



INSTALLATION MANUAL

R410A SPLIT SERIES



MODELS

FTXB50CV1B
FTXB60CV1B

RXB50CV1B
RXB60CV1B

Installation Manual
R410A Split Series

English

Manuel d'installation
Série split R410A

Français

Installationsanleitung
Split-Baureihe R410A

Deutsch

Manuale d'installazione
Serie Multiambienti R410A

Italiano

Manual de instalación
Serie Split R410A

Español

Руководство по монтажу
Серия R410A с раздельной установкой

Русский

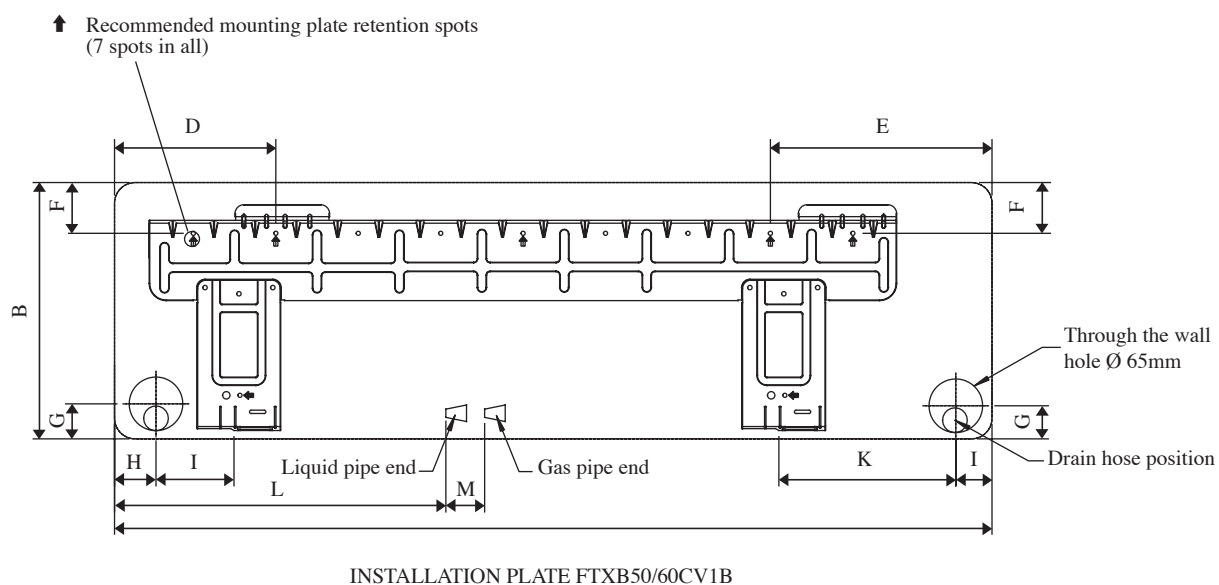
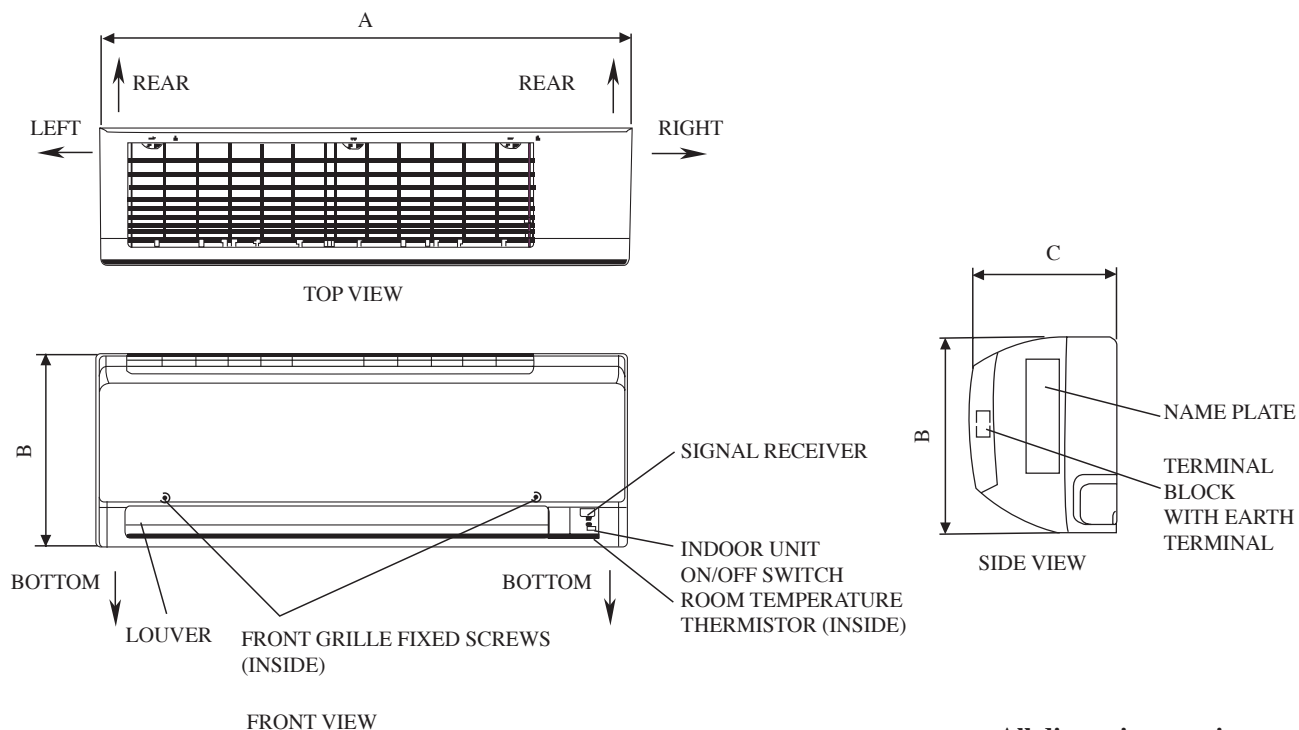
Montaj kılavuzu
R410A Split serisi

