# **Air conditioner**

## **Installation manual**

AC\*\*\*RNADKG / AC\*\*\*RNTDKG

- Thank you for purchasing this Samsung air conditioner.
- Before operating this unit, please read this Installation manual carefully and retain it for future reference.



SAMSUNG

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# Installation

## Safety Information on Installation



### WARNING

 Hazards or unsafe practices that may result in severe personal injury or death.



#### CAUTION

- Hazards or unsafe practices that may result in minor personal injury or property damage.
- Carefully follow the precautions listed below because they are essential to guarantee the safety of the equipment.



#### WARNING

- Always disconnect the air conditioner from the power supply before servicing it or accessing its internal components.
- Verify that installation and testing operations are performed by qualified personnel.
- Verify that the air conditioner is not installed in an easily accessible area.

#### General information



#### WARNING

- Carefully read the content of this manual before installing the air conditioner and store the manual in a safe place in order to be able to use it as reference after installation.
- For maximum safety, installers should always carefully read the following warnings.
- Store the operation and installation manual in a safe location and remember to hand it over to the new owner if the air conditioner is sold or transferred.
- This manual explains how to install an indoor unit with a split system with two SAMSUNG units. The use of other types of units with different control systems may damage the units and invalidate the warranty. The manufacturer shall not be responsible for damages arising from the use of non compliant units.

- The manufacturer shall not be responsible for damage originating from unauthorized changes or the improper connection of electric and requirements set forth in the "Operating limits" table, included in the manual, shall immediately invalidate the warranty.
- The air conditioner should be used only for the applications for which it has been designed: the indoor unit is not suitable to be installed in areas used for laundry.
- Do not use the units if damaged. If problems occur, switch the unit off and disconnect it from the power supply.
- In order to prevent electric shocks, fires or injuries, always stop the unit, disable the protection switch and contact SAMSUNG's technical support if the unit produces smoke, if the power cable is hot or damaged or if the unit is very noisy.
- Always remember to inspect the unit, electric connections, refrigerant tubes and protections regularly. These operations should be performed by qualified personnel only.
- The unit contains moving parts, which should always be kept out of the reach of children.
- Do not attempt to repair, move, alter or reinstall the unit. If performed by unauthorized personnel, these operations may cause electric shocks or fires.
- Do not place containers with liquids or other objects on the unit
- All the materials used for the manufacture and packaging of the air conditioner are recyclable.
- The packing material and exhaust batteries of the remote controller(optional) must be disposed of in accordance with current laws.
- The air conditioner contains a refrigerant that has
  to be disposed of as special waste. At the end of its
  life cycle, the air conditioner must be disposed of in
  authorised centres or returned to the retailer so that it
  can be disposed of correctly and safely.
- Do not use means to accelerate the defrost operation or to clean, other than those recommended by Samsung.
- · Do not pierce or burn.
- Be aware that refrigerants may not contain an odour.

## Safety Information on Installation

### Installing the unit



#### WARNING

IMPORTANT: When installing the unit, always remember to connect first the refrigerant tubes, then the electrical lines.

- Always disassemble the electric lines before the refrigerant tubes.
- Upon receipt, inspect the product to verify that it has not been damaged during transport. If the product appears damaged, DO NOT INSTALL it and immediately report the damage to the carrier or retailer (if the installer or the authorized technician has collected the material from the retailer.)
- After completing the installation, always carry out a functional test and provide the instructions on how to operate the air conditioner to the user.
- Do not use the air conditioner in environments with hazardous substances or close to equipment that release free flames to avoid the occurrence of fires, explosions or injuries.
- Our units should be installed in compliance with the spaces shown in the installation manual, to ensure accessibility from both sides and allow repairs or maintenance operations to be carried out. The unit's components should be accessible and easy to disassemble without endangering people and objects. For this reason, when provisions of the installation manual are not complied with, the cost required to access and repair the units (in SAFETY CONDITIONS, as set out in prevailing regulations) with harnesses, ladders, scaffolding or any other elevation system will NOT be considered part of the warranty and will be charged to the end customer.

## Power supply line, fuse or circuit breaker



#### WARNING

- Always make sure that the power supply is compliant with current safety standards. Always install the air conditioner in compliance with current local safety standards.
- Always verify that a suitable grounding connection is available.
- Verify that the voltage and frequency of the power supply comply with the specifications and that the installed power is sufficient to ensure the operation of

- any other domestic appliance connected to the same electric lines.
- Always verify that the cut-off and protection switches are suitably dimensioned.
- Verify that the air conditioner is connected to the power supply in accordance with the instructions provided in the wiring diagram included in the manual.
- Always verify that electric connections (cable entry, section of leads, protections...) are compliant with the electric specifications and with the instructions provided in the wiring scheme. Always verify that all connections comply with the standards applicable to the installation of air conditioners.
- Devices disconnected from the power supply should be completely disconnected in the condition of overvoltage category.
- Be sure not to perform power cable modification, extension wiring, and multiple wire connection.
  - It may cause electric shock or fire due to poor connection, poor insulation, or current limit override.
  - When extension wiring is required due to power line damage, refer to "Step 2.4 Optional: Extending the power cable" in the installation manual.



#### CAUTION

#### Make sure that you earth the cables.

 Do not connect the earth wire to the gas pipe, water pipe, lighting rod or telephone wire. If earthing is not complete, electric shock or fire may occur.

#### Install the circuit breaker.

 If the circuit breaker is not installed, electric shock or fire may occur.

Make sure that the condensed water dripping from the drain hose runs out properly and safely.

Install the power cable and communication cable of the indoor and outdoor unit at least 1m away from the electric appliance.

Install the indoor unit away from lighting apparatus using the ballast.

 If you use the wireless remote control, reception error may occur due to the ballast of the lighting apparatus.

Do not use the indoor unit for preservation of food items, plants, equipment, and art works. This may cause deterioration of their quality.

Do not install the indoor unit if it has any drainage problem.

