DAIKIN

R410A

INSTALLATION MANUAL

VRV SYSTEM Inverter Air Conditioners

MODELS

Ceiling-mounted Duct type

FXMQ30MVJU
FXMQ36MVJU
FXMQ48MVJU

Ceiling-mounted Built-in type

FXSQ12MVJU	**FXSQ30MVJU**
FXSQ18MVJU	**FXSQ36MVJU**
FXSQ24MVJU	**FXSQ48MVJU**

Read these instructions carefully before installation.
Keep this manual in a handy place for future reference.
This manual should be left with the equipment owner.

CONTENTS

1. SAFETY CONSIDERATIONS

Please read these “SAFETY CONSIDERATIONS” carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term “appliances not accessible to the general public”.
Meaning of warning, caution and note symbols.

WARNING ..... Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION ..... Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.

NOTE ..... Indication situation that may result in equipment or property-damage-only accidents.

WARNING

- **Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.**
  Improper installation may result in water leakage, electric shocks or fire.
- **Perform installation work in accordance with this installation manual.**
  Improper installation may result in water leakage, electric shocks or fire.
- **When installing the unit in a small room, take measures against to keep refrigerant concentration from exceeding allowable safety limits in the event of refrigerant leakage.**
  Contact the place of purchase for more information. Excessive refrigerant in a closed ambient can lead to oxygen deficiency.
- **Be sure to use only the specified accessories and parts for installation work.**
  Failure to use the specified parts may result in water leakage, electric shocks, fire or the unit falling.
- **Install the air conditioner on a foundation strong enough to withstand the weight of the unit.**
  A foundation of insufficient strength may result in the equipment falling and causing injuries.
- **Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.**
  Improper installation work may result in the equipment falling and causing accidents.
- **Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.**
  An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.
- **Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.**
  Improper connections or installation may result in fire.
- **When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.**
  Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.
- **If the refrigerant gas leaks during installation, ventilate the area immediately.**
  Toxic gas may be produced if the refrigerant gas comes into contact with fire.
- **After completing the installation work, check that the refrigerant gas does not leak.**
  Toxic gas may be produced if the refrigerant gas leaks into the room and comes into contact with a source of fire, such as a fan heater, stove or cooker.
- **Before touching electrical parts, turn off the unit.**
- **Ground the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.**
  Incomplete grounding may result in electric shocks.
- **Do not touch the switch with wet fingers.**
  Touching a switch with wet fingers can cause electric shock.
- **Install an leak circuit breaker, as required.**
  If an leak circuit breaker is not installed, electric shock may result.

- **Do not install the air conditioner in the following locations:**
  (a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen Plastic parts may deteriorate and fall off or result in water leakage.
  (b) where corrosive gas, such as sulfurous acid gas, is produced Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) near machinery emitting electromagnetic waves Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
  (d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions may result in fire.

⚠ CAUTION

- **While following the instructions in this installation manual, install drain piping in order to ensure proper drainage and insulate piping in order to prevent condensation.**
  Improper drain piping may result in water leakage and property damage.
- **Do not touch the heat exchanger fins.**
  Improper handling may result in injury.
- **Be very careful about product transportation.**
  Some products use PP bands for packaging. Do not use any PP bands for a means of transportation. It is dangerous.
- **Safely dispose of the packing materials.**
  Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
  Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.
- **Do not turn off the power immediately after stopping operation.**
  Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

⚠ NOTE

- **Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.**
  (Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)
- **Remote controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps. (inverter or rapid start types)**
  Install the indoor unit as far away from fluorescent lamps as possible.
- **This unit is a class A product.**
  In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
- **Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

2. BEFORE INSTALLATION

- **When moving the unit while removing it from the carton box, be sure to lift it by holding on to the four lifting lugs without exerting any pressure on other parts, especially, the refrigerant piping, drain piping, and other resin parts.**
- Be sure to check the type of R410A refrigerant to be used before installing the unit. (Using an incorrect refrigerant will prevent normal operation of the unit.)
- The accessories needed for installation must be retained in your custody until the installation work is completed. Do not discard them!
- Decide upon a line of transport.
- Leave the unit inside its packaging while moving, until reaching the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, to avoid damage or scratches to the unit.
- When moving the unit at or affter opening, hold the unit by the hanger brackets (× 4). Do not apply force to the refrigerant piping, drain piping or plastic parts.
- For the installation of an outdoor unit, refer to the installation manual attached to the outdoor unit.
- Do not install or operate the unit in rooms mentioned below.
  - **Laden with mineral oil, or filled with oil vapor or spray like in kitchens. (Plastic parts may deteriorate which could eventually cause the unit to fall out of place, or could lead to leaks.)**
  - **Where corrosive gas like sulfurous gas exists. (Copper tubing and brazed spots may corrode which could eventually lead to refrigerant leaks.)**
  - **Where exposed to combustible gases and where volatile flammable gas like thinner or gasoline is used. (Gas in the vicinity of the unit could ignite.)**
  - **Where machines can generate electromagnetic waves. (Control system may malfunction.)**
  - **Where the air contains high levels of salt such as that near the ocean and where voltage fluctuates greatly such as that in factories.**
    Also in vehicles or vessels.
- This unit, both indoor and outdoor, is suitable for installation in a commercial and light industrial environment.
  If installed as a household appliance it could cause electromagnetic interference.

⚠ NOTE

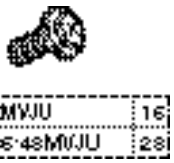
- Be sure to read this manual before installing the indoor unit.
- Entrust installation to the place of purchase or a qualified serviceman. Improper installation could lead to leaks and, in worse cases, electric shock of fire.
- Use only parts provided with the unit or parts satisfying required specifications. Unspecified parts could cause the unit to fall out of place, or could lead to leaks and, in worse cases, electric shock or fire.
- Be sure to mount an air filter (part to be procured in the field) in the suction air passage in order to prevent water leaking, etc.

FXMQ30MVJU FXMQ48MVJU
FXMQ36MVJU

2-1 ACCESSORIES

Check the following accessories are included with your unit.

Name	Metal clamp	Drain hose	Insulation for fitting	Sealing pad
Quantity	1 pc.	1 pc.	1 each.	1 each.
Shape			 for gas pipe  for liquid pipe	 Large  Mid

Name	Clamp	Screws for duct flanges	(Other)
Quantity	6 pcs.	As described in table below	• Operation manual • Installation manual • Washers for hanger bracket (8 pcs.)
Shape			

2-2 OPTIONAL ACCESSORIES

Table 1

Remote controller	
Wired type	BRC1C71

FOR THE FOLLOWING ITEMS, TAKE SPECIAL CARE DURING CONSTRUCTION AND CHECK AFTER INSTALLATION IS FINISHED.

a. Items to be checked after completion of work

Items to be checked	If not properly done, what is likely to occur.	Check
Are the indoor and outdoor unit fixed firmly?	The units may drop, vibrate or make noise.	
Is the gas leak test finished?	It may result in insuffcient cooling.	
Is the unit fully insulated?	Condensate water may drip.	
Does drainage flow smoothly?	Condensate water may drip.	
Does the power supply voltage correspond to that shown on the name plate?	The unit may malfunction or the components burn out.	
Are wiring and piping correct?	The unit may malfunction or the components burn out.	
Is the unit safely grounded?	Dangerous at electric leakage.	
Is wiring size according to specifications?	The unit may malfunction or the components burn out.	
Is something blocking the air outlet or inlet of either the indoor or outdoor units?	It may result in insufficient cooling.	
Are refrigerant piping length and additional refrigerant charge noted down?	The refrigerant charge in the system is not clear.	

b. Items to be checked at time of delivery

Also review the “SAFETY CONSIDERATIONS”

Items to be checked	Check
Did you explain about operations while showing the operation manual to your customer?	
Did you hand the operation manual over to your customer?	

c. Points for explanation about operations

The items with ⚠WARNING and ⚠CAUTION marks in the operation manual are the items pertaining to possibillties for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your customers to read the operation manual.

2-3 NOTE TO INSTALLER

- Be sure to instruct customers how to properly operate the unit (especially cleaning filters, operating different functions, and adjusting the temperature) by having them carry out operations themselves while looking at the manual.

3. SELECTING INSTALLATION SITE

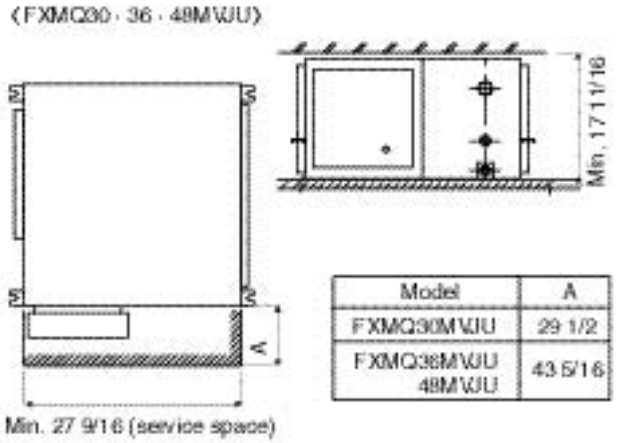
Please attach additional thermal insulation material to the unit body when it is believed that the relative humidity in the ceiling exceeds 80%. Use glass wool, polyethylene foam, or similar with a thickness of 3/8”. or more as thermal insulation material.

