

SPLIT TYPE  
ROOM AIR CONDITIONER  
WALL MOUNTED TYPE

# SERVICE MANUAL



|             |              |
|-------------|--------------|
| Indoor unit | Outdoor unit |
| ASYG24LFCC  | AOYG24LFCC   |

## CONTENTS

|                                 |    |
|---------------------------------|----|
| SPECIFICATIONS.....             | 1  |
| DIMENSIONS.....                 | 2  |
| REFRIGERANT SYSTEM DIAGRAM....  | 3  |
| CIRCUIT DIAGRAM.....            | 4  |
| INDOOR PCB CIRCUIT DIAGRAM..... | 5  |
| OUTDOOR PCB CIRCUIT DIAGRAM.... | 8  |
| ERROR DETECTION.....            | 10 |
| PARTS (INDOOR UNIT).....        | 11 |
| PARTS (OUTDOOR UNIT).....       | 15 |
| ACCESSORIES.....                | 18 |

FUJITSU GENERAL LIMITED

# SPECIFICATIONS

## ELECTRICAL DATA

|                      |         |                          |
|----------------------|---------|--------------------------|
| TYPE                 |         | Cool & heat inverter     |
| INDOOR UNIT          |         | ASYG24LFCC               |
| OUTDOOR UNIT         |         | AOYG24LFCC               |
| COOLING CAPACITY     |         | 7.10 kW                  |
| HEATING CAPACITY     |         | 8.00 kW                  |
| POWER SOURCE         |         | 230 V                    |
| FREQUENCY            |         | 50 Hz                    |
| RUNNING CURRENT      | COOLING | 9.7 A                    |
|                      | HEATING | 9.7 A                    |
| INPUT WATTS          | COOLING | 2.20 kW                  |
|                      | HEATING | 2.21 kW                  |
| E.E.R.               | COOLING | 3.23 kW/kW               |
| COP                  | HEATING | 3.61 kW/kW               |
| MOISTURE REMOVAL     |         | 2.7 L/hr                 |
| AIR CIRCULATION HIGH |         | 1,120 m <sup>3</sup> /hr |
| MAXIMUM CURRENT      | COOLING | 13.5 A                   |
|                      | HEATING | 18.5 A                   |

## FAN MOTOR

|                     |        |              |
|---------------------|--------|--------------|
| POWER SOURCE        |        | 230 V        |
| INDOOR UNIT (Cool)  | High   | 1,480 r.p.m. |
|                     | Medium | 1,220 r.p.m. |
|                     | Low    | 1,020 r.p.m. |
|                     | Quiet  | 860 r.p.m.   |
| INDOOR UNIT (Heat)  | High   | 1,480 r.p.m. |
|                     | Medium | 1,220 r.p.m. |
|                     | Low    | 1,020 r.p.m. |
|                     | Quiet  | 860 r.p.m.   |
| OUTDOOR UNIT (Cool) |        | 1,100 r.p.m. |
| OUTDOOR UNIT (Heat) |        | 1,050 r.p.m. |

## NOISE LEVEL

|                     |        |       |
|---------------------|--------|-------|
| INDOOR UNIT (Cool)  | High   | 49 dB |
|                     | Medium | 42 dB |
|                     | Low    | 37 dB |
|                     | Quiet  | 32 dB |
| INDOOR UNIT (Heat)  | High   | 48 dB |
|                     | Medium | 42 dB |
|                     | Low    | 37 dB |
|                     | Quiet  | 32 dB |
| OUTDOOR UNIT (Cool) |        | 55 dB |
| OUTDOOR UNIT (Heat) |        | 56 dB |

## COMPRESSOR AND REFRIGERANT

|                           |                  |                               |
|---------------------------|------------------|-------------------------------|
| TYPE                      |                  | Hermetic type, 6 pole, Rotary |
| DISCRIMINATION            |                  | N-SF17ND1A                    |
| WEIGHT WITH OIL           |                  | 10.6 kg                       |
| PRECHARGED REFRIGERANT    |                  | 1,800 g                       |
| REFRIGERANT TYPE          |                  | R410A                         |
| FULL CHARGE               | Pipe length 15 m | 1,800 g                       |
|                           | 30 m             | 2,100 g                       |
| ADDITIONAL CHARGE         |                  | 20 g/m                        |
| MAXIMUM HEIGHT DIFFERENCE |                  | 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 290 mm |

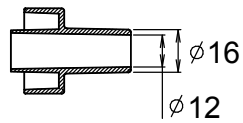
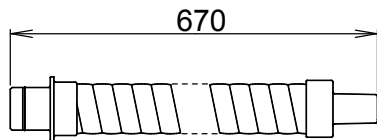
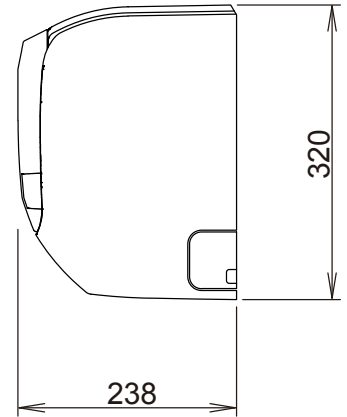
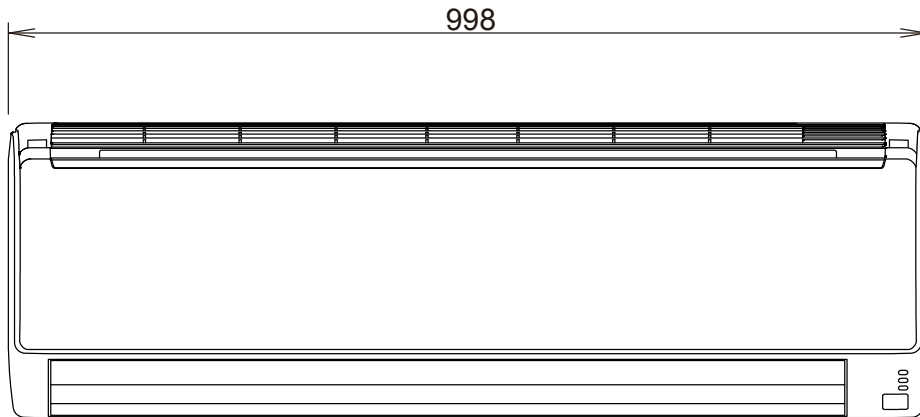
## WEIGHT

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

# DIMENSIONS

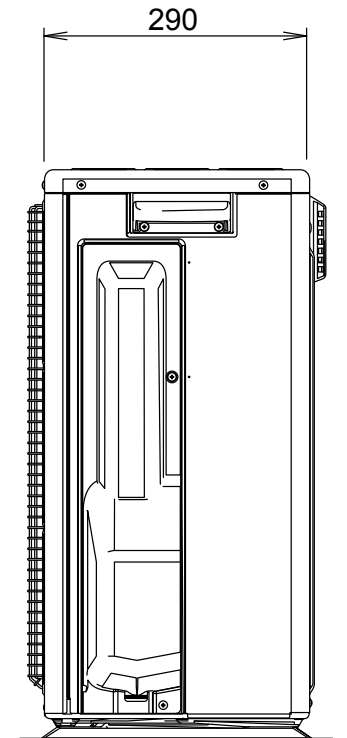
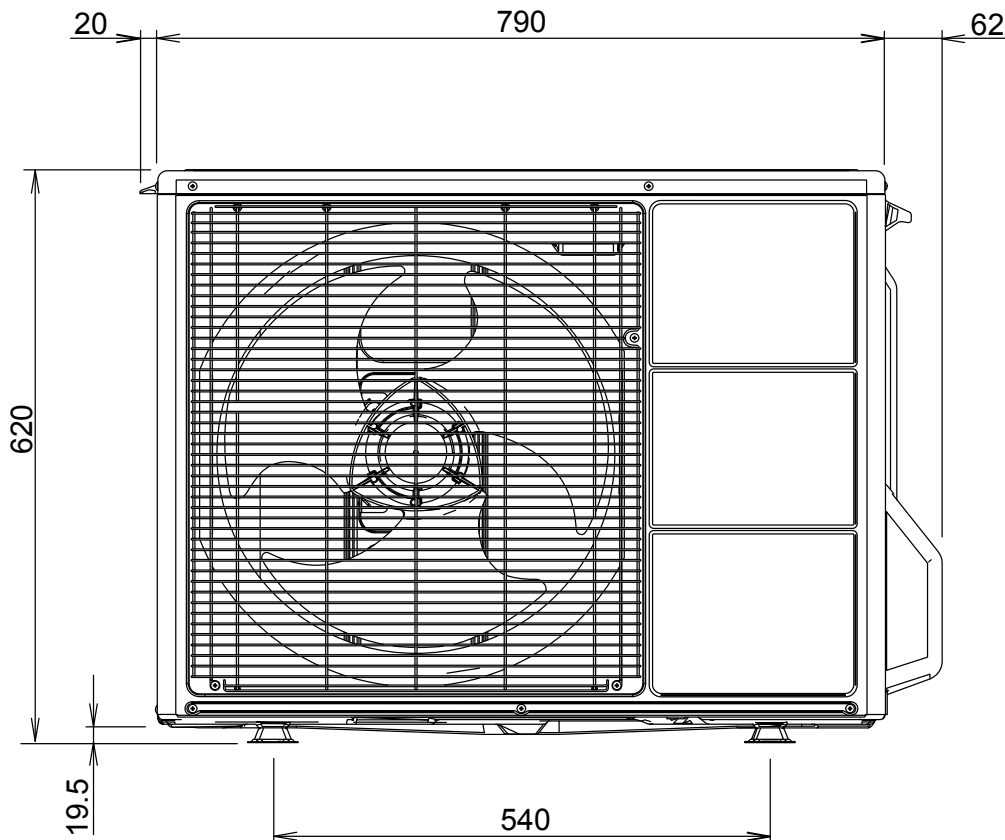
Unit : mm

