Contents

Safety precautions

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

- 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. Making such changes or improper connections may damage the units and 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 authorized centers or returned to the retailer so that it can be disposed of correctly and safely.
- Do not use the drain pipe or gas (liquid) pipe as a lift point for moving the unit.

Safety precautions

Installing the unit

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

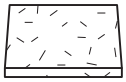
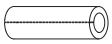
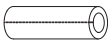
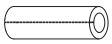
- Always make sure that the power supply is compliant with current safety standards. Always install the air conditioner in compliance with current local safety standards.
- Always verify that a suitable grounding connection is available.
- Verify that the voltage and frequency of the power supply comply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

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 install the air conditioner in following places.
  - 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.

Accessories

- The following accessories are supplied with the indoor unit.
- The type may differ depending on the specifications and it is subject to the actual type.

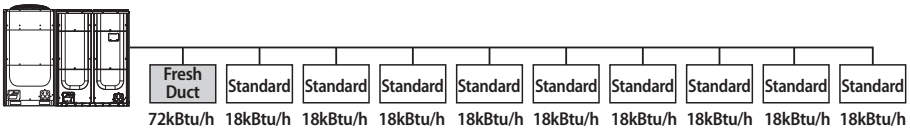
User manual (1) 	Installation manual (1) 	Clamp hose (1) 	Flexible hose (1) 	Insulation drain (1) 
Thermal insulation sponge A (1) 	Thermal insulation sponge B (1) 	Thermal insulation sponge C (1) 	Cable-tie (8) 	Rubber (8) 

Installation conditions for a fresh duct

Installation information on a fresh duct

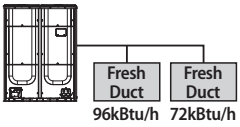
- A fresh duct can be installed wiith an indoor unit or with another fresh duct.
- A fresh duct should be installed within 50%~100% of outdoor unit's cooling capacity.
- If a fresh duct is installed with an indoor unit, the fresh duct should be installed within 30% of outdoor unit's cooling capacity.
- A fresh duct can be installed with HEAT PUMP outdoor unit but cannot be installed with HEAT RECOVERY outdoor unit.
  - e.g. A fresh duct 6ton(72kBtu/h) + Duct 18kBtu/h x 9 = 234kBtu/h
    Outdoor unit 6ton(72kBtu/h) + 14ton(168kBtu/h) = 240kBtu/h
    Indoor unit combination rate = 97.5% → O.K
    Fresh duct combination rate = 30% → O.K

Mixture Install
Outdoor : 240 kBtu/h



- Fresh duct 8ton(96kBtu/h) + Fresh duct 6ton(72kBtu/h) = 168kBtu/h
  Outdoor unit 14ton(168kBtu/h) = 168kBtu/h
  Fresh duct combination rate = 100% → O.K
  Indoor unit combination rate = 0% → O.K

Only Fresh Air Intake Unit install
Outdoor : 168 kBtu/h



Selecting the Installation Location

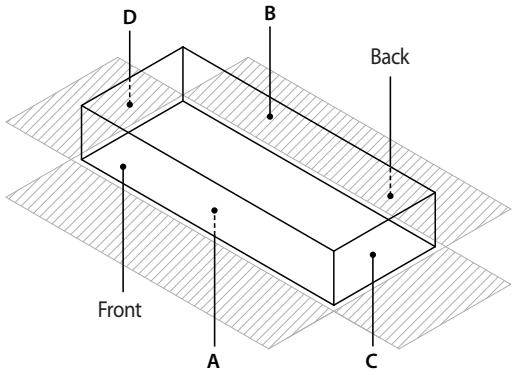
Indoor unit

- There must be no obstacles near the air inlet and outlet.
- Install and mount the indoor unit on a ceiling that can support its weight.
- Maintain sufficient clearance around the indoor unit.
- Make sure that the water drains from the hose properly and safely.
- The indoor unit must be installed in such way that it is out of commonly accessible area. (Not touchable by the users.)
- Durable walls which can't be shaken.
- Where it is not exposed to direct sunshine.
- Where the air filter can be removed and cleaned easily.
- Cautions on installation
  1) Do not install in crowded places. Please install in equipment spaces such as mechanical rooms and adopt measures to prevent noise and vibration.
  2) Adopt preventative measures to accommodate noise and vibration according to the ceiling installation condition (washroom, corridor).
  3) Separate air outlet shall be installed for the Fresh duct. Do not connect with the inlet of other indoor units, otherwise, the performance of air conditioner will be affected.
  4) Please purchase damper to adjust air volume and filter screen for installation.

CAUTION

- In principle, the unit should not be installed at an height of lower than 8.2ft (2.5m) from the ground.
- If the unit has proper pipe (11.8inch (300mm) in length or more) to avoid contact with the fan motor blower, it is possible to install the unit at a height of between 7.2~8.2ft (2.2~2.5m) from the ground.
- If the humidity is over 80%, it is required to add 10mm polyethylene foam or other similar insulation to the indoor unit when installing belt or pipe type indoor unit on the ceiling.

Insulation Guide



Thickness: more than 0.39inch (10mm)

Indoor Unit		A	B	C	D	Front / Back
AM072JNESCH AM096JNESCH	57.68"×33.86"×18.11" (1465×860×460)	53.54"×18.11" (1360×460)	53.54"×18.11" (1360×460)	33.86"×18.11" (860×460)	33.86"×18.11" (860×460)	Insulate the front and back side in proper size at the same time when insulating the suction duct and discharge duct.

- Insulate the end of the pipe and some curved area by using separate insulator.
- Insulate the discharge and suction part at the same time when you insulate connection duct.
- If the humidity is over 80%, it is required to add 0.39inch(10mm) polyethylene foam or other similar insulation to the indoor unit when installing belt or pipe type indoor unit on the ceiling.

Space requirements for indoor unit

▶ Construction Standard for Inspection Hole.

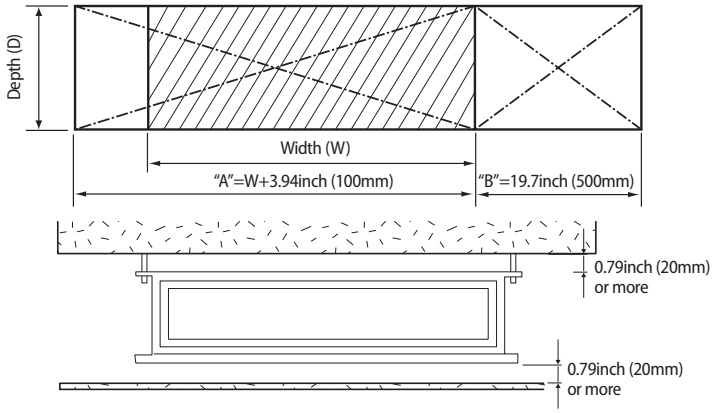
5) In case the ceiling is textile, inspection hole is not necessary.

6) In case the ceiling is plaster board, inspection hole depends on the inside height of the ceiling.

a. Height is more than 1.64ft (0.5m) : Only "B" [Inspection for PBA] is applied.

b. Height is less than 1.64ft (0.5m) : Both "A" & "B" are applied.

c. "A" & "B" are inspection holes.

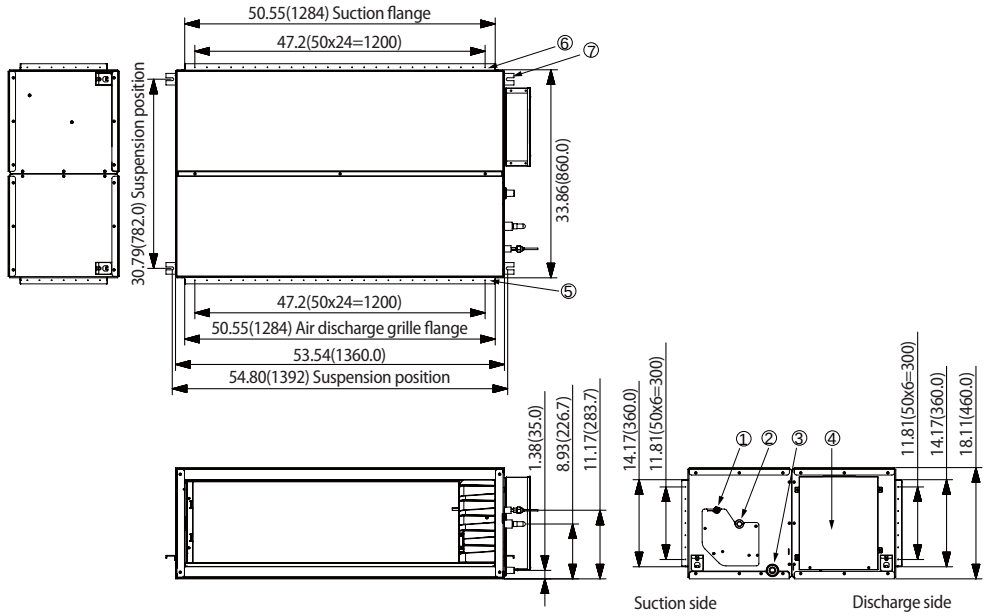


- You must have 0.79inch (20mm) or more space between the ceiling and the bottom of indoor unit. Otherwise, the noise from the vibration of indoor unit may bother the user.
- When the ceiling is under construction, the inspection hole must be made to enable servicing, maintenance and cleaning.
- The indoor unit should be installed at a height of 8.2ft (2.5m) and/or above ground.