Türkçe

OUTLINE AND DIMENSIONS

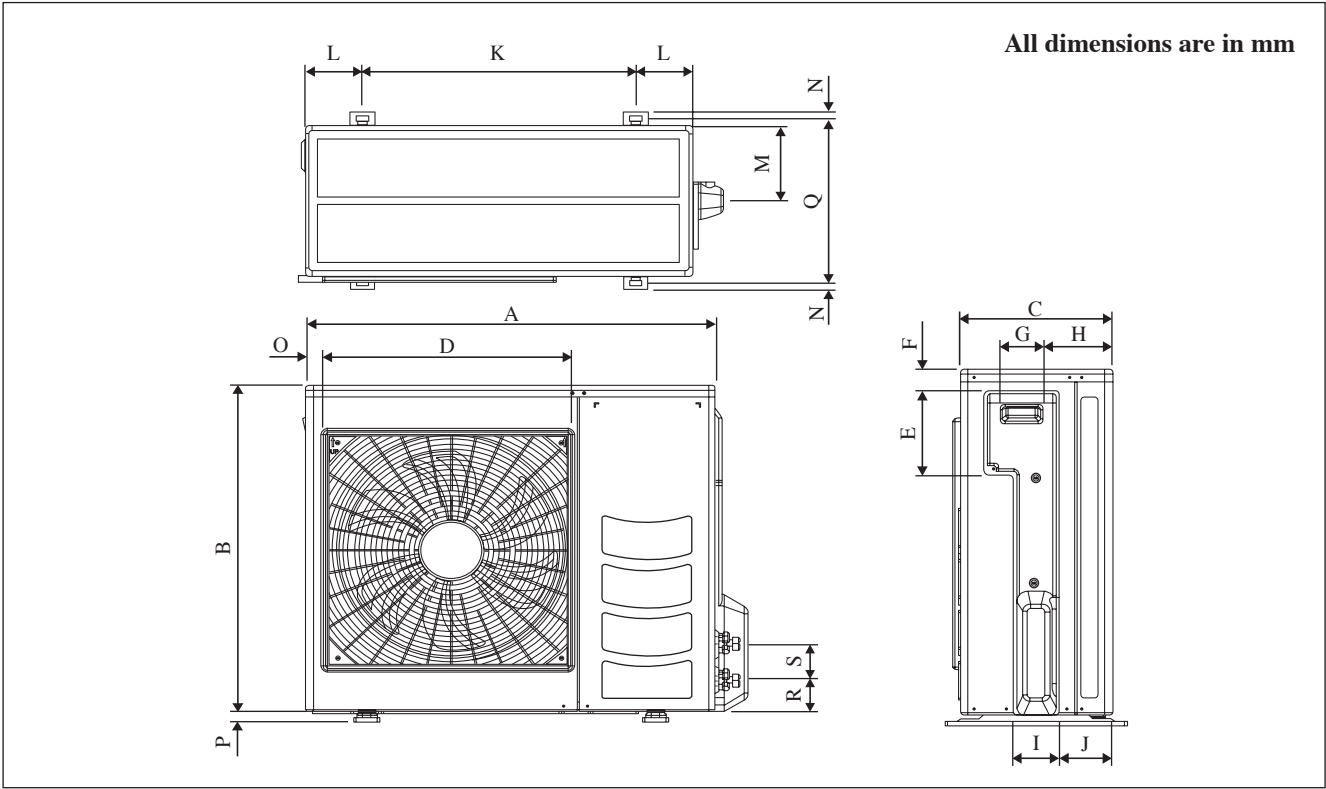
Indoor Unit

THE MARK (→) SHOWS PIPING DIRECTION



Model \ Dimension	A	B	C	D	E	F	G	H	I	J	K	L	M
FTXB50/60CV1B	1065	310	228	190	173	61	40	45	48	91	219	580	45

Outdoor Unit RXB50/60CV1B



Dimension / Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
RXB50/60CV1B	855	730	328	520	179	46	93	149	101	113	603	126	164	15

Dimension / Model	O	P	Q	R	S
RXB50/60CV1B	34	23	362	73	75

INSTALLATION MANUAL

This manual provides the procedures of installation to ensure a safe and good standard of operation for the air conditioner unit. Special adjustment may be necessary to suit local requirement.

Before using your air conditioner, please read this instruction manual carefully and keep it for future reference.

This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.

This appliance is not intended for use by persons, including children, with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.





SAFETY PRECAUTIONS

WARNING

- Installation and maintenance should be performed by qualified persons who are familiar with local code and regulation, and experienced with this type of appliance.
- All field wiring must be installed in accordance with the national wiring regulation.
- Ensure that the rated voltage of the unit corresponds to that of the name plate before commencing wiring work according to the wiring diagram.
- The unit must be GROUNDED to prevent possible hazard due to insulation failure.
- All electrical wiring must not touch the refrigerant piping or any moving parts of the fan motors.
- Confirm that the unit has been switched OFF before installing or servicing the unit.
- Disconnect from the main power supply before servicing the air conditioner unit.
- DO NOT pull out the power cord when the power is ON. This may cause serious electrical shocks which may result in the fire hazards.
- Keep the indoor and outdoor units, power cable and transmission wiring, at least 1m from TVs and radios, to prevent distorted pictures and static. {Depending on the type and source of the electrical waves, static may be heard even when more than 1m away}.

CAUTION

Please take note of the following important points when installing.

- **Do not install the unit where leakage of flammable gas may occur.**
 If gas leaks and accumulates around the unit, it may cause fire ignition.
- **Ensure that drainage piping is connected properly.**
 If the drainage piping is not connected properly, it may cause water leakage which will dampen the furniture.
- **Do not overcharge the unit.**
This unit is factory pre-charged.
 Overcharge will cause over-current or damage to the compressor.
- **Ensure that the unit's panel is closed after service or installation.**
 Unsecured panels will cause the unit to operate noisily.
- **Sharp edges and coil surfaces are potential locations which may cause injury hazards. Avoid from being in contact with these places.**
- **Before turning off the power supply, set the remote controller's ON/OFF switch to the "OFF" position to prevent the nuisance tripping of the unit.** If this is not done, the unit's fans will start turning automatically when power resumes, posing a hazard to service personnel or the user.
- **Do not install the units at or near doorway.**
- **Do not operate any heating apparatus too close to the air conditioner unit or use in room where mineral oil, oil vapour or oil steam exist, this may cause plastic part to melt or deform as a result of excessive heat or chemical reaction.**
- **When the unit is used in kitchen, keep flour away from going into suction of the unit.**
- **This unit is not suitable for factory used where cutting oil mist or iron powder exist or voltage fluctuates greatly.**
- **Do not install the units at area like hot spring or oil refinery plant where sulphide gas exists.**
- **Ensure the color of wires of the outdoor unit and the terminal markings are same to the indoors respectively.**
- **IMPORTANT: DO NOT INSTALL OR USE THE AIR CONDITIONER UNIT IN A LAUNDRY ROOM.**
- **Don't use joined and twisted wires for incoming power supply.**
- **The equipment is not intended for use in a potentially explosive atmosphere.**

NOTICE

Disposal requirements

Your air conditioning product is marked with this symbol. This means that electrical and electronic products shall not be mixed with unsorted household waste.

Do not try to dismantle the system yourself: the dismantling of the air conditioning system, treatment of the refrigerant, of oil and of other parts must be done by a qualified installer in accordance with relevant local and national legislation.

Air conditioners must be treated at a specialized treatment facility for re-use, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. Please contact the installer or local authority for more information.

Batteries must be removed from the remote controller and disposed of separately in accordance with relevant local and national legislation.



IMPORTANT

Important information regarding the refrigerant used

This product contains fluorinated greenhouse gases.

Do not vent gases into the atmosphere.

Refrigerant type: R410A

GWP ⁽¹⁾ value: 2087.5

⁽¹⁾ GWP = Global Warming Potential

Please fill in with indelible ink,

- ① the factory refrigerant charge of the product,
- ② the additional refrigerant amount charged in the field and
- ① + ② the total refrigerant charge

on the refrigerant charge label supplied with the product.

The filled out label must be adhered in the proximity of the product charging port (e.g. onto the inside of the service cover).

Contains fluorinated greenhouse gases
4

R410A

① = kg
 1

② = kg
 2

① + ② = kg
 3

4
 5
 6

1 factory refrigerant charge of the product:
see unit name plate ⁽²⁾

2 additional refrigerant amount charged in the field

3 total refrigerant charge

4 contains fluorinated greenhouse gases

5 outdoor unit

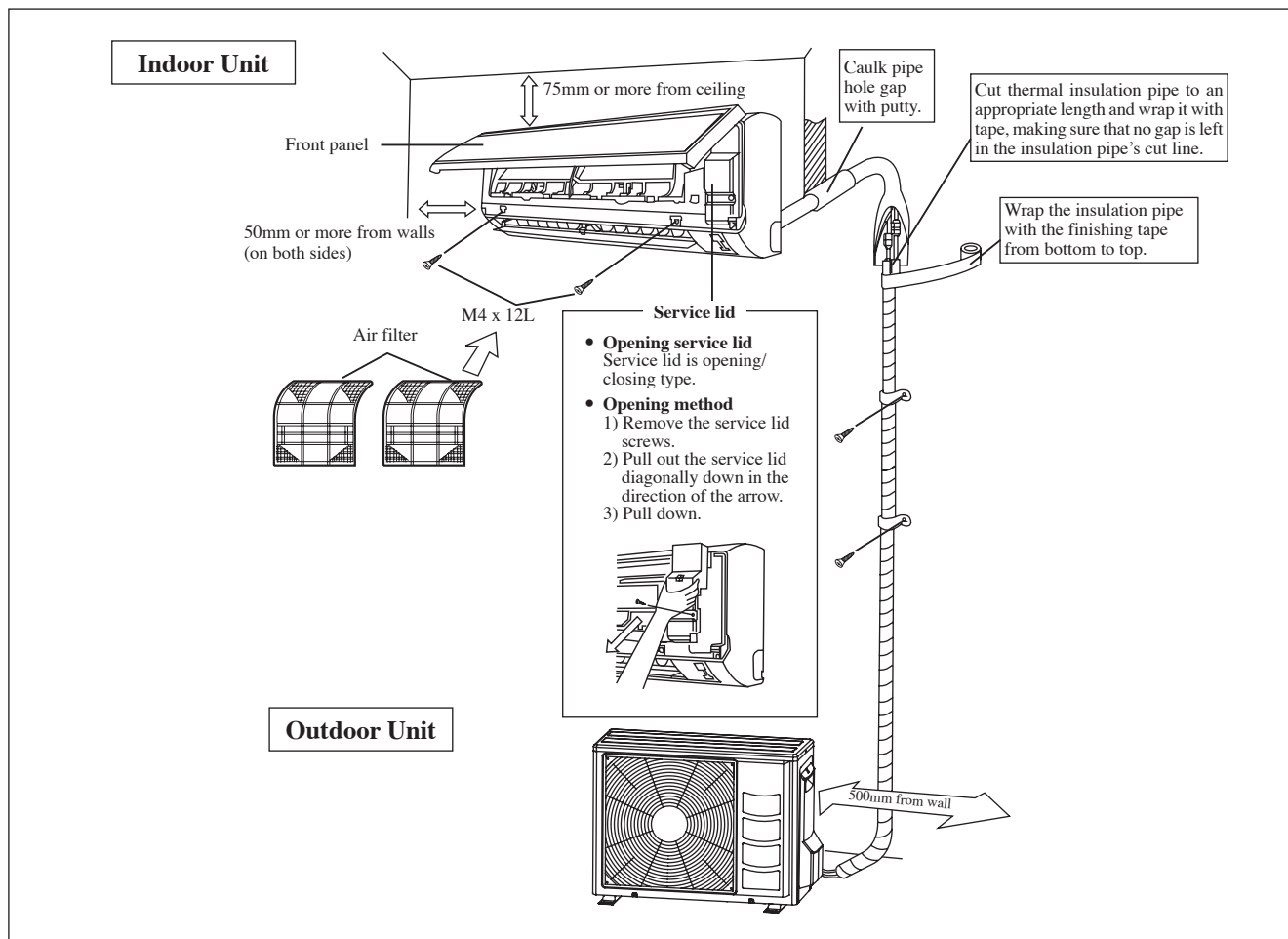
6 refrigerant cylinder and manifold for charging

