

# **SYSTEM AIR CONDITIONER**

#### **INDOOR UNIT**

AVXCSH023/032/040CE AVXC4H052/072/100/110/145CE AVXCMH032/040/052/060CE AVXDSH020/032/040/052/072/100/110/145CE AVXDUH100/110/145CE AVXWVH020/032/040/052/060CE AVXWNH020/032/040/052/060CE ND023/032/0401HXCA ND052/072/100/1454HXCA ND032/040/052/060MHXCA ND020/032/040/052/072/100/110/145LHXCA ND100/110/145SHXCA ND220/280HHXCE(CA) ND020/032/040/052/060VHXCA ND020/032/040/052/060NHXCA ND052/072CHXCA ND020/032/040/052/060QHXCA

ND052/072/100/110/1454HXCB

#### **OUTDOOR UNIT**

RVXVHT075/100/125FE RD040/050MHXCA RD075/100/125VHXFA RD075/100/125VRXFA

# SERVICE Manual

#### **AIR CONDITIONER**



#### **CONTENTS**

- 1. Precautions
- 2. Product Specifications
- 3. Disassembly and Reassembly
- 4. Troubleshooting
- 5. Exploded Views and Parts List
- 6. PCB Diagram and Parts List
- 7. Wiring Diagram
- 8. Schematic Diagram
- 9. Reference Sheet

Refer to the service manual in the GSPN(see the rear cover) for the more information.

1.	Pre	cautions ·	1-1
	1-1	Precautions for the Service	1-1
	1-2	Precautions for the Static Electricity and PL	1-1
	1-3	Precautions for the Safety	1-2
	1-4	Others	1-2
2.	Pro	duct Specifications	2-1
	2-1	The Feature of Product	2-1
		2-1-1 Feature	2-1
		2-1-2 Changes in comparison to basic model	2-22
	2-2	Product Specifications	2-24
		2-2-1 Indoor Unit	2-24
		2-2-2 Outdoor Unit	2-47
	2-3	Accessory and Option Specifications	2-50
		2-3-1 Accessories	2-50
3.	Dis	assembly and Reassembly	3-1
	3-1	Indoor Unit	3-2
	3-2	Outdoor Unit	3-11
4.	Tro	ubleshooting	4-1
	4-1	Setting Option Setup Method	4-1
		4-1-1 PCB option code input method	4-1
		4-1-2 Setting an indoor unit address and installation option	
		4-1-3 Option Items	
	4-2	What to check before diagnosis	4-19
		4-2-1 Lamp combination expression method display (cassette type indoor unit) $\cdots\cdots$	4-19
		4-2-2 Numeric type display (outdoor unit, Wired remote controller, wall-mount type etc.) $\cdots$	4-29
	4-3	How to take measures for each symptom	
		(Model: RVXVHT075/100/125FE, RD075/100/125VHXFA)	4-31
		4-3-1 Outdoor unit operation flow	4-36
		4-3-2 Indoor Unit ROOM sensor Error (Open/Short)	4-40
		4-3-3 Indoor unit EVAP IN sensor Error (Open/Short)	4-41
		4-3-4 Indoor EVAP OUT sensor Error (Open/Short)	4-42
		4-3-5 Indoor heat exchanger's EVAP IN sensor dislocation error	4-43
		4-3-6 Indoor Heat Exchanger's EVA OUT sensor dislocation error (Open/Short)	4-44
		4-3-7 Simultaneous Indoor heat exchanger's EVA IN, OUT sensor dislocation error (Open/Short) $\cdots$	4-45
		4-3-8 Operational error of indoor Unit's Clean Fan (Open/Short)	4-46

4-3-9 Breakdown of EEV (2 <sup>nd</sup> ) ·····	4-47
4-3-10 Problem with EEV closure (2 <sup>nd</sup> ) ······	4-48
4-3-11 E 153: Detection of Floating Switch of Indoor Unit's Drain Pump	4-49
4-3-12 The operational error of Indoor Unit's Fan Motor	4-50
4-3-13 EEPROM error	4-51
4-3-14 Option error of the Remote Controller for an Indoor Unit	4-52
4-3-15 Error due to confused use of Fahrenheit and Celsius	4-53
4-3-16 Error due to incorrect Indoor Unit Power/Communication Cable C	Connection ···· 4-54
4-3-17 SPi Feedback Error	4-55
4-3-18 Communication error between Indoor and Outdoor units during	Tracking 4-56
4-3-19 Communication error between Indoor & Outdoor units after Completi	ing Tracking ··· 4-58
4-3-20 Communication error between Main and Sub Micoms of an Outd	
among Outdoor Units	4-59
4-3-21 Outdoor Temperature Sensor error	4-60
4-3-22 Outdoor Temperature dislocation error	4-61
4-3-23 COND OUT Temperature Sensor error (Open/Short)	4-62
4-3-24 Outdoor COND OUT Sensor dislocation error	4-63
4-3-25 Discharge Temperature Sensor error for a digital Compressor (Ope	en/Short) 4-64
4-3-26 Discharge Temperature Sensor error for a fixed scroll Compressor (C	pen/Short) ··· 4-65
4-3-27 Compressor's Discharge Temperature Sensor dislocation error	4-66
4-3-28 E2E5: Dislocation error of Compressor SUMP Temperature (oil temperature)	
4-3-29 EZES: Dislocation error of Suction Temperature Sensor	
4-3-30 SUMP Temperature Sensor error (Open/Short)	
4-3-31 High Pressure Temperature Sensor error (Open/Short)	
4-3-32 Low Ppressure Temperature Sensor error (Open/Short)	
4-3-33 Oil Balance Valve Temp. Sensor error (Open/Short)	
4-3-34 SUCTION Temperature Sensor error (Open/Short)	
4-3-35 Double pipe temperature sensor error	
4-3-36 Main Cooling Sol Valve Open Error	
4-3-37 EVI IN Temperature Sensor error (Open/Short)	
4-3-38 EVI OUT Temperature Sensor error (Open/Short)	
4-3-39 <i>E ปนิ</i> 7 : Comp. Down due to a Protective Control of High pressure	
4-3-40 E 내 III: Comp. Down due to a Protective Control of Low Pressure	
4-3-41 Protection Control by Sump Sensor Error	4-79
4-3-42 E4 15: Comp. Down due to Discharge Temperature Sensor of a C	Compressor ··· 4-80
4-3-43 3 Detection of phase negative voltage sequence, Phase fail	
4-3-44 E42B: Comp. Down due to compression rate control	
4-3-45 E43 1: Self-diagnosis of Oil valve(balance keeping valve) 1(oper	
breakdown, sensor dislocation or defect)	
4-3-46 EVI EEV Open Error ·····	4-84

	4-3-47 E ЧЧロ, E ЧЧ≥: Prohibition of the operation of Compressor due to	
	OoutdoorTemperature	4-85
	4-3-48 High Pressure below the Average before Cooling (Unable to Restart)	4-86
	4-3-49 Instantaneous Blackout	4-87
	4-3-50 Error by High Temperature in an Outdoor Fan Motor	4-87
	4-3-51 RPM Error of an Outdoor Fan Motor	4-87
	4-3-52 Over-Voltage Error of an Outdoor Fan Motor	4-88
	4-3-53 Counter-Rotation Error of an Outdoor Fan motor	4-88
	4-3-54 E458: Over-voltage error of Compressor	4-89
	4-3-55 E4E 1: Low-amperage error of Compressor	4-90
	4-3-56 Liquid Compressor Protection Control	4-91
	4-3-57 Breakdown of an EEV(1st)	4-92
	4-3-58 Breakdown of an EEV closure(1st)	4-93
4-4	How to take measures for each symptom (Model : RD040/050MHXCA) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$	4-94
	4-4-1 Indoor Unit ROOM sensor Error (Open/Short)	4-97
	4-4-2 Indoor unit EVAP IN sensor Error (Open/Short)	4-98
	4-4-3 Indoor EVAP OUT sensor Error (Open/Short)	4-99
	4-4-4 Indoor Heat Exchanger's EVAP IN sensor dislocation error	4-100
	4-4-5 Indoor Heat Exchanger's EVA OUT sensor dislocation error (Open/Short)	4-101
	4-4-6 $\it E$ $\it 130$ : Simultaneous Indoor Heat Exchanger's EVA IN, OUT sensor dislocation error (Open/Short) $\cdots$	
	4-4-7 <i>E (5 (</i> : Breakdown of EEV (2 <sup>nd</sup> )	
	4-4-8 E 152: Problem with EEV closure (2 <sup>nd</sup> )	
	4-4-9 £ (53: Detection of Floating Switch of Indoor Unit's Drain Pump	
	4-4-10 E 154: The operational error of Indoor Unit's Fan Motor	
	4-4-11 E /E /: Mixed operation Error	
	4-4-12 EEPROM error	
	4-4-13 Option error of the Remote Controller for an Indoor Unit	
	4-4-14 Error due to confused use of Fahrenheit and Celsius	
	4-4-15 Error due to incorrect Indoor Unit Power/Communication Cable Connection $\cdots$	
	4-4-16 Communication error between Indoor and Outdoor units during Tracking	
	4-4-17 Communication error between Indoor & Outdoor units after Completing Tracking $\cdots$	
	4-4-18 Communication error between main PCB and inverter PCB during Tracking	
	4-4-19 Outdoor Temperature Sensor error	
	4-4-20 COND OUT Temperature Sensor error (Open/Short)	
	4-4-21 E24E: Outdoor COND OUT Sensor dislocation error	
	4-4-22 Discharge Temperature Sensor error (Open/Short)	
	4-4-23 E2E :: Compressor's Discharge Temperature Sensor dislocation error	
	4-4-24 High Pressure Temperature Sensor error (Open/Short)	
	4-4-25 Double pipe temperature sensor error(Open/Short)	
	4-4-26 OLP sensor error (Open/Short)	4-120

		4-4-2/ 돈석합국: Freezing control causes comp. down	4-121
		4-4-28 E 4ติๆ: High voltage protection compressor stopped	4-122
		4-4-29 E ਪ 1ਹੁ: Compressor down by low pressure sensor protection control	4-123
		4-4-30 E4 IE: Dischase temperature sensor error	4-124
		4-4-31 <i>E ਪਪਹ</i> , <i>E ਪਪ t</i> , <i>E ਪਪ 2</i> : Abnormal outside temperature halts operation of the compressor	4-125
		4-4-32 E462: Current protection control causes comp. down	4-125
		4-4-33 ይዛይ 3 : OLP protection control caused comp. down	4-126
		4-4-34 E458, E475: Electrical malfunctions of the outdoor machine	4-127
		4-4-35 E7₽2: EEV Off-malfunctions (1st)	4-128
		4-4-36 E ๆ ฏ ส : EEV Off inefficiently (1st)	4-128
5	Fyr	oloded Views and Parts List	5-1
٦.	_	Indoor Unit	
	5-1	5-1-1 Slim 1 way cassette type	5-1
		5-1-2 Mini 4 way cassette type	
		5-1-3 4 way cassette type	
		5-1-4 Globel 4 way cassette type	
		5-1-5 Duct type(Slim I)	
		5-1-6 Duct type(Slim II)	
		5-1-7 Duct type(Slim III)	
		5-1-8 Duct type(MSP)	
		5-1-9 Duct type(BIG)	
		5-1-10 Wall-mounted type(Vivace)	
		5-1-11 Wall-mounted type(Neo Forte without EEV)	
		5-1-12 Wall-mounted type(Neo Forte with EEV)	
		5-1-13 Ceiling type	
	5-2	Outdoor Unit	
		5-2-1 RVXVHT075/100FE, RD075/100VHXFA	
		5-2-2 RVXVHT125FE, RD125VHXFA	
		5-2-4 RD125VRXFA	
		5-2-5 RD040/050MHXCA	5-67
6.	PCE	3 Diagram	6-1
	6-1	Indoor Unit	6-1
		6-1-1 Slim 1 way cassette type	6-1
		6-1-2 4 way cassette type	6-3
		6-1-3 Mini 4 way cassette type ·····	6-4
		6-1-4 Duct type(Slim)	6-5

		6-1-5 Duct type(MSP)	6-9
		6-1-6 Duct type(BIG)	6-11
		6-1-7 Wall-mounted type(Neo Forte without EEV)	6-15
		6-1-8 Wall-mounted type(Neo Forte with EEV)	6-19
		6-1-9 Wall-mounted type(Vivace)	6-23
		6-1-10 Ceiling type	6-26
	6-2	Outdoor Unit	6-27
		6-2-1 RVXVHT075/100/125FE, RD075/100/125VHXFA	6-27
		6-2-2 RD040/050MHXCA	6-33
7.	Wir	ing Diagram	7-1
	7-1	Indoor unit	7-1
		7-1-1 Slim 1 way cassette type	7-1
		7-1-2 4 way cassette type	7-2
		7-1-3 Mini 4way cassette type ······	7-3
		7-1-4 Duct type(Slim I, II)	7-4
		7-1-5 Duct type(Slim III)	7-5
		7-1-6 Duct type(MSP)	7-6
		7-1-7 Duct type(BIG)	7-7
		7-1-8 Wall Mounted type(Vivace)	7-8
		7-1-9 Wall Mounted type(Neo Forte with EEV)	7-9
		7-1-10 Wall Mounted type(Neo Forte without EEV)	7-10
		7-1-11 Distributor kit	7-11
		7-1-12 Ceiling type	7-12
	7-2	Outdoor Unit	7-13
8.	Sch	ematic Diagram	8-1
	8-1	Indoor Unit	8-1
		8-1-1 Slim 1 way cassette type	8-1
		8-1-2 4 way cassette type	8-2
		8-1-3 Mini 4 way cassette type	8-3
		8-1-4 Duct type	8-4
		8-1-5 Duct type(BIG)	8-5
		8-1-6 Wall-mounted type(Neo Forte/Vivace)	8-7
		8-1-7 Wall-mounted type(Neo Forte with EEV)	8-8
		8-1-8 Ceiling type ·····	8-9
	8-2	Outdoor Unit	8-10
		8-2-1 RVXVHT075/100/125FE, RD075/100/125VHXFA	8-10
		8-2-2 RD040/050MHXCA	8-15

9.	Reference Sheet		9-1
	9-1	Index for Model Name	9-1
		9-1-1 Indoor Unit	9-1
		9-1-2 Outdoor Unit	9-3
	9-2	Refrigerant Circuit Diagram	9-5
		9-2-1 Cycle Operation Mode	9_5

### 1. Precautions

#### 1-1 Precautions for the Service

- Use the standard parts when replacing the electric parts.
  - Confirm the model name, rated voltage, rated current of the electric parts.
- Repair the disconnection of HARNESS securely when repairing the break down.
  - If there is any connection error, it causes an abnormal noise and incorrect operation.
- In case that you assemble or disassemble the products with laying it on the side, do work on the work cloth.
  - If not, the exterior of products can be scratched.
- Remove dust and foreign materials from harness, connection part, and inspection part thoroughly when repairing the break down.
  - It protects the danger of fire such as tracking and short.
- Tighten tightly the service valve of outdoor unit and the cap of charging valve with a monkey spanner.
- Check the assembly status of parts after repairing the break down.
  - It should be same as the status before repairing.

# 1-2 Precautions for the Static Electricity and PL

- As the PCB power terminal has a weakness for the static electricity, pay attention to it during the repair and measurement.
  - Work with insulation gloves during the repair and measurement of PCB.
- Check the distance between the product and the other electronic appliances such as TV, video, and audio.
   It should be over 6.6ft.
  - If not, it causes a bad picture quality or a noise.
- Repairing the products by consumer should be strictly prohibited.
  - There is a danger of electric shock or fire due to incorrect disassembly.

#### 1-3 Precautions for the Safety

- Do not pull any electric wires and do not touch an auxiliary power switch with a wet hand.
  - There is a danger of electric shock or fire.
- In case any wire or power plug has been damaged, replace it to eliminate any possible danger.
- Do not bend the power cord by force and do not put any heavy object on the power cord.
  - There is a danger of electric shock or fire.
- Do not use multi socket.
  - There is a danger of electric shock or fire.
- Ground the product if necessary.
  - Be sure to ground the product if there is any danger of electric leakage due to water or moisture.
- Be sure to turn off the auxiliary power switch or pull out the power plug during replacement or repair of electric parts.
  - There is a danger of electric shock.
- In case the product will not be in use for a long time, the battery of remote control should be kept separately.
  - Leakage of inside fluid can cause break down of remote control.
- The installation must be done by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard.
  - Installation by an unqualified person may cause a water leakage, electric shock or fire and so on.
- The electric work must be done by service agent or similarly qualified persons according to national wiring regulations and use only rated cable.
  - If the capacity of the power cable is insufficient or electric work is not properly completed, electric shock or fire may occur.
- Use only rated parts and tools.
  - If you don't use the rated parts and tools, it can cause trouble with the air conditioner and bring about injury.
- If any gas or impurities except R410A refrigerant come into the refrigerant pipe, serious problem may occur and it may cause injury.
- Leak test must be done using only Nitrogen(NO₂)gas.
  - R410A refrigerant is used for DVM PLUS III, SUPER FJM air conditioner.
    - When using R410A, moisture or foreign substances may affect to the capacity and reliability of the product. Safety precautions must be taken when installing the refrigerant pipe.
    - The design pressure of the unit is 4.1MPa. Select appropriate material and thickness according to the regulations.
    - R410A is a quasi-azeotrope of two refrigerants.
    - Make sure to charge liquid one when adding refrigerant.
    - If you charge gaseous refrigerant, it may affect the capacity and reliability of the product as a result of change formation of the refrigerant.
  - Connect only the indoor units fit on R410A refrigerant. Check whether the indoor units can be connected with the product's catalogue. (When incorrect indoor units are connected, they cannot operate normally.)

#### 1-4 Others

When installing, make sure there is no leakage. When recovering the refrigerant, ground the compressor first before removing the
connection pipe. If the refrigerant pipe is not properly connected and the compressor works with the service valve open, the pipe
inhales the air and it makes the pressure inside of the refrigerant cycle abnormally high. It may cause explosion and injury.

1-2 Samsung Electronics

# 2. Product Specifications

#### 2-1 The Feature of Product

#### 2-1-1 Feature

#### 2-1-1-1 RVXVHT075/100/125FE, RD075/100/125VHXFA, RD075/100/125VRXFA

#### 1. Introduction

DVM PLUS III is a module multi-system air conditioner that has the world's largest capacity(7.5~37.5HP) with the application of a DVI (Digital Vapor Injection) compressor, and can connect up to a maximum of 49 indoor units.



- The highest COP levels in the industry
- The smallest installation space requirement in the world
- The highest heating capacity and COP in low temperature condition (14°F/-10°C)
- Possible to connect up to 49 indoor units
- Digital unit module

#### 2. New technology of DVM PLUS III

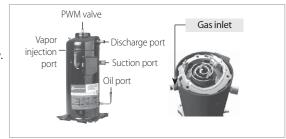
#### **■** Digital hybrid system

DHS (Digital Hybrid System) is a brand new concept system composed of DVI (Digital Vapor Injection) compressor, vapor injection technology and turbo intercooler. These 3 factors together provide highly efficient performance.

#### 1) DVI compressor

Efficient and reliable DVI (Digital Vapor Injection) compressor coupled with vapor injection technology has been applied to improve cooling and heating performance and energy efficiency.

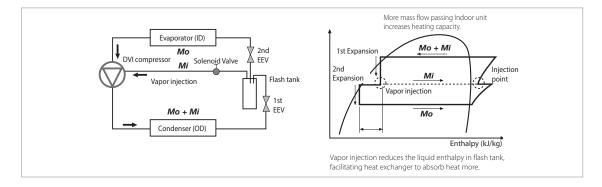




#### 2) Vapor injection technology

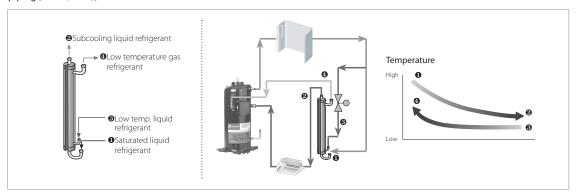
Improved cooling and heating performance and COP by a new technology of two stage compression. As injecting optimized mid-range pressure refrigerant, this technology achieved the high heating performance and COP under the lowest temperature, which leads the industry.

- Increase refrigerant flow rates with a new vapor injection technology.
- Improved sub-cooling necessary for long piping installation while increasing cooling and heating performance and COP.



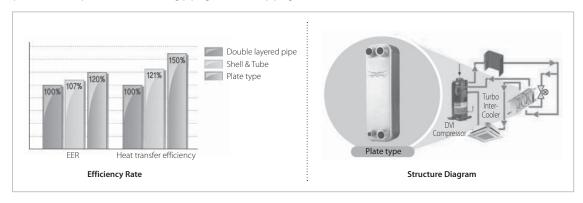
#### 3) Turbo intercooler (RVXVH075/100/125FE, RD075/100/125VHXFA Only)

Turbo intercooler (Shell & tube type) improves cooling and heating COP and secures reliable operation of installation with long piping [200m(656ft)].



#### 4) Plate type intercooler (RD075/100/125VRXFA Only)

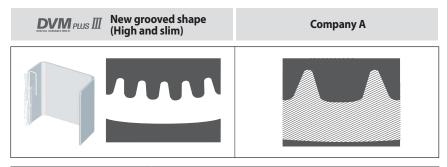
The plate type intercooler is the new concept intercooler technology which is more advanced than the existing double layered pipe type and Shell & Tube type heat exchanger. The plate type intercooler increases heat exchange efficiency by 30% and provides stable performance with long piping and vertical piping.



2-2 Samsung Electronics

#### ■ High efficiency Ø0.32 heat exchanger

Efficient Ø0.32 grooved tube reduced pressure loss while increasing heat exchange rates to improve COP. Grooved shape is designed to be high and slim to increase heat transfer performance inside the tube.

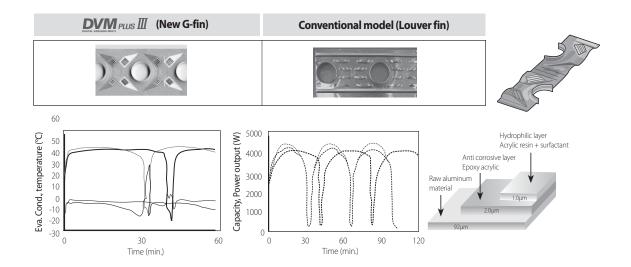


ltem		Improved heat exchanger
Diameter(inch)		$\emptyset$ 0.28 $\rightarrow$ $\emptyset$ 0.32
Heat transfer surface area		19% ↑
Pressure loss in heat Evaporat		14.1%↓
exchanger Condensation		10.3% ↓
Inside heat transfer performance		30.8% ↑
Pressure resistance		same

#### ■ New G-fin

Highly efficient new G-fin increased heat transfer performance, reinforced corrosion resistance, and increased operating duration in frost condition.

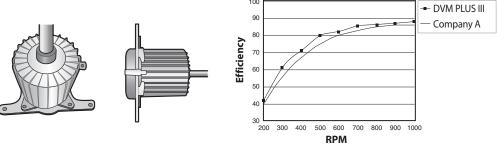
- Heat transfer performance improved by 13% compared to the conventional fin, even with the equivalent pressure loss.
- Epoxy acrylic coating reinforced corrosion resistance.
- 1.4 times longer heating operation in frost condition thanks to new G-fin.

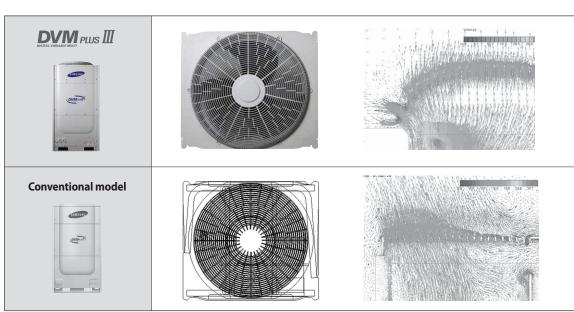


#### ■ Newly designed fan guard

Fan guard has been optimized to improve air volume and reduce noise and vibration.

- $\bullet$  BLDC motor, which is 2.7% more efficient than the competitors has been applied.
- High static pressure propeller fan and the optimum Bell mouth figuration for high external static pressure. (8mmAq)



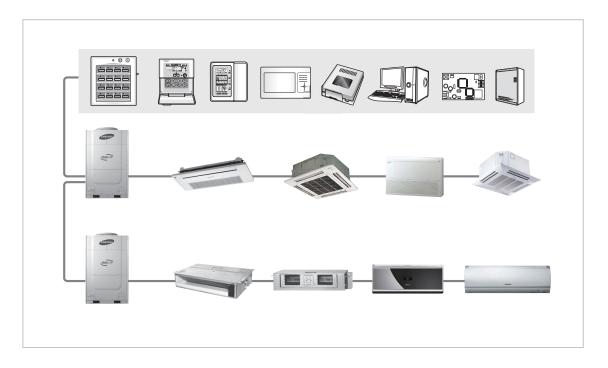


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#### **■** Upgraded control solutions

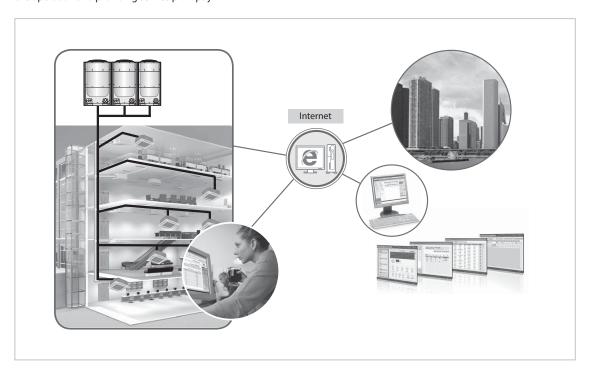
#### 1) Easy management system

A wide range of control system is provided to support various needs and applications such as individual or central control and automated building management.



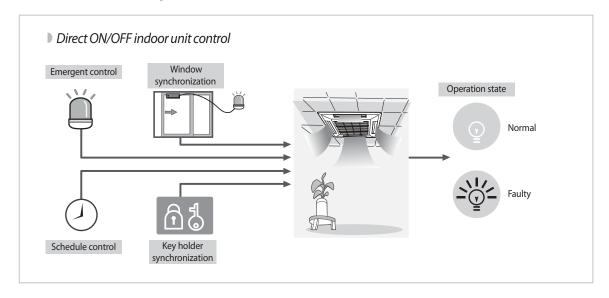
#### 2) Enhanced remote analysis

System managers, installers or service engineers can monitor the whole air-conditioning system through the internet, analyzing the operation and providing service promptly.



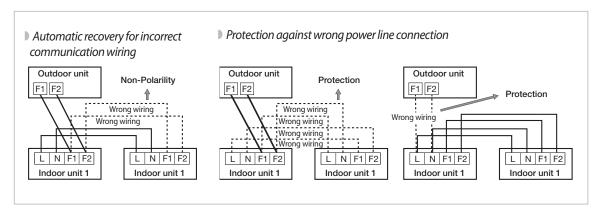
#### 3) Simple contact control

Contact interface makes it possible to connect mechanical contacts to indoor units directly, allowing individual and group control as well as malfunction monitoring of the indoor units.



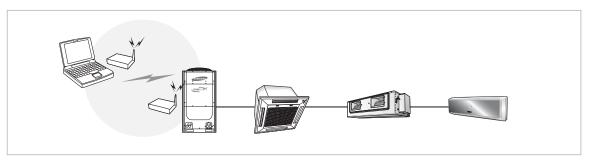
#### 4) Wrong wiring protection

Non-polarity communication ensures Normal Operation of air-conditioning system even in case of wrong communication wiring. Furthermore, power protection mechanism protects indoor units from blowing out under a crossed connection between power and communication wires, resulting in enhancing system safety and robustness.



#### 5) Wireless test run tool

Zigbee wireless test run tool provides installers with easy and convenient control and monitoring of the outdoor unit and 49 indoor units without bothersome wiring.



2-6 Samsung Electronics

#### 3. Main features of DVM PLUS III, DVM PLUS III HR

#### ☐ High Performance and Efficiency

#### **■** High COP

High efficiency DVM PLUS III has improved average cooling and heating COP compared to conventional products and achieved the world's top class energy efficiency.

- DHS(Digital Hybrid System) technology increased refrigerant flow rate and evaporation enthalpy difference.
- Wide Ø0.32 Grooved tube and new G-fin increased heat exchange efficiency.
- The best BLDC motor in the industry and optimum fan guard design increased efficiency.



#### **■** Improved heating performance

Vapor injection technology has improved heating performance by 20% at a low ambient temperature of (14°F/-10°C).



#### ☐ Simple and Easy Installation

#### ■ Digital unit module

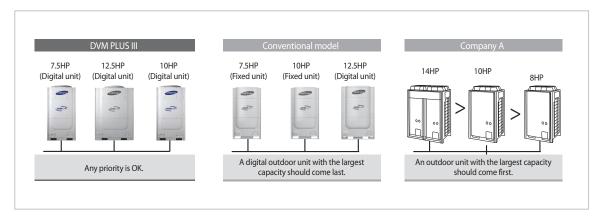
Digital unit module combination enables the system to alternate compressor operation to prolong each compressor's life cycle and improves COP with part loads.

- · Control the compressor capacity precisely.
- Ensure long life cycle by alternating operation of the DVI compressors.
- Improve COP using multiple heat exchangers of outdoor units at part loads.



#### **■** Free installation

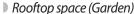
DVM PLUS III provides the degree of freedom from priority of capacity when installing outdoor units in module.

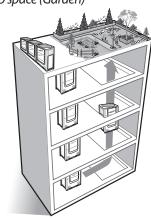


#### ■ Small size and light weight

To facilitate the convenience and mobility of module installation, DVM PLUS III is the best compact air conditioner in the world with its small size and weight. It reduces the burden of weight and minimizes the required installation space (it can be installed in the rooftop), ensuring a more spacious place for relaxation, parking lots, or additional offices, for instance.

Item Conventional model		DVM PLUS III
Design		
Weight	250kg(551lbs) (100%)	240kg(529lbs) (96%)



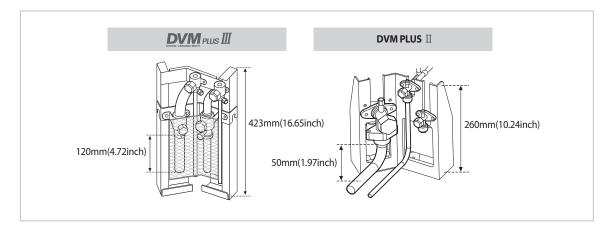


2-8 Samsung Electronics

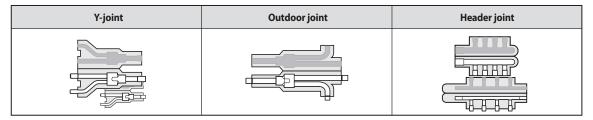
#### **■** Rapid installation

DVM PLUS III supports more convenient and rapid installation work through the improvement of service valve structure and the provision of branch joints.

- Improved the location of service valve and welding points for aiding piping connection work
- Modified the plate into open structure type for keeping interference out during welding work
- The application of OTS (One Touch Solution) valve that makes it easy to connect pipes and to open or shut valves.



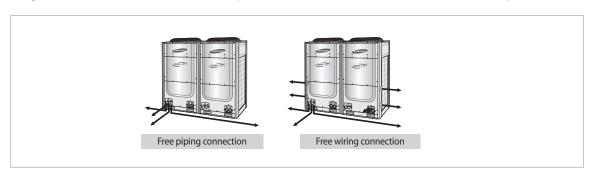
🄰 Y, Header, Outdoor joints allow easy piping expansion and reduction with insulations to facilitate the installation.



#### **■** Free piping & wiring directions

DVM PLUS III is easy to install as its piping can be connected from front, right, left and bottom side.

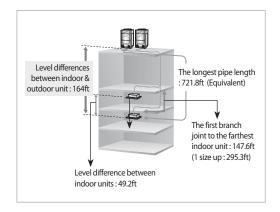
Wiring hole (Conduits) adds convenience as it allows power and communication lines to be connected in various ways and directions.



#### ■ The world's longest piping length

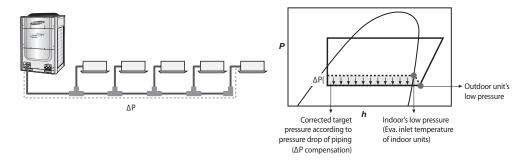
DVM PLUS III has an actual piping length of 656ft, with the maximum piping length of 147.6ft from the first branch joint to the farthest indoor unit, thereby providing convenience and flexibility for installation for commercial buildings.

- The longest piping length: 721.8ft (Equivalent)
- Total piping length: 3280.8ft
- From the first branch joint to the farthest indoor unit : 295.3ft
- Upsize all pipes between branch joints. (liquid&gas)



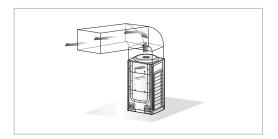
#### ■ Automatic piping length recognition

With automatic piping length recognition, installation can be carried out without extra PCB setup.



#### **■** High external static pressure

To respond to a range of various installation environments, DVM PLUS III is designed to be used even in external static pressure of 8 mmAq.

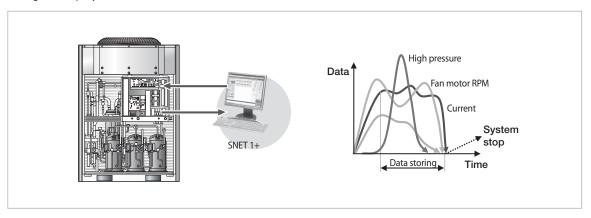


2-10 Samsung Electronics

#### **☐** Easy Maintenance

#### ■ Auto data backup in PCB

In case of problems in product, operation information of last 20 mins is stored before system shut down. Therefore, DVM PLUS III can be diagnosed rapidly and serviced.

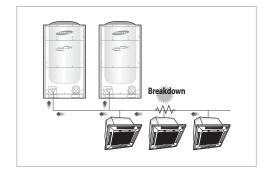


#### ■ Refrigerant pump-down and pump-out

DVM PLUS III provides several functions to facilitate the replacements of product, additional installation and maintenance without much effort.

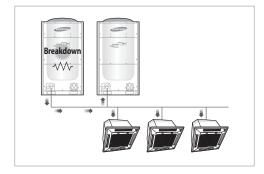
#### Refrigerant pump-down function

In case of moving outdoor units, maintenance of pipes between indoor units, between outdoor units and indoor units, it is possible that recover refrigerant into outdoor units.



#### Refrigerant pump-out function

In case of maintenance of outdoor units, it is possible that recover refrigerant into indoor or pipes.

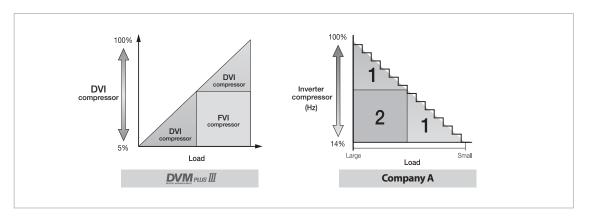


#### ☐ High Reliability

#### ■ Optimum control and high reliability of DVI scroll compressor

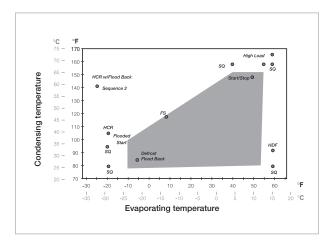
#### 1) DVI scroll compressor

As DVM PLUS III employs a DVI scroll compressor, it can adjust not only the compressor capacity linearly in accordance with indoor loads, but at minimum load. Therefore it is superior to Inverter system in creating a pleasant indoor environment and energy saving.

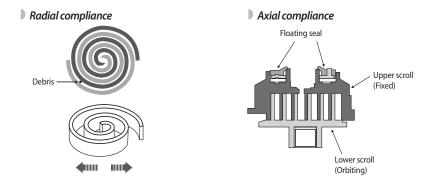


#### 2) Dual compliances

Through rigorous tests such as High load and liquid flood back, DVI compressor is evaluated as reliable as it can operate under any conditions.



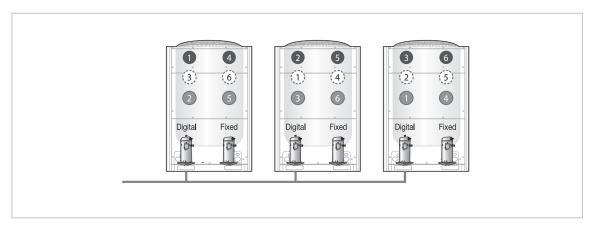
As DVI compressor is mechanically simple in structure, it has strong durability, and flexibility in radial and axial directions while being strong against debris, liquid flood back, leakage of refrigerant inside the scroll, and internal overheating. In particular, it is very strong against partial abrasion and compressor burn out by internal overheating compared with inverter compressor that employs tip seal techniques.



2-12 Samsung Electronics

#### **■** Compressor operating pattern

Digital unit's module installation secures reliability of long life cycle with sequential activation of compressors and improves part load efficiency as it is possible to use bigger outdoor units to take care of part load.



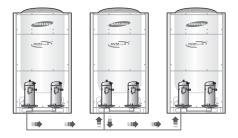
#### ■ Oil balancing and recovery technology

In terms of oil recovery that is the most important operation in module system air conditioner's reliability, DVM PLUS III:

- Achieves continuous cooling or heating during oil recovery operation.
- Allows level difference between outdoor unit module.

2 DVM PLUS III's oil recovery has much higher reliability as internal and external oil balancing take place simultaneously.

#### Oil balancing



#### Oil recovery

	DVM PLUS III	Company A	
Oil recovery during cooling operation	Cooling operation	Cooling operation	
Oil recovery during heating operation	Heating operation	Cooling operation	

#### ■ Acceleration life cycle test

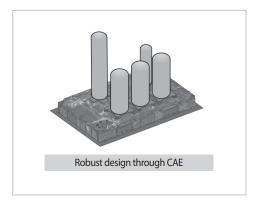
All parts fitted to DVM PLUS III ensure reliability for life cycle through ALT (Acceleration Life cycle Test ).





#### **■** Robust design

DVM PLUS III ensures product reliability through robust design against all potential defects that can occur in the process of production, distribution and customers' usage environment.



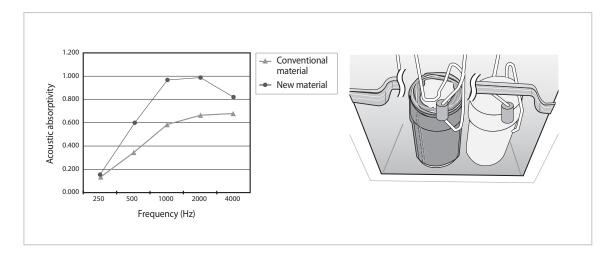
#### **☐** Sound Quality

#### **■** Sound quality

DVM PLUS III improves the problem of noise not only at the low sound level, but also at the actual sound quality level by:

- Developing a sound insulation material for compressor
- Improving fan guard air flow
- Adopting Ø0.32 heat exchanger

In particular, it enhances sound quality as it improves compressor noise by 4dB(A) by employing new material with better acoustic absorptivity.



2-14 Samsung Electronics

#### ☐ Environment Friendly

#### ■ Small refrigerant charge amount

With consideration of environment, DVM PLUS III is less charged compared to competitor's products.

of	DVM PLUS III (10HP)	Company A (10HP)	
Refrigerant volume	7.5kg(16.5lbs)	8.4kg(18.5lbs)	
%	89	100	

#### **■** Refrigerant leakage prevention

To prevent refrigerant leakage, we provide how to diagnose any refrigerant leakage in operation. Also, changing service valves from flange type to brazed type further prevents refrigerant leakage.



#### **■** RoHS compliance

RoHS restriction only applies to small or large household appliances, IT equipment, lightings, power train, toys, leisure or sports equipment, and vending machines.

Samsung expands the RoHS restriction into its entire range of products based on its own environmental policies.

#### **■** Lead-free

DVM PLUS III is an environment friendly product that prevents pollution problems caused by the use of lead, by applying lead-free indoor and outdoor PCBs.

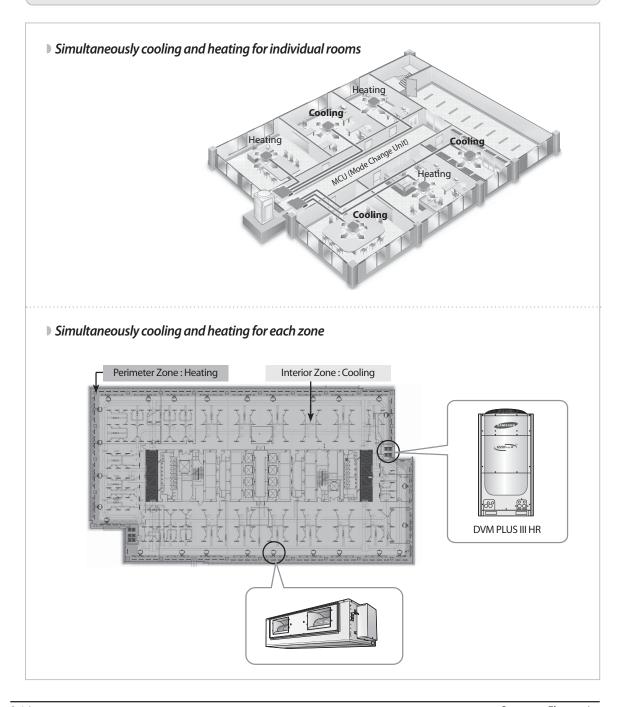


#### 4. DVM PLUS III HR

#### 1) Versatile application

As DVM PLUS III HR allows a simultaneous cooling and heating operation with one system, the product makes it possible for a wide range of applications.

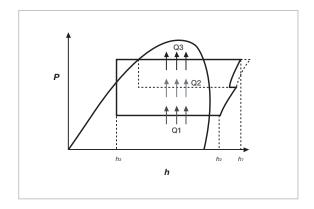
- Great for places where simultaneous cooling and heating operation is required such as hotels, nursing homes, conference rooms,
- For seasonal air-conditioning which may need a simultaneous cooling and heating operation.
- In case of medium or large office, DVM PLUS III HR satisfies cooling and heating operation simultaneously for the requirements of interior and perimeter zone.



2-16 Samsung Electronics

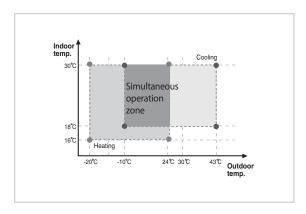
#### 2) High COP

As DVM PLUS III HR utilizes the retrieved energy from indoor cooling operation for heating, which has a high energy efficiency and is further enhanced by our Vapor Injection technology.



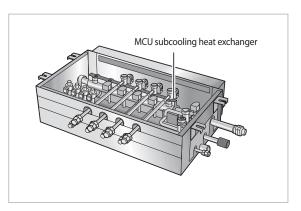
#### 3) Wide operation range

DVM PLUS III HR can carry out a simultaneous cooling and heating operation within a wide range of temperatures.



#### 4) New MCU

The MCU for DVM PLUS III HR has a double-tube heat exchanger for securing high subcooling effect by the MCU itself, thus improving the reliability of the long piping and cooling and heating performance.



#### Feature(Cont.)

#### 2-1-1-2 RD040/050MHXCA

# **Summarize**

#### **Overview**



**SUPER FJM** is an all-in-one type product integrating the control R&D and Samsung patented compressor. The air conditioning system uses the latest single tube in parallel connection and both the indoor and outdoor machines use independent electronic expansion valves to control the amount of coolant. You can connect a maximum of nine indoor machines to one outdoor machine.

### **POWER SAVING**

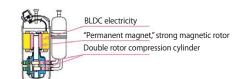
**SUPER FJM** considers the trend in air conditioner use. It optimizes the energy efficiency of loads ranging from partial to full. It achieves an excellent energy effect for the users of the air conditioner.

### Samsung patented compressor

Samsung has been researching and developing compressors since the 70's. It has developed power saving compressors for more than thirty years.

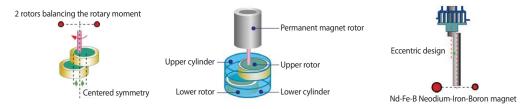
The **SUPER FJM** compressor adopts a double-rotor BLDC compressor with permanent magnets made by Samsung. Electricity for the compressor rotor is obtained from a neodium-iron-boron permanent magnetic material (boron magnet can attract iron material weighing 1000 times its own weight.) It strengthens the rotary moment of the compressor to maximize the entire efficiency of the compressor.







**SAMSUNG**'s double-rotor compressor has the upper and lower rotors designed symmetrically. The double rotor in symmetry can remove vibrations caused by the eccentric design of the cylinder.

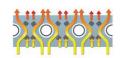


# High efficiency heat exchanger

**SUPER FJM** uses new multiple-teeth screw pipes with a diameter of 8 mm to improve the heat exchangeability of the pipe by **30.8%**. The water-friendly aluminum foil in the heat exchanger uses the G-fin patent design to improve the efficiency of heat exchange by **13%**.



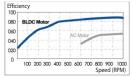




# DC fan electricity

The **SUPER FJM** outdoor machine uses DC fan electricity. The rotational speed of electricity is 100 RPM to 1050 RPM with step-free control. The electrical efficiency is improved by about **33%** compared to AC electricity.





2-18 Samsung Electronics

### **Excellent energy efficiency**

All the **SUPER FJM** series is superior to class 1 energy efficiency, the power saving standard for multiple connection (heat pump) machines. Its IPLV(C), the comprehensive energy efficiency is 4.94.



### FRESHNESS AND HEALTH

**SUPER FJM** optimizes the aspects of environment friendliness, air control, toxic material control, low temperature heaters and noise. It guarantees a refreshing and healthy environment for the user.

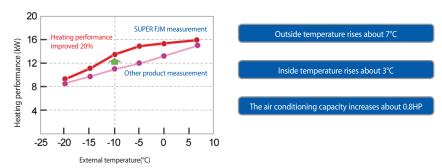
#### **Environment friendliness**

**SUPER FJM** uses the environment-friendly coolant, R410A and all of its parts are in strict compliance with the EU environment guidelines (RoHS). It controls toxic materials and prevents damage to the atmosphere. It does not spread any toxic materials indoors.



### **Strong heater**

SUPER FJM adopts Samsung's high performance double-rotor compressor. Compared to other products, its heating effect at -10°C is about 20% higher.



# Deep level anti-bacteria

All of the **SUPER FJM** indoor heat exchanger aluminum foil is processed with special anti-bacteria paint to prevent the growth of bacteria in the humid inner area of the air conditioner and maintain clean indoor air.



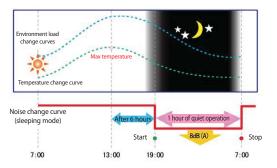
### **Quiet operation of the indoor machine**

SUPER FJM's indoor machine has a minimum noise level of 21 decibels. Even in the late, quiet night, you can hardly hear any noise.



#### **Quiet night**

**SUPER FJM**'s outdoor machine can be set to quiet nighttime operation mode. The outdoor machine executes quiet operation (sleeping mode) after six hours. After 12 hours, it returns to the previous mode automatically.

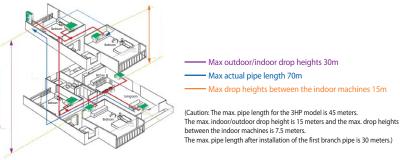


# SIMPLE DESIGN AND INSTALLATION

The **SUPER FJM** design supports simple installation. The outdoor and indoor machines use a copper pipe and a branch pipe string in parallel connection. They are provided with electricity independently.

# Long pipe

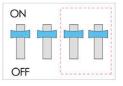
The **SUPER FJM** indoor/outdoor machine's pipe length is a max. of 70 meters. The max. drop height between the indoor and the outdoor machines is 30 meters. (If the outdoor machine is located below the indoor machine, it is 25 meters). The max. pipe length after installation of the first branch pipe is 40 meters.



# Limitations of the operational current classes

**SUPER FJM**'s indoor/outdoor machine control circuit board uses four types of current limits mode. It can be efficiently installed in an area with a shortage of electrical stability. If it is to be remodeled for an old building that does not meet the electricity capacity standard, first install an air conditioner for testing. Then set the current after expanding the electricity capacity.

Current limit mode	DIP button	DIP button
Mode 1	ON	ON
Mode 2	ON	OFF
Mode 3	OFF	ON
Mode 4	OFF	OFF



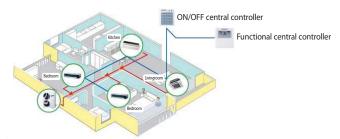
2-20 Samsung Electronics

# **PROHIBITION**

**SUPER FJM** with smart control uses the smart network control method for management and support simple controls.

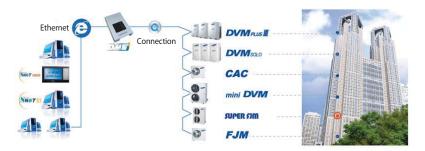
### **Independent smart central control**

Independent controllers are installed in each indoor machine of **SUPER FJM**. Using the central controller, it can control all the indoor machines at home. When leaving home, use the central controller installed in the living room to turn off all the air conditioners. You can prevent unnecessary power consumption caused by the air conditioner running with no one at home.



# **Smart group control for multiple households**

**SUPER FJM** supports group controls in conjunction with Samsung's other commercial air conditioners. It achieves a wide range of smart control including individual metering for each household, computer monitoring and network monitoring.



# **SPEEDY TROUBLESHOOTING**

**SUPER FJM** is designed to perform perfect smart self diagnosis functions that support speedy troubleshooting.

# **Self diagnosis of malfunctions -**

The SUPER FJM indoor/outdoor machines has an LED monitor where you can quickly diagnose the operational variables and repair them the property of the pro



LED display of the control panel of the outdoor machine



#### Malfunction codes

	Codes	Causes for malfunction
	E101	Communication failures between the indoor machine and the outdoor machine
	E460	Bad power connection between the indoor and the outdoor machines
Γ	E467	Bad operation of the compressor
Γ	E466	Inadequate voltage supply

# Auto recovery of the coolant

**SUPER FJM** is designed to support the saving function that recovers the coolant automatically for the user. Depending on which outdoor or indoor machine is being repaired, it decides which machine to recover the coolant from. This way, the amount of coolant can be saved.





# 2-1-2 Changes in comparison to basic model

# ■ RVXVHT075/100/125FE, RD075/100/125VHXFA, RD075/100/125VRXFA

Changed part	Changed item and feature	Basic	After changed
Compressor	DVI compressor Efficient and reliable DVI(Digital Vapor Injection) compressor coupled with Vapor Injection technology has been applied to improve cooling and heating performance and energy efficiency.		
Intercooler	Turbo intercooler (Shell & Tube type) improves cooling and heating COP and secures reliable operation of installation with long piping (200m).		
Heat Exchanger	New G-Fin Highly efficient new G-Fin increased heat transfer performance, reinforced corrosion resistance, and increased operating duration in frost condition.		
Fan Guard	Fan Guard has been optimized to improve air volume and reduce noise and vibration.		
Service Valve	Ball type service valve applied → easy to operate		
MAIN PCB	Expanded MICOM capacity, improved serviceability		
SUB PCB	Redesigned Power circuit, improved assembly		

2-22 Samsung Electronics

# ■ RD040/050MHXCA

Changed part	Changed item and feature	Basic	After changed
Guard Fan	Guard Fan P/D → M/D Changed(New Mold) Improved trouble caused by rust development and reduced noise by increasing air volume		
Motor Bracket	Secured larger opening for improved air flow		
Compressor	Digital Scroll → Twin BLDC Inverter		
Control			
Felt	Double layerd felt reduces noice from compressor		

# **2-2 Product Specifications**

# 2-2-1 Indoor Unit

### ■ Slim 1 way cassette type

	ı	Model		AVXCSH023CE/ND0231HXCA	AVXCSH032CE / ND0321HXCA	AVXCSH040CE/ND0401HXCA
Power Supply Ø,V			Ø,V,Hz	1,208~230,60	1,208~230,60	1,208~230,60
Mode *1)			HP/HR	HP/HR	HP/HR	
		*3)	kW	2.3	3.2	4.0
Performance		Cooling *2)	Btu/h	7,500	9,500	12,000
	Capacity	*2)	kW	2.6	3.6	4.5
		Heating *3)	Btu/h	8,500	10,500	13,500
	Condensate (wit	h High fan speed)	ℓ/h			-
	Input Consumpt	tion (Cooling/Heating)	W	40/40	45/45	50/50
Power	Running Current	t (Cooling/Heating)	Α	0.2/0.2	0.23/0.23	0.25/0.25
Noise Level	Actual Noise Pre	ssure (High) *4)	dB(A)	34 37		40
	Туре	-	-	Cross flow fan Cross flow fan		Cross flow fan
		Model	-	SFN-220-20-4B-1	SFN-220-20-4B-1	SFN-220-20-4B-1
Fan	Motor	Туре	-	Non Feedback SSR	Non Feedback SSR	Non Feedback SSR
		Output	W	20	20	20
	The progress of	· ·		-	-	-
Fan Speed	Cooling (H/M/L)		rpm	930/860/790	1,035/913/790	1,245/1,105/965
, an speed	Heating (H/M/L)			1,035/965/895	1,140/1,018/895	1,245/1,105/965
	Cooling (High)			6.0	7.0	8.0
	Heating (High)		m³/min	7.0	8.0	9.0
	Cooling (High)			212	247	283
Airflow Rate	Heating (High)		CFM	247	283	318
		Standard(Min.~Max)	mmH2O	-	203	-
	External Static Pressure	Standard(Min.~Max)		-	-	-
		Standard(Will.~Wax)	WG			
Refrigerant	Type		-	R410a	R410a	R410a EEV
	Control Method		-		EEV EEV	
Temperature C			-	Micom&Thermistors Micom&Thermistors		Micom&Thermistors
Safety Devices	T		-	Fuse	Fuse	Fuse
Option Code	AVXCSH***CE		-	078605-1260C8 200001-300000	078605-1460F8 200001-300000	075605-16625D 200001-300000
	ND***1HXCA		-	078605-1260C8 200000-300000	078605-1460F8 200000-300000	075605-16625D 200000-300000
	Liquid (Flare)		Ø,mm	6.35	6.35	6.35
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Ø,inch	1/4"	1/4"	1/4"
Piping	Gas (Flare)		Ø,mm	12.70	12.70	12.70
Connections	das (r.iare)		Ø,inch	1/2"	1/2"	1/2"
	Drain (Quick Lock)		Ø,mm	ID 18 hose	ID 18 hose	ID 18 hose
	Drain (Quien 200	,	Ø,inch	-	-	-
	Net Weight		kg	10.5	10.5	10.5
Weight	Wet Weight		lbs	23.0	23.0	23.0
Weight	Shipping Weigh	Chinning Maight		13.5	13.5	13.5
	Shipping Weigh		lbs	30.0	30.0	30.0
	Net Dimensions	(M>H>D)	mm	970x135x410	970x135x410	970x135x410
Dimensions	Net Dimensions	(WALIAD)	inch	38.2x5.3x16.1	38.2x5.3x16.1	38.2x5.3x16.1
Difficitions	Chinning Dimon	sions (M/vHvD)	mm	1,164x212x478	1,164x212x478	1,164x212x478
	Shipping Dimensions (W×H×D)		inch	45.8x8.3x18.8	45.8x8.3x18.8	45.8x8.3x18.8
	Model	Model		PSSMA	PSSMA	PSSMA
	Not Well		kg	3.0	3.0	3.0
	Net Weight —		lbs	6.6	6.6	6.6
	China in 147 : 1		kg	5.0	5.0	5.0
	Shipping Weigh	t	lbs	11.0	11.0	11.0
				1,180×25×460	1,180×25×460	1,180×25×460
	Net Dimensions (W×H×D)		inch	46.5×1.0×18.1	46.5×1.0×18.1	46.5×1.0×18.1
	Shipping Dimensions (W×H×D)		mm	1,259×144×539	1,259×144×539	1,259×144×539
			inch	49.6×5.7×21.2	49.6×5.7×21.2	49.6×5.7×21.2

2-24 Samsung Electronics

# Indoor Unit(cont.)

# Slim 1 way cassette type(cont.)

Model				AVXCMH032CE/ND032MHXCA	AVXCMH040CE/ND040MHXCA	AVXCMH052CE/ND052MHXCA
	Auto Restart		-	0	0	0
Functions	Auto Swing		-	0	0	0
	Group/Individual	Group/Individual Control		0	0	0
	External Contact (	Control	-	0	0	0
	Trouble Shooting by LED		-	0	0	0
	Installation Manual		-	0	0	0
	Operation Manual		-	X	Х	Х
Standard	Pattern Sheet for Installation		-	0	0	0
Accessories	Flexible Drain Hose		-	0	0	0
	Filter / Safety Grille		-	Filter / Safety Grille	Filter / Safety Grille	Filter / Safety Grille
	Drain Pump (Pumping speed, lift)		ℓ/h,mm	24, 750	24, 750	24, 750
	Wireless Remote Controller	AVXCSH***CE	-	MR-BH01U	MR-BH01U	MR-BH01U
		ND***1HXCA		MR-BH01	MR-BH01	MR-BH01
Optional	Wired Remote Controller	Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00
Accessories		Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00
		Premium	-	MWR-WS01	MWR-WS01	MWR-WS01
	External Contact Interface Module -		-	MIM-B14	MIM-B14	MIM-B14



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on;
  - Indoor temperature : 81°F/27°C DB, 66 °F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- $\ensuremath{^{*5}}\xspace$  ) Specifications may be subject to change without prior notice for product improvement.

# Indoor Unit(cont.)

# ■ Mini 4 way cassette type

Model Power Supply Ø,V,Hz				AVXCMH032CE/ ND032MHXCA	AVXCMH040CE/ ND040MHXCA	AVXCMH052CE/ ND052MHXCA	AVXCMH060CE/ ND060MHXCA
				1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60
Mode *1)				HP / HR	HP/HR	HP / HR	HP / HR
		C 1: *2)	kW	3.2	4.0	5.2	6.0
		Cooling *2)	Btu/h	9,500	12,000	18,000	20,000
Performance	Capacity	*2\	kW	3.6	4.5	6.0	6.8
		Heating *3)	Btu/h	10,500	13,500	20,000	23,000
	Condensate (wit	h High fan speed)	ℓ/h	-	-	-	-
	Input Consumpt	ion (Cooling/Heating)	w	110 / 110	110/110	110/110	110 / 110
Power	Running Current	(Cooling/Heating)	А	0.47 / 0.47	0.47 / 0.47	0.47 / 0.47	0.50 / 0.50
Noise Level	Actual Noise Pre	ssure (High) *4)	dB(A)	46 / 46	46 / 46	47 / 47	48 / 48
	Туре		-	Turbo Fan (Ø320)	Turbo Fan (Ø320)	Turbo Fan (Ø320)	Turbo Fan (Ø320)
	7.	Model	-	ASS035ZTEJ	ASS035ZTEJ	ASS035ZTEJ	ASS035ZTEJ
Fan	Motor	Туре	_	Non Feedback SSR	Non Feedback SSR	Non Feedback SSR	Non Feedback SSR
		Output	W	55 *5)	55 *5)	55 *5)	55 *5)
	The progress of	· ·		745/690/620	745/690/620	760/700/630	820/700/600
Fan Speed	Cooling (H/M/L)		rpm	745/690/620	745/690/620	760/700/631	820/700/601
. un specu	Heating (H/M/L)		-	745/690/620	745/690/620	760/700/632	820/700/602
	Cooling (High)			11.0	11.0	13.5	14.5
	Heating (High)		m³/min	12.0	12.0	14.5	15.5
	Cooling (High)			388	388	477	512
Airflow Rate	Heating (High)		CFM	424	424	512	547
		Standard(Min.~Max)	mmH2O	-	727	312	547
	External Static Pressure	Standard(Min.~Max)	WG		-	-	-
		Standard(Wiln.~Wiax)					
Refrigerant	Туре		-	R410a	R410a	R410a	R410a
T	Control Method		-	EEV	EEV	EEV	EEV
Temperature Co	ontroi		-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse	Fuse	Fuse
Option Code	AVXCMH***CE		-	045224-1540B3 -200000-300000	045224-1840B3 -200001-300000	045224-1B40B3 -200001-300000	045224-1C40F1 -200001-300000
option code	ND***MHXCA		-				
	Liquid (Flare)		Ø,mm	6.35	6.35	6.35	6.35
			Ø,inch	1/4"	1/4"	1/4"	1/4"
Piping			Ø,mm	12.70	12.70	12.70	12.70
Connections	Gas (Flare)	Gas (Flare)		1/2"	1/2"	1/2"	1/2"
			Ø,inch Ø,mm	VP25 (OD 32,ID 25)			
	Drain (Quick Lock)		Ø,inch	VP25 (OD 1 1/4",ID 1")			
			kg	17.0	17.0	17.0	17.0
	Net Weight		lbs	37.5	37.5	37.5	37.5
Weight				20.0	20.0	20.0	20.0
	Shipping Weight		kg Ibs	44.1	44.1	44.1	44.1
	1		mm	575×260×575	575×260×575	575×260×575	575×260×575
	Net Dimensions	(W×H×D)	inch	22.6×10.2×22.6	22.6×10.2×22.6	22.6×10.2×22.6	22.6×10.2×22.6
Dimensions			mm	660×310×635	660×310×635	660×310×635	660×310×635
	Shipping Dimensions (W×H×D)		inch	26×12.2×25	26×12.2×25	26×12.2×25	26×12.2×25
	Model	Model		PMSMAA	PMSMAA	PMSMAA	PMSMAA
Panel Size	Model	Model Net Weight					
	Net Weight			7.7	3.5	3.5 7.7	3.5 7.7
					7.7		
	Shipping Weight	t	kg	6.2	6.2	6.2	6.2
			lbs	13.7	13.7	13.7	13.7
	Net Dimensions	(W×H×D)	mm	670×35×670	670×35×670	670×35×670	670×35×670
			inch	26.3×1.4×26.3	26.3×1.4×26.3	26.3×1.4×26.3	26.3×1.4×26.3
	Shipping Dimensions (W×H×D)		mm	717×93×717	717×93×717	717×93×717	717×93×717
			inch	28.2×3.7×28.2	28.2×3.7×28.2	28.2×3.7×28.2	28.2×3.7×28.2

2-26 Samsung Electronics

# Indoor Unit(cont.)

# Mini 4 way cassette type(cont.)

Model			AVXCMH032CE/ ND032MHXCA	AVXCMH040CE/ ND040MHXCA	AVXCMH052CE/ ND052MHXCA	AVXCMH060CE/ ND060MHXCA	
	Auto Restart		-	0	0	0	0
Functions	Auto Swing	Auto Swing		0	0	0	0
	Group/Individual	Control	-	0	0	0	0
	External Contact	Control	-	0	0	0	0
	Trouble Shooting by LED		-	0	0	0	0
	Installation Manual		-	0	0	0	0
	Operation Manual		-	Х	X	Х	Х
Standard	Pattern Sheet for Installation		-	0	0	0	0
Accessories	Flexible Drain Hose		-	0	0	0	0
	Filter / Safety Grille		-	Filter / Safety Grille	Filter / Safety Grille	Filter / Safety Grille	Filter / Safety Grille
	Drain Pump (Pumping speed, lift)		ℓ/h,mm	24, 750	24, 750	24, 750	24, 750
Optional Accessories	Wireless Remote Controller	AVXCMH***CE	-	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U
		ND***MHXCA	-	MR-BH01	MR-BH01	MR-BH01	MR-BH01
	Wired Remote Controller	Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00
		Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00
		Premium	-	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01
	External Contact Interface Module -		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14



- \*1) Mode
- HP : Heat Pump
- \*2) Norminal cooling capacities are based on; -Indoor temperature: 81°F/27°C DB, 66°F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- $\ensuremath{^{*5}}\xspace$  ) Specifications may be subject to change without prior notice for product improvement.

## ■ 4 way cassette type

	Мо	del		AVXC4H052CE/ ND0524HXCA	AVXC4H072CE/ ND0724HXCA	AVXC4H100CE/ ND1004HXCA	AVXC4H110CE/ ND1104HXCA	AVXC4H145CE/ ND1454HXCA
Power Supply			Ø,V,Hz	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60
Mode *1)				HP/HR	HP/HR	HP/HR	HP/HR	HP/HR
		Cooling *2)	kW	5.2	7.2	10.0	11.0	14.5
	Compositus	Cooling -	Btu/h	18,000	24,000	30,000	36,000	48,000
Performance	Capacity	Heating *3)	kW	6.0	8.1	11.0	12.8	16.3
		neating -/	Btu/h	20,000	27,000	34,000	40,000	54,000
	Condensate (wit	h High fan speed)	ℓ/h	2.71	3.51	5.58	5.58	7.18
Dower	Input Consumption (Cooling/Heating)		W	40 / 40	45 / 45	50 / 50	50 / 50	80 / 80
Power	Running Current (Cooling/Heating)		Α	0.19 / 0.19	0.21 / 0.21	0.23 / 0.23	0.23 / 0.23	0.36 / 0.36
Noise Level	Actual Noise Pressure (High) *4)		dB(A)	43 / 44	43 / 44	46 / 46	46 / 46	51 / 52
	Туре		-	Turbo Fan				
Fan		Model	-	SIC-67FV-F135-1	SIC-67FV-F135-1	SPG DL-95835SSIA	SPG DL-95835SSIA	SPG DL-95835SSIA
rall	Motor Type		-	BLDC	BLDC	BLDC	BLDC	BLDC
		Output	W	-	-	-	-	-
	The progress of v	work(H/M/L)		-	-	-	-	-
Fan Speed	Cooling (H/M/L)		rpm	440/400/360	500/440/380	520/470/420	560/520/480	600/560/520
	Heating (H/M/L)			400/360/320	460/400/340	520/470/420	560/520/480	640/600/560
	Cooling (High)		m³/min	14.5	17.0	23.0	25.0	26.5
	Heating (High)		m <sup>-</sup> /min	16.5	18.5	26.5	29.5	32.0
A: D-+	Cooling (High)		CEM	512	600	812	883	936
Airflow Rate	Heating (High)		CFM	583	653	936	1,042	1,130
	External Static	Standard(Min.~Max)	mmH2O	-	-	-	-	-
	Pressure	Standard(Min.~Max)	WG	-	-	-	-	-
D. ( : .	Туре		-	R410a	R410a	R410a	R410a	R410a
Refrigerant	Control Method		-	EEV	EEV	EEV	EEV	EEV
Temperature C	ontrol		-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse	Fuse	Fuse	Fuse
	AVXC4H***CE		-	043217-1B00C8 200001-300000	043217-1D00F9 200001-300000	045A17-10020B 200001-300000	045A17-12022E 200001-300000	047A17-130340 200001-300000
Option Code	ND***4HXCA		-	043217-1B00C8 200000-300000	043217-1D00F9 200000-300000	045A17-10020B 200000-300000	045A17-12022E 200000-300000	047A17-130340 200000-300000
			Ø,mm	6.35	9.52	9.52	9.52	9.52
	Liquid (Flare)		Ø,inch	1/4"	3/8"	3/8"	3/8"	3/8"
Piping			Ø,mm	12.70	15.88	15.88	15.88	15.88
Connections	Gas (Flare)		Ø,inch	1/2"	5/8"	5/8"	5/8"	5/8"
			Ø,mm	VP25 (OD 32,ID 25)				
	Drain (Quick Loc	k)	Ø,inch		VP25 (OD 1 1/4",ID 1")			
			kg	25.0	25.0	29.0	29.0	29.0
	Net Weight		lbs	55.1	55.1	63.9	63.9	63.9
Weight			kg	31.0	31.0	35.0	35.0	35.0
	Shipping Weight		lbs	68.3	68.3	77.2	77.2	77.2
			mm	840×218×840	840×218×840	840×298×840	840×298×840	840×298×840
	Net Dimensions	(W×H×D)	inch	33.1×8.6×33.1	33.1×8.6×33.1	33.1×11.7×33.1	33.1×11.7×33.1	33.1×11.7×33.1
Dimensions			mm	925×280×925	925×280×925	925×360×925	925×360×925	925×360×925
	Shipping Dimen	sions (W×H×D)	inch	36.4×11×36.4	36.4×11×36.4	36.4×14.2×36.4	36.4×14.2×36.4	36.4×14.2×36.4
	Model		-	P4SMA	P4SMA	P4SMA	P4SMA	P4SMA
			kg	7.0	7.0	7.0	7.0	7.0
	Net Weight		lbs	-	-	-	-	7.0
			kg	10.3	10.3	10.3	10.3	10.3
Panel Size	Shipping Weight		lbs	10.5	- 10.3	- 10.3	- 10.3	10.5
i di ici Size				950×35×950	950×35×950	950×35×950	950×35×950	950×35×950
	Net Dimensions	(W×H×D)	inch	37.4×1.4×37.4	37.4×1.4×37.4		37.4×1.4×37.4	
			inch			37.4×1.4×37.4		37.4×1.4×37.4
	Shipping Dimen	sions (W×H×D)	mm	1,042×103×1,042	1,042×103×1,042	1,042×103×1,042	1,042×103×1,042	1,042×103×1,042
			inch	41×4.1×41	41×4.1×41	41×4.1×41	41×4.1×41	41×4.1×41

2-28 Samsung Electronics

#### 4 way cassette type(cont.)

	Mod	del		AVXC4H052CE/ ND0524HXCA	AVXC4H072CE/ ND0724HXCA	AVXC4H100CE/ ND1004HXCA	AVXC4H110CE/ ND1104HXCA	AVXC4H145CE/ ND1454HXCA
	Auto Restart		-	0	0	0	0	0
	Auto Swing		-	0	0	0	0	0
Functions	Group/Individual	Control	-	0	0	0	0	0
	External Contact (	Control	-	0	0	0	0	0
	Trouble Shooting	by LED	-	0	0	0	0	0
	Installation Manu	al	-	0	0	0	0	0
	Operation Manual		-	Х	X	Х	Х	Х
Standard	Pattern Sheet for Installation		-	0	0	0	0	0
Accessories	Flexible Drain Hose		-	0	0	0	0	0
	Filter / Safety Grill	ter / Safety Grille		Filter / Safety Grille				
	Drain Pump (Pum	Drain Pump (Pumping speed, lift)		24, 750	24, 750	24, 750	24, 750	24, 750
	Wireless Remote	AVXC4H***CE	-	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U
	Controller	ND***4HXCA	-	MR-BH01	MR-BH01	MR-BH01	MR-BH01	MR-BH01
Optional		Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00
Accessories	Wired Remote Controller	Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00
	Controller	Premium	-	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01
	External Contact I	nterface Module	-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on; -Indoor temperature: 81°F/27°C DB, 66°F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- $\ensuremath{^{*5}}\xspace$  ) Specifications may be subject to change without prior notice for product improvement.

Samsung Electronics 2-29

## ■ Global 4 way cassette

	Мо	del		ND0524HXCB	ND0724HXCB	ND1004HXCB	ND1104HXCB	ND1454HXCB
Power Supply			Ø,V,Hz	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60
Mode *1)				HP/HR	HP/HR	HP/HR	HP/HR	HP/HR
		*2)	kW	5.2	7.2	10.0	11.0	14.5
		Cooling *2)	Btu/h	18,000	24,000	30,000	36,000	48,000
Performance	Capacity	Va.	kW	6.0	8.1	11.0	12.8	16.3
		Heating *3)	Btu/h	20,000	27,000	34,000	40,000	54,000
	Condensate (with	n High fan speed)	ℓ/h	-	-	-	-	-
		on (Cooling/Heating)	W	32/32	40/40	32/32	69/69	89/89
Power		(Cooling/Heating)	A	0.15/0.15	0.20/0.20	0.15/0.15	0.33/0.33	0.45/0.45
Noise Level	Actual Noise Pressure (High) *4)		dB(A)	42/44	43 / 44	48/49	49/49	53/53
110.50 2010.	Туре	, , , , , , , , , , , , , , , , , , ,	-	Turbo Fan				
	.,,,,	Model	_	FMC6531SSH	FMC6531SSH	FMC6531SSH	FMC6531SSF	DAI33585ZLB
Fan	Motor	Туре	_	BLDC	BLDC	BLDC	BLDC	BLDC
	Motor	Output	W	DLDC	DLDC	DLDC	BLDC	BLDC
	The progress of u	· ·	VV	-	-	-	-	-
Fan Chand	The progress of w	VOTK(II/IVI/L)		360/320/200	440/200/240	-		600/550/500
Fan Speed	Cooling (H/M/L)		rpm	360/320/300	440/390/340	540/460/380	540/480/420	600/550/500
	Heating (H/M/L)			340/300/280	440/390/340	540/460/380	540/480/420	600/550/500
	Cooling (High)		m³/min	15.5	17.5	19.5	24.0	29.0
	Heating (High)			17.5	19.5	22.0	28.0	33.0
Airflow Rate	Cooling (High)		CFM	547	618	689	848	1,024
	Heating (High)			618	689	777	989	1,165
	External Static	Standard(Min.~Max)	mmH2O	-	-	-	-	-
	Pressure	Standard(Min.~Max)	WG	-	-	-	-	-
Refrigerant	Туре		-	R410a	R410a	R410a	R410a	R410a
	Control Method		-	EEV	EEV	EEV	EEV	EEV
Temperature C	Control		-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse	Fuse	Fuse	Fuse
Option Code	AVXC4H***CE		-	01407F 156097 233434 300008 020010 100000 200000 300000 030000 100000 200000 300000	01407F 1560C7 234848 300008 020010 100000 200000 300000 030000 100000 200000 300000	01407F 156219 236464 300008 020010 100000 200000 300000 030000 100000 200000 300000	01407F 15621B 236E6E 300028 020010 100000 200000 300000 030000 100000 200000 300000	01407F 15624F 239191 300048 020010 100000 200000 300000 030000 100000 200000 300000
			Ø,mm	6.35	9.52	9.52	9.52	9.52
	Liquid (Flare)		Ø,inch	1/4"	3/8"	3/8"	3/8"	3/8"
Piping			Ø,mm	12.70	15.88	15.88	15.88	15.88
Connections	Gas (Flare)		Ø,inch	1/2"	5/8"	5/8"	5/8"	5/8"
			Ø,mm	VP25 (OD 32,ID 25)				
	Drain (Quick Lock	<)	Ø,inch			VP25 (OD 1 1/4",ID 1")		
			kg	15.5	15.5	15.5	17.0	19.0
	Net Weight		lbs	34.2	34.2	34.2	37.5	41.9
Weight			kg	19.5	19.5	19.5	22.0	24.0
	Shipping Weight		lbs	43	43	43	48.5	52.9
			mm	840x204x840	840x204x840	840x204x840	840x246x840	840x288x840
	Net Dimensions (	(W×H×D)	inch	33.1x8.0x33.1	33.1x8.0x33.1	33.1x8.0x33.1	33.1x9.7x33.1	33.1x11.3x33.1
Dimensions			mm					898x357x898
		Dimensions (W×H×D)		898x275x898	898x275x898	898x275x898	898x316x898	
					35.4x10.8x35.4	35.4x10.8x35.4	35.4x12.4x35.4	35.4x14.0x35.4
	Madal	NOTIS (WATIAD)	inch	35.4x10.8x35.4	DC4NI ICIA	DC4NILICIA	DC4NI ICIA	DC 4NILICIA
	Model	norts (WATIAE)	-	PC4NUSKA	PC4NUSKA	PC4NUSKA	PC4NUSKA	PC4NUSKA
	Model Net Weight	ions (wantab)	- kg		PC4NUSKA 6.7	PC4NUSKA 6.7	PC4NUSKA 6.7	PC4NUSKA 6.7
		ions (WAINO)	- kg lbs	PC4NUSKA 6.7 -	6.7	6.7	6.7	6.7
Panel Size			kg Ibs	PC4NUSKA				
Panel Size	Net Weight		kg lbs kg lbs	PC4NUSKA 6.7 - 8.9	6.7 - 8.9 -	6.7 - 8.9 -	6.7 - 8.9	6.7 - 8.9 -
Panel Size	Net Weight		kg lbs kg lbs mm	PC4NUSKA 6.7 - 8.9 - 950x30x950	6.7 - 8.9 - 950x30x950	6.7 - 8.9 - 950x30x950	6.7 - 8.9 - 950x30x950	6.7 - 8.9 - 950x30x950
Panel Size	Net Weight Shipping Weight		kg lbs kg lbs	PC4NUSKA 6.7 - 8.9	6.7 - 8.9 -	6.7 - 8.9 -	6.7 - 8.9	6.7 - 8.9 -

2-30 Samsung Electronics

# Global 4 way cassette(cont.)

	Mod	del		ND0524HXCB	ND0724HXCB	ND1004HXCB	ND1104HXCB	ND1454HXCB
	Auto Restart	Auto Restart		0	0	0	0	0
	Auto Swing		-	0	0	0	0	0
Functions	Group/Individual	Control	-	0	0	0	0	0
	External Contact	Control	-	0	0	0	0	0
	Trouble Shooting	by LED	-	0	0	0	0	0
	Installation Manu	al	-	0	0	0	0	0
	Operation Manua	peration Manual		Х	Х	Х	Х	Х
Standard	Pattern Sheet for Installation		-	0	0	0	0	0
Accessories	Flexible Drain Hose		-	0	0	0	0	0
	Filter / Safety Grill	ter / Safety Grille		Filter / Safety Grille				
	Drain Pump (Pum	ping speed, lift)	ℓ/h,mm	24, 750	24, 750	24, 750	24, 750	24, 750
	Wireless Remote	AVXC4H***CE	-	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U
	Controller	ND***4HXCA	-	MR-BH01	MR-BH01	MR-BH01	MR-BH01	MR-BH01
Optional		Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00
Accessories	Wired Remote Controller	Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00
	Controller	Premium	-	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01
	External Contact I	nterface Module	-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on; -Indoor temperature: 81°F/27°C DB, 66°F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- $\ensuremath{^{*5}}\xspace$  ) Specifications may be subject to change without prior notice for product improvement.

Samsung Electronics 2-31

## ■ Slim duct type

	Mod	lel		AVXDSH020CE/ ND020LHXCA	AVXDSH032CE/ ND032LHXCA	AVXDSH040CE/ ND040LHXCA	AVXDSH052CE/ ND052LHXCA
Power Supply			Ø,V,Hz	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60
Mode *1)			-	HP/HR	HP / HR	HP / HR	HP / HR
		S 11 *2)	kW	2.0	3.2	4.0	5.2
		Cooling *2)	Btu/h	6,000	7,500	12,000	18,000
Performance	Capacity	*2)	kW	2.3	3.6	4.5	6.0
		Heating *3)	Btu/h	7,000	8,500	13,500	20,000
	Condensate (with	n High fan speed)	ℓ/h	-	-	-	-
	Input Consumption	on (Cooling/Heating)	W	47 / 47	60 / 60	75 / 75	110 / 110
Power	Running Current	(Cooling/Heating)	A	0.32 / 0.32	0.34 / 0.34	0.35 / 0.35	0.65 / 0.65
Noise Level	Actual Noise Pres		dB(A)	37 / 38	37 / 38	37 / 38	45 / 45
	Туре		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	71.	Model	-	YSK110-25-6SN	YSK110-25-6SN	YSK110-25-6SN	YSK140-60-4B-1
Fan	Motor	Туре	_	Non Feedback SSR	Non Feedback SSR	Non Feedback SSR	Non Feedback SSR
	Motor	Output	W	-	- North Coupuck 3511	- North Codduck 35ft	-
	The progress of w	· ·	**	702/560/451	988/839/571	1,008/852/616	1,115/907/739
Fan Speed	Cooling (H/M/L)	VOIK(II/IVI/L)	rpm .	920/840/740	1,040/960/830	1,060/990/870	1,220/1,048/916
ran speeu	Heating (H/M/L)		ipili	920/840/740	1,040/960/830	1,060/990/870	1,220/1,048/916
				8.0	1,040/960/830	1,060/990/870	1,220/1,048/916
	Cooling (High)		m³/min	9.0			
	Heating (High)				12.0	13.0	16.5
Airflow Rate	Cooling (High)		CFM	282	353	424	512
	Heating (High)	T		318	424	459	583
	External Static	Standard(Min.~Max)	mmH2O	2 (0~4)	2 (0~4)	2 (0~4)	2 (0~4)
	Pressure	Standard(Min.~Max)	WG	0.08 (0~0.16)	0.08 (0~0.16)	0.08 (0~0.16)	0.08 (0~0.16)
Refrigerant	Туре		-	R410a	R410a	R410a	R410a
	Control Method		-	EEV	EEV	EEV	EEV
Temperature C	Control		-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse	Fuse	Fuse
0 6 .	AVXDSH***CE		-	015221-1103D1 -200001-300000	015223-1401B6 -200001-300000	015223-160329 -200001-300000	015223-1901ED -200001-300000
Option Code	ND***LHXCA		-	015221-1103D1 -200000-300000	015223-1401B6 -200000-300000	015223-160329 -200000-300000	015223-1901ED -200000-300000
			Ø,mm	6.35	6.35	6.35	6.35
	Liquid (Flare)		Ø,inch	1/4"	1/4"	1/4"	1/4"
Piping			Ø,mm	12.70	12.70	12.70	12.70
Connections	Gas (Flare)		Ø,inch	1/2"	1/2"	1/2"	1/2"
			Ø,mm	VP25 (OD 32,ID 25)			
	Drain (Quick Lock	<b>(</b> )	Ø,inch	VP25 (OD 1 1/4",ID 1")			
			kg	26.0	26.0	26.0	31.0
	Net Weight		lbs	57.3	57.3	57.3	68.3
Weight			kg	31.0	31.0	31.0	39.0
	Shipping Weight		lbs	68.3	68.3	68.3	86.0
			mm	900×199×600	900×199×600	900×199×600	1100×199×600
	Net Dimensions (	W×H×D)					
Dimensions			inch	35.4×7.8×23.6	35.4×7.8×23.6	35.4×7.8×23.6	43.3×7.8×23.6
	Shipping Dimens	ions (W×H×D)	mm	1,133×330×730	1,133×330×730	1,133×330×730	1,330×330×730
			inch	44.6×13×28.7	44.6×13×28.7	44.6×13×28.7	52.4×13×28.7
	Model		-	-	-	-	-
	Net Weight		kg	-	-	-	-
			lbs	-	-	-	-
	Shipping Weight		kg	-	-	-	-
Panel Size	5		lbs	-	-	-	-
	Net Dimensions (	W×H×D)	mm	-	-	-	-
		,	inch	-	-	-	-
	Shipping Dimens	ions (W×H×D)	mm	-	-	-	-
	Jampping Dimens	(١١٨١١٨٠)	inch	-	-	_	-

2-32 Samsung Electronics

#### Slim duct type(cont.)

	Mode	el		AVXDSH020CE/ ND020LHXCA	AVXDSH032CE/ ND032LHXCA	AVXDSH040CE/ ND040LHXCA	AVXDSH052CE/ ND052LHXCA
	Auto Restart		-	0	0	0	0
	Auto Swing Group/Individual Control		-	Х	Х	X	Х
Functions			-	0	0	0	0
	External Contact C	Control	-	0	0	0	0
	Trouble Shooting	by LED	-	Х	Х	X	Х
	Installation Manua	al	-	0	0	0	0
	Operation Manua	1	-	0	0	0	0
Standard	Pattern Sheet for I	nstallation	-	Х	Х	Х	Х
Accessories	Flexible Drain Hose		-	0	0	0	0
	Filter / Safety Grille	9	-	Filter (Washable)	Filter (Washable)	Filter (Washable)	Filter (Washable)
	Drain Pump (Pum	ping speed, lift)	ℓ/h,mm	24, 750	24, 750	24, 750	24,750
	Wireless Remote	AVXDSH***CE	-	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U
	Controller	ND***LHXCA	-	MR-BH01	MR-BH01	MR-BH01	MR-BH01
		Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00
	Wired Remote Controller	Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00
	Controller	Premium	-	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01
Optional Accessories	External Contact Interface Module		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14
Accessories	Drain Pump		-	MDP-E075SEE	MDP-E075SEE	MDP-E075SEE	MDP-E075SEE
	Remote Controlle Receiver Kit(Duct)		-	MRK-A00	MRK-A00	MRK-A00	MRK-A00
	Remote Controlle Receiver Wire(Duc		-	MRW-10A	MRW-10A	MRW-10A	MRW-10A



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on;
  - Indoor temperature : 81°F/27°C DB, 66°F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70° F/20° C DB, 60° F/15° C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- $^*4$ ) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- \*5) Specifications may be subject to change without prior notice for product improvement.