(1) Select an installation site where the following conditions are fulfilled and that meets with your customer’s approval.
- In the upper space (including the back of the ceiling) of the indoor unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
- Where optimum air distribution can be ensured.
- Where nothing blocks the air passage.
- Where condensate can be properly drained.
- If supporting structural members are not strong enough to take the unit’s weight, the unit could fall out of place and cause serious injury.
- Where the false ceiling is not noticeably on an incline.
- Where there is no risk of flammable gas leakage.
- Where sufficient clearance for maintenance and service can be ensured. **(Refer to Fig. 1)**
- Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual of the outdoor unit.)

⚠ NOTE

- Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise. (Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

(2) Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.

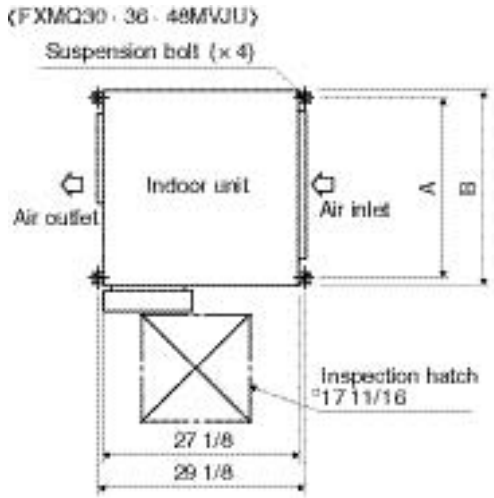


Model	A
FXMQ30MVJU	29 1/2
FXMQ36MVJU 48MVJU	43 5/16

Fig. 1 (length: in.)

4. PREPARATIONS BEFORE INSTALLATION

(1) Relative positions of indoor unit and suspension bolt. **(Refer to Fig. 2)**

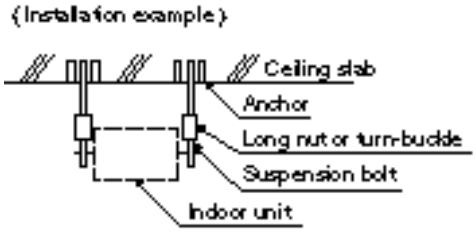


Model	A	B
FXMQ30MVJU	26 5/16	28 5/16
FXMQ36MVJU 48MVJU	41 11/16	43 11/16

Fig. 2 (length: in.)

(2) Install a canvass duct to the air discharge outlet and air inlet so that vibration from the machine body isn't transmitted to the duct or ceiling.
You should also apply acoustic (insulation material) to the inside of the duct, and vibration insulation rubber to the suspension bolts.

(3) Install suspension bolts.
(Use bolts of 3/8" diameter.)
- Install the equipment where supporting structures are strong enough to bear the equipment's weight. Use embedded inserts or anchor bolts with new buildings and hole-in-anchors with old buildings.

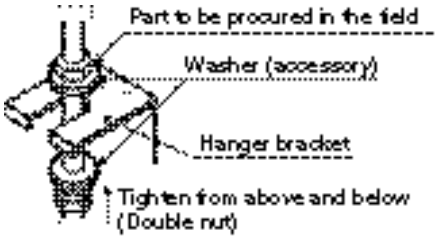


Note) All the above parts are field supplied.

5. INDOOR UNIT INSTALLATION

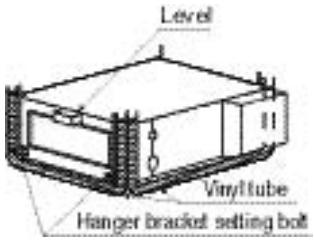
Installing optional accessories before installing the indoor unit is easier.
As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by our company.

(1) Fix the hanger bracket to the suspension bolt. Tighten both upper and lower nuts firmly using washers.



(2) Adjust the height of the unit.

(3) Make sure the unit is level.
- Level the unit with a level when installing. If the unit is not level, it could become the source of water leaks.
- When leveling the unit, check all four corners with a level or a vinyl tube containing water. (See the figure on the right.)



(4) Tighten the nuts on the top.

NOTE

Setting the unit at an angle opposite to the drain piping might cause leaks.

6. REFRIGERANT PIPING WORK

6-1 GENERAL INSTRUCTIONS

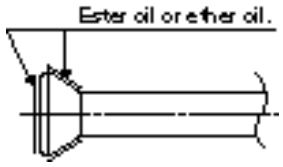
- For refrigerant piping of outdoor units, see the installation manual attached to the outdoor unit.
- Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.
- The outdoor unit is charged with refrigerant.

NOTE

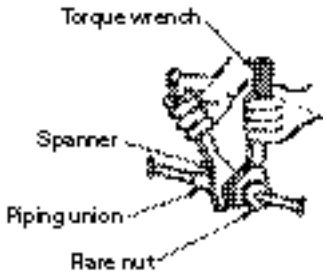
- Use a pipe cutter and flare suitable for the type of refrigerant.
- To prevent dust, moisuture or other foreign matter from infiltrating the tube, either pinch the end or cover it with tape.
- Do not allow anything other than the designated refrigerant to get mixed into the refrigerant circuit, such as air, etc. If any refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.

6-2 Connecting the refrigerant piping

- When connecting the flare nut, coat the flare both inside and outside with ester oil or ether oil and initially tighten by hand 3 or 4 turns before tightening firmly.

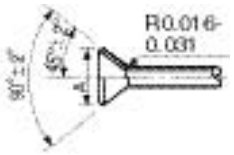


- To prevent flare nut cracking and gas leaks, be sure to use both a spanner and torque wrench together, as shown in the drawing below, when connecting or disconnecting pipes to/ from the unit.



- Refer to the Table 2 for the dimensions of flare nut spaces.
- Refer to the Table 2 to determine the proper tightening torque.

Table 2

Pipe size	Tightening torque (ft.lbf)	Flare dimensions A (in.)	Flare shape (in.)
ϕ 1/4"	10.4 – 12.7	0.342-0.358	
ϕ 3/8"	24.1 – 29.4	0.504-0.520	
ϕ 1/2"	36.5 – 44.5	0.638-0.654	
ϕ 5/8"	45.6 – 55.6	0.760-0.776	

NOTE

- Apply ester oil or ether oil around the flare portions before connecting.
- The flare nuts used must be those included with the main body.
- Over-tightening may damage the flare and cause a refrigerant leakage.

Not recommendable but in case of emergency

You must use a torque wrench but if you are obliged to install the unit without a torque wrench, you may follow the installation method mentioned below.

After the work is finished, make sure to check that there is no gas leak.

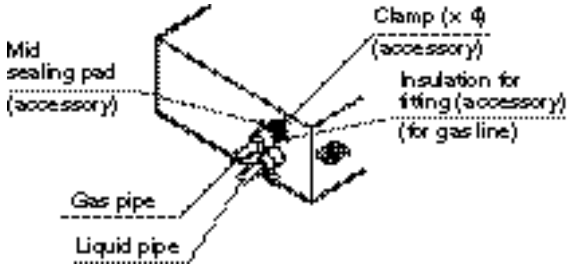
When you keep on tightening the flare nut with a spanner, there is a point where the tightening torque suddenly increases. From that position, further tighten the flare nut the angle shown below:

Table 3

Pipe size	Further tightening angle	Recommended arm length of tool (in.)
ϕ 1/4"	60 to 90 degrees	Approx. 5 7/8
ϕ 3/8"	60 to 90 degrees	Approx. 7 7/8
ϕ 1/2"	30 to 60 degrees	Approx. 9 13/16
ϕ 5/8"	30 to 60 degrees	Approx. 11 13/16

6-3 Piping insulation

- Execute heat insulation work completely on both sides of the gas piping and the liquid piping. Otherwise, a water leakage can result sometimes.
- When using a heat pump, the temperature of the gas piping can reach up to approximately 250°F, so use insulation which is sufficiently resistant.
- Also, in cases where the temperature and humidity of the refrigerant piping sections might exceed 86°F or RH80%, reinforce the refrigerant insulation. (13/16" or thicker) Condensation may form on the surface of the insulating material.
- Check the pipe connector for gas leaks, then insulate it as shown in the drawing below.
- Make absolutely sure to execute heat insulation works on the pipe-connecting section after checking gas leakage by thoroughly studying the following figure and using the attached heat insulating materials for fitting. (Fasten both ends with the clamps (accessory).)
- Wrap the sealing pad (accessory) only around the insulation for the joints on the gas piping side.

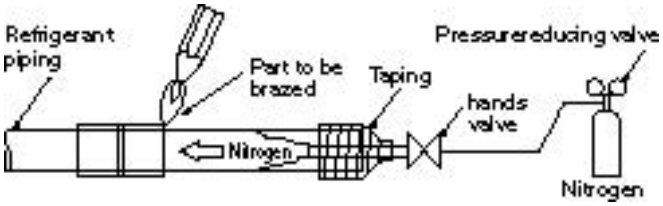


CAUTION

Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.