Selecting the Installation Location

AM072JNESCH / AM096JNESCH

Unit : inch(mm)

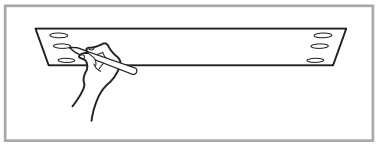


No.	Name	Description
1	Diameter of liquid pipe	ø9.52 (3/8")
2	Diameter of air pipe	AM072JNESCH : ø19.05 (3/4") AM096JNESCH : ø22.22 (7/8")
3	Diameter of drain pipe	VP25 (OD ø32 (1.26"), ID ø25 (0.98"))
	Diameter of drain pipe (Optional drain pump)	VP25 (OD ø32 (1.26"), ID ø25 (0.98"))
4	Power supply / Communication connection	
5	Air discharge grille flange	
6	Suction flange	
7	Hook	ø9.52 (3/8") or M10

Indoor Unit Installation

When deciding on the location of the air conditioner with the owner, the following restrictions must be taken into account.

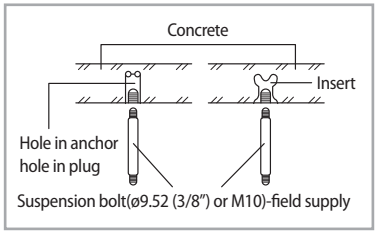
1. Place the pattern sheet on the ceiling at the spot where you want to install the indoor unit.



NOTE

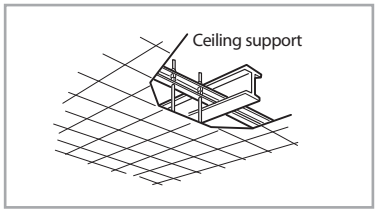
- Since the diagram is made of paper, it may shrink or stretch slightly due to temperature or humidity. For this reason, before drilling the holes maintain the correct dimensions between the markings.

2. Insert bolt anchors. Use existing ceiling supports or construct a suitable support as shown in figure.
3. Install the suspension bolts depending on the ceiling type.

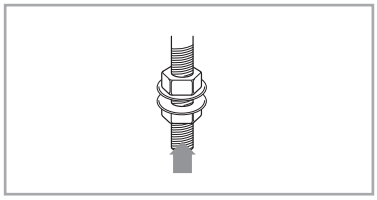


CAUTION

- Ensure that the ceiling is strong enough to support the weight of the indoor unit. Before hanging the unit, test the strength of each attached suspension bolt.
- If the length of suspension bolt is more than 4.92ft (1.5m), it is required to prevent vibration.
- If this is not possible, create an opening on the false ceiling in order to be able to use it to perform the required operations on the indoor unit.



4. Screw eight nuts to the suspension bolts making space for hanging the indoor unit.



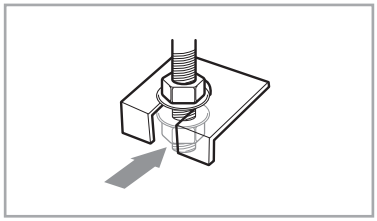
NOTE

- You must install all the suspension rods.

5. Hang the indoor unit to the suspension bolts between two nuts.

CAUTION

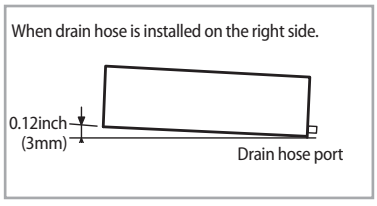
- Piping must be laid and connected inside the ceiling when suspending the unit. If the ceiling is already constructed, lay the piping into position for connection to the unit before placing the unit inside the ceiling.



6. Screw the nuts to suspend the unit.
7. Adjust level of the unit by using measurement plate for all 4 sides.

CAUTION

- For proper drainage of condensate, give a 0.12inch (3mm) slant to the left or right side of the unit which will be connected with the drain hose, as shown in the figure. Make a tilt when you wish to install the drain pump, too.
- •When installing the indoor unit, make sure it is not tilted toward front or back side.



Purging the Unit

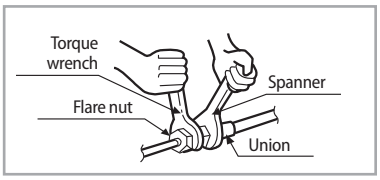
On delivery, the indoor unit is loaded with inert gas. All this gas must therefore be purged before connecting the assembly piping. To purge the inert gas, proceed as follows.

Unscrew the pinch pipe at the end of each refrigerant unit.

Result : All inert gas escapes from the indoor unit.

NOTE

- Since the diagram is made of paper, it may shrink or stretch slightly due to temperature or humidity. For this reason, maintain the correct measurements between the markings before drilling the holes.

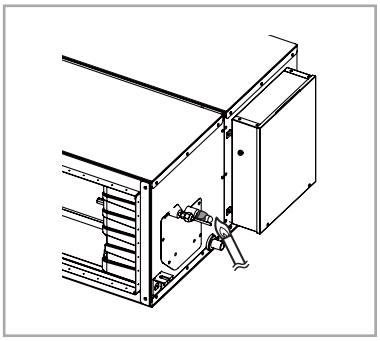


In order to perform leak check, the product has been filled with nitrogen. Discharge all the nitrogen before installation.

The liquid pipe and air pipe are connected by nuts and are welded, respectively. Unscrew the nuts of liquid pipe to clear the nitrogen and then disconnect the air pipe with welding flame.

CAUTION

- Welding without unscrewing the nuts of liquid pipe and while there is nitrogen present will result in explosion.
- Leak may occur when there is no nitrogen present after unscrewing the liquid pipe.
- Before installation, be sure to perform leak check.



✻ The design and shape are subject to change according to the model.

Connecting the Refrigerant Pipe

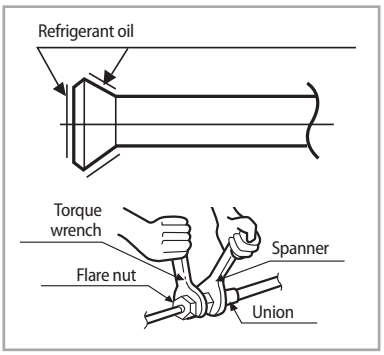
There are two refrigerant pipes of different diameters:

- A smaller one for the liquid refrigerant
- A larger one for the gas refrigerant
- The inside of copper pipe must be clean and has no dust.

The connection procedure for the refrigerant pipes varies according to the exit position of the pipes from the indoor unit, as seen when facing the indoor in the "A" side.

- Liquid refrigerant port
- Gas refrigerant port
- Drain hose port

1. Remove the pinch pipe on the pipes, connect the assembly pipes to each pipe and tighten the nuts. First tighten the nuts manually and then with a torque wrench applying the following torque.