## INDOOR UNIT

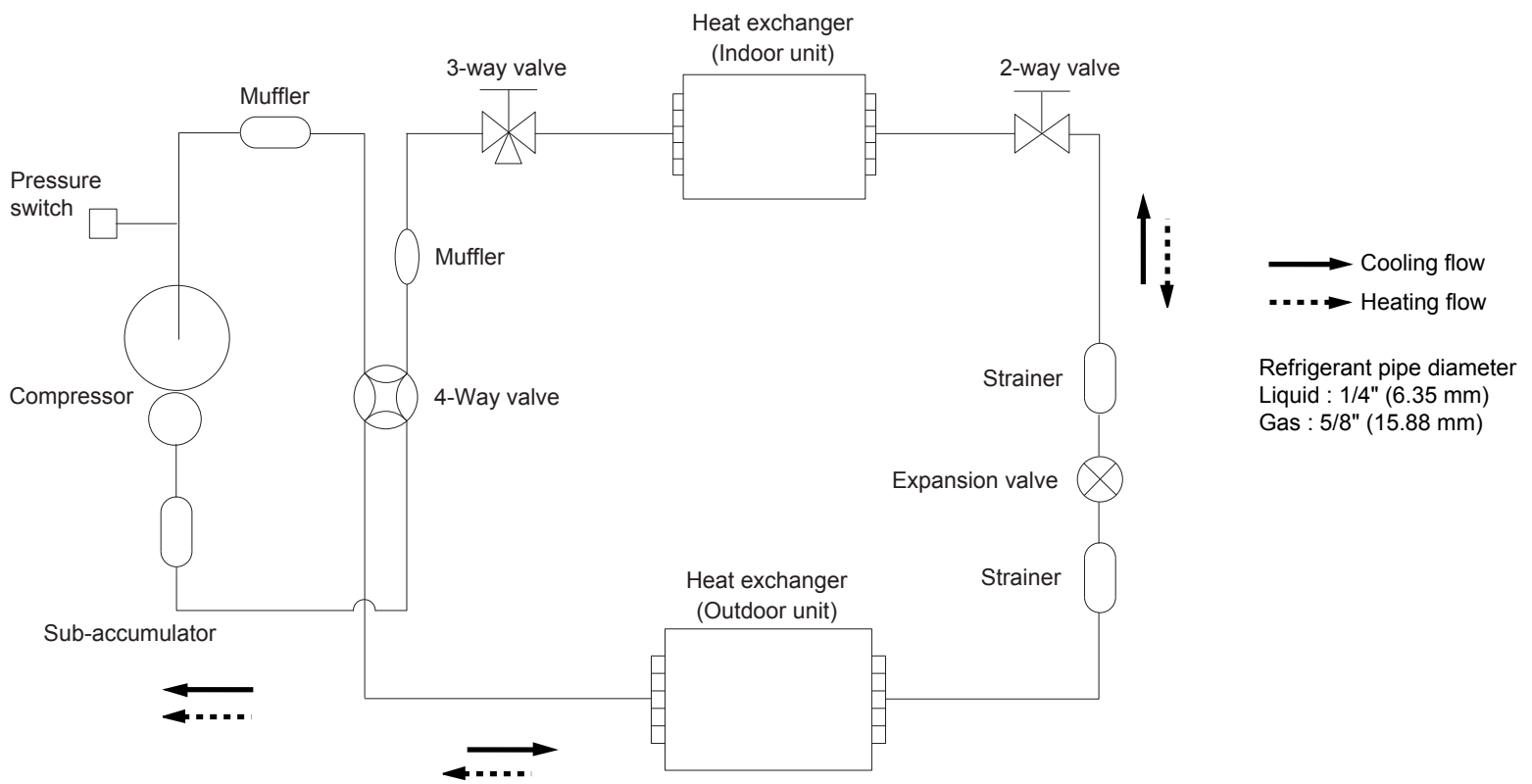


Drain hose length : 670 mm  
Drain hose diameter  
Inside : 12 mm  
Outside : 16 mm

