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, 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 authorized centers or returned to the retailer so that it can be disposed of correctly and safely.

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.
- Devices disconnected from the power supply should be completely disconnected in the condition of overvoltage category.

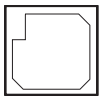
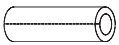
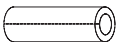
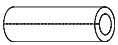
⚠ CAUTION

- 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 controller, 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.

Selecting the installation location

Accessories

- The following accessories are supplied with the indoor unit.
  The type and quantity may differ depending on the specifications.

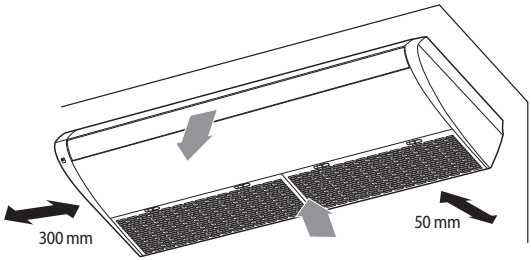
Pattern sheet (2) 	Insulation cover pipe A (1) 	Insulation cover pipe B (1) 	Insulation drain (1) 	Flexible hose clamp (1) 
Flexible hose (1) 	Cable-tie (8) 	User manual (1) 	Install manual (1) 	

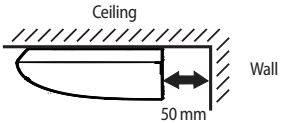
Indoor Unit

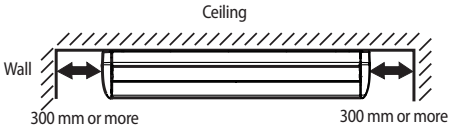
- Select a convenient location that permits the air to reach every corner of the area to be cooled.
- Pre-plan for easy and short routing of the refrigerant tubing and wiring to the outdoor unit.
- There should be no flammable gas, alkaline, substances present in the air.
- Avoid location where obstacles preventing good air circulation are present.
- Noise prevention should be considered in determining the unit's location.
- The structure, where the unit is to be installed should be strong enough to support the weight of the unit.
- Rigid wall without vibration.
- Where it is not exposed to direct sunshine.
- Where the air filter can be removed and cleaned easily.

Space Requirements for Indoor Unit

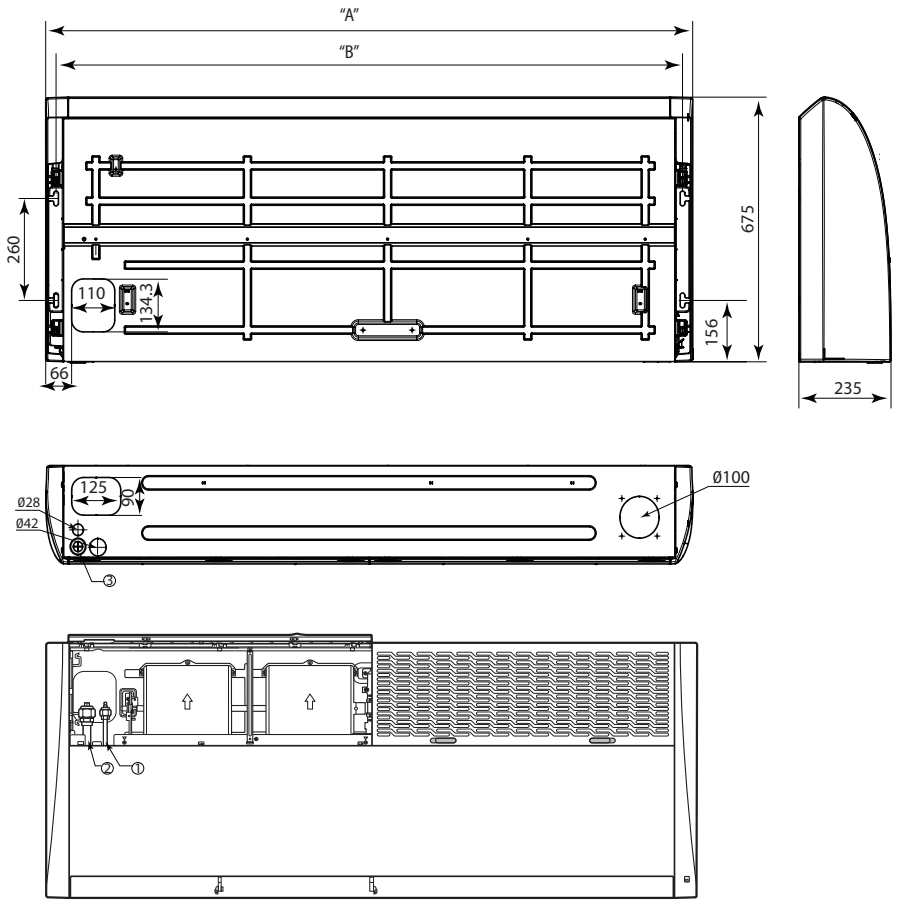
Ceiling installation







Dimension of the indoor unit

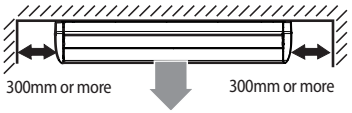


Model	Dimension	
	"A"	"B"
AC✳✳✳JNCDEH	1650	1598
AC✳✳✳JNCDEH1	1350	1298

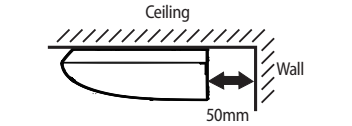
No.	Name	Description
1	Liquid pipe connection	ø9.52 (3/8")
2	Gas pipe connection	ø15.88 (5/8")
3	Drain pipe connection	OD ø25; ID ø20

