

Airwell

Service Manual

FWDE / SXE Series

| Indoor Units | Outdoor Units |
|-------------------------------------|------------------|
| AWSI-SXE009-N11 | AWAU-YBDE009-H11 |
| AWSI-FWDE012-N11 AWSI-SXE012-N11 | AWAU-YBDE012-H11 |
| AWSI-FWDE018-N11 AWSI-SXE018-N11 | AWAU-YBDE018-H11 |
| AWSI-FWDE024-N11 | AWAU-YBDE024-H11 |



REFRIGERANT

R410A

SM FWDE/SXE 1-A.1 GB

June - 2014

Version:1

LIST OF EFFECTIVE PAGES

Note: Changes in the pages are indicated by a "Revision#" in the footer of each effected page (when none indicates no changes in the relevant page). All pages in the following list represent effected/ non effected pages divided by chapters.

Dates of issue for original and changed pages are:

Original 01 June 30, 2014

Total number of pages in this publication is 52 consisting of the following:

| Page No. | Revision No. # | Page No. | Revision No. # | Page No. | Revision No. # |
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1. INTRODUCTION

1.1 General

FWDE /SXE series split ceiling mounted range DC Inverter models, as follows:

FWDE series:

- AWSI-FWDE012-N11// AWAU-YBDE012-H11
- AWSI-FWDE018-N11// AWAU-YBDE018-H11
- AWSI-FWDE024-N11// AWAU-YBDE024-H11

FWDE is designed to have the ability to work on low room temperature down to 12^oC

SXE series:

- AWSI-SXE009-N11// AWAU-YBDE009-H11
- AWSI-SXE012-N11// AWAU-YBDE012-H11
- AWSI-SXE018-N11// AWAU-YBDE018-H11

1.2 Main Features

The FWD series benefits from the most advanced technological innovations, namely:

- DCI R410A models
- Microprocessor control
- Infrared remote control RC8 with LED
- Remote operation By connecting a special cable(7m length) to display box
- Fresh Air & Distribution treated air to adjacent room
- Indoor centrifugal fan
- High COP
- Ability to work on Low room temperature, down to 12^oC (for FWDE only)
- Cooling operation at outdoor temperature down to -10^oC
- Easy access to the interconnecting tubing and wiring connections, main control panel can slide out for service
- Automatic treated air sweep
- Low indoor and outdoor noise levels
- Easy installation and service
- Precharged refrigerant up to the max allowing tubing distance of 20m

1.3 Indoor Unit

The indoor unit is ceiling mounted, and can be easily fitted to many types of residential and commercial applications.

It includes:

- Coil with hydrophilic aluminum fins.
- Motorized flaps (two step motors)
- Advanced electronic control box assembly (DCI storm)
- Mounting plate

1.4 Filtration

The FWDE / SXE series presents several types of air filters:

- Easily accessible, and re-usable pre-filters (mesh)

1.5 Control

The microprocessor indoor controller, and an infrared remote control, supplied as standard, provide complete operating function and programming. For further details please refer to the Operation Manual.

1.6 Outdoor Unit

The outdoor units can be installed as floor or wall mounted units by using a wall supporting bracket. The metal sheets are protected by anti- corrosion paint work allowing long life resistance. All outdoor units are pre-charged. For further information please refer to the Product Data Sheet, Chapter 2.

It includes :

- Compressor mounted in a soundproofed compartment :
- Axial fan.
- Outdoor coil with hydrophilic louver fins for RC units.
- Outlet air fan grill.
- Service valves" flare" type connection.
- Interconnecting wiring terminal block.

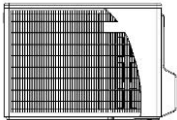
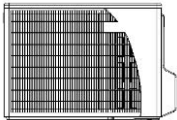
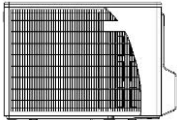
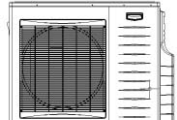
1.7 Tubing Connections

Flare type interconnecting tubing to be produced on site.
For further details please refer to the Installation Manual.

1.8 Inbox Documentation

Each unit is supplied with its own installation, operation and remote control manuals.

1.9 Matching Table

| OUTDOOR UNITS | INDOOR UNITS | | | |
|---|-----------------|-------------------------------------|-------------------------------------|------------------|
| | AWSI-SXE009-N11 | AWSI-FWDE012-N11 AWSI-SXE012-N11 | AWSI-FWDE018-N11 AWSI-SXE018-N11 | AWSI-FWDE024-N11 |
|  AWAU-YBDE009-H11 | ✓ | | | |
|  AWAU-YBDE012-H11 | | ✓ | | |
|  AWAU-YBDE018-H11 | | | ✓ | |
|  AWAU-YBDE024-H11 | | | | ✓ |

2. PRODUCT DATA SHEET

2.1 AWSI-SXE019-N11

| Model Indoor Unit | | | AWSI-SXE009-N11 | | |
|-------------------------------------|-------------------------------------|---------------------------|----------------------|--------------------|--|
| Model Outdoor Unit | | | AWAU-YBDE009-H11 | | |
| Installation Method of Pipe | | | Flared | | |
| Characteristics | | Units | Cooling | Heating Average | |
| Capacity ⁽¹⁾ | | kW | 2,5 (1,4-3,6) | 3,2 (1,5-4,5) | |
| Pdesign | | kW | 2.5 | 2.5 | |
| SEER /SCOP ⁽²⁾ | | W/W | 5.25 | 3.45 | |
| Energy efficiency class | | | A | A | |
| Annual energy consumption | | kWh | 167 | 1014 | |
| Tbiv | | °C | N/A | -7 | |
| Tol | | °C | N/A | -15 | |
| Power supply | | V/Ph/H | 220-240V/Single/50Hz | | |
| Circuit breaker rating | | A | 16 | | |
| INDOOR | Fan type & quantity | | Centrifugal x 2 | | |
| | Fan speeds | H/M/L | RPM | 760/670/500 | |
| | Air flow ⁽³⁾ | H/M/L | m3/hr | 400/350/300 | |
| | External static pressure | Min-Max | Pa | 0 | |
| | Sound power level ⁽⁴⁾ | H/M/L | dB(A) | 54 | |
| | Sound pressure level ⁽⁵⁾ | H/M/L | dB(A) | 42/37/29 | |
| | Moisture removal | | l/hr | 1 | |
| | Condensate drain tube I.D | | mm | 16 | |
| | Dimensions | WxHxD | mm | 820x630x190 | |
| | Weight | | kg | 21 | |
| | Package dimensions | LxWxH | mm | 920x726x273 | |
| | Packaged weight | | kg | 25 | |
| | Stacking height | | units | 7 | |
| | OUTDOOR | Refrigerant control | | EEV | |
| Compressor type, model | | Single-rotary DC Inverter | | | |
| Fan type & quantity | | Axial x 1 | | | |
| Fan speeds | | H/L | RPM | 830 | |
| Air flow | | H/L | m3/hr | 1760 | |
| Sound power level ⁽⁴⁾ | | H/L | dB(A) | 61 | |
| Sound pressure level ⁽⁵⁾ | | H/L | dB(A) | 51 | |
| Dimensions | | WxHxD | mm | 795x610x2905 | |
| Weight | | kg | 38 | | |
| Package dimensions | | LxWxH | mm | 920x726x273 | |
| Packaged weight | | kg | 42 | | |
| Stacking height | | units | 3 | | |
| Refrigerant type | | R410A | | | |
| Refrigerant charge (standard) | | kg(5m) | 1.1 | | |
| Additional charge per 1 meter | | gr / 1m | NA | | |
| Connections between units | | Liquid line | In.(mm) | 1/4" (6.35) | |
| | Suction line | In.(mm) | 3/8"(9.53) | | |
| | Max.tubing length | m. | 20 | | |
| | Max.height difference | m. | 10 | | |
| Operation control type | | Remote control | | | |
| Heating elements | | kW | | | |
| Others | | | | | |

2.2 AWSI-FWDE012-N11, AWSI-SXE012-N11

| Model Indoor Unit | | | AWSI-FWDE012--N11 | | AWSI-SXE012-N11 | | |
|-------------------------------------|-------------------------------------|---------------------------|-------------------|---------------------------|------------------|---------------|--|
| Model Outdoor Unit | | | AWAU-YBDE012-H11 | | AWAU-YBDE012-H11 | | |
| Installation Method of Pipe | | | Flared | | Flared | | |
| Characteristics | Units | Cooling | Heating | | Cooling | Heating | |
| | | | Average | | | | |
| Capacity ⁽¹⁾ | kW | 3,5 (1,5-4,4) | NA | | 3,5 (1,5-4,4) | 4,2 (1,5-5,0) | |
| Pdesign | kW | 3.5 | NA | | 3.5 | 3.45 | |
| SEER /SCOP ⁽²⁾ | W/W | 5.3 | NA | | 5.3 | 3.6 | |
| Energy efficiency class | | A | NA | | A | A | |
| Annual energy consumption | kWh | 231 | NA | | 231 | 1420 | |
| Tbiv | °C | N/A | NA | | N/A | -7 | |
| Tol | °C | N/A | NA | | N/A | -15 | |
| Power supply | V/Ph/H | 220-240V/Single/50Hz | | 220-240V/Single/50Hz | | | |
| Circuit breaker rating | A | 16 | | 16 | | | |
| INDOOR | Fan type & quantity | | Centrifugal x 2 | | Centrifugal x 2 | | |
| | Fan speeds | H/M/L | RPM | 830/760/500 | | 830/760/500 | |
| | Air flow ⁽³⁾ | H/M/L | m3/hr | 450/400/300 | | 450/400/300 | |
| | External static pressure | Min-Max | Pa | 0 | | 0 | |
| | Sound power level ⁽⁴⁾ | H/M/L | dB(A) | 56 | | 56 | |
| | Sound pressure level ⁽⁵⁾ | H/M/L | dB(A) | 45/41/30 | | 45/41/30 | |
| | Moisture removal | | l/hr | 1.5 | | 1.5 | |
| | Condensate drain tube I.D | | mm | 16 | | 16 | |
| | Dimensions | WxHxD | mm | 820x630x190 | | 820x630x190 | |
| | Weight | | kg | 22 | | 22 | |
| | Package dimensions | LxWxH | mm | 920x726x273 | | 920x726x273 | |
| | Packaged weight | | kg | 26 | | 26 | |
| | Stacking height | | units | 7 | | 7 | |
| | OUTDOOR | Refrigerant control | | EEV | | EEV | |
| Compressor type, model | | Single-rotary DC Inverter | | Single-rotary DC Inverter | | | |
| Fan type & quantity | | Axial x 1 | | Axial x 1 | | | |
| Fan speeds | | H/L | RPM | 830 | | 830 | |
| Air flow | | H/L | m3/hr | 1760 | | 1760 | |
| Sound power level ⁽⁴⁾ | | H/L | dB(A) | 62 | | 62 | |
| Sound pressure level ⁽⁵⁾ | | H/L | dB(A) | 52 | | 52 | |
| Dimensions | | WxHxD | mm | 795x610x2905 | | 795x610x2905 | |
| Weight | | | kg | 38.5 | | 38.5 | |
| Package dimensions | | LxWxH | mm | 920x726x273 | | 920x726x273 | |
| Packaged weight | | | kg | 42.5 | | 42.5 | |
| Stacking height | | | units | 3 | | 3 | |
| Refrigerant type | | R410A | | R410A | | | |
| Refrigerant charge (standard) | | kg(5m) | 1.2 | | 1.2 | | |
| Additional charge per 1 meter | | gr / 1m | NA | | NA | | |
| Connections between units | | Liquid line | In.(mm) | 1/4" (6.35) | | 1/4" (6.35) | |
| | Suction line | In.(mm) | 3/8"(9.53) | | 3/8"(9.53) | | |
| | Max.tubing length | m. | 20 | | 20 | | |
| | Max.height difference | m. | 10 | | 10 | | |
| Operation control type | | Remote control | | Remote control | | | |
| Heating elements | | kW | | | | | |
| Others | | | | | | | |

2.3 AWSI-FWDE018-N11, AWSI-SXE018-N11

| Model Indoor Unit | | | AWSI-FWDE018--N11 | | AWSI-SXE018-N11 | | |
|-------------------------------------|-------------------------------------|---------------------------|-------------------|---------------------------|------------------|---------------|--|
| Model Outdoor Unit | | | AWAU-YBDE018-H11 | | AWAU-YBDE018-H11 | | |
| Installation Method of Pipe | | | Flared | | Flared | | |
| Characteristics | Units | Cooling | Heating | | Cooling | Heating | |
| | | | Average | | | | |
| Capacity ⁽¹⁾ | kW | 5 (1,5-5,8) | NA | | 5 (1,5-5,8) | 5,6 (1,3-6,5) | |
| Pdesign | kW | 5 | NA | | 5 | 4.5 | |
| SEER /SCOP ⁽²⁾ | W/W | 5.1 | NA | | 5.1 | 3.6 | |
| Energy efficiency class | | A | NA | | A | A | |
| Annual energy consumption | kWh | 343 | NA | | 343 | 1750 | |
| Tbiv | °C | N/A | NA | | N/A | -7 | |
| Tol | °C | N/A | NA | | N/A | -15 | |
| Power supply | V/Ph/H | 220-240V/Single/50Hz | | 220-240V/Single/50Hz | | | |
| Circuit breaker rating | A | 20 | | 20 | | | |
| INDOOR | Fan type & quantity | | Centrifugal x 2 | | Centrifugal x 2 | | |
| | Fan speeds | H/M/L | RPM | 1050/950/700 | | 1050/950/700 | |
| | Air flow ⁽³⁾ | H/M/L | m3/hr | 870/750/600 | | 870/750/600 | |
| | External static pressure | Min-Max | Pa | 0 | | 0 | |
| | Sound power level ⁽⁴⁾ | H/M/L | dB(A) | 65 | | 65 | |
| | Sound pressure level ⁽⁵⁾ | H/M/L | dB(A) | 51/48/40 | | 51/48/40 | |
| | Moisture removal | | l/hr | 2 | | 2 | |
| | Condensate drain tube I.D | | mm | 16 | | 16 | |
| | Dimensions | WxHxD | mm | 1200x630x190 | | 1200x630x190 | |
| | Weight | | kg | 30 | | 30 | |
| | Package dimensions | LxWxH | mm | 1300x726x273 | | 1300x726x273 | |
| | Packaged weight | | kg | 36 | | 36 | |
| | Stacking height | | units | 7 | | 7 | |
| | OUTDOOR | Refrigerant control | | EEV | | EEV | |
| Compressor type, model | | Single-rotary DC Inverter | | Single-rotary DC Inverter | | | |
| Fan type & quantity | | Axial x 1 | | Axial x 1 | | | |
| Fan speeds | | H/L | RPM | 920 | | 920 | |
| Air flow | | H/L | m3/hr | 2160 | | 2160 | |
| Sound power level ⁽⁴⁾ | | H/L | dB(A) | 63 | | 63 | |
| Sound pressure level ⁽⁵⁾ | | H/L | dB(A) | 53 | | 53 | |
| Dimensions | | WxHxD | mm | 795x610x2905 | | 795x610x2905 | |
| Weight | | | kg | 39 | | 39 | |
| Package dimensions | | LxWxH | mm | 920x726x273 | | 920x726x273 | |
| Packaged weight | | | kg | 43 | | 43 | |
| Stacking height | | | units | 3 | | 3 | |
| Refrigerant type | | R410A | | R410A | | | |
| Refrigerant charge (standard) | | kg(5m) | 1.26 | | 1.26 | | |
| Additional charge per 1 meter | | gr / 1m | NA | | NA | | |
| Connections between units | | Liquid line | In.(mm) | 1/4" (6.35) | | 1/4" (6.35) | |
| | Suction line | In.(mm) | 1/2"(12.7) | | 1/2"(12.7) | | |
| | Max.tubing length | m. | 20 | | 20 | | |
| | Max.height difference | m. | 10 | | 10 | | |
| Operation control type | | Remote control | | Remote control | | | |
| Heating elements | | kW | | | | | |
| Others | | | | | | | |

