ΚΛΙΜΑΤΙΣΤΙΚΑ ΣΥΣΤΗΜΑΤΑ
AIR CONDITIONING SYSTEMS

Models: V4MVI-09WFR / V4MVO-09
V4MVI-12WFR / V4MVO-12
V4MVI-18WFR / V4MVO-18
V4MVI-24WFR / V4MVO-24

inventor®
Your-conditions

Wall Mounted Unit

Installation Manual

Επιτοίχια Μονάδα

Εγχειρίδιο Εγκατάστασης

Σας ευχαριστούμε που επιλέξατε τη μονάδα κλιματισμού της INVENTOR. Για τη σωστή χρήση της μονάδας. παρακαλούμε διαβάστε προσεκτικά το παρόν εγχειρίδιο και φυλάξτε το για αναφορά στο μέλλον.

Thank you for choosing INVENTOR air conditioning system. For correct use of this unit, please read this manual carefully and keep it for future reference.

English/Ελληνικά/ Română

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CONTENTS

⚠ CAUTION

- Contact an authorised service technician for repair or maintenance of this unit.
- The appliance shall be installed in accordance with national wiring regulations.
- 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.
- Young children should be supervised to ensure that they do not play with the air conditioner.
- Do not operate your air conditioner in a wet room such as a bathroom or laundry room.
- Installation work must be performed in accordance with the national wiring standards by authorised personnel only.

- Read the follow SAFETY PRECAUTIONS carefully before installation.
- Incorrect installation due to ignoring of the instruction will cause harm or damage, and the seriousness is classified by the following indications.

⚠ WARNING	This symbol indicates the possibility of death or serious injury.
⚠ CAUTION	This symbol indicates the possibility of injury or damage to property.

The items to be followed are classified by the symbols:

⃠	Symbol will background white denotes item that is PROHIBITED from doing.

⚠ WARNING

1) Engage dealer or specialist for installation. If installation done by the user is defective, it will cause water leakage, electrical shock or fire.
2) Install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electrical shock or fire.
3) Use the attached accessories parts and specified parts for installation. otherwise, it will cause the set to fall, water leakage, electrical shock or fire.
4) Install at a strong and firm location which is able to withstand the set's weight. If the strength is not enough or installation is not properly done, the set will drop and cause injury.
5) For electrical work, follow the local national wiring standard, regulation and this installation instructions. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in electrical work, it will cause electrical shock or fire.
6) Use the specified cable and connect tightly and clamp the cable so that no external force will be acted on the terminal. If connection or fixing is not perfect, it will cause heat-up or fire at the connection.
7) Wiring routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will cause heat-up at connection point of terminal, fire or electrical shock.
8) When carrying out piping connection, take care not to let air substances other than the specified refrigerant go into refrigeration cycle. Otherwise, it will cause lower capacity, abnormal high pressure in the refrigeration cycle, explosion and injury. ⃠
9) Do not modify the length of the power supply cord or use of extension cord, and do not share the single outlet with other electrical appliances. Otherwise, it will cause fire or electrical shock. ⃠

⚠ CAUTION

1) This equipment must be earthed and installed with earth leakage current breaker. It may cause electrical shock if grounding is not perfect.
2) Do not install the unit at place where leakage of flammable gas may occur. In case gas leaks and accumulates at surrounding of the unit, it may cause fire. ⃠
3) Carry out drainage piping as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture.
4) For the unit adopts auxiliary electric heater, keep at least 1 meter away from the nearest combustible materials.

Selecting installation place

Read completely, then follow step by step.

Indoor unit

- There should not be any heat source, inflammable gas or stream near the unit.
- There should not be any obstacles blocking the air circulation.
- A place where air circulation in the room is good.
- A place where drainage can be easily done.
- A place where noise prevention is taken into consideration.
- Do not install the unit near the door way.
- Ensure the restrictions on installation specified in the indoor unit installation drawings are met.
- Select a location which is firm enough for installation so that the device is not subjected to vibrations.
- The device should be installed at a distance of at least 1m from all other electrical devices and installations, e.g. TV, radio, computer, etc.
- There should not be any direct sunlight. If unavoidable, sunlight prevention should be taken into consideration.

Outdoor unit

- If an awning is built over the unit to prevent direct sunsight or rain, be careful that heat radiation from the condenser is not obstructed.
- There should not be any animal or plant which could be affected by hot air discharged.
- Make sure that there is sufficient space as specified in the installation drawings.
- Do not place any obstacles which may cause a short circuit of the discharged air.
- Select a location which avoids causing a nuisance to neighbours from noise and air emissions from device.
- Select a location which is sufficiently well ventilated.
- Never cover the air inlets and outlets.
- The location must be sufficiently firm for installation and the prevention of vibrations.
- There must be no risk presented by combustible gas or gas escaping as a result of corrosion.
- Avoid a location where there is a high salt content.
- Avoid a location which is heavily exposed to dust.
- Avoid a location to which the general public have access.

Accessories

Indoor unit					
Ⓐ Installation plate	1		Ⓗ Air freshening filter (used to install on Air filter)	1	
Ⓑ Clip Anchor	5				
Ⓒ Mounting plate fixing screw ST3.9x25	5		Ⓘ Seal	1 (for cooling & heating models only)	
Ⓓ Remote controller	1		Ⓙ Drain joint		
Ⓔ Fixing screw for remote controller holder ST2.9X10	2	optional parts	Ⓚ Ower's manual	1	
			Ⓛ Installation manual	1	
Ⓕ Remote controller holder	1		Ⓜ Remote controller illustration	1	
Ⓖ Dry battery AAA.LR03	2				

NOTE: Use the supplied installation accessories as required. The items necessary to install this air conditioner are not included must be purchased separately.

Indoor & outdoor unit installation drawings

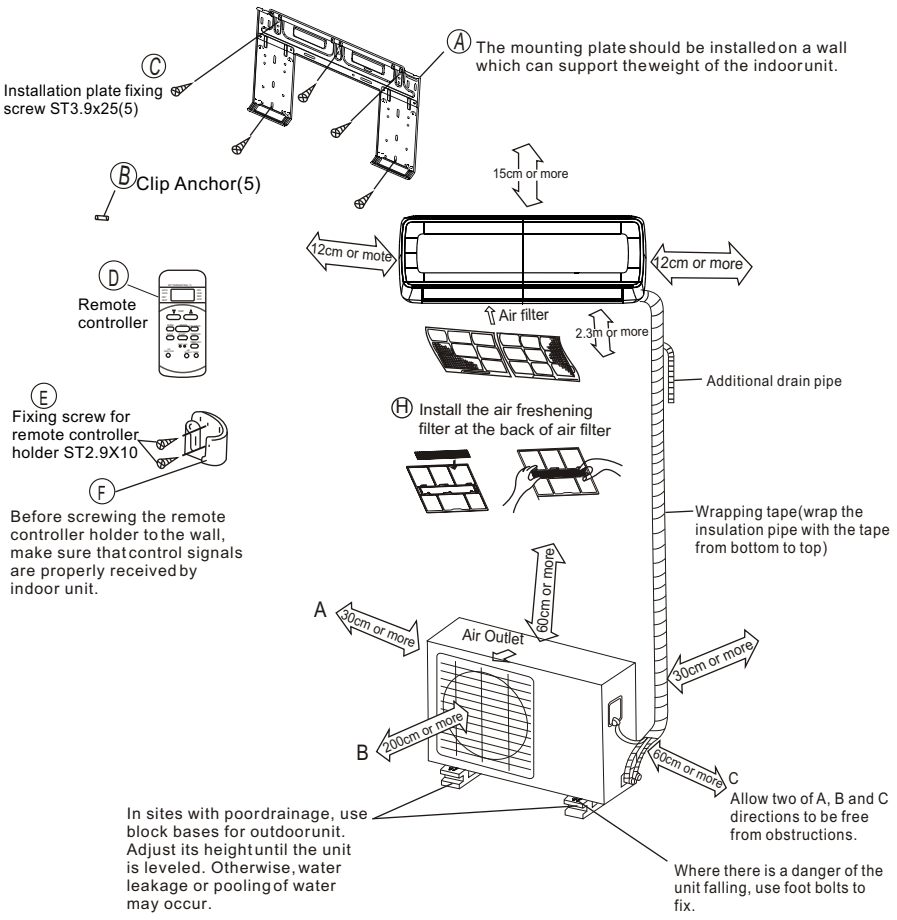


Fig.1

NOTE: Appearance of outdoor unit and indoor unit may differ from some models. The actual shape shall prevail.

INDOOR UNITINSTALLAITON

Remove the installation plate from the indoor unit.The installation plate should be installed on a wall which can support the weight of the indoor unit.

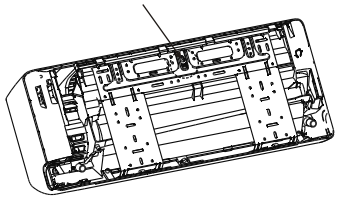
1. Installation PlateMounting

1. Fit the installation plate horizontally on structural parts of the wall with spaces around the installation plate.
2. If the wall is made of brick, concrete or the like, drill five 5mm diameter holes in the wall and insert Clip anchor for appropriate mounting screws.
3. Secure the installation plate to the wall with screws.

