

SPLIT TYPE  
ROOM AIR CONDITIONER  
WALL MOUNTED TYPE

# SERVICE MANUAL

|             |              |
|-------------|--------------|
| Indoor unit | Outdoor unit |
| ASYG18LFCA  | AOYG18LFC    |



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# SPECIFICATIONS

## ELECTRICAL DATA

|                        |                        |
|------------------------|------------------------|
| INDOOR UNIT            | ASYG18LFCA             |
| OUTDOOR UNIT           | AOYG18LFC              |
| POWER SOURCE           | 230 V                  |
| FREQUENCY              | 50 Hz                  |
| COOLING CAPACITY       | 5.20 kW                |
| HEATING CAPACITY       | 6.30 kW                |
| RUNNING CURRENT (Cool) | 6.8 A                  |
| RUNNING CURRENT (Heat) | 7.6 A                  |
| INPUT WATTS (Cooling)  | 1.52 kW                |
| INPUT WATTS (Heating)  | 1.71 kW                |
| E.E.R. (Cooling)       | 3.42 kW/kW             |
| C.O.P. (Heating)       | 3.68 kW/kW             |
| MAXIMUM CURRENT (Cool) | 9.0 A                  |
| MAXIMUM CURRENT (Heat) | 12.5 A                 |
| MOISTURE REMOVAL       | 2.8 L/hr               |
| AIR CIRCULATION HIGH   | 900 m <sup>3</sup> /hr |

## FAN MOTOR

|              |        |              |
|--------------|--------|--------------|
| POWER SOURCE |        | 230 V        |
| INDOOR UNIT  | High   | 1,220 r.p.m. |
|              | Medium | 1,020 r.p.m. |
|              | Low    | 900 r.p.m.   |
|              | Quiet  | 710 r.p.m.   |
| OUTDOOR UNIT | Cool   | 920 r.p.m.   |
|              | Heat   | 870 r.p.m.   |

## NOISE LEVEL

|                          |        |       |
|--------------------------|--------|-------|
| INDOOR UNIT<br>(Cooling) | High   | 43 dB |
|                          | Medium | 37 dB |
|                          | Low    | 33 dB |
|                          | Quiet  | 26 dB |
| INDOOR UNIT<br>(Heating) | High   | 42 dB |
|                          | Medium | 37 dB |
|                          | Low    | 33 dB |
|                          | Quiet  | 25 dB |
| OUTDOOR UNIT (Cool)      |        | 50 dB |
| OUTDOOR UNIT (Heat)      |        | 51 dB |

## COMPRESSOR AND REFRIGERANT

|                        |  |         |
|------------------------|--|---------|
| TYPE                   | Hermetic type,<br>4 pole, Rotary,<br>DC inverter motor |         |
| DISCRIMINATION         | 808 903 80   |         |
| WEIGHT (with oil)      | 9.0 kg   |         |
| REFRIGERANT TYPE       | R410A  |         |
| PRECHARGED REFRIGERANT | 1,200 g  |         |
| FULL CHARGE            | Pipe Length 15 m                                       | 1,200 g |
|                        | 20 m   | 1,300 g |
|                        | 25 m   | 1,400 g |
| ADDITIONAL CHARGE      | 20 g/m   |         |
| MAX HEIGHT             | 20 m   |         |

## DIMENSIONS

|              |           |                    |
|--------------|-----------|--------------------|
| INDOOR UNIT  | H x W x D | 320 x 998 x 238 mm |
| OUTDOOR UNIT | H x W x D | 620 x 790 x 298 mm |

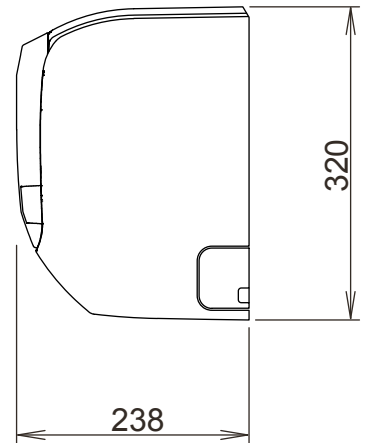
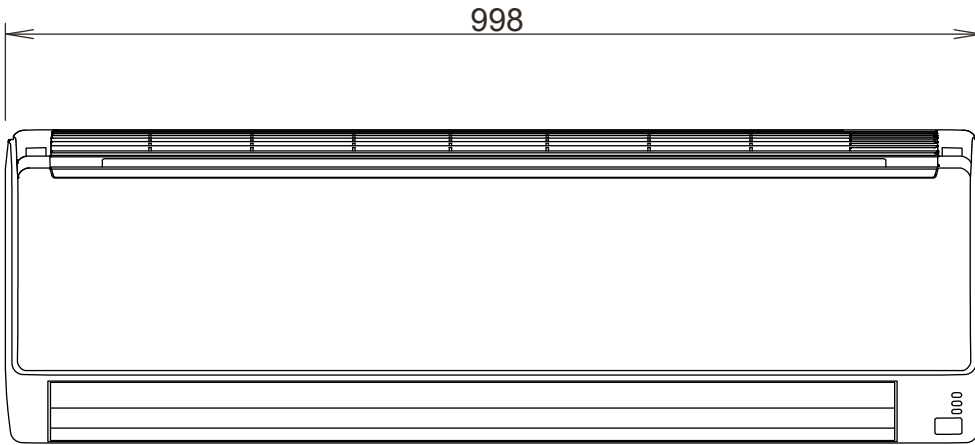
## WEIGHT

|              |                |               |
|--------------|----------------|---------------|
| INDOOR UNIT  | Shipping / Net | 18 kg / 14 kg |
| OUTDOOR UNIT | Shipping / Net | 45 kg / 41 kg |