2.4 AWSI-FWDE024-N11

| Model Indoor Unit | | | AWSI-FWDE024-N11 | | | |
|-------------------------------------|-------------------------------------|-------------------------|---|----------------|-----------------|--|
| Model Outdoor Unit | | | AWAU-YBDE024-H11 | | | |
| Installation Method of Pipe | | | Flared | | | |
| Characteristics | | Units | Cooling | | Heating Average | |
| Capacity ⁽¹⁾ | | kW | 6,8 (1,5-7,6) | | N/A | |
| Pdesign | | kW | 6.8 | | N/A | |
| SEER /SCOP ⁽²⁾ | | W/W | 5.1 | | N/A | |
| Energy efficiency class | | | A | | N/A | |
| Annual energy consumption | | kWh | 467 | | N/A | |
| Tbiv | | °C | N/A | | N/A | |
| Tol | | °C | N/A | | N/A | |
| Power supply | | V/Ph/H | 220-240V/Single/50Hz | | | |
| Circuit breaker rating | | A | 25 | | | |
| INDOOR | Fan type & quantity | | Centrifugal x 2 | | | |
| | Fan speeds | H/M/L | RPM | 1300/1200/1050 | | |
| | Air flow ⁽³⁾ | H/M/L | m3/hr | 1020/950/800 | | |
| | External static pressure | Min-Max | Pa | 0 | | |
| | Sound power level ⁽⁴⁾ | H/M/L | dB(A) | 66 | | |
| | Sound pressure level ⁽⁵⁾ | H/M/L | dB(A) | 54/51/46 | | |
| | Moisture removal | | l/hr | 2.5 | | |
| | Condensate drain tube I.D | | mm | 16 | | |
| | Dimensions | WxHxD | mm | 1200x630x190 | | |
| | Weight | | kg | 32 | | |
| | Package dimensions | LxWxH | mm | 1300x726x273 | | |
| | Packaged weight | | kg | 36 | | |
| | Stacking height | | units | 7 | | |
| | OUTDOOR | Refrigerant control | | EEV | | |
| Compressor type, model | | Twin-rotary DC Inverter | | | | |
| Fan type & quantity | | Axial x 1 | | | | |
| Fan speeds | | H/L | RPM | 850 | | |
| Air flow | | H/L | m3/hr | 3600 | | |
| Sound power level ⁽⁴⁾ | | H/L | dB(A) | 69 | | |
| Sound pressure level ⁽⁵⁾ | | H/L | dB(A) | 59 | | |
| Dimensions | | WxHxD | mm | 950x864x340 | | |
| Weight | | kg | 65.5 | | | |
| Package dimensions | | LxWxH | mm | 1140x510x930 | | |
| Packaged weight | | kg | 73 | | | |
| Stacking height | | units | 2 | | | |
| Refrigerant type | | R410A | | | | |
| Refrigerant charge (standard) | | kg(5m) | 2.3 | | | |
| Additional charge per 1 meter | | gr / 1m | 7.5m < Length ≤ 20m: +0g; 20m < Length ≤ 30m: +300g | | | |
| Connections between units | | Liquid line | In.(mm) | 3/8" (9.53) | | |
| | Suction line | In.(mm) | 5/8"(15.88) | | | |
| | Max.tubing length | | m. | 30 | | |
| | Max.height difference | | m. | 15 | | |
| Operation control type | | Remote control | | | | |
| Heating elements | | kW | | | | |
| Others | | | | | | |

3. RATING CONDITIONS

Rating conditions in accordance with ISO 5151 and ISO 13253 (for ducted units).

Cooling:

Indoor: 27°C DB 19°C WB

Outdoor: 35°C DB

Heating:

Indoor: 20°C DB

Outdoor: 7°C DB 6°C WB

3.1 Operating Limits

FWDE series

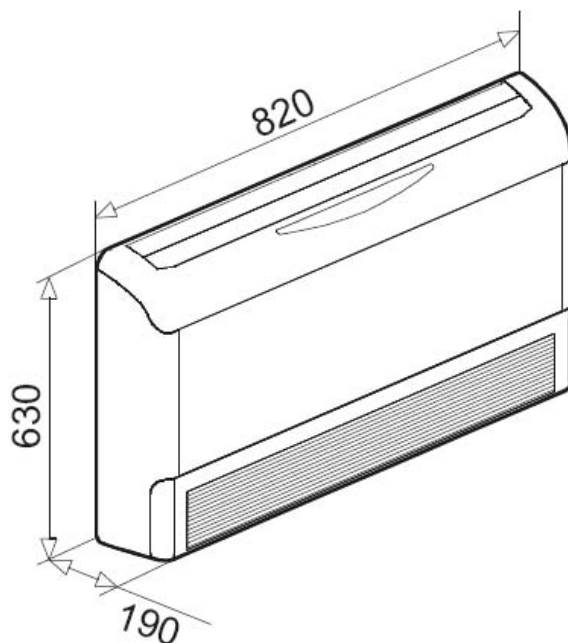
| | | Indoor | Outdoor |
|---------|-------------|-----------------|----------|
| Cooling | Upper limit | 26°C DB 19°C WB | 46°C DB |
| | Lower limit | 12°C DB 9°C WB | -10°C DB |
| Voltage | 1PH | 198 – 264 V | |

SXE series

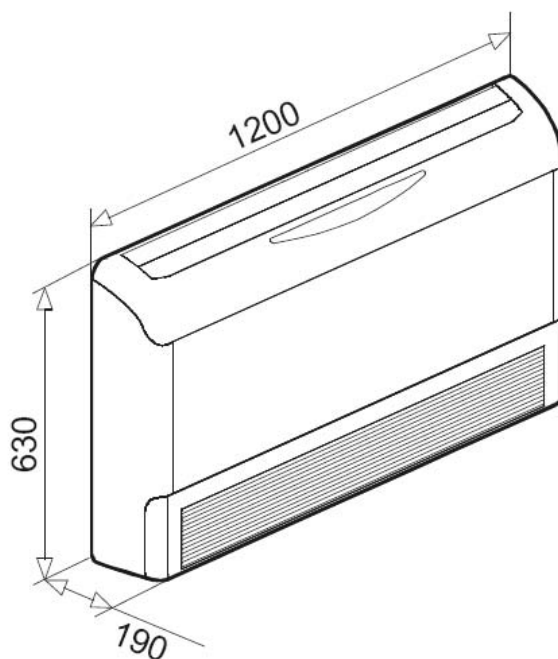
| | | Indoor | Outdoor |
|---------|-------------|-----------------|-------------------|
| Cooling | Upper limit | 26°C DB 19°C WB | 46°C DB |
| | Lower limit | 21°C DB 15°C WB | -10°C DB |
| Heating | Upper limit | 27°C DB | 24°C DB 18°C WB |
| | Lower limit | 10°C DB | -15°C DB -16°C WB |
| Voltage | 1PH | 198 – 264 V | |

4. OUTLINE DIMENSIONS

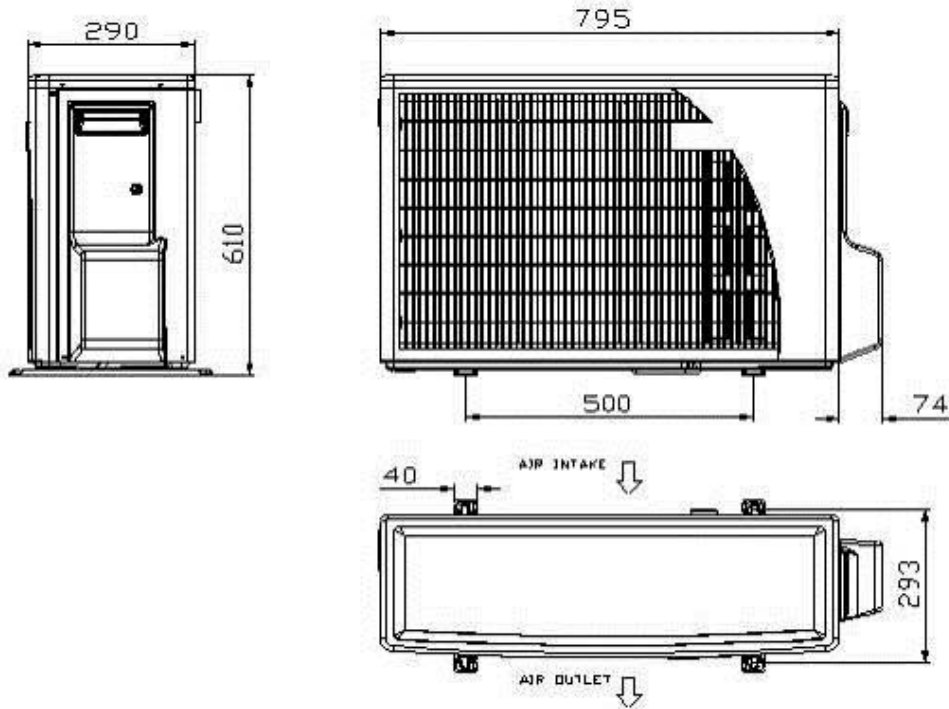
4.1 SXE009/012, FWDE012



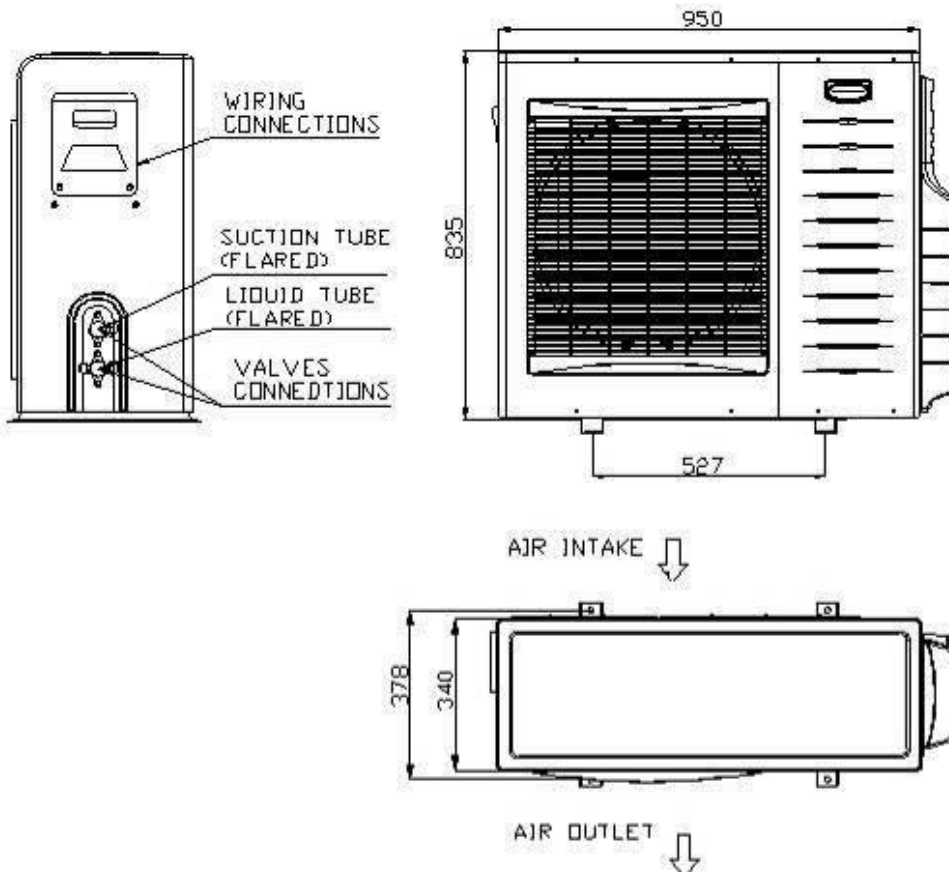
4.2 SXE018, FWDE018/024



4.3 Outdoor Unit: YBDE009/012 / 018



4.4 Outdoor Unit: YBDE 024



5. ELECTRICAL DATA

5.1 Single Phase Units

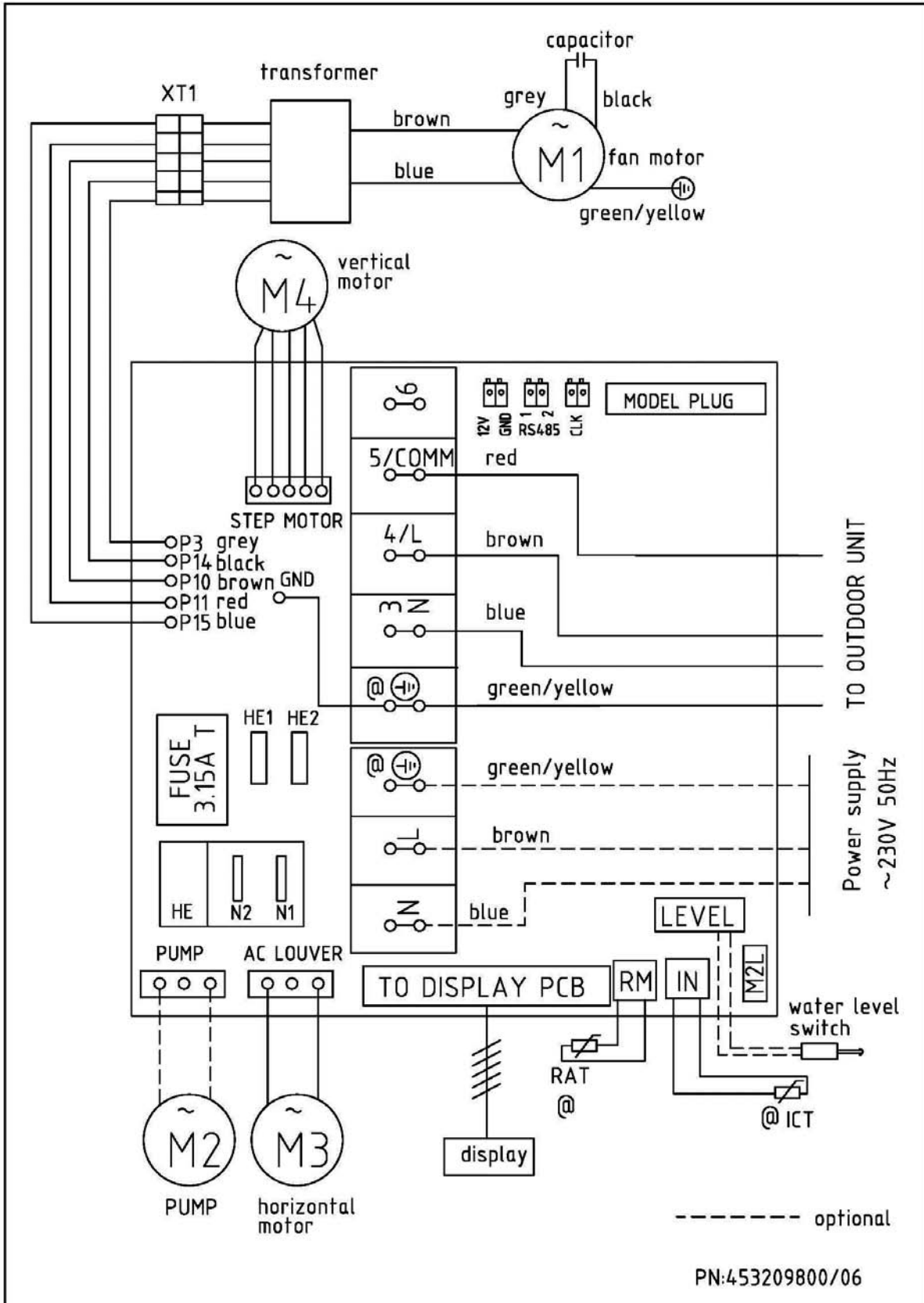
| MODEL | SXE009 | FWDE012 SXE012 | FWDE018 SXE018 | FWDE024 |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Power Supply | To indoor | | | To outdoor |
| | 1PH-230V-50Hz | | | |
| Max Current, A | 10 | 10 | 12 | 14 |
| Inrush Current A | 35 | 35 | 35 | 45 |
| Starting Current A | 10.5 | 10.5 | 10.5 | 10.5 |
| Circuit Breaker A | 16 | 16 | 20 | 20 |
| Power Supply Wiring No. X Cross Section mm ² | 3x1.5 mm ² | 3x1.5 mm ² | 3x2.5 mm ² | 3x2.5 mm ² |
| Interconnecting Cable No. X Cross Section mm ² | 4x1.5 mm ² | 4x1.5 mm ² | 4x2.5 mm ² | 4x1.5 mm ² |