Ceiling installation

1 Select pipe directions.
When the directions are selected, drill 3-1/8"-(100mm, for pipe and cables) and 1-3/4"-(40mm, for drain hose) diameter holes on the wall so that it slants slightly downwards toward the outdoor for smooth water flow.



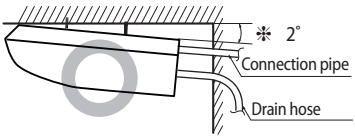
NOTE
Use the template to select pipe directions.



2 Drill holes for anchor bolts according to the distance and mount them.

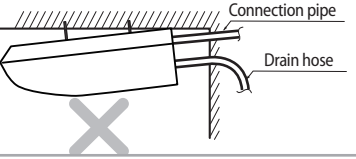
NOTE
Use the template.

3 Install the unit onto the ceiling. Be sure to arrange the drain hose so that it is leveled lower than the drain hose connecting port of the indoor unit.



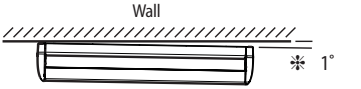
✻ 2˚ (The gap between the lower end of the indoor unit and the ceiling should be 23 mm or more.)

NOTE
For proper drainage of condensate, give a 2° (The gap between the lower end of the indoor unit and the ceiling should be 23 mm or more.) slant to the side of the unit which will be connected with the drain hose as shown in the figure.



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.
- Install the drain hose from the rear of the unit.

NOTE
Give a 1˚ slant to the right side of the unit.

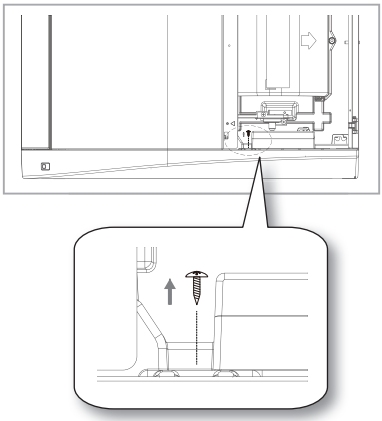


✻ AC✳✳✳JNCDEH✳:The gap between the lower end of the indoor unit and the ceiling should be 1˚ or 23 mm.

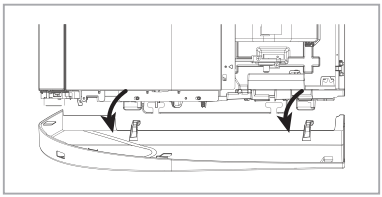
✻ AC✳✳✳JNCDEH:The gap between the lower end of the indoor unit and the ceiling should be 1˚ or 28 mm.

4 When Hanging the Set, firstly unscrew the screws from the both of sides, and then disassemble the Case-sides, or else the case-side will be damaged by disassembling it directly.

5 Reassemble the Case-sides, tightening the screws after hanging the set.



Unscrew two screws from the both of sides.



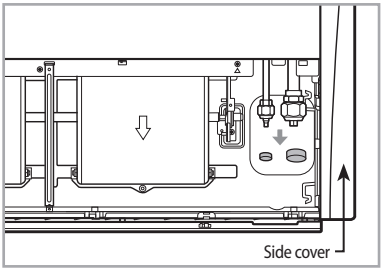
Remove the Case-sides from the both of sides.

Purging the unit

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

1 Unscrew the caps at the end of each pipe.
Result: All inert gas escapes from the indoor unit.
Loosen but do not remove completely the flare nuts with plastic caps.
- You should hear gas escaping.

NOTE
- To prevent dirt or foreign objects from getting into the pipes during installation, do NOT remove the caps completely until you are ready to connect the piping.



Connecting the refrigerant pipe

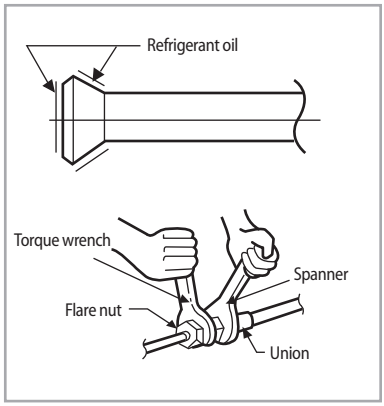
There are two refrigerant pipes of differing diameters:
- ***A smaller one for the liquid refrigerant***
- ***A larger one for the gas refrigerant***
- ***The inside of copper pipe must be clean & has no dust.***

1 Before connecting the refrigerant pipe, remove the side covers.

2 Remove the pinch pipe on the pipes and connect the assembly pipes to each pipe, tightening the nuts, first manually and then with a torque wrench, a spanner applying the following torque.