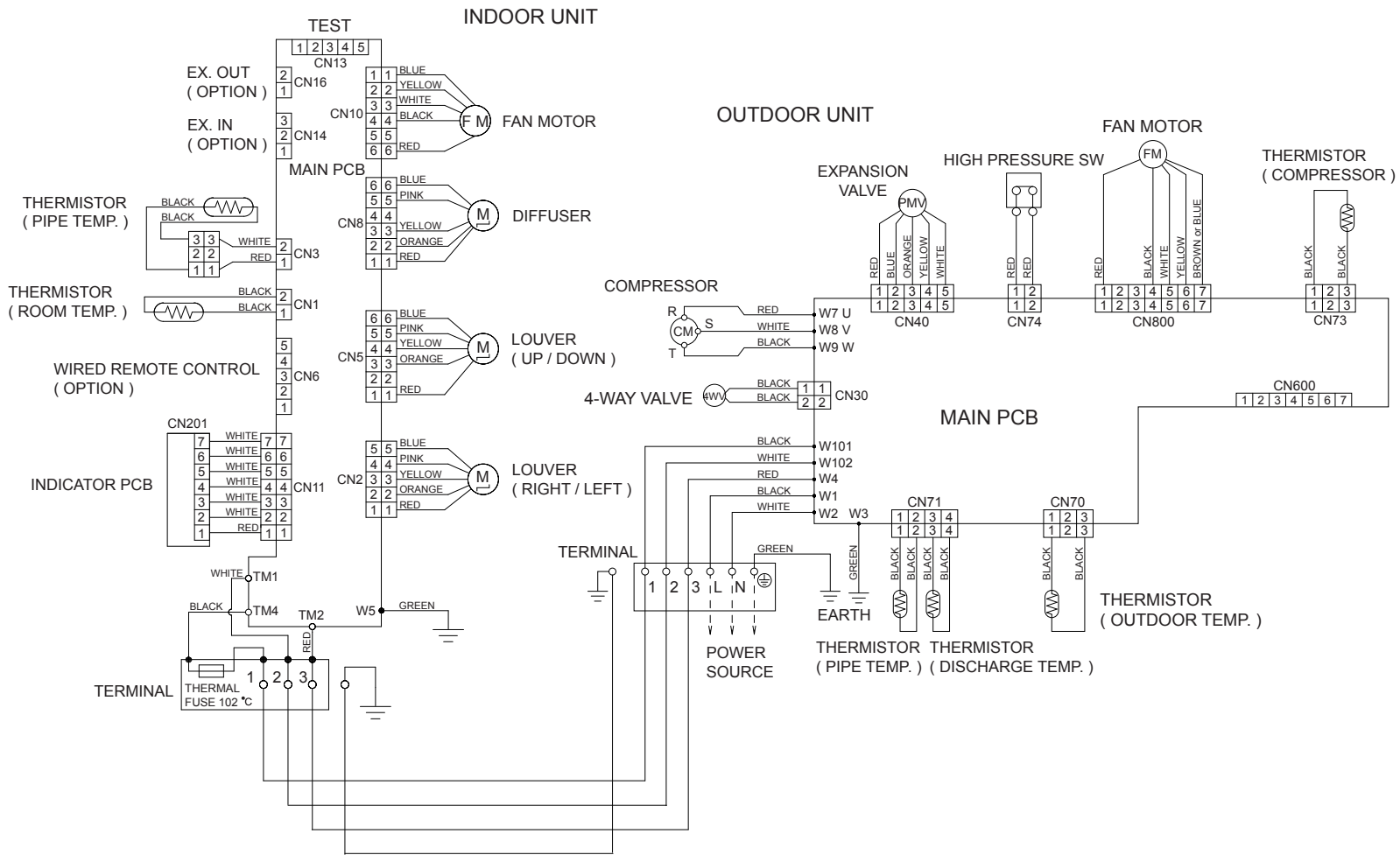
## OUTDOOR UNIT



# REFRIGERANT SYSTEM DIAGRAM

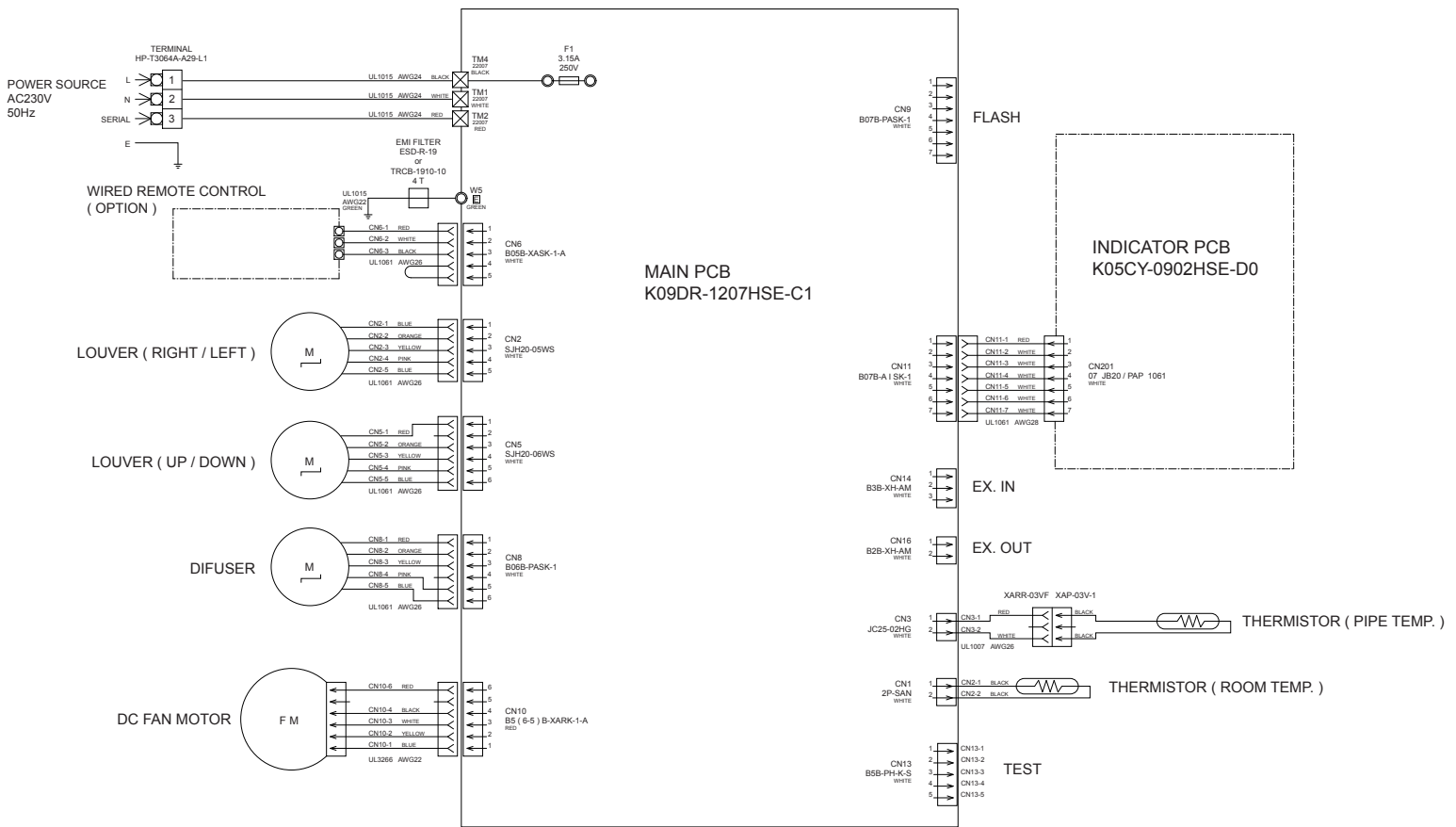


# CIRCUIT DIAGRAM

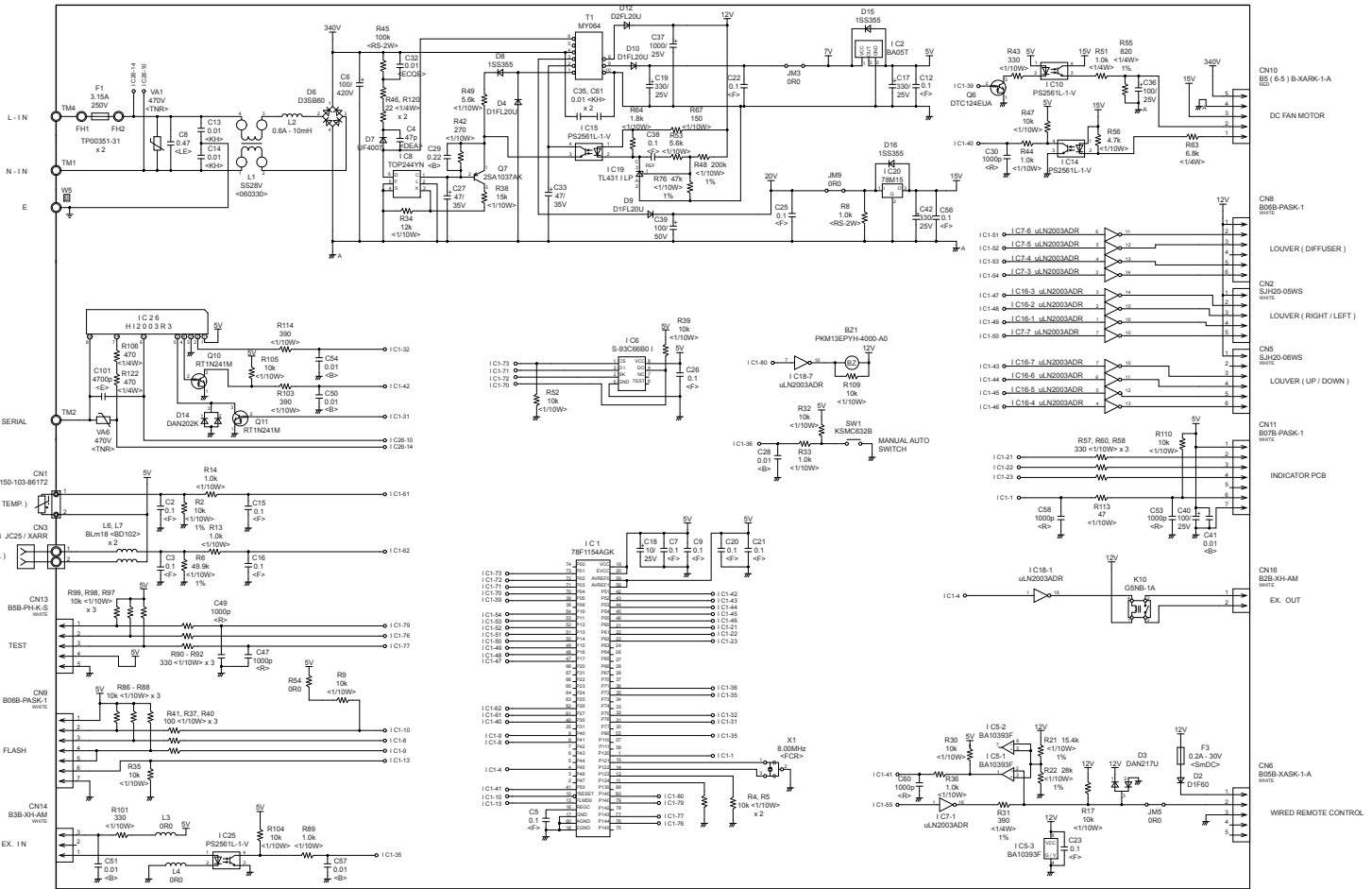