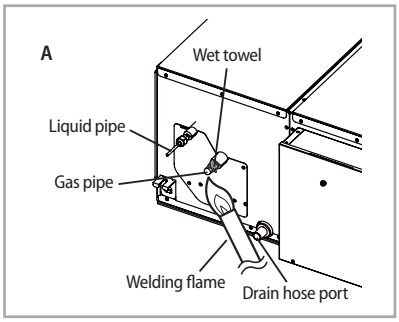


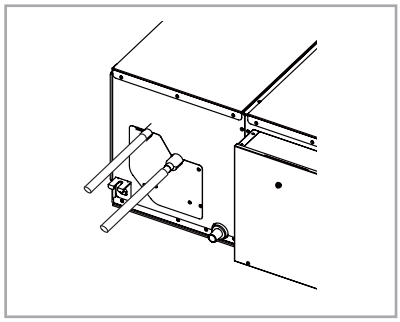
Outer Diameter		Torque		
mm	inch	kgf•cm	N•m	lbf•ft
6.35	1/4	140~180	14~18	10.3~13.3
9.52	3/8	350~430	34~42	25.1~31.0
12.70	1/2	500~620	49~61	36.1~45.0
15.88	5/8	690~830	68~82	50.2~60.5

NOTE
- Must apply refrigerant oil on the flaring area to prevent a leak.

2. Be sure that there must be no crak or kink on the bended area.

AM072JNESCH / AM096JNESCH





✻ Before connection, unscrew the nuts of liquid pipe first.
- Product is filled with nitrogen.

Model	Liquid pipe	Gas pipe	Description
AM072JNESCH	Ø9.52 (3/8")	Ø19.05 (3/4")	Gas pipe: Welded
AM096JNESCH	Ø9.52 (3/8")	Ø22.22 (7/8")	Gas pipe: Welded

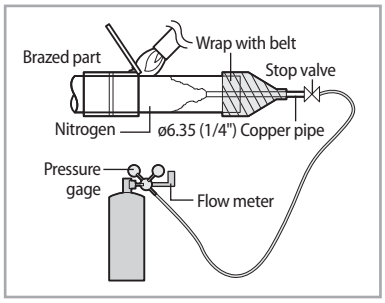
Connecting the Refrigerant Pipe

Welding copper pipe

- ▶ Make sure that there is no moisture inside the pipe.
- ▶ Make sure that there is no foreign substance inside the pipe.
- ▶ Make sure that there is no leakage.
- ▶ Make sure to follow the instruction while welding the copper pipe.

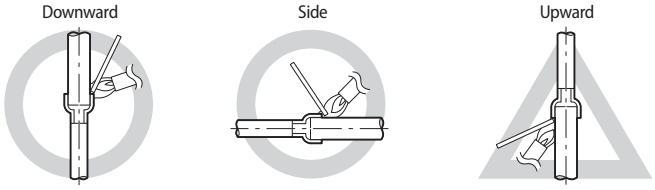
Fill nitrogen

1. Use nitrogen while welding the copper pipe, as shown in the figure.
2. If nitrogen is not used while welding the copper pipe, oxidation may be produced inside the pipe, causing damage to the compressor and valve.
3. Use pressure gage to adjust the filling speed and keep it within 0.05m^3/h.



Pipe direction upon welding of copper pipe

Place the marked side downward or on the level position while welding the copper pipe.

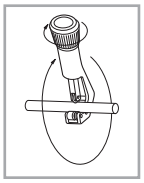
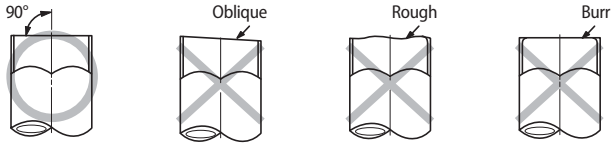


NOTE

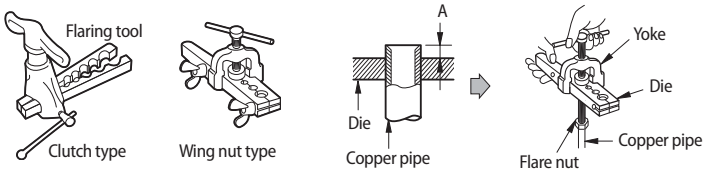
- Avoid welding pipe upward.

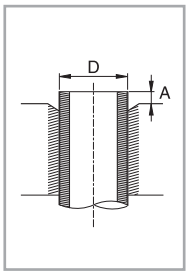
Cutting/Flaring the pipes

1. Make sure that you prepare the required tools (pipe cutter, reamer, flaring tool and pipe holder).
2. If you want to change the length of pipe, cut it using a pipe cutter ensuring that the cut edge remains at a right angle with the side of the pipe. There are some examples of correctly and incorrectly cut edges below.

3. To prevent a gas leak, remove all burrs at the cut edge of the pipe using a reamer.
4. Carry out flaring work using flaring tool as shown below.

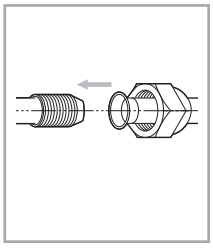


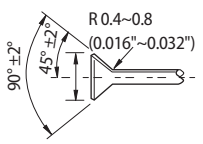


Outer Diameter (D)		A					
		R-410A Flare tool for clutch type		Conventional flare tool			
				Clutch type		Wing nut type	
mm	inch	mm	inch	mm	inch	mm	inch
6.35	1/4	0~0.5	0~0.02	1.0~1.5	0.04~0.06	1.5~2.0	0.06~0.08
9.52	3/8	0~0.5	0~0.02	1.0~1.5	0.04~0.06	1.5~2.0	0.06~0.08
12.70	1/2	0~0.5	0~0.02	1.0~1.5	0.04~0.06	1.5~2.0	0.06~0.08
15.88	5/8	0~0.5	0~0.02	1.0~1.5	0.04~0.06	1.5~2.0	0.06~0.08

5. Check if you flared the pipe correctly. There are some examples of incorrectly flared pipes below.

6. Align the pipes and tighten the flare nuts first manually and then with a torque wrench, applying the following torque.



Outer diameter		Torque			Flare dimension		Flare shape
mm	inch	kgf·cm	N·m	lbf·ft	mm	inch	
6.35	**1/4**	140~180	14~18	10.3~13.3	8.70~9.10	0.34~0.36	
9.52	**3/8**	350~430	34~42	25.1~31.0	12.80~13.20	0.50~0.52	
12.70	**1/2**	500~620	49~61	36.1~45.0	16.20~16.60	0.64~0.65	
15.88	**5/8**	690~830	68~82	50.2~60.5	19.30~19.70	0.76~0.78	

CAUTION

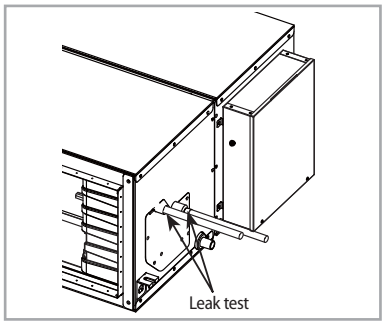
- In case of needing brazing, you must work with Nitrogen gas blowing.

Performing Leak Test & Heat Insulation

Leak test

In order to detect gas leak from the indoor unit, use nitrogen to check the connection areas of the refrigerant pipes.

NOTE
- Please refer to the leak test in the installation manual for the outdoor unit.



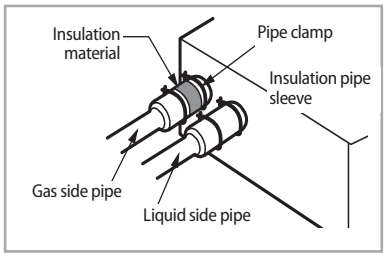
✻ The design and shape are subject to change according to the model.

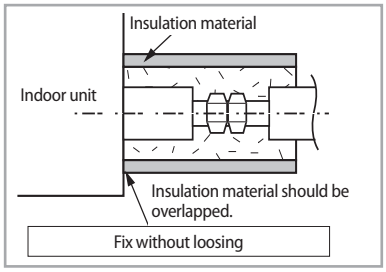
Insulation

1. Insulate the refrigerant pipe.

▶ Make sure to insulate the refrigerant pipe, connector and connection area.
- If the pipes are insulated, condensation will not come out from the piping and the capacity of Fresh duct will be increased.

▶ Check for cracks in the insulation cover pipe out at the bended area.





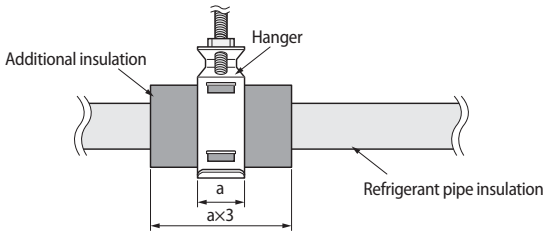
2. Select the insulation of refrigerant pipe.