NOTE:

Mount the Installation Plate and drill holes in the wall according to the wall structure and corresponding mounting points on the installation plate. The installation plate provided with the machine differ from appliance to appliance.
(Dimensions are in " mm" unless otherwise stated)

The installation plate is fixed with a screw for the convenience of shipment, please remove the screw first before installation.



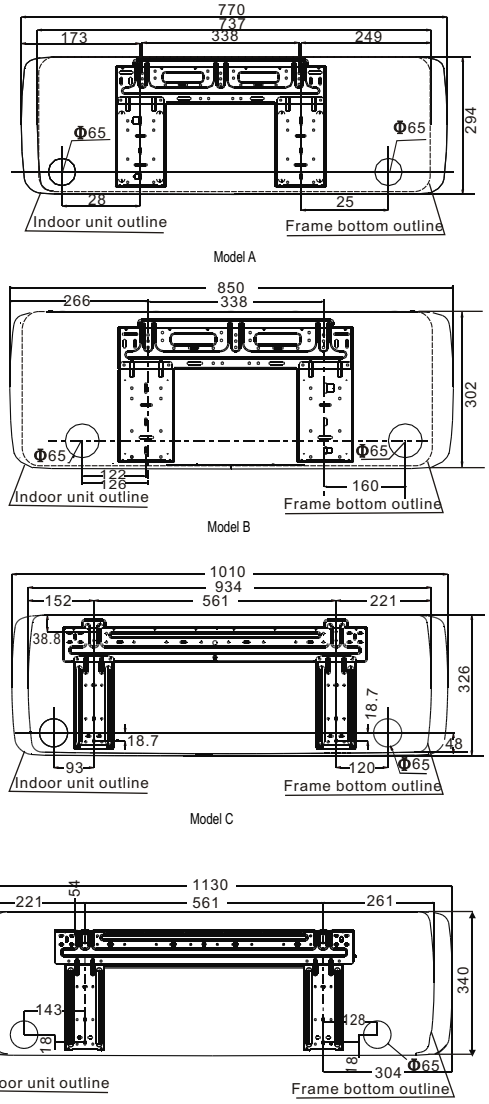


Fig.2

2. Drill a hole in the wall

1. Determine hole positions according to left and right side of the installation plate. The hole center is obtained by measuring the distance as shown in the diagram of Fig.2.
2. Dirll the piping plate hole with ϕ65mm hole-core drill.
3. Drill the piping hole at either the right or the left and the hole should be slightly slanted to the outdoor side, so that the outside end is lower than inside end,see Fig.3.
4. Always take steps to protect the pipe when drilling metal grid,metal plate or the like.

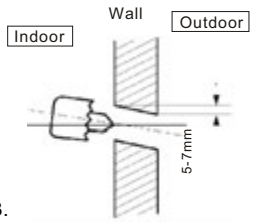


Fig.3

3. Connective pipe installation

1. For the left-hand and right-hand piping, remove the pipe cover from the side panel.
2. For the right back and left back piping, install the piping as shown.
   NOTE: Both sides drainage structure is standard. For both sides drainage structure, it can be choosen for right, left or both sides drainage connection. If choosing both sides drainage connection, another proper drain hose is needed as there is only one drain hose offered by factory. If choosing one side drainage connection, make sure the drain hole on the other side is well plugged.
   For 9k/12k models, if choosing left-hand or left-back piping,please choosing left side drainage connection. The connection of the drain hose is supposed to be done by qualified installer in case of water leakage.
3. Attach the drain hose to the underside of the refrigerant pipes with adhesive viny tape.
4. Wrap the refrigerant pipes and drain hose together with insulation tape.
5. Open the front panel, then open the wire cover, connecting the cables.
6. Bundle the pipes, connecting cable, and drain hose with tape securely, evenly as shown in Figure on the right.
7. Pass them through the wall hole.

- Because the condensed water from rear of the indoor unit is gathered in ponding box and is piped out of room. Do not put anything else in the box.

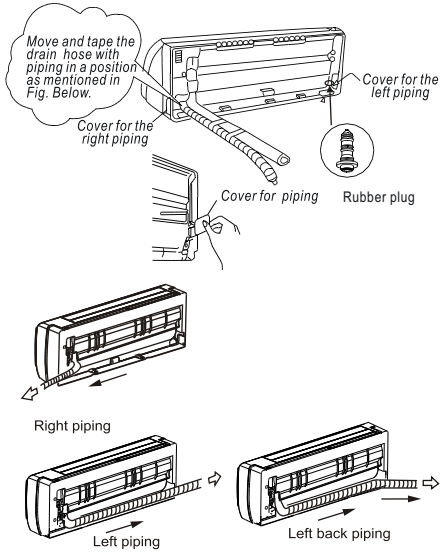


Fig.4

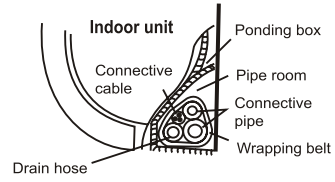


Fig.5

CAUTION

- Connect the indoor unit first, then the outdoor unit.
- Do not allow the piping to let out from the back of the indoor unit.
- Be careful not to let the drain hose slack.
- Heat insulation should be done to the extension drain hose of indoor unit.
- Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause drain pan to overflow inside the unit.
- Never intercross nor intertwist the power wire with any other wiring.

4.Drain piping

1. Connect the drain hose as described in Fig.6. The drain hose should be inclined downward.
2. When drain hose requires extension, obtain an extension hose commercially available. Be sure to thermally insulate the indoor section of the extension hose. Do not let the drain hose slack.
3. Remove the air filter and pour some water into the drain pan to check the water flows smoothly.

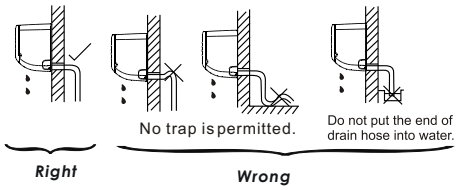


Fig.6

5. Connect the cable to the indoor unit

Electrical work

Electric safety regulations for the initial Installation

1. If there is serious safety problem about the power supply, the technicians should refuse to install the air conditioner and explain to the client until the problem is solved.
2. Power voltage should be in the range of 90%~110% of rated voltage.
3. The surge protector and main power switch with a 1.5 times capacity of Max. Current of the unit should be installed in power circuit. Ensure the air conditioner is grounded well.
4. The appliance shall be installed in accordance with national wiring regulations. Do not operate your air conditioner in a wet room such as a bathroom or laundry room.
5. An all-pole disconnection device which has at least 3mm clearances in all poles, and have a leakage current that may exceed 10mA, the residual current device(RCD) having a rated residual operating current not exceeding 30mA, and disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
6. For the unit adopts auxiliary electric heater, keep at least 1 meter away from the nearest combustible materials.
7. According to the attached Electrical Connection Diagram located on the panel of the indoor & outdoor unit to connect the wire.
8. All wiring must comply with local and national electrical codes and be installed by qualified and skilled electricians.
9. Every wire must be connected firmly. No wire should be allowed to touch refrigerant tubing, the compressor, or any moving parts.
10. Loose wiring may cause the terminal to overheat or result in unit malfunction. A fire hazard may also exist. Therefore, be sure all wiring is tightly connected.
9. An individual branch circuit and single receptacle used only for this air conditioner must be available. See the following table for suggested wire sizes and fuse specifications:

Minimum cross-sectional area of conductors:

Rated current of appliance (A)	Nominal cross-sectional area (mm2)
>3 and ≤6	0.75
>6 and ≤10	1
>10 and ≤16	1.5
>16 and ≤25	2.5
>25 and ≤32	4
>32 and ≤40	6

NOTE:

- The wire size of power supply cord and interconnected wire and the current of the fuse or switch are determined by the maximum current indicated on the nameplate which located on the side panel of the unit. Please refer to the nameplate before selecting the wire size, fuse or switch.
- The controller of the air conditioner designed with a fuse protection function under abnormal conditions, the specifications of the fuse have printed on the circuit board, such as: T3.15A/250VAC, T5A/250VAC, etc.

Connect the cable to the indoor unit

NOTE: Before performing any electrical work, turn off the main power to the system.

1. The indoor power cord type is H05VV-F or H05V2V2-F, the outdoor power cord and interconnected cord type is H07RN-F.
2. Lift the indoor unit panel up, remove the wire box cover by loosening the screw.
3. Remove the cable clamp. Match wire colours with terminal numbers on indoor and outdoor unit's terminal blocks and firmly screw wires to the corresponding terminals.
4. Connect the end of the connection cable fully inserting into the terminal block.
5. Fasten the connection cable with a cable clamp.

NOTE: The wiring connection is differ from appliance to appliance, please refer to Page 12..