6-4 Brazing referigerant piping

- Before brazing local refrigerant piping, nitrogen gas shall be blown through the piping to expel air from the piping.
  If your brazing is done without nitrogen gas blowing, a large amount of oxide film develops inside the piping, and could cause system malfunction.
- When brazing the refrigerant piping, only begin brazing after having carried out nitrogen substitution or while inserting nitrogen into the refrigerant piping. Once this is done, connect the indoor unit with a flared or a flanged connection.
- Nitrogen should be set to 2.9psi. with a pressure-reducing valve if brazing while inserting nitrogen into the piping.



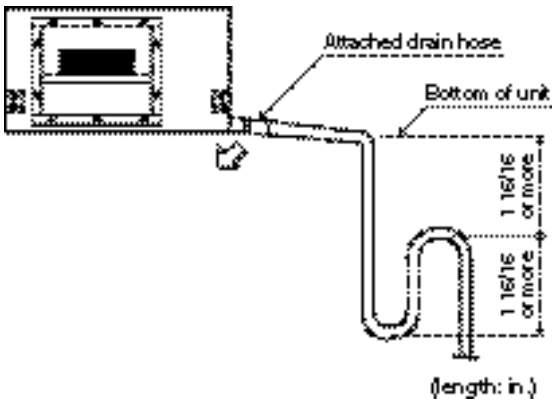
NOTE

Do not use flux when brazing refrigerant piping. Therefore, use the phosphor copper brazing filter metal (BCuP) which does not require flux.
(Flux has extremely harmful infulence on refrigerant piping sysems. For instance, if the chlorine based flux is used, it will cause pipe corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.)

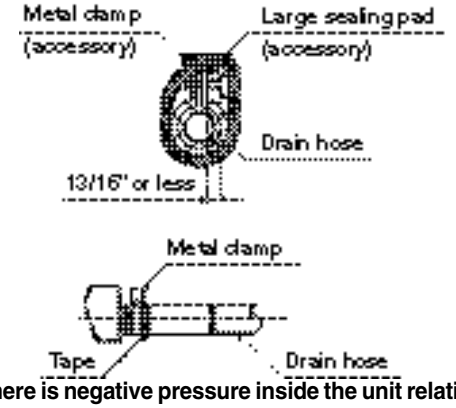
7. DRAIN PIPING WORK

〈〈**Rig the drain pipe as shown below and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.**〉〉
〈〈**Insulate the drain piping inside the building.**〉〉

(1) Carry out the drain piping.



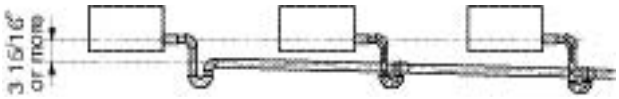
- Keep piping as short as possible and slope it downwards so that air may not remain trapped inside the pipe.
- Keep pipe size equal to or greater than that of the connecting pipe (Vinyl pipe of 1 " nominal diam. and 1 1/4" outer diam.).
- Use the attached drain hose and clamp.
  Tighten the clamp firmly.
- Insulate the metal clamp with the sealing pad.



- **There is negative pressure inside the unit relative to atmospheric pressure when the unit is running, so be sure to provide condensate trap on the condensate outlet. (See the figure)**
- **In order to prevent foreign matter from building up inside the piping, you should avoid curves as much as possible, and arrange so the trap can be cleaned.**

NOTE

- If converging multiple drain pipes, install according to the procedure shown below. (Install a condensate trap for each indoor unit.)



(2) After piping work is finished, check drainage flows smoothly.

- Add approximately 61in^3 of water slowly from the air inlet and check drainage flow.

NOTE

- Drain piping connections
  Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.

8. ELECTRIC WIRING WORK

8-1 GENERAL INSTRUCTIONS

- All field supplied parts and materials and electric works must conform to local codes.
- Use copper wire only.
- For electric wiring work, refer to also “Wiring diagram label” attached to the electric parts box lid.
- For remote controller wiring details, refer to the installation manual attached to the remote controller.
- All wiring must be performed by an authorized electrician.
- This system consists of multiple indoor units. Mark each indoor unit as unit A, unit B..., and be sure the terminal board wiring to the outdoor unit and BS unit are properly matched. If wiring and piping between the outdoor unit and an indoor unit are mismatched, the system may cause a malfunction.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.
- Refer to the installation manual attached to the outdoor unit for the size of power supply wiring connected to the outdoor unit, the capacity of the circuit breaker and switch, and wiring instructions.
- Be sure to ground the air conditioner.
- Do not connect the ground wire to gas and water pipes, lightning rods, or telephone ground wires.

- Gas pipes : might cause explosions or fire if gas leaks.
- Water pipes : no grounding effect if hard vinyl piping is used.
- Telephone ground wires or lightning rods : might cause abnormally high electric potential in the ground during lighting storms.

8-2 ELECTRICAL CHARACTERISTICS

Units				Power supply		Fan motor	
Model	Hz	Volts	Voltage range	MCA	MFA	W	FLA
FXMQ30MVJU	60	208-230	Max. 253 Min. 187	1.6	15	160	1.3
FXMQ36MVJU				2.9	15	270	2.4
FXMQ48MVJU				4.4	15	430	3.5

MCA: Min. Circuit Amps (A); MFA: Max. Fuse Amps (A)
kW: Fan Motor Rated Output (W); FLA: Full Load Amps (A)

8-3 SPECIFICATIONS FOR FIELD SUPPLIED FUSES AND WIRE

Model	Power supply wiring		Remote controller wiring Transmission wiring	
	Field fuses	Size	Wire	Size
FXMQ30MVJU FXMQ36MVJU FXMQ48MVJU	15A	Wire size must comply with local codes.	Sheathed wire (2 wire)	AWG 18-16

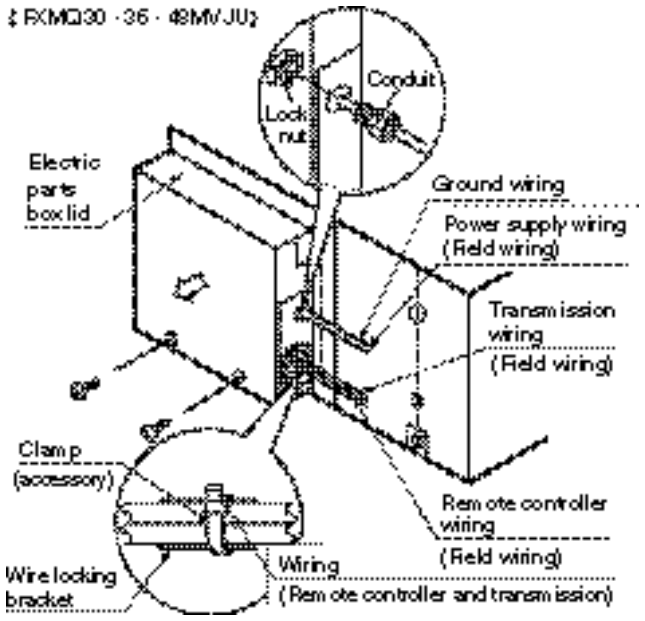
NOTE

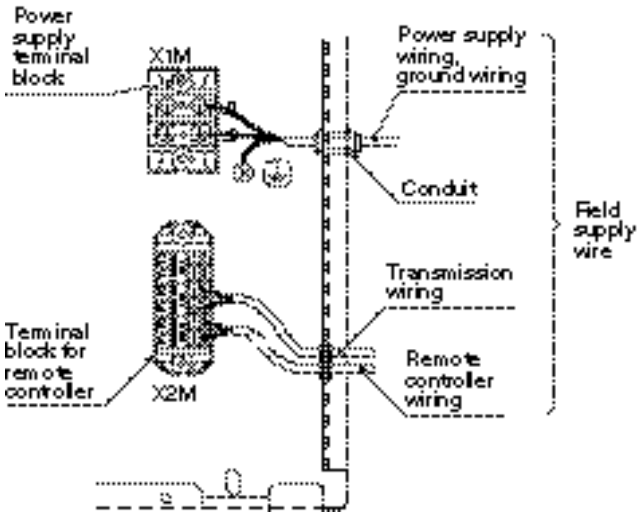
1. Allowable length of transmission wiring between indoor/outdoor units and between the indoor unit and the remote controller is as follows.
   (1) Outdoor unit – Indoor unit:
   Max. 3280ft. (Total wiring length: 6560ft.)
   (2) Indoor unit – Remote controller:
   Max. 1640ft.

9. WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER

9-1 HOW TO CONNECT WIRINGS

(Remove the electric parts box lid and wire as shown in the figure below.)



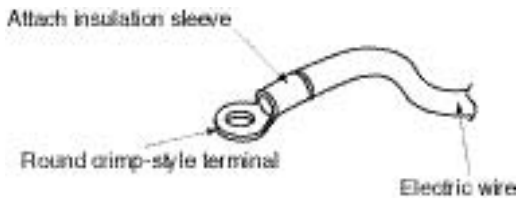


CAUTION

- Be sure to attach the sealing material or putty (field supplied) to hole of wiring to prevent the infiltration of water as well as any insects and other small creatures from outside. Otherwise a short-circuit may occur inside the electric parts box.
- When clamping the wires, be sure no pressure is applied to the wire connections by using the included clamping material to make appropriate clamps. Also, when wiring, make sure the lid on the electric parts box fits snugly by arranging the wires neatly and attaching the electric parts box lid firmly. When attaching the electric parts box lid, make sure no wires get caught in the edges. Pass wiring through the wiring through holes to prevent damage to them.
- Make sure the remote controller wiring, the wiring between the units, and other electrical wiring do not pass through the same locations outside of the unit, separating them by at least 1 15/16", otherwise electrical noise (external static) could cause mistaken operation or breakage.