Samsung Electronics 2-33

# Slim duct type(cont.)

	Mo	odel		AVXDSH072CE/ ND072LHXCA	AVXDSH100CE/ ND100LHXCA	AVXDSH110CE/ ND110LHXCA	AVXDSH145CE/ ND145LHXCA
Power Supply			Ø,V,Hz	1,208~230,60 HP / HR	1,208~230,60	1,208~230,60	1,208~230,60
Mode *1)			-		HP/HR	HP / HR	HP / HR
		Cooling *2)	kW	7.2	10.0	11.0	14.5
	Cit-	Cooling -/	Btu/h	24,000	30,000	36,000	48,000
Performance	Capacity	114:*3)	kW	8.1	11.0	12.8	16.3
		Heating *3)	Btu/h	27,000	34,000	40,000	54,000
	Condensate (with	h High fan speed)	ℓ/h	-	-	-	-
Davisa	Input Consumpt	Input Consumption (Cooling/Heating)		130 / 130	95/95	120/120	180/180
Power	Running Current	(Cooling/Heating)	А	0.70 / 0.70	0.8/0.8	1.05/1.05	1.4/1.4
Noise Level	Actual Noise Pres	ssure (High) *4)	dB(A)	47 / 47	43 / 44	43 / 44	45 / 46
	Туре		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
F		Model	-	YSK140-60-4B-1	DL-12840SSBC	DL-12840SSBC	DL-12840SSBC
Fan	Motor	Туре	-	Non Feedback SSR	BLDC	BLDC	BLDC
		Output	W	183	183	183	183
	The progress of v	work(H/M/L)		1,275/1,025/785	886/817/737	945/847/758	1,075/930/801
Fan Speed	Cooling (H/M/L)		rpm	1,350/1,139/968	950/880/810	1,020/910/830	1,160/1,000/870
	Heating (H/M/L)		] [	1,350/1,139/968	950/880/810	1,020/910/830	1,160/1,000/870
	Cooling (High)		m³/min	17.0	25.0	29.0	35.0
	Heating (High)		1 111 /1111111	19.0	22.0	33.0	37.0
Airflow Rate	Cooling (High)		- CFM -	600	883	1024	1236
Alfilow Rate	Heating (High)		CFIVI	671	777	1165	1306
	External Static	Standard(Min.~Max)	mmH2O	2 (0~4)	3 (0~6)	3 (0~6)	3 (0~6)
	Pressure	Standard(Min.~Max)	WG	0.08 (0~0.16)	0.12(0~0.24)	0.12(0~0.24)	0.12(0~0.24)
Dofringrant	Туре		-	R410a	R410a	R410a	R410a
Refrigerant	Control Method		-	EEV	EEV	EEV	EEV
Temperature Co	ontrol		-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse	Fuse	Fuse
0 11 6 1	AVXDSH***CE		-	015224-1C0250 -200001-300000	015213-1F019F 200001-300000	015A14-1000D0 200001-300000	015A14-130263 200001-300000
Option Code	ND***LHXCA		-	015224-1C0250 -200000-300000	015213-1F019F 200000-300000	015A14-1000D0 200000-300000	015A14-130263 200000-300000
			Ø,mm	9.52	9.52	9.52	9.52
	Liquid (Flare)		Ø,inch	3/8"	3/8"	3/8"	3/8"
Piping	5 (51 )		Ø,mm	15.88	15.88	15.88	15.88
Connections	Gas (Flare)		Ø,inch	5/8"	5/8"	5/8"	5/8"
			Ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
	Drain (Quick Lock	K)	Ø,inch	VP25 (OD 1 1/4",ID 1")	VP25 (OD 1 1/4",ID 1")	VP25 (OD 1 1/4",ID 1")	VP25 (OD 1 1/4",ID 1")
	N		kg	31.0	43.0	43.0	46.0
A/-:	Net Weight		lbs	68.3	94.8	94.8	101.4
Weight	Chinain a Mainh		kg	39.0	51.5	51.5	54.5
	Shipping Weight		lbs	86.0	113.5	113.5	120.2
	Not Dimensions	(MVIVD)	mm	1,100×199×600	1,300×295×690	1,300×295×690	1,300×295×690
Dimonsions	Net Dimensions	(WXIIXD)	inch	43.3×7.8×23.6	51.2×11.6×27.2	51.2×11.6×27.2	51.2×11.6×27.2
Dimensions	Shipping Dimens	sions (WVHVD)	mm	1,330×330×730	1,600×441×831	1,600×441×831	1,600×441×831
	3hipping Dimens	SIOLIS (WXHXD)	inch	52.4×13×28.7	63×17.4×32.7	63×17.4×32.7	63×17.4×32.7
	Model		-	-	-	-	-
	Net Weight		kg Ibs	-	-	-	-
				-	-	-	-
Panel Size	Shipping Weight		kg lbs	-	-	-	-
	N . D:	(14, 11, 5)	mm	-	-	-	-
	Net Dimensions	(WXHXD)	inch	-	-	-	-
	Shipping Dimens	sions (W×H×D)	mm	-	-	-	-
	Shipping Dimens	SIOTIS (VVALIAD)	inch	-	-	-	-

2-34 Samsung Electronics

#### Slim duct type(cont.)

	Mod	del		AVXDSH072CE/ ND072LHXCA	AVXDSH100CE/ ND100LHXCA	AVXDSH110CE/ ND110LHXCA	AVXDSH145CE/ ND145LHXCA
	Auto Restart		-	0	0	0	0
	Auto Swing		-	Х	Х	Х	Х
Functions	Group/Individual	Control	-	0	0	0	0
	External Contact C	Control	-	0	0	0	0
	Trouble Shooting	by LED	-	Х	X	X	Х
	Installation Manu	al	-	0	0	0	0
	Operation Manua		-	0	0	0	0
Standard	Pattern Sheet for I	nstallation	-	X	X	X	Х
Accessories	Flexible Drain Hos	e	-	0	0	0	0
	Filter / Safety Grille	e	-	Filter (Washable)	Filter (Washable)	Filter (Washable)	Filter (Washable)
	Drain Pump (Pum	ping speed, lift)	ℓ/h,mm	24, 750	24, 750	24, 750	24, 750
	Wireless Remote	AVXDSH***CE	-	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U
	Controller	ND***LHXCA	-	MR-BH01	MR-BH01	MR-BH01	MR-BH01
		Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00
	Wired Remote Controller	Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00
	Controller	Premium	-	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01
Optional Accessories	External Contact I	nterface Module	-	MIM-B14	MIM-B14	MIM-B14	MIM-B14
Accessories	Drain Pump		-	MDP-E075SEE1	MDP-E075SEE1	MDP-E075SEE1	MDP-E075SEE1
	Remote Controlle Receiver Kit(Duct)		-	MRK-A00	MRK-A00	MRK-A00	MRK-A00
	Remote Controlle Receiver Wire(Duc		-	MRW-10A	MRW-10A	MRW-10A	MRW-10A



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on;
  - Indoor temperature : 81°F/27°C DB, 66°F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- \*5) Specifications may be subject to change without prior notice for product improvement.

Samsung Electronics 2-35

## ■ MSP duct type

	Λ	/lodel		AVXDUH100CE/ ND100SHXCA	AVXDUH110CE/ ND110SHXCA	AVXDUH145CE/ ND145SHXCA
Power Supply			Ø,V,Hz	1,208~230,60	1,208~230,60	1,208~230,60
Mode *1)			-	HP/HR	HP / HR	HP/HR
		C 1: *2)	kW	10.0	11.0	14.5
		Cooling *2)	Btu/h	30,000	36,000	48,000
Performance	Capacity	*** ***	kW	11.0	12.8	16.3
		Heating *3)	Btu/h	34,000	40,000	54,000
	Condensate (wit	h High fan speed)	ℓ/h	-	-	-
_	Input Consumpt	ion (Cooling/Heating)	W	260 / 260	275 / 275	430 / 430
Power	Running Current	t (Cooling/Heating)	А	1.52 / 1.52	1.57 / 1.57	2.45 / 2.45
Noise Level	Actual Noise Pre	ssure (High) *4)	dB(A)	48 / 49	48 / 49	50/51
	Туре		-	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Model		-	YSK140-200-4	YSK140-200-4	YDK-370S65023-01
Fan	Motor Type		-	Non Feedback SSR	Non Feedback SSR	Non Feedback SSR
		Output	W	180	180	218
	The progress of v	· ·		1,000/880/744	1,071/921/787	895/763/645
Fan Speed	Cooling (H/M/L)		rpm	1,240/1,170/1090	1,280/1,190/1,110	1,040/950/880
	Heating (H/M/L)			1,240/1,170/1,090	1,280/1,190/1,110	1,040/950/880
	Cooling (High)			25.0	27.0	35.0
	Heating (High)		m³/min	25.0	27.0	35.0
				883	953	1236
Airflow Rate	Cooling (High) Heating (High)		CFM	883	953	1236
		Ctandard(Min May)	mmH2O			
	External Static Pressure	Standard(Min.~Max)		8 (6~10)	8 (6~10)	8 (6~10)
		Standard(Min.~Max)	WG	0.31 (0.24~0.39)	0.31 (0.24~0.39)	0.31 (0.24~0.39)
Refrigerant	Туре		-	R410a	R410a	R410a
	Control Method		-	EEV	EEV	EEV
Temperature C			-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices	1		-	Fuse	Fuse	Fuse
Option Code	AVXDUH***CE	E	-	015224-1F0202 -200001-300000	015A24-100244 -200001-300000	015A24-130243 -200001-300000
Option Code	ND***SHXCA		-	015224-1F0202 -200000-300000	015A24-100244 -200000-300000	015A24-130243 -200000-300000
			Ø,mm	9.52	9.52	9.52
	Liquid (Flare)		Ø,inch	3/8"	3/8"	3/8"
Piping			Ø,mm	15.88	15.88	15.88
Connections	Gas (Flare)		Ø,inch	5/8"	5/8"	5/8"
			Ø,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
	Drain (Quick Loc	k)	Ø,inch	VP25 (OD 1 1/4",ID 1")	VP25 (OD 1 1/4",ID 1")	VP25 (OD 1 1/4",ID 1")
			kg	46.0	46.0	52.0
	Net Weight		lbs	101.4	101.4	114.6
Weight			kg	54.5	54.5	60.0
	Shipping Weight	t	lbs	120.2	120.2	132.3
			mm	1,150×320×480	1,150×320×480	1,200×360×650
	Net Dimensions	(W×H×D)	inch	43.3×12.6×18.9	43.3×12.6×18.9	47.2×14.2×25.6
Dimensions			mm	1,390×424×584	1,390×424×584	1,456×434×778
	Shipping Dimen	sions (W×H×D)	inch	54.7×16.7×23	54.7×16.7×23	57.3×17.1×30.6
	Model		-	-	-	-
	Model		kg	-	-	-
	Net Weight		lbs	<u> </u>	-	-
					-	-
Danol Cin-	Shipping Weight	t	kg		-	-
Panel Size			lbs	-	-	-
	Net Dimensions	(W×H×D)	mm	-	-	-
			inch	-	-	-
	Shipping Dimen	sions (W×H×D)	mm	-	-	-
	1, 5	,	inch	-	-	-

2-36 Samsung Electronics

#### MSP duct type(cont.)

	М	odel		AVXDUH100CE/ ND100SHXCA	AVXDUH110CE/ ND110SHXCA	AVXDUH145CE/ ND145SHXCA
	Auto Restart		-	0	0	0
	Auto Swing		-	Х	X	Х
Functions	Group/Individual Control External Contact Control		-	0	0	0
			-	0	0	0
	Trouble Shooting	by LED	-	Χ	X	Х
	Installation Manu	al	-	0	0	0
	Operation Manua	I	-	0	0	0
Standard	Pattern Sheet for	Installation	-	Х	X	Х
Accessories	Flexible Drain Hose		-	0	0	0
	Filter / Safety Grill	e	-	Filter (Washable)	Filter (Washable)	Filter (Washable)
	Drain Pump (Pum	ping speed, lift)	ℓ/h,mm	24, 750	24, 750	24,750
	Wireless Remote	AVXDUH***CE	-	MR-BH01U	MR-BH01U	MR-BH01U
	Controller	ND***SHXCA	-	MR-BH01	MR-BH01	MR-BH01
		Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00
	Wired Remote Controller	Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00
	Controller	Premium	-	MWR-WS01	MWR-WS01	MWR-WS01
Optional Accessories	External Contact Interface Module		-	MIM-B14	MIM-B14	MIM-B14
Accessories	Drain Pump		-	MDP-M075SGU1	MDP-M075SGU1	MDP-M075SGU2
	Remote Controlle Receiver Kit(Duct		-	MRK-A00	MRK-A00	MRK-A00
		Remote Controller Receiver Wire(Duct)		MRW-10A	MRW-10A	MRW-10A



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on;
  - Indoor temperature : 81°F/27°C DB, 66°F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70° F/20° C DB, 60° F/15° C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- \*5) Specifications may be subject to change without prior notice for product improvement.

Samsung Electronics 2-37

# ■ BIG duct type

	N	lodel		ND220HHXCE ND220HHXCA	ND280HHXCE ND280HHXCA
Power Supply			Ø,V,Hz	1/208-230/60	1/208-230/60
Mode *1)			-	HP / HR	HP/HR
		C 11 *2)	kW	22.4	28.0
		Cooling *2)	Btu/h	76,800	96,000
erformance	Capacity	*2)	kW	25.0	31.5
		Heating *3)	Btu/h	85,200	108,000
	Condensate (wit	:h High fan speed)	ℓ/h		
		nput Consumption (Cooling/Heating)		530	790
ower		t (Cooling/Heating)	A	3.8	5.9
loise Level	Actual Noise Pre		dB(A)	47	48
VOISC ECVCI	Туре	ssure (riigii)	- GD(A)	Sirocco Fan	Sirocco Fan
	Турс	Model	-	DL-13875SSOB	DL-13875SSOB
an	Matax		-	BLDC	BLDC
	Motor	Type	-	400	400
	TI 6	Output	W	400	400
	The progress of	work(H/M/L)		065/070/010	1100/1000/070
an Speed	Cooling (H/M/L)		rpm	965/870/810	1100/1000/870
	Heating (H/M/L)			965/870/810	1100/1000/870
	Cooling (High)		m³/min	58	72
	Heating (High)			58	72
Airflow Rate	Cooling (High)		CFM	2,048	2,542
	Heating (High)		C	2,048	2,542
	External Static	Standard(Min.~Max)	mmH2O	15(5-25)	15(5-28)
	Pressure	Standard(Min.~Max)	WG	0.59(0.20-0.98)	0.59(0.20-1.10)
\- <del>(</del>	Туре		-	R410A	R410A
Refrigerant	Control Method		-	EEV	EEV
emperature C	ontrol		-	Micom&Thermistors	Micom&Thermistors
afety Devices			-	Fuse	Fuse
·	ND***CE		-	"015A171600E8 -200001300000"	"015A1717025B -200001300000"
Option Code	ND***CA		-	"015A171600E8 -20000300000"	"015A1717025B -20000300000"
			Ø,mm	9.52	9.52
	Liquid (Flare)		Ø,inch	3/8"	3/8"
linin n			Ø,mm	19.05	22.2
Piping Connections	Gas (Flare)		Ø,inch	3/4"	7/8"
			Ø,mm	VP25(OD32, ID25)	VP25(OD32, ID25)
	Drain (Quick Loc	k)		VP25(OD1 1/4", ID 1")	VP25(OD1 1/4", ID 1")
			Ø,inch	95	VP25(ODT 1/4, ID T ) 95
	Net Weight		kg	210	
Veight			lbs		210
	Shipping Weight	t	kg	105	105
			lbs	232	232
	Net Dimensions	(W×H×D)	mm	1240x470x1040	1240x470x1040
Dimensions			inch	48.8x18.5x41.0	48.8x18.5x41.0
	Shipping Dimen	sions (W×H×D)	mm	1507x558x1155	1507x558x1155
	Jpping Dimen		inch	59.4x22.0x45.5	59.4x22.0x45.5
	Model		-	-	-
	Not Woight		kg	-	-
	Net Weight		Ibs	-	-
			kg	-	-
anel Size	Shipping Weigh		Ibs	-	-
			mm	-	-
	Net Dimensions (W×H×D)				+
	Net Dimensions	Net Dimensions (W×H×D)		-	_
	Net Dimensions	(WALIAD)	inch	-	-

2-38 Samsung Electronics

#### **BIG duct type(cont.)**

	М	odel		ND220HHXCE ND220HHXCA	ND280HHXCE ND280HHXCA
	Auto Restart		-	0	0
	Auto Swing		-	X	Х
Functions	Group/Individual	Control	-	0	0
	External Contact	Control	-	0	0
	Trouble Shooting	by LED	-	Х	Х
	Installation Manu	ial	-	0	0
	Operation Manua	al	-	0	0
Standard	Pattern Sheet for	Installation	-	0	0
Accessories	Flexible Drain Ho	se	-	0	0
	Filter / Safety Grill	le	-	X	X
	Drain Pump (Pumping speed, lift)		ℓ/h,mm	24, 470	24, 470
	Wireless Remote	ND***CE	-	MR-BH01U	MR-BH01U
	Controller	ND***CA	-	MR-BH00	MR-BH00
		Simplified	-	MWR-WH02	MWR-WH02
	Wired Remote Controller	Multi Function	-	MWR-WE10	MWR-WE10
	Controller	Premium	-	-	-
Optional Accessories	External Contact	Interface Module	-	MIM-B14	MIM-B14
Accessories	Drain Pump		-	MDP-N047SNC1	MDP-N047SNC1
	Remote Controlle Receiver Kit(Duct		-	MRK-A00	MRK-A00
	Remote Controlle Receiver Wire(Du		-	MRW-10A	MRW-10A



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on;
  - Indoor temperature : 81°F/27°C DB, 66°F/19°C WB
- Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- $^*4$ ) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- \*5) Specifications may be subject to change without prior notice for product improvement.

Samsung Electronics 2-39

# ■ Wall Mounted type\_Vivace

	Mo	odel		AVXWVH020CE/ ND020VHXCA	AVXWVH032CE/ ND032VHXCA	AVXWVH040CE/ ND040VHXCA	AVXWVH052CE/ ND052VHXCA	AVXWVH060CE/ ND060VHXCA
Power Supply			Ø,V,Hz	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60
Mode *1)			-	HP/HR	HP/HR	HP / HR	HP / HR	HP/HR
		Cooling *2)	kW	2.0	3.2	4.0	5.2	6.0
	Camasitus	Cooling -	Btu/h	6,000	9,500	12,000	18,000	20,000
Performance	Capacity	Heating *3)	kW	2.3	3.6	4.5	6.0	6.8
		neating -/	Btu/h	7,000	10,500	13,500	20,000	23,000
	Condensate (wit	h High fan speed)	ℓ/h	1.12	1.44	1.91	3.03	3.51
Power	Input Consumpt	ion (Cooling/Heating)	W	30/30	30/30	35 / 35	50 / 50	50 / 50
rowei	Running Current	(Cooling/Heating)	Α	0.13 / 0.13	0.18/0.18	0.19 / 0.19	0.3 / 0.3	0.3 / 0.3
Noise Level	Actual Noise Pres	ssure (High) *4)	dB(A)	42 / 42	43 / 43	43 / 43	50 / 50	50 / 50
	Туре		-	Crossflow Fan				
For.		Model	-	YDK-016S1408-01	YDK-016S1408-01	YDK-016S1408-01	YDK-045S42213-02	YDK-045S42213-02
Fan	Motor	Туре	-	Feedback SSR				
		Output	W	23.0	23.0	23.0	42.0	42.0
	Cooling (H/M/L)			1,000/878/755	1,000/878/755	1,105/965/860	1,245/1,105/1,000	1,315/1,210/1,105
Fan Speed	Heating (H/M/L)		rpm	965/843/720	965/843/720	1,175/1,035/930	1,245/1,105/1,000	1,315/1,210/1,105
	Cooling (High)		3/ .	7.0	7.0	8.2	13.3	13.3
	Heating (High)		m³/min	7.3	7.3	8.8	14.0	14.0
	Cooling (High)			247	247	290	470	470
Airflow Rate	Heating (High)		CFM	258	258	311	494	494
	External Static	Standard(Min.~Max)	mmH2O	-	-	-	-	-
	Pressure	Standard(Min.~Max)	WG	-	-	-	-	-
	Type	, ,	-	R410a	R410a	R410a	R410a	R410a
Refrigerant	Control Method		-	EEV (optional)				
Temperature C	Control		-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse	Fuse	Fuse	Fuse
0 6 .	AVXWVH***CE		-	004602-1120E7 200001-300000	004602-1320E7 200001-300000	007602-15221A 200001-300000	005606-1A225E 200001-300000	005606-1C2371 200001-300000
Option Code	ND***VHXCA		-	004602-1120E7 200000-300000	004602-1320E7 200000-300000	007602-15221A 200000-300000	005606-1A225E 200000-300000	005606-1C2371 200000-300000
	Liquid (Flave)		Ø,mm	6.35	6.35	6.35	6.35	6.35
	Liquid (Flare)		Ø,inch	1/4"	1/4"	1/4"	1/4"	1/4"
Piping	Cos (Flore)		Ø,mm	12.70	12.70	12.70	12.70	12.70
Connections	Gas (Flare)		Ø,inch	1/2"	1/2"	1/2"	1/2"	1/2"
	Drain (Quick Loc	k)	Ø,mm	ID 18 hose				
	Diairi (Quick Loc	K)	Ø,inch	-	-	-	-	-
	Net Weight		kg	8.5	7.8	7.8	12.0	12.0
Weight	Net Weight		lbs	18.7	17.2	17.2	26.5	26.5
weignt	Shipping Weight	•	kg	11.5	9.4	9.4	15.0	15.0
	Shipping weight	L	lbs	25.4	20.7	20.7	33.1	33.1
	Net Dimensions	(MVHVD)	mm	825×285×189	825×285×189	825×285×189	1,065×298×218	1,065×298×218
Dimonsions	Net Dimensions	(WXIIXD)	inch	32.5×11.2×7.4	32.5×11.2×7.4	32.5×11.2×7.4	42×11.7×8.6	42×11.7×8.6
Dimensions	Chinain a Diman	-i (\A\(\dagger\)	mm	900×349×252	900×349×252	900×349×252	1,137×377×299	1,137×377×299
	Shipping Dimen	sions (W×H×D)	inch	35.4×13.7×10	35.4×13.7×10	35.4×13.7×10	44.8×14.8×11.8	44.8×14.8×11.8
	Auto Restart		-	0	0	0	0	0
	Auto Swing		-	0	0	0	0	0
Functions			-	0	0	0	0	0
			-	0	0	0	0	0
	Trouble Shooting	g by LED	-	0	0	0	0	0
	Installation Manu	ual	-	0	0	0	0	0
	III IStaliation iviant				_		_	0
	-	Operation Manual		0	0	0	0	0
Standard	-		-	O X	X	X	X	X
Standard Accessories	Operation Manu	Installation						-

2-40 Samsung Electronics

#### Wall Mounted type\_Vivace(cont.)

	Мо	del		AVXWVH020CE/ ND020VHXCA	AVXWVH032CE/ ND032VHXCA	AVXWVH040CE/ ND040VHXCA	AVXWVH052CE/ ND052VHXCA	AVXWVH060CE/ ND060VHXCA
Wireless Remote Controller	Wireless Remote	AVXWVH***CE	-	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U
	Controller	ND***VHXCA	-	MR-BH01	MR-BH01	MR-BH01	MR-BH01	MR-BH01
Optional		Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00
Accessories	Wired Remote Controller	Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00
		Premium	-	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01
	External Contact Interface Module -		-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on;
  - Indoor temperature : 81°F/27°C DB, 66°F/19°C WB
- Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB \*3) Norminal heating capacities are based on;
- - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- \*5) Specifications may be subject to change without prior notice for product improvement.

Samsung Electronics 2-41

## ■ Wall Mounted type\_Neo forte without EEV

	٨	lodel .		AVXWNH020CE/ ND020NHXCA	AVXWNH032CE/ ND032NHXCA	AVXWNH040CE/ ND040NHXCA	AVXWNH052CE/ ND052NHXCA	AVXWNH060CE/ ND060NHXCA
Power Supply		Ø,V,Hz	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60	
Mode *1)			-	HP / HR				
		Cooling *2)	kW	2.0	3.2	4.0	5.2	6.0
	c		Btu/h	6,000	9,500	12,000	18,000	20,000
Performance	Capacity	*2\	kW	2.3	3.6	4.5	6.0	6.8
		Heating *3)	Btu/h	7,000	10,500	13,500	20,000	23,000
	Condensate (w	ith High fan speed)	ℓ/h	1.12	1.44	1.91	2.87	3.51
_	Input Consum	otion (Cooling/Heating)	W	25 / 25	25 / 25	30 / 30	45 / 45	50/50
Power	Running Curre	nt (Cooling/Heating)	Α	0.16 / 0.16	0.16 / 0.16	0.18 / 0.18	0.27 / 0.27	0.30/0.30
Noise Level	Actual Noise Pr	ressure (High) *4)	dB(A)	42 / 42	43 / 43	43 / 43	48 / 48	48 / 48
	Туре		-	Crossflow fan				
		Model	-	YDK-016S41408-01	YDK-016S41408-01	YDK-016S41408-01	YDK-045S42213-02	YDK-045S42213-02
Fan	Motor	Туре	-	Feedback SSR				
		Output	W	23	23	23	40	40
	Cooling (H/M/L	_)		1,035 / 948 / 860	1,035 / 948 / 860	1,210 / 1,088 / 965	1,280 / 1,158 / 1,035	1,350 / 1,193 / 1,035
Fan Speed	Heating (H/M/I	_)	rpm	1,105 / 1,018 / 930	1,105 / 1,018 / 930	1,280 / 1,158 / 1,035	1,315 / 1,193 / 1,070	1,385 / 1,228 / 1,070
	Cooling (High)			7.8	7.8	9.3	12.0	14.0
	Heating (High)		m³/min	8.2	8.2	9.5	13.0	15.0
	Cooling (High)			275	275	328	424	494
Airflow Rate	Heating (High)		CFM	290	290	335	459	530
	External Static	Standard(Min.~Max)	mmH2O	-	-	-	-	
	Pressure	Standard(Min.~Max)	WG	_	_	_	_	
	Туре		-	R410a	R410a	R410a	R410a	R410a
Refrigerant	Control Metho	d	-	EEV (optional)				
Temperature (	Control		-	Micom&Thermistors			Micom&Thermistors	Micom&Thermistors
Safety Devices			-	Fuse	Fuse	Fuse	Fuse	Fuse
	AVXWNH***	CE		027602-1120FA	027602-1320FA	027602-15224D	026602-1A226F	026602-1C228F
Option Code	AVAVINITATA			200001-300000 027602-1120FA	200001-300000 027602-1320FA	200001-300000 027602-15224D	200001-300000 026602-1A226F	200001-300000 026602-1C228F
	ND***NHXC	Α	-	200000-300000	200000-300000	200000-300000	200002-142207	200000-10228F
	Liquid (Flare)		Ø,mm	6.35	6.35	6.35	6.35	6.35
	Liquid (Flare)		Ø,inch	1/4"	1/4"	1/4"	1/4"	1/4"
Piping	Gas (Flare)		Ø,mm	12.70	12.70	12.70	12.70	12.70
Connections	Gus (Flare)		Ø,inch	1/2"	1/2"	1/2"	1/2"	1/2"
	Drain (Quick Lo	ock)	Ø,mm	ID 18 hose				
	Diairi (Quick Lo	JCK)	Ø,inch	-	-	-	-	-
	Not Waight		kg	7.8	7.8	7.8	13.0	13.0
Net Weigh	inet weight		lbs	17.2	17.2	17.2	28.7	28.7
Weight			kg	9.4	9.4	9.4	16.0	16.0
	Shipping Weight		lbs	20.7	20.7	20.7	35.3	35.3
	Not Div	- (/A/, .l.lD)	mm	825×285×189	825×285×189	825×285×189	1,099×315×217	1,099×315×217
D: .	Net Dimension	s (WXHXD)	inch	32.5×11.2×7.4	32.5×11.2×7.4	32.5×11.2×7.4	43.3×12.4×8.5	43.3×12.4×8.5
Dimensions	ci :	. (14.1: 5)	mm	900×349×252	900×349×252	900×349×252	1,137×377×299	1,137×377×299
	Shipping Dime	nsions (W×H×D)	inch	35.4×13.7×10	35.4×13.7×10	35.4×13.7×10	44.8×14.8×11.8	44.8×14.8×11.8

2-42 Samsung Electronics

#### Wall Mounted type\_Neo forte without EEV(cont.)

Model			AVXWNH020CE/ ND020NHXCA	AVXWNH032CE/ ND032NHXCA	AVXWNH040CE/ ND040NHXCA	AVXWNH052CE/ ND052NHXCA	AVXWNH060CE/ ND060NHXCA	
	Auto Restart		-	0	0	0	0	0
	Auto Swing		-	0	0	0	0	0
Functions	Group/Individu	al Control	-	0	0	0	0	0
	External Contac	ct Control	-	0	0	0	0	0
	Trouble Shootin	ng by LED	-	0	0	0	0	0
Installation Ma		nual	-	0	0	0	0	0
	Operation Manual		-	0	0	0	0	0
Standard Accessories	Pattern Sheet for Installation		-	Х	Х	Х	Х	Х
	Flexible Drain Hose		-	0	0	0	0	0
	Filter / Safety G	Filter / Safety Grille		Filter (Washable)	Filter (Washable)	Filter (Washable)	Filter (Washable)	Filter (Washable)
	Wireless Remote	AVXWNH***CE	-	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U
	Controller	ND***NHXCA	-	MR-BH01	MR-BH01	MR-BH01	MR-BH01	MR-BH01
Optional		Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00
Accessories	Wired Remote Controller	Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00
		Premium	-	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01
	External Contac	t Interface Module	-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on; -Indoor temperature: 81°F/27°C DB, 66°F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - Outdoor temperature :  $47^{\circ}\text{F/7}^{\circ}\text{C DB}$ ,  $43^{\circ}\text{F/6}^{\circ}\text{C WB}$
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- \*5) Specifications may be subject to change without prior notice for product improvement.

Samsung Electronics 2-43

## ■ Wall Mounted type\_Neo forte with EEV

	N	lodel		ND020QHXCA	ND032QHXCA	ND040QHXCA	ND052QHXCA	ND060QHXCA
Power Supply			Ø,V,Hz	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60	1,208~230,60
Mode *1)			-	HP / HR				
		Cooling *2)	kW	2.0	3.2	4.0	5.2	6.0
			Btu/h	6,000	9,500	12,000	18,000	20,000
Performance	Capacity	***	kW	2.3	3.6	4.5	6.0	6.8
		Heating *3)	Btu/h	7,000	10,500	13,500	20,000	23,000
	Condensate (w	ith High fan speed)	ℓ/h	1.12	1.44	1.91	2.87	3.51
	Input Consump	otion (Cooling/Heating)	W	25 / 25	25 / 25	30 / 30	45 / 45	50/50
Power	Running Curre	nt (Cooling/Heating)	А	0.16 / 0.16	0.16 / 0.16	0.18 / 0.18	0.27 / 0.27	0.27 / 0.27
Noise Level	Actual Noise Pr	essure (High) *4)	dB(A)	43 / 43	44 / 44	44 / 44	49 / 49	49 / 49
	Туре		-	Crossflow fan				
		Model	-	YFK-8-4-SX06	YFK-8-4-SX06	YFK-8-4-SX06	YDK-045S42213-02	YDK-045S42213-02
Fan	Motor	Туре	-	Feedback SSR				
		Output	W	16	16	16	40	40
	Cooling (H/M/L	.)		1,035 / 948 / 860	1,035 / 948 / 860	1,210 / 1,088 / 965	1,280 / 1,158 / 1,035	1,280 / 1,158 / 1,035
Fan Speed	Heating (H/M/l	_)	rpm	1,105 / 1,018 / 930	1,105 / 1,018 / 930	1,280 / 1,158 / 1,035	1,315 / 1,193 / 1,070	1,315 / 1,193 / 1,070
	Cooling (High)		3, .	7.8	7.8	9.3	12.0	12.0
Heating (High			m³/min	8.2	8.2	9.5	13.0	13.0
A. a. B.	Cooling (High)		CEM	275	275	328	424	424
Airflow Rate	Heating (High)		CFM	290	290	335	459	530
	External Static	Standard(Min.~Max)	mmH2O	-	-	-	-	
	Pressure	Standard(Min.~Max)	WG	-	-	-	-	
Defilerent	Туре		-	R410a	R410a	R410a	R410a	R410a
Refrigerant	Control Metho	d	-	EEV	EEV	EEV	EEV	EEV
Temperature (	Control		-	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors	Micom&Thermistors
Safety Devices	i		-	Fuse	Fuse	Fuse	Fuse	Fuse
Option Code	ND***QHXC/	A	-	027602-1120FA 200000-300000	027602-1420FA 200000-300000	027602-16224D 200000-300000	026602-19226F 200000-300000	026602-1B226F 200000-300000
	(51		Ø,mm	6.35	6.35	6.35	6.35	6.35
	Liquid (Flare)		Ø,inch	1/4"	1/4"	1/4"	1/4"	1/4"
Piping	C (Fl)		Ø,mm	12.70	12.70	12.70	12.70	12.70
Connections	Gas (Flare)		Ø,inch	1/2"	1/2"	1/2"	1/2"	1/2"
	D : (0 : 1 1	1)	Ø,mm	ID 18 hose				
	Drain (Quick Lo	OCK)	Ø,inch	-	-	-	-	-
Weight	Net Weight		kg	9	9	9	13.0	13.0
Weight	Shipping Weigl	ht	kg	11	11	11	16.0	16.0
	Net Div	- (\M(-11-1D)	mm	825×285×189	825×285×189	825×285×189	1,099×315×217	1,099×315×217
Dimon -!	Net Dimension	s (WXHXD)	inch	32.5×11.2×7.4	32.5×11.2×7.4	32.5×11.2×7.4	43.3×12.4×8.5	43.3×12.4×8.5
Dimensions	Chinair - Di-	neigne (M/d I - D)	mm	900×349×252	900×349×252	900×349×252	1,137×377×299	1,137×377×299
	Snipping Dime	nsions (W×H×D)	inch	35.4×13.7×10	35.4×13.7×10	35.4×13.7×10	44.8×14.8×11.8	44.8×14.8×11.8

2-44 Samsung Electronics

#### Wall Mounted type\_Neo forte with EEV(cont.)

	Model			ND020QHXCA	ND032QHXCA	ND040QHXCA	ND052QHXCA	ND060QHXCA
	Auto Restart	Auto Restart		0	0	0	0	0
	Auto Swing		-	0	0	0	0	0
Functions	Group/Individu	ial Control	-	0	0	0	0	0
	External Conta	ct Control	-	0	0	0	0	0
	Trouble Shooti	ng by LED	-	0	0	0	0	0
	Installation Ma	nual	-	0	0	0	0	0
	Operation Manual		-	0	0	0	0	0
Standard Accessories	Pattern Sheet for Installation		-	Х	Х	х	Х	х
	Flexible Drain Hose		-	0	0	0	0	0
	Filter / Safety G	Filter / Safety Grille		Filter (Washable)				
	Wireless	AVXWNH***CE	-	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U	MR-BH01U
	Remote Controller	ND***NHXCA	-	MR-BH01	MR-BH01	MR-BH01	MR-BH01	MR-BH01
Optional		Simplified	-	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00	MWR-SH00
Accessories	Wired Remote Controller	Multi Function	-	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00	MWR-WE00
		Premium	-	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01	MWR-WS01
	External Contac	t Interface Module	-	MIM-B14	MIM-B14	MIM-B14	MIM-B14	MIM-B14



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on; -Indoor temperature: 81°F/27°C DB, 66°F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB - Outdoor temperature : 47° F/7° C DB, 43° F/6° C WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- \*5) Specifications may be subject to change without prior notice for product improvement.

Samsung Electronics 2-45

#### **■** Ceiling type

	Mod	el		AVXTFH056E*	AVXTFH071E*
Power Supply			ø/V/Hz	1/220~240/50	1/220~240/50
Mode*1)				HP / HR	HP / HR
		- 11 ×2)	kW	5.6	7.1
		Cooling*2)	Btu/h	19,100	24,200
Performance	Capacity	"3)	kW	6.3	8.0
		Heating*3)	Btu/h	21,400	27,200
	Condensate (with	n High fan speed)	Liters/h	2.87	2.87
<u> </u>	Input		W	72	120
Power	Running Current		A	0.33	0.6
Sound Level	Sound Pressure (	High/Low)*4)	dB(A)	36 / 32	36/32
	Туре		-	Sirocco Fan	Sirocco Fan
_		Model	-	YSK140-60-4B	YSK140-60-4B
Fan	Motor	Туре	-	Non Feedback SSR	Non Feedback SSR
		Output	W	*5)	*5)
A: (1 D :	Cooling (High)		m³/min	16.5	16.5
Airflow Rate	Heating (High)		m³/min	20.0	20.0
D. ( )	Туре		-	R410A	R410A
Refrigerant	Control Method		-	EEV	EEV
Temperature Control		-	Micom&Thermistors	Micom&Thermistors	
Safety Devices			-	Fuse	Fuse
	Liquid (Flare)		ø, mm	9.52	9.52
Piping Connections	Gas (Flare)		ø, mm	15.88	15.88
Connections	Drain		ø, mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
M I.	Net Weight		kg	31.0	31.0
Weight	Shipping Weight		kg	39.0	39.0
Di	Net Dimensions	(W x H x D)	mm	1,100x199x600	1,100x199x600
Dimensions	Shipping Dimens	sions (W x H x D)	mm	1,330x330x730	1,330x330x730
	Auto Restart		-	0	0
	Auto Swing		-	X	X
Functions	Group/Individua	Control	-	0	0
	External Contact	Control	-	0	0
	Trouble Shooting	by LED	-	X	Х
	Installation Manu	ıal	-	0	0
e	Operation Manua	al	-	0	0
Standard Accessories	Pattern Sheet for	Installation	-	X	X
Accessories	Flexible Drain Hose		-	0	0
	Filter / Safety Grille		-	Filter (Washable)	Filter (Washable)
	Wireless Remote	Controller	-	MRK-A01	MRK-A01
0 " 1	ME 15	Simplified	-	MWR-TH01	MWR-TH01
Optional Accessories	Wired Remote Controller	Standard	-	MWR-WS00	MWR-WS00
Accessories	Controller	Premium	-	MIM-B14	MIM-B14
	External Contact	Interface Module	-	MDP-E075SEE	MDP-E075SEE1



- \*1) Mode
- HP : Heat Pump, HR : Heat Recovery
- \*2) Nominal cooling capacities are based on;
  - Indoor temperature : 81°F/27°C DB, 66°F/19°C WB
- $Outdoor \, temperature: 95^{\circ}F/35^{\circ}C\,DB, 75^{\circ}F/24^{\circ}C\,WB, Equivalent\, refrigerant\, piping: 7.5m (24.6ft), Level\, differences: 0m, 2000 and 2000 are considered by the contraction of the contracti$
- \*3) Nominal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - $Outdoor \, temperature: 47^{\circ} \text{F/7}^{\circ} \text{C DB, } 43^{\circ} \text{F/6}^{\circ} \text{C WB, Equivalent refrigerant piping}: 7.5 \text{m} (24.6 \text{ft}), Level \, differences: 0 \text{m} (24.6 \text{ft}), Level \, differences:$
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- \*5) Specifications may be subject to change without prior notice for product improvement.

2-46 Samsung Electronics

# 2-2-2 Outdoor Unit

## ■ RVXVHT075/100/125FE, RD075/100/125VHXFA, RD075/100/125VRXFA

	Model				/RD075VHXFA/ SVRXFA		/RD100VHXFA/ VRXFA		/RD125VHXFA/ SVRXFA
Power Supply			Ø,V,Hz		·230,60	3,208~	230,60	3,208~230,60	
Mode *1)			-						IP
	Horse Power		HP		.5		0.0		2.5
			kW	2.		28			5.2
Performance		Cooling *2)	Btu/h		000	96,000		120,000	
	Capacity		kW		3.7	31.7		39.6	
		Heating *3)	Btu/h	81,000		108,000		-	,000
		Cooling	kW		50		50		1.70
Power	Nominal input	Heating	kW		15		08	-	1.09
Tower	Circuit Breaker (I		A		10		0		50
	Cooling	TICCO/LLD/	-		84		75		29
COP	Heating		_	4.			47		92
	Model		_	ZPJ72KCE-TF5-496	ZPI61KCE-TF5-496	ZPJ72KCE-TF5-496	ZPI61KCE-TF5-496	ZPJ83KCE-TF5-496	ZPI83KCE-TF5-496
	Туре		_	Digital Scroll	Fixed Scroll	Digital Scroll	Fixed Scroll	Digital Scroll	Fixed Scroll
	Number		EA	1	1	1	1	1	1
Compressor		mont	cc/Rev	67.1	58.1	67.1	58.1	77.2	77.2
Compressor	Piston Displace	nent	kW						
	Output	Туре	KVV -	6.94	5.83 F POE	6.94	5.83 POE	8.01	8.01 F POE
	Lubricant				1				
	T /C + l	Charging	СС	1,685	1,685	1,685	1,685	1,685	1,685
	Type/Control		-	· ·	er/BLDC	· ·	er/BLDC	· ·	er/BLDC
	Motor Output		W		30	630			30
Fan	Airflow Rate		m³/min			1:		180	
			CFM	6,004			004	6,357	
	External Static	Max.	mmAq	8 78.5		-	3		8
	Pressure		Pa				3.5	78.5	
			-		ure Switch		ure Switch		sure Switch
	Mechanical Typ	e	-	Crank Case Heater			se Heater		se Heater
Safety				Fuse for PCB			or PCB		or PCB
Devices			-	Over Voltage Protection		Over Voltag			e Protection
	Electronic Type		-	Current Transformer		Current Tr			ransformer
			-	Fan Over Heat/Current Protector		Fan Over Heat/Current Protector			Current Protector
	Liquid		Ø,mm		52	9.52		12.70	
	<u>'</u>		Ø,inch		/8"	3/8"		1/2"	
	Gas		Ø,mm		.05		.23	-	.58
			Ø,inch	3,	/4"	7/	'8"	1 1	1/8"
Piping	Oil (Flare)		Ø,mm		-		-		-
Connections			Ø,inch		-		-		-
		Max.	m		00	20			00
	Installation	Length	ft		56		56	-	56
	Limitation	Max.	m		0	5			50
		Height	ft		64	-	54		64
	Туре		-		10A		10A		10A
Refrigerant	Factory Chargin	q	kg		.5		.5		.0
			lbs	14.4			5.5		9.8
Sound *4)					8		50		
	Net Weight		kg		40		40	-	80
			lbs		29		29		17
	Shipping Weigh	t	kg		53	-	53		97
Set Size	11 .5 19		lbs		58		58		55
_	Net Dimensions	(WxHxD)	mm		723×765		′23×765		,723×765
		,	inch		7.8×30.1		7.8×30.1		7.8×30.1
	Shipping Dimer	nsions	mm		388×832		888×832		,888×832
	(WxHxD)		inch	37.3×74	4.3×32.8	37.3×74	1.3×32.8	50×74	.3×32.8

Samsung Electronics 2-47

## **Outdoor Unit(cont.)**

#### **RVXVHT075/100/125FE(cont.)**

	Model		RVXVHT075FE/RD075VHXFA/ RD075VRXFA	RVXVHT100FE/RD100VHXFA/ RD100VRXFA	RVXVHT125FE/RD125VHXFA/ RD125VRXFA
	Capling	°C	-5 ~ 43	-5 ~ 43	-5 ~ 43
Operating	Cooling	°F	23~109	23~109	23~109
Temp. Range		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24
	Heating	°F	-4~75	-4~75	-4~75
Standard Acco	Standard Accessories		Installation Manual	Installation Manual	Installation Manual
Stanuard Acce			Drain Plug	Drain Plug	Drain Plug



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on;
  - Indoor temperature : 81°F/27°C DB, 66°F/19°C WB
  - Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB
  - Outdoor temperature : 47°F/7°C DB, 43°F/6°C WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.
- \*5) Specifications may be subject to change without prior notice for product improvement.

2-48 Samsung Electronics

## **Outdoor Unit(cont.)**

#### ■ RD040/050MHXCA

	Mod	del		RD040MHXCA	RD050MHXCA
Power Supply			ø,V,Hz	1/208~230/60	1/208~230/60
Mode			-	HP	HP
	Horse Power		HP	4	5
		G 11	kW	11.2	14.0
Performance	l	Cooling	Btu/h	36,000	48,000
	Capacity		kW	12.5	16.0
		Heating	Btu/h	40,000	54,000
		Cooling	kW	3.0	4.5
Power	Nominal input	Heating	kW	3.4	4.2
	Circuit Breaker (I		A	40	40
EER	en cure or currer (r	Cooling	-	9.6	9.0
SEER		cooming	-	13.2	13.1
HSPF			-	7.85	7.9
11311	Model		_	UG5T360FUCEKSS	UG5T450FUCEXSS
	Туре		-	Twin BLDC	Twin BLDC
	Number		EA	1	1
Compressor		nont		-	_
Compressor	Piston Displacen	nent	cc/Rev		
	Out put	Tuno	kW -		-
	Lubricant	Type			
	T/C : 1	Charging	СС	1,300	1,300
	Type/Control		-	Propeller/BLDC	Propeller/BLDC
_	Motor Output		W	130	130
Fan	Airflow Rate(C/H	1)	m³/min	97/102	97/102
	External Static	Max.	mmAq	-	-
	Pressure		Pa	-	-
	Liquid		ø, mm	9.52	9.52
	Liquid		ø, inch	3/8"	3/8"
	Gas	os .		15.88	15.88
	Gus			5/8"	5/8"
Piping	Oil (Flare)		ø, mm	-	-
Connections	Oli (Flale)		ø, inch	-	-
		Max.	m	70	70
	Installation	Length	ft	229 11/16	229 11/16
	Limitation	Max.	m	30	30
		Height	ft	98 7/16	98 7/16
	Туре		-	R410A	R410A
Refrigerant	F		kg	4.0	4.0
	Factory Charging	g	lbs	8.82	8.82
	3/8"		g/m	50	50
Refrigerant		ng to liquid piping)	oz/ft	0.54	0.54
charging	1/4"		g/m	20	20
-		ng to liquid piping)	oz/ft	0.215	0.215
			kg	108	108
	Net Weight		lbs	238.1	238.1
			kg	116	116
	Shipping Weight	t	lbs	255.7	255.7
Set Size			mm	1,128x932x375	1,128x932x375
Net Dimensions (Wxl		(WxHxD)	inch	44 13/32x36 11/16x14 3/4	44 13/32x36 11/16x14 3/4
		cione	mm	1,286x1,091x472	1,286x1,091x472
	(WxHxD)	1310113	inch	50 5/8x42 15/16x18 19/32	50 5/8x42 15/16x18 19/32
	(VVAIIAD)		°C	-5~43	-5~43
Omeret':	Cooling		°F		
Operating				23~109.4	23~109.4
Temp. Range	Heating		°C	-20~24	-20~24
			°F	-4~75.2	-4~75.2
Standard Acces	sories		-	Installation Manual	Installation Manual
			-	Drain Plug	Drain Plug



- \*1) Mode
  - HP : Heat Pump
- \*2) Norminal cooling capacities are based on;
  - Indoor temperature : 81°F/27°C DB, 66°F/19°C WB
- \*3) Norminal heating capacities are based on;
  - Indoor temperature : 70°F/20°C DB, 60°F/15°C WB - Outdoor temperature :  $47^{\circ}F/7^{\circ}C$  DB,  $43^{\circ}F/6^{\circ}C$  WB
- \*4) Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions. \*5) Specifications may be subject to change without prior notice for product improvement.

- Outdoor temperature : 95°F/35°C DB, 75°F/24°C WB

Samsung Electronics 2-49

# **2-3 Accessory and Option Specifications**

# 2-3-1 Accessories

ltem	Descriptions	Code-No.	Q'TY	Remark
	Installation Manual	DB98-31180A (RVXVHT***FE, RD***VHXFA)	1	Outdoor Unit
		DB98-32073A (RD***MHXCA)		
	Drain Plug	DB67-20011A (RVXVHT***FE, RD***VHXFA)	2	Outdoor Unit
		DB67-00477A (RD***MHXCA)		
	Drain Cap	DB63-10355C	2	Outdoor Unit
	Slim 1 way cassette panel	PSSMA	-	ND***1**** AVXCSH*** Series
	4 way cassette panel	P4SMA	-	ND***4**** AVXC4H*** Series
	mini 4 way cassette panel	PMSMAA	-	ND***M**** AVXCMH*** Series
	Global 4 way cassette pane	PC4NUSKA	-	ND***4H***
		MDP-E075SEE	-	ND020~072L**** AVXDSH020~072C* Series
4.0		MDP-E075SEE1	-	ND100~145L**** AVXDSH100~145C* Series
	Drain Pump	MDP-M075SGU1	-	ND100~100S**** AVXDUH100~110C* Series
		MDP-M075SGU2	-	ND145S**** AVXDUH145C* Series
		MDP-N047SNC1	-	ND220/280* Series
	Outdoor Joint	MXJ-T3819*	-	Below 48 HP
		MXJ-HA2512*	-	Below 160MBH (for 4 rooms)
TULL	Header Joint	MXJ-HA3115*	-	160~240MBH (for 8 rooms)
TITT		MXJ-HA3819∗	-	Over 240MBH (for 8 rooms)

2-50 Samsung Electronics

# Accessories (cont.)

Item	Descriptions	Code-No.	Q'TY	Remark
		MXJ-YA1509*	-	Below 51MBH
		MXJ-YA2512*	-	51~138MBH
		MXJ-YA2812*	-	138~160MBH
	Y-Joint	MXJ-YA2815*	-	160~240MBH
		MXJ-YA3319*	-	240~336MBH
		MXJ-YA3819*	-	336~468MBH
		MXJ-YA4422*	-	Over 468MBH
		MCU-X6NEF1	-	For 6 rooms
		MCU-X4NEF1	-	For 4 rooms
	MCU(Mode Control Unit)	MCU-X4VEF1	-	For 4 rooms (EEV included) Below 4.5MBH
		MCU-X4WEF1	-	For 4 rooms (EEV included) Over 5.6MBH
	Cinalo FFV/Vit	MEV-A13SA	-	Below 12MBH
and the	Single EEV Kit	MEV-A16SA	-	Over 18~24MBH
		MXD-A13K116A	-	Below 12MBH(1 unit) +18MBH~24MBH(1 unit)
	2 Room EEV Kit	MXD-A13K200A	-	Below 12MBH(2 units)
	2 NOOM ELV NIC	MXD-A16K200A	-	18MBH~24MBH(2 units)
		MXD-A22K200A	-	Over 24MBH(2 units)
		MXD-A13K216A	-	Below 12MBH(2 units) +18MBH~24MBH(1 units)
	2 Danie FFV/Vit	MXD-A13K300A	-	Below 12MBH(3 units)
	3 Room EEV Kit	MXD-A16K213A	-	Below 12MBH(1 unit) +18MBH~24MBH(2 units)
		MXD-A16K300A	-	18MBH~24MBH(3 units)
: ::::::::::::::::::::::::::::::::::::	Wireless Signal Receiver Kit	MRK-A00	-	Option
	Receiver Wire	MRW-10A	-	Option

Samsung Electronics 2-51

# Accessories (cont.)

ltem	Descriptions	Code-No.	Q'TY	Remark
	Wireless Remote Controller	MR-BH01U	-	Option
□ 200 = □ 200	Wired Remote Controller	MWR-WS01	-	Option
10000 10000		MWR-SH00	-	Option
	485 Interface Module	MIM-B13A	-	Option
	Ket Tag Interface Module	MIM-B02	-	Option
	External Contact Interface Module	MIM-B14	-	Option
SAMSUNG Service Samuel Service Samuel	SIM Interface Module	MIM-B12	-	Option
SAMSDIRE	Centralized Controller	MCM-A202A	-	Option
EAMSUNG	Operation Selection Switch	MCM-C200	-	Option
	DMS	MIM-D00	-	Option
	S-NET 3	MST-P3P	-	Option
	S-NET mini	MST-S3W	-	Option

2-52 Samsung Electronics

# 3. Disassembly and Reassembly

# ■ Necessary Tools

Item	Remark
+Screw Driver	
Monkey Spanner	
–Screw Driver	
Nipper	
Electric Motion Driver	
L-Wrench	

Samsung Electronics 3-1

# ■ Global 4way Cassette type

No	Parts	Procedure	Remark
1	Panel	Push the handles on both sides of the Samsung logo towards the product's interior to open the Grille.	
		Push up the green knob in the Open direction, and detach the white link from the panel. Detach the safety clip.	
		3) Remove the 2 fixed screws to remove the Control-Box Cover. (Use +Screw Driver)	
		4) Remove the Remocon-Receiver and Blade Connector Wire from the PBA. (3EA)	
		5) Push the 4 panel corners and cover downwards to remove it.	

3-2 Samsung Electronics

No	Parts	Procedure	Remark
		6) Disassemble the bolts that are assembled with the indoor unit at the 4 panel corners.	
		7) Press the Steel Hangers at both sides of the panel inwards, and rotate them 90 degrees to remove it from the indoor unit's Hock. Remove the panel from the indoor unit.	
2	Control-Box	Disconnect the Connector Wire that is connected to the indoor unit's PBA from the PBA.	
		Unscrew the 2 fixed screws on both sides of the Control Box, and disassemble the Control Box from the indoor unit. (Use +Screw Driver)	

Samsung Electronics 3-3

No	Parts	Procedure	Remark
3	Bell-Mouth	Unscrew the screw fixed on the Bell-Mouth.     (Use +Screw Driver)	
		Push the Bell-Mouth in the direction opposite to where it's installed on the Control-Box to remove it.	
4	Drain Pan	Unscrew the screws on the 4 corners of the indoor unit. (Use +Screw Driver)	
		2) Remove the Drain Pan from the indoor unit	

3-4 Samsung Electronics

No	Parts	Procedure	Remark
5	Bell-Mouth	Remove the 2 fixed screws and disconnect the white drainage hose from the Drain Pump. (Use +Screw Driver)	
		2) Remove the 2 screws and take the Drain-Hose out from the indoor unit to disassemble the transparent Drain-Hose fixed on the side of the indoor unit. (Use +Screw Driver)	
6	Evap. Temperature Sensor	Use your hand to remove the temperature sensor attached to the Evap Pipe along with the fixing clip.	

Samsung Electronics 3-5

No	Parts	Procedure	Remark
7	Fan & Motor	Turn the hexangular nut attached to the top of the Fan counterclockwise to remove it.     Take the Fan out of the Motor.	
		2) Turn the three hexangular nuts on the Motor counterclockwise to remove the nuts. Take the Motor Wires attached to these three locations out with your hands prior to removing the Motor.	
7	Evap. Temperature Sensor	1) Remove the screws of the 2 Steel Holder Evaps that are used to fix the Heat Exchanger, and then remove it. (Use +Screw Driver)	
		Remove the 2 fixing screws of the Partition     Evap at the Heat Exchanger's In/Out Pipe.     (Use +Screw Driver)	The state of the s

3-6 Samsung Electronics

No	Parts	Procedure	Remark
		3) Remove the screw of the Cover Pipe that is used to fix the In/Out Pipe.  Remove the In/Out Pipe. (Use +Screw Driver)	
		4) Remove the Heat Exchanger from the indoor unit's cabinet.	

Samsung Electronics 3-7

# **■** BIG DUCT

No	Parts	Procedure	Remark
1	MOTOR & BLOWER	1) Detach the motor connectors from the PCB.	
		2) Unscew 16 screws and detach Cabinet-Base Blower. (Use+Screw Driver)	1
		Unscrew 8 screws and detach Case-Blower.     (Use +Screw Driver)	
		4) Unscrew 4 bolts and separate Motor & blower from Bracket-Motor. (Use +Screw Driver)	

3-8 Samsung Electronics

No	Parts	Procedure	Remark
		5) Unscrew bolt and Separate Blower from the motor. (Use +Screw Driver)	
2	EVAPORATOR & DRAIN-PAN	Detach EEV and Sensor connectors from the PCB. (Use +Screw Driver)	
		Unscrew 8 screws and Detach Cover-Pipe. (Use +Screw Driver)	
		3) Unscrew 31 screws and detach Cabinet- Base Blower andCabinet-Base Drain. (Use +Screw Driver)	

Samsung Electronics 3-9

No	Parts	Procedure	Remark
		4) Unscrew 10 screws and detach Drain-Pan from the indoor unit. (Use +Screw Driver)	
			000
		5) Separate Evaporator from the indoor unit.	

3-10 Samsung Electronics

# ■ RVXVHT075/100FE, RD075/100VHXFA, RD075/100/120VRXFA

No	Parts	Procedure	Remark
1	Common In	Remove fixing screw from the Cabinet.     (Use +Screw Driver)	SAMSUNG O O O
		2) Separate the Cabinet from the Outdoor Unit.	SAMSUNG
			SAMSUNG

Samsung Electronics 3-11

No	Parts	Procedure	Remark
		Separate the Electrical Component Box from the Outdoor Unit.	
			SAMSUNG
2	Motor & Fan	Remove fixing screw from the Bell Mouth. (Use +Screw Driver)	
		<ol> <li>Separate the Bell Mouth.</li> <li>Remove fixing bolt from the Fan.</li> <li>Separate the Fan from the Outdoor Unit.</li> <li>Remove fixing screw and after removing screws, separate the Motor.</li> </ol>	

3-12 Samsung Electronics

# ■ RVXVHT125FE, RD125VHXFA, RD125VRXFA

No	Parts	Procedure	Remark
1	Common In	Remove fixing screw from the Cabinet. (Use +Screw Driver)	O O O
		Separate the Cabinet from the Outdoor Unit.	AMSUNG COOK
			SAMSUNG

No	Parts	Procedure	Remark
		Separate the Electrical Component Box from the Outdoor Unit.	SAMSUNG

3-14 Samsung Electronics

No	Parts	Procedure	Remark
2	Motor & Fan	Remove fixing screw from the Bell     Mouth. (Use +Screw Driver)	
		<ol> <li>Separate the Bell Mouth.</li> <li>Remove fixing bolt from the Fan.</li> <li>Separate the Fan from the Outdoor Unit.</li> <li>Remove fixing screw and after removing screws, separate the Motor.</li> </ol>	

# ■ RD040/050MHXCA

No	Parts	Procedure	Remark
1	General tasks	Stop operating the machine.     Disassemble the main power cable.	SAMSUNG.
		Unfasten the two fixing bolts and remove the right-front board.	
		3) Unfasten the eight fixing bolts and remove the upper cover. (Use +Screw Driver)	
		4) Unfasten the three bolts fixing the electrical control box to the right rear plate. (Use +Screw Driver)	
		5) Unfasten the twelve bolts and remove the right rear plate. (Use +Screw Driver)	

3-16 Samsung Electronics

No	Parts	Procedure	Remark
		6) Unfasten the two bolts and disassemble the column. (Use +Screw Driver)	
		7) Unfasten the eleven bolts and disassemble the front board. (Use +Screw Driver)	
2	Fan and electricity	Unfasten the flange nut to remove the fan.     (Refer to the right figure.)     (Use Monkey Spanner.)	
		Unfasten the four fixing bolts and remove the electrical machinery. (Use Monkey Spanner.)	
		3) Disassemble the electrical cable. The white plug is for the upper part. The blue plug is for the lower part.	

No	Parts	Procedure	Remark
		4) Unfasten the two fixing bolts to disassemble the electricity support. (Use +Screw Driver)	
3	Disassemble the electrical control box.	Disassemble the parts for the electrical control panel.	
		Push the buckle to loosen the three black cable ties.	
		3) Cut the white cable tie.	
		4) Unfasten the two fixing bolts between the electrical control box and the central separation plate. (Use +Screw Driver)	

3-18 Samsung Electronics

No	Parts	Procedure	Remark
		5) Unfasten the two ground bolts.	
		6) Lift the electrical control box and push it outward.	
4	Disassemble the electrical control box. (Inverter board)	1) Disassemble the left-front board.	
		Unfasten the one fixing bolt on the fixing board below the electrical control box and the left-rear board.	
		3) Unfasten the one fixing bolt on the fixing board below the electrical control box and the central separation plate. (Use +Screw Driver)	

No	Parts	Procedure	Remark
		4) Unfasten the two fixing bolts on the fixing board below the inverter control box and the electrical control box. (Use +Screw Driver)	
		5) Use a wrench to cut the cable tie.	
		6) Unplug the power cable for the compressor.	
		7) Disassemble the fixing plate below the electrical control box.	
		8) Unfasten the fixing bolt for the inverter control box and the right-rear board. (Use +Screw Driver)	

3-20 Samsung Electronics

No	Parts	Procedure	Remark
		9) Push the fixing buckle with your thumb to disassemble the black cable tie of the control box.	
		10) Use a knife to cut off the cable tie. Unfasten the two bolts fixing the harness.	
		11) Unfasten the two bolts in the lower area of the metering device and disassemble the harness. (Use +Screw Driver)	
		12) Disassemble the plug for the reactor connection cable.	
		13) Unfasten the one bolt fixing the inverter control box and the central separation board. (Use +Screw Driver)	

No	Parts	Procedure	Remark
		14) Unfasten the four bolts fixing the main control box and the inverter control box. (Use +Screw Driver)	
		15) Pull out the inverter control box to separate it.	
		16) Finish disassembling the control box.	
5	Heat exchanger and compressor	Discharge all the coolants.     Unfasten the fixing bolts of the blocking valve. (Use +Screw Driver)	
		<ul><li>3) Using a welding machine, disassemble the inlet and outlet pipes.</li><li>4) Disassemble the heat exchanger.</li></ul>	

3-22 Samsung Electronics

No	Parts	Procedure	Remark
		<ul><li>5) Remove the noise protection sponge in the external layer.</li><li>6) Remove the noise protection sponge in the internal layer.</li></ul>	
		<ul><li>7) Unfasten the bolts fixing the electrical box for the compressor. (Use Monkey Spanner.)</li><li>8) Disassemble the power cable for the compressor.</li></ul>	
		<ul><li>9) Unfasten the three bolts on the compressor leg. (Use Monkey Spanner.)</li><li>10) Disassemble the compressor.</li></ul>	

# 4. Troubleshooting

# **4-1 Setting Option Setup Method**

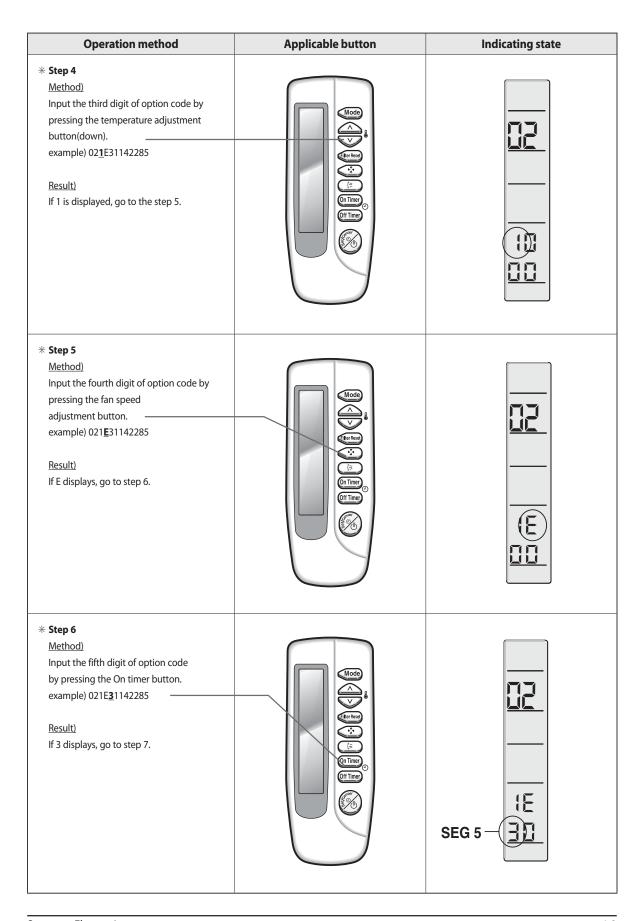
# 4-1-1 PCB option code input method

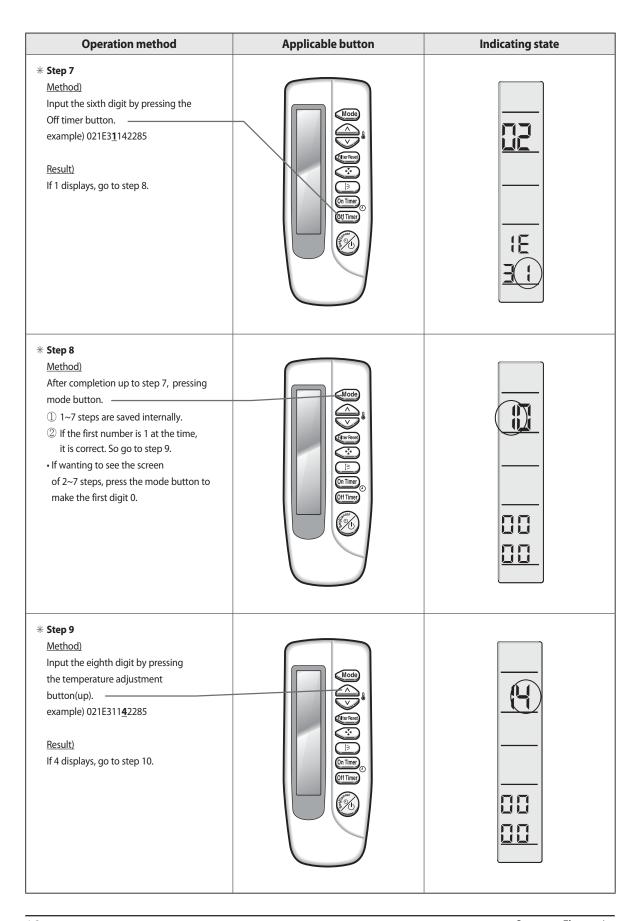
# 4-1-1-1 example: 021E31142285

Be sure to input the option code suitable for the indoor unit by use of wireless remote controller after replacing the PCB of indoor unit. Follow to do the following 15 steps sequentially.

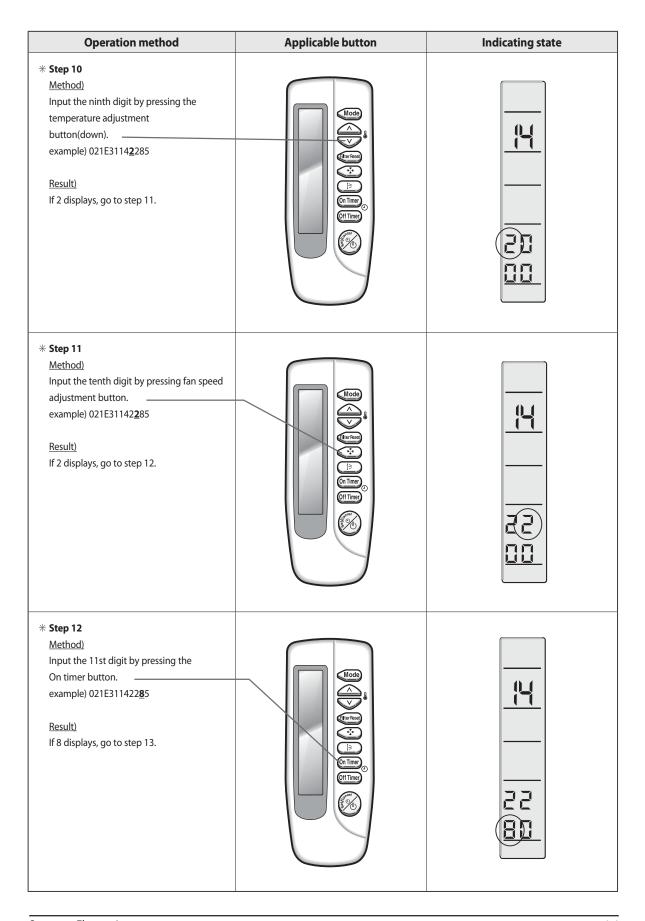
Operation method	Applicable button	Indicating state
* Step 1  Method)  ① Remove the battery of remote controller.  ② Push the temperature adjustment button simultaneously.  ③ Insert the battery.  Result)  When the display of remote controller is indicated as shown in the right, then go to the step 2.	The river (m) Times (m) Ti	
* Step 2  Method)  If the first digit of remote controller shows "0", go to the step 3.  If it shows 1, press the Mode button one time to change it into 0 and then go to step 3.	Mode State Property Continues Contin	
* Step 3  Method) Input the second digit of option code by pressing the temperature adjustment button(up). example) 021E31142285  Result) If 2 is displayed, go to the step 4 (whenever pressing the button, 1~9, A,B,C,D,E,F are lit in order.)	Thode  Thode  Thode  Thode  Therefore  There	

4-1 Samsung Electronics





4-3 Samsung Electronics



Operation method	Applicable button	Indicating state
* Step 13  Method) Input the 12th digit by pressing the Off timer button. example) 021E31142285  Result) If 5 displays, go to step 14.	Mode A Section France Contract of Times Contract	
* Step 14  Method)  Turn the remote controller toward the indoor unit and press the On/Off button, and if the "Ting" or "Tiriring" sounds, the input of option is completed.  If error displays, solve the problem with reference to the right side.	Mode Carlot Mode C	■ Error  ① If the On/Off, Timer and Fan indicator is flickering, the wrong option code is input. Put off the power of indoor unit and turn it on again and then input the option code again. If the same error occurs, it is the EEPROM is defective or not inserted. Replace the PCB. ② If all of On/Off, Timer, Fan and Filter Sign indicator are flickering along with the "Tiriring" sound, there is option code already input which are different from the current ones. Check the option code and press the button again if correct. Option code will be
** Step 15  Method)  If the steps 1 to 14 are completed, remove the battery and insert it again to return to the original display of remote controller.  (Operation mode/SET TEMP.  /fan speed displays.)	rear side	input.(Check the option code correctly. At the time, if the same error continues to occur, the option code is out of input range. Check the option code again and repeat the step 1~14.

4-5 Samsung Electronics

#### PCB option code input method(cont.)

#### 4-1-1-2 example: 066064-170373

#### ■ AVXWVH\*\*\*C\*/ND\*\*\*V\*\*\*\*

#### Step 1: Enter the Option Setup mode.

1st Take out the batteries of remote control.

2<sup>nd</sup> Press the temperature button simultaneously and insert the battery again.

 $3^{rd}$  Make sure the remocon display shown as  $\begin{array}{cc} 00 \\ 00 \\ \end{array}$ 



#### Step 2: Enter the Option Setup mode and select your option according to the following procedure.



The default value is 0000000 Otherwise, push the 00000000 button to 000000.

Every time you push the button, the display panel reads 000000000 repeatedly.

Push the  $\bigcirc$  button to set the display panel to  $\delta$ .

Every time you push the button, the display panel reads  $0 \rightarrow 1 \rightarrow 2 \rightarrow 3 \rightarrow \cdots \rightarrow 3 \rightarrow 8 \rightarrow 6 \rightarrow 6 \rightarrow 6 \rightarrow 6 \rightarrow 7$  repeatedly.

Push the  $\bigcirc$  button to set the display panel to  $\mathcal{E}$ .

Every time you push the button, the display panel reads  $\mathcal{Q} \rightarrow \mathcal{C} \rightarrow \mathcal{C} \rightarrow \mathcal{C}$   $\rightarrow \cdots \mathcal{C} \rightarrow \mathcal$ 

Push the button to set the display panel to G.

Every time you push the button, the display panel reads  $G \rightarrow I \rightarrow Z \rightarrow 3$   $A \rightarrow B \rightarrow B \rightarrow C \rightarrow C \rightarrow C \rightarrow E \rightarrow F$  repeatedly.

Push the  $\stackrel{\circ}{\longrightarrow}$  button to set the display panel to  $\mathcal{S}$ .

Every time you push the button, the display panel reads  $\mathcal{G} \rightarrow \mathcal{I} \rightarrow \mathcal{Z} \rightarrow \mathcal{J}$   $\rightarrow \cdots \mathcal{G} \rightarrow \mathcal{R} \rightarrow \mathcal{B} \rightarrow \mathcal{C} \rightarrow \mathcal{C} \rightarrow \mathcal{C} \rightarrow \mathcal{E} \rightarrow \mathcal{F}$  repeatedly.

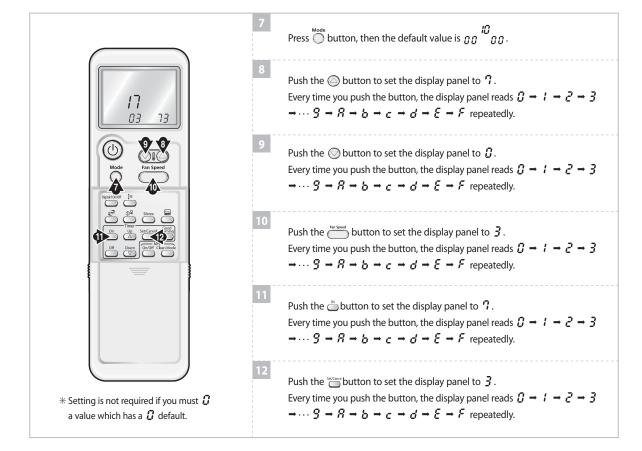
Push the button to set the display panel to  ${}^{\prime}$ . Every time you push the button, the display panel reads  ${}^{\prime}$   $\rightarrow$   ${}^{\prime}$  repeatedly.

\* Setting is not required if you must \( \mathcal{G} \)

a value which has a \( \mathcal{G} \) default.

Push the button to set the display panel to \( \mathcal{G} \).

Every time you push the button, the display panel real



#### Step 3: Upon completion of the selection, check you made right selections.

Press the Mode Selection key,  $\bigcap^{\mathsf{Mode}}$  to set the display part to  $\mathcal{I}$  and check the display part.

 $\Rightarrow$  The display part shows  $\mathcal{Q}_{\mathcal{S}\mathcal{Q}}$ 

Press the Mode Selection key, to set the display part to and check the display part.

#### Step 4: Pressing the ON/OFF button ((1))

When pressing the operation ON/OFF key with the direction of remote control for unit, the sound "Ding" or "Diriring" is heard and the OPERATION ICON( $\approx$ ) lamp of the display is flickering at the same time, then the input of option is completed. (If the diriring sound isn't heard, try again pressing the ON/OFF button.)

#### Step 5: Unit operation test-run

**First,** Remove the battery from the remote control.

**Second,** Re-insert the battery into the remote control.

Third, Press ON/OFF key with the direction of remote control for set.

#### • Error Mode

1<sup>5t</sup> If all lamps of indoor unit are flickering, plug out, plug in power plug again and press the ON/OFF key to retry.

2<sup>nd</sup> If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for its model.

4-7 Samsung Electronics

# PCB option code input method(cont.)

#### 4-1-1-3 example:660157022E

#### ■ AVXWNH\*\*\*C\*/ND\*\*\*N\*\*\*\*

#### Step 1 : Enter the Option Setup mode.

1st Take out the batteries of remote control.

2<sup>nd</sup> Press the temperature button simultaneously and insert the battery again.

3<sup>rd</sup> Make sure the remocon display shown as





Step 2: Enter the Option Setup mode and select your option according to the following procedure.

	Feature	Display
	Setting Option SEG1.  Push the $\nabla$ button to set the display panel to $\mathcal{S}$ .  Every time you push the button, the display panel reads $\mathcal{G} \rightarrow \mathcal{I} \rightarrow \mathcal{Z} \rightarrow \mathcal{J}$ $\rightarrow \cdots \mathcal{G} \rightarrow \mathcal{R} \rightarrow \mathcal{b} \rightarrow \mathcal{c} \rightarrow \mathcal{d} \rightarrow \mathcal{E} \rightarrow \mathcal{F}$ repeatedly.	60 ***
文 文 文 文 Turbo Power  Lith.②	Setting Option SEG2.  Push the $\triangle$ button to set the display panel to $\mathcal{E}$ .  Every time you push the button, the display panel reads $\mathcal{G} \rightarrow \mathcal{I} \rightarrow \mathcal{E} \rightarrow \mathcal{F}$ $\rightarrow \cdots \mathcal{G} \rightarrow \mathcal{R} \rightarrow \mathcal{B} \rightarrow \mathcal{C} \rightarrow \mathcal{C} \rightarrow \mathcal{E} \rightarrow \mathcal{F}$ repeatedly.	€ <b>*5</b> 5
Mode 3 Tenip. 14-7   2-25 Fan Energy Saving	Change it into the set display of Option SEG3 and SEG4 with the object button.	© <b>₹ ₹ ₹ ₹ ₹</b>
Set/Cancel   Off 3   Off 3	Setting Option SEG3.  Push the $\nabla$ button to set the display panel to $G$ .  Every time you push the button, the display panel reads $G \rightarrow I \rightarrow Z \rightarrow 3$ $\rightarrow \cdots \rightarrow G \rightarrow B \rightarrow b \rightarrow c \rightarrow d \rightarrow E \rightarrow F$ repeatedly.	*• • • • •
SAMSUNG 5	Setting Option SEG4.  Push the $\triangle$ button to set the display panel to $1$ .  Every time you push the button, the display panel reads $G \rightarrow 1 \rightarrow 2 \rightarrow 3 \rightarrow \cdots \rightarrow 3 \rightarrow 8 \rightarrow 6 \rightarrow 6$	© <b>₹</b>

	Feature	Display
	Change it into the set display of Option SEG5 and SEG6 with the ⊕ button.	# <b>(00</b>
	Setting Option SEG5.  Push the $\nabla$ button to set the display panel to $\mathcal{S}$ .  Every time you push the button, the display panel reads $\mathcal{D} \rightarrow \mathcal{I} \rightarrow \mathcal{E} \rightarrow \mathcal{S}$ $\rightarrow \cdots \mathcal{S} \rightarrow \mathcal{R} \rightarrow \mathcal{b} \rightarrow \mathcal{c} \rightarrow \mathcal{d} \rightarrow \mathcal{E} \rightarrow \mathcal{F}$ repeatedly.	. 5 <i>u</i>
Turbo Power	Setting Option SEG6.  Push the $\triangle$ button to set the display panel to $7$ .  Every time you push the button, the display panel reads $0 \rightarrow 1 \rightarrow 2 \rightarrow 3$ $\rightarrow \cdots 9 \rightarrow 8 \rightarrow b \rightarrow c \rightarrow d \rightarrow \mathcal{E} \rightarrow \mathcal{F}$ repeatedly.	\$ <b>57</b>
Fan Energy Saving	Change it into the set display of Option SEG7 and SEG8 with the button.	© # # # # # #
Flap good'sleep 1	Setting Option SEG7.  Push the $\nabla$ button to set the display panel to $G$ .  Every time you push the button, the display panel reads $G \rightarrow I \rightarrow Z \rightarrow 3$ $\rightarrow \cdots \  \   \mathcal{S} \rightarrow \mathcal{S} \rightarrow \mathcal{B} \rightarrow \mathcal{C} \rightarrow \mathcal{C} \rightarrow \mathcal{C} \rightarrow \mathcal{E} \rightarrow \mathcal{F}$ repeatedly.	6 * * * *
	Setting Option SEG8.  Push the $\triangle$ button to set the display panel to $\mathcal{C}$ .  Every time you push the button, the display panel reads $\mathcal{D} \rightarrow \mathcal{C} \rightarrow \mathcal{C} \rightarrow \mathcal{C}$ $\rightarrow \cdots \mathcal{C} \rightarrow $	# # # # # # # # # # # # # # # # # # #
Turbo Power  Hr.© Mode  Tenip.	Change it into the set display of Option SEG9 and SEG10 with the book button.	@ <b>00</b>
	Setting Option SEG9.  Push the $\nabla$ button to set the display panel to $\mathcal{C}$ .  Every time you push the button, the display panel reads $\mathcal{G} \rightarrow \mathcal{I} \rightarrow \mathcal{C} \rightarrow \mathcal{J}$ $\rightarrow \cdots \mathcal{G} \rightarrow \mathcal{B} \rightarrow \mathcal{C} \rightarrow \mathcal{C} \rightarrow \mathcal{C} \rightarrow \mathcal{E} \rightarrow \mathcal{F}$ repeatedly.	~ <b>7</b> 11
	Setting Option SEG10.  Push the $\triangle$ button to set the display panel to $\mathcal{E}$ .  Every time you push the button, the display panel reads $\mathcal{G} \rightarrow \mathcal{E} \rightarrow \mathcal{E} \rightarrow \mathcal{E} \rightarrow \mathcal{E}$ repeatedly.	# <b>7</b>

4-9 Samsung Electronics

#### Step 3: Upon completion of the selection, check you made right selections.

Whenever you press the  $\bigcap^{MODE}$  button, the set Option will be displayed.