- ▶ Insulate the gas side and liquid side pipe referring to the thickness according to the pipe size.
- ▶ Indoor temperature of 30°C (86°F) and humidity of 85% is the standard condition. If installing in a high humidity condition, use one grade thicker insulator by referring to the table below. If installing in an unfavorable condition, use thicker insulator.
- ▶ Insulation's heat-resistance temperature should be more than 120°C (248°F).

Pipe	Pipe size		Installation type (Heating/Cooling)				Remarks
			Standard [30°C (86°F),85%]		High humidity [30°C (86°F), over 85%]		
			EPDM, NBR				
	mm	inch	mm	inch	mm	inch	
Liquid pipe	Ø6.35 ~ Ø9.52	1/4~3/8	9t	**3/8**	9t	**3/8**	
	Ø12.7 ~ Ø50.80	1/2~2	13t	**1/2**	13t	**1/2**	
Gas pipe	Ø6.35	1/4	13t	**1/2**	19t	**3/4**	
	Ø9.52	3/8	19t	**3/4**	25t	**1**	Internal temperature is higher than 120°C (248°F)
	Ø12.70	1/2					
	Ø15.88	5/8					
	Ø19.05	3/4					
	Ø22.23	7/8					
	Ø25.40	1					
	Ø28.58	9/8			32t	5/4	
	Ø31.75	5/4					
	Ø38.10	3/2					
	Ø44.45	7/4					
	Ø50.80	2	25t	**1**	38t	3/2	

CAUTION

- The insulation must be installed diligently and the adhesives should be used on the connecting part to prevent moisture from entering.
- Wind the refrigerant pipe with insulation tape if it is exposed to outside sunlight.
- Insulation mustn't become thinner at the bent part or the hanging area of the refrigerant pipe.
- Add the additional insulation if the insulation plate gets thinner.

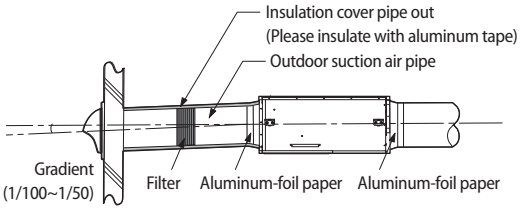


Air Pipe Installation

1. Use hose (provided on site) to connect the adapter at the suction/discharge side.
   Please use aluminum-foil paper to seal the connection area of air pipe to avoid gas leak.

CAUTION
- For installation, tilt the suction side of air pipe to avoid water accumulation.

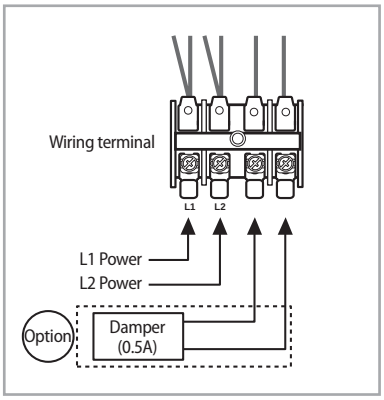
2. Insulate the air pipe to avoid condensation.



CAUTION
- Filter must be installed at the air inlet. Buy filter with a dust collection efficiency of over 50% (standard of weight method) and install.
- If the sealing material is not tidy or tight, abnormal situation may occur during operation.

Connection method of external load

1. Damper can be installed if necessary when connecting to the Fresh duct.
2. Install damper from outside and the damper will work with the Fresh duct.

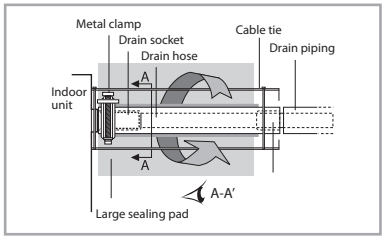


Drain Pipe and Drain Hose Installation

Care must be taken when installing the drain hose for the indoor unit to ensure that any condensation is correctly drained outside. The drain hose can be installed to the left or right side of the base pan.

1. Install the drain hose as short as possible.

NOTE
- In order to discharge condensation water, the drain hose should keep tilted.
- Secure the drain hose with the cable-tie not to be separated from the unit.
- The drain pump connection port is used when using a drain pump.

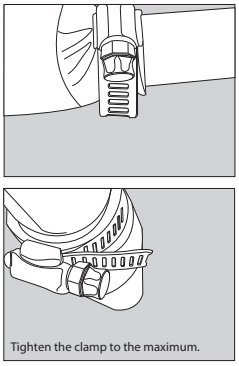


2. When there is no draining pump, insulate the drain hose and then fix it as a picture.

NOTE
- Insert the drain hose to bottom of the outfall of water basin.
- Lock steel ring of the drain hose according to the figure.
- Wind and wrap steel ring and drain hose fully with thermal insulation sponge; fix both ends of external layer with ribbon for thermal insulation.
- After being installed, drain hose must be insulated fully by heat insulating material.(To be provided at site.)

3. While using draining pump, insulate the drain hose with heat insulating material according to the figure.

NOTE
- Check if the rubber ring is installed properly on the draining pump.
- Check if the drain cap blocks the outfall of drain pan properly.

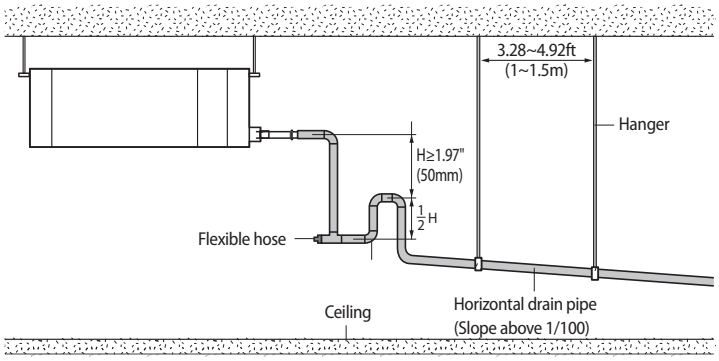


Drain Pipe and Drain Hose Installation

Connecting Drain Pipe

Without the drain pump

1. Install horizontal drain pipe with a slope of 1/100 or more and fix it by hanger space of 3.28~4.92ft (1.0~1.5m).
2. Install U-trap at the end of the drain pipe to prevent odor to reach the indoor unit.
3. The drain pipe should not be installed at an upward position; it may cause water flowing back to the unit.



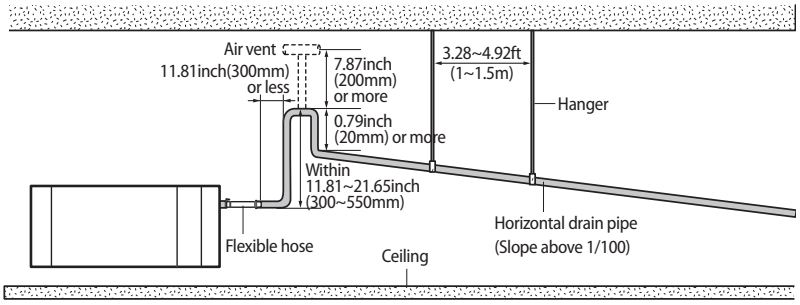
With the drain pump

1. The drain pipe should be installed within 11.81inch(300mm) to 21.65inch(550mm) from the flexible hose and then lift down 0.79inch(20mm) or more.
2. Install horizontal drain pipe with a slope of 1/100 or more and fix it by hanger space of 3.28~4.92ft (1.0~1.5m).
3. Install the air vent in the horizontal drain pipe to prevent water flow back to the indoor unit.

NOTE

- You may not need to install it if there were proper slope in the horizontal drain pipe.

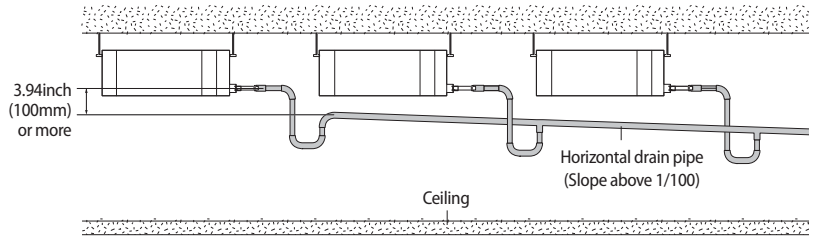
4. The flexible hose should not be installed at an upward position; it may cause water flowing back to the indoor unit.