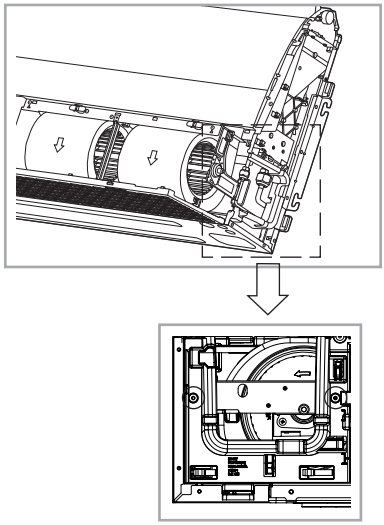
Outer Diameter (D)	Torque (N•m)
ø 6.35 mm	14~18
ø 9.52 mm	34~42
ø 12.70 mm	49~61
ø 15.88 mm	68~82
ø 19.05 mm	100~120

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



3 Be sure that there must be no crack or kink on the bended area.

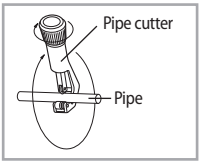
NOTE
If necessary, the right side hanging bracket can be removed to aid installation, by removing two screws. Remember to refit the bracket.

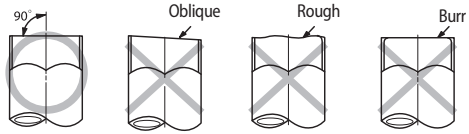


Cutting/Flaring the pipes

1. Make sure that you have the required tools available. (pipe cutter, reamer, flaring tool and pipe holder)

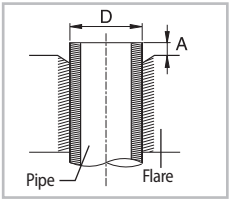
2. If you wish to shorten the pipes, cut it with a pipe cutter, taking care to ensure that the cut edge remains at a 90° angle with the side of the pipe. Refer to the illustrations below for examples of edges cut correctly and incorrectly.





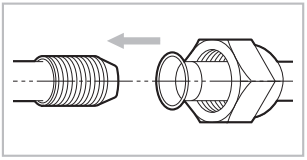
3. To prevent any gas from leaking out, remove all burrs at the cut edge of the pipe, using a reamer.

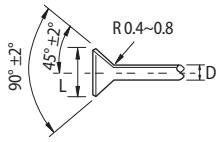
4. Slide a flare nut on to the pipe and modify the flare.



Outer Diameter (D)	Depth (A)
ø 6.35 mm	1.3 mm
ø 9.52 mm	1.8 mm
ø 12.70 mm	2.0 mm
ø 15.88 mm	2.2 mm
ø 19.05 mm	2.2 mm

5. Check that the flaring is correct, referring to the illustrations below for examples of incorrect flaring.



Outer diameter (D,mm)	Connection torque (N·m)	Flare dimension (L,mm)	Flare shape (mm)
Ø 6.35	14~18	8.7~9.1	
Ø 9.52	34~42	12.8~13.2	
Ø 12.70	49~61	16.2~16.6	
Ø 15.88	68~82	19.3~19.7	
Ø 19.05	100~120	23.6~24.0	

CAUTION

- If the pipes require brazing, ensure that OFN (Oxygen Free Nitrogen) is flowing through the system. If it is not flowing,Comp or valve can be damaged.
- Nitrogen blowing pressure range is 0.02 ~ 0.05MPa.

Performing leak test & insulation

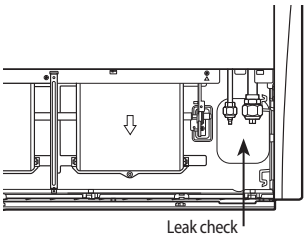
Leak test

LEAK TEST WITH NITROGEN (before opening valves)

In order to detect basic refrigerant leaks, before recreating the vacuum and recirculating the R-410A, it's responsable of installer to pressurize the whole system with nitrogen (using a cylinder with pressure reducer) at a pressure above 40 bar (gauge).

LEAK TEST WITH R-410A (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 R410A.



❊ The designs and shape are subject to change according to the model.

Insulation

Once you have checked that there are no leaks in the system, you can insulate the piping and hose.

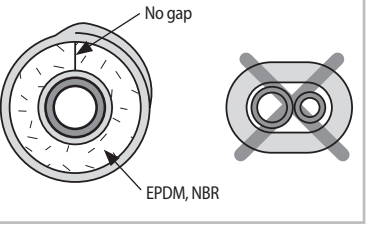
1 To avoid condensation problems, place Acrylonitrile Butadien Rubber separately around each refrigerant pipe.

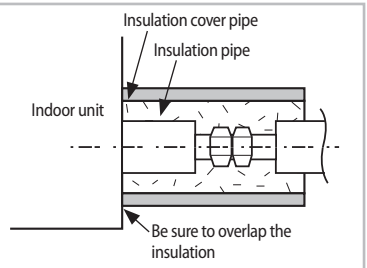
NOTE Always make the seam of pipes face upwards.

