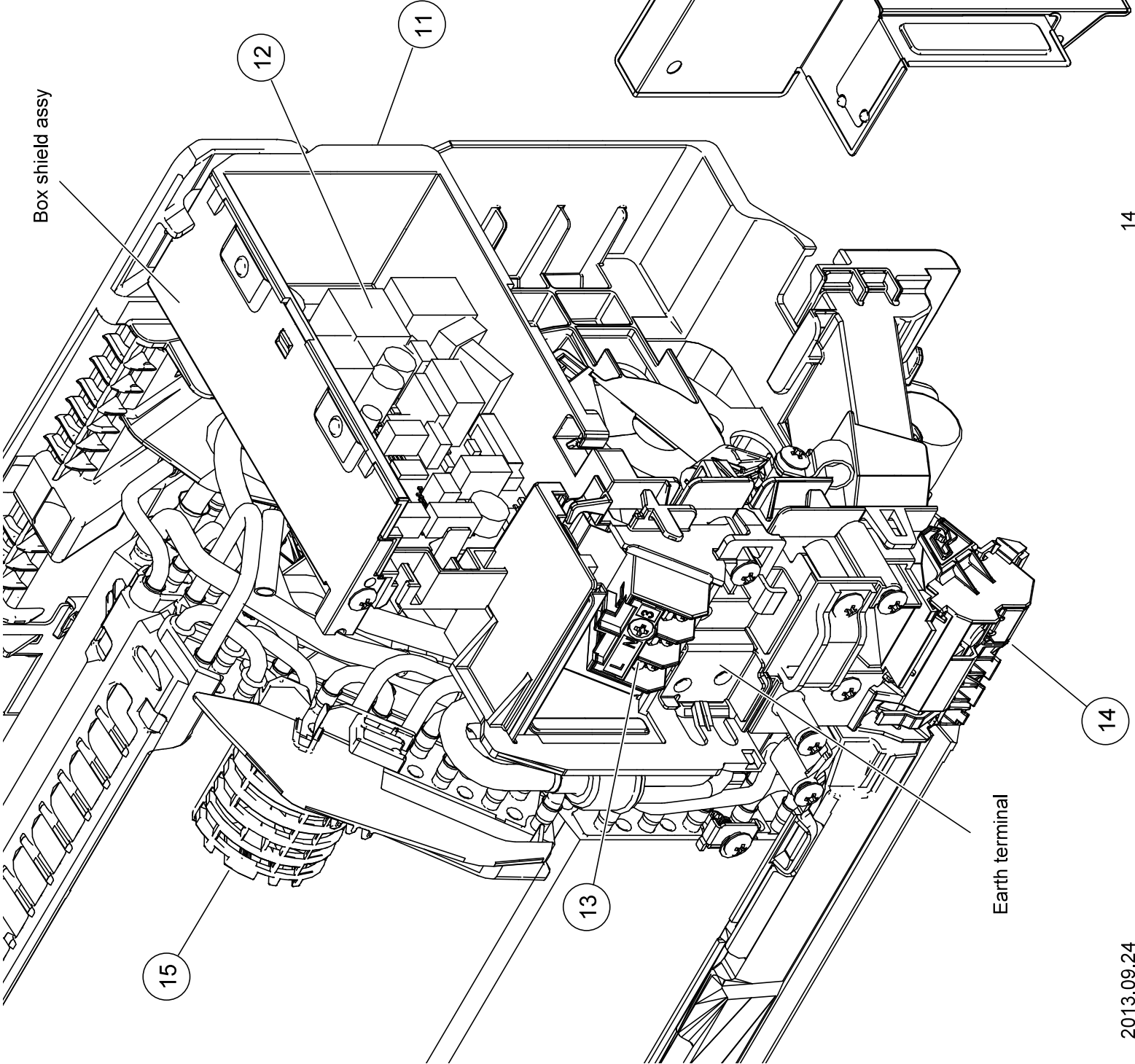
# PARTS

## INDOOR UNIT

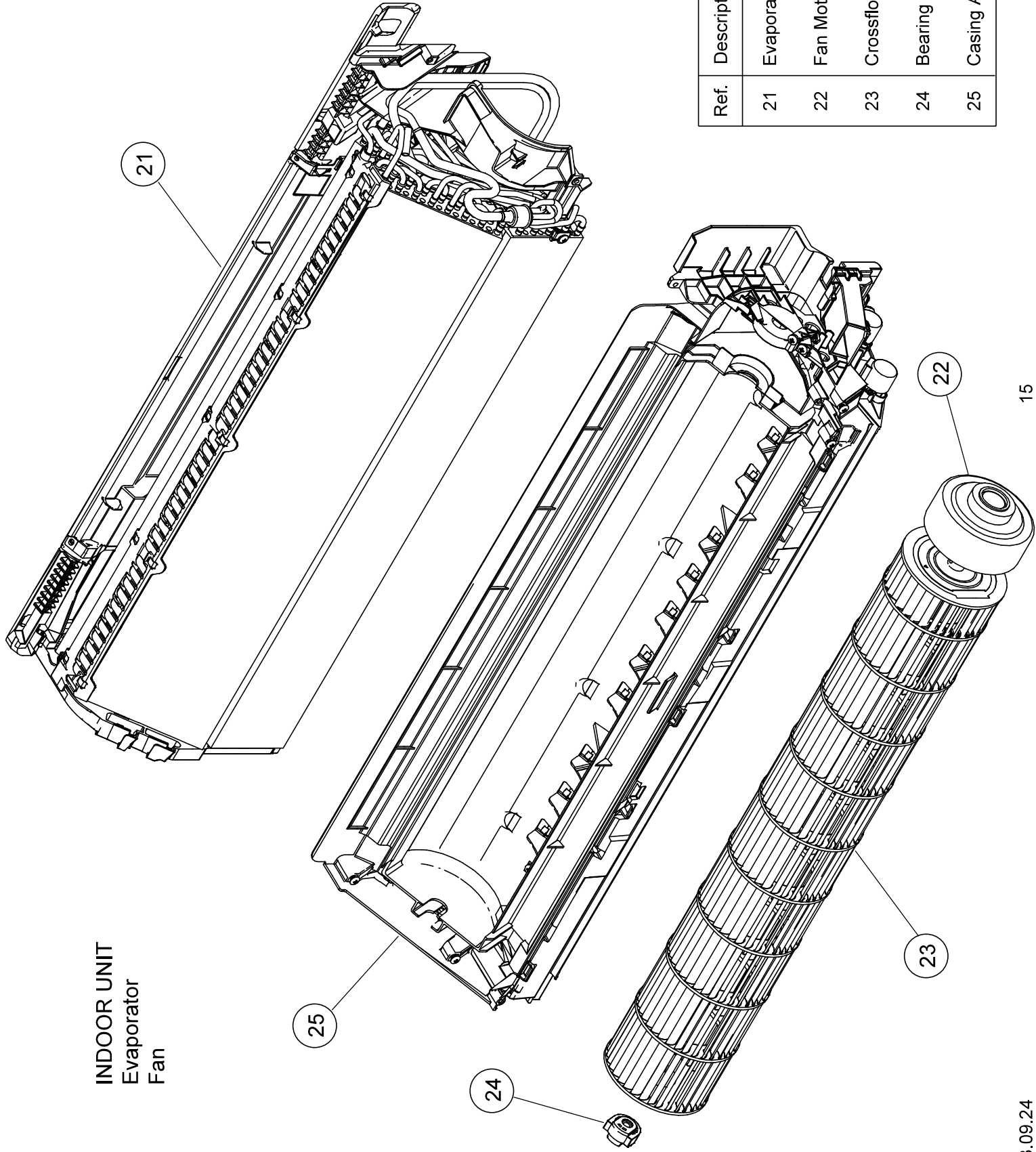


Ref.	Description	Part number
1	Remote Control	9319208008
2	Remote Control Holder	9318912005
3	Electric Filter Holder	9332911008
4	Air Clean Filter Assy	9317250009
5	Air Filter	9332875010
6	Front Panel Sub Assy (FUJITSU)	9332994001
7	Intake Grille (FUJITSU)	9333052007
8	Wire Cover	9332894004
9	Louver with Shaft cover	9333353005
10	Diffuser Assy	9332998009