Centralized drainage

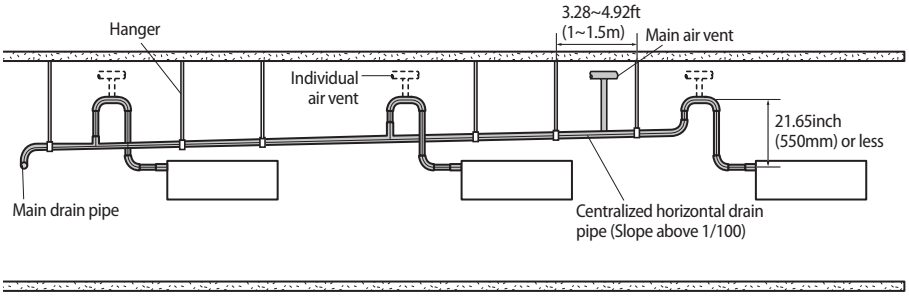
Without the drain pump

1. Install horizontal drain pipe with a slope of 1/100 or more and fix it by hanger space of 3.28~4.92ft (1~1.5m).
2. Install U-trap at the end of the drain pipe to prevent odor to reach the indoor unit.
3. The drain pipe should not be installed at an upward position; it may cause water flowing back to the unit.



With the drain pump

1. Install main air vent at the front of the farthest indoor unit from the main drain pipe when installed indoor units are more than 3.
2. You may need to install individual air vent to prevent water flow back at the top of each indoor unit drain pipe.



Drain Pipe and Drain Hose Installation

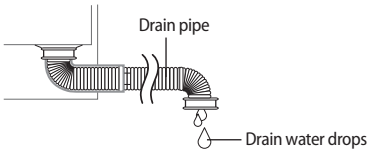
Testing the drainage

After installation, test the drainage. Prepare about 2 liters of water.

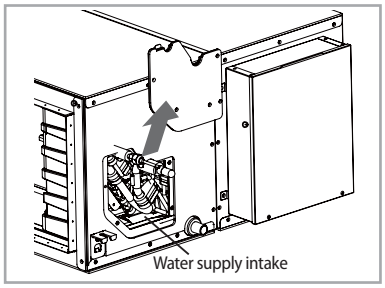
1. Unscrew the screws of pipe cover and remove the cover.
2. Pour water into the indoor unit as shown in the figure.

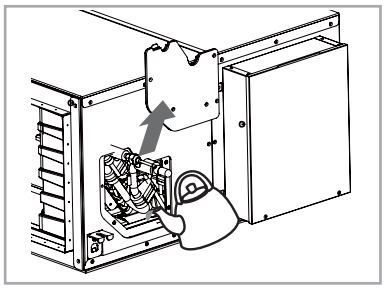
NOTE
- Please refer to the leak test in the installation manual for the outdoor unit.

3. Confirm that the water flows out through the drain hose.
4. When the drain pump is installed, operate the unit in cooling mode and check the pumping operation of the drain pump.
5. Check the water drops draining at the end of the drain pipe.



6. Make sure there is no water leak at the drainage.
7. Reassemble the cover of water supply intake.





✻ The design and shape are subject to change according to the model.

Wiring Work

Power and communication cable connection

1. Before wiring work, you must turn off all power source.
2. Indoor unit power should be supplied through the breaker (MCCB: Molded Case Circuit Breaker, ELB: Earth Leakage Breaker, ELCB: Earth Leakage Circuit Breaker) separated by the outdoor power.

   MCCB: overcurrent protection

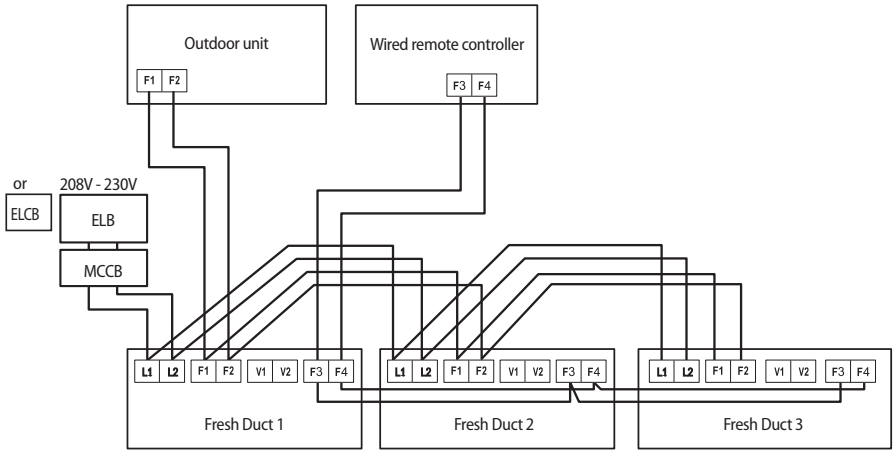
   ELB: earth leakage protection

   ELCB: overcurrent protection + earth leakage protection
3. The power cable should only use copper wires.
4. Connect the power cable {1(L), 2(N)} among the units and communication cables (F1, F2). The maximum length of cables shall be 3281ft (1000m).
5. When installing the wired remote control, connect F3 and F4 (for communication).
   (Indoor PBA will be damaged if V1, V2, F3, F4 are shorted out.)
6. Installation conditions for a wired remote controller

- ▶ A fresh duct and an indoor unit should not be installed by one wired remote controller.
- ▶ The fresh duct has a different operation mode, temperature setting, etc. Therefore, if the fresh duct and an indoor unit are installed by one wired remote controller, a problem may occur.
- ▶ Installation between fresh ducts can be controlled by one wired remote controller.

Example of correct installation

Installation between fresh ducts



✻ ELCB : Essential installation.

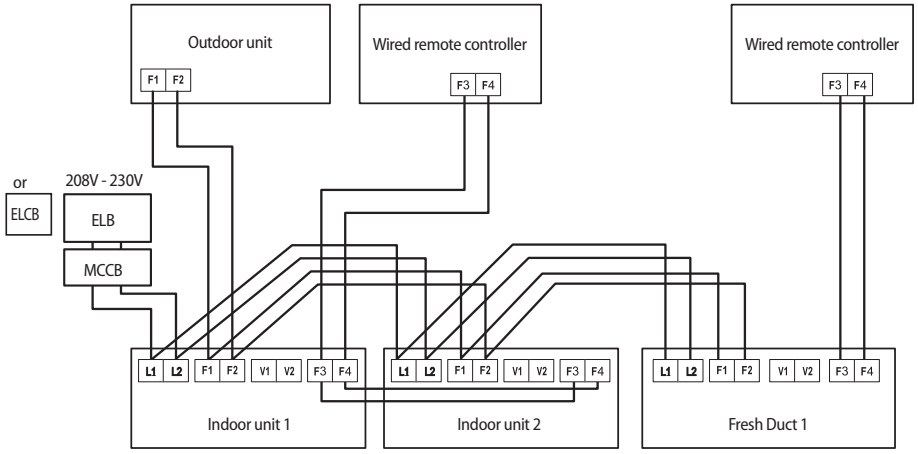
WARNING

- Power off before connecting any wire. Indoor PBA will be damaged if V1, V2, F3, F4 are shorted out.

NOTE

- Installation between fresh ducts can be controlled by one wired remote controller.

Wiring Work



✻ ELCB : Essential installation.

WARNING

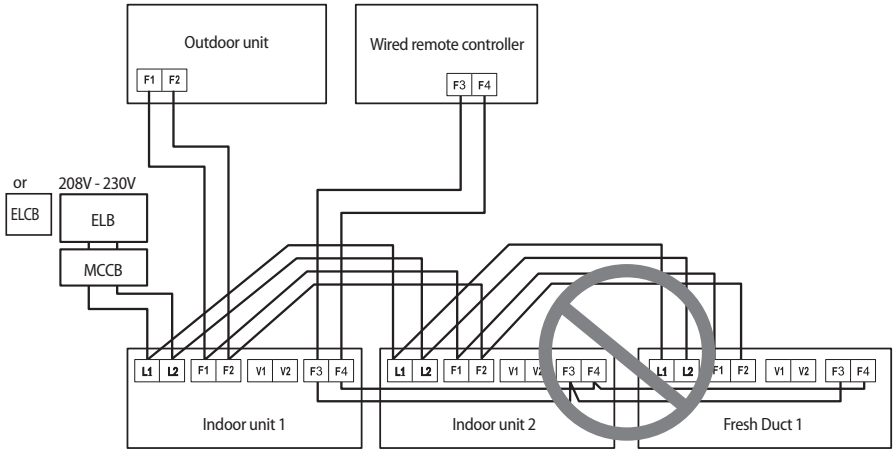
- Power off before connecting any wire. Indoor PBA will be damaged if V1, V2, F3, F4 are shorted out.