NOTE

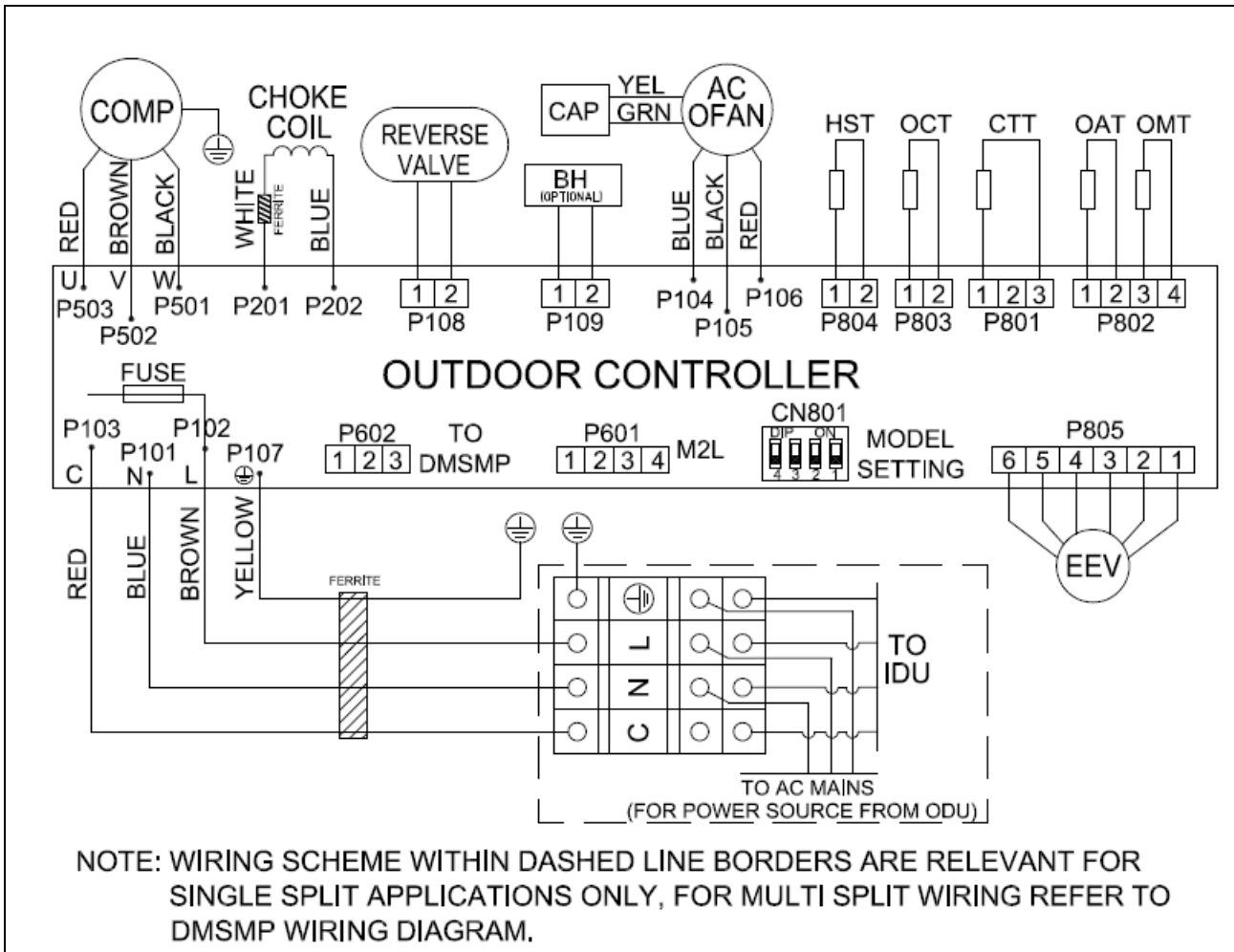
Power wiring cord should comply with local laws and electrical regulations requirements.

6. WIRING DIAGRAMS

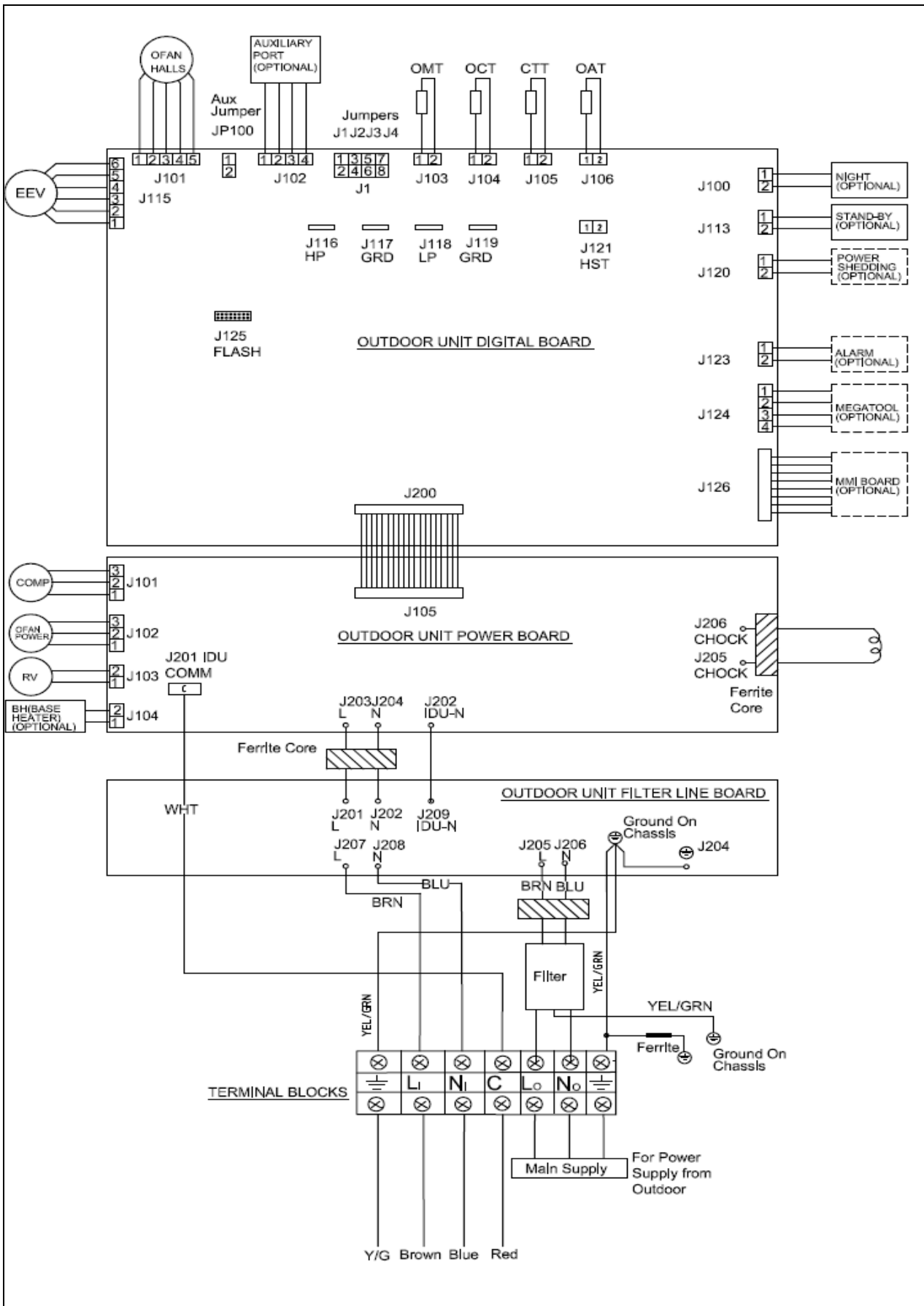
6.1 Indoor Unit: SXE009/012/018, FWDE012/018/024



6.2 Outdoor Unit: YBDE009/012/018

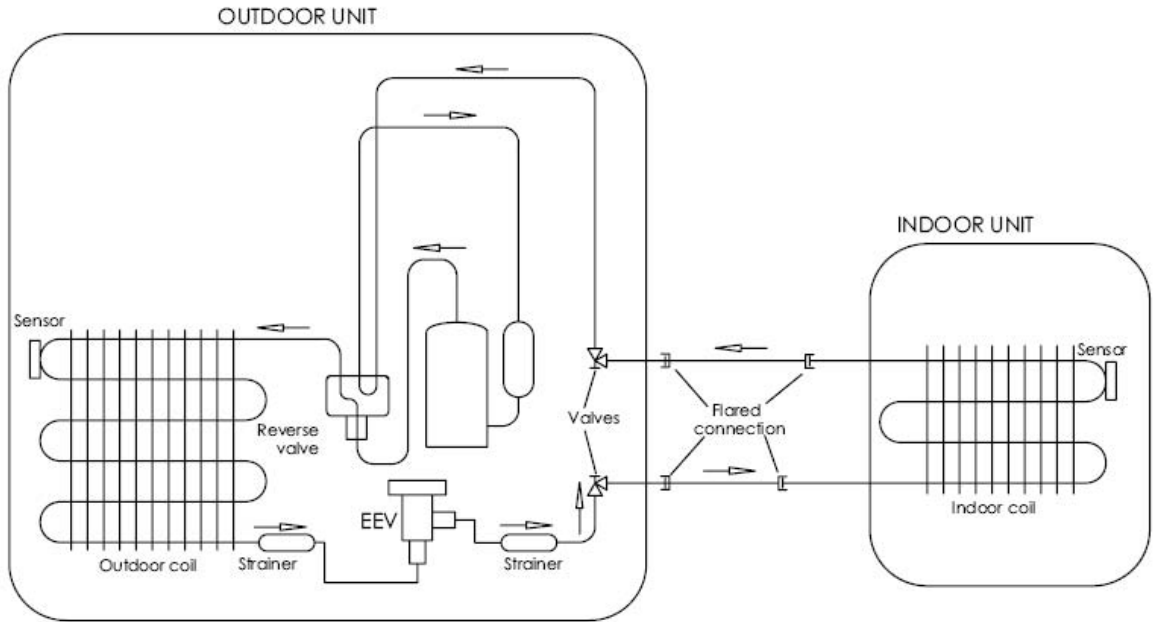


6.3 Outdoor Unit: YBDE024

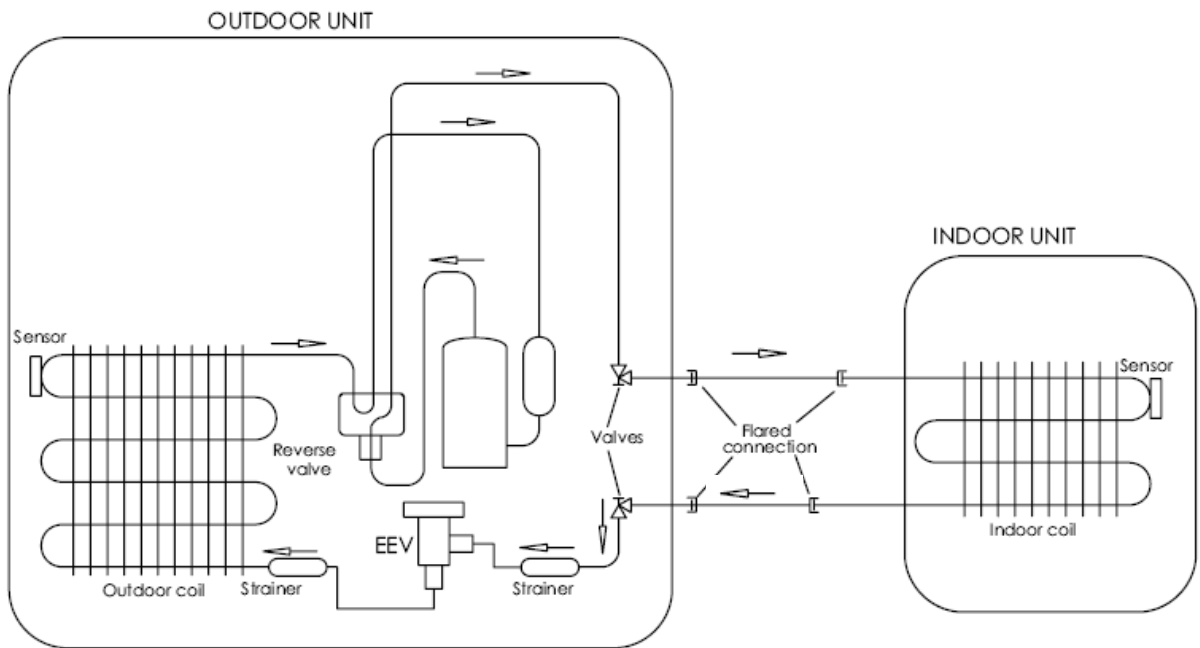


7. REFRIGERATION DIAGRAMS

7.1 Cooling Mode



7.2 Heating Mode



8. CONTROL SYSTEM

8.1 Electronic Control

8.1.1 General Functions and Operating Rules (for single split models)

The DCI software is fully parametric.

All the model dependent parameters are shown in Blue color and with Italic style [*parameter*]. The parameters values are given in the last section of this control logic chapter of the service manual.

8.1.2 System Operation Concept

The control function is divided between indoor and outdoor unit controllers. Indoor unit is the system 'Master', requesting the outdoor unit for cooling/heating capacity supply. The outdoor unit is the system 'Slave' and it must supply the required capacity unless it enters into a protection mode avoiding it from supplying the requested capacity.

The capacity request is transferred via indoor to outdoor communication, and is represented by a parameter called 'NLOAD'. NLOAD is an integer number with values between 0 and 127, and it represents the heat or cool load felt by the indoor unit.

8.1.3 Compressor Frequency Control

8.1.3.1 NLOAD setting

The NLOAD setting is done by the indoor unit controller, based on a PI control scheme. The actual NLOAD to be sent to the outdoor unit controller is based on the preliminary LOAD calculation, the indoor fan speed, and the power shedding function.

NLOAD limits as a function of indoor fan speed:

| Indoor Fan Speed | Maximum NLOAD Cooling | Maximum NLOAD Heating |
|------------------|-----------------------|-----------------------|
| Low | <i>Max NLOADIF1C</i> | 127 |
| Medium | <i>Max NLOADIF2C</i> | 127 |
| High | <i>Max NLOADIF3C</i> | 127 |
| Turbo | <i>Max NLOADIF4C</i> | 127 |
| Auto | <i>Max NLOADIF5C</i> | 127 |

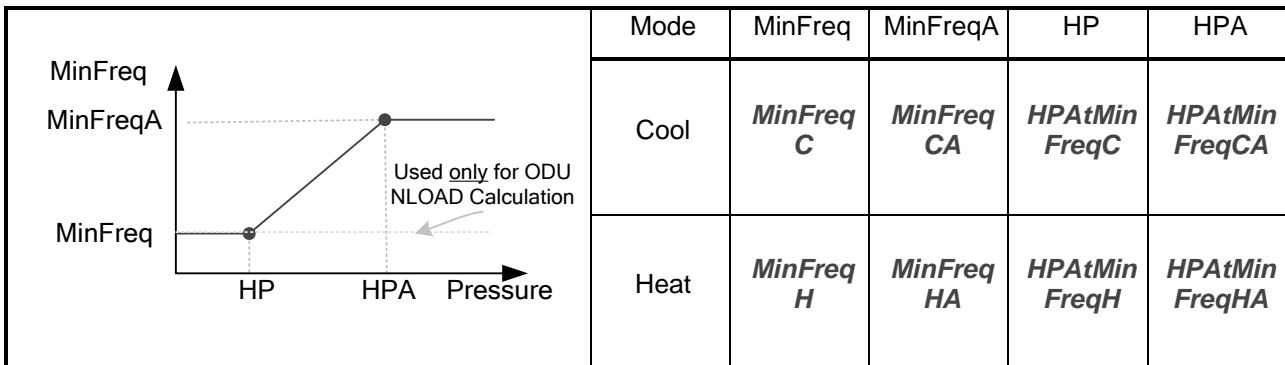
8.1.3.2 Target Frequency Setting

The compressor target frequency is set by the following table, according to the NLOAD number received from the indoor unit.

| NLOAD | Target Frequency [Hz] | |
|---------------------|--|----------------------|
| 0 | 0 | |
| 0 < NLOAD ≤ MinFreq | MinFreq | |
| >MinFreq | $\frac{\text{MaxFreq} - \text{MinFreq}}{\text{LoadDeadZone} - \text{MinFreq}} \cdot \{\min(\text{NLOAD}, \text{LoadDeadZone}) - \text{MinFreq}\} + \text{MinFreq}$ | |
| Definitions | | |
| | Cool | Heat |
| MinFreq | <i>MinFreqC</i> | <i>MinFreqH</i> |
| MaxFreq | <i>MaxFreqC</i> | <i>MaxFreqH</i> |
| LoadDeadZone | <i>LoadDeadZoneC</i> | <i>LoadDeadZoneH</i> |

During running time (unlike starting) Compressor can operate only in its allowed frequency range.