# INDOOR PCB CIRCUIT DIAGRAM

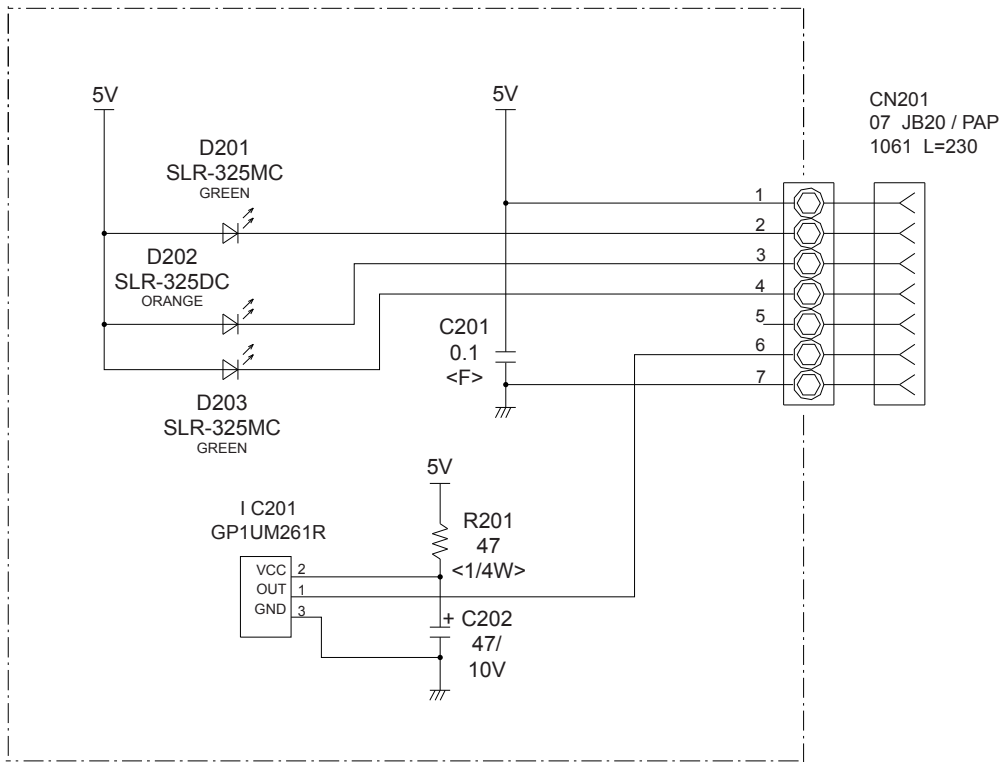
CONTROL UNIT  
EZ-01211HSE



INDOOR UNIT  
MAIN PCB  
K09DR-1207HSE-C1



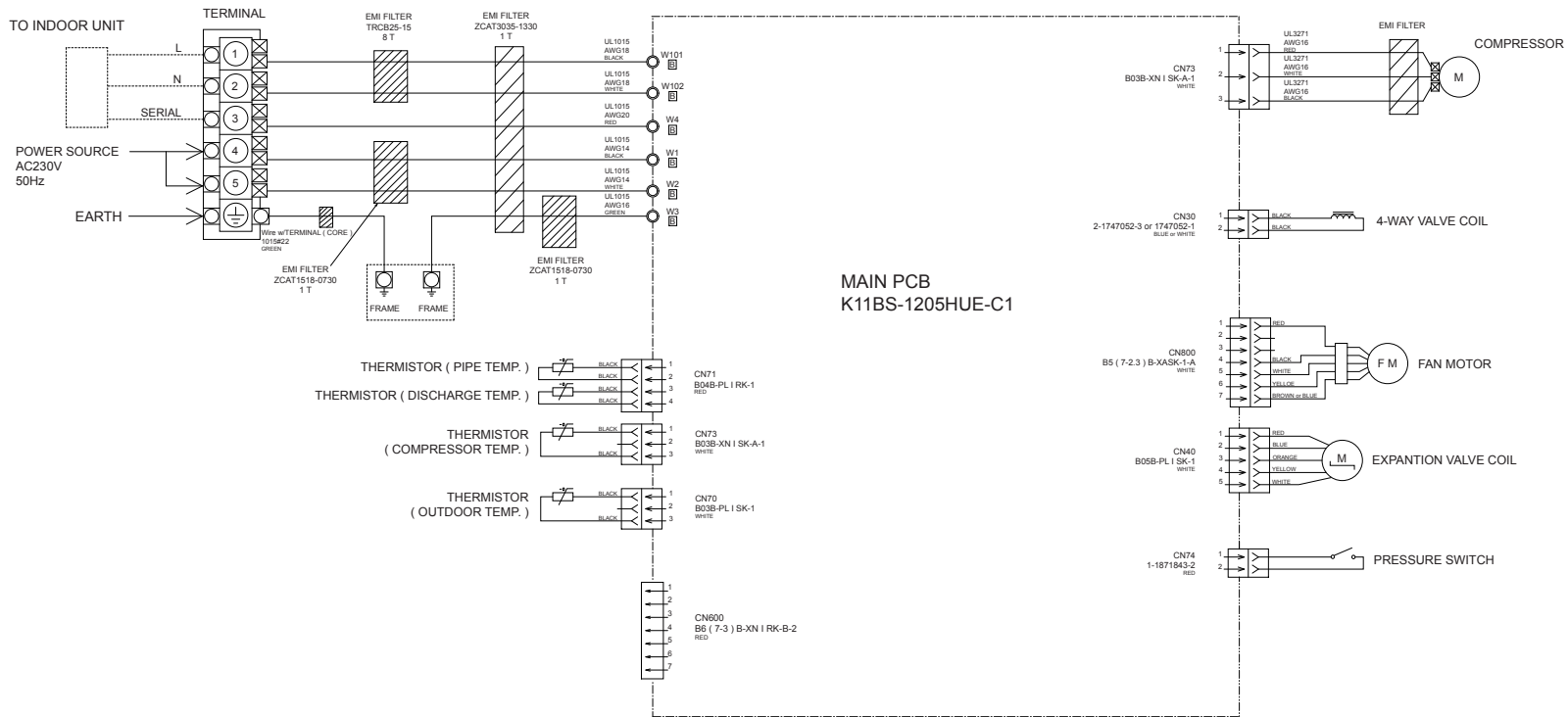
INDOOR UNIT  
 INDICATOR PCB  
 K05CY-0902HSE-D0