⁽²⁾ In case of multiple indoor systems, only 1 label must be adhered*, mentioning the total factory refrigerant charge of all indoor units connected in the refrigerant system.

Periodical inspections for refrigerant leaks may be required depending on European or local legislation. Please contact your local dealer for more information.

* on the outdoor unit

INSTALLATION DIAGRAM



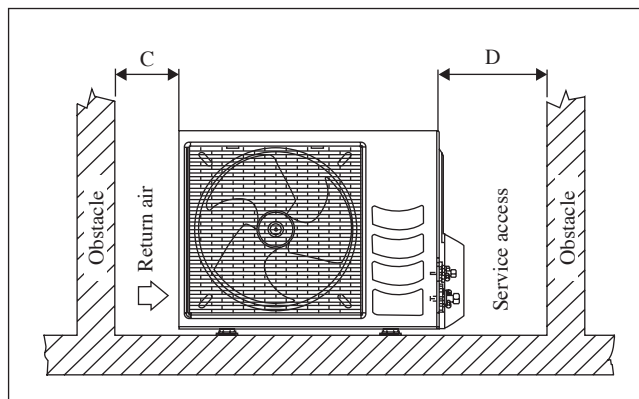
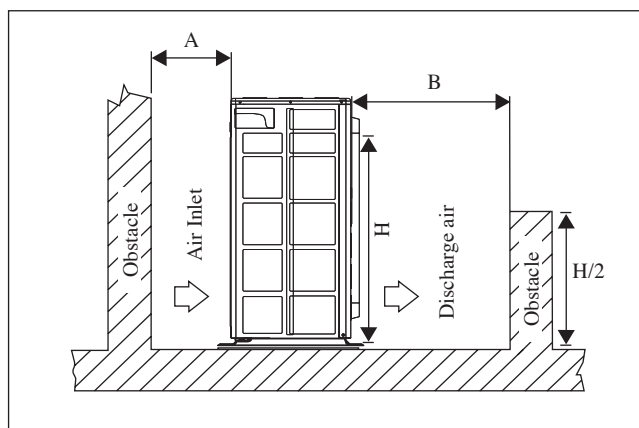
INSTALLATION OF THE OUTDOOR UNIT

The outdoor unit must be installed in such a way, so as to prevent short circuit of the hot discharged air or obstruction to the smooth air flow. Please follow the installation clearances shown in the figure. Select the coolest possible place where intake air temperature is not greater than the outside air temperature (Refer to operating range).

Installation clearances

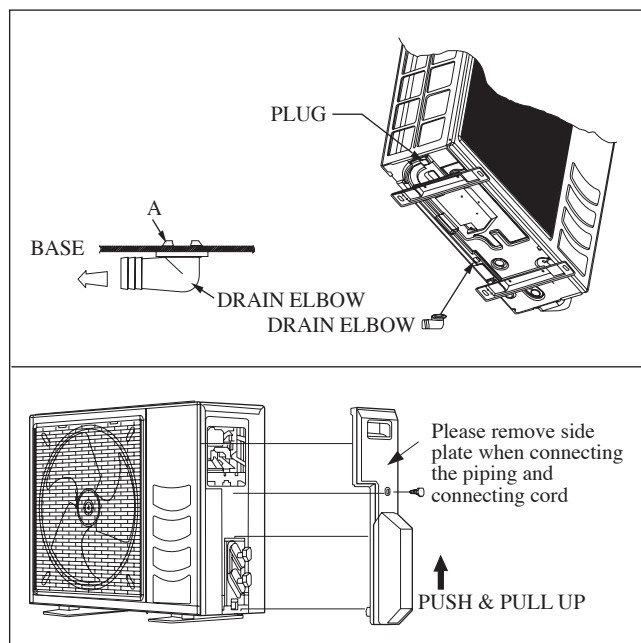
Dimension	A	B	C	D
Minimum Distance, mm	300	1000	300	500

Note: If there is any obstacle higher than 2m, or if there is any obstruction at the upper part of the unit, please allow more space than the figure indicated in the above table.



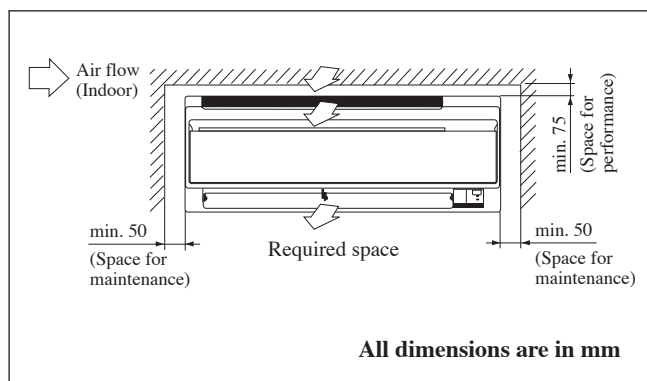
Condensed Water Disposal Of Outdoor Unit (Heat Pump Unit Only)

- There are 2 holes on the base of Outdoor Unit for condensed water to flow out. Insert the drain elbow to one of the holes.
- To install the drain elbow, first insert one portion of the hook to the base (portion A), then pull the drain elbow in the direction shown by the arrow while inserting the other portion to the base. After installation, check to ensure that the drain elbow clings to base firmly.
- If the unit is installed in a snowy and chilly area, condensed water may freeze in the base. In such case, please remove plug at the bottom of unit to smooth the drainage.



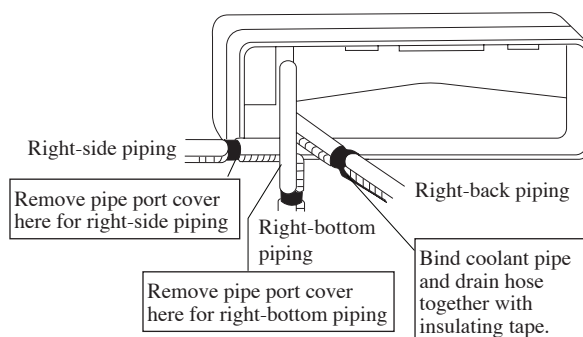
INSTALLATION OF THE INDOOR UNIT

The indoor unit must be installed in such a way so as to prevent short circuit of the cool discharged air with the hot return air. Please follow the installation clearance shown in the figure. Do not place the indoor unit where there could be direct sunlight shining on it. Also, this location must be suitable for piping and drainage, and be away from doors or windows.