NOTE

- If indoor units are mixed with fresh ducts, they should not be controlled by one wired remote controller.

Example of incorrect installation

Installation between a fresh duct and an indoor unit



✻ ELCB : Essential installation.

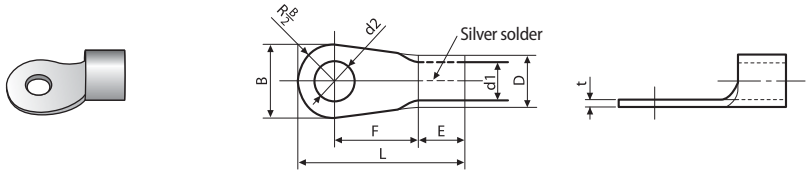
WARNING

- Power off before connecting any wire. Indoor PBA will be damaged if V1, V2, F3, F4 are shorted out.

NOTE

- If indoor units mixed with fresh ducts are controlled by one wired remote controller, a problem may occur due to different operation specification.

Selecting compressed ring terminal



Norminal dimensions for cable [inch² (mm²)]		0.0023 (1.5)		0.0039 (2.5)		0.0062 (4)
Norminal dimensions for screw [inch (mm)]		0.16 (4)	0.16 (4)	0.16 (4)	0.16 (4)	0.16 (4)
B	Standard dimension [inch (mm)]	0.26 (6.6)	0.31 (8)	0.26 (6.6)	0.33 (8.5)	0.37 (9.5)
	Allowance [inch (mm)]	±0.0079 (±0.2)		±0.0079 (±0.2)		±0.0079 (±0.2)
D	Standard dimension [inch (mm)]	0.13 (3.4)		0.17 (4.2)		0.22 (5.6)
	Allowance [inch (mm)]	+0.012 (+0.3) -0.0079 (-0.2)		+0.012 (+0.3) -0.0079 (-0.2)		+0.012 (+0.3) -0.0079 (-0.2)
d1	Standard dimension [inch (mm)]	0.067 (1.7)		0.091 (2.3)		0.134 (3.4)
	Allowance [inch (mm)]	±0.0079 (±0.2)		±0.0079 (±0.2)		±0.0079 (±0.2)
E	Min. [inch (mm)]	0.16 (4.1)		0.24 (6)		0.24 (6)
F	Min. [inch (mm)]	0.24 (6)		0.24 (6)		0.20 (5)
L	Max. [inch (mm)]	0.63 (16)		0.69 (17.5)		0.79 (20)
d2	Standard dimension [inch (mm)]	0.17 (4.3)		0.17 (4.3)		0.17 (4.3)
	Allowance [inch (mm)]	+0.0079 (+0.2) 0 (0)		+0.0079 (+0.2) 0 (0)		+0.0079 (+0.2) 0 (0)
t	Min. [inch (mm)]	0.028 (0.7)		0.031 (0.8)		0.035 (0.9)

Specification of electric wire

Power supply	MCCB	ELB or ELCB	Power cable	Earth cable	Communication cable
Max.: 253V Min.: 187.2V	XA	XA, 30mmA 0.1 s	0.0039inch² (2.5mm²)	0.0039inch² (2.5mm²)	0.0012~0.0023inch² (0.75~1.5mm²)

✻ Rating current

Unit	Model	Rating current	Remarks
AM✻✻✻JNESCH✻✻✻	✻✻072✻✻	2.6A	-
	✻✻096✻✻	3.1A	-

▶ Decide the capacity of ELCB or MCCB and ELB by the following formula.

The capacity of ELCB or MCCB and ELB X[A] = 1.25 X 1.1 X ∑Ai

✻ X : The capacity of ELCB or MCCB and ELB

✻ ∑Ai : Sum of rating currents of each indoor unit.

✻ Refer to each installation manual about the rating current of indoor unit.

Wiring Work

▶ Decide the power cable specification and maximum length within 10% power drop among the indoor units.

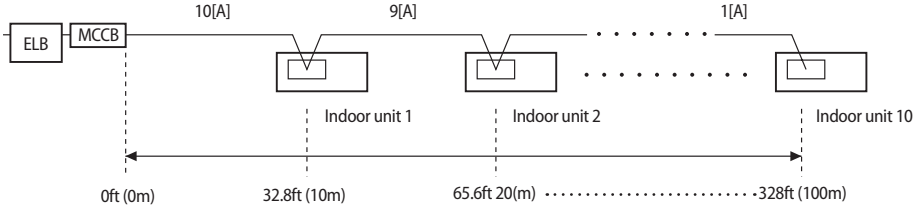
$$\sum_{k=1}^{n}\left(\frac{\text{Coef}\times 35.6\times Lk\times ik}{1000\times Ak}\right) < \text{10\% of input voltage[V]}$$

❋ coef: 1.55

❋ Lk: Distance among each unit [m], Ak: Power cable specification [mm²]
ik: Running current of each unit [A]

Example of Installation

- Total power cable length L = 328ft (100m), Running current of each units 1[A]
- Total 10 indoor units were installed

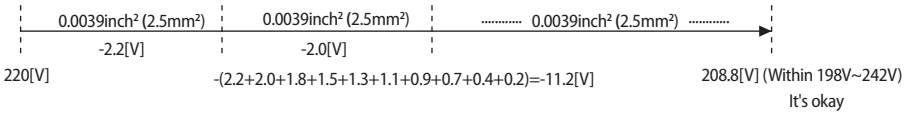


▶ Use the following formula

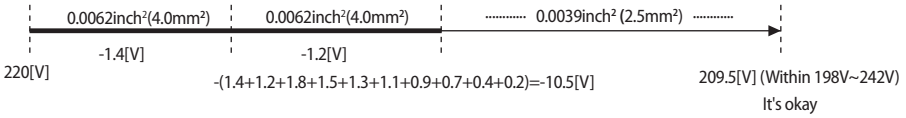
$$\sum_{k=1}^{n}\left(\frac{\text{Coef}\times 35.6\times Lk\times ik}{1000\times Ak}\right) < \text{10\% of input voltage [V]}$$

❋ Calculation

• Installing with 1 sort wire.



• Installing with 2 different sort wire.



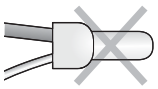
CAUTION

- Select the power cable in accordance with relevant local and national regulations.
- Wire size must comply with local and national code.
- Power Supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F or IEC:60245 IEC 66/ CENELEC: H07RN-F)
- You should connect the power cable into the power cable terminal and fasten it with a clamp.
- The unbalanced power must be maintained within 10% of supply rating among all indoor units.
- If the power is significantly unbalanced, it may shorten the life of the condenser. If the unbalanced power exceeds 10% of power rating, the indoor unit will stop operation due to its built-in protection and display an error code.
- To protect the product from water and possible shock, you should properly protect the power cable and the maintain the connection cord of the indoor and outdoor units in good protection.
- Connect the power cable to the auxiliary circuit breaker. All disconnection points from the power supply must be jointed as one single wire and its length should be over 0.12inch (3mm).
- You must keep the cable in a protection tube.
- Keep distances of 1.97inch (50mm) or more between power cable and communication cable.
- The maximum length of power cables are decided within 10% of power drop. If it exceeds, you must consider another power supplying method.
- The circuit breaker (MCCB or ELCB) should be considered more capacity if many indoor units are connected from one circuit breaker.
- Use round pressure terminal for connections to the power terminal block.
- For wiring, use the designated power cable and connect it firmly, then secure it to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.
- Over-tightening the terminal screws may break them.
- See the table below for tightening torque for the terminal screws.