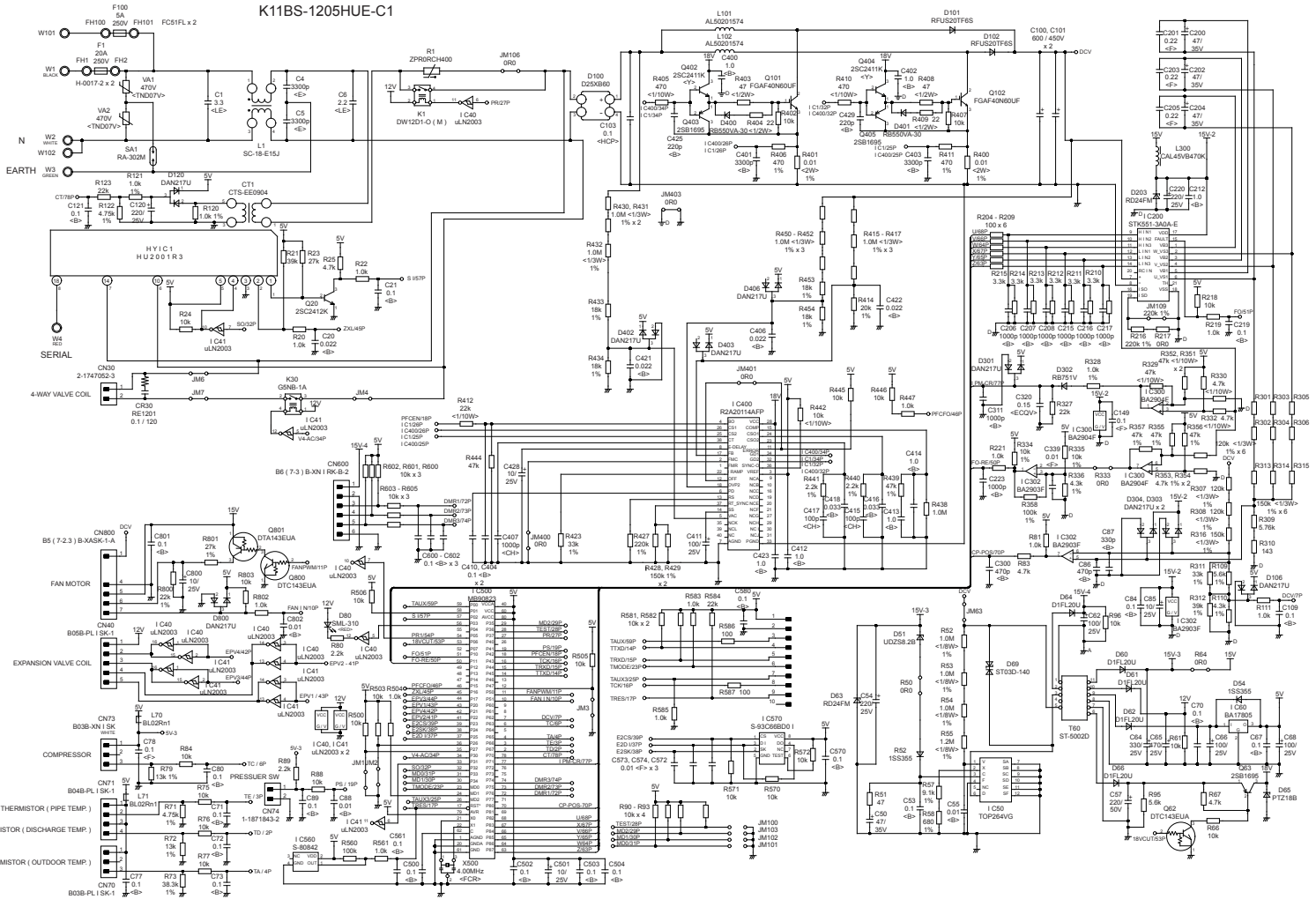
# OUTDOOR PCB CIRCUIT DIAGRAM

INVERTER ASSEMBLY  
EZ-012YHUE



MAIN PCB  
K11BS-1205HUE-C1

OUTDOOR UNIT  
MAIN PCB  
K11BS-1205HUE-C1



## ERROR DETECTION

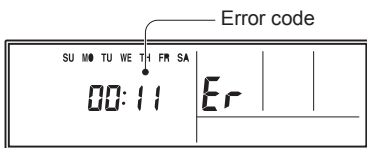
### INDOOR UNIT and WIRED REMOTE CONTROL

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.

#### Troubleshooting with the wired remote control.

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



EX. Self-diagnosis

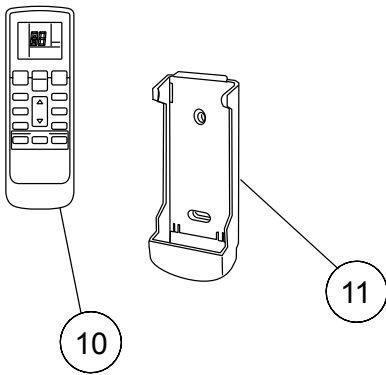
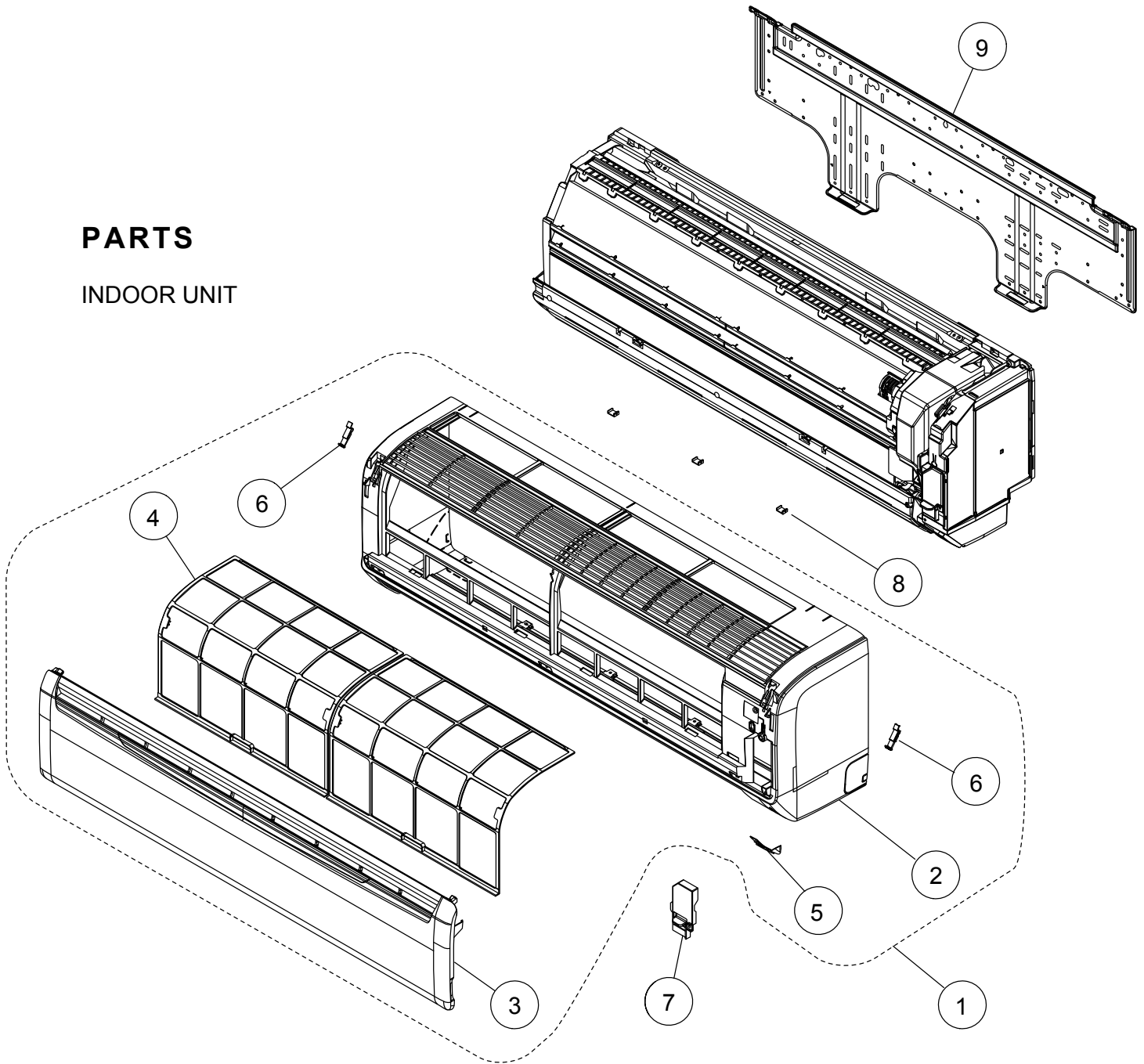
- : 0.5s on / 0.5s off
- ◇ : 0.1s on / 0.1s off
- ( ) : Number of flashing

| 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 slave unit) [Simultaneous Multi]<br>• Connection unit number error (indoor unit or branch unit) [Flexible Multi] |
| ● (2)             | ● (7)          | ◇               | 27                   | Primary unit, secondary 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                   | Inlet air 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)             | ● (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<br>• 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<br>• 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<br>• Suction pressure sensor error<br>• 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 [Flexible Multi]   |