# DIMENSIONS

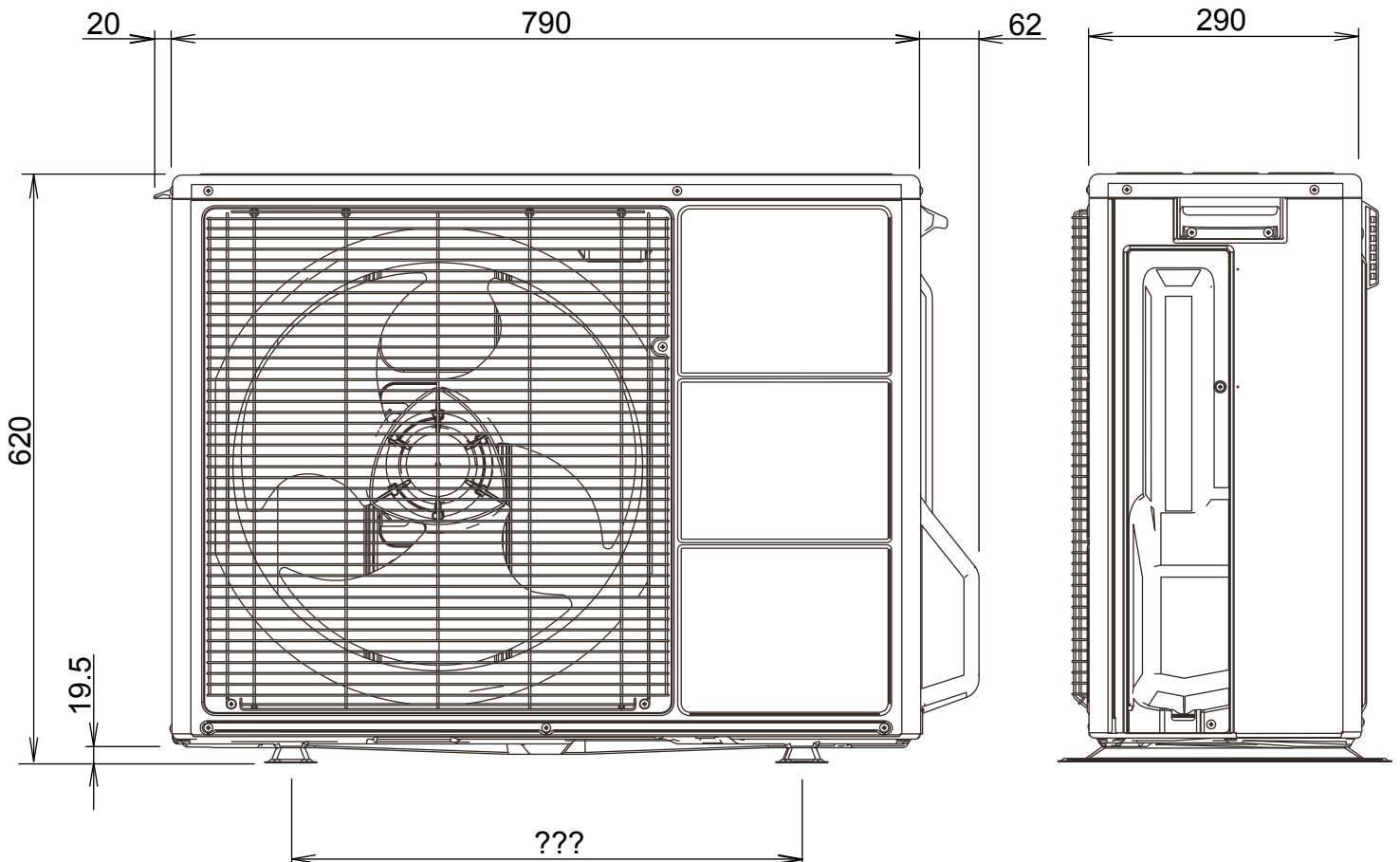
Unit : mm

## INDOOR UNIT

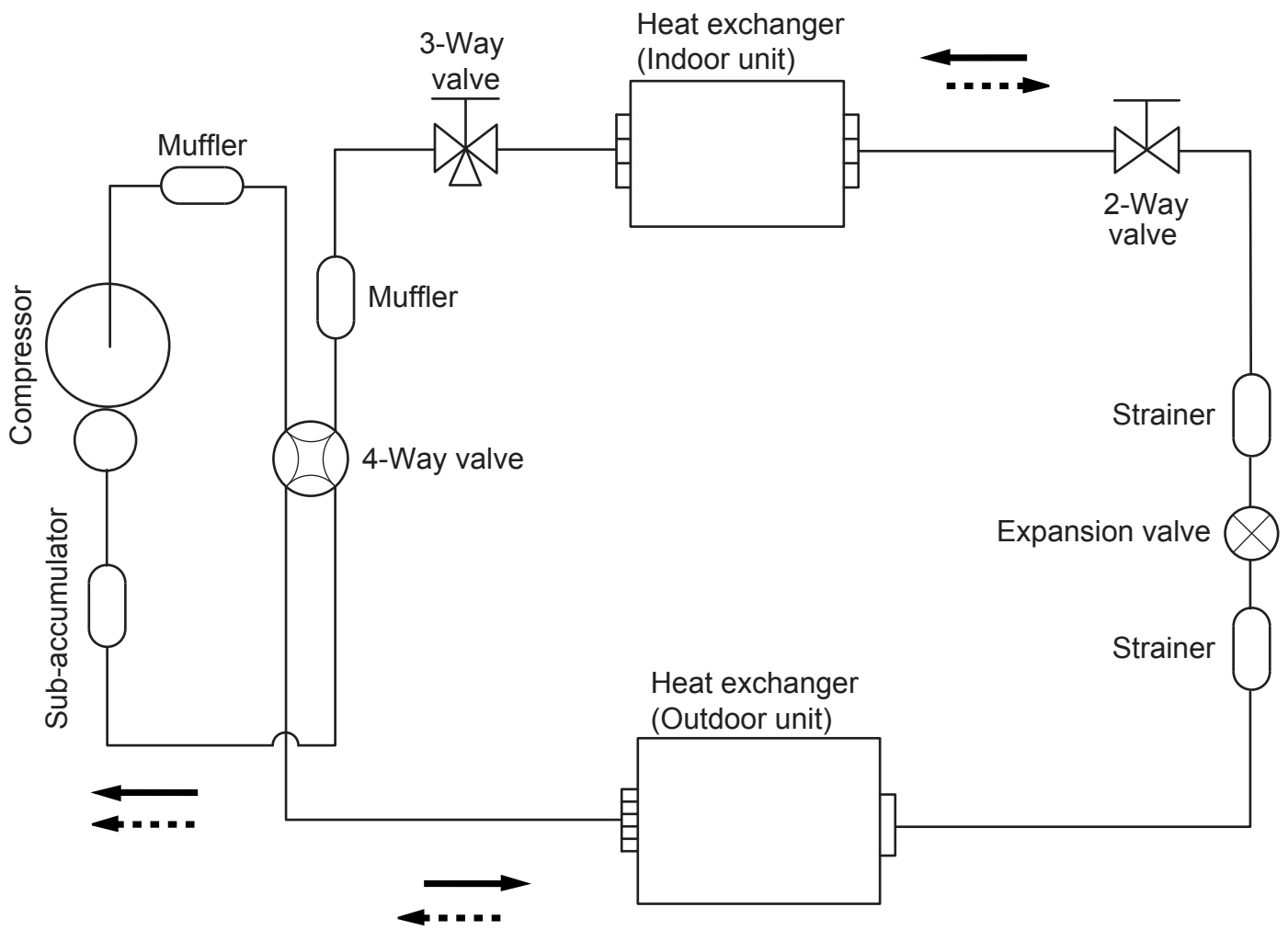


Drain hose length : 670 mm


## OUTDOOR UNIT



# REFRIGERANT SYSTEM DIAGRAM



Refrigerant direction

-  Cooling
-  Heating

Refrigerant pipe diameter

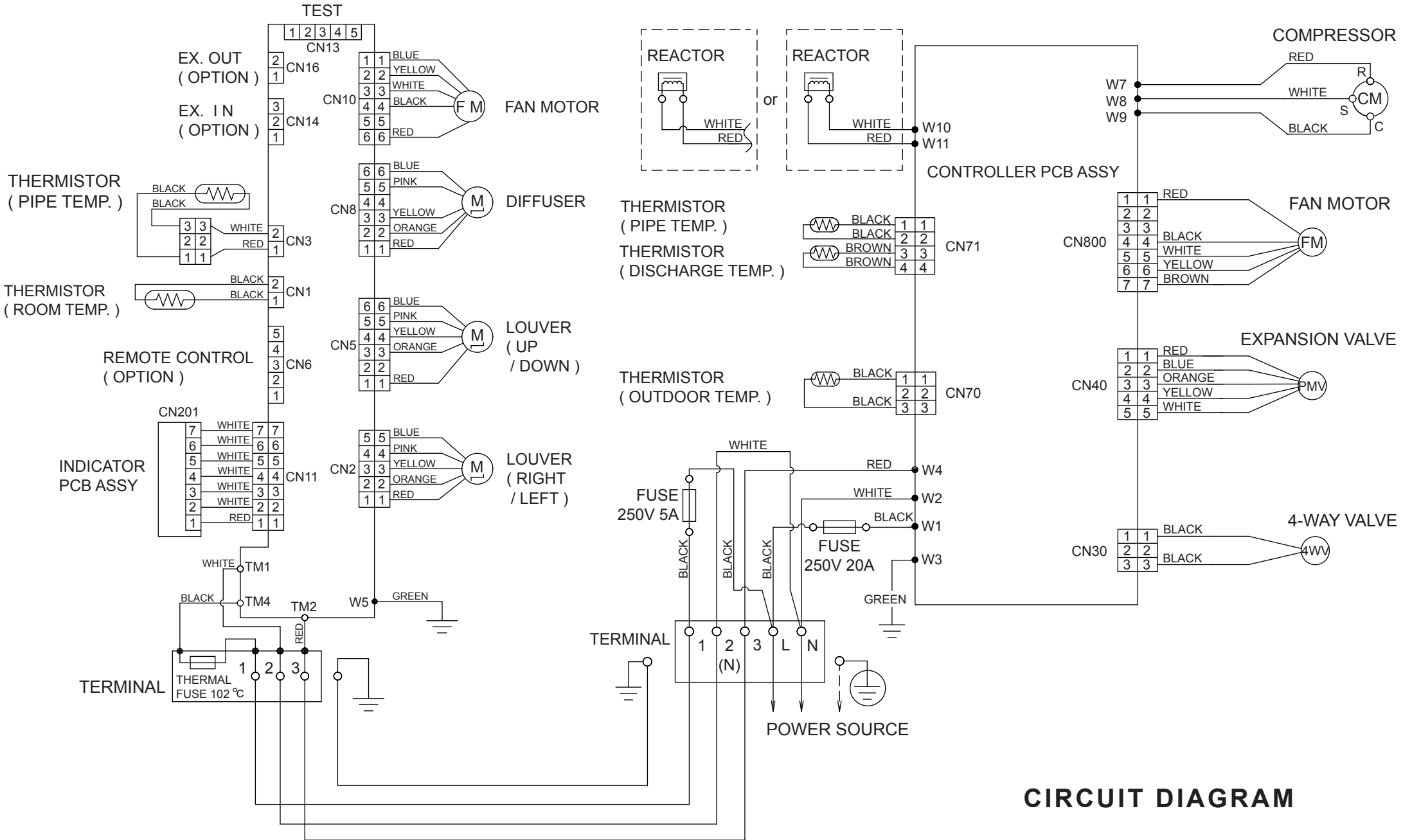
Liquid : 1/4" (6.35 mm)

Gas : 1/2" (12.7 mm)

INDOOR UNIT

CONTROLLER  
PCB ASSY  
( MAIN PCB )

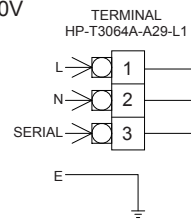
OUTDOOR UNIT



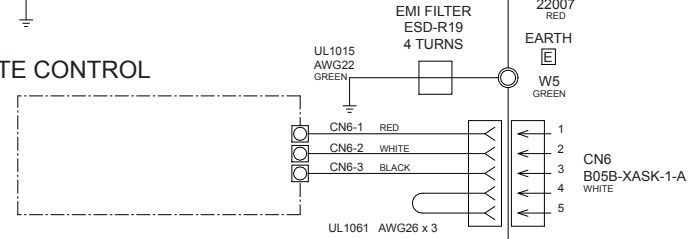
**CIRCUIT DIAGRAM**

# CONTROL UNIT EZ-010YHSE

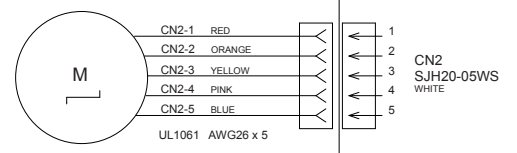
POWER SOURCE  
AC230V  
50Hz



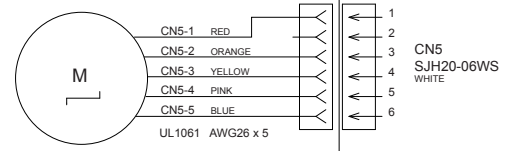
WIRED REMOTE CONTROL  
( OPTION )



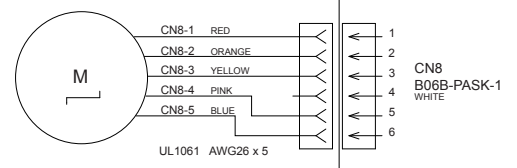
LOUVER ( RIGHT / LEFT )



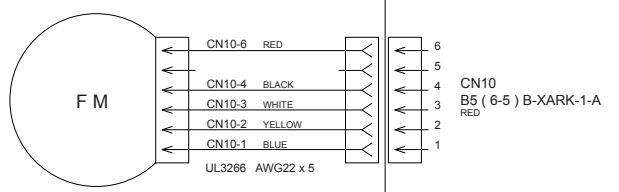
LOUVER ( UP / DOWN )