Tightening torque			
M4	12.0~18.0 kgf•cm	1.2~1.8 N•m	0.89~1.3 lbf·ft

WARNING

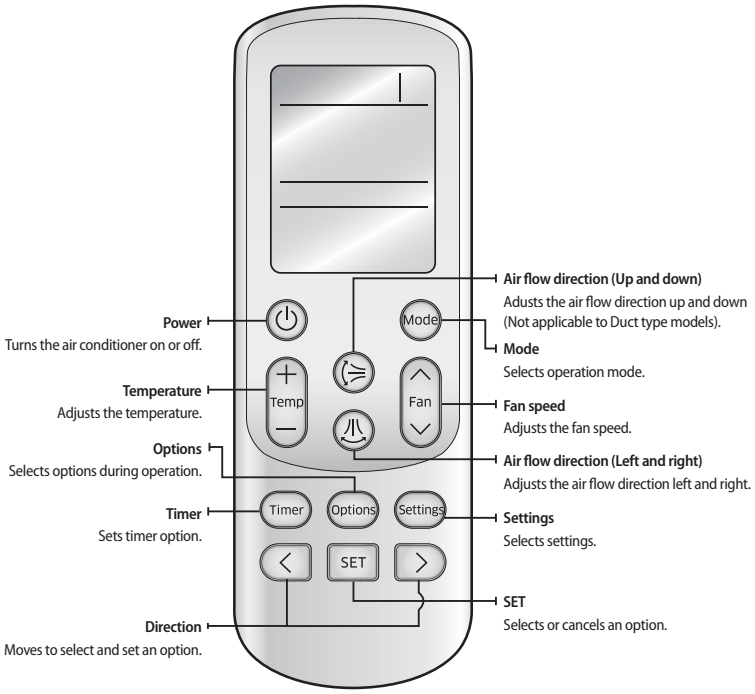
- In case of extending the electric wire, please DO NOT use a round-shaped pressing socket.
  - Incomplete wire connections can cause electric shock or a fire.



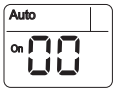
Setting an indoor unit address and installation option

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.

The procedure of option setting



Step 1. Entering mode to set option

1. Remove batteries from the remote controller.
2. Insert batteries and enter the option setting mode while pressing High Temp button and Low Temp button. 
3.  Check if you have entered the option setting status.

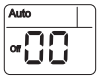
Step 2. The procedure of option setting

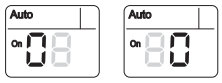
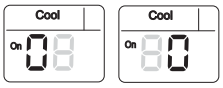
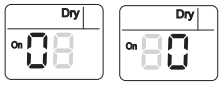
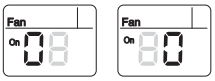
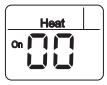
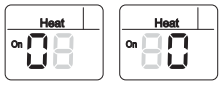
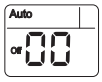
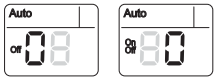
After entering the option setting status, select the option as listed below.

CAUTION

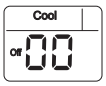
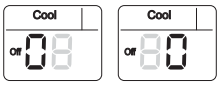
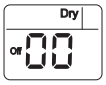
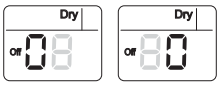
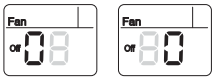
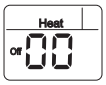
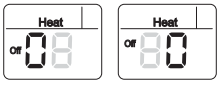
- **Option setting is available from SEG1 to SEG 24**
- **SEG1, SEG7, SEG13, SEG19 are not set as page option.**
- **Set the SEG2~SEG6, SEG8~SEG12 as ON status and SEG14~18, SEG20~24 as OFF status.**

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

On(SEG1~12)	Off(SEG13~24)
	

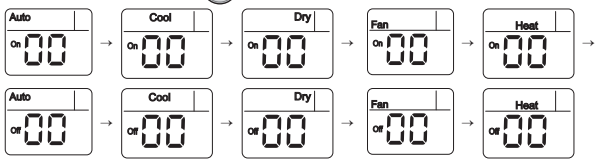
Option setting	Status
1. Setting SEG2, SEG3 option Press Low Fan button(∨) to enter SEG2 value. Press High Fan button(∧) to enter SEG3 value. Each time you press the button, 0→1→ ··· E→F will be selected in rotation.	 SEG2 SEG3
2. Setting Cool mode Mode Press Mode button to be changed to Cool mode in the ON status.	
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, 0→1→ ··· E→F will be selected in rotation.	 SEG4 SEG5
4. Setting Dry mode Mode Press Mode button to be changed to DRY mode in the ON status.	
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, 0→1→ ··· E→F will be selected in rotation.	 SEG6 SEG8
6. Setting Fan mode Mode Press Mode button to be changed to FAN mode in the ON status.	
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, 0→1→ ··· E→F will be selected in rotation.	 SEG9 SEG10
8. Setting Heat mode Mode Press Mode button to be changed to HEAT mode in the ON 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, 0→1→ ··· E→F will be selected in rotation.	 SEG11 SEG12
10. Setting Auto mode Mode Press Mode button to be changed to AUTO mode in the OFF status.	
11. 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, 0→1→ ··· E→F will be selected in rotation.	 SEG14 SEG15

Setting an indoor unit address and installation option

Option setting	Status
12. Setting Cool mode Mode Press Mode button to be change to Cool mode in the OFF status.	
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, 0 → 1 → ··· E → F will be selected in rotation.	 SEG16 SEG17
14. Setting Dry mode Mode Press Mode button to be change to Dry mode in the OFF status.	
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, 0 → 1 → ··· E → F will be selected in rotation.	 SEG18 SEG20
16. Setting Fan mode Mode Press Mode button to be change to Fan mode in the OFF status.	
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, 0 → 1 → ··· E → F will be selected in rotation.	 SEG21 SEG22
18. Setting Heat mode Mode Press Mode button to be change to HEAT mode in the OFF status.	
19. Setting SEG23, SEG24 mode Press Low Fan button(∨) to enter SEG23 value. Press High Fan button(∧) to enter SEG24 value. Each time you press the button, 0 → 1 → ··· E → F will be selected in rotation.	 SEG23 SEG24

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.



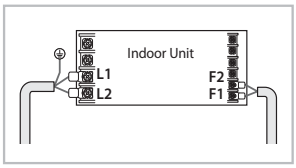
Step 4. Input option

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

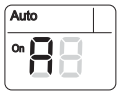
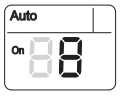
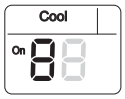
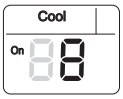
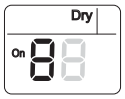
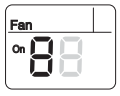
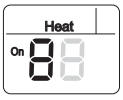
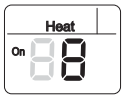
1. Reset the indoor unit by pressing the RESET button of indoor unit or outdoor unit.
2. Take the batteries out of the remote controller and insert them again and then press the operation button.

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.
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 setting status of indoor unit ADDRESS(MAIN/RMC) is "0A0000-100000-200000-300000".

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

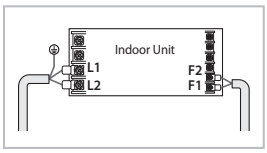
Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		Mode		Setting Main address		100-digit of indoor unit address		10-digit of indoor unit		The unit digit of an indoor unit	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		A		0	No Main address	0~9	100-digit	0~9	10-digit	0~9	A unit digit
					1	Main address setting mode						
Option	SEG7		SEG8		SEG9		SEG10		SEG11		SEG12	
Explanation	PAGE		—		Setting RMC address		—		Group channel(*16)		Group address	
Remote Controller Display												
Indication and Details	Indication	Details			Indication	Details			Indication	Details	Indication	Details
	1				0	No RMC address			RMC1	0~F	RMC2	0~F
					1	RMC address setting mode						

CAUTION

- **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 SEG5~6.**
- **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.**
- **You cannot set SEG11 and SEG12 as F value at the same time.**

Setting an indoor unit address and installation option

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 "020010-100000- 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.

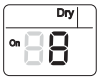
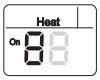
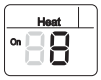
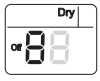
■ *02 series installation option*

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	2	-	-	Central control	-
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	Drain pump	-	-	EEV Step when heating stops	Master / Slave
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	External control	External control output	-	-	Number of hours using filter
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	-	Heating setting compensation	EEV Step of stopped unit during oil return/defrost mode	-	-

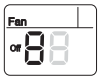
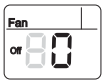
- ▶ 1 WAY / 2WAY / 4WAY, DUCT MODEL : Number of hours using filter(SEG18) will be set to '1000 hour' even if the SEG18 is set to exept for 2 or 6.
- ▶ When setting the option other than above SEG values, the option will be set as "0".
- ▶ SEG5 central control option is basically set as 1 (Use), so you don't need to set the central control option additionally. However, if the central control is not connected but it doesn't indicate an error message, you need to set the central control option as 0 (Disuse) to exclude the indoor unit from the central control.