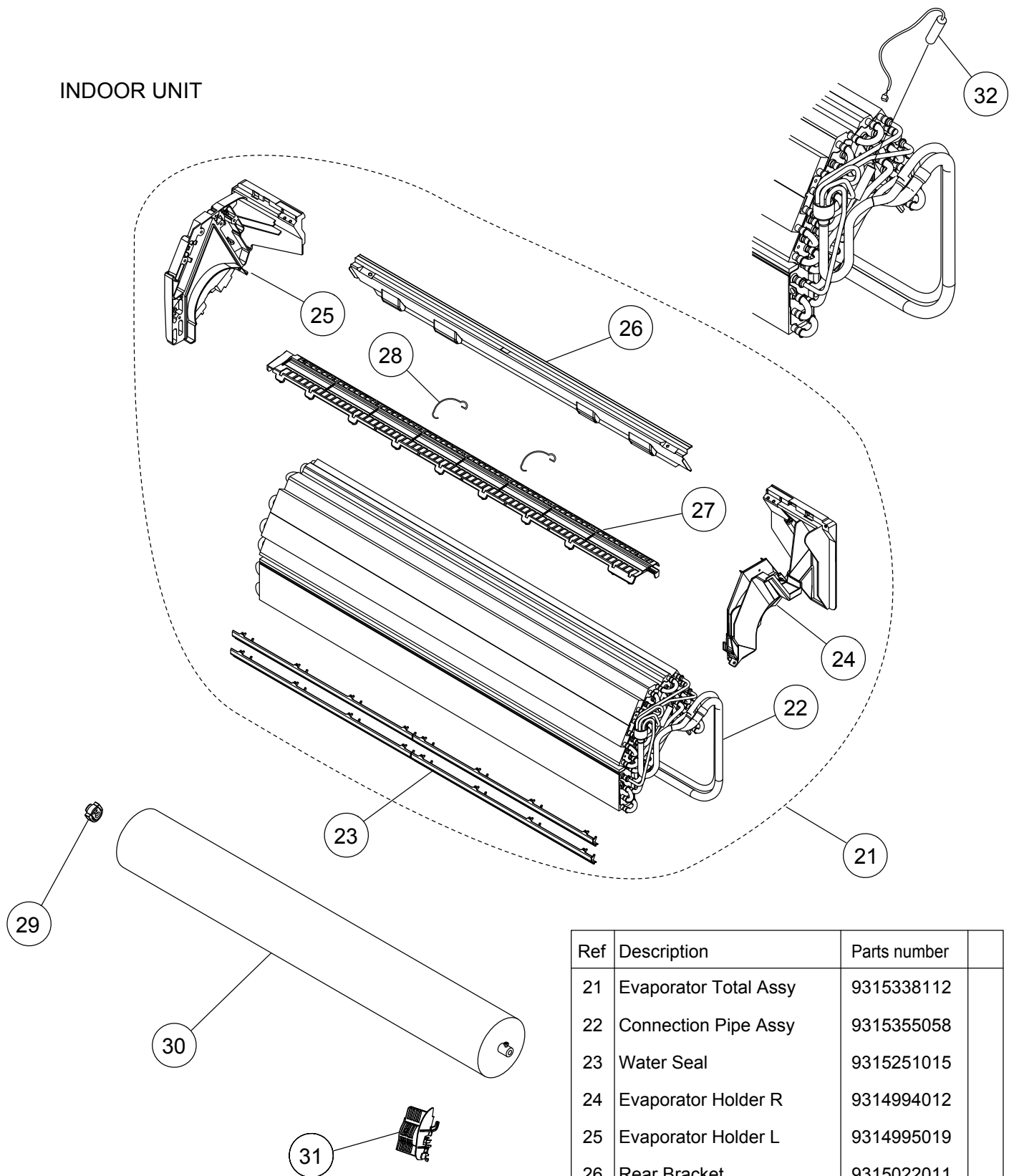
# PARTS

## INDOOR UNIT



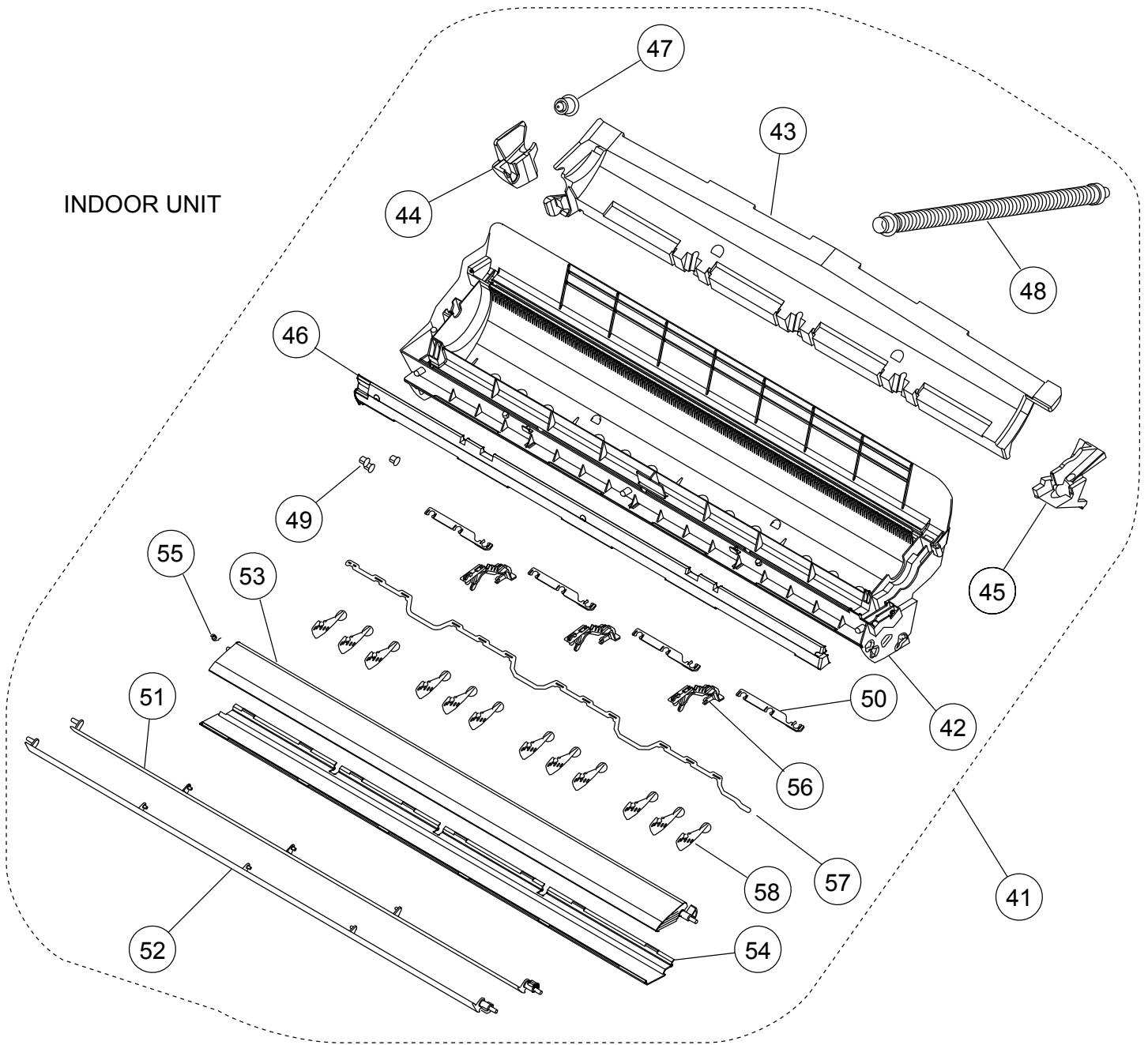
| Ref | Description            | Parts number |
|-----|------------------------|--------------|
| 1   | Front Panel Total Assy | 9318738001   |
| 2   | Front Panel            | 9314991080   |
| 3   | Intake Grille Assy     | 9385985049   |
| 4   | Air Filter             | 9315014016   |
| 5   | Receiver Window        | 9315010018   |
| 6   | Clamber Grille         | 9306755010   |
| 7   | Wire Clamber           | 9315015013   |
| 8   | Cap (Screw)            | 9309002074   |
| 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    | 9315338112   |
| 22  | Connection Pipe Assy     | 9315355058   |
| 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   |

