



SPLIT TYPE  
ROOM AIR CONDITIONER  
WALL MOUNTED TYPE

# SERVICE MANUAL



|             |              |
|-------------|--------------|
| Indoor unit | Outdoor unit |
| ASHG14LMCA  | AOHG14LMCA   |

## CONTENTS

|                                 |    |
|---------------------------------|----|
| SPECIFICATIONS.....             | 1  |
| DIMENSIONS.....                 | 2  |
| REFRIGERANT SYSTEM DIAGRAM....  | 3  |
| CIRCUIT DIAGRAM.....            | 4  |
| INDOOR PCB CIRCUIT DIAGRAM..... | 5  |
| OUTDOOR PCB CIRCUIT DIAGRAM.... | 9  |
| ERROR DETECTION.....            | 11 |
| PARTS (INDOOR UNIT).....        | 13 |
| PARTS (OUTDOOR UNIT).....       | 17 |
| ACCESSORIES.....                | 20 |

# SPECIFICATIONS

## ELECTRICAL DATA

|                      |         |                       |
|----------------------|---------|-----------------------|
| TYPE                 |         | Cool & heat inverter  |
| INDOOR UNIT          |         | ASHG14LMCA            |
| OUTDOOR UNIT         |         | AOHG14LMCA            |
| COOLING CAPACITY     |         | 4.00 kW               |
| HEATING CAPACITY     |         | 5.00 kW               |
| POWER SOURCE         |         | 230 V                 |
| FREQUENCY            |         | 50 Hz                 |
| RUNNING CURRENT      | Cooling | 5.3 A                 |
|                      | Heating | 6.3 A                 |
| INPUT WATTS          | Cooling | 1.14 kW               |
|                      | Heating | 1.37 kW               |
| E.E.R.               | Cooling | 3.52 kW/kW            |
| COP                  | Heating | 3.66 kW/kW            |
| MOISTURE REMOVAL     |         | 2.1 L/h               |
| AIR CIRCULATION HIGH |         | 770 m <sup>3</sup> /h |
| MAXIMUM CURRENT      | Cooling | 9.0 A                 |
|                      | Heating | 10.5 A                |

## FAN MOTOR

|                      |        |              |
|----------------------|--------|--------------|
| POWER SOURCE         |        | 230 V        |
| INDOOR UNIT Cooling  | High   | 1,360 r.p.m. |
|                      | Medium | 1,220 r.p.m. |
|                      | Low    | 990 r.p.m.   |
|                      | Quiet  | 750 r.p.m.   |
| INDOOR UNIT Heating  | High   | 1,360 r.p.m. |
|                      | Medium | 1,220 r.p.m. |
|                      | Low    | 1,040 r.p.m. |
|                      | Quiet  | 770 r.p.m.   |
| OUTDOOR UNIT Cooling |        | 850 r.p.m.   |
| OUTDOOR UNIT Heating |        | 750 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 |        | 50 dB |
| OUTDOOR UNIT Heating |        | 50 dB |

## COMPRESSOR AND REFRIGERANT

|                        |                  |                                                           |
|------------------------|------------------|-----------------------------------------------------------|
| COMPRESSOR TYPE        |                  | Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary |
| DISCRIMINATION         |                  | DA89X1C-20FZ2                                             |
| WEIGHT (with oil)      |                  | 9.2 kg                                                    |
| PRECHARGED REFRIGERANT |                  | 1,050 g                                                   |
| REFRIGERANT TYPE       |                  | R410A                                                     |
| FULL CHARGE            | Pipe length 15 m | 1,050 g                                                   |
|                        | 20 m             | 1,150 g                                                   |
| ADDITIONAL CHARGE      |                  | 20 g/m                                                    |
| MAXIMUM PIPING HEIGHT  |                  | 15m                                                       |

## DIMENSIONS

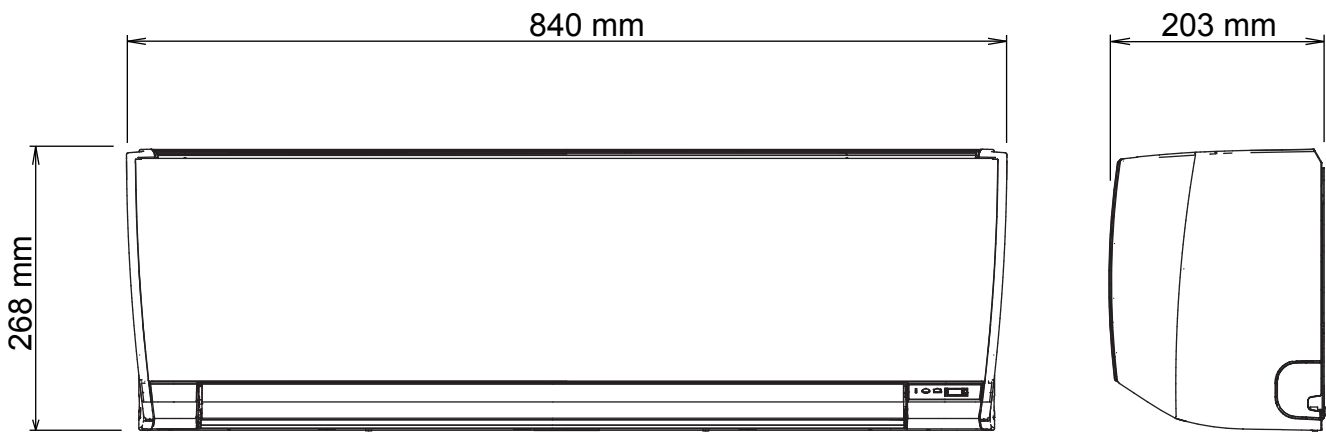
|              |           |                    |
|--------------|-----------|--------------------|
| INDOOR UNIT  | H x W x D | 268 x 840 x 203 mm |
| OUTDOOR UNIT | H x W x D | 540 x 790 x 290 mm |

## WEIGHT

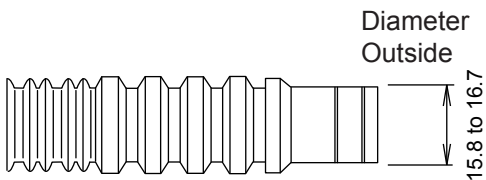
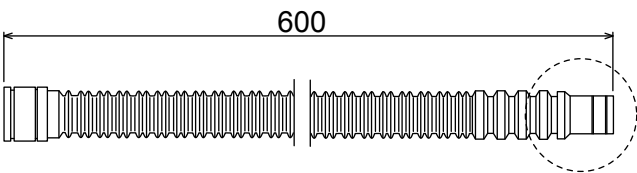
|              |                |                  |
|--------------|----------------|------------------|
| INDOOR UNIT  | Shipping / Net | 10.5 kg / 8.5 kg |
| OUTDOOR UNIT | Shipping / Net | 37 kg / 34 kg    |