## **Preparation**

## Step 1.1 Choosing the installation location

#### Installation location requirements

- · There must be no obstacles near the air inlet and outlet.
- Install the indoor unit on a ceiling that can support its weight.
- Maintain sufficient clearance around the indoor unit.
- Before installing the indoor unit, be sure to check whether the chosen location is well-drained.



#### WARNING

 If appliances contain R-32 refrigerant, then the floor area of the room in which the appliances are installed, operated and stored must be larger than the minimum floor area defined in table below A (m²).

Minimum required room area (A, m²)			
m (kg) Wall-mounted type			
≤ 1.842	No requirement		
1.843	4.45		
1.9	4.58		
2.0	4.83		
2.2	5.31		
2.4	5.79		
2.6	6.39		
2.8	7.41		
3.0	8.51		
3.2	9.68		
3.4	10.9		
3.6	12.3		
3.8	13.7		
4.0	15.1		
4.2	16.7		
4.4	18.3		
4.6	20.0		
4.8	21.8		
5.0	23.6		

- · m: Total refrigerant charge in the system
- · A: Minimum required room area

- IMPORTANT: it's mandatory to consider either the table 1 or taking into consideration the local law regarding the minimum living space of the premises.
- Minimum installation height of indoor unit is 0.6 m for floor mounted, 1.8 m for wall, 2.2 m for ceiling.



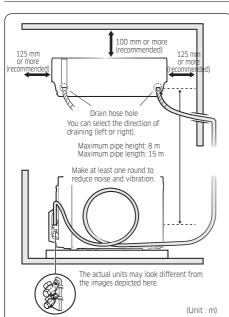
#### CAUTION

#### Do not install the air conditioner in following places.

- The place where there is mineral oil or arsenic acid.
   Resin parts flame and the accessories may drop or water may leak. The capacity of the heat exchanger may reduce or the air conditioner may be out of order.
- The place where corrosive gas such as sulfurous acid gas generates from the vent pipe or air outlet. The copper pipe or connection pipe may corrode and refrigerant may leak.
- The place where there is a machine that generates electromagnetic waves. The air conditioner may not operate normally due to control system.
- The place where there is a danger of existing combustible gas, carbon fiber or flammable dust.
- The place where thinner or gasoline is handled. Gas may leak and it may cause fire.
- The place where animals may urinate on the product.
   Ammonia may be generated.
- The place where is close to heat sources.

## **Preparation**

#### Overview of installation location requirements



Model	Pipe length		Pipe height	
Model	Minimum	Maximum	Maximum	
AC026/035RNADKG	3	20	15	
AC052RNADKG	3	30	20	
AC071RNADKG AC100RNTDKG	3	50	30	



Make a U-trap (A) on the pipe (which is connected to CAUTION the indoor unit) at outer wall and cut the bottom part of the insulation (about 10 mm) to prevent rainwater from getting inside through the insulation.

## **CAUTION**

rainwater drained

- · Comply with the length and height limits described in the figure above.
- For the product that uses the R-32 refrigerant, Install the indoor unit on the wall 1.8 m or higher from the floor.

### Step 1.2 Checking and preparing accessories and tools

#### Accessories

Accessories in the indoor unit package

#### AC\*\*\*RNADKG

AC^^RNADKG	
Installation plate (1) **026/035** (01 frame)	Installation plate (1) **052** (04 frame)
Installation plate (1) **071** (05 frame)	Remote control (1)
	080 888
Remote control battery (2)	User Manual (1)
Installation Manual (1)	Cap screw (3)
Remote Control Holder (1)	M4 x 16 Tapped Screws (2)
	<i>∢mmm</i> }
Guide Left(1)	Guide Right(1)
	\$

#### AC\*\*\*RNTDKG

Installation plate (1) **100**	Remote control (1)
	080 088
Remote control battery (2)	User Manual (1)
Installation Manual (1)	Remote Control Holder (1)
M4 x 16 Tapped Screws (2)	
€mmm>	

#### Tools

#### General tools

- Vacuum pump (Backward flowing prevention)
- Manifold gauge
- Stud finder
- Torque wrench
- Pipe cutter
- Reamer

- Pipe bender
- Spirit level
- Screwdriver
- Spanner
- Drill
- L-wrench
- · Measuring tape

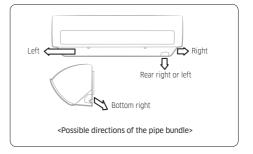
#### Tools for test operation

- Thermometer
- Resistance meter
- Electroscope

### Step 1.3 Drilling a hole through the wall

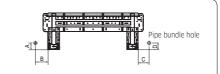
Before fixing the installation plate to a wall and then fixing the indoor unit to the installation plate, a window frame, or a gypsum board, you must determine the position of a hole (with 65 mm inner diameter) through which the pipe bundle (consisting of power and communication cables, refrigerant pipes, and drain hose) will pass and then drill that hole

1 Determine the position of a 65 mm hole in consideration of the possible directions of the pipe bundle and the minimum distances between the hole and the installation plate.



### ∴ CAUTION

If changing the pipe direction from left to right, do not drastically bent it but slowly turn it in the opposite direction as shown. Otherwise, the pipe may be damaged in the process.



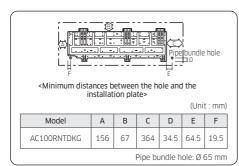
<Minimum distances between the hole and the installation plate>

(Unit:mm)

Model	Α	В	С	D
AC026RNADKG AC035RNADKG	36	60	65	36
AC052RNADKG	36	190	81	36
AC071RNADKG	33	110	110	33

Pipe bundle hole: Ø 65 mm

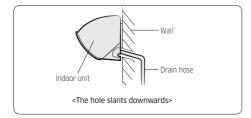
## **Preparation**



Drill the hole.

### **↑** CAUTION

- · Be sure to drill only one hole.
- Make sure that the hole slants downwards so that the drain hose slants downwards to drain water well.

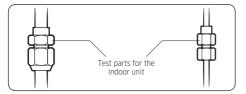


### Step 1.4 Performing leak test

#### Leak test

LEAK TEST WITH NITROGEN (before opening valves)
In order to detect basic refrigerant leaks, before recreating
the vacuum and recirculating the R-32, it's responsible of
installer to pressurize the whole system with nitrogen (using
a pressure regulator) at a pressure above 4.1MPa (gauge).