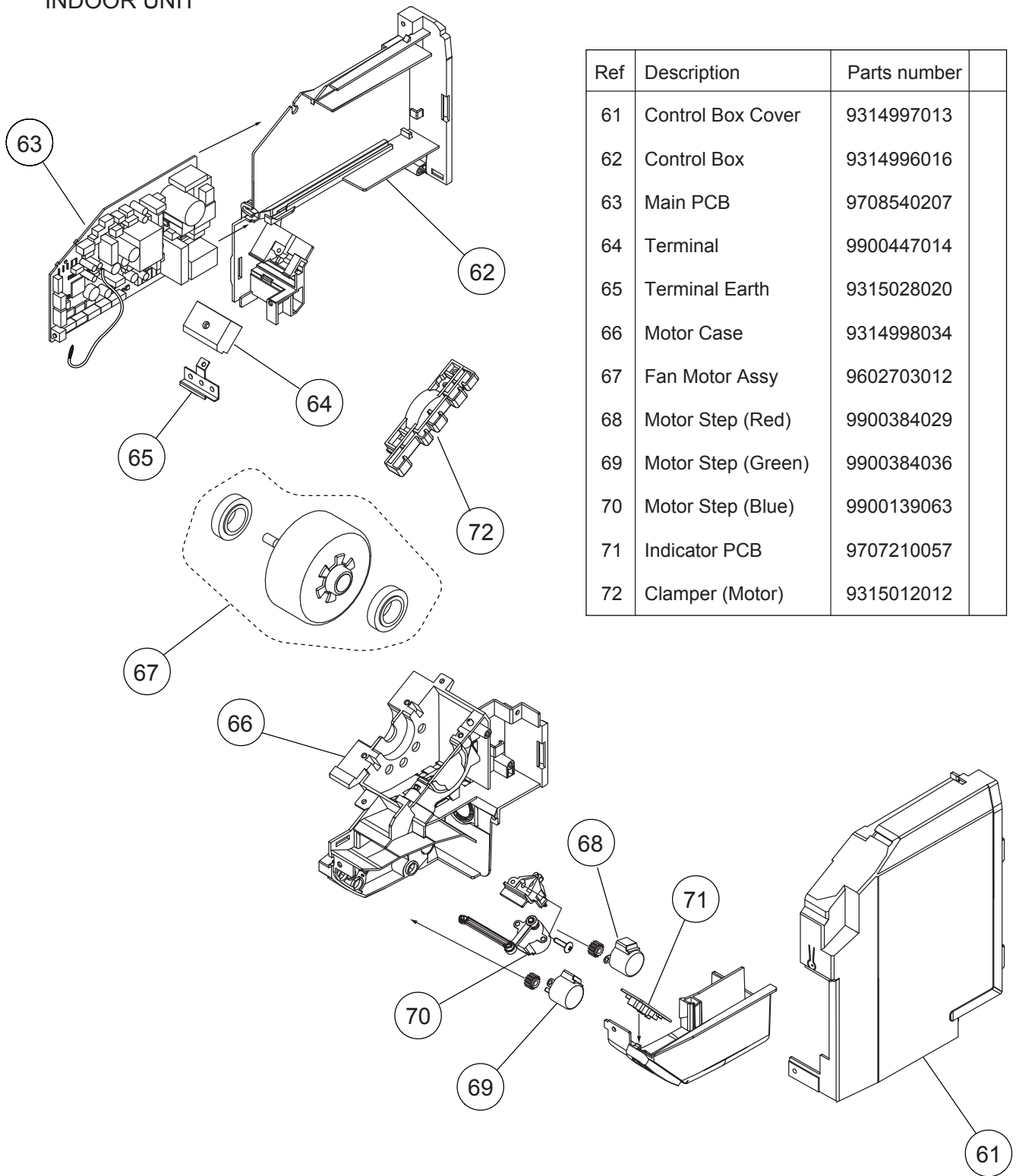
INDOOR UNIT



| Ref | Description     | Parts number |
|-----|-----------------|--------------|
| 41  | Casing Assy     | 9315331045   |
| 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 D        | 9315282019   |

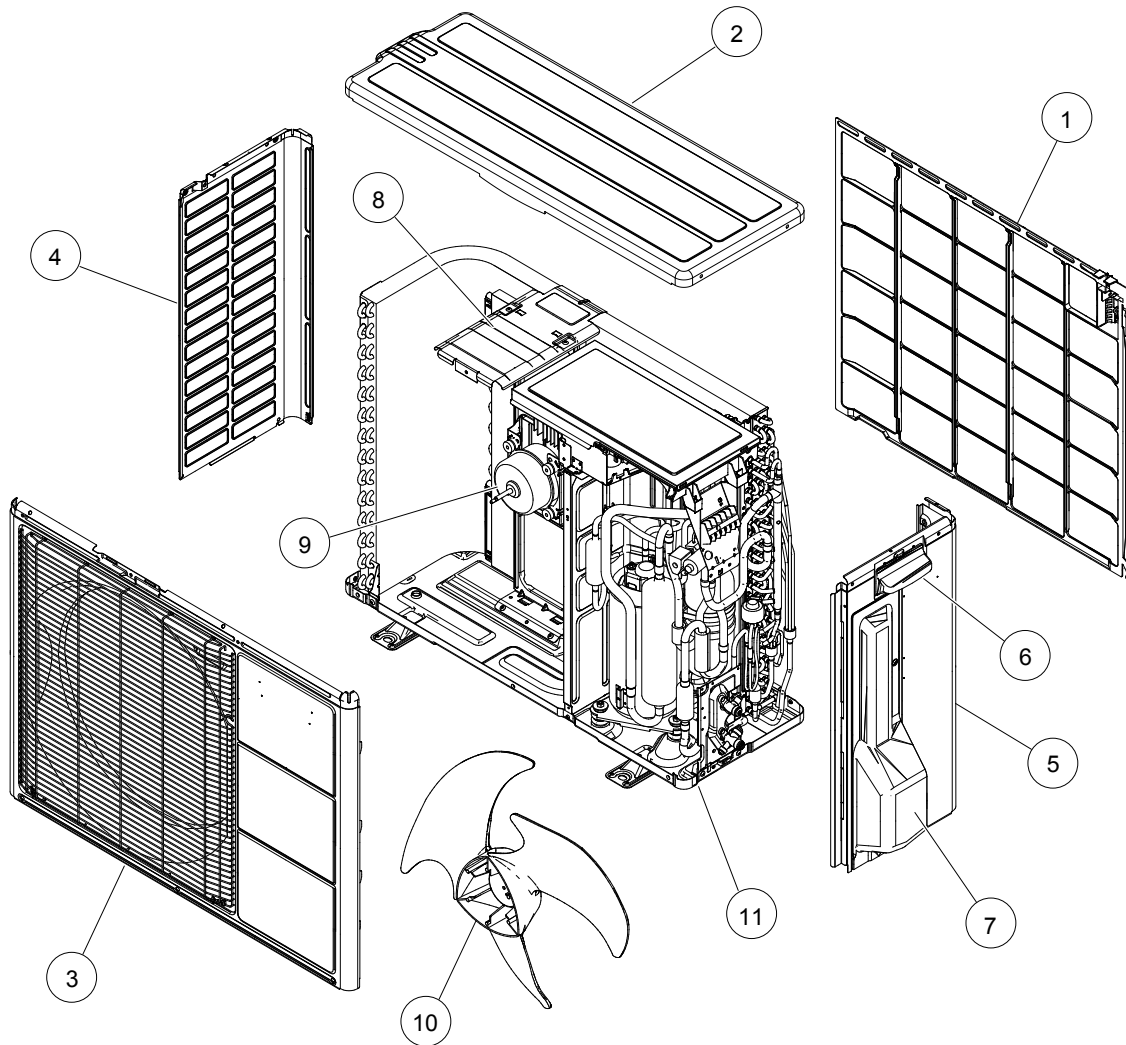
| Ref | Description            | Parts number |
|-----|------------------------|--------------|
| 51  | Louver U               | 9315000026   |
| 52  | Louver Z               | 9315001023   |
| 53  | Diffuser U             | 9315002020   |
| 54  | Diffuser Z             | 9315003027   |
| 55  | Spring 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  | Main PCB           | 9708540207   |
| 64  | Terminal           | 9900447014   |
| 65  | Terminal Earth     | 9315028020   |
| 66  | Motor Case         | 9314998034   |
| 67  | Fan Motor Assy     | 9602703012   |
| 68  | Motor Step (Red)   | 9900384029   |
| 69  | Motor Step (Green) | 9900384036   |
| 70  | Motor Step (Blue)  | 9900139063   |
| 71  | Indicator PCB      | 9707210057   |
| 72  | Clamper (Motor)    | 9315012012   |