LOUVER ( DIFFUSER )

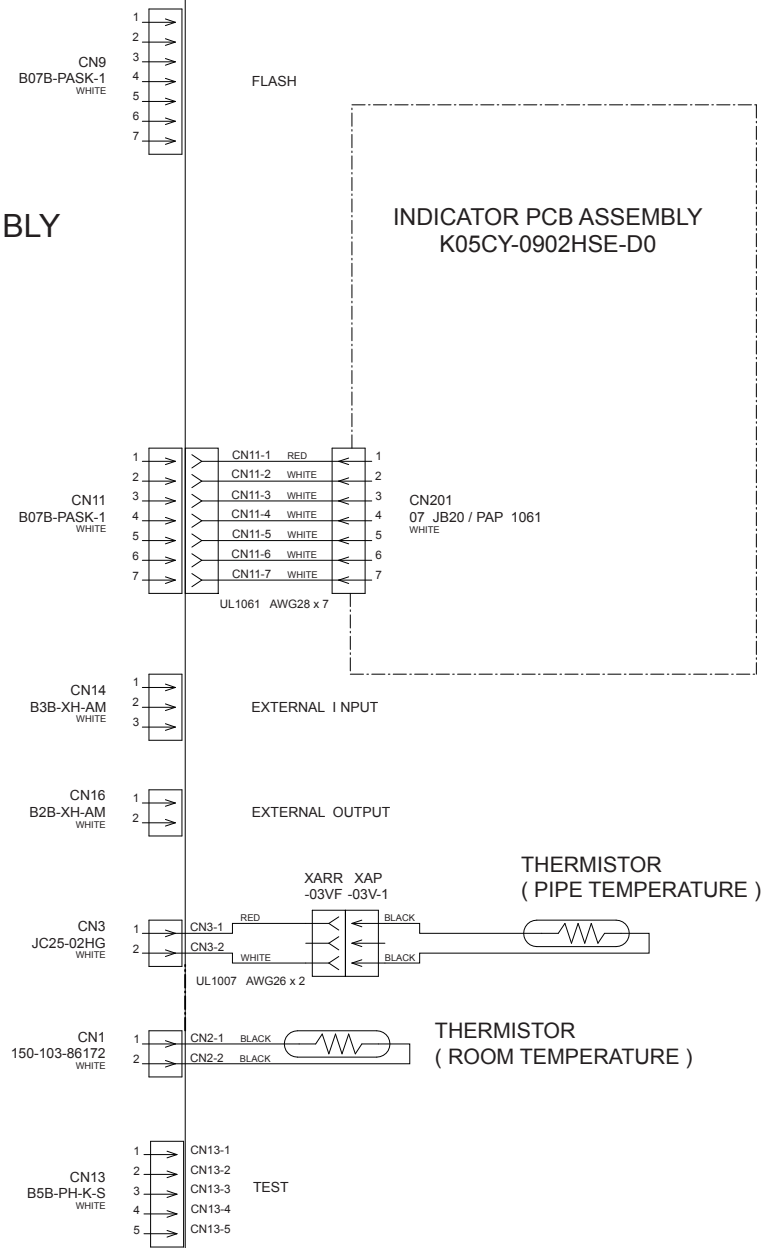


DC FAN MOTOR

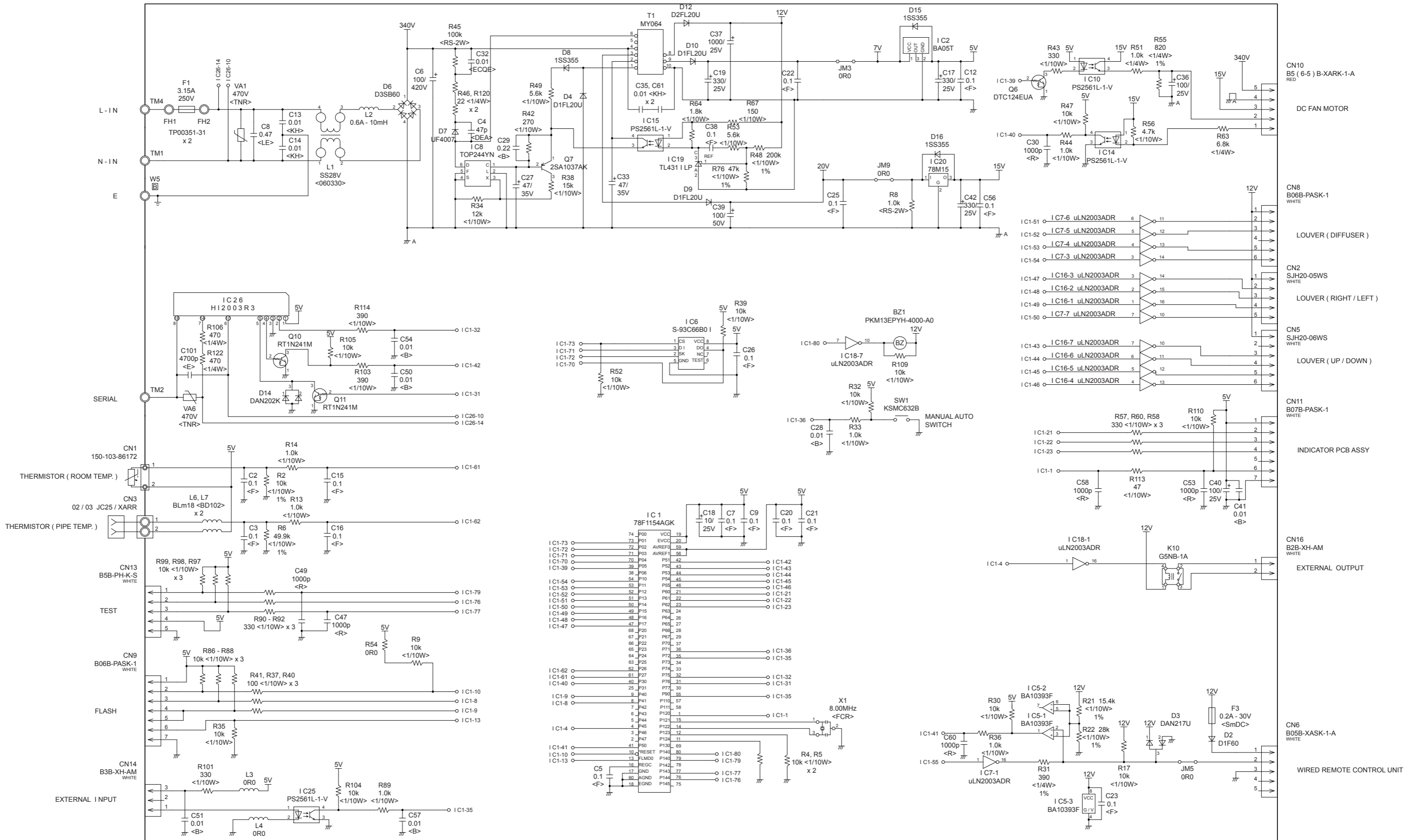


## CONTROLLER PCB ASSEMBLY ( MAIN PCB ) K09DR-1001HSE-C1

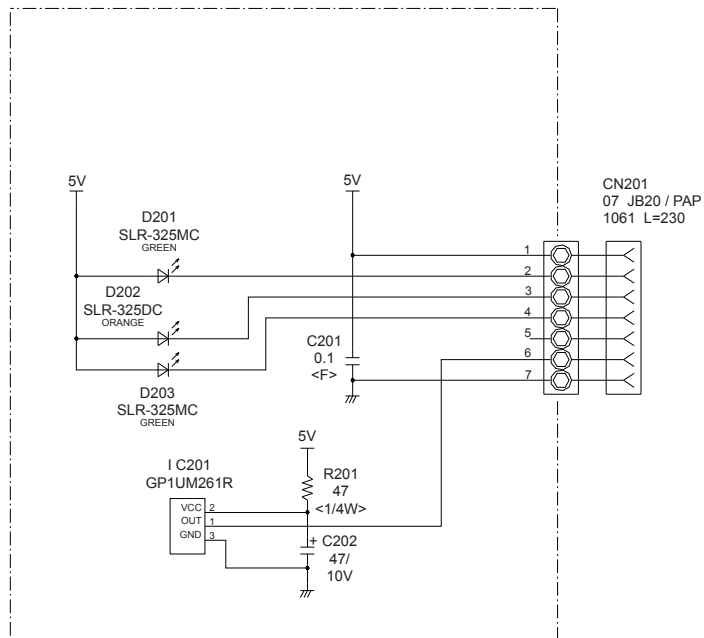
## INDOOR PCB CIRCUIT DIAGRAM



INDOOR UNIT  
 CONTROLLER PCB ASSEMBLY ( MAIN PCB )  
 K09DR-1001HSE-C1



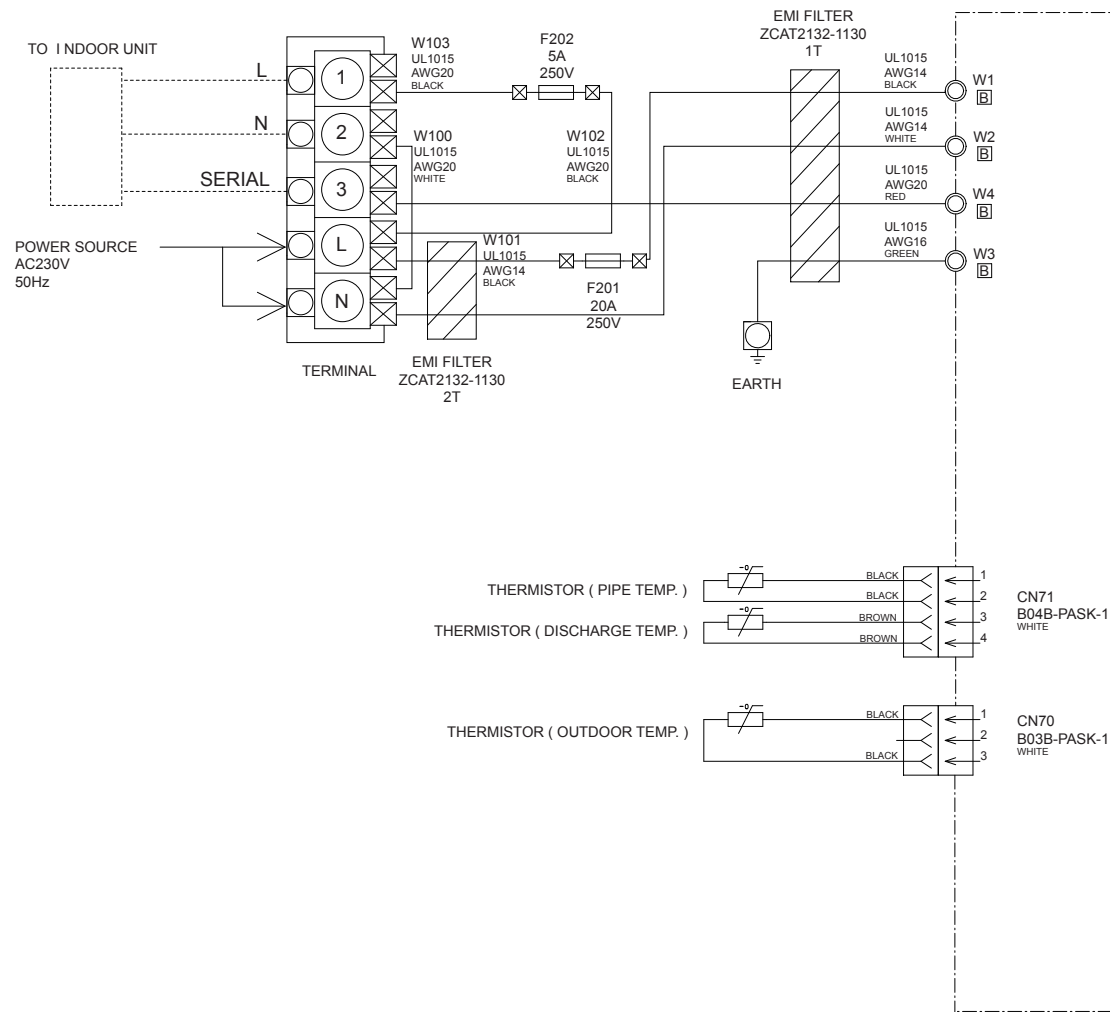
INDOOR UNIT  
 INDICATOR PCB ASSEMBLY  
 K05CY-0902HSE-D0