2 Wind insulating tape around the pipes and drain hose avoiding to compress the insulation too much.

3 Finish wrapping insulating tape around the rest of the pipes leading to the outdoor unit.

4 The pipes and electrical cables connecting the indoor unit with the outdoor unit must be fixed to the wall with suitable ducts.





CAUTION **Must fit tightly against body without any gap.**

CAUTION All refrigerant connection must be accessible, in order to permit either unit maintenance or removing it completely.

5 Select the insulation of the refrigerant pipe.

- ▶ Insulate the gas side and liquid side pipe referring to the thickness according to the pipe size.
- ▶ Indoor temperature of 30 °C 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 conditions, use thicker one.
- ▶ Insulator's heat-resistance temperature should be more than 120 °C.

Pipe	Pipe size	Insulation Type (Heating/Cooling)		Remarks
		Standard [30 °C, 85 %]	High humidity [30 °C, over 85 %]	
		EPDM, NBR		
Liquid pipe	Ø 6.35 ~ Ø 9.52	9 t	9 t	Internal temperature is higher than 120 °C
	Ø 12.7 ~ Ø 19.05	13 t	13 t	
Gas pipe	Ø 6.35	13 t	19 t	
	Ø 9.52	19 t	25 t	
	Ø 12.70			
	Ø 15.88			
	Ø 19.05			

- ▶ When installing insulation in places and conditions below, use the same insulation that is used for high humidity conditions.

  <Geological condition>
  - High humidity places such as shoreline, hot spring, near lake or river, and ridge (when the part of the building is covered by earth and sand.)

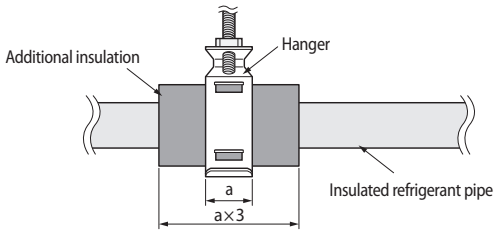
  <Operation purpose condition>
  - Restaurant ceiling, sauna, swimming pool etc.

  <Building construction condition>
  - The ceiling frequently exposed to moisture and cooling is not covered.

  e.g. The pipe installed at a corridor of a dormitory and studio or near an exit that opens and closes frequently.
  - The place where the pipe is installed is highly humid due to the lack of ventilation system.

⚠ CAUTION

- Install the insulation not to get wider and use the adhesives on the connection part of it to prevent moisture from entering.
- Wind the refrigerant pipe with insulation tape if it is exposed to outside sunlight.
- Install the refrigerant pipe respecting that the insulation does not get thinner on the bent part or hanger of pipe.
- Add the additional insulation if the insulation plate gets thinner.

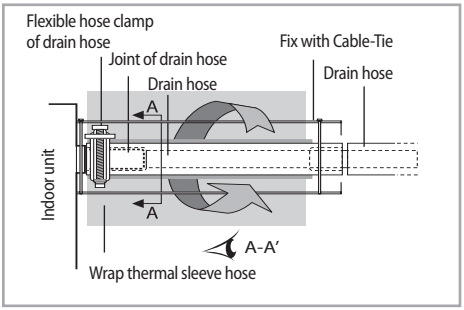


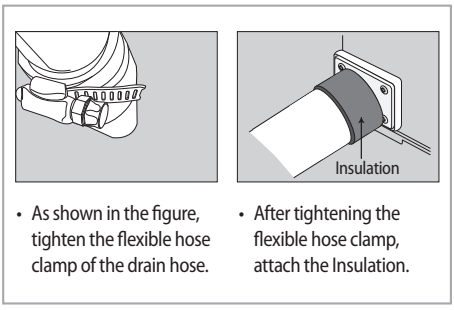
Drain hose installation

Care must be taken when installing the drain hose from the indoor unit to ensure that any condensate water is correctly drained outside.
The drain hose can be installed to the right of the base pan.

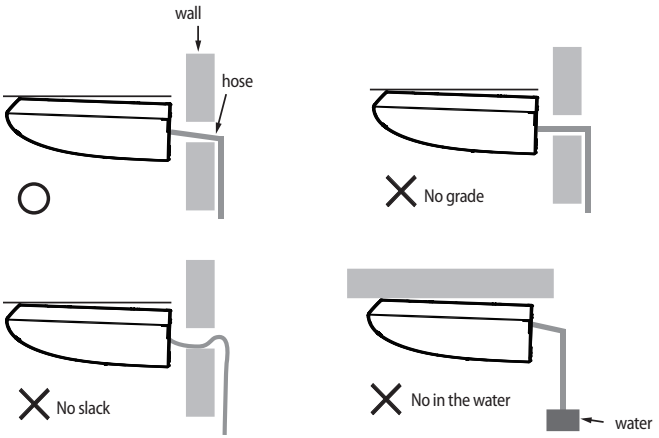
1 Installing the drain hose should be the shorter, the better.
- ▶ In order to discharge condensate water, a downward gradient should be maintained.
- ▶ Fix the drain hose with Cable-Tie, so that it will not separate from the machine.

2 Insulate and fix the drain hose according to the figure.
- ▶ Insert the drain hose to bottom of the outfall of water basin.
- ▶ Lock flexible hose clamp of the drain hose according to the figure.
- ▶ Wind and wrap flexible hose clamp 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.)