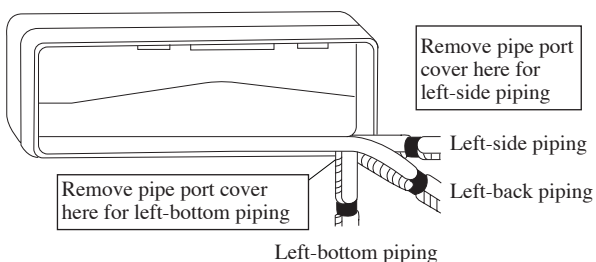


The refrigerant piping can be routed to the unit in a number of ways (left or right from the back of the unit), by using the cut-out holes on the casing of the unit (see figure). Bend the pipes carefully to the required position in order to align it with the holes. For the side and bottom, hold the bottom of the piping and then position it to the required direction (see figure). The condensation drain hose can be taped to the pipes.

Right-side, right-back or right-bottom piping



Left-side, left-back or left-bottom piping

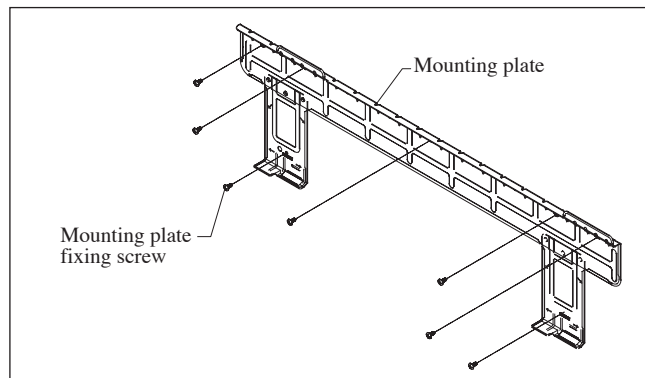


Mounting Installation Plate

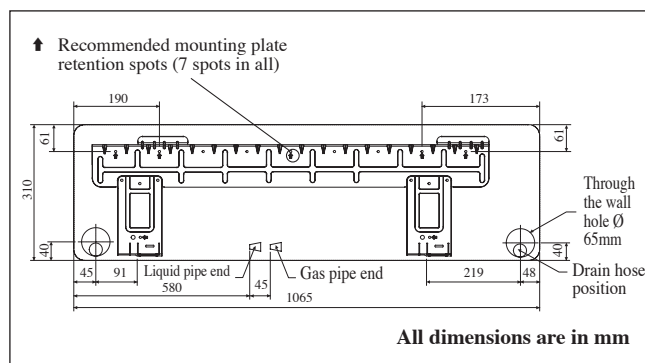
Ensure that the wall is strong enough to withstand the weight of the unit. Otherwise, it is necessary to reinforce the wall with plates, beams or pillars.

Use the level gauge for horizontal mounting, and fix it with 7 suitable screws for FTXB50/60CV1B.

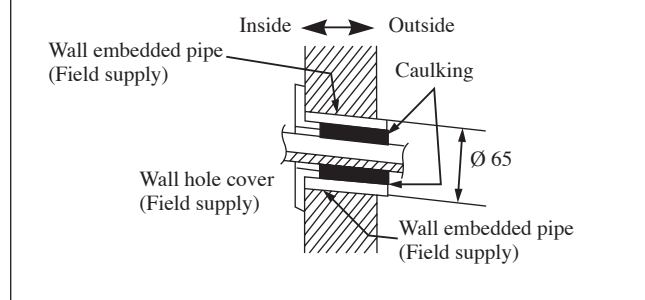
In case the rear piping draws out, drill a hole 65mm in diameter with a cone drill, slightly lower on the outside wall (see figure).



Recommended Mounting Plate Retention Spots And Dimensions



Hole with cone drill



Mount The Unit Onto The Installation Plate

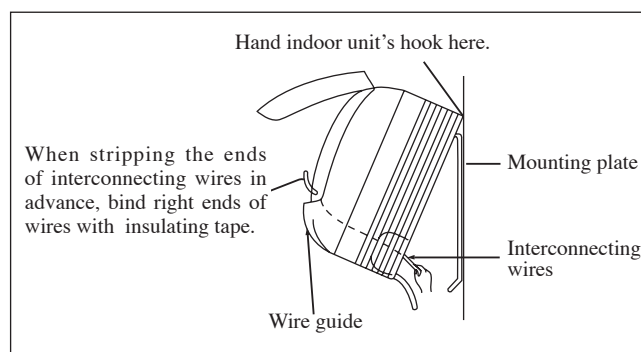
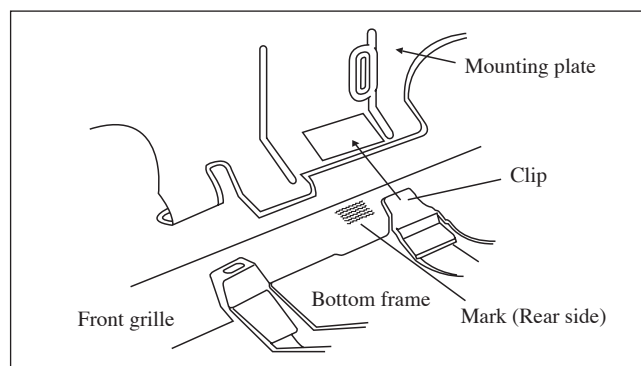
Hook the indoor unit onto the upper portion of the installation plate (Engage the two hooks at the rear top of the indoor unit with the upper edge of the installation plate). Ensure that the hooks are properly seated on the installation plate by moving it to the left and right.

How To Attach The Indoor Unit

Hook the claws of the bottom frame to the mounting plate.

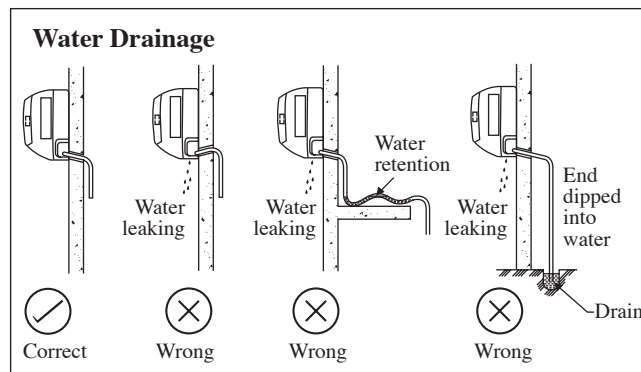
How To Remove The Indoor Unit

Push up the marked area (at the lower part of the front grille) to release the claws.



Water Drainage Piping

The indoor drain pipe must be in a downward gradient for smooth drainage. Avoid situations that are likely to cause water to leak.



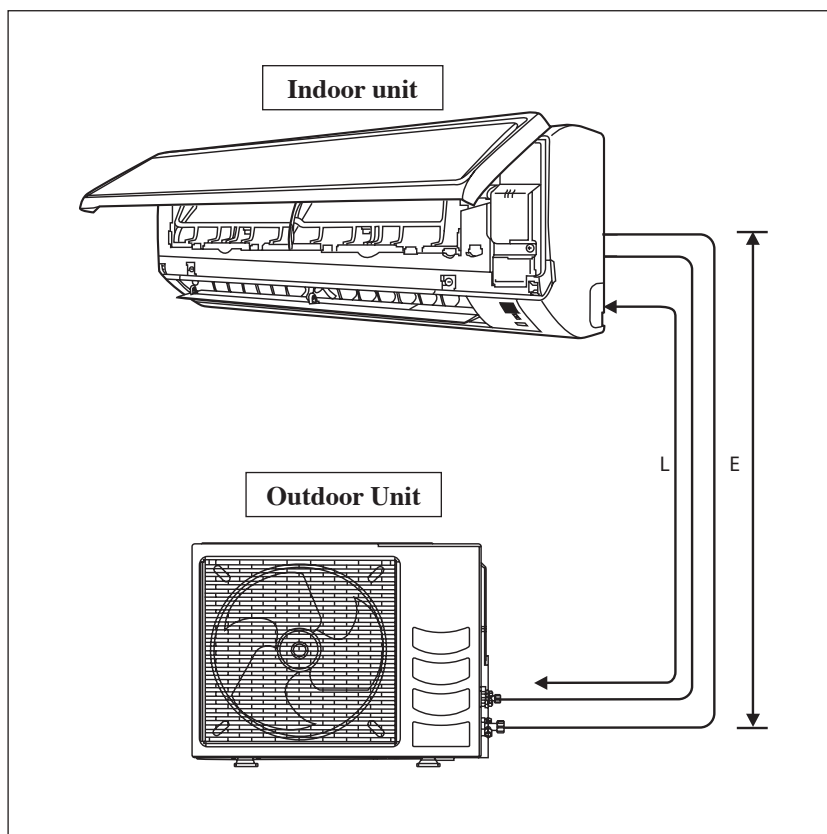
⚠ CAUTION

- Do not install the unit at altitude over 2000m for both indoor & outdoor.

