

INVERTER SPLIT TYPE
AIR CONDITIONER (50Hz)
DUCT TYPE

SERVICE MANUAL



| | |
|-------------|--------------|
| Indoor unit | Outdoor unit |
| ARYG24LMLA | AOYG24LALA |

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) | 14 |
| ACCESSORIES..... | 16 |

SPECIFICATIONS

ELECTRICAL DATA

| | | |
|------------------------|---------|-------------------------|
| TYPE | | Inverter cool & heat |
| INDOOR UNIT | | ARYG24LMLA |
| OUTDOOR UNIT | | AOYG24LALA |
| COOLING CAPACITY | | 6.80 kW |
| HEATING CAPACITY | | 8.00 kW |
| POWER SOURCE | | 230 V |
| FREQUENCY | | 50 Hz |
| RUNNING CURRENT | Cooling | 9.7 A |
| | Heating | 9.9 A |
| INPUT WATTS | Cooling | 2.21 kW |
| | Heating | 2.26 kW |
| E.E.R. | Cooling | 3.08 kW/kW |
| COP | Heating | 3.54 kW/kW |
| AIR FLOW, INDOOR UNIT | | 1,100 m ³ /h |
| AIR FLOW, OUTDOOR UNIT | | 2,470 m ³ /h |
| MOISTURE REMOVAL | | 2.5 L/hr |
| MAXIMUM CURRENT | Cooling | 12.0 A |
| | Heating | 13.5 A |

FAN SPEED

| | | |
|--------------|----------------|--------------|
| INDOOR UNIT | Discrimination | MFG-24RVA |
| | High | 830 r.p.m. |
| | Medium | 700 r.p.m. |
| | Low | 600 r.p.m. |
| | Quiet | 550 r.p.m. |
| OUTDOOR UNIT | Discrimination | MFE-24ROAM |
| | Cooling | 1,050 r.p.m. |
| | Heating | 1,050 r.p.m. |

NOISE LEVEL

| | | |
|--------------|---------|-------|
| INDOOR UNIT | High | 31 dB |
| | Medium | 29 dB |
| | Low | 27 dB |
| | Quiet | 25 dB |
| OUTDOOR UNIT | Cooling | 52 dB |
| | Heating | 53 dB |

COMPRESSOR AND REFRIGERANT

| | | |
|------------------------------|------------------|------------------------|
| TYPE | | Hermetic type, 4 poles |
| DISCRIMINATION | | DA150A1F-20NA |
| COMPRESSOR WEIGHT (with oil) | | 10.0 kg |
| PRECHARGED REFRIGERANT | | 1,700 g |
| REFRIGERANT TYPE | | R410A |
| FULL CHARGE | Pipe length 15 m | 1,700 g |
| | 20 m | 1,800 g |
| | 25 m | 1,900 g |
| | 30 m | 2,000 g |
| ADDITIONAL CHARGE | | 20 g/m |
| MAXIMUM PIPE HEIGHT | | 20 m |

DIMENSIONS

| | | |
|--------------|-----------|----------------------|
| INDOOR UNIT | H x W x D | 270 x 1,135 x 700 mm |
| OUTDOOR UNIT | H x W x D | 570 x 790 x 315 mm |

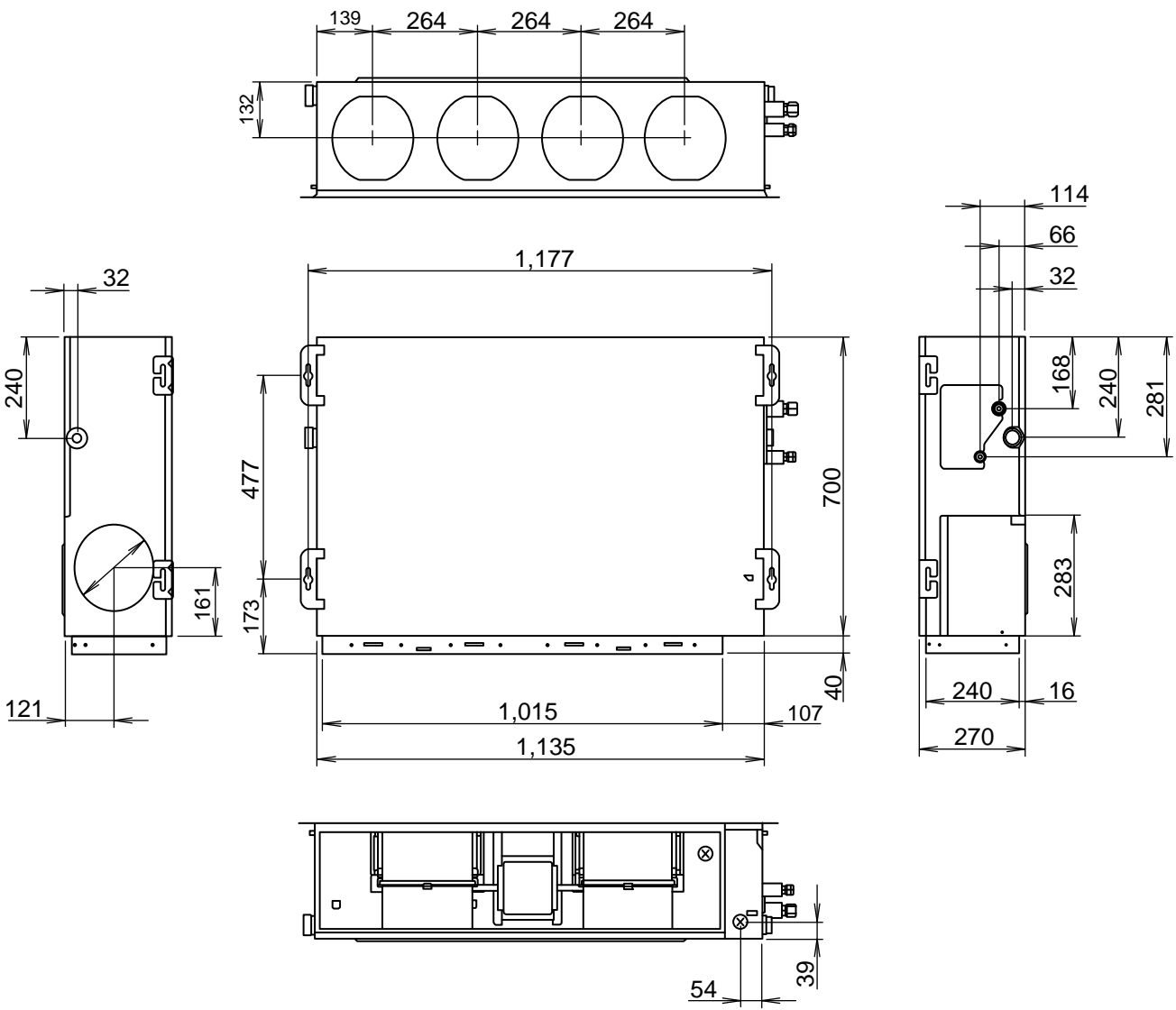
WEIGHT

| | | |
|--------------|----------------|---------------|
| INDOOR UNIT | Net / Shipping | 38 kg / 44 kg |
| OUTDOOR UNIT | Net / Shipping | 44 kg / 48 kg |