NOTE

1. Use round crimp-style terminals for connecting wires to the power supply terminal block.
   If unavailable, observe the following points when wiring.
   - Do not connect wires of different gauge to the same power supply terminal.
     (Looseness in the connection may cause overheating.)
   - Use the specified electric wire. Connect the wire securely to the terminal. Lock the wire down without applying excessive force to the terminal. (Tightening torque: 0.97ft.lbf ±10 %)



2. **Tightening torque for the terminal screws.**
   - Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
   - If the terminal screws are tightened too hard, screws might be damaged.

- Refer to the table below for the tightening torque of the terminal screws.

Terminal	Size	Tightening torque (ft.lbf)
Terminal block for remote controller (6P)	M3.5	0.58~ 0.72
Power supply terminal block	M4	0.87~ 1.06

3. Do not connect wires of different gauge to the same grounding terminal. Looseness in the connection may deteriorate protection.
4. Outside of the unit, keep transmission wiring at least 1 15/16” away from power supply wiring. The equipment may malfunction if subjected to electrical (external) noise.
5. For remote controller wiring, refer to the “INSTALLATION MANUAL OF REMOTE CONTROLLER” attached to the remote controller.
6. **Never connect power supply wiring to the terminal block for remote controller wiring. A mistake of the sort could damage the entire system.**
7. Use only specified wire and tightly connect wires to terminals. Be careful wires do not place external stress on terminals. Keep wiring in neat order and so as not to obstruct other equipment such as popping open the electric parts box lid. Make sure the lid closes tight. Incomplete connections could result in overheating, and in worse case, electric shock or fire.

Continued to “COMMON ITEM” (P18)

FXSQ12MVJU FXSQ24MVJU FXSQ36MVJU
FXSQ18MVJU FXSQ30MVJU FXSQ48MVJU

2-1 ACCESSORIES

Check the following accessories are included with your unit.

Name	Metal clamp	Paper pattern for installation	Drain hose	Insulation for fitting
Quantity	1 pc.	1 pc.	1 pc.	1 each.
Shape				 for gas pipe for liquid pipe

Name	Sealing pad	Screws for duct flanges
Quantity	1 each	1 set
Shape	 Large  mid	 FXSQ12MVJU 6 / FXSQ18MVJU 8 / FXSQ24MVJU 12 / FXSQ30 · 36 · 48MVJU 16

Name	Washer for hanger bracket	Clamp	Screws for fixing the paper pattern for installation	(Other)
Quantity	8 pcs.	6 pcs.	6 pcs.	• Operation manual • Installation manual • Sealing material (Small 1 3/8×5 7/8) (2 pcs.)
Shape				

• Screws for fixing panels are attached to decoration panel.

2-2 OPTIONAL ACCESSORIES

• Parts listed on the below table are required with this indoor unit.

Table 1

Model	Min. height above ceiling (in.)	Air inlet panel		Canvas connection for air inlet panel
		Color	White	
FXSQ12MVJU	16 3/4 or more *	BYBS32DJW1		Installation not required
	13 3/4 or more			KSAJ25K36
FXSQ18MVJU	16 3/4 or more *	BYBS45DJW1		Installation not required
	13 3/4 or more			KSAJ25K56
FXSQ24MVJU	16 3/4 or more *	BYBS71DJW1		Installation not required
	13 3/4 or more			KSAJ25K80
FXSQ30 · 36 · 48MVJU	16 3/4 or more *	BYBS125DJW1		Installation not required
	13 3/4 or more			KSAJ25K160

* A minimum height of 16 3/4" from the ceiling is required to install the canvas connection for the air inlet panel.

Table 2

Remote controller	
Wired type	BRC1C71

FOR THE FOLLOWING ITEMS, TAKE SPECIAL CARE DURING CONSTRUCTION AND CHECK AFTER INSTALLATION IS FINISHED.

a. Items to be checked after completion of work

Items to be checked	If not properly done, what is likely to occur	Check
Are the indoor and outdoor unit fixed firmly?	The units may drop, vibrate or make noise.	
Is the gas leak test finished?	It may result in insuffcient cooling.	
Is the unit fully insulated?	Condensate water may drip.	
Does drainage flow smoothly?	Condensate water may drip.	
Does the power supply voltage correspond to that shown on the name plate?	The unit may malfunction or the components burn out.	
Are wiring and piping correct?	The unit may malfunction or the components burn out.	
Is the unit safely grounded?	Dangerous at electric leakage.	
Is wiring size according to specifications?	The unit may malfunction or the components burn out.	
Is something blocking the air outlet or inlet of either the indoor or outdoor units?	It may result in insufficient cooling.	
Are refrigerant piping length and additional refrigerant charge noted down?	The refrigerant charge in the system is not clear.	

b. Items to be checked at time of delivery

Also review the "SAFETY CONSIDERATIONS"

Items to be checked	Check
Did you explain about operations while showing the operation manual to your customer?	
Did you hand the operation manual over to your customer?	

c. Points for explanation about operations

The items with ⚠WARNING and ⚠CAUTION marks in the operation manual are the items pertaining to possibillties for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your customers to read the operation manual.

2-3 NOTE TO THE INSTALLER

Be sure to instruct customers how to properly operate the unit (especially cleaning filters, operating different functions, and adjusting the temperature) by having them carry out operations themselves while looking at the manual.

3. SELECTING INSTALLATION SITE

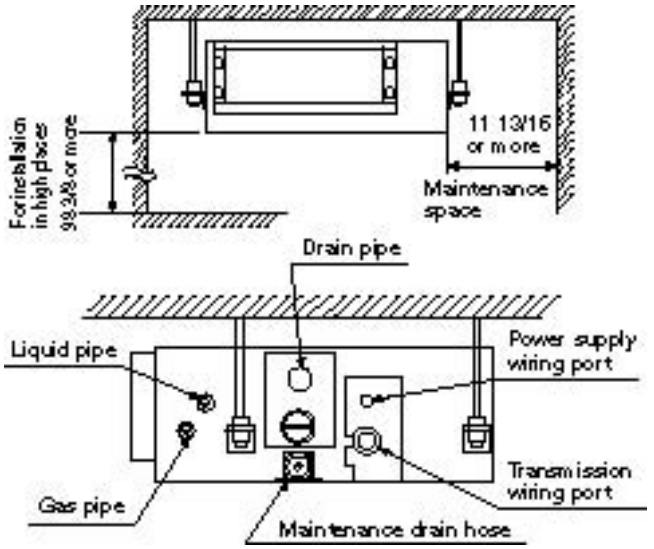
Please attach additional thermal insulation material to the unit body when it is believed that the relative humidity in the ceiling exceeds 80%. Use glass wool, polyethylene foam, or similar with a thickness of 3/8" or more as thermal insulation material.

(1) Select an installation site where the following conditions are fulfilled and that meets with your customer's approval.

- Where optimum air distribution can be ensured.
- Where nothing blocks air passage.
- Where condensate can be properly drained.
- In the upper space (including the back of the ceiling) of the indoor unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
- If supporting structural members are not strong enough to take the unit's weight, the unit could fall out of place and cause serious injury.
- Where the false ceiling is not noticeably on an incline.
- Where there is no risk of flammable gas leakage.
- Where sufficient clearance for maintenance and service can be ensured.
- Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual for the outdoor unit.)

NOTE

- Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5 ft. away from televisions or radios in order to prevent image interference or noise. (Depending on the radio waves, a distance of 3.5 ft. may not be sufficient enough to eliminate the noise.)



- Install this unit where the height of bottom panel is more than 8.2 ft. so that the user cannot easily touch.

(length: in.)

NOTE

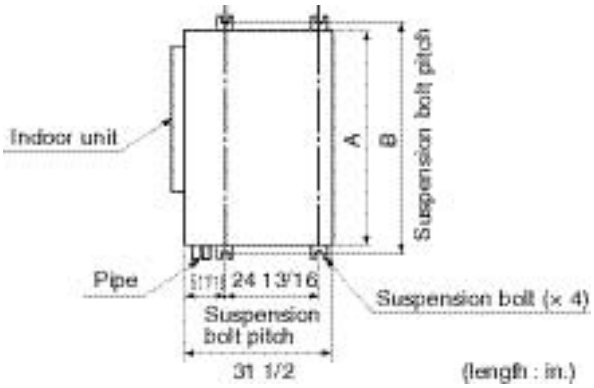
If installing the wireless kit in a room with electronic fluorescent lighting (inverter or rapid start type), the remote controller's transmission distance may be shortened. Indoor units should be installed as far away from fluorescent lighting as possible.

(2) Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.

(Installation pitch is marked on the paper pattern for installation. Refer to it to check for points requiring reinforcing.)