REFRIGERANT PIPING

Allowable Piping Length

If the pipe is too long, both the capacity and reliability of the unit will drop. As the number of bends increases, resistance to the flow of refrigerant system increases, thus lowering cooling capacity. As a result, the compressor may become defective. Always choose the shortest path and follow the recommendations as tabulated below:





Model	FTXB50CV1B	FTXB60CV1B
Min. Allowable Length (L), m	3	
Max. Allowable Length (L), m	30	
Max. Allowable Elevation (E), m	10	
Gas Pipe Size, mm/(in)	12.70 (1/2")	15.88 (5/8")
Liquid Pipe Size, mm/(in)	6.35 (1/4")	

*Be sure to add the proper amount of additional refrigerant. Failure to do so may result in reduced performance.

Remark: The refrigerant pre-charged in the outdoor unit is for piping length up to 7.5m.

Equivalent length for various fitting (meter)

Pipe Size	L joint 	Trap bend 
3/8" (OD9.52mm)	0.18	1.3
1/2" (OD12.7mm)	0.20	1.5
5/8" (OD15.9mm)	0.25	2
3/4" (OD19.1mm)	0.35	2.4
7/8" (OD22.2mm)	0.40	3
1" (OD25.4mm)	0.45	3.4
1 1/8" (OD28.6mm)	0.50	3.7
1 3/8" (OD34.9mm)	0.60	4.4

Notes:

1. Equivalent piping length is obtained with actual length of gas piping.
2. 90° bend of piping is equivalent to L joint.

Bending must be carefully made so as not to crush the pipe. Use a pipe bender to bend a pipe where possible.

Piping Works And Flaring Technique

- Do not use contaminated or damaged copper tubing. If any piping, evaporator or condenser had been exposed or had been opened for 15 seconds or more, the system must be vacuumed. Generally do not remove plastic, rubber plugs and brass nuts from the valves, fittings, tubing and coils until it is ready to connect suction or liquid line into valves or fittings.
- If any brazing work is required, ensure that nitrogen gas is passed through coil and joints while the brazing work is being done. This will eliminate soot formation on the inside wall of copper tubings.
- Cut the pipe stages by stages, advancing the blade of pipe cutter slowly. Extra force and a deep cut will cause more distortion of pipe and therefore extra burr. See Figure I.
- Remove burrs from cut edges of the pipes with remover. See Figure II. Hold the pipe on top position and burr remover at lower position to prevent metal chips from entering the pipe. This will avoid unevenness on the flare faces which will cause gas leak.
- Insert the flare nuts, mounted on the connection parts of both the indoor unit and outdoor unit, into the copper pipes.
- The exact length of pipe protruding from the top surface of the swaging block is determined by the flaring tool. See Figure III.
- Fix the pipe firmly on the swaging block. Match the centers of both the swaging block and the flaring punch, then tighten the flaring punch fully.

Piping Connection To The Units

- Align the center of the piping and tighten the flare nut sufficiently with fingers. See Figure IV.
- Finally, tighten the flare nut with torque wrench until the wrench clicks.
- When tightening the flare nut with the torque wrench, ensure that the tightening direction follows the arrow indicated on the wrench.
- The refrigerant pipe connection are insulated by closed cell polyurethane.

Pipe Size, mm (in)	Torque, Nm/(ft-lb)
6.35 (1/4")	18 (13.3)
12.70 (1/2")	55 (40.6)
15.88 (5/8")	65 (48.0)

Figure I

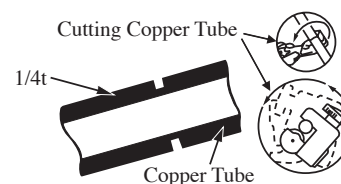


Figure II

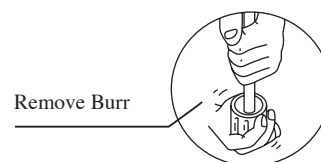
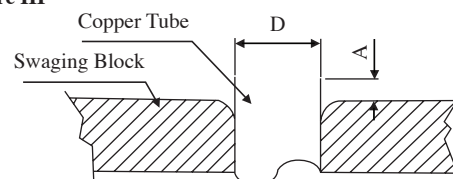
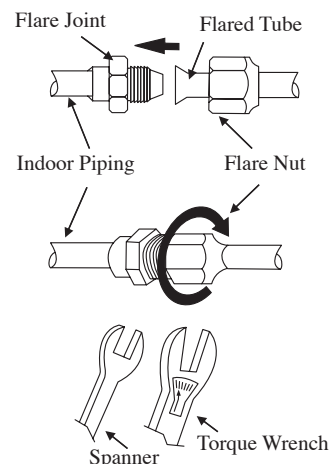


Figure III



Ø Tube, D		A (mm)	
Inch	mm	Imperial (Wing-nut Type)	Rigid (Clutch Type)
1/4"	6.35	1.30	0.70
1/2"	12.70	1.90	1.30
5/8"	15.88	2.20	1.70

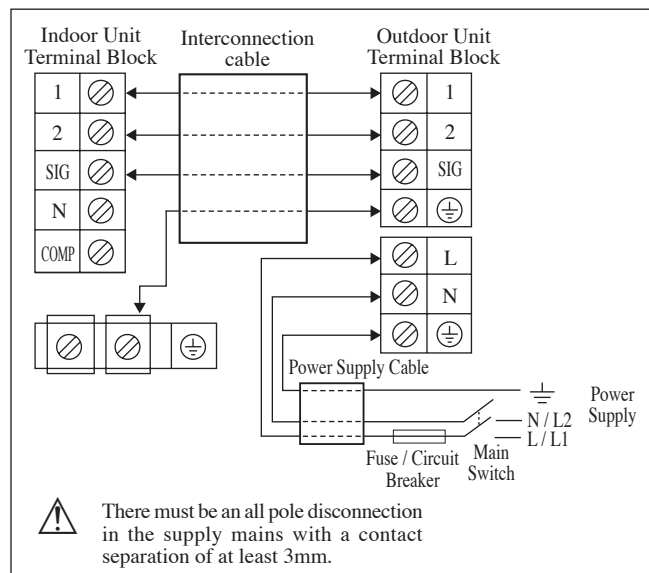
Figure IV



ELECTRICAL WIRING CONNECTION

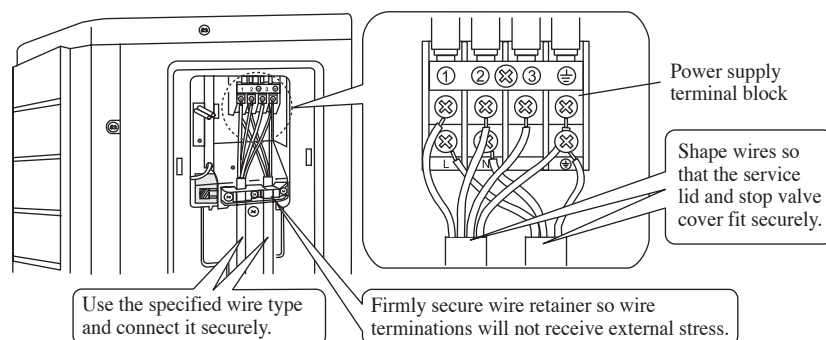
IMPORTANT : * The figures shown in the table are for information purpose only. They should be checked and selected to comply with the local/national codes of regulations. This is also subject to the type of installation and conductors used.