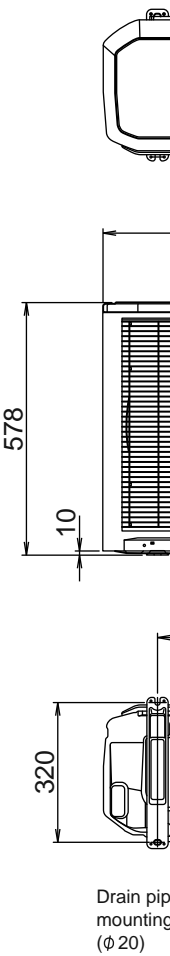
DIMENSIONS

Unit : mm

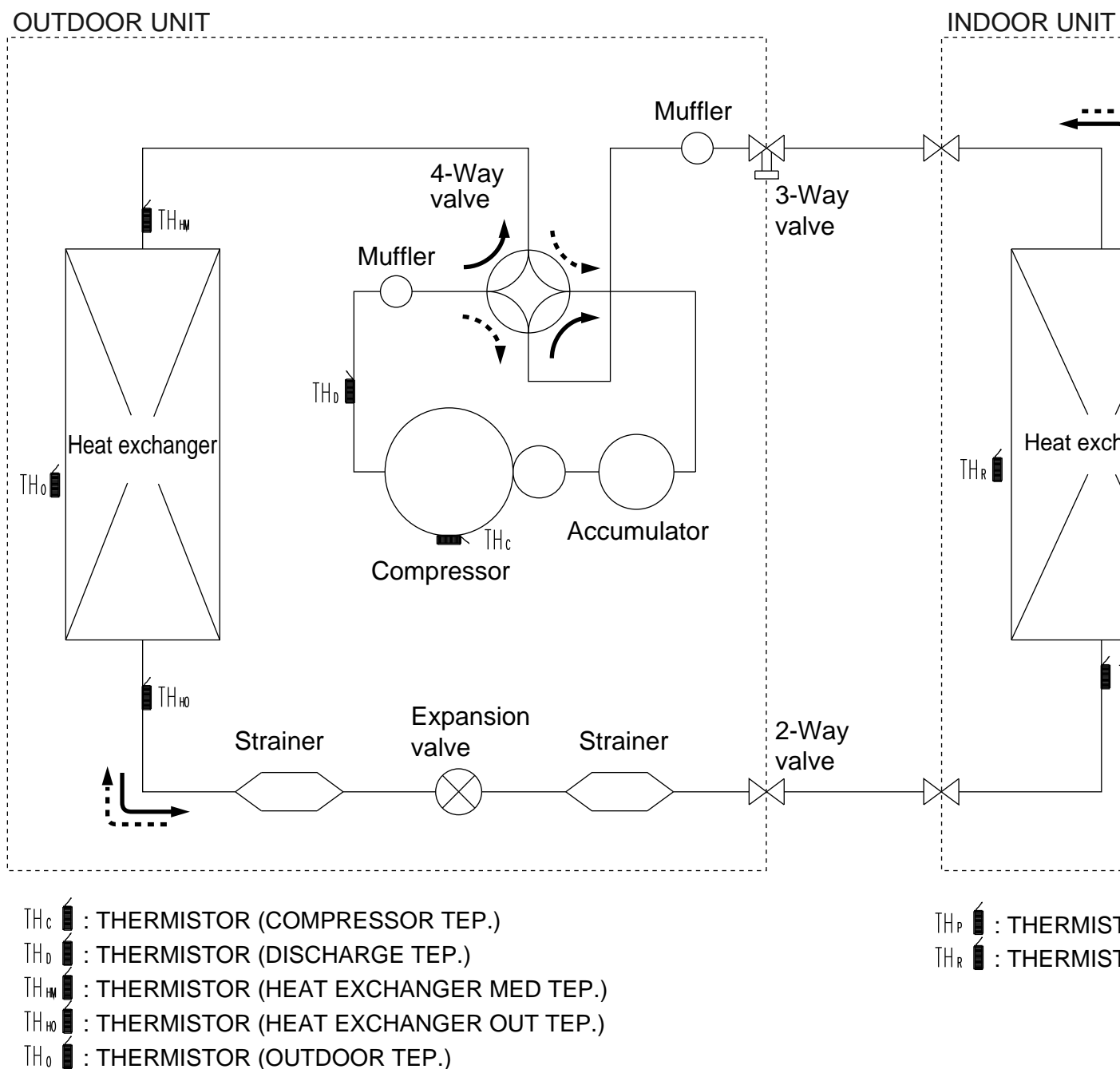
INDOOR UNIT



OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



CIRCUIT DIAGRAM

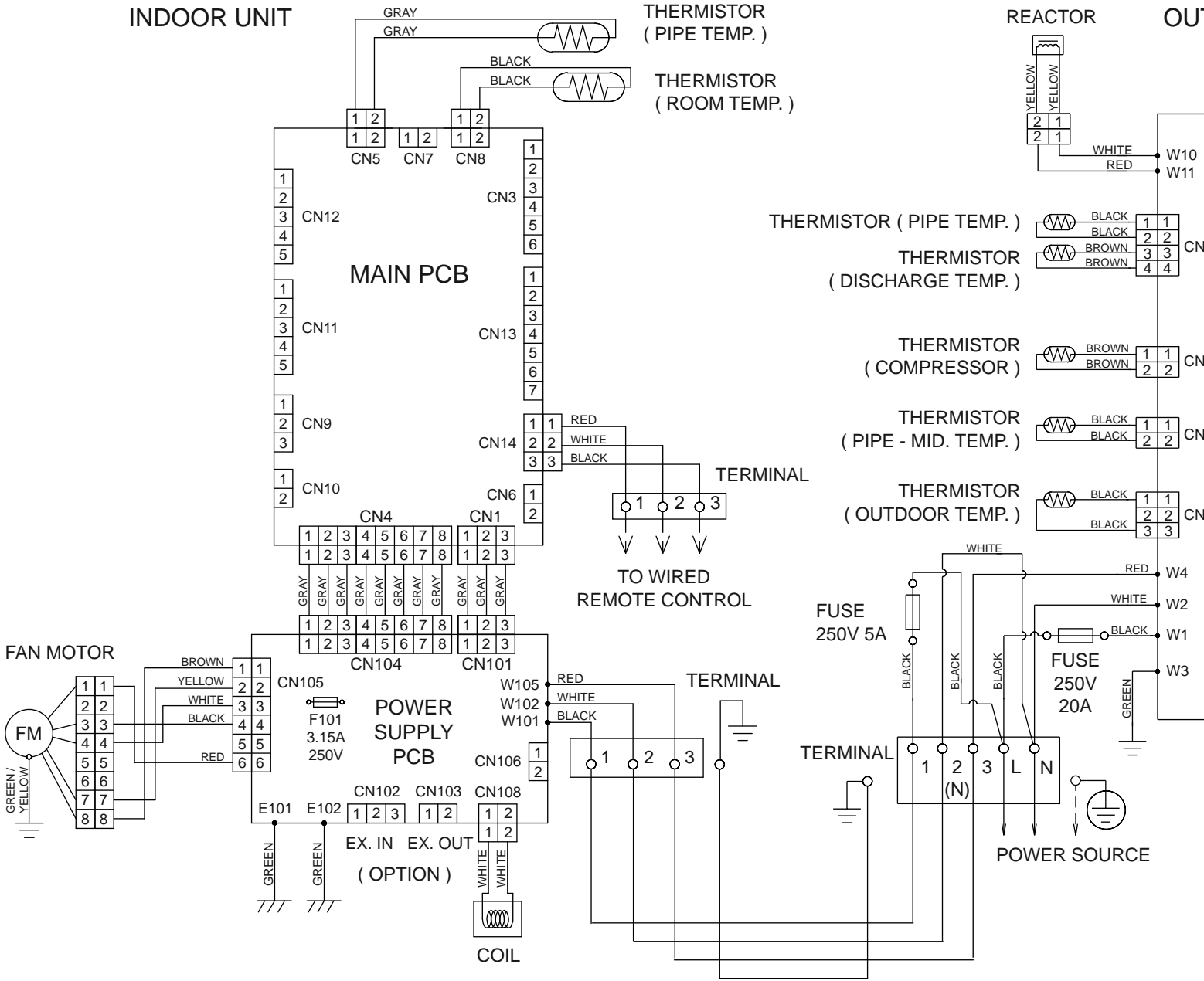
INDOOR UNIT

THERMISTOR
(PIPE TEMP.)

THERMISTOR
(ROOM TEMP.)