- As shown in the figure, tighten the flexible hose clamp of the drain hose.
- After tightening the flexible hose clamp, attach the Insulation.



Installing DPM

NOTE

Only AC100JNCDEH and AC120JNCDEH models are available to install DPM.

- When installing DPM, you should set "DPM setting" to the outdoor unit.
- You do not need to set the address manually for the indoor 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.
- To enable Level contol with the centralized controller, refer to page 21, 22.

CAUTION

- When installing DPM, only one external controller can be connected.

Wiring work

Power and communication cable connection

CAUTION

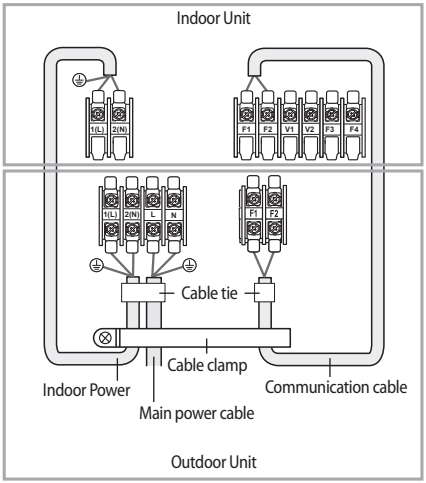
- Always remember to connect the refrigerant pipes before performing the electric connections. When disconnecting the system, always disconnect the electric cables before disconnecting the refrigerant pipes.
- Always remember to connect the air conditioner to the grounding system before performing the electric connections.

The indoor unit is powered by the outdoor unit by means of a H05RN-F connection cable or upper grade ones, with insulation in synthetic rubber and jacket in polychloroprene(neoprene), in accordance with the requirements of standard EN 60335-2-40.

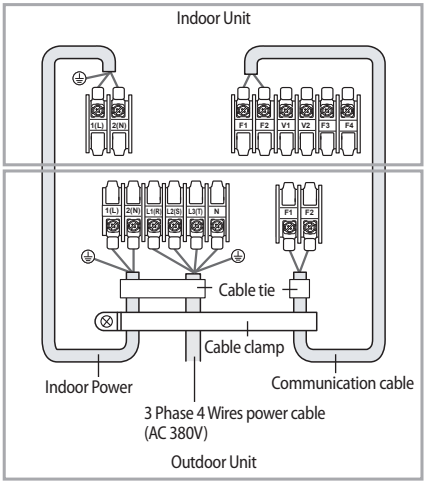
1	Remove the screw on the electrical component box and remove the cover plate.
2	Route the connection cord through the side of the indoor unit and connect the cable to terminals; refer to the figure below.
3	Route the other end of the cable to the outdoor unit through the ceiling & the hole on the wall.
4	Reassemble the electrical component box cover, carefully tightening the screw.

Wiring diagram

1 phase



3 phase



Wiring work

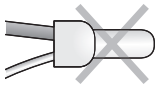
Between Indoor and Outdoor Connection Cord Specifications

Indoor Power supply			Signal Cable
Power Supply	Max/Min(V)	Indoor Power cable	
220-240 V / 50 Hz	±10 %	2.5 mm²↑, 3 wires	0.75~1.25 mm², 2 wires

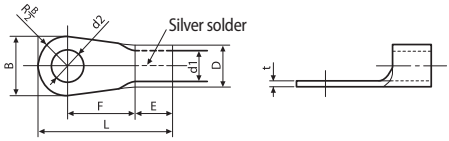
- ❊ Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F or IEC:60245 IEC 66 / CENELEC: H07RN-F)
- ❊ Screws on terminal block must not be unscrewed with the torque less than 12 kgf•cm.
- ❊ Since it has the external power supply, refer to the outdoor unit installation manual for MAIN POWER.

⚠ 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.



Selecting compressed ring terminal



Nominal dimensions for cable (mm²)		1.5		2.5		4
Nominal dimensions for screw (mm)		4	4	4	4	4
B	Standard dimension (mm)	6.6	8	6.6	8.5	9.5
	Allowance (mm)	±0.2		±0.2		±0.2
D	Standard dimension (mm)	3.4		4.2		5.6
	Allowance (mm)	+0.3 -0.2		+0.3 -0.2		+0.3 -0.2
d1	Standard dimension (mm)	1.7		2.3		3.4
	Allowance (mm)	±0.2		±0.2		±0.2
E	Min. (mm)	4.1		6		6
F	Min. (mm)	6		6		5
L	Max. (mm)	16		17.5		20
d2	Standard dimension (mm)	4.3		4.3		4.3
	Allowance (mm)	+0.2 0		+0.2 0		+0.2 0
t	Min. (mm)	0.7		0.8		0.9