#### Step 4: Pressing the ON/OFF button ( (1))

When pressing the operation ON/OFF key with the direction of remote controller for unit, the sound "Ding" is heard and the OPERATION LED lamp is flickering at the same time, then the input of option is completed. (If the "ding" sound isn't heard, try again pressing the ON/OFF button.)

#### Step 5: Unit operation test-run

First, Remove the battery from the remote controller.

**Second,** Re-insert the battery into the remote controller.

Third, Press ON/OFF ( (1)) key with the direction of remote controller for set.

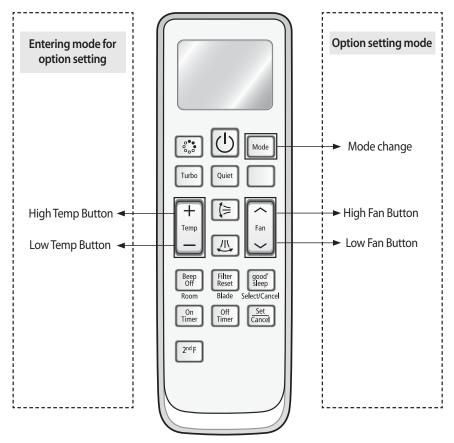
#### • Error Mode

- 1st If all lamps of indoor unit are flickering, Plug out, plug in power plug again and press ON/OFF key to retry.
- 2<sup>nd</sup> If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for its model.

#### 4-1-2 Setting an indoor unit address and installation option

Set the indoor unit address and installation option with remote controller option.
Set the each option separately since you cannot set the ADDRESS setting and indoor unit installation setting option at the same time. You need to set twice when setting indoor unit address and installation option.

#### 4-1-2-1 The procedure of option setting



#### Step 1. Entering mode to set option

- 1. Remove batteries from the remote controller.
- $2. \ \underline{\textbf{Insert batteries and enter the option setting mode while pressing High Temp button and Low Temp button.}$



Check if you have entered the option setting status.

#### Step 2. The procedure of option setting

After entering the option setting status, select the option as listed below.



Option setting is available from SEG1 to SEG 24

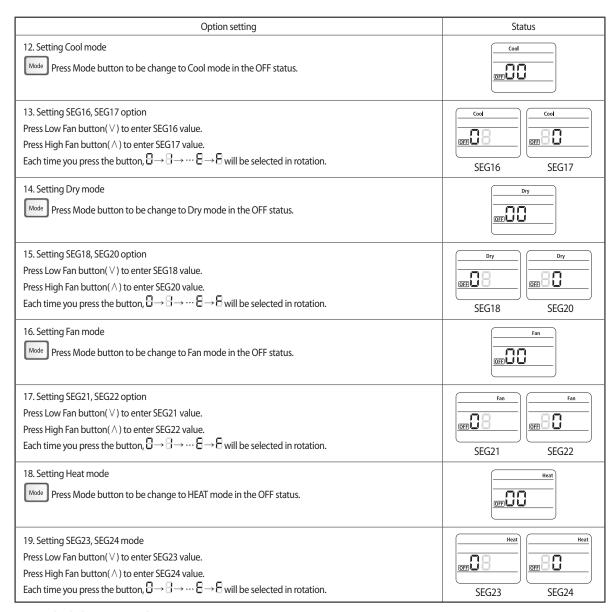
- SEG1, SEG7, SEG13, SEG19 are not set as page option.
- Set the SEG2~SEG6, SEG8~SEG12 as ON status and SEG14~18, SEG20~24 as OFF status.

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
0	Х	Х	Χ	Χ	Х	1	Χ	Х	Х	Χ	Χ
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18	SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
2	Χ	Х	Χ	Χ	Х	3	Χ	Х	Х	Χ	Χ



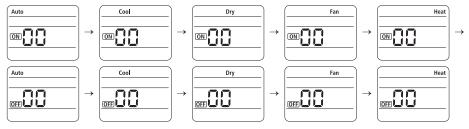
4-11 Samsung Electronics

Option setting	Status
1. Setting SEG2, SEG3 option	Auto
Press Low Fan button( $\vee$ ) to enter SEG2 value.	
Press High Fan button( $\land$ ) to enter SEG3 value.	
Each time you press the button, $B \to B \to \cdots B \to B$ will be selected in rotation.	SEG2 SEG3
2. Setting Cool mode	Cool
Press Mode button to be changed to Cool mode in the ON status.	
3. Setting SEG4, SEG5 option	Cool
Press Low Fan button( $\lor$ ) to enter SEG4 value.	
Press High Fan button( $\land$ ) to enter SEG5 value.	
Each time you press the button, $\Box \to \Box \to \cdots \Box \to \Box$ will be selected in rotation.	SEG4 SEG5
4. Setting Dry mode	Dry
Press Mode button to be changed to DRY mode in the ON status.	
5. Setting SEG6, SEG8 option	Dry Dry
Press Low Fan button( $\lor$ ) to enter SEG6 value.	
Press High Fan button( $\land$ ) to enter SEG8 value.	
Each time you press the button, $B \to B \to \cdots B \to B$ will be selected in rotation.	SEG6 SEG8
6. Setting Fan mode	Fan
Press Mode button to be changed to FAN mode in the ON status.	
7. Setting SEG9, SEG10 option	Fan Fan
Press Low Fan button( $\vee$ ) to enter SEG9 value.	
Press High Fan button( $\land$ ) to enter SEG10 value.	
Each time you press the button, $\Theta \to \Theta \to \Theta$ will be selected in rotation.	SEG9 SEG10
8. Setting Heat mode	Heat
Press Mode button to be changed to HEAT mode in the ON status.	
9. Setting SEG11, SEG12 option	Heat Heat
Press Low Fan button( $\lor$ ) to enter SEG11 value.	
Press High Fan button( $\land$ ) to enter SEG12 value.	
Each time you press the button, $\Box \to \Box \to \cdots \Box \to \Box$ will be selected in rotation.	SEG11 SEG12
10. Setting Auto mode	Auto
Press Mode button to be changed to AUTO mode in the OFF status.	OFF
11. Setting SEG14, SEG15 option	Auto
Press Low Fan button(∨) to enter SEG14 value.	OFF OFF
Press High Fan button( $\land$ ) to enter SEG15 value.	OFF U
Each time you press the button, $B \to B \to \cdots B \to B$ will be selected in rotation.	SEG14 SEG15



#### Step 3. Check the option you have set

After setting option, press Mode button to check whether the option code you input is correct or not.



#### Step 4. Input option

Press operation button with the direction of remote control for set.

For the correct option setting, you must input the option twice.

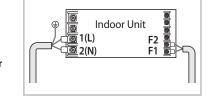
#### Step 5. Check operation

- 1. Reset the indoor unit by pressing the RESET button of indoor unit or outdoor unit.
- 2. Take the batteries out of the remote controller and insert them again and then press the operation button.

4-13 Samsung Electronics

#### 4-1-2-2 Setting an indoor unit address (MAIN/RMC)

- 1. Check whether power is supplied or not.
  - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
- 2. The panel(display) should be connected to an indoor unit to receive option.
- Before installing the indoor unit, assign an address to the indoor unit according to the air conditioning system plan.
- 4. Assign an indoor unit address by wireless remote controller.
  - The initial setting status of indoor unit ADDRESS(MAIN/RMC) is "0A0000-100000-200000-300000".



Option N	lo.: 0AXXXX-1XXXX	X-2XXXXX-3XXXXX	
Option	SEG1	SEG2	

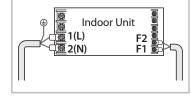
Option	SEG	1	SEG	2		SEG3	SEG	4	SEG5		SEG6	
Explanation	PAG	E	MOE	DΕ	Setting	Main address	100-digit of indoor unit address		10-digit of indoor unit		The unit digit of an indoor unit	
Remote Controller Display			Auto		Auto	18	Cool		Cool		Dry ON CON	
	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
Indication and Details	0	0 A			0	No Main address	0~9	100	0~9	10-digit	0~9	A unit
	U		A		1	Main address setting mode	0~9	-digit	0~9		0~9	digit
Option	SEG	7	SEG	8	SEG9		SEG10		SEG11		SEG12	
Explanation	PAG	E			Setting	RMC address			Group char	nnel(*16)	Group address	
Remote Controller Display					Fan ON Fan					Heat	eat ON B	
	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
Indication	1				0	No RMC address						
and Details					1	RMC address setting mode			RMC1	0~2	RMC2	0~F



- When "A"~"F" is entered to SEG5~6, the indoor unit MAIN ADDRESS is not changed.
- $\bullet \quad \text{If you set the SEG 3 as 0, the indoor unit will maintain the previous MAIN ADDRESS even if you input the option value of SEG5 $\sim$6.}$
- If you set the SEG 9 as 0, the indoor unit will maintain previous RMC ADDRESS even if you input the option value of SEG11~12.

#### 4-1-2-3 Setting an indoor unit installation option(suitable for the condition of each installation location)

- 1. Check whether power is supplied or not.
  - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
- 2. The panel(display) should be connected to an indoor unit to receive option.
- 3. Set the installation option according to the installation condition of an air conditioner.
  - The default setting of an indoor unit installation option is "02000-100000-200000-300000".
  - Individual control of a remote controller (SEG20) is the function that controls an indoor unit individually when there is more than one indoor unit.
- 4. Set the indoor unit option by wireless remote controller.



SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	2	RESERVED	Exterior temperature sensor	Central control	FAN RPM compensation
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	Drain pump	Hot water heater	Electronic heater	Opening the electronic expansion valve	Master / Slave
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	External control	External control output	S-Plasma ion	Buzzer	Number of hours using filter
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	Individual control of a remote controller	Heating setting compensation	EEV opening of an indoor unit stopped during oil return or Defrost operation.	-	Human sensor

- ▶ 1WAY/2WAY/4WAY MODEL: Drain pump(SEG8) will be set to 'USE + 3minute delay' even if the drain pump is set to 0.
- ▶ 1 WAY/2WAY/4WAY, DUCT MODEL: Number of hours using filter(SEG18) will be set to '1000hour' even if the SEG18 is set to exept for 2 or 6.
- ▶ If you input a number other than 0~4 of the individual control of the indoor unit(SEG20), the indoor is set as "indoor 1".

Option No.: 02XXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG	1	SEC	G2	SEG3		SEG4			SEG5	SEG6							
Explanation	PAG	E	МО	DE	Use of robot cleaning			Use of external temperature sensor		of central control	FAN RPM compensation							
Remote Controller Display			Auto		Auto ON B		Cool		0	Cool	ON Dry							
	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details						
Indication and Details	0		2		0	Disuse	0	Disuse	0	Disuse	1	Disuse RPM compensation						
					1	Use	1	Use	1	Use	2	High ceiling KIT						
Option	SEG	7	SEC	<b>3</b> 8	SEG9		SEG10			SEG11	SE	G12						
Explanation	PAG	E	Use of dra	in pump	Use of hot water heater		Use of electronic heater		expansion	ning the electronic valve of an indoor unit ating operation stops.	Master / Slave							
Remote Controller Display			ON			Fan		Fan		Heat	(ON) Heat							
	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details						
			0	Disuse	0	Disuse	0	Disuse	0	0	0	slave						
Indication and Details	1					Use	1	Use	1	Use	1	80	1	master				
and Details	1		1		1		1		2	Use + 3minute delay								

4-15 Samsung Electronics

Option	SEG1	13	SEG14 SEG15 SEG16		i16		SEG17	SEG18																	
Explanation	PAG	iΕ	Use of e		Setting the output of external control		S-Plasn	S-Plasma ion		uzzer control	Number of hours using filter														
Remote Controller Display		Auto			Auto OFF B		Cool		O	Cool	OFF B														
	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details													
			0	Disuse	0	Thermo on	0	Disuse	0	Mixed operation control1/ Use buzzer	2	1000 Hour													
Indication and Details	2		1	ON/OFF					1	Mixed operation control1/ Disuse of buzzer															
			'	Control	1	Operation on	1	Use	2	Mixed operation control2/ Use buzzer	6	2000 Hour													
			2	OFF Control					3	Mixed operation control2/ Disuse of buzzer															
Option	SEG1	19	SEC	520	SEG21		SEG22			SEG23	SE	G24													
Explanation	PAG	iΕ	Individual a remote		Heating setting compensation		EEV opening of an indoor unit stopped during oil return or defrost operation.				Huma	n sensor													
Remote Controller Display		Dry OFF B		OFF BE	Heat OFF		Fan		Heat	Heat OFF)															
	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details													
Indication		3		3								'			0 or 1		channel 1	<b>⊣</b> ∪	Disuse	0	150 step			8	Disuse
and Details	3 2 channel 2 3 channel 3					nnel 2	1 0 step				9	Use													
			4 channel 4		2	5°C																			

# 4-1-2-4 Changing a particular option

You can change each digit of set option.

Option	SEG1 SEG2		62	SEC	SEG3		SEG4		SEG5		66	
Explanation	PAC	GE	MOI	DE	The option mode you want to change		The tens' digit of an option SEG you will change		The unit digit of an option SEG you will change		The changed value	
Remote Controller Display		Auto		Auto		Cool		Cool		Dry  ON P		
	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
Indication and Details	0		D		Option mode	0~F	Tens' digit of SEG	0~9	Unit digit of SEG	0~9	The changed value	0~F



- When changing a digit of an indoor unit address setting option, set the SEG3 as 'A'.
   When changing a digit of indoor unit installation option, set the SEG3 as '2'.

Ex) When setting the 'buzzer control' into disuse status.

Option	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
Explanation	PAGE	MODE	The option mode you want to change	The tens' digit of an option SEG you will change	The unit digit of an option SEG you will change	The changed value
Indication	0	D	2	1	7	1

# 4-1-3 Option Items

Troubleshooting

MID AMERICA   USA   STECK   ND0231HXCA   AVXCSH032CE   O	_				NEGO	,	2 2 6 4 9	9 9 9	2		8 38	2 0 2 0 2 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0	0 0	0 0	0 0	0 0	3 3	3	,	7	<del>,</del>	ESP (mmAq)
ND0321HXCA   AVXCSH023CE     ND0401HXCA   AVXCSH03CE     ND0401HXCA   AVXCMH03CE     ND052MHXCA   AVXCMH06CE     ND052MHXCA   AVXCMH06CE     AVXCH05CE     AVXCH05CE     AVXCH10CE     AVXCH10CE     AVXCH110CE     AV					2 2 4 4 4 4 7 7 7 7		2 4	9 9 9	0 0 0					0 0	0	0	3	0				
ND0321HXCA   AVXCSH032CE     ND032MHXCA   AVXCMH032CE     ND052MHXCA   AVXCMH060CE     ND052MHXCA   AVXCMH060CE     AVXCH060CE     AVXCH106CC     AVXCH110CC     AVXCH10CC     AVXCH10CC			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		2 2 4 4 4 7 7 7		4 9	9 9	0 6					0	-	0	0					
ND0401HXCA   AVXCSH040CE     ND052MHXCA   AVXCMH040CE     ND052MHXCA   AVXCMH060CE     ND052MHXCA   AVXCMH060CE     AVXCH060CE     AVXCH060CE     AVXCH10CC     AVXCH110CC     AVXCH10CC     AVXCH1			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		2 4 4 4 7 7 7 7		9	9	r		.,	_	_	_	>	,	n	0	0	0	0	
ND032MHXCA   AVXCMH032CE     ND060MHXCA   AVXCMH040CE     ND062MHXCA   AVXCMH060CE     AVXCH052CE     AVXCH052CE     AVXCH10CE     AVXCH10CE     AVXCH110CE     AVXCH10CE     AVXCH10CC     AVXCH10					4 4 4 7 7 7			_	7	2	P	2 0	0	0	0	0	3	0	0	0 0	0 0	
ND052MHXCA   AVXCMH040CE     ND052MHXCA   AVXCMH052CE     ND06-			000000000000000000000000000000000000000		4 4 4 7 7 7	Į,	2	4	0	q	.,	2 0	0	0	0	0	3	0	0	0	0 0	
ND052MHXCA   AVXCMH052CE				7 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	4 4 7 7 7	_	8	4	0	q	3	2 0	0	0	0	0	3	0	0	0	0 0	
ND052HXCA   AVXCAH060CE				8	4	-	q	4	0	q	3	2 0	0	0	0	0	3	0	0	0	0 0	
ND0321HXCB   ND0			1000			-	U	4	0		-	2 0	0	0	0	0	8	0	0	0	0 0	
ND0224HXCB   ND0224HXCB   ND0224HXCB   ND0224HXCB   ND0324HXCB   ND0324HXCB   ND0324HXCB   ND0321HXCB   ND0			000000000000000000000000000000000000000		7 7	-	q	0	0	U	80	2 0	0	0	0	0	3	0	0	0	0 0	
ND0524HXCB   ND0524HXCB   ND0524HXCB   ND0724HXCB   ND0			000000000000000000000000000000000000000		7	-	p	0	0	ш	6	2 0	0	0	0	0	3	0	0	0	0 0	
ND0324HXCA			0 0 0 4 4 7 7 7 9 9		7	-	0	0	2	0	a a	2 0	0	0	0	0	3	0	0	0	0 0	
ND0324HXCA			0 0 V V V V V V V V V V V V V V V V V V			-	2	0	2	2	ш	2 0	0	0	0	0	3	0	0	0	0 0	
ND0324HXCA			0 0 V V V V V V V V V V V V V V V V V V		7	-	3	0	3	4	0	2 0	0	0	0	0	3	0	0	0	0 0	
ND0724HXCA       ND1004HXCA       ND1524HXCA       ND0524HXCB       ND0724HXCB       ND1004HXCB       ND1104HXCB       ND1324HXCB       ND1324HXCB       ND104HXCB       ND104HXCB       ND0321HXCA   AVXDSH03CE			0 0 V A A A Z		7	-	Ф	0	0	U	8	2 0	0	0	0	0	3	0	0	0	0 0	
ND0524HXCA     ND0524HXCA     .   ND0724HXCB     .   .   .   .     .     .     .			4 4 4 0 0		7	-	p	0	0	ш.	6	2 0	0	0	0	0	3	0	0	0	0 0	
ND0524HXCA     ND0524HXCA     .   .   .   .   .   .   .   .	0 0 0 0 0 0 0		<b>4 4 0 0</b>		7	-	0	0	2	0	٩	2 0	0	0	0	0	8	0	0	0	0	
ND0524HXCB     .   .   .   .   .   .   .   .			4 0 0 F	-	7	-	2	0	2	2	ш	2 0	0	0	0	0	3	0	0	0	0 0	
ND0724HXCB	0 0 0 0 0 0		0 0	-	7	-	9	0	9	4	0	2 0	0	0	0	0	3	0	0	0	0 0	
ND0724HXCB	0 0 0 0 0		0	7	ш	-	2	9	0	6	7	2 3	e	4		4	2	0	0	0	8 0	
ND0724HXCB	0 0 0 0			-	0	1	0	0	0	0	0	2 0	0	0	0	0	3	0	0	0	0 0	
ND0724HXCB	0 0 0	3	0	0	0	-	0	0	0	0	0	2 0	0	0	0	0	3	0	0	0	0 0	
ND1324HXCB	0 0	1 4	0	7	ш	-	2	9	0	U	7	2 3	4	∞	4	8	3	0	0	0	8 0	
ND1 004HXCB	0	2 0	0	-	0	-	0	0	0	0	0	2 0	0	0	0	0	3	0	0	0	0 0	
ND1 004HXCB		3 0	0	0	0	-	0	0	0	0	0	2 0	0	0	0	0	8	0	0	0 0	0	
ND1 004HXCB	0	1 4	0	7	Ь	1	5	9	2	1	6	2 3	9	4	9	4	3	0	0	0 0	8 0	
ND1104HXCB     ND14HXCB     .   ND14HXCB     .   .     .     .	0	2 0	0	1	0	1	0	0	0	0	0	2 0	0	0	0	0	3	0	0	0 0	0 0	
ND1104HXCB	0	3 0	0	0	0	-	0	0	0	0	0	2 0	0	0	0	0	23	0	0	0	0 0	
ND1104HXCB	0	1 4	0	7	ч	1	5	9	2	1	- q	2 3	9	Е	9	Е	3	0	0	0 2	2 8	
ND1454HXCB  ND03CHXCA AVXDSH020CE  ND04CHXCA AVXDSH032CE  ND04CHXCA AVXDSH03CCE  ND05ZHXCA AVXDSH03CCE  ND05ZHXCA AVXDSH03CCE	0	2 0	0	1	0	1	0	0	0	0	0	2 0	0	0	0	0	3	0	0	0 0	0 0	
ND1454HXCB	0	3 0	0	0	0	1	0	0	0	0	0	2 0	0	0	0	0	3	0	0	0	0 0	
ND032LHXCA AVXDSH020CE ND032LHXCA AVXDSH032CE ND04DLHXCA AVXDSH032CE ND052LHXCA AVXDSH032CE ND052LHXCA AVXDSH052CE ND072LHXCA AVXDSH07CE	0	1 4	0	7	н	1	5	9	2	4	Е.	2 3	6	1	6	1	3	0	0	0 4	4 8	
NDO32LHXCA AVXDSH020CE ND032LHXCA AVXDSH032CE ND04DLHXCA AVXDSH03CCE ND052LHXCA AVXDSH052CE ND072LHXCA AVXDSH07CC	0	2 0	0	-	0	-	0	0	0	0	0	2 0	0	0	0	0	3	0	0	0	0 0	
ND020LHXCA AVXDSH020CE ND032LHXCA AVXDSH032CE ND040LHXCA AVXDSH040CE ND072LHXCA AVXDSH052CE ND072LHXCA AVXDSH072CE	0	3 0	0	0	0	-	0	0	0	0	0	2 0	0	0	0	0	3	0	0	0	0 0	
ND032LHXCA AVXDSH032CE ND040LHXCA AVXDSH040CE ND032LHXCA AVXDSH052CE ND072LHXCA AVXDSH072CE	0	1 5	2	2	-	-	-	0	3	P	-	2 0	0	0	0	0	3	0	0	0	0 0	
ND040LHXCA AVXDSH040CE  ND052LHXCA AVXDSH052CE  ND072LHXCA AVXDSH100CF	0	1 5	2	2	3	-	4	0	-	p q	9	2 0	0	0	0	0	3	0	0	0 0	0 0	
ND052LHXCA AVXDSH052CE ND072LHXCA AVXDSH100CF	0	1 5	2	2	3	-	9	0	3	2	6	2 0	0	0	0	0	3	0	0	0	0 0	
ND072LHXCA AVXDSH072CE	0	1 5	2	2	е	-	6	0	-	Е	P	2 0	0	0	0	0	е	0	0	0	0 0	
AVXDSH100CF	0	1 5	2	2	4	1	C	0	2	2 (	0	2 0	0	0	0	0	3	0	0	0 0	0 0	
AVADSHIDOGE	0	1 5	2	1	3	1	F	0	1	6	F .	2 0	0	0	0	0	3	0	0	0 0	0 0	
Slim Duct 3 ND110LHXCA AVXDSH110CE 0	0	1 5	∀	-	4	-	0	0	0	р	0	2 0	0	0	0	0	23	0	0	0	0 0	
AVXDSH145CE	0	1 5	A	1	4	1	3	0	2	9	3	2 0	0	0	0	0	3	0	0	0 0	0 0	
ND100SHXCA AVXDUH100CE 0	0	1 5	2	2	4	-	ш	0	2	0	2	2 0	0	0	0	0	е	0	0	0	0 0	
	0	1 5	∢	2	4	-	0	0	2	4	4	2 0	0	0	0	0	3	0	0	0	0 0	
ND145SHXCA AVXDUH145CE 0	0	1 5	∢	2	4	-	3	0	2	4	3	2 0	0	0	0	0	3	0	0	0	0 0	

Troubleshooting

# Troubleshooting

# Option Items (cont.)

	Mc	Model										$\vdash$	$\vdash$	$\vdash$		$\vdash$	$\vdash$						$\vdash$	$\vdash$	$\vdash$	
tem	MID AMERICA	USA	SEG1	SEG2	SEG3	SEG4	SEGS	SEG6	SEG7 S	SEG8 SI	SEG9 SEC	SEG10 SEC	SEG11 SEG12	12 SEG13	113 SEG14	4 SEG15	SEG16	SEG17	SEG18	SEG19	SEG20	SEG21	SEG22	SEG23	SEG24 E	ESP (mmAq)
			0	-	2	4	-	7	-	9	0	0	9 7	2	0	0	0	0	0	3	0	0	0	0	0	5
			0	-	2	4	1	7	-	9	0	0	c 7	2	0	0	0	0	0	3	0	0	0	0	0	10
	ND220HHXCA	ND220HHXCE	0	-	2	¥	-	7	-	9	0	0	8	2	0	0	0	0	0	e	0	0	0	0	0	15
			0	-	2	٧	-	7	-	9	0	2 4	4 d	2	0	0	0	0	0	3	0	0	0	0	0	20
			0	-	2	٧	-	7	-	9	0	2 9	9 F	2	0	0	0	0	0	e	0	0	0	0	0	25
BIG Duct			0	-	2	V	-	7	-	7	0	2 (	0 7	2	0	0	0	0	0	е	0	0	0	0	0	5
			0	-	2	4	-	7	-	7	0	2	2 9	2	0	0	0	0	0	e	0	0	0	0	0	10
	ADVIDOCOM	NDOCCIN	0	-	2	٧	-	7	-	7	0	2	5 b	2	0	0	0	0	0	е	0	0	0	0	0	15
	NDZSUHHACA		0	-	2	V	-	7	-	7	0	2	9 E	2	0	0	0	0	0	e	0	0	0	0	0	20
			0	-	2	٧	-	7	-	7	0	3	1 p	2	0	0	0	0	0	e	0	0	0	0	0	25
			0	-	2	V	-	7	-	7	0	8	Э.	2	0	0	0	0	0	е	0	0	0	0	0	28
	ND020VHXCA	AVXWVH020CE	0	0	4	9	0	2	1	-	2 (	0	E 7	2	0	0	0	0	0	3	0	0	0	0	0	
	ND032VHXCA	ND032VHXCA AVXWVH032CE	0	0	4	9	0	2	1	e e	2 (	0	E 7	2	0	0	0	0	0	3	0	0	0	0	0	
Vivace	ND040VHXCA	AVXWVH040CE	0	0	7	9	0	2	-	2	2	2	1 A	2	0	0	0	0	0	e	0	0	0	0	0	
	ND052VHXCA	AVXWVH052CE	0	0	2	9	0	9	-	4	2 2	2	5 E	2	0	0	0	0	0	e	0	0	0	0	0	
	ND060VHXCA	ND060VHXCA AVXWVH060CE	0	0	2	9	0	9	-	U	2 3		7 1	2	0	0	0	0	0	3	0	0	0	0	0	
	ND020NHXCA	ND020NHXCA AVXWNH020CE	0	2	7	9	0	2	-	-	2 0	0	F	2	0	0	0	0	0	e	0	0	0	0	0	
	ND032NHXCA	ND032NHXCA AVXWNH032CE	0	2	7	9	0	2	-	3	2 (	0	F A	2	0	0	0	0	0	3	0	0	0	0	0	
Neo Forte without EEV	ND040NHXCA	AVXWNH040CE	0	2	7	9	0	2	-	2	2 2	2 ,	4 d	2	0	0	0	0	0	е	0	0	0	0	0	
	ND052NHXCA	ND052NHXCA AVXWNH052CE	0	2	9	9	0	2	1	٧	2 2	2 6	6 F	2	0	0	0	0	0	3	0	0	0	0	0	
	ND060NHXCA	AVXWNH060CE	0	2	9	9	0	2	-	U	2 2	2 8	8	2	0	0	0	0	0	е	0	0	0	0	0	
	ND020QHXCA		0	2	7	9	0	2	-	-	2 (	0	F A	2	0	0	0	0	0	3	0	0	0	0	0	
1	ND021QHXCA		0	2	7	9	0	2	-	4	2 (	0	F A	2	0	0	0	0	0	3	0	0	0	0	0	
Neo Forte with EEV	ND0220QHXCA		0	2	7	9	0	2	-	9	2 2	2 ,	4 d	2	0	0	0	0	0	3	0	0	0	0	0	
	ND023QHXCA		0	2	9	9	0	2	-	6	2 2	2 (	9 F	2	0	0	0	0	0	e	0	0	0	0	0	
	ND024QHXCA		0	2	9	9	0	2	-	q	2 2	2 6	9 F	2	0	0	0	0	0	е	0	0	0	0	0	
gallio	ND052CHXCA		0	3	2	2	0	0	-	6	4	0	0 0	2	0	0	0	0	0	3	0	0	0	0	0	
Selling.	ND072CHXCA		0	3	5	2	0	0	1	O	4	0	0 0	2	0	0	0	0	0	3	0	0	0	0	0	

<sup>\*</sup> If you are going to use up to \$EG 24, please refer to following instruction.

SEG 17:0→1: Using high ceiling kit for 4way

SEG 18:

	Not in use	Use
Change temperature display	0(Celsius)	1 (Fahrenheit)
Sound Mute	0	2
Mixed operation control	0	4

<sup>•</sup> If you want to use multiple functions, add each of the 'use' value of the function you want to used and input the final addition as option value. (Use Fahrenheit + Sound mute + Mixed operation control : 1 + 2 + 4 = 7)

Ex) 044217-1400e6-200000-300000

When using Sound mute: 044217-1400e6-200000-300000

When using high ceiling kit for 4way and mixed operation error preventing function: 044217-1400e6-200014-300000

# 4-2-1 Lamp combination expression method display (cassette type indoor unit)

#### 4-2-1-1 Slim 1 way cassette type

#### **■** Error detection and restart

- When error occurs during operation, indicate a problem with LED flashes, and no other operations but LED stops.
- When restarting operation with remote controller or switch, it will determine the appropriate error mode after normal operation

#### ■ LED lamp display with error detection

		LED I	amp d	isplay			
Error type	Green	Red	<b>(</b>	Sp.		Causes	Follow-up measures
Power reset	•	×	×	×	×	When indoor and outdoor power is on again	Not an error
Indoor temperature sensor error (Open/Short)	×	×	•	×	×	Indoor temperature sensor connector breakaway     Short of temperature sensor wire	Check the indoor temperature sensor connector     Check the temperature sensor wire
Indoor heat exchanger sensor error Indoor heat exchanger OUT sensor error Indoor emission temperature sensor error (Open/Short) : Heater using models	•	×	•	×	×	• Indoor pipe temperature sensor connector breakaway	Check the temperature sensor connector breakaway
Mixed operation error	×	•	×	•	×	Operate cooling & heating operation simultaneously	Change the operation mode
Indoor fan motor error: maintains for over 15 seconds below 450RPM	×	×	×	•	×	Not drive the indoor fan motor	Check the connector breakaway     Check the fan motor lock
Outdoor temperature sensor error COND sensor error DISCHARGE sensor error	•	×	×	•	×	Outdoor unit operation error	Manage after checking the error on the outdoor PCB display window
1. Detect the indoor unit when there is no communication between the indoor unit and outdoor unit for 2 minutes. (When communication error is for over 2 minutes)  2. The indoor unit receives the communication error signal from the outdoor unit  3. The outdoor unit tracking 3 minutes error  4. When the outdoor unit transmits a communication error which is caused by difference between the number of the installation unit and the number of communication unit after completion of tracking. (When communication error is for over 2 minutes)	×	×	•	•	×	Comm. error	Check comm. line connection     Check Indoor/outdoor unit power input     Check Comm. IC

lacktriangle: On lacktriangle: Flickering  $\times$ : Off

4-19 Samsung Electronics

#### ■ LED lamp display with error detection (cont.)

		LED I	amp di	splay			
Error type			( <del>1</del> )	S <sub>S</sub>		Causes	Follow-up measures
	Green	Red	0	3			
Self diagnosis error display (Include the indoor unit that is not detected)  1. EEV close status defect 2. EEV open status defect 3. EVAP OUT sensor breakaway 4. EVAP IN sensor breakaway	×	×	•	•	•	Outdoor Unit or self-diagnosis error	Check if there is an error in Outdoor Unit PCB display then take appropriate steps.
5. COND MID sensor breakaway 6. Refrigerant complete leakage 2 <sup>nd</sup> detection 7. COND high temperature 2 <sup>nd</sup> detection 8. DISCHARGE high temperature 2 <sup>nd</sup> detection 9. Low pressure switch 2 <sup>nd</sup> detection COMP DOWN 10. Reverse phase detection error 11. Freezing 6 <sup>th</sup> detection compressor stop 12. Compression sensor self diagnosis (G8, G9) 13. Compressor down error by compression ratio control	×	×	•	•	•	Outdoor unit operation error	Manage after checking the error on the outdoor PCB display window
Flot switch detection	×	×	×	•	•	Overflow of condensed water of indoor unit drain plate	Check the drain pipe pump Check the drain pipe clogging
Peripheral control device option setting error	×	×	•	×	•	Setting error of the indoor unit option device	Readjust the indoor PCB option S/W
EEPROM error	•	×	•	•	×	Incorrectly input the indoor unit option code	Input the indoor unit option code
EEPROM option error	•	•	•	•	•	Not input the indoor unit option code	Input the indoor unit option code
SPI error	•	×	•	×	•	SPI connector dislocation     SPI feedback	Check the connection of SPI Connector

●:On ①:Flickering ×:Off

<sup>-</sup> When stopping the operation during an error is displayed, all lamps are off.

 $<sup>-</sup> When \ restarting \ after \ stopping \ an \ operation, redisplay \ the \ error \ status \ by \ deciding \ the \ error \ again \ on \ Normal \ Operation.$ 

<sup>-</sup> Refer to the "4. Troubleshooting" for detail contents related to the error mode.

# 4-2-1-2 4 way, mini 4 way cassette type

#### **■** Error detection and restart

- When error occurs during operation, indicate a problem with LED flashes, and no other operations but LED stops.
- When restarting operation with remote controller or switch, it will determine the appropriate error mode after normal operation

#### ■ LED lamp display with error detection

		LED I	amp di	splay			
Error type	(1)	*	<b>(1)</b>	c/So		Causes	Follow-up measures
Power reset	•	×	×	×	×	When indoor and outdoor power is on again	Not an error
Indoor temperature sensor error (Open/Short)	×	×	•	×	×	Indoor temperature sensor connector breakaway     Short of temperature sensor wire	Check the indoor temperature sensor connector     Check the temperature sensor wire
Indoor heat exchanger sensor error Indoor heat exchanger OUT sensor error Indoor emission temperature sensor error (Open/Short): Heater using models	•	×	•	×	×	Indoor pipe temperature sensor connector breakaway	Check the temperature sensor connector breakaway
Indoor fan motor error: maintains for over 15 seconds below 450RPM	×	•	×	•	×	Not drive the indoor fan motor	Check the connector break- away     Check the fan motor lock
Outdoor temperature sensor error COND sensor error DISCHARGE sensor error	•	×	×	•	×	Outdoor unit operation error	Manage after checking the error on the outdoor PCB display window
1. Detect the indoor unit when there is no communication between the indoor unit and outdoor unit for 2 minutes. (When communication error is for over 2 minutes)  2. The indoor unit receives the communication error signal from the outdoor unit  3. The outdoor unit tracking 3 minutes error  4. When the outdoor unit transmits a communication error which is caused by difference between the number of the installation unit and the number of communication unit after completion of tracking. (When communication error is for over 2 minutes)	×	×	•	•	×	Comm. error	Check comm. line connection     Check Indoor/outdoor unit power input     Check Comm. IC

4-21 Samsung Electronics

#### ■ LED lamp display with error detection (cont.)

		LED I	amp di	splay			
Error type	(1)	*	<b>(4)</b>	c c c c c c c c c c c c c c c c c c c		Causes	Follow-up measures
Self diagnosis error display (Include the indoor unit that is not detected)  1. EEV close status defect 2. EEV open status defect 3. EVAP OUT sensor breakaway 4. EVAP IN sensor breakaway	×	×	•	•	•	Outdoor Unit Operational error	Check error on the Outdoor Unit display window then take appropriate steps.
5. COND MID sensor breakaway 6. Refrigerant complete leakage 2 <sup>nd</sup> detection 7. COND high temperature 2 <sup>nd</sup> detection 8. DISCHARGE high temperature 2 <sup>nd</sup> detection 9. Low pressure switch 2 <sup>nd</sup> detection COMP DOWN 10. Reverse phase detection error 11. Freezing 6 <sup>th</sup> detection compressor stop 12. Compression sensor self diagnosis (G8, G9) 13. Compressor down error by compression ratio control	×	×	•	•	•		
Flot switch detection	×	×	×	•	•	Overflow of condensed water of indoor unit drain plate	Check the drain pipe pump     Check the drain pipe clogging
Peripheral control device option setting error	×	×	•	×	•	Setting error of the indoor unit option device	Readjust the indoor PCB option S/W
EEPROM error	•	×	•	•	×	Incorrectly input the indoor unit option code	Input the indoor unit option code
EEPROM option error	•	•	•	•	•	Not input the indoor unit option code	Input the indoor unit option code
SPi error	•	×	•	×	•	SPi connector dislocation     SPi feedback	Check the connection of SPi Connector

<sup>-</sup> When stopping the operation during an error is displayed, all lamps are off.

 $<sup>-</sup> When \ restarting \ after \ stopping \ an \ operation, redisplay \ the \ error \ status \ by \ deciding \ the \ error \ again \ on \ Normal \ Operation.$ 

<sup>-</sup> Refer to the "4. Troubleshooting" for detail contents related to the error mode.

# 4-2-1-3 Duct type

#### **■** Error detection and restart

- When error occurs during operation, indicate a problem with LED flashes, and no other operations but LED stops.
- When restarting operation with remote controller or switch, it will determine the appropriate error mode after normal operation

#### ■ LED lamp display with error detection(Remote Control Receiver)

		LED la	mp d	ispla	у		
		(Reclama- tion type)					
Error type	Green	Red	<b>(</b> 4)	c.		Causes	Follow-up measures
	(Standa	rd type)		3			
	(1)	*5	-				
Power reset	•	×	×	×	×	When indoor and outdoor power is on again	Not an error
Indoor temperature sensor error (Open/Short)	×	×	•	×	×	Indoor temperature sensor connector breakaway     Short of temperature sensor wire	Check the indoor temperature sensor connector     Check the temperature sensor wire
Indoor heat exchanger sensor error Indoor heat exchanger OUT sensor error Indoor emission temperature sensor error (Open/Short) : Heater using models	•	×	•	×	×	Indoor pipe temperature sensor connector breakaway	Check the temperature sensor connector breakaway
Mixed operation error	×	•	×	•	×	Operate cooling & heating operation simultaneously	Change the operation mode
Outdoor temperature sensor error COND sensor error DISCHARGE sensor error	•	×	×	•	×	Outdoor unit operation error	Manage after checking the error on the outdoor PCB display window
1. Detect the indoor unit when there is no communication between the indoor unit and outdoor unit for 2 minutes. (When communication error is for over 2 minutes)  2. The indoor unit receives the communication error signal from the outdoor unit  3. The outdoor unit tracking 3 minutes error  4. When the outdoor unit transmits a communication error which is caused by difference between the number of the installation unit and the number of communication unit after completion of tracking. (When communication error is for over 2 minutes)	×	×	•	•	×	Comm. error	Check comm. line connection     Check Indoor/outdoor unit power input     Check Comm. IC

lacktriangle:On lacktriangle:Flickering  $\times$ :Off

4-23 Samsung Electronics

#### ■ LED lamp display with error detection(Remote Control Receiver) (cont.)

		LED I	amp di	isplay			
Error type	Green	Red Red rd type)	4	<b>%</b>		Causes	Follow-up measures
Self diagnosis error display (Include the indoor unit that is not detected)  1. EEV close status defect 2. EEV open status defect 3. EVAP OUT sensor breakaway 4. EVAP IN sensor breakaway	×	×	•	•	•	Outdoor Unit Operational error	Check error on the Outdoor Unit display window then take appropriate steps.
5. COND MID sensor breakaway 6. Refrigerant complete leakage 2 <sup>nd</sup> detection 7. COND high temperature 2 <sup>nd</sup> detection 8. DISCHARGE high temperature 2 <sup>nd</sup> detection 9. Low pressure switch 2 <sup>nd</sup> detection COMP DOWN 10. Reverse phase detection error 11. Freezing 6 <sup>th</sup> detection compressor stop 12. Compression sensor self diagnosis (G8, G9) 13. Compressor down error by compression ratio control	×	×	•	•	•		
Plot switch detection	×	×	×	•	•	Overflow of condensed water of indoor unit drain plate	Check the drain pipe pump Check the drain pipe clogging
Peripheral control device option setting error	×	×	•	×	•	Setting error of the indoor unit option device	Readjust the indoor PCB option S/W
EEPROM error	•	×	•	•	×	Incorrectly input the indoor unit option code	Input the indoor unit option code
EEPROM option error	•	•	•	•	•	Not input the indoor unit option code	Input the indoor unit option code

●:On ①:Flickering ×:Off

<sup>-</sup> When stopping the operation during an error is displayed, all lamps are off.

 $<sup>-</sup> When \ restarting \ after \ stopping \ an \ operation, \ redisplay \ the \ error \ status \ by \ deciding \ the \ error \ again \ on \ Normal \ Operation.$ 

<sup>-</sup> Refer to the "4. Troubleshooting" for detail contents related to the error mode.

#### 4-2-1-4 Wall-mounted type (Neo Forte without EEV/with EEV)

#### **■** Error detection and reoperation

- If an error occurs during the operation, an LED flickers and the operation is stopped except the LED.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

#### ■ Indoor unit LED lamp display at error detecting

	L	ED lamp displa	y	
Abnormal conditions	OPERATION	TIMER	TURBO	Remark
	iiiii MPI	<b>④</b>	Ů	
Indoor unit room temperature sensor error (open or short)	0	•	0	
Indoor unit heat exchanger temperature sensor error (open or short)	•	•	0	
Indoor fan motor malfunction	0	0	•	
EEPROM error	•	•	•	Option Setting
Option error (option wasn t set up or option data error)	•	•	•	Option Setting
Outdoor unit error	•	0	•	Remote Control on/off Outdoor Unit Power Reset

4-25 Samsung Electronics

#### 4-2-1-5 Wall-mounted type (Vivace)

Display	LED lamp display	Remark		
E 1 ↔ Ø 1	Communication error (unable to receive data)	Communication cable connection		
€ 1 ↔ 82	Communication error (outdoor cannot communicate)	Another indoor unit or indoor PCB		
£ 1 ↔ ₹ 1	Indoor unit room temperature sensor error (Open/Short)	Room temperature sensor, indoor PCB		
£ 1 ↔ 22	Indoor unit heat exchanger in temperature sensor error (Open/Short)	Heat exchanger in sensor, indoor PCB		
£ 1 ↔ 23	Indoor unit heat exchanger out temperature sensor error (Open/Short)	Heat exchanger out sensor, indoor PCB		
<i>E 1 ↔ 28</i>	Indoor unit heat exchanger in temperature sensor detached	Heat exchanger in sensor		
€ 1 ↔ 29	Indoor unit heat exchanger out temperature sensor detached	Heat exchanger out sensor		
E 1 ↔ 30	Indoor unit heat exchanger in & out temperature sensor detached	Heat exchanger in & out sensor		
£ 1 ↔ 5 4	Indoor unit fan motor malfunction	Fan motor and cable		
£ 1 ↔ 8 1	More than 2 indoor units cool and heat simultaneously	Another indoor unit operation mode		
£ 1 ↔ 82	EEPROM error	Indoor PCB		
£ 1 ↔ 8 3	Option code setting error	Option code		
£ 1 ↔ 85	Cable miss-wiring	Cable connection (Indoor & Outdoor unit)		
E 1 ↔ 88	MPI error malfunction	MPI		
<i>E 2</i> ↔ <i>0</i> 1	The number of indoor unit mismatched	Cable connection (another indoor unit & outdoor unit), SW01(outdoor)		
<i>E2</i> ↔ 5 <i>I</i>	Compressor discharge sensor error(Short/Open)	Outdoor unit		
<i>E</i> 5 ↔ 5 <i>B</i>	Outdoor unit error	Outdoor unit (Error code)		

#### 4-2-1-6 Ceiling type

#### **■** Error detection and reoperation

- If an error occurs during the operation, an LED flickers and the operation is stopped except the LED.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

#### ■ Indoor unit LED lamp display at error detecting

		LED	lamp di	splay		
Error type		*	(4)	(%)		Operating
Power reset	•	×	×	×	×	
Error of temperature sensor in indoor unit (Open/ Short)	×	×	•	×	×	Displayed on appropriate indoor unit which is operating
Error of heat exchanger sensor in indoor unit Error of heat exchanger OUT sensor in indoor unit Error of outlet temperature sensor in indoor unit (Open/Short): For heat pump models only	•	×	•	×	×	Displayed on appropriate indoor unit which is operating
Error of mixed operation	×	•	×	•	×	
Error of indoor fan motor: Below 450RPM for 15 minutes	×	×	×	•	×	Displayed on appropriate indoor unit which is operating
Error of outdoor temperature sensor Error of COND sensor Error of DISCHARGE sensor	•	×	×	•	×	Displayed on appropriate indoor unit which is operating Displayed on outdoor unit
1. No communication for 2 minutes between indoor unit and outdoor unit (communication error for more than 2 minutes) 2. Indoor unit receiving the communication error from outdoor unit 3. Outdoor unit tracking 3 minute error 4. When sending the communication error from outdoor unit due to the mismatching of the communication numbers and installed numbers after completion of tracking (communication error for more than 2 minutes)	×	×	•	•	×	Error of indoor unit: Displayed on the indoor unit regardless of operation     Error of outdoor unit: Displayed on the indoor unit which is operating
Self-diagnostic error (including the indoor unit not detected) 1. Error of electronic expansion valve close 2. Error of electronic expansion valve open 3. Breakaway of EVA OUT sensor 4. Breakaway of EVA IN sensor	×	×	•	•	•	Displayed on appropriate indoor unit which is operating Displayed on outdoor unit

lacktriangle: On lacktriangle: Elickering imes: Off

4-27 Samsung Electronics

#### ■ Indoor unit LED lamp display at error detecting (cont.)

		LED	lamp dis	splay		
Error type		*	<b>(</b>	SS .		Operating
5. Breakaway of COND MID sensor 6. 2 <sup>nd</sup> detection of refrigerant completely leak 7. 2 <sup>nd</sup> detection of high temperature COND 8. 2 <sup>nd</sup> detection of high temperature DISCHARGE 9. COMP DOWN due to 2 <sup>nd</sup> detection of low pressure switch 10. Error of reverse phase 11. Compressor down due to 6 <sup>th</sup> detection of freezing 12. Self-diagnosis of condensation sensor (G8, G9) 13. Compressor down due to condensation ratio control	×	×	•	•	•	Displayed on appropriate indoor unit which is operating Displayed on outdoor unit
Error of float switch	×	×	×	•	•	
Error of setting option switches for optional accessories	×	×	•	×	•	
EEPROM error	•	×	•	•	×	
EEPROM option error	•	•	•	•	•	

<sup>-</sup> If you turn off the air conditioner when the LED is flickering, the LED is also turned off.

<sup>-</sup> If you re-operate the air conditioner, it operates normally at first, then detects an error again.

#### 4-2-2 Numeric type display(outdoor unit, Wired remote controller, wall-mount type etc.)

#### ■ Meanings of the first Alphabet numbers in Error Numbers

E	P	<u> </u>	A
Displayed in numbers 101 to 700 Displayed when a self-diagnosis turns out to be an Error.	Displayed in numbers 701 to 800 Displayed when the first detection has been completed for those items that requires more than 2 detections	Indicate the address of an outdoor unit that occurs errors U200: Main outdoor unit U201: Sub1 outdoor unit U202: Sub2 outdoor unit U203: Sub3 outdoor unit	Indicate the address of an indoor unit that occurs errors ex) A000: error occurs in the indoor unit with the address 0 ex) A047: error occurs in the indoor unit with the address 47

#### **■** Error display order

Classification	Error display method	Display examples
Error display method for ones occurred in indoor unit	Error no. → indoor unit address → error no., repeated	E471 → A002 → E417 → A002
Error display method for ones occurred in outdoor unit	Error no. → outdoor unit address → error no., repeated	E471 → U200 → E417 → U200

<sup>•</sup> Indicate the address of the smallest indoor unit only when the same error occurs in multiple units.

4-29 Samsung Electronics

#### **MEMO**

# 4-3 How to take measures for each symptom(Model: RVXVHT075/100/125FE, RD075/100/125VHXFA)

## Error display

			Product's	Product's operation condition during error (Main parts status)	uring error(Main par	ts status)	
Errormode	Cause	Measures to take	Frequency	Outdoor unit status	Error occurred indoor unit.	Other indoor units	Diagnosis method
121	Dislocation of indoor temp, sensor connector Whre breaking of indoor temp, sensor Defective indoor temp, sensor	<ul> <li>Check if the wire of indoor temp. sensor is broken</li> <li>Check if there is any problem in indoor temp sensor connection circuit and in sensor</li> </ul>	1	Normal operation	Operation off	Normal operation	page 4-40
122	Dislocation of In-sensor connector in IUS heat exchanger In-sensor wire breaking in IUS heat exchanger Defective In-sensor in IUS heat exchanger	<ul> <li>Check if the wire of in-temp sensor of IU heat exchanger is broken</li> <li>Check if there is any problem in In-temp. sensor connection circuit and sensor of IU heat exchanger</li> </ul>	-	Normal operation	Operation off	Normal operation	page 4-41
123	Dislocation of Out-sensor connector in IU's heat exchanger Out-sensor wire breaking in IU's heat exchanger Defective Out-sensor in IU's heat exchanger	<ul> <li>Check if the wire of Out-temp sensor of IU heat exchanger is broken</li> <li>Check if there is any problem in Out-temp, sensor connection circuit and sensor of IU heat exchanger</li> </ul>	1	Normal operation	Operation off	Normal operation	page 4-42
128	IU's heat exchanger in sensor dis location error	• Check if the in sensor of IU's heat exchanger is dislocated • Check if the holder of in sensor of IU's heat exchanger is attached	1	Normal operation	Operation off	Normal operation	page 4-43
129	IUs heat exchanger out sensor dislocation error	• Check if the out sensor of IU's heat exchanger is dislocated • Check if the holder of out sensor of IU's heat exchanger is attached	1	Normal operation	Operation off	Normal operation	page 4-44
130	Simultaneous IU's heat exchanger in out sensor dislocation error	• Check if the in out sensor of IU's heat exchanger is dislocated • Check if the holder of in, out sensor of IU's heat exchanger is attached	1	Normal operation	Operation off	Normal operation	page 4-45
135	Indoor clean fan rotational frequency feedback error	<ul> <li>Check the feedback connection line</li> <li>Check the rotational output of the clean fan motor</li> <li>Check if the motor operates well</li> </ul>	1	Normal operation	Normal in other Functions	Normal operation	page 4-46
151	The $2^{nd}$ opening error of indoor electrically operated valve	- Check the PCB connection of electrically operated valve wire - Check the sealing condition of electrically operated valve - Check if there is any external rust, internal breakage/short circuit on the coil - After resetting OU(K3), re-check if error occurs again - Replace electrically operated valve if the breakdown is confirmed	2	Operation off	Operation off	Normal operation	page 4-47
152	The $2^{nd}$ closing error of indoor electrically operated valve	- Check the PCB connection of electrically operated valve wire - Check the sealing condition of electrically operated valve - Check if there is any external rust, internal breakage/short circuit on the coil - After resetting OU (K3), re-check if enror occurs again - Replace electrically operated valve if the breakdown is confirmed	2	Operation off	Operation off	Normal operation	page 4-48
153	Indoorfloating sensor error	<ul> <li>Check if the wire of indoor floating sensor is broken</li> <li>Check if the wire of drain pump is broken</li> <li>Check if the drain pump operates well</li> </ul>	1	Operation off	Operation off	Normal operation	page 4-49
154	Indoorfan error	<ul> <li>Check the feedback connection line</li> <li>Check the rotational output of the fan motor</li> <li>Check if the motor operates well</li> </ul>	1	Normal operation	Operation off	Normal operation	page 4-50
162	Defective EEPROM circuit	<ul> <li>Check if there is wire breaking/nonwetting/dewetting of circuits around EEPROM parts</li> </ul>	-	Normal operation	Operation off	Normal operation	page 4-51

Samsung Electronics

4-31

# Troubleshooting

Troubleshooting

# ■ Error display (cont.)

			Product	Product's operation condition during error (Main parts status)	uring error(Main pa	ts status)	
Errormode	Cause	Measures to take	Frequency	Outdoor unit status	Error occurred indoor unit.	Other indoor units	Diagnosis method
163	Indoor unit remote controller option input is wrong/not entered.	• Re-enter remote controller option	1	Normal operation	Operation off	Normal operation	page 4-52
170	Mixed use of Fahrenheit/Celsius setup (occurs in indoor unit with Celsius setup)	• Input Celsius options in the remote controllers for error free indoor units (Celsius using regions)	-	Normal operation	Operation off	Normal operation	page 4-53
185	Power input Error into indoor unit comm. line	• Reconfirm the indoor unit comm. line connection – power line input	-	Operation off	Operation off	Operation off	page 4-54
186	Clean Unit (5P) feedback error	Check the connection of SPI feedback     Check if SPI operates well	-	Normal operation	Normal in other functions	Normal operation	page 4-55
201	Comm. Error among, Indoor units and outdoor units after completing initial tracking Inconsistency between the number of setup IUs and the unit number setup switches	Check the comm. lines between Indoor/ourdoor units     Check the setup address switch on the Indoor units PCB     Check IU No. setup switch on the ourdoor unit's PCB	-	Operation off	Operation off	Operation off	page 4-56
202	Comm. Error among all IUs	Check the comm. lines between indoor/outdoor units     Check the main/sub unit setup switch     Check the number of indoor unit setting switch on the outdoor unit PCB	-	Operation off	Operation off	Operation off	page 4-58
203	Comm, Error between main. & sub outdoor units Comm. Error between main. & sub Micoms	Check the comm. lines between outdoor units     Check the Main/Sub unit setting switch/outdoor units     Check for the disconnected line/cold solder/short circuit between Main/Sub MICOM	1	Operation off	Operation off	Operation off	page 4-59
221	Outdoor unit Temp SENSOR ERROR(Open/Short) • Error level: over 4.9V(-50°), below 0.4V(93°)	<ul> <li>Check the connection part of the outdoor temp. sensor circuit and any problem in the sensor.</li> <li>Check the wire breaking of the outdoor temp, sensor circuit and the connection status of the connector PCB</li> </ul>	-	Operation off	Operation off	Operation off	page 4-60
226	Outdoor temp, sensor dislocation error	• Check if the outdoor temp, sensor is mounted in the right position	1	Operation off	Operation off	Operation off	page 4-61
231	COND_OUT Main Temp SENSOR ERROR (Open/Short) • Error level: over 4.9V (-50°), below 0.4V (93°)	Check the connection part of the COND OUT temp. sensor circuit and any problem in the sensor     Check the wire breaking of the COND OUT temp. sensor circuit and the connection status of the connector PCB	-	Operation off	Operation off	Operation off	page 4-62
241	Outdoor COND OUT temp. sensor dislocation error	• Check if the outdoor COND OUT sensor is mounted in the right position	1	Operation off	Operation off	Operation off	page 4-63
251	Digital compressor discharge temp. error (Open/Short)  • Error detection condition: outdoor temp. over - 10°  • Error level: over 495V (-50°), below 0.4V (93°)	Check the connection part of the digital compressor discharge temp, sensor circuit and any problem in the sensor.     Check the wire breaking of the digital compressor discharge temp, sensor circuit and the connection status of the connector PCB	-	Operation off	Operation off	Operation off	page 4-64

# ■ Error display (cont.)

Troubleshooting

			Product's	Product's operation condition during error (Main parts status)	uring error(Main pa	rts status)	
<b>Error mode</b>	Cause	Measures to take	Frequency	Outdoor unit status	Error occurred indoor unit.	Other indoor units	Diagnosis method
257	Fixed scroll compressor 2 compressor discharge temp, error (Open/Short)  • Error detection condition: outdoor temp, over- 10 °  • Error level: over 4.95V (-30°), below 0.5V (151°)	<ul> <li>Check the connection part of fixed scroll compressor 2's discharge temp, sensor circuit and any problem in the sensor.</li> <li>Check the wire breaking of the fixed scroll compressor 2's discharge temp, sensor circuit and the connection status of the connector PCB</li> </ul>	-	Operation off	Operation off	Operation off	page 4-65
258	Fixed scroll compressor 3 compressor discharge temp, error (Open/Short)  • Error detection condition: outdoor temp, over- 10 °  • error level: over 4,95V (-307), below 0.5V (151 °)	<ul> <li>Check the connection part of fixed scroll compressor 3's discharge temp, sensor circuit and any problem in the sensor.</li> <li>Check the wire breaking of the fixed scroll compressor 3's discharge temp, sensor circuit and the connection status of the connector PCB</li> </ul>	-	Operation off	Operation off	Operation off	page 4-65
261	Digital compressor discharge temp. Sensor dislocation error	-Check if the digital compressor discharge temp. sensor is mounted in the right position	-	Operation off	Operation off	Operation off	page 4-66
263	Fixed scroll compressor 2 discharge temp. Sensor dislocation error	• Check if the fixed scroll compressor 2's discharge temp, sensor is mounted in the right position	-	Operation off	Operation off	Operation off	page 4-66
264	Fixed scroll compressor 3 discharge temp. Sensor dislocation error	- Check if the fixed scroll compressor 3's discharge temp, sensor is mounted in the right position	-	Operation off	Operation off	Operation off	page 4-66
265	SUMP sensor dislocation	- Check if SUMP sensor location is mounted in the right position	-	Operation off	Operation off	Operation off	page 4-67
269	SUCTION sensor dislocation	- Check if SUCTION sensor location is mounted in the right position	-	Operation off	Operation off	Operation off	page 4-68
271	SUMP_Temp Digita I SENSOR ERROR (Open/Short)  • Error detection condition: outdoor temp, over-10 °  • error level: over 4.95V (*30°), below 0.5V (151°)	Check the connection part of SUMP_Temp Digital sensor circuit and any problem in the sensor     Check for disconnected SUMP temperature power line and the PCB connection	-	Operation off	Operation off	Operation off	page 4-69
291	Detect only high pressure SENSOR ERROR (Open/Short) compressor (short error: detect only below 0.4V) (Open error: detect only over 4.2V)	• Check the wire breaking of high pressure sensor • Check the high pressure sensor circuit and any problem in the sensor	-	Operation off	Operation off	Operation off	page 4-70
296	Detect only low pressure SENSOR ERROR (Open/Short) compressor (short error: detect only below 0.4V) (Open error: detect only over 4.2V)	• Check the wire breaking of low pressure sensor • Check the low pressure sensor circuit and any problem in the sensor	1	Operation off	Operation off	Operation off	page 4-70
307	Balance keeping sensor connector dislocation Balance keeping sensor wire breaking Defective balance keeping sensor	• Check if balance keeping sensor wire is broken • Check the balance keeping sensor connection circuit and any problem with sensor	1	Operation off	Operation off	Operation off	page 4-71
308	Suction temp, sensor connector dislocation Suction temp, sensor wire breaking Defective suction temp, sensor	• Check if a suction sensor wire is broken • Check the suction sensor connection circuit and any problem with sensor	-	Operation off	Operation off	Operation off	page 4-72
311	Liquid pipe temp, sensor connector dislocation Liquid pipe temp, sensor wire breaking Defective liquid pipe temp, sensor	-Check if a liquid pipe temp. sensor wire is broken     -Check the liquid pipe temp. sensor connection circuit and any problem with sensor	-	Operation off	Operation off	Operation off	page 4-73

### Troubleshooting

■ Error display (cont.)

			Product's	Product's operation condition during error(Main parts status)	uring error(Main par	ts status)	
Error mode	Cause	Measures to take	Frequency	Outdoor unit status	Error occurred indoor unit.	Other indoor units	Diagnosis method
312	Main Cooling Sol Valve Open Error	• Check if main cooling sol valve is open • Check if there is any problem with a valve connector/coil setting	-	Operation off	Operation off	Operation off	page 4-74
321	EVI in temp, sensor dislocation EVI in temp, sensor wire breaking Defective EVI in temp, sensor	• Check if EVI sensor is broken • Check EVI sensor connection circuit and any problem with sensor	-	operation off	operation off	operation off	page 4-75
322	EVI Out connector dislocation EVI Out connector wire breaking Defective EVI Out connector	• Check if EVI OUT sensor is broken • Check EVI OUT sensor connection circuit and any problem with sensor	1	Operation off	Operation off	Operation off	page 4-76
407	Compressor down by high pressure sensor protection control	Check if a service valve is open Compare the values between manifold gauge and S-net: check if there are any problems with high pressure sersor Check if indoor/outdoor EEV operates Check if there is any clog in the piping such as filters Check if the fan operates well Check the amount of refrigerants (overcharging)	1	Operation off	Operation off	Operation off	page 4-77
410	Compressor down by low pressure sensor protection control	Check if a service valve is open  • Compare the values between manifold gauge and S-net: Check if there are any problems with high pressure sensor  • Check if indoor/outdoor EEV operates  • Check if there is any clog in the piping such as filters  • Check the amount of refrigerants (shortage)	-	Operation off	Operation off	Operation off	page 4-78
413	Protection Control by Sump sensor	<ul> <li>Check if SUMP sensor is mounted in the right position and any problem with sensor connector</li> <li>Protective control operation, if compressor refrigerants inflow</li> </ul>	-	Operation off	Operation off	Operation off	page 4-79
416	Compression down by discharge temp.	• Check the resistance of discharge sensors • Check if a service valve is open • Compare the values between manifold gauge and S-net: Check if there are any problems with high pressure sensor • Check if indoor/outdoor EEV operates • Check if there is any clog in the piping such as filters	-	Operation off	Operation off	Operation off	page 4-80
425	Outdoor compression ratio 1 error	• Check 3-phase connection error • Check if there is any problem with 3-phase detection part circuit.	1	Operation off	Operation off	Operation off	page 4-81
428	Compressor down by compressor ratio control	Check if a service valve is open  Compare the values between manifold gauge and S-net: Check if there are any problems with high pressure sensor  Check if indoor/outdoor EEV operates  Check if indoor/outdoor EEV operates  Check there is any clog in the piping such as filters  Check the amount of refrigerants (shortage)	1	Operation off	Operation off	Operation off	page 4-82
431	Balance keeping valve 1 self-diagnosis	Check if there is any dislocation/pbm. with oil valve temp sensor 1     Check if an oil service valve is open     Check if there is any pbm with a valve connector/coil setting	-	Operation off	Operation off	Operation off	page 4-83

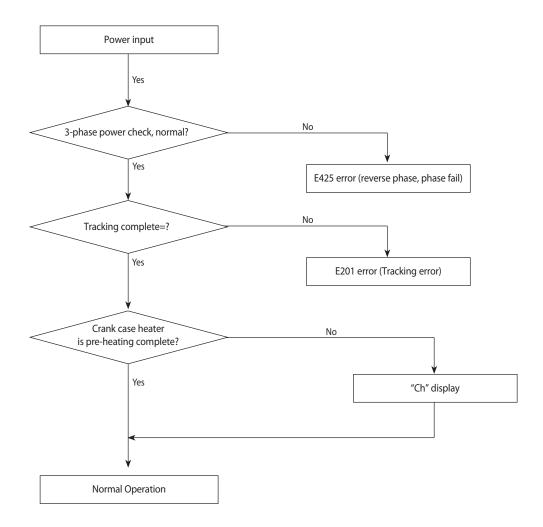
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4-34

# ■ Error display (cont.)

			Product's	Product's operation condition during error (Main parts status)	uring error(Main par	rts status)	
Errormode	Cause	Measurs to take	Frequency	Outdoor unit status	Error occurred indoor unit.	Other indoor units	Diagnosis method
438	EVI EEV opening error	• Check if there is any problem with EV, EEV connector/coil mounted in the right position • Check if there is any problem with a valve	1	Operation off	Operation off	Operation off	page 4-84
440	Prohibit heating for outdoor temperature over 30°	Check if there is any dislocation/phm. with outdoor temp sensor     if outdoor temp measured normal normal operation by protective control	1	Operation off	Operation off	Operation off	page 4-85
442	Prohibit filling mode for outdoor temperature over 15°	Check if there is any dislocation/pbm: with outdoor temp sensor     if outdoor temp measured normal normal operation by protective control	1	Operation off	Operation off	Operation off	page 4-85
443	High pressure below the average before cooling (Unable to restart)	• Check if there is high pressure sensor failure or error by the refrigerants leakage	1	Operation off	Operation off	Operation off	page 4-86
452	Instant blackout error (delete when compressor reruns) OU power frequency error	- Check outdoor power connection line     - Check if there is wire breaking/nonwetting/dewetting of the PCB power input part     - Check the power frequency	-	Operation off	Operation off	Operation off	page 4-87
453	Error by high temp. outdoor fan	Check the motor temp.     Check the fan motor's rotational output     Check if the motor operate well	-	Operation off	Operation off	Operation off	page 4-87
454	Displayed when outdoorfan's RPM is lower then 50	• Check the feedback connection line • Check the fan motor's rotational output • Check if the motor operates well	1	Operation off	Operation off	Operation off	page 4-87
456	Outdoor fan over voltage error	Motor connection line     Check if the motor operates well	1	Operation off	Operation off	Operation off	page 4-88
457	Outdoor fan counter rotation error	- Check feedback connection line - Check if the motor operates well - Check the fan motor's totational output - Occurs with the motor's counter-rotation by reverse wind	1	Operation off	Operation off	Operation off	page 4-88
458	Detect over voltage in COMP current sensor	• Check if there is any problem with COMP • Check the electric leakage for COMP connecting wire	1	Operation off	Operation off	Operation off	page 4-89
461	Detect low voltage in COMP current sensor	• Check COMP connection wire • Check defective COMP Magnet switch	1	Operation off	Operation off	Operation off	page 4-90
477	Liquid compressor protection control	<ul> <li>Protective control operation, if the refrigerants inflow by digital compressor</li> </ul>	-	Operation off	Operation off	Operation off	page 4-91
702	1st close indoor electrically operated valve	- Check the PCB connection of electrically operated valve wire - Check the sealing condition of electrically operated valve - Check if there is any external rust, internal breakage/short circuit on the coil - After resetting OU (K3), re-check if error occurs again	1	Normal operation	Operation off	Normal operation	page 4-92
703	1 <sup>st</sup> open indoor electrically operated valve	- Check the PCB connection of electrically operated valve wire - Check the sealing condition of electrically operated valve - Check if there is any external rust, internal breakage/short circuit on the coil - After resetting OU (K3), re-check if error occurs again	1	Re-start	Re-start	Normal operation	page 4-93

#### 4-3-1 Outdoor unit operation flow



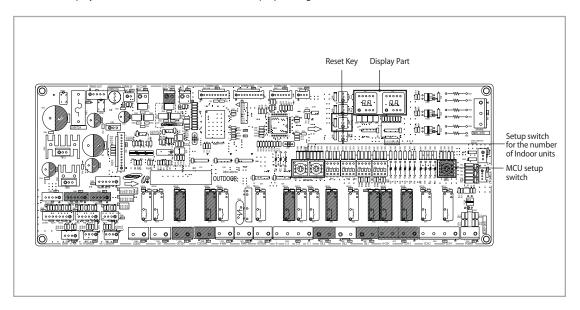
4-36 Samsung Electronics

3-phase tester

#### ■ Reverse phase, phase fail detection (Outdoor unit using 3-phase power) – E425 display with any problems

#### 1. When power is on, it checks the power status used for 3-phase power compressor.

When the order of 3-phase L1(R) - L2(S) - L3(T) is changed (reversed) or there is a phase that does not receive power (phase fail), it will display E425 and the air conditioner will stop operating.



- 1) Check if the power is L1(R) L2(S) phase/ L1(R) L3(T) phase/ L2(S) L3(T) phase.
- When there is any terminal that does not have normal voltage, check the external power of the air conditioner and take appropriate measures.
- 3) If 3-phase power is normal check the phase of the power line using 3-phase tester.
  - If it shows reverse phase, please change the current power line connection.
- 4) After completing above, press reset key (K3) then check the power again.
- 5) If the same problem occurs during the second check-up, check the color of the 3-phase power check lines. If there is no problem, please replace PCB.



• When there is a wrong line connection on N phase (when one of R, S and T is changed with N phase), DVM PLUS3 carries out power protection to display E425 and cut off the power within 1 minute.

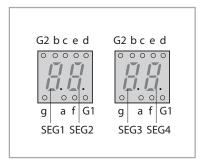
If that happens, it is not a PCB power defect and check the phase of power lines before replacing PCB.

#### ■ Initial Tracking (Communication Check) – $\mathcal{E} \supseteq \mathcal{U} \neq \text{display with any problems}$

- 1. Depending on whether an outdoor unit is a master unit or sub unit, there are some differences in what is displayed.
  - 1) Master Unit
    - When power is on, outdoor unit MICOM tries to communicate with indoor units that are connected to its communication line (F1/F2).
    - 2 display parts on the left show the main address of the indoor units subject to a communication attempt made by the outdoor unit in sequential order. (Ex: 0,1,2 ~47)
    - 2 display parts on the right show the main address of the indoor units with which the outdoor unit successfully communicated.
    - When there is discrepancy in the number of indoor unit setup by the outdoor unit and those where communication was made, the four display parts shows E201.

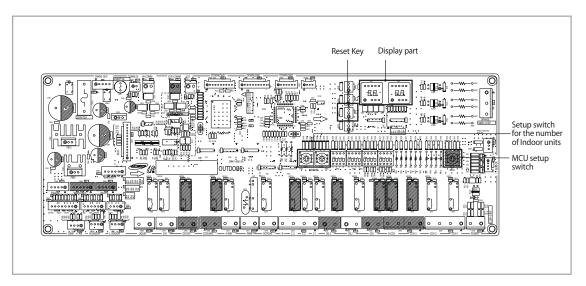
#### 2) Sub(Slave) Unit

- It shows the MICOM address of MAIN PBA within the sub unit that is connected to a master unit in turn. (ex: C9, CA, CB, CC, CD, CE, DF)



The display part of an outdoor unit

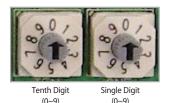
2. Figure out the number of indoor units connected to the outdoor unit through a setup switch for the number of indoor unit .



#### Setup switch for the number of Indoor units

The following is an example of how to use a switch for the number of indoor units installed. The max. number of units for connection is 64.

3 units Co	nnection	17 units C	onnection	31 units C	onnection	64 Units C	onnection
Tenth Digit	Single Digit						
0	3	1	7	3	1	6	4



3. When there is a discrepancy between the number of indoor units detected through a setup switch for the no. of indoor units and the number of indoor units detected in the tracking process, E210 and U200 will be displayed in turn.

4-38 Samsung Electronics

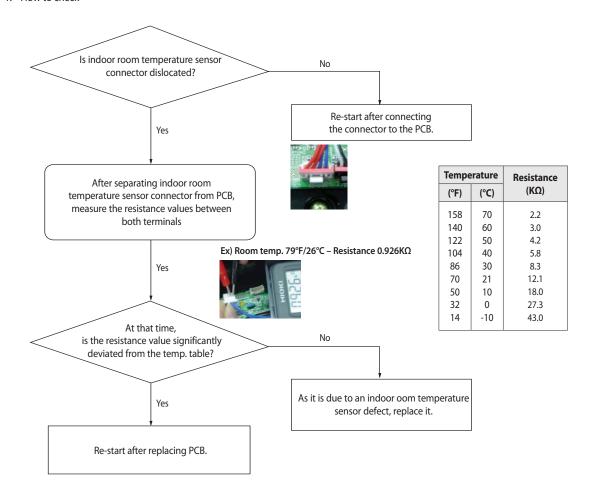
#### ■Compressor pre-heating – [h display

- 1. When tracking is completed, check compressor temperature before moving onto the system operation to determine if it is ready to operate.
- 2. If it has all conditions to operate the compressor, the flashing light of the CH will disappear and the left display part will show the address of the indoor units subject to the outdoor unit's communication attempt while the right one shows the address of the indoor units that have responded to the communication.
- 3. When it is not suitable to immediately operate the compressor, the display part flickers CH and heats the compressor with CCH (Crank Case Heater) for 2 hours and 30 minutes.
- 4. Whether or not it is at a suitable temperature to operate is determined once after turning on the power. However, for the first time of carrying out the test operation after installation please input the power six hours before test operation.

#### 4-3-2 Indoor Unit ROOM sensor Error (Open/Short)

Outdoor unit display	$E \cap R \times X \times$		
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\times$ (Fan) $\times$ (Filter) $\times$ (Defrost)		
Criteria	Refer to how to determine below		
Cause of problem	• The room temperature sensor of No. XXX indoor unit has defective OPEN/SHORT		

#### 1. How to check

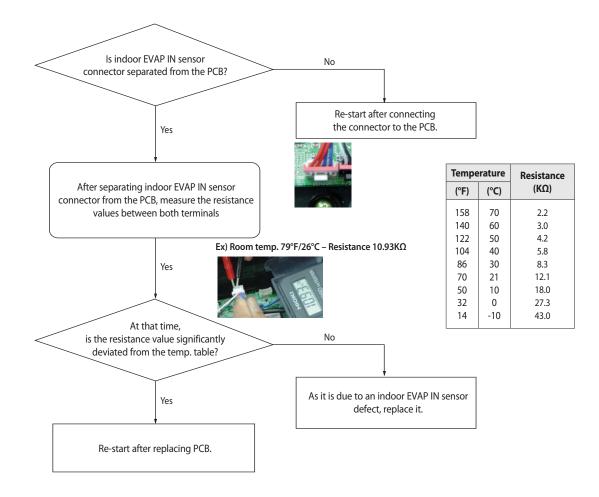


4-40 Samsung Electronics

#### 4-3-3 Indoor unit EVAP IN sensor Error (Open/Short)

Outdoor unit display	$E : \mathbb{Z} \hookrightarrow \mathbb{R}^{\times \times $		
Indoor unit display	lacktriangle (Operation) $lacktriangle$ (Timer) $lacktriangle$ (Fan) $lacktriangle$ (Defrost)		
Criteria	• Refer to how to determine below		
Cause of problem	• The EVAP IN sensor of No. XXX indoor unit has defective OPEN/SHORT		

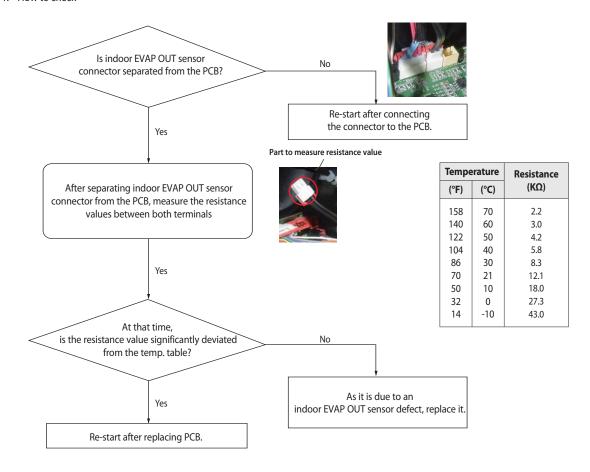
#### 1. How to check



#### 4-3-4 Indoor EVAP OUT sensor Error (Open/Short)

Outdoor unit display	$E : \mathcal{F} \to \mathcal{F} \times \times$		
Indoor unit display			
Criteria	• Refer to how to determine below		
Cause of problem	• The EVAP out sensor of No. XXX indoor unit has defective OPEN/SHORT		

#### 1. How to check



4-42 Samsung Electronics

#### 4-3-5 Indoor Heat Exchanger's EVAP IN sensor dislocation error

Outdoor unit display	$E : \mathcal{B} \hookrightarrow \mathcal{A} \times \times$	
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	• Indoor heat exchanger's EVAP IN piping sensor has been dislocated	

#### 1. How to diagnose

#### 1) During Cooling Operation

Tcond, out - Tair, out > 37°F/3°C	ОК
Tair, in - Teva, out > 39°F/4°C	NO
Tair, in - Teva, out > 39°F/4°C	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Indoor heat exchanger's EVAP IN sensor dislocation error

#### 2) During heating operation

Average high pressure > 2.45MPa	ОК
Average low pressure > 0.83MPa	ОК
Tcond, out - Tair, out ≥ 37°F/3°C	ОК
Tair, in - Teva, out ≥ 35.6°F/2°C	NO
Tcond, out - Tair, out < 28.4°F/-2°C	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Indoor heat exchanger's EVAP IN sensor dislocation error

#### 2. How to check

Check if an Indoor heat exchanger's EVAP IN sensor has been dislocated then is correct after assembling.

#### 4-3-6 Indoor Heat Exchanger's EVA OUT sensor dislocation error (Open/Short)

Outdoor unit display	$E / 29 \leftrightarrow R \times \times$	
Indoor unit display	$\times$ (Operation) $\P$ (Timer) $\P$ (Fan) $\P$ (Filter) $\times$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	• Indoor heat exchanger's EVA IN piping sensor has been dislocated	

#### 1. How to diagnose

#### 1) During Cooling Operation

Tcond, out - Tair, out > 37°F/3°C	ОК
Tair, in - Teva, out > 39°F/4°C	NO
Tair, in - Teva, out > 39°F/4°C	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Indoor heat exchanger's EVA IN sensor dislocation error

#### 2) During Heating operation

Average high pressure > 2.45MPa	ОК
Average low pressure > 0.83MPa	ОК
Tcond, out - Tair, out ≥ 37°F/3°C	NO
Tair, in - Teva, out ≥ 35.6°F/2°C	NO
Tcond, out - Tair, out < 28.4°F/-2°C	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Indoor heat exchanger's EVA IN sensor dislocation error

#### 2. How to check

Check if an Indoor heat exchanger's EVA OUT sensor has been dislocated then is correct after assembling.

4-44 Samsung Electronics

#### 4-3-7 Simultaneous Indoor Heat Exchanger's EVA IN, OUT sensor dislocation error (Open/Short)

#### 1. How to diagnose

#### 1) During Cooling Operation

Tcond, out - Tair, out > 37°F/3°C	ОК
Tair, in - Teva, out > 39°F/4°C	NO
Tair, in - Teva, out > 39°F/4°C	NO
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Simultaneous indoor heat exchanger's EVA IN, OUT sensor dislocation error

#### 2) During Heating operation

Average high pressure > 2.45MPa	ОК
Average low pressure > 0.83MPa	ОК
Tcond, out - Tair, out ≥ 37°F/3°C	NO
Tair, in - Teva, out ≥ 35.6°F/2°C	NO
Tcond, out - Tair, out < 28.4°F/-2°C	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Simultaneous Indoor heat exchanger's EVA IN, OUT sensor dislocation error

#### 2. How to check

 $Check\ if\ an\ Indoor\ heat\ exchanger's\ EVA\ IN,\ OUT\ sensor\ has\ been\ dislocated\ then\ is\ correct\ after\ assembling.$ 

#### 4-3-8 Operational error of indoor Unit's Clean Fan (Open/Short)

Outdoor unit display	$E 135 \leftrightarrow R \times \times$	
Indoor unit display	$\times$ (Operation) $\times$ (Timer) $\bullet$ (Fan) $\times$ (Filter) $\times$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	• The operational error of the fan motor of No. XXX indor unit	

#### 1. How to diagnose

Occurs when RPM values are not sent as feedback to MICOM at a PID control-type fan motor

#### 2. How to check

- 1) Check the HALL IC connector that carries out RPM value feedback
- 2) If the operational capacitor is a PCB separation type, check the connection terminal
- 3) Check the operation status of fan motor
- 4) If there is no problem with the above checkup items, replace the PCB.

4-46 Samsung Electronics

#### 4-3-9 Breakdown of EEV (2<sup>nd</sup>)

#### 1. How to diagnose

Detect only on cooling operation. (No detection during heating operation.)

During cooling operation, the temperature of the inlet or outlet ducts of heat exchanger is kept below 32°F/0°C for more than 20 minutes without cessation

#### 2. How to check

- 1) Check if the wire of electronic expansion valve is correctly connected to the PCB of indoor unit.
- 2) Check if the coil of an electronic expansion valve is correctly plugged into the main body.
- 3) Check if there is any rust on the surface of the electronic expansion valve with naked eyes then check the resistance between each terminal to find any wire breaking or short circuit.
- 4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.
  - In case of closure problem, operate the indoor unit in which the error has occurred.
  - In case of opening problem, please do not operate the indoor unit in which the error has occurred.
- 5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.
- As an electronic expansion valve replacement is tricky work that requires collecting refrigerants in all systems, please check the above items before replacement.

#### 4-3-10 Problem with EEV closure (2<sup>nd</sup>)

#### 1. How to diagnose

1) During Cooling operation(Each of the below conditions have to be met for at least 20 minutes.)

Tcond, out - Tair, out > 37°F/3°C	ОК
Tair, in - Teva, out > 39°F/4°C	NO
Tair, in - Teva, out > 39°F/4°C	NO
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Electrically operated valve closure breakdown

- 2) During heating operation (must satisfy all conditions below)
  - When more than 2 indoor units are on Thermo On heating operation.
  - When average high pressure is over 1.76MPa
  - 5 minutes after finishing Safety Start
  - Keep Indoor units' T(Eva\_In)<T(Room) +37°F/3°C and T(Eva\_Out)<T(Room) +37°F/3°C condition for more than 5 minutes

#### 2. How to check

- 1) Check if the wire of electronic expansion valve is correctly connected to the PCB of indoor unit.
- 2) Check if the coil of electronic expansion valve is correctly plugged into the main body.
- 3) Check if there is any rust on the surface of the electronic expansion valve with naked eye then check the resistance between each terminal to find any wire breaking or short circuit.
- 4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.
  - In case of closure problem, operate the indoor unit in which the error has occurred.
  - In case of opening problem, please do not operate the indoor unit in which the error has occurred.
- 5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.
- As electronic expansion valve replacement is tricky work that requires collecting refrigerants in all systems, please check the above items before replacement.