Ref.	Description	Part number
11	Control Box	9332892000
12	Main PCB	9709427200
13	Terminal	9900720001
14	Display Assy	9709430019
15	Room Thermistor Holder	9332868005
--	Thermistor Assy	9900714024



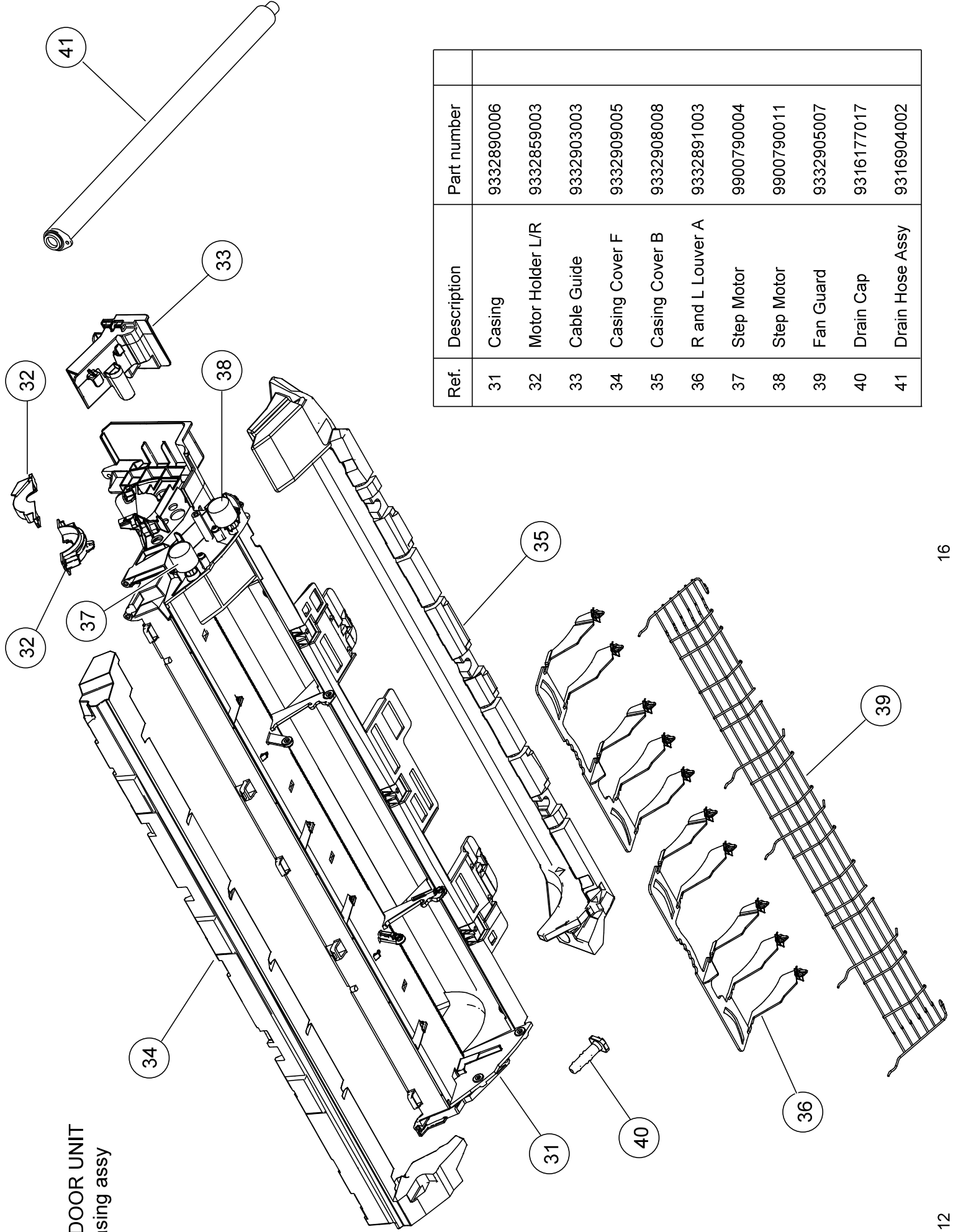
INDOOR UNIT  
Evaporator  
Fan



Ref.	Description	Part number
21	Evaporator Total Assy	9332989014
22	Fan Motor	9603269005
23	Crossflow Fan Assy	9316830004
24	Bearing C Assy	9306628017
25	Casing Assy	9333009001