LEAK TEST WITH R-32 (after opening valves)
Before opening valves, discharge all the nitrogen into the
system and create vacuum. After opening valves check
leaks using a leak detector for refrigerant R-32.



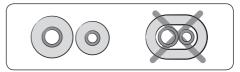
### **↑** CAUTION

 Discharge all the nitrogen to create a vacuum and charge the system.

## Step 1.5 Wrapping the pipes with the insulation

After checking for gas leaks in the system, insulate the pipe, hose and cables. Then place the indoor unit on the installation plate.

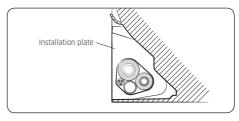
1 To avoid condensation problems, place heatresistant poly-ethylene foam separately around each refrigerant pipe in the lower part of the indoor unit.



Wrap the refrigerant pipe and the drain hose in the rear of the indoor unit with the absorbent pad.

### NOTE

- Wind the pipe and hose three times to the end of the indoor unit with the absorbent pad. (20mm interval)
- **3** Wind the pipe, assembly cable and drain hose with insulation tape.
- 4 Place the bundle (the pipe, assembly cable and drain hose) in the lower part of the indoor unit carefully so it doesn't project from the rear of the indoor unit.



- 5 Hook the indoor unit to the installation plate and move the unit to the right and left until it is securely in place.
- **6** Wrap the rest of the pipe with vinyl tape.
- 7 Attach the pipe to the wall using clamps (optional).

## **Indoor Unit Installation**

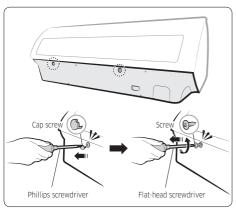


Please scan this QR code for detail video of indoor unit installation.

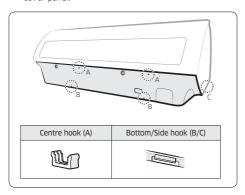
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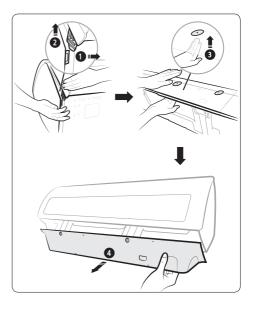
## Step 2.1 Disassembling the cover panel (Only for AC\*\*\*RNADKG)

1 Remove the cap screws, then the screws.

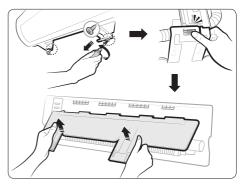


2 Unlock the side hooks (1), (2), then centre hooks (3). Then unlock the bottom hooks (4) to pull out the cover panel.



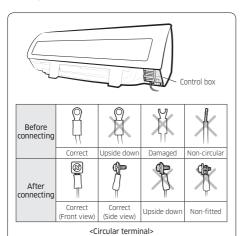


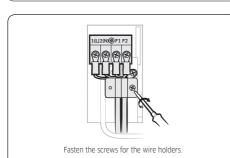
Step 2.2 Disassembling the installation plate



## Indoor Unit Installation

# Step 2.3 Connecting the power and communication cables (assembly cable)





Model	ACO26RNADKG ACO35RNADKG ACO52RNADKG ACO71RNADKG AC100RNTDKG
Outdoor-to-indoor power cable	3G X 0.75 mm², H07RN-F
Communication cable	2 X 0.75 mm², H05RN-F
Type GL	16A

- When performing electrical and earthing works, be sure to comply with the 'technical standards of electrical installations' and the 'wiring regulations' in the local regulations.
- Tighten the terminal block screw to 1.2-1.8 N·m (12-18 kgf·cm).

### NOTE

- Each wire is labelled with the corresponding terminal number.
- Use shield cable (Category 5; less than 50pF/m) for noisy environmental site.
- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC: 60245 IEC 66/ CENELEC: H07RN-F, IEC: 60245 IEC 57/CENELEC: H05RN-F)

### **A** CAUTION

- For the terminal block wiring, use a wire with a ring terminal socket only. Regular wires without a ring terminal socket may become a hazard due to overheating of the electrical contact during installation.
- Do not connect two or more different cables to extend the length. This connection may cause fire.
- Each circular terminal must match the size of its corresponding screw in the terminal block.
- After connecting the cables, make sure that terminal numbers on the indoor and outdoor units match.
- Ensure that power and communication cables are separated, they must not be in the same cable.
- For the product that uses the R-32 refrigerant, be cautious not to generate a spark by keeping the following requirements:
  - Do not remove the fuses with power on.
  - Do not disconnect the power plug from the wall outlet with power on.
  - It is recommended to locate the outlet in a high position. Place the cords so that they are not tangled.

### **↑** WARNING

 Connect the wires firmly so that wires cannot be pulled out easily. (If they are loose, it could cause burn-out of the wires.)

## Step 2.4 Optional: Extending the power cable

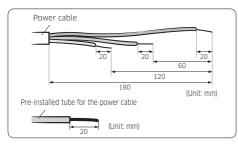
1 Prepare the following tools.

Tools	Spec	Shape
Crimping pliers	MH-14	
Connection sleeve (mm)	20xØ7.0 (HxOD)	
Insulation tape	Width 18 mm	
Contraction tube (mm)	50xØ8.0 (LxOD)	

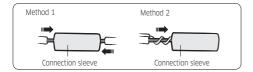
- **2** As shown in the figure, peel off the shields from the rubber and wire of the power cable.
  - Peel off 20 mm of cable shields from the preinstalled tube.

## **⚠** CAUTION

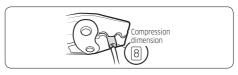
- For information about the power cable specifications for indoor and outdoor units, refer to the installation manual.
- After peeling off cable wires from the preinstalled tube, insert a contraction tube.