# DIMENSIONS

## INDOOR UNIT

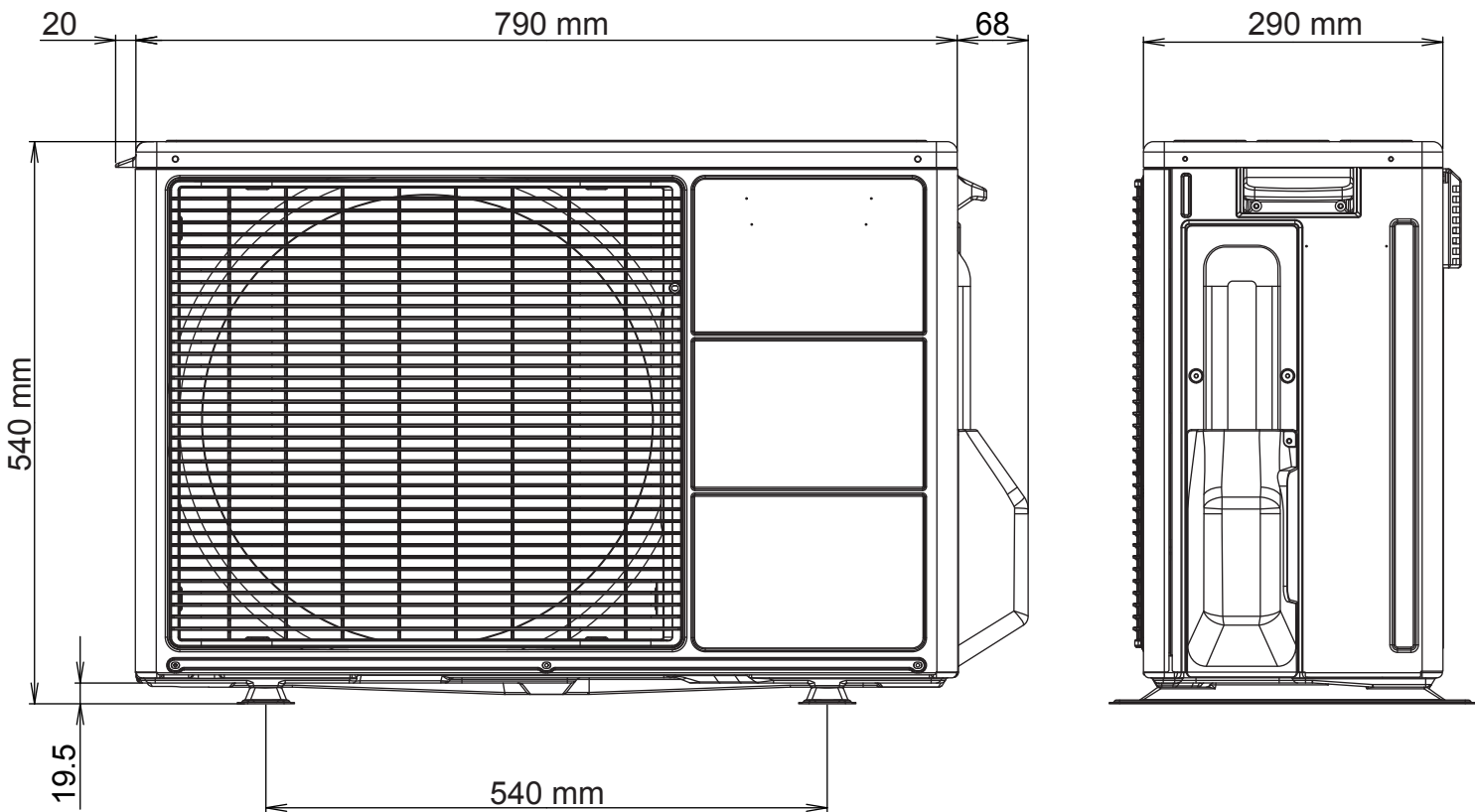


Drain hose

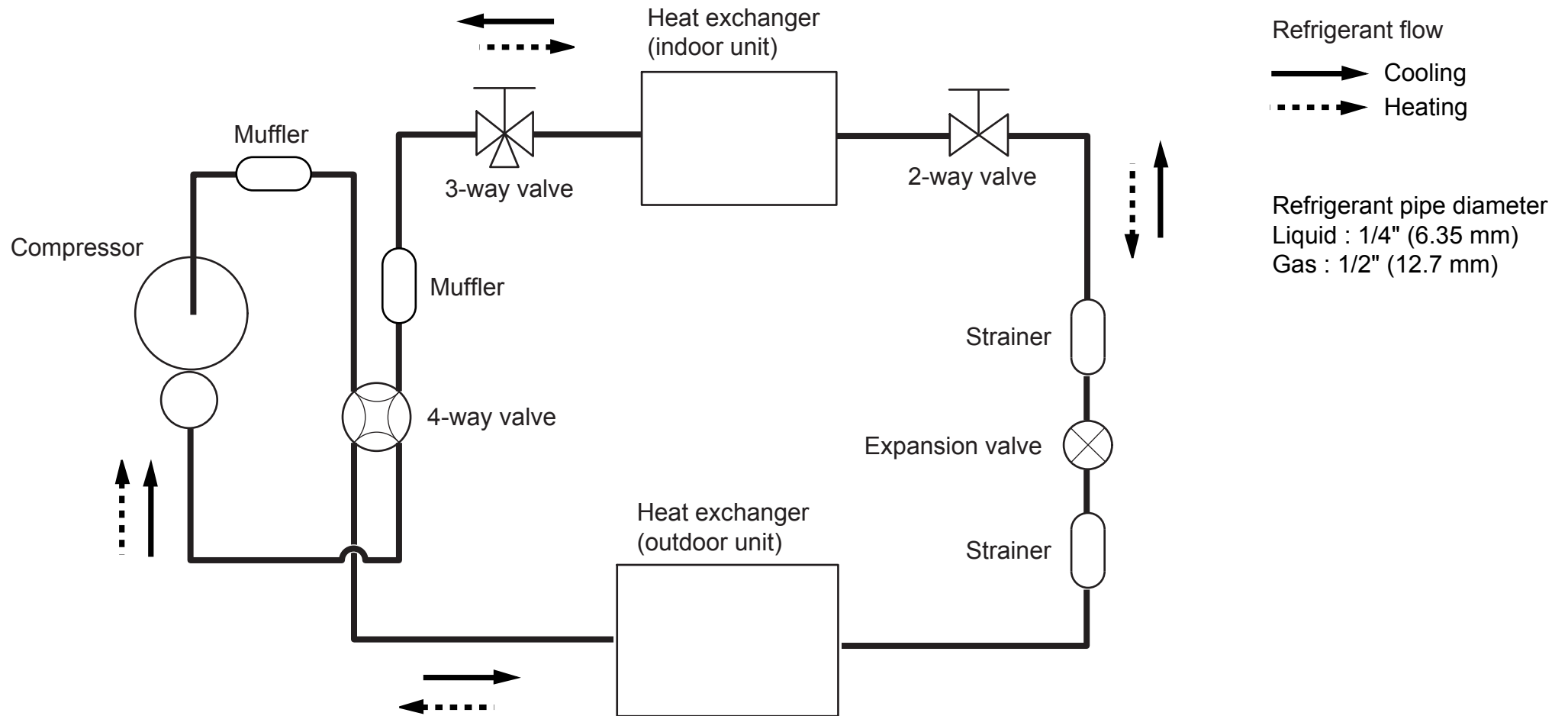


Inside : 13.8 mm

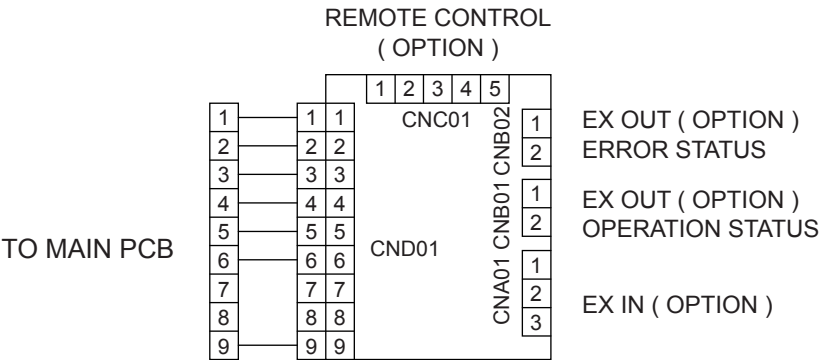
## OUTDOOR UNIT



# REFRIGERANT SYSTEM DIAGRAM



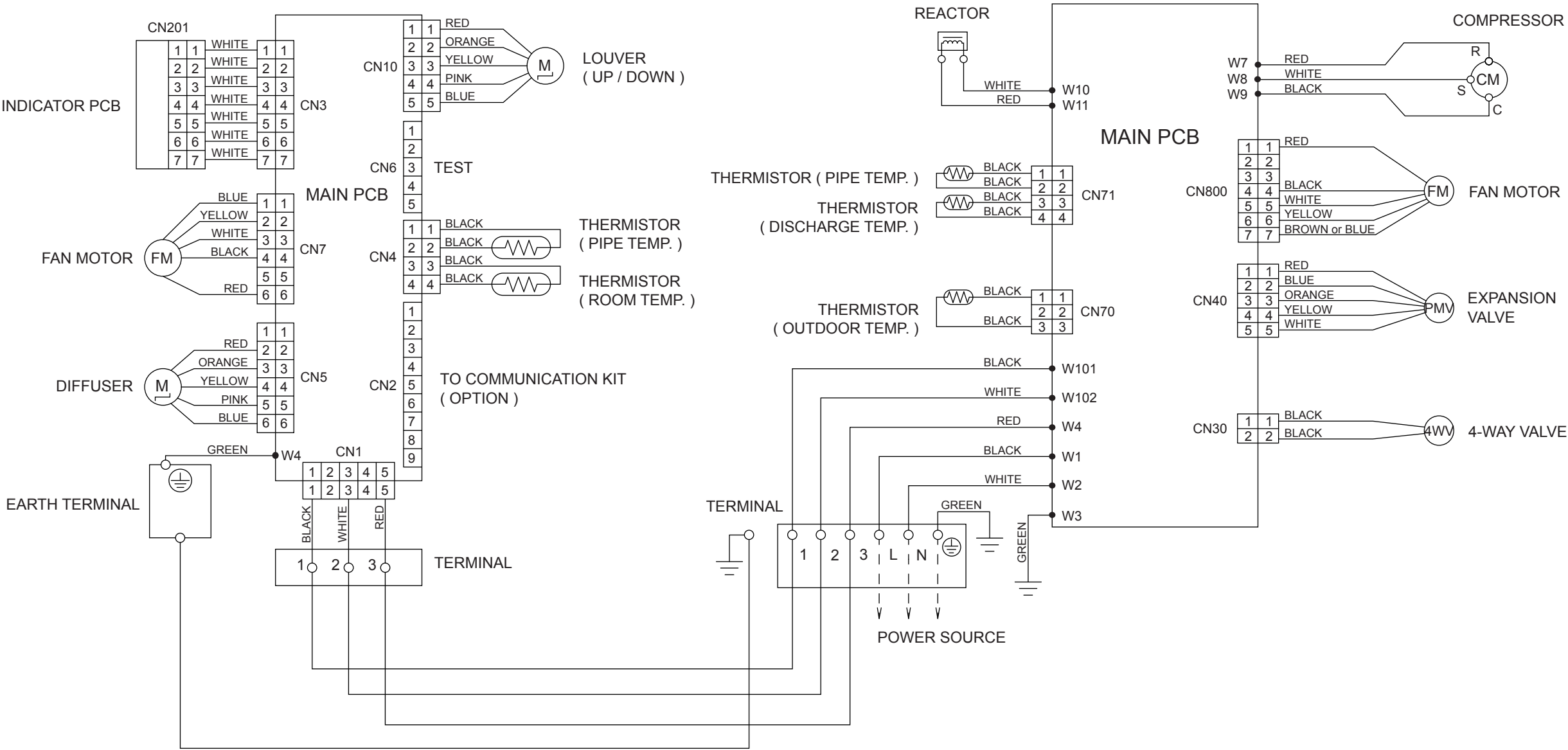
COMMUNICATION PCB  
UTY-XCBXZ2 ( OPTION )