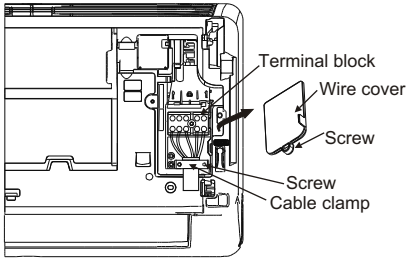
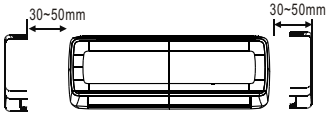


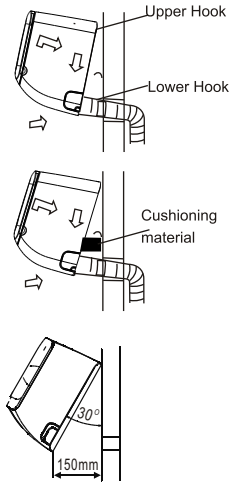
Fig.7

Indoor unit installation

1. Pass the piping through the hole in the wall.
2. Hook the indoor unit onto the upper portion of installation plate(Engage the indoor unit with the upper edge of the installation plate). Ensure the hooks are properly seated on the installation plate by moving it in left and right.
3. Piping can easily be made by lifting the indoor unit with a cushioning material between the indoor unit and the wall. Get it out after finish piping. When use a wall embedded pipe, the indoor unit can be moved to the left or right for 30~50mm(model dependent), which offers sufficient space to arrange the pipes and ensure the indoor unit fully close to the wall after installation.
4. Press the lower left and right side of the unit against the installation plate until hooks engages with the their slots.



Move to left or right



Wall embedded pipe

Fig.8

OUTDOOR UNIT INSTALLATION

Outdoor installation precaution

- Install the outdoor unit on a rigid base to prevent increasing noise level and vibration.
- Determine the air outlet direction where the discharged air is not blocked.
- In the case that the installation place is exposed to strong wind such as a seaside, make sure the fan operating properly by putting the unit lengthwise along the wall or using a dust or shield plates. Specially in windy area, install the unit to prevent the admission of wind. If need suspending installation, the installation bracket should accord with technique requirement in the installation bracket diagram.
- The installation wall should be solid brick, concrete or the same intensity construction, or actions to reinforce, damping supporting should be taken. The connection between bracket and wall, bracket and the air conditioner should be firm, stable and reliable.
- Be sure there is no obstacle which block radiating air.

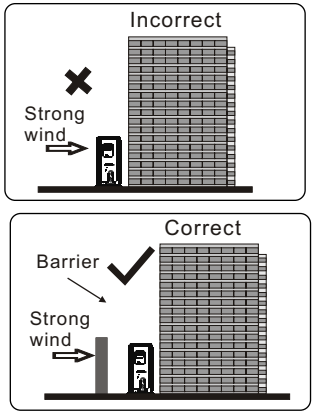


Fig.9

Settlement of outdoor unit

- Anchor the outdoor unit with a bolt and nut ϕ10 or ϕ8 tightly and horizontally on a concrete or rigid mount.
  NOTE: The outdoor unit you purchase may be like one of the following. Install the outdoor unit according to the dimension as indicated in the table below:

Outdoor unit dimension mm(WxHxD)	Mounting dimensions	
	A(mm)	B(mm)
685x430x260	460	276
700x540x240	458	250
780x540x250	549	276
760x590x285	530	290
845x700x320	560	335
810x558x310	549	325
900x860x315	590	333
945x810x395	640	405

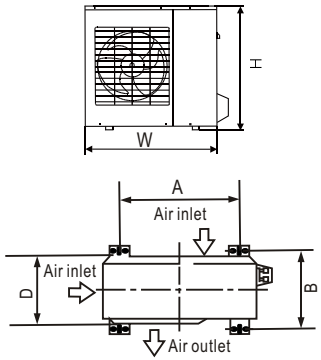


Fig.10

Drain joint installation

NOTE: The drain joint is slightly different according to the different outdoor unit.
For the drain joint with the seal(Fig.11 (A)), first fit the seal onto the drain joint, then insert the drain joint into the base pan hole of outdoor unit, rotate 90° to securely assemble them. To install drain joint as shown in Fig.11 (B), insert the drain joint into the base pan hole of outdoor unit until it remains fixed with a clicking sound. Connecting the drain joint with an extension drain hose (Locally purchased), in case of the water draining off the outdoor unit during the heating mode.
NOTE: In cold areas, do not use a drain hose with the outdoor unit.(otherwise, drain water may freeze)

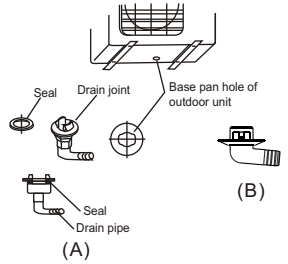


Fig.11

Refrigerant pipe connection

NOTE: Connective pipe length will affect the capacity and energy efficiency of the unit. The nominal efficiency is tested basing on the pipe length of 5 meters. Consult the technicians to purchase proper size connective pipe for your machine..

1. Flaring work
Main cause for refrigerant leakage is due to defect in the flaring work. Carry out correct flaring work using the following procedure:

A: Cut the pipes and the cable.

1. Use the piping kit accessory or pipes purchased locally.
2. Measure the distance between the indoor and the outdoor unit.
3. Cut the pipes a little longer than the measured distance.
4. Cut the cable 1.5m longer than the pipe length.

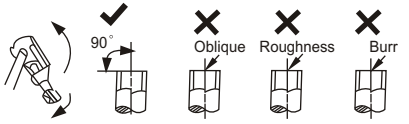


Fig.12

B: Burr removal

1. Completely remove all burrs from the cut cross section of pipe/tube.
2. Put the end of the copper tube/pipe in a downward direction as you remove burrs in order to avoid dropping burrs into the tubing.

C: Putting nut on

Remove flare nuts attached to indoor and outdoor unit, then put them on pipe/tube having completed burr removal. (not possible to put them on after flaring work)

D: Flaring work

Firmly hold copper pipe in a die in the dimension shown in the table below.

Outer diam. (mm)	A(mm)	
	Max.	Min.
ϕ 6.35	1.3	0.7
ϕ 9.52	1.6	1.0
ϕ 12.7	1.8	1.0
ϕ 16	2.2	2.0

E: Pipe length

Model	Capacity (Btu/h)	Max. Length of refrigerant pipe(m)	Max. drop height (m)
R410A inverter split air condtioner	<15000	25	10
	≥15000~<24000	30	20
	≥24000~<36000	50	25
	≥36000~≤60000	65	30

2. Tightening Connection

- Align the center of the pipes.
- Sufficiently tighten the flare nut with fingers, and then tighten it with a spanner and torque wrench as shown in Fig.16 & 17.

Outer diam.	Tightening torque(N.cm)	Additional tightening torque(N.cm)
ϕ 6.35	1500 (153kgf.cm)	1600 (163kgf.cm)
ϕ 9.52	2500 (255kgf.cm)	2600 (265kgf.cm)
ϕ 12.7	3500 (357kgf.cm)	3600 (367kgf.cm)
ϕ 16	4500 (459kgf.cm)	4700 (479kgf.cm)

Caution

- Excessive torque can break nut depending on installation conditions.

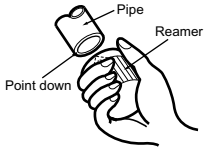


Fig.13

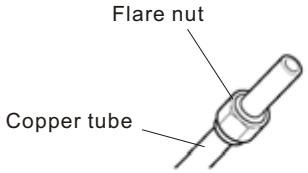


Fig.14

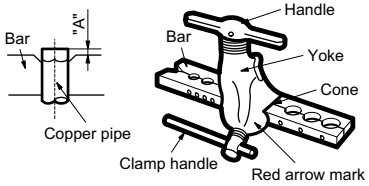


Fig.15

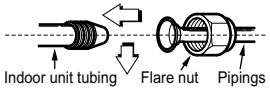


Fig.16

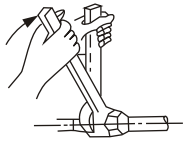
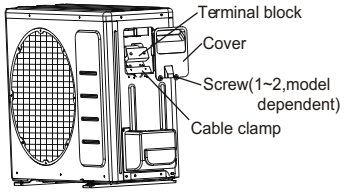
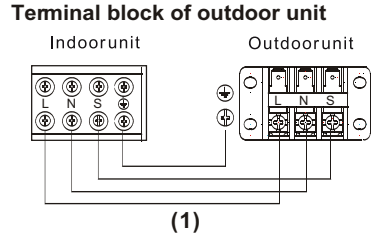


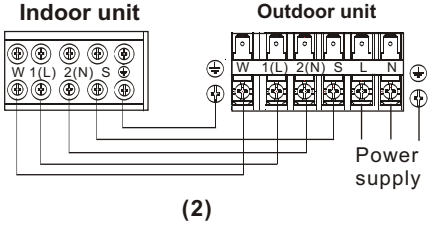
Fig.17

Connect the cable to the outdoor unit

1. Remove the electrical wiring cover from the outdoor unit by loosening the screws.
2. Connect the connective cables to the terminals as identified with their respective matched numbers on the terminal block of indoor and outdoor units.
3. Secure the cable onto the control board with the cable clamp.
4. To prevent the irgress of water, form a loop of the connective cable as illustrated in the installation drawings of indoor and outdoor units.
5. Insulate unused cords (conductors) with PVC-tape. Process them so they do not touch any electrical or metal parts.