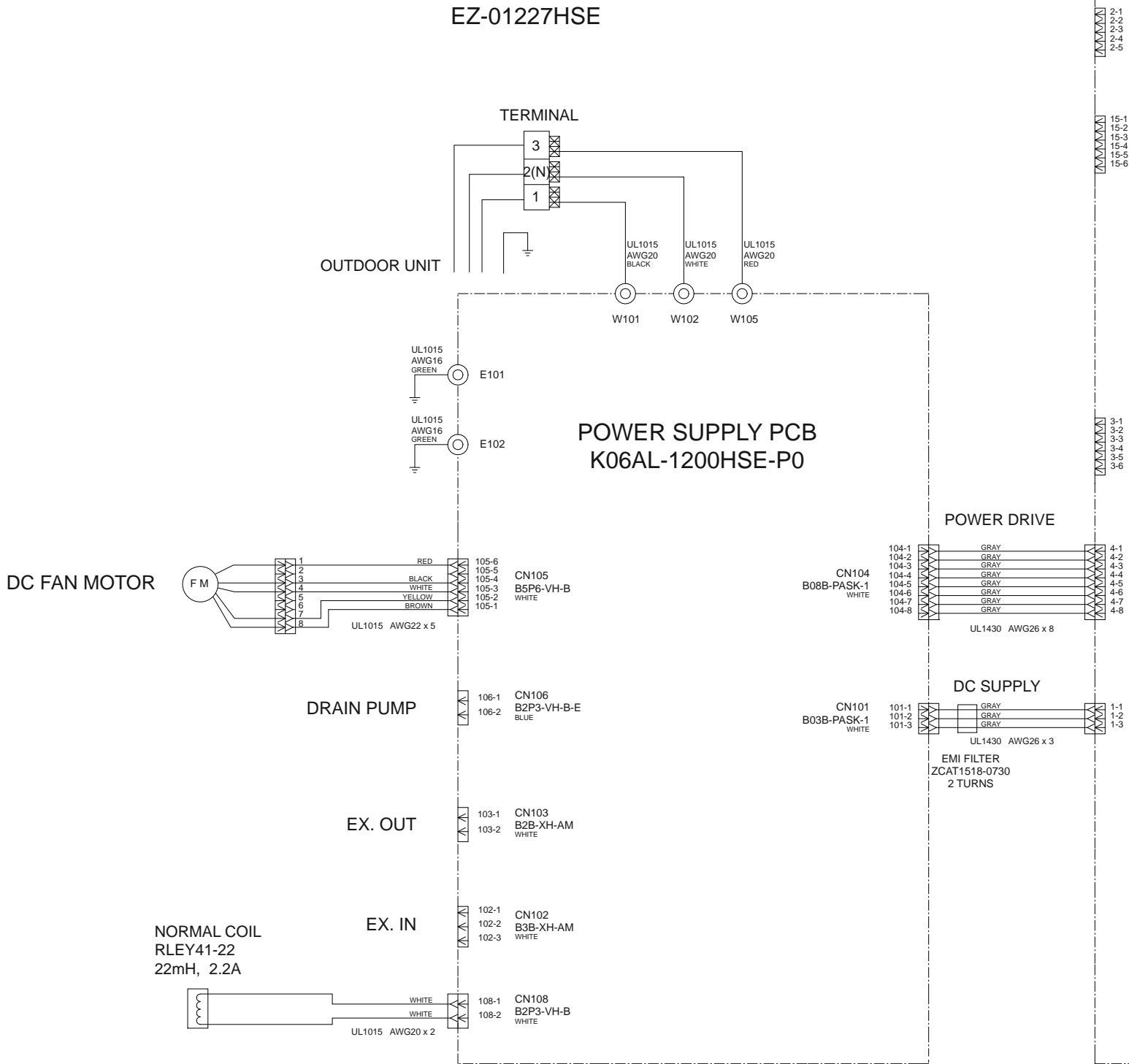
REACTOR

OUTDOOR UNIT

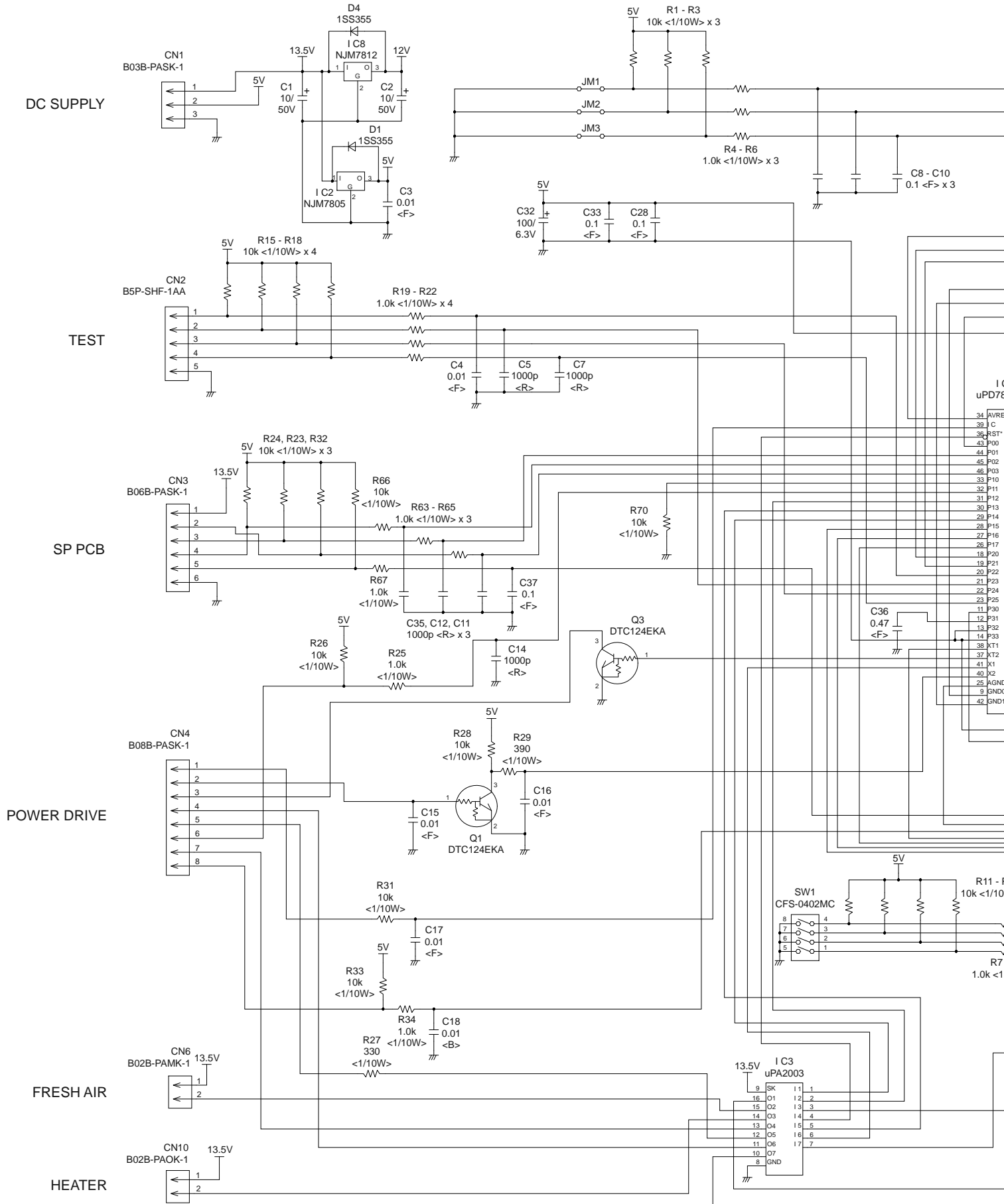


INDOOR PCB CIRCUIT DIAGRAM

CONTROL UNIT
EZ-01227HSE



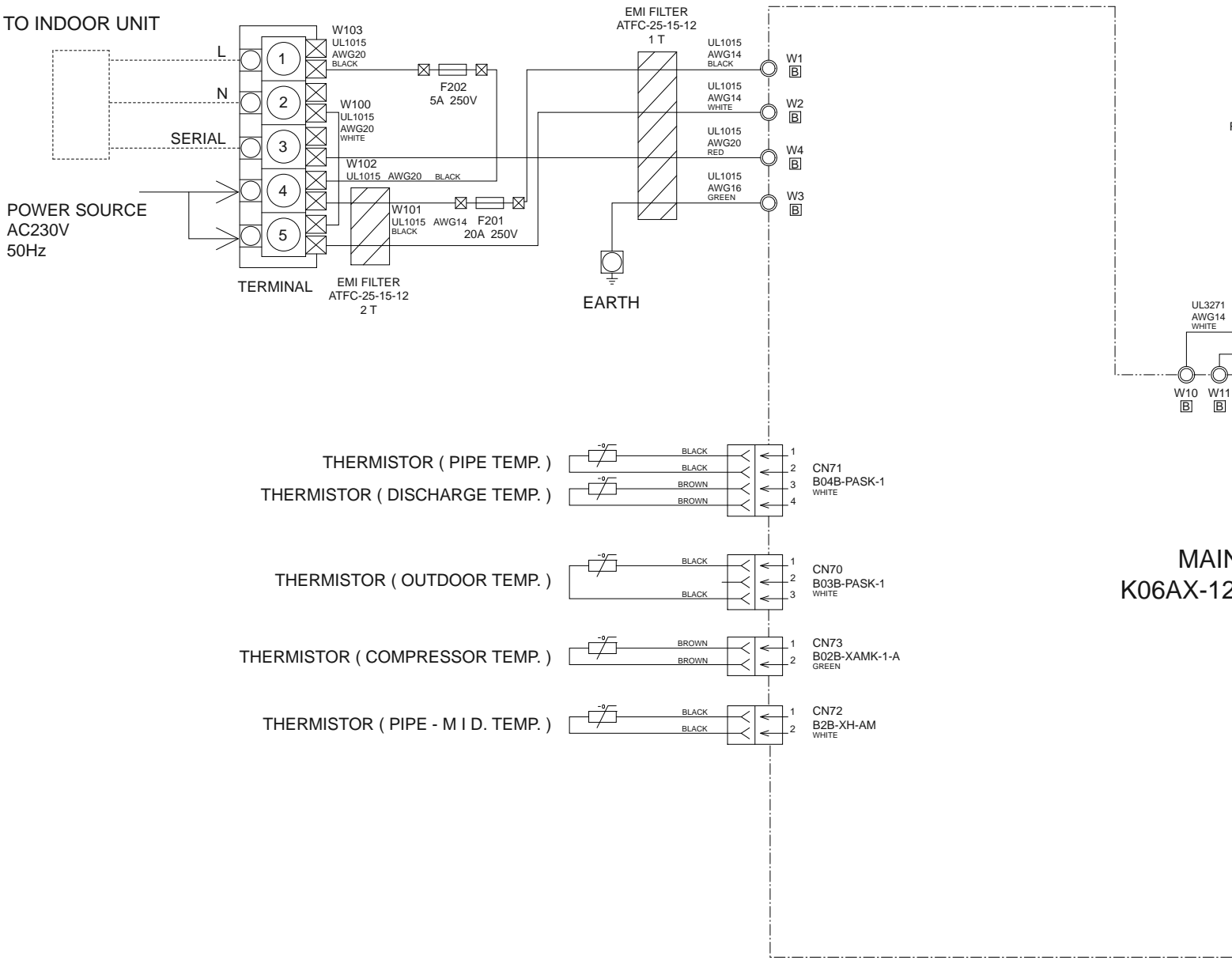
INDOOR UNIT MAIN PCB K06AK-120SHSE-C1



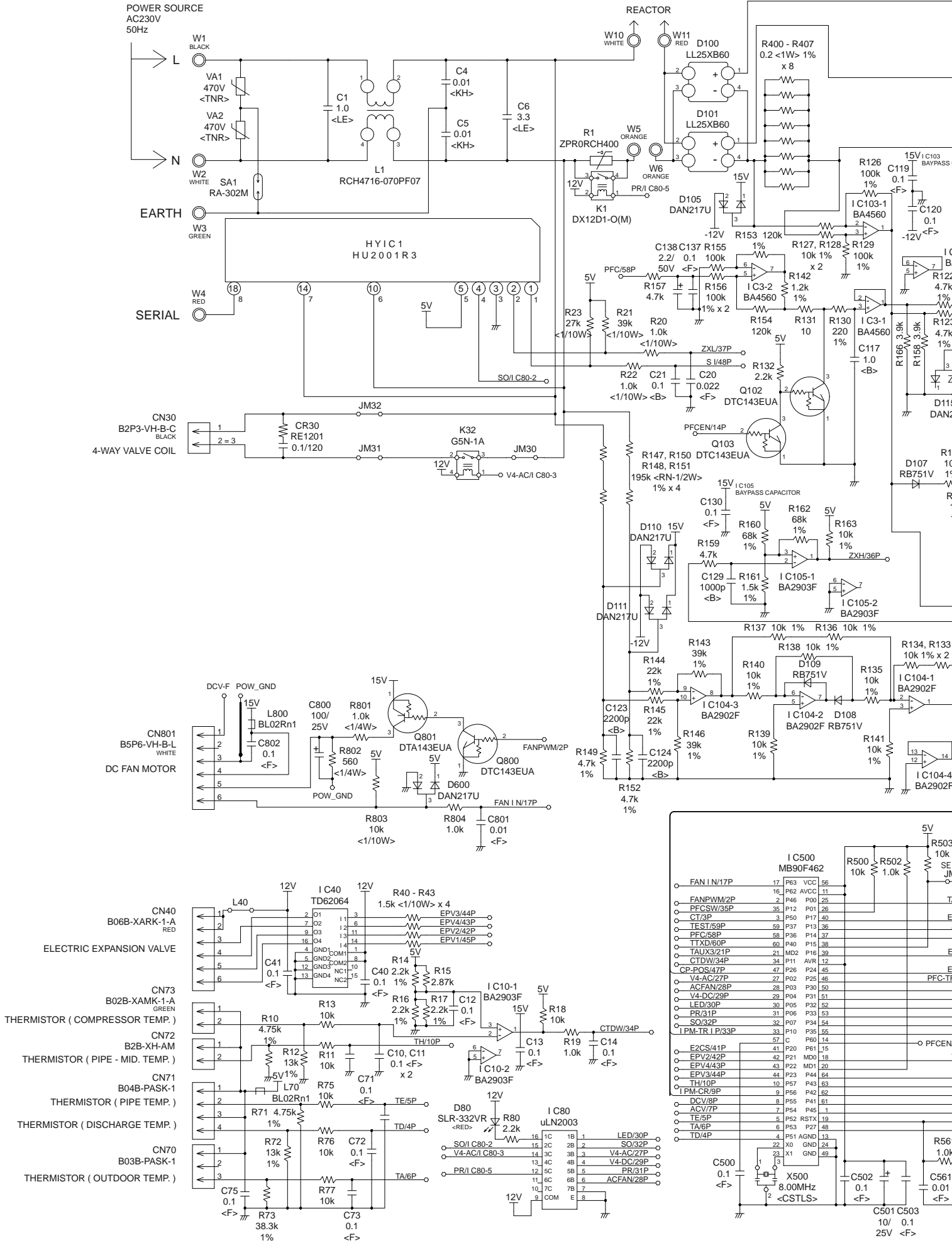
OUTDOOR PCB CIRCUIT DIAGRAM

INVERTER ASSEMBLY
EZ-0121EHUE

TO INDOOR UNIT



OUTDOOR UNIT
MAIN PCB
K06AX-1200HUE-C1



ERROR DETECTION

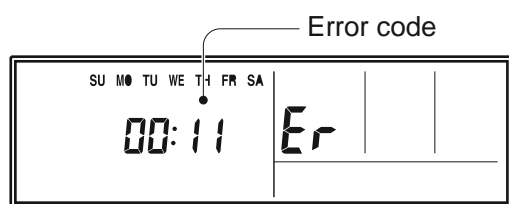
INDOOR UNIT and WIRED REMOTE CONTROL

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 type 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 running.

This is possible only on a wired remote control.