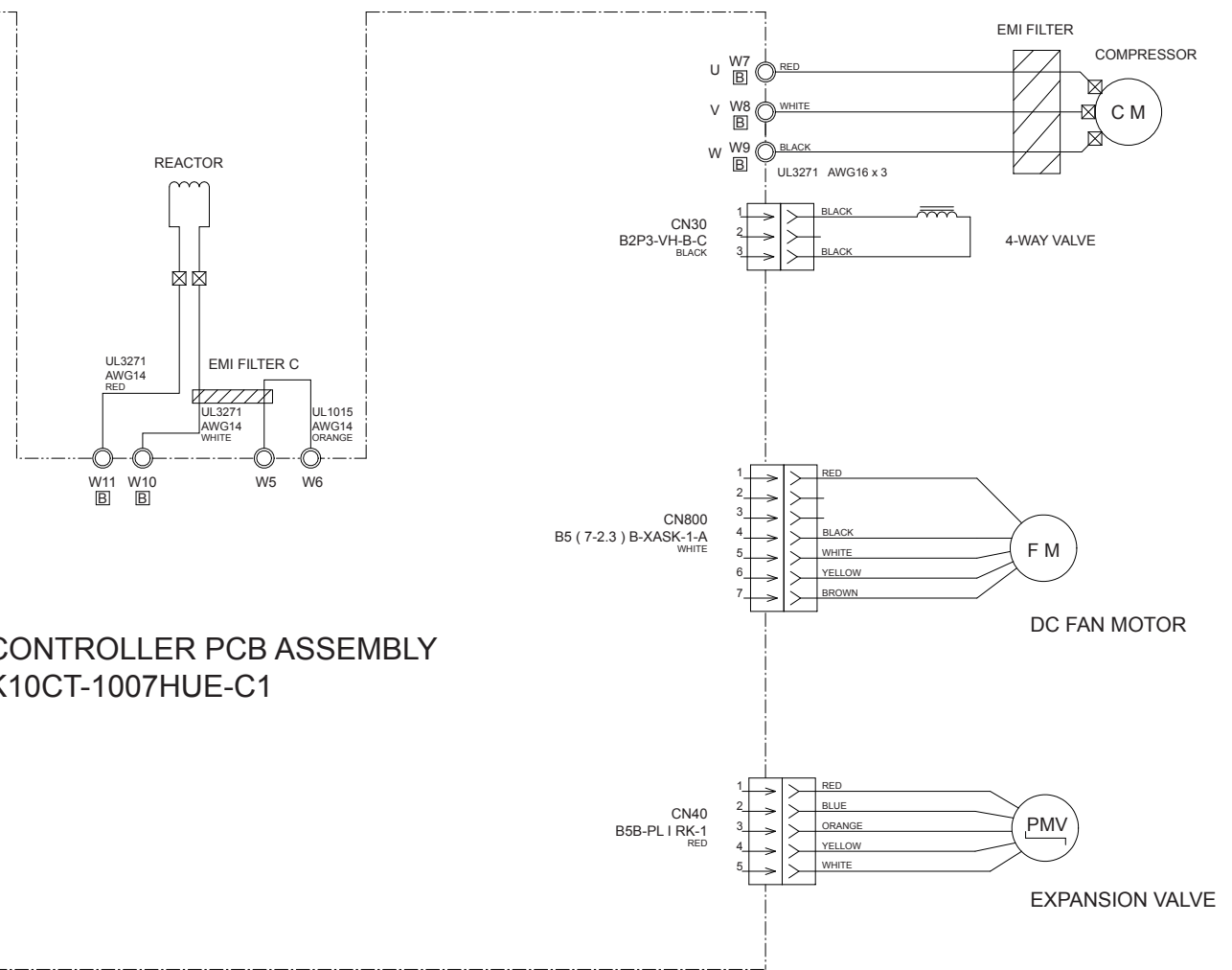


# OUTDOOR PCB CIRCUIT DIAGRAM

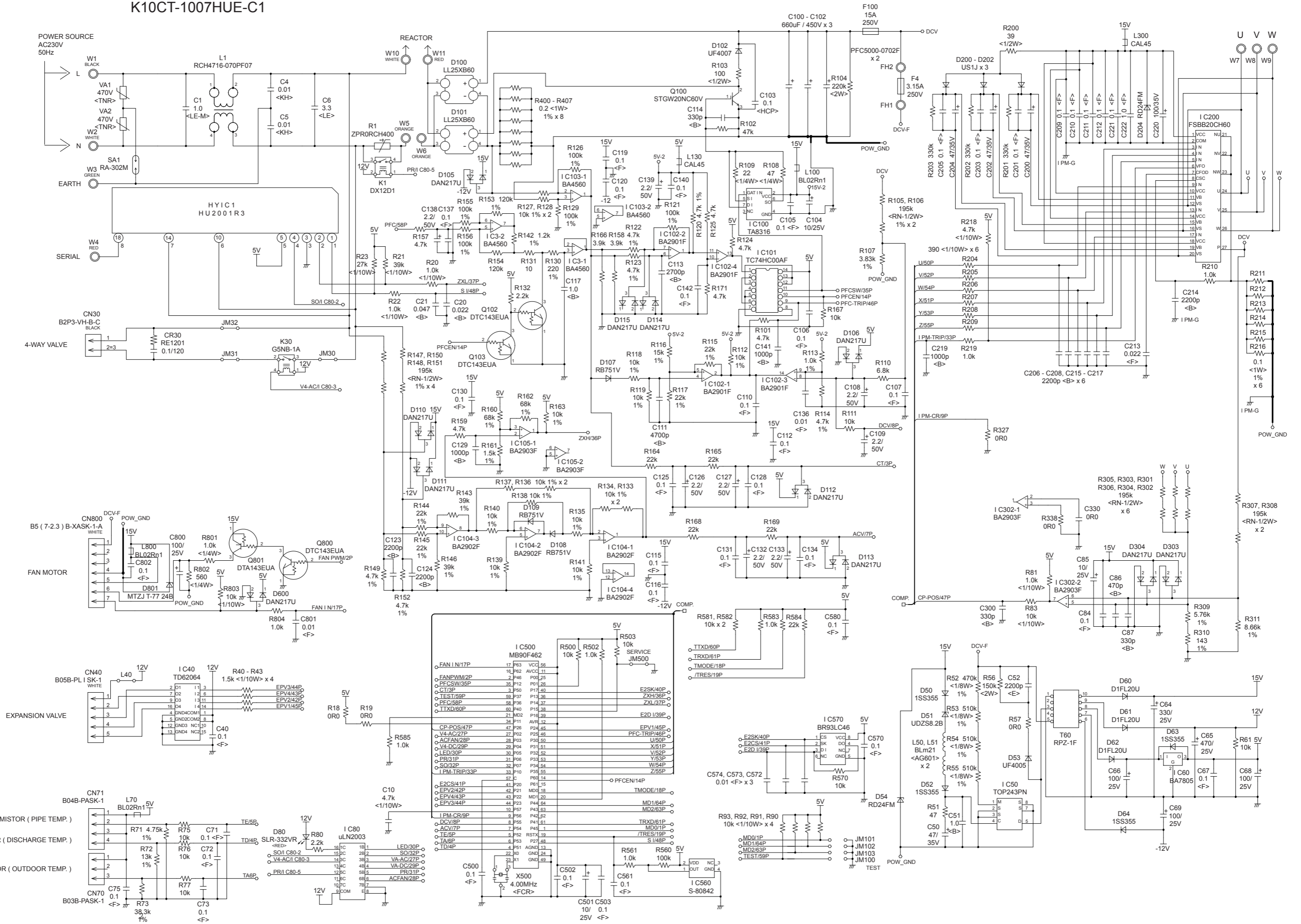
## INVERTER ASSEMBLY EZ-0101MHUE



## CONTROLLER PCB ASSEMBLY K10CT-1007HUE-C1



# OUTDOOR UNIT CONTROLLER PCB ASSEMBLY K10CT-1007HUE-C1

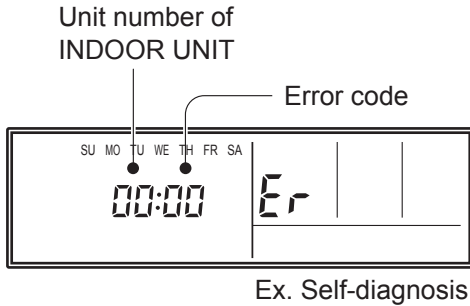


# ERROR DETECTION

## INDOOR UNIT and REMOTE CONTROL

If an error occurs, the following display will be shown.

("Er" will appear in the set room temperature display.)

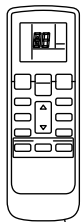
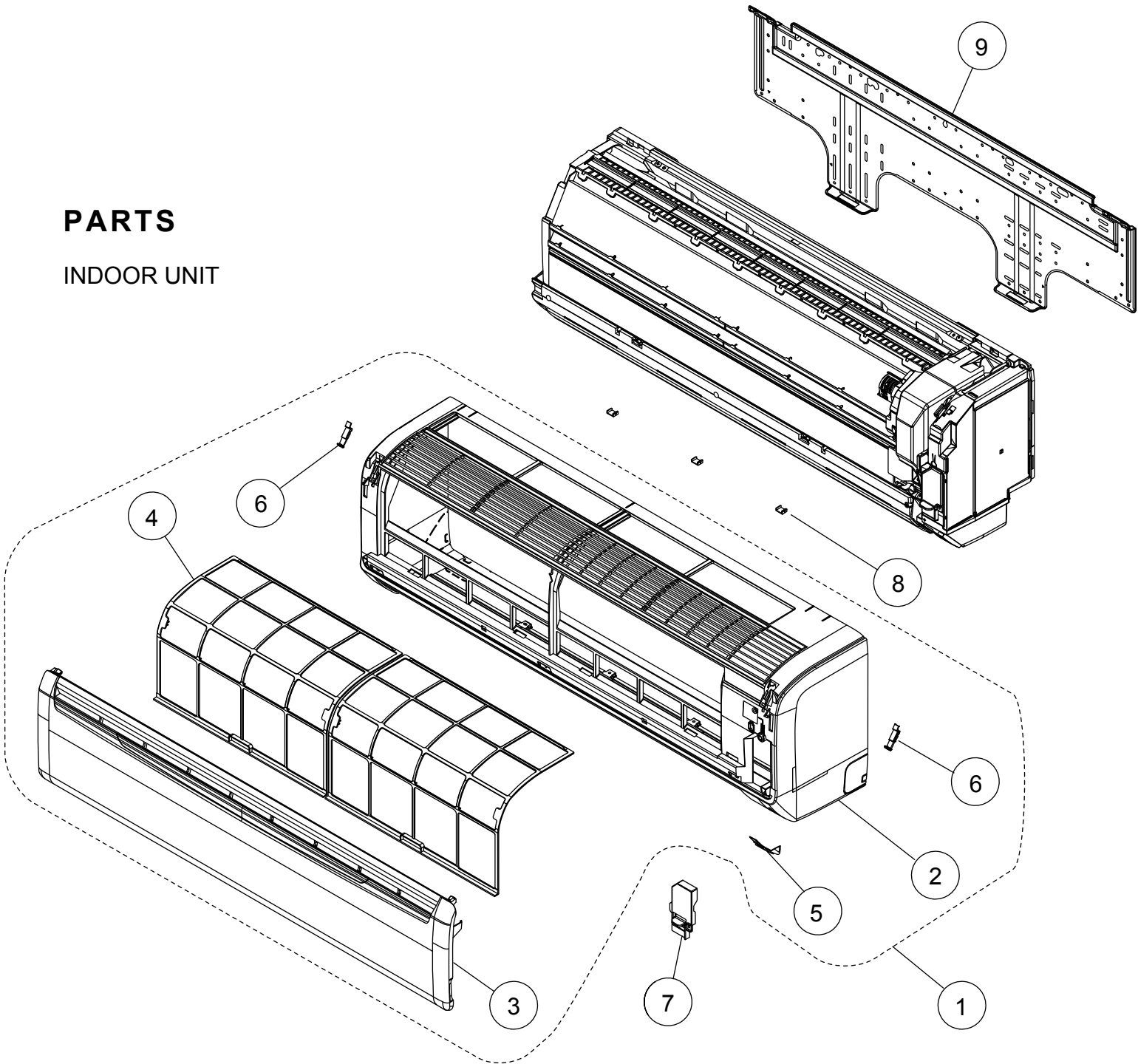


- : 0.5s ON / 0.5s OFF
- ◇ : 0.1s ON / 0.1s OFF
- ( ) : Number of flashing

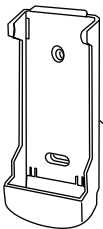
| Indoor unit            |                     |                  | Wired remote control | Mode               | DESCRIPTION   |
|------------------------|---------------------|------------------|----------------------|--------------------|---|
| OPERATION lamp (green) | TIMER lamp (orange) | ECO lamp (green) |                      |                    |   |
| ● (1)                  | ● (1)               | ◇                | 11                   | Communication      | Serial communication error  |
| ● (1)                  | ● (2)               | ◇                | 12                   | Communication      | Wired remote control communication error  |
| ● (2)                  | ● (2)               | ◇                | 22                   | System             | Indoor unit capacity error  |
| ● (3)                  | ● (1)               | ◇                | 31                   | Indoor unit        | Power supply interruption error   |
| ● (3)                  | ● (5)               | ◇                | 35                   | Indoor unit        | Manual auto switch error  |
| ● (3)                  | ● (9)               | ◇                | 39                   | Indoor unit        | fan motor driving circuit error   |
| ● (4)                  | ● (1)               | ◇                | 41                   | Indoor unit        | Inlet air temp. sensor error  |
| ● (4)                  | ● (2)               | ◇                | 42                   | Indoor unit        | Indoor Heat Ex. Middle Temp. Sensor error                                       |
| ● (5)                  | ● (1)               | ◇                | 51                   | Indoor unit        | Indoor unit fan motor1 error  |
| ● (5)                  | ● (3)               | ◇                | 53                   | Indoor unit        | Drainage error  |
| ● (5)                  | ● (9)               | ◇                | 59                   | Indoor unit        | Indoor unit fan motor2 error  |