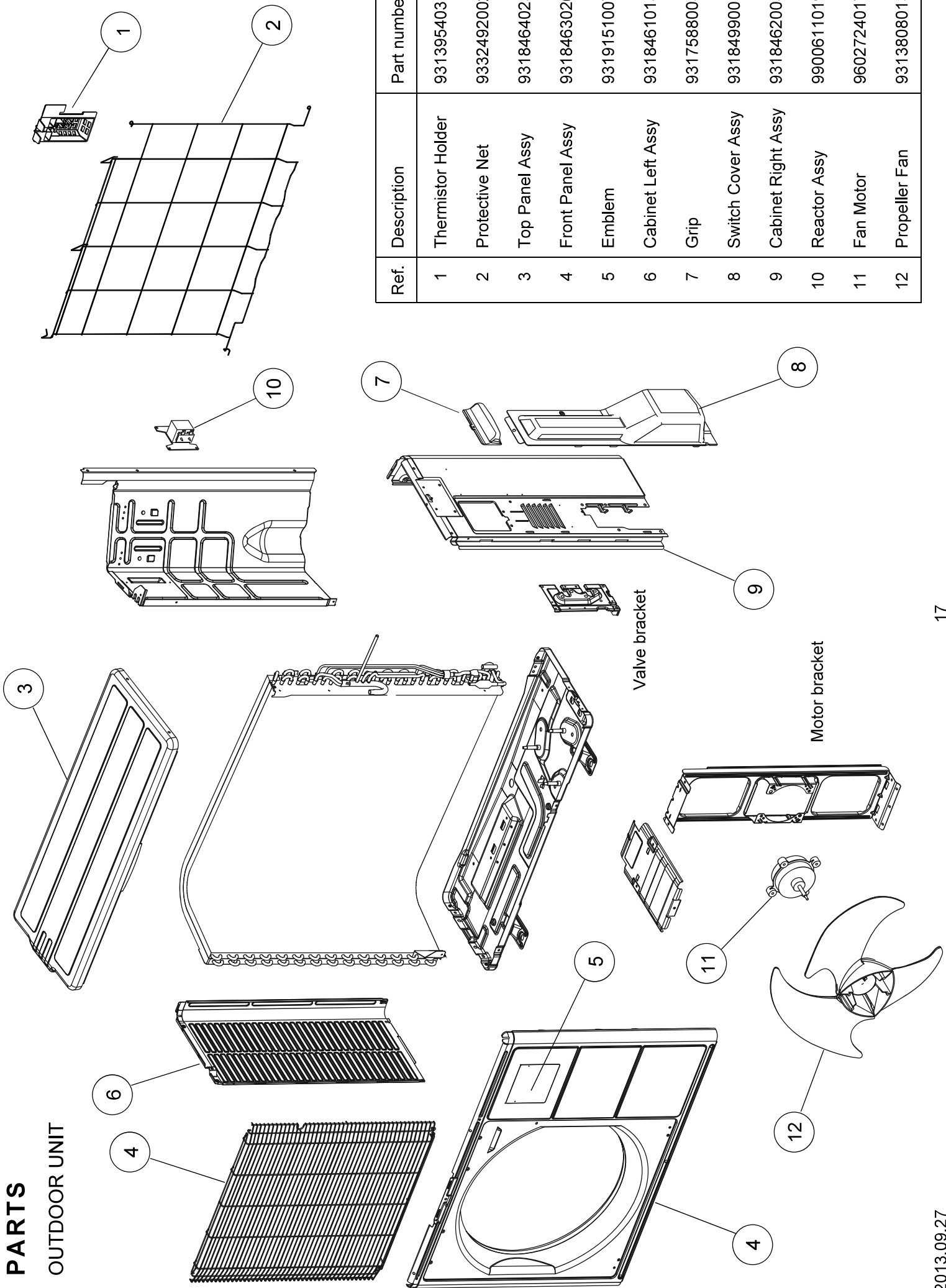
**INDOOR UNIT**  
Casing assy



Ref.	Description	Part number
31	Casing	9332890006
32	Motor Holder L/R	9332859003
33	Cable Guide	9332903003
34	Casing Cover F	9332909005
35	Casing Cover B	9332908008
36	R and L Louver A	9332891003
37	Step Motor	9900790004
38	Step Motor	9900790011
39	Fan Guard	9332905007
40	Drain Cap	9316177017
41	Drain Hose Assy	9316904002