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



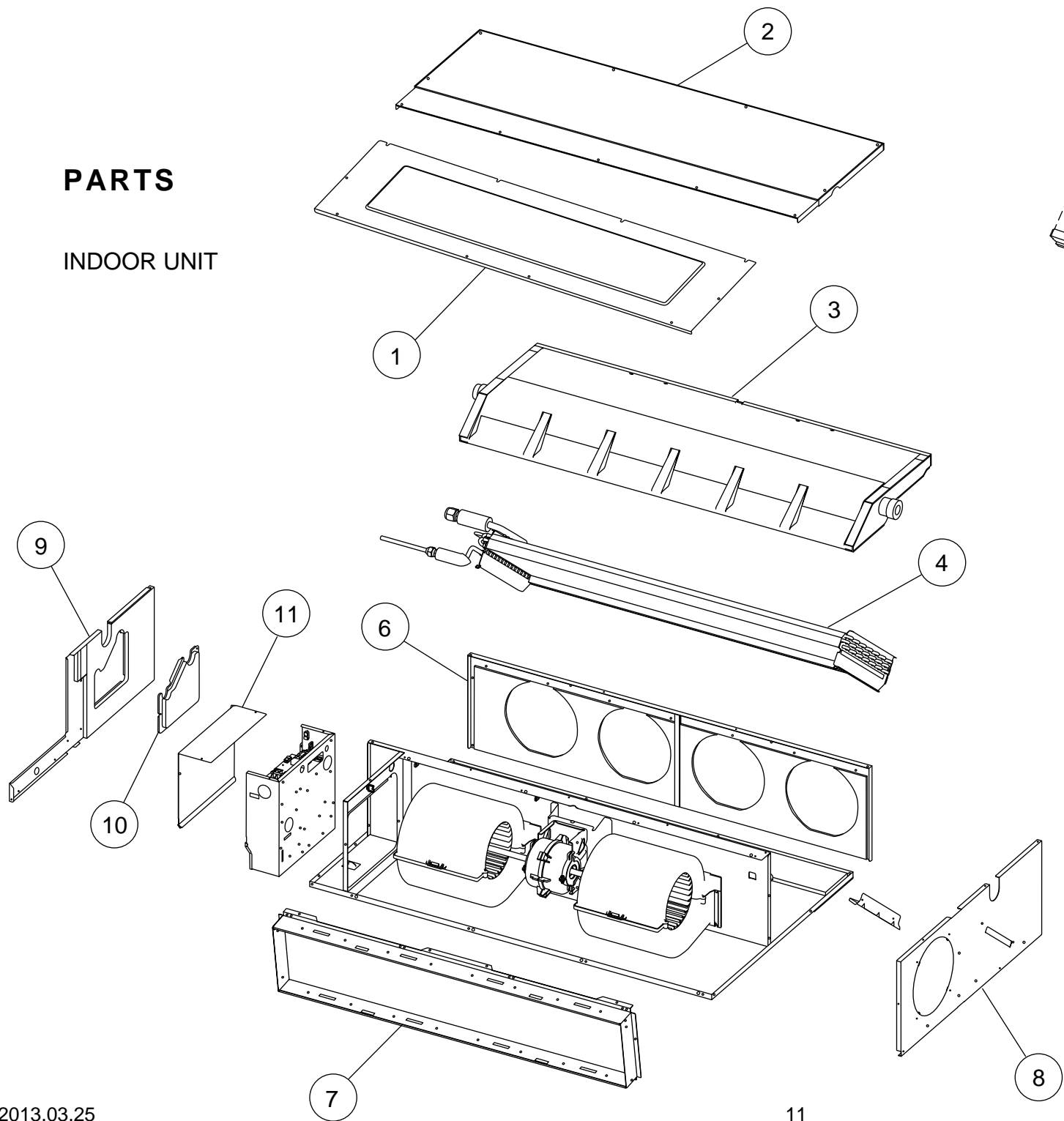
EX. Self-diagnosis

- : 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 | <ul style="list-style-type: none"> • Connection unit number error (indoor slave 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) | ● (1) | ◇ | 31 | Power supply interruption error |
| ● (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 |