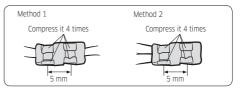
- **3** Insert both sides of core wire of the power cable into the connection sleeve.
  - Method 1: Push the core wire into the sleeve from both sides.
  - Method 2: Twist the wire cores together and push it into the sleeve



- **4** Using a crimping tool, compress the two points and flip it over and compress another two points in the same location.
  - The compression dimension should be 8.0.

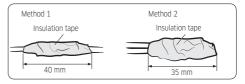


 After compressing it, pull both sides of the wire to make sure it is firmly pressed.

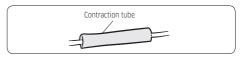


Wrap it with the insulation tape twice or more and position your contraction tube in the middle of the insulation tape.

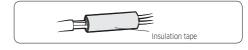
Three or more layers of insulation are required.



**6** Apply heat to the contraction tube to contract it.



7 After tube contraction work is completed, wrap it with the insulation tape to finish.



### **↑** CAUTION

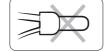
- Make sure that the connection parts are not exposed to outside.
- Be sure to use insulation tape and a contraction tube made of approved reinforced insulating materials that

## **Indoor Unit Installation**

have the same level of withstand voltage with the power cable. (Comply with the local regulations on extensions.)

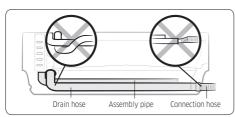
### **⚠ WARNING**

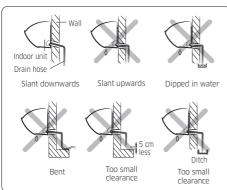
- In case of extending the electric wire, please DO NOT use a round-shaped pressing socket.
  - Incomplete wire connections can cause electric shock or a fire.



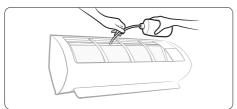
## Step 2.5 Installing and connecting the drain hose

1 Install the drain hose.





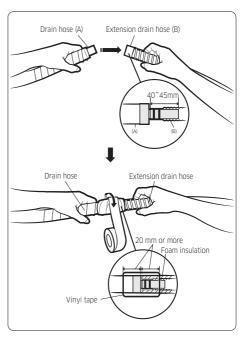
2 Pour water into the drain pan. Check whether the hose is well drained.



### ♠ CAUTION

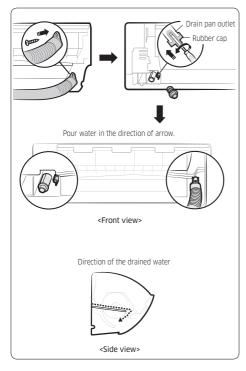
- Make sure that the indoor unit is in upright position when you pour water to check for leakage. Make sure that the water does not overflow onto the electrical part
- If the diameter of the connection hose is smaller than the product's drain hose, water leakage may occur.
- · Inadequate installation may cause water leakage.
- If the drain hose is routed inside the room, insulate the hose so that dripping condensation does not damage the furniture or floors.
- Do not box in or cover the drain hose connection.
   Drain hose connection must be easily accessible and serviceable.

## Step 2.6 Optional: Extending the drain hose



## Step 2.7 Optional: Changing the direction of the drain hose

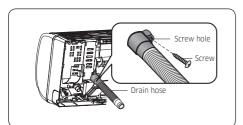
#### AC\*\*\*RNADKG



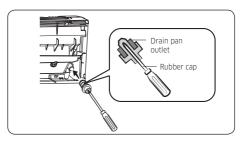
#### AC\*\*\*RNTDKG

Change the direction only when it is necessary.

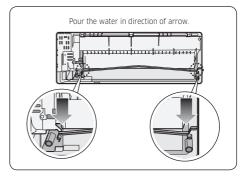
1 Detach the rubber cap with the flyer.

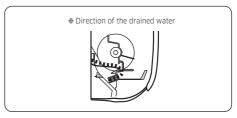


- 2 Detach the drain hose by pulling it and turning to the left.
- **3** Insert the drain hose by fixing it into the groove of the drain hose and the outlet of the drain pan.



- **4** Attach the rubber cap with a screwdriver by turning it to the right until it fixes to the end of the groove.
- **5** Check for leakage on both side of the drain outlet.





### **∴** CAUTION

 Make sure that the indoor unit is in upright position when you pour water to check for leakage. Make sure that the water does not overflow onto the electrical part.

## **Indoor Unit Installation**

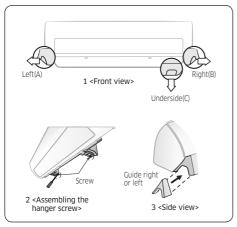
# Step 2.8 Installing and connecting the assembly pipes to the refrigerant pipes (assembly pipe)

Connect indoor and outdoor units with field-supplied copper pipes by means of flare connections. Use insulated seamless refrigeration grade pipe only, (Cu DHP type according to ISO1337), degreased and deoxidized, suitable for operating pressures of at least 4200 kPa and for burst pressure of at least 20700 kPa. Under no circumstances must sanitary type copper pipe be used.

There are 2 refrigerant pipes of different diameters:

- · The smaller one is for the liquid refrigerant
- · The larger one is for the gas refrigerant

A short liquid refrigerant pipe and a short gas refrigerant pipe are already fitted to the air conditioner. The connection procedure for the refrigerant pipes varies according to the exit position of each pipe when facing the wall:



- Cut out the appropriate knock-out piece (A, B, C) on the rear of the indoor unit unless you connect the pipe directly from the rear.
- 2 Smooth the cut edges.
- 3 Remove the protection caps of the pipes and connect the assembly pipe to each pipe. Tighten the nuts first with your hands, and then with a torque wrench, applying the following torque:

Outer diameter (mm)	Torque (N•m)	Torque (kgf•cm)
ø 6.35	14 to 18	140 to 180
ø 9.52	34 to 42	350 to 430
ø 12.70	49 to 61	500 to 620
ø 15.88	68 to 82	690 to 830

### NOTE

- If you want to shorten or extend the pipes, see Step 2.10 Shortening or extending the refrigerant pipes (assembly pipe) on page 15.
- Tighten the nuts to the specified torques. If overtightened, the nuts could be broken so refrigerant may leak.
- 4 Cut off the remaining foam insulation.
- 5 If necessary, bend the pipe to fit along the bottom of the indoor unit. Then pull it out through the appropriate hole.
  - The pipe should not project from the rear of the indoor unit.
  - The bending radius should be 100 mm or more.
- 6 Pass the pipe through the hole in the wall.
- 7 Fix the indoor unit on the wall.Pass the cables, pipes and hose through the knock-out hole which would be connected to the outdoor unit.
- **8** Use 2 screws to fix the indoor unit as shown in the picture 2.
- **9** Assemble the Guide into the position of A or B as shown in the picture 3.