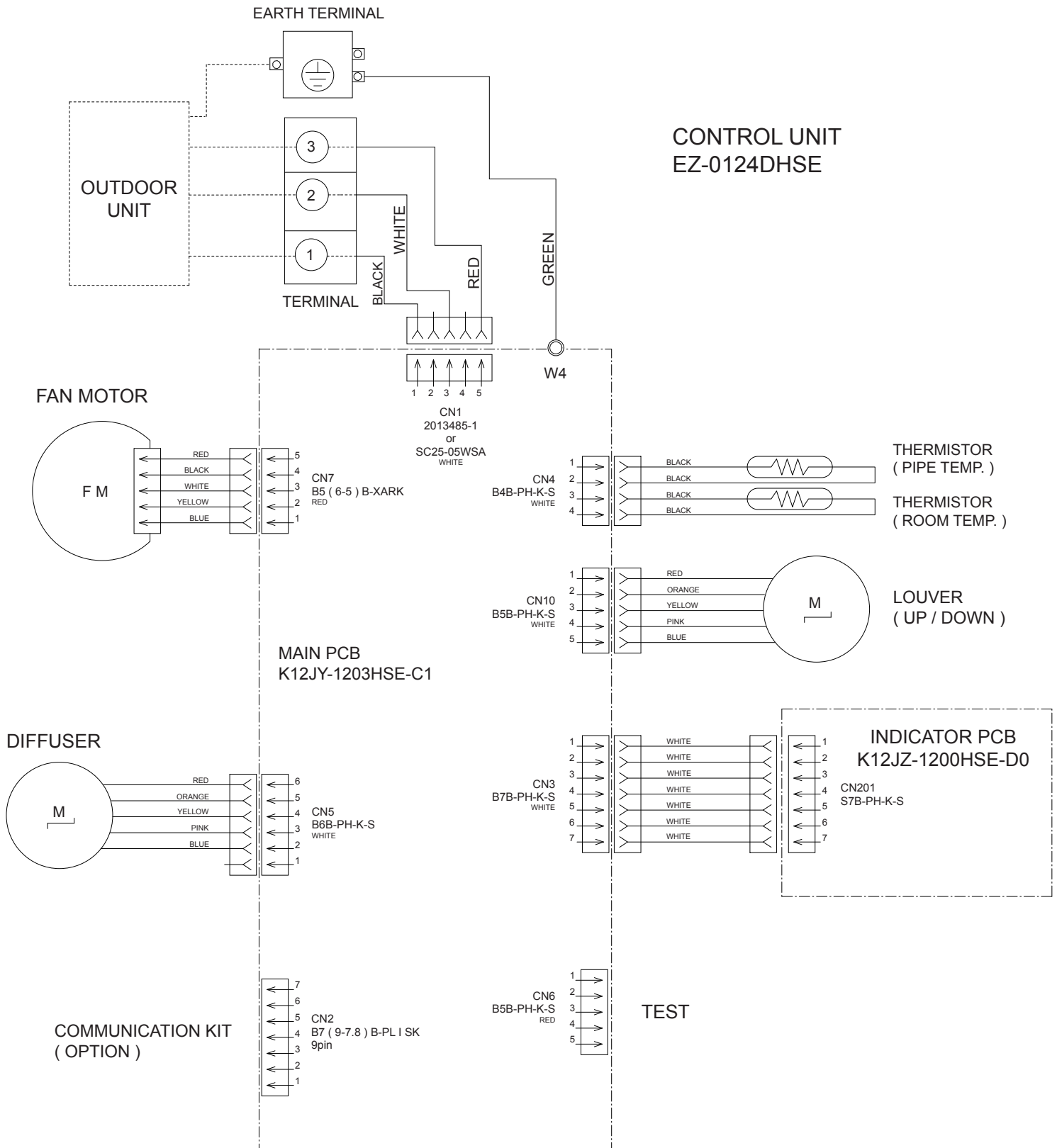
CIRCUIT DIAGRAM

INDOOR UNIT

OUTDOOR UNIT

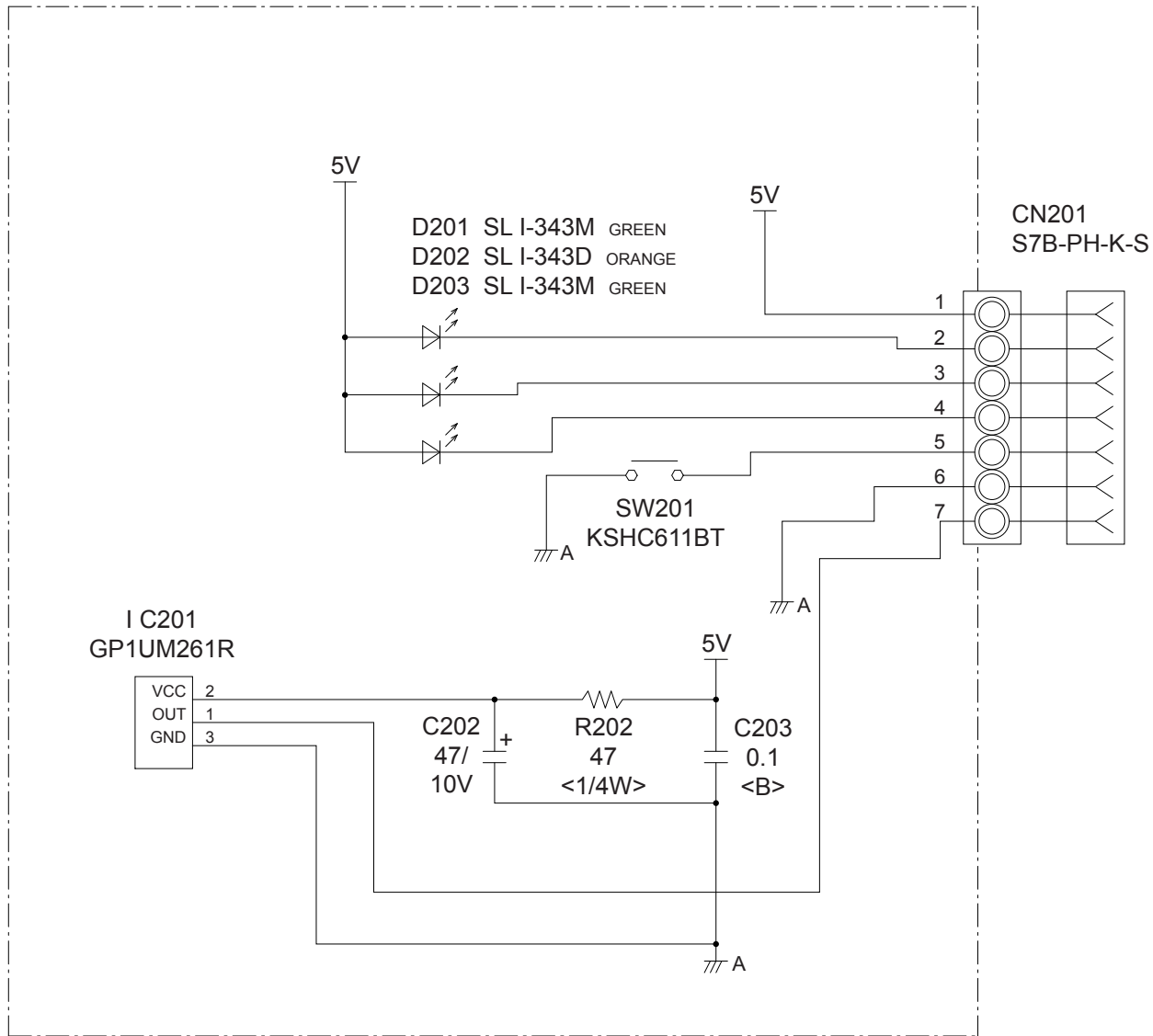


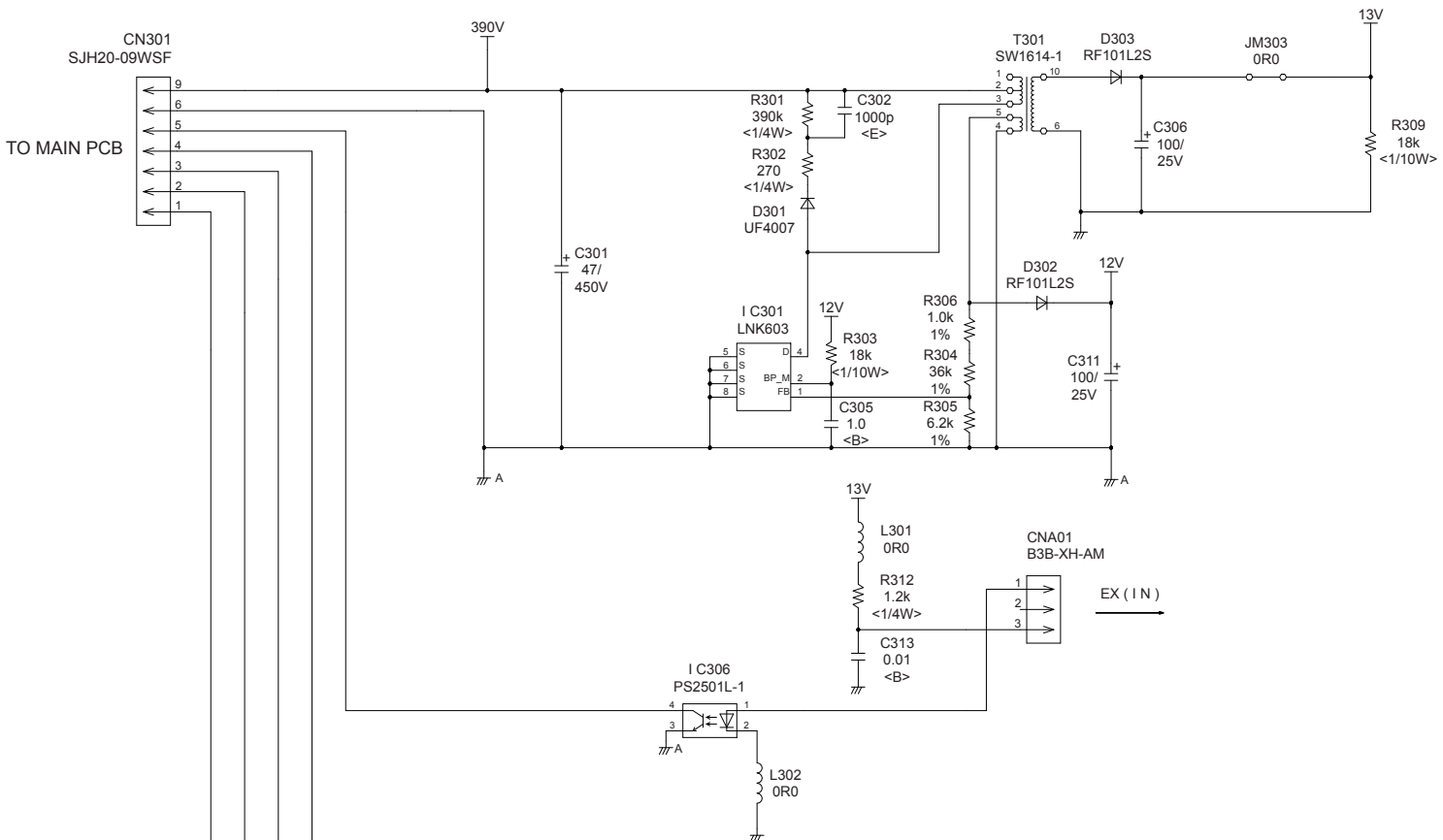