CAUTION

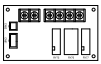
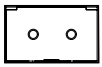
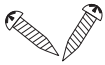
- Select the power cable in accordance with relevant local and national regulations.
- Wire size must comply with local and national code.
- For the power cable, use the grade of H07RN-F or H05RN-F materials.
- You should connect the power cable into the power cable terminal and fasten it with a clamp.
- The unbalanced power must be maintained within 10% of supply rating among whole indoor units.
- If the power is unbalanced greatly, it may shorten the life of the condenser. If the unbalanced power is exceeded over 10% of supply rating, the indoor unit is protected, stopped and the error mode indicates.
- To protect the product from water and possible shock, you should keep the power cable and the connection cord of the indoor and outdoor units in the iron pipe.
- Connect the power cable to the auxiliary circuit breaker. An all pole disconnection from the power supply must be incorporated in the fixed wiring(≥3mm).
- You must keep the cable in a protection tube.
- Keep distances of 50mm or more between power cable and communication cable.
- 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(ELCB or MCCB+ELB) should be considered more capacity if many indoor units are connected from one 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 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(kgf•cm)	
M3	5.0 ~ 7.5
M 4	12.0 ~ 18.0

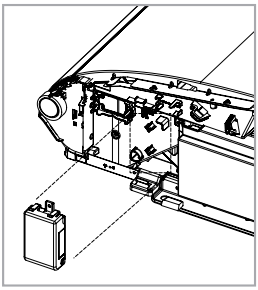
Interface module Installation (Optional)

Accessories

Interface module : MIM-B14

External Control	PCB Case	Haness Wire(2P)	Haness Wire (4P)	Screw
				

1. Fix the case at with bolts on the side of the control box in the indoor unit.(See the picture)
2. Attach the Interface module PCB to the case in the control box of the indoor unit, then connect the power and the communication cable between the Interface module and the indoor unit;
3. If you install a Interface module to an indoor unit, every outdoor unit which is connected to an indoor unit can be controlled simultaneously.
4. Each indoor unit connected to the same centralized controller has its own Interface module.

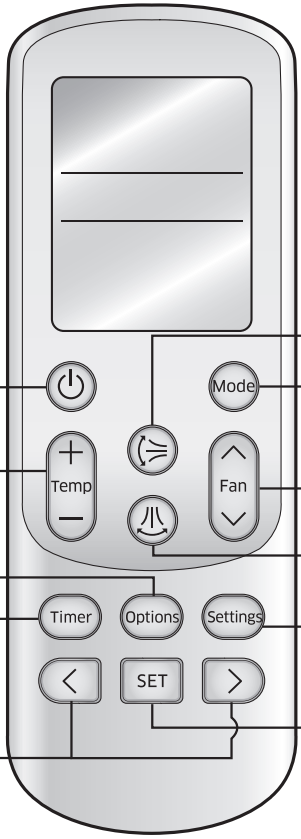


Setting an indoor unit address and installation option

- Set the indoor unit address and installation option with remote controller.
  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 remocon which can set 24 digit option code. Following is the instructions of setting option code with wireless remocon of MR-EH00
- Please refer to the wired remocon installation manual for setting with the wired remocon.

The procedure of setting option

MR-EH00



Power
Turns the air conditioner on or off.

Temperature
Adjusts the temperature.

Options
Selects options during operation.

Timer
Sets timer option.

Direction
Moves to select and set an option.

Air flow direction (Up and down)
Adusts the air flow direction up and down (Not applicable to Duct type models).

Mode
Selects operation mode.

Fan speed
Adjusts the fan speed.

Air flow direction (Left and right)
Adjusts the air flow direction left and right.

Settings
Selects settings.

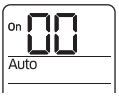
SET
Selects or cancels an option.

❊ Button shape and display may be different depending on the remote controller.

Setting an indoor unit address and installation option

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

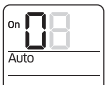
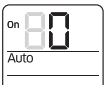
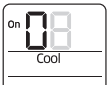
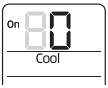
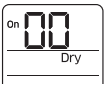
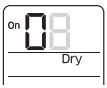
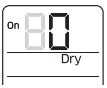
After entering the option setting status, select the option as listed below.

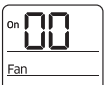
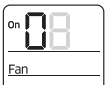
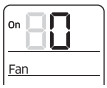
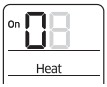
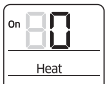
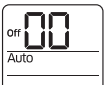
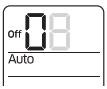
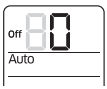
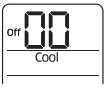
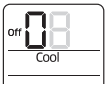
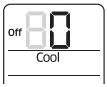
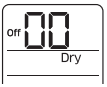
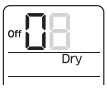
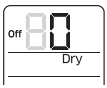
CAUTION

- Option setting is available from SEG1 to SEG 24.
- SEG1, SEG7, SEG13, SEG18 do not need to be set at MR-EH00. They are the page options which were used at the previous other remocons.
- Set the each 2 bit option code in order except page options.
- For example : SEG2, 3 → SEG4, 5 → SEG6, 8 → SEG9, 10 → SEG11, 12 → SEG 14, 15 → SEG 16, 17 → SEG 18, 20 → SEG 21, 22 → SEG23, 24.