| ● (5)                  | ● (15)              | ◇                | 5U                   | Indoor unit        | Indoor unit error   |
| ● (6)                  | ● (2)               | ◇                | 62                   | Outdoor unit       | Outdoor unit model information error  |
| ● (6)                  | ● (3)               | ◇                | 63                   | Outdoor unit       | Inverter error  |
| ● (6)                  | ● (5)               | ◇                | 65                   | Outdoor unit       | I.P.M. error  |
| ● (7)                  | ● (1)               | ◇                | 71                   | Outdoor unit       | Discharge temp. sensor error  |
| ● (7)                  | ● (2)               | ◇                | 72                   | Outdoor unit       | Compressor temp. sensor error   |
| ● (7)                  | ● (3)               | ◇                | 73                   | Outdoor unit       | Heat Ex. centre temp. sensor error<br>Heat Ex. Liquid outlet temp. sensor error |
| ● (7)                  | ● (4)               | ◇                | 74                   | Outdoor unit       | Outdoor temp. sensor error  |
| ● (7)                  | ● (7)               | ◇                | 77                   | Outdoor unit       | Heat sink temp. sensor error  |
| ● (8)                  | ● (4)               | ◇                | 84                   | Outdoor unit       | Current sensor error  |
| ● (8)                  | ● (6)               | ◇                | 86                   | Outdoor unit       | Pressure sensor error<br>High pressure switch error                             |
| ● (9)                  | ● (4)               | ◇                | 94                   | Outdoor unit       | Over current error  |
| ● (9)                  | ● (5)               | ◇                | 95                   | Outdoor unit       | Compressor control error  |
| ● (9)                  | ● (7)               | ◇                | 97                   | Outdoor unit       | Outdoor unit fan motor 1 error  |
| ● (9)                  | ● (8)               | ◇                | 98                   | Outdoor unit       | Outdoor unit fan motor 2 error  |
| ● (9)                  | ● (9)               | ◇                | 99                   | Outdoor unit       | 4-way valve error   |
| ● (10)                 | ● (1)               | ◇                | A1                   | Refrigerant system | Discharge temp. error   |
| ● (10)                 | ● (3)               | ◇                | A3                   | Refrigerant system | Compressor temp. error  |
| ● (10)                 | ● (5)               | ◇                | A5                   | Refrigerant system | Low pressure error  |