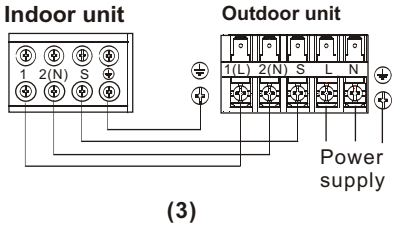


Fig.18

Air purging

Air and other foreign matter in the refrigerant circuit causes abnormal pressure rise, which may result in equipment damage and even injury. Therefore, the indoor unit and tubing between the indoor and outdoor unit must be leak tested and evacuated to remove any noncondensables and moisture from the system.

1.Air purging with vacuum pump

- Preparation
  Check that each tube (both liquid and gas side tubes) between the indoor and outdoor units have been properly connected and all wiring for the test run has been completed. Remove the service valve caps from both the gas and the liquid side on the outdoor unit. Note that both the liquid and the gas side service valves on the outdoor unit are kept closed at this stage.
- Pipe length and refrigerant amount:

Connective pipe length	Air purging method	Additional amount of refrigerant to be charged	
Less than 5m	Use vacuum pump.	———	
More than 5m	Use vacuum pump.	Liquid side:Φ 6.35 R22: (Pipe length-5)x30g/m R410A: (Pipe length-5)x15g/m	Liquid side:Φ 9.52 R22: (Pipe length-5)x60g/m R410A: (Pipe length-5)x30g/m

- When relocate the unit to another place, perform evacuation using vacuum pump.
- Make sure the refrigerant added into the air conditioner is liquid form in any case. (Not applicable to the units adopt freon R22)

Caution in handling the packed valve

- Open the valve stem until it hits against the stopper. Do not try to open it further.
- Securely tighten the valve stem cap with a spanner or the like.
- Valve stem cap tightening torque (See Tightening torque table in previous page).

2.When Using the Vacuum Pump

(For method of using a manifold valve, refer to its operation manual.)

1. Completely tighten the flare nuts, A, B, C, D, connect the manifold valve charge hose to a charge port of the low-pressure valve on the gas pipe side.
2. Connect the charge hose connection to the vacuum pump.
3. Fully open the handle Lo of the manifold valve.
4. Operate the vacuum pump to evacuate. After starting evacuation, slightly loose theflare nut of the Lo valve on the gas pipe side and check that the air is entering(Operation noise of the vacuum pump changes and a compound meter indicates 0 instead of minus)
5. After the evacuation is complete, fully close the handle Lo of the manifold valve and stop the operation of the vacuum pump. Make evacuation for 15 minutes or more and check that the compound meter indicates -76cmHg (-1x10^{5}Pa).
6. Turn the stem of the packed valve B about 45° counterclockwise for 6~7 seconds after the gas coming out, then tighten the flare nut again. Make sure the pressure display in the pressure indicator is a little higher than the atmosphere pressure.
7. Remove the charge hose from the Low pressure charge hose.
8. Fully open the packed valve stems B and A.
9. Securely tighten the cap of the packed valve.

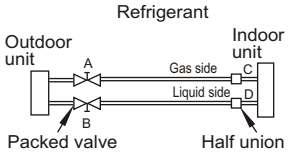


Fig.19

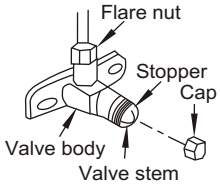


Fig.20

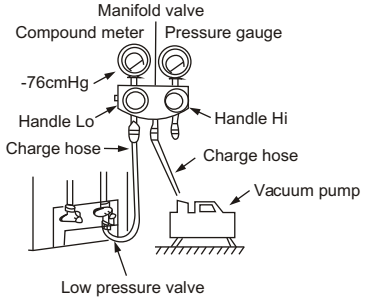


Fig.21

3.Safety and leakage check

● **Electrical safety check**

Perform the electric safe check after completing installation:

1. Grounding work
   After finishing grounding work, measure the grounding resistance by visual detection and grounding resistance tester. Make sure the grounding resistance is less than 4 Ω.
2. Electrical leakage check (performing during test running)
   During test operation after finishing installation, the serviceman can use the electroprobe and multimeter to perform the electrical leakage check. Turn off the unit immediately if leakage happens. Check and find out the solution ways till the unit operate properly.

● **Gas leak check**

1. Soap water method:
   Apply a soap water or a liquid neutral detergent on the indoor unit connections and outdoor unit connections by a soft brush to check for leakage of the connecting points of the piping. If bubbles come out, it indicates that the pipes have leakage.
2. Leak detector
   Use the leak detector to check for leakage.

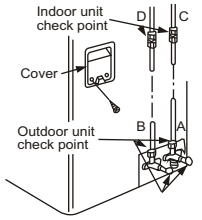


Fig.22

CAUTION

A: Lo packed valve B: Hi packed valve

C and D are ends of indoor unit connection.

TEST RUNNING

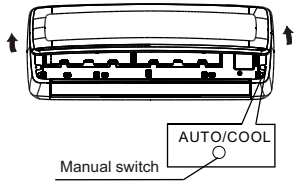
Perform test operation after completing gas leak check at the flare nut connections and electrical safety check.

- Check that all tubing and wiring have been properly connected.
- Check that the gas and liquid side service valves are fully open.

1. Connect the power, press the ON/OFF button on the remote controller to turn the unit on.
2. Use the MODE button to select COOL, HEAT, AUTO and FAN to check if all the functions works well.
3. When the ambient temperature is too low(lower than 17°C), the unit cannot be controlled by the remote controller to run at cooling mode, manual operation can be taken. Manual operation is used only when the remote controller is disable or maintenance necessary.

- Hold the panel sides and lift the panel up to an angle until it remains fixed with a clicking sound.
- Press the Manual control button to select the AUTO or COOL, the unit will operate under Forced AUTO or COOL mode(see User Manual for details).

4. The test operation should last about 30 minutes.



ΠΕΡΙΕΧΟΜΕΝΑ

⚠ ΠΡΟΣΟΧΗ

- Επικοινωνήστε με εξειδικευμένο τεχνικό για την συντήρηση ή επισκευή της μονάδας
- Η εγκατάσταση της μονάδας πρέπει να γίνει σύμφωνα με τους εθνικούς κανόνες συνδεσμολογίας
- Αυτή η συσκευή δεν προορίζεται για χρήση από άτομα (συμπεριλαμβανομένων των παιδιών) με μειωμένες σωματικές, αισθητηριακές ή διανοητικές ικανότητες ή έλλειψη εμπειρίας και γνώσης, εκτός και αν έχουν επιτήρηση ή οδηγίες σχετικά με τη χρήση της συσκευής από πρόσωπο που είναι υπεύθυνο για την ασφάλειά τους.
- Θα πρέπει να επιβλέπονται τα μικρά παιδιά για να εξασφαλιστεί ότι δεν παίζουν με το κλιματιστικό.
- Μην λειτουργείτε το κλιματιστικό σας σε δωμάτιο με υγρασία, όπως το μπάνιο ή το πλυσταριό.
- Οι εργασίες εγκατάστασης πρέπει να εκτελούνται σύμφωνα με τα εθνικά πρότυπα καλωδίωσης από εξουσιοδοτημένο προσωπικό.

- Παρακαλούμε διαβάστε αυτές τις οδηγίες ασφαλείας πριν την εγκατάσταση
- Ακαλουθήστε όλες τις παρακάτω οδηγίες, είναι σημαντικές για την ασφάλειά σας.

⚠ **ΠΡΟΕΙΔΟΠΟΙΗΣΗ**	Αυτό το σύμβολο υποδεικνύει την πιθανότητα σοβαρού τραυματισμού ή θανάτου.
⚠ **ΠΡΟΣΟΧΗ**	Αυτό το σύμβολο υποδεικνύει την πιθανότητα τραυματισμού ή καταστροφή περιουσίας

⊘	Αυτό το σύμβολο υποδεικνύει την αποτροπή κάποιας ενέργειας

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΗ

1. Η εγκατάσταση, συντήρηση και επισκευή αυτής της μονάδας θα πρέπει να γίνει από εξειδικευμένο τεχνικό. Εάν η εγκατάσταση δεν έχει γίνει σωστά, μπορεί να προκληθεί διαρροή νερού, ηλεκτροπληξία ή πυρκαγιά

2. Εγκαταστήστε τη μονάδα αυστηρά σύμφωνα με αυτές τις οδηγίες εγκατάστασης. Εάν η εγκατάσταση δεν έχει γίνει σωστά, μπορεί να προκληθεί διαρροή νερού, ηλεκτροπληξία ή πυρκαγιά

3. Για την εγκατάσταση χρησιμοποιήστε αποκλειστικά τα συμπεριλαμβανόμενα και προδιαγραφόμενα εξαρτήματα, αλλιώς μπορεί να προκληθεί πτώση της μονάδας, διαρροή νερού, ηλεκτροπληξία ή πυρκαγιά.

4. Εγκαταστήστε τη μονάδα σε σταθερή βάση η οποία να μπορεί να αντέξει το βάρος της μονάδας. Εάν η βάση δεν είναι σταθερή ή η εγκατάσταση είναι ελλιπής, μπορεί να προκληθεί πτώση της μονάδας και να υπάρξει τραυματισμός

5. Για τις ηλεκτρολογικές εργασίες θα πρέπει να ακολουθηθούν οι εθνικοί κανονισμοί και οι οδηγίες που περιγράφονται σε αυτό το εγχειρίδιο. Θα πρέπει να χρησιμοποιηθεί ξεχωριστό κύκλωμα. Εάν η χωρητικότητα του ηλεκτρικού κυκλώματος δεν είναι επαρκής ή αν είναι ελλατωματικό, μπορεί να προκληθεί ηλεκτροπληξία ή πυρκαγιά.