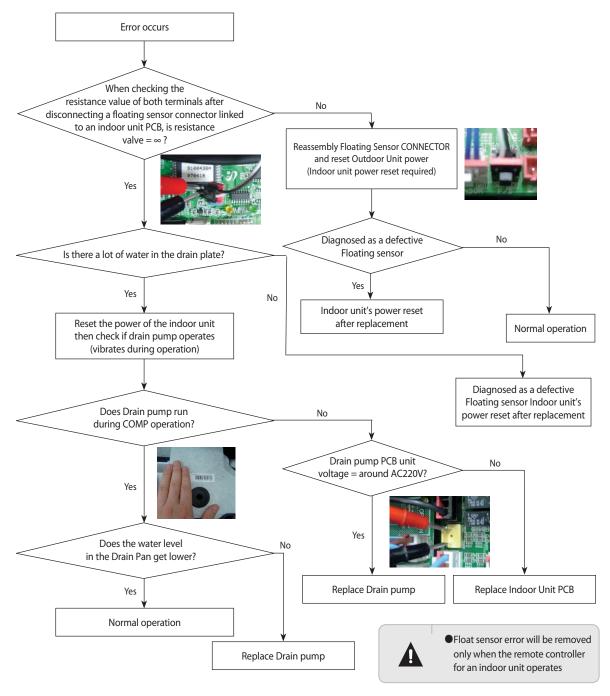
4-48 Samsung Electronics

#### 4-3-11 *E 15∃*: Detection of Floating Switch of Indoor Unit's Drain Pump

Outdoor unit display	$F : 153 \leftrightarrow R \times \times$
Indoor unit display	$\times$ (Operation) $\times$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	• Refer to how to determine below
Cause of problem	• Due to the breakdown of a drain pump of the indoor unit, an increase in the water level in the drainage plate or defective detection sensor

<sup>\*</sup> To release E153 error, you must reset the power of the indoor unit.

#### 1. How to check



#### 4-3-12 The operational error of Indoor Unit's Fan Motor

Outdoor unit display	$E : 154 \leftrightarrow R \times X \times$
Indoor unit display	imes(Operation) $ imes$ (Timer) $ imes$ (Fan) $ imes$ (Filter) $ imes$ (Defrost)
Criteria	• Refer to how to determine below
Cause of problem	The operational error of the fan motor of No. XXX indoor unit

#### 1. How to diagnose

1) Occurs when RPM valve fails to feedback to MICOM at a PID control-type fan motor

#### 2. How to check

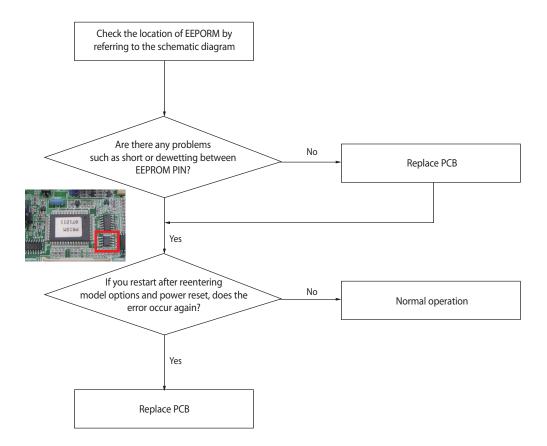
- 1) Check HALL IC connector that carries out feedback of RPM value.
- 2) If a fan motor operation capacitor is a PCB separating type, check the connection terminal.
- 3) Check the operational status of the fan motor.
- 4) If there is no problem with the above checkup items, replace the PCB.

4-50 Samsung Electronics

#### 4-3-13 EEPROM error

Outdoor unit display	E 162
Indoor unit display	$\times$ (Operation) $\mathbb{O}$ (Timer) $\mathbb{O}$ (Fan) $\mathbb{O}$ (Filter) $\times$ (Defrost)
Criteria	Communication failure between EEPROM and MICOM
Cause of problem	• PCB replacement due to defective EEPROM

#### 1. How to check



#### 4-3-14 Option error of the Remote Controller for an Indoor Unit

Outdoor unit display	E 163
Indoor unit display	<b>①</b> (Operation) <b>①</b> (Timer) <b>①</b> (Fan) <b>①</b> (Filter) <b>①</b> (Defrost)
Criteria	• Display number type of indoor unit – E163 occurs, Lamp type – all lamps flash
Cause of problem	Missed or erroneous input of remote controller options

• Check relevant remote controller options for each model then enter correct options

4-52 Samsung Electronics

#### 4-3-15 Error due to confused use of Fahrenheit and Celsius

Outdoor unit display	E 170
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	Display number type of indoor unit – E170 occurs, Lamp type – all lamps flash     Occurs in an indoor unit with Celsius setting
Cause of problem	Missed input of remote controller options

- Check relevant remote controller options for each model then enter correct options
- As this happens only in a Celsius setting model, it is necessary to reenter option codes for error-free models in a region where Celsius is used.

#### 4-3-16 Error due to incorrect Indoor Unit Power/Communication Cable Connection

Outdoor unit display	E 185
Indoor unit display	E 185 (wall mount type)
Criteria	Check for Power input(220V) for the Terminal block(F1/F2).
Cause of problem	Apply power (220V) to the terminal of the indoor unit communication block (F1/F2)

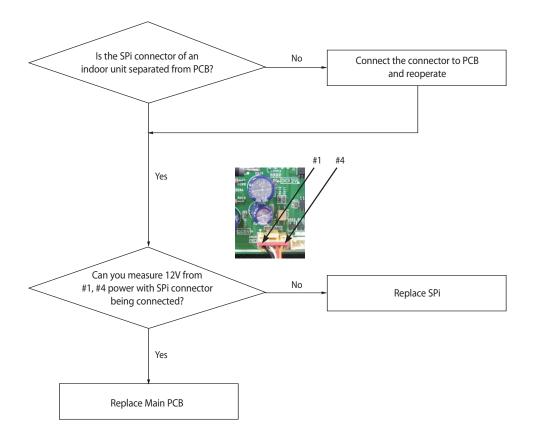
• Check for disconnected line after turning off the Main power.

4-54 Samsung Electronics

#### 4-3-17 SPi Feedback Error

Outdoor unit display	E 186
Indoor unit display	lacktriangle (Operation) $lacktriangle$ (Timer) $lacktriangle$ (Fan) $lacktriangle$ (Filter) $lacktriangle$ (Defrost)
Criteria	• Check if the output of SPi Feedback is 12V
Cause of problem	• SPi defect

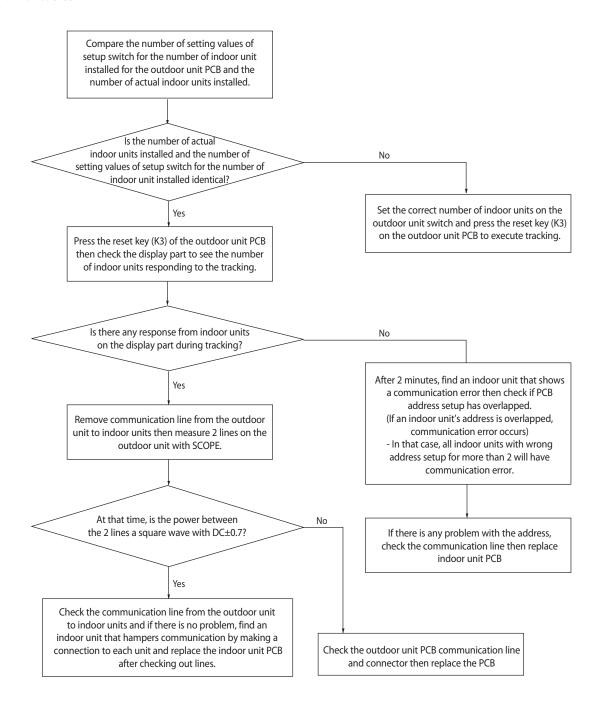
#### 1. How to check



#### 4-3-18 Communication error between Indoor and Outdoor units during Tracking

Outdoor unit display	E20 /
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\times$ (Filter) $\times$ (Defrost)
Criteria	Communication error between indoor and outdoor units
Cause of problem	• Refer the below

#### 1. How to check



4-56 Samsung Electronics

#### **\*Important things to check before replacing PCB for Communication error**

- 1. Find a communication IC around a communication terminal.
  - Indoor Unit
    - The upper part of the red connector communication IC for communication between indoor and outdoor units
    - The upper part of the blue connector wired remote controller communication IC

#### Outdoor Unit

- If there is a module communication as in PLUSII, PLUSII: the upper part of the red connector: communication IC for communication between indoor and outdoor units
- If there is a module communication as in PLUSII, PLUSII: the upper part of the yellow connector of each unit: communication IC for communication among outdoor units
- Other outdoor units the upper part of the communication connector: communication IC for communication between indoor and outdoor units





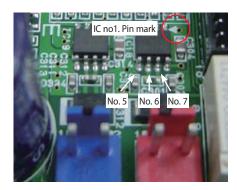


Module-type outdoor unit



Independent-type outdoor unit

- 2. Measure the resistance of communication IC.
  - How to measure : measure resistance between no. 5 no.6 Pin measure resistance between no. 5 no.7 Pin



- 3. Diagnosis of communication IC's status using the measured resistance.
  - Diagnosed as normal
    - Each resistance value should be between several tens  $k\Omega\text{-several}$  hundreds  $k\Omega$  unit
    - The difference between both resistances should be within several  $k\Omega$
  - Diagnosed as defective
    - One or both has low resistance values around several tens  $\boldsymbol{\Omega}$
    - One or both are open.

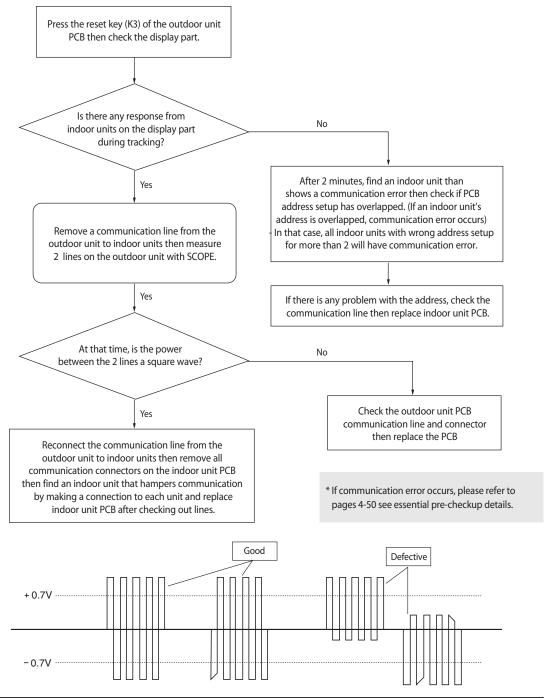


4-57

#### 4-3-19 Communication error between Indoor & Outdoor units after Completing Tracking

Outdoor unit display	E202
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\times$ (Filter) $\times$ (Defrost)
Criteria	• When the communication between indoor/outdoor units cut-off for 2 minutes (all chambers fail to receive)
Cause of problem	Communication error between indoor/outdoor units and/or the erroneous setup switch setting for the number of indoor units installed.

#### 1. How to check

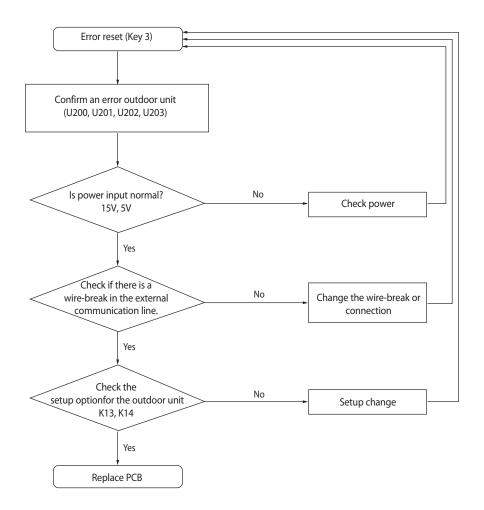


4-58 Samsung Electronics

#### 4-3-20 Communication error between Main and Sub Micoms of an Outdoor unit or among Outdoor Units

Outdoor unit display	$EZIJ \rightarrow R \times \times$
Indoor unit display	-
Criteria	• Refer to the diagnosis method below
Cause of problem	Communication error between outdoor units

#### 1. How to check

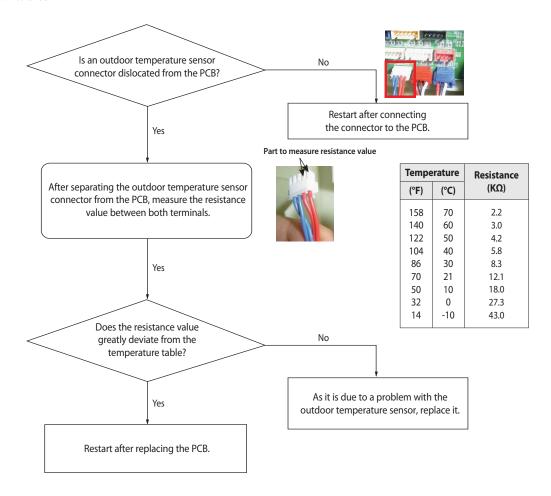


\* If communication error occurs, please refer to pages 4-50 see essential pre-checkup details.

#### 4-3-21 Outdoor Temperature Sensor error

Outdoor unit display	E22
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Fan) $ imes$ (Defrost)
Criteria	• Refer to how to determine below
Cause of problem	Outdoor temperature sensor OPEN/SHORT defective

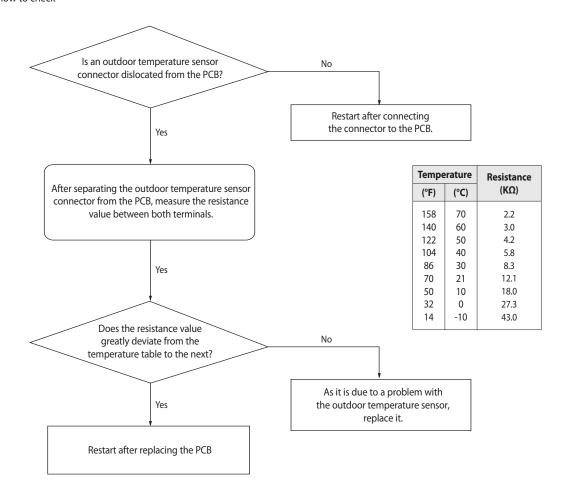
#### 1. How to check



4-60 Samsung Electronics

## 4-3-22 Outdoor Temperature dislocation error

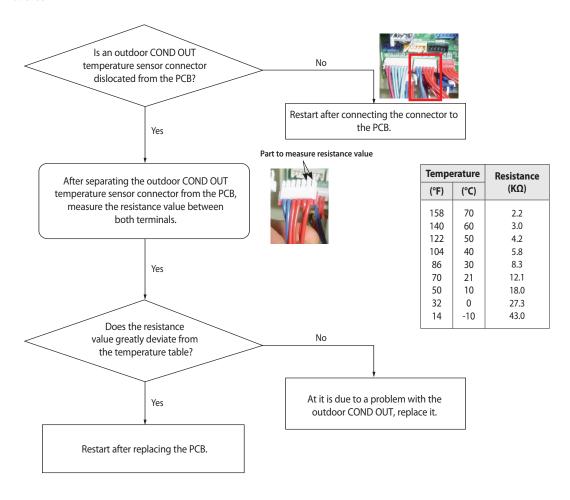
## 1. How to check



## 4-3-23 COND OUT Temperature Sensor error (Open/Short)

Outdoor unit display	E23 (	
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Fan) $ imes$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Wire breaking or failure of the relevant sensor	

## 1. How to check



4-62 Samsung Electronics

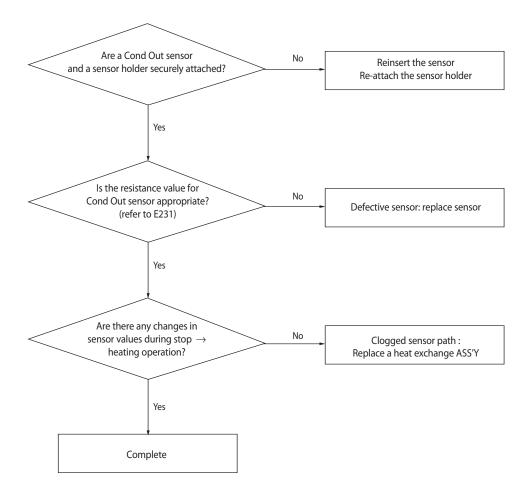
## 4-3-24 Outdoor COND OUT Sensor dislocation error

## 1. How to diagnose

- 1) During Cooling operation, there will be no detection
- 2) During Heating operation(Each of the below conditions have to be met for at least 20 minutes.)

Average high pressure > 2.45MPa	ОК
Average low pressure > 0.83MPa	ОК
Tcond, out - Tair, out ≥ 37°F/3°C	ОК
Tair, in - Teva, out ≥ 35.6°F/2°C	ОК
Tcond, out - Tair, out < 28.4°F/-2°C	NO
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Outdoor Cond Out sensor dislocation error

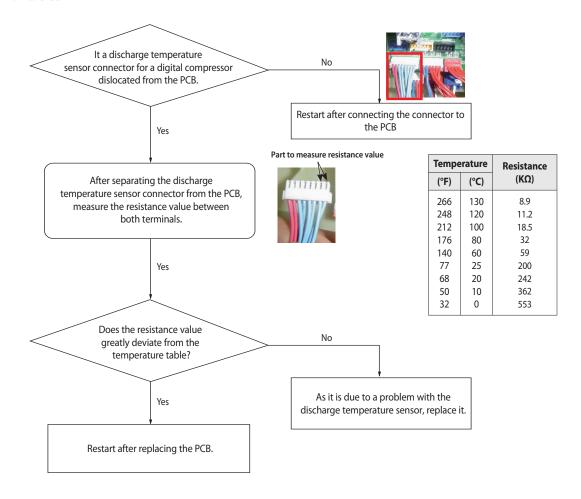
## 1. How to check



## 4-3-25 Discharge Temperature Sensor error for a digital Compressor (Open/Short)

Outdoor unit display	E25 /	
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Filter) $ imes$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Digital compressor's discharge temperature sensor OPEN/SHORT defective	

## 1. How to check

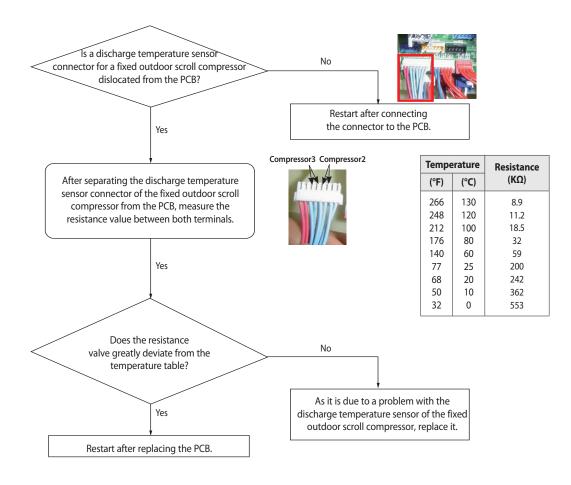


4-64 Samsung Electronics

## 4-3-26 Discharge Temperature Sensor error for a fixed scroll Compressor (Open/Short)

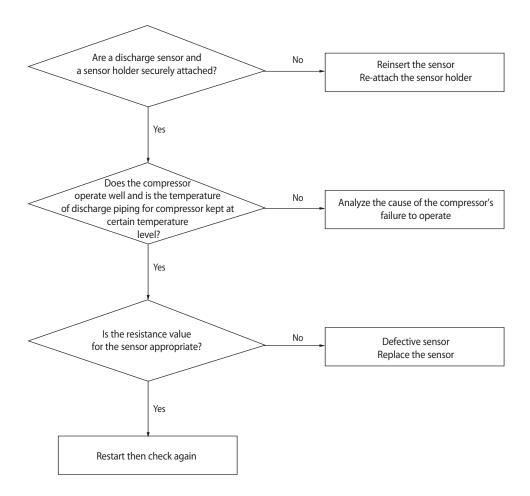
Outdoor unit display	E257, E258 (Compressor 2, Compressor 3)	
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Filter) $ imes$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Fixed scroll compressor's discharge temperature sensor OPEN/SHORT defective	

## 1. How to check



## 4-3-27 Compressor's Discharge Temperature Sensor dislocation error

## 1. How to check



4-66 Samsung Electronics

## 4-3-28 £255 : Dislocation error of Compressor SUMP Temperature (oil temperature) Sensor

Outdoor unit display	E255 (digital compressor or fixed compressor 1)	
Indoor unit display	$\times$ (Operation) $\P$ (Timer) $\P$ (Fan) $\P$ (Filter) $\times$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Sump (oil) temperature sensor dislocation error	

## 1. How to diagnose

1) If the Sump temperature right before the start of compressor = Tsump.ini, current compressor's SUMP temp = Tsump. real, When the difference between Tsump.ini and Tsump.real is an absolute value so that it cannot be more than 35.6°F/2°C, In other words, the condition of Tsump.real-Tsump.ini<35.6°F/2°C has been satisfied for 60 minutes since a compressor started, it is diagnosed as an error.

After 60 minutes of compressor operation, there will be no Sump sensor dislocation detection.

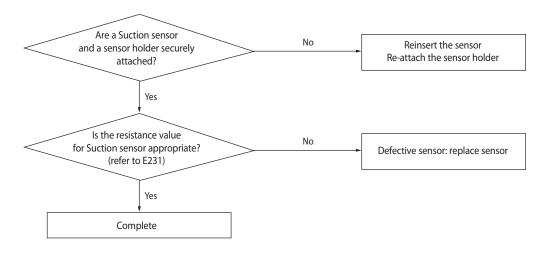
## 2. How to check

1) Check if a sensor of the relevant compressor has been dislocated in accordance with error code, assemble and correct the error.

## 4-3-29 $\mathcal{E} \mathcal{Z} \mathcal{L} \mathcal{G}$ : Dislocation error of Suction Temperature Sensor

Outdoor unit display	E269
Indoor unit display	$\times$ (Operation) $\P$ (Timer) $\P$ (Fan) $\P$ (Filter) $\times$ (Defrost)
Criteria	• The suction temperature of compressor right before its operation = Tsuc.ini, current temperature of compressor = Tsuc, real, if the condition of Tsuc.real-Tsuc.ini<35.6°F kept for 30 minutes, it is diagnosed as error
Cause of problem	Suction temperature sensor dislocation error

## 1. How to check

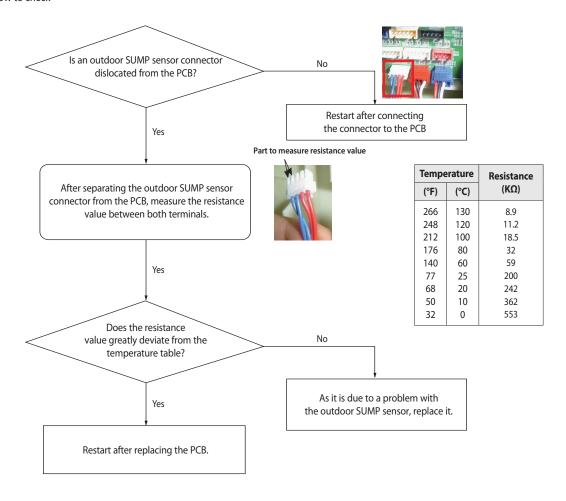


4-68 Samsung Electronics

## 4-3-30 SUMP Temperature Sensor error (Open/Short)

Outdoor unit display	E271	
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Filter) $ imes$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Wire breaking or failure of the relevant sensor	

## 1. How to check



## 4-3-31 High Pressure Temperature Sensor error (Open/Short)

Outdoor unit display	E29 /	
Indoor unit display	$ imes$ (Operation) $ extbf{1}$ (Timer) $ extbf{1}$ (Fan) $ extbf{1}$ (Filter) $ imes$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Wire breaking or failure of the relevant sensor	

## ■ How to detect OPEN/SHORT error in Low/High pressure sensor

- 1. During oil retrieval, omit the error detection and start detecting 5 minutes after complete operation.
- 2. During safety start operation, omit the error detection and start detecting 5 minutes after complete operation.
- 3. During defrost operation, omit the error detection and start detecting 5 minutes after complete operation
- 4. SHORT error detection: carry out error detection only if it is under 0.4V.
- 5. During refrigerant refill/retrieval, omit low pressure sensor error detection.

## 4-3-32 Low Ppressure Temperature Sensor error (Open/Short)

Outdoor unit display	E296	
Indoor unit display	lacktriangle (Operation) $lacktriangle$ (Timer) $lacktriangle$ (Filter) $lacktriangle$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Wire breaking or failure of the relevant sensor	

## ■ How to detect OPEN/SHORT error in Low/High pressure sensor

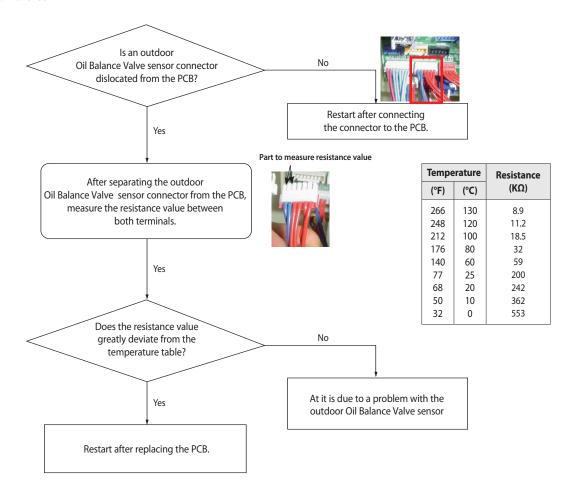
- 1. During oil retrieval, omit the error detection and start detecting 5 minutes after complete operation.
- 2. During safety start operation, omit the error detection and start detecting 5 minutes after complete operation.
- 3. During defrost operation, omit the error detection and start detecting 5 minutes after complete operation
- 4. SHORT error detection: carry out error detection only if it is under 0.4V.
- 5. During refrigerant refill/retrieval, omit low pressure sensor error detection.

4-70 Samsung Electronics

## 4-3-33 Oil Balance Valve Temp. Sensor error (Open/Short)

Outdoor unit display	E307	
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Filter) $ imes$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Wire breaking or failure of the relevant sensor	

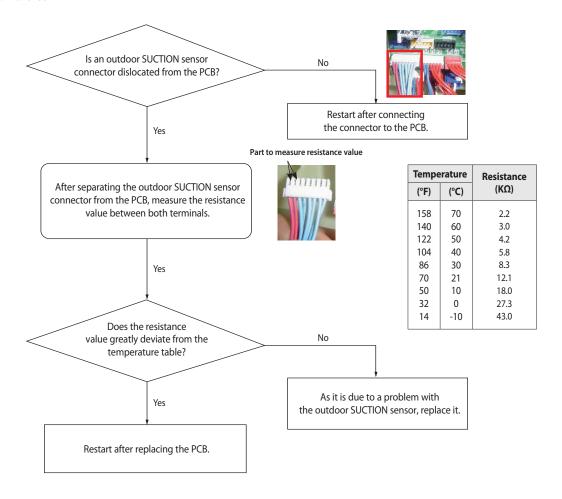
## 1. How to check



## 4-3-34 SUCTION Temperature Sensor error (Open/Short)

Outdoor unit display	E308	
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Filter) $ imes$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Wire breaking or failure of the relevant sensor	

## 1. How to check

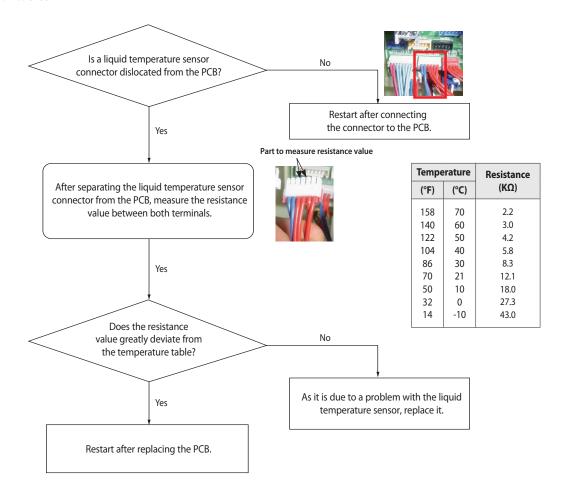


4-72 Samsung Electronics

## 4-3-35 Double pipe temperature sensor error

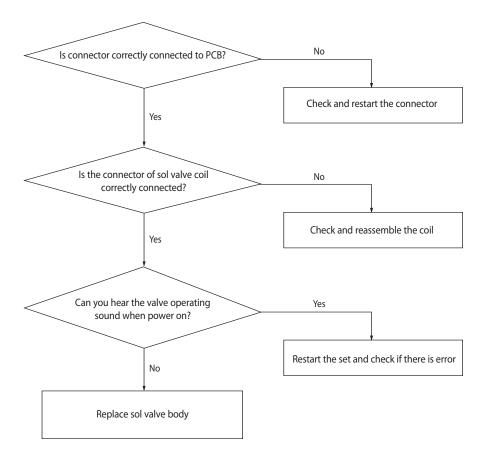
Outdoor unit display	E3 / /	
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Filter) $ imes$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Wire breaking or failure of the relevant sensor	

## 1. How to check



## 4-3-36 Main Cooling Sol Valve Open Error

## 1. How to check

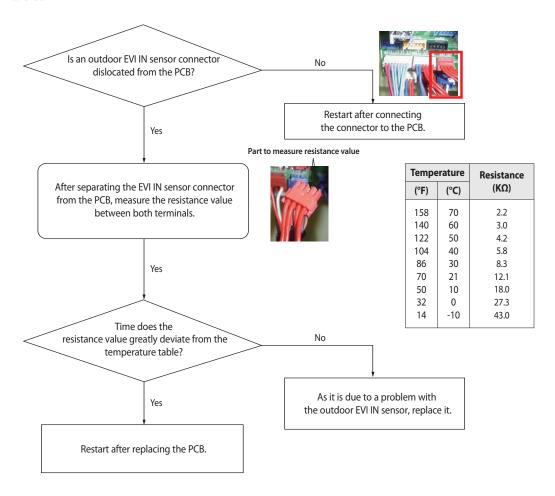


4-74 Samsung Electronics

## 4-3-37 EVI IN Temperature Sensor error (Open/Short)

Outdoor unit display	E32 (
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Filter) $ imes$ (Defrost)
Criteria	• Refer to how to determine below
Cause of problem	Wire breaking or failure of the relevant sensor

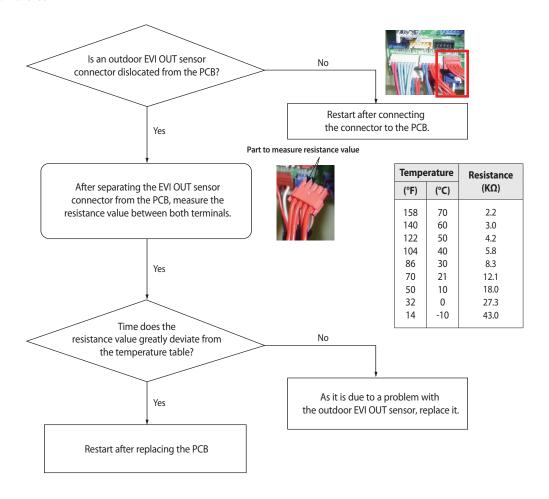
## 1. How to check



## 4-3-38 EVI OUT Temperature Sensor error (Open/Short)

Outdoor unit display	E322
Indoor unit display	lacktriangle (Operation) $ imes$ (Timer) $lacktriangle$ (Filter) $ imes$ (Defrost)
Criteria	• Refer to how to determine below
Cause of problem	Wire breaking or failure of the relevant sensor

## 1. How to check

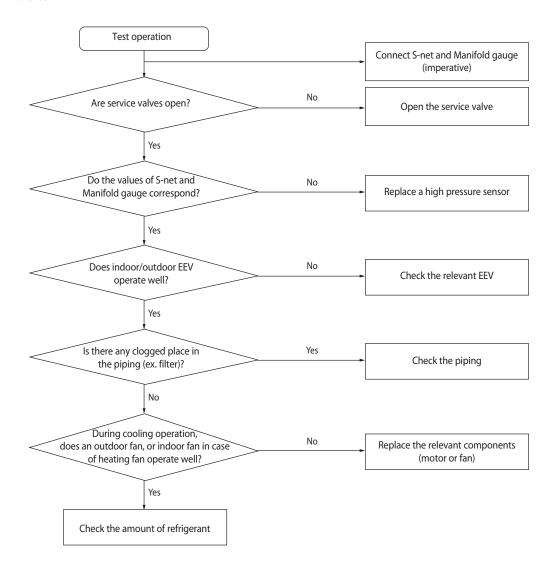


4-76 Samsung Electronics

## 

Outdoor unit display	EYD7
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	• Detect when the value of high pressure sensor is over 4.0MPa
Cause of problem	<b>&gt;During cooling operation&gt;</b> <ul> <li>Problem with Outdoor unit fan motor (stall, defect)</li> <li>Outdoor heat exchanger contamination</li> <li>Locked service valve/excessive refrigerant</li> </ul> <b>&gt;During heating operation&gt;</b> <ul> <li>Problem with Outdoor unit fan motor (stall, defect)</li> <li>Locked service valve/excessive refrigerant</li> </ul> <li>Defective SSR for fan control</li> <li>Defective fan motor capacitor or wire-breaking</li>

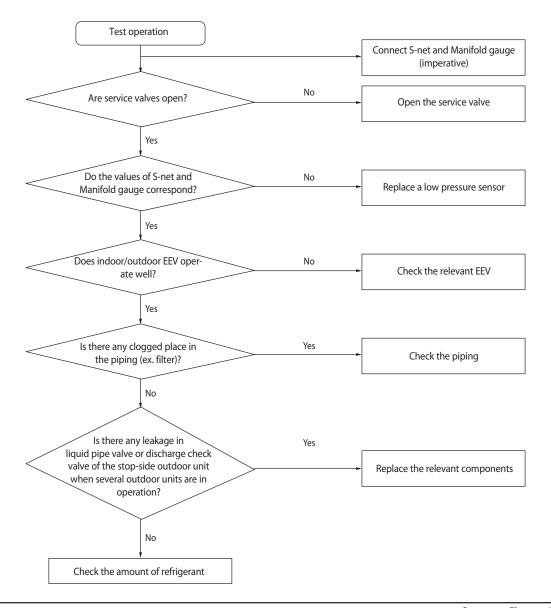
## 1. How to check



## 4-3-40 $E \lor II$ : Comp. Down due to a Protective Control of Low Pressure

Outdoor unit display	E4 10
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	Detect when the value of low pressure sensor is below 0.25MPa during cooling operation, 0.14MPa during heating operation
Cause of problem	Insufficient refrigerant Clogged electronically operated valve Clogged service valve Compressor unloading defect Defective low pressure sensor Leakage in discharge check valve of the compressor in the stop-side outdoor unit When used in a temperature condition that does not fall within the usage condition (outdoor air temperature during heating operation –below 68°F/20°C, outdoor air temperature during cooling operation – below 23°F/-5°C), this error may occur

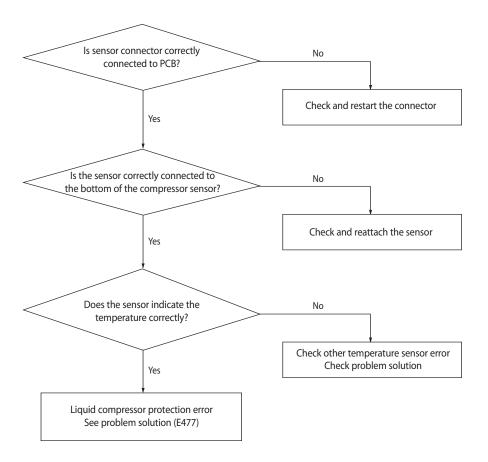
## 1. How to check



4-78 Samsung Electronics

## 4-3-41 Protection Control by Sump Sensor Error

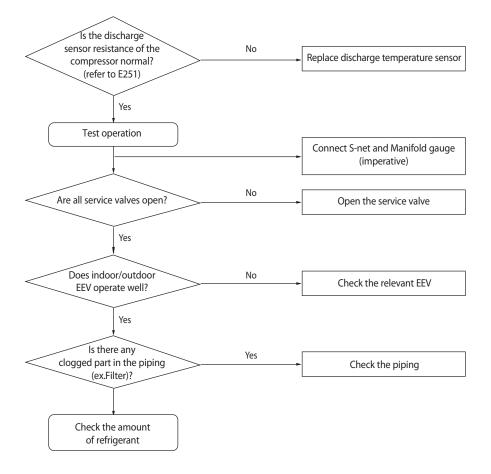
## 1. How to check



## 4-3-42 ₣Ч /后: Comp. Down due to Discharge Temperature Sensor of a Compressor

Outdoor unit display	E4 15
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	• Detect when the value of compressor's discharge temperature sensor is over 275°F/135°C
Cause of problem	Insufficient refrigerant Clogged indoor & outdoor electronically operated valves Clogged service valve Defective discharge temperature sensor clogged piping and/or filter Liquid EEV breakdown Liquid Tube valve breakdown Leakage in discharge check valve of the compressor in the stop-side outdoor unit

## 1. How to check



4-80 Samsung Electronics

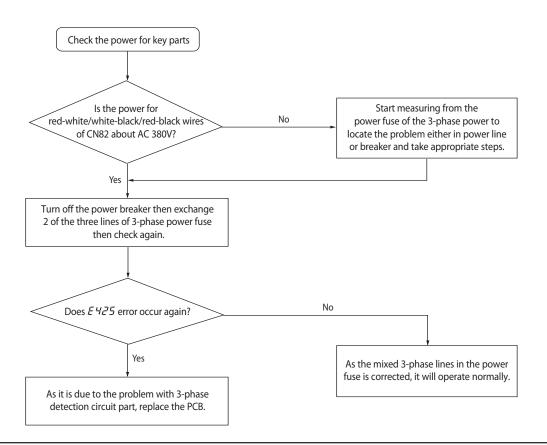
## 4-3-43 3 Detection of phase negative voltage sequence, Phase fail

Outdoor unit display	E425
Indoor unit display	$\times$ (Operation) $\P$ (Timer) $\P$ (Fan) $\P$ (Filter) $\times$ (Defrost)
Criteria	• When comparing the order of the wave form of the 3 phase detection circuit, there is mixed order or a failure to have one or all of phase power (When phase power is back to normal, E425 is automatically released)
Cause of problem	<ul> <li>3-phase power L1(R), L2(S), L3(T) wire-breaking error</li> <li>Missing input of 3-phase power</li> </ul>

## 1. How to check

- 1) Check the 3-phase detection part power on the PCB of outdoor unit
- 2) The color of wire is red, white, and black for 3-phase detection part, respectively. (Please be careful not to mix the colors or order)

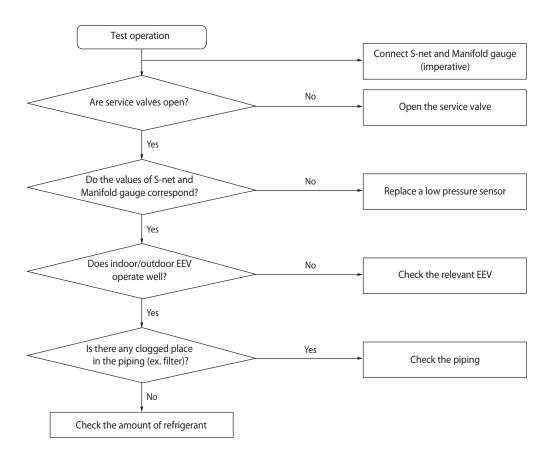




## 4-3-44 £4₽8 : Comp. Down due to compression rate control

Outdoor unit display	E428
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	• The ratio of (high pressure +1)/(low pressure +1) is over 8.5 for more than 10 minutes
Cause of problem	• Indoor/outdoor EEV breakdown and clogged piping / Defective high/low pressure sensor

## 1. How to check

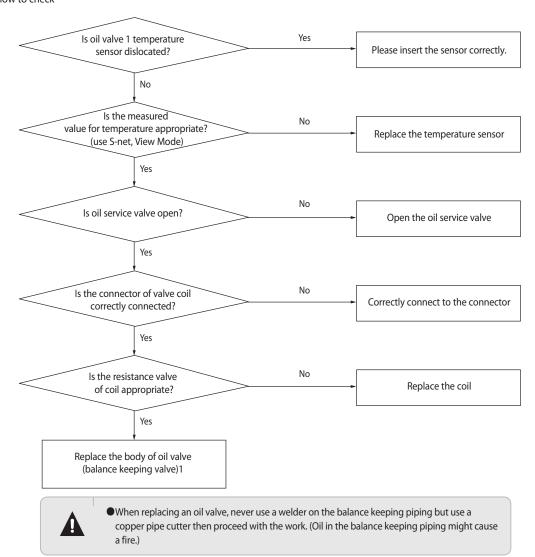


4-82 Samsung Electronics

## 4-3-45 본식국 : Self-diagnosis of Oil valve (balance keeping valve) 1 (open or closure breakdown, sensor dislocation or defect)

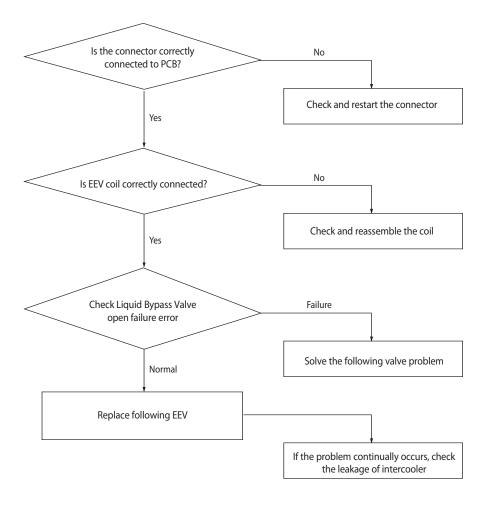
Outdoor unit display	E43 (
Indoor unit display	$\times$ (Operation) $\P$ (Timer) $\P$ (Fan) $\P$ (Filter) $\times$ (Defrost)
Criteria	<ol> <li>When only one outdoor unit is installed, it does not diagnose</li> <li>When more than 2 outdoor units are connected and exchange their oil, the oil valve (balance keeping valve)</li> <li>is broken or temperature sensor of breakdown detection for balance keeping valve 1 is dislocated, the error is displayed.</li> <li>When temperature rises for more than 5bC after closing balance keeping valve 1 and opens hot gas bypass before entering a balance keeping operation, the error is displayed.</li> <li>At the stage of releasing oils during balance keeping operation, if there is less than 44.6°F/7°C temperature change after opening an oil valve (balance keeping valve) and opening the hot gas bypass, the error is displayed.</li> </ol>
Cause of problem	Oil valve (balance keeping valve)'s temperature sensor dislocation Oil valve (balance keeping valve) breakdown Coil defect or terminal contact defect

## 1. How to check



## 4-3-46 EVI EEV Open Error

## 1. How to check



4-84 Samsung Electronics

## 4-3-47 E リソロ , E リソロ : Prohibition of the operation of Compressor due to OoutdoorTemperature

Outdoor unit display	[F44] (prohibit heating operation in outdoor temperature over 86°F/30°C) [F44] (prohibit heat filling operation in outdoor temperature over 59°F/15°C)
Indoor unit display	No sign
Criteria	E ソリロ: Right before an outdoor unit starts heating operation by On signal of an indoor Remocon, the error occurs and prohibits the operation in outdoor temperature over 86°/30°C E リリロ: Right before operating heat refrigerant filling mode by the K1 switch of an outdoor PCB, the error occurs and prohibits the operation in outdoor temperature over 59°F/15°C
Cause of problem	Operation Prohibition mode by the indoor temperature limit

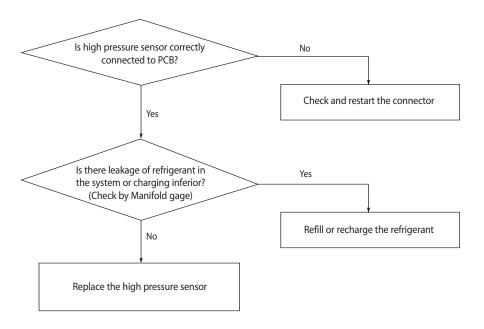
## 1. How to check

The above error code is not caused by a product's problem but a function to protect the product by limiting the available temperature range so please refer to the usable temperature range in the product manual.

If the error code is displayed despite a condition that does not belong to any of the above diagnosis methods, read the temperature sensor value of the outdoor inlet air with View Mode or S-net, and if the actual outdoor temperature is different, please replace the temperature sensor.

## 4-3-48 High Pressure below the Average before Cooling (Unable to Restart)

## 1. How to check



4-86 Samsung Electronics

## 4-3-49 Instantaneous Blackout

Outdoor unit display	E452
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	• Temperary stop of a compressor due to instantaneous blackout
Cause of problem	• Temperary stop of a compressor due to instantaneous blackout

## 4-3-50 Error by High Temperature in an Outdoor Fan Motor

Outdoor unit display	E453
Indoor unit display	-
Criteria	• When an operating outdoor fan motor is overheated for more than 230°F/110°C
Cause of problem	• Indoor fan motor lock or defect

## 1. How to check

- 1) As it is a function that is programmed to protect overheating or motor protection, lower the rotational frequency of the motor to cool it down, there would be no problem as long as the motor operates.
- 2) Check if outdoor fan motor rotates or is locked
- 3) If it is locked, it is possible to operate by removing the cause of the lock

## 4-3-51 RPM Error of an Outdoor Fan Motor

Outdoor unit display	E454
Indoor unit display	-
Criteria	When an operating outdoor fan motor's rotational frequency is more than 100rpm difference
Cause of problem	• Outdoor fan motor lock or defect

## 1. How to check

- 1) Error signal can occur for the operational problem. As it is programmed to try to restart several times to operate the motor, if motor is operating, there would be no problem.
- 2) Check if outdoor fan motor rotates or is locked
- 3) Check the motor, the contact status of the signal terminal
- 4) If motor does not operate, it is due to a motor defect.

## 4-3-52 Over-Voltage Error of an Outdoor Fan Motor

Outdoor unit display	E456
Indoor unit display	-
Criteria	• When the current of an operating outdoor fan motor is more then 7A for 1 minute
Cause of problem	Outdoor fan motor lock or defect Occurs by abrupt start or overload

## 1. How to check

- 1) Check if outdoor fan motor rotates or is locked
- 2) If it is not locked, the above error occurs due to overload and signals by abnormal operation, and it indicates the overload status. Thus, it is not breakdown.
- 3) Need to check if there is a problem with fan load status

## 4-3-53 Counter-Rotation Error of an Outdoor Fan Motor

Outdoor unit display	E457
Indoor unit display	-
Criteria	When the rotational direction of an outdoor fan motor is counter-clockwise before operating
Cause of problem	• Due to wind that can run the fan counter-wise

## 1. How to diagnose

1) Check if the start instruction of outdoor unit's fan is counter-clockwise

## 2. How to check

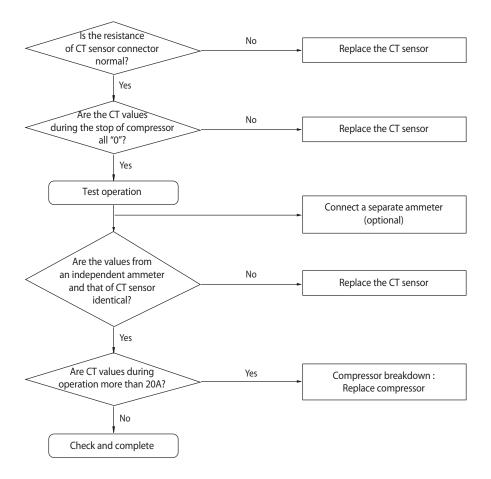
- 1) It is a signal to protect a motor by checking the operational condition of the outdoor unit's fan motor without power so as not to operate it in counter-clockwise condition.
- 2) Check if there is wind strong enough to force a fan to rotate counter-clockwise where the outdoor unit is installed.

4-88 Samsung Electronics

## 4-3-54 *E* Ч5*B* : Over-voltage error of Compressor

Outdoor unit display	E458
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	• Display the error when the CT sensor value of the relevant compressor is over 20A for 3 minutes or more
Cause of problem	Compressor breakdown / defective CT sensor

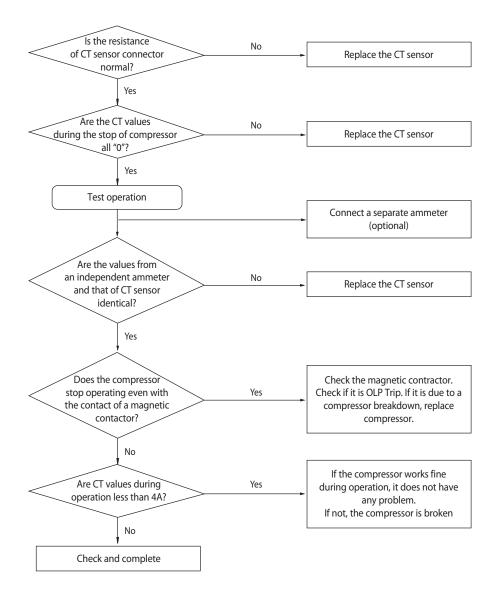
## 1. How to check



## 4-3-55 £ 4₺ /: Low-amperage error of Compressor

Outdoor unit display	E4E (Compressor 1, Compressor 2, Compressor 3)
Indoor unit display	No signal
Criteria	• Display the error when the CT sensor value of the relevant compressor is below 4A for five hours or more.  When it operates as 1A for more than 1 minute, reset timer
Cause of problem	Compressor breakdown/defective CT sensor/OLP Trip

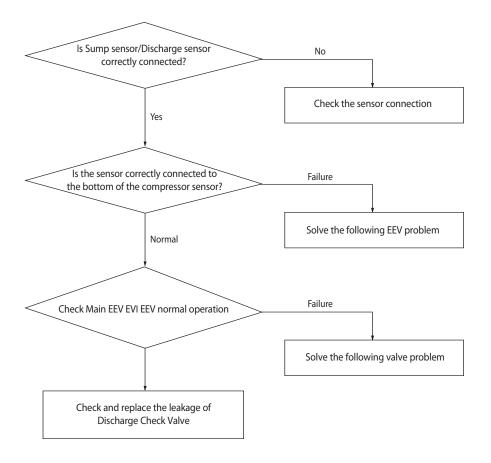
## 1. How to check



4-90 Samsung Electronics

## **4-3-56 Liquid Compressor Protection Control**

## 1. How to check



## 4-3-57 Breakdown of an EEV(1st)

## 1. How to diagnose

Detect only on cooling operation. (No detection during heating operation.)

During cooling operation, the temperature of the inlet or outlet ducts of heat exchanger is kept lower than 32°F for more than 20 minutes without cessation

## 2. How to check

- 1) Check if the wire of an electronic expansion valve is correctly connected to the PCB of indoor unit.
- 2) Check if the coil of an electronic expansion valve is correctly plugged into the main body.
- 3) Check if there is any rust on the surface of the coil of an electronic expansion valve with the naked eye, and then check the resistance between each terminal to find any wire breaking or short circuit.
- 4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.
  - In case of closure problem, operate the indoor unit in which the error has occurred.
  - In case of opening problem, please do not operate the indoor unit in which the error has occurred.
- 5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.
  - As an electronic expansion valve replacement is tricky work that requires collecting refrigerants in all systems, please make sure to check the above items before replacement.

4-92 Samsung Electronics

## 4-3-58 Breakdown of an EEV closure(1st)

## 1. How to diagnose

1) During cooling operation (It must satisfy each of the following conditions for over 20minutes.)

Tcond, out - Tair, out > 37.4°F/3°C	ОК
Tair, in - Teva, out > 39.2°F/4°C	NO
Tair, in - Teva, out > 39.2°F/4°C	NO
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	EEV closure breakdown

- 2) During heating operation (must satisfy each of conditions below)
  - When more than 2 indoor units are on Thermo On heating operation.
  - When average high pressure is over 1.77MPa
  - 5 minutes after finishing Safety Start
  - Keep Indoor units' T(Eva\_In)<T(Room) +37.4°F/3°C and T(Eva\_Out)<T(Room) +37.4°F/3°C condition for more than five minutes

## 2. How to check

- 1) Check if the wire of an electronic expansion valve is correctly connected to the PCB of indoor unit.
- 2) Check if the coil of an electronic expansion valve is correctly plugged into the main body.
- 3) Check if there is any rust on the surface of the coil of an electronic expansion valve with the naked eye, and then check the resistance between each terminal to find any wire breaking or short circuit.
- 4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.
  - In case of closure problem, operate the indoor unit in which the error has occurred.
  - In case of opening problem, please do not operate the indoor unit in which the error has occurred.
- 5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.
  - As an electronic expansion valve replacement is tricky work that requires collecting refrigerant in all systems, please make sure to check the above items before replacement.

# 4-4 How to take measures for each symptom(Model: RD040/050MHXCA)

## Error display

			Product's	Product's operation condition during error(Main parts status)	luring error(Main par	ts status)	
Error mode	Cause	Measures to take	Frequency	Outdoor unit status	Error occurred indoor unit.	Other indoor units	Diagnosis method
121	Dislocation of indoor temp, sensor connector Wire breaking of indoor temp, sensor Defective indoor temp, sensor	• Check if the wire of indoor temp, sensor is broken • Check if there is any problem in indoor temp sensor connection circuit and in sensor	1	Normal operation	Operation off	Normal operation	page 4-97
122	Dislocation of In-sensor connector in IU's heat exchanger In-sensor wire breaking in IU's heat exchanger Defective In-sensor in IU's heat exchanger	- Check if the wire of in-temp sensor of IU heat exchanger is broken     - Check if there is any problem in In-temp, sensor connection circuit and sensor of IU heat     exchanger	-	Normal operation	Operation off	Normal operation	page 4-98
123	Dislocation of Out-sensor connector in IU's heat exchanger Out-sensor wire breaking in IU's heat exchanger Defective Out-sensor in IU's heat exchanger	- Check if the wire of Out-temp sensor of IU heat exchanger is broken - Check if there is any problem in Out-temp, sensor connection circuit and sensor of IU heat exchanger	1	Normal operation	Operation off	Normal operation	page 4-99
128	IVs heat exchanger in sensor dislocation error	• Check if the in sensor of IU's heat exchanger is dislocated • Check if the holder of in sensor of IU's heat exchanger is attached	-	Normal operation	Operation off	Normal operation	page 4-100
129	IUs' heat exchanger out sensor dislocation error	• Check if the out sensor of IU's heat exchanger is dislocated • Check if the holder of out sensor of IU's heat exchanger is attached	1	Normal operation	Operation off	Normal operation	page 4-101
130	Simultaneous IU's heat exchanger in out sensor dislocation error	<ul> <li>Check if the inout sensor of IU's heat exchanger is dislocated</li> <li>Check if the holder of in, out sensor of IU's heat exchanger is attached</li> </ul>	-	Normal operation	Operation off	Normal operation	page 4-102
151	The $2^{\Pi d}$ opening error of Indoor electrically operated valve	- Check the PCB connection of electrically operated valve wire - Check the scaling condition of electrically operated valve - Check if there is any external rust, internal breakage'short circuit on the coil - After resetting OU(K3), re-check if error occurs again - Replace electrically operated valve if the breakdown is confirmed	2	Operation off	Operation off	Normal operation	page 4-103
152	The $2^{nd}$ dosing error of indoor electrically operated valve	- Check the PCB connection of electrically operated valve wire - Check the scaling condition of electrically operated valve - Check if there is any exemal rust, intensal breakage/short circuit on the coil - After resetting OU (K3), re-check if error occurs again - Replace electrically operated valve if the breakdown is confirmed	2	Operation off	Operation off	Normal operation	page 4-104
153	Indoor floating sensor error	• Check if the wire of indoor floating sensor is broken • Check if the wire of drain pump is broken • Check if the drain pump operates well	1	Operation off	Operation off	Normal operation	page 4-105
154	Indoorfan error	• Check the feedback connection line • check the rotational output of the fan motor • Check if the motor operates well	-	Normal operation	Operation off	Normal operation	page 4-106
161	Mixed operation error	• When additional Indoor unit is under heating operation during cooling operation for outdoor unit or other Indoor unit is under cooling operation during heating operation for outdoor with or other Indoor unit is under cooling operation during heating operation for outdoor . Applied only to Heat Pump model (no mixed operation error for HR model) • Due to wrong Indoor unit operation order and stop or change an operational mode for the relevant Indoor unit	1	Normal operation	Operation off	Normal operation	page 4-107
162	Defective EEPROM part Defective EEPROM circuit	• Check if there is wire breaking/nonwetting/dewetting of circuits around EEPROM parts	-	Normal operation	Operation off	Normal operation	page 4-108

# ■ Error display (cont.)

			Product's	Product's operation condition during error(Main parts status)	uring error(Main par	'ts status)	
Errormode	Gause	Measures to take	Frequency	Outdoor unit status	Error occurred indoor unit.	Other indoor units	Diagnosis method
163	Indoor unit remote controller option input is wrong/not entered.	• Re-enter remote controller option	1	Normal operation	Operation off	Normal operation	page 4-109
170	Mixed use of Fahrenheit/Celsius setup (occurs in indoor unit with Celsius setup)	• Input Celsius options in the remote controllers for error free indoor units (Celsius using regions)	1	Normal operation	Operation off	Normal operation	page 4-109
185	Power input Error into indoor unit comm. line	- Reconfirm the indoor unit comm. Line connection – power line input	-	Operation off	Operation off	Operation off	page 4-109
201	Comm. Error among, Indoor units and outdoor units after completing initial tracking Inconsistency between the number of setup IUs and the unit number setup switches	Check the comm. lines between indoor/outdoor units     Check the setup address switch on the Indoor unit's PCB     Check IJ No. setup switch on the outdoor unit's PCB	-	Operation off	Operation off	Operation off	page 4-110
202	Comm. Error among all IUS	- Check the comm. lines between Indoor/outdoor units - Check the main/sub unit setup switch - Check the number of indoor unit setting switch on the outdoor unit PCB	1	Operation off	Operation off	Operation off	page 4-111
203	Comm. Error between main & sub outdoor units Comm. Error between main & sub Micoms	- Check the comm. lines between outdoor units - Check the Main/Sub unit setting switch/outdoor units - Check for the disconnected line/cold solder/short circuit between Main/Sub MICOM	1	Operation off	Operation off	Operation off	page 4-112
221	Outdoor unit Temp SENSOR ERROR(Open/Short) • Error level: over 49V(-50°), below 0.4V(93°)	<ul> <li>Check the connection part of the outdoor temp. sensor circuit and any problem in the sensor.</li> <li>Check the wire breaking of the outdoor temp. sensor circuit and the connection status of the connector PCB</li> </ul>	1	Operation off	Operation off	Operation off	page 4-113
231	COND_OUT Main Temp SENSOR ERROR (Open/Short) • Error level: over 4.9V (-50°), below 0.4V (93°)	Check the connection part of the COND OUT temp. sensor circuit and any problem in the sensor     check the wire breaking of the COND OUT temp. sensor circuit and the connection status of the connector PCB	1	Operation off	Operation off	Operation off	page 4-114
246	Outdoor COND OUT temp. sensor dislocation error	• Check if the outdoor COND OUT sensor is mounted in the right position	1	Operation off	Operation off	Operation off	page 4-115
251	Discharge temp. error (Open/Short) • Error detection condition: outdoor temp. over - 10 ° • Error level: over 495 V (+50°), below 0.4V (93°)	Check the connection part of the discharge temp, sensor circuit and any problem in the sensor.     Check the wire breaking of the discharge temp, sensor circuit and the connection status of the connector PCB	-	Operation off	Operation off	Operation off	page 4-116
261	Discharge temp. Sensor dislocation error	<ul> <li>Check if the discharge temp, sensor is mounted in the right position</li> </ul>	1	Operation off	Operation off	Operation off	page 4-117
291	Detect only high pressure SENSOR ERROR (Open/Short) compressor (short error: detect only below 0.4V) (Open error: detect only over 4.2V)	• Check the wire breaking of high pressure sensor • Check the high pressure sensor circuit and any problem in the sensor	1	Operation off	Operation off	Operation off	page 4-118
311	Liquid pipe temp, sensor connector dislocation Liquid pipe temp, sensor wire breaking Defective liquid pipe temp, sensor	<ul> <li>Check if a liquid pipe temp. sensor wire is broken</li> <li>Check the liquid pipe temp. sensor connection circuit and any problem with sensor</li> </ul>	-	Operation off	Operation off	Operation off	page 4-119
320	OLP Sensor (Open/Short)	- Check for OPL sensor wire cut off	-	operation off	operation off	operation off	page 4-120

Samsung Electronics

4-95

# ■ Error display (cont.)

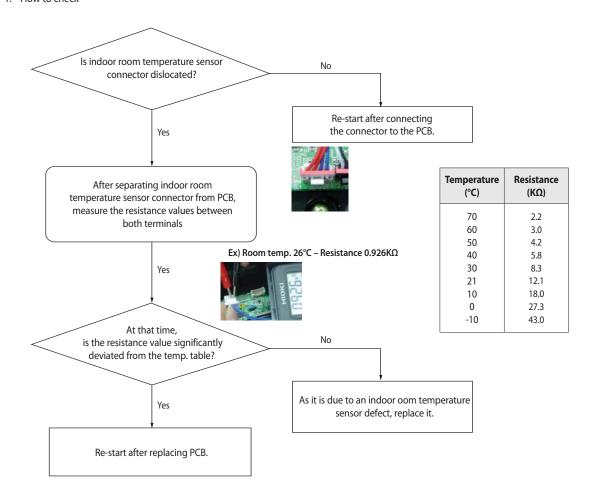
Troubleshooting

			Product's	Product's operation condition during error(Main parts status)	uring error(Main par	rts status)	
Error mode	Cause	Measures to take	Frequency	Outdoor unit status	Error occurred indoor unit.	Other indoor units	Diagnosis method
403	All the operating indoor machines do not reach -4°C for more than five minutes	- Check if the indoor FANVMOTOR operates normally.     - Check if the indoor EEV operates normally.     - Check the indoor heat exchanger's IN/OUT sensor.     - Check for clogging in the suction area of the indoor machine.	1	Operation off	Operation off	Operation off	page 4-121
407	Compressor down by high pressure sensor protection control	- Check if a service valve is open - Compare the values between manifold gauge and S-net: check if there are any problems with high pressure sensor - Check if indoor/outdoor EEV operates - Check if there is any clog in the piping such as filters - Check the fan operates well - Check the amount of refrigerants (overcharging)	-	Operation off	Operation off	Operation off	раде 4-122
410	Compressor down by low pressure sensor protection control	• Check if a service valve is open • Compare the values between manifold gauge and 5-net: Check if there are any problems with high pressure sensor • Check if indoor/outdoor EEV operates • Check if indee is any dog in the piping such as filters • Check the amount of refrigerants (shortage)	-	Operation off	Operation off	Operation off	page 4-123
416	Compressor down by discharge temp.	• Check the resistance of discharge sensors • Check if a service valve is open • Compare the values between manifold gauge and 5-net: Check if there are any problems with high pressure sensor • Check if indoor/outdoor EEV operates • Check if there is any clog in the piping such as filters	-	Operation off	Operation off	Operation off	page 4-124
440	Prohibit heating for outdoor temperature over 30°	<ul> <li>Check if there is any dislocation/pbm. with outdoor temp sensor</li> <li>If outdoor temp measured normal, normal operation by protective control</li> </ul>	1	Operation off	Operation off	Operation off	page 4-125
442	Prohibit filling mode for outdoor temperature over 15°	<ul> <li>Check if there is any dislocation/pbm. with outdoor temp sensor</li> <li>If outdoor temp measured normal, normal operation by protective control</li> </ul>	1	Operation off	Operation off	Operation off	page 4-126
462	Current protection control causes comp. down	• Check the compressor input voltage (error for low voltage) • Check the overcurrent option setting	1	Operation off	Operation off	Operation off	page 4-126
463	OLP protection control cause comp. down	See if the sub valve is open     Check the amount of coolant     Check the CLP sensor	-	Operation off	Operation off	Operation off	page 4-126
458 475	Electrical malfunctions of the outdoor machine	• Fan stuck • Poor fan connection • Damaged fan	1	Operation off	Operation off	Operation off	page 4-127
702	1 <sup>st</sup> close indoor electrically operated valve	- Check the PCB connection of electrically operated valve wire - Check the sealing condition of electrically operated valve - Check if there is any external rust, internal breakage/short circuit on the coil - After resetting OU (K3), re-check if error occurs again	1	Normal operation	Operation off	Normal operation	page 4-128
703	1 <sup>st</sup> open indoor electrically operated valve	- Check the PCB connection of electrically operated valve wire - Check the sealing condition of electrically operated valve - Check if there is any external rust, internal breakage/short circuit on the coil - After resetting OU (K3), re-check if error occurs again	-	Re-start	Re-start	Normal operation	page 4-128

# 4-4-1 Indoor Unit ROOM sensor Error (Open/Short)

Outdoor unit display	$F : \mathcal{F} \hookrightarrow \mathcal{F}^{\times \times \times (\times \times \times : \text{The address of the error occurred indoor unit)}}$	
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\times$ (Fan) $\times$ (Filter) $\times$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	• The room temperature sensor of No. XXX indoor unit has defective OPEN/SHORT	

#### 1. How to check

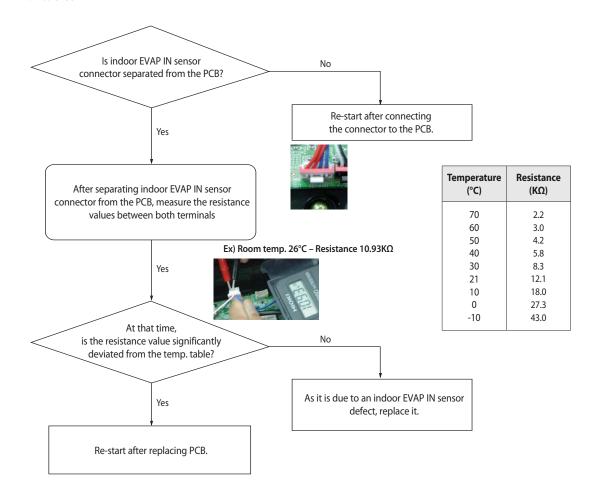


4-97 Samsung Electronics

# 4-4-2 Indoor unit EVAP IN sensor Error (Open/Short)

Outdoor unit display	$F : \mathbb{Z} \longrightarrow \mathbb{R} \times \times$		
Indoor unit display	lacktriangle (Operation) $lacktriangle$ (Timer) $lacktriangle$ (Filter) $lacktriangle$ (Defrost)		
Criteria	• Refer to how to determine below		
Cause of problem	• The EVAP IN sensor of No. XXX indoor unit has defective OPEN/SHORT		

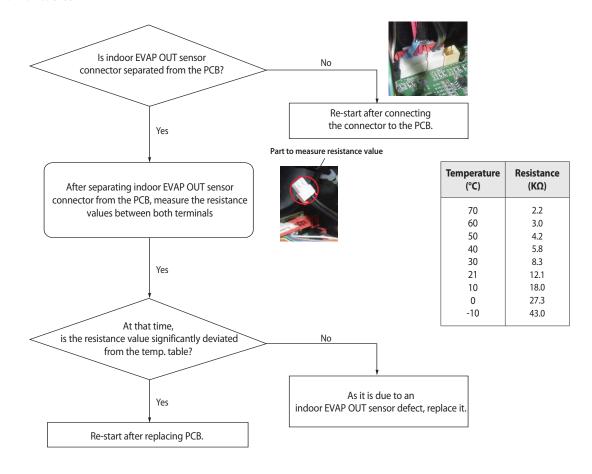
#### 1. How to check



# 4-4-3 Indoor EVAP OUT sensor Error (Open/Short)

Outdoor unit display	$E : E  \rightarrow R \times $	
Indoor unit display	lacktriangle (Operation) $lacktriangle$ (Timer) $lacktriangle$ (Filter) $lacktriangle$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	• The EVAP out sensor of No. XXX indoor unit has defective OPEN/SHORT	

#### 1. How to check



4-99 Samsung Electronics

# 4-4-4 Indoor Heat Exchanger's EVAP IN sensor dislocation error

Outdoor unit display	$E \vdash B \hookrightarrow R \times X \times$	
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	• Indoor heat exchanger's EVAP IN piping sensor has been dislocated	

## 1. How to diagnose

## 1) During Cooling Operation

Tcond, out - Tair, out > 3°C	ОК
Tair, in - Teva, out > 4°C	NO
Tair, in - Teva, out > 4°C	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Indoor heat exchanger's EVAP IN sensor dislocation error

#### 2) During heating operation

Average low pressure > 8.5kg/cm <sup>2</sup>	ОК
Tcond, out - Tair, out ≥ 3°C	ОК
Tair, in - Teva, out ≥ 2°C	NO
Tcond, out - Tair, out < -2°C	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Indoor heat exchanger's EVAP IN sensor dislocation error

#### 2. How to check

 $Check\ if\ an\ Indoor\ heat\ exchanger's\ EVAP\ IN\ sensor\ has\ been\ dislocated\ then\ is\ correct\ after\ assembling.$ 

# 4-4-5 Indoor Heat Exchanger's EVA OUT sensor dislocation error (Open/Short)

Outdoor unit display	$E : B \hookrightarrow R \times X \times$	
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	• Indoor heat exchanger's EVA IN piping sensor has been dislocated	

## 1. How to diagnose

## 1) During Cooling Operation

Tcond, out - Tair, out > 3°C	ОК
Tair, in - Teva, out > 4℃	NO
Tair, in - Teva, out > 4°C	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Indoor heat exchanger's EVA IN sensor dislocation error

#### 2) During Heating operation

Average high pressure > 25kg/cm²	ОК
Tcond, out - Tair, out ≥ 3°C	ОК
Tair, in - Teva, out ≥ 2°C	NO
Tcond, out - Tair, out < -2°C	OK
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Indoor heat exchanger's EVA IN sensor dislocation error

#### 2. How to check

Check if an Indoor heat exchanger's EVA OUT sensor has been dislocated then is correct after assembling.

4-101 Samsung Electronics

# 4-4-6 £ /∃☐: Simultaneous Indoor Heat Exchanger's EVA IN, OUT sensor dislocation error (Open/Short)

## 1. How to diagnose

## 1) During Cooling Operation

Tcond, out - Tair, out > 3°C	ОК
Tair, in - Teva, out > 4°C	NO
Tair, in - Teva, out > 4°C	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Simultaneous indoor heat exchanger's EVA IN, OUT sensor dislocation error

## 2) During Heating operation

Average high pressure > 25kg/cm²	ОК
Teva, out - Tair, out ≥ 3°C	ОК
Tair, in - Teva, out ≥ 2°C	NO
Tcond, out - Tair, out < -2°C	OK
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Simultaneous Indoor heat exchanger's EVA IN, OUT sensor dislocation error

#### 2. How to check

Check if an Indoor heat exchanger's EVA IN, OUT sensor has been dislocated then is correct after assembling.

# 4-4-7 £ /5 /: Breakdown of EEV (2nd)

#### 1. How to diagnose

Detect only on cooling operation. (No detection during heating operation.)

During cooling operation, the temperature of the inlet or outlet ducts of heat exchanger is kept below 0°C for more than 20 minutes without cessation

#### 2. How to check

- 1) Check if the wire of electronic expansion valve is correctly connected to the PCB of indoor unit.
- 2) Check if the coil of an electronic expansion valve is correctly plugged into the main body.
- 3) Check if there is any rust on the surface of the electronic expansion valve with naked eyes then check the resistance between each terminal to find any wire breaking or short circuit.
- 4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.
  - In case of closure problem, operate the indoor unit in which the error has occurred.
  - In case of opening problem, please do not operate the indoor unit in which the error has occurred.
- 5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.
  - As an electronic expansion valve replacement is tricky work that requires collecting refrigerants in all systems, please check the above items before replacement.

4-103 Samsung Electronics

## 4-4-8 £ (5,5): Problem with EEV closure (2<sup>nd</sup>)

#### 1. How to diagnose

1) During Cooling operation(Each of the below conditions have to be met for at least 20 minutes.)

Tcond, out - Tair, out > 3°C	ОК
Tair, in - Teva, out > 4°C	NO
Tair, in - Teva, out > 4℃	ОК
Compressor in operation & Indoor unit operation & Thermo On	ОК
Error details	Electrically operated valve closure breakdown

- 2) During heating operation (must satisfy all conditions below)
  - When more than 2 indoor units are on Thermo On heating operation.
  - When average high pressure is over 18kg/cm<sup>2</sup>
  - 5 minutes after finishing Safety Start
  - Keep Indoor units' T(Eva\_In)<T(Room) +3°C and T(Eva\_Out)<T(Room) +3°C condition for more than 5 minutes

#### 2. How to check

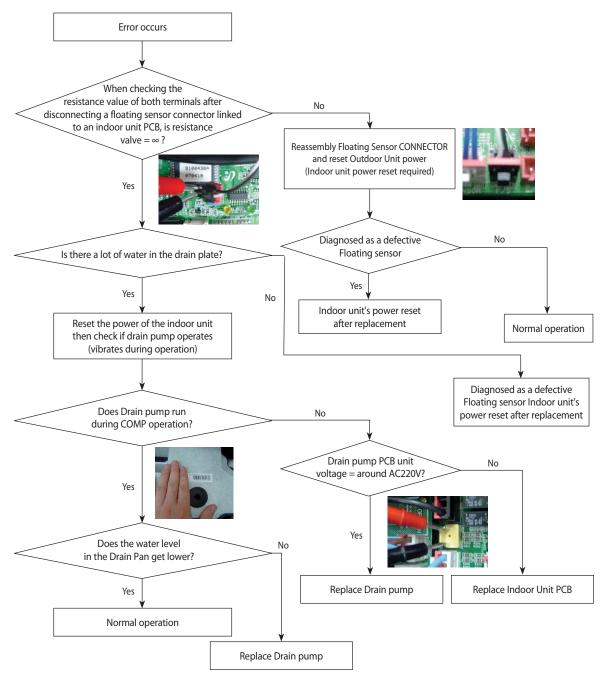
- 1) Check if the wire of electronic expansion valve is correctly connected to the PCB of indoor unit.
- 2) Check if the coil of electronic expansion valve is correctly plugged into the main body.
- 3) Check if there is any rust on the surface of the electronic expansion valve with naked eye then check the resistance between each terminal to find any wire breaking or short circuit.
- 4) Press the RESET KEY (K3) of the outdoor unit then see if the same error occurs.
  - In case of closure problem, operate the indoor unit in which the error has occurred.
  - In case of opening problem, please do not operate the indoor unit in which the error has occurred.
- 5) If there is no problem with the above checkup items, replace the electronic expansion valve of the troubled indoor unit.
- As electronic expansion valve replacement is tricky work that requires collecting refrigerants in all systems, please check the above items before replacement.

# 4-4-9 £ 153: Detection of Floating Switch of Indoor Unit's Drain Pump

Outdoor unit display	$E : 153 \leftrightarrow R \times \times$		
Indoor unit display	$\times$ (Operation) $\times$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)		
Criteria	• Refer to how to determine below		
Cause of problem	• Due to the breakdown of a drain pump of the indoor unit, an increase in the water level in the drainage plate or defective detection sensor		

<sup>\*</sup> To release E153 error, you must reset the power of the indoor unit.

#### 1. How to check



4-105 Samsung Electronics

# 4-4-10 *E 154*: The operational error of Indoor Unit's Fan Motor

Outdoor unit display	$F : \mathcal{F} \hookrightarrow \mathcal{F} \times \times$	
Indoor unit display	$\times$ (Operation) $\times$ (Timer) $\bullet$ (Fan) $\times$ (Filter) $\times$ (Defrost)	
Criteria	Refer to how to determine below	
Cause of problem	• The operational error of the fan motor of No. XXX indoor unit	

## 1. How to diagnose

1) Occurs when RPM valve fails to feedback to MICOM at a PID control-type fan motor

#### 2. How to check

- 1) Check HALL IC connector that carries out feedback of RPM value.
- 2) If a fan motor operation capacitor is a PCB separating type, check the connection terminal.
- 3) Check the operational status of the fan motor.
- 4) If there is no problem with the above checkup items, replace the PCB.

# 4-4-11 *E ∤E ∤*: Mixed operation Error

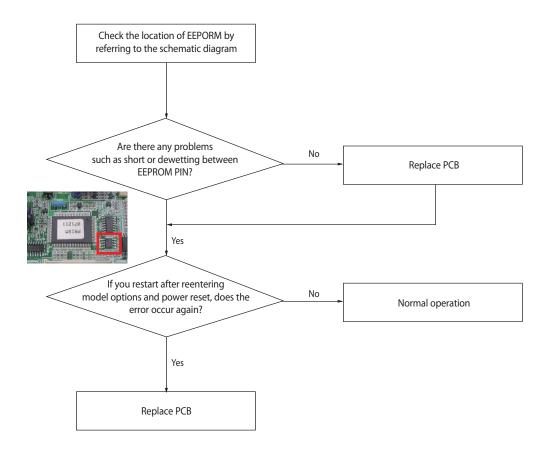
- Mixed operation error is not due to a product problem but is displayed when the operational mode input in an indoor unit is different from current operational status (other indoor unit's operational mode).
- Check the operational mode of outdoor unit or other indoor unit then re-enter or stop the operational mode of the relevant unit.
- If it is necessary to apply a different operational mode to an indoor unit from others, please stop other indoor units then operate the indoor unit.

4-107 Samsung Electronics

## 4-4-12 EEPROM error

Outdoor unit display	E 162	
Indoor unit display	x(Operation)	
Criteria	Communication failure between EEPROM and MICOM	
Cause of problem	PCB replacement due to defective EEPROM	

#### 1. How to check



# 4-4-13 Option error of the Remote Controller for an Indoor Unit

Outdoor unit display	E 163	
Indoor unit display	<b>①</b> (Operation) <b>①</b> (Timer) <b>①</b> (Fan) <b>①</b> (Filter) <b>①</b> (Defrost)	
Criteria	Display number type of indoor unit – E163 occurs, Lamp type – all lamps flash	
Cause of problem	Missed or erroneous input of remote controller options	

• Check relevant remote controller options for each model then enter correct options

#### 4-4-14 Error due to confused use of Fahrenheit and Celsius

Outdoor unit display	E 170	
Indoor unit display	$\times$ (Operation) $\mathbb{D}$ (Timer) $\mathbb{D}$ (Fan) $\mathbb{D}$ (Filter) $\times$ (Defrost)	
Criteria	Display number type of indoor unit – E170 occurs, Lamp type – all lamps flash     Occurs in an indoor unit with Celsius setting	
Cause of problem	Missed input of remote controller options	

- Check relevant remote controller options for each model then enter correct options
- As this happens only in a Celsius setting model, it is necessary to reenter option codes for error-free models in a region where Celsius is used.

## 4-4-15 Error due to incorrect Indoor Unit Power/Communication Cable Connection

Outdoor unit display	E 185	
Indoor unit display	E 1B5 (wall mount type)	
Criteria	Check for Power input(220V) for the Terminal block(F1/F2).	
Cause of problem	• Apply power (220V) to the terminal of the indoor unit communication block (F1/F2)	

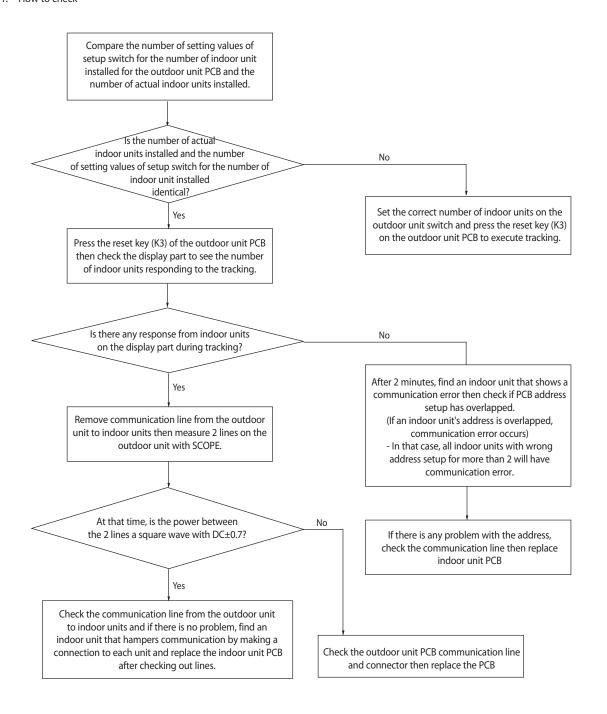
• Check for disconnected line after turning off the Main power.

4-109 Samsung Electronics

#### 4-4-16 Communication error between Indoor and Outdoor units during Tracking

Outdoor unit display	E20 I	
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\times$ (Filter) $\times$ (Defrost)	
Criteria	Communication error between indoor and outdoor units	
Cause of problem	• Refer the below	

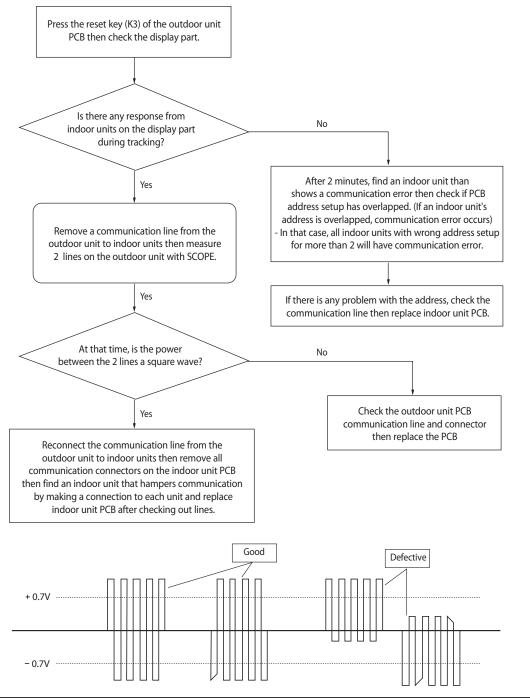
#### 1. How to check



# 4-4-17 Communication error between Indoor & Outdoor units after Completing Tracking

Outdoor unit display	E202		
Indoor unit display	$\times$ (Operation) $\mathbb{D}$ (Timer) $\mathbb{D}$ (Fan) $\times$ (Filter) $\times$ (Defrost)		
Criteria	• When the communication between indoor/outdoor units cut-off for 2 minutes (all chambers fail to receive)		
Cause of problem	Communication error between indoor/outdoor units and/or the erroneous setup switch setting for the number of indoor units installed.		