# PARTS

## INDOOR UNIT



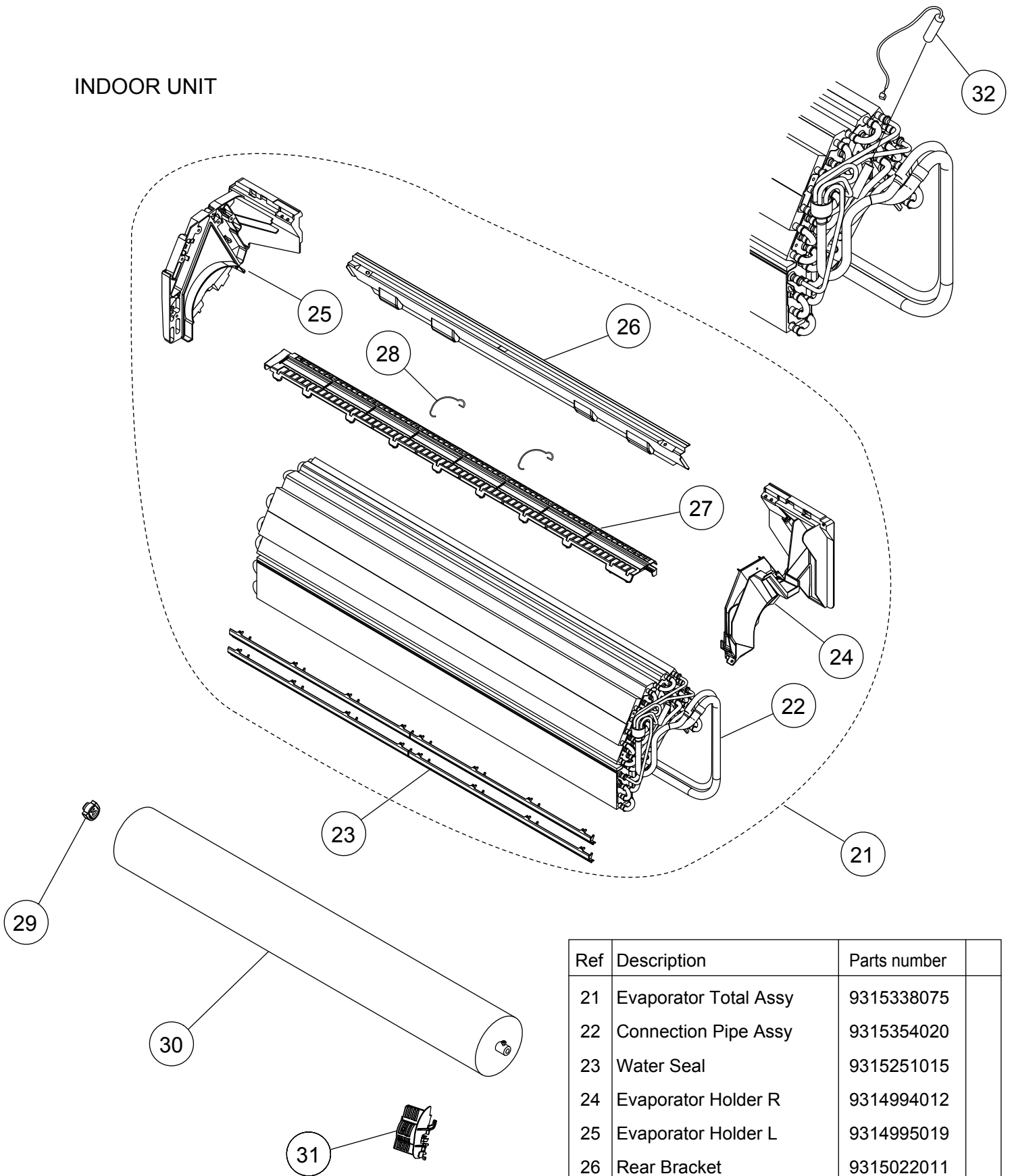
10



11

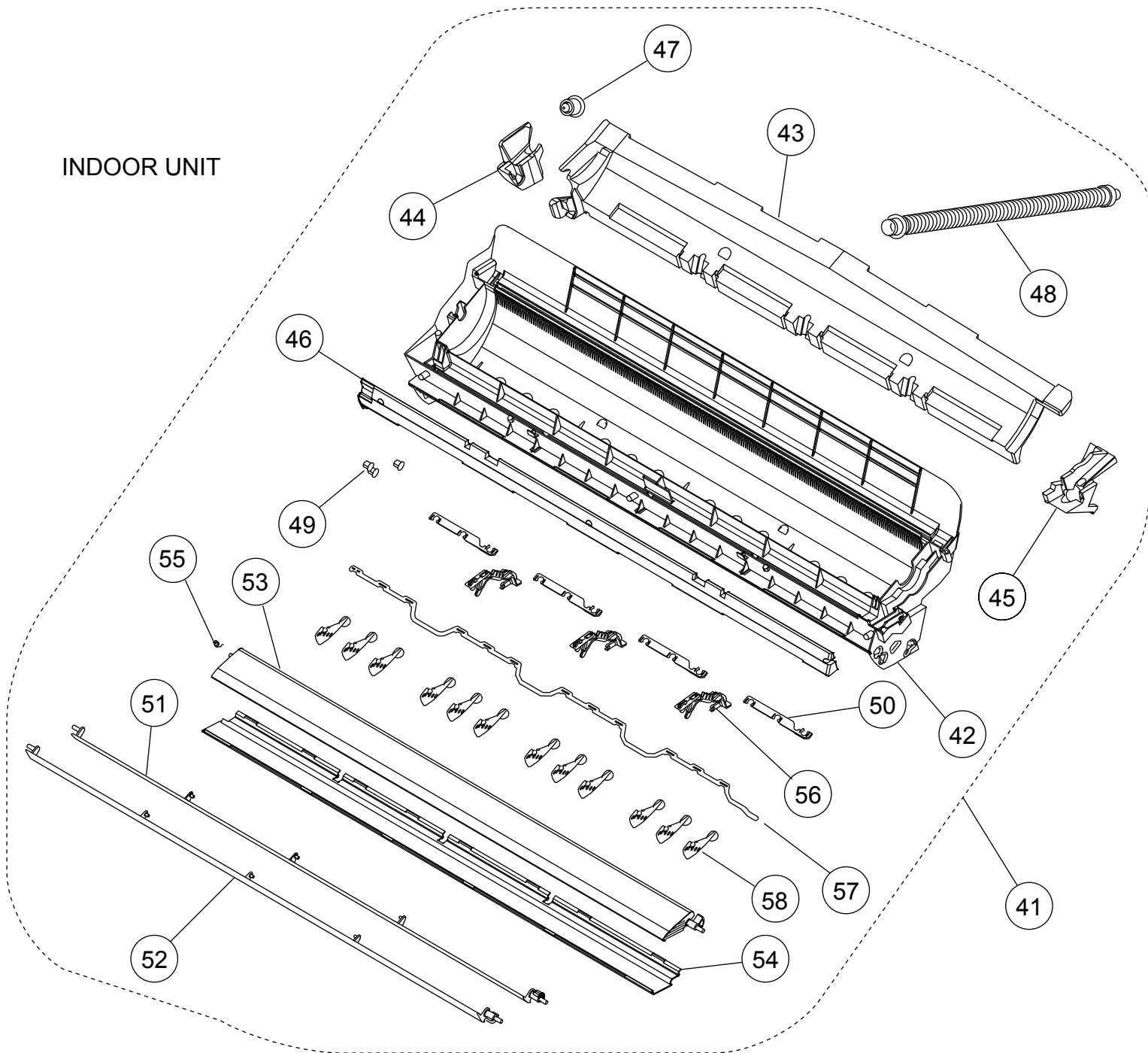
| Ref | Description            | Parts number |
|-----|------------------------|--------------|
| 1   | Front Panel Total Assy | 9318738001   |
| 2   | Front Panel            | 9314991080   |
| 3   | Intake Grille Assy     | 9385985049   |
| 4   | Air Filter             | 9315014016   |
| 5   | Receiver Window        | 9315010018   |
| 6   | Clamper Grille         | 9306755010   |
| 7   | Wire Clamper           | 9315015013   |
| 8   | Cap (Screw)            | 9309002050   |
| 9   | Bracket Panel          | 9315023018   |
| 10  | Remote Control         | 9379219037   |
| 11  | Remote Control Holder  | 9305642045   |
| --  | Air Clean Filter Assy  | 9315212016   |

# INDOOR UNIT



| Ref | Description              | Parts number |
|-----|--------------------------|--------------|
| 21  | Evaporator Total Assy    | 9315338075   |
| 22  | Connection Pipe Assy     | 9315354020   |
| 23  | Water Seal               | 9315251015   |
| 24  | Evaporator Holder R      | 9314994012   |
| 25  | Evaporator Holder L      | 9314995019   |
| 26  | Rear Bracket             | 9315022011   |
| 27  | Filter Guide             | 9315013019   |
| 28  | Filter Guard             | 9315411013   |
| 29  | Bearing C Assy           | 9306628017   |
| 30  | Crossflow Fan Assy       | 9315024015   |
| 31  | Holder (Room Thermistor) | 9315252012   |
| 32  | Pipe Thermistor          | 9900551018   |