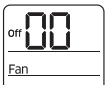
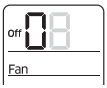
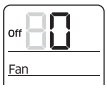
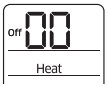
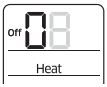
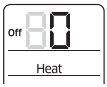
SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
0	X	X	X	X	X	1	X	X	X	X	X
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18	SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
2	X	X	X	X	X	3	X	X	X	X	X

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

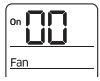
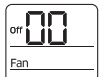
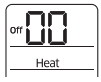
Option setting	Status
6. Setting Fan mode (Mode) Press Mode button to be changed to FAN mode in the ON status.	
7. Setting SEG9, SEG10 option Press Low Fan button(∨) to enter SEG9 value. Press High Fan button(∧) to enter SEG10 value. Each time you press the button, 0→1→…E→F will be selected in rotation.	 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
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

Setting an indoor unit address and installation option

Option setting	Status
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.

Option	[SEG2,3]	[SEG4,5]	[SEG6,8]	[SEG9,10]	[SEG11,12]
Remote Controller Display					
Option	**[SEG14,15]**	**[SEG16,17]**	**[SEG18,20]**	**[SEG21,22]**	**[SEG23,24]**
Remote Controller Display					

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 installation option (suitable for the condition of each installation location)

1. Check whether power is supplied or not.
   - When the indoor unit is not plugged in, there should be additional power supply in the indoor unit.
2. The panel(display) should be connected to an indoor unit to receive option.
3. Set the installation option according to the installation condition of an air conditioner.
   - The default setting of an indoor unit installation option is "02000-100000-200000-300000".
   - Individual control of a remote controller(SEG20) is the function that controls an indoor unit individually when there is more than one indoor unit.
   - No need to assign SEG3, 6, 8, 9, 10, 11, 14, 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	SEG1		SEG2			SEG3	SEG4		SEG5		SEG6
Explanation	PAGE		MODE			RESERVED	Use of external temperature sensor		Use of central control		RESERVED
Indication and Details	Indication	Details	Indication	Details			Indication	Details	Indication	Details	
	0		2				0	Disuse	0	Disuse	
							1	Use	1	Use	

Option	SEG7		SEG8	SEG9	SEG10	SEG11	SEG12
Explanation	PAGE		RESERVED	RESERVED	RESERVED	RESERVED	RESERVED
Indication and Details	Indication	Details					
	1						

Option	SEG13		SEG14			SEG15		SEG16		SEG17		SEG18	
Explanation	PAGE		Use of external control			Setting the output of external control		S-Plasma ion		Buzzer control		Number of hours using filter	
Indication and Details	Indication	Details	Indication	Details		Indication	Details	Indication	Details	Indication	Details	Indication	Details
	2		0	Disuse	Slave (disable Level control*)	0	Thermo on	0	Disuse	0	Use of buzzer	2	1000 Hour
			1	On/Off control									
			2	Off control									
			3	Window on/off control									
			4	Disuse	Master (enable Level control*)	1	Operation on	1	Use	1	Non use of buzzer	6	2000 Hour
			5	On/Off control									
			6	Off control									
			7	Window on/off control									

⚠ CAUTION SEG18 is applied in case of strong wind.

Setting an indoor unit address and installation option

Option	SEG19		SEG20		SEG21		SEG22	SEG23	SEG24
Explanation	PAGE		Individual control of a remote controller		Heating setting copensation				
Indication and Details	Indication	Details	Indication	Details	Indication	Details			
	3		0 or 1	Indoor 1	0	Default	RESERVED	RESERVED	RESERVED
					1	2℃			
			2	Indoor 2	2	5℃			
			3	Indoor 3					
			4	Indoor 4					

▶ If you input a number other than 0~4 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, Number of hours using filer : 2000hr",

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	2	-	1	0	-
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	-	-	-	-	0
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	-	0	-	0	6
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	0	0	-	-	-

* 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)

Condition		SEG14 Setting				Result
External control	Level control	Indoor 1	Indoor 2	Indoor 3	Indoor 4	
Default		Not set (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)

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		The changed value	
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		D		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'.

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

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

Troubleshooting

Detection of errors

- If an error occurs during the operation, one or more 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 indoor unit

LED Display

Abnormal conditions	Indicators				Remarks
	Blue	Green	Orange	Red	
Power reset	◑	×	×	×	0.5[S]=On, 0.5[S]=Off
Operation on	●	×	×	×	
Operation off	×	×	×	×	
Reservation	×	●	×	×	
Filter sign	×	×	●	×	
Defrosting	◑	×	×	×	1[S]=On, 9[S]=Off
Smart install Error	×	×	×	●	
Communication error between indoor units	×	◑	×	×	
EEPROM error /EEPROM option error	◑	×	×	◑	
Error of temperature sensor in indoor unit (open/short)	×	×	×	◑	
Error of outdoor Unit/Self-Diagnosis	×	×	◑	×	
Error of the indoor unit pipe sensor	×	◑	×	◑	
High pressure blockage error	×	×	◑	×	
Indoor fan error	◑	◑	×	×	
Thermal fuse open error	◑	×	◑	×	
Indoor unit float S/W 2nd detection	×	◑	◑	×	

Troubleshooting

● On ◑ Flickering X Off

- 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 detects an error again.
- If the LED displays only one color, it is turned on for a second and turned off for a second.
- If the LED displays more than two colors, each color is shown for a second alternately.