The lower allowed frequency is extracted from the following:



Notes:

1. HP stands for High Pressure.
2. Pressure is represented by the following:
 - Cooling: $\max \{OMT, OCT\}$ in cooling mode,
 - Heating (Multi split): maximum ICT among all active and available inactive IDUs in heating mode.
 - Heating (Single Split): ICT
3. The above parameters are determined from the compressor specifications.

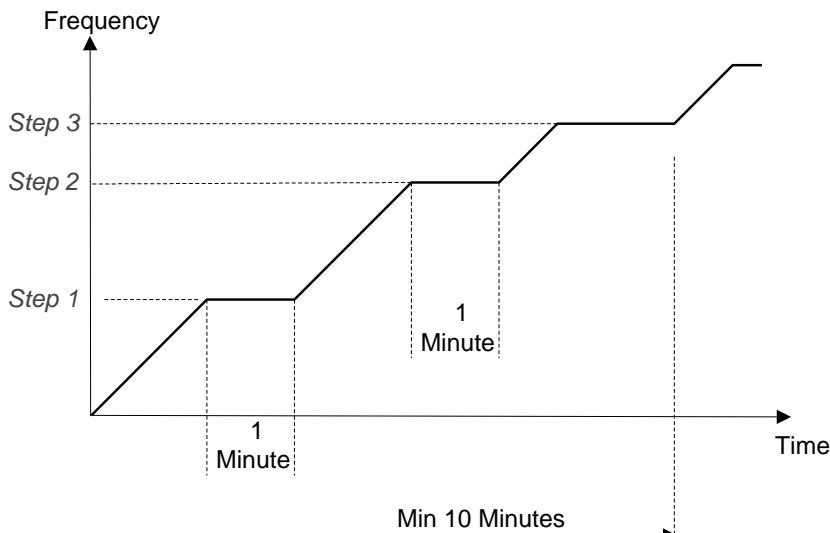
The higher allowed frequency is extracted from the following:

| Mode | 'Unit Night Mode' | Maximum Frequency (MaxFreq) |
|------|-------------------|-----------------------------|
| Cool | On | $MaxFreqC * 0.75$ |
| | Off | $MaxFreqC$ |
| Heat | On | $MaxFreqH * 0.75$ |
| | Off | $MaxFreqH$ |

8.1.3.3 Frequency Changes Control

Frequency change rate is 1 Hz/sec.

8.1.3.4 Compressor Starting Control



WIRING DIAGRAMS

8.1.3.5 Minimum On and Off Time

3 minutes.

8.1.4 Indoor Fan Control

10 Indoor fan speeds are determined for each model. 5 speeds for cool/dry/fan modes and 5 speeds for heat mode.

When user sets the indoor fan speed to a fixed speed (Low/ Medium/ High), unit will operate constantly at set speed.

When Auto Fan is selected, indoor unit controller can operate in all speeds. The actual speed is set according to the cool/heat load.

8.1.4.1 Turbo Speed

The Turbo speed is activated during the first 30 minutes of unit operation when auto fan speed is selected and under the following conditions:

- Difference between set point and actual room temperature is bigger then 3 degrees.
- Room temperature > 22 for cooling, or < 25 for heating.

8.1.5 Heating Element Control

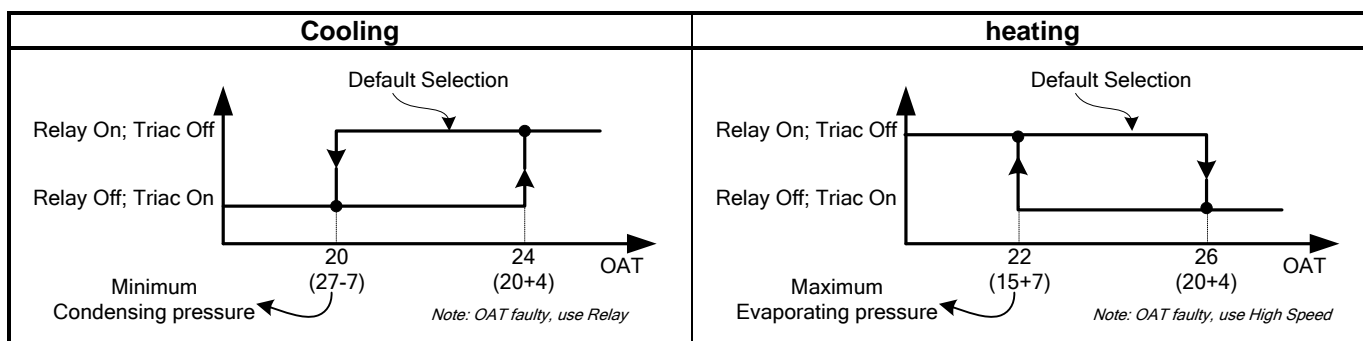
Heating element can be started if $LOAD > 0.8 * MaximumNLOAD$ AND Indoor Coil temperature < 45.

The heating element will be stopped when $LOAD < 0.5 * MaximumNLOAD$ OR if Indoor Coil temperature > 50.

8.1.6 Outdoor Fan Control

8.1.6.1 OFAN Operation

With keeping the OFAN general rules above in the highest priority, the operation of the OFAN will be operating as the following:



- The Triac and the Relay can never be activated at the same time

8.1.7 EEV (electronic Expansion valve) Control

EEV opening is defined as $EEV = EEV_{OL} + EEV_{CV}$

- EEV_{OL} is the initial EEV opening as a function of the compressor frequency, operation mode, unit model and capacity.
- EEV_{CV} is a correction value for the EEV opening that is based on the Target CTT and discharge superheats.
- During the first 5 minutes of compressor operation $EEV_{CV} = 0$.
- Once the first 5 minutes are over, the correction value is calculated as follow: $EEV_{CV} = EEV_{SH\ Discharge} + EEV_{Target\ CTT}$
- $EEV_{SH\ Discharge}$
 For cooling, $SH_{DischargeC} = CTT - OMT$
 For Heating, $SH_{DischargeH} = CTT - ICT$

Unit will switch from heat to cool when compressor is off for 5 minutes, and $\Delta T < -3$.

8.6 Dry Mode

As long as room temperature is higher than the set point, indoor fan will work in low speed and compressor will work between 0 and *MaxNLOADIF1C* Hz.

When the room temperature is lower than the set point, compressor will be switched OFF and indoor fan will cycle 3 minutes OFF, 1 minute ON.

8.7 Protections

There are 5 protection codes.

Normal (Norm) – unit operate normally.

Stop Rise (SR) – compressor frequency can not be raised but does not have to be decreased.

HzDown1 (D1) – Compressor frequency is reduced by *Down1* Hz/min.

HzDown2 (D2) – Compressor frequency is reduced by *Down2* Hz/min.

Stop Compressor (SC) – Compressor is stopped.

8.7.1 Indoor Coil Defrost Protection

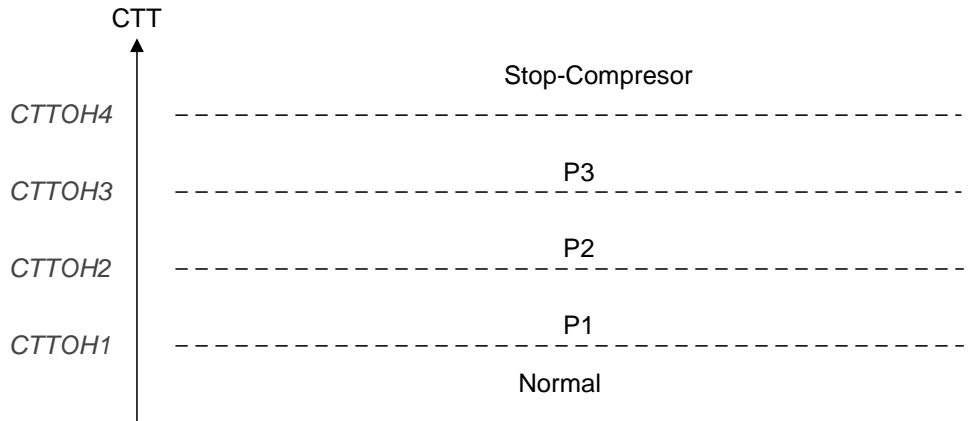
| ICT | ICT Trend | | | | |
|--------------|-----------------|------------|-----------|------------|-----------------|
| | Fast Increasing | Increasing | No change | Decreasing | Fast Decreasing |
| ICT < -2 | SC | SC | SC | SC | SC |
| -2 ≤ ICT < 0 | D1 | D1 | D2 | D2 | D2 |
| 0 ≤ ICT < 2 | SR | SR | D1 | D2 | D2 |
| 2 ≤ ICT < 4 | SR | SR | SR | D1 | D2 |
| 4 ≤ ICT < 6 | Norm | Norm | SR | SR | D1 |
| 6 ≤ ICT < 8 | Norm | Norm | Norm | SR | SR |
| 8 ≤ ICT | Normal | | | | |

8.7.2 Indoor Coil over Heating Protection

| ICT | ICT Trend | | | | |
|---------------|-----------------|------------|-----------|------------|-----------------|
| | Fast Decreasing | Decreasing | No Change | Increasing | Fast Increasing |
| ICT > 55 | SC | SC | SC | SC | SC |
| 53 < ICT ≤ 55 | D1 | D1 | D2 | D2 | D2 |
| 49 < ICT ≤ 53 | SR | SR | D1 | D2 | D2 |
| 47 < ICT ≤ 49 | SR | SR | SR | D1 | D2 |
| 45 < ICT ≤ 47 | Norm | Norm | SR | SR | D1 |
| 43 < ICT ≤ 45 | Norm | Norm | Norm | SR | SR |
| ICT ≤ 43 | Normal | | | | |

8.7.3 Compressor over Heating Protection

Compressor temperature can be in one of 5 control zones (4 in protection, and 1 normal), according to the following chart.

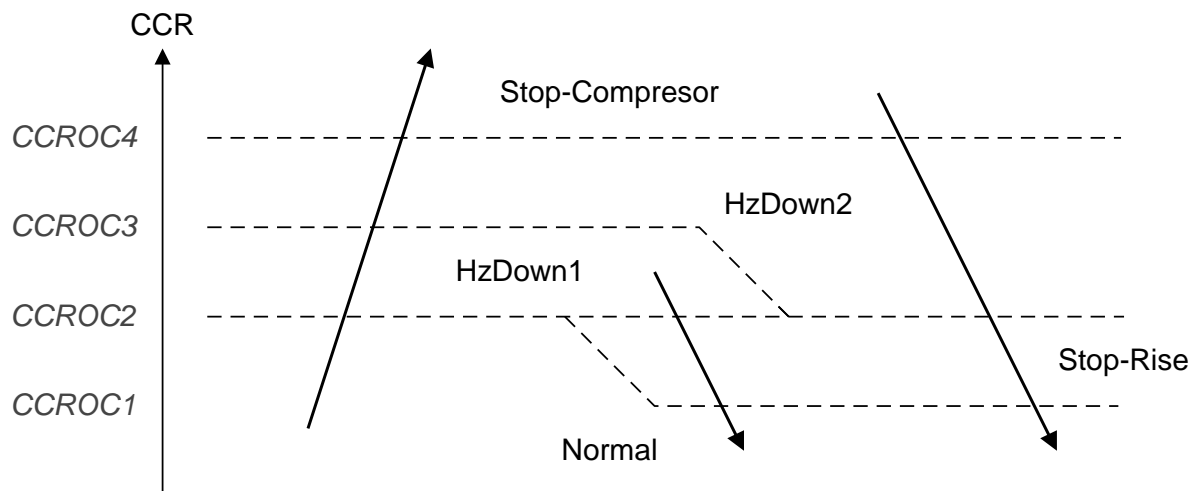


| | | |
|-----------------|----------------------------------|------|
| Control Status | Compressor Temperature Increases | Else |
| P1 | Norm | SR |
| P2 | D1 | SR |
| P3 | D2 | D1 |
| Stop Compressor | SC | |

8.7.4 Outdoor Coil Overheating Protection

| OMT _n | OMT _n -OMT _{n-1} | | | | |
|--------------------------------|--------------------------------------|------|------|------|------|
| | <-1 | -1 | 0 | 1 | >1 |
| OMT _n ≥ HPC5 | SC | SC | SC | SC | SC |
| HPC4 ≤ OMT _n < HPC5 | D2 | D2 | D2 | D2 | D2 |
| HPC3 ≤ OMT _n < HPC4 | D1 | D1 | D1 | D1 | D1 |
| HPC2 ≤ OMT _n < HPC3 | SR | SR | SR | SR | SR |
| HPC1 ≤ OMT _n < HPC2 | Norm | Norm | Norm | Norm | Norm |
| OMT _n < HPC1 | Norm | | | | |

8.7.5 Compressor over Current Protection



8.7.6 Heat Sink Over Heating Protection

A new control status will be set according to the following graph every one-minute or whenever when going up by the rows.

WIRING DIAGRAMS

HST_n is the current reading of HST and HST_{n-1} is the last reading of HST.

| HST _n | HST _n -HST _{n-1} | | | | |
|------------------------------|--------------------------------------|------|------|----|----|
| | <-1 | -1 | 0 | 1 | >1 |
| $HST_n > HSTOH5$ | SC | SC | SC | SC | SC |
| $HSTOH4 \leq HST_n < HSTOH5$ | D1 | D1 | D2 | D2 | D2 |
| $HSTOH3 \leq HST_n < HSTOH4$ | SR | SR | D1 | D2 | D2 |
| $HSTOH2 \leq HST_n < HSTOH3$ | SR | SR | SR | D1 | D1 |
| $HSTOH1 \leq HST_n < HSTOH2$ | Norm | Norm | Norm | SR | SR |
| $HST_n < HSTOH1$ | Norm | | | | |

(*) **Normal (Norm)** – No protection status is ON.

Stop-Rise (SR) – System is in protection.

HSTDown1 (D1) - System is in protection.

HSTDown2 (D2) - System is in protection.

8.7.7 System Over Power Protection

| Power _n | Power _n -Power _{n-1} | | | | |
|----------------------------------|--|----------|------|--------|-----|
| | <-50 | [-50,-1] | 0 | [1,50] | >50 |
| $Power_n > OVRPWR5$ | SC | SC | SC | SC | SC |
| $OVRPWR4 \leq Power_n < OVRPWR5$ | D1 | D1 | D2 | D2 | D2 |
| $OVRPWR3 \leq Power_n < OVRPWR4$ | SR | SR | D1 | D2 | D2 |
| $OVRPWR2 \leq Power_n < OVRPWR3$ | SR | SR | SR | D1 | D1 |
| $OVRPWR1 \leq Power_n < OVRPWR2$ | Norm | Norm | Norm | SR | SR |
| $Power_n < OVRPWR1$ | Norm | | | | |

8.7.8 Outdoor Coil Deicing Protection

In the deicing protection, IFAN is forced OFF.

8.7.8.1 Deicing Starting Conditions

Deicing operation will start when either one of the following conditions exist:

- Case 1: $OCT < -DST$ AND $TLD > DI$
- Case 2: $OCT < -4$ AND $TLD > 100$ minutes
- Case 3: OCT is Invalid AND $TLD > DI$
- Case 4: Unit is just switched to STBY AND $OCT < -DST$
- Case 5: compressor is stopped during heating operation, $OCT < -DST$ AND $TLD > DI$,

OCT – Outdoor Coil Temperature

OAT – Outdoor Air Temperature

TLD – Time from Last Deicing

DI – Deicing Interval (Time Interval Between Two Deicing)

DT- Deicing Time

DST is defined as:

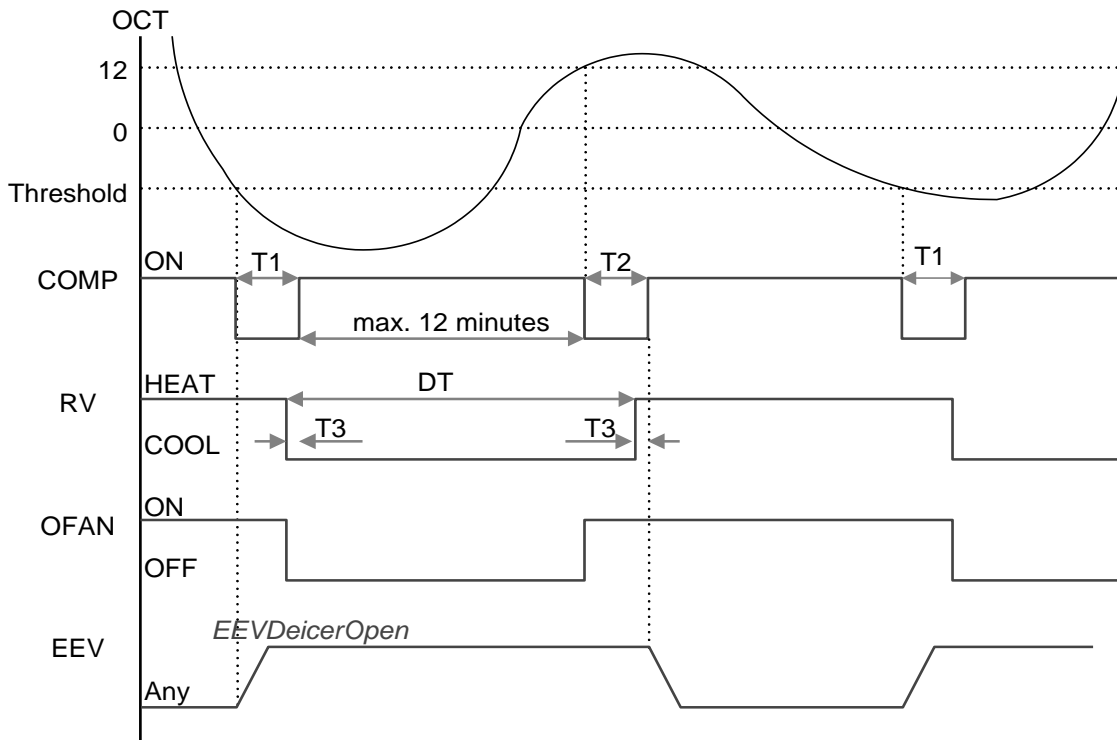
When $OAT > 0$ or OAT is invalid; then $DST = 8$

When $OAT \leq 0$; then $DST = \text{round down} (-DeicerCoef * OAT) + 8$

Deicing interval time when compressor is first started in heat mode is 30 minutes.