### NOTE

 The pipe will be insulated and fixed permanently into position after finishing the installation and the gas leak test.

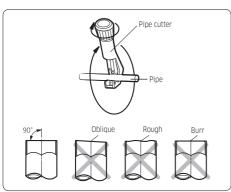
### **A** CAUTION

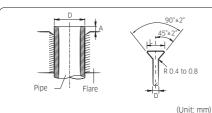
- Tighten the flare nut with a torque wrench according to specified method. If the flare nut is over-tightened, the flare may break and cause refrigerant gas leakage.
- Do not box in or cover the pipe connection. All refrigerant pipe connection must be easily accessible and serviceable.

#### Step 2.9 Optional: Installing DPM

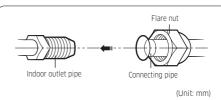
- When installing DPM,you should set "DPM setting" to the outdoor unit.
- If DPM model is not set,communication error may occur.
- While the outdoor unit is tracking the indoor unit for one minute after the power supply is turned on the operation may stop if the remote control reception signal of the installed indoor unit is different.
- When DPM is installed, Automatic Air-Volume function cannot be performed simultaneously for all indoor units. Automatic Air-Volume function must be performed for each indoor unit with the wired remote control attached.

## Step 2.10 Shortening or extending the refrigerant pipes (assembly pipe)





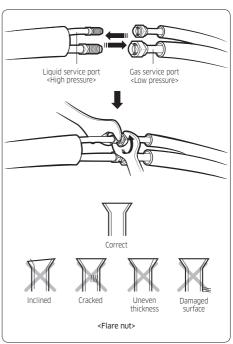
Outer diameter (D)	Depth (A)	Flare dimension (L)
ø 6.35	1.3	8.7 to 9.1
ø 9.52	1.8	12.8 to 13.2
ø 12.70	2.0	16.2 to 16.6
ø 15.88	2.2	19.3 to 19.7



Outer diameter (mm)	Torque (N•m)	Torque (kgf•cm)
ø 6.35	14 to 18	140 to 180
ø 9.52	34 to 42	350 to 430
ø 12.70	49 to 61	500 to 620
ø 15.88	68 to 82	690 to 830

### **∴** CAUTION

- If you need a pipe longer than specified in piping codes and standards, you must add refrigerant to the pipe. Otherwise, the indoor unit may freeze.
- While removing burrs, put the pipe face down to make sure that the burrs do not get in to the pipe.



## Indoor Unit Installation

## NOTE

 Excessive torque may cause gas leakage. When extending the pipe with welding or brazing, ensure that nitrogen is used during the welding or brazing process. The joint must be accessible and serviceable.

## **↑** CAUTION

 Tighten the flare nut at the specified torque. If the flare nut is over-tightened, it may break to cause leakage of refrigerant gas.

### Step 2.11 Fixing the installation plate

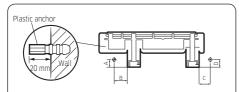
You can install the indoor unit on a wall, window frame, or gypsum board.

### **∴** WARNING

 Make sure that the wall, window frame, or gypsum board can withstand the weight of the indoor unit. If you install the indoor unit in a place where it is not strong enough to withstand the unit's weight, the unit could fall and cause injury.

#### When fixing the indoor unit on a wall

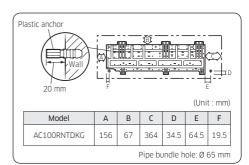
Fix the installation plate to the wall giving attention to the weight of the indoor unit.



(Unit: mm)

Model	Α	В	С	D
AC026RNADKG AC035RNADKG	36	60	65	36
AC052RNADKG	36	190	81	36
AC071RNADKG	33	110	110	33

Pipe bundle hole: Ø 65 mm



### NOTE

 If you mount the plate to a concrete wall using plastic anchors, make sure that gaps between the wall and the plate, created by projected anchor, is less than 20 mm.

#### When fixing the indoor unit on a window frame

- Determine the positions of the wooden uprights to be attached to the window frame.
- 2 Attach the wooden uprights to the window frame giving attention to the weight of the indoor unit.
- **3** Attach the installation plate to the wooden upright using tapping screws.

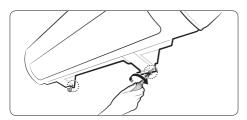
#### When fixing the indoor unit on a gypsum board

- 1 Use stud finder to find out locations of the studs.
- 2 Fix the plate hanger on two studs.

### **⚠** CAUTION

- If you fix the indoor unit on a gypsum board, use only specified anchor bolts on reference positions.
   Otherwise, the gypsum surrounding the joints may crumble over time and cause the screws to be loosened and stripped. This may Imead to physical injury or equipment damage.
- Search for other spots if there are less than two studs, or the distance between the studs are different from the plate hanger.
- Fix the installation plate without inclining to one side.

## Step 2.12 Fixing the indoor unit to the installation plate

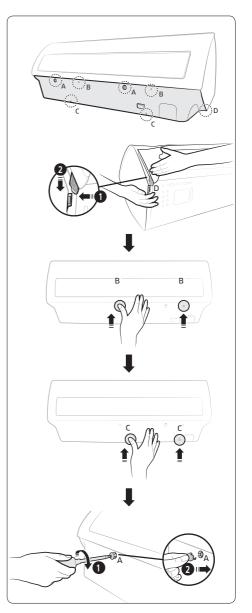


### **A** CAUTION

 Make sure that the pipe bundle does not move when you install the indoor unit onto the installation plate.