4. PREPARATIONS BEFORE INSTALLATION

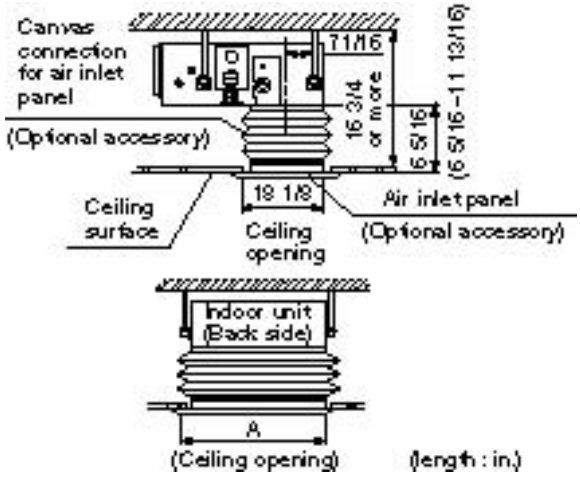
(1) Relation of ceiling opening to unit and suspension bolt position



Model	A (in.)	B (in.)
FXSQ12MVJU	21 5/8	23 5/8
FXSQ18MVJU	27 9/16	29 1/2
FXSQ24MVJU	39 3/8	41 5/16
FXSQ30 · 36 · 48MVJU	55 1/16	57 1/16

- For standard installation (air inlet on the bottom side), choose one of the below two means of installation.
  Note: For other than standard installation, contact your Daikin dealer for details.

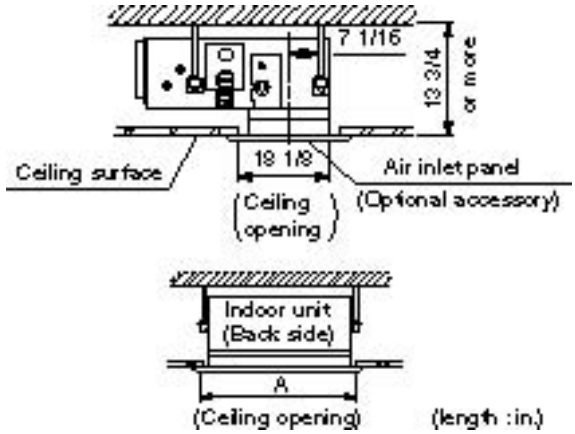
For mounting air inlet panel with canvas connection



Model	A (in.)
FXSQ12MVJU	24
FXSQ18MVJU	29 7/8
FXSQ24MVJU	41 11/16

FXSQ30 · 36 · 48MVJU	57 7/16

For mounting air inlet panel directly

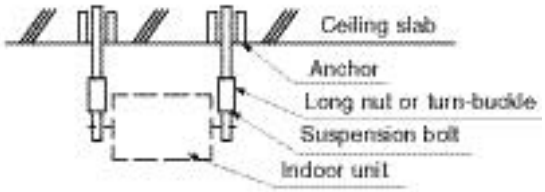


Model	A (in.)
FXSQ12MVJU	24
FXSQ18MVJU	29 7/8
FXSQ24MVJU	41 11/16
FXSQ30 · 36 · 48MVJU	57 7/16

(2) The fan speed for this indoor unit is preset to provide standard external static pressure.

- If higher or lower external static pressure is required, reposition the adapter for the PC board. Refer to "9. WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER".

〈Installation example〉



Note: All the above parts are field supplied.

(3) Install the suspension bolts. (Use bolts of 3/8" diameter.)

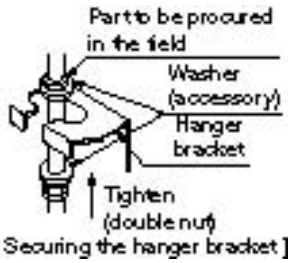
Use a hole-in-anchor, sunken insert, sunken anchor for existing ceilings, and a sunken insert, sunken anchor or other part to be procured in the field to reinforce the ceiling to bearing the weight of the unit.

5. INDOOR UNIT INSTALLATION

〈〈**Installing optional accessories (except for the decoration panel) before installing the indoor unit is easier.**
As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by our company.〉〉

(1) Install the indoor unit temporarily.

- Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and washer from the upper and lower sides of the hanger bracket.

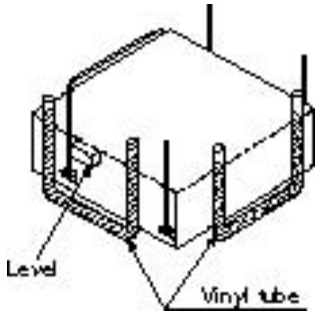


[Securing the hanger bracket]

(2) Check the unit is horizontally level.

NOTE

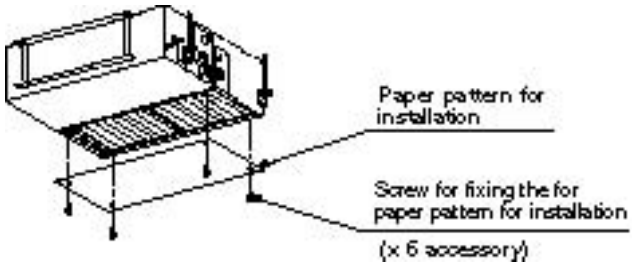
- **The indoor unit is equipped with a built-in drain pump and float switch. At each of the unit's 4 corners, verify that it is level by using a level or a water-filled vinyl tube. (If the unit is inclined against condensate flow, the float switch may malfunction and cause water to drip.)**



(3) Tighten the upper nut.

(4) Fix the paper pattern for installation.

- The paper pattern for installation corresponds with the measurements of the ceiling opening. Consult the builder for details.
- Attach the paper pattern for installation to the unit with the screws as shown in the drawing.
  The paper pattern for installation is marked for 3 types of ceiling openings. Read the notations carefully when installing.



6. REFRIGERANT PIPING WORK

6-1 GENERAL INSTRUCTIONS

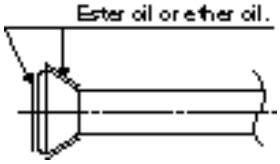
- For refrigerant piping of outdoor units, see the installation manual attached to the outdoor unit.
- Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.
- The outdoor unit is charged with refrigerant.

NOTE

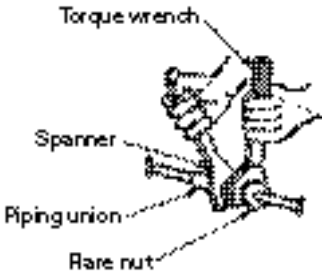
- Use a pipe cutter and flare suitable for the type of refrigerant.
- To prevent dust, moisuture or other foreign matter from infiltrating the tube, either pinch the end or cover it with tape.
- Do not allow anything other than the designated refrigerant to get mixed into the refrigerant circuit, such as air, etc. If any refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.

6-2 Connecting the refrigerant piping

- When connecting the flare nut, coat the flare both inside and outside with ester oil or ether oil and initially tighten by hand 3 or 4 turns before tightening firmly.

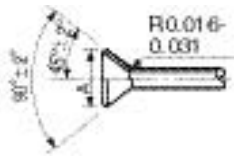


- To prevent flare nut cracking and gas leaks, be sure to use both a spanner and torque wrench together, as shown in the drawing below, when connecting or disconnecting pipes to/ from the unit.



- Refer to the Table 3 for the dimensions of flare nut spaces.
- Refer to the Table 3 to determine the proper tightening torque.

Table 3

Pipe size	Tightening torque (ft.lbf)	Flare dimensions A (in.)	Flare shape (in.)
ϕ 1/4"	10.4 – 12.7	0.342-0.358	
ϕ 3/8"	24.1 – 29.4	0.504-0.520	
ϕ 1/2"	36.5 – 44.5	0.638-0.654	
ϕ 5/8"	45.6 – 55.6	0.760-0.776	

NOTE

- Apply ester oil or ether oil around the flare portions before connecting.
- The flare nuts used must be those included with the main body.
- Over-tightening may damage the flare and cause a refrigerant leakage.

Not recommendable but in case of emergency

You must use a torque wrench but if you are obliged to install the unit without a torque wrench, you may follow the installation method mentioned below.

After the work is finished, make sure to check that there is no gas leak.

When you keep on tightening the flare nut with a spanner, there is a point where the tightening torque suddenly increases. From that position, further tighten the flare nut the angle shown below:

Table 4

Pipe size	Further tightening angle	Recommended arm length of tool (in.)
ϕ 1/4"	60 to 90 degrees	Approx. 5 7/8
ϕ 3/8"	60 to 90 degrees	Approx. 7 7/8
ϕ 1/2"	30 to 60 degrees	Approx. 9 13/16
ϕ 5/8"	30 to 60 degrees	Approx. 11 13/16

6-3 Piping insulation

- Execute heat insulation work completely on both sides of the gas piping and the liquid piping. Otherwise, a water leakage can result sometimes.
- When using a heat pump, the temperature of the gas piping can reach up to approximately 250°F, so use insulation which is sufficiently resistant.
- Also, in cases where the temperature and humidity of the refrigerant piping sections might exceed 86°F or RH80%, reinforce the refrigerant insulation. (13/16" or thicker) Condensation may form on the surface of the insulating material.
- Check the pipe connector for gas leaks, then insulate it as shown in the drawing below.
- Make absolutely sure to execute heat insulation works on the pipe-connecting section after checking gas leakage by thoroughly studying the following figure and using the attached heat insulating materials for fitting. (Fasten both ends with the clamps (accessory).)
- Wrap the sealing pad (accessory) only around the insulation for the joints on the gas piping side.