# INDOOR PCB CIRCUIT DIAGRAM





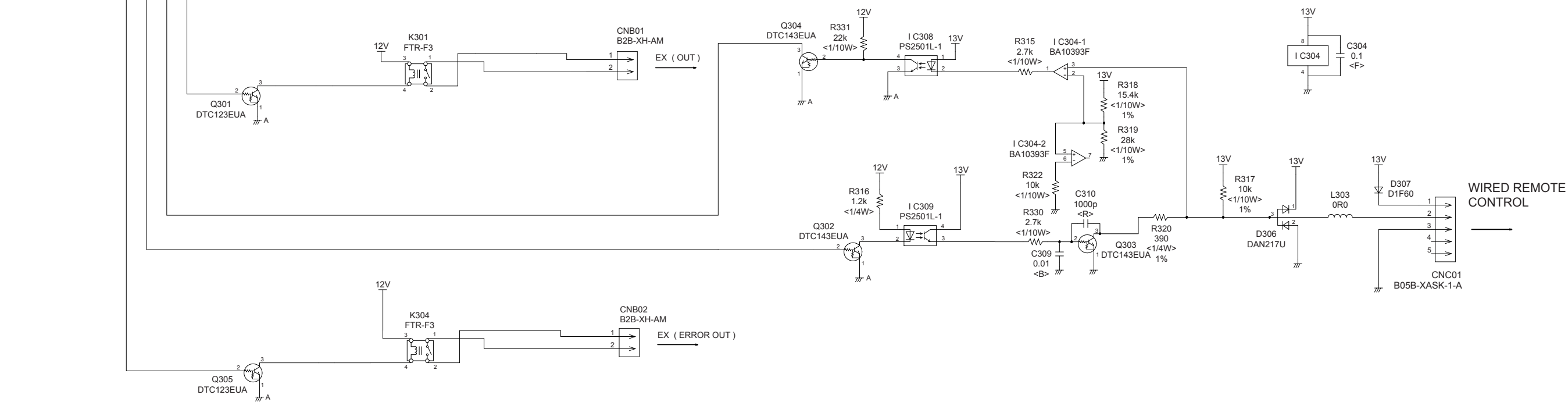
INDOOR UNIT  
INDICATOR PCB  
K12JZ-1200HSE-D0





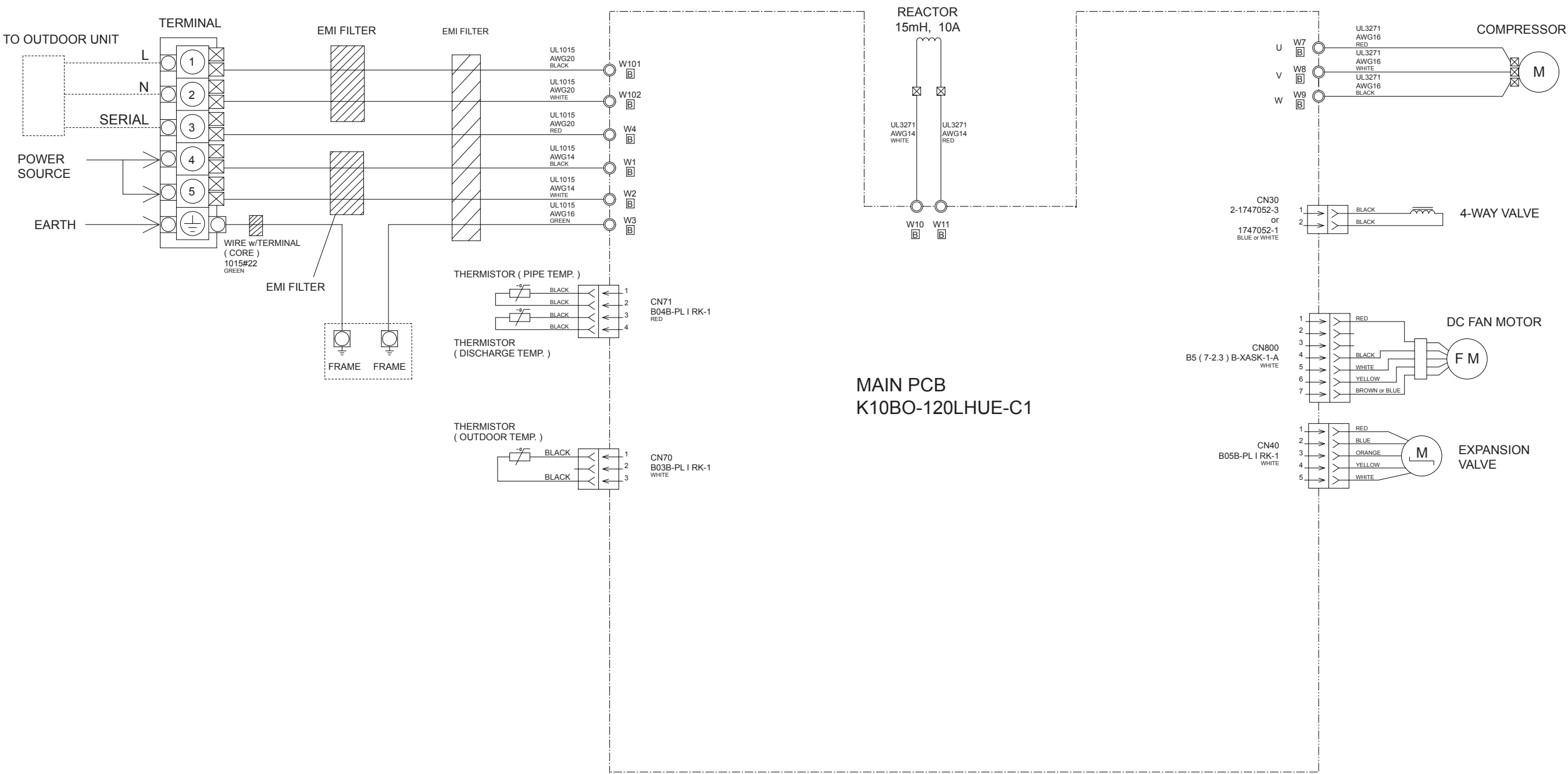
(Option)  
Communication kit  
UTY-XCBXZ2