## Step 2.13 Assembling the cover panel (Only for AC\*\*\*RNADKG)

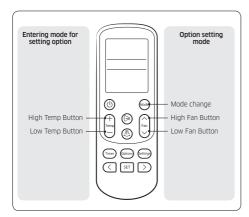
- Lock the side hooks (D), then centre hooks (B). Then lock the bottom hooks (C) to engage the cover panel in place.
- 2 Fasten the screw (A-1), then assemble the cap screws (A-2).



## 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.
- Please use the proper wireless remote controller which can set 24 digit option code.
- Please refer to the wired remote controller installation manual for setting with the wired remote controller.

## Common steps for setting the addresses and options



## NOTE

 The remote control display and buttons may vary depending on the model.

- 1 Enter the mode for setting the options:
  - a Remove the batteries from the remote control, and then insert them again.
  - b While holding down the (High Temp) and (Low Temp) buttons simultaneously, insert the batteries into the remote control.
  - c Make sure that you are entered to the mode for setting the options:

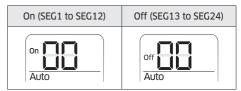


2 Set the option values.

## **↑** CAUTION

- The total number of available options are 24: SEG1 to SEG24.
- Because SEG1, SEG7, SEG13, and SEG19 are the page options used by the previous remote control models, the modes to set values for these options are skipped automatically.
- Set a 2-digit value for each option pair in the following order: SEG2 and SEG3 → SEG4 and SEG5 → SEG6 and SEG8 → SEG9 and SEG10 → SEG11 and SEG12 → SEG14 and SEG15 → SEG16 and SEG17 → SEG18 and SEG20 → SEG21 and SEG22 → SEG23 and SEG24

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



Take the steps presented in the following table:

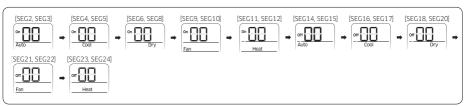
	Option setting	Status
1	Setting SEG2, SEG3 option  Press Low Fan button to enter SEG2 value.  Press High Fan button to enter SEG3 value.  Each time you press the button, $3 + 3 + \cdots + F$ will be selected in rotation.	On Auto  SEG2  SEG3
2	Setting Cool mode  Press Mode button to be changed to Cool mode in the ON status.	on Cool
3	Setting SEG4, SEG5 option  Press Low Fan button to enter SEG4 value.  Press High Fan button to enter SEG5 value.  Each time you press the button, □ • □ • □ • □ will be selected in rotation.  Setting Dry mode	On Cool  SEG4  SEG5
	Press Mode button to be changed to DRY mode in the ON status.	on Dry
5	Setting SEG6, SEG8 option  Press Low Fan button to enter SEG6 value.  Press High Fan button to enter SEG8 value.  Each time you press the button, $B * B * \cdots E * E$ will be selected in rotation.	on Dry  SEG6  SEG8
6	Setting Fan mode  Press Mode button to be changed to FAN mode in the ON status.	on Fan
7	Setting SEG9, SEG10 option  Press Low Fan button to enter SEG9 value.  Press High Fan button to enter SEG10 value.  Each time you press the button, 3 → 1 → E → F will be selected in rotation.	Fan SEG9 SEG10
8	Setting Heat mode  Press Mode button to be changed to HEAT mode in the ON status.	on Heat

## Setting an indoor unit address and installation option

	Option setting	Status
9	Setting SEG11, SEG12 option  Press Low Fan button to enter SEG11 value.  Press High Fan button to enter SEG12 value.  Each time you press the button, $\mathfrak{G} \bullet \mathfrak{H} \bullet \cdots \mathfrak{E} \bullet \mathfrak{E}$ will be selected in rotation.	On Heat  Heat  Heat  SEG11  SEG12
10	Setting Auto mode  Press Mode button to be changed to AUTO mode in the OFF status.	orr Auto
	Setting SEG14, SEG15 option  Press Low Fan button to enter SEG14 value.  Press High Fan button to enter SEG15 value.  Each time you press the button, 8 • 11 • ···· E • E will be selected in rotation.  Setting Cool mode	Off Auto  SEG14  SEG15
	Press Mode button to be changed to Cool mode in the OFF status.	Off Cool
13	Setting SEG16, SEG17 option  Press Low Fan button to enter SEG16 value.  Press High Fan button to enter SEG17 value.  Each time you press the button, □ • □ • · · · E • F will be selected in rotation.	off Cool  SEG16  SEG17
14	Setting Dry mode  Press Mode button to be changed to Dry mode in the OFF status.	Off
15	Setting SEG18, SEG20 option  Press Low Fan button to enter SEG18 value.  Press High Fan button to enter SEG20 value.  Each time you press the button,	off Dry  SEG18  Off Dry  Dry  SEG20
16	Setting Fan mode  Press Mode button to be changed to Fan mode in the OFF status.	off Fan

	Option setting	St	atus
17	Setting SEG21, SEG22 option  Press Low Fan button to enter SEG21 value.  Press High Fan button to enter SEG22 value.  Each time you press the button, 3 + 3 + ··· E + F will be selected in rotation.	off Fan SEG21	off Fan SEG22
18	Setting Heat mode  Press Mode button to be changed to HEAT mode in the OFF status.	Off He	eat
19	Setting SEG23, SEG24 option  Press Low Fan button to enter SEG23 value.  Press High Fan button for to enter SEG24 value.  Each time you press the button, 8 → 8 → E → F will be selected in rotation.	Heat SEG23	Off Heat SEG24

3 Check whether the option values that you have set are correct by pressing the button repeatedly.



- 4 Save the option values into the indoor unit:
  - Press the button with the direction of remote control for set. For correcting option values, input the option values twice
- 5 Check whether the air conditioner operates in accordance with the option values you have set:
  - a Reset the indoor unit by pressing the Reset button on the indoor or outdoor unit.
  - **b** Remove the batteries from the remote control, insert them again, and then press the button on the remote control.