Deicing interval time is changed (increased/ decreased in 10 minutes steps) as a function of deicing time. If deicing time is shorter than former deicing time, the deicing interval time will be increased. If deicing time is longer than former deicing time, the deicing interval time will be decreased.

8.7.8.2 Deicing Protection Procedure



T1 = DEICT1 seconds, T2 = DEICT2 seconds, T3 = DEICT3 seconds

8.7.8.3 Exiting Deicing

OCT > OCTExitDeicer or Deicer current time is over MaxDeicerTime minutes.

8.7.9 Exceeding operation conditions

| Indoor Mode request | Exceeding limits state | | | | Normal state (default) |
|---------------------|--------------------------|-------------------------------------|------------------|-------------------|------------------------|
| | Outdoor conditions | | EnableExceedCond | | Outdoor mode |
| | Indoor Hydro (Family 31) | Indoor Non Hydro (Family is not 31) | 1 | 0 (or OAT faulty) | |
| Cooling | A=47 | A=47 | Idle | Cooling | Cool |
| Cooling | B=-11 | B=-11 | Idle | Cooling | Cool |
| Heating | B=-18 | B=-18 | Idle | Heating | Heat |
| Heating | A=+40 | A=+30 | Idle | Heating | Heat |

8.8 Indoor Unit Dry Contact

Indoor unit Dry contact has two alternative functions that are selected by J8.

| | Function | Contact = Open | Contact = Short |
|------------|------------------------------|----------------|-----------------|
| J8 = Open | Presence Detector Connection | No Limit | Forced to STBY |
| J8 = Short | Power Shedding Function | No Limit | Limit NLOAD |

8.9 Operating the Unit from the Mode Button

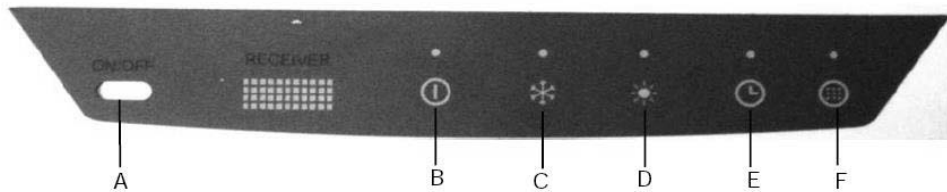
Forced operation allows to start, stop and operate in Cooling or Heating, in pre-set temperature according to the following table:

WIRING DIAGRAMS

| Forced operation Mode | Pre-set Temperature |
|-----------------------|---------------------|
| Cooling | 20°C |
| Heating | 28°C |

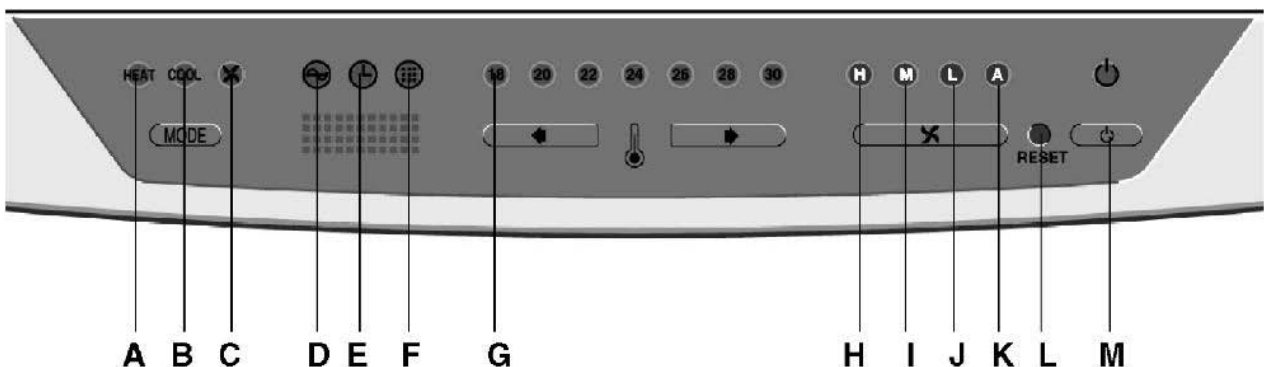
8.10 Indoor Unit Controllers and Indicators

FWDE series



| | | |
|---|-------------------|---|
| A | ON/OFF Button | 1- Press the button to turn ON/OFF the unit. 2- When Filter LED is on - turn off the FILTER INDICATOR after a clean filter has been reinstalled. |
| B | OPERATE INDICATOR | Lights up during operation |
| C | COOLING INDICATOR | Lights up when system is switched to Cool Mode |
| D | HEATING INDICATOR | Lights up when system is switched Heat Mode |
| E | TIMER INDICATOR | Lights up during Timer and Sleep operation. |
| F | FILTER INDICATOR | Lights up when Air Filter needs to be cleaned. |

SXE Series



| | | |
|------------------|---------------------------|---|
| A | HEATING INDICATOR | Lights up when system is switched Heat Mode |
| B | COOLING INDICATOR | Lights up when system is switched to Cool Mode |
| C | FAN MODE INDICATOR | Lights up in Fan Mode |
| D | OPERATE INDICATOR | Lights up during operation |
| E | TIMER INDICATOR | Lights up during Timer and Sleep operation. |
| F | FILTER INDICATOR | Lights up when Air Filter needs to be cleaned. |
| G | TEMP. SETTING INDICATORS | Each one of the seven indicators indicates the following SPT: 18, 20, 22, 24, 26, 28, 30 [°c]. The odd number temperatures are indicated by turning on the two adjacent indicators. |
| H I J K | FAN SPEED INDICATORS | H- Lights up when IFAN setting is High. M- Lights up when IFAN setting is Medium. L- Lights up when IFAN setting is Low. A- Lights up when IFAN setting is Auto. |
| Buttons | RESET / FILTERBUTTON | For short pressing: When Filter LED is on - turn off the FILTER INDICATOR after a clean filter has been reinstalled. When Filter LED is off – enable/disable the buzzer announcer, if selected. In long pressing system enters set up mode (if in SB). |
| | POWER BUTTON | Toggle the unit between OPER & STBY modes. |
| | Mode button | Every short pressing , the next operation mode is selected, in this order : SB → Cool Mode → Heat Mode → SB → ... In long pressing system enters diagnostic mode. |
| | FAN speed button | Press this button to change the speed of the IFAN. Each pressing change the speed in the sequence of: L → M → H → Auto → L → ... |
| | TEMP. SETTING UP BUTTON | Pressing this button increases the SPT by 1°c. Note: The Max SPT is 30°c. |
| | TEMP. SETTING DOWN BUTTON | Pressing this button decreases the SPT by 1°c. Note: The Min SPT is 18°c. |

Note:

1. Pressing time is defined as the time between press and release.
2. If pressing time is one second or less – press is consider as short pressing.
3. If pressing time is three seconds or longer – pressing is considered as long pressing. In between, pressing is undetermined and system will not respond to pressing.

System Diagnostics from IDU

Pressing Mode button for long pressing in any operation mode, will activate diagnostic mode by the acknowledgment of 3 short beeps and lighting of COOL and HEAT LED's. Then, every short pressing Mode button will scroll between indoor and outdoor unit diagnostic modes by the acknowledgment of 3 short beeps and lighting of COOL and HEAT LED's.

In diagnostic mode, system problems / information will be indicated by blinking of Heat & Cool LED's.

The coding method will be as follows:

Heat led will blink 5 times in 5 seconds, and then will be shut off for the next 5 seconds. Cool Led will blink during the same 5 seconds according to the following IDU/ODU tables:

For IDU diagnostics:

| No | Problem | AO | 5 | 4 | 3 | 2 | 1 |
|-----|--|-----|---|---|---|---|---|
| 1 | ICT is disconnected | Yes | 0 | 0 | 0 | 0 | 1 |
| 2 | ICT is shorted | Yes | 0 | 0 | 0 | 1 | 0 |
| 3 | RAT is disconnected | Yes | 0 | 0 | 0 | 1 | 1 |
| 4 | RAT is shorted | Yes | 0 | 0 | 1 | 0 | 0 |
| 5 | Reserved (for MSMP used as RGT fault) | No | 0 | 0 | 1 | 0 | 1 |
| 6 | ICTE shorted/disconnected (when enabled) | Yes | 0 | 0 | 1 | 1 | 0 |
| 7 | Undefined IDU Family/Model | Yes | 0 | 0 | 1 | 1 | 1 |
| 8 | No Communication | Yes | 0 | 1 | 0 | 0 | 0 |
| 9 | No Encoder | No | 0 | 1 | 0 | 0 | 1 |
| 10 | Reserved | No | 0 | 1 | 0 | 1 | 0 |
| 11 | Outdoor Unit Fault | No | 0 | 1 | 0 | 1 | 1 |
| ... | Reserved | No | | | | | |
| 17 | Defrost protection | No | 1 | 0 | 0 | 0 | 1 |
| 18 | Deicing Protection | No | 1 | 0 | 0 | 1 | 0 |
| 19 | Outdoor Unit Protection | No | 1 | 0 | 0 | 1 | 1 |
| 20 | Indoor Coil HP Protection | No | 1 | 0 | 1 | 0 | 0 |
| 21 | Overflow Protection | Yes | 1 | 0 | 1 | 0 | 1 |
| 22 | Reserved | No | | | | | |
| 24 | EEPROM Not Updated | No | 1 | 1 | 0 | 0 | 0 |
| 25 | Bad EEPROM | No | 1 | 1 | 0 | 0 | 1 |
| 26 | Bad Communication | No | 1 | 1 | 0 | 1 | 0 |
| 27 | Using EEPROM data | No | 1 | 1 | 0 | 1 | 1 |
| 28 | Model A | No | 1 | 1 | 1 | 0 | 0 |
| 29 | Model B | No | 1 | 1 | 1 | 0 | 1 |
| 30 | Model C | No | 1 | 1 | 1 | 1 | 0 |
| 31 | Model D | No | 1 | 1 | 1 | 1 | 1 |

8.11 Outdoor Unit Controllers and Indicators

8.11.1 The user display uses three 7 segments.

8.11.1.1 The user interface concept is Tree menus.

8.11.1.2 The navigation through the menu can be performed by either the key pad or RC8 remote controller (through infra red receiver).

| Command Type | Function | Keypad | Remote controller | RC8 sketch: |
|--------------------|--|------------------------|--|-------------|
| Up or Down command | Scrolling among options (up and down). | Up or Down key button. | Up: Set Point '+' Down: Set Point '-' | |
| Selection command | Go down one level in the menu or select an option. | Select button | FAN mode | |
| Escaping command | Go up one level in the menu | Escape button | Oper/STBY | |

Note: the buttons above are selected according to RC8 design (refer to RC8 specifications) for the technician convenient use.

- The navigation type selection, remote controller or keypad, is set through software parameter: *HMIType=0* (keypad), *HMIType=1* (remote controller)
- The following table summarizes the remote controller commands:

| Command Type | Pressed Button | Values on the IR protocol | | | | | | |
|--------------|-------------------|---------------------------|------|-----|-------|-------------------|--------|------------|
| | | SPT | Oper | FAN | Sleep | Horizontal Louver | I-FEEL | Other bits |
| Up | '+' | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| Down | '-' | 16 | 0 | 0 | 0 | 0 | 0 | 0 |
| Escape | Oper | Don't care | 1 | 0 | 0 | 0 | 0 | 0 |
| Enter | FAN | Don't care | 0 | 01 | 0 | 0 | 0 | 0 |
| Reserved | Sleep | Don't care | 0 | 0 | 1 | 0 | 0 | 0 |
| Reserved | Horizontal Louver | Don't care | 0 | 0 | 0 | 1 | 0 | 0 |
| Reserved | I-FEEL | Don't care | 0 | 0 | 0 | 0 | 1 | 0 |
| - | Other | 20 | 0 | 0 | 0 | 0 | 0 | 0 |

Notes:

- The zeros stated above must be checked in order to judge for proper message.
- Proper checksum has to be performed according to the RC7 specifications.

- For any remote controller command, the most right 'dot' will blink for 1 second in order to acknowledge the command is received.

8.11.1.3 Active selection or status will be indicated by blinking the display.

8.11.2 Keys functionality

- Scrolling will be done whenever the button is pressed.

- When scrolling alpha values, if the scroll button is held in, the selection will change at the rate of one step per second.
- The display will not roll over during selection (for example stop/Ode/Dia/Stp/Par/stop)

8.11.3 Menus

8.11.3.1 General

All the green colored items will be deactivated for single split units.

8.11.3.2 Main Menu

Technician Test (tt)

Installation Test (it)

Diagnostics (dia)

Set Up (Stp)

Status (Stt)

Notes:

1. The default presentation will be alternation among:
 - the mode of the unit (Cl/Ht/Sb) shown for 2 sec.
 - ID + the detected IDUs number shown for 2 sec.
 - Active fault (among ODU or IDUs), each to be shown for 2 sec.
2. In diagnostics menu:
 - xx means failure code.
 - Maximum 5 faults are presented for each unit (each IDUs/ODU). When no faults "--" sign will be shown.
 - The active faults have higher priority for presentation than non active ones.
 - Non active faults are presented according to their chronological order, starting from the latest one.
 - Whenever a new active fault occurs, it will be presented immediately.
 - Active faults are blinking, where non active ones do not.
3. Exiting 'Status' menu and its sub-menus back to the main menu is done by either pressing escape or after continuous 60 minutes out of any press.
4. Technician Test mode, once is selected, it cannot last more than predefined time. Refer to technician test for details, Sect. **Error! Reference source not found.**
5. All the menus, except Status and its sub-menu, Technician Test once selected, are automatically exited to the main menu after 10 continuous minute out of any press.
6. When Technician test cool or heat menus are selected (operative), it will be blinking constantly until, this menu is escaped.
7. When the installation test begins, the system will show up count down based (refer to the installation test sect. **Error! Reference source not found.** At the end of the installation test, the result will be presented.
8. For the indoor diagnostics, whenever there is no-communication with indoor unit or indoor unit is not detected, 'no-communication' will be shown under the relevant indoor unit diagnostics. In addition to the indoor diagnostics, these faults will be also shown as well under the default show.
9. When Alpha and numeric values are combined, they will be separated by dot.