Communication PCB  
K10DC-1000HSE-CA0

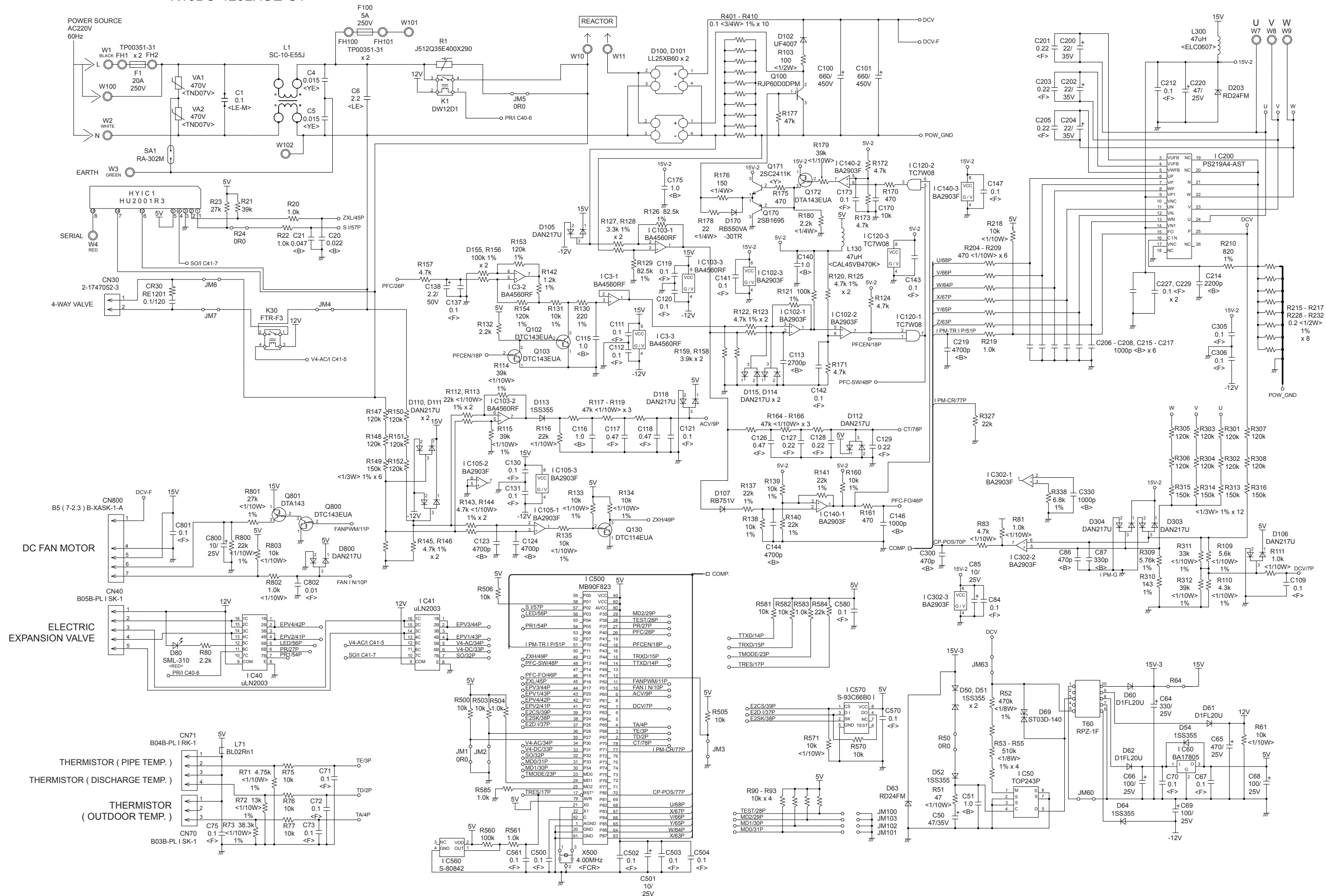


# OUTDOOR PCB CIRCUIT DIAGRAM

INVERTER ASSEMBLY  
EZ-0122DHUE



OUTDOOR UNIT  
MAIN PCB  
K10BO-120LHUE-C1



# ERROR DETECTION

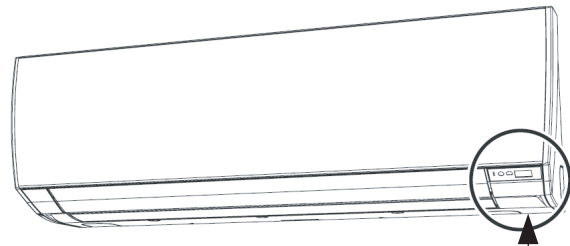
## INDOOR UNIT REMOTE CONTROL

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.



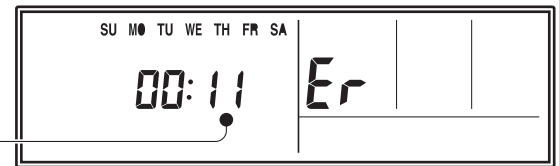
OPERATION indicator lamp (green)

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.)



Error code

● : 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]<br>•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)         | ◇               | 50                   | 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                                                                                                                           |

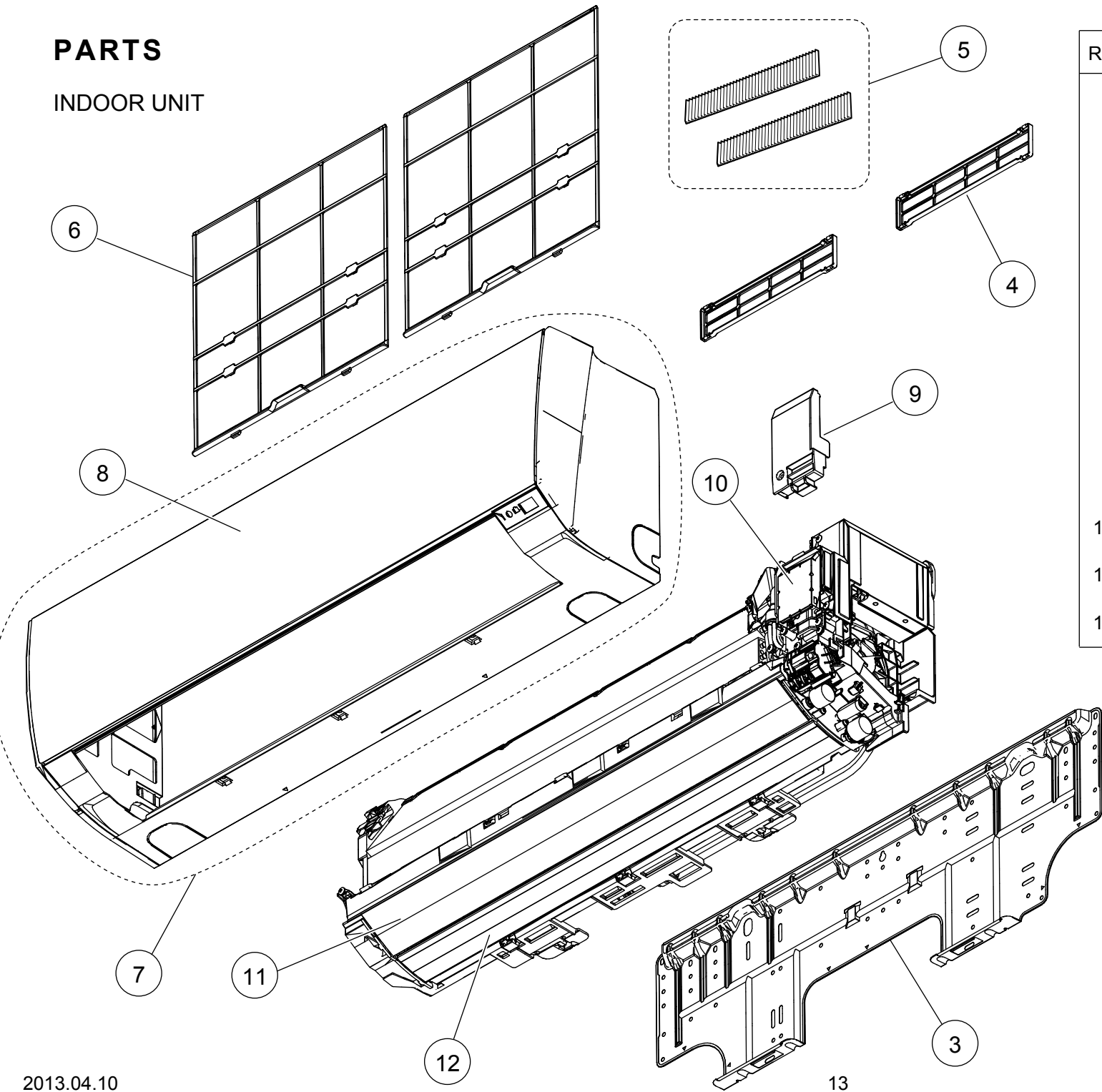
| Indoor unit lamps |                |                 | Wired remote control | Description                                                                                           |
|-------------------|----------------|-----------------|----------------------|-------------------------------------------------------------------------------------------------------|
| 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                                                                                    |