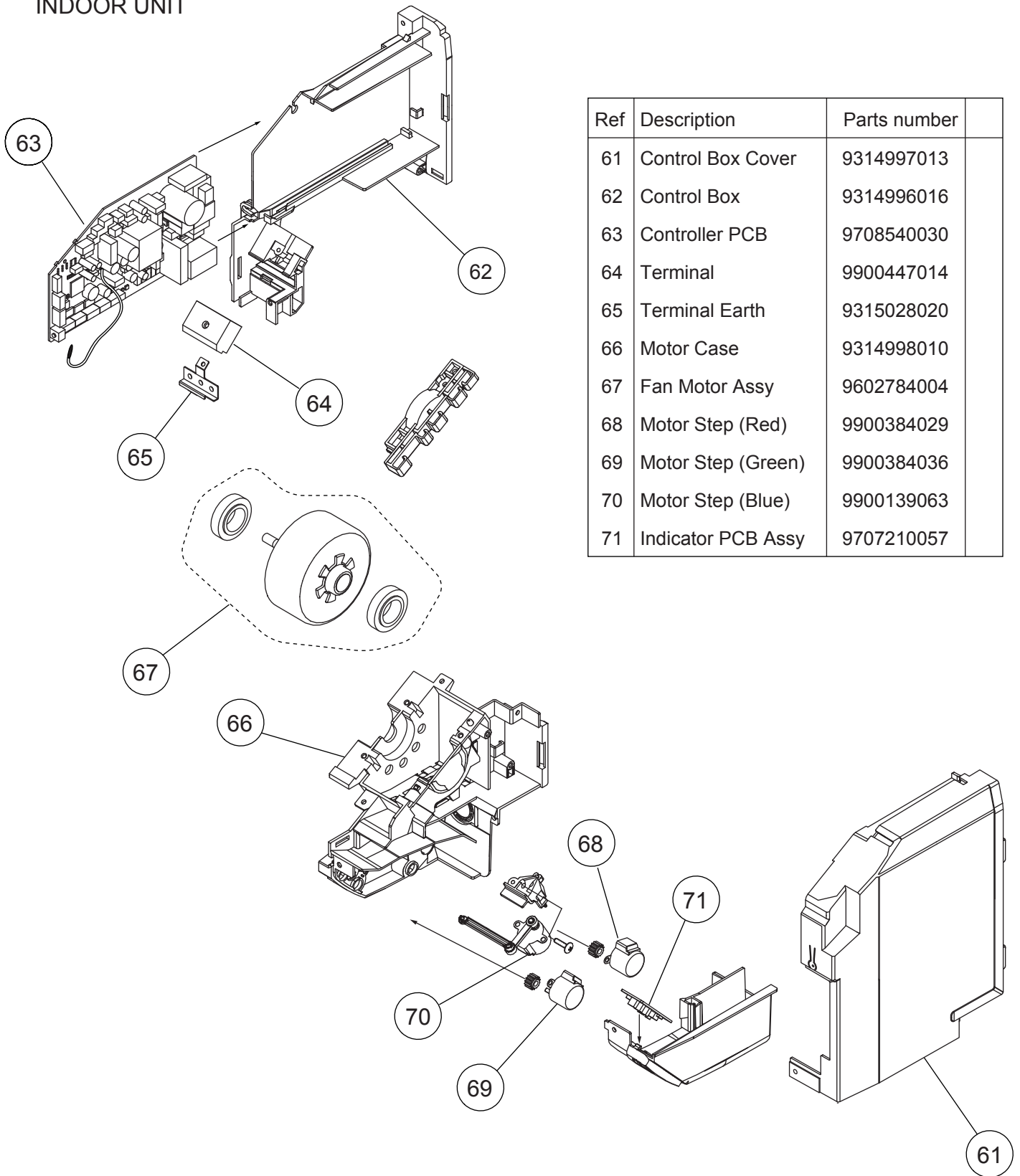
INDOOR UNIT



| Ref | Description     | Parts number |
|-----|-----------------|--------------|
| 41  | Casing Assy     | 9315331038   |
| 42  | Casing          | 9314993015   |
| 43  | Casing Cover B  | 9315016010   |
| 44  | Casing Cover L  | 9315017017   |
| 45  | Casing Cover R  | 9315018014   |
| 46  | Casing Cover F  | 9315019011   |
| 47  | Drain Cap       | 9367677009   |
| 48  | Drain Hose Assy | 9315769015   |
| 49  | Bush B          | 9312156016   |
| 50  | Spacer B        | 9312441013   |

| Ref | Description            | Parts number |
|-----|------------------------|--------------|
| 51  | Louver U               | 9315000019   |
| 52  | Louver Z               | 9315001016   |
| 53  | Diffuser U             | 9315002013   |
| 54  | Diffuser Z             | 9315003010   |
| 55  | Spring C               | 9314142017   |
| 56  | Piller A               | 9315009012   |
| 57  | Joint B                | 9315006011   |
| 58  | R and L Louver         | 9311997016   |
| -   | Fan Guard              | 9305751051   |
| -   | Fan Guard Holder Right | 9315814012   |
| -   | Fan Guard Holder Left  | 9315815019   |

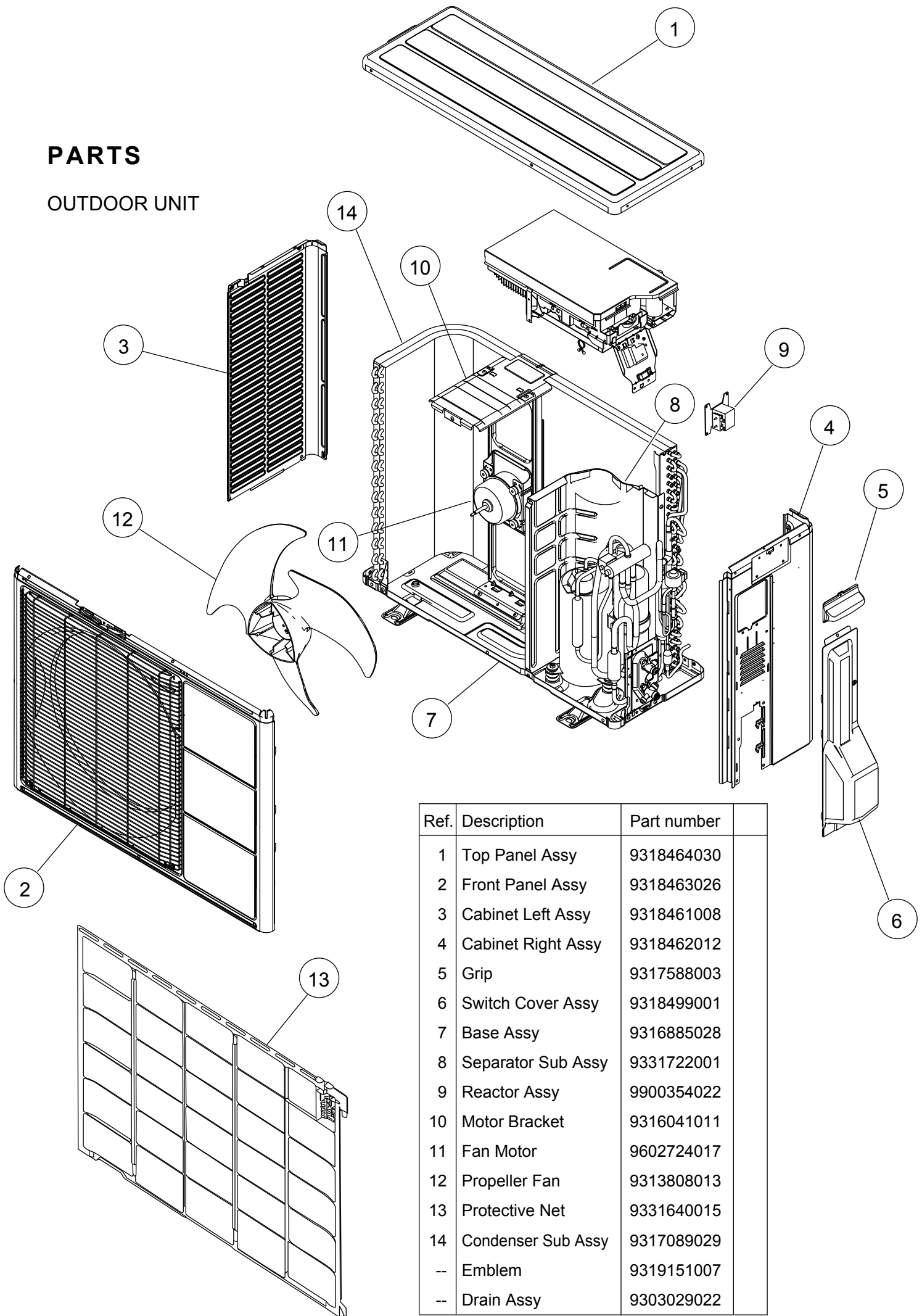
# INDOOR UNIT



| Ref | Description        | Parts number |
|-----|--------------------|--------------|
| 61  | Control Box Cover  | 9314997013   |
| 62  | Control Box        | 9314996016   |
| 63  | Controller PCB     | 9708540030   |
| 64  | Terminal           | 9900447014   |
| 65  | Terminal Earth     | 9315028020   |
| 66  | Motor Case         | 9314998010   |
| 67  | Fan Motor Assy     | 9602784004   |
| 68  | Motor Step (Red)   | 9900384029   |
| 69  | Motor Step (Green) | 9900384036   |
| 70  | Motor Step (Blue)  | 9900139063   |
| 71  | Indicator PCB Assy | 9707210057   |