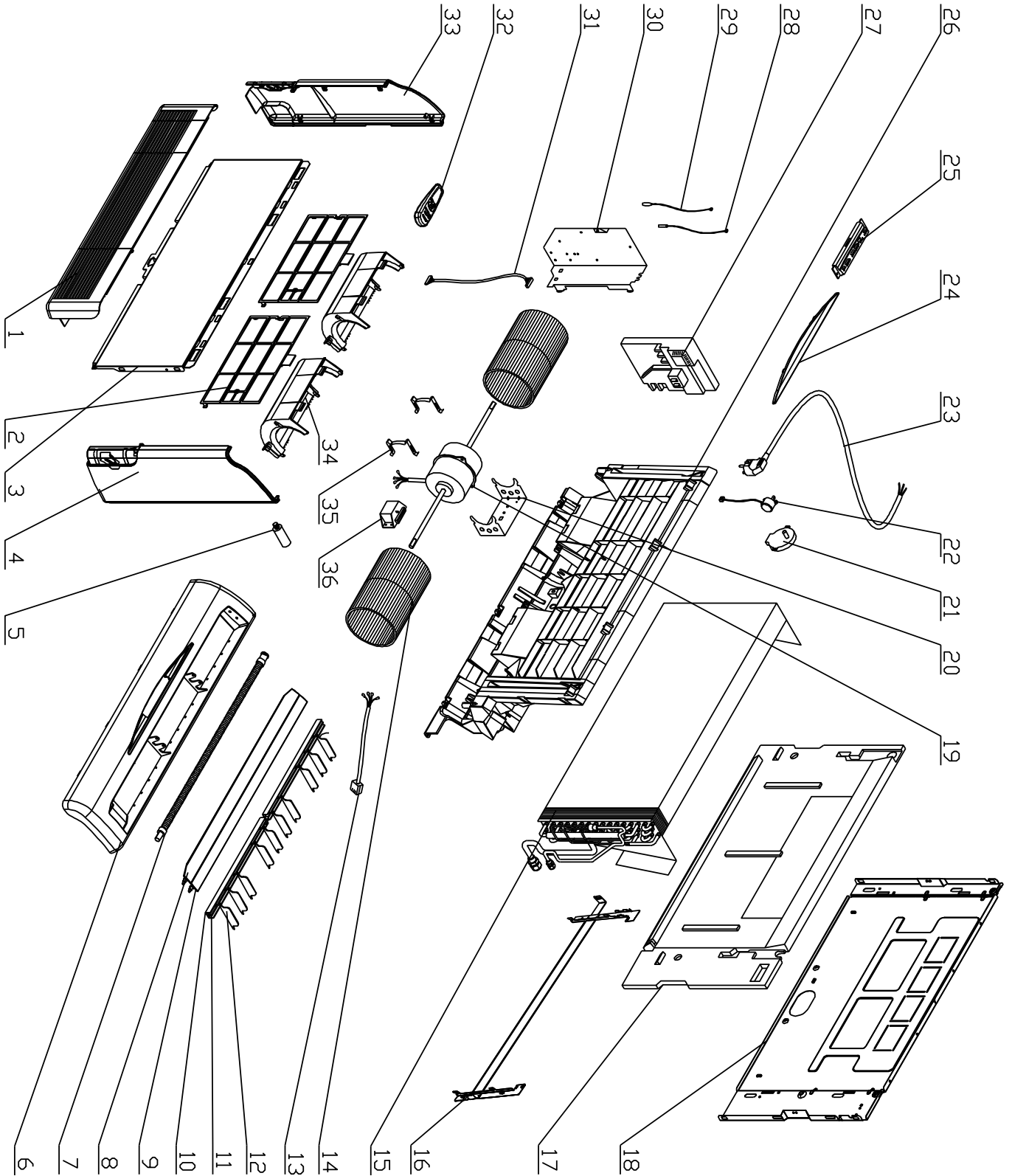
10. For technician mode presentation, the active setting target compressor frequency will be presented directly upon entry. The active selected value will be blinking. The set target compressor frequency will be enabled to be scrolled up and down within the minimum and maximum operating frequency values (the values do depend on the outdoor model setting as well as the operation mode- cool or heat)
11. For technician mode presentation, whenever the system exit technician mode due any of the faults listed under Sect. **Error! Reference source not found.**, the HMI will show the fault in the same way to Diagnostics sub menu.

Fault Code:

| No | Problem |
|----|---|
| 1 | OCT is shorted/disconnected |
| 2 | CTT is shorted/disconnected |
| 3 | HST is shorted/disconnected |
| 4 | OAT is shorted/disconnected |
| 5 | OMT is shorted/disconnected |
| 6 | RGT is shorted/disconnected |
| 7 | RLT is shorted/disconnected |
| 8 | Reserved |
| 9 | Reserved |
| 10 | Reserved |
| 11 | Compressor IPM Fault / IPM Driver Pin / Compressor Current Sensor Fault |
| 12 | Bad EEPROM |
| 13 | DC under voltage |
| 14 | DC over voltage |
| 15 | AC under voltage/AC over Voltage/Zero Crossing detection |
| 16 | Mismatch between IDU & ODU models |
| 17 | No Communication |
| 18 | System Over Power |
| 19 | PFC Current sensor |
| 20 | Heat sink Over Heating |
| 21 | Deicing |
| 22 | Compressor Over Heating |
| 23 | Compressor Over Current |
| 24 | No OFAN Feedback |
| 25 | OFAN IPM fault / OFAN IPM Driver Pin |
| 26 | Compressor Lock |
| 27 | Bad Communication |
| 28 | Missing ODU configuration |
| 29 | Undefined ODU Model |
| 30 | Outdoor/Indoor Coil Overheating |
| 31 | Operation conditions are exceeded |

9. EXPLODED VIEWS AND SPARE PART LISTS

9.1 Exploded view of Indoor unit: SXE009/012, FWDE012



9.2 Spare part list of Indoor Unit: SXE009

| Item | PN | Description | Qty |
|------|-------------------|---|-----|
| 1 | 465800145 | Air Intake Grille Assy. (Small)/RAL9003AW | 1 |
| 2 | 221555 | FILTER (SMALL) | 2 |
| 3 | 464040018P4 | Front Panel/RAL9003AW/AWSI-SXE009/12-N11/PXD/Airwell/ECO DESIGN/France | 1 |
| 4 | 465060004 | Side Plate / Left /RAL9003AW | 1 |
| 5 | 455000600 | Capacitor With Screw for fan motor 1uF (CBB65D) | 1 |
| 6 | 465120035 | Air Outlet Frame (Small)/RAL9003AW | 1 |
| 7 | 285032 | DRAIN TUBE | 1 |
| 8 | 465160055 | Horizontal Flap/Front (Small)/RAL9003AW | 1 |
| 9 | 465160056 | Horizontal Flap/Black (Small)/RAL9003AW | 1 |
| 10 | 465340138 | Cover/Linkage/RAL9003AW | 2 |
| 11 | 465160058 | Linkage/ Vertical Flap/RAL9003AW | 2 |
| 12 | 465160057 | Vertical Flap/RAL9003AW | 10 |
| 13 | 4525333 | HPI PXD 9/12 Motor connective wire | 1 |
| 14 | 293321 | CENTRIFUGAL FAN (SMALL) | 2 |
| 15 | 462350133 | Evap. assy./AWSI-SXE009/12-N11/PXD/Airwell/ECO DESIGN/France | 1 |
| 16 | 466235 | MOUNTED BRCKET ASSY. (SMALL) | 1 |
| 17 | 382334 | BASE EPS (SMALL) | 1 |
| 18 | 307979 | BACK PANEL (SMALL) | 1 |
| 19 | 4520158R | MOTOR PXD 9-12-15 | 1 |
| 20 | 323425 | MOTOR SUPPORT LENGTH 99 | 1 |
| 21 | 263034 | SWING MOTOR | 1 |
| 22 | 436665 | STEP MOTOR | 1 |
| 23 | 455013705R | Power Cord Without Plug/3G/1.5/2100 | 1 |
| 24 | 465020285 | Panel Assy./Display/Airwell/RAL9003AW | 1 |
| 25 | 234213R | DISPLAY BOX PXD EHK: 906A041-02 | 1 |
| 26 | 373247 | FAN FRAME (SMALL) | 1 |
| 27 | 452935900R | INDOOR STORM DC INVERTER CONTROLLER (ENGLISH) 916A521-01 | 1 |
| 28 | 467400053 | ICT Indoor Coil Temperature (RT2) sensor/10K/Copper-capsulation $\varnothing 6$ | 1 |
| 29 | 467400025 | Indoor Air Inlet Temperature Sensor 650mm | 1 |
| 30 | 311036 | STORM METAL PANEL | 1 |
| 31 | 391508 | CABLE DISPLAY | 1 |
| 32 | 467240054 | Remote Controller Assy. with Batteries.for Export RC08 | 1 |
| 33 | 465060005 | Side Plate / Right /RAL9003AW | 1 |
| 34 | 372341 | FAN COVER (SMALL) | 2 |
| 35 | 324296 | MOTOR SPRING CLIP | 2 |
| 36 | 452987400 | Auto-transformer | 1 |

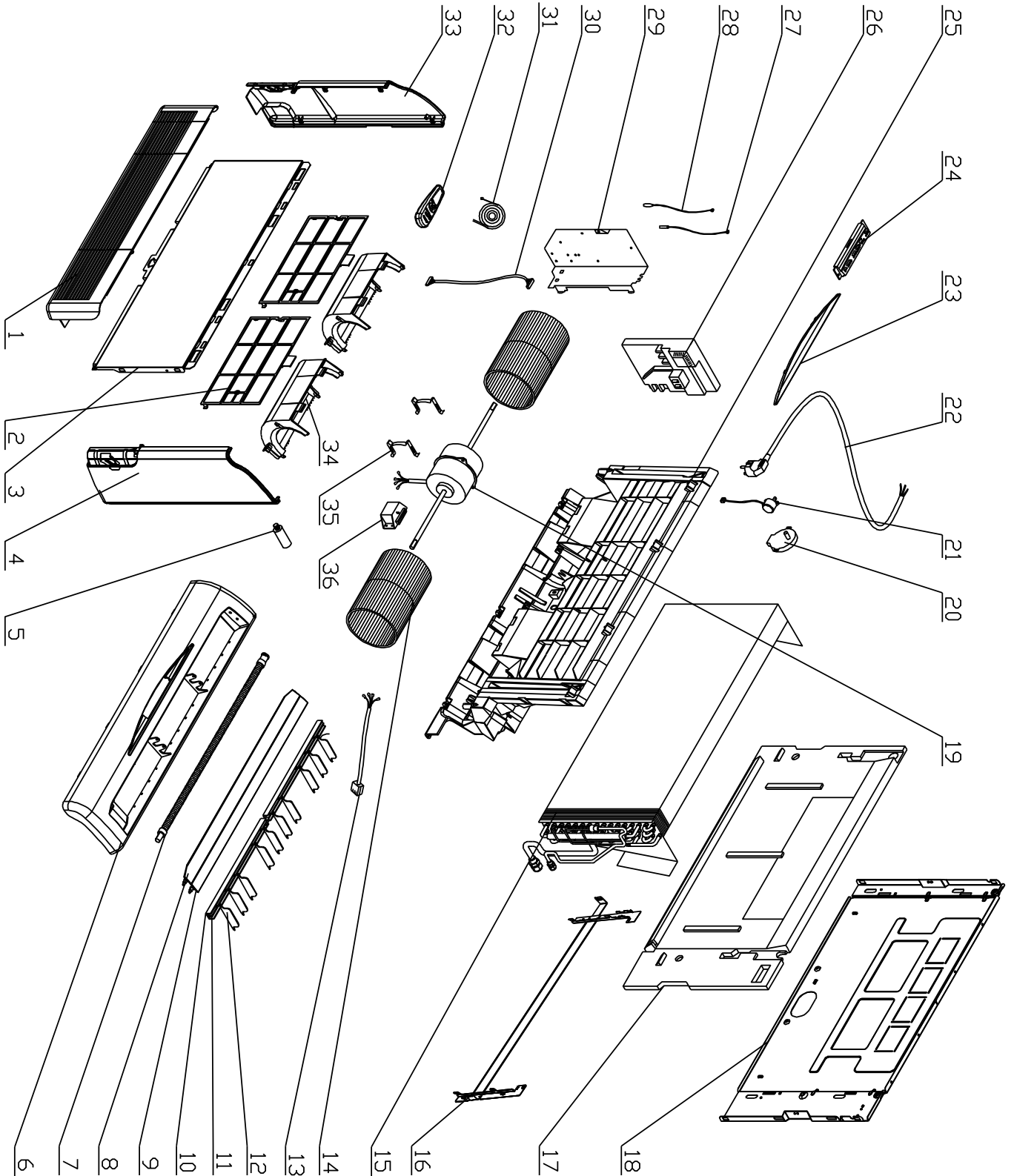
9.3 Spare part list of Indoor Unit: SXE012

| Item | PN | Description | Qty |
|------|-------------|---|-----|
| 1 | 465800145 | Air Intake Grille Assy. (Small)/RAL9003AW | 1 |
| 2 | 221555 | FILTER (SMALL) | 2 |
| 3 | 464040018P4 | Front Panel/RAL9003AW/AWSI-SXE009/12-N11/PXD/Airwell/ECO DESIGN/France | 1 |
| 4 | 465060004 | Side Plate / Left /RAL9003AW | 1 |
| 5 | 455000600 | Capacitor With Screw for fan motor 1uF (CBB65D) | 1 |
| 6 | 465120035 | Air Outlet Frame (Small)/RAL9003AW | 1 |
| 7 | 285032 | DRAIN TUBE | 1 |
| 8 | 465160055 | Horizontal Flap/Front (Small)/RAL9003AW | 1 |
| 9 | 465160056 | Horizontal Flap/Black (Small)/RAL9003AW | 1 |
| 10 | 465340138 | Cover/Linkage/RAL9003AW | 2 |
| 11 | 465160058 | Linkage/ Vertical Flap/RAL9003AW | 2 |
| 12 | 465160057 | Vertical Flap/RAL9003AW | 10 |
| 13 | 4525333 | HPI PXD 9/12 Motor connective wire | 1 |
| 14 | 293321 | CENTRIFUGAL FAN (SMALL) | 2 |
| 15 | 462350133 | Evap. assy. /AWSI-SXE009/12-N11/PXD/Airwell/ECO DESIGN/France | 1 |
| 16 | 466235 | MOUNTED BRACKET ASSY. (SMALL) | 1 |
| 17 | 382334 | BASE EPS (SMALL) | 1 |
| 18 | 307979 | BACK PANEL (SMALL) | 1 |
| 19 | 4520158R | MOTOR PXD 9-12-15 | 1 |
| 20 | 323425 | MOTOR SUPPORT LENGTH 99 | 1 |
| 21 | 263034 | SWING MOTOR | 1 |
| 22 | 436665 | STEP MOTOR | 1 |
| 23 | 455013705R | Power Cord Without Plug/3G/1.5/2100 | 1 |
| 24 | 465020285 | Panel Assy. /Display/Airwell/RAL9003AW | 1 |
| 25 | 234213R | DISPLAY BOX PXD EHK: 906A041-02 | 1 |
| 26 | 373247 | FAN FRAME (SMALL) | 1 |
| 27 | 452935900R | INDOOR STORM DC INVERTER CONTROLLER (ENGLISH) 916A521-01 | 1 |
| 28 | 467400053 | ICT Indoor Coil Temperature (RT2) sensor/10K/Copper-capsulation $\varnothing 6$ | 1 |
| 29 | 467400025 | Indoor Air Inlet Temperature Sensor 650mm | 1 |
| 30 | 311036 | STORM METAL PANEL | 1 |
| 31 | 391508 | CABLE DISPLAY | 1 |
| 32 | 467240054 | Remote Controller Assy. with Batteries. for Export RC08 | 1 |
| 33 | 465060005 | Side Plate / Right /RAL9003AW | 1 |
| 34 | 372341 | FAN COVER (SMALL) | 2 |
| 35 | 324296 | MOTOR SPRING CLIP | 2 |
| 36 | 452987400 | Auto-transformer | 1 |