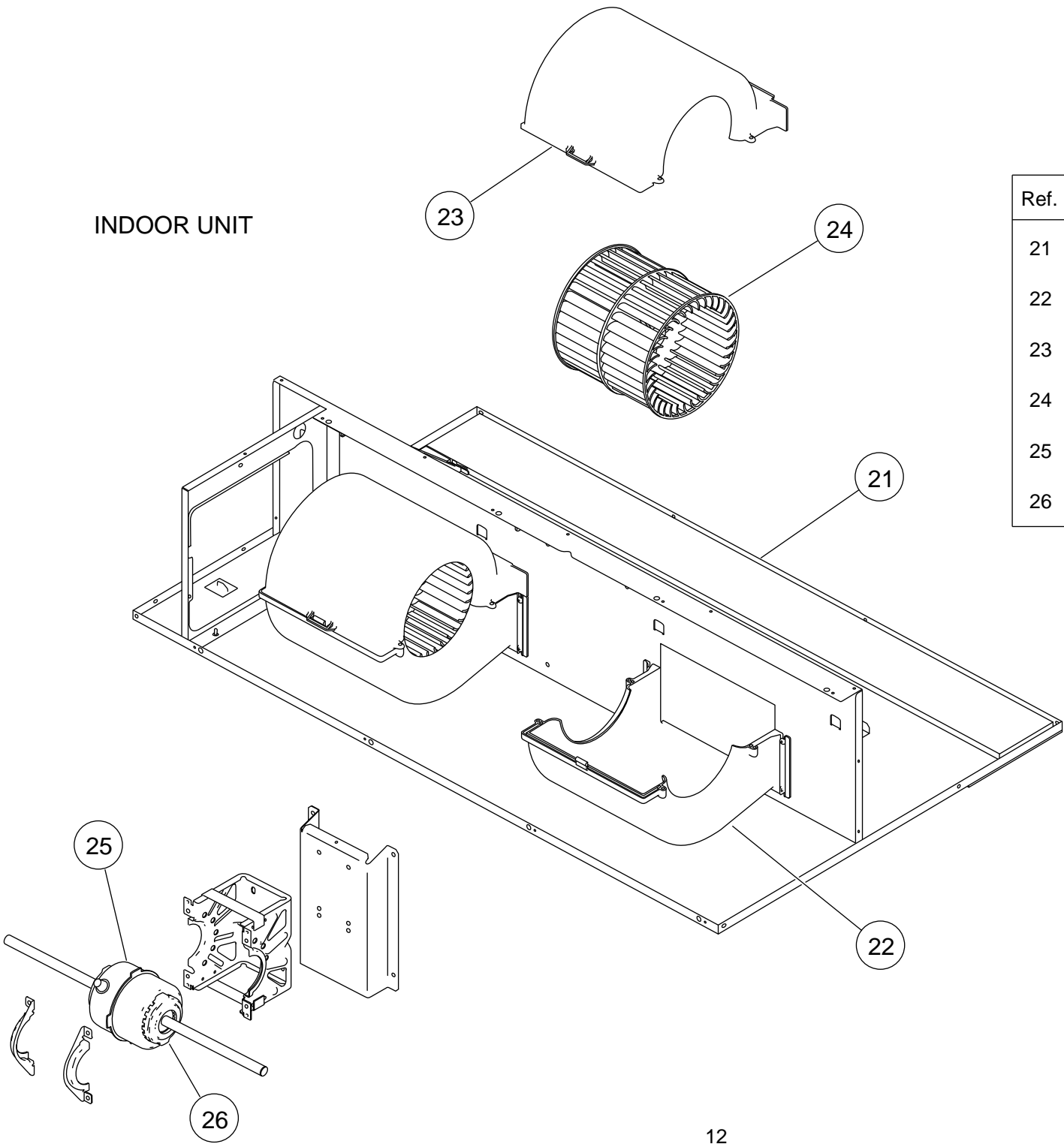
PARTS

INDOOR UNIT



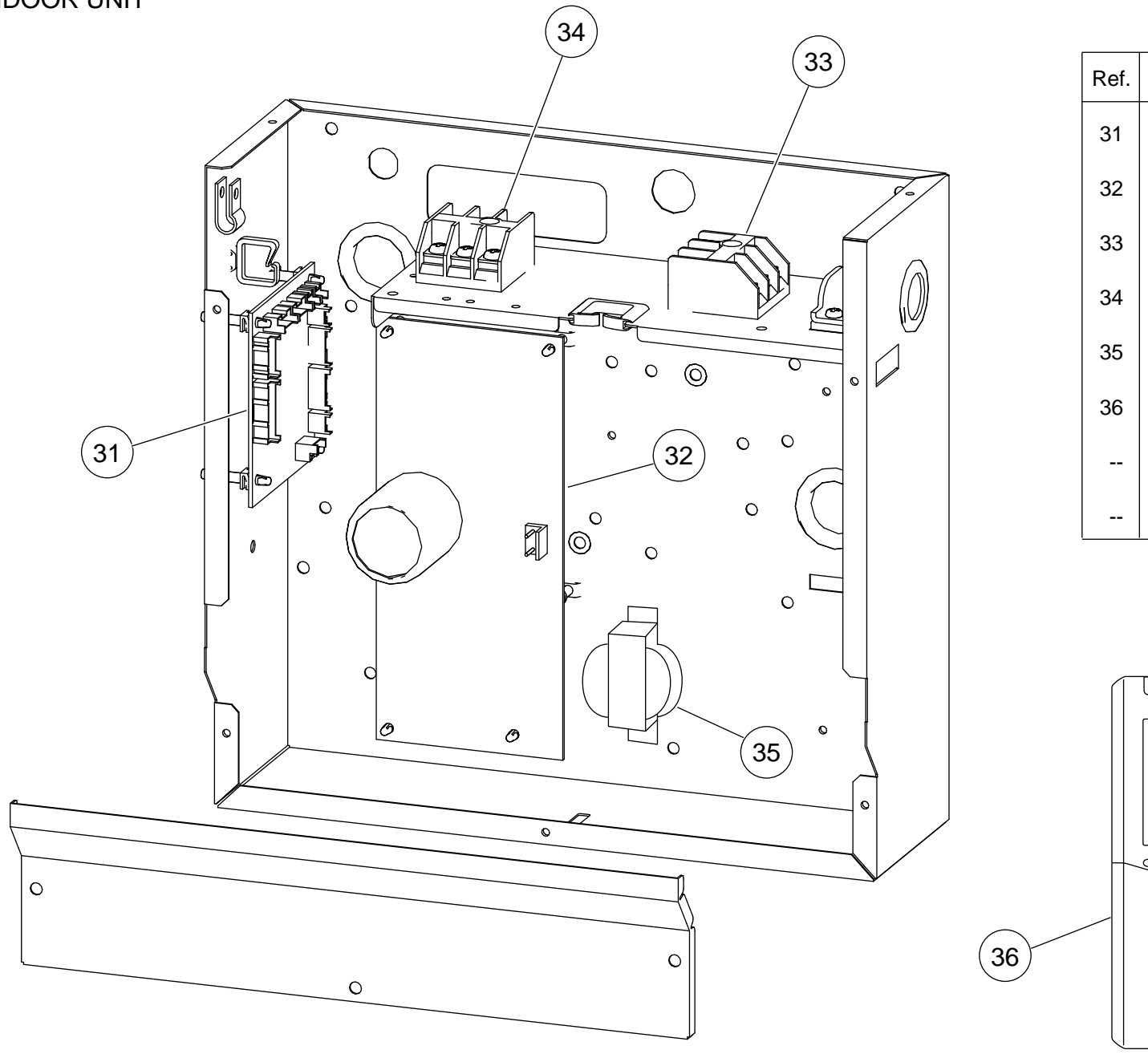
| Ref. |
|------|
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |

INDOOR UNIT



| Ref. |
|------|
| 21 |
| 22 |
| 23 |
| 24 |
| 25 |
| 26 |

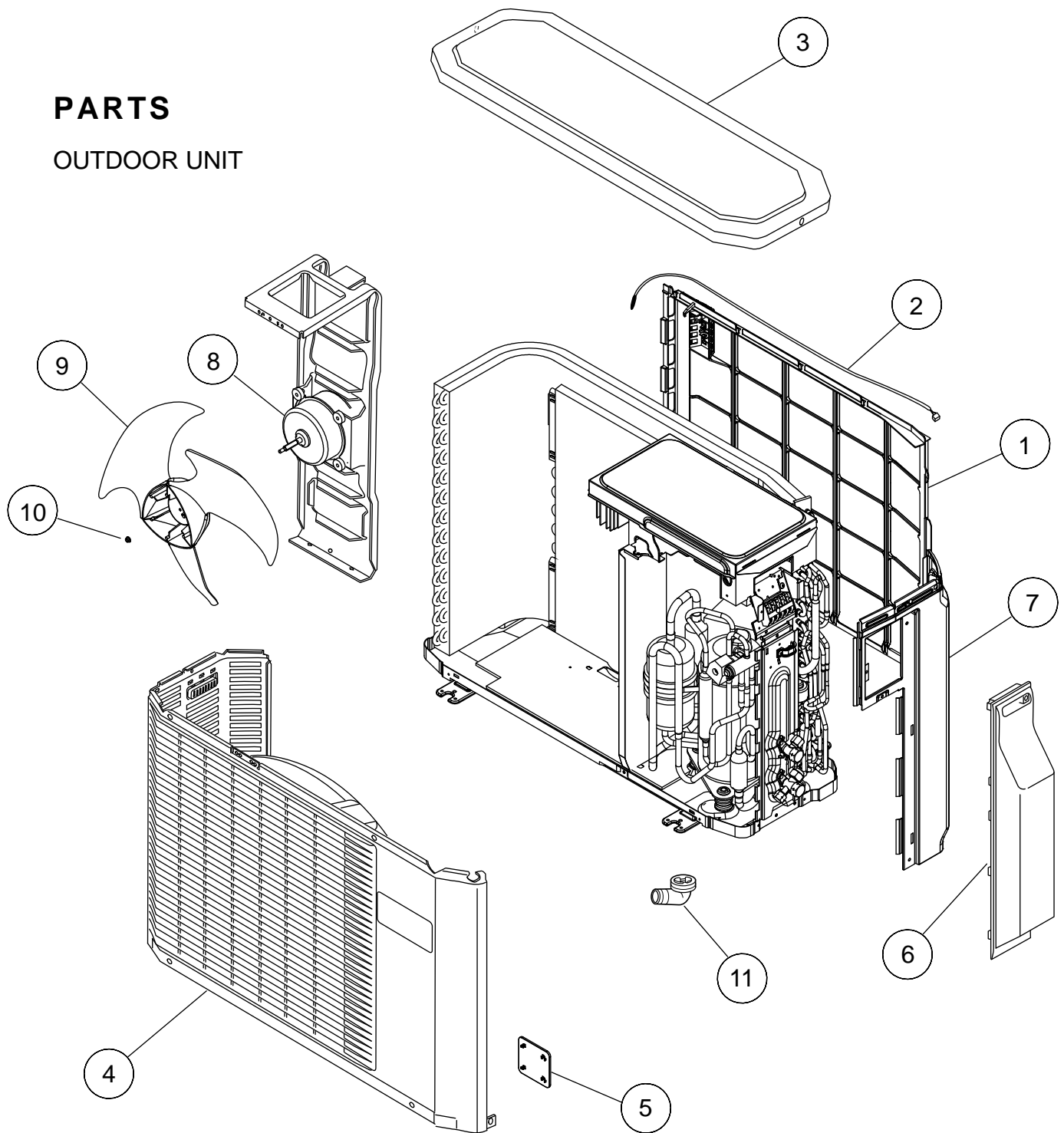
INDOOR UNIT



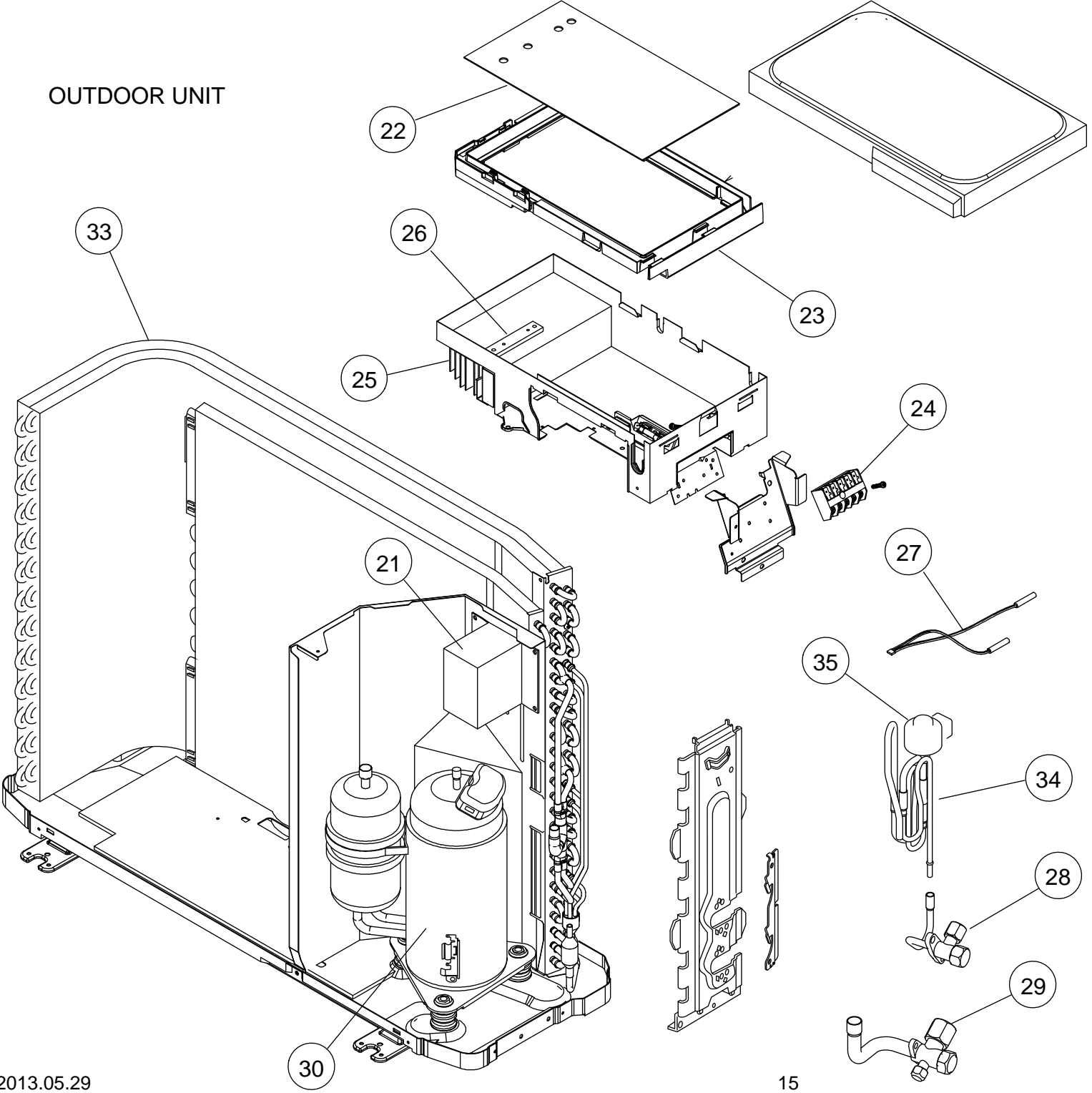
| Ref. | |
|------|--|
| 31 | |
| 32 | |
| 33 | |
| 34 | |
| 35 | |
| 36 | |
| -- | |
| -- | |

PARTS

OUTDOOR UNIT



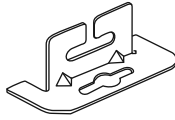
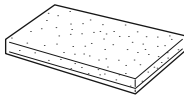



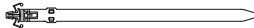
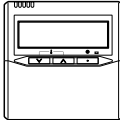
OUTDOOR UNIT







2013.05.29

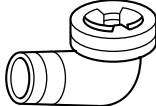
ACCESSORIES

INDOOR UNIT

| Name and Shape | Q'ty | Application (part number) |
|--|------|---|
| Hanger  | 4 | For suspending the indoor unit from ceiling (9356563009) |
| Drain hose insulation  | 1 | Insulates the drain hose and vinyl hose (313806217708) |
| Cable tie (large)  | 1 | For fixing the drain hose (312300787605) |
| Cable tie (small)  | 1 | For remote control and remote control cable binding (313361275805) |
| Cable tie  | 2 | For electrical wiring |
| Wire clammer  | 1 | For electrical wiring |
| Remote control  | 1 | (9318593013) |

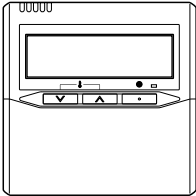

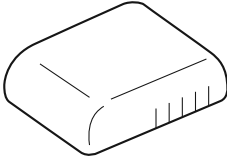