5. Για τις ηλεκτρολογικές εργασίες θα πρέπει να ακολουθηθούν οι εθνικοί κανονισμοί και οι οδηγίες που περιγράφονται σε αυτό το εγχειρίδιο. Θα πρέπει να χρησιμοποιηθεί ξεχωριστό κύκλωμα. Εάν η χωρητικότητα του ηλεκτρικού κυκλώματος δεν είναι επαρκής ή αν είναι ελλατωματικό, μπορεί να προκληθεί ηλεκτροπληξία ή πυρκαγιά.

6. Χρησιμοποιήστε το προδιαγραμένο καλώδιο και συνδέστε το σφιχτά στην επαφή έτσι ώστε να μην ασκείται εξωτερική πίεση στο τερματικό. Εάν η σύνδεση δεν είναι απολύτως σωστή θα προκληθεί υπερθέρμανση ή πυρκαγιά.

7. Θα πρέπει η διέλευση των καλωδίων να γίνει με τρόπο ώστε το κάλυμμα της πλακέτας να κλείνει. Εάν το κάλυμμα δεν τοποθετηθεί σωστά θα προκληθεί υπερθέρμανση στο σημείο σύνδεσης, ηλεκτροπληξία ή πυρκαγιά. ⊘

8. Κατά τη σύνδεση των σωληνώσεων, φροντίστε να μην εισέλθει αέρας στο ψυκτικό κύκλωμα. Σε αντίθετη περίπτωση θα προκληθεί μείωση απόδοσης, υψηλή πίεση στο ψυκτικό κύκλωμα, έκρηξη και τραυματισμός ⊘

⚠ ΠΡΟΣΟΧΗ

1. Θα πρέπει να υπάρχει γείωση στη μονάδα και να τοποθετηθεί ρελέ διαφυγής. Εάν η γείωση δεν είναι σωστή μπορεί να προκληθεί ηλεκτροπληξία.

2. Μην τοποθετείτε τη μονάδα σε μέρος όπου μπορεί να προκληθεί διαρροή εύφλεκτου αερίου. Εάν υπάρξει μεγάλη διαρροή αερίου κοντά στη μονάδα μπορεί να προκληθεί πυρκαγιά. ⊘

3. Βεβαιωθείτε πως η σύνδεση του αγωγού αποστράγγισης έγινε σύμφωνα με τις οδηγίες εγκατάστασης. Εάν η απορροή των συμπυκνωμάτων δεν γίνεται σωστά μπορεί να εμφανιστεί διαρροή νερού από την εσωτερική μονάδα και να φθαρούν τα έπιπλα

4. Για τις μονάδες που έχουν ηλεκτρική αντίσταση, πρεπει να τοποθετηθούν τουλάχιστον ένα μέτρο μακριά εύφλεκτα υλικά.

Επιλογή θέσης εγκατάστασης

Διαβάστε προσεκτικά τις οδηγίες και έπειτα ακολουθήστε τα βήματα

Εσωτερική μονάδα

- Δεν πρέπει κοντά στη μονάδα να υπάρχει κάποια πηγή θερμότητας ή αέρα.
- Δεν πρέπει να υπάρχουν εμπόδια στην κυκλοφορία του αέρα
- Θα πρέπει να υπάρχει επαρκής κυκλοφορία του αέρα
- Εγκαταστήστε σε μέρος όπου μπορεί γίνεται εύκολα η απορροή συμπυκνωμάτων
- Εγκαταστήστε σε μέρος όπου αποφεύγεται ο θόρυβος
- Μην τοποθετείτε τη μονάδα κοντά σε είσοδο πόρτας
- Διατηρήστε τις αποστάσεις από την οροφή τους τοίχους και το δάπεδο σύμφωνα με τα βέλη.
- Επιλέξτε μια θέση η οποία είναι αρκετά σταθερή για την εγκατάσταση, έτσι ώστε η συσκευή να μην υποβάλλεται σε δονήσεις.
- Η συσκευή πρέπει να εγκατασταθεί σε απόσταση τουλάχιστον 1μ. από όλες τις άλλες ηλεκτρικές συσκευές και εγκαταστάσεις, π.χ. Τηλεόραση, ραδιόφωνο, υπολογιστή, κλπ.
- Δεν πρέπει να υπάρχει απευθείας ηλιακή ακτινοβολία. Εάν είναι αναπόφευκτο, πρέπει να βρεθεί τρόπος προστασίας.

Εξωτερική μονάδα

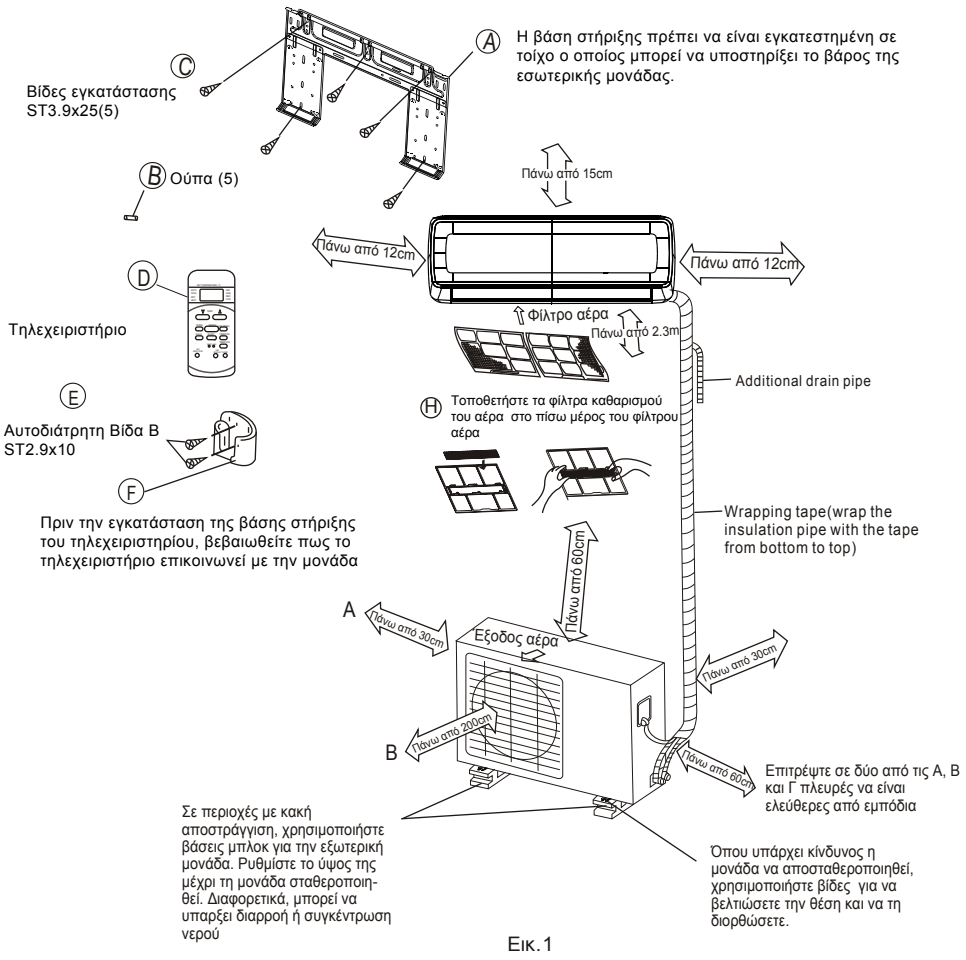
- Εάν υπάρχει στέγαστρο πάνω από τη μονάδα για προστασία από καιρικά φαινόμενα, βεβαιωθείτε πως δεν παρεμποδίζεται η έκλυση θερμότητας από την εξωτερική μονάδα.
- Δεν πρέπει κοντά να υπάρχει κάποιο ζώο ή φυτό που μπορεί να επηρρεαστεί από τον ζεστό αέρα που αποβάλλεται.
- Διατηρήστε τις αποστάσεις από την οροφή, τους τοίχους, το πάτωμα ή άλλα εμπόδια σύμφωνα με τα βέλη.
- Μην τοποθετείτε αντικείμενα τα οποία μπορεί να εμοδίζουν τον αέρα που εξέρχεται από τη μονάδα.
- Επιλέξτε μια θέση που αποφεύγει την πρόκληση ενοχλήσεων στους γείτονες από τις εκπομπές θορύβου και την έξοδο αέρα από τη συσκευή.
- Επιλέξτε μια θέση η οποία είναι καλά αεριζόμενη
- Μην καλύπτετε ποτέ τις εισόδους και τις εξόδους αέρα
- Η θέση πρέπει να είναι αρκετά σταθερή για την εγκατάσταση και την πρόληψη των δονήσεων.
- Δεν πρέπει να υπάρχει στον ευρύτερο χώρο εγκατάστασης καύσιμο, φυσικό αέριο ή οποιαδήποτε διαρροή αέριου γιατί υπάρχει κίνδυνος διάβρωσης
- Αποφύγετε μια θέση όπου υπάρχει υψηλή περιεκτικότητα σε αλάτι.
- Αποφύγετε μια θέση η οποία είναι σε μεγάλο βαθμό εκτεθειμένα στη σκόνη.
- Αποφύγετε μια θέση στην οποία το ευρύ κοινό έχει πρόσβαση.