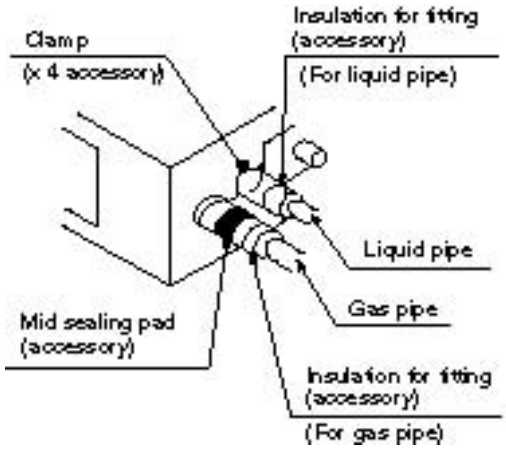


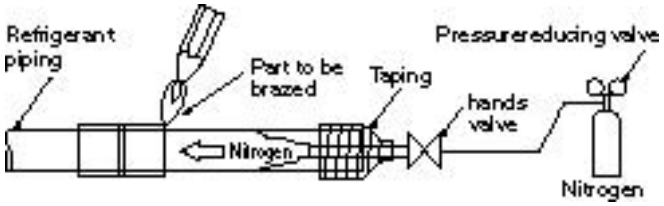
Fig. 1

CAUTION

Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.

6-4 Brazing referigerant piping

- Before brazing local refrigerant piping, nitrogen gas shall be blown through the piping to expel air from the piping.
  If your brazing is done without nitrogen gas blowing, a large amount of oxide film develops inside the piping, and could cause system malfunction.
- When brazing the refrigerant piping, only begin brazing after having carried out nitrogen substitution or while inserting nitrogen into the refrigerant piping. Once this is done, connect the indoor unit with a flared or a flanged connection.
- Nitrogen should be set to 2.9psi. with a pressure-reducing valve if brazing while inserting nitrogen into the piping.



NOTE

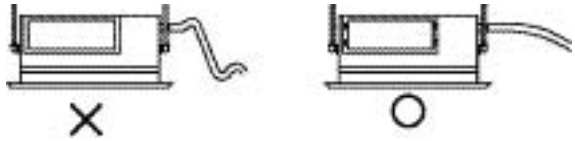
Do not use flux when brazing refrigerant piping. Therefore, use the phosphor copper brazing filter metal (BCuP) which does not require flux.
(Flux has extremely harmful infulence on refrigerant piping sysems. For instance, if the chlorine based flux is used, it will cause pipe corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.)

7. DRAIN PIPING WORK

〈〈**Rig the drain pipe as shown below and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.**〉〉

(1) Carry out the drain piping

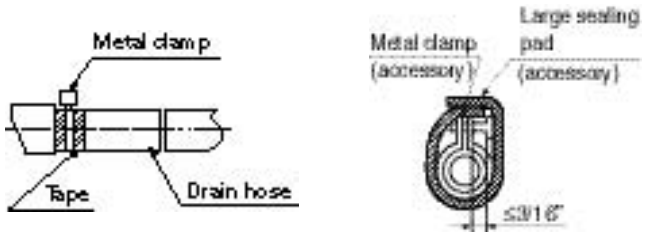
- The diameter of the drain pipe should be greater than or equal to the diameter of the connecting pipe (vinyl tube; pipe size: 13/16"; outer dimension: 1 1/4").
- Keep the drain pipe short and sloping downwards at a gradient of at least 1/100 to prevent air pockets from forming.
- If the drain hose cannot be sufficiently set on a slope, execute the drain raising piping.
- To keep the drain hose from sagging, space hanging wires every 3.28 to 4.92 ft..



NOTE

Setting the unit at an angle opposite to the drain piping might cause leaks.

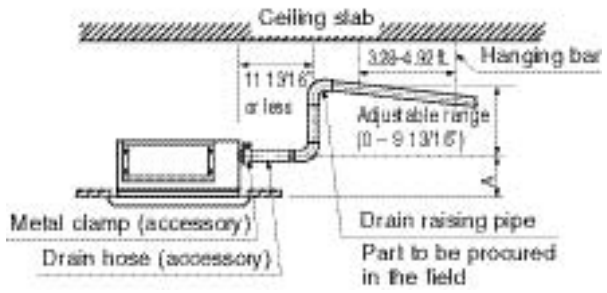
- Use the drain hose and the metal clamp. Tighten the clamp firmly. Insert the drain hose into the drain socket, up to the tape. Tighten the clamp until the screw head is less than 3/16" from the hose.
- Wrap the sealing pad over the metal clamp and drain hose to insulate.
- Insulate the drain hose inside the building.



〈 **PRECAUTIONS FOR DRAIN RAISING PIPING** 〉

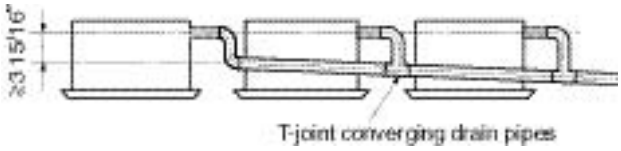
〈 **HOW TO INSTALL PIPING** 〉

(1) Connect the drain hose to the drain raising pipes, and insulate them.
(2) Connect the drain hose to the drain outlet on the indoor unit, and tighten it with the metal clamp.
(3) Insulate both metal clamp and drain hose with the sealing pad.



	A (in.)
When canvas duct is installed	13 3/4 – 20 7/8
When air inlet panel is directly installed	10 13/16

- If converging multiple drain pipes, install according to the procedure shown below.



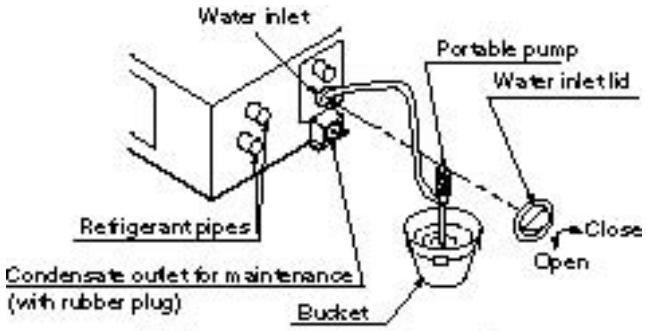
Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.

NOTE

- Drain piping connections
  Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.
- Keep in mind that it will become the cause of getting drain pipe blocked if water collects on drain pipe.

(2) After piping work is finished, check drainage flows smoothly.

- Open the water inlet lid, add approximately 61 in^3 of water gradually and check drainage flow.



《Adding water from inspection opening》

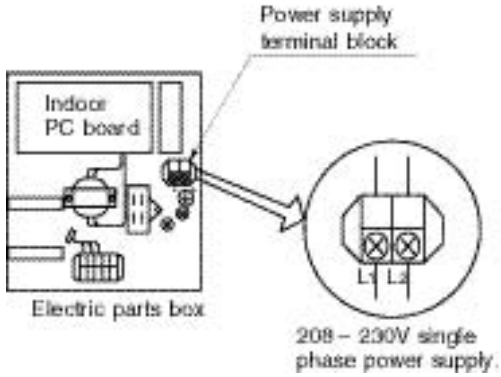
Note: Use this outlet to condensate water from the drain pan.

[WHEN ELECTRIC WIRING WORK IS FINISHED]

- Check drainage flow during COOL running, explained under "TEST OPERATION."

[WHEN ELECTRIC WIRING WORK IS NOT FINISHED]

- Remove the electric parts box lid, connect a power supply and remote controller to the terminals.
  (Refer to the "HOW TO CONNECT WIRINGS")



Be sure attach the electric parts box lid before turning on the power.
Next, press the inspection/test operation button " " on the remote controller. The unit will engage the test operation mode. Press the operation mode selector button " " until selecting FAN OPERATION " ". Then, press the ON/OFF button " ". The indoor unit fan and drain pump will start up. Check that the water has drained from the unit. Press " " to go back to the first mode.

- You can check whether drainage is satisfactory or not by removing the access opening lid and checking the water level of the drain pan through the access opening.
- **Be careful when doing so because the fan is turning at the same time.**

8. ELECTRIC WIRING WORK

8-1 GENERAL INSTRUCTIONS

- All field supplied parts and materials, electric works must conform to local codes.
- Use copper wire only.
- Follow the "WIRING DIAGRAM" attached to the unitbody to wire the outdoor unit, indoor units and the remote controller. For details on hooking up the remote controller, refer to the "INSTALLATION MANUAL OF REMOTE CONTROLLER."
- All wiring must be performed by an authorized electrician.
- This system consists of multiple indoor units. Mark each indoor unit as unit A, unit B . . . , and be sure the terminal board wiring to the outdoor unit and BS unit are properly matched. If wiring and piping between the outdoor unit and an indoor unit are mismatched, the system may cause a malfunction.
- A circuit breaker capable of shutting down the power supply to the entire system must be installed.