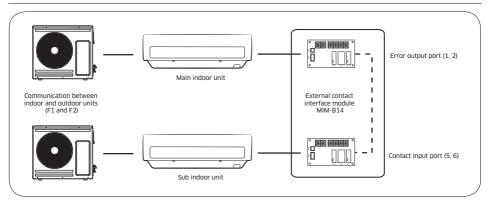
## Setting an indoor unit address and installation option

#### **Emergency Temperature Output (ETO) function**

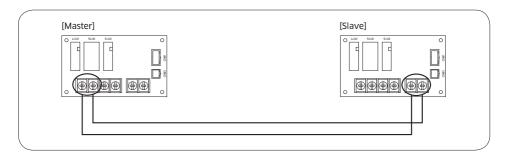
### 

- In order to deploy the ETO function, the MIM-B14, an external contact interface module, must be installed in each indoor unit.
- The ETO is a concept of emergency operation of indoor units. If the indoor unit 1 (main indoor unit) stops because of an error, the indoor unit 2 (sub indoor unit) starts to operate.
- Basically, the indoor unit 2 operates in the previous mode. [For the first time operation, it starts in 24 °C (75 °F) Auto
- To set more detailed operation conditions for the indoor unit 2, use the S-net Pro.

#### Setting up the ETO



- 1 Main indoor unit
  - Disable the external contact control (Default).
  - Connect the S-net pro2 to F1 and F2.
  - Enable the ETO function and set the temperature and time.
- Sub indoor unit
  - (Required) Enable the external contact control (with the installation option SEG14 Reverse Control).
  - Connect the S-net pro2 to F1 and F2.
  - Enable the entrance control and set the mode, set temperature, and fan speed.



#### ETO operation specifications

- 1 Main indoor unit
  - Based on the external contact control settings, the main indoor unit decides whether to generate output when an error (indoor unit stop) occurs.
  - Based on the ETO settings, the main indoor unit decides whether to generate output according to the temperature and time conditions.
- 2 Sub indoor unit
  - Based on the entrance control settings, the sub indoor unit decides the mode, set temperature, and fan speed when contact inputs are given.

	Enable of ETO	Enable of external contact	Error port output		
	X	X	N/A		
	X	0	Output due to an error		
Main indoor unit	0	Х	Output by ETO entrance conditions (temperature / time / error occurrence)		
	0	0	Output by ETO entrance conditions (temperature / time / error occurrence)		
			# Ready to control the main contact input		

	Enable of entrance control	Enable of external contact	Operation when outputting Main			
Sub indoor unit	X	X X N/A				
	X	0	O On with the previous operation conditions			
	0	0	On with the entrance control enabled			

## Setting an indoor unit address and installation option

#### Setting the indoor unit addresses

- 1 Make sure that the power is supplied to the indoor unit. If the indoor unit is not plugged in, it must include a power supply.
- 2 The panel(display) should be connected to an indoor unit to receive option.
- 3 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 indoor unit ADDRESS is set as "MAIN: O. RMC: O".
  - Set Main and RMC Address only the setting is required.
  - There is no need to assign the indoor unit Main Address if the outdoor unit is addressing automatically. The indoor unit Main address will follow the outdoor unit's automatically.
  - Assign 12 digit when setting the indoor unit address.
  - No need to assign SEG4, 5, 8, 10 which are non applicable. Even though those segments are set, they will be ignored.
  - If you set the applicable segments with numbers other than the indiciated, the initial setting will be maintained.

#### Option No.: 0AXXXX-1XXXXX-2XXXXX-3XXXXX

Option	SE	G1	SE	G2		SEG3	SEG4	SE	G5	SEG6	
Explanation	PA	GE	МО	DE	Setting	Main address				The unit digit of an indoor unit	
	Indication	Details	Indication	Details	Indication	Details				Indication	Details
Indication and Details					0 No Main RESERVED RI address	RESEI	RVED	0~3(ACN*)	Details		
and Betails	(	)	<i>A</i>	4	1	Main address setting mode				0~4 (AJN*)	A single digit
Option	SE	G7	SE	G8		SEG9	SEG10	SEG11		SEG12	
Explanation	PA	GE			Setting	Setting RMC address		Gro chann		Group a	address
	Indication	Details	RESE	DVED.	Indication	Details	RESERVED	Indication	Details	Indication	Details
Indication and Details			KESEI	KVED	0	No RMC address	RESERVED	RMC1	0~2	RMC2	0~F
	-				1	RMC address setting mode		RIVICI	0 2	RIVIC2	

\*SEG6: AJN\*\* models should check maximum installation indoor unit number of outdoor unit. (Indoor1: 0. Indoor2: 1. ~)

#### 

- When "A"~"F" is entered to SEG5~6, the indoor unit MAIN ADDRESS is not changed.
- 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 SEG6.
- 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

Example) If you want to set as "MAIN: 3, CHANNEL: 1, RMC: B",

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	А	1	-	-	3
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	-	1	-	1	В

assign option codes except SEG 1, 7 which are page options.











#### Setting the installation options in a batch

- 1 Make sure that the power is supplied to the indoor unit. If the indoor unit is not plugged in, it must include a power supply.
- 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.
  - No need to assign SEG3, 6, 9, 10, 11, 16, 21, 22, 23, 24 which are non applicable. Even though those segments
    are set, they will be ignored.
  - If you set the applicable segments with numbers other than the indiciated, the initial setting will be maintained.
- 4 Set the indoor unit option by wireless remote controller.