#### 1. How to check

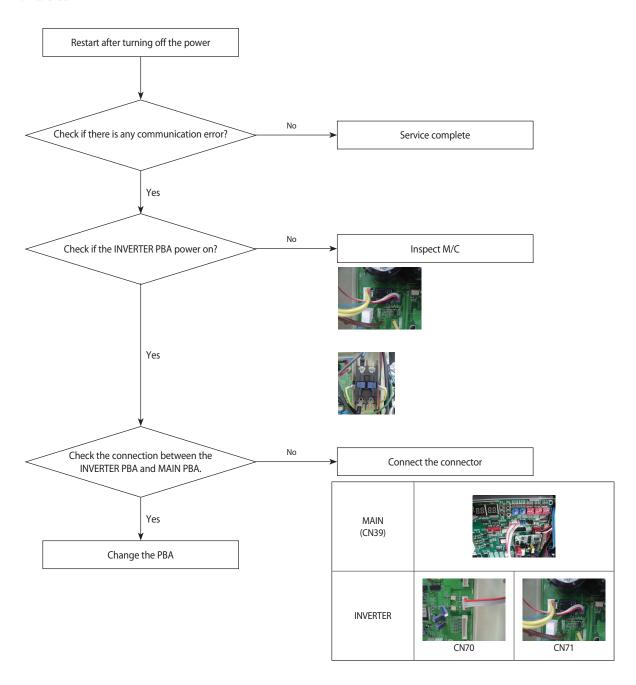


4-111 Samsung Electronics

# 4-4-18 Communication error between main PCB and inverter PCB during Tracking

Outdoor unit display	E203	
Indoor unit display	$\times$ (Operation) $\P$ (Timer) $\P$ (Fan) $\times$ (Filter) $\times$ (Defrost)	
Criteria	Communication error between main PCB and inverter PCB during	
Cause of problem	• Refer the below	

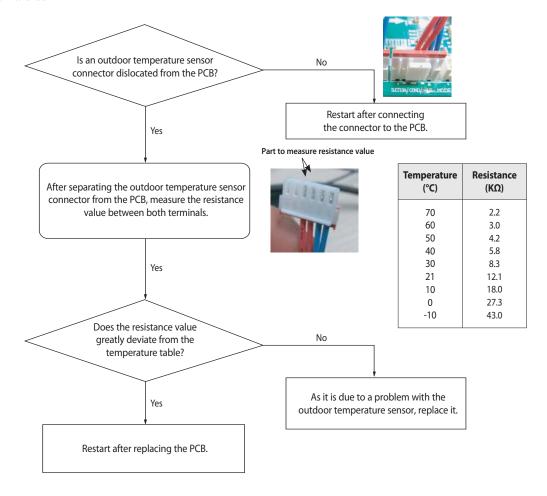
#### 1. How to check



# **4-4-19 Outdoor Temperature Sensor error**

Outdoor unit display	E22	
Indoor unit display	$lacktriangle$ (Operation) $\times$ (Timer) $lacktriangle$ (Fan) $\times$ (Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Outdoor temperature sensor OPEN/SHORT defective	

#### 1. How to check

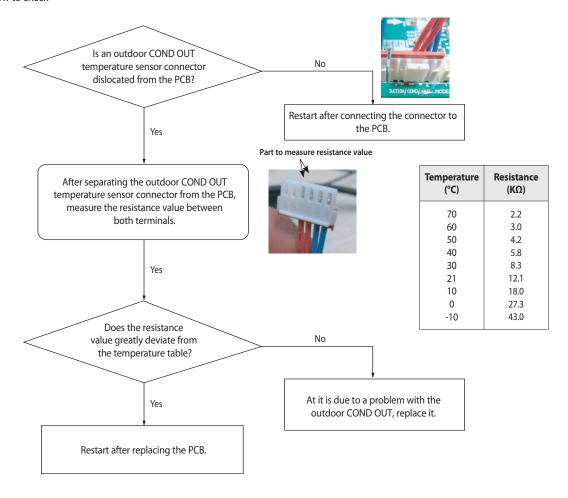


4-113 Samsung Electronics

# 4-4-20 COND OUT Temperature Sensor error (Open/Short)

Outdoor unit display	E23 (	
Indoor unit display	●(Operation) ×(Timer) ●(Fan) ×(Filter) ×(Defrost)	
Criteria	• Refer to how to determine below	
Cause of problem	Wire breaking or failure of the relevant sensor	

#### 1. How to check



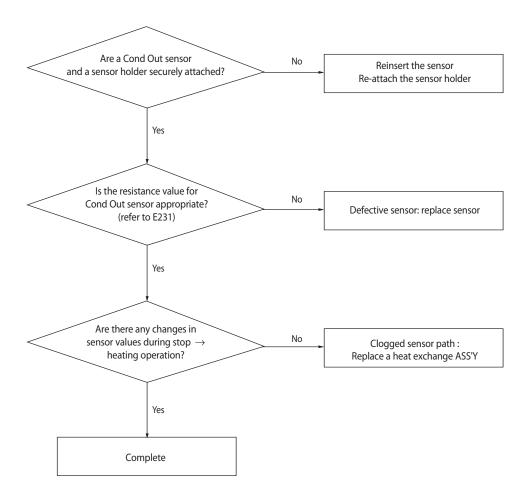
# 4-4-21 *Eご*りだ: Outdoor COND OUT Sensor dislocation error

#### 1. How to diagnose

- 1) During Cooling operation, there will be no detection
- 2) During Heating operation(Each of the below conditions have to be met for at least 20 minutes.)

Average high pressure > 25kg/cm <sup>2</sup>	OK
Tcond, out - Tair, out ≥ 3°C	OK
Tair, in - Teva, out ≥ 2°C	ОК
Tcond, out - Tair, out < -2°C	OK
Compressor in operation & Indoor unit operation & Thermo On	NO
Error details	Outdoor Cond Out sensor dislocation error

#### 2. How to check

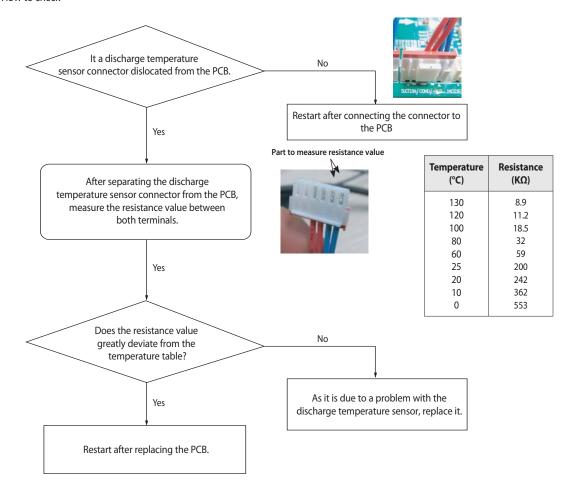


4-115 Samsung Electronics

# 4-4-22 Discharge Temperature Sensor error (Open/Short)

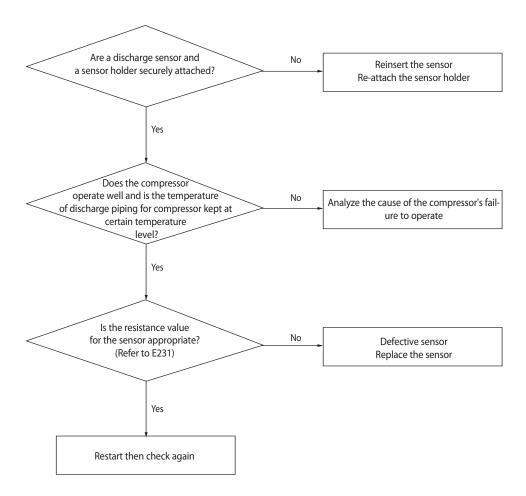
Outdoor unit display	E25 (
Indoor unit display	$lacktriangle$ (Operation) $\times$ (Timer) $\bullet$ (Fan) $\times$ (Defrost)
Criteria	• Refer to how to determine below
Cause of problem	Discharge temperature sensor OPEN/SHORT defective

## 1. How to check



# 4-4-23 *Eこ*ら /: Compressor's Discharge Temperature Sensor dislocation error

#### 1. How to check



4-117 Samsung Electronics

# 4-4-24 High Pressure Temperature Sensor error (Open/Short)

Outdoor unit display	E29 (
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	• Refer to how to determine below
Cause of problem	Wire breaking or failure of the relevant sensor

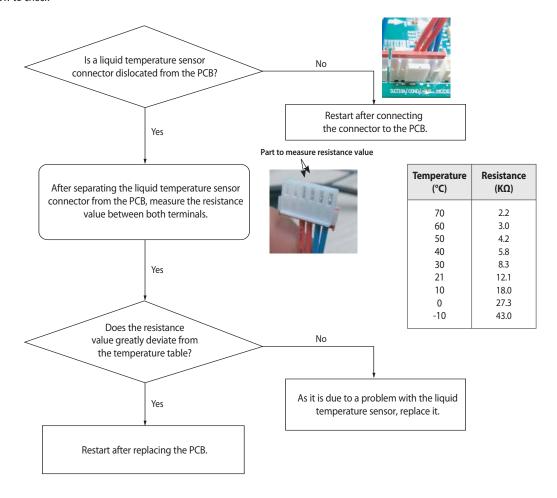
#### ■ How to detect OPEN/SHORT error in Low/High pressure sensor

- 1. During oil retrieval, omit the error detection and start detecting 5 minutes after complete operation.
- 2. During safety start operation, omit the error detection and start detecting 5 minutes after complete operation.
- 3. During defrost operation, omit the error detection and start detecting 5 minutes after complete operation
- 4. SHORT error detection: carry out error detection only if it is under 0.4V.
- 5. During refrigerant refill/retrieval, omit low pressure sensor error detection.

# 4-4-25 Double pipe temperature sensor error(Open/Short)

Outdoor unit display	E3 / /
Indoor unit display	$lacktriangle$ (Operation) $\times$ (Timer) $lacktriangle$ (Fan) $\times$ (Defrost)
Criteria	• Refer to how to determine below
Cause of problem	Wire breaking or failure of the relevant sensor

#### 1. How to check

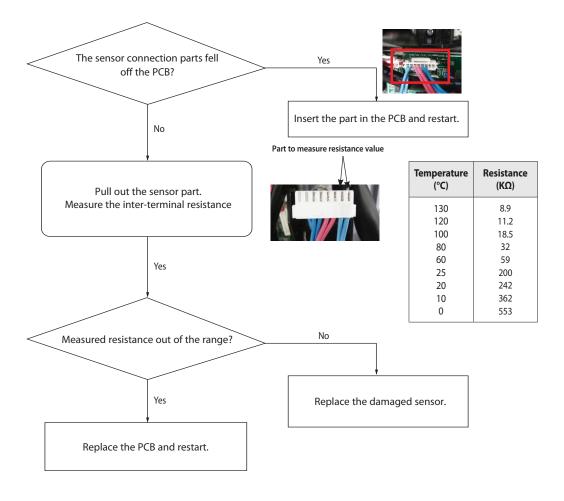


4-119 Samsung Electronics

# 4-4-26 OLP sensor error (Open/Short)

Outdoor unit display	E320
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	• Refer to how to determine below
Cause of problem	Wire breaking or failure of the relevant sensor

#### 1. How to check



# 4-4-27 *E Чロ*∃: Freezing control causes comp. down

Outdoor unit display	E403
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\bullet$ (Defrost)
Criteria	• All the operating indoor machines do not reach -4°C for more than five minutes
Cause of problem	Check if the indoor FAN/MOTOR operates normally. Check if the indoor EEV operates normally. Check the indoor heat exchanger's IN/OUT sensor. Check for clogging in the suction area of the indoor machine.

#### 1. How to check

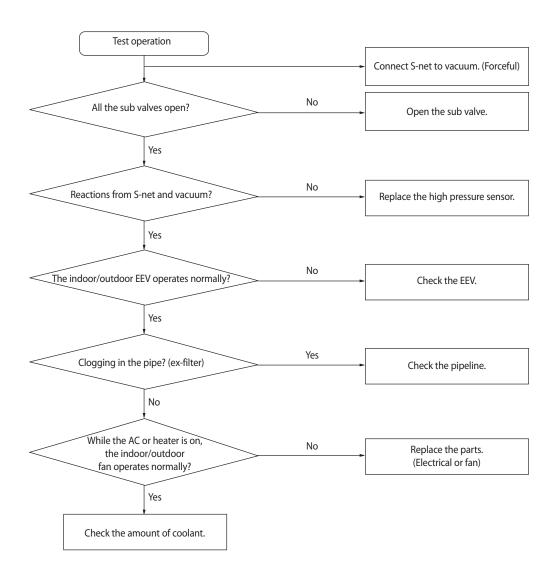


4-121 Samsung Electronics

# 4-4-28 *E Ч□□*: High voltage protection compressor stopped

Outdoor unit display	E407	
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defros	t)
Criteria	• The high pressure sensor reading approaches 38KG/C	M <sup>2</sup> .
Cause of problem	<ul> <li><ac in="" operation=""></ac></li> <li>Check electrical installation of the outdoor machine.</li> <li>Polluted outdoor machine heat exchanger.</li> <li>Closed sub valve./Add some coolant.</li> <li>Check for clogging in the suction area of the indoor machine.</li> <li>Electrical motor is weak or cut off cable.</li> <li>Fan control SSR inefficient.</li> </ul>	<heater in="" operation=""> • Electrical installation of the outdoor machine. • Closed sub valve./Add some coolant. • Electrical motor is weak or cut off cable.</heater>

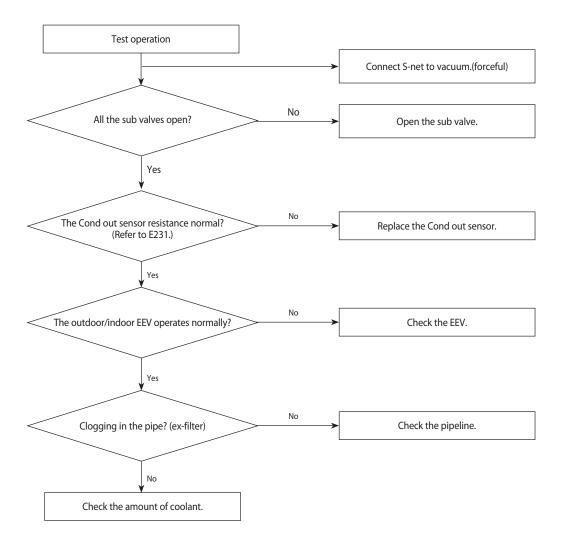
#### 1. How to check



# 4-4-29 돈님 네글: Compressor down by low pressure sensor protection control

Outdoor unit display	E4 ID
Indoor unit display	×(Operation)
Criteria	•The Cond out sensor temperature is detected below -35°C.
Cause of problem	<ul> <li>Insufficient coolant, clogging in the motor.</li> <li>Bad compressor.</li> <li>Bad Cond out sensor.</li> <li>The outdoor compressor's Discharge Check Valve leaks.</li> <li>Exceeding the temperature limit (For heater operation, the outside temperature is below -20°C.</li> <li>For AC operation, the outside temperature is below -5°C) Possibilities for errors.</li> </ul>

#### 1. How to check

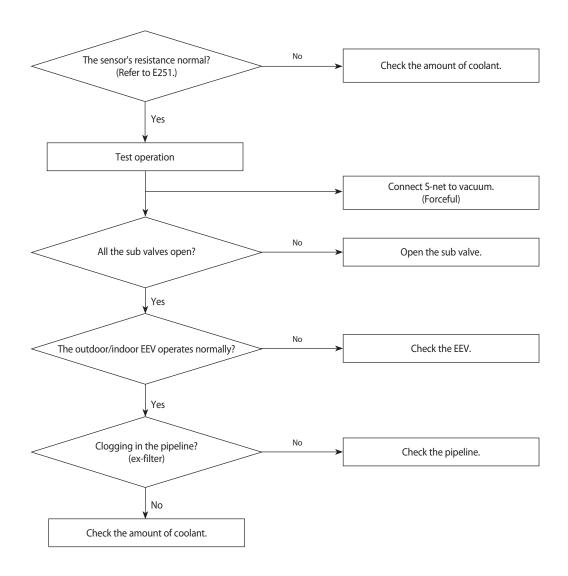


4-123 Samsung Electronics

# 4-4-30 £ 4 1₺: Dischage temperature sensor error

Outdoor unit display	E4 15
Indoor unit display	x(Operation)
Criteria	• The compressor temperature above 110°C.
Cause of problem	<ul> <li>Insufficient coolant.</li> <li>Clogging in the outdoor machine's solenoid valve.</li> <li>Clogging in the sub valve.</li> <li>Malfunctioning exhaust gas temp sensor.</li> <li>Clogging in the pipeline and the filter.</li> <li>Liquid EEV damaged.</li> </ul>

#### 1. How to check



# 4-4-31 E リソロ, E リソー, E リソー: Abnormal outside temperature halts operation of the compressor

Outdoor unit display	E ソリロ (No heater operation with the outside temperature above 30°C.) E ソリ (No AC operation with the outside temperature below -10°C.) E ソリロ (No refilling of the heater coolant with the outside temperature above 15°C.)
Indoor unit display	No signals
Criteria	E リリロ: If the outside temperature is above 30°C, operation of the indoor heater with a remocon causes this error.  E リリイ: The indoor machine remocon ON signal. If the outside temperature is below -10°C before the AC runs, this error occurs.  E リリン: If the outside temperature is above 15°C and the K1 button of the outdoor machine PCB is pressed to refill the coolant, this error is generated.
Cause of problem	OLP SENSOR temp above Trip_Dis.

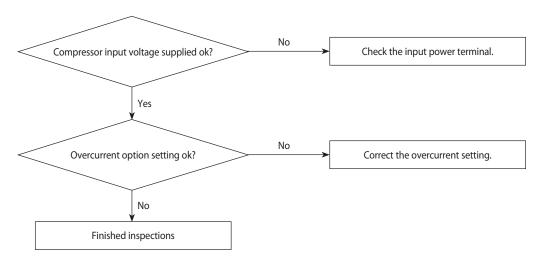
#### 1. How to diagnose

The above malfunction codes do not indicate a malfunction of the product. All you have to do is change the temperature suitably for the limits shown in the manual. When the product malfunctions, if the actual situation does not match the above diagnosis, measure the temperature of incoming air with S-net to see if the measurement is the same as the actual outdoor temperature. If not, replace the temperature sensor.

# 4-4-32 *E ЧБ2*: Current protection control causes comp. down

Outdoor unit display	E462
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\bullet$ (Defrost)
Criteria	•The outdoor machine input current above I_Trip.
Cause of problem	Check the compressor input voltage. (error for low voltage.)     Check the overcurrent option setting.

#### 1. How to check

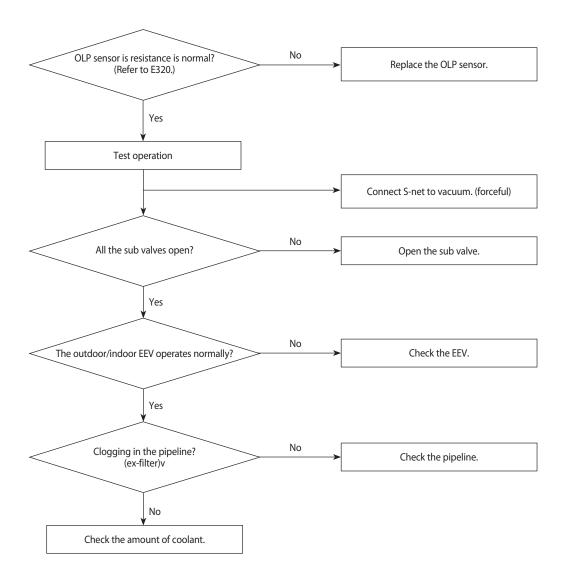


4-125 Samsung Electronics

# 4-4-33 *E* ЧБ∃: OLP protection control caused comp. down

Outdoor unit display	E463
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\bullet$ (Defrost)
Criteria	• OLP SENSOR temp above Trip_Dis.
Cause of problem	<ul><li>See if the sub valve is open.</li><li>Check the amount of coolant.</li><li>Check the OLP sensor.</li></ul>

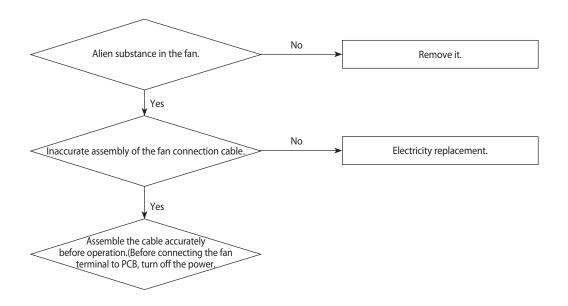
#### 1. How to check



# 4-4-34 E45B, E475: Electrical malfunctions of the outdoor machine

Outdoor unit display	E458.E475
Indoor unit display	$\times$ (Operation) $\bullet$ (Timer) $\bullet$ (Fan) $\bullet$ (Filter) $\times$ (Defrost)
Criteria	• Refer to the below method.
Cause of problem	Fan stuck. Poor fan connection. Damaged fan.

#### 1. How to check



4-127 Samsung Electronics

## 4-4-35 ETUS: EEV Off-malfunctions (1st)

#### 1. How to check

The above malfunction codes do not indicate a malfunction of the product. All you have to do is change the temperature suitably for the limits shown in the manual. When the product malfunctions, if the actual situation does not match the above diagnosis, measure the temperature of incoming air with S-net to see if the measurement is the same as the actual outdoor temperature. If not, replace the temperature sensor.

#### 2. Inspection:

- 1) See if the EEV cable is properly connected to the indoor machine PCB.
- 2) See if the EEV coil is inserted into the EEV main body.
- 3) Visually inspect the rust on the EEV coil. Measure the inter-terminal resistance and look for open/short circuited areas.
- 4) Press the outdoor machine PCB reset button (K3) to see if the same error occurs again.
  - Problems with turning off, then start the indoor machine where the error occurs.
  - Problems with turning on, then do not operate the indoor machine where the error occurs.
- 5) If the above inspections successful, replace the electronic expansion valve of the problematic indoor machine.
  - It is very complicated work to replace the electronic expansion valve because it takes a collection of coolant from the system.

    Before replacement, you must check the above items.

## 4-4-36 E 7773: EEV Off inefficiently (1st)

#### 1. Diagnosis:

1) Check only if the AC is on. (The following conditions met for more than 20 minutes.).

Cooler exit/exhaust air temp>3°C	ОК
Sucked air temp-cooler inlet temperature>4°C	NO
Sucked air temp-cooler exit temperature>4°C	NO
Compressor operation, indoor machine operation, thermostat operation	ОК
Malfunctions	EEV Off-malfunctions

- 2) Check if the heater is on. (All the conditions should be met.)
  - Min. two indoor machines operate when the thermostat is started.
  - The mean high pressure exceeds 18kg/cm2.
  - 5 minutes of safe operation.
  - Maintained for more than 5 minutes. Indoor machine evaporator inlet temperature < actual temperature +  $3^{\circ}$ C and evaporator exit temperature < actual temperature +  $3^{\circ}$ C.

#### 2. Inspection

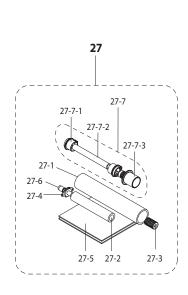
- 1) Check if the electronic expansion valve is accurately connected to the indoor machine PCB.
- 2) Check if the electronic expansion valve coil is inserted into the main body.
- 3) Visually inspect the rust on the EEV coil. Measure the inter-terminal resistance and look for open/short circuited areas.
- 4) Press the outdoor machine PCB reset button (K3) to see if the same error occurs again.
  - Problems with turning off, then start the indoor machine where the error occurs.
  - Problems with turning on, then do not operate the indoor machine where the error occurs.
- 5) If the above inspections are successful, replace the electronic expansion valve of the problematic indoor machine.
  - It is very complicated work to replace the electronic expansion valve because it takes a collection of coolant from the system. Before replacement, you must check the above items.

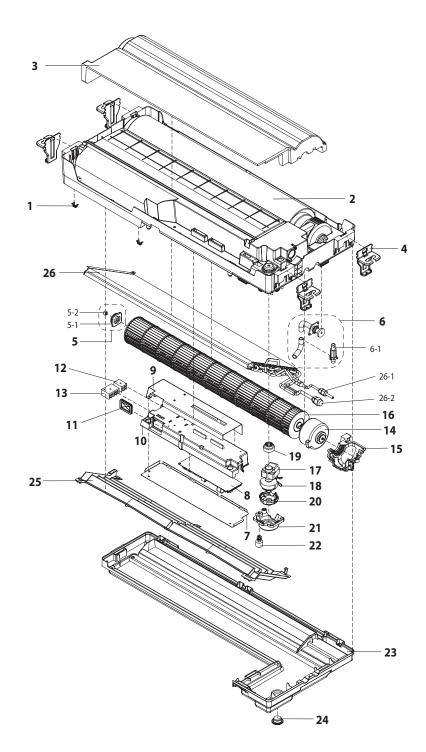
# 5. Exploded Views and Parts List

# 5-1 Indoor Unit

# 5-1-1 Slim1 way cassette type

# **■** Body





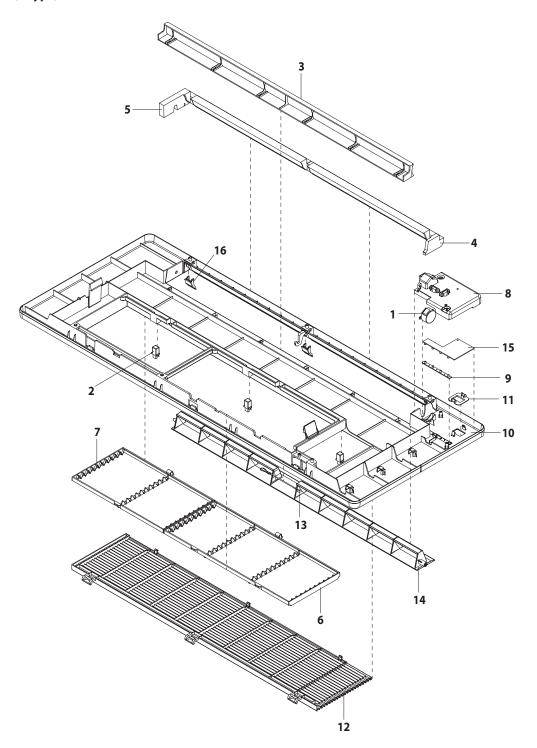
5-1 Samsung Electronics

# **■** Parts List

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB61-03127A	BRACKET-PAN	SGCC-M,1.0,12,20,	2	SNA
2	DB64-01763A	CABINET-IN	ABS,3,417,1011,-,GRAY	1	SNA
3	DB64-01764A	CABINET-CUSHION	EPS,-,310,835,-,WHT	1	SNA
4	DB70-00753A	PLATE-HANGER	SGCC-M,1.2,73,100	4	SA
5	DB94-00258A	ASS'Y BEARING	G-PJT,CR,BLK	1	SA
5-1	DB73-00128A	RUBBER-BEARING	G-P/J,CR,55,BLK	1	SNA
5-2	DB94-40007A	ASS'Y BEARING	ASS'Y,POLYSLIDER-PG5	1	SA
6	DB94-01546A	ASS'Y-DRAIN SOCKET	ASS'Y	1	SNA
6-1	DB62-04236A	VALVE CHECK	ASS'Y,72.5	1	SA
7	DB70-00754A	PLATE-COVER CONTROL	SGCC-M,0.7,96,428	1	SNA
8	DB93-05558C	ASS'Y PCB MAIN	FR-4,1.6T,230mmx70mm,SMPS	1	SA
9	DB61-03126A	CASE-CONTROL	ABS,2.5,113,430,BLK	1	SNA
10	DB70-00755A	PLATE-CASE CONTROL	SGCC-M,0.7,96,428	1	SNA
11	DB73-00307A	RUBBER-WIRE HOLE	NBR,52.1,BLK	1	SNA
12	DB95-01058D	ASS'Y-TERMINAL BLOCK	2P	1	SNA
13	DB95-01101E	ASS'Y-TERMINAL BLOCK	4P,F1,F2,V1,V2	1	SNA
14	DB31-00436A	MOTOR FAN	SFN-220-20-4B-1,0.3A,40W,220V/230V,1250,50/60Hz,	1	SA
			B,E,YH396-05VRT/YT396B-RT,700,ST730679-3,500		
15	DB63-01698A	COVER MOTOR	ABS,2.5,147,135,GRAY	1	SNA
16	DB94-00040Y	ASS'Y-CROSS FAN	ASS'Y	1	SA
17	DB67-00833A	DRAIN-PUMP	PBT,1.0,WHITE	1	SA
18	DB69-00137A	BAND-RING	STS304,T1.5,PI14	1	SNA
19	DB73-00390B	RUBBER-BASE PUMP	NBR,30,BLK	1	SNA
20	DB73-00391B	RUBBER-CAP PUMP	NBR,30,BLK	1	SNA
21	DB63-01699A	COVER-PUMP	ABS,2.5,78,100,GRAY	1	SNA
22	DB95-00131M	ASS'Y-SENSOR FLOAT SLIM1WAY	SmH250-02L,180mm,RED,BLK	1	SA
23	DB94-01367C	ASS'Y DRAIN PAN	ASS'Y	1	SA
24	DB73-00133B	RUBBER-CAP DRAIN SOCKET	NBR,38.30.27.24/15.12.9.4,45,15,BLK	1	SNA
25	DB94-01492A	ASS'Y DRAIN PAN-SUB	ASS'Y	1	SA
26	DB96-08129A	ASS'Y EVAP TOTAL	ASS'Y	1	SA
26-1	DB60-30010A	NUT-FLARE	HEX,7/16-20UnF	1	SA
26-2	DB60-30010C	NUT-FLARE	HEX,3/4-16UnF	1	SA
27	DB94-01278A	ASS'Y DRAIN-HOSE INSTALL	ASS'Y	1	SA
27-1	DB62-01960B	INSULATION-DRAIN	FOAM-PE,GRAY,200x45x10	1	SNA
27-2	DB62-04783A	INSULATION DRAIN-HOSE	FOAM-PE,T12,20,165,GREY,NON FLAmmABILITY	1	SNA
27-3	DB63-00237A	GROMMET-HANGER	NBR	8	SNA
27-4	DB67-00285A	DRAIN HOSE-SOCKET	POM,T3	1	SNA
27-5	DB72-00401C	INSULATION-JOINT OUT	FOAM-PE,T3,W200,L200,GREY	2	SNA
27-6	DB73-00089B	RUBBER-PLUG	NBR,D10,30,BLK	1	SNA
27-7	DB94-01258C	ASS'Y DRAIN-HOSE JOINT	ASS'Y	1	SA
27-7-1	DB67-00335A	DRAIN HOSE-HOUSING	BLUE	2	SNA
27-7-2	DB67-00336E	HOSE DRAIN-PVC	SOFT PVC,14,20,3,GRAY	1	SNA
27-7-3	DB67-00805C	DRAIN HOSE-JOINT B	ABS,T3.0,NORmAL	1	SA
			. ,		- '

# Slim 1 way cassette type(cont.)

# ■ Panel(A type)



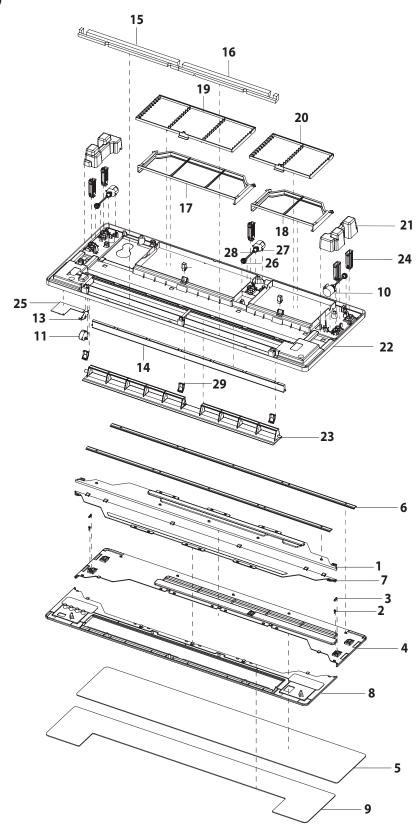
5-3 Samsung Electronics

# **■** Parts List

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB31-00370A	MOTOR STEP	35BYJ46,DC12V800gf.cm,SmH250-05L(WHT),100mm	1	SA
2	DB61-02894A	HOLDER-PUSH LATCH	POM,PC+PE,11.9,12.9,21,BLACK	3	SA
3	DB61-03123A	GUIDE-AIR OUTLET	HIPS,2.5,70,860,GRAY	1	SNA
4	DB61-03124A	GUIDE-CUSHION AIR OUT LF	EPS,105,426,WHT	1	SNA
5	DB61-03125A	GUIDE-CUSHION AIR OUT RH	EPS,105,463,WHT	1	SNA
6	DB63-01694A	FILTER-AIR INLET	ABS,2,196,437,BLK	1	SA
7	DB63-01695A	FILTER-AIR INLET G	ABS,2,196,320,BLK	1	SA
8	DB63-01697A	COVER-DISPLAY PCB	HIPS,2.5,117,154,BLK	1	SNA
9	DB64-00237A	PANEL-DISPLAY LED	AKM-2800,PC	1	SA
10	DB64-01759A	PANEL FRONT-SLIM 1WAY	ABS,40,465,1180,DA White	1	SNA
11	DB64-01760A	WINDOW-DISPLAY PCB	PC,1.5,40,40,-,MILKY WHT	1	SNA
12	DB64-01762A	GRILLE-AIR INLET	ABS,2.0,213,859,WHT	1	SA
13	DB65-00023A	CLIP-WIRE-ASS'Y	NYLON,AG-240E	1	SNA
14	DB66-01187A	BLADE-G	ABS,5,11.6,WHT	1	SNA
15	DB93-05321A	ASS'Y PCB SUB	FR-1,LEAD FREE	1	SNA
16	DB63-01696A	COVER-SCREW	ABS,2.5,19,34,WHT	1	SNA

# Slim 1 way cassette type(cont.)

# ■ Panel(B type)

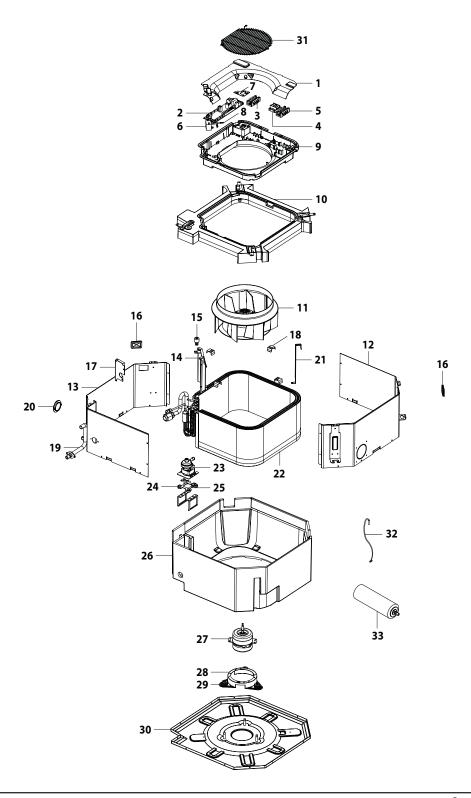


5-5 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB61-03230A	GUIDE-INLET ACRYLIC	ASGP1181,ABS,2,230,1181,SLIM1WAY	1	SA
2	DB61-03359A	HINGE-LOCK	AGSP1181G,POM,1.7,14,3,SLIDE PANEL	2	SA
3	DB61-03362A	HINGE	AGSP1181G,POM,2.5,8.5,20,SLIDE PANEL	2	SA
4	DB64-01836A	PANEL-INLET SLIDE	AGSP1181,ABS,2,230,1181,SLIM1WAY	1	SA
5	DB64-01884A	WINDOW-PANEL INTAKE	AGSP1181G,PmmA,3,225,1174,SLIDE PANEL	1	SA
6	DB70-00902A	PLATE-PANEL S	AGSP1181,SGCC-P,1,198,1143,SLIM1WAY	2	SA
7	DB61-03231A	GUIDE-FRONT ACRYLIC	AGSP1181,ABS,2,230,1181,SLIM1WAY	1	SA
8	DB64-01842A	PANEL FRONT-SLIDE	AGSP1181,ABS,2,230,1181,SLIM1WAY	1	SA
9	DB64-01883A	WINDOW-PANEL FRONT	AGSP1181G,PmmA,3,225,1174,SLIDE PANEL	1	SA
10	DB31-00368A	MOTOR STEP	50BYJ46-1,GLOBAL3-PJT,3500gf.cm,60,220,12Vdc,40Ω	3	SC
11	DB31-00370A	MOTOR STEP	35BYJ46,DC12V,DC12V,800gf.cm, SmH250-05L(WHT),100mm	1	SA
12	DB61-02894A	HOLDER-PUSH LATCH	HP-C180VC,POM,PC+PE,11.9,12.9,21,BLACK,CRYSTAL-PJT	2	SA
13	DB61-03158A	BRACKET-STEPPING MOTOR	AG4S0951G,SGCC-M,T1.0,31.5,53,WHT,STAR	1	SNA
14	DB61-03266A	GUIDE-AIR OUTLET S	AGSP1181,ABS,2.5,32,760,SLIM1WAY	1	SA
15	DB61-03267A	GUIDE-CUSHION AIR OUT S LF	AGSP1181,ABS,12,32,448,SLIM1WAY	1	SA
16	DB61-03268A	GUIDE-CUSHION AIR OUT S RH	AGSP1181,ABS,12,32,435,SLIM1WAY	1	SA
17	DB61-03366A	GUIDE-FILTER L	AGSP1181G,ABS,2,55,438,SLIDE PANEL	1	SA
18	DB61-03367A	GUIDE-FILTER S	AGSP1181G,ABS,2,55,278,SLIDE PANEL	1	SA
19	DB63-01858A	FILTER-AIR INLET L	AGSP1181G,ABS,3,178,430,BLK,SLIDE PANEL	1	SA
20	DB63-01785A	FILTER-AIR INLET S	AGSP1181,ABS,2,180,280,BLK,SLIM1WAY	1	SA
21	DB63-01786A	COVER-GEAR	AGSP1181,ABS,2.5,68,164,SLIM1WAY	2	SA
22	DB64-01835A	PANEL-BASE SLIDE	AGSP1181,ABS,2,460,1181,SLIM1WAY	1	SA
23	DB66-01219A	BLADE-SLIDE	AGSP1181,ABS,2,SLIM1WAY	1	SA
24	DB66-01239A	GEAR RACK	AGSP1181,ABS,2,17,2.5,WHT,SLIM1WAY	5	SA
25	DB93-05321A	ASS'Y PCB SUB	SLIM 1WAY DISPLAY PCB,PANEL, FR-1, LEAD FREE,	1	SNA
			AIXCSH040B1, AIXCSH032B1, AIXCSH023B1		
26	DB66-00422A	GEAR-PINION B	AS-SA680,POM,1,18,24,WHITE,20,P.C.D18,	3	SA
27	DB66-01290A	GEAR-PINION A	AS-SA680,POM,1,18,26.5,WHITE,20,P.C.D18,	3	SA
28	DB70-00320B	BAR-HEXA	AGSP1181,STS304,5,85,SLIDE PANEL	3	SNA
29	DB63-01696B	COVER-SCREW S	AGSP1181W,ABS,2.5,Neo Victory Gray,	3	SNA
			Spray-Color:EMPIRE SILVER		
			·		

# 5-1-2 Mini 4 way cassette type

## **■** Body

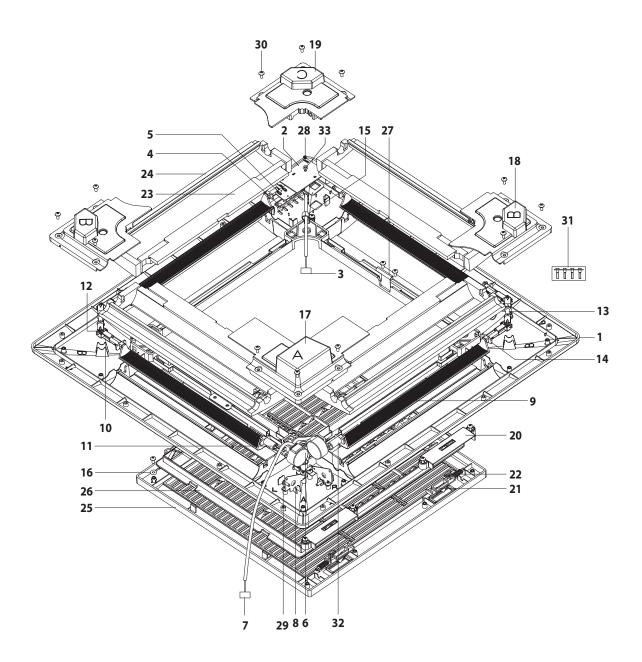


5-7 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB63-01367A	COVER CONTROL	ABS(V0),T2.0	1	SNA
2	DB93-04122J	ASS'Y PCB MAIN	MINI 4WAY CASSETTE	1	SNA
3	DB65-00029M	TERMINAL BLOCK 4P	1(L),2(N),Vc,Vc	1	SA
4	DB65-00182A	TERMINAL BLOCK 2P	F1,F2	1	SA
5	DB65-00029Z	TERMINAL BLOCK 4P	V1,V2,F3,F4	1	SA
6	2301-001378	C-FILM,LEAD-OTHER	450VAC,3.5uF	1	SA
7	DB61-02499A	BRACKET EARTH WIRE	SGCC-M,T1.0	1	SA
8	DB32-00067D	THERMISTOR WIRE IN	103AT,-20~100ÞC	1	SA
9	DB61-02486B	PCB BASE CONTROL	5VA,T2.0	1	SNA
10	DB94-00826A	ASS'Y DRAIN PAN	MINI 4WAY CASSETTE	1	SA
11	DB94-00812A	ASS'Y FAN TURBO	SAN+GF20%	1	SA
12	DB90-02221A	ASS'Y CABI SIDE A	MINI 4WAY CASSETTE	1	SA
13	DB90-02220A	ASS'Y CABI SIDE B	MINI 4WAY CASSETTE	1	SA
14	DB94-00847B	ASS'Y PARTITION	MINI 4WAY CASSETTE	1	SA
15	DB95-00131K	ASS'Y SENSOR FLOAT	250mm,MINI 4WAY CASSETTE	1	SA
16	DB73-00307A	RUBBER WIRE HOLE	NBR,52.1	2	SNA
17	DB90-02225A	ASS'Y COVER PIPE	MINI 4WAY CASSETTE	1	SA
18	DB61-02527A	HOLDER EVAP	STS304,T0.7	4	SA
19	DB94-00846A	ASS'Y DRAIN HOSE	MINI 4WAY CASSETTE	1	SA
20	DB90-01010A	ASS'Y COVER DRAIN	CH040EZM,NEW 4WAY CASSETTE	1	SNA
21	DB61-02490A	GUIDE EVAP	STS304,T0.7	1	SA
22	DB96-05354D	ASS'Y EVAP UNIT	MINI 4WAY CASSETTE	1	SNA
23	DB31-00303A	PUMP DRAIN	FUJIKOKI,220V 50Hz,60Hz	1	SA
24	DB73-00022C	RUBBER PUMP	EPDM+BUTYL,40~45Þ	4	SNA
25	DB61-02492A	BRACKET PUMP	SGCC-M,T1.5	1	SA
26	DB90-02223A	ASS'Y BASE CUSHION	MINI 4WAY CASSETTE	1	SA
27	DB31-00305C	MOTOR FAN	ASS035WTVA,4WAYMINI-PJT,50Hz	1	SA
28	DB61-02495A	BRACKET MOTOR IN	SGCC-M,T1.2	1	SA
29	DB63-01407A	GROMMET MOTOR	NR,35Þ	3	SA
30	DB90-02222A	ASS'Y CABI BASE	MINI 4WAY CASSETTE	1	SA
31	DB63-01372A	GUARD SAFETY	HSWR,T2.5	1	SA
32	DB32-00066E	THERMISTOR EVAP IN	300mm,MINI 4WAY CASSETTE	1	SA
33	DB94-01287D	ASS'Y DRAIN HOSE INSTALL	MINI 4WAY CASSETTE	1	SNA

# Mini 4 way cassette type(cont.)

### ■ Panel(PMSMAA)

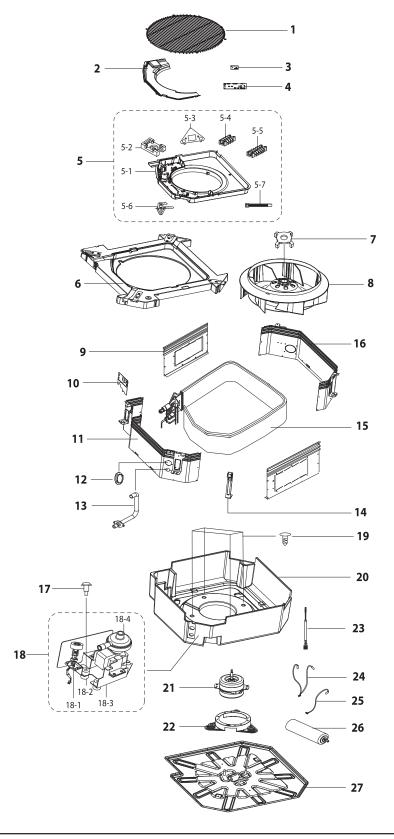


5-9 Samsung Electronics

Parts I	T				2.2 (2.1.2
No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB64-01421A	PANEL-FRONT	ABS,T3.0,WHT	1	SA
2	DB93-02803A	ASS'Y PCB MAIN	ASS'Y	1	SA
3	DB39-00082E	CONNECT	WIRE-DISPLAY PCB L990mm	1	SA
4	DB64-01422A	BUTTON-PCB	ABS,BLK	1	SA
5	DB64-01424A	INLAY-PCB	PC,WHT	1	SA
6	DB31-00370A	MOTOR	STEPPING 35BYJ46-276,800g.cm,12V	2	SA
7	DB39-00542E	CONNECT	WIRE-STEP MOTOR I320mm	1	SA
8	DB61-02485B	BRACKET	MOTOR-PANEL SGCC-M,T0.8	2	SA
9	DB66-01008A	BLADE-H	PBT/ABS,T3.5	4	SA
10	DB61-01871A	CONNECTOR-BLADE	POM,NTR	4	SA
11	DB61-02480A	CONNECTOR-MOTOR A	POM,NTR	1	SA
12	DB66-00756A	JOINT UNIVERSAL	POM,NTR	4	SA
13	DB66-01009A	LINK-BLADE	POM,NTR	2	SA
14	DB61-02488A	BUSH-MINI	POM,NTR	8	SA
15	DB65-10074D	CLAMP CABLE	DA-4N	2	SA
16	DB65-00023A	CLIP-WIRE-ASS'Y	L130mm	1	SA
17	DB63-01364A	COVER-A	ABS(V0),BLK	1	SA
18	DB63-01366A	COVER-B	ABS(V1),BLK	2	SA
19	DB63-01377A	COVER-C	ABS(V2),BLK	1	SA
20	DB63-01036A	COVER-KNOB	HIPS,UL94-HB,WHT	2	SA
21	DB64-01145A	KNOB-SLIDE	HIPS,94HB,HG-0760,WHT	2	SA
22	DB67-00030A	SPRING-KNOB	STS304,T0.5	2	SA
23	DB69-01269A	CUSHION-IN	EPS,30	4	SA
24	DB69-01270A	CUSHION-OUT	EPS,30	4	SA
25	DB64-01420A	GRILLE-AIR	INLET ABS,WHT	1	SA
26	DB63-01423A	FILTER-PRE	MINI PP,BLK,ANTI BACTERIAL FILTER	1	SA
27	DB70-00302A	PLATE-HANGER	STS304,T0.5	2	SA
28	6002-000534	SCREW-TAPPING	PH,2S,M3,L8,ZPC(BLK),SWRCH18A	1	SNA
29	6002-000536	SCREW-TAPPING	PH,2S,M4,ZPC(YEL)	4	SNA
30	6002-001079	SCREW-TAPPING	TH,2S,M4,L10	27	SNA
31	6011-001493	BOLT-HEX	M6,L10,ZPC(YEL),SWRM18A	4	SA
32	DB61-02480B	CONNECTOR-MOTOR B	POM,NATURAL	1	SA
33	-	WASHER	-	1	SNA

## 5-1-3 4 way cassette type

## ■ Body(AVXC4H052/072C\*, ND052/0724H\*\*\*)

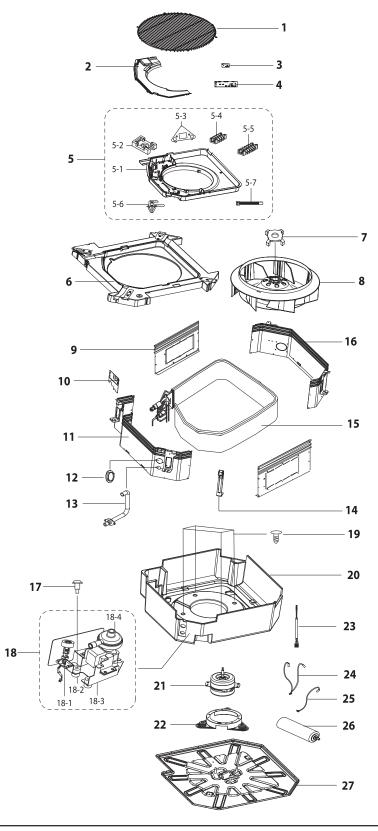


5-11 Samsung Electronics

				Q'	TY	
No.	Code No.	Description	Specification	AVXC4H052C* ND0524H***	AVXC4H072C* ND0724H***	SA/SNA
1	DB63-01480A	GUARD-SAFETY	CH140EAMC,HSWR	1	1	SNA
2	DB63-01481A	COVER-CONTROL	CH140EAMC,ABC	1	1	SNA
3	DB93-05981G	ASS'Y MAIN PCB	CH140EAMC	1	1	SNA
4	DB93-04119B	ASS'Y PCB SUB-POWER	CH140EAMC	1	1	SNA
5	DB93-05254L	ASS'Y CONTROL IN	ASS'Y	1	1	SNA
5-1	DB61-03092B	BASE CONRTROL	5VA	1	1	SNA
5-2	DB61-02501A	TIE MOUNTS	NYLON66	2	2	SNA
5-3	DB61-02700A	BRACKET EARTH WIRE	SGCC-M	1	1	SNA
5-4	DB65-00029M	TERMINAL BLOCK 4P	ASS'Y,6P	1	1	SA
5-5	DB65-00029X	TERMINAL BLOCK 6P	ASS'Y,4P	1	1	SA
5-6	DB61-02765A	HOLDER SENSOR	PP	1	1	SNA
5-7	6501-001052	REUSABLE CABLE TIES	NYLON66	2	2	SNA
6	DB94-01062A	ASS'Y CUSHION DRAIN	ASS'Y,EPS,V0	1	1	SNA
7	DB61-01783A	BRACKET WASHER FAN	SGCC-M	1	1	SNA
8	DB67-00804A	ASS'Y FAN TURBO	ABS+GF10%	1	1	SNA
9	DB64-01734A	CABI SIDE	SGCC-M	2	2	SNA
10	DB90-02692A	ASS'Y COVER PIPE	ASS'Y	1	1	SNA
11	DB90-03189A	ASS'Y CABI FEONT	ASS'Y,SGCC-M	1	1	SNA
12	DB90-01950B	ASS'Y COVER DRAIN PUMP	ASS'Y	1	1	SNA
13	DB94-01389A	ASS'Y HOSE DRAIN	ASS'Y	1	1	SNA
14	DB61-03093A	HOLDER EVAP	STS301	2	2	SNA
15	DB96-08027B	ASS'Y EVAP UNIT	ASS'Y	1	-	SNA
	DB96-08027A	ASS'Y EVAP UNIT	ASS'Y	_	1	SNA
16	DB90-03190A	ASS'Y CABI BACK	ASS'Y,SGCC-M	1	1	SNA
17	DB90-02090B	SCREW PUMP	M5X30	-	-	SA
18	DB94-01381A	ASS'Y DRAIN PUMP	ASS'Y	1	1	SNA
18-1	DB34-00063A	SWITCH FLOAT	ASS'Y	1	1	SNA
18-2	DB73-00345A	RUBBER PUMP	NBR	3	3	SNA
18-3	DB61-02709A	BRACKET DRAIN PUMP	SGCC-M	1	1	SNA
18-4	DB67-00790A	DRAIN PUMP	ASS'Y	1	1	SNA
19	DB61-02349A	CLIP BRUSH	NYLON 66	_	-	SNA
20	DB97-05920A	ASS'Y CUSHION BASE	ASS'Y,EPS,V0	1	1	SNA
21	DB31-00439A	MOTOR INDOOR	BLDC	1	1	SA
22	DB90-03188A	ASS'Y BRACKET MOTOR	ASS'Y	-	-	SNA
23	DB93-07219A	CONNECT MOTOR FAN SUB	ASS'Y	1	1	SNA
24	DB33-07213/A	THERMISTOR IN	ASS'Y	1	1	SA
25	DB32-00103A	THERMISTOR EVAP	ASS'Y	1	1	SNA
26	DB94-01389A	ASS'Y DRAIN HOSE	ASS'Y	1	1	SNA
27	DB94-01389A DB90-02689B	ASS'Y CABI BASE	ASS'YSGCC-M	1		SNA
21	DD90-02009B	A33 I CADI DA3E	A33 I3GCC-IVI		1	JIVA

## 4 way cassette type(cont.)

## ■ Body(AVXC4H100/110/145C\*, ND100/110/145H\*\*\*)

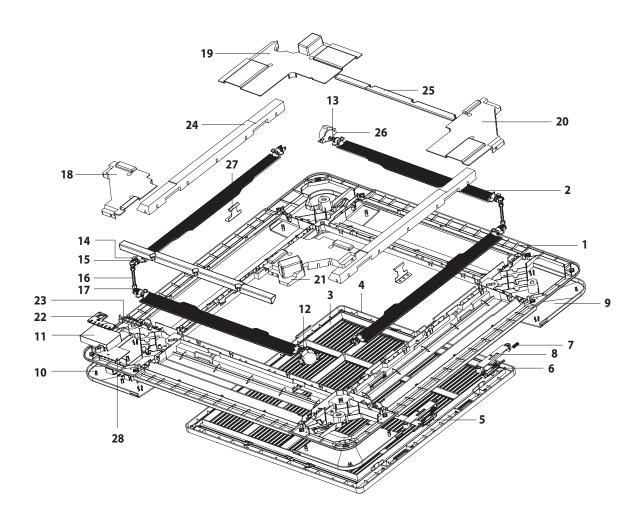


5-13 Samsung Electronics

		Description		Q'	TY	
No.	Code No.		Specification	AVXC4H100C* AVXC4H110C* ND1004H*** ND1104H***	AVXC4H145C* ND0724H***	SA/SNA
1	DB63-01480A	GUARD-SAFETY	CH140EAMC,HSWR	1	1	SA
2	DB63-01481A	COVER-CONTROL	CH140EAMC,ABS	1	1	SNA
3	DB93-05981G	ASS'Y MAIN PCB	CH140EAMC	1	1	SA
4	DB93-04119B	ASS'Y PCB SUB-POWER	CH140EAMC	1	1	SA
5	DB93-04404E	ASS'Y CONTROL IN	ASS'Y	1	1	SA
5-1	DB61-02706B	BASE CONTROL	5VA	1	1	SNA
5-2	DB61-02501A	TIE MOUNTS	NYLON66	2	2	SNA
5-3	DB61-02700A	BRACKET EARTH WIRE	SGCC-M	1	1	SNA
5-4	DB65-00029M	TERMINAL BLOCK 4P	ASS'Y ,6P	1	1	SNA
5-5	DB65-00029X	TERMINAL BLOCK 6P	ASS'Y ,4P	1	1	SNA
5-6	DB61-02765A	HOLDER SENSOR	PP	1	1	SNA
5-7	6501-001052	REUSABLE CABLE TIES	NYLON66	2	2	SNA
6	DB94-01062A	ASS'Y CUSHION DRAIN	ASS'Y,EPS,V0	1	1	SNA
7	DB61-01783A	BRACKET WASHER FAN	SGCC-M	1	1	SA
8	DB67-00682A	ASS'Y FAN TURBO	ABS+GF10%	1	1	SA
9	DB64-01562A	CABI SIDE	SGCC-M	2	2	SA
10	DB90-02692A	ASS'Y COVER SIDE	ASS'Y	1	1	SA
11	DB90-02690A	ASS'Y CABI FRONT	ASS'Y,SGCC-M	1	1	SA
12	DB90-01950B	ASS'Y COVER DRAIN PUMP	ASS'Y	1	1	SA
13	DB90-02693A	ASS'Y HOSE DRAIN	ASS'Y	1	1	SA
14	DB61-02701A	HOLDER EVAP	STS301	2	2	SA
15	DB96-06677A	ASS'Y EVAP UNIT	ASS'Y	-	1	SA
	DB96-06707A	ASS'Y EVAP UNIT	ASS'Y	1	-	SA
16	DB90-02688A	ASS'Y CABI BACK	ASS'Y,SGCC-M	1	1	SA
17	DB97-02090B	SCREW PUMP	M5X30	3	3	SA
18	DB94-01381A	ASS'Y DRAIN PUMP	ASS'Y	1	1	SA
18-1	DB34-00063A	SWITCH FLOAT	ASS'Y	1	1	SNA
18-2	DB73-00345A	RUBBER PUMP	NBR	3	3	SNA
18-3	DB61-02709A	BRACKET DRAIN PUMP	SGCC-M	1	1	SNA
18-4	DB67-00790A	DRAIN PUMP	ASS'Y	1	1	SNA
19	DB61-02349A	CLIP BRUSH	NYLON 66	4	4	SNA
20	DB90-02693A	ASS'Y CUSHION BASE	ASS'Y,EPS,V0	1	1	SA
21	DB31-00364A	MOTOR INDOOR	BLDC	1	1	SA
22	DB94-01059A	ASS'Y BRACKET MOTOR	ASS'Y	-	-	SA
23	DB93-07219A	CONNECT MOTOR FAN SUB	ASS'Y	1	1	SA
24	DB32-00169A	THERMISTOR IN	ASS'Y	1	1	SA
25	DB32-00141B	THERMISTOR EVAP	ASS'Y	1	1	SA
26	DB94-01078A	ASS'Y DRAIN HOSE	ASS'Y	1	1	SA
27	DB90-02689A	ASS'Y CABI BASE	ASS'Y,SGCC-M	1	1	SNA

# 4 way cassette type(cont.)

### ■ Panel(P4SMA)

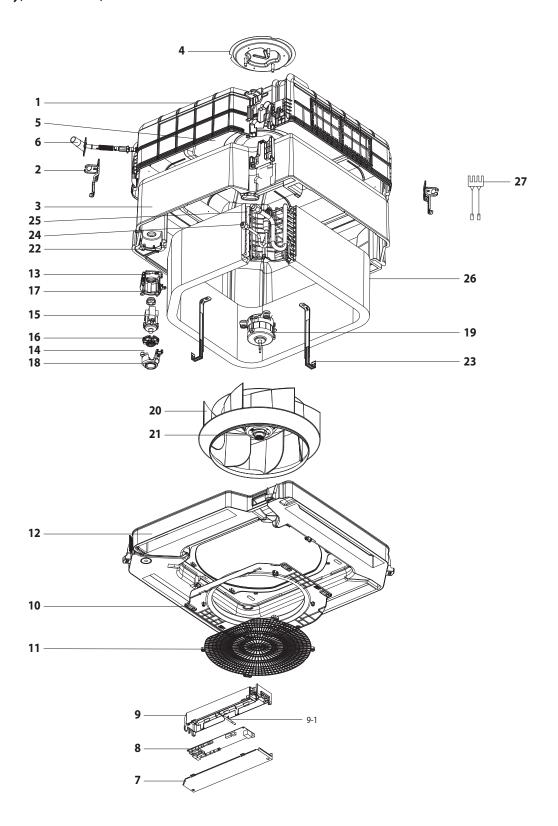


5-15 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB64-01564B	PANEL FRONT	HF ABS(Korea)	1	SA
2	DB66-01102B	BLADE	PBT+20%GF(Korea)	4	SA
3	DB64-01565B	GRILLE AIR INLET	HF ABS(Korea)	1	SA
4	DB63-01491A	FILTER AIR	P.P(BLK)+40%	1	SNA
5	DB64-01566B	KNOB SLIDE A	HF ABS(Korea)	1	SA
6	DB64-01567B	KNOB SLIDE B	HF ABS(Korea)	1	SA
7	DB61-02714A	SPRING KNOB	STS304,T0.5	2	SNA
8	DB63-01483A	COVER KNOB	HIPS	2	SNA
9	DB63-01484B	CORNER COVER	HF ABS(Korea)	3	SA
10	DB63-01485B	CORNER COVER PCB	HF ABS(Korea)	1	SA
11	DB63-01500A	COVER PCB	HIPS	1	SNA
12	DB66-01103A	LINK MOTOR A	POM	1	SNA
13	DB66-01104A	LINK MOTOR B	POM	1	SNA
14	DB61-02711A	HOLDER LINK BLADE	ABS(BLK)	8	SNA
15	DB66-01105A	LINK BLADE	POM	7	SNA
16	DB66-01106A	LINK UNIVERSAL JOINT	POM	2	SNA
17	DB66-01107A	JOINT UNIVERSAL	POM	5	SNA
18	DB63-01486A	COVER SIDE A	HIPS(BLK)	1	SNA
19	DB63-01487A	COVER SIDE B	HIPS(BLK)	1	SNA
20	DB63-01488A	COVER SIDE C	HIPS(BLK)	1	SNA
21	DB63-01489A	COVER SIDE D	HIPS(BLK)	1	SNA
22	DB64-01558A	INLAY PCB	PC	1	SNA
23	DB64-01559A	BUTTON PCB	ABS	1	SNA
24	DB69-01419A	CUSHION IN	EPS,25	4	SNA
25	DB69-01420A	CUSHION OUT	EPS,25	4	SNA
26	DB61-02704A	BRACKET STEPPING MOTOR	SGCC-M,T1.0	2	SNA
27	DB61-02705A	PLATE HANGER	STS304,T0.5	2	SNA
28	DB93-04220A	ASS'Y PCB DISPLAY	ASS'Y	1	SNA

# 5-1-4 Global 4 way cassette type

## ■ Body(ND\*\*\*4HXCB)



5-17 Samsung Electronics

					Q'	TY		
No.	Code No.	Description	Specification	ND0524HXCB	ND0724HXCB ND1004HXCB	ND1104HXCB	ND1454HXCB	SA/SNA
1	DB61-04515A	CASE-CABI IN	PP,T0.7,W836.4,L836.4	1	1	-	-	SNA
	DB61-04514A	CASE-CABI IN	PP,T0.7,W836.4,L836.4	-	-	1	-	SNA
	DB61-04468A	CASE-CABI IN	PP,T0.7,W836.4,L836.4	-	-	-	1	SNA
2	DB61-04495A	PLATE-HANGER	GI-SGCC, T0.6	4	4	4	4	SA
3	DB63-02710A	CUSHION-CABI IN	EPS,T10,W832.6,L832.6	1	1	-	-	SNA
	DB63-02709A	CUSHION-CABI IN	EPS,T10,W832.6,L832.6	-	-	1	-	SNA
	DB63-02694A	CUSHION-CABI IN	EPS,T10,W832.6,L832.6	-	-	-	1	SNA
4	DB90-05821A	ASS'Y BRACKET MOTOR	ASS'Y	1	1	1	1	SNA
5	DB90-05829A	ASS'Y COVER-PIPE	ASS'Y	1	1	1	1	SNA
6	DB94-03171A	ASS'Y DRAIN-SOCKET	ASS'Y	1	1	-	-	SA
	DB94-02693A	ASS'Y DRAIN-SOCKET	ASS'Y	-	-	1	1	SA
7	DB61-04491A	PLATE-COVER CONTROL	GI-SGCC, T0.5	1	1	1	1	SNA
8	DB93-12266A	ASS'Y PCB MAIN-IN	ASS'Y	1	1	1	1	SA
9	DB93-10648A	ASS'Y CONTROL IN	ASS'Y	1	1	1	1	SNA
9-1	DB95-04459A	ASS'Y THERMISTOR IN-ROO	M ASS'Y	1	1	1	1	SA
10	DB61-04496A	CASE-BELL MOUTH	HIPS,T0.2,448.5,499	1	1	1	1	SA
11	DB63-02702B	COVER-SAFETY	ABS,T3.0,414,379	1	1	1	1	SA
12	DB94-02667C	ASS'Y DRAIN PAN	ASS'Y	1	1	1	1	SA
13	DB61-04498A	CASE-PUMP	HIPS,T0.2,139,98.6	1	1	1	1	SNA
14	DB63-02703A	COVER-PUMP	HIPS,T0.2,81.2,57.9	1	1	1	1	SA
15	DB67-00982C	DRAIN-PUMP	ASS'Y	1	1	1	1	SA
16	DB73-00521A	RUBBER-CAP PUMP	EPDM	1	1	1	1	SA
17	DB73-00521A	RUBBER-BASE PUMP	NBR	1	1	1	1	SA
18	DB95-04462A	ASS'Y SENSOR FLOAT	ASS'Y	1	1	1	1	SA
19	DB31-00578A	MOTOR FAN	FMC6531SSF	'	'		'	SA
19		MOTOR FAN		1	1	1	-	SA
	DB31-00578B		FMC6531SSH	'	'	-	_	
20	DB31-00577A	MOTOR FAN	DAI33585ZLB/SEC	-	-	-	1	SA
20	DB94-03093A	ASS'Y FAN-TURBO	ASS'Y	1	1	-	-	SA
	DB94-02718A	ASS'Y FAN-TURBO	ASS'Y	-	-	1	-	SA
	DB94-02663A	ASS'Y FAN-TURBO	ASS'Y	-	-	-	1	SA
21	DB60-00406A	FASTENER-NUT FLANGE	NSWR3,M6	1	1	1	1	SA
22	DB61-04517A	CASE-PARTITION EVAP	ABS,T2.0	1	1	-	-	SNA
	DB61-04516A	CASE-PARTITION EVAP	ABS,T2.0	-	-	1	-	SNA
	DB61-04511A	CASE-PARTITION EVAP	ABS,T2.0	-	-	-	1	SNA
23	DB61-04518A	HOLDER-EVAP	STS430,T0.6	2	2	-	-	SNA
	DB61-04519A	HOLDER-EVAP	STS430,T0.6	-	-	2	-	SNA
	DB61-02669B	HOLDER-EVAP	STS430,T0.6	-	-	-	2	SNA
24	DB96-15994A	ASS'Y TUBE EVAP IN	ASS'Y	-	1	-	-	SNA
	DB96-15994B	ASS'Y TUBE EVAP IN	ASS'Y	1	-	-	-	SNA
	DB96-15995A	ASS'Y TUBE EVAP IN	ASS'Y	-	-	1	-	SNA
	DB96-15996A	ASS'Y TUBE EVAP IN	ASS'Y	-	-	-	1	SNA

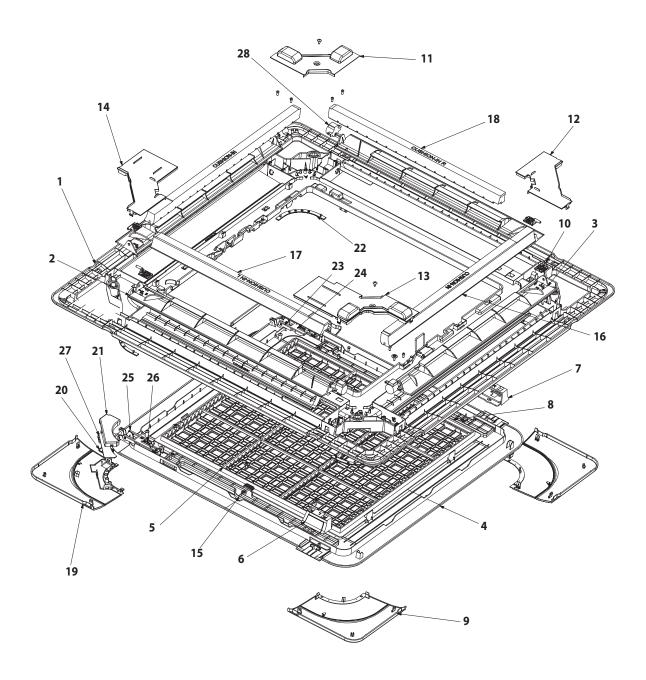
■ Parts	LIST							
					Q'	TY		
No.	Code No.	Description	Specification	ND0524HXCB	ND0724HXCB ND1004HXCB	ND1104HXCB	ND1454HXCB	SA/SNA
25	DB62-16062A	ASS'Y COLLECTOR	ASS'Y	-	1	-	-	SNA
	DB62-16062B	ASS'Y COLLECTOR	ASS'Y	1	-	-	-	SNA
	DB96-16061A	ASS'Y COLLECTOR	ASS'Y	-	-	1	-	SNA
	DB96-14726B	ASS'Y COLLECTOR	ASS'Y	-	-	-	1	SNA
26	DB96-16063A	ASS'Y EVAP UNIT	ASS'Y	-	1	-	-	SA
	DB96-16063B	ASS'Y EVAP UNIT	ASS'Y	1	-	-	-	SA
	DB96-15439B	ASS'Y EVAP UNIT	ASS'Y	-	-	1	-	SA
	DB96-14909B	ASS'Y EVAP UNIT	ASS'Y	-	-	-	1	SA
27	DB95-04461A	ASS'Y THERMISTOR IN-EVA IN OUT	ASS'Y	1	1	1	1	SA

5-19 Samsung Electronics

# **MEMO**

# Global 4way cassette type (cont.)

### ■ Panel(ND\*\*\*4HXCB)

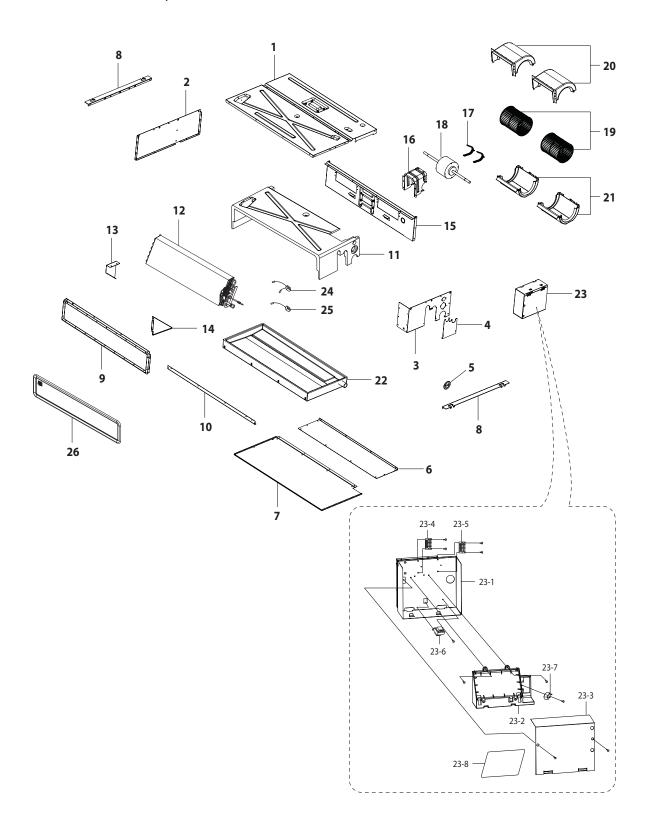


5-21 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB64-02538A	PANEL-BASE	HIPS(VICTORY GRAY)	1	SA
2	DB66-01545A	BLADE A	ABS(VICTORY GRAY)	2	SA
3	DB66-01546A	BLADE B	ABS(VICTORY GRAY)	2	SA
4	DB64-02539A	PANEL-GRILL	HIPS(VICTORY GRAY)	1	SA
5	DB63-02739A	FILTER	ABS(INNER GRAY)	1	SA
6	DB66-01542A	LEVER-CLAMP L	HIPS(VICTORY GRAY)	1	SA
7	DB66-01543A	LEVER-CLAMP R	HIPS(VICTORY GRAY)	1	SA
8	DB61-04689A	SPRING ETC-KNOB	STS304	2	SA
9	DB63-02732A	COVER-CORNER	HIPS(VICTORY GRAY)	3	SA
10	DB61-04544A	HOLDER-BLADE	POM(WHT)	4	SA
11	DB63-02734A	COVER-BACK A	HIPS(BLK)	1	SNA
12	DB63-02735A	COVER-BACK B	HIPS(BLK)	1	SNA
13	DB63-02736A	COVER-BACK C	HIPS(BLK)	1	SNA
14	DB63-02737A	COVER-BACK D	HIPS(BLK)	1	SNA
15	DB66-01544A	LINK-CLAMP	HIPS(VICTORY GRAY)	2	SA
16	DB63-02740A	CUSHION-IN	EPS,25	2	SNA
17	DB63-02741A	CUSHION-IN L	EPS,25	1	SNA
18	DB63-02742A	CUSHION-IN R	EPS,25	1	SNA
19	DB63-02744A	COVER-DISPLAY	HIPS(VICTORY GRAY)	1	SA
20	DB64-02542A	WINDOW-SENSOR	PC(WAFFLE MILKY)	1	SA
21	DB63-02738A	COVER-PBA	PP(NTR)	1	SA
22	DB64-02541A	WINDOW-LED	PC(WAFFLE FLOCKING GRAY)	4	SA
23	DB66-01412A	LINK-HINGE A	POM(WHT)	1	SA
24	DB66-01419A	LINK-SWITCH A	ABS(GREEN)	1	SA
25	DB66-01410A	LINK-HINGE B	POM(WHT)	1	SA
26	DB66-01420A	LINK-SWITCH B	ABS(GREEN)	1	SA
27	DB93-10649A	ASS'Y PCB PANEL DISPLAY	ASS'Y	1	SA
28	DB31-00371B	MOTOR STEP	ASS'Y	4	SA

# 5-1-5 Duct type(Slim I)

### ■ AVXDSH020/032/040C\*, ND020/032/040LH\*\*\*

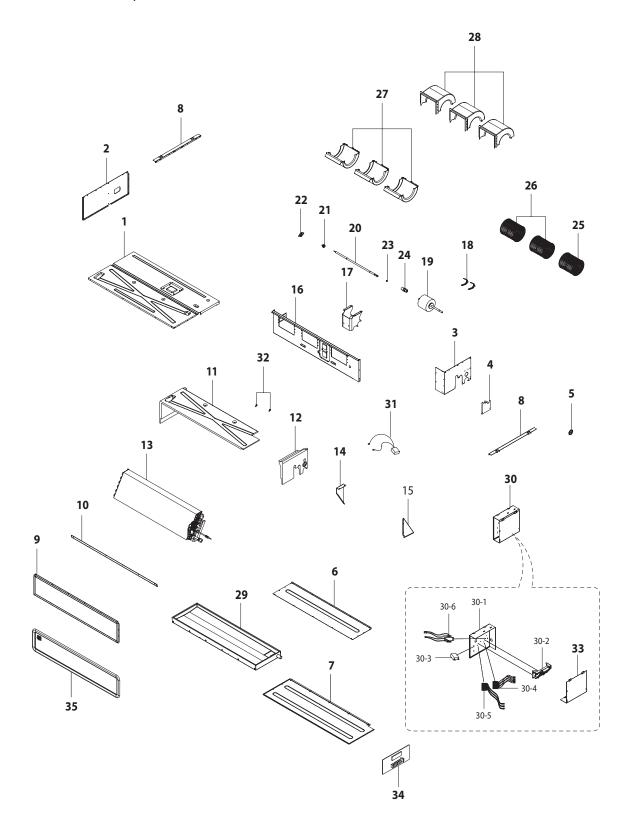


5-23 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB90-02014A	ASS'Y CABI BASE	ASS'Y	1	SA
2	DB90-03262A	ASS'Y CABI SIDE LF	ASS'Y	1	SA
3	DB90-01951A	ASS'Y CABI SIDE RH	ASS'Y	1	SA
4	DB90-01938A	ASS'Y COVER PIPE	ASS'Y	1	SA
5	DB90-01950A	ASS'Y COVER DRAIN PUMP	ABS T2.0	1	SA
6	DB64-01326A	CABI TOP MOTOR	SGCC-M, T0.8	1	SA
7	DB90-02069D	ASS'Y CABI TOP EVAP	ASS'Y	1	SA
8	DB61-02274A	PLATE HANGER	SGCC-M, T2.0	1	SA
9	DB94-00712A	ASS'Y BRACKET OUTLET	ASS'Y	2	SA
10	DB61-02277A	BRACKET OUTLET SUB	SGCC-M, T0.8	1	SA
11	DB97-03791A	ASS'Y CUSHION BASE	ASS'Y	1	SNA
12	DB96-05330C	ASS'Y EVAP UNIT	ASS'Y	1	SA
13	DB90-01978A	ASS'Y SUPPORT EVAP LF	ASS'Y	1	SA
14	DB90-01946A	ASS'Y SUPPORT EVAP RH	ASS'Y	1	SA
15	DB94-00768A	ASS'Y PARTITION	ASS'Y	1	SA
16	DB61-02282A	BRACKET MOTOR	SGCC-MT2.0	1	SA
17	DB99-00669A	BAND MOTOR	SINYA	4	SA
18	DB31-00312A	MOTOR	SINYA, SSR, PID	1	SA
19	DB67-00565A	BLOWER	ASS'Y, ABS, TORSIONAL BUSH	2	SA
20	DB90-01947A	ASS'Y CASE BLOWER UPPER	ASS'Y	2	SA
21	DB90-01948A	ASS'Y CASE BLOWER BOTTOM	ASS'Y	2	SA
22	DB94-01007B	ASS'Y DRAIN PAN	ASS'Y	1	SNA
23	DB93-05576F	ASS'Y CONTROL IN	ASS'Y	1	SA
23-1	DB90-01941B	ASS'Y CASE CONTROL	ASS'Y	1	SA
23-2	DB61-02287B	CASE PCB	5VA	1	SA
23-3	DB63-01237A	COVER CONTROL	SGCC-M T0.5	1	SA
23-4	DB65-00105L	TERMINAL BLOCK 6P	6P, POWER	1	SNA
23-5	DB65-00105M	TERMINAL BLOCK 6P	6P, COMMUNICATION	1	SNA
23-6	DB26-00080A	TRANS POWER	230V, 50HZ	1	SA
23-7	2301-001370	CAPACITOR	450V 1.5μF	1	SA
23-8	DB93-08296A	ASS'Y PCB MAIN	ASS'Y	1	SA
24	DB32-00142A	ASS'Y THERMISTOR	ASS'Y	1	SA
25	DB32-00141A	THERMISTOR EVAP	ASS'Y	1	SA
26	DB63-01299E	ASS'Y FILTER	ASS'Y	1	SA