8-2 ELECTRICAL CHARACTERISTICS

Units				Power supply		Fan motor	
Model	Hz	Volts	Volt-age range	MCA	MFA	W	FLA
FXSQ12MVJU	60	208-230	Max. 253 Min. 187	0.7	15	50	0.6
FXSQ18MVJU				1.0	15	85	0.8
FXSQ24MVJU				1.4	15	125	1.1
FXSQ30MVJU				1.8	15	225	1.4
FXSQ36MVJU				1.8	15	225	1.5
FXSQ48MVJU				2.4	15	225	2.0

MCA:Min. Circuit Amps (A); MFA:Max. Fuse Amps (A)

kW: Fan Motor Rated Output (W); FLA:Full Load Amps (A)

8-3 SPECIFICATIONS FOR FIELD SUPPLIED FUSES AND WIRE

Model	Power supply wiring		Remote controller wiring Transmission wiring	
	Field fuses	Size	Wire	Size
FXSQ12MVJU FXSQ18MVJU FXSQ24MVJU FXSQ30MVJU FXSQ36MVJU FXSQ48MVJU	15A	Wire size must comply with local codes.	Sheathed wire (2 wire)	AWG 18-16

NOTE

1. Allowable length of transmission wiring between indoor/outdoor units and between the indoor unit and the remote controller is as follows.
   (1) Outdoor unit – Indoor unit:
   Max. 3280 ft. (Total wiring length: 6560 ft.)
   (2) Indoor unit – Remote controller:
   Max. 1640 ft.

2. Insulated thickness: 1/16” or more

9. WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER

9-1 HOW TO CONNECT WIRINGS

- Lower the electric parts box, as shown in the drawing, to make connections.

NOTE

- After wiring, adhere the sealing material (1 3/8" × 5 7/8") around the wires as shown below.
  [Be sure to adhere it to avoid water from outside unit.]

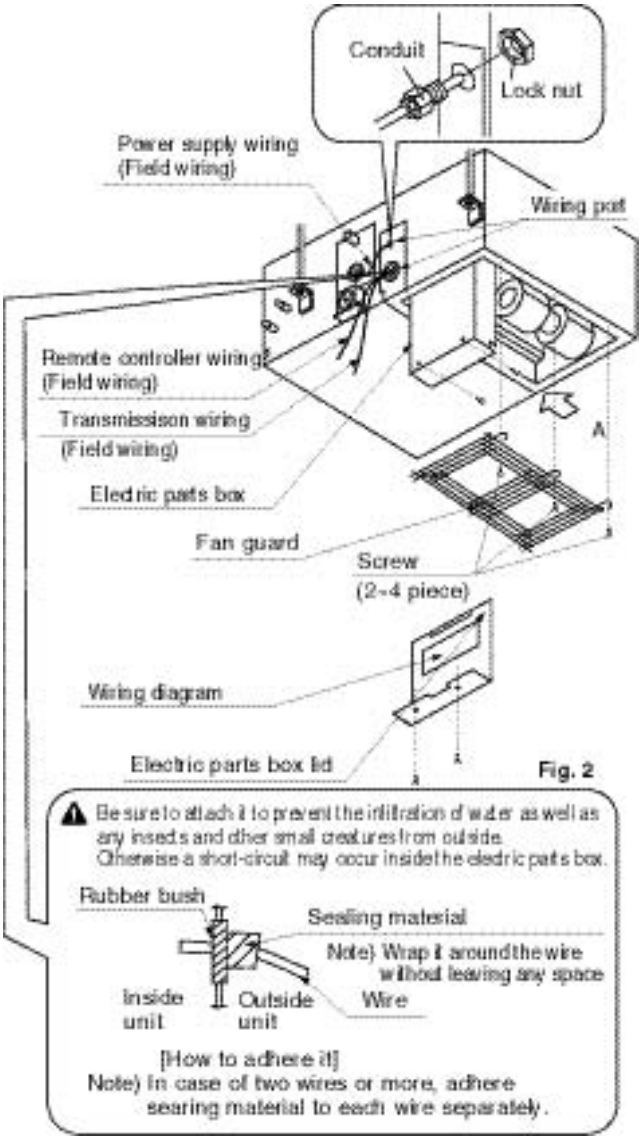


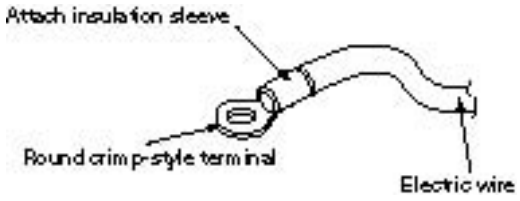
Fig. 2

CAUTION

- Be sure to attach the sealing material or putty (field supplied) to hole of wiring to prevent the infiltration of water as well as any insects and other small creatures from outside. Otherwise a short-circuit may occur inside the electric parts box.
- When clamping the wires, be sure no pressure is applied to the wire connections by using the included clamping material to make appropriate clamps. Also, when wiring, make sure the lid on the electric parts box fits snugly by arranging the wires neatly and attaching the electric parts box lid firmly. When attaching the electric parts box lid, make sure no wires get caught in the edges. Pass wiring through the wiring through holes to prevent damage to them.
- Make sure the remote controller wiring, the wiring between the units, and other electrical wiring do not pass through the same locations outside of the unit, separating them by at least 1 15/16", otherwise electrical noise (external static) could cause mistaken operation or breakage.

NOTE

1. Use round crimp-style terminals for connecting wires to the power supply terminal block.
   If unavailable, observe the following points when wiring.
   - Do not connect wires of different gauge to the same power supply terminal.
     (Looseness in the connection may cause overheating.)
   - Use the specified electric wire. Connect the wire securely to the terminal. Lock the wire down without applying excessive force to the terminal. (Tightening torque: 0.97ft.lbf ±10 %)

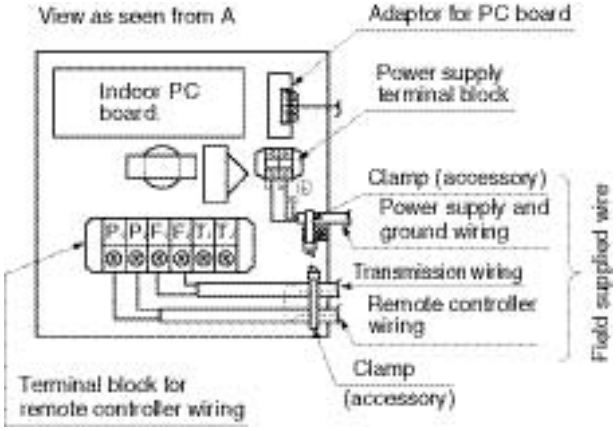


2. Tightening torque for the terminal screws.

- Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.
- Refer to the table below for the tightening torque of the terminal screws.

Terminal	Size	Tightening torque (ft.lbf)
Terminal block for remote controller (6P)	M3.5	0.58 – 0.72
Power supply terminal block	M4	0.87 – 1.06
Ground terminal	M4	1.06 – 1.43

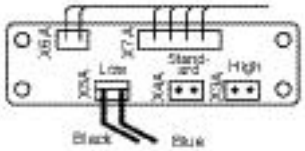
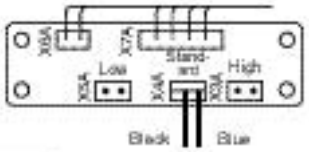
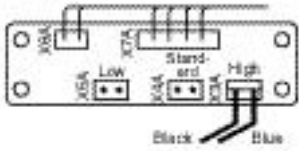
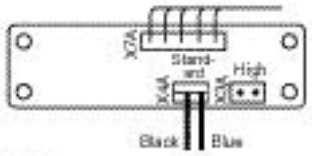
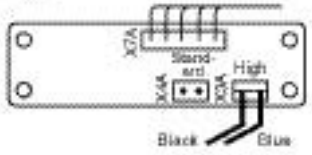
3. Do not connect wires of different gauge to the same grounding terminal. Looseness in the connection may deteriorate protection.
4. Outside of the unit, keep transmission wiring at least 1 15/16" away from power supply wiring. The equipment may malfunction if subjected to electrical (external) noise.



5. For remote controller wiring, refer to the "INSTALLATION MANUAL OF REMOTE CONTROLLER" attached to the remote controller.
6. **Never connect power supply wiring to the terminal block for remote controller wiring. A mistake of the sort could damage the entire system.**
7. Use only specified wire and tightly connect wires to terminals. Be careful wires do not place external stress on terminals. Keep wiring in neat order and so as not to obstruct other equipment such as popping open the electric parts box lid. Make sure the lid closes tight. Incomplete connections could result in overheating, and in worse case, electric shock or fire.

9-2 SETTING OF STATIC PRESSURE CHANGEOVER CONNECTOR

- According to the system static pressure requirement, reposition the adaptors of PC board inside the electric parts box as shown in the below drawings.