Εξαρτήματα

Εσωτερική μονάδα					
Ⓐ Βάση Εγκατάστασης	1		Ⓗ Φίλτρο καθαρισμού του αέρα (προαιρετικά για να τοποθετηθεί στο Φίλτρο	1	
Ⓑ Ούπα	5				
Ⓒ Αυτοδιάτρητη Βίδα ST3.9x25	5		Ⓘ Τάπα	1 Για μοντέλα ψύξης/θέρμανσης μόνο	
Ⓓ Ασύρματο τηλεχειριστήριο	1		Ⓙ Σύνδεσμος αποστράγγισης		
Ⓔ Αυτοδιάτρητη Βίδα για την βάση του τηλεχειριστηρίου ST2.9X10	2	optional parts	Ⓚ Εγχειρίδιο Λειτουργίας Χρήστη	1	
			Ⓛ Εγχειρίδιο Εγκατάστασης	1	
Ⓕ Βάση ασύρματου τηλεχειριστηρίου	1		Ⓜ Εγχειρίδιο Λειτουργιας τηλεχειριστηρίου	1	
Ⓖ Μπαταρίες AAA.LR03	2				

Σημείωση: Εκτός από τα παρεχόμενα εξαρτήματα, τα υπόλοιπα που θα χρειαστούν κατά την εγκατάσταση θα πρέπει να τα αγοράσετε.

Σχεδιαγραμμα εγκαταστασης της εσωτερικής και της εξωτερικής μονάδας



Εικ.1

Σημείωση: Η εμφάνιση της εξωτερικής μονάδας και εσωτερικής μονάδας μπορεί να διαφέρουν από ορισμένα μοντέλα. Το πραγματικό μοντέλο υπερισχύει.

Εγκατάσταση εσωτερικής μονάδας

Αφαιρέστε την βάση εγκατάστασης από την εσωτερική μονάδα. Η Βάση εγκατάστασης θα πρέπει να εγκατασταθεί σε ένα τοίχωμα το οποίο μπορεί υποστηρίξει το βάρος της εσωτερικής μονάδας

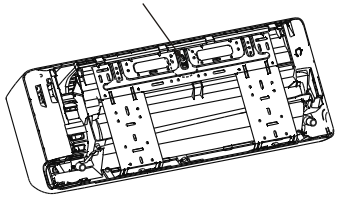
Εγκατάσταση της Βάσης

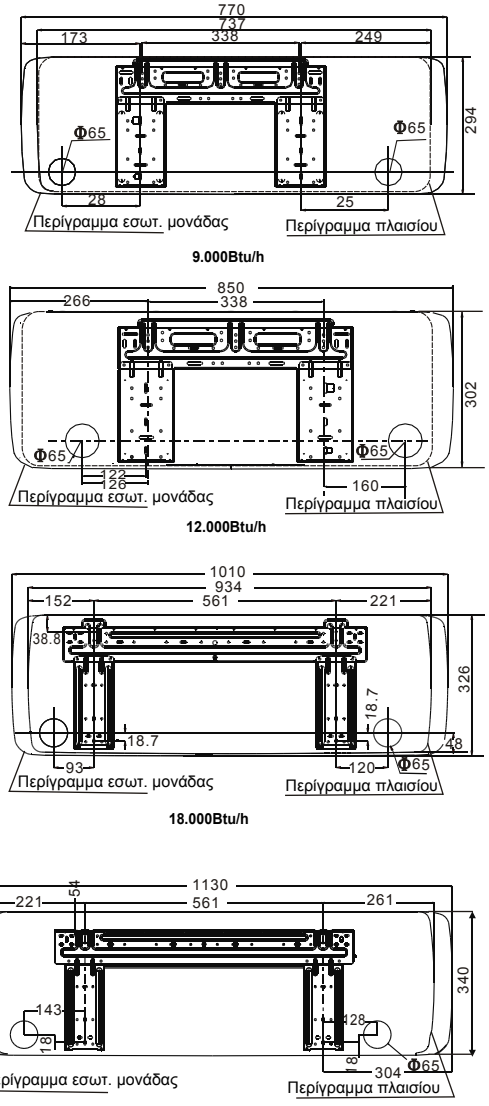
1. Τοποθετήστε τη βάση οριζόντια στα δομικά στοιχεία του τοίχου αφήνοντας αποστάσεις γύρω από αυτή.
2.Εάν ο τοίχος είναι από τούβλα, τσιμέντο ή παρόμοιο υλικό, διανοίξτε 5 ή 8 οπές των 5mm. Εισάγετε τα κατάλληλα ούπα για τις αντίστοιχες βίδες
3. Ασφαλίστε τη βάση εγκατάστασης στον τοίχο με βίδες.

ΣΗΜΕΙΩΣΗ:

Τοποθετήστε τη βάση και διανοίξτε οπές στον τοίχο σύμφωνα με την δομή του τοίχου και τα αντίστοιχα σημεία στήριξης πάνω στη βάση. Η βάση που συνοδεύει τη μονάδα διαφέρει ανά μοντέλο.
(Οι διαστάσεις είναι σε mm)

Η βάση εγκατάστασης στερεώνεται με μια βίδα για διευκόλυνση, παρακαλούμε αφαιρέστε τη βίδα πριν την εγκατάσταση.

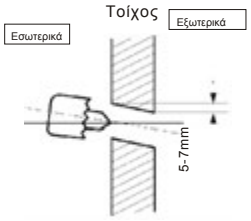




Εικ.2

Διάνοιξη οπής στον τοίχο

1.Ορίστε τις θέσεις διάνοιξης των οπών δεξιά και αριστερά από τη βάση στήριξης. Το κέντρο της οπής θα το υπολογίσετε μετρώντας την απόσταση όπως φαίνεται στο παραπάνω διάγραμμα.
2. Διανοίξτε την οπή για τις σωληνώσεις στη βάση με τρυπάνι Φ65.
3. Διανοίξτε την οπή για τις σωληνώσεις στη βάση είτε δεξιά είτε αριστερά με ελαφρά κλίση προς την εξωτερική πλευρά.
4. Φροντίστε η μονάδα να είναι προστατευμένη όταν τρυπάτε μεταλλικό πλέγμα, μεταλλική βάση ή κάτι παρόμοιο.



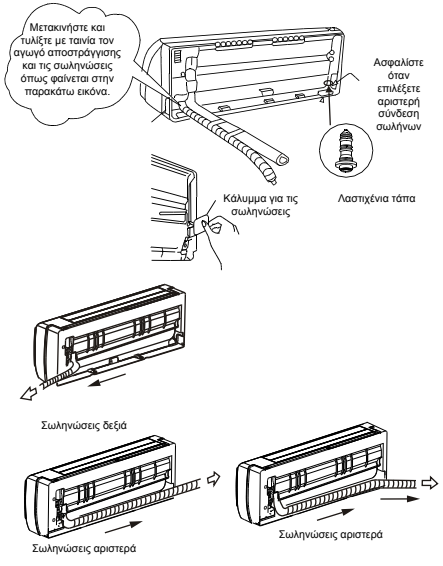
Εικ.3

Εγκατάσταση σωλήνων σύνδεσης

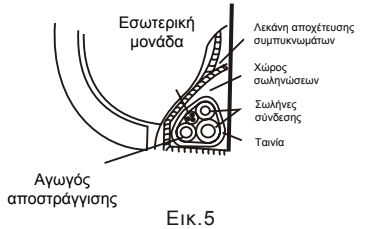
Για εγκατάσταση είτε δεξιά είτε αριστερά, αφαιρέστε την τάπα από το πλαϊνό πάνελ.
2. Για εγκατάσταση πίσω δεξιά ή πίσω αριστερά εγκαταστήστε τις σωληνώσεις όπως φαίνεται στην εικόνα.

ΣΗΜΕΙΩΣΗ: Η τοποθέτηση του αγωγού αποστράγγισης είναι τυποποιημένη και για τις 2 πλευρές. Η σύνδεση μπορεί να γίνει δεξιά, αριστερά ή και στις 2 πλευρές. Εάν επιλέξετε να γίνει και στις 2 πλευρές θα πρέπει να προμηθευτείτε και ακόμα 1 αγωγό αποστράγγισης, καθώς με τη συσκευασία παρέχεται μόνο 1. Εάν επιλέξετε μία από τις 2 πλευρές, βεβαιωθείτε πως η άλλη είναι σφραγισμένη. Για το μοντέλα των 9.000 Btu/h και 12.000Btu/h, εάν επιλέξετε η σύνδεση να γίνει στην αριστερή ή πίσω αριστερή πλευρά, επιλέξτε η σύνδεση του αγωγού αποστράγγισης να γίνει αριστερά.
Η σύνδεση του αγωγού αποστράγγισης πρέπει να γίνει από εξειδικευμένο προσωπικό για την αποφυγή διαρροής νερού.
3. Συνδέστε τον εύκαμπτο σωλήνα αποστράγγισης στο κάτω μέρος του σωλήνα ψυκτικού με αυτοκόλλητη βινυλ ταινία.
4. Τυλίξτε τις σωληνώσεις, τα καλώδια και τον αγωγό αποστράγγισης με ταινία, όπως φαίνεται στην εικόνα δεξιά.
5.Ανοίξτε το μπροστινό κάλυμμα, στη συνέχεια, ανοίξτε το κάλυμμα του σύρματος, που συνδέει τα καλώδια.
6. Δέστε τους σωλήνες, καλώδιο σύνδεσης, και εύκαμπτο σωλήνα αποστράγγισης με ταινία με ασφάλεια, ομοιόμορφα όπως φαίνεται στο σχήμα στα δεξιά.
7. Περάστε το μέσα από την τρύπα στον τοίχο.