# 5-1-6 Duct type(Slim II)

### ■ AVXDSH052/070C\*, ND052/072LH\*\*\*

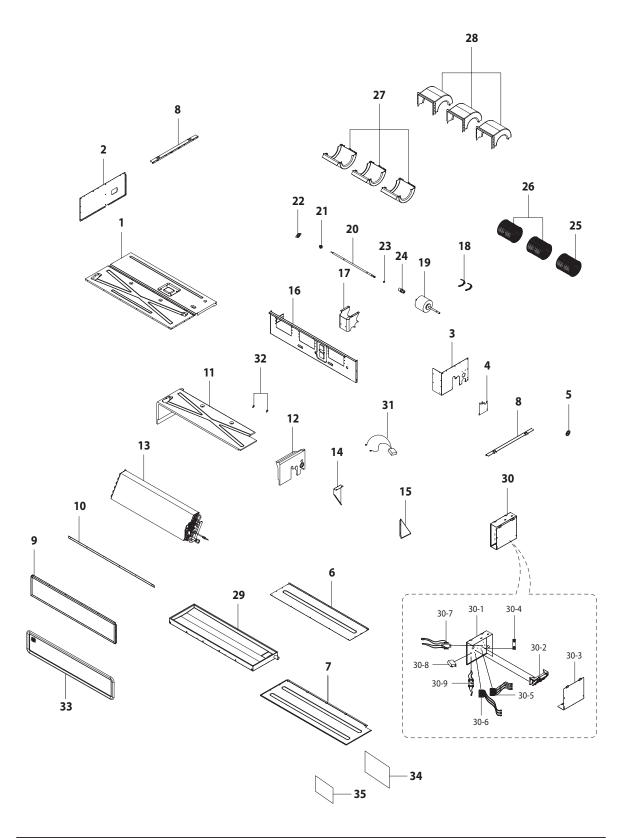


5-25 Samsung Electronics

				Q'	SA/SNA	
No.	Code No.	Description	Specification	AVXDSH052C* ND052LH***	AVXDSH070C* ND072LH***	3A/3NA
1	DB90-02160A	ASS'Y CABI BASE	SGCC-M,T0.8	1	1	SA
2	DB90-03262A	ASS'Y CABI SIDE LF	SGCC-M,T0.8	1	1	SA
3	DB90-01951A	ASS'Y CABI SIDE RH	SGCC-M,T0.8	1	1	SA
4	DB90-01938A	ASS'Y COVER PIPE	SGCC-M,T0.5	1	1	SA
5	DB90-01950A	ASS'Y COVER DRAIN PUMP	SLIM DUCT	1	1	SA
6	DB64-01325A	CABI TOP MOTOR	SGCC-M,T0.8	1	1	SA
7	DB90-02161B	ASS'Y CABITOP EVAP	SGCC-M,T0.8	1	1	SA
8	DB61-02274A	PLATE HANGER	SGCC-M,T2.0	2	2	SA
9	DB97-03796A	ASS'Y BRACKET OUTLET	SGCC-M,T0.8	1	1	SA
10	DB61-02322A	BRACKET OUTLET SUB	SGCC-M,T0.8	1	1	SA
11	DB97-03792A	ASS'Y CUSHION BASE A	EPS 25	1	1	SNA
12	DB97-03791A	ASS'Y CUSHION BASE B	EPS 25	1	1	SNA
13	DB96-05785B	ASS'Y EVAP UNIT	ASS'Y	1	-	SA
	DB96-05785A	ASS'Y EVAP UNIT	ASS'Y	-	1	SA
14	DB90-01978A	ASS'Y SUPPORT EVAP LF	SGCC-M,T0.8	1	1	SA
15	DB90-01946A	ASS'Y SUPPORT EVAP RH	SGCC-M,T0.8	1	1	SA
16	DB94-00809A	ASS'Y PARTITION	SGCC-M,T1.0	1	1	SA
17	DB61-02282A	BRACKET MOTOR	SGCC-M,T2.0	1	1	SA
18	DB97-03800A	BAND MOTOR	SINYA	1	1	SA
19	DB31-00314C	MOTOR	SINYA,60Hz	1	1	SA
20	DB66-01007A	MOTOR SHAFT	SINYA	1	1	SNA
21	DB94-00759A	MOLD BEARING	ASS'Y	1	1	SA
22	DB67-00581A	CAP BEARING	SGCC-M,T0.8	1	1	SNA
23	DB73-00285A	RUBBER SHAFT	CR V0	1	1	SNA
24	DB96-04902A	COUPLER	ASS'Y	1	1	SA
25	DB67-00565A	BLOWER A	ASS'Y,ABS	1	1	SA
26	DB67-00576A	BLOWER B	ASS'Y,ABS	2	2	SA
27	DB90-01947A	ASS'Y CASE BLOWER UPPER	ASS'Y,ABS	3	3	SA
28	DB90-01948A	ASS'Y CASE BLOWER BOTTOM	ASS'Y,ABS	3	3	SA
29	DB94-01007A	ASS'Y DRAIN	ASS'Y	1	1	SNA
30	DB93-03321E	ASS'Y CONTROL PART	ASS'Y	1	1	SA
30-1	DB90-01941A	ASS'Y CASE CONTROL	ASS'Y	1	1	SA
30-2	DB61-02287B	CASE PCB	5VA	1	1	SA
30-3	2301-001379	CAPACITOR	450V,4uF	1	1	SA
30-4	DB65-00105L	TERMINAL BLOCK 6P	6P,POWER	1	1	SNA
30-5	DB65-00105M	TERMINAL BLOCK 6P	6P,COMMUNICATION	1	1	SNA
30-6	DB26-10070G	TRANS POWER	60Hz	1	1	SNA
31	DB32-00142A	ASS'Y THERMISTOR	ASS'Y	1	1	SA
32	DB61-02349A	CLIP BRUSH	NYLON66,BLACK	2	2	SNA
33	DB90-02101A	ASS'Y COVER CONTROL	ASS'Y	1	1	SA
34	DB93-08296A	ASS'Y PCB	ASS'Y	1	1	SA
35	DB63-01299C	FILTER	ASS'Y	1	1	SA

# 5-1-7 Duct type(Slim III)

### ■ AVXDSH100/110/145C\*, ND100/110/145LH\*\*\*

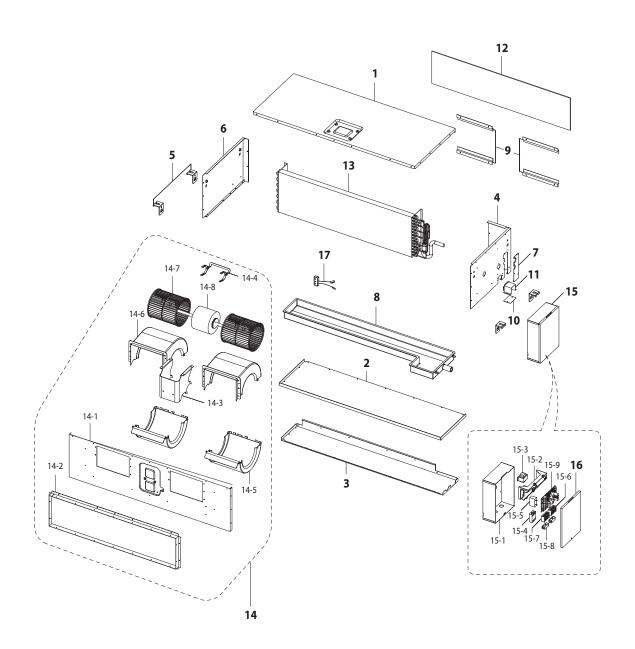


5-27 Samsung Electronics

				Q'	TY	
No.	Code No.	Description	Specification	AVXDSH100C* AVXDSH110C* ND100LH*** ND110LH***	AVXDSH145C* ND145LH***	SA/SNA
1	DB90-02088A	ASS'Y CABI BASE	SGCC-M,T0.8	1	1	SA
2	DB90-03249A	ASS'Y CABI SIDE LF	SGCC-M,T0.8	1	1	SA
3	DB90-02087A	ASS'Y CABI SIDE RH	SGCC-M,T0.8	1	1	SA
4	DB90-01938A	ASS'Y COVER PIPE	SGCC-M,T0.5	1	1	SA
5	DB90-01950A	ASS'Y COVER DRAIN PUMP	SLIM DUCT	1	1	SA
6	DB64-01351A	CABITOP MOTOR	SGCC-M,T0.8	1	1	SA
7	DB90-03248A	ASS'Y CABITOP EVAP	SGCC-M,T0.8	1	1	SA
8	DB61-02323A	PLATE HANGER	SGCC-M,T2.0	1	1	SA
9	DB90-02055A	ASS'Y BRACKET OUTLET	SGCC-M,T0.8	2	2	SA
10	DB61-02326A	BRACKET OUTLET SUB	SGCC-M,T0.8	1	1	SA
11	DB97-03748A	ASS'Y CUSHION BASE	ASS'Y	1	1	SA
12	DB97-03749A	ASS'Y CUSHION BASE RH	ASS'Y	1	1	SA
13	DB96-05867A	ASS'Y EVAP UNIT	ASS'Y	1	-	SA
	DB96-05868A	ASS'Y EVAP UNIT	ASS'Y	-	1	SA
14	DB97-03747A	ASS'Y SUPPORT EVAP LF	ASS'Y	1	1	SA
15	DB97-03746A	ASS'Y SUPPORT EVAP RH	ASS'Y	1	1	SA
16	DB94-00785A	ASS'Y PARTITION	ASS'Y	1	1	SA
17	DB61-02331A	BRACKET MOTOR	SGCC-M,T2.5	1	1	SA
18	DB97-03751A	BAND MOTOR	SINYA	1	1	SA
19	DB31-00427A	MOTOR	SINYA,SSR	1	1	SA
20	DB81-00617A	MOTOR SHAFT	SINYA	1	1	SA
21	DB94-00759A	MOLD BEARING	ASS'Y	1	1	SA
22	DB67-00581A	CAP BEARING	SGCC-M,T0.8	1	1	SA
23	DB73-00285A	RUBBER SHAFT	CR V0	1	1	SA
24	DB96-04902A	COUPLER	ASS'Y	1	1	SA
25	DB67-00583A	BLOWER A	ASS'Y	1	1	SA
26	DB67-00583B	BLOWER B	ASS'Y	2	2	SA
27	DB90-02085A	ASS'Y CASE BLOWER UPPER	ASS'Y	3	3	SA
28	DB90-02084A	ASS'Y CASE BLOWER BOTTOM	ASS'Y	3	3	SA
29	DB94-01028A	ASS'Y DRAIN	ASS'Y	1	1	SA
30	DB93-04867B	ASS'Y CONTROL IN	ASS'Y	1	1	SA
30-1	DB90-02054A	ASS'Y CASE CONTROL	ASS'Y	1	1	SA
30-2	DB61-02287B	CASE PCB	5VA	1	1	SA
30-3	DB90-02101B	ASS'Y COVER CONTROL	ASS'Y	1	1	SA
30-4	DB61-40291A	HOLDER WIRE	PP BLACK	1	1	SA
30-5	DB65-00105L	TERMINAL BLOCK 6P	6P,POWER	1	1	SA
30-6	DB65-00105M	TERMINAL BLOCK 6P	6P,COMMUNICATION	1	1	SA
30-7	DB26-00080A	TRANS POWER	230V,50Hz	1	1	SA
30-8	DB61-03122A	CASE BLDC	ABS(UL94-V5),BLK	1	1	SA
31	DB32-00142A	ASS'Y THERMISTOR	ASS'Y	1	1	SA
32	DB61-02349A	CLIP BRUSH	NYLON66,BLACK	2	2	SA
33	DB63-01299C	FILTER	ASS'Y	1	1	SA
35	DB03-01299C DB93-08296C	ASS'Y PCB MAIN	ASS'Y	1	1	SA
34	DB93-08290C DB93-04959A	ASS'Y PCB SUB-BLDC	ASS'Y	1	1	SA
<b>5</b> T	DDJS OTSSSA		7.001			JA

# 5-1-8 Duct type(MSP)

### ■ AVXDUH100/110C\*, ND100/110SH\*\*\*

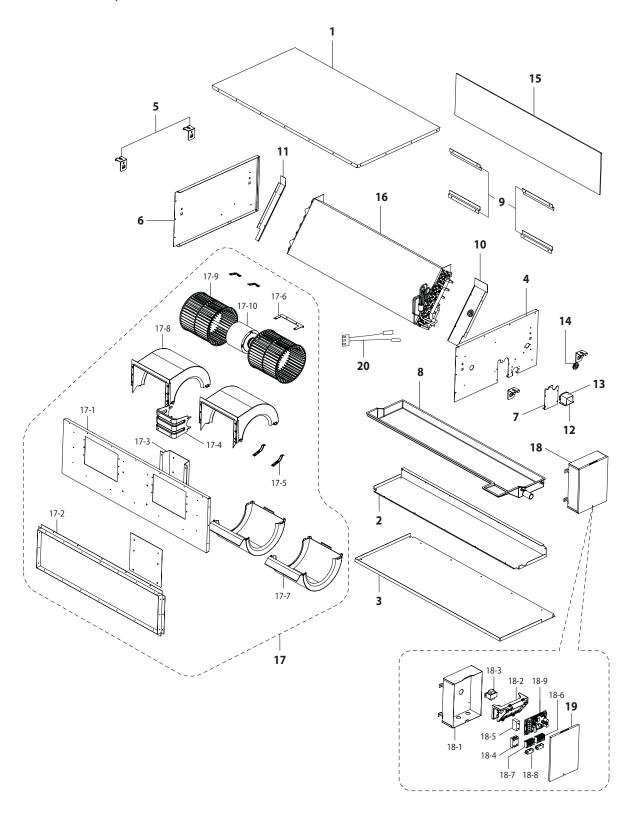


5-29 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB90-03109A	ASS'Y CABI BASE	ASS'Y,SGCC-M,T1.0	1	SA
2	DB90-02409A	ASS'Y CABI BOTTOM DRAIN	ASS'Y,SGCC-M,T1.0	1	SA
3	DB90-03110A	ASS'Y CABI BOTTOM BLOWER	ASS'Y,SGCC-M,T1.0	1	SA
4	DB90-02406A	ASS'Y CABI SIDE RH	ASS'Y,SGCC-M,T1.0	1	SA
5	DB61-01282A	HOLDER SIDE CABI	SGCC-M,T3.0	4	SNA
6	DB90-02407A	ASS'Y CABI SIDE LF	ASS'Y,SGCC-M,T1.0	1	SA
7	DB90-02404A	ASS'Y COVER PIPE	ASS'Y,SGCC-M,T1.0	1	SA
8	DB91-00346A	ASS'Y DRAIN PAN	ASS'Y,SGCC-M,T1.0	1	SA
9	DB61-02374A	BRACKET FILTER	SGCC-M,T1.0	4	SNA
10	DB61-02326A	COVER HOLDER	SGCC-M,T1.0	1	SNA
11	DB61-02378A	HOLDER PIPE	SGCC-M,T1.0	1	SNA
12	DB63-01299B	FILTER PRE	ASS'Y	1	SA
13	DB96-07234A	ASS'Y EVAP UNIT	3R14C WAVE 1.3 OD7	1	SA
14	DB94-01691A	ASS'Y BLOWER	ASS'Y	1	SNA
14-1	DB90-02402A	ASS'Y CABI FRONT	ASS'Y,SGCC-M,T1.5	1	SNA
14-2	DB90-02408A	ASS'Y BRACKET OUTLET PART	ASS'Y,SGCC-M,T1.0	1	SA
14-3	DB61-02331A	BRACKET MOTOR	ASS'Y,SGCC-M,T2.5	1	SNA
14-4	DB72-03751A	BAND MOTOR	ASS'Y,SGCC-M,T1.6	4	SA
14-5	DB61-02333A	CASE FAN LOW	ASS'Y,ABS/GF10,T3.0	2	SA
14-6	DB61-02332A	CASE FAN UP	ASS'Y,ABS/GF10,T3.0	2	SA
14-7	DB67-00583B	BLOWER	ASS'Y,ABS/GF10,OD230	2	SA
14-8	DB31-00355B	MOTOR FAN	YSK140-200-4A	1	SA
15	DB93-05578B	ASS'Y CONTROL IN	ASS'Y	1	SA
15-1	DB90-01992A	ASS'Y CASE CONTROL	ASS'Y,SGCC-MT1.0	1	SNA
15-2	DB61-02287B	CASE PCB	5VA	1	SA
15-3	DB26-10070G	TRANS POWER	DC17V	1	SNA
15-4	3502-001027	SSR	OMRON G3NA-210BPL	1	SNA
15-5	2301-001381	C-FILM, LEAD-OTHER	8uF,450VAC	1	SA
15-6	DB65-00105M	TERMINAL BLOCK 6P	250V,20A	1	SNA
15-7	DB65-00105L	TERMINAL BLOCK 6P	250V,20A	1	SNA
15-8	DB61-00250A	HOLDER-WIRE CLAMP	NYLON	2	SNA
15-9	DB93-08296B	ASS'Y PCB MAIN	ASS'Y	1	SA
16	DB63-01296A	ASS'Y COVER CONTROL	ASS'Y	1	SA
17	DB32-00142B	THERMISTOR -ASS'Y	103AT,103FW	1	SA

# Duct type(MSP)(cont.)

### ■ AVXDUH145C\*, ND145SH\*\*\*

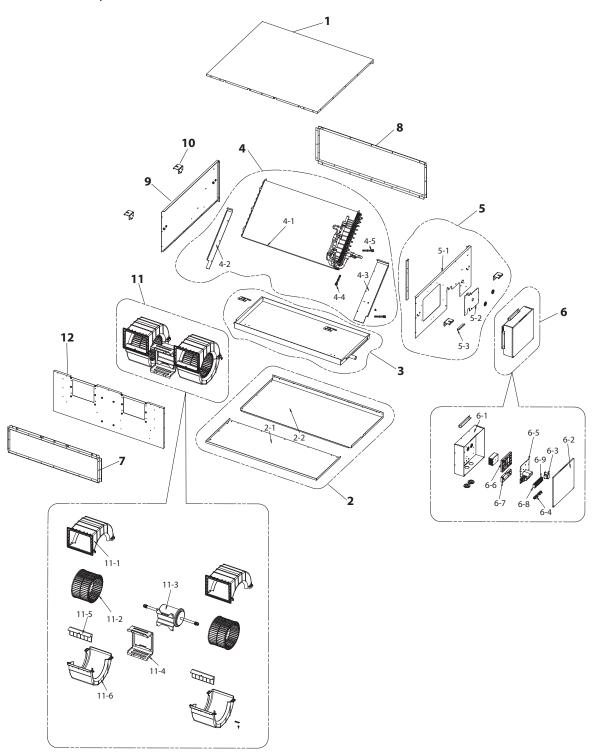


5-31 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB90-02083A	ASS'Y CABI BASE	ASS'Y,SGCC-M,T1.0	1	SA
2	DB90-02007A	ASS'Y CABI BOTTOM DRAIN	ASS'Y,SGCC-M,T1.0	1	SA
3	DB90-02008A	ASS'Y CABI BOTTOM BLOWER	ASS'Y,SGCC-M,T1.0	1	SA
4	DB90-02009A	ASS'Y CABI SIDE RH	ASS'Y,SGCC-M,T1.0	1	SA
5	DB61-01282A	HOLDER SIDE CABI	SGCC-M,T3.0	4	SNA
6	DB90-02010A	ASS'Y CABI SIDE LF	ASS'Y,SGCC-M,T1.0	1	SA
7	DB90-02011A	ASS'Y COVER PIPE	ASS'Y,SGCC-M,T1.0	1	SA
8	DB91-00317A	ASS'Y DRAIN PAN	ASS'Y,ABS/GF10 T3.0	1	SA
9	DB61-02374A	BRACKET FILTER	SGCC-M,T1.0	4	SNA
10	DB61-02380A	BRACKET EVAP RH	SGCC-M,T1.5	1	SA
11	DB61-02379A	BRACKET EVAP LF	SGCC-M,T1.5	1	SA
12	DB63-01297A	COVER HOLDER	SGCC-M,T1.0	1	SNA
13	DB61-02378A	HOLDER PIPE	SGCC-M,T1.0	1	SNA
14	DB73-00270A	RUBBER COVER WIRE	NBR	2	SNA
15	DB63-01299A	FILTER PRE	ASS'Y	1	SA
16	DB96-07235A	ASS'Y EVAP UNIT	3R14C WAVE 1.3 OD7	1	SA
17	DB94-01370A	ASS'Y BLOWER	ASS'Y	1	SNA
17-1	DB90-02028A	ASS'Y CABI FRONT	ASS'Y,SGCC-M,T1.5	1	SNA
17-2	DB90-02013A	ASS'Y BRACKET OUTLET PART	ASS'Y,SGCC-M,T1.0	1	SA
17-3	DB61-02372A	BASE MOTOR	ASS'Y,SGCC-M,T2.5	1	SNA
17-4	DB61-02375A	BRACKET MOTOR	ASS'Y,SGCC-M,T2.5	1	SNA
17-5	DB72-00710A	BAND MOTOR	ASS'Y,SGCC-MT1.6	4	SA
17-6	DB61-00540B	BRACKET MOTOR GUIDE	ASS'Y,SGCC-MT1.6	1	SNA
17-7	DB61-02382A	CASE FAN LOW	ASS'Y,ABS/GF10 T3.0	2	SA
17-8	DB61-02381A	CASE FAN UP	ASS'Y,ABS/GF10 T3.0	2	SA
17-9	DB67-00594A	BLOWER	ASS'Y,ABS/GF10 OD230	2	SA
17-10	DB31-00321D	MOTOR FAN	YDK-370S43223-01	1	SA
18	DB93-05578B	ASS'Y CONTROL IN	ASS'Y	1	SA
18-1	DB90-01992A	ASS'Y CASE CONTROL	ASS'Y,SGCC-MT1.0	1	SNA
18-2	DB61-02287B	CASE PCB	5VA	1	SA
18-3	DB26-10070G	TRANS POWER	DC17V	1	SNA
18-4	3502-001027	SSR	OMRON G3NA-210BPL	1	SNA
18-5	2301-001381	C-FILM, LEAD-OTHER	8uF,450VAC	1	SA
18-6	DB65-00105M	TERMINAL BLOCK 6P	250V,20A	1	SNA
18-7	DB65-00105L	TERMINAL BLOCK 6P	250V,20A	1	SNA
18-8	DB61-00250A	HOLDER-WIRE CLAMP	NYLON	2	SNA
18-9	DB93-08296B	ASS'Y PCB MAIN	ASS'Y	1	SA
19	DB63-01296A	ASS'Y COVER CONTROL	ASS'Y	1	SA
20	DB32-00142B	THERMISTOR -ASS'Y	103AT,103FW	1	SA

# 5-1-9 Duct type(BiG)

### ■ ND\*\*\*HHXCA, ND\*\*\*HHXCE

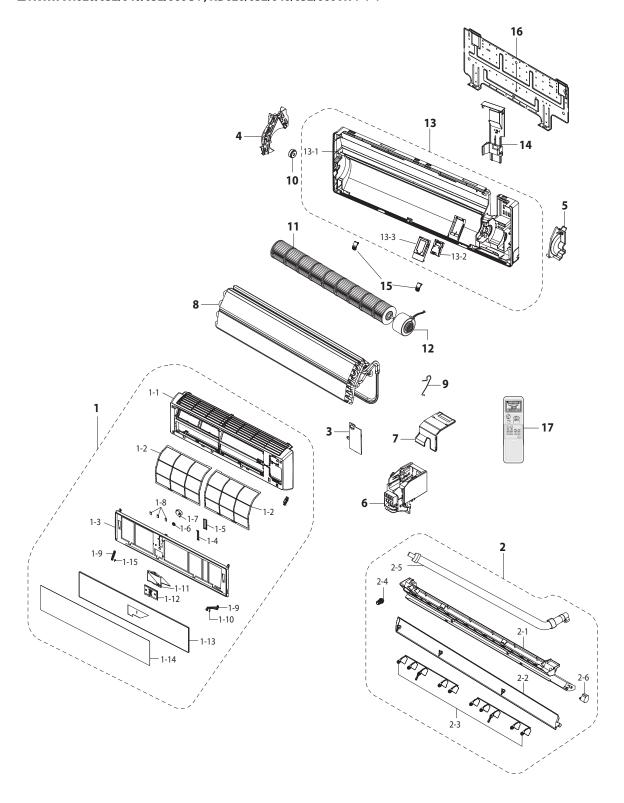


5-33 Samsung Electronics

No.	Code No.	Description		Q'TY		
			Specification	ND220HHXCA ND220HHXCE	ND280HHXCA ND280HHXCE	SA/SNA
1	DB90-06462A	ASS'Y CABINET-TOP PART	SGCC	1	1	SNA
2	DB90-06459A	ASS'Y CABINET-BASE DRAIN PART		1	1	SNA
2-1	DB64-02756A	CABINET-BASE BLOWER	SGCC	1	1	SNA
2-2	DB64-02757A	CABNET-BASE DRAIN	SGCC	1	1	SNA
3	DB91-01247A	ASS'Y DRAIN PAN	SECC	1	1	SNA
4	DB96-15610B	ASS'Y EVAP PARTS	8HP	1		SNA
	DB96-15610A	ASS'Y EVAP PARTS	10HP		1	SNA
4-1	DB96-15733B	ASS'Y EVAP UNIT	8HP	1		SA
	DB96-15733A	ASS'Y EVAP UNIT	10HP		1	SA
4-2	DB61-04979A	BRACKET EVAP-LF	SECC	1	1	SNA
4-3	DB61-04981A	BRACKET EVAP-RH	SECC	1	1	SNA
4-4	DB95-01958D	ASS'Y THEMISTOR- EVA OUT		1	1	SA
4-5	DB95-04530A	ASS'Y THEMISTOR-ROOM EVA IN		1	1	SA
5	DB90-06460A	ASS'Y CABINET-SIDE RH PART		1	1	SNA
5-1	DB90-06419A	ASS'Y CABINET-SIDE RH	SGCC	1	1	SNA
5-2	DB63-03007A	COVER-PIPE	SGCC	1	1	SNA
5-3	DB61-04984A	BRACKET CONTROL-BASE	SGCC	1	1	SNA
6	DB93-11723C	ASS'Y CONTROL IN		1	1	SNA
6-1	DB90-06715A	ASS'Y CASE-CONTROL	SGCC	1	1	SNA
6-2	DB63-03004A	COVER-CONTROL	SGCC	1	1	SNA
6-3	DB26-00095A	TRANS POWER		1	1	SA
6-4	DB61-00250A	HOLDER WIRE		2	2	SNA
6-5	DB93-12676A	ASS'Y-BLDC DRIVER		1	1	SA
6-6	DB93-12654A	ASS'Y PCB MAIN IN		1	1	SA
6-7	DB93-12108A	ASS'Y PCB SUB EMI		1	1	SA
6-8	DB65-00179E	TERMINAL BLOCK		1	1	SA
6-9	DB65-00179F	TERMINAL BLOCK		1	1	SA
7	DB90-06422A	BRACKET INLET	SECC	1	1	SNA
8	DB90-06422A	BRACKET INLET	SECC	1	1	SNA
9	DB90-06461A	ASS'Y CABINET-SIDE LF PART	SGCC	1	1	SNA
10	DB61-04882A	BRACKET HINGE-SIDE CABI	SGCC	4	4	SNA
11	DB94-03142A	ASS'Y FAN IN PARTS		1	1	SNA
11-1	DB67-01123A	DUCT-BACK	HIPS	2	2	SNA
11-2	DB94-03168A	ASS'Y FAN-BLOWER	ABS+GF10	2	2	SNA
11-3	DB31-00593B	MOTOR FAN		1	1	SA
11-4	DB61-04881A	BASE MOTOR	SGCC	1	1	SNA
11-5	DB67-01124A	DUCT-OUT OFF	HIPS	2	2	SNA
11-6	DB67-01122A	DUCT-FRONT	HIPS	2	2	SNA
12	DB90-06417A	ASS'Y CABI FRONT PANEL	SGCC	1	1	SNA

# 5-1-10 Wall-mounted type(Vivace)

#### ■ AVXWVH020/032/040/052/060C\*, ND020/032/040/052/060VH\*\*\*



5-35 Samsung Electronics

No.	Code No.	Description	Specification	Q'	Q'TY	
				AVXWVH040C* ND020VH***	AVXWVH052C* AVXWVH060C* ND052VH*** ND060VH***	SA/SNA
1	DB92-01087D	ASS'Y PANEL FRONT	ASS'Y HALF MIRROR	1	-	SNA
	DB92-01086D	ASS'Y PANEL FRONT	ASS'Y HALF MIRROR	-	1	SNA
1-1	DB64-01633A	PANEL FRONT	HIPS,EMPIRE SILVER	1	-	SA
	DB64-01638A	PANEL FRONT	HIPS,EMPIRE SILVER	-	1	SA
1-2	DB63-01593A	FILTER-PRE	PP,GRAY	2	-	SA
	DB63-01594A	FILTER-PRE	PP,GRAY	-	2	SA
1-3	DB64-01634A	PANEL-MID	HIPS,EMPIRE SILVER	1	-	SA
	DB64-01639A	PANEL-MID	HIPS,EMPIRE SILVER	-	1	SA
1-4	DB66-01152A	LINK-GRILLE	POM,WHITE	1	1	SA
1-5	DB66-01156A	GEAR-RACK	POM,WHITE	1	1	SA
1-6	DB66-01155A	GEAR-PINION	POM,WHITE	1	1	SA
1-7	DB31-00369B	MOTOR STEP	ASS'Y	1	1	SA
1-8	6002-000588	SCREW-TAP	TH M4XL6	3	3	SNA
1-9	DB66-01176A	LINK-SUPPORT	POM,WHITE	4	4	SA
1-10	DB61-03139A	SPRING ETC-GRILLE	STS	1	1	SA
1-11	DB63-01630A	COVER-DISPLAY	ABS-FR(17)	1	1	SA
1-12	DB93-04452F	ASS'Y DISPLAY	ASS'Y	1	1	SA
1-13	DB61-02910A	FRAME-GRILLE	ASS'Y	1	1	SA
1-14	DB92-01052A	WINDOW-MIRROR	ACRYL	1	_	SNA
	DB92-01052B	WINDOW-MIRROR	ACRYL	_	1	SNA
1-15	DB61-03139B	SPING ETC-GRILLE	STS	1	1	SA
2	DB94-01237A	ASS'Y TRAY DRAIN	ASS'Y	1	-	SA
	DB94-01245A	ASS'Y TRAY DRAIN	ASS'Y	_	1	SA
2-1	DB63-01578A	TRAY DRAIN	ASS'Y	1	-	SA
	DB63-01581A	TRAY DRAIN	ASS'Y	_	1	SA
2-2	DB61-02908A	BLADE-H	ABS, EMPIRE SILVER	1	_	SA
_	DB61-02914A	BLADE-H	ABS, EMPIRE SILVER	-	1	SA
2-3	DB61-01636A	BLADE-V	PP	2	-	SA
_ •	DB61-01976A	BLADE-V	PP	_	2	SA
2-4	DB73-00180A	RUBBER-CAP DRAIN	GUM-EPM	1	1	SNA
2-5	DB94-00458B	ASS'Y DRAIN-HOSE	ASS'Y	1	1	SA
2-6	DB31-00371A	MOTOR STEP	ASS'Y	1	_	SA
	DB31-00370A	MOTOR STEP	ASS'Y	_	1	SA
3	DB63-00844D	COVER-TERMINAL	HIPS,V0	1		SA
-	DB63-01063C	COVER-TERMINAL	HIPS,V0	_	1	SA
4	DB63-00850A	COVER-BEARING	ABS,BLACK	1		SNA
	DB63-01065A	COVER-BEARING	ABS,BLACK	_	1	SNA
5	DB96-03149A	ASS'Y EVAP-SUPPORT RH	ASS'Y	1	-	SA
,	DB96-03149A	ASS'Y EVA P-SUPPORT RH	ASS'Y		1	SA

#### ■ Parts List(cont.)

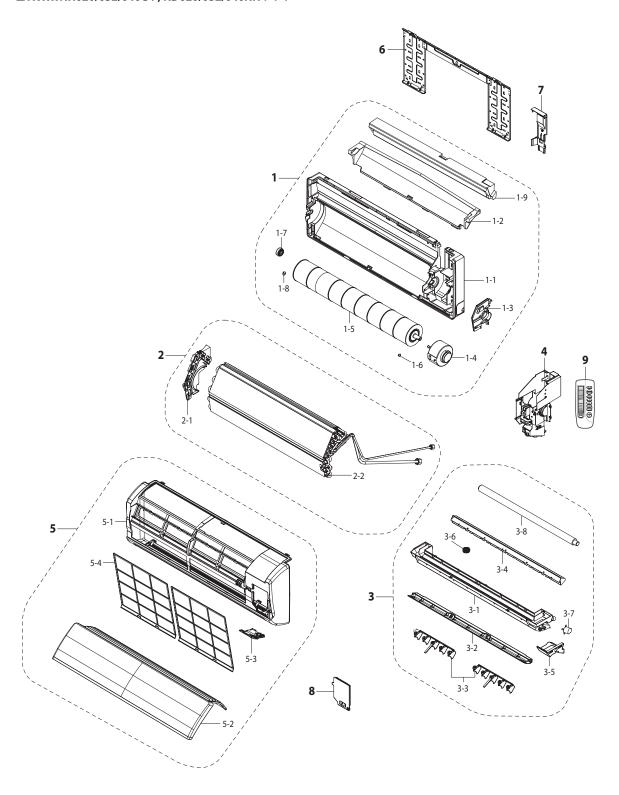
	Code No.	Description	Specification	Q'TY		
No.				AVXWVH020C* AVXWVH032C* AVXWVH040C* ND020VH***	AVXWVH052C* AVXWVH060C* ND052VH*** ND060VH***	SA/SNA
6	DB93-04636J	ASS'Y CONTROL IN	ASS'Y	1	-	SNA
	DB93-04664B	ASS'Y CONTROL IN	ASS'Y	-	1	SNA
7	DB90-02167B	ASS'Y COVER-CONTROL IN	ASS'Y	1	-	SA
	DB90-02082A	ASS'Y COVER-CONTROL IN	ASS'Y	-	1	SA
8	DB96-07856A	ASS'Y EVAP-TOTAL	ASS'Y	1	-	SNA
	DB96-06587D	ASS'Y EVAP-TOTAL	ASS'Y	-	1	SNA
9	DB67-60030A	SPRING-SENSOR	STS301	2	2	SNA
10	DB94-00455A	ASS'Y BEARING-RUBBER	ASS'Y	1	1	SA
11	DB94-00456A	ASS'Y-CROSS FAN	ASS'Y	1	-	SA
	DB94-00456B	ASS'Y-CROSS FAN	ASS'Y	-	1	SA
12	DB31-00219A	MOTOR FAN	ASS'Y	1	-	SA
	DB31-00267A	MOTOR FAN	ASS'Y	-	1	SA
13	DB94-01152B	ASS'Y-BODY BACK	ASS'Y	1	-	SA
	DB94-01153B	ASS'Y-BODY BACK	ASS'Y	-	1	SA
13-1	DB61-03028A	BODY BACK	HIPS	1	-	SA
	DB61-03029A	BODY BACK	HIPS	-	1	SA
13-2	DB93-04230A	ASS'Y-COMPACT MPI	ASS'Y	1	-	SA
13-3	DB63-01583A	COVER-MPI	HIPS	1	-	SA
14	DB61-01638B	HOLDER-PIPE	HIPS	1	-	SA
	DB61-01981B	HOLDER-PIPE	HIPS	-	1	SA
15	DB67-00499C	CAP-SCREW	HIPS,EMPIRE SILVER	2	2	SA
16	DB97-02851B	PLATE-HANGER	SGCC-M	1	-	SNA
	DB90-02738A	PLATE-HANGER	SGCC-M	1	1	SNA
17	DB93-06280V	ASS'Y REMOCON	ASS'Y	-	1	SA

5-37 Samsung Electronics

# **MEMO**

# 5-1-11 Wall-mounted type(Neo Forte without EEV)

### ■ AVXWNH020/032/040C\*, ND020/032/040NH\*\*\*

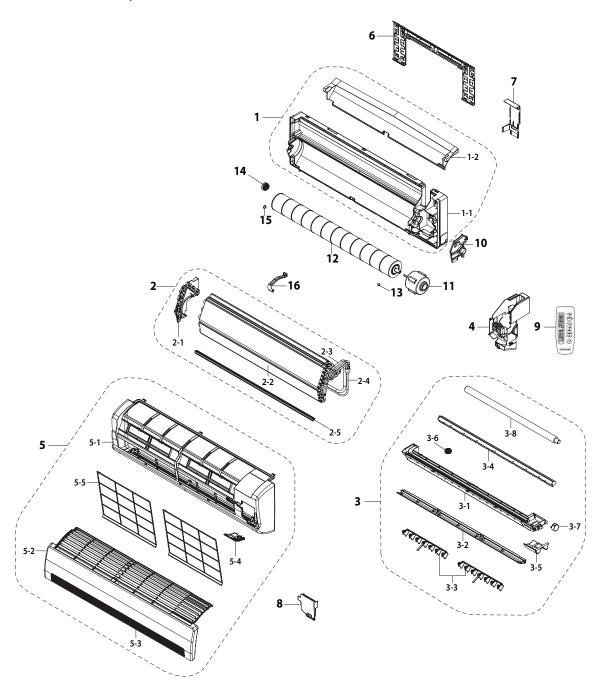


5-39 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB94-00454H	ASS'Y BACK BODY	ASS'Y	1	SA
1-1	DB61-01632D	BACK BODY	HIPS	1	SNA
1-2	DB69-00834A	CROSS FAN	EPS	1	SNA
1-3	DB96-03149A	ASS'Y SUPPORT EVAP RH	HIPS	1	SA
1-4	DB31-00219A	MOTOR IN	220-240V~,50/60Hz,Class E	1	SA
1-5	DB94-00456A	ASS'Y CROSS FAN	OD92xL635	1	SA
1-6	DB97-02075A	ASS'Y BOLT SPECIAL	ASS'Y	1	SNA
1-7	DB94-00455A	ASS'Y RUBBER BEARING	ASS'Y	1	SNA
1-8	DB94-40007A	ASS' Y BEARING	BEARING	1	SA
1-9	DB69-00833A	CUSHION EVAP UP	EPS	-	SA
2	DB96-09930A	ASS'Y EVAP TOTAL	ASS'Y	1	SA
2-1	DB63-00850A	COVER BEARING	ABS	-	SNA
2-2	DB96-03060G	ASS'Y EVAP	ASS'Y	1	SNA
3	DB94-00457J	ASS'Y TRAY DRAIN	ASS'Y	1	SA
3-1	DB63-00848A	TRAIN DRAIN	ABS	1	SNA
3-2	DB61-01635C	BRADE-H	HIPS	1	SA
3-3	DB61-01636A	BLADE-V	PP	1	SA
3-4	DB63-00849A	TRAY STABILIZER	ABS	1	SNA
3-5	DB69-00839A	CUSHION EPS TRAY RH	EPS	3	SA
3-6	DB73-00180A	RUBBER CAP DRAIN	GUM-EPM	3	SNA
3-7	DB31-00371A	ASS'Y MOTOR STEPPING	220-240V~,50/60Hz,Class E	1	SA
3-8	DB94-00458B	ASS'Y DRAIN HOSE	ASS'Y	1	SA
4	DB93-06025F	ASS'Y CONTROL IN	ASS'Y	1	SA
5	DB92-01237A	ASS'Y PANEL FRONT	ASS'Y	1	SA
5-1	DB64-00989E	PANEL FRONT	HIPS	1	SA
5-2	DB92-01207A	ASS'Y GRILLE AIR INLET	ASS'Y	1	SA
5-3	DB90-03094A	ASS'Y COVER DISPLAY	ASS'Y	1	SA
5-4	DB63-01591A	GUARD AIR FILTER	PP	1	SNA
6	DB97-02851B	ASS'Y PLATE HANGER	ASS'Y	-	SNA
7	DB61-01638B	HOLDER PIPE	PS	1	SNA
8	DB90-03965A	ASS'Y COVER TERMINAL	ASS'Y	1	SA
9	DB93-03012P	ASS'Y REMOCON	ASS'Y	1	SA

## Wall-mounted type(Neo Forte without EEV)(cont.)

## ■ AVXWNH056/060C\*, ND056/060NH\*

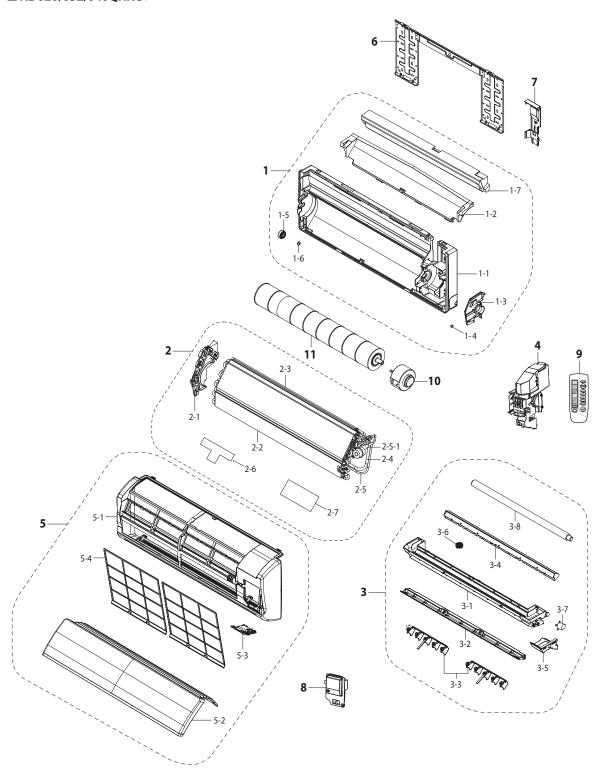


5-41 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB94-00615B	ASS'Y BACK BODY	ASS'Y	1	SA
1-1	DB61-01974B	BACK BODY	HIPS	1	SNA
1-2	DB69-01039A	CUSHION BACK BADY	EPS	1	SNA
2	DB96-06587D	ASS'Y EVAP TOTAL	ASS'Y	1	SA
2-1	DB63-01065A	COVER BEARING	ABS	1	SNA
2-2	DB96-07606A	ASS'Y EVAP MAIN	ASS'Y	1	SNA
	DB96-06525B	ASS'Y EVAP SUB	ASS'Y	1	SNA
2-3	DB96-07590A	ASS'Y TUBE EVAP OUT	ASS'Y	1	SA
2-4	DB96-07589A	ASS'Y TUBE EVAP IN	ASS'Y	1	SA
2-5	DB60-00192A	SPACE EVAP LOW		1	SA
3	DB94-00616E	ASS'Y TRAY DRAIN	ASS'Y	1	SA
3-1	DB63-01071A	TRAIN DRAIN	ABS	1	SA
3-2	DB61-01975C	BRADE-H	HIPS	1	SNA
3-3	DB61-01976A	BLADE-V	РР	1	SNA
3-4	DB63-01066A	TRAY STABILIZER	ABS	1	SA
3-5	DB69-01024A	CUSHION EPS TRAY RH	EPS	1	SA
3-6	DB73-00180A	RUBBER CAP DRAIN	GUM-EPM	1	SA
3-7	DB31-00285A	ASS'Y MOTOR STEPPING	220-240V~,50/60Hz,Class E	1	SNA
3-8	DB94-00458B	ASS'Y DRAIN HOSE	ASS'Y	1	SNA
4	DB93-06038F	ASS'Y CONTROL IN	ASS'Y	1	SA
5	DB92-01235A	ASS'Y PANEL FRONT	ASS'Y	1	SNA
5-1	DB64-01184C	PANEL FRONT	HIPS	1	SA
5-2	DB64-02045A	ASS'Y GRILLE AIR INLET	ASS'Y	1	SA
5-3	DB64-02046A	DECORATON GRILLE	PC(GRAY)	1	SNA
5-4	DB93-02867C	ASS'Y COVER DISPLAY	ASS'Y	1	SA
5-5	DB63-01592B	GUARD AIR FILTER	PP	2	SNA
6	DB90-02738A	ASS'Y PLATE HANGER	ASS'Y	1	SA
7	DB61-01981B	ASS'Y DRAIN HOSE	PS	1	SA
8	DB90-03966A	ASS'Y COVER TERMINAL	ASS'Y	1	SA
9	DB93-03170Z	ASS'Y REMOCON	ARH-463	1	SA
10	DB96-03817A	ASS'Y SUPPORT EVAP RH	HIPS	1	SA
11	DB31-00267A	MOTOR IN	220-240V~,50/60Hz,Class E	1	SA
12	DB94-00456B	ASS'Y CROSS FAN	OD92xL635	1	SA
13	DB97-02075A	ASS'Y BOLT SPECIAL	ASS'Y	1	SNA
14	DB94-00455A	ASS'Y RUBBER BEARING	ASS'Y	1	SNA
15	DB94-40007A	ASS'Y BEARING MOTOR	BEARING	1	SNA
16	DB61-01977A	BRACKET EVAP	SGCC-M	1	SA

## 5-1-12 Wall-mounted type(Neo Forte with EEV)

## ■ ND020/032/040QHXC\*

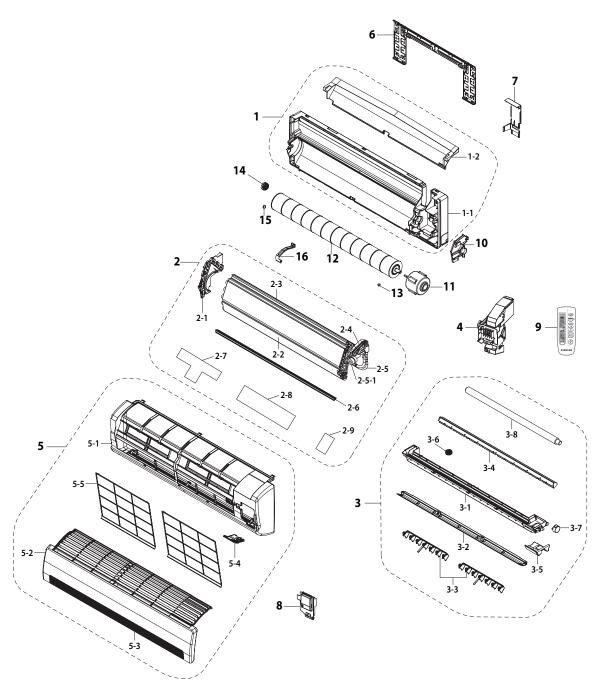


5-43 Samsung Electronics

No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB94-00454H	ASS'Y BACK BODY	ASS'Y	1	SA
1-1	DB61-01632D	BACK BODY	HIPS	1	SNA
1-2	DB69-00834A	CUSION BODY BACK	EPS	1	SNA
1-3	DB96-03149A	ASS'Y SUPPORT EVAP RH	HIPS	1	SA
1-4	DB97-02075A	ASS'Y BOLT SPECIAL	ASS'Y	1	SNA
1-5	DB94-00455A	ASS'Y RUBBER BEARING	ASS'Y	1	SNA
1-6	DB94-40007A	ASS'Y BEARING	BEARING	1	SA
1-7	DB69-00833A	CUSHION EVAP UP	EPS	-	SA
2	DB96-13821B	ASS'Y EVAP TOTAL	ASS'Y	1	SA
2-1	DB63-00850A	COVER BEARING	ABS	1	SNA
2-2	DB96-04544F	ASS'Y EVAP MAIN	ASS'Y	1	SA
2-3	DB96-04546D	ASS'Y EVAP SUB	ASS'Y	1	SA
2-4	DB96-13794A	ASS'Y TUBE EVAP OUT	ASS'Y	1	SNA
2-5	DB96-13801A	ASS'Y TUBE EVAP IN	ASS'Y	1	SNA
2-5-1	DB62-09160A	EXPANSION VALVE	ø1.3 EEV	1	SA
2-6	DB73-00569A	RUBBER BUTYL	BUTYL	1	SA
2-7	DB73-00570A	RUBBER BUTYL	BUTYL	1	SA
3	DB94-00457J	ASS'Y TRAY DRAIN	ASS'Y	1	SA
3-1	DB63-00848A	TRAIN DRAIN	ABS	1	SNA
3-2	DB61-01635C	BRADE-H	HIPS	1	SA
3-3	DB61-01636A	BLADE-V	PP	1	SA
3-4	DB63-00849A	TRAY STABILIZER	ABS	1	SNA
3-5	DB69-00839A	CUSHION EPS TRAY RH	EPS	3	SA
3-6	DB73-00180A	RUBBER CAP DRAIN	GUM-EPM	3	SNA
3-7	DB31-00371A	ASS'Y MOTOR STEPPING	220-240V~,50/60Hz,Class E	1	SA
3-8	DB94-00458B	ASS'Y DRAIN HOSE	ASS'Y	1	SA
4	DB93-09503A	ASS'Y CONTROL IN	ASS'Y	1	SA
5	DB92-01237A	ASS'Y PANEL FRONT	ASS'Y	1	SA
5-1	DB64-00989E	PANEL FRONT	HIPS	1	SA
5-2	DB92-01207A	ASS'Y GRILLE AIR INLET	ASS'Y	1	SA
5-3	DB90-03094A	ASS'Y COVER DISPLAY	ASS'Y	1	SA
5-4	DB63-01591B	GUARD AIR FILTER	PP	1	SNA
6	DB97-02851C	ASS'Y PLATE HANGER	ASS'Y	1	SNA
7	DB61-01638B	HOLDER PIPE	HIPS	1	SNA
8	DB90-05667A	ASS'Y COVER TERMINAL	ASS'Y	1	SA
9	DB93-03170Z	ASS'Y REMOCON	ARH-465	1	SA
10	DB31-00219A	MOTOR IN	220-240V~,50/60Hz,Class E	1	SA
11	DB94-00456A	ASS'Y CROSS FAN	OD92xL635	1	SA

## Wall-mounted type(Neo Forte with EEV)(cont.)

## ■ ND052/060QHXC\*

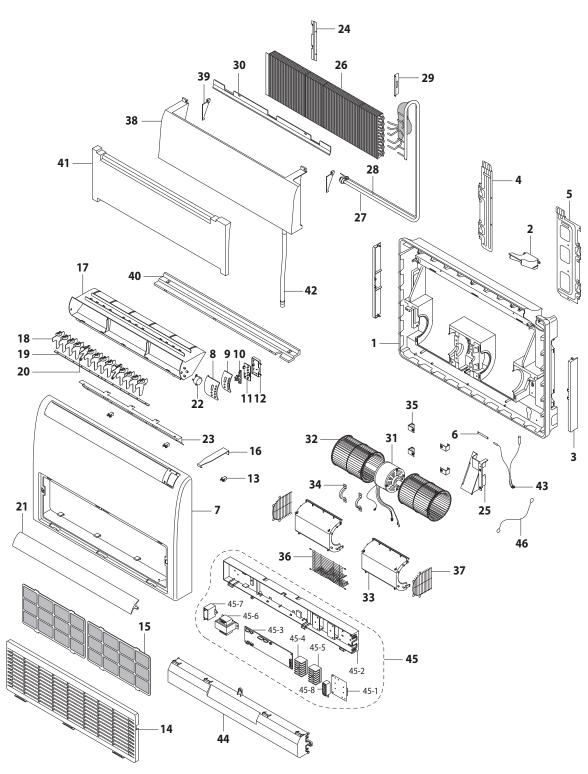


5-45 Samsung Electronics

No	Code No	Docarintion	Specification	Q'	TY	CA/CNIA
No.	Code No.	Description	Specification	ND052QHXC*	ND060QHXC*	SA/SNA
1	DB94-00615B	ASS'Y BACK BODY	ASS'Y	1	1	SA
1-1	DB61-01974B	BACK BODY	HIPS	1	1	SNA
1-2	DB69-01039A	CUSHION BACK BADY	EPS	1	1	SNA
2	DB96-13822B	ASS'Y EVAP TOTAL	ASS'Y	1	-	SA
	DB96-13822C	ASS'Y EVAP TOTAL	ASS'Y	-	1	SA
2-1	DB63-01065A	COVER BEARING	ASS'Y	1	1	SNA
2-2	DB96-07606B	ASS'Y EVAP MAIN	ASS'Y	1	1	SA
2-3	DB96-06525B	ASS'Y EVAP SUB	ASS'Y	1	1	SA
2-4	DB96-07590A	ASS'Y TUBE EVAP OUT	ASS'Y	1	-	SNA
	DB96-07590B	ASS'Y TUBE EVAP OUT	ASS'Y	-	1	SNA
2-5	DB96-13804B	ASS'Y TUBE EVAP IN	ASS'Y	1	-	SNA
	DB96-13804A	ASS'Y TUBE EVAP IN	ASS'Y	_	1	SNA
2-5-1	DB62-09159A	EXPANSION VALVE	ø2.0 EEV	1	1	SA
2-6	DB60-00192A	SPACE EVAP LOW		1	1	SNA
2-7	DB73-00569A	RUBBER BUTYL	BUTYL	1	1	SA
2-8	DB73-00571A	RUBBER BUTYL	BUTYL	1	1	SA
2-9	DB73-00571B	RUBBER BUTYL	BUTYL	1	1	SA
3	DB94-00616E	ASS'Y TRAY DRAIN	ASS'Y	1	1	SA
3-1	DB63-01071A	TRAIN DRAIN	ABS	1	1	SNA
3-2	DB61-01975C	BRADE-H	HIPS	1	1	SA
3-3	DB61-01976A	BLADE-V	PP	1	1	SA
3-4	DB63-01066A	TRAY STABILIZER	ABS	1	1	SNA
3-5	DB69-01024A	CUSHION EPS TRAY RH	EPS	1	1	SA
3-6	DB73-00180A	RUBBER CAP DRAIN	GUM-EPM	1	1	SNA
3-7	DB31-00285A	ASS'Y MOTOR STEPPING	220-240V~,50/60Hz,Class E	1	1	SA
3-8	DB94-00458B	ASS'Y DRAIN HOSE	ASS'Y	1	1	SA
4	DB93-09504A	ASS'Y CONTROL IN	ASS'Y	1	1	SA
5	DB92-01235A	ASS'Y PANEL FRONT	ASS'Y	1	1	SA
5-1	DB64-01184C	PANEL FRONT	HIPS	1	1	SA
5-2	DB64-02045A	ASS'Y GRILLE AIR INLET	ASS'Y	1	1	SA
5-3	DB64-02046A	DECORATON GRILLE	PC(GRAY)	1	1	SA
5-4	DB93-02867C	ASS'Y COVER DISPLAY	ASS'Y	1	1	SA
5-5	DB63-01592C	GUARD AIR FILTER	PP	2	2	SNA
6	DB90-02738A	ASS'Y PLATE HANGER	ASS'Y	1	1	SNA
7	DB61-01981B	HOLDER PIPE	HIPS	1	1	SNA
8	DB90-05667B	ASS'Y COVER TERMINAL	ASS'Y	1	1	SA
9	DB93-03170Z	ASS'Y REMOCON	ARH-465	1	1	SA
10	DB96-03817A	ASS'Y SUPPORT EVAP RH	HIPS	1	1	SA
11	DB31-00442A	MOTOR IN	220-240V~,50/60Hz,Class E	1	1	SA
12	DB94-00456B	ASS'Y CROSS FAN	OD92xL635	1	1	SA
13	DB97-02075A	ASS'Y BOLT SPECIAL	ASS'Y	1	1	SNA
14	DB94-00455A	ASS'Y RUBBER BEARING	ASS'Y	1	1	SNA
15	DB94-40007A	ASS'Y BEARING MOTOR	BEARING	1	1	SA
16	DB61-01977A	BRACKET EVAP	SGCC-M	1	1	SA

## 5-1-13 Ceiling type

## ■ ND052/070CHXCA



5-47 Samsung Electronics

No.	Code No.	Description	Specification	Q'	TY	SA/SNA
NO.	Code No.	Description	Specification	ND052CHXCA	ND070CHXCA	SA/SINA
1	DB64-00682A	CABI BASE	ABS	1	1	SA
2	DB63-00601A	COVER PIPE	ABS	1	1	SA
3	DB63-00602A	COVER SIDE	ABS	2	2	SA
4	DB61-01149A	PLATE HANGER LF	SGCC-M	1	1	SA
5	DB61-01150A	PLATE HANGER RH	SGCC-M	1	1	SA
6	DB61-01155A	BRACKET COVER PIPE	SGCC-M	1	1	SA
7	DB64-00683A	CABI FRONT	ABS(SILK PRINT)	1	1	SA
8	DB63-00606C	COVER DISPLAY A	ABS(SILK PRINT)	1	1	SA
9	DB63-00607A	COVER DISPLAY B	PC	1	1	SA
10	DB63-00604A	COVER LED	ABS	1	1	SA
11	DB93-01476B	DISPLAY PCB IN	PCB	1	1	SA
12	DB61-01159A	CASE DISPLAY PCB	ABS	1	1	SA
13	DB66-00451A	LATCH PUSH	ASS'Y	3	3	SA
14	DB64-00684A	INLET GRILLE	ABS	1	1	SA
15	DB63-00610A	FILTER AIR	PP	2	2	SA
16	DB61-01153A	PLATE HANGER FRONT	SGCC-M	1	1	SA
17	DB61-01156A	BRACKET OUTLET	ABS	1	1	SA
18	DB31-00158A	BLADE V	ABS	12	12	SA
19	DB31-00159A	BLADE CONNECTOR V	ABS	2	2	SA
20	DB31-00164A	BLADE CONNECTOR H	ABS	2	2	SA
21	DB31-00157A	BLADE H	ABS	1	1	SA
22	DB31-10113A	SWING MOTOR IN	ASS'Y	1	1	SA
23	DB61-01352A	BRACKET DRAIN	SGCC-M	1	1	SA
24	DB67-00258A	DRAIN SUB LF	SGCC-M	1	1	SA
25	DB67-00259A	DRAIN SUB RH	ABS	1	1	SA
26	DB96-07272B	EVAPORATOR	ASS'Y	1	1	SA
27	DB96-07656A	ASS'Y COLLECTOR	ASS'Y	-	1	SA
	DB96-07656B	ASS'Y COLLECTOR	ASS'Y	1	-	SA
28	DB96-07658A	ASS'Y INLET	ASS'Y	-	1	SA
	DB96-07657A	ASS'Y INLET	ASS'Y	1	-	SA
29	DB61-01157A	BRACKET EVAP	SGCC-M	1	1	SA
30	DB63-00624A	COVER EVAP	ABS	1	1	SA
31	DB31-00467B	MOTOR FAN	ASS'Y(Y5S413B216)	0	1	SA
-	DB31-00467C	MOTOR FAN	ASS'Y(Y5S613A86)	1	0	SA
32	DB67-00260A	BLOWER	ABS	2	2	SA
33	DB61-01160A	CASE FAN UP	ABS	2	2	SA
34	DB63-00611A	COVER MOTOR	SGCC-M	2	2	SA
35	DB61-01162A	HOLDER MOTOR	SGCC-M	4	4	SA
36	DB63-00738A	GUARD SAFETY	HSWR	1	1	SA
37	DB63-00739A	GUARD FAN	HSWR	2	2	SA
38	DB67-00257A	DRAIN PAN	ABS	1	1	SA
39	DB67-00237A	DRAIN PARTITION	ABS	2	2	SA

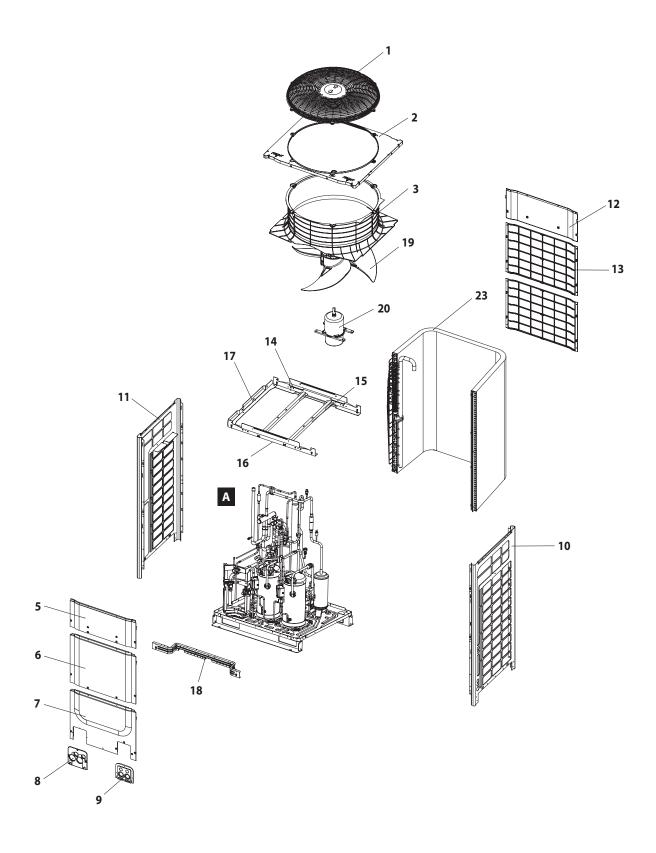
#### ■ Parts List(cont.)

Codo No	Description	Specification	Q'	TY	SA/SNA
Code No.	Description	Specification	ND052CHXCA	ND070CHXCA	SA/SINA
DB69-00617A	CUSHION DRAIN A	EPS(25FOAM-PS)	1	1	SA
DB69-00714A	CUSHION DRAIN B	EPS(25FOAM-PS)	1	1	SA
DB94-00240E	ASS'Y DRAIN HOSE	ASS'Y	1	1	SA
DB32-00141B	THERMISTOR EVAP	ASS'Y	1	1	SA
DB63-00605A	COVER CONTROL	ABS(UL94-V0)	1	1	SA
DB93-05193B	ASS'Y CONTROL IN	ASS'Y	-	1	SA
DB93-05193A	ASS'Y CONTROL IN	ASS'Y	1	-	SA
DB61-01154A	BASE CONTROL	SGCC-M	1	1	SA
DB61-01220A	CASE PCB MAIN	ABS(UL94-V0)	1	1	SA
DB93-05982C	CEILING EU,PCB ASS'Y	PCB	1	1	SA
DB65-00105M	TERMINAL BLOCK 6P	DAF-S6P	1	1	SA
DB95-01101B	TERMINAL BLOCK 6P	DAF-S6P	1	1	SA
DB26-00080A	TRANS POWER	ASS'Y	1	1	SA
2301-001368	CAPACITOR	5uF 450VAC	-	1	SA
2301-001369	CAPACITOR	3uF 450VAC	1	-	SA
DB61-00250A	CLAMP WIRE	NYLON	2	2	SA
DB32-00102D	THERMISTOR EVAP OUT	ASS'Y	1	1	SA
	DB69-00714A  DB94-00240E  DB32-00141B  DB63-00605A  DB93-05193B  DB93-05193A  DB61-01154A  DB61-01220A  DB93-05982C  DB65-00105M  DB95-01101B  DB26-00080A  2301-001368  2301-001369  DB61-00250A	DB69-00617A CUSHION DRAIN A DB69-00714A CUSHION DRAIN B DB94-00240E ASS'Y DRAIN HOSE DB32-00141B THERMISTOR EVAP DB63-00605A COVER CONTROL DB93-05193B ASS'Y CONTROL IN DB93-05193A ASS'Y CONTROL IN DB61-01154A BASE CONTROL DB61-011220A CASE PCB MAIN DB93-05982C CEILING EU,PCB ASS'Y DB65-00105M TERMINAL BLOCK 6P DB95-01101B TERMINAL BLOCK 6P DB95-01101B TERMINAL BLOCK 6P DB26-00080A TRANS POWER 2301-001368 CAPACITOR DB61-00250A CLAMP WIRE	DB69-00617A         CUSHION DRAIN A         EPS(25FOAM-PS)           DB69-00714A         CUSHION DRAIN B         EPS(25FOAM-PS)           DB94-00240E         ASS'Y DRAIN HOSE         ASS'Y           DB32-00141B         THERMISTOR EVAP         ASS'Y           DB63-00605A         COVER CONTROL         ABS(UL94-V0)           DB93-05193B         ASS'Y CONTROL IN         ASS'Y           DB93-05193A         ASS'Y CONTROL IN         ASS'Y           DB61-01154A         BASE CONTROL         SGCC-M           DB61-01220A         CASE PCB MAIN         ABS(UL94-V0)           DB93-05982C         CEILING EU,PCB ASS'Y         PCB           DB65-00105M         TERMINAL BLOCK 6P         DAF-S6P           DB95-01101B         TERMINAL BLOCK 6P         DAF-S6P           DB26-00080A         TRANS POWER         ASS'Y           2301-001369         CAPACITOR         SuF 450VAC           2301-001369         CAPACITOR         3uF 450VAC           DB61-00250A         CLAMP WIRE         NYLON	Code No.         Description         Specification           DB69-00617A         CUSHION DRAIN A         EPS(25FOAM-PS)         1           DB69-00714A         CUSHION DRAIN B         EPS(25FOAM-PS)         1           DB94-00240E         ASS'Y DRAIN HOSE         ASS'Y         1           DB32-00141B         THERMISTOR EVAP         ASS'Y         1           DB63-00605A         COVER CONTROL         ABS(UL94-V0)         1           DB93-05193B         ASS'Y CONTROL IN         ASS'Y         -           DB93-05193A         ASS'Y CONTROL IN         ASS'Y         1           DB61-01154A         BASE CONTROL         SGCC-M         1           DB61-01220A         CASE PCB MAIN         ABS(UL94-V0)         1           DB93-05982C         CEILING EU,PCB ASS'Y         PCB         1           DB65-00105M         TERMINAL BLOCK 6P         DAF-S6P         1           DB95-01101B         TERMINAL BLOCK 6P         DAF-S6P         1           DB26-00080A         TRANS POWER         ASS'Y         1           2301-001369         CAPACITOR         5uF 450VAC         -           2301-001369         CAPACITOR         3uF 450VAC         1           DB61-00250A         CLAMP WIRE	ND052CHXCA   ND070CHXCA

5-49 Samsung Electronics

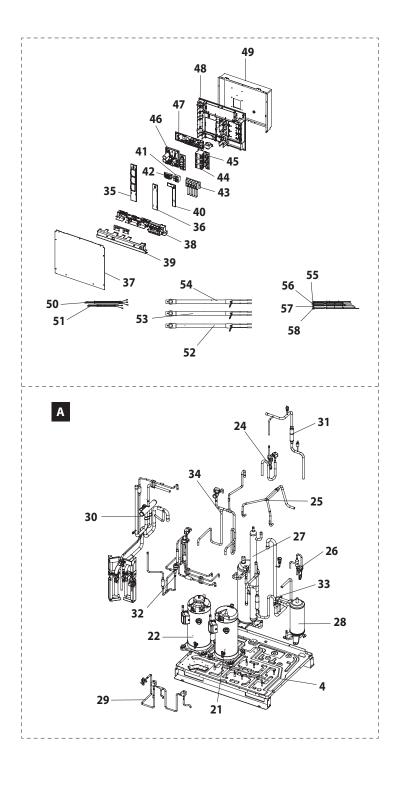
# **MEMO**

## 5-2-1 RVXVHT075/100FE, RD075/100VHXFA



5-51 Samsung Electronics

## RVXVHT075/100FE, RD075/100VHXFA(cont.)



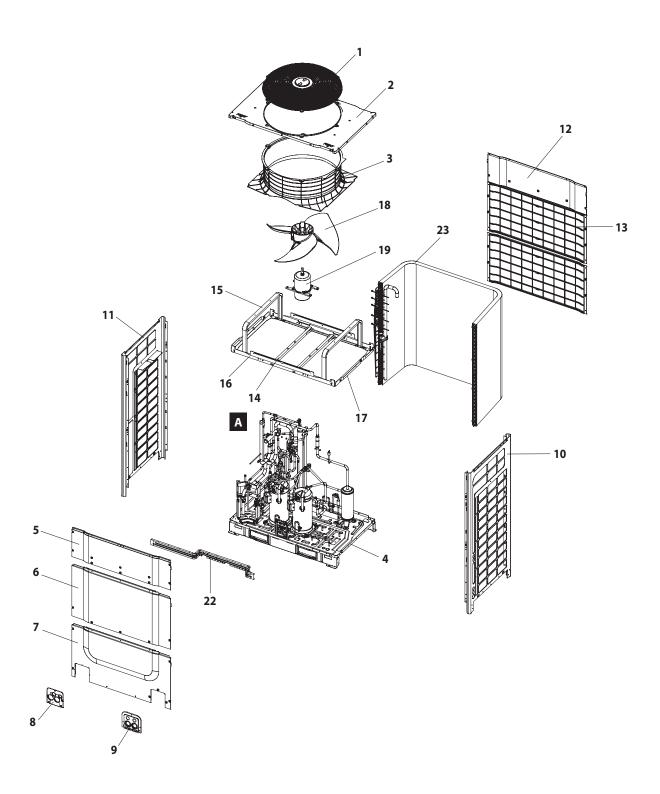
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No.	Code No.	Description	Specification	RVXVHT075FE RD075VHXFA	RVXVHT100FE RD100VHXFA	SA/SNA
1	DB63-02614A	GUARD-FAN	MSWR-SWRM, TOUCH GRAY	1	1	SA
2	DB63-02618A	COVER-TOP	EGI-SECC, T1.2, TOUCH GRAY	1	1	SA
3	DB62-03304B	BELLOW-MOUTH	PP,TOUCH GRAY	1	1	SA
4	DB90-02141A	ASS'Y BASE COMP	ASS'Y	1	1	SNA
5	DB90-02121E	ASS'Y CABI FRONT-UP 10HP	ASS'Y	1	1	SA
6	DB90-02122C	ASS'Y CABI FRONT-MID 10HP	ASS'Y	1	1	SA
7	DB90-02123B	ASS'Y CABI FRONT-LOW	ASS'Y	1	1	SA
8	DB63-01921A	COVER-VALVE	PP,TOUCH GRAY	1	1	SA
9	DB63-01441A	COVER-PLATE	SECC-P,t0.8,TOUCH GRAY	1	1	SA
10	DB90-04734A	ASS'Y-CABI SIDE RH	ASS'Y	1	1	SA
11	DB90-04735A	ASS'Y-CABI SIDE LF	ASS'Y	1	1	SA
12	DB90-02130D	ASS'Y CABI BACK-UP 14HP	ASS'Y	1	1	SA
13	DB90-02317A	ASS'Y-GUARD COND BACK	ASS'Y	2	2	SA
14	DB90-02145C	ASS'Y BACK BEAM UP 10HP	ASS'Y	1	1	SNA
15	DB61-02255A	BRACKET MOTOR	SGCC-M,t2.0	1	1	SA
16	DB90-02143B	ASS'Y FRONT BEAM UP	ASS'Y	1	1	SNA
17	DB90-02638B	ASS'Y-PLATE BEAM SIDE LF	ASS'Y	1	1	SNA
18	DB90-04740A	ASS'Y FRONT BEAM LOW	ASS'Y	1	1	SNA
19	DB31-00298A	FAN PROPELLER	AS+G/F20%	1	1	SA
20	DB31-00330B	MOTOR FAN	UGBTEF-13LSAM02	1	1	SA
21	DB95-01456H	ASS'Y COMP-EVI (FIXED)	ZPI61KCE-TF5-496	1	1	SA
22	DB95-01468F	ASS'Y COMP-EVI (DIGITAL)	ZPJ72KCE-TF5-496	1	1	SA
23	DB96-09442B	ASS'Y COND OUT-A	ASS'Y	1	1	SA
24	DB96-12960A	ASS'Y-TUBE HOT-GAS BYPASS	ASS'Y	1	1	SA
25	DB96-08421A	ASS'Y TUBE DISCHARGE-A	ASS'Y	1	1	SA
26	DB96-12415A	ASS'Y TUBE-OIL RETURN A	ASS'Y	1	1	SNA
27	DB96-12350A	ASS'Y-ACCUM SUBCOOLER 12HP	ASS'Y	1	1	SNA
28	DB96-08688A	ASS'Y OIL SEPAPOTOR 12HP	ASS'Y	1	1	SA
29	DB96-11587D	ASS'Y TUBE-OIL BALANCE VALVE-A	ASS'Y	1	1	SA
30	DB96-12956A	ASS'Y-TUBE 4WAY LIQUID SVC VV	ASS'Y	1	1	SNA
31	DB96-12942A	ASS'Y-OIL SEPA OUT A	ASS'Y	1	1	SNA
32	DB96-12949A	ASS'Y-EXPANSION BYPASS VALVE B	ASS'Y	1	1	SNA
33	DB96-12417A	ASS'Y TUBE SUCTION-PWM A	ASS'Y	1	1	SNA
34	DB96-12406A	ASS'Y TUBE-VAPOR INJECTION	ASS'Y	1	1	SNA
35	DB63-01361D	COVER-CONTROL IN	ABS,5V	1	1	SNA
36	DB63-01361E	COVER-CONTROL IN	ABS,5V	1	1	SNA
37	DB90-02149A	ASS'Y COVER CONTROL-BOX	ASS'Y	1	1	SA
38	DB93-07899A	ASS'Y CONTROL-WIRE LOW	ASS'Y	1	1	SA
39	DB63-02249A	COVER-CONTROL WIRE UP	ABS,5V	1	1	SNA
40	DB63-01361F	COVER-CONTROL IN	ABS,5V	1	1	SNA
41	DB65-00209B	TERMINAL BLOCK-AC	DATA 60A,AC1500V,10mA	1	1	SA

5-53 Samsung Electronics

#### ■ Parts List(cont.)

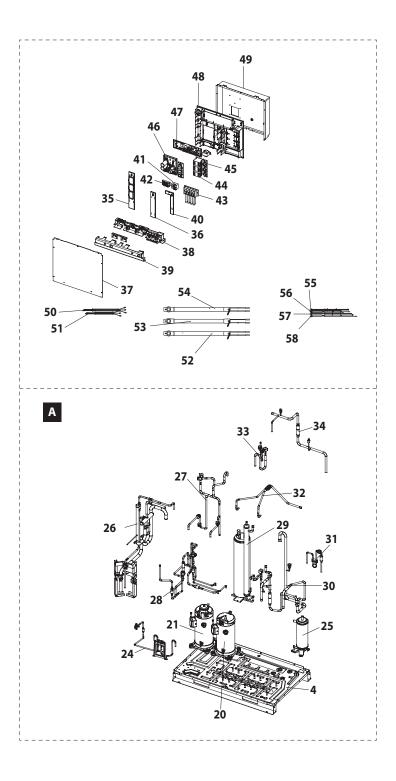
			Q'	TY	
Code No.	Description	Specification	RVXVHT075FE RD075VHXFA	RVXVHT100FE RD100VHXFA	SA/SN/
DB65-40062U	TERMINAL BLOCK	ASS'Y	1	1	SA
DB65-00232D	TERMINAL BLOCK-3PHASE	ASS'Y	1	1	SNA
DB35-00096A	RELAY	XMC0-503IBBC00F	2	2	SA
DB93-08707A	ASS'Y PCB SUB	ASS'Y	1	1	SA
DB93-06543K	ASS'Y-BLDC DRIVER	ASS'Y	1	1	SA
DB93-08701A	ASS'Y PCB MAIN-OUT	ASS'Y	1	-	SA
DB93-08701B	ASS'Y PCB MAIN-OUT	ASS'Y	-	1	SA
DB90-05282A	ASS'Y CASE CONTROL IN	ASS'Y	1	1	SNA
DB64-01311C	CONTROL-BOX BODY	SGCC-M,t0.8	1	1	SNA
DB93-08105A	ASS'Y LEAD WIRE-MAIN COMP	ASS'Y	1	1	SA
DB93-08105B	ASS'Y LEAD WIRE-MAIN COMP	ASS'Y	1	1	SA
DB95-00766G	ASS'Y COMP-HEATER	ASS'Y	1	1	SA
DB95-00766H	ASS'Y COMP-HEATER	ASS'Y	1	1	SA
DB95-01425B	ASS'Y BELT HEATER	ASS'Y	-	-	SA
DB95-01959D	ASS'Y DISCHARGE SENSOR	ASS'Y	1	1	SA
DB95-01965C	ASS'Y-THERMISTOR OUTDOOR	ASS'Y	1	1	SA
DB95-01962A	ASS'Y-THERMISTOR OUT SUMP	ASS'Y	1	1	SA
DB95-01960A	ASS'Y THERMISTOR-EVI IN OUT	ASS'Y	1	1	SA
	DB65-00232D DB35-00096A DB93-08707A DB93-06543K DB93-08701A DB93-08701B DB90-05282A DB64-01311C DB93-08105A DB93-08105B DB95-00766G DB95-00766H DB95-01425B DB95-01959D DB95-01965C DB95-01962A	DB65-40062U TERMINAL BLOCK DB65-00232D TERMINAL BLOCK-3PHASE DB35-00096A RELAY DB93-08707A ASS'Y PCB SUB DB93-06543K ASS'Y-BLDC DRIVER DB93-08701A ASS'Y PCB MAIN-OUT DB93-08701B ASS'Y PCB MAIN-OUT DB90-05282A ASS'Y CASE CONTROL IN DB64-01311C CONTROL-BOX BODY DB93-08105A ASS'Y LEAD WIRE-MAIN COMP DB93-08105B ASS'Y LEAD WIRE-MAIN COMP DB95-00766G ASS'Y COMP-HEATER DB95-01425B ASS'Y BELT HEATER DB95-01959D ASS'Y DISCHARGE SENSOR DB95-01965C ASS'Y-THERMISTOR OUT SUMP	DB65-40062U         TERMINAL BLOCK         ASS'Y           DB65-00232D         TERMINAL BLOCK-3PHASE         ASS'Y           DB35-00096A         RELAY         XMC0-503IBBC00F           DB93-08707A         ASS'Y PCB SUB         ASS'Y           DB93-06543K         ASS'Y-BLDC DRIVER         ASS'Y           DB93-08701A         ASS'Y PCB MAIN-OUT         ASS'Y           DB93-08701B         ASS'Y PCB MAIN-OUT         ASS'Y           DB90-05282A         ASS'Y CASE CONTROL IN         ASS'Y           DB94-01311C         CONTROL-BOX BODY         SGCC-M,t0.8           DB93-08105A         ASS'Y LEAD WIRE-MAIN COMP         ASS'Y           DB93-08105B         ASS'Y LEAD WIRE-MAIN COMP         ASS'Y           DB95-00766G         ASS'Y COMP-HEATER         ASS'Y           DB95-0166H         ASS'Y COMP-HEATER         ASS'Y           DB95-01425B         ASS'Y DISCHARGE SENSOR         ASS'Y           DB95-01965C         ASS'Y-THERMISTOR OUT SUMP         ASS'Y           DB95-01962A         ASS'Y-THERMISTOR OUT SUMP         ASS'Y	Code No.         Description         Specification         RVXVHT075FE RD075VHXFA           DB65-40062U         TERMINAL BLOCK         ASS'Y         1           DB65-00232D         TERMINAL BLOCK-3PHASE         ASS'Y         1           DB35-00096A         RELAY         XMC0-503IBBC00F         2           DB93-08707A         ASS'Y PCB SUB         ASS'Y         1           DB93-06543K         ASS'Y PCB MORIN-OUT         ASS'Y         1           DB93-08701A         ASS'Y PCB MAIN-OUT         ASS'Y         1           DB93-08701B         ASS'Y PCB MAIN-OUT         ASS'Y         -           DB90-05282A         ASS'Y CASE CONTROL IN         ASS'Y         1           DB94-01311C         CONTROL-BOX BODY         SGCC-M,to.8         1           DB93-08105A         ASS'Y LEAD WIRE-MAIN COMP         ASS'Y         1           DB93-08105B         ASS'Y LEAD WIRE-MAIN COMP         ASS'Y         1           DB95-00766G         ASS'Y COMP-HEATER         ASS'Y         1           DB95-00766H         ASS'Y COMP-HEATER         ASS'Y         -           DB95-01959D         ASS'Y DISCHARGE SENSOR         ASS'Y         1           DB95-01965C         ASS'Y-THERMISTOR OUTDOOR         ASS'Y         1 <td>DB65-40062U         TERMINAL BLOCK         ASS'Y         1         1           DB65-40062U         TERMINAL BLOCK         ASS'Y         1         1           DB65-00232D         TERMINAL BLOCK-3PHASE         ASS'Y         1         1           DB35-00096A         RELAY         XMC0-503IBBC00F         2         2           DB93-08707A         ASS'Y PCB SUB         ASS'Y         1         1           DB93-06543K         ASS'Y-BLDC DRIVER         ASS'Y         1         1           DB93-08701A         ASS'Y PCB MAIN-OUT         ASS'Y         1         1           DB93-08701B         ASS'Y PCB MAIN-OUT         ASS'Y         -         1           DB93-08701B         ASS'Y CASE CONTROL IN         ASS'Y         1         1           DB90-05282A         ASS'Y CASE CONTROL IN         ASS'Y         1         1           DB64-01311C         CONTROL-BOX BODY         SGCC-M,to.8         1         1           DB93-08105A         ASS'Y LEAD WIRE-MAIN COMP         ASS'Y         1         1           DB93-08105B         ASS'Y LEAD WIRE-MAIN COMP         ASS'Y         1         1           DB95-00766G         ASS'Y COMP-HEATER         ASS'Y         1         1      &lt;</td>	DB65-40062U         TERMINAL BLOCK         ASS'Y         1         1           DB65-40062U         TERMINAL BLOCK         ASS'Y         1         1           DB65-00232D         TERMINAL BLOCK-3PHASE         ASS'Y         1         1           DB35-00096A         RELAY         XMC0-503IBBC00F         2         2           DB93-08707A         ASS'Y PCB SUB         ASS'Y         1         1           DB93-06543K         ASS'Y-BLDC DRIVER         ASS'Y         1         1           DB93-08701A         ASS'Y PCB MAIN-OUT         ASS'Y         1         1           DB93-08701B         ASS'Y PCB MAIN-OUT         ASS'Y         -         1           DB93-08701B         ASS'Y CASE CONTROL IN         ASS'Y         1         1           DB90-05282A         ASS'Y CASE CONTROL IN         ASS'Y         1         1           DB64-01311C         CONTROL-BOX BODY         SGCC-M,to.8         1         1           DB93-08105A         ASS'Y LEAD WIRE-MAIN COMP         ASS'Y         1         1           DB93-08105B         ASS'Y LEAD WIRE-MAIN COMP         ASS'Y         1         1           DB95-00766G         ASS'Y COMP-HEATER         ASS'Y         1         1      <