Model	Static pressure
FXSQ12· 18· 24MVJU	Low  Standard  High 
FXSQ30· 36· 48MVJU	Low Not available Standard  High 

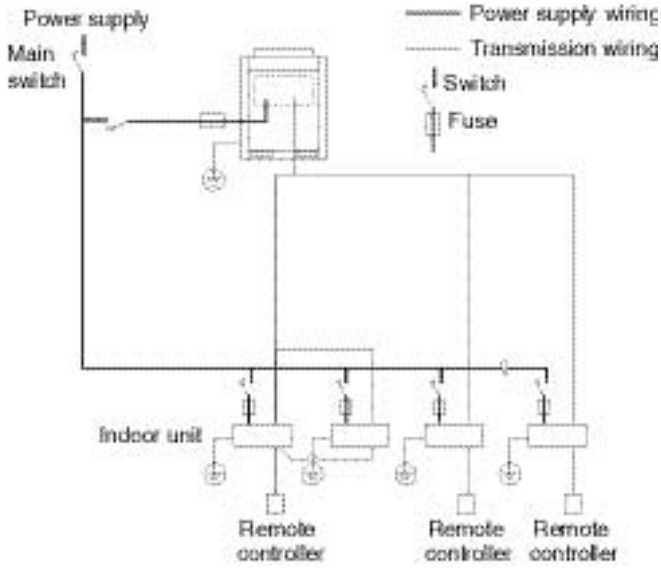
NOTE

- The unit is factory set for standard static pressure (X4A) at the time of shipping.

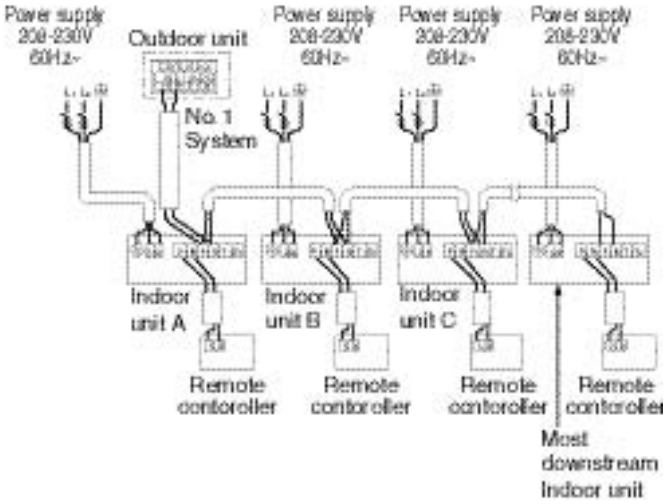
9-3 WIRING EXAMPLE

- Fit the power supply wiring of each unit with a switch and fuse as shown in the drawing.

COMPLETE SYSTEM EXAMPLE



1. When using 1 remote controller for 1 indoor unit. (Normal operation)



2. For group control or use with 2 remote controllers

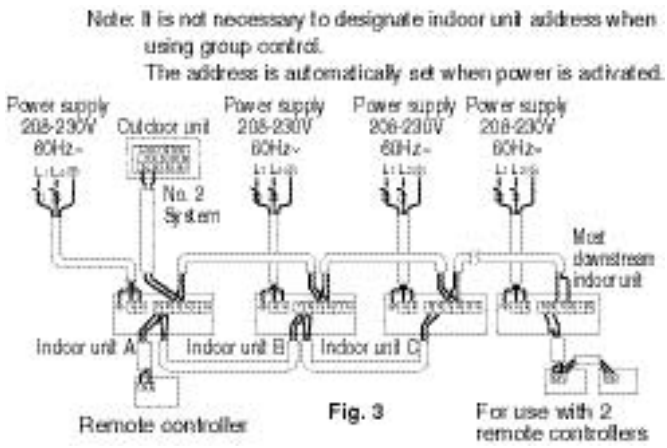


Fig. 3

NOTE

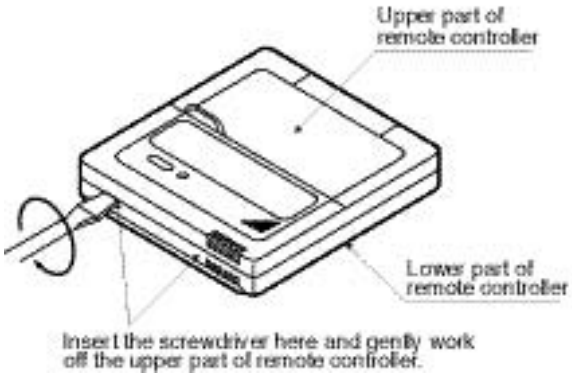
1. A single switch can be used to supply power to units on the same system. However, branch switches and branch circuit breakers must be selected carefully.
2. Do not ground the equipment on gas pipes, water pipes or lightning rods, or crossground with telephones. Improper grounding could result in electric shock.

9-4 CONTROL BY 2 REMOTE CONTROLLERS (Controlling 1 indoor unit by 2 remote controllers)

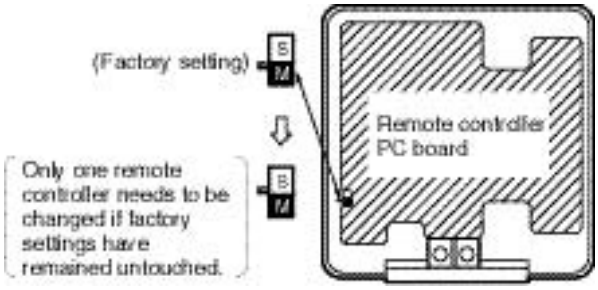
- When using 2 remote controllers, one must be set to “MAIN” and the other to “SUB”.

MAIN/SUB CHANGEOVER

(1) Insert a screw driver into the recess between the upper and lower part of remote controller and, working from the 2 positions, pry off the upper part.
The remote controller PC board is attached to the upper part of remote controller.



(2) Turn the MAIN/SUB changeover switch on one of the two remote controller PC boards to “S”.
(Leave the switch of the other remote controller set to “M”.)



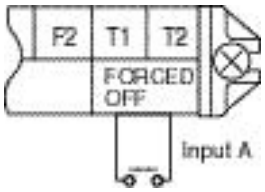
Wiring Method (See “ELECTRIC WIRING WORK”)

(3) Remove the electric parts box lid

(4) Add remote control 2 (slave) to the terminal block for remote controller (P_1, P_2) in the electric parts box. (There is no polarity.) (Refer to Fig. 3 and 8-3.)

9-5 COMPUTERISED CONTROL (FORCED OFF AND ON/OFF OPERATION)

(1) Wire specifications and how to perform wiring
- Connect the input from outside to terminals T1 and T2 of the terminal block for remote controller.



Wire specification	Sheathed vinyl cord or cable (2 wire)
Gauge	AWG 18-16
Length	Max. 328ft.
External terminal	Contact that can ensure the minimum applicable load of 15 V DC, 10 mA.

(2) Actuation
- The following table explains FORCED OFF and ON/OFF OPERATIONS in response to Input A.

FORCED OFF	ON/OFF OPERATION
Input “ON” stops operation (impossible by remote controllers.)	Input OFF → ON turns ON unit.
Input OFF enables control by remote controller.	Input ON → OFF turns OFF unit.

(3) How to select FORCED OFF and ON/OFF OPERATION
- Turn the power on and then use the remote controller to select operation.

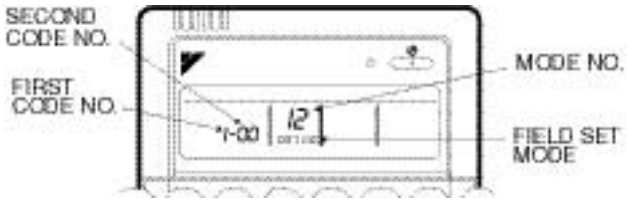
9-6 CENTRALIZED CONTROL

- For centralized control, it is necessary to designate the group No. For details, refer to the manual of each optional controllers for centralized control.

10. FIELD SETTING

Make sure the terminal box lids are closed on the indoor and outdoor units.
Field setting must be made from the remote controller in accordance with the installation condition.

- Setting can be made by changing the “Mode No.”, “FIRST CODE NO.”, and “SECOND CODE NO.”.
- For setting and operation, refer to the “FIELD SETTING” in the installation manual of the remote controller.



- Set the remote controller to the field set mode. For details, refer to the “HOW TO SET IN THE FIELD”, in the remote controller manual.
- When in the field set mode, select mode No. 12, then set the first code (switch) No. to “1”. Then set second code (position) No. to “01” for FORCED OFF and “02” for ON/OFF OPERATION. (FORCED OFF at factory set)

11. TEST OPERATION

Refer to the installation manual of the outdoor unit.

- The operation lamp of the remote controller will flash when an malfunction occurs. Check the malfunction code on the liquid crystal display to identify the point of trouble. An explanation of malfunction codes and the corresponding trouble is provided in “CAUTION FOR SERVICING” of the outdoor unit.
  If any of the items in Table 4 are displayed, there may be a problem with the wiring or power, so check the wiring again.

Table 2

Remote control display	Content
“Concentrated Management” is lit up	• There is a short circuit at the FORCED OFF terminals (T1, T2)
“U3” is lit up	• The check operation has not performed on outdoor unit P.C.B.
“U4” is lit up “UH” is lit up	• The power on the outdoor unit is off. • The outdoor unit has not been wired for power supply. • Incorrect wiring for the transmission wiring and / or FORCED OFF wiring.
No display	• The power on the indoor unit is off. • The indoor unit has not been wired for power supply. • Incorrect wiring for the remote controller wiring, the transmission wiring and / or the FORCED OFF wiring.

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