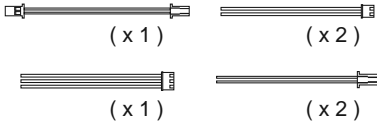
| Name and Shape |
|--|
| Remote control cord  |
| Screw (M4 x 16)  |
| Coupler heat insulation (large)  |
| Coupler heat insulation (small)  |
| Special nut A (large flange) |
| Special nut B (small flange) |

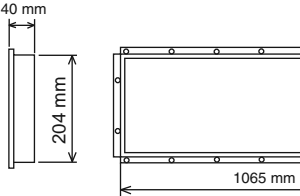
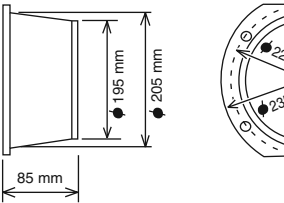
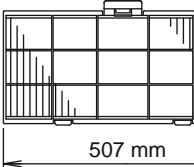
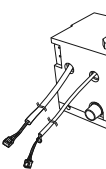
OUTDOOR UNIT

| Name and Shape | Q'ty | Application |
|---|------|---|
| Drain pipe  | 1 | For outdoor unit drain piping work. (9303029015) |

OPTIONAL PARTS

When connecting the square duct and round duct, use the optional square flange or round flange and flexible duct.

| Name and Shape | Application (part number) |
|---|---|
| Wired remote control UTY-RNNYM  | |
| Simple remote control UTY-RSNYM  | |
| Remote sensor unit UTY-XSZX  | Room temperature sensor (9002763005) |
| External connect kit UTD-ECS5A  | For control input/output port (9077359004) |

| Name and Shape |
|---|
| Square flange, UTD-SF045T  |
| Round flange, UTD-RF204  |
| Long-life filter UTD-LF25NA  |
| Drain pump unit UTZ-PX1NBA  |

1302G4179