9.4 Spare part list of Indoor Unit: FWDE012

| Item | PN | Description | Qty |
|------|-------------------|--|-----|
| 1 | 465800145 | Air Intake Grille Assy. (Small) /RAL9003AW | 1 |
| 2 | 221555 | FILTER (SMALL) | 2 |
| 3 | 464040018P4 | Front Panel/RAL9003AW/AWSI-SXE009/12-N11/PXD/Airwell/ECO DESIGN/Fran | 1 |
| 4 | 465060004 | Side Plate / Left /RAL9003AW | 1 |
| 5 | 455000600 | Capacitor With Screw for fan motor 1uF (CBB65D) | 1 |
| 6 | 465120035 | Air Outlet Frame (Small) /RAL9003AW | 1 |
| 7 | 285032 | DRAIN TUBE | 1 |
| 8 | 465160055 | Horizontal Flap/Front (Small) /RAL9003AW | 1 |
| 9 | 465160056 | Horizontal Flap/Black (Small) /RAL9003AW | 1 |
| 10 | 465340138 | Cover/Linkage/RAL9003AW | 2 |
| 11 | 465160058 | Linkage/ Vertical Flap/RAL9003AW | 2 |
| 12 | 465160057 | Vertical Flap/RAL9003AW | 10 |
| 13 | 4525333 | HPI PXD 9/12 Motor connective wire | 1 |
| 14 | 293321 | CENTRIFUGAL FAN (SMALL) | 2 |
| 15 | 462350111 | Evaporator assy./PXD(Wne Cellar) 35 DCI | 1 |
| 16 | 466235 | MOUNTED BRACKET ASSY.(SMALL) | 1 |
| 17 | 382334 | BASE EPS (SMALL) | 1 |
| 18 | 307979 | BACK PANEL (SMALL) | 1 |
| 19 | 4520158R | MOTOR PXD 9-12-15 | 1 |
| 20 | 323425 | MOTOR SUPPORT LENGTH 99 | 1 |
| 21 | 263034 | SWING MOTOR | 1 |
| 22 | 436665 | STEP MOTOR | 1 |
| 23 | 455013705R | Power Cord Without Plug/3G/1.5/2100 | 1 |
| 24 | 465720811 | Panel Assy./PXD(Wne Cellar) Display/Airwell | 1 |
| 25 | 467300306R | Display Board / PXD Wne cellar display | 1 |
| 26 | 373247 | FAN FRAME(SMALL) | 1 |
| 27 | 452935900R | INDOOR STORM DC INVERTER CONTROLLER(ENGLISH)916A521-01 | 1 |
| 28 | 467400053 | ICT Indoor Coil Temperature (RT2) sensor/10K/Copper- capsulation | 1 |
| 29 | 467400025 | Indoor Air Inlet Temperature Sensor 650mm | 1 |
| 30 | 311036 | STORM METAL PANEL | 1 |
| 31 | 391508 | CABLE DISPLAY | 1 |
| 32 | 467240052 | Remote Controller Assy. with Batteries.for Export RC08 | 1 |
| 33 | 465060005 | Side Plate / Right /RAL9003AW | 1 |
| 34 | 372341 | FAN COVER (SMALL) | 2 |
| 35 | 324296 | MOTOR SPRING CLIP | 2 |
| 36 | 452987400 | Auto-transformer | 1 |

9.5 Exploded view of Indoor unit: SXE018, FWDE018



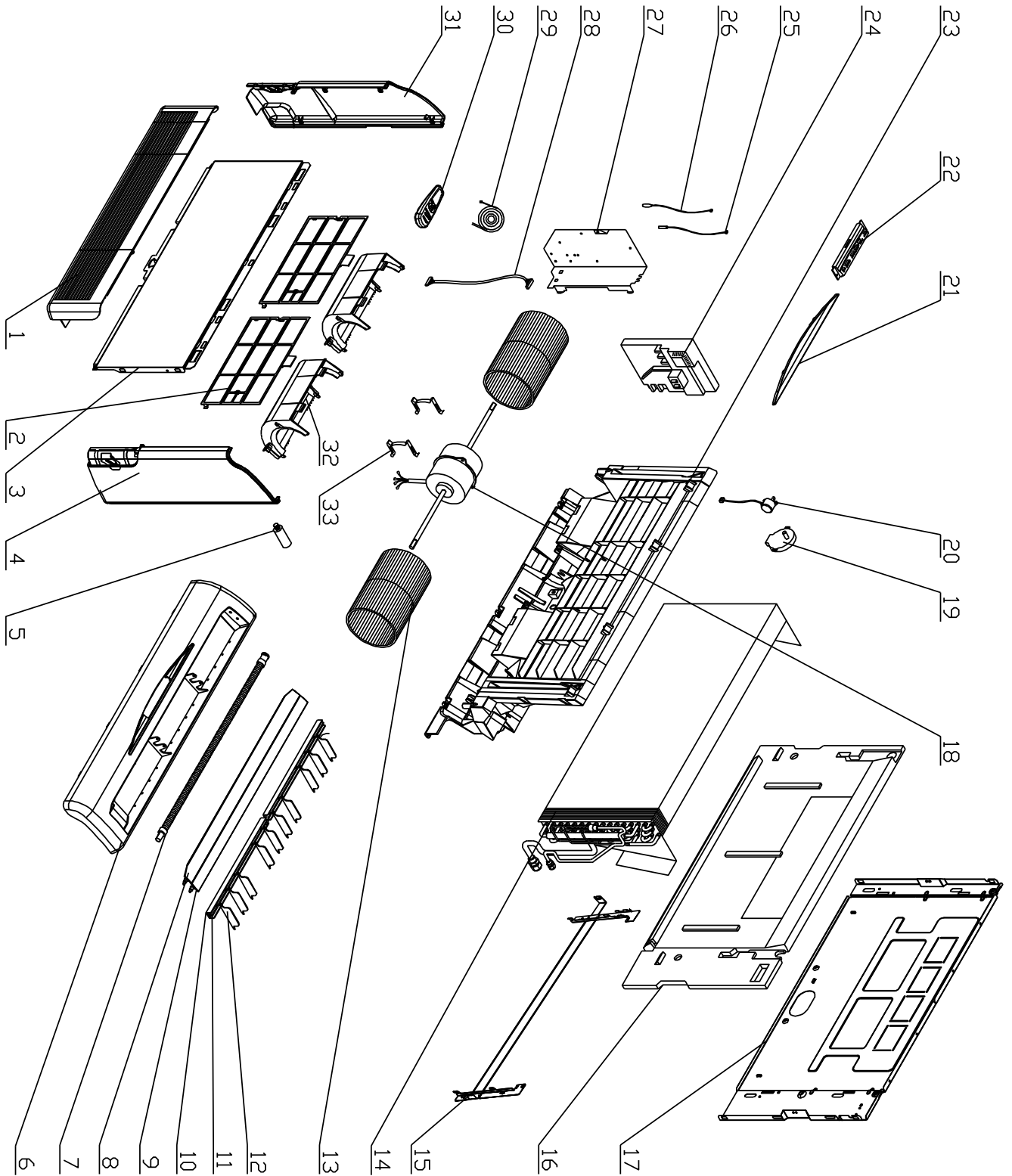
9.6 Spare part list of Indoor Unit: SXE018

| Item | PN | Description | Qty |
|------|-------------------|---|-----|
| 1 | 465800148 | Air Intake Grille Assy. (Big)/RAL9003AW | 1 |
| 2 | 221554 | FILTER PXD (BIG) | 2 |
| 3 | 465020284P 4 | Front Panel/RAL9003AW/AWSI-SXE018/24-N11/PXD/Airwell/ECO DESIGN/France | 1 |
| 4 | 465060004 | Side Plate / Left /RAL9003AW | 1 |
| 5 | 455000604 | Capacitor With Screw 1.5uF (CBB65D) | 1 |
| 6 | 465120036 | Air Outlet Frame (Big)/RAL9003AW | 1 |
| 7 | 285032 | DRAIN TUBE | 1 |
| 8 | 465160059 | Horizontal Louver/Front (Big)/RAL9003AW | 1 |
| 9 | 465160060 | Horizontal Flap/Black (Big)/RAL9003AW | 1 |
| 10 | 465340138 | Cover/Linkage/RAL9003AW | 3 |
| 11 | 465160058 | Linkage/ Vertical Flap/RAL9003AW | 3 |
| 12 | 465160057 | Vertical Flap/RAL9003AW | 16 |
| 13 | 4525333 | HPI PXD 9/12 Motor connective wire | 1 |
| 14 | 293322 | CENTRIFUGAL FAN (BIG) | 2 |
| 15 | 462350134 | Evap. assy./AWSI-SXE018-N11/PXD/Airwell/ECO DESIGN/France | 1 |
| 16 | 466236 | MOUNTED BRCKET ASSY. (BIG) | 1 |
| 17 | 382333 | BASE EPS (BIG) | 1 |
| 18 | 307980 | BACK PANEL (BIG) | 1 |
| 19 | 4520931R | Motor Assy. for PXD24-28 | 1 |
| 20 | 263034 | SWING MOTOR | 1 |
| 21 | 436665 | STEP MOTOR | 1 |
| 22 | 455013707R | Power Cord Without Plug/3G/2.5/2100 | 1 |
| 23 | 465020285 | Panel Assy./Display/Airwell/RAL9003AW | 1 |
| 24 | 234213R | DISPLAY BOX PXD EHK: 906A041-02 | 1 |
| 25 | 373246 | FAN FRAME (BIG) | 1 |
| 26 | 452935900R | INDOOR STORM DC INVERTER CONTROLLER (ENGLISH) 916A521-0 1 | 1 |
| 27 | 467400053 | ICT Indoor Coil Temperature (RT2) sensor/10K/Copper-capsulation \varnothing 6 | 1 |
| 28 | 467400025 | Indoor Air Inlet Temperature Sensor 650mm | 1 |
| 29 | 311036 | STORM METAL PANEL | 1 |
| 30 | 391508 | CABLE DISPLAY | 1 |
| 31 | 4520904 | MAGNET PART | 2 |
| 32 | 467240054 | Remote Controller Assy. with Batteries. for Export RCO 8 | 1 |
| 33 | 465060005 | Side Plate / Right /RAL9003AW | 1 |
| 34 | 372340 | FAN COVER (BIG) | 2 |
| 35 | 324296 | MOTOR SPRING CLIP | 2 |
| 36 | 453206900 | Transformer | 1 |

9.7 Spare part list of Indoor Unit: FWDE018

| Item | PN | Description | Qty |
|------|-------------------|--|-----|
| 1 | 465800148 | Air Intake Grille Assy. (Big)/RAL9003AW | 1 |
| 2 | 221554 | FILTER PXD (BIG) | 2 |
| 3 | 465020284P4 | Front Panel/RAL9003AW/AWSI-SXE018/24-N11/PXD/Air | 1 |
| 4 | 465060004 | Side Plate / Left /RAL9003AW | 1 |
| 5 | 455000604 | Capacitor With Screw 1.5uF (CBB65D) | 1 |
| 6 | 465120036 | Air Outlet Frame (Big)/RAL9003AW | 1 |
| 7 | 285032 | DRAIN TUBE | 1 |
| 8 | 465160059 | Horizontal Louver/Front (Big)/RAL9003AW | 1 |
| 9 | 465160060 | Horizontal Flap/Black (Big)/RAL9003AW | 1 |
| 10 | 465340138 | Cover/Linkage/RAL9003AW | 3 |
| 11 | 465160058 | Linkage/ Vertical Flap/RAL9003AW | 3 |
| 12 | 465160057 | Vertical Flap/RAL9003AW | 16 |
| 13 | 4525333 | HPI PXD 9/12 Motor connective wire | 1 |
| 14 | 293322 | CENTRIFUGAL FAN (BIG) | 2 |
| 15 | 462350112 | Evaporator1 assy./PXD 50 DCI | 1 |
| 16 | 466236 | MOUNTED BRCKET ASSY. (BIG) | 1 |
| 17 | 382333 | BASE EPS (BIG) | 1 |
| 18 | 307980 | BACK PANEL (BIG) | 1 |
| 19 | 4520931R | Motor Assy. for PXD24-28 | 1 |
| 20 | 263034 | SWING MOTOR | 1 |
| 21 | 436665 | STEP MOTOR | 1 |
| 22 | 455013707R | Power Cord Without Plug/3G/2.5/2100 | 1 |
| 23 | 465720811 | Panel Assy./PXD(Wine Cellar)Display/Airwell | 1 |
| 24 | 467300306R | Display Board / PXD Wine cellar display | 1 |
| 25 | 373246 | FAN FRAME (BIG) | 1 |
| 26 | 452935900R | INDOOR STORM DC INVERTER CONTROLLER(ENGLISH)916A | 1 |
| 27 | 467400053 | ICT Indoor Coil Temperature (RT2) sensor/10K/Cop | 1 |
| 28 | 467400025 | Indoor Air Inlet Temperature Sensor 650mm | 1 |
| 29 | 311036 | STORM METAL PANEL | 1 |
| 30 | 391508 | CABLE DISPLAY | 1 |
| 31 | 4520904 | MAGNET PART | 2 |
| 32 | 467240052 | Remote Controller Assy. with Batteries. for Expor | 1 |
| 33 | 465060005 | Side Plate / Right /RAL9003AW | 1 |
| 34 | 372340 | FAN COVER (BIG) | 2 |
| 35 | 324296 | MOTOR SPRING CLIP | 2 |
| 36 | 453206900 | Transformer | 1 |

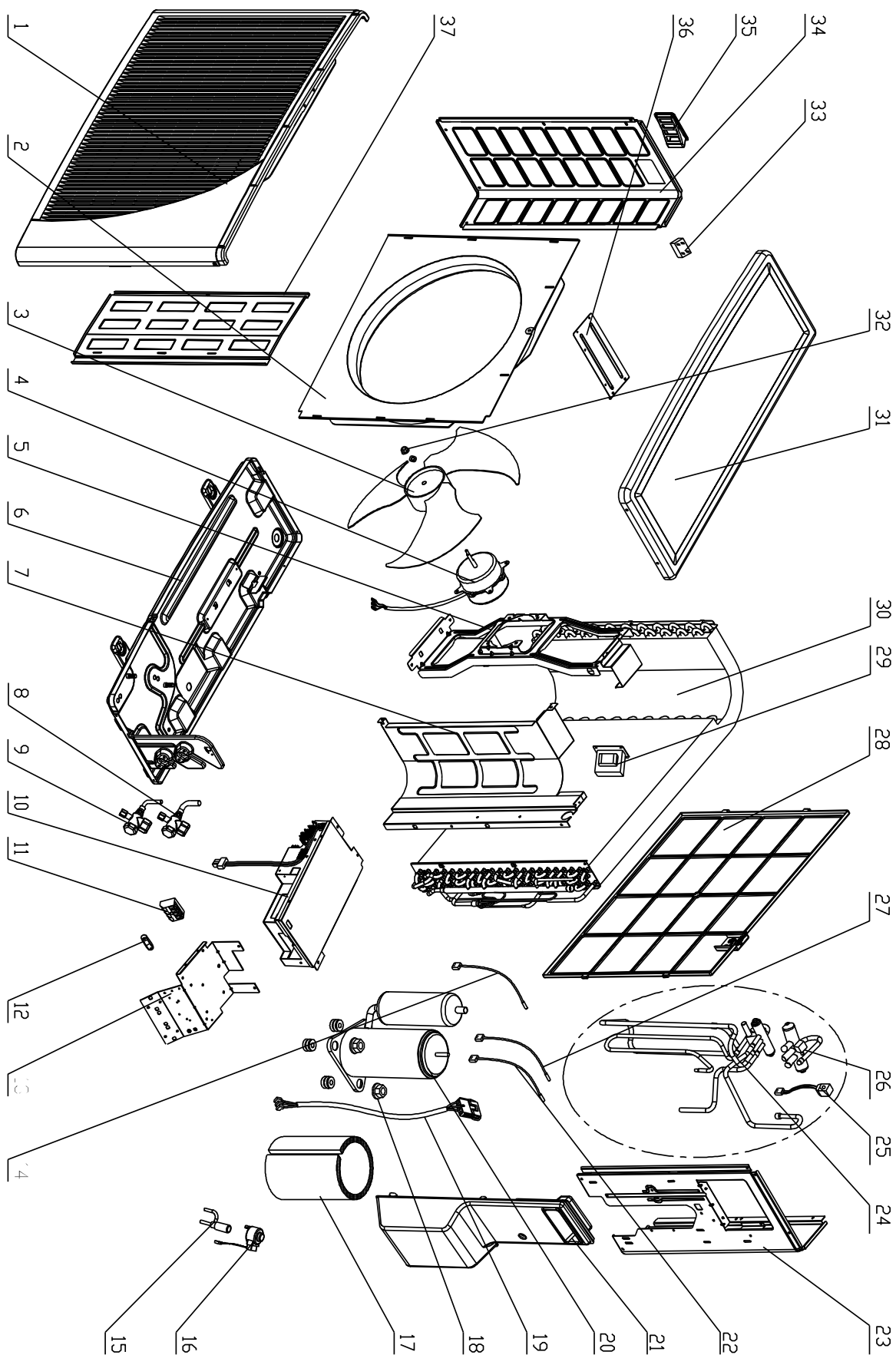
9.8 Exploded view of Indoor unit: FWDE024