#### OUTDOOR UNIT

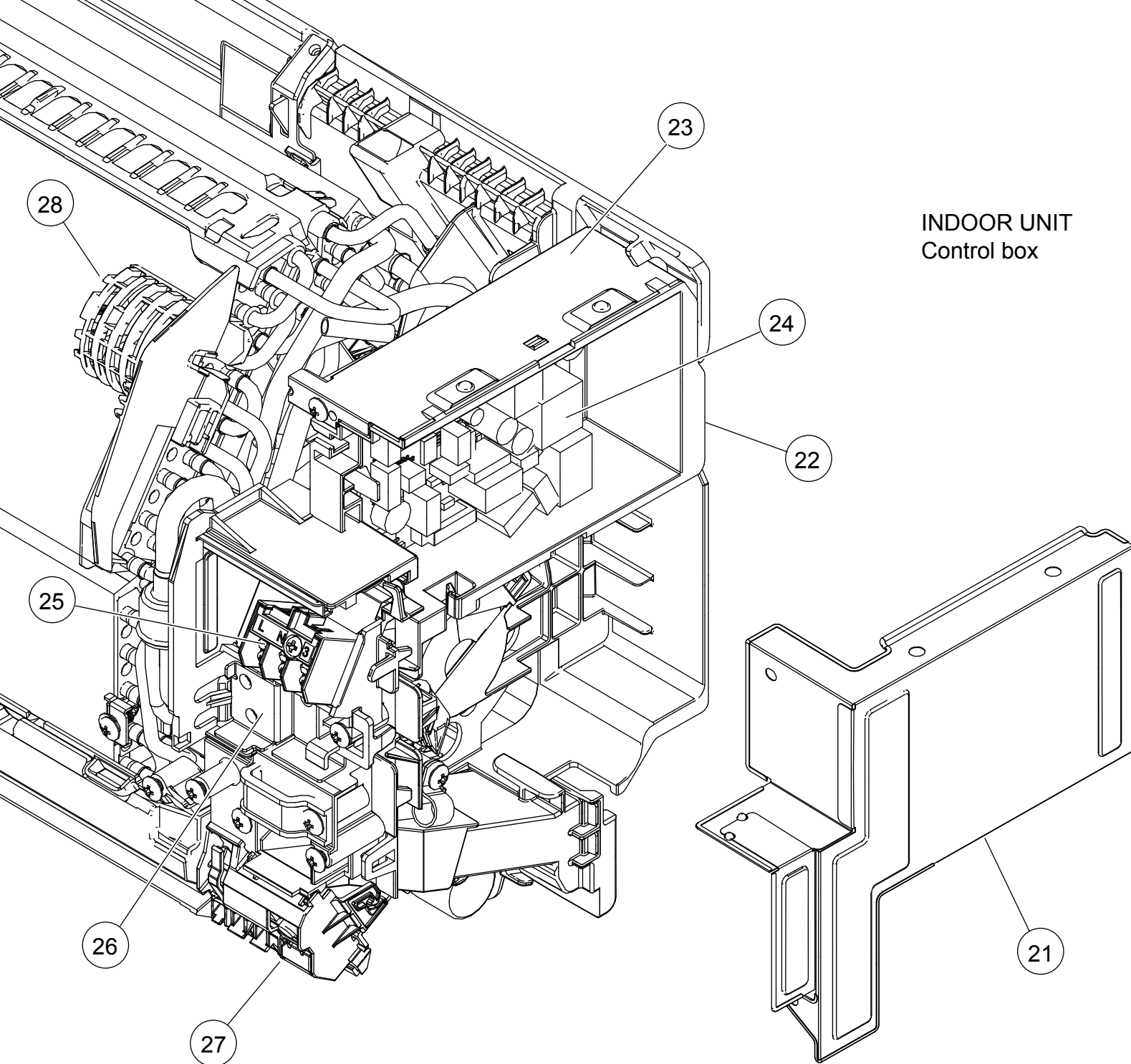
| Indicator lamp                 | Error                       |
|--------------------------------|-----------------------------|
| on                             | Discharge temperature error |
| 0.5 second on / 0.5 second off | IPM overcurrent protection  |
| 0.1 second on / 0.1 second off | Thermistor 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

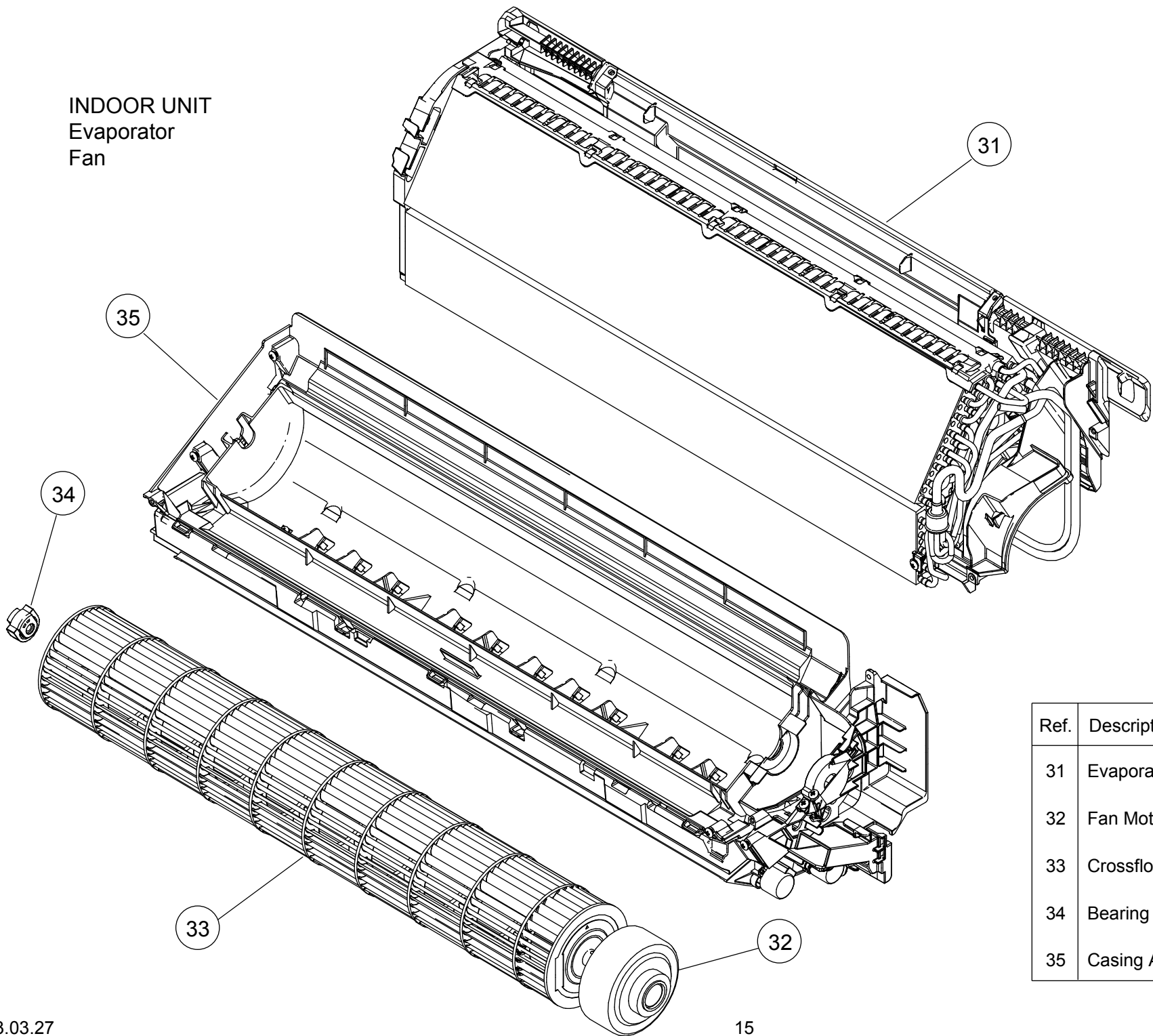


| Ref. | Description                    | Part number |  |
|------|--------------------------------|-------------|--|
| 1    | Remote Control                 | 9319208008  |  |
| 2    | Remote Control Holder          | 9318912005  |  |
| 3    | Bracket Panel                  | 9332882018  |  |
| 4    | Electric Filter Holder         | 9332911008  |  |
| 5    | Air Clean Filter Assy          | 9317250009  |  |
| 6    | Air Filter                     | 9332875003  |  |
| 7    | Front Panel Sub Assy (GENERAL) | 9332994018  |  |
| 8    | Intake Grille (GENERAL)        | 9333052014  |  |
| 9    | Wire Cover                     | 9332894004  |  |
| 10   | Wire Shield                    | 9332906004  |  |
| 11   | Louver                         | 9332900002  |  |
| 12   | Diffuser Assy                  | 9332998009  |  |



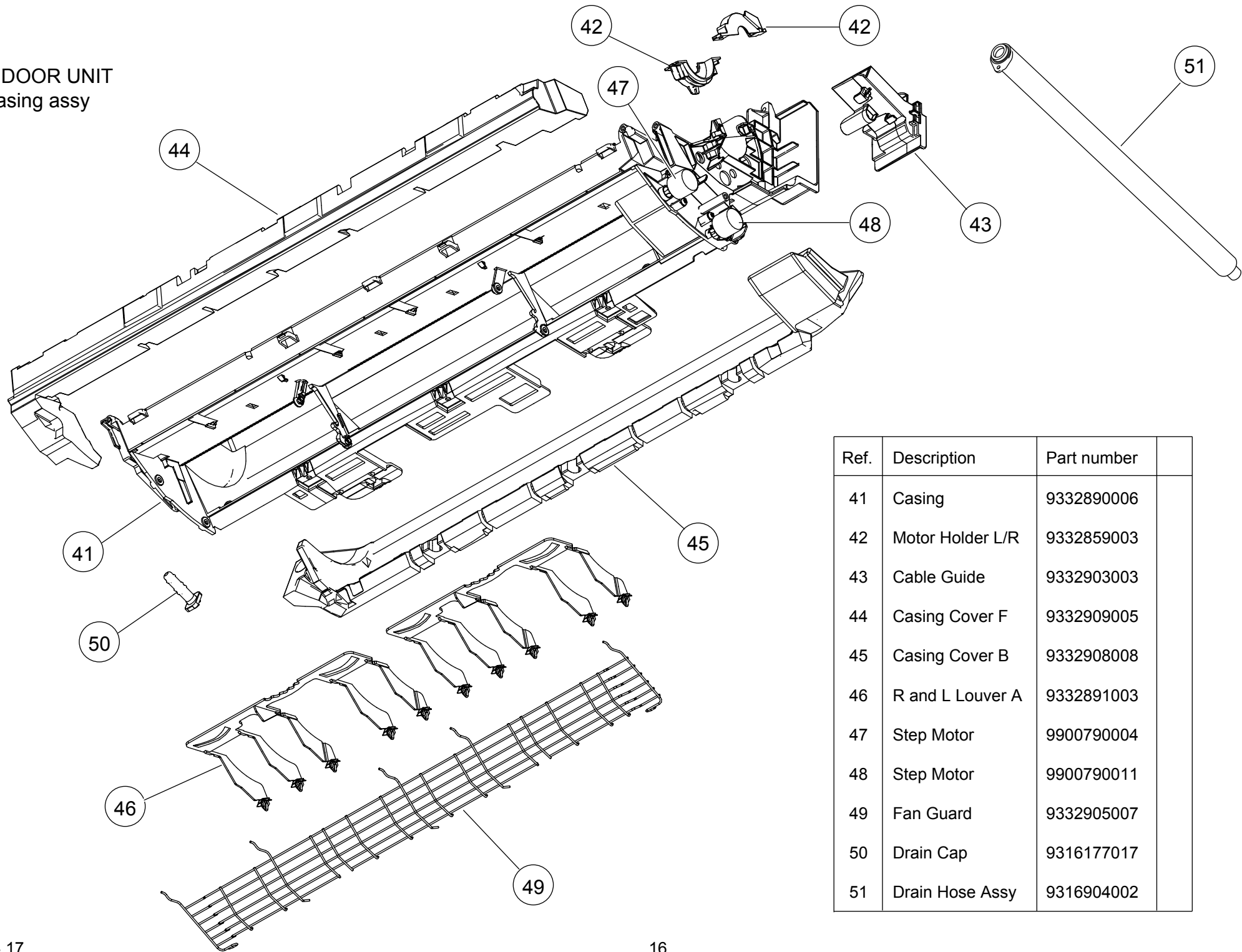
| Ref. | Description            | Part number |  |
|------|------------------------|-------------|--|
| 21   | Cover Shield           | 9332915006  |  |
| 22   | Control Box            | 9332892000  |  |
| 23   | Box Shield Assy        | 9332877007  |  |
| 24   | Main PCB               | 9709427040  |  |
| 25   | Terminal               | 9900720001  |  |
| 26   | Earth Terminal         | 9332880007  |  |
| 27   | Display Assy           | 9709430019  |  |
| 28   | Room Thermistor Holder | 9332868005  |  |
| --   | Thermistor Assy        | 9900714024  |  |