■ *02 series installation option(Detailed)*

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

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		-		-		Use of central control		-	
Remote Controller Display					-		-				-	
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		2		-	-	-	-	0	Disuse	-	-
									1	Use		
Option	SEG7		SEG8		SEG9		SEG10		SEG11		SEG12	
Explanation	PAGE		Use of drain pump		-	-	-		EEV Step when heating stops		Master / Slave	
Remote Controller Display					-	-	-					
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	1		0	Disuse	-	-	-	-	0	Default value	0	slave
			1	Use					1	Noise decreasing setting	1	master
			2	When an indoor unit stops, drain pump will operate for 3min.								
Option	SEG13		SEG14		SEG15		SEG16		SEG17		SEG18	
Explanation	PAGE		Use of external control		Setting the output of external control		-		-		Number of hours using filter	
Remote Controller Display							-		-			
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	2		0	Disuse	0	Thermo on	-	-	-	-	2	1000 Hour
			1	ON/OFF control	1	Operation on					6	2000 Hour
			2	OFF control								
			3	Window ON/OFF control								

Setting an indoor unit address and installation option

Option	SEG19		SEG20		SEG21		SEG22		SEG23		SEG24	
Explanation	PAGE		-		Heating setting compensation		EEV Step of stopped unit during oil return/ defrost mode		-		-	
Remote Controller Display	-		-						-		-	
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	3		-	-	0	Disuse	0	Default value	-	-	-	-
					1	2℃	1	Oil return or Noise decreasing in defrost mode				
					2	5℃						

* Advanced function: Controlling cooling/heating current or power saving with motion detect.

(*1) Minimizing fan operation when thermostat is off
- Fan operates for 20 seconds at an interval of 5 minutes in heat mode.

(*2) 1: Fan is turned on continually when the hot water heater is turned on,
3: Fan is turned off when the hot water heater is turned on with cooling only indoor unit
Cooling only indoor unit: To use this option,install the Mode Select switch(MCM-C200) on the outdoor unit and fix it as cool mode.

(*3) When the following 2 or 3 is used as external heater On/Off signal, the signal for monitoring external contact control will not be output.
2: Fan is turned on continually when the external heater is turned on,
3: Fan is turned off when the external heater is turned on with cooling only indoor unit
Cooling only indoor unit: To use this option,install the Mode Select switch(MCM-C200) on the outdoor unit and fix it as cool mode.

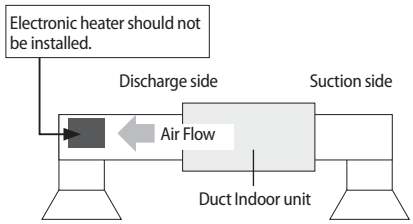
- If Fan is set to off for cooling only indoor unit by setting the SEG9=3 or SEG15=3, you need to use an external sensor or wired remote controller sensor to detect indoor temperature exactly.

(*4) Default setting value
- 4Way Cassette, Mini 4Way Cassette: 5 ℃
- Other indoor units: 2 ℃

(*5) This function can be applied to 4 Way Cassette and Mini 4 Way Cassette only. If the air conditioner operates the heating mode immediately after finishing the cooling mode, the condensated water in the drain pan becomes water vapor by the heat of the indoor unit heat exchanger. Since the water vapor might be condensed on the indoor unit, which may fall into a living space, use this function to get rid of the water vapor out of the indoor unit by operating the fan (for maximum 20 minutes) even when the indoor unit is turned off after cooling mode is turned to heating mode .

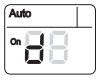
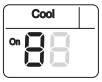
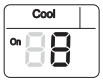
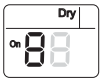
CAUTION

- Do not install the electronic heater in the flow channel of the indoor unit fan.



Changing a particular option

You can change each digit of set option.

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		Changed value	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		D		Option mode	1~6	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'.**

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	Changed value
Indication	0	D	2	1	7	1

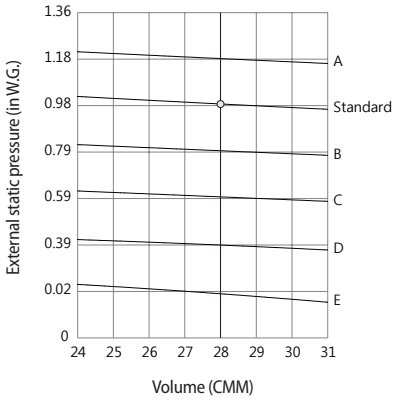
CAUTION

- **If you are using heat pump model, mixed operation mode (two or more indoor units operating in different operation mode simultaneously) is not available when the indoor units are connected to same outdoor unit. If you set the master indoor unit with a remote controller, outdoor unit will operate in the mode which was set in the master indoor unit.**

Increasing Fan Speed

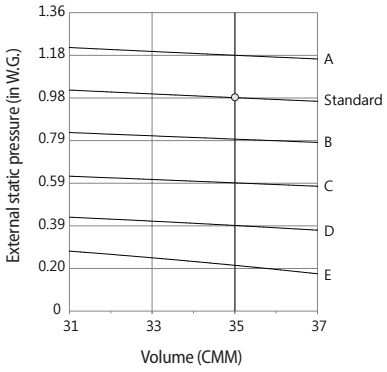
Air volume curve diagram and external static pressure limit

Model : AM072JNESCH



Classification	Option code
A	01B064-19348E-231515-333000
Standard	01B064-19343E-231515-333000
B	01B064-1930EC-231515-333000
C	01B064-193097-231515-333000
D	01B064-193051-231515-333000
E	01B064-193020-231515-333000

Model : AM096JNESCH



Classification	Option code
A	01B064-1934AE-231C1C-333000
Standard	01B064-19345E-231C1C-333000
B	01B064-19340E-231C1C-333000
C	01B064-1930A8-231C1C-333000
D	01B064-193061-231C1C-333000
E	01B064-193030-231C1C-333000

Final Checks and User Tips

To complete the installation, perform the following checks and tests to ensure that the Fresh duct operates correctly.

1. Check the followin
- ▶ Strength of the installation site
- ▶ Tightness of pipe connection and inspect it to determine whether there is a gas leak
- ▶ Electrical wire connections
- ▶ Heat-resistance insulation of the pipe
- ▶ Drainage
- ▶ Grounding wire connection
- ▶ Correct operation (follow the steps below)

After finishing the installation of the Fresh duct, you should explain the following to the user. Refer to appropriate pages in the User's Manual.

1. How to start and stop the Fresh duct?
2. How to select the modes and functions?
3. How to adjust the temperature and fan speed?
4. How to adjust the airflow direction?
5. How to set the timers?
6. How to clean and replace the filters?

NOTE

- When you complete the installation successfully, hand over the User's Manual and this Installation Manual to the user for storage in an easily accessible and safe place.

Troubleshooting

Error Code	Indication	Remarks
E101	Communication error of indoor unit	
E102	Error of communication from outdoor unit to indoor unit	
E108	Error due to using the same communication address twice.	
E109	Error due to incomplete communication address setting	
E121	Error of temperature sensor in indoor unit (OPEN/SHORT)	
E122	Error of temperature sensor at inlet of heat exchanger (OPEN/SHORT)	
E123	Error of temperature sensor at outlet of heat exchanger (OPEN/SHORT)	
E126	Error of temperature sensor at discharge side (OPEN/SHORT)	Fresh duct
E128	Temperature sensor falling off at inlet of heat exchanger of indoor unit	
E129	Temperature sensor falling off at outlet of heat exchanger of indoor unit	
E151	Two times of error of electronic expansion valve open in indoor unit	
E152	Two times of error of electronic expansion valve close in indoor unit	
E153	Two times of detection of indoor unit float s/w	
E154	Fan error of indoor unit	
E162	EEPROM error	
E163	EEPROM setting error	
E164	Error due to incompatibility with an indoor unit that a special consumption tax is applied.	
E198	Thermal Fuse Open Error	
E201	Error of indoor unit setting number (communication with outdoor unit)	

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SAMSUNG

Duct Type
AM✳✳✳JNESCH✳✳✳

Air Conditioner
installation manual

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