- Επειδή τα συμπυκνώματα συγκεντρώνονται σε λεκάνη συμπυκνωμάτων και μετά αποστραγγίζονται, μην τοποθετήσετε κάποιο αντικείμενο σε αυτή.



Εικ.4



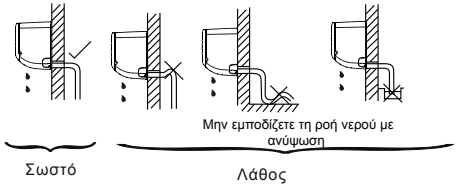
Εικ.5

ΠΡΟΣΟΧΗ

- Συνδέστε πρώτα την εσωτερική μονάδα και μετά την εξωτερική.
- Φροντίστε οι σωληνώσεις να μην βγουν από το πίσω μέρος της μονάδας.
- Φροντίστε ο αγωγός αποστράγγισης να μην είναι χαλαρός.
- Θα πρέπει να τοποθετήσετε θερμομόνωση στον αγωγό αποστράγγισης.
- Βεβαιωθείτε πως ο αγωγός αποστράγγισης είναι στο χαμηλότερο σημείο της δέσμης, διότι αν είναι στο υψηλότερη σημείο μπορεί να προκληθεί διαρροή νερού από την εσωτερική μονάδα.
- Μην διασταυρώνετε και μην περιπλέξετε το καλώδιο τροφοδοσίας με οποιοδήποτε άλλο καλώδιο.

Εγκατάσταση συνδετικών σωλήνων και αγωγού αποστράγγισης

1. Τοποθετήστε τον αγωγό οπώς παρουσιάζετε στην εικόνα 6.
2. Όταν στον σωλήνα αποστράγγισης απαιτείται επέκταση, αγοράστε προέκταση από το εμπόριο οπου διατίθεται. Να είστε βέβαιοι οτι μονώνει θερμικά το εσωτερικο τμήμα της επέκτασης. Μην αφήνετε χαλαρό τον σωλήνα αποστράγγισης.
3. Αφαιρέστε το φίλτρο αέρα και ρίξτε λίγο νερό στο δοχείο αποστράγγισης για να ελέγξετε εάν το νερό ρέει ομαλά.



Εικ.6

Σύνδεση του καλωδίου στην εσωτερική μονάδα

Ηλεκτρολογική εργασία

Κανονισμοί ασφαλείας για την αρχική εγκατάσταση
1. Εάν υπάρχει σοβαρό πρόβλημα ασφάλειας με την παροχή ρεύματος, το τεχνικό προσωπικό θα πρέπει να αρνηθεί να προχωρήσει με την εγκατάσταση και να εξηγήσουν στον πελάτη πως δεν μπορεί να γίνει εκατάσταση αν δεν λυθεί το πρόβλημα.
2. Η τάση δικτύου θα πρέπει να κυμαίνεται στο 90%-110% της βαθμονομημένης τάσης.
3. Στο κύκλωμα θα πρέπει να τοποθετηθεί διάταξη προστασίας υπέρτασης και ασφαλειοδιακόπτης με χωρητικότητα 1,5 φορά μεγαλύτερη από τη μέγιστη ένταση ρεύματος της μονάδας. Βεβαιωθείτε πως έχει γίνει σωστή γείωση.
4. Η μονάδα θα πρέπει να εγκατασταθεί σύμφωνα με τους εθνικούς κανονισμούς. Μην λειτουργείτε τη μονάδα σε χώρους όπως μπάνιο.
5. Οι μονάδες που έχουν εφεδρική αντίσταση πρέπει να βρίσκονται τουλάχιστον σε 1m απόσταση από εύφλεκτα υλικά.
6. Συνδέστε τα καλώδια σύμφωνα με τα ηλεκτρολογικά διαγράμματα που βρίσκονται στην εσωτερική και στην εξωτερική μονάδα.
7. Η συνδεσμολογία της μονάδας θα πρέπει να γίνεται σύμφωνα με τους εθνικούς κανονισμούς και από εξειδικευμένο προσωπικό.
8. Όλες οι καλωδιώσεις πρέπει να συμμορφώνονται με τους τοπικούς και εθνικούς ηλεκτρολογικούς κώδικες και να εγκατασταθεί από ειδικευμένο και ειδικευμένους ηλεκτρολόγους.
9. Κάθε καλώδιο πρέπει να συνδεθεί σταθερά. Θα πρέπει να επιτραπεί σε κανένα καλώδιο να αγγίξει ψυκτικές σωληνώσεις, στο συμπιεστή, ή οποιαδήποτε κινούμενα μέρη.
10. Χαλαρή καλωδίωση μπορεί να προκαλέσει υπερθέμανση του τερματικού ή να οδηγήσει σε δυσλειτουργία της μονάδας. Μπορεί επίσης να υπάρχουν κίνδυνος πυρκαγιάς. Ως εκ τούτου,πρέπει όλα τα καλώδια να είναι καλά συνδεδεμένα.
11. Για την κλιματιστική μονάδα θα πρέπει να υπάρχει ειδικό ξεχωριστό κύκλωμα. Δείτε τον παρακάτω πίνακα για τις διατομές των καλωδίων και τις ασφάλειες:

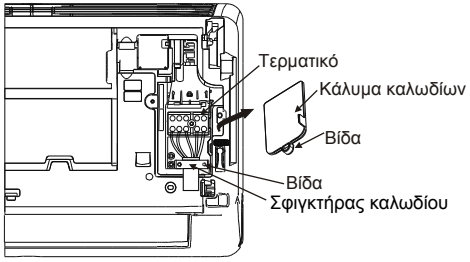
Ασφάλεια (A)	Διατομή καλωδίου (mm2)
>3 και ≤6	0.75
>6 και ≤10	1
>10 και ≤16	1.5
>16 και ≤25	2.5
>25 και ≤32	4
>32 και ≤40	6

- Το μέγεθος του καλωδίου τροφοδοσίας και το ρεύμα της ασφάλειας ή του διακόπτη καθορίζεται από το μέγιστο ρεύμα που αναγράφεται στην πινακίδα η οποία βρίσκεται στην πλευρά του πίνακα της μονάδας. Ανατρέξτε στην πινακίδα πριν επιλέξετε το μέγεθος του καλωδίου, την ασφάλεια ή τον διακόπτη.

Σύνδεση του καλωδίου στην εσωτερική μονάδα

ΣΗΜΕΙΩΣΗ:
Πριν εκτελέσετε οποιαδήποτε ηλεκτρική εργασία αποσυνδέστε την μονάδα από την παροχή ρεύματος.
1. Ο τύπος καλωδίου για την εσωτερική μονάδα είναι H05VV-F ή H05V2V2 και ο τύπος του καλωδίου τροφοδοσίας της εξωτερικής μονάδας καθώς και του καλωδίου ενδοεπικοινωνίας είναι H07RN-F.
2. Ανασηκώστε την εσωτερική μονάδα πίνακα προς τα επάνω, αφαιρέστε το κάλυμμα του κουτιού χαλαρώνοντας τη βίδα.
3. Αφαιρέστε το σφιγκτήρα καλωδίου. Βεβαιωθείτε πως τα χρώματα των καλωδίων καθώς και τα νούμερα των τερματικών επαφών της εσωτερικής μονάδας είναι ίδια με της εξωτερικής και βιδώστε τα καλώδια στους αντίστοιχους ακροδέκτες.
4. Συνδέστε το άκρο του καλωδίου σύνδεσης πλήρως την εισαγωγή μέσα στο μπλοκ ακροδεκτών
5. Στερεώστε το καλώδιο σύνδεσης με ένα κολάρο καλωδίου.

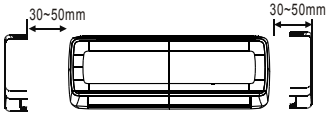
ΣΗΜΕΙΩΣΗ: Η συνδεσμολογία διαφέρει από συσκευή σε συσκευή, ανατρέξτε στη σελίδα 12.