INDOOR UNIT  
Evaporator  
Fan



| Ref. | Description           | Part number |  |
|------|-----------------------|-------------|--|
| 31   | Evaporator Total Assy | 9332989014  |  |
| 32   | Fan Motor             | 9603269005  |  |
| 33   | Crossflow Fan Assy    | 9316830004  |  |
| 34   | Bearing C Assy        | 9306628017  |  |
| 35   | Casing Assy           | 9333009001  |  |

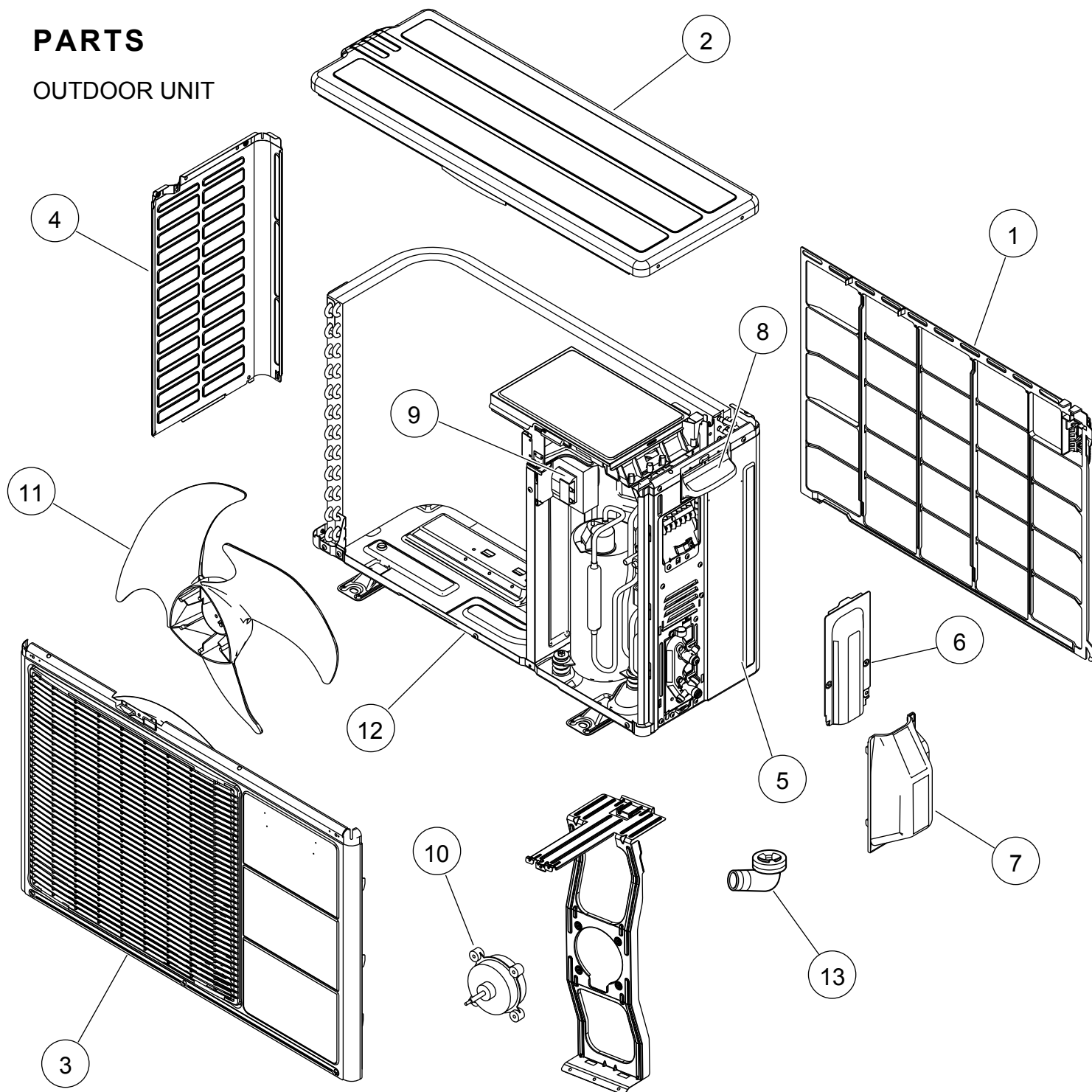
INDOOR UNIT  
Casing assy



| Ref. | Description      | Part number |  |
|------|------------------|-------------|--|
| 41   | Casing           | 9332890006  |  |
| 42   | Motor Holder L/R | 9332859003  |  |
| 43   | Cable Guide      | 9332903003  |  |
| 44   | Casing Cover F   | 9332909005  |  |
| 45   | Casing Cover B   | 9332908008  |  |
| 46   | R and L Louver A | 9332891003  |  |
| 47   | Step Motor       | 9900790004  |  |
| 48   | Step Motor       | 9900790011  |  |
| 49   | Fan Guard        | 9332905007  |  |
| 50   | Drain Cap        | 9316177017  |  |
| 51   | Drain Hose Assy  | 9316904002  |  |

# PARTS

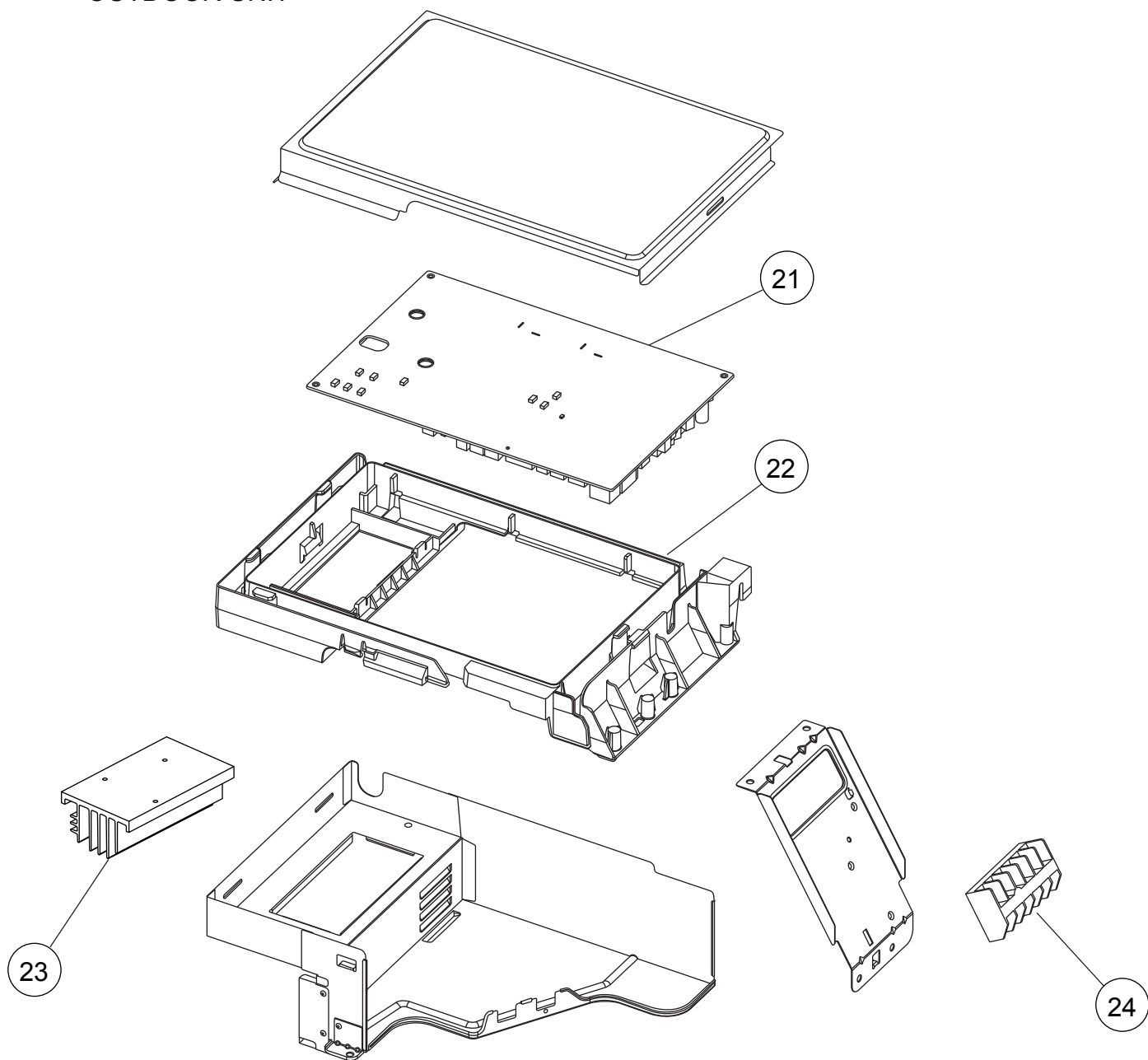
## OUTDOOR UNIT



| Ref. | Description         | Part number |
|------|---------------------|-------------|
| 1    | Protective Net      | 9313941055  |
| 2    | Top Panel Assy      | 9317761055  |
| 3    | Front Panel Assy    | 9317760041  |
| 4    | Cabinet Left        | 9318247008  |
| 5    | Cabinet Right Assy  | 9317759021  |
| 6    | Switch Cover A Assy | 9317795005  |
| 7    | Switch Cover B      | 9317582001  |