** The appropriate voltage range should be checked with label data on the unit.

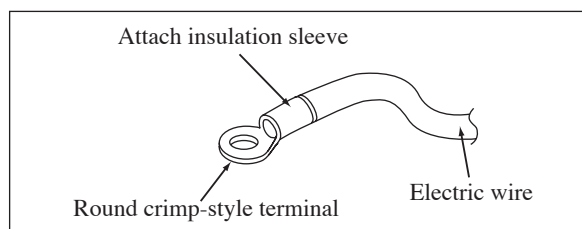


Model	FTXB50/60CV1B RXB50/60CV1B
Voltage range**	220-240V/~/50Hz + ⊕
Power supply cable size* mm ²	2.5
Number of Conductors	3
Interconnection cable size* mm ²	2.5
Number of Conductors	4
Recommended fuse/circuit breaker rating A	20

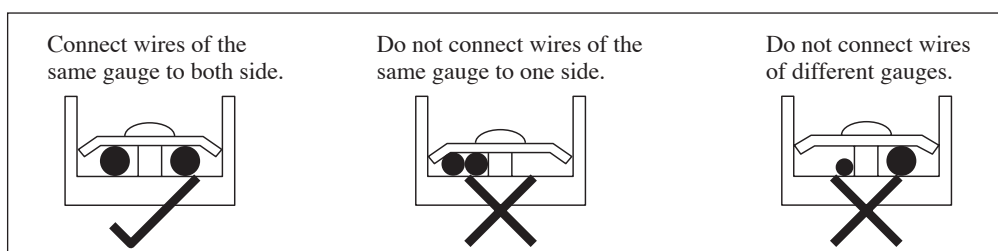
* If the length of the cable is more than 2m, use cable with bigger size.



- All wires must be firmly connected.
- Make sure all the wire do not touch the refrigerant pipings, compressor or any moving parts.
- The connecting wire between the indoor unit and the outdoor unit must be clamped by using provided cord anchorage.
- The power supply cord must be equivalent to H07RN-F which is the minimum requirement.
- Make sure no external pressure is applied to the terminal connectors and wires.
- Make sure all the covers are properly fixed to avoid any gap.
- Use round crimp-style terminal for connecting wires to the power supply terminal block. (Refer to the wiring diagram attached on the unit).



- Used the correct screwdriver for terminal screws tightening. Unsuitable screwdrivers can damage the screw head.
- Over tightening can damage the terminal screws.
- Do not connect wire of different gauge to same terminal.
- Keep wiring in an orderly manner. Prevent the wiring from obstructing other parts and the terminal box cover.



SPECIAL PRECAUTIONS WHEN DEALING WITH R410A UNIT

R410A is a new HFC refrigerant which does not damage the ozone layer. The working pressure of this new refrigerant is 1.6 times higher than conventional refrigerant (R22), thus proper installation/servicing is essential.

- Never use refrigerant other than R410A in an air conditioner which is designed to operate with R410A.
- POE or PVE oil is used as lubricant for R410A compressor, which is different from the mineral oil used for R22 compressor. During installation or servicing, extra precaution must be taken not to expose the R410A system too long to moist air. Residual POE or PVE oil in the piping and components can absorb moisture from the air.
- To prevent mischarging, the diameter of the service port on the flare valve is different from that of R22.
- Use tools and materials exclusively for refrigerant R410A. Tools exclusively for R410A are manifold valve, charging hose, pressure gauge, gas leak detector, flare tools, torque wrench, vacuum pump and refrigerant cylinder.
- As an R410A air conditioner incurs higher pressure than R22 units, it is essential to choose the copper pipes correctly. Never use copper pipes thinner than 0.8mm even though they are available in the market.
- If the refrigerant gas leakage occurs during installation/servicing, be sure to ventilate fully. If the refrigerant gas comes into contact with fire, a poisonous gas may occur.
- When installing or removing an air conditioner, do not allow air or moisture to remain in the refrigerant cycle.

VACUUMING AND CHARGING

Vacuuming is necessary to eliminate all moisture and air from the system.

Vacuuming The Piping And The Indoor Unit

Except for the outdoor unit which is pre-charged with refrigerant, the indoor unit and the refrigerant connection pipes must be air-purged because the air containing moisture that remains in the refrigerant cycle may cause malfunction of the compressor.

- Remove the caps from the valve and the service port.
- Connect the center of the charging gauge to the vacuum pump.
- Connect the charging gauge to the service port of the 3-way valve.
- Start the vacuum pump. Evacuate for approximately 30 minutes. The evacuation time varies with different vacuum pump capacity. Confirm that the charging gauge needle has moved towards -760mmHg.

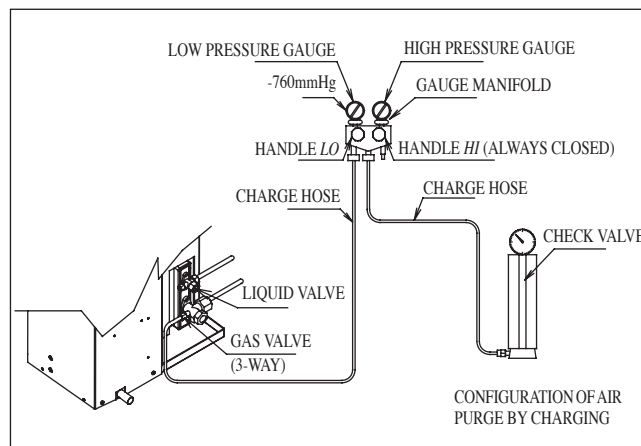
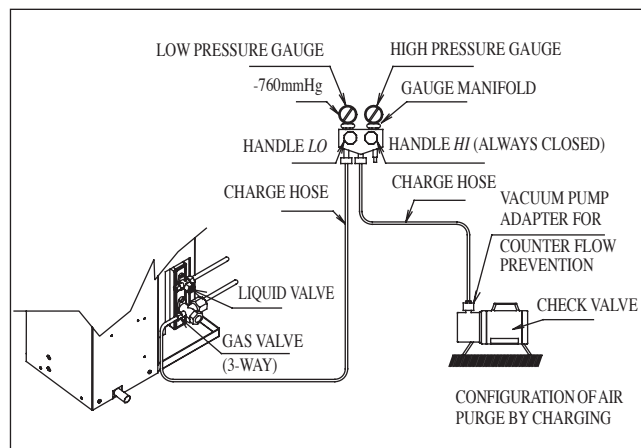
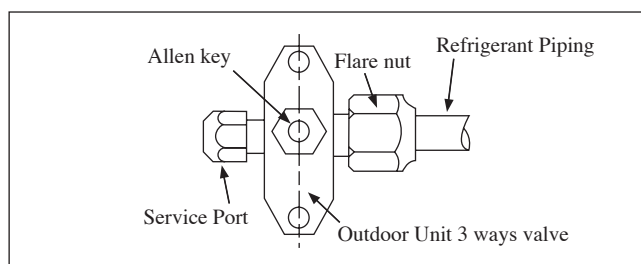
Caution

- If the gauge needle does not move to -760mmHg, be sure to check for leakage at flare type connection of the indoor and outdoor unit and repair the leak before proceeding to the next step.
- Close the valve of the changing gauge and stop the vacuum pump.
- On the outdoor unit, open the suction valve (3 way) and liquid valve (2 way) (in anti-clockwise direction) with 4mm key for hexagon sacked screw.

Charge Operation

This operation must be done by using a gas cylinder and a precise weighing machine. The additional charge is topped-up into the outdoor unit using the suction valve via the service port.

- Remove the service port cap.
- Connect the low pressure side of the charging gauge to the suction service port center of the cylinder tank and close the high pressure side of the gauge. Purge the air from the service hose.
- Start the air conditioner unit.
- Open the gas cylinder and low pressure charging valve.
- When the required refrigerant quantity is pumped into the unit, close the low pressure side and the gas cylinder valve.
- Disconnect the service hose from service port. Put back the service port cap.



ADDITIONAL CHARGE

The refrigerant is pre-charged in the outdoor unit. If the piping length is less than 7.5m, then additional charge after vacuuming is not necessary. If the piping length is more than 7.5m, then use the additional charge value as indicated in the table.

Additional refrigerant charge [g] per additional 1m length as tabulated

Indoor	FTXB50CV1B	FTXB60CV1B
Outdoor	RXB50CV1B	RXB60CV1B
Additional charge [g/m]	20	20

Example:

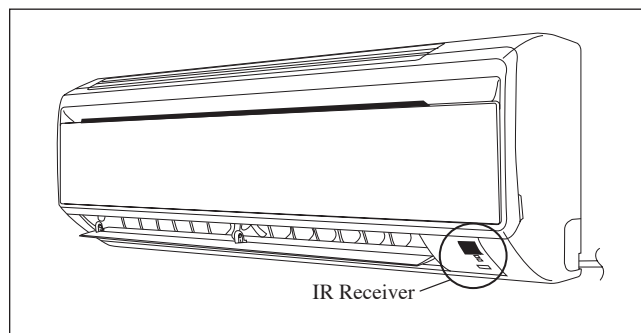
FTXB50CV1B & RXB50CV1B with 12m piping length, additional piping length is 4.5m. Thus,
 Additional charge = 4.5[m] x 20[g/m]
 = 90.0[g]

INDICATOR LIGHTS

IR Signal Receiver

When an infrared remote control operating signal has been transmitted, the signal receiver on the indoor unit will respond as below to confirm acceptance of the signal transmission.