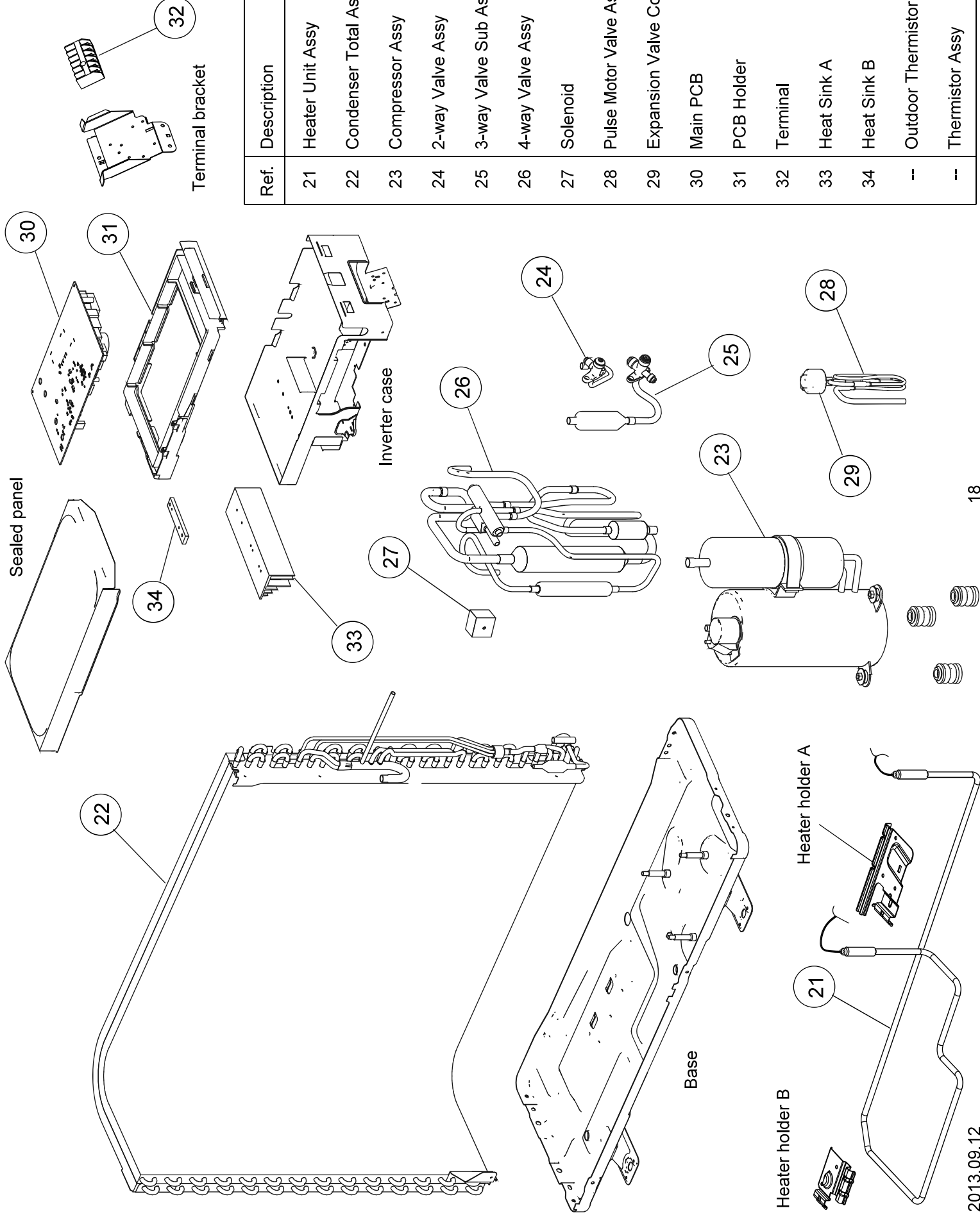
# PARTS

## OUTDOOR UNIT



Ref.	Description	Part number
1	Thermistor Holder	9313954031
2	Protective Net	9332492002
3	Top Panel Assy	9318464023
4	Front Panel Assy	9318463026
5	Emblem	9319151007
6	Cabinet Left Assy	9318461015
7	Grip	9317588003
8	Switch Cover Assy	9318499001
9	Cabinet Right Assy	9318462005
10	Reactor Assy	9900611019
11	Fan Motor	9602724017
12	Propeller Fan	9313808013

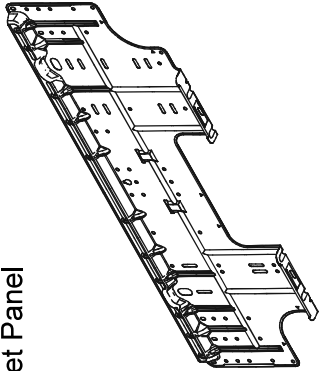



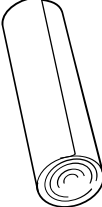
# OUTDOOR UNIT



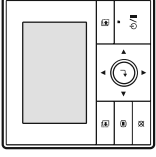
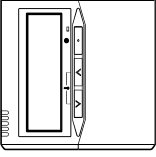
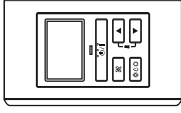
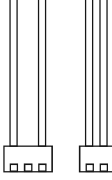
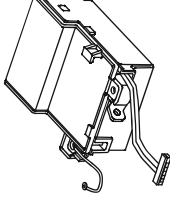
Ref.	Description	Part number
21	Heater Unit Assy	9900616014
22	Condenser Total Assy	9317089098
23	Compressor Assy	9317117005
24	2-way Valve Assy	9332371000
25	3-way Valve Sub Assy	9317109055
26	4-way Valve Assy	9315311092
27	Solenoid	9970110047
28	Pulse Motor Valve Assy	9332368048
29	Expansion Valve Coil	9970095030
30	Main PCB	9708753515
31	PCB Holder	9313074029
32	Terminal	9900435028
33	Heat Sink A	9314410017
34	Heat Sink B	9314090011
--	Outdoor Thermistor	9900544010
--	Thermistor Assy	9900614027

# ACCESSORIES

## INDOOR UNIT

Name and Shape	Part number
 <p>Bracket Panel</p>	9332882018
  <p>Remote Control</p>	9319208008
Remote Control Holder	9318912005
 <p>Battery (penlight)</p>	0600185541
 <p>Cloth tape</p>	9310519004

## OPTIONAL PARTS

Name and Shape	Part number
 <p>Wired remote control UTY-RVNYM</p>	9304536000
 <p>Wired remote control UTY-RNNYM</p>	0700076046
 <p>Simple remote Control UTY-RSNYM</p>	0700019036
 <p>External connect kit UTY-XWZXZ5</p>	9317250009
 <p>Communication kit UTY-XCBXZ2</p>	9332911008

1309G4251