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

Option	SE	G1	SE	G2	SEG3	SE	G4	SEG5		SE	SEG6	
Explanation	PA	GE	МС	DE			external ure sensor	Use of cer	ntral control			
	Indication	Details	Indication	Details	RESERVED	Indication	Details	Indication	Details	RESE	RVFD	
Indication and details	,	<u> </u>		2	NEGETTES	0	Disuse	0	Disuse	11232		
	(	)	4	<u>′</u>		1	Use	1	Use			
Option	SEG7		SE	G8	SEG9	SEC	G10	SEG11		SEG12		
Explanation	PA	GE	Use of dr	ain pump							Group address	
	Indication	Details	Indication	Details						Indication	Details	
			0	Disuse							slave	
Indication and details	1	1	Use	RESERVED	RESERVED		RESERVED		1	master		
		ı	2	Use + 3minute delay								

## Setting an indoor unit address and installation option

Option	SEG13			SEG14		SEC	G15	SEC	516	SEC	G17	SEG18
Explanation	PA	GE	Use of	external	control		he output al control	S-Plas	ma ion	Buzzer	control	
	Indication	Details	Indication	Det	ails	Indication	Details	Indication	Details	Indication	Details	
			0	Disuse								
			1	On/Off	Slave,							
			2	Off	Existing Control							
			3	Window		0	Thermo	0	Dieueo	0	Use	
			4	Disuse		0	on		Disuse	0	036	
			5	On/Off	Master, Existing							
			6	Off	Control							RESERVED
Indication and details	2	,	7	Window						NESERVES		
	2		8	Disuse								
			9	On/Off	Slave, Reverse							
			А	Off	Control							
		В	Window		1	Operation on	1	Use	1	Disuse		
			С						Disuse			
			D	On/Off	Master, Reverse	e						
			E	Off	Control							
			F	Window								
Option	SEC	i19		SEG20			521	SEC	G22	SEC	G23	SEG24
Explanation	PA	GE		dual contr ote contr		Heating compe	setting nsation					
	Indication	Details	Indication	Det	ails	Indication	Details					
			0 or 1	Indo	or 1			5555	D) (ED	255	-D. (ED.	050501/50
Indication and details			2	Indo	or 2	0	Disuse	RESE	RVED	RESERVED		RESERVED
details	3	3	3	Indo	or 3							
			4	Indo	or 4	1	2°C					
						2	5°C					

If you input a number other than  $0^{\sim}4$  on the individual control of the indoor unit(SEG 20), the indoor is set as "Indoor 1". Example) If you want to set as "Exterior temperature sensor: USE, External control: USE

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

assign option codes except SEG 1, 7, 13, 19 which are page options.

\* Level control : The centralized controller can limit the functions and inputs of connected products with this function enabled.

[ Example: Operation mode limit (Cooling only/Heating only/No limitation), Heating temperature upper limit, Cooling temperature lower limit ]

To enable 'Level control' when applying the DPM with the centralized controller, appoint the master (Set 'Use of external control [SEG14] option to 4 or higher).

Example: When installing DPM (1 Outdoor unit with 4 indoor units)

Cond	lition		SEG 14					
External control	Level control	Indoor 1	door 1 Indoor 2 Indoor 3 Indoor 4		Result			
Def	ault		Not s	et (0)		Slave (All)		
Disuse	Use	4 Not set (0) Not set (0)		Not set (0)	Master (Indoor 1), Slave (Indoor 2,3,4)			
Use (Indoor 3)	Disuse	Not set (0) Not set (0) 1~3		Not set (0)	Slave (All)			
Use (Indoor 4)	Use	Not set (0)	Not set (0)	Not set (0)	5~7	Master (Indoor 4), Slave (Indoor 1,2,3)		

## Setting an indoor unit address and installation option

#### Changing the addresses and options individually

You can change each digit of set option.

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	anation PAGE		MODE The opti		l option SEG voi		G you will			The changed value		
In diameter	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
Indication and Details	0		[	)	Option mode	0~F	Tens' digit of SEG	0~9	Unit digit of SEG	0~9	The changed value	0~F

## NOTE

- · 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'.
   Example) 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	

## **Troubleshooting**

#### **Detection of errors**

- 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.

#### LED Display on the receiver & display unit

#### **LED Display**

- ◆ If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.
- When E108 error occurs, change the address and reset the system.Ex.) When address of the indoor unit #1 and #2 are set as 5, address of the indoor unit #1 will become 5 and indoor unit #2 will display E108, A002.

#### On Flickering X Off

		<u>LED Display</u>			
<u>Abnormal condition</u>	<u>Error</u> <u>code</u>	(1)	(4)	TURBO	
Error on indoor temperature sensor (Short or Open)	E121	×	•	×	
Error on Eva-in sensor (Short or Open)     Error on Eva-out sensor (Short or Open)     Discharge sensor error (Short or Open)	E122 E123 E126	•	•	×	
Indoor fan error	E154	×	×	•	
Error on outdoor temperature sensor (Short or Open)     Error on cond sensor     Error on discharge sensor     Other outdoor unit sensor error that is not on the above list	E221 E237 E251	•	×	•	
1. When there is no communication between the indoor • outdoor units for 2 minutes 2. Communication error received from the outdoor unit 3. 3 miniute tracking error on outdoor unit 4. Communication error after tracking due to unmatching number of installed units 5. Error due to repeated communication address 6. Communication address not confirmed Other outdoor unit communication error that is not on the above list	E101 E102 E202 E201 E108 E109	×	•	•	
Self diagnosis error display 1. Error due to opened EEV (2nd detection) 2. Error due to closed EEV (2nd detection) 3. Eva in sensor is detached 4. Eva out sensor is detached 5. Thermal fuse error (Open)	E151 E152 E128 E129 E198	•	•	•	

## Troubleshooting

	_	<u>LED Display</u>			
Abnormal condition	Error code	(1)	<b>(1)</b>	TURBO	
1. COND mid sensor is detached 2. Refrigerant leakage (2nd detection) 3. Abnomally high temperature on Cond (2nd detection) 4. Low pressure s/w (2nd detection) 5. Abnomally high temperature on discharged air on outdoor unit (2nd detection) 6. Indoor operation stop due to unconfirmed error on outdoor unit 7. Error due to reverse phase detection 8. Comp stop due to freeze detection (6th detection) 9. High pressure sensor is detached 10. Low pressure sensor is detached 11. Outdoor unit copression ration error 12. Outdoor sump down_1 prevetion control 13. Compressor down due to low pressure sensor prevention control_1 14. Simultaneous opening of cooling/heating MCU SOL valve (1st detection) 15. Simultaneous opening of cooling/heating MCU SOL valve (2nd detection) Other outdoor unit self-diagnosis error that is not on the above list	E241 E554 E450 E451 E416 E559 E425 E403 E301 E306 E428 E413 E410 E180	•	•	•	
EEPROM error	E162	•	•	•	

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