ON to OFF	1 Long Beep
OFF to ON	2 Short Beep
Pump down / Cool force on	2 Short Beep
Others	1 Short Beep



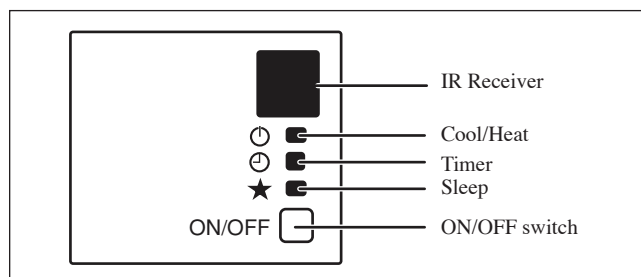
Cooling Unit/Heat Pump Unit

The table shows the LED indicator lights for the air conditioner unit under normal operation and fault conditions.

The LED indicator lights are located at the side of the air conditioner unit.

The heat pump units are equipped with an "auto" mode sensor whereby it will provide reasonable room temperature by switching automatically to either "cool" or "heat" mode according to the temperature set by the user.

LED Indicator Lights for Cooling Unit/Heat Pump Unit



LED Indicator Lights: Normal Operation And Fault Conditions For Cooling/Heat Pump Unit

★	COOL/HEAT (GREEN/RED)	⌚	Operation
	○ GREEN		Cool mode
	○ RED		Heat mode
	○ RED		Auto mode in Heating operation
	○ GREEN		Auto mode in Cooling operation
	○		Timer on
○	○		Sleep mode on
	○ GREEN		Fan mode on
	○ GREEN		Dry mode on
	● RED		Defrost operation
	● GREEN		Unit error

○ ON

● Blinking

AIR CONDITIONER UNIT OPERATION

Dry Mode

- When the air humidity is high, the unit can operate in dry mode. Press <MODE> button and choose <DRY>.
- If the room temperature is 2°C/3.6°F higher than the set temperature, the air conditioner will operate under cooling mode until it reaches within the 2°C/3.6°F range of difference compared to the set temperature before it converts to dry mode.
- If the room temperature is within the 2°C/3.6°F range of difference compared to the set temperature, it will directly operate under dry mode.
- The unit will operate at LOW speed under dry mode.

Heat Mode (for heat pump unit only)

- When the unit is switched on from cold start or defrosting cycle, the indoor fan will start to operate only after the coil reaches the desired temperature.
- When the set temperature is achieved, the indoor fan will operate until the coil cannot provide anymore additional heat.

Air Flow Control

- For more effective air circulation, you can manually adjust the air discharge grille to the left or right.
- During cool mode operation and dry mode operation, do not direct the air discharge louver downwards for too long. If operating continues in this way, condensation may occur on the louver, thus resulting in drippings.

Fan Speed And Rated Cooling Capacity

- The rated cooling capacity is provided at the HIGH fan speed.
- The cooling capacity is lower when the unit is operating at MEDIUM and LOW fan speed.

Notes On Flaps And Louvers Angles

- When “**SWING button**” is selected, the flaps swinging range depends on the operation mode. (See the figure.)

ATTENTION

- Always use a remote controller to adjust the flaps angle. If you attempt to move it forcibly with hand when it is swinging, the mechanism may be broken.
- Be careful when adjusting the louvers. Inside the air outlet, a fan is rotating at a high speed.

Overheating Protection (for heat pump unit only)

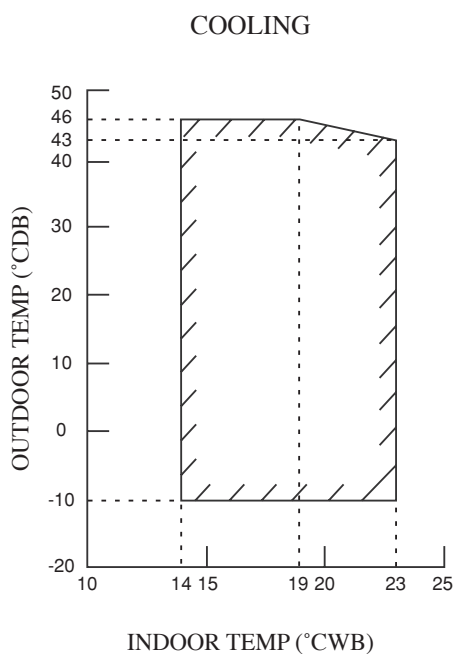
- In case the internal and/or the external temperature is too high, or that the filter is dirty and clogged up, the refrigerant may be overheated. The compressor will cut out when the condensing temperature reaches 62°C/143.6°F.

Frost Prevention

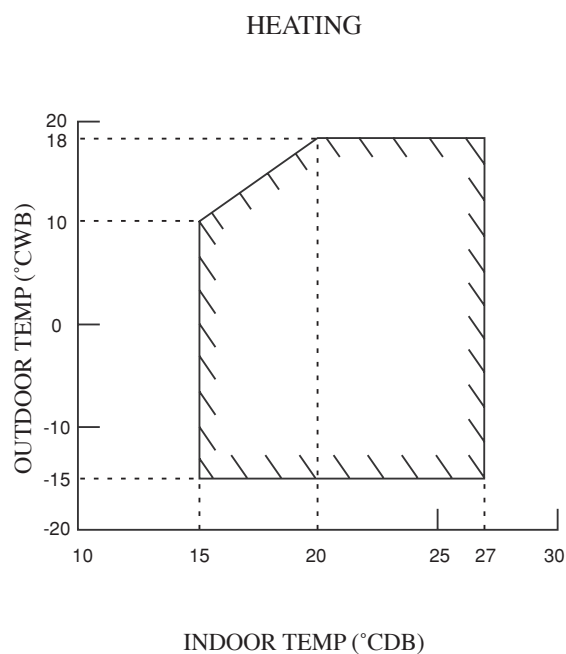
- When the air filter is dirty, the evaporating temperature will decrease and eventually cause frosting.
- If the evaporating temperature reaches -1°C/33.8°F, the unit will trip.

OPERATING RANGE

Model: FTXB50/60CV1B
RXB50/60CV1B



DB: Dry bulb

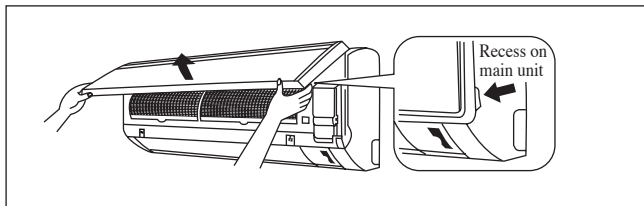


WB: Wet bulb

AIR FILTER

1. Open the front panel.

- Hold the panel at the recesses on the main unit (2 recesses on right and left sides) and lift it until it stops.

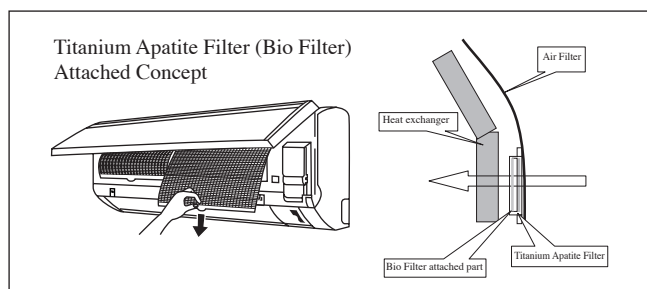


2. Pull out the air filters.

- Push a little upwards the tab at the center of each air filter, then pull it down.

3. Take off the Bio filter with bacteriostatic, virustatic functions.

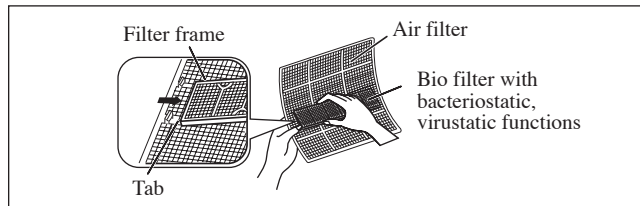
- Hold the recessed parts of the frame and unhook the four claws.