## 5-2-2 RVXVHT125FE, RD125VHXFA



5-55 Samsung Electronics

## RVXVHT125FE, RD125VHXFA(cont.)



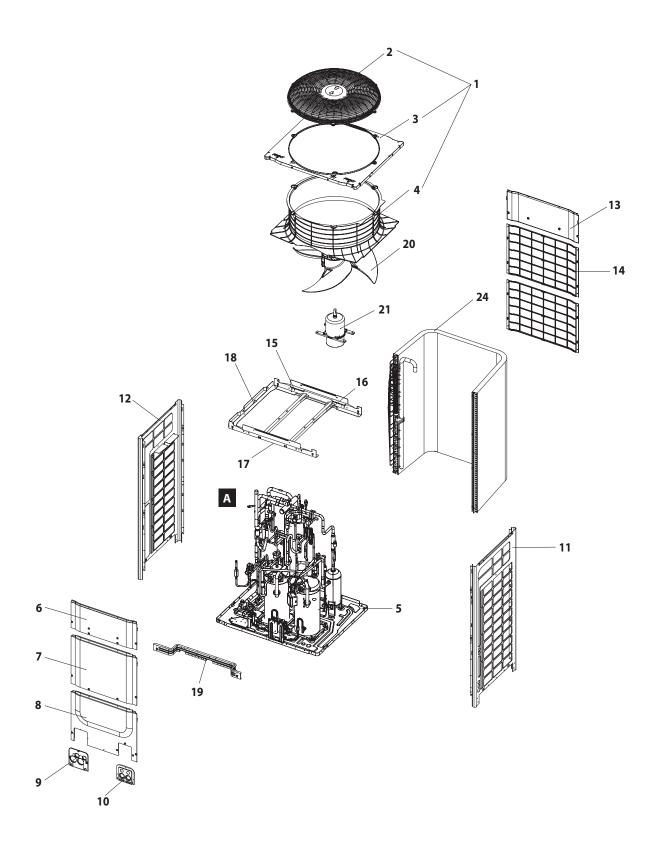
No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB63-02614A	GUARD-FAN	MSWR-SWRM, TOUCH GRAY	1	SA
2	DB63-02619A	COVER-TOP	EGI-SECC, T1.2, TOUCH GRAY	1	SA
3	DB62-03304B	BELLOW-MOUTH	PP,TOUCH GRAY	1	SA
4	DB90-04730A	ASS'Y BASE OUTDOOR	ASS'Y	1	SNA
5	DB90-02131E	ASS'Y CABI FRONT-UP	ASS'Y	1	SA
6	DB90-02132C	ASS'Y CABI FRONT-MID	ASS'Y	1	SA
7	DB90-02133B	ASS'Y CABI FRONT-LOW	ASS'Y	1	SA
8	DB63-01921A	COVER-VALVE	PP,TOUCH GRAY	1	SA
9	DB63-01441A	COVER-PLATE	SECC-P,T0.8,TOUCH GRAY	1	SA
10	DB90-04734A	ASS'Y-CABI SIDE RH	ASS'Y	1	SA
11	DB90-04735A	ASS'Y-CABI SIDE LF	ASS'Y	1	SA
12	DB90-02140D	ASS'Y CABI BACK-UP 14HP	ASS'Y	1	SA
13	DB90-02320A	ASS'Y-GUARD COND BACK	ASS'Y	2	SA
14	DB61-02255A	BRACKET MOTOR	SGCC-M,T2.0	2	SA
15	DB61-02299A	SUPPORT-TOP	SGCC-M,T1.6	2	SNA
16	DB90-02144B	ASS'Y FRONT BEAM UP	ASS'Y	2	SNA
17	DB90-02638B	ASS'Y-PLATE BEAM SIDE LF	ASS'Y	2	SNA
18	DB31-00298A	FAN PROPELLER	AS+G/F20%	1	SA
19	DB31-00330B	MOTOR FAN	UGBTEF-13LSAM02	1	SA
20	DB95-01456G	ASS'Y COMP-EVI (FIXED)	ZPI83KCE-TF5-496	1	SA
21	DB95-01468G	ASS'Y COMP-EVI (DIGITAL)	ZPJ83KCE-TF5-496	1	SA
22	DB90-04739A	ASS'Y BEAM FRONT LOW	ASS'Y	1	SA
23	DB96-09444B	ASS'Y COND OUT-C	ASS'Y	1	SA
24	DB96-11587C	ASS'Y TUBE-OIL BALANCE VALVE-A	ASS'Y	1	SA
25	DB96-08687A	ASS'Y-OIL SEPAPATOR 16HP	ASS'Y	1	SNA
26	DB96-12425A	ASS'Y-TUBE 4WAY LIQUID SVC VV	ASS'Y	1	SNA
27	DB96-12312A	ASS'Y TUBE-VAPOR INJECTION	ASS'Y	1	SNA
28	DB96-12950A	ASS'Y-EXPANSION BYPASS VALVE	ASS'Y	1	SNA
29	DB96-12350A	ASS'Y-ACCUM SUBCOOLER	ASS'Y	1	SNA
30	DB96-12958A	ASS'Y TUBE SUCTION-PWM	ASS'Y	1	SNA
31	DB96-12311A	ASS'Y TUBE-OIL RETURN	ASS'Y	1	SNA
32	DB96-12320A	ASS'Y TUBE DISCHARGE-A	ASS'Y	1	SA
33	DB96-12959A	ASS'Y-TUBE HOT-GAS BYPASS	ASS'Y	1	SNA
34	DB96-08924A	ASS'Y-TUBE OIL SEPA OUT	ASS'Y	1	SA
35	DB63-01361D	COVER-CONTROL IN	ABS,5V	1	SNA
36	DB63-01361E	COVER-CONTROL IN	ABS,5V	1	SNA
37	DB90-02149A	ASS'Y COVER CONTROL-BOX	ASS'Y	1	SA
38	DB93-07899A	ASS'Y CONTROL-WIRE LOW	ASS'Y	1	SA
39	DB63-02249A	COVER-CONTROL WIRE UP	ABS,5V	1	SNA
40	DB63-01361F	COVER-CONTROL IN	ABS 5V	1	SNA
41	DB65-00209B	TERMINAL BLOCK-AC	DATA 60A,AC1500V,10mA	1	SA
42	DB65-40062U	TERMINAL BLOCK	ASS'Y	1	SA
43	DB65-00232D	TERMINAL BLOCK-3PHASE	ASS'Y	1	SNA

5-57 Samsung Electronics

#### ■ Parts List(cont.)

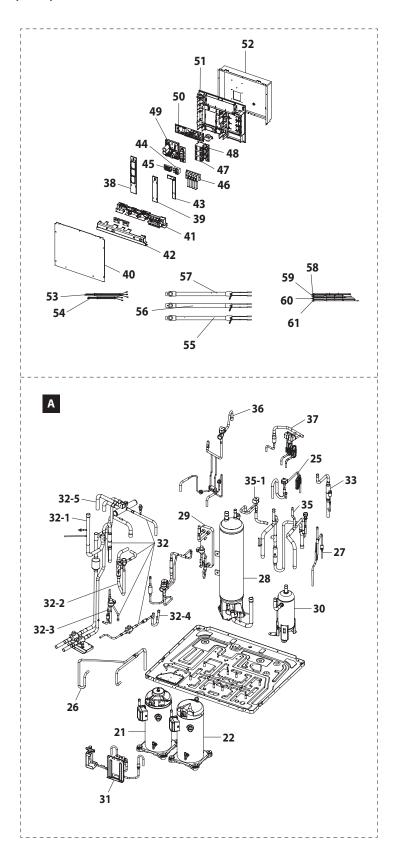
No.	Code No.	Description	Specification	Q'TY	SA/SNA
44	DB35-00096A	RELAY	XMC0-503IBBC00F	2	SA
45	DB93-08707A	ASS'Y PCB SUB	ASS'Y	1	SA
46	DB93-06543K	ASS'Y-BLDC DRIVER	ASS'Y	1	SNA
47	DB93-08701C	ASS'Y PCB MAIN-OUT	ASS'Y	1	SA
48	DB90-05282A	ASS'Y CASE CONTROL IN	ASS'Y	1	SNA
49	DB64-01311C	CONTROL-BOX BODY	SGCC-M,T0.8	1	SNA
50	DB93-08105C	ASS'Y LEAD WIRE-MAIN COMP	ASS'Y	1	SA
51	DB93-08105D	ASS'Y LEAD WIRE-MAIN COMP	ASS'Y	1	SA
52	DB95-00766G	ASS'Y COMP-HEATER	ASS'Y	1	SA
53	DB95-00766H	ASS'Y COMP-HEATER	ASS'Y	1	SA
54	DB95-01425B	ASS'Y BELT HEATER	ASS'Y	-	SA
55	DB95-01959G	ASS'Y DISCHARGE SENSOR	ASS'Y	1	SA
56	DB95-01965J	ASS'Y-THERMISTOR OUTDOOR	ASS'Y	1	SA
57	DB95-01962B	ASS'Y-THERMISTOR OUT SUMP	ASS'Y	1	SA
58	DB95-01960B	ASS'Y THERMISTOR-EVI IN OUT	ASS'Y	1	SA

## 5-2-3 RD075/100VRXFA



5-59 Samsung Electronics

## RD075/100VRXFA(cont.)



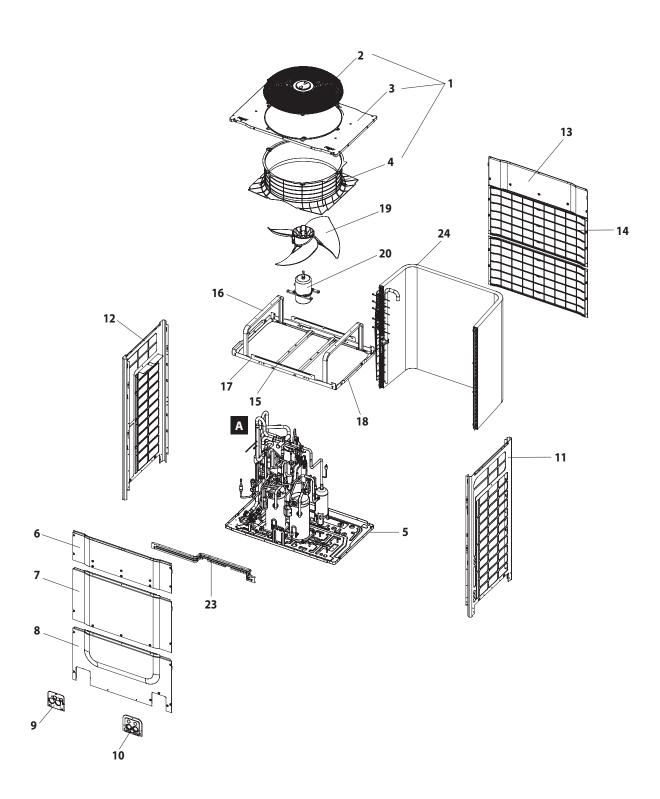
				Q'	TY	
No.	Code No.	Description	Specification	RD075VRXFA	RD100VRXFA	SA/SNA
1	DB90-05485B	ASS'Y COVER-TOP	ASS'Y	1	1	SA
2	DB63-02614A	GUARD-FAN	MSWR-SWRM,TOUCH GRAY	1	1	SA
3	DB63-02618A	COVER-TOP	EGI-SECC,T1.2,TOUCH GRAY	1	1	SA
4	DB62-03304B	BELLOW-MOUTH	PP,TOUCH GRAY	1	1	SA
5	DB90-02141A	ASS'Y BASE COMP	ASS'Y	1	1	SNA
6	DB90-02121E	ASS'Y CABI FRONT-UP 10HP	ASS'Y	1	1	SA
7	DB90-02122C	ASS'Y CABI FRONT-MID 10HP	ASS'Y	1	1	SA
8	DB90-02123B	ASS'Y CABI FRONT-LOW	ASS'Y	1	1	SA
9	DB63-01921A	COVER-VALVE	PP,TOUCH GRAY	1	1	SA
10	DB63-01441A	COVER-PLATE	SECC-P,t0.8,TOUCH GRAY	1	1	SA
11	DB90-04734A	ASS'Y-CABI SIDE RH	ASS'Y	1	1	SA
12	DB90-04735A	ASS'Y-CABI SIDE LF	ASS'Y	1	1	SA
13	DB90-02130D	ASS'Y CABI BACK-UP 14HP	ASS'Y	1	1	SA
14	DB90-02317A	ASS'Y-GUARD COND BACK	ASS'Y	2	2	SA
15	DB90-02145C	ASS'Y BACK BEAM UP 10HP	ASS'Y	1	1	SNA
16	DB61-02255A	BRACKET MOTOR	SGCC-M,t2.0	1	1	SA
17	DB90-02143B	ASS'Y FRONT BEAM UP	ASS'Y	1	1	SNA
18	DB90-02638B	ASS'Y-PLATE BEAM SIDE LF	ASS'Y	1	1	SNA
19	DB90-04740A	ASS'Y FRONT BEAM LOW	ASS'Y	1	1	SNA
20	DB31-00298A	FAN PROPELLER	AS+G/F20%	1	1	SA
21	DB31-00330B	MOTOR FAN	UGBTEF-13LSAM02	1	1	SA
22	DB95-01456H	ASS'Y COMP-EVI (FIXED)	ZPI61KCE-TF5-496	1	1	SA
23	DB95-01468F	ASS'Y COMP-EVI (DIGITAL)	ZPJ72KCE-TF5-496	1	1	SA
24	DB96-09442B	ASS'Y COND OUT-A	ASS'Y	1	1	SA
25	DB96-14377A	ASS'Y-TUBE HOT-GAS BYPASS	ASS'Y	1	1	SA
26	DB96-14332A	ASS'Y TUBE DISCHARGE	ASS'Y	1	1	SA
27	DB96-14331A	ASS'Y TUBE-OIL RETURN	ASS'Y	1	1	SA
28	DB96-14342A	ASS'Y-ACCUMLATOR	ASS'Y	1	1	SA
29	DB96-14347A	ASS'Y TUBE SUBCOOLER	ASS'Y	1	1	SA
30	DB96-14974A	ASS'Y OIL SEPAPOTOR	ASS'Y	1	1	SA
31	DB96-14404A	ASS'Y TUBE-OIL BALANCE VALVE	ASS'Y	1	1	SA
32	DB96-14343A	ASS'Y-TUBE 4WAY LIQUID SVC VALVE	ASS'Y	1	1	SA
32-1	DB96-14344A	ASS'Y-TUBE 4WAY VALVE	ASS'Y	1	1	SA
32-2	DB96-14346A	ASS'Y-TUBE MAIN COOLING VALVE	ASS'Y	1	1	SA
32-3	DB96-14403A	ASS'Y-TUBE HR EEV	ASS'Y	1	1	SA
32-4	DB96-14419A	ASS'Y-TUBE LIQUID VALVE	ASS'Y	1	1	SA
32-5	DB96-14645A	ASS'Y-TUBE 4WAY VALVE	ASS'Y	1	1	SA
33	DB96-14351A	ASS'Y-OIL SEPA OUT A	ASS'Y	1	1	SA
34	DB96-14349A	ASS'Y TUBE-EXPANSION VALVE	ASS'Y	1	1	SA
35	DB96-14334A	ASS'Y TUBE SUCTION-PWM	ASS'Y	1	1	SA
35-1	DB96-08402A	ASS'Y TUBE PWM VALVE	ASS'Y	1	1	SA

5-61 Samsung Electronics

#### ■ Parts List(cont.)

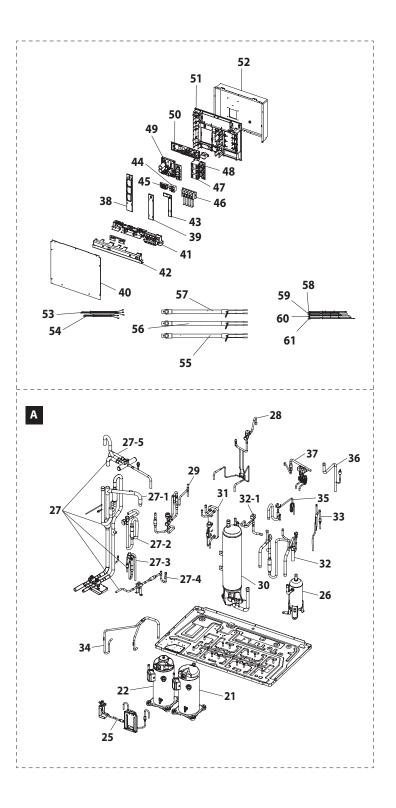
				Q'	TY	
No.	Code No.	Description	Specification	RD075VRXFA	RD100VRXFA	SA/SNA
36	DB96-14316A	ASS'Y TUBE-VAPOR INJECTION	ASS'Y	1	1	SA
37	DB96-14350A	ASS'Y TUBE-LIQUID BYPASS VALVE	ASS'Y	1	1	SA
38	DB63-01361D	COVER-CONTROL IN	ABS,5V	1	1	SNA
39	DB63-01361E	COVER-CONTROL IN	ABS,5V	1	1	SNA
40	DB90-02149A	ASS'Y COVER CONTROL-BOX	ASS'Y	1	1	SA
41	DB93-07899A	ASS'Y CONTROL-WIRE LOW	ASS'Y	1	1	SA
42	DB63-02249A	COVER-CONTROL WIRE UP	ABS,5V	1	1	SNA
43	DB63-01361F	COVER-CONTROL IN	ABS,5V	1	1	SNA
44	DB65-00209B	TERMINAL BLOCK-AC	DATA 60A,AC1500V,10mA	1	1	SA
45	DB65-40062U	TERMINAL BLOCK	ASS'Y	1	1	SA
46	DB65-00232D	TERMINAL BLOCK-3PHASE	ASS'Y	1	1	SNA
47	DB35-00096A	RELAY	XMC0-503IBBC00F	2	2	SA
48	DB93-08707A	ASS'Y PCB SUB	ASS'Y	1	1	SA
49	DB93-06543K	ASS'Y-BLDC DRIVER	ASS'Y	1	1	SA
50	DB93-10733A	ASS'Y PCB MAIN-OUT	ASS'Y	1	-	SA
	DB93-10733B	ASS'Y PCB MAIN-OUT	ASS'Y	-	1	SA
51	DB90-05282A	ASS'Y CASE CONTROL IN	ASS'Y	1	1	SNA
52	DB64-01311C	CONTROL-BOX BODY	SGCC-M,t0.8	1	1	SNA
53	DB93-08105A	ASS'Y LEAD WIRE-MAIN COMP	ASS'Y	1	1	SA
54	DB93-08105B	ASS'Y LEAD WIRE-MAIN COMP	ASS'Y	1	1	SA
55	DB95-00766G	ASS'Y COMP-HEATER	ASS'Y	1	1	SA
56	DB95-00766H	ASS'Y COMP-HEATER	ASS'Y	1	1	SA
57	DB95-01425B	ASS'Y BELT HEATER	ASS'Y	1	1	SA
58	DB95-01959H	ASS'Y DISCHARGE SENSOR	ASS'Y	1	1	SA
59	DB95-01965K	ASS'Y-THERMISTOR OUTDOOR	ASS'Y	1	1	SA
60	DB95-01962C	ASS'Y-THERMISTOR OUT SUMP	ASS'Y	1	1	SA
61	DB95-01960F	ASS'Y THERMISTOR-EVI IN OUT	ASS'Y	1	1	SA

## 5-2-4 RD125VRXFA



5-63 Samsung Electronics

## RD125VRXFA(cont.)



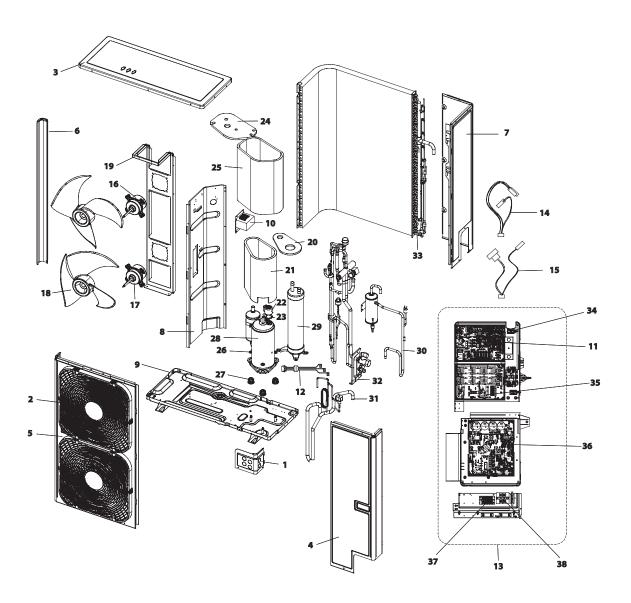
No.	Code No.	Description	Specification	Q'TY	SA/SNA
1	DB63-05486B	ASS'Y COVER-TOP	ASS'Y	1	SA
2	DB63-02614A	GUARD-FAN	MSWR-SWRM,TOUCH GRAY	1	SA
3	DB63-02620A	COVER-TOP	EGI-SECC,T1.2,TOUCH GRAY	1	SA
4	DB62-03304B	BELLOW-MOUTH	PP,TOUCH GRAY	1	SA
5	DB90-04730A	ASS'Y BASE OUTDOOR	ASS'Y	1	SNA
6	DB90-02131E	ASS'Y CABI FRONT-UP	ASS'Y	1	SA
7	DB90-02132C	ASS'Y CABI FRONT-MID	ASS'Y	1	SA
8	DB90-02133B	ASS'Y CABI FRONT-LOW	ASS'Y	1	SA
9	DB63-01921A	COVER-VALVE	PP,TOUCH GRAY	1	SA
10	DB63-01441A	COVER-PLATE	SECC-P,T0.8,TOUCH GRAY	1	SA
11	DB90-04734A	ASS'Y-CABI SIDE RH	ASS'Y	1	SA
12	DB90-04735A	ASS'Y-CABI SIDE LF	ASS'Y	1	SA
13	DB90-02140D	ASS'Y CABI BACK-UP 14HP	ASS'Y	1	SA
14	DB90-02320A	ASS'Y-GUARD COND BACK	ASS'Y	2	SA
15	DB61-02255A	BRACKET MOTOR	SGCC-M,T2.0	2	SA
16	DB61-02299A	SUPPORT-TOP	SGCC-M,T1.6	2	SNA
17	DB90-02144B	ASS'Y FRONT BEAM UP	ASS'Y	2	SNA
18	DB90-02638B	ASS'Y-PLATE BEAM SIDE LF	ASS'Y	2	SNA
19	DB31-00298A	FAN PROPELLER	AS+G/F20%	1	SA
20	DB31-00330B	MOTOR FAN	UGBTEF-13LSAM02	1	SA
21	DB95-01456G	ASS'Y COMP-EVI (FIXED)	ZPI83KCE-TF5-496	1	SA
22	DB95-01468G	ASS'Y COMP-EVI (DIGITAL)	ZPJ83KCE-TF5-496	1	SA
23	DB90-04739A	ASS'Y BEAM FRONT LOW	ASS'Y	1	SA
24	DB96-09444B	ASS'Y COND OUT-C	ASS'Y	1	SA
25	DB96-14374A	ASS'Y TUBE-OIL BALANCE VALVE	ASS'Y	1	SA
26	DB96-14974A	ASS'Y-OIL SEPAPATOR	ASS'Y	1	SA
27	DB96-14366A	ASS'Y-TUBE 4WAY LIQUID SVC VV	ASS'Y	1	SA
27-1	DB96-14367A	ASS'Y-TUBE 4WAY VALVE	ASS'Y	1	SA
27-2	DB96-14369A	ASS'Y-TUBE MAIN COOLING VALVE	ASS'Y	1	SA
27-3	DB96-14715A	ASS'Y-TUBE HR EEV	ASS'Y	1	SA
27-4	DB96-14368A	ASS'Y-TUBE LIQUID SVC VALVE	ASS'Y	1	SA
27-5	DB96-14646A	ASS'Y-TUBE 4WAY SVC	ASS'Y	1	SA
28	DB96-14364A	ASS'Y TUBE-VAPOR INJECTION	ASS'Y	1	SA
29	DB96-14370A	ASS'Y TUBE-EXPANSION VALVE	ASS'Y	1	SA
30	DB96-14342A	ASS'Y-ACCUMLATOR	ASS'Y	1	SA
31	DB96-14363A	ASS'Y TUBE-SUBCOOLER	ASS'Y	1	SA
32	DB96-14375A	ASS'Y TUBE SUCTION-PWM	ASS'Y	1	SA
32-1	DB96-11441A	ASS'Y TUBE PWM VALVE	ASS'Y	1	SA
33	DB96-14331A	ASS'Y TUBE-OIL RETURN	ASS'Y	1	SA
34	DB96-14373A	ASS'Y TUBE DISCHARGE	ASS'Y	1	SA
35	DB96-14372A	ASS'Y-TUBE HOT-GAS BYPASS	ASS'Y	1	SA
36	DB96-14365A	ASS'Y-TUBE OIL SEPA OUT	ASS'Y	1	SA
37	DB96-14371A	ASS'Y-TUBE LIQUID BYPASS VALVE	ASS'Y	1	SA

5-65 Samsung Electronics

#### ■ Parts List(cont.)

No.	Code No.	Description	Specification	Q'TY	SA/SNA
38	DB63-01361D	COVER-CONTROL IN	ABS,5V	1	SNA
39	DB63-01361E	COVER-CONTROL IN	ABS,5V	1	SNA
40	DB90-02149A	ASS'Y COVER CONTROL-BOX	ASS'Y	1	SA
41	DB93-07899A	ASS'Y CONTROL-WIRE LOW	ASS'Y	1	SA
42	DB63-02249A	COVER-CONTROL WIRE UP	ABS,5V	1	SNA
43	DB63-01361F	COVER-CONTROL IN	ABS 5V	1	SNA
44	DB65-00209B	TERMINAL BLOCK-AC	DATA 60A,AC1500V,10mA	1	SA
45	DB65-40062U	TERMINAL BLOCK	ASS'Y	1	SA
46	DB65-00232D	TERMINAL BLOCK-3PHASE	ASS'Y	1	SNA
47	DB35-00096A	RELAY	XMC0-503IBBC00F	2	SA
48	DB93-08707A	ASS'Y PCB SUB	ASS'Y	1	SA
49	DB93-06543K	ASS'Y-BLDC DRIVER	ASS'Y	1	SNA
50	DB93-10733C	ASS'Y PCB MAIN-OUT	ASS'Y	1	SA
51	DB90-05282A	ASS'Y CASE CONTROL IN	ASS'Y	1	SNA
52	DB64-01311C	CONTROL-BOX BODY	SGCC-M,T0.8	1	SNA
53	DB93-08105C	ASS'Y LEAD WIRE-MAIN COMP	ASS'Y	1	SA
54	DB93-08105D	ASS'Y LEAD WIRE-MAIN COMP	ASS'Y	1	SA
55	DB95-00766G	ASS'Y COMP-HEATER	ASS'Y	1	SA
56	DB95-00766H	ASS'Y COMP-HEATER	ASS'Y	1	SA
57	DB95-01425A	ASS'Y BELT HEATER	ASS'Y	1	SA
58	DB95-01959J	ASS'Y DISCHARGE SENSOR	ASS'Y	1	SA
59	DB95-01965L	ASS'Y-THERMISTOR OUTDOOR	ASS'Y	1	SA
60	DB95-01962D	ASS'Y-THERMISTOR OUT SUMP	ASS'Y	1	SA
61	DB95-01960G	ASS'Y THERMISTOR-EVI IN OUT	ASS'Y	1	SA

## 5-2-5 RD040/050MHXCA



5-67 Samsung Electronics

#### ■ Parts List(RD040/050MHXCA)

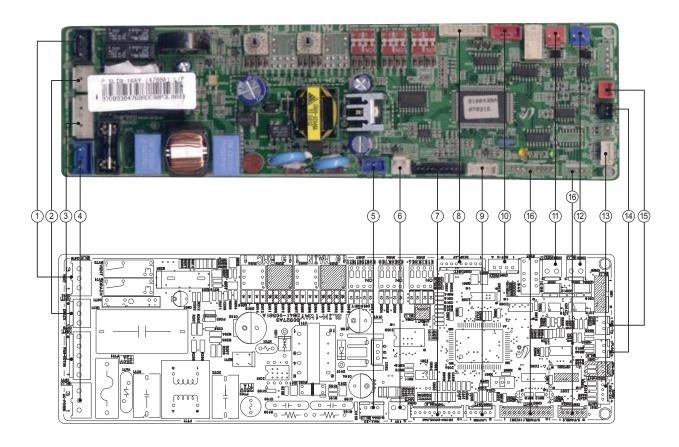
1 DE	Code No.  0861-01910B 0863-02226B 0890-01533B 0890-01534E 0890-01535C 0890-01588A 0890-01536A 0890-01588A 0890-0158A 0890-	BRACKET-WIRE PAINT GUARD FAN  ASS'Y CABINET-TOP COVER  ASS'Y CABI FRONT RH  ASS'Y CABI BACK-LF  ASS'Y CABI BACK-RH  ASS'Y PARTITION  ASS'Y-CABI BASE PART  COIL CHOKE-REACTOR PLATE-CONTROL UP  ASS'Y CONNECTOR WIRE-COMP  ASS'Y CONTROL OUT  ASS'Y THEMISTOR-COND OUT	Specification  SECC-P, T1.0  COMPOSITE PP,WHT  SECC-P, T0.8  SECC-P, T0.8  SECC-P, T1.2  SECC-P, T1.2  SECC-P, T1.6  RIXBHF040B1,4.4mH,  SGCC-M,T1.0  ASSY	040  1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	050  1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SA/SNA SA SNA SNA SNA SA SNA SA SA SNA SA SA SA
2 DE 3 DE 4 DE 5 DE 6	0863-02226B 0890-01533B 0890-01534E 0890-01535C 0890-01588A 0890-01637C 0894-02156A 0899-00538G 0827-00065A 0861-03566A 0893-07574A 0893-08257G 0895-02026A 0895-02027A	GUARD FAN  ASS'Y CABINET-TOP COVER  ASS'Y CABI FRONT RH  ASS'Y CABI BACK-LF  ASS'Y CABI BACK-RH  ASS'Y PARTITION  ASS'Y-CABI BASE PART  COIL CHOKE-REACTOR  PLATE-CONTROL UP  ASS'Y CONNECTOR WIRE-COMP  ASS'Y CONTROL OUT	COMPOSITE PP,WHT  SECC-P, T0.8  SECC-P, T0.8  SECC-P, T1.2  SECC-P, T1.2  SECC-M,T0.8  SGCC-M,T0.8  SGCC-M,T1.0  ASSY	2 1 1 1 1 1 1 1 1 1	2 1 1 1 1 1 1 1	SNA SNA SNA SA SNA SA SNA SA SNA
3 Di  4 Di  5 Di  6 Di  7 Di  8 Di  9 Di  10 Di  11 Di  12 Di  13 Di  14 Di  15 Di  16 Di  17 Di  18 Di  19 Di  20 Di  21 Di  22 Di  22 Di  22 Di  23 Di  24 Di  25 Di  26 Di  27 Di  28 GST	0B90-01533B 0B90-01534E 0B90-01535C 0B90-01588A 0B90-01637C 0B94-02156A 0B99-00538G 0B27-00065A 0B61-03566A 0B93-07574A 0B93-08257G 0B95-02026A 0B95-02027A	ASS'Y CABINET-TOP COVER ASS'Y CABI FRONT RH ASS'Y CABI FRONT-LF ASS'Y CABI BACK-LF ASS'Y CABI BACK-RH ASS'Y PARTITION ASS'Y-CABI BASE PART COIL CHOKE-REACTOR PLATE-CONTROL UP ASS'Y CONNECTOR WIRE-COMP ASS'Y CONTROL OUT	SECC-P, T0.8  SECC-P, T0.8  SECC-P, T0.8  SECC-P, T1.2  SECC-P, T0.8  SGCC-M,T0.8  SECC-P, T1.6  RIXBHF040B1,4.4mH,  SGCC-M,T1.0  ASSY	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	SA SNA SNA SA SA SNA
4 DI 5 DE 6 DE	0B90-01534E 0B90-01535C 0B90-01538A 0B90-01637C 0B94-02156A 0B99-00538G 0B27-00065A 0B61-03566A 0B93-07574A 0B93-08257G 0B95-02026A 0B95-02027A	ASS'Y CABI FRONT RH ASS'Y CABI FRONT-LF ASS'Y CABI BACK-LF ASS'Y CABI BACK-RH ASS'Y PARTITION ASS'Y-CABI BASE PART COIL CHOKE-REACTOR PLATE-CONTROL UP ASS'Y CONNECTOR WIRE-COMP ASS'Y CONTROL OUT	SECC-P, T0.8 SECC-P, T0.8 SECC-P, T1.2 SECC-P, T0.8 SGCC-M,T0.8 SECC-P, T1.6 RIXBHF040B1,4.4mH, SGCC-M,T1.0 ASSY	1 1 1 1 1 1 1	1 1 1 1 1 1	SNA SNA SA SNA SNA SNA SNA
5 DE 6 DE 7 DE 8 DE 8 DE 9 DE 9 DE 9 DE 9 DE 9 DE 9	0B90-01535C 0B90-01588A 0B90-01637C 0B94-02156A 0B99-00538G 0B27-00065A 0B61-03566A 0B93-07574A 0B93-08257G 0B95-02026A 0B95-02027A	ASS'Y CABI FRONT-LF ASS'Y CABI BACK-LF ASS'Y CABI BACK-RH ASS'Y PARTITION ASS'Y-CABI BASE PART COIL CHOKE-REACTOR PLATE-CONTROL UP ASS'Y CONNECTOR WIRE-COMP ASS'Y CONTROL OUT	SECC-P, T0.8 SECC-P, T1.2 SECC-P, T0.8 SGCC-M,T0.8 SECC-P, T1.6 RIXBHF040B1,4.4mH, SGCC-M,T1.0 ASSY	1 1 1 1 1 1	1 1 1 1 1	SNA SA SNA SNA SA
6 DE 7 DE 8 DE 9 DE 9 DE 10 DE 11 DE 12 DE 13 DE 15 DE 16 DE 17 DE 18 DE 19 DE 20 DE 21 DE 22 DE 23 DE 24 DE 25 DE 26 DE 27 DE 28 G5T G5T	0B90-01588A 0B90-01637C 0B94-02156A 0B99-00538G 0B27-00065A 0B61-03566A 0B93-07574A 0B93-08257G 0B95-02026A	ASS'Y CABI BACK-LF ASS'Y CABI BACK-RH ASS'Y PARTITION ASS'Y-CABI BASE PART COIL CHOKE-REACTOR PLATE-CONTROL UP ASS'Y CONNECTOR WIRE-COMP ASS'Y CONTROL OUT	SECC-P, T1.2 SECC-P, T0.8 SGCC-M,T0.8 SECC-P, T1.6 RIXBHF040B1,4.4mH, SGCC-M,T1.0 ASSY	1 1 1 1 1	1 1 1 1	SA SA SNA SA
7 DE 8 DE 9 DE 10 DE 11 DE 12 DE 13 DE 15 DE 16 DE 17 DE 18 DE 19	0B90-01637C 0B94-02156A 0B99-00538G 0B27-00065A 0B61-03566A 0B93-07574A 0B93-08257G 0B95-02026A 0B95-02027A	ASS'Y CABI BACK-RH ASS'Y PARTITION ASS'Y-CABI BASE PART COIL CHOKE-REACTOR PLATE-CONTROL UP ASS'Y CONNECTOR WIRE-COMP ASS'Y CONTROL OUT	SECC-P, T0.8 SGCC-M,T0.8 SECC-P, T1.6 RIXBHF040B1,4.4mH, SGCC-M,T1.0 ASS'Y	1 1 1 1	1 1 1	SA SNA SA
8 DE 9 DE 10 DE 11	0B94-02156A 0B99-00538G 0B27-00065A 0B61-03566A 0B93-07574A 0B93-08257G 0B95-02026A 0B95-02027A	ASS'Y PARTITION  ASS'Y-CABI BASE PART  COIL CHOKE-REACTOR  PLATE-CONTROL UP  ASS'Y CONNECTOR WIRE-COMP  ASS'Y CONTROL OUT	SGCC-M,T0.8 SECC-P,T1.6 RIXBHF040B1,4.4mH, SGCC-M,T1.0	1 1 1 1	1 1 1	SNA <b>SA</b>
9 DE 10 DE 11 DE 11 DE 12 DE 15 DE 16 DE 17 DE 17 DE 18 DE 19 DE 1	0B99-00538G 0B27-00065A 0B61-03566A 0B93-07574A 0B93-08257G 0B95-02026A	ASS'Y-CABI BASE PART COIL CHOKE-REACTOR PLATE-CONTROL UP ASS'Y CONNECTOR WIRE-COMP ASS'Y CONTROL OUT	SECC-P, T1.6 RIXBHF040B1,4.4mH, SGCC-M,T1.0 ASS'Y	1 1 1	1	SA
10 DE 11 DE 12 DE 13 DE 14 DE 15 DE 16 DE 17 DE 18 DE 19 DE 12 DE	0B27-00065A 0B61-03566A 0B93-07574A 0B93-08257G 0B95-02026A	COIL CHOKE-REACTOR PLATE-CONTROL UP ASS'Y CONNECTOR WIRE-COMP ASS'Y CONTROL OUT	RIXBHF040B1,4.4mH, SGCC-M,T1.0 ASS'Y	1 1	1	
11 DE 12 DE 13 DE 14 DE 15 DE 16 DE 17 DE 18 DE 19 DE	0B61-03566A 0B93-07574A 0B93-08257G 0B95-02026A 0B95-02027A	PLATE-CONTROL UP ASS'Y CONNECTOR WIRE-COMP ASS'Y CONTROL OUT	SGCC-M,T1.0 ASS'Y	1		SA
12 DE 13 DE 14 DE 15 DE 16 DE 17 DE 18 DE 19 DE	0B93-07574A 0B93-08257G 0B95-02026A 0B95-02027A	ASS'Y CONNECTOR WIRE-COMP ASS'Y CONTROL OUT	ASS'Y		1	
13 DE 14 DE 15 DE 16 DE 17 DE 18 DE 19 DE 19 DE 12 DE	0B93-08257G 0B95-02026A 0B95-02027A	ASS'Y CONTROL OUT			· '	SA
14 DE 15 DE 16 DE 17 DE 18 DE 19 DE 20 DE 21 DE 22 DE 23 DE 25 DE 26 DE 27 DE 28 G5T G5T	0B95-02026A 0B95-02027A		A CCD (	1	1	SA
15 DE 16 DE 17 DE 18 DE 19 DE 20 DE 21 DE 22 DE 23 DE 25 DE 26 DE 27 DE 28 GST.	)B95-02027A	ASS'Y THEMISTOR-COND OUT	ASS'Y	1	1	SA
16 DE 17 DE 18 DE 19 DE		7.55 THEMISTON CONDOUT	ASS'Y	1	1	SNA
17 DI 18 DE 19 DE 20 DE 21 DE 22 DE 23 DE 24 DE 25 DE 26 DE 27 DE 28 GST	B31-00512D	ASS'Y THEMISTOR-TSO OLP TSC DIS	ASS'Y	1	1	SNA
18 DF 19 DF 20 DF 21 DF 22 DF 23 DF 24 DF 25 DF 26 DF 27 DF 28 GST		MOTOR FAN	FMBC531SSFI,600mA,60Hz	1	1	SNA
19 DE 20 DE 21 DE 22 DE 23 DE 24 DE 25 DE 26 DE 27 DE 28 GST. GST.	B31-00512E	MOTOR FAN	FMBC531SSG,600mA,60Hz	1	1	SNA
20 DE 21 DE 22 DE 23 DE 24 DE 25 DE 26 DE 27 DE 28 GST.	B67-00861A	FAN-PROPELLER	AS+GF20%,460,3FAN	2	2	SA
21 DE 22 DE 23 DE 24 DE 25 DE 26 DE 27 DE 28 GST.	B90-04482A	ASS'Y BRACKET MOTOR	SGCC-M, T2.0	1	1	SNA
22 DE 23 DE 24 DE 25 DE 26 DE 27 DE 28 GST GST	B63-02260A	FELT-TOP COVER A	FELT+PVC+FELT	1	1	SNA
23 DE 24 DE 25 DE 26 DE 27 DE 28 G5T G5T	B63-02259A	FELT-COMP SOUND A	FELT+PVC+FELT	1	1	SNA
24 DE 25 DE 26 DE 27 DE 28 GST GST	B63-02280A	COVER TERMINAL	NORYL SE1-701, BLK	1	1	-
25 DE 26 DE 27 DE 28 G5T G5T	B63-02281A	GASKET	55F TBR,EPDM RUBBER,T0.8	1	1	-
26 DE 27 DE 28 G5T G5T	B63-02282A	FELT-TOP COVER B	FELT+PVC+FELT	1	1	SNA
27 DE 28 G5T G5T	B63-02283A	FELT-COMP SOUND B	FELT+PVC+FELT	1	1	SNA
28 G5T	B60-30028A	SCREW HEX	-	3	3	SNA
G5T	B63-02331A	GROMMET ISOLATOR	NR,BLACK	3	3	SNA
	T450FUCEX-SS	TWIN BLDC COMPRESSOR	G5T450FUCEX-SS	-	1	-
	T360FUCEK-SS	TWIN BLDC COMPRESSOR	G5T360FUCEK-SS	1	-	-
29 DE	B90-01924B	ASS'Y-ACCUMULATOR	ASS'Y	1	1	SNA
30 DE	B96-11468A	ASS'Y TUBE DISCHARGE	ASS'Y	-	1	SNA
DE	)B96-11468B	ASS'Y TUBE DISCHARGE	ASS'Y	1	-	SNA
31 DE	B96-11469A	ASS'Y TUBE SUCTION	ASS'Y	-	1	SNA
DE	)B96-11469B	ASS'Y TUBE SUCTION	ASS'Y	1	-	SNA
32 DE	)B99-01034B	ASS'Y VALVE	ASS'Y	1	1	SNA
33 DE	B96-11474A	ASS'Y COND UNIT	ASS'Y	-	1	SNA
DE	B96-11618A	ASS'Y COND UNIT	ASS'Y	1	-	SNA
34 DE	B93-07456C	ASS'Y PCB MAIN OUT	ASS'Y	1	1	SA
35 DE	B93-08299A	ASS'Y PCB SUB EMI	ASS'Y	1	1	SA
36 DE	B93-07458M	ASS'Y PCB MAIN OUT INVERTER	ASS'Y	-	1	SA
DE	B93-07458N	ASS'Y PCB MAIN OUT INVERTER	ASS'Y	1	-	SA
37 DE		TERMINAL BLOCK	ASS'Y	1	1	SA
38 DE	)B65-00253R	TERMINAL BLOCK	ASS'Y	1	1	SA
	0B65-00253R 0B65-00260C					

# 6. PCB Diagram

## 6-1 Indoor Unit

## 6-1-1 Slim 1 way cassette type

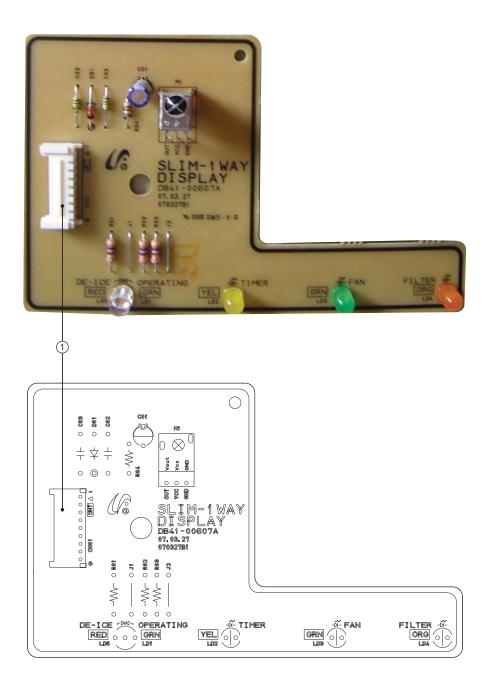
#### ■ MAIN PCB

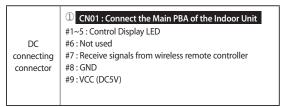


① CN74 Ventilator	② CN74- Drain Pump	3 CN73- Fan Motor #1: Input Operating Capacitor Motor #2, #4: No used #3: Motor Control Signal #5: N phase Boltage	④ CN71-AC Power #1: L phase #2: N phase
(5) CN44- RPM Feedback #1: 5V input #2: GND #3: Hall IC output	(6) CN32-Remocon DC12V #1: DC12V #2: GND	© CN10-Micom Download	® CN91-Display #1~5: LED Control #6: AUTO_S/W #7: Remocon_Signal #8: GND #9: VCC
© CN60-Louver #1: DC12V #2~5: Louver control	(I) CN81-External Control Out #1, #3: DC12V #2: Error CHK Out #4: Comp. CHK Out	CN31- Indoor/Outdoor Unit Communication  #1: Comm. Signal F1  #2: Comm. Signal F2	© CN33- Wred Remote Controller Communication #1: Comm. Signal F3 #2: Comm. Signal F4
(3) CN41-Temp. sensor #1: ROOMTemp. Sensor #2: GND #3: EVA IN Temp. sensor #4: GND	#1: GND #2: Float S/W	(5) CN83- External Control #1: On/off Contact point input #2: GND	(i) CN61, CN62-Slide Panel #1,6: DC12V #2-5: Motor Control #7~10: Not used

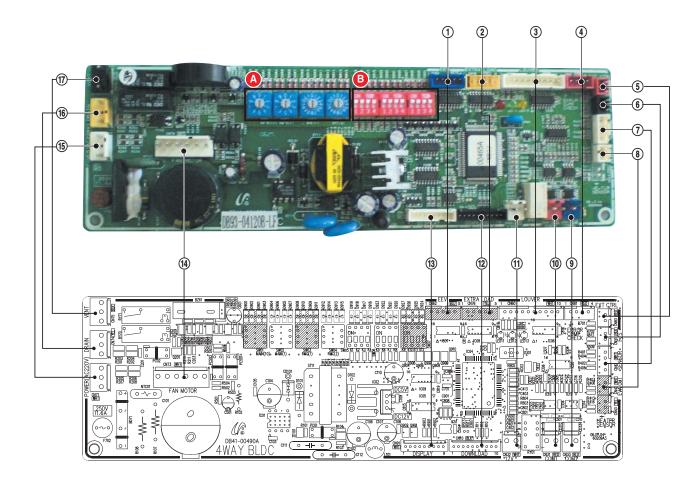
6-1 Samsung Electronics

#### **■** Panel





## 6-1-2 4 way cassette type

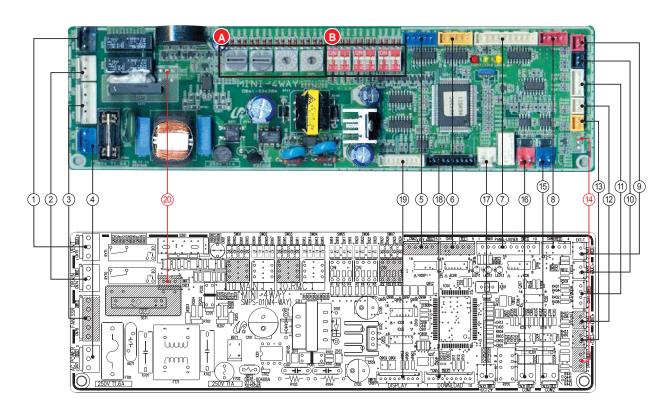


① CN62-EEV #1~4 : EEV Control Singal #5: DC12V	© CN76-EXTERNAL OPTION #1: 12V #2: LOAD 1 #3: LOAD 2 #4: LOAD 3	3 CN60-LOUVER #1~5: Step Motor #6~10: Step Motor	#1: DC12V #2: Error Check Signal #3: DC12V #4: Comp Check Signal
© CN83-EXTANAL CONTROL #1: GND #2: External control Signal	© CN51-FLOAT S/W #1: GND #2: FLOAT-SW Signal	#1: Room Th Sensor #2: GND #3: EVA IN Th Sensor #4: GND	8 CN42-EVA, OUT TEMP SENSOR #1: GND #2: EVA OUT Th Sensor
<ul><li>© CN33-Comm2 (Wired Remote F3/F4)</li><li>#1: Communication F3</li><li>#2: Communication F4</li></ul>	(I) CN31-Comm1(Indoor F1/F2) #1: Communication F1 #2: Communication F2	(I) CN32-Remote Control DC12 #1: DC12V #2: GND	② CN10-MICOM DOWNLOAD
© CN91-Display #1~5: Display Control Signal #7: Remote Sihnal Receive #8: GND #9: VCC(DC5V)	#1: DV310V #2: N/C #3: GND #4: DC15V #5: Motor Control Signal #6: Motor Feedback Signal	(§) CN71-MAIN POWER #1: L Phase #2: N Phase	© CN74-DRAIN MOTOR OUTPUT #1: N Phase #2: Drain Pump Control
© CN75-VENTILOTOR OUTPUT #1: N Phase #2: Ventilator Control	I		

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## 6-1-3 Mini 4 way cassette type

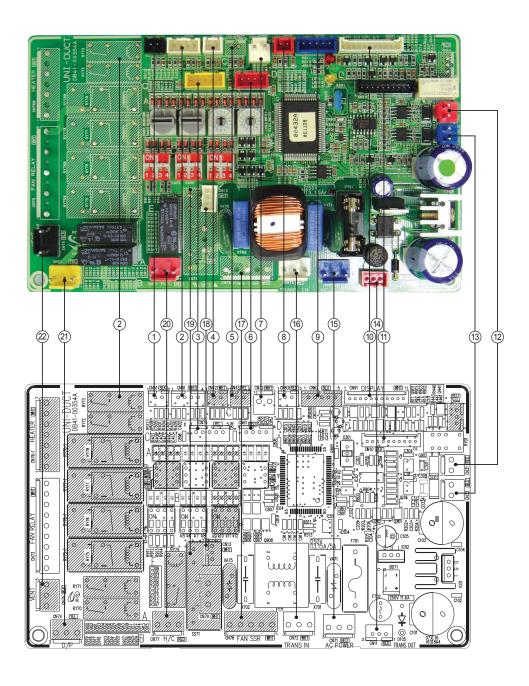
▲ The red number connecter is not used



① CN75-Ventilator	② CN74- Drain pump	3 CN73- Fan Motor #1 Input Operating Capacitor Motor #2, #4: Not Used #3: Motor Control Signal #5: N phase Voltage	④ CN71-AC power #1: L phase #2: N phase
© CN62- Electrically Operated Valve Control #1~4: Electrically Operated Valve Control #5: DC12V	⑥ CN76-SUB PCB Connection	© CN60-Louver #1, #6: DC12V #2~5, #7~10: LOUVER control	8 CN81-External Control Out #1,3: DC12V #2: Error CHK Out #4: Comp. CHK Out
© CN83- External Control OUT #1: GND #2: EXT_CTRL Output	© CN51-Float S/W #1: GND #2: Float S/W	(I) CN41- Temp. Sensor #1: Room Temp. Sensor #2: GND #3: EVA IN Temp. sensor #4: GND	© CN42-Temp. Sensor #1: EVA Out Thermistor #2: GND
(3) CN43- Heter Discharge Temp #1: GND #2: Heater Discharge Output	(I) CN44- RPM Feedback #1: 5V input #2: GND #3: Hall IC output	(15) CN33-Wired Remocon Comm. #1: Comm. Signal F3 #2: Comm. Signal F4	© CN31- Indoor/outdoor Unit Communication #1: Comm. Signal F1 #2: Comm. Signal F2
© CN32-Remocon DC12V #1: DC12V #2: GND	(B) CN10-Micom Download	(1) CN91-Display #1~5: LED Control #6: AUTO_S/W #7: REMOCON_SIGNAL #8: GND #9: VCC	© CN13-SSR Fan Control #1: DC12V #2: FAN SSR OUT

## 6-1-4 Duct type(Slim)

#### ■ MAIN PCB



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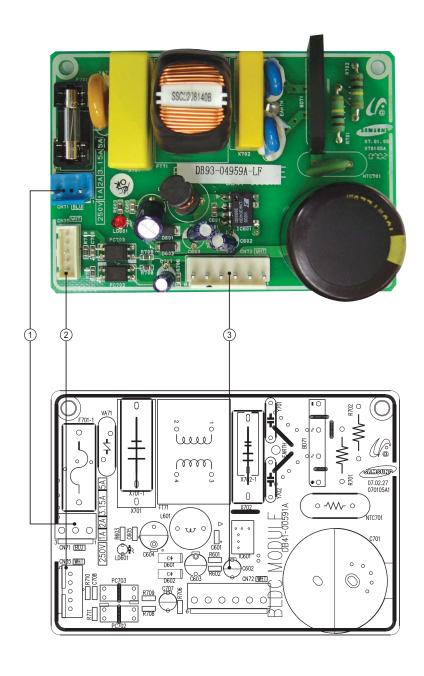
## **Duct type(Slim)(cont.)**

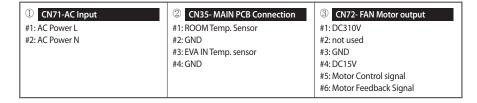
#### MAIN PCB(cont.)

CN51- Floating Switch #1: GND #2: Floating Switch signal	2 CN41-ROOM/EVA, IN Temp. Sensor #1: ROOM Temp. Sensor #2: GND #3: EVA IN Temp. sensor #4: GND	3 CN76-SUB PCB Connector #1: FAN LOW Signal (AC 220V L phase output) #2: FAN MID Signal (AC 220V L phase output) #3: FAN HIGH Signal (AC 220V L phase output)	CN42- ROOM/EVA, OUT Temp. Sensor #1: EVA OUT Temp. Sensor #2: GND
(5) CN43- CCH Temp. sensor #1: GND #2: Heater Discharge Temp. Sensor Signal	© CN81- External CHECK #1: DC12V #2: ERROR CHK signal #3: DC12V #4: COMP CHK signal	© CN32-Wire Remocon Power #1: DC12V #2: GND	© CN83- External Control #1: GND #2: External Control signal point input
© CN62-EEV #1~#4: EEV Control Signal #2: DC12V	#1,#2: Buzz control #3~#7: Display control #8:Operating switch #9: Remocon receiving signal #10:GND #11: DC5V	① CN10-Micom Download	© CN31- Communication (indoor unit F1/F2) #1: Comm. Signal F1 #2: Comm. Signal F2
(Wired remocon F1/F2) #1: Comm. Signal F3 #2: Comm. Signal F4	(I) CN11- Trans Out #1,3: Trans OUtput connect	© CN71-AC power #1: AC Power L #2: AC Power N	© CN72-Trans In #1: AC Power L #2: AC Power N
① None	® CN13-BLDC PCB Connector #1: DC12V #2: Fan Control Signal	None	© CN77-Heated water coil #1: N phase #2: heated water coil signal
② CN74- Drain Pump #1: N phase #2: Drain signal	© CN75-Ventilator #1: N phase #2: Ventilator signal		

## **Duct type(Slim)(cont.)**

#### ■ SUB PCB



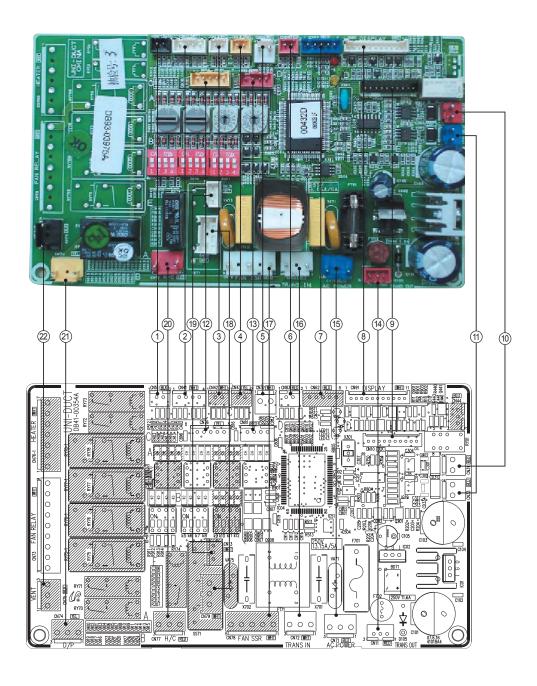


6-7 Samsung Electronics

# **MEMO**

# 6-1-5 Duct type(MSP)

### ■ MAIN PCB



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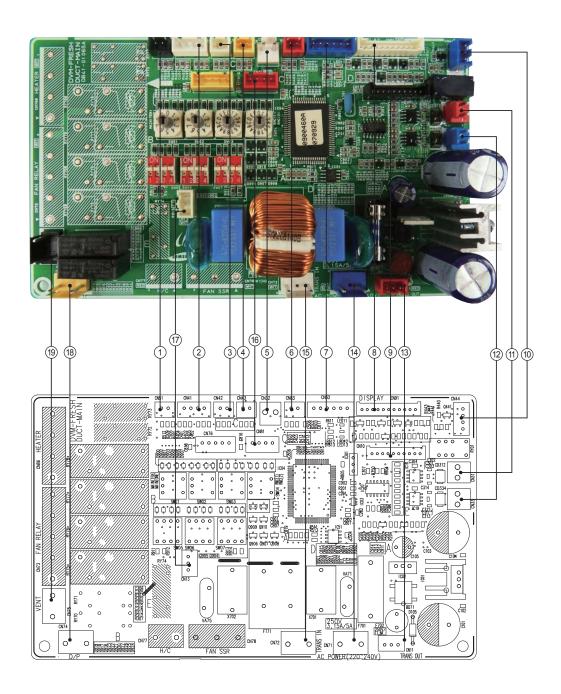
# Duct type(MSP)(cont.)

### MAIN PCB(cont.)

① CN51- Float Switch #1: GND #2: Float Switch	© CN41-Temp. Sensor #1: ROOM Temp. Sensor #2: GND #3: EVA IN Temp. sensor #4: GND	3 CN42- Temp. Sensor #1: GND #2: EVA OUT Temp. Sensor	CN43- Heater Discharge #1: GND #2: Discharge. Sensor
© CN32- Wired Remocon Power #1: 12V #2: GND	© CN83- External Control #1: GND #2: External Control signal point input	CN62- EEV #1~#4: Electrically operated valve Control Signal #2: 12V	8 CN91- Display #1,#2: Buzz control #3-#7: Display control #8: Operating switch #9: Remocon receiving signal #10: GND #11: DC5V
③ CN10-Micom Download	CN31- Indoor/outdoor unit     Communication  #1: Comm. Signal F1 #2: Comm. Signal F2	① CN33- Wired Remocon Communication #1: Comm. Signal F3 #2: Comm. Signal F4	② CN76- Subsidual Load
(3) CN81- External Control Check #1:12V #2: ERROR CHK #3: 12V #4: COMP CHK	(4) CN11-Trans Out #1,3: TRANS outpu connnection	(IS) CN71-AC Power #1: L phase #3: N phase	(1) CN72-Trans In #1: AC power L #3: AC power N
(The second seco	(® CN79-SSR Output #1: SSR Output #3: SSR luput	(3) CN13-SSR control #1: 12V #3: Control Signal	© CN77-Heated Water Coil #1: N phase #2: heated water coil signal
② CN74- Drain Pump #1: N phase #2: Drain pump signal	② CN75- Ventilator #1: N phase #2: Ventilator signal		

# 6-1-6 Duct type(BIG)

### ■ MAIN PCB



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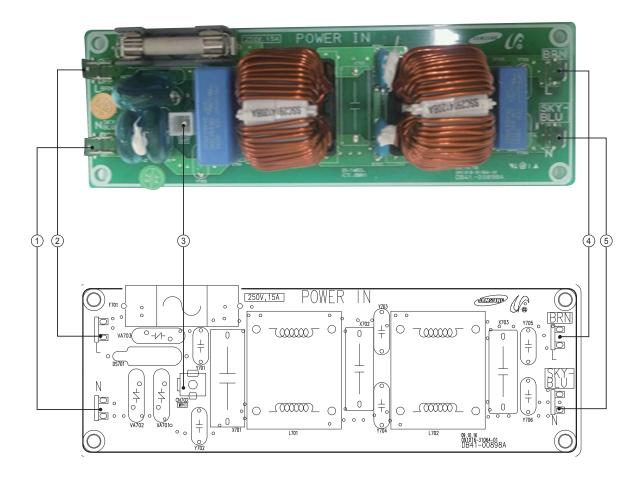
# Duct type(BIG) (cont.)

### ■ MAIN PCB(cont.)

CN51-Floating Switch #1:GND #2:Floating Switch Signal	© CN41-Room/Eva In Temp. Sensor #1: Room Temp. Sensor #2: GND #3: EVA In Temp. Sensor #4: GND	③ CN42-Eva Out Temp. Sensor #1: EVA OUT Temp. Sensor #2: GND	CN43-Discharge Temp. Sensor #1 : Discharge Temp. Sensor #2 : GND
⑤ CN32-Wired Remocon Power #1:DC12V #2:GND	© CN83-External Control #1:GND #2:External Control Signal Input	© CN62-EEV #1~#4 : EEV Control Signal #5~#6 : DC 12V	(**S) CN91-Display  #1,#2: Buzzer Control  #3~#7: Display Control  #8: Operating Switch  #9: Remocon Receiving Signal  #10: GND  #11: DC5V
CN10-Micom Downlaod	(ii) CN44-Motor Feedback #1: DC5V #2: GND #3: Feedback Signal #: Inrush	(I) CN31- Communication(Outdoor) #1: Comm. Signal F1 #2: Comm. Signal F2	(I) CN32-Communicatio(Remocon) #1 : Comm. Signal F3 #2 : Comm. Signal F4
(3) CN11-Trans Out #1,#3: Trans Output	(I) CN71-AC Power #1: AC Power L #2: AC Power N	(15) CN72-Trans In #1: AC Power L #2: AC Power N	#1: DC12V #2: Error Check Signal #3: DC12V #4: Comp Check Signal
(ii) CN13-BLDC PCB Connector #1: DC12V #3: Fan Control Signal	® CN74-Drain Pump #1 : N phase #2 : Drain Pump Signal	(I) CN75-Ventilator #1: N Phase #2: Ventilator Signal	

# Duct type(BIG) (cont.)

# **■** EMI PCB

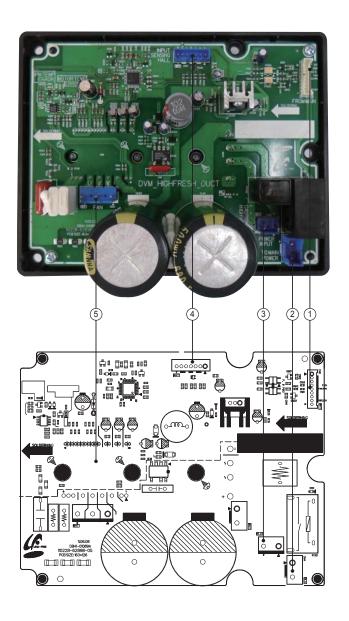


① Power Input L	② Power Input N	③ Earth	Power Output L
⑤ Power Output N			

6-13 Samsung Electronics

# Duct type(BIG) (cont.)

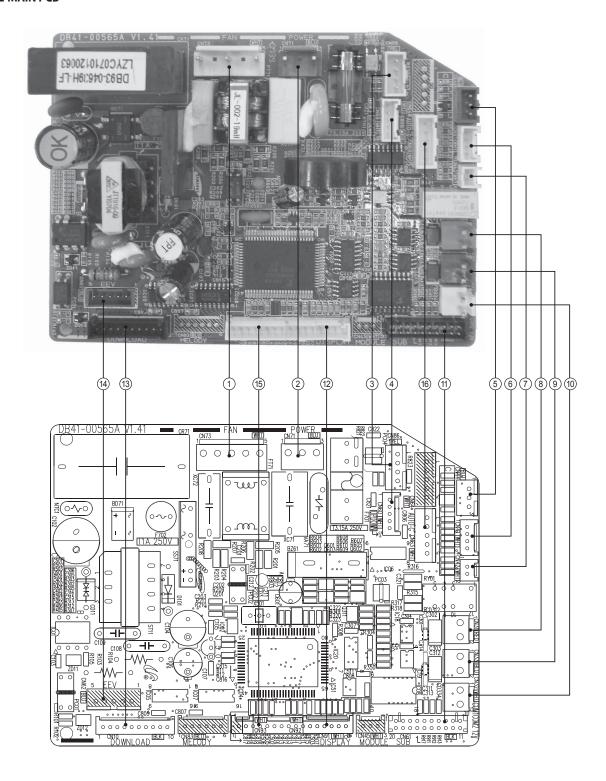
# ■ BLDC PCB



① CN11-Main PCB Connection #1: DC12V #2: GND #3: DC5V #4: FAN Signal #5: FAN RPM #8: Inrush	② CN14-AC Power #1 : AC Power L #2 : AC Power N	3 10-AC Power #1 : AC Power L #2 : AC Power N	(4) CN12-Motor DC Connector #1,#3,#5: U,V,W Feedback #2: DC5V #4: GND #6: Motor Temperature #7: GND
⑤ CN13-Motor Control #1:U #2:V #3:W			

# 6-1-7 Wall-mounted type(Neo Forte without EEV)

#### ■ MAIN PCB



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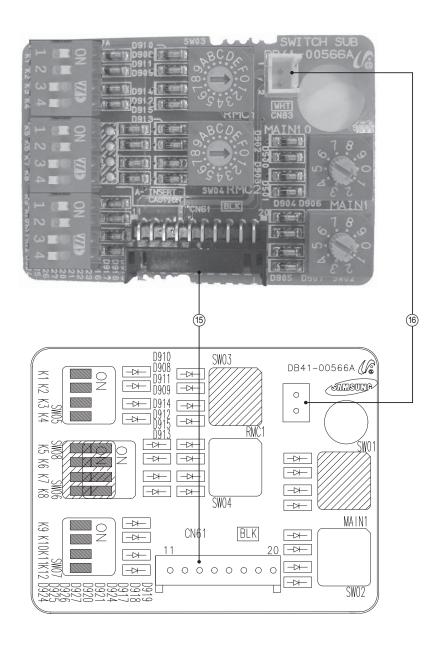
# Wall-mounted type(Neo Forte without EEV)(cont.)

### MAIN PCB(cont.)

(1) CN73-Fan Motor #1: Input Operating Capacitor Motor #2,#4: Not Used #3: Motor Control Signal #5: N Phase Voltage	© CN71-AC Power #1: L Phase #2: N Phase	3 CN82- MPI(Not Used) #1: MPI - #2: MPI + #3: 12V #4: MPI feedback	#1: DC12V #2,#3,#4: Louver Control Signal
© CN52- RPM Feedback #1: DC5V #2: GND #3: Hall IC Input	© CN41-Temp. Sensor #1: Room Temp. Sensor #2: GND #3: EVA IN Temp. sensor #4: GND	© CN42 - Temp. Sensor #1: EVA Out Thermistor #2: GND	S CN31- Indoor/Outdoor Unit Communication  #1: Comm. Signal F1  #2: Comm. Signal F2
© CN33- Communication 2 (REMOCON) #1: Comm. Signal F3 #2: Comm. Signal F4	© CN32-Wired Remocon Power #1: 12V #2: GND	(I) CN61-Option Setup Sub Board Connection  #1~10,#20: Option Switch Address Signal  #11~14: GND  #15: External Control Signal  #16: Comp Check Signal  #17,#19: 12V  #18: Error Check Signal	#1: Display #1: Display Control #3: Operating switch #4: 5V #5: Remocon Receiver signal #6: GND
(3) CN10-Micom Download	(I) CN62-EEV(Not used) #1~4: EEV control Signal #5: 12V	(IS) CN93-Display #1~4: Electrically Operated Valve Signal #5: 12V	(b) CN63-Auto Grille #1: 12V #2~#5: Auto Grille Control

# Wall-mounted type(Neo Forte without EEV)(cont.)

### **■ SUB SWITCH**



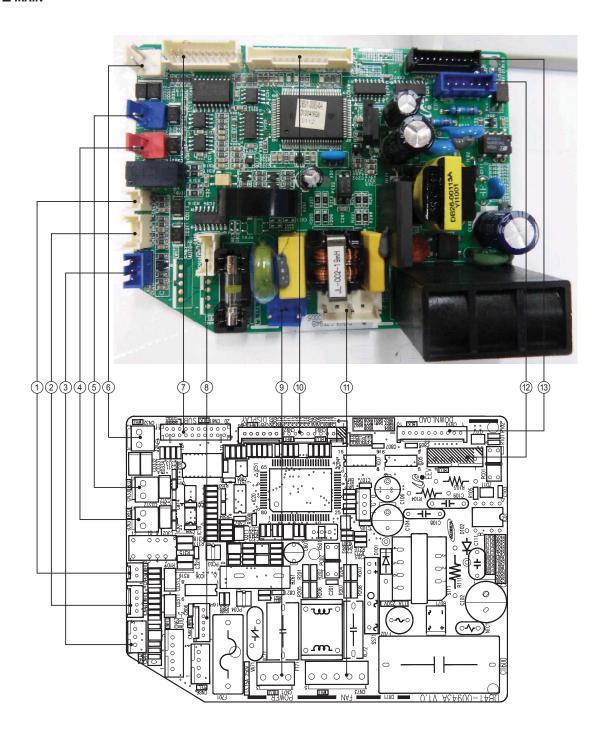
No.	CN#	COLOR	FUNCTION	
15	CN61	Black	Main-Sub PCB Connecor	
16	CN83	White	External Contact Control	

6-17 Samsung Electronics

# **MEMO**

# 6-1-8 Wall-mounted type(Neo Forte with EEV)

### ■ MAIN



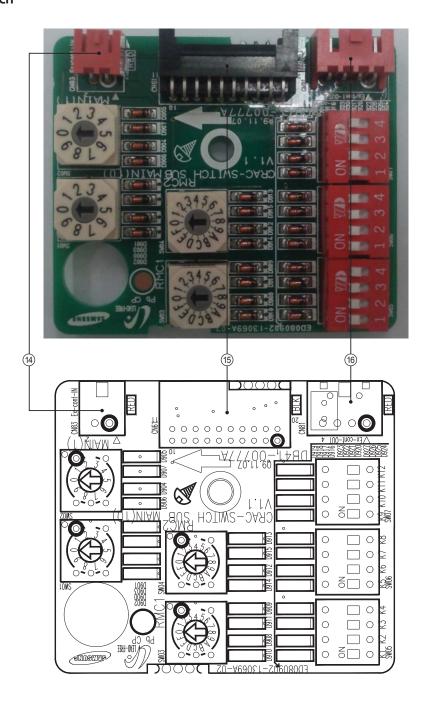
6-19 Samsung Electronics

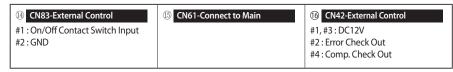
# Wall-mounted type(Neo Forte with EEV)(cont.)

© CN42-Temp. Sensor #1: GND #2: EVA OUT Sensor	#1: Room Temp. Sensor #2: GND #3: EVA IN sensor #4: GND	3 CN44- RPM Feedback #1: DC5V #2: GND #3: Hall IC Input	#1: Comm. Signal F1 #2: Comm. Signal F2
© CN33-Wired Remocon Comm. #1: Comm. Signal F3 #2: Comm. Signal F4	© CN32-Wired Remocon DC Power #1: DC12V #2: GND	#1~#10,#20: Option Switch Address Signal #11~#14: GND #15: External Control Signal #16: Comp Check Signal #17,#19: 12V #18: Error Check Signal	\$\(\begin{align*} \text{CN60-UP/DOWN LOUVER} \\ #1: DC12V \\ #2~#5: Louver Control Signal  \end{align*}
© CN71- AC Power #1: L Phase #3: N Phase	#1,#2,#14,#15 : DISPLAY Signal #3 : Operation S/W #4 : DC5V #5 : Wireless Remocon Signal #6: GND	(I) CN73-FAN MOTOR #1: Start Capacitor #3: Motor Control #5: N Phase	(2) CN62-EEV #1~#4: EEV Control #5, #6: DC12V
CN10-Micom Download			

# Wall-mounted type(Neo Forte with EEV)(cont.)

### **■ SUB SWITCH**



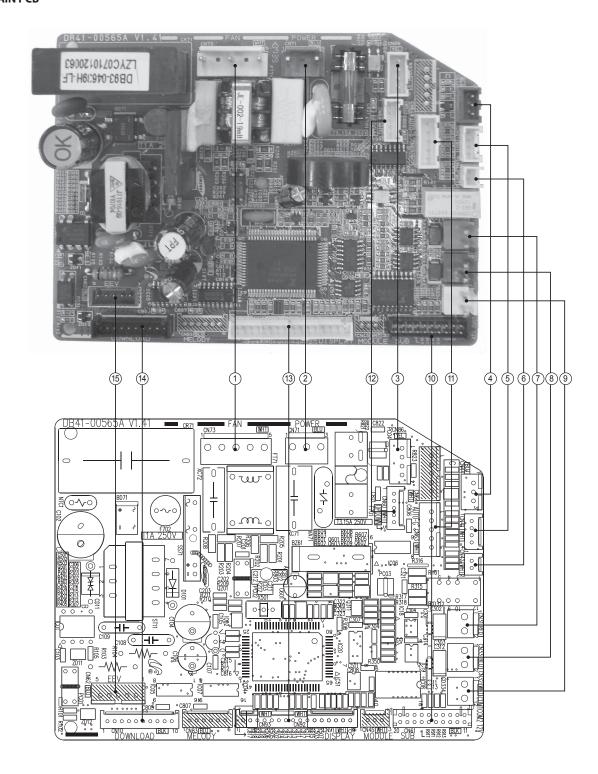


6-21 Samsung Electronics

# **MEMO**

# 6-1-9 Wall-mounted type(Vivace)

#### ■ MAIN PCB



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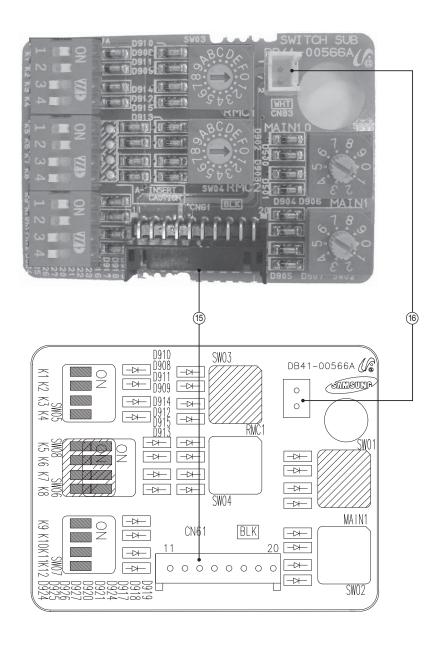
# Wall-mounted type(Vivace)(cont.)