Wired remote control

- If an error occurs, TEST is displayed on the wired remote control.
- If you would like to see an error code, press the Test button.

Display	Explanation
E108	Error due to repeated communication address
E121	Error on room temperature sensor of indoor unit (Short or Open)
E122	Error on EVA IN sensor of indoor unit (Short or Open)
E123	Error on EVA OUT sensor of indoor unit (Short or Open)
E153	Error on float switch (2nd detection)
E154	Indoor fan error
E198	Error on thermal fuse of indoor unit (Open)
E201	Communication error between indoor unit and outdoor unit (Pre tracking failure or when actual number of indoor units are different from the indoor unit quantity setting on the outdoor unit) Error due to communication traking failure after initial power is supplied.
E202	Communication error between indoor unit and outdoor unit (When there is no response from indoor units after tracking is completed)
E203	Communication error between outdoor unit inv - main micom (For PF #4~#6 controller, error will be determined from the time when compressor is turned on)
E221	Error on outdoor temperature sensor (Short or Open)
E231	Error on outdoor COND OUT sensor (Short or Open)
E251	Error on discharge temperature sensor of compressor 1 (Short or Open)
E320	Error on OLP sensor (Short or Open)
E403	Compressor down due to freeze protection control
E404	System stop due to overload protection control
E416	System stop due to discharge temperature
E422	Blockage detected on high pressure pipe
E425	Reverse phase or open phase
E440	Heating operation restricted at outdoor temperature over Theat_high value (default: 30 ℃)
E441	Cooling operation restricted at outdoor temperature below Tcool_low value (default: 0 ℃)
E458	Fan speed error
E461	Error due to operation failure of inverter compressor
E462	System stop due to full current control
E463	Over current trip / PFC over current error

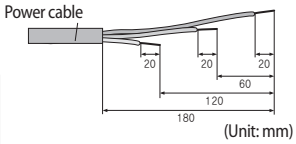
Display	Explanation
E464	IPM Over Current(O.C)
E465	Comp. Over load error
E466	DC-Link voltage under/over error
E467	Error due to abnormal rotation of the compressor or unconnected wire of compressor
E468	Error on current sensor (Short or Open)
E469	Error on DC-Link voltage sensor (Short or Open)
E470	Outdoor unit EEPROM Read/Write error (Option)
E471	Outdoor unit EEPROM Read/Write error (H/W)
E472	AC Line Zero Cross Signal out
E473	Comp Lock error
E474	Error on IPM Heat Sink sensor of inverter 1 (Short or Open)
E475	Error on inverter fan 2
E484	PFC Overload (Over current) Error
E485	Error on input current sensor of inverter 1 (Short or Open)
E500	IPM over heat error on inverter 1
E508	Smart install is not installed
E554	Gas leak detected
E556	Error due to mismatching capacity of indoor and outdoor unit
E557	DPM remote controller option error
E590	Inverter EEPROM CheckSum error
E660	Inverter Boot Code error

How to connect your extended power cables

1. Prepare the following tools.

Tools	Crimping pliers	Connection sleeve (mm)	Insulation tape	Contraction tube (mm)
Spec	MH-14	20xØ6.5(HxOD)	Width 19mm	70xØ8.0(LxOD)
Shape				

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

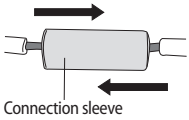


CAUTION
- After peeling off the tube wire, you must insert a contraction tube.
- For information about the power cable specifications for indoor and outdoor units, refer to the installation manual.

3. Insert both sides of core wire of the power cable into the connection sleeve.

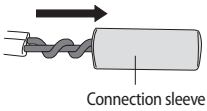
▶ **Method 1**

Push the core wire into the sleeve from both sides.

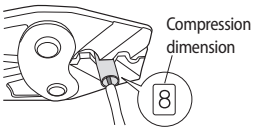


▶ **Method 2**

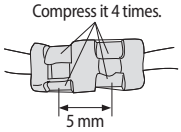
Twist the wire cores together and push it into the sleeve.



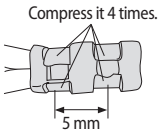
4. Using a crimping tool, compress the two points and flip it over and compress another two points in the same location.
   - The compression dimension should be 8.0.
   - After compressing it, pull both sides of the wire to make sure it is firmly pressed.



▶ **Method 1**

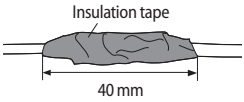


▶ **Method 2**

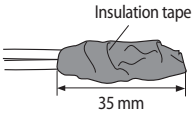


5. Wrap it with the insulation tape twice or more and position your contraction tube in the middle of the insulation tape.
   A total of three or more layers of insulation is required.

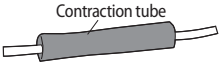
▶ **Method 1**



▶ **Method 2**



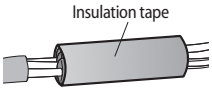
6. Apply heat to the contraction tube to contract it.



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

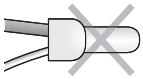
CAUTION

- 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 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.



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