9.9 Spare part list of Indoor Unit: FWDE024

| Item | PN | Description | Qty |
|------|-------------------|--|-----|
| 1 | 465800148 | Air Intake Grille Assy. (Big)/RAL9003AW | 1 |
| 2 | 221554 | FILTER PXD (BIG) | 2 |
| 3 | 465020284P4 | Front Panel/RAL9003AW/AWSI-SXE018/24-N11/PXD | 1 |
| 4 | 465060004 | Side Plate / Left /RAL9003AW | 1 |
| 5 | 455000604 | Capacitor With Screw 1.5uF (CBB65D) | 1 |
| 6 | 465120036 | Air Outlet Frame (Big)/RAL9003AW | 1 |
| 7 | 285032 | DRAIN TUBE | 1 |
| 8 | 465160059 | Horizontal Louver/Front (Big)/RAL9003AW | 1 |
| 9 | 465160060 | Horizontal Flap/Black (Big)/RAL9003AW | 1 |
| 10 | 465340138 | Cover/Linkage/RAL9003AW | 3 |
| 11 | 465160058 | Linkage/ Vertical Flap/RAL9003AW | 3 |
| 12 | 465160057 | Vertical Flap/RAL9003AW | 16 |
| 13 | 293322 | CENTRIFUGAL FAN (BIG) | 2 |
| 14 | 462350113 | Evaporatorassy./PXD 72 DCI | 1 |
| 15 | 466236 | MOUNTED BRCKET ASSY. (BIG) | 1 |
| 16 | 382333 | BASE EPS (BIG) | 1 |
| 17 | 307980 | BACK PANEL (BIG) | 1 |
| 18 | 466100005R | Metal Motor Assy. / PXD DCI | 1 |
| 19 | 263034 | SWING MOTOR | 1 |
| 20 | 436665 | STEP MOTOR | 1 |
| 21 | 465720811 | Panel Assy./PXD(Wine Cellar)Display/Airwell | 1 |
| 22 | 467300306R | Display Board / PXD Wine cellar display | 1 |
| 23 | 373246 | FAN FRAME (BIG) | 1 |
| 24 | 452935900R | INDOOR STORM DC INVERTER CONTROLLER(ENGLISH)916A521-01 | 1 |
| 25 | 467400053 | ICT Indoor Coil Temperature (RT2) sensor/10K | 1 |
| 26 | 467400025 | Indoor Air Inlet Temperature Sensor 650mm | 1 |
| 27 | 311036 | STORM METAL PANEL | 1 |
| 28 | 391508 | CABLE DISPLAY | 1 |
| 29 | 4520904 | MAGNET PART | 2 |
| 30 | 467240052 | Remote Controller Assy. with Batteries.for Export RC08 | 1 |
| 31 | 465060005 | Side Plate / Right /RAL9003AW | 1 |
| 32 | 372340 | FAN COVER (BIG) | 2 |
| 33 | 324296 | MOTOR SPRING CLIP | 2 |

9.10 Exploded view of outdoor unit: YBDE009/012/018



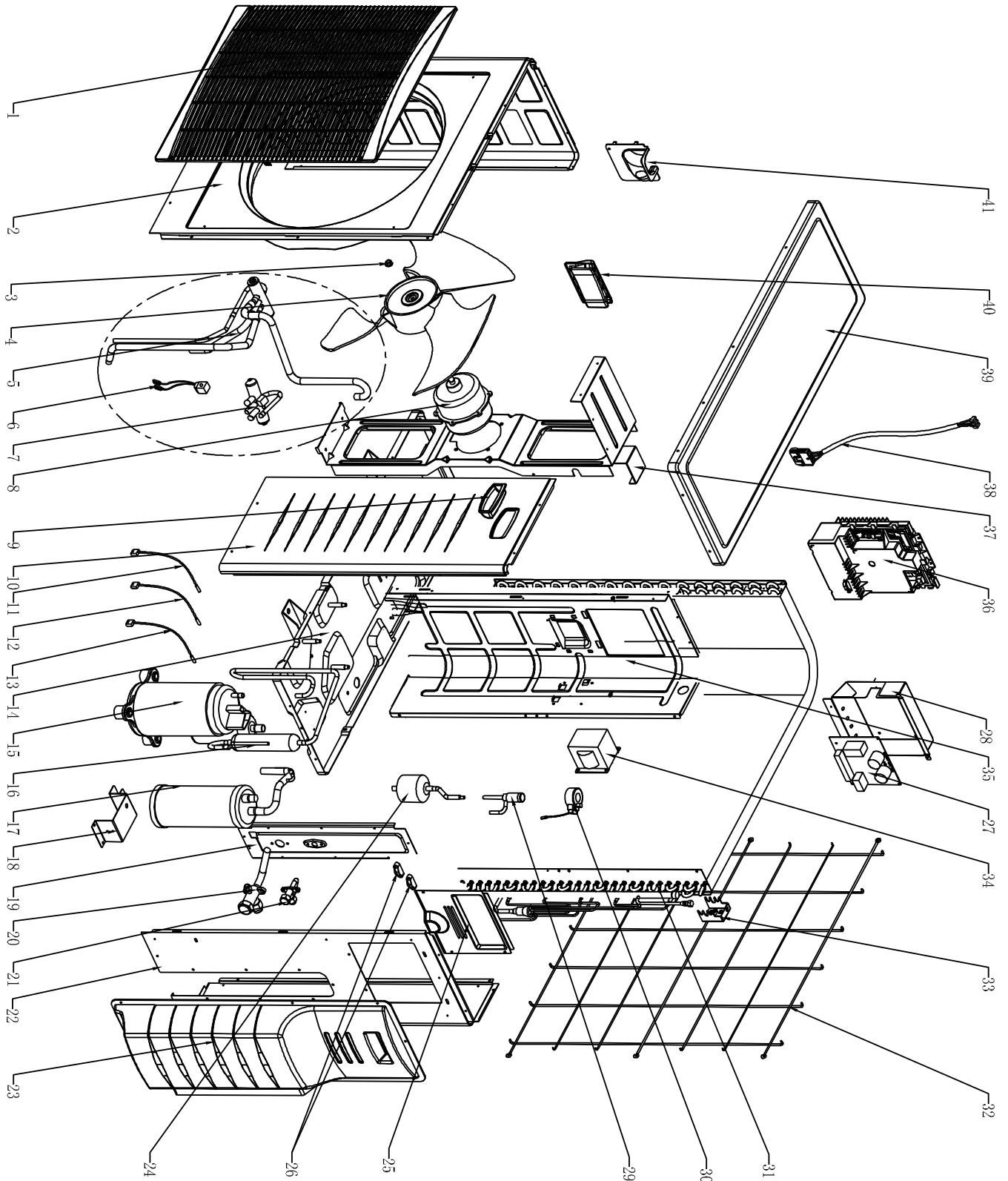
9.11 Spare part list of Outdoor Unit: YBDE009/012

| Item | PN | Description | Qty |
|------|-------------------|--|-----|
| 1 | 433218 | Front Panel A | 1 |
| 2 | 4526340 | Air inlet ring-420 | 1 |
| 3 | 4526476 | Axial fan OD=401 | 1 |
| 4 | 4527092R | DC MOTOR for DCI 25/35 | 1 |
| 5 | 433215 | Motor Support | 1 |
| 6 | 4523059P1 | Painting Base Assy. | 1 |
| 7 | 452808800 | Partition Assy. | 1 |
| 8 | 461010004 | Gas Valve 3/8" R410A | 1 |
| 9 | 461000004 | Liquid Valve 1/4" R410A) | 1 |
| 10 | 467300365R | Controller/DCI 1.8KW (SCM1243MF) BD | 1 |
| 11 | 4519188 | 4 poles terminal block | 1 |
| 12 | 204107 | Cable clip Nylon | 1 |
| 13 | 453012700 | Electric Panel | 1 |
| 14 | 467400200 | CTT Compressor Top Temperature Sensor/10K/Resin-capsulation | 1 |
| 15 | 4526827 | Electronical expansion valve CAM-BD15 FKS-1 | 1 |
| 16 | 452682802 | EEV coil CAM-MD12FKS-2 (White connector, 530mm) | 1 |
| 17 | 469120004 | Insulation 2 Felt+PVC/ Compressor DCI 25 35 | 1 |
| 18 | 4510677 | Nut With Flange M8 -D=24 GB6187-86 | 3 |
| 19 | 4526221 | Compressor wire | 1 |
| 20 | 4526204 | DC INVERTER Compressor Assy 5RS102XAB | 1 |
| 21 | 465340080 | Valve Cover/PP+UV 5VA/ONG3 | 1 |
| 22 | 467400056 | OCT Outdoor Coil Temperature Sensor/10K/Copper-capsulation \varnothing 6 | 1 |
| 23 | 433226P1 | Right side panel /painting plate/DCI 25/35/ONG3 | 1 |
| 24 | 461600131 | 4-Way Valve Assy./DCI 25/35/ONG3 | 1 |
| 25 | 461030008 | 4-W valve coil /SHF(L)-4H/7H | 1 |
| 26 | 461020006 | 4-W valve /DSF-4-R410A | 1 |
| 27 | 467400040 | Condenser Middle Temperature Sensor/OAT & OMT/DCR LC 25/35 | 1 |
| 28 | 433228 | Back Side Net | 1 |
| 29 | 467550014R | Choke/9A/3mH/DCR 1.6KW | 1 |
| 30 | 4526368 | Condensor Soldering assy | 1 |
| 31 | 433231P1 | Painting Top Cover/DCI 25/35/ONG3 | 1 |
| 32 | 4519300 | Nut M5 L | 1 |
| 33 | | | |
| 34 | 433224P1 | Left Side Panel/Painting Plate/DCI 25/35/ONG3 | 1 |
| 35 | 433225 | Handle | 1 |
| 36 | 4526298 | Bridge | 1 |
| 37 | 433223P5 | Painting Insulation Plate | 1 |

9.12 Spare part list of Outdoor Unit: YBDE018

| Item | PN | Description | Qty |
|------|-------------------|--|-----|
| 1 | 433218 | Front Panel A | 1 |
| 2 | 4526340 | Air inlet ring-420 | 1 |
| 3 | 4519251 | Axial Fan OD=400 | 1 |
| 4 | 466100034R | Metal Motor /DCR 50 Z | 1 |
| 5 | 4527203 | Motor Support | 1 |
| 6 | 464000032P1 | Base Painting Assy. /ONG3/DCI 50 R410A | 1 |
| 7 | 464730012 | Partition Plate Assy./DCR 50 Z | 1 |
| 8 | 461010005 | Gas Valve 1/2" R410A | 1 |
| 9 | 461000004 | Liquid Valve 1/4" R410A) | 1 |
| 10 | 467300355R | Controller/DCRS 2.8KW Sine Wave (PS21997) Main BD | 1 |
| | 467300372R | Controller/DCRS 2.8KW Sine Wave (PS21997) Main BD | 1 |
| 11 | 467420025 | 4 Poles Terminal Block | 1 |
| 12 | 204107 | Cable clip Nylon | 1 |
| 13 | 452823600 | Terminal Plate Assy. | 1 |
| 14 | 467400200 | CTT Compressor Top Temperature Sensor/10K/Resin-capsulation | 1 |
| 15 | 461040013 | Electronic Expansion Valve DPF(Q)1.65C-63 | 1 |
| 16 | 461050014 | EEV Coil QA(Q)12-HX-03 | 1 |
| 17 | 469120013 | Insulation Felt+PVC/Compressor Panasonic 5RS132 | 1 |
| 18 | 4510677 | Nut With Flange M8 -D=24 GB6187-86 | 3 |
| 19 | 467000001 | Compressor Power Cord/DCR CR 25/35 | 1 |
| 20 | 460150020R | Compressor Assy./ Panasonic 5RS132ZAD21 | 1 |
| 21 | 465340080 | Valve Cover/PP+UV 5VA/ONG3 | 1 |
| 22 | 467400056 | OCT Outdoor Coil Temperature Sensor/10K/Copper-capsulation \varnothing 6 | 1 |
| 23 | 433226P1 | Right side panel /painting plate/DCI 25/35/ONG3 | 1 |
| 24 | 461600079 | 4-Way Valve Welding Assy./DCR 50 Z | 1 |
| 25 | 461020004 | 4-W valve /SHF(L)-7H-34U | 1 |
| 26 | 461020006 | 4-W valve /DSF-4-R410A | 1 |
| 27 | 467400040 | Condenser Middle Temperature Sensor/OAT & OMT/DCR LC 25/35 | 1 |
| 28 | 433228 | Back Side Net | 1 |
| 29 | 467550005R | Choke/ DCR 50 Z | 1 |
| 30 | 462300127 | Condenser Welding Assy./YBD 018 | 1 |
| 31 | 433231P1 | Painting Top Cover/DCI 25/35/ONG3 | 1 |
| 32 | 4519300 | Nut M5 L | 1 |
| 33 | 455000108 | Double patch Capacitor for fan motor 2uF | 1 |
| 34 | 433224P1 | Left Side Panel/Painting Plate/DCI 25/35/ONG3 | 1 |
| 35 | 433225 | Handle | 1 |
| 36 | 4526298 | Bridge | 1 |
| 37 | 433223P5 | Painting Insulation Plate | 1 |

9.13 Exploded view of outdoor unit: YBDE024



9.14 Spare part list of Outdoor Unit: YBDE024

| Item | PN | Description | Qty |
|------|-------------------|---|-----|
| 1 | 465100000 | Grill/ DCI Trio | 1 |
| 2 | 4522593P1 | Left front plate/Painting/YBD 024 | 1 |
| 3 | 4523758 | Nut M8 left | 1 |
| 4 | 452960400 | Outdoor Axial Fan OD=493 | 1 |
| 5 | 461600055 | 4-Way Valve Assy./ DCI 80 CR | 1 |
| 6 | 461030003 | 4-Way valve coil/DCI 80 CR | 1 |
| 7 | 4526522 | FOUR-WAY VALVE (English) R410A | 1 |
| 8 | 466110008R | DC Resin Motor(SIC-71FW-F170-1A)/DCI 80 CR | 1 |
| 9 | 4522601 | Right Handle | 1 |
| 10 | 4522594P1 | Right front plate/Painting/YBD 024 | 1 |
| 11 | 467400200 | CTT Compressor Top Temperature Sensor/10K/Resin-capsulation | 1 |
| 12 | 467400040 | Condenser Middle Temperature Sensor/OAT & OMT/DCR LC 25/35 | 1 |
| 13 | 467400038 | ODU COIL MIDDLE TEMPERATURE SENSOR/CMV/VRF | 1 |
| 14 | 452809800P1 | Base Painting Assy. /YBD 024 | 1 |
| 15 | 460090007R | Compressor Assy./ C-7RZ233H1A (SANYO ShenYang) | 1 |
| 16 | 452783600 | Oil Separator Assy. | 1 |
| 17 | 452783200 | Liquid-gas Separator | 1 |
| 18 | 452803100P1 | Support Painting Support Assy./Gas-Liquid Separator | 1 |
| 19 | 4526081P1 | Valve plate paint assy./YBD 024 | 1 |
| 20 | 4526513 | LOW PRESS VALVE (R410A) | 1 |
| 21 | 4526514 | Hight press valve(R410A) | 1 |
| 22 | 464080007P1 | Right-Rear Plate/Painting/YBD 024 | 1 |
| 23 | 465340082 | Valve Cover/PP+UV 5VA/GC 30 | 1 |
| 24 | 4518950 | Filter Drier BFK-053S | 1 |
| 25 | 464250093 | Protecting Plate /controller /DCI 80 CR | 1 |
| 26 | 204107 | Cable clip Nylon | 1 |
| 27 | 467300185R | Filter Board / DCI 80 CR | 1 |
| 28 | 464280003 | Terminal Plate/ DCI 80 CR | 1 |
| 29 | 461040013 | Electronic Expansion Valve DPF(Q)1.65C-63 | 1 |
| 30 | 461050014 | EEV Coil QA(Q)12-HX-03 | 1 |
| 31 | 462300105 | Condenser Assy. /DCI80Z R410A | 1 |
| 32 | 453174200P1 | Guard Net Painting Assy./YBD 024 | 1 |
| 33 | 453083800 | Support/OAT | 1 |
| 34 | 467550002R | Choke / DCI 80 CR | 1 |
| 35 | 464160023 | Partition Plate/DCI 80 CR | 1 |
| 36 | 467300184R | Controller / DCI 80 CR OUTDOOR BOX ASSY | 1 |
| | 467300358R | Controller / DCI 80 CR OUTDOOR BOX ASSY | 1 |
| 37 | 464200026 | Motor Support/TRIO DCI/VIESSMANN | 1 |
| 38 | 452956600 | Compressor Cable | 1 |
| 39 | 4522597P1 | PAINTED TOP COVER ASSY | 1 |
| 40 | 4522600 | Left Handle | 1 |
| 41 | 465120013 | Air Outlet Cover/DCI 80 CR R410a | 1 |