### MAIN PCB(cont.)

CN73-Fan Motor #1: Input Operating Capacitor Motor #2 #4: Not Used #3: Motor Control Signal #5: N Phase Voltage	② CN71-AC Power #1: L Phase #2: N Phase	3 CN82- MPI #1: MPI- #2: MPI+ #3: 12 #4: MPI Feedback	#1: DC12V #2,3,4: Louver Sontrol Signal
© CN52- RPM Feedback #1: DC5V #2: GND #3: Hall IC Input	© CN41-Temp. Sensor #1: Room Temp. Sensor #2: GND #3: EVA IN Temp. sensor #4: GND	© CN42-Temp. Sensor #1: EVA Out Thermistor #2: GND	8 CN31- Indoor/Outdoor Unit Communication     #1: Comm. Signal F1     #2: Comm. Signal F2
© CN33- Wired Remocon Comm. #1: Comm. Signal F3 #2: Comm. Signal F4	© CN32-Wired Remocon Power #1: 12V #2: GND	CN61-Option Setup Sub Board Connection  #1~10,#20: Option Switch Address Signal #11~14: GND  #15: External Control Signal #16: Comp Check Signal #17,#19: 12V #18: Error Check Signal	#1: Not Used #2~12: Display Control #13: Operating Switch #14: 5V #15: Remocon Receiver Signal #16: GND
(3) CN10-Micom Download	4 CN62-EEV(Not Used) #1~4: EEV Control Signal #5: 12V	(I) CN93-Display #1: 12V #2~#5: Auto Grille Control	

# Wall-mounted type(Vivace)(cont.)

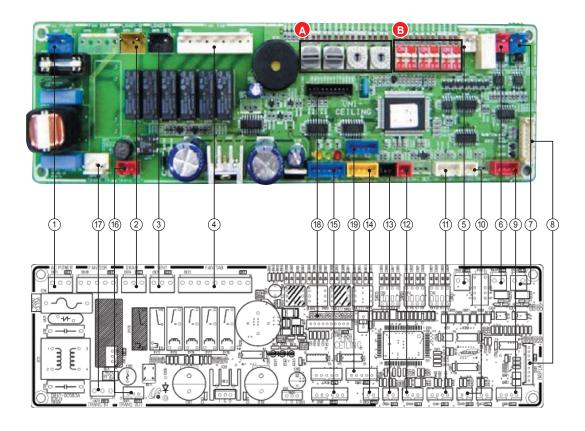
### **■ SUB SWITCH**



No.	CN#	COLOR	FUNCTION	
15	CN61	Black	Main-Sub PCB Connecor	
16	CN83	White	External Contact Control	

6-25 Samsung Electronics

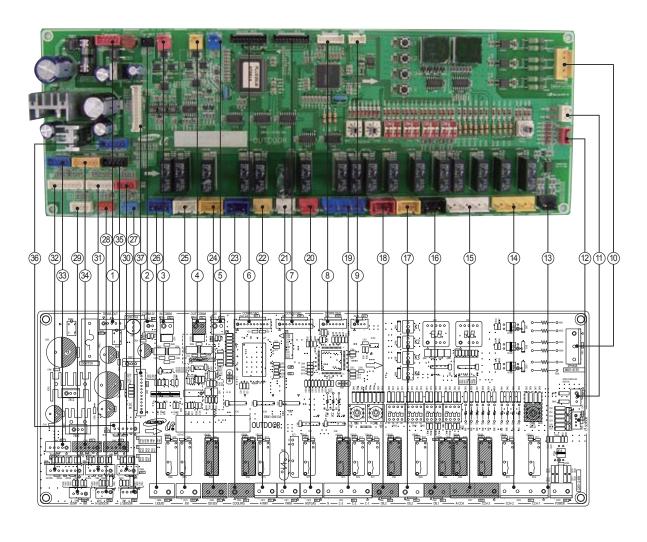
# 6-1-10 Celing type



① CN71-AC Power #1: L Phase #2: N Phase	② CN74-Drain Pump	③ CN75 Ventilator	#1: Input Operating Capacitor Motor #2, #4: No Used #3: Motor Control Signal #5: N Phase Voltage
© CN32- Remocon DC12V #1: DC12V #2: GND	© CN31- Indoor/Outdoor Unit Communication #1: Comm. Signal F1 #2: Comm. Signal F2	© CN33- Wired Remocon Communication #1: Comm. Signal F3 #2: Comm. Signal F4	8 CN91-Display #1~5: LED Control #6: Auto_S/W #7:Remocon_Signal #8:GND #9: VCC
© CN81- External Control OUT #1,3: DC12V #2: Error CHK Out #4: Comp. CHK Out	① CN42-Temp. Sensor #1: EVA OUT THEMISTOR #2: GND	① CN41- Temp. sensor #1: ROOM Temp. Sensor #2: GND #3: EVA IN Temp. sensor #4: GND	© CN83- External Control #1: On/off Contact point input #2: GND
(3) CN51-Float S/W #1: GND #2: Float S/W	(I) CN76-SUB PCB Connetction	(ii) CN61-LOUVER #1: DC12V #2~5: LOUVER control	(i) CN11-TRANS-OUT #1: DC12V #2: - #3: GND
① CN72-Trans In #1: N #2: L	® CN10-Micom Download	(1) CN62-EEV #1: EEV #2: DC12V	

# 6-2-1 RVXVHT075/100/125FE, RD075/100/125VHXFA, RD075/100/125VRXFA

#### ■ MAIN PCB

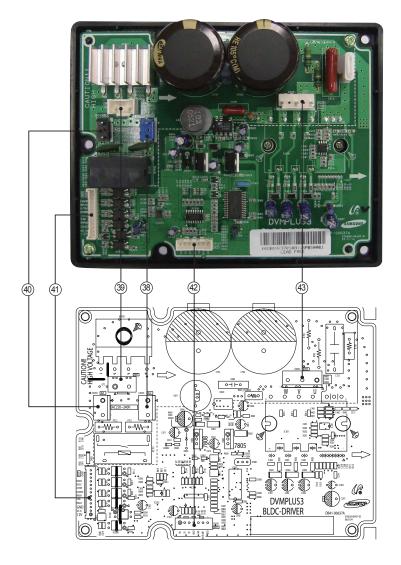


6-27 Samsung Electronics

### MAIN PCB(cont.)

CN901-TRANS OUTPUT #1, #2: DC Power Source #3: Not used	2 CN13- Relay Comm. 5V #1: 5V #2: Comm. Voltage 5V GND	3 CN31- Indoor/outdoor unit Communication	4 CN32- Outdoor Units Communication
#4, #5: Comm. Power source	#2. Comm. Voltage 3V GND	#1: Comm. Signal F1 #2: Comm. Signal F2	#1: Comm. Signal OF1 #2: Comm. Signal OF2
⑤ CN12-replay power #1: 12V #2: GND	⑥ CN92-SUB MICOM D/L	⑦ CN91-MAIN MICOM D/L	CN10-Developer D/L
© CN100-For Developer	© CN83-3 phase Detection part #1: R phase input #2: S phase input #3: T phase input	① OPT1- Cooling/Heating Switch #1: Cooling #2: GND #3: Heating	© CN51-CT Sensor Input #1: CT Input #2: CT2 input #3: CT3 input #4: GND
(3) CN70-220V input #1: L phase #2: N phase	(1) CN76-CCH Control #1: CCH 1 L phase #2: CCH 1 N phase #3: CCH 2 L phase #4: CCH 2 N phase	(IS) CN75-CCH Control #1: CCH 3 L phase #2: CCH 3 N phase #3: ACCUM CCH L phase #4: ACCUM CCH N phase	© CN81- Balance Keeping Valve1
(T) CN82- Balance Keeping Valve2	® CN80- Balance Keeping Valve3	(19) CN 72- Compressor Control #1: COMP1 #2: COMP2 #3: COMP3 #4: N phase	② CN74-Hot Gas Valve
② CN71- PMM Valve	② CN73- 4 Way Valve	② CN84- Main Cooling Valve	② CN85-Outdoor Unit EEV Valve
② CN75- EVI Valve	② CN86- Liquid Valve	CN41- Low Pressure Sensor #1: Not used #2: Low Pressure Sensor #3: GND #4: 5V	© CN75- CCH Control #1: High Pressure Sensor #2: Not Used #3: GND #4: 5V
© CN49- Temp. Sensor #1: Outdoor Temperature Sensor #2: GND #3: SUMP Temperature Sensor #4: GND	© CN48-Temp. Sensor #1: EVI IN Temperature Sensor #2: GND #3: EVI OUT Temperature Sensor #4: GND	(3) CN47-Temp. Sensor #1: Oil Valance Temperature Sensor #2: GND #3: Liquid Temperature Sensor #4: GND #5: Cond Out Temperature Sensor #6: GND	#1: Comp 1. Output Temperature Sensor #2: GND #3: Comp 2. Output Temperature Sensor #4: GND #5: Comp 3. Output Temperature Sensor #6: GND #7: Suction Temperature Sensor #8: GND
(3) CN64- EVI EEV #1, #2, #3, #4: Control signal #5: 12V	(3) CN63- Main EEV #1, #2, #3, #4: Control signal #5, #6: 12V	(3) CN65- HR EEV #1, #2, #3, #4: Control signal #5: 12V	© CN62- Main EEV #1, #2, #3, #4: Control Signal #5, #6: 12V
(3) CN99-Main/BLDC Connection #1: 12V #2: 5V #3: GND #4: IPM Fault Error Signal #5: BLDC Fan Motor Control Signal #6: Inrush Relay Signal #7: Over Voltage Error Signal #8: Motor Overheating Error signal #9: Fan Motor counter rotation Error Signal #10: Fan RPM Error Signal #11, #12, #13: Not used			

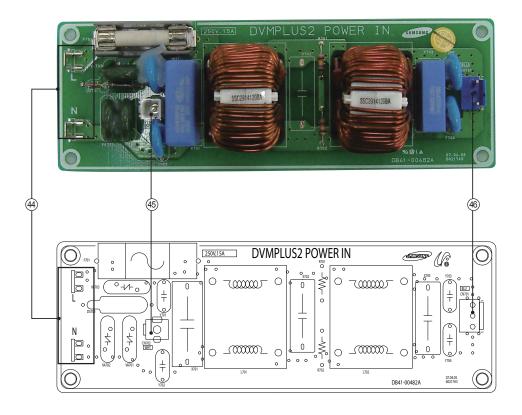
### **■** BLCD



® CN701-Power Input (AC220V) #1: L #3: N	(3) GT2-Trans Output #1: AC 220V - L #2: AC 220V - N	(CN703- Power Output (220V) #1: AC 220V - L #3: AC 220V - N	(1) CN501- Main PCB Signal Connector  #1: 12V Input #2: 5V Input #3: GND #4: IPM Fault Error Signal Output #5: Fan Control Signal Input #6: Inrush Relay Movement Signal Input #7: Motor Over Voltage Detection Signal Output #8: Motor Overheating detection Signal Output #9: Motor Counter Rotation Detection Signal Output #10: Motor RPM Feedback Signal #11: Not used #12: Not used #13: Not used
(CN101- Motor Control Signal #1: U Phase Control Signal #2: DC 5V #3: V Phase Control Signal #4: GND #5: W Phase Control Signal #6: Motor Temp. Sensor Input #7: GND	(3) CN31- Motor Power #1: U Phase Output #2: V Phase Output #3: W Phase Output		

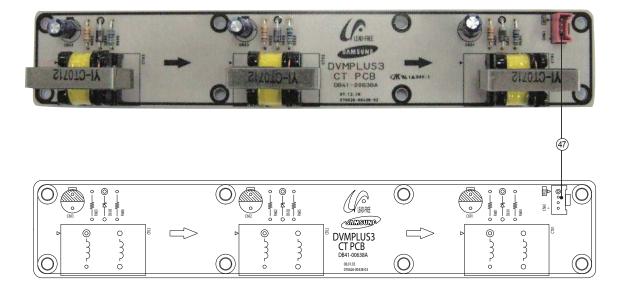
6-29 Samsung Electronics

### **■** Filter PCB



(AC220V)	⑤ CN702-Earth	(220V)
L: L phase input	Earth Connection	#1: AC 220V - L
N: N phase input		#3: AC 220V - N

### **■** CT PCB



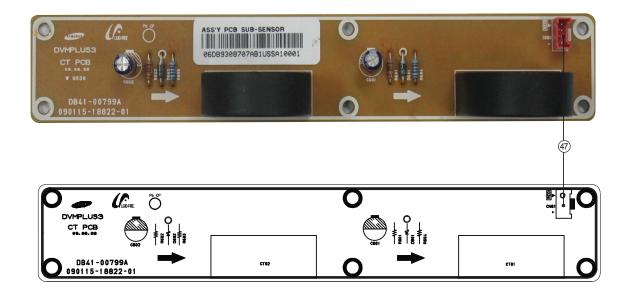
#### (1) CN61-Current sensor output value

#1: COMP 1 Current Value Output #2: COMP 2 Current Value Output #3: COMP 3 Current Value Output

#4: GND

6-31 Samsung Electronics

### **■** CT PCB

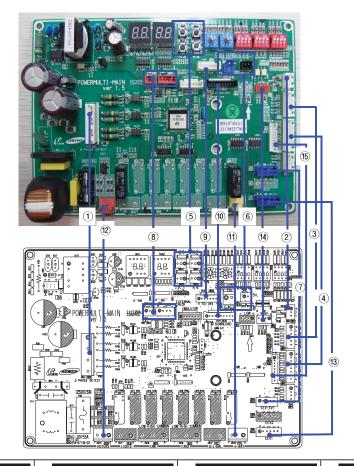


#### (1) CN61-Current sensor output value

#1: COMP 1 Current Value Output #2: COMP 2 Current Value Output #3: COMP 3 Current Value Output #4: GND

# 6-2-2 RD040/050MHXCA

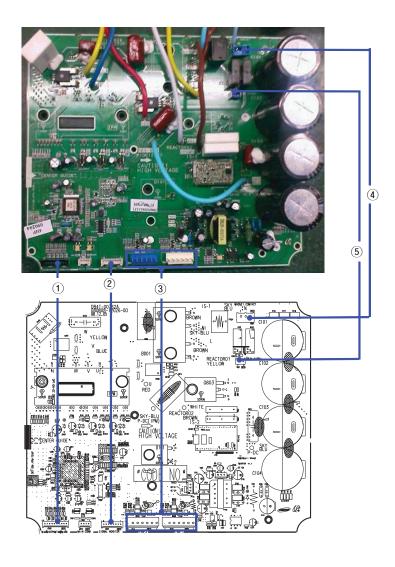
### ■ MAIN PCB



1 N15(4PIN/White) – Main Power #5 : Power L #7 : Power N	② CN74-Thermal Valve #1 : Power N #3 : Power L	③ CN44-Sensor #1,2:OUT Sensor #3,4:COND Sensor #5,6:SUCTION Sensor	(4) CN43- Sensor #1,2 : DIS1 Sensor #3,4 : TSC Sensor #5,6 : OLP Sensor #7,8 : Empty
K1, K2, K3, K4-Button     K1, K2: Special Control     K3: Restart     K4: Operation data display	⑥ CN12, CN13-DC Output CN12 : DC 12V CN13 : DC 5V	<ul><li>CN83-EVI Electric Expansion Valve</li><li>#1~4: Phase Control Signal #5: 12V Voltage</li></ul>	(8) CN85, CN86-External Contact Signal CN85 : External Test Signal CN86 : External Contact Signal
<ul> <li>(9) CN81- Main Inverter board communication</li> <li>#1: Signal Input</li> <li>#2: Signal Output</li> <li>#3: GND</li> <li>#4: DC 5V</li> <li>#5: DC 12V</li> <li>#6: Inverter board DC control</li> <li>#7: Not used</li> </ul>	(f) CN37- Programmer	① CN75- 4 Way Valve	① CN74- Thermal Valve
(3) CN81-Electric Expansion Valve #1~4: Phase Control Signal #5~6: 12V Voltage	(4) CN42- High Pressure Sensor #1: High Pressure Sensor #2: Not Used #3: GND #4: DC 5V	(1) CN32- Main, Communication board connection #1: DC 12V #2: DC 5V #3, 4: Communication Signal #5: Enable Signal #6: Reverse Signal #7, 8: AC Protection	

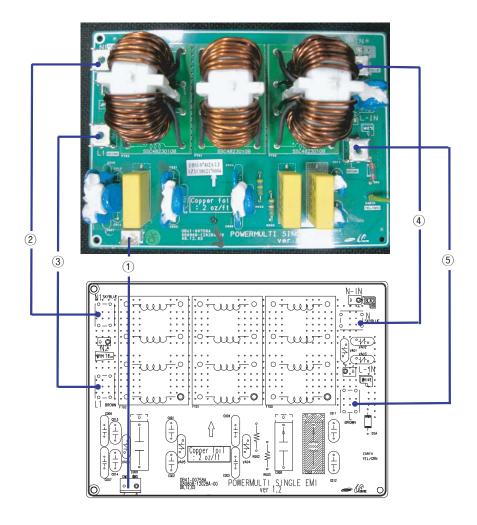
6-33 Samsung Electronics

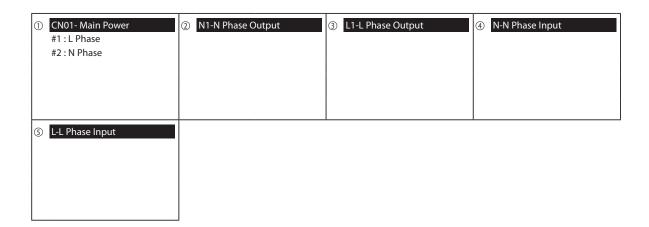
#### **■ INVERTER PCB**



① CN30- Programmer CN70- Main Inverter Board CN41, CN42- DC Fan 4 CN22- DC Contact Control Communication #1 : DC Voltage 310V #1, 2 : Main Inverter Board #2: Not Used Communication Signal #3 : Feedback Signal #3:GND #4: DC 16V #4: DC 5V #5 : GND #6: Revolution Control Signal ⑤ CN71- Main Inverter Board Communication #1:DC 12V #2: Inverter Board DC Control #3: Not Used

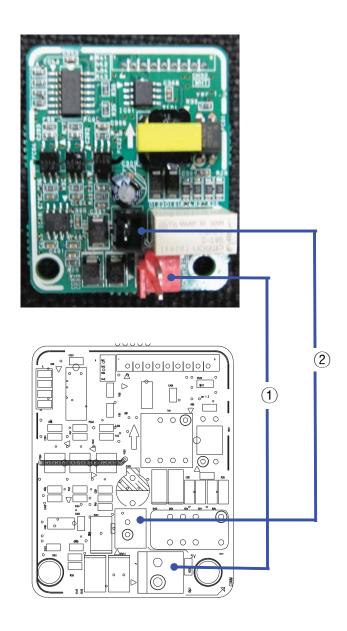
### **■** EMI PCB

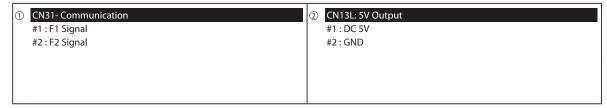




6-35 Samsung Electronics

### **■** COMMUNICATION PCB

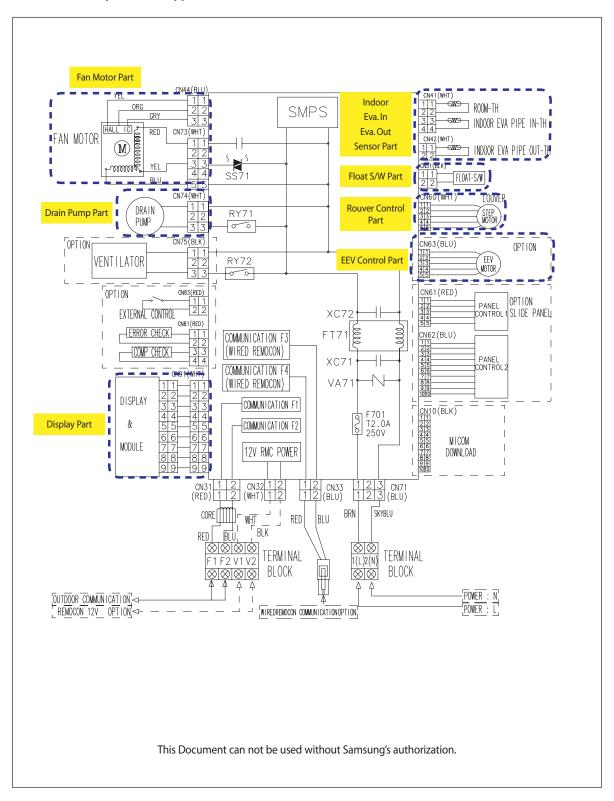




# 7. Wiring Diagram

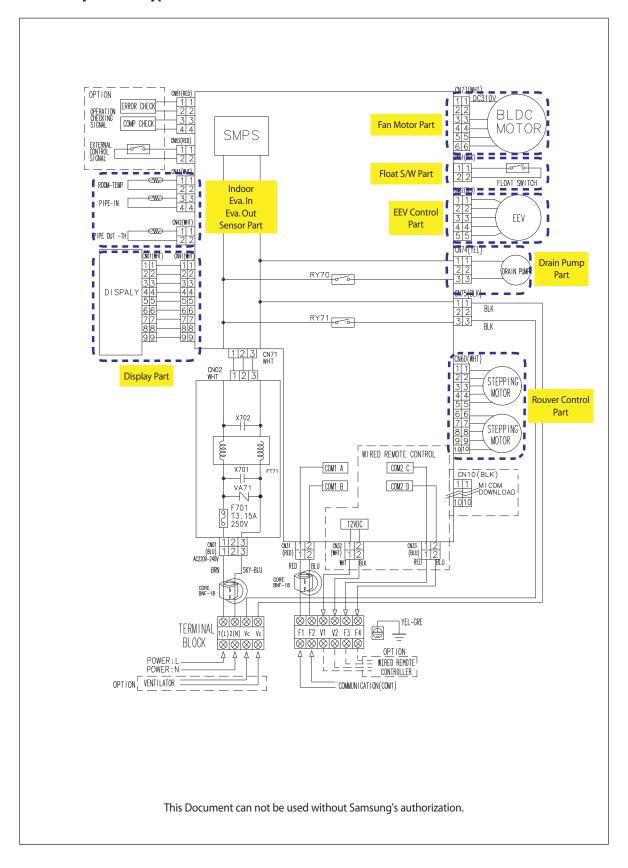
### 7-1 Indoor

### 7-1-1 Slim 1way cassette type

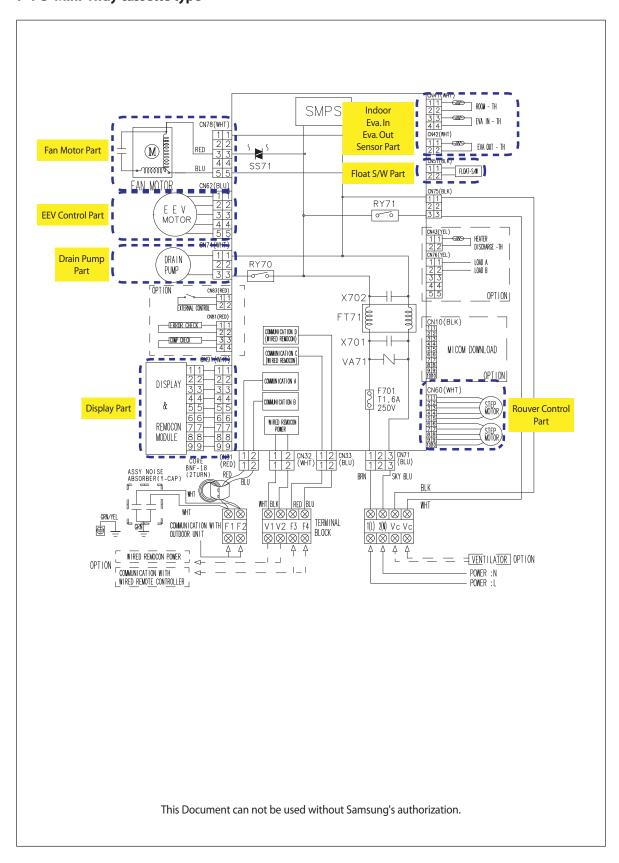


7-1 Samsung Electronics

### 7-1-2 4 way cassette type



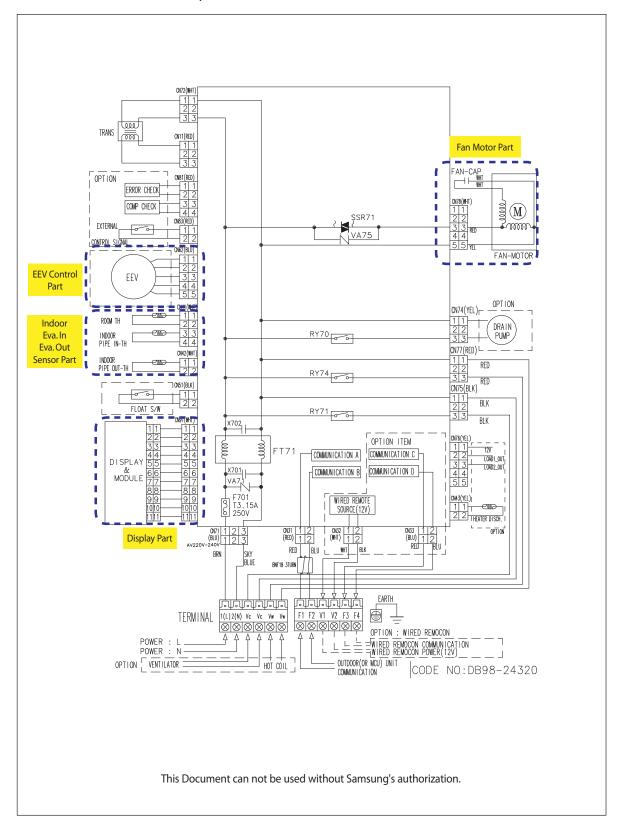
### 7-1-3 Mini 4way cassette type



7-3 Samsung Electronics

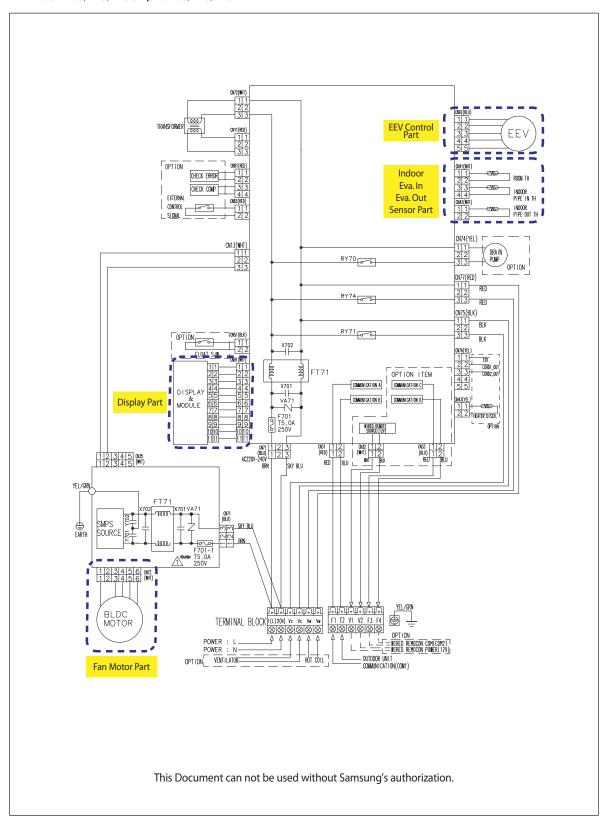
### 7-1-4 Duct type(Slim I, II)

#### ■ AVXDSH020/032/040/052/072C\*, ND020/032/040/052/060/072LH\*\*\*



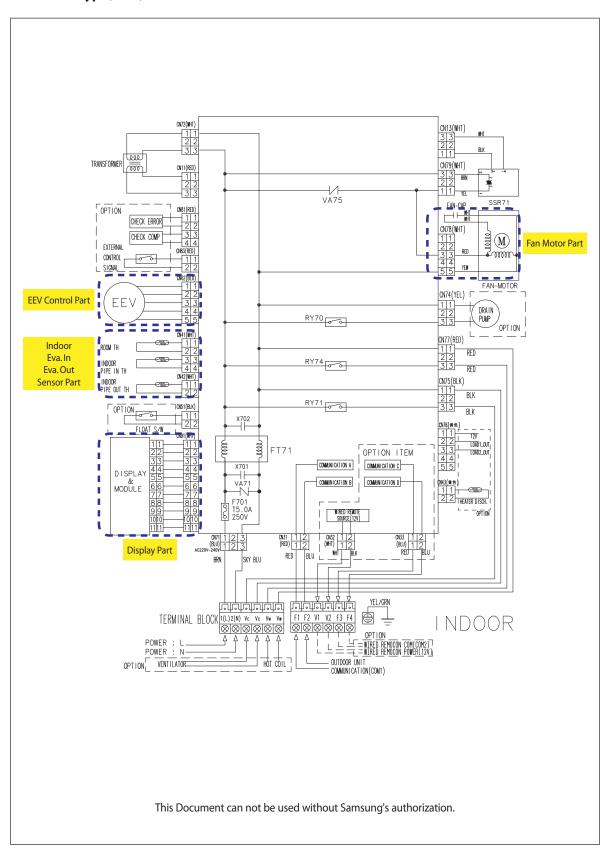
### 7-1-5 Duct type(Slim III)

#### ■ AVXDSH100/110/145C\*, ND100/110/145LH\*\*\*

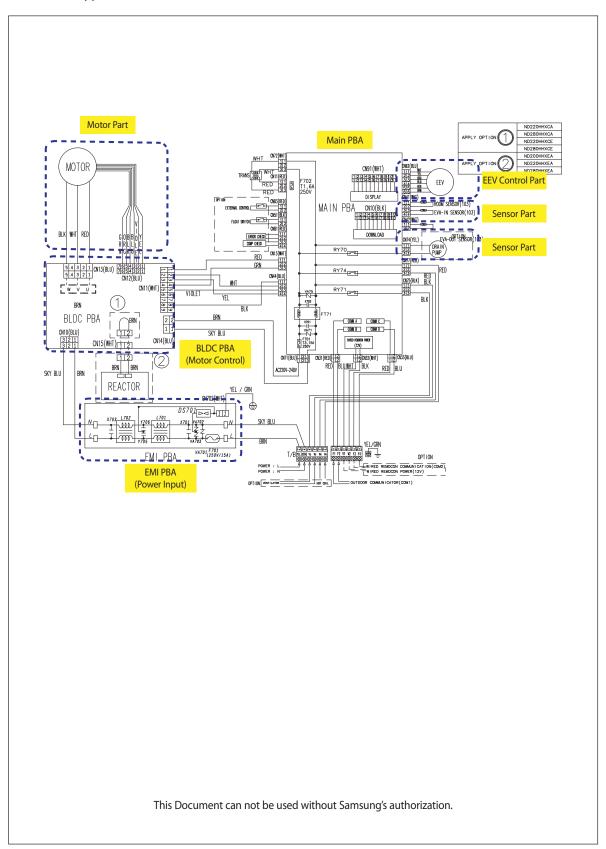


7-5 Samsung Electronics

### 7-1-6 Duct type(MSP)

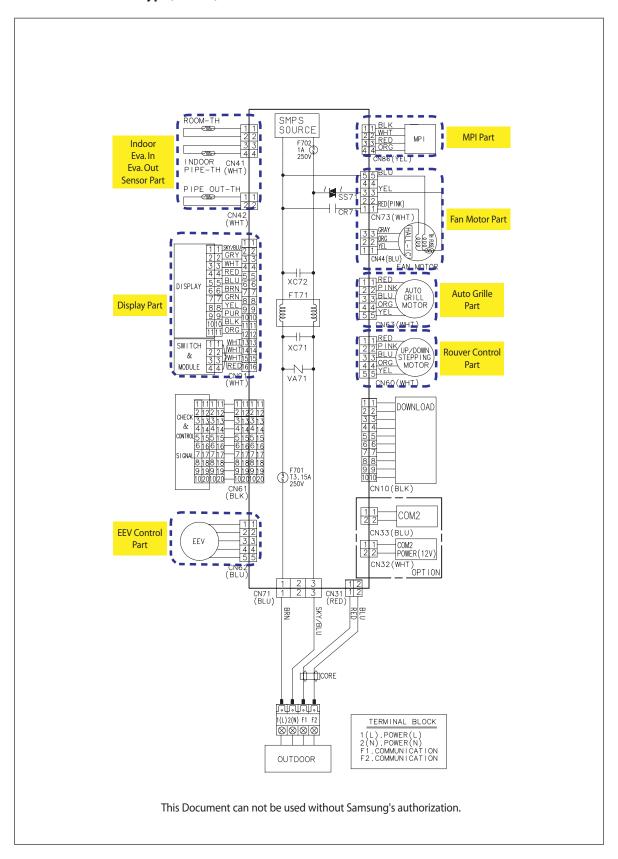


# 7-1-7 Duct type(BIG)

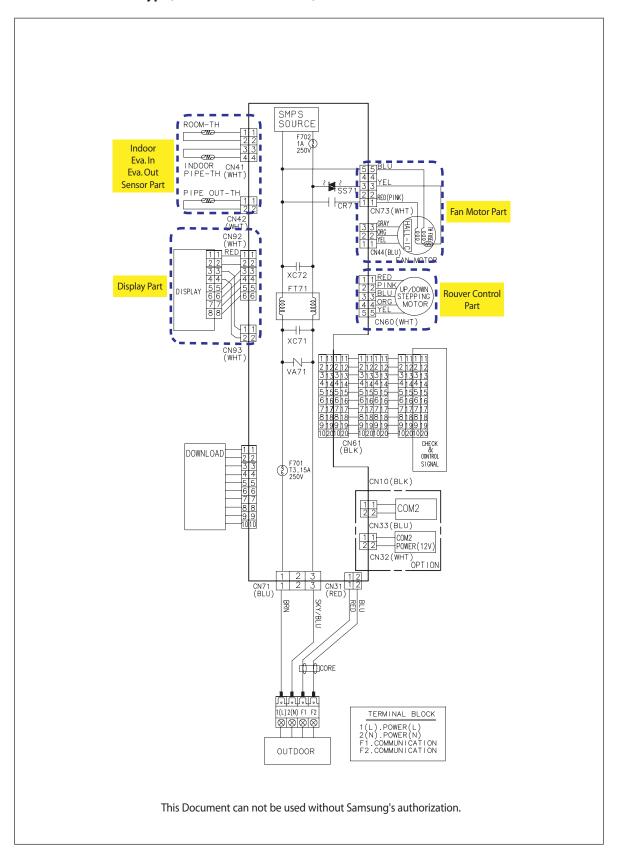


7-7 Samsung Electronics

# 7-1-8 Wall Mounted type(Vivace)

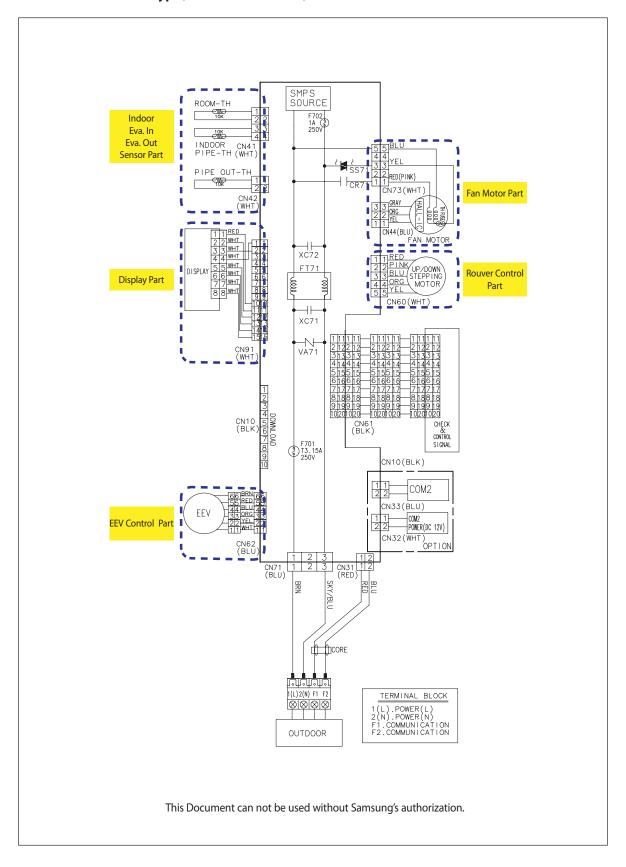


#### 7-1-9 Wall Mounted type(Neo Forte without EEV)



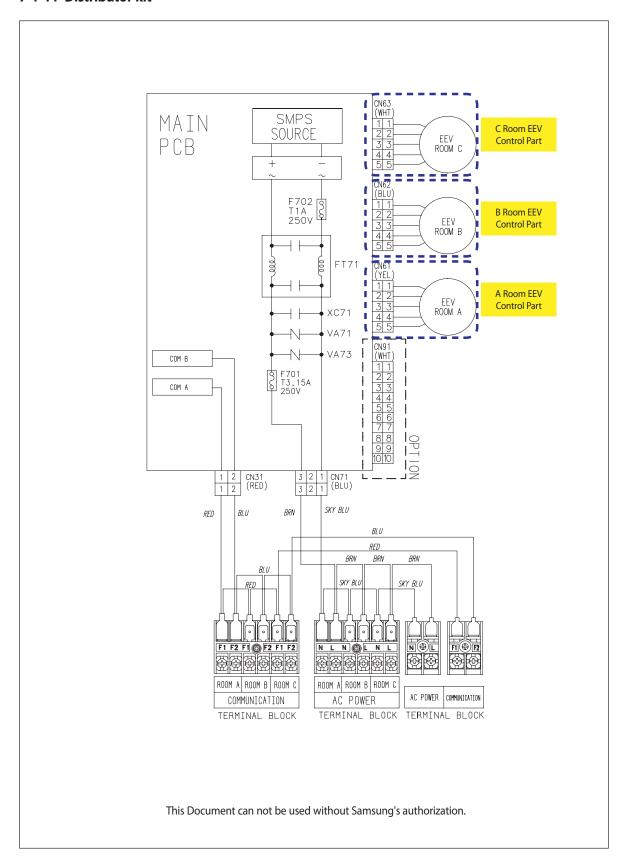
7-9 Samsung Electronics

#### 7-1-10 Wall Mounted type(Neo Forte with EEV)



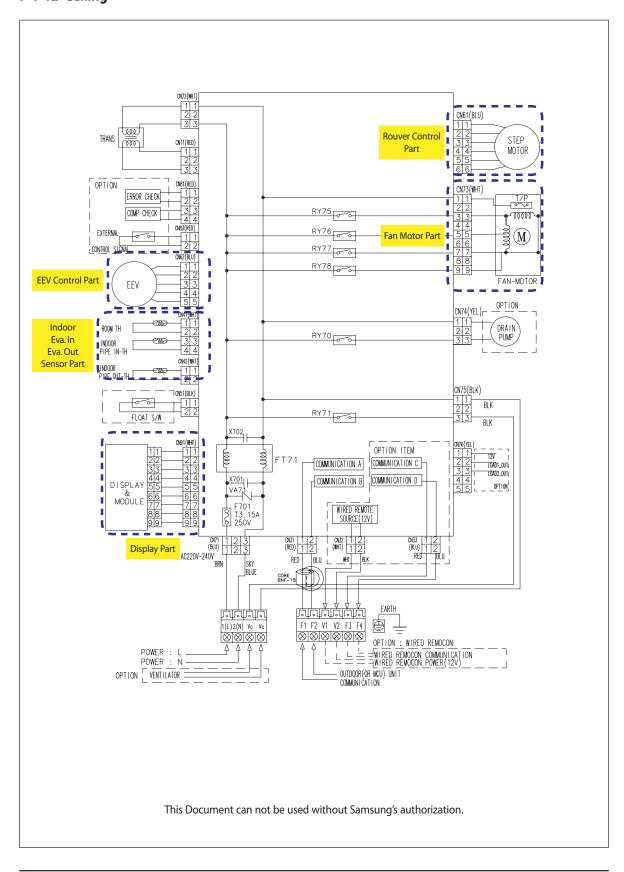
Samsung Electronics 7-10

#### 7-1-11 Distributor kit



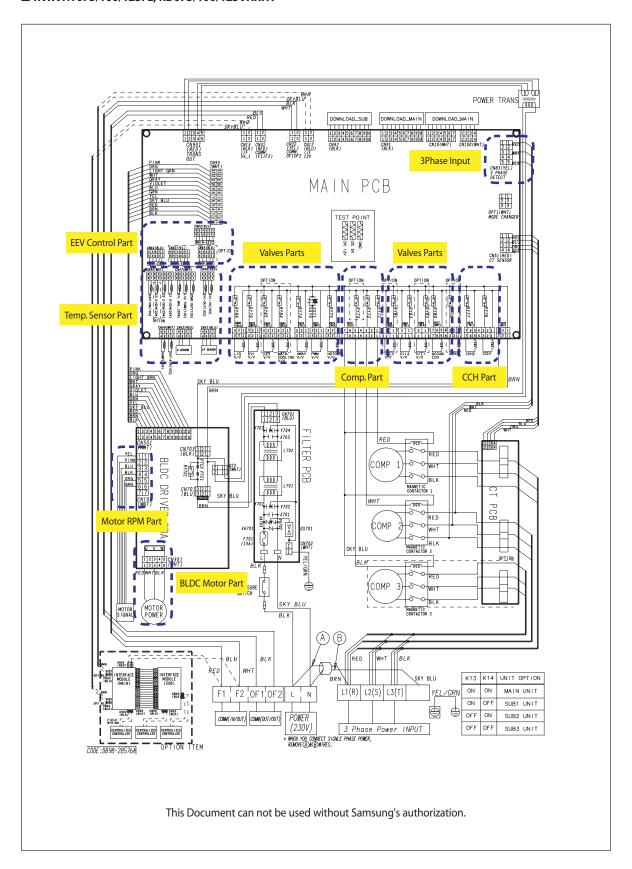
7-11 Samsung Electronics

#### 7-1-12 Ceiling



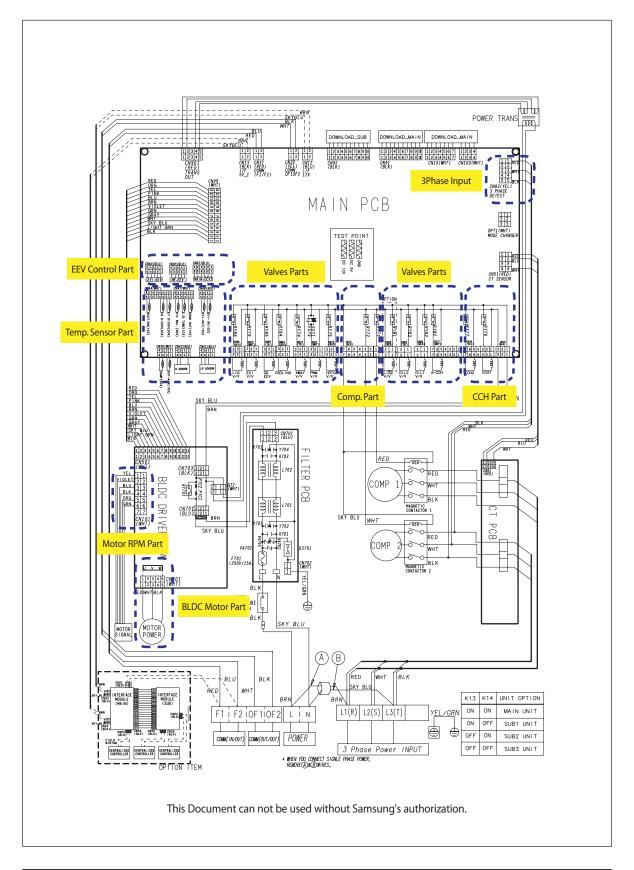
Samsung Electronics 7-12

#### ■ RVXVHT075/100/125FE, RD075/100/125VHXFA



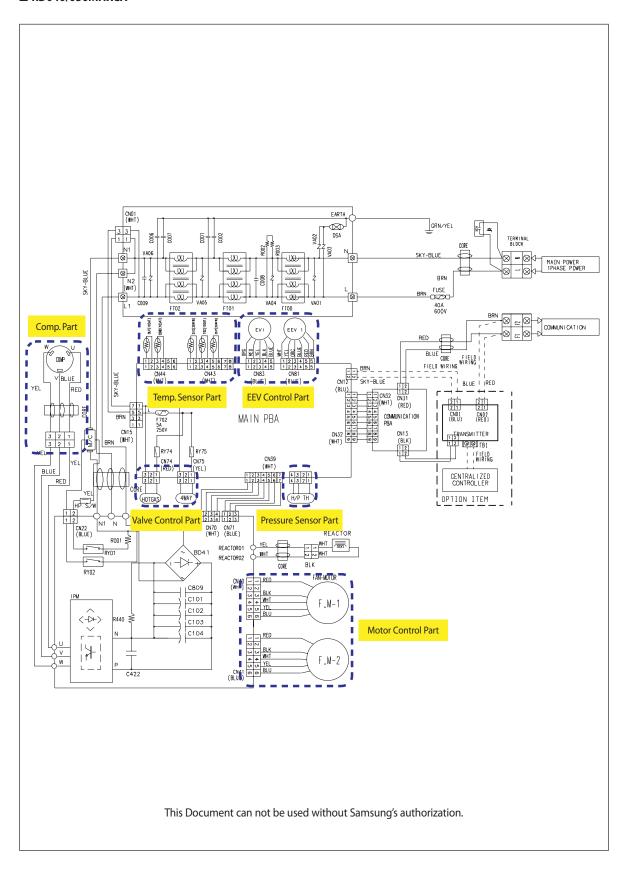
7-13 Samsung Electronics

#### ■ RD075/100/125VRXFA



Samsung Electronics 7-14

#### ■ RD040/050MHXCA



7-15 Samsung Electronics

#### **MEMO**

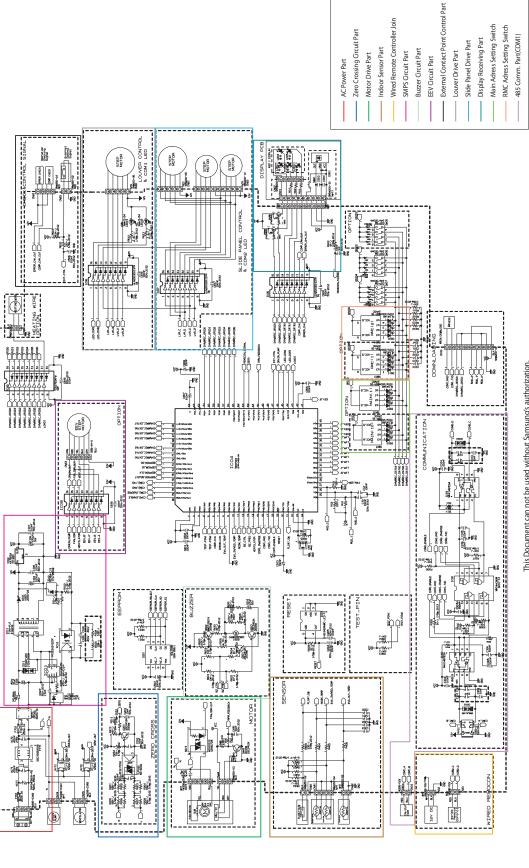
Samsung Electronics 7-16

## 8. Schematic Diagram

### 8-1 Indoor Unit

## 8-1-1 Slim 1 way cassette type

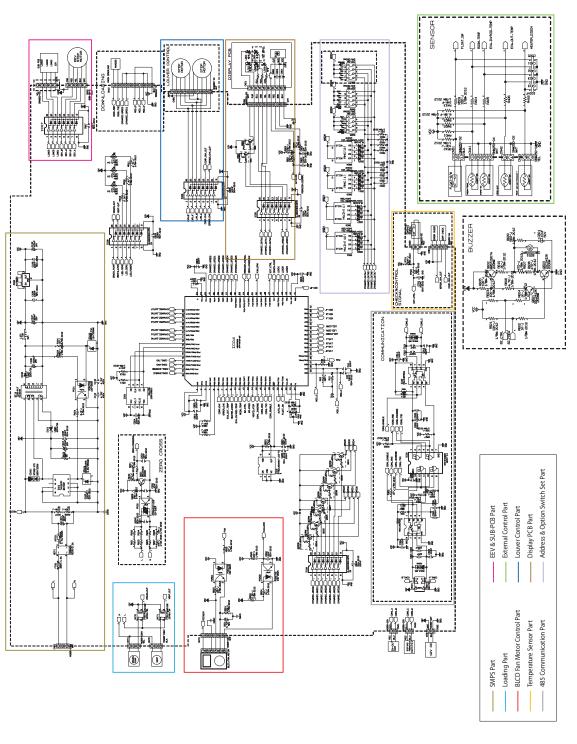




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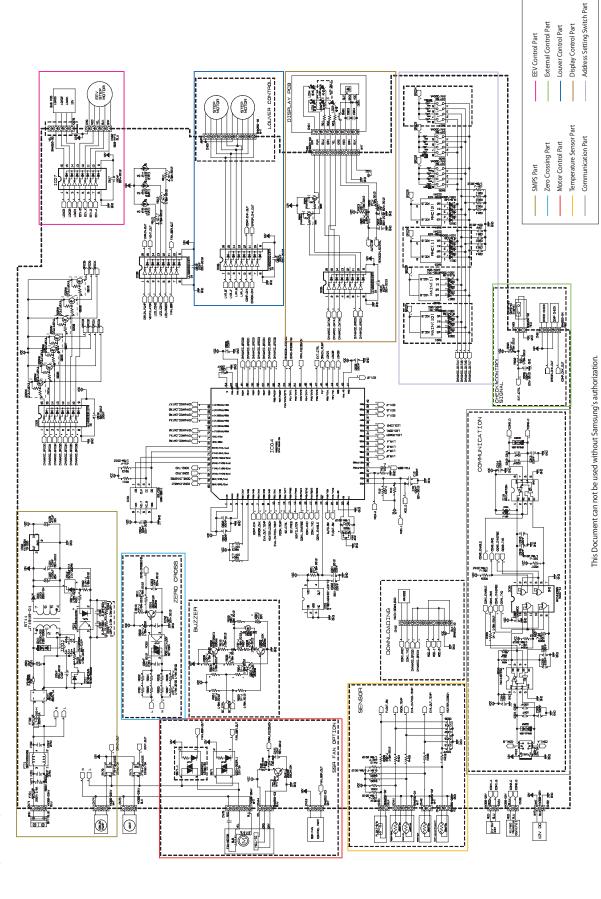
Schematic Diagram

## 8-1-2 4 way cassette type



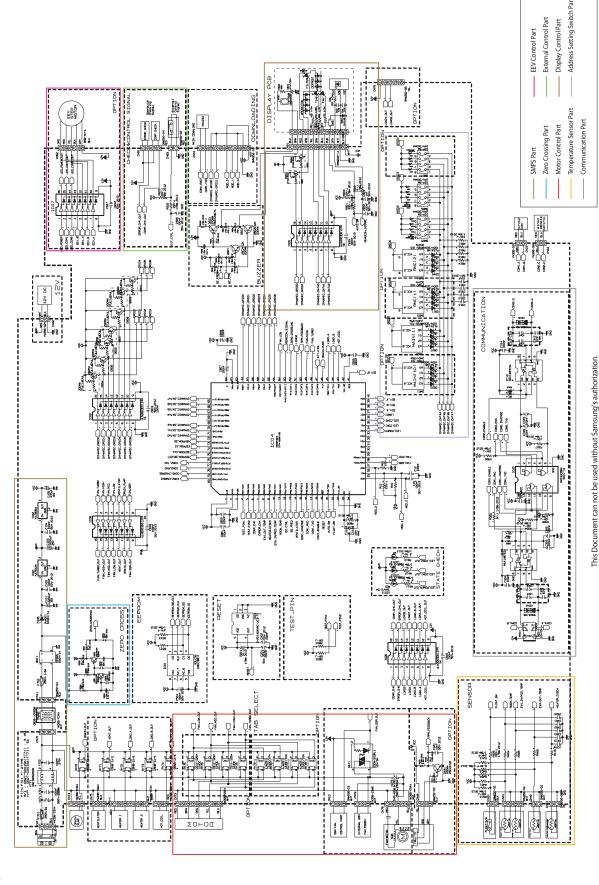
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## 8-1-3 Mini 4 way cassette type



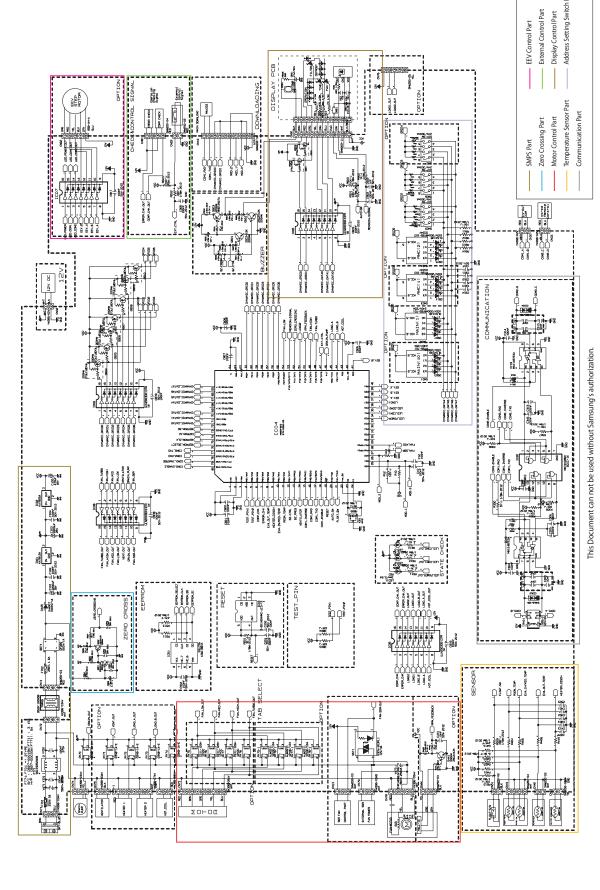
8-4

## 8-1-4 Duct type



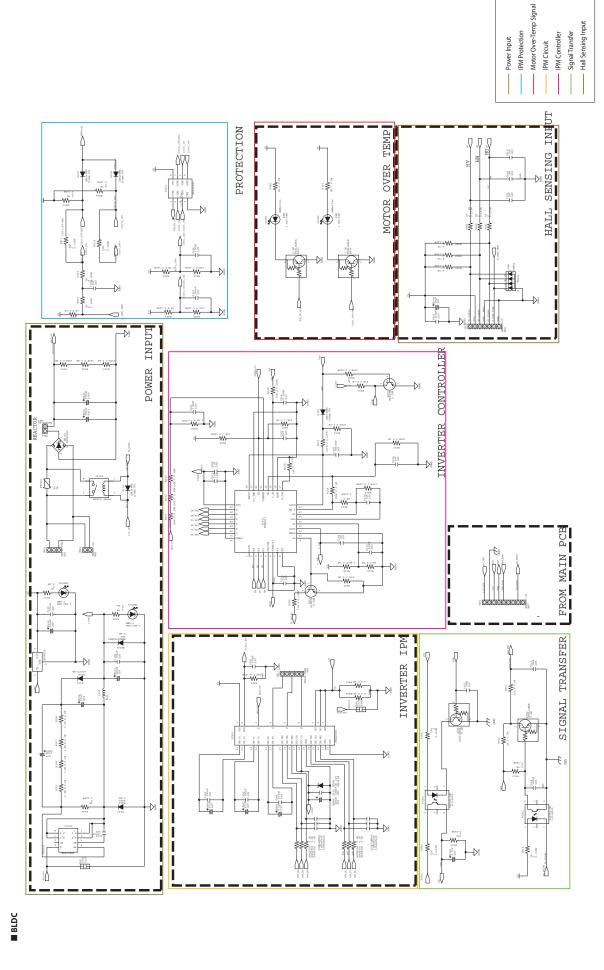
## 8-1-5 Duct type (BIG)





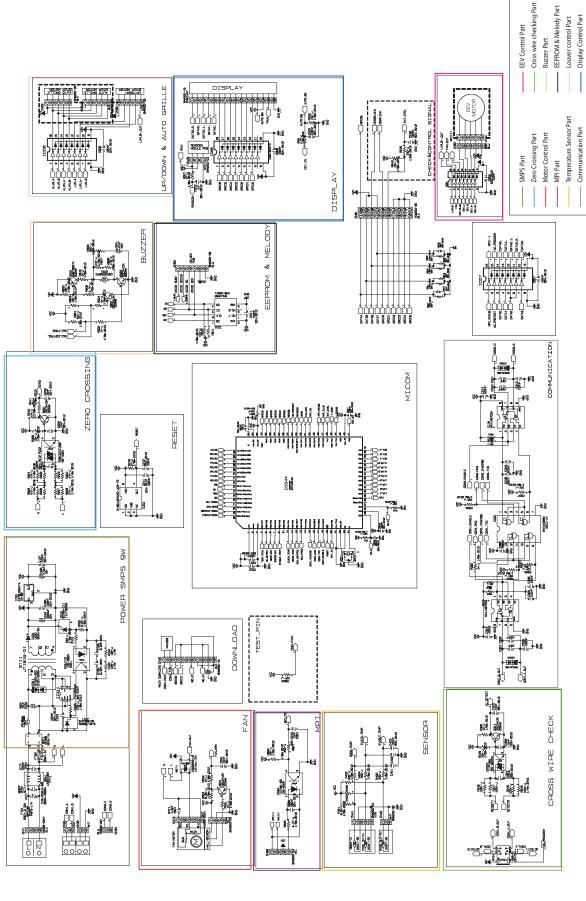
8-5

## Duct type (BIG) (cont.)



Samsung Electronics

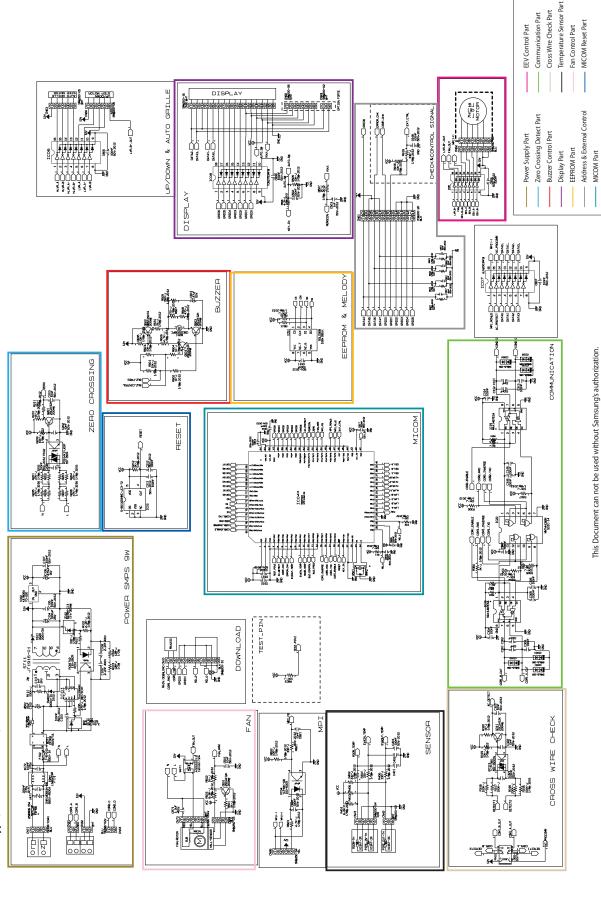
## 8-1-6 Wall-mounted type(Neo Forte without EEV/Vivace)



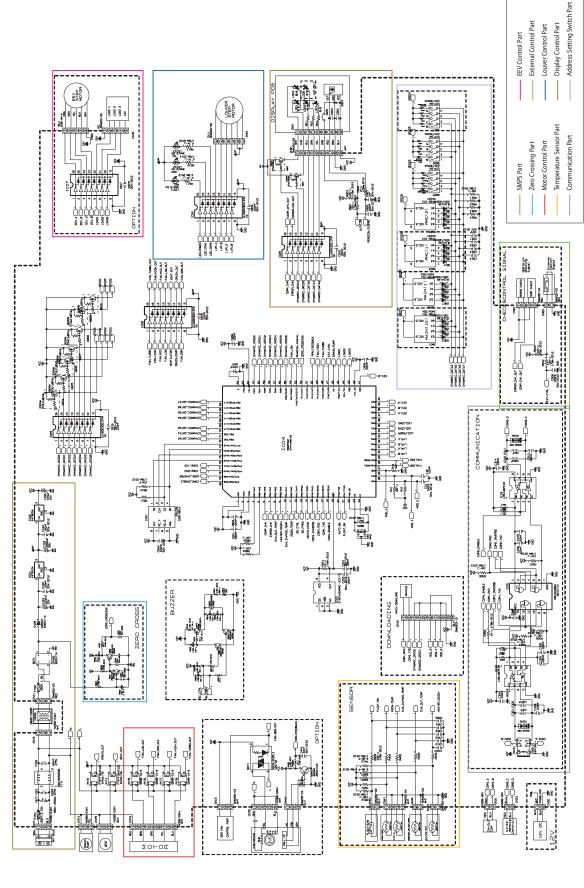
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8-7

## 8-1-7 Wall-mounted type(Neo Forte with EEV)



## 8-1-8 Ceiling type

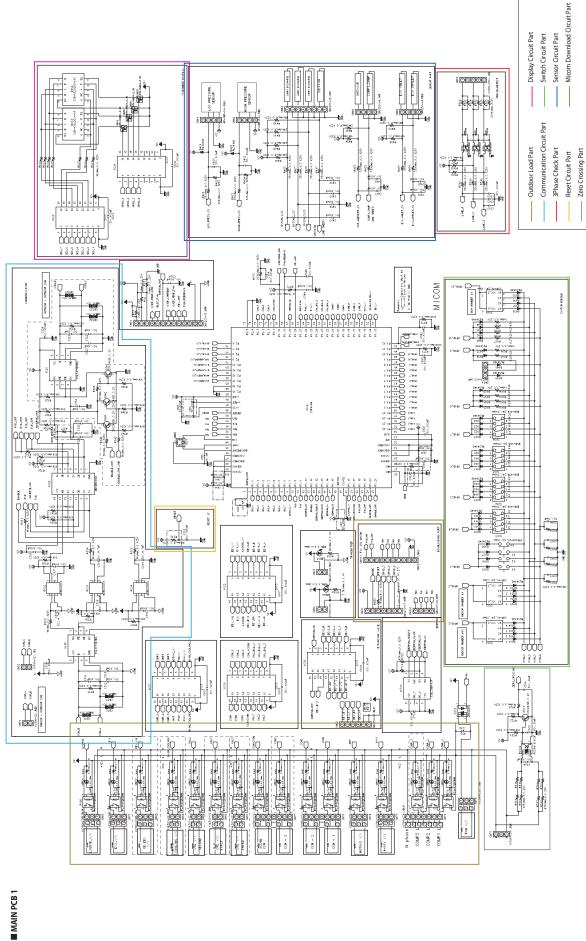


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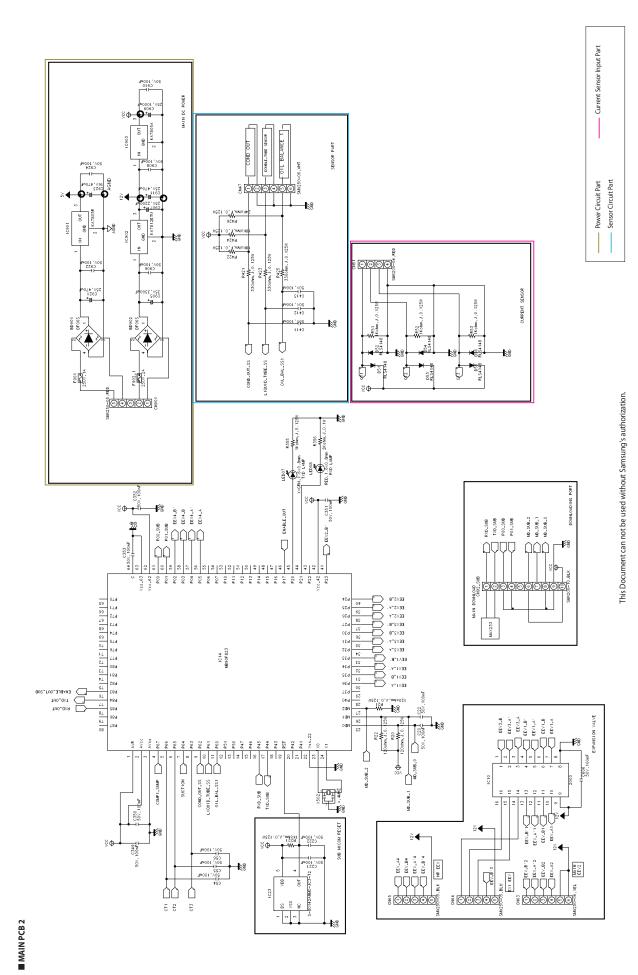
8-9

## 8-2 Outdoor Unit

# 8-2-1 RVXVHT075/100/125FE, RD075/100/125VHXFA, RD075/100/125VRXFA



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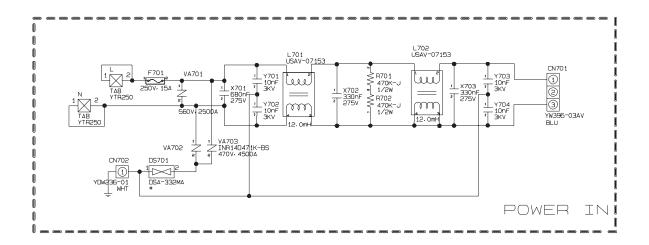


8-11 Samsung Electronics

Schematic Diagram

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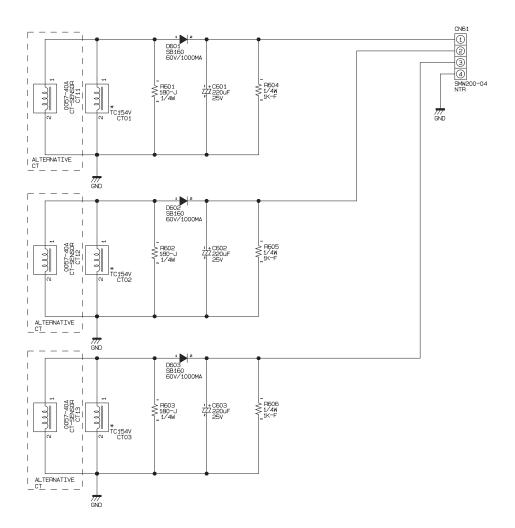
#### **■** Filter PCB



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8-13 Samsung Electronics

#### **■** CT PCB



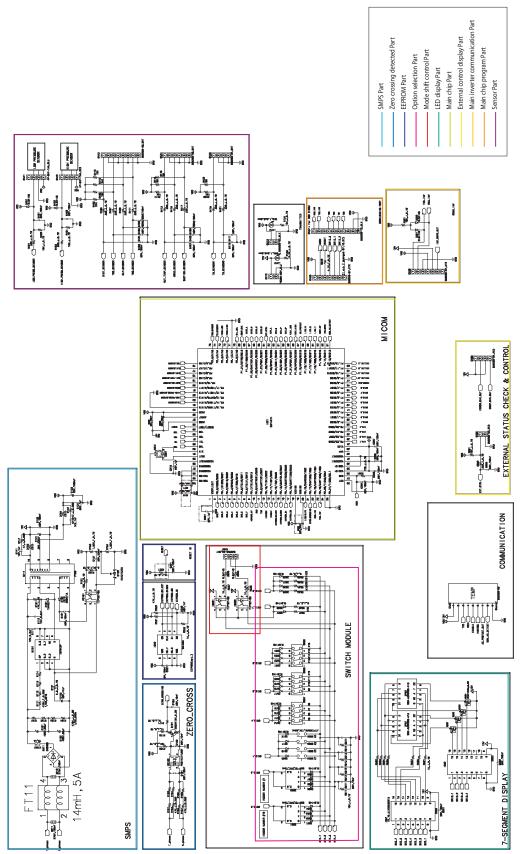
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Samsung Electronics 8-14

## 8-2-2 RD040/050MHXCA

Schematic Diagram

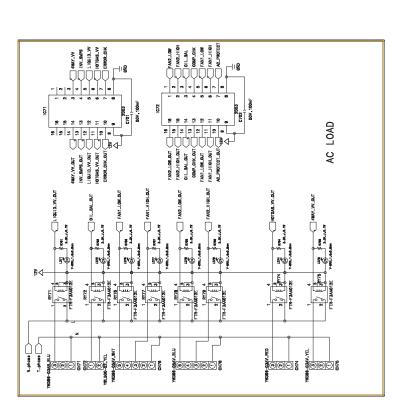
#### ■ MAIN PCB 1



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#### ■ MAIN PCB 2

Schematic Diagram



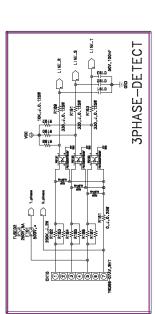
EEV2.A. CEV2.A. CEV2.A. CEV2.A. CEV2.B. CEV2.B

EXPANSION VALVE

CONSTRUCTOR OF THE CONSTRUCTOR O

EEVZ\_A'\_OUT [
EEVZ\_A'\_OUT [
EEVZ\_AOUT [
12V EEVZ\_AOUT [

EEV.A'.OUT CEV.A'.OUT CEV.A'.OUT CEV.A'.OUT CEV.A.OUT CEV.A.OUT CEV.A.OUT CEV.A.OUT CEV.A.OUT CEV.A.OUT CEV.A.OUT CEV.A'.OUT CEV.A.OUT CEV.A'.OUT CEV.A'.O

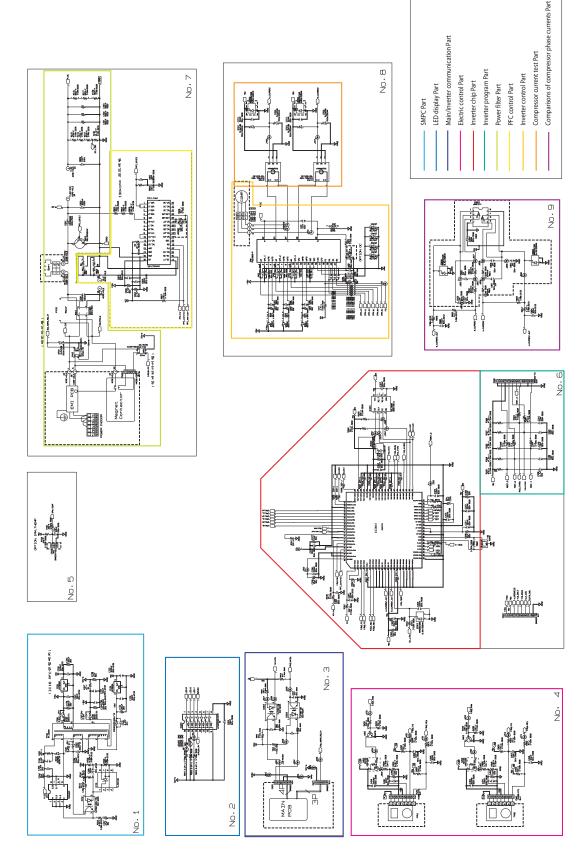


EEV controller Part

AC load PartThree-phase inspection Part

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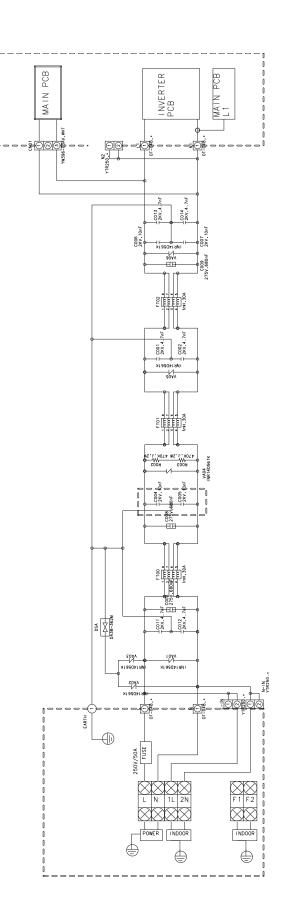
### ■ INVERTER PCB



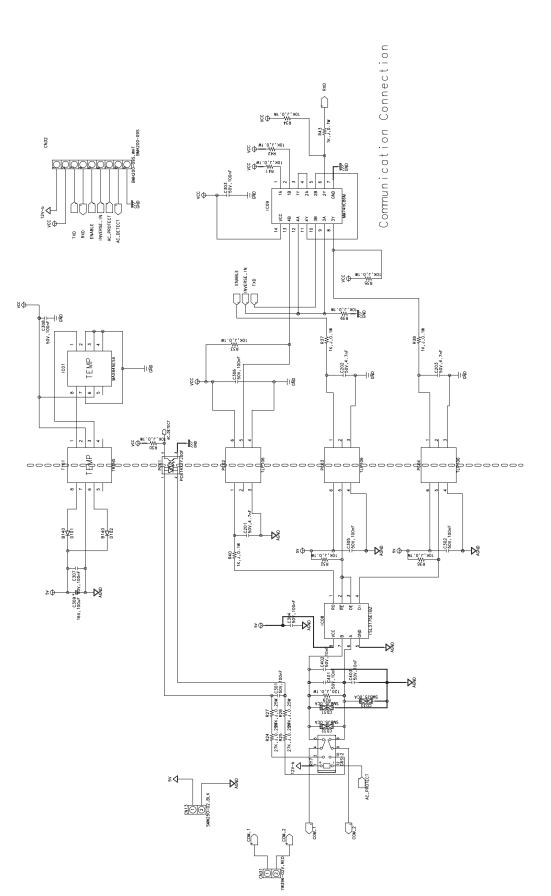
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■ EMI PCB

Schematic Diagram



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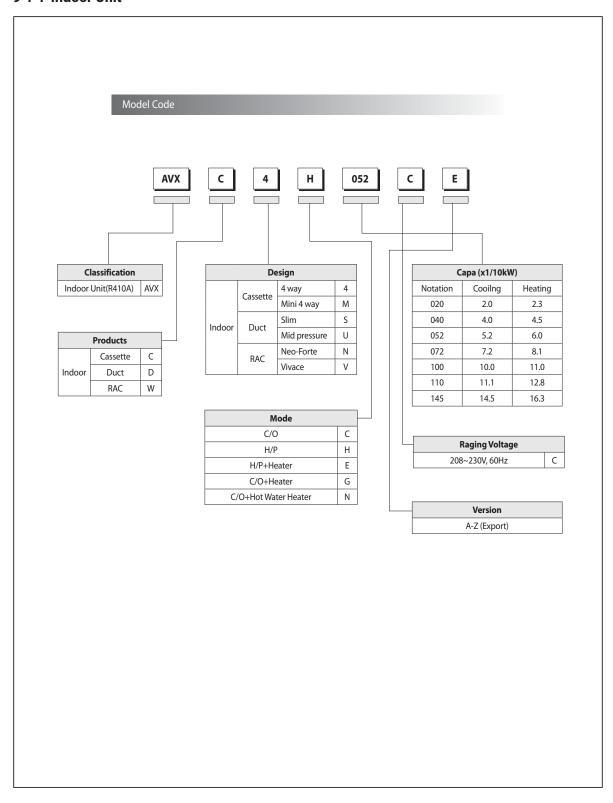


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#### 9. Reference Sheet

#### 9-1 Index for Model Name

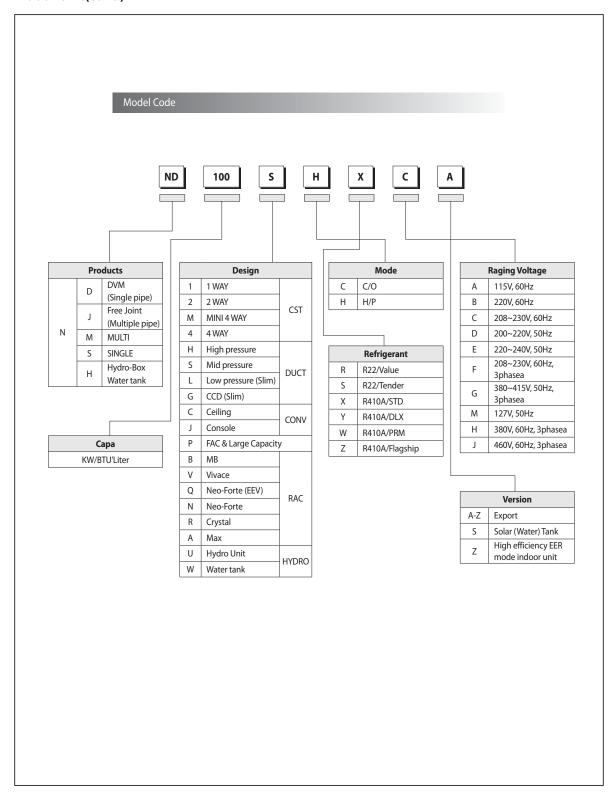
#### 9-1-1 Indoor Unit



9-1 Samsung Electronics

#### Index for Model Name(cont.)

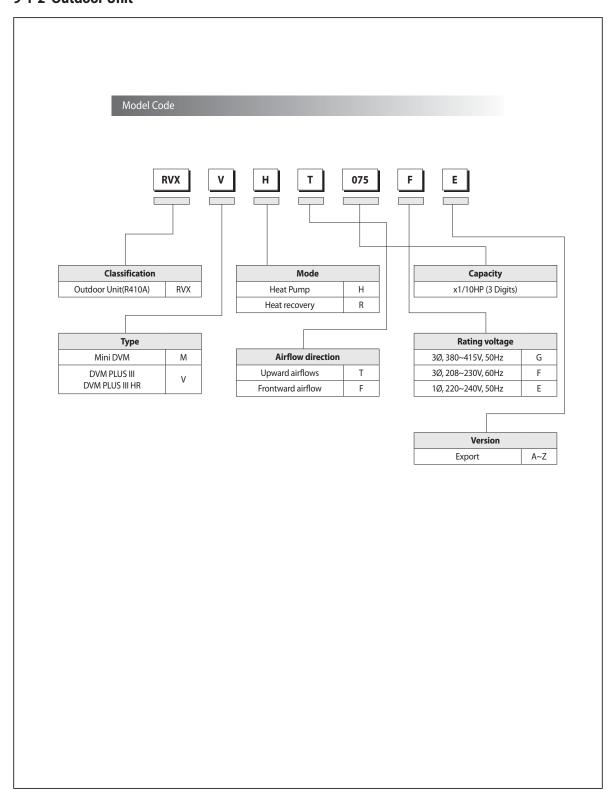
#### Indoor Unit(cont.)



Samsung Electronics 9-2

#### **Index for Model Name(cont.)**

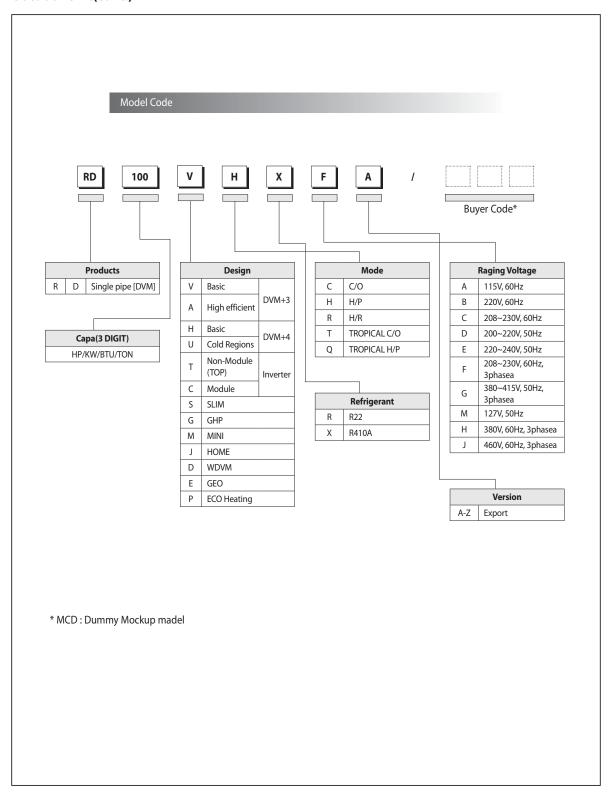
#### 9-1-2 Outdoor Unit



9-3 Samsung Electronics

#### **Index for Model Name(cont.)**

#### **Outdoor Unit(cont.)**



Samsung Electronics 9-4

#### 9-2-1 Cycle Operation Mode

#### 9-2-1-1 RVXVHT075/100/125FE, RD075/100/125VHXFA, RD075/100/125VRXFA

#### **■** Description of function parts

No.	Classification	Description		
1	А	DVI (Digital Vapor Injection) compressor		
2	В	FVI (Fixed Vapor Injection) compressor 1		
3	С	FVI (Fixed Vapor Injection) compressor 2		
4	D	PWM solenoid valve		
5	E	Discharge temperature sensor of DVI compressor		
6	F	Discharge temperature sensor of FVI compressor 1		
7	G	Discharge temperature sensor of FVI compressor 2		
8	Н	Oil separator		
9	ı	Capillary tube from oil separator		
10	J	High pressure switch		
11	К	Hot gas bypass solenoid valve		
12	L	Check valve		
13	М	High pressure sensor		
14	N	Reversing solenoid valve (4way valve)		
15	0	Heat exchanger of outdoor unit (Condensing unit)		
16	Р	Ambient air temperature sensor		
16	Q	Cond_out temperature sensor		
17	R	Main EEV 1 (For heating operation)		
18	S	Main EEV 2 (For heating operation)		
19	Т	Check valve		
20	U	Liquid bypass solenoid valve		
20	V	EVI EEV		
21	W	Turbo Intercooler		
22	Х	EVI_in temperature sensor		
23	Y	EVI_out temperature sensor		
25	Z	Liquid tube temperature sensor		
26	a	EVI bypass pilot solenoid valve		
27	b	Suction temperature sensor		
28	С	Accumulator		
29	d	Accumulator CCH (Crank Case Heater)		
30	е	Oil solenoid valve 1		
31	f	Oil solenoid valve 2		
32	g	Oil solenoid valve 3		
33	h	Oil balancing service valve between units		
34	i	Low pressure sensor		

No.	Classification	Description	
35	j	Check valve	
36	k	Crank case heater of DVI compressor	
37	m	Crank case heater of FVI compressor 1	
38	n	Crank case heater of FVI compressor 2	
39	0	Sump(Base) temperature sensor	
40	р	Oil temperature sensor	
41	q	Capillary tube from hot gas bypass valve	
42	r	Capillary tube from liquid bypass valve	
43	S	High pressure liquid service valve	
44	t	Low pressure gas service valve only for HR/MCU unit	
45	u	EEV of indoor unit	
46	٧	Eva_in temperature sensor	
47	W	Heat exchanger of indoor unit (Evaporating unit)	
48	х	Eva_out temperature sensor	
49	у	HR check valve	
50	z	Main cooling check valve	
51	a	Main cooling pilot solenoid valve	
52	(b)	Outdoor pilot solenoid valve	
53	©	HR EEV	
54	<b>(d)</b>	HR EEV check valve	
55	(e)	High pressure gas service valve in HR/MCU unit	
		Low pressure gas service valve in HP unit (Heat Pump)	
56	(f)	Heating solenoid valve	
57	g	Cooling solenoid valve	
58	h	MCU liquid bypass solenoid valve	
59	(i)	MCU main heating pilot solenoid valve	
60	j	MCU EEV	
61	(k)	Sub cooler_in temperature sensor	
62	m	Sub cooler	
63	n	Sub cooler_out temperature sensor	
64	0	Sub cooler EEV	
65	P	Liquid service valve between MCU & Indoor unit	
66	<b>(</b> P)	CGas service valve between MCU & Indoor unit	
67	(f)	EEV bypass service valve	
68	S	EEVs for wall mount & ceiling unit in MCU	

9-5 Samsung Electronics

#### RVXVHT075/100/125FE, RD075/100/125VHXFA, RD075/100/125VRXFA(cont.)

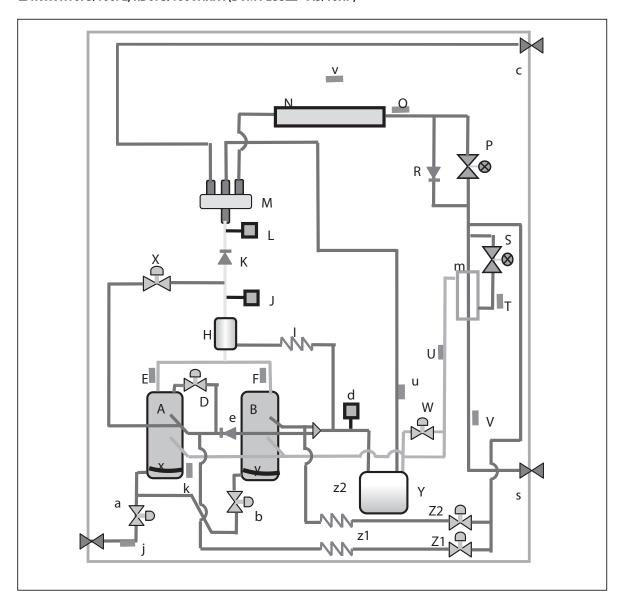
#### ■ Sign of Cycle of Function Parts

Category			Descriptions		
1	6	Temperature	-	Temperature sensor	
	Sensor	Pressure	77	High / Low pressure sensor	
	Valve	Solenoid	© X	Solenoid valve	
2		Pilot Solenoid		Pilot solenoid valve	
		Expansion		Electronic Expansion Valve (EEV)	
		Reversing		Reversing valve (4 way valve)	
		Check	7	Check valve	
		Service	M	Service valve (Angle & ball type)	
3	Switch & Heater	Pressure Switch	P	High pressure switch (Mechanical type)	
3		Heater	ии фии	Electric heater	
4	Others	Compressor		DVI (Digital Vapor Injection) Compressor FVI (Fixed Vapor Injection) Compressor	
		Accumulator		Accumulator	
		Heat Exchanger		Condensing or Evaporating unit	
		Sub cooler		Turbo intercooler or Sub cooler	
		Capillary	*	Capillary tube	

Samsung Electronics 9-6

#### RVXVHT075/100/125FE, RD075/100/125VHXFA(cont.)

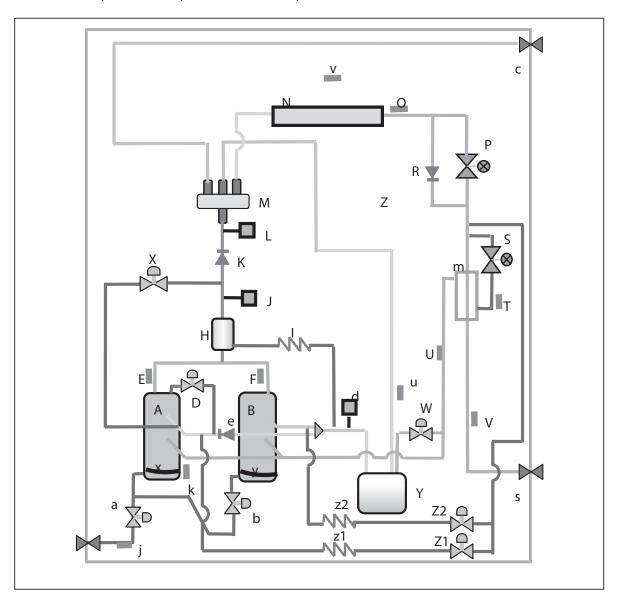
#### ■ RVXVHT075/100FE, RD075/100VHXFA (DVM PLUSIII - 7.5/10HP)



9-7 Samsung Electronics

#### RVXVHT075/100/125FE, RD075/100/125VHXFA(cont.)

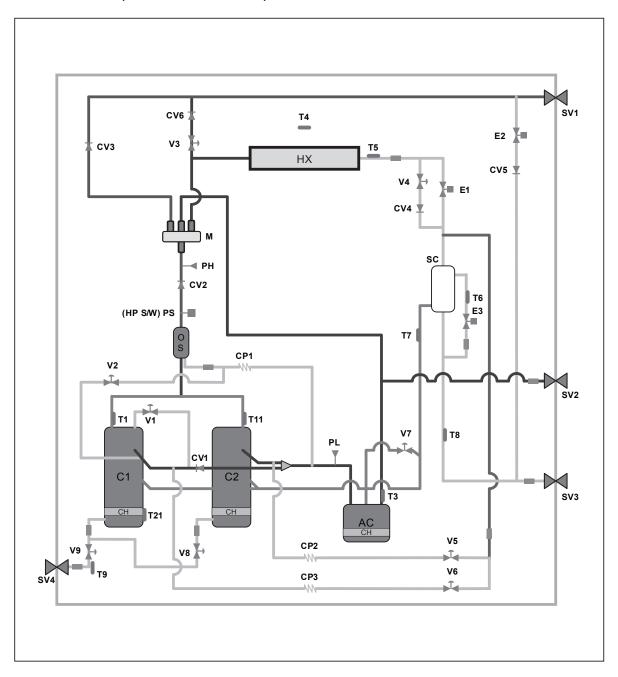
#### ■ RVXVHT125FE, RD125VHXFA (DVM PLUSIII - 12.5HP)



Samsung Electronics 9-8

#### RD075/100VRXFA

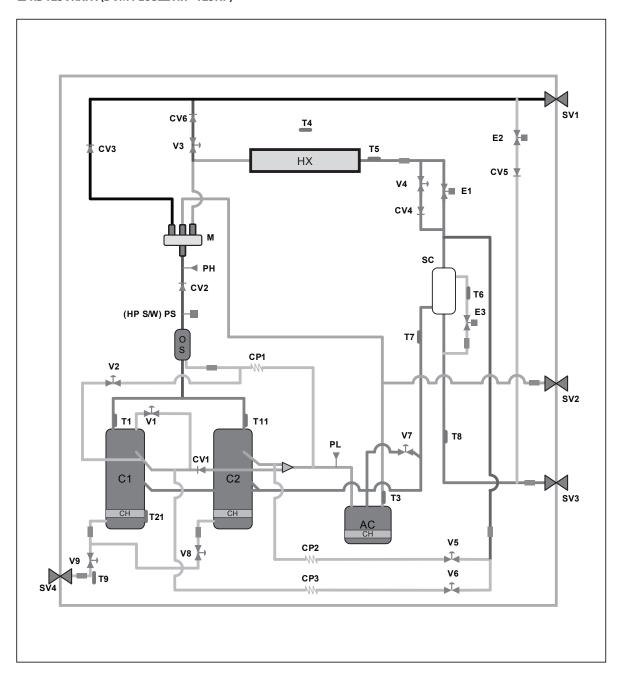
#### ■ RD075/100VRXFA (DVM PLUSIII HR - 7.5/10HP)



9-9 Samsung Electronics

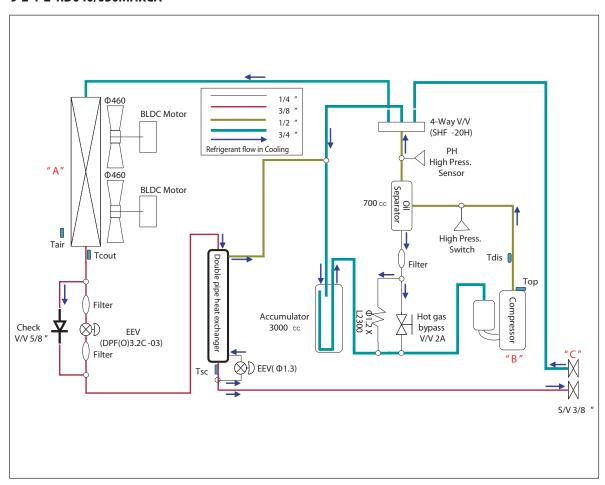
#### RD125VRXFA

#### ■ RD125VRXFA (DVM PLUSIII HR - 125HP)



Samsung Electronics 9-10

#### 9-2-1-2 RD040/050MHXCA



Mark	Name	4HP	5HP
А	Outdoor unit heat exchanger	2Row 52Column, Ø7, FP1.5	2Row 52Column, Ø8, FP1.5
В	Compressor	G5T360FUAEK	G5T450FUCEX
С	Low Pressure	5/8″	5/8″

9-11 Samsung Electronics



#### **GSPN(Global Service Partner Network)**

Area	Web Site	
North America	http://service.samsungportal.com	
Latin America	http://latin.samsungportal.com	
CIS	http://cis.samsungportal.com	
Europe	http://europe.samsungportal.com	
China	http://china.samsungportal.com	
Asia	http://asia.samsungportal.com	
Mideast & Africa	http://mea.samsungportal.com	

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