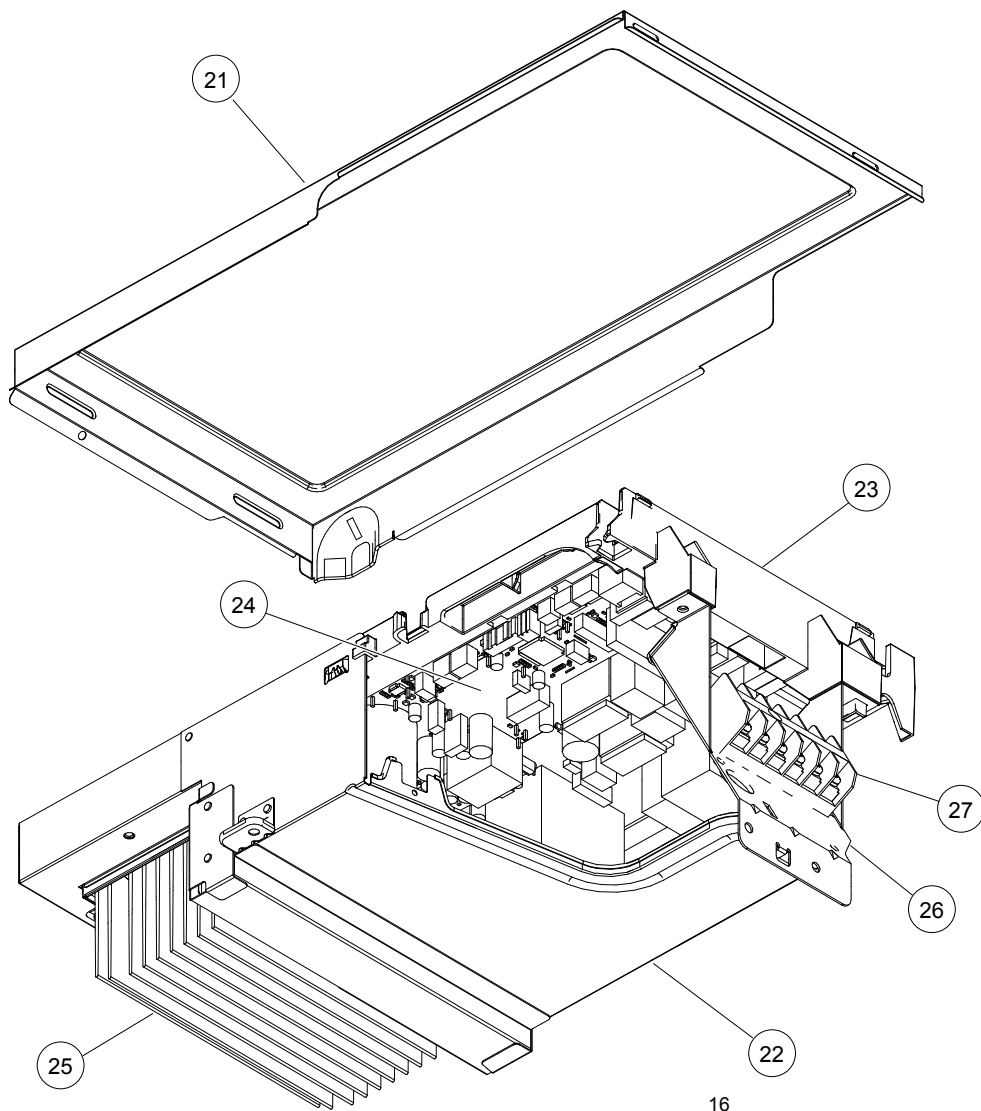


## PARTS

### OUTDOOR UNIT

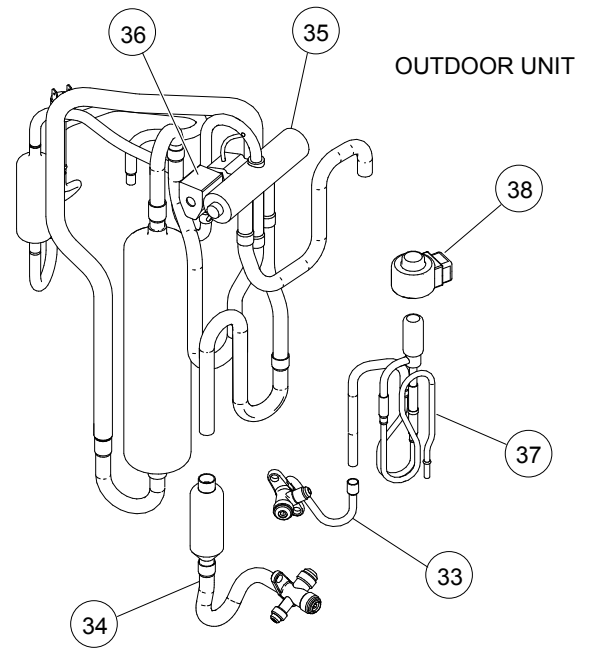
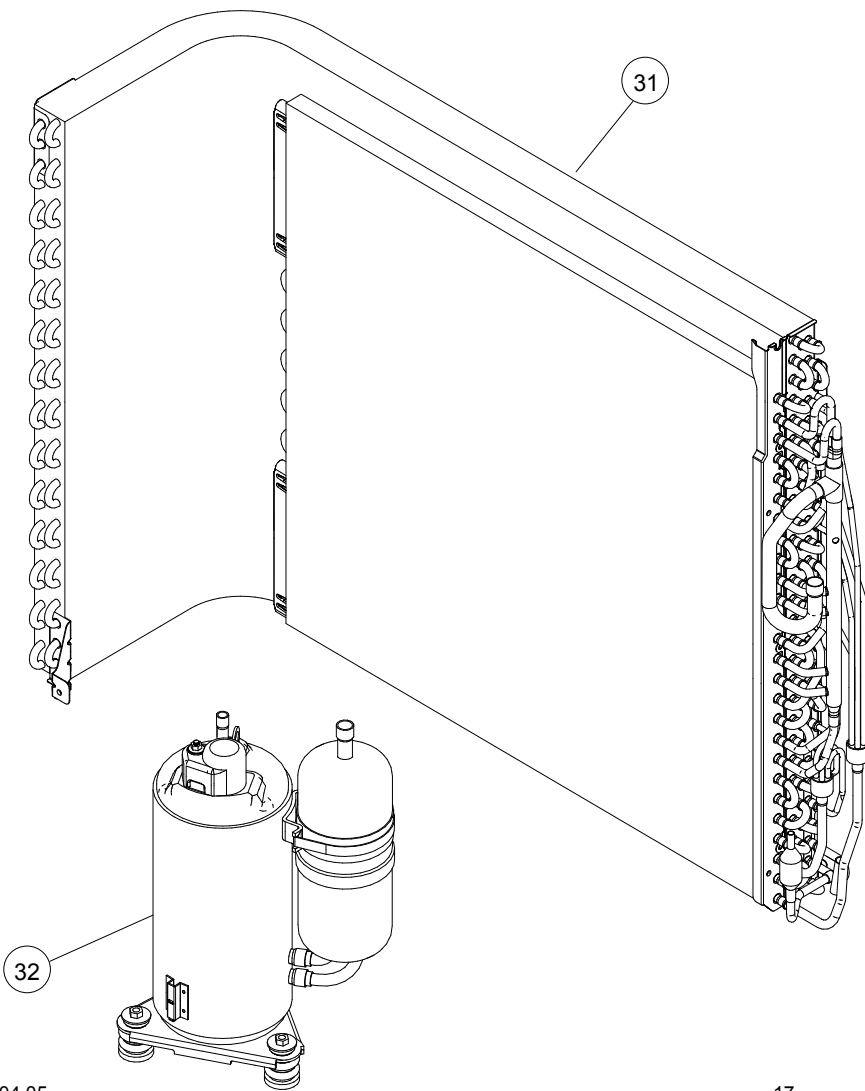
| Ref. | Description        | Part number |
|------|--------------------|-------------|
| 1    | Protective Net     | 9331640015  |
| 2    | Top Panel Assy     | 9318464139  |
| 3    | Front Panel Assy   | 9318463040  |
| 4    | Cabinet Left Assy  | 9318461015  |
| 5    | Cabinet Right Assy | 9318462012  |
| 6    | Grip               | 9317588003  |
| 7    | Switch Cover Assy  | 9318499001  |
| 8    | Motor Bracket Assy | 9319124001  |
| 9    | Fan Motor          | 9602724017  |
| 10   | Propeller Fan      | 9313808013  |
| 11   | Base Assy          | 9316885066  |
| --   | Emblem             | 9319151007  |
| --   | Drain Assy         | 9303029022  |





## OUTDOOR UNIT

| Ref. | Description           | Part number |
|------|-----------------------|-------------|
| 21   | Shield Panel          | 9319542003  |
| 22   | Inverter Case Assy    | 9319548012  |
| 23   | PCB Holder            | 9319547015  |
| 24   | Main PCB              | 9708996165  |
| 25   | Heat Sink             | 9319540009  |
| 26   | Terminal Bracket      | 9319543017  |
| 27   | Terminal 6P           | 9900435028  |
| --   | Outdoor Thermistor    | 9900565008  |
| --   | Thermistor Assy       | 9900727017  |
| --   | Compressor Thermistor | 9900777012  |

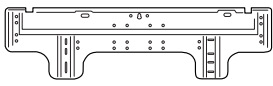
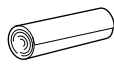

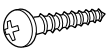



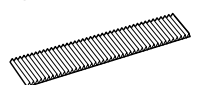

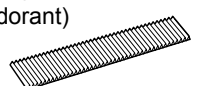
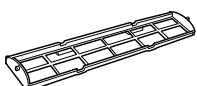


OUTDOOR UNIT

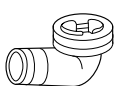

| Ref. | Description            | Part number |
|------|------------------------|-------------|
| 31   | Condenser Total Assy   | 9317089166  |
| 32   | Compressor             | 9810244000  |
| 33   | 2-way Valve Assy       | 9314554018  |
| 34   | 3-way Valve Sub Assy   | 9319098005  |
| 35   | 4-way Valve Assy       | 9319874012  |
| 36   | Solenoid               | 9970110023  |
| 37   | Pulse Motor Valve Assy | 9314557019  |
| 38   | Expansion Valve Coil   | 9970095030  |

## ACCESSORIES

### INDOOR UNIT

| Name and Shape   | Part number | Name and Shape   | Part number |
|--|-------------|--|-------------|
| Wall hook bracket<br>        | 9315023018  | Cloth tape<br>                            | 9310519004  |
| Remote control<br>         | 9379219037  | Tapping screw (big)<br>                   | 0700076046  |
| Remote control holder<br> | 9305642045  | Tapping screw (small)<br>               | 0700019036  |
| Battery (penlight)<br>    | 0600185541  | Air cleaning filter (Apple katekin)<br> | UTR-FA13-1  |
| Drain hose insulation<br>  | 9361756007  | Air cleaning filter (Ion deodorant)<br> | UTR-FA13-2  |
|  |             | Filter holder<br>                       | 9368568009  |

### OUTDOOR UNIT

| Name and Shape  | Part number  |
|---|--------------|
| Drain assy<br> | 9303029022   |
| Drain cap<br>  | 313166024302 |

1211G4132