4. Clean or replace each filter.

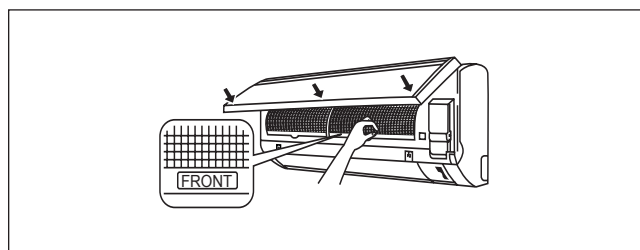
See figure.

- When shaking off remaining water, do not wring the filter.



5. Set the air filter and Bio filter with bacteriostatic, virustatic functions as they were and close the front panel.

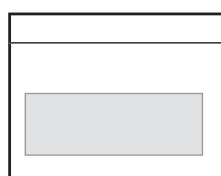
- Insert claws of the filters into slots of the front panel. Close the front panel slowly and push the panel at the 3 points. (1 on each side and 1 in the middle.)
- The air filter and Bio filter with bacteriostatic, virustatic functions have a symmetrical form in the horizontal direction.



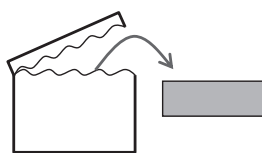
* Bio Filter and Titanium Apatite Filter are optional accessories.

Installation Procedure for Bio Filter

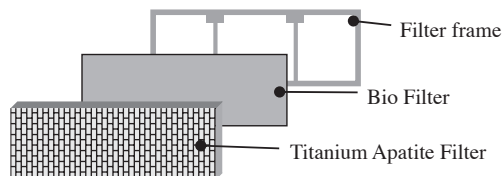
Bio Filter packs in a hermetically-sealed bag.



Take it out at the time of installation.



Slip the Filter in between Filter frame and Titanium Apatite Filter.



⚠ CAUTION

- Please use this Bio Filter during **dry season** such as winter.
- Storage, handling and disposal methods.**
 - The lifetime of this Bio Filter is about a year after opening.
 - In case you do not use this Bio Filter right away, please don't place the Bio Filter in any place where it will be subjected to direct sunlight, high temperatures and/or high humidity.
 - There can be slight differences between Bio Filter color because of the manufacturing reasons, there is no effect on the unit performance.
 - Please open this bag right before you use it. Bio Filter should remain unopened and sealed in its packaging until right before usage. (It may cause performance deterioration or quality change.)
 - To avoid danger of suffocation and any unexpected accident, please dispose the plastic bag immediately after you remove the Bio Filter. Keep out of reach of babies and children.
 - If you keep this Bio Filter for a long time, please keep it unopened and store in a cool place avoiding direct sunlight.
 - Please dispose the old Bio Filter as nonflammable garbage after use.
- Operation with dirty filters:**
 - (1) cannot deodorize the air.
 - (2) cannot clean the air.
 - (3) results in poor heating or cooling.
 - (4) may cause odour.
- To order Bio Filter, contact the service shop where you bought the air conditioner.

SERVICE AND MAINTENANCE

Note is valid for Turkey only: The lifetime of our products is ten (10) years

Service Parts	Maintenance Procedures	Period
Indoor air filter	<ol style="list-style-type: none"> 1. Remove any dust adhering to the filter by using a vacuum cleaner or wash in lukewarm water (below 40°C/104°F) with a neutral cleaning detergent. 2. Rinse the filter well and dry before placing it back onto the unit. 3. Do not use gasoline, volatile substances or chemicals to clean the filter. 	<p>At least once every 2 weeks.</p> <p>More frequently if necessary.</p>
Indoor unit	<ol style="list-style-type: none"> 1. Clean any dirt or dust on the grille or panel by wiping it with a soft cloth soaked in lukewarm water (below 40°C/104°F) and a neutral detergent solution. 2. Do not use gasoline, volatile substances or chemicals to clean the indoor unit. 	<p>At least once every 2 weeks.</p> <p>More frequently if necessary.</p>

CAUTION

- Avoid direct contact of any coil treatment cleaners on plastic part. This may cause plastic part to deform as a result of chemical reaction.

1. Open the front panel.

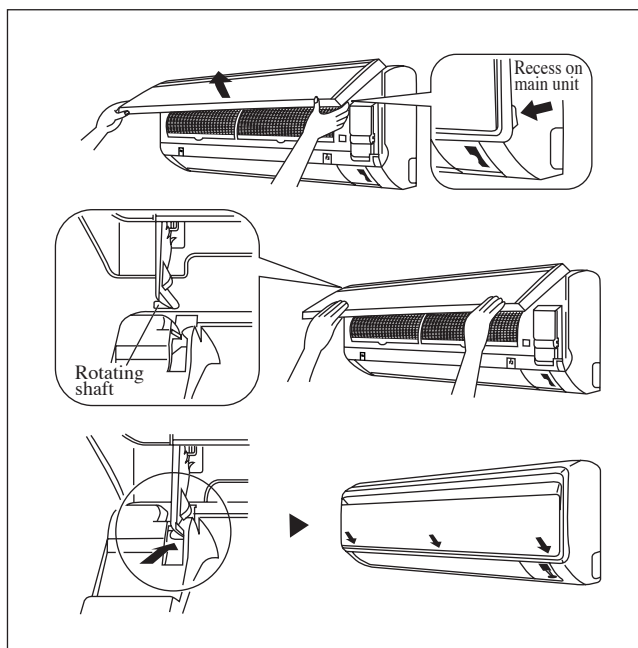
- Hold the panel at the recesses on the main unit (2 recesses on right and left sides) and lift it until it stops.

2. Remove the front panel.

- While lifting the front panel further, slide it to the right and pull it to the front side. The left rotating shaft is detached. Slide the right rotating shaft to the left and pull it to the front side to remove it.

3. Attach the front panel.


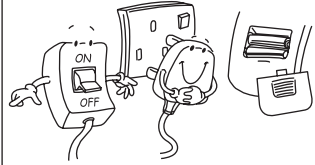
- Align the right and left rotating shafts of the front panel with the grooves and push them all the way in.
- Gently close the front panel. (Push both ends and the center on the front panel.)



⚠ CAUTION

- Don't touch the metal parts of the indoor unit. It may cause an injury.
- When removing or attaching the front panel, support the panel securely with hand to prevent it from falling.
- For cleaning, do not use hot water above 40°C, benzene, gasoline, thinner, nor other volatile oils, polishing compound, scrubbing brushes, nor other hand stuff.
- After cleaning, make sure that the front panel is securely fixed.

When The Unit Is Not To Be Used For An Extended Long Period Of Time

<p>Operate the unit for 2 hours with the following setting.</p> <p>Operating mode : cool Temperature : 30°C/86°F</p>		<p>Remove the power plug. If you are using an independent electric circuit for your unit, cut off the circuit. Remove the batteries in the remote control.</p>	
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TROUBLESHOOTING

For any enquiries on spare part, please contact your authorized dealer. When any malfunction of the air conditioner unit is noted, immediately switch off the power supply to the unit. Check the following fault conditions and causes for some simple troubleshooting tips.

Fault	Causes / Action
1. The compressor does not operate 3 minutes after the air conditioner unit is started.	– Protection against frequent starting. Wait for 3 to 4 minutes for the compressor to start operating.
2. The air conditioner unit does not operate.	<ul style="list-style-type: none"> – Power failure, or the fuse needs to be replaced. – The power plug is disconnected. – It is possible that your delay timer has been set incorrectly. – If the fault persist after all these verifications, please contact the air conditioner unit installer.
3. The air flow is too low.	<ul style="list-style-type: none"> – The air filter is dirty. – The doors or windows are open. – The air suction and discharge are clogged. – The regulated temperature is not high enough.
4. Discharge air flow has bad odour.	– Odours may be caused by cigarettes, smoke particles, perfume etc. which might have adhered onto the coil.
5. Condensation on the front air grille of the indoor unit.	<ul style="list-style-type: none"> – This is caused by air humidity after an extended long period of operation. – The set temperature is too low, increase the temperature setting and operate the unit at high fan speed.
6. Water flowing out from the air conditioner unit.	– Switch off unit and call dealer.

If the fault persists, please call your local dealer / serviceman.