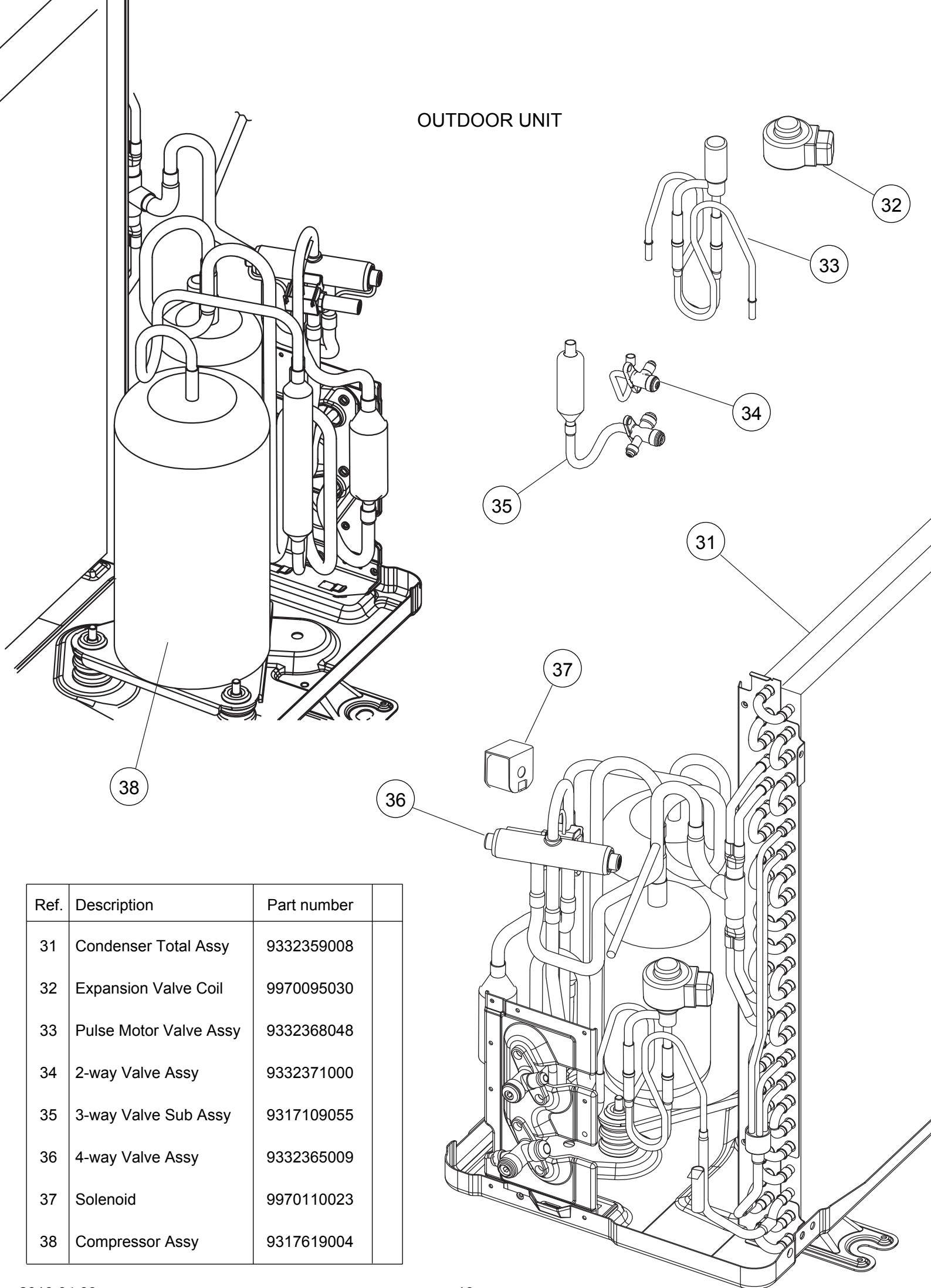
| Ref. | Description   | Part number |
|------|---------------|-------------|
| 8    | Grip          | 9317588003  |
| 9    | Reactor Assy  | 9900788018  |
| 10   | Fan Motor     | 9602864003  |
| 11   | Propeller Fan | 9313808013  |
| 12   | Base Assy     | 9316885028  |
| 13   | Drain Assy    | 9303029022  |
| --   | Emblem        | 9319157009  |

OUTDOOR UNIT



| Ref. | Description        | Part number |  |
|------|--------------------|-------------|--|
| 21   | Main PCB           | 9708683478  |  |
| 22   | PCB Holder         | 9318182002  |  |
| 23   | Heat Sink          | 9319070001  |  |
| 24   | Terminal           | 9900435028  |  |
| --   | Outdoor Thermistor | 9900565008  |  |
| --   | Thermistor Assy    | 9900628000  |  |

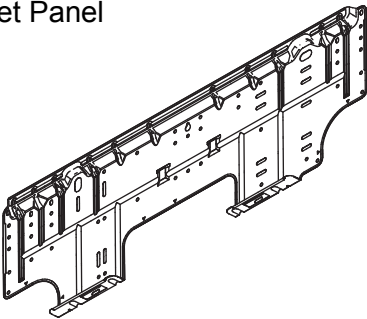
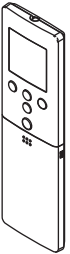
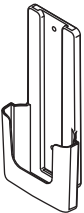
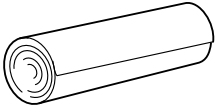
## OUTDOOR UNIT

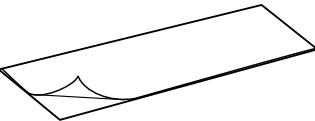
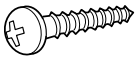
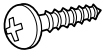
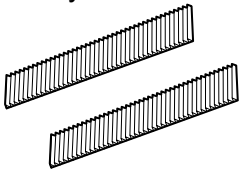
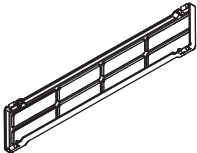


| Ref. | Description            | Part number |  |
|------|------------------------|-------------|--|
| 31   | Condenser Total Assy   | 9332359008  |  |
| 32   | Expansion Valve Coil   | 9970095030  |  |
| 33   | Pulse Motor Valve Assy | 9332368048  |  |
| 34   | 2-way Valve Assy       | 9332371000  |  |
| 35   | 3-way Valve Sub Assy   | 9317109055  |  |
| 36   | 4-way Valve Assy       | 9332365009  |  |
| 37   | Solenoid               | 9970110023  |  |
| 38   | Compressor Assy        | 9317619004  |  |

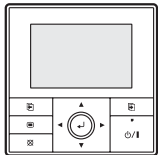
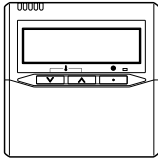
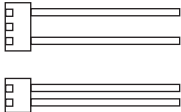
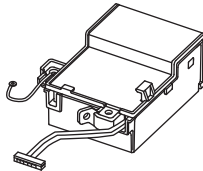
# ACCESSORIES

## INDOOR UNIT

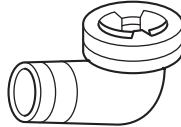
| Name and Shape                                                                                             | Part number |
|------------------------------------------------------------------------------------------------------------|-------------|
| Bracket Panel<br>         | 9332882018  |
| Remote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

| Name and Shape                                                                                                       | Part number |
|----------------------------------------------------------------------------------------------------------------------|-------------|
| Seal A<br>                         | 9304536000  |
| Tapping screw<br>(M4 x 25 mm)<br> | 0700076046  |
| Tapping screw<br>(M3 x 12 mm)<br> | 0700019036  |
| Air cleaning filter assy<br>     | 9317250009  |
| Filter holder<br>                | 9332911008  |

## OPTIONAL PARTS

| Name and Shape                                                                                                            |  |
|---------------------------------------------------------------------------------------------------------------------------|--|
| Wired remote control<br>UTY-RVNYM<br>  |  |
| Wired remote control<br>UTY-RNNYM<br>  |  |
| Simple remote Control<br>UTY-RSNYM<br> |  |
| External connect kit<br>UTY-XWZXZ5<br> |  |
| Communication kit<br>UTY-XCBXZ2<br>   |  |

## OUTDOOR UNIT

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

1303G4203