# PARTS

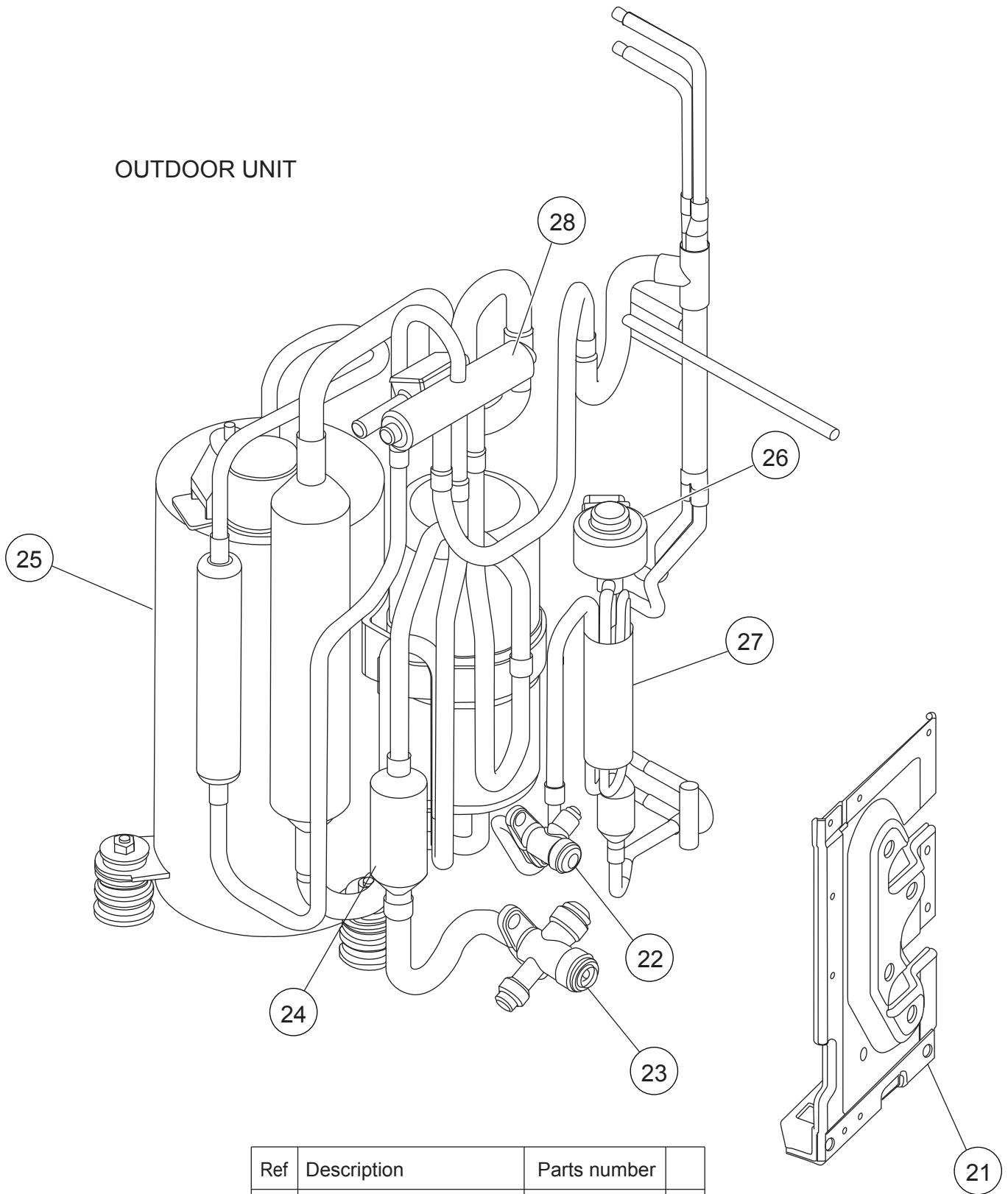
## OUTDOOR UNIT



| Ref. | Description        | Part number |
|------|--------------------|-------------|
| 1    | Top Panel Assy     | 9318464030  |
| 2    | Front Panel Assy   | 9318463026  |
| 3    | Cabinet Left Assy  | 9318461008  |
| 4    | Cabinet Right Assy | 9318462012  |
| 5    | Grip               | 9317588003  |
| 6    | Switch Cover Assy  | 9318499001  |
| 7    | Base Assy          | 9316885028  |
| 8    | Separator Sub Assy | 9331722001  |
| 9    | Reactor Assy       | 9900354022  |
| 10   | Motor Bracket      | 9316041011  |
| 11   | Fan Motor          | 9602724017  |
| 12   | Propeller Fan      | 9313808013  |
| 13   | Protective Net     | 9331640015  |
| 14   | Condenser Sub Assy | 9317089029  |
| --   | Emblem             | 9319151007  |
| --   | Drain Assy         | 9303029022  |

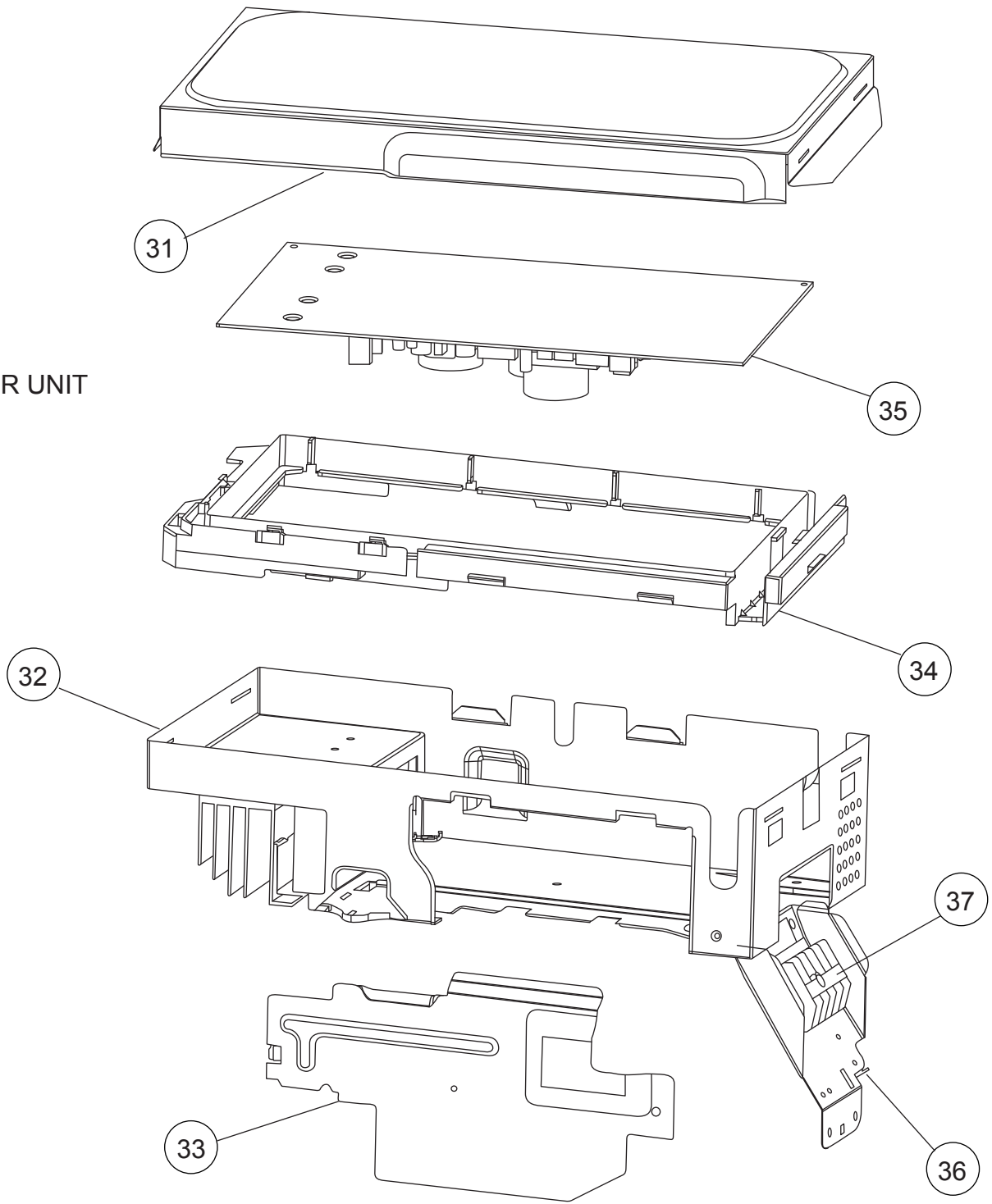


# OUTDOOR UNIT



| Ref | Description            | Parts number |
|-----|------------------------|--------------|
| 21  | Bracket Valve          | 9331649001   |
| 22  | 2-way Valve Assy       | 9314554018   |
| 23  | 3-way Valve Assy       | 9316388017   |
| 24  | Muffler                | 9316276017   |
| 25  | Compressor Assy        | 9313279011   |
| 26  | Expansion Valve Coil   | 9970095030   |
| 27  | Pulse Motor Valve Assy | 9314557019   |
| 28  | 4-way Valve Assy       | 9315311047   |
| --  | Solenoid               | 9970055010   |

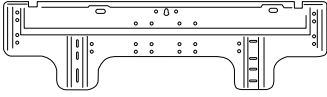
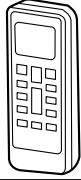

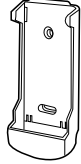


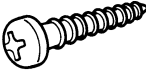
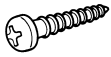
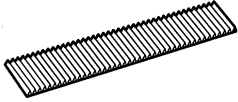
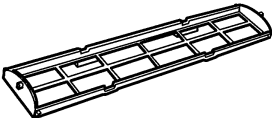
OUTDOOR UNIT



| Ref | Description         | Parts number |
|-----|---------------------|--------------|
| 31  | Sealed Panel        | 9309913011   |
| 32  | Inverter Case Assy  | 9315690029   |
| 33  | Inverter Case Cover | 9314507038   |
| 34  | PCB Holder          | 9313074029   |
| 35  | PCB Assy            | 9708753089   |
| 36  | Bracket Terminal    | 9315233080   |
| 37  | Terminal            | 9900421038   |
| --  | Thermistor Assy     | 9900148041   |
| --  | Outdoor Thermistor  | 9900544010   |

# ACCESSORIES

## INDOOR UNIT

| Name and Shape   | Q'ty |
|--|------|
| Wall hook bracket<br>           | 1    |
| Remote control<br>              | 1    |
| Battery<br>                     | 1    |
| Remote control holder<br>       | 1    |
| Drain hose insulation<br>     | 1    |
| Cloth tape<br>                | 1    |
| Tapping screw (big)<br>       | 8    |
| Tapping screw (small)<br>     | 2    |
| Air cleaning filter<br>       | 2    |
| Air cleaning filter frame<br> | 2    |

1101G3874