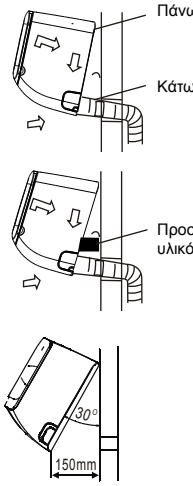
Εικ.7

Εγκατάσταση εσωτερικής μονάδας

1. Περάστε τις σωληνώσεις από την οπή στον τοίχο.
2. Στερεώστε την εσωτερική μονάδα στο πάνω μέρος της βάσης. Βεβιαωθείτε πως τα άγκιστρα είναι σωστά τοποθετημένα πάνω στη βάση, κινώντας τη δεξιά και αριστερά
3. Οι σωληνώσεις μπορούν εύκολα να συνδεθούν ανασηκώνοντας λίγο τη μονάδα με ειδικό εργαλείο, το οποίο μπορείτε να το απομακρύνετε όταν ολοκληρώσετε τη σύνδεση.
4. Πιέστε την κάτω δεξιά και κάτω αριστερή πλευρά της μονάδας στην βάση μέχρι τα άγκιστρα να μπουν στις αντίστοιχες κόγχες.



Μετακινείστε δεξιά ή αριστερά

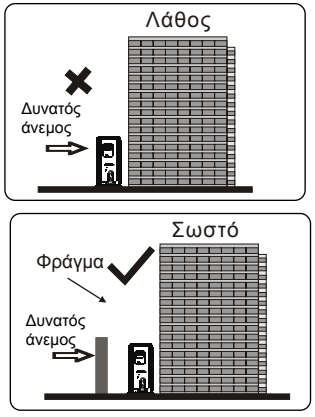


Εντοιχισμένος σωλήνας

Εικ.8

Εγκατάσταση εξωτερικής μονάδας

- Εγκαταστήστε την εξωτερική μονάδα σε μια σταθερή και συμπαγής βάση για να αποφύγετε την αύξηση θορύβου και δονήσεων.
- Επιλέξτε μια θέση ώστε να μη εμποδίζεται η ροή εξερχόμενου αέρα.
- Εάν ο τόπος εγκατάστασης είναι εκτεθειμένος σε δυνατούς ανέμους, όπως κοντά σε ακτή, βεβαιωθείτε πως ο ανεμιστήρας λειτουργεί σωστά, τοποθετώντας την εξωτερική μονάδα παράλληλα στον τοίχο ή χρησιμοποιώντας ειδικά ελάσματα προστασίας από σκόνη. Ειδικά σε περιοχές με πολλούς ανέμους τοποθετήστε τη μονάδα με τέτοιο τρόπο ώστε να μην έρχεται σε απευθείας επαφή με τον αέρα. Εάν χρειαστεί να κρεμαστεί η μονάδα, η εγκατάσταση της βάσης θα πρέπει να γίνει σύμφωνα με το αντίστοιχο διάγραμμα εγκατάστασης.
- Ο τοίχος θα πρέπει να είναι από τούβλο, τσιμέντο ή παρόμοιο υλικό αλλιώς θα πρέπει να γίνουν ενέργειες ενίσχυσης. Η βάση θα πρέπει να είναι σταθερή και στιβαρή ώστε να είναι αξιόπιστη.
- Βεβαιωθείτε πως ο αποβαλλόμενος αέρας δεν παρεμποδίζεται

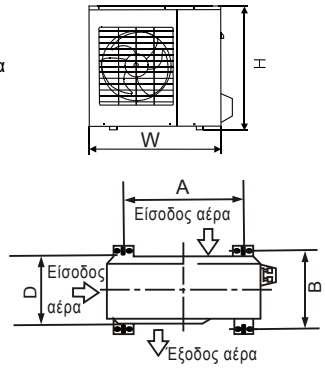


Εικ.9

Εγκατάσταση της εξωτερικής μονάδας

- Στηρίξτε την εξωτερική μονάδα με βίδα και παξιμάδι Φ10 ή Φ8 σε στερεή βάση.
  ΣΗΜΕΙΩΣΗ: Η εξωτερική μονάδα που έχετε αγοράσει μπορεί να έχει τις παρακάτω διαστάσεις. Εγκαταστήστε την εξωτερική μονάδα σύμφωνα με τις διαστάσεις που φαίνονται στον παρακάτω πίνακα:

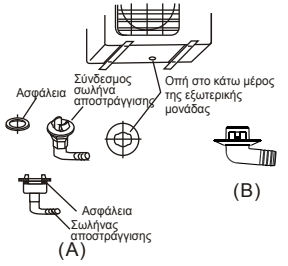
Διαστάσεις εξωτερικής μονάδας σε mm (ΠxYxΒ)	Διαστάσεις βάσης	
	A(mm)	B(mm)
685x430x260	460	276
700x540x240	458	250
780x540x250	549	276
760x590x285	530	290
845x700x320	560	335
810x558x310	549	325
900x860x315	590	333
945x810x395	640	405



Εικ.10

Εγκατάσταση αγωγού αποστράγγισης

ΣΗΜΕΙΩΣΗ: Ο σύνδεσμος αποστράγγισης διαφέρει ανάλογα με την εξωτερική μονάδα. Όταν πρόκειται για σύνδεσμο με ασφάλεια (Εικ. 11), τοποθετήστε πρώτα την ασφάλεια πάνω στον σύνδεσμο, έπειτα εισάγετε τον σύνδεσμο στην οπή που υπάρχει στο κάτω μέρος της εξωτερικής μονάδας και στρέψτε τον 90 μοίρες.
Για τα τοποθετήσετε ένα σύνδεσμο αποστράγγισης όπως φαίνεται στην Εικ.11 Β, εισάγετε τον σύνδεσμο στην οπή στο κάτω μέρος της εξωτερικής μονάδας μέχρι να ακούσετε έναν ήχο "κλικ". Μπορείτε να συνδέσετε έναν αγωγό αποστράγγισης, για την απορροή συμπυκνωμάτων από την εξωτερική μονάδα όταν λειτουργεί σε θέρμανση.
ΣΗΜΕΙΩΣΗ: Σε κρύες περιοχές, μην χρησιμοποιείτε σωλήνα αποστράγγισης στην εξωτερική μονάδα. (Αλλιώς, το νερό μπορεί να παγώσει)



Εικ.11

Σύνδεση σωλήνων ψυκτικού υγρού

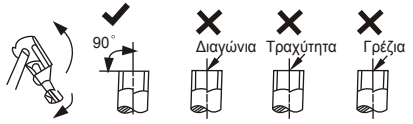
ΣΗΜΕΙΩΣΗ: Το μήκος του συνδετικού σωλήνα θα επηρεάσει την ικανότητα και την ενεργειακή απόδοση της μονάδας. Η ονομαστική απόδοση δοκιμάζεται βασίζοντας το σωλήνα μήκος 5 μέτρων. Συμβουλευτείτε τους τεχνικούς για να αγοράσετε το σωστό μέγεθος του συνδετικού σωλήνα για το μηχάνημα σας.

1. Εργασία επιμήκυνσης

Η διαρροή ψυκτικού υγρού οφείλεται πιθανόν σε ελάττωμα κατα την διεργασία επιμήκυνσης. Διενεργήστε σωστά την επιμήκυνση ακολουθώντας την παρακάτω διαδικασία:

Α: Κόψτε τους σωλήνες και το καλώδιο

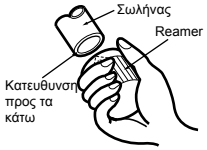
1. Χρησιμοποιήστε τις σωληνώσεις της μονάδας ή τους σωλήνες που αγοράσατε απο το εμπόριο.
2. Μετρήστε την απόσταση μεταξύ της εσωτερικής και της εξωτερικής μονάδας.
3. Κόψτε τους σωλήνες λίγο περισσότερο από ότι η μετρημένη απόσταση.
4. Κόψτε το καλώδιο 1.5m μεγαλύτερο από το μήκος του σωλήνα.



Εικ.12

Β: Αφαίρεση ρινισμάτων

1. Αφαιρέσετε τελείως όλα τα γρέζια από το κόψιμο της διατομής του σωλήνα.
2. Τοποθετήστε το άκρο του σωλήνα χαλκού με κατεύθυνση προς τα κάτω, όπως αφαιρείτε τα γρέζι προκειμένου να αποφευχθεί η πτώση ρινισμάτων μέσα στο σωλήνα.



Εικ.13

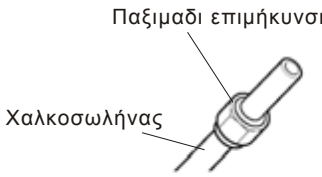
Γ: Βάζοντας τα παξιμάδια

Αφαιρέστε τα παξιμάδια που συνδέονται με την εσωτερική και την εξωτερική μονάδα, και έπειτα βάλτε τα στο σωλήνα έχοντας ολοκληρώσει την απομάκρυνση των γρεζιών (δεν είναι δυνατόν να τους βάλετε μετά την επιμήκυνση του σωλήνα).

Δ: Εργασία Επιμήκυνσης

Κρατήστε σταθερή την διάσταση του χαλκοσωλήνα όπως φαίνεται στον παρακάτω πίνακα.

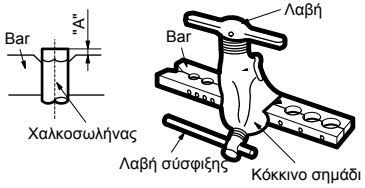
Εξωτερική διάμετρος (mm)	A(mm)	
	Μέγιστο	Ελάχιστο
ϕ 6.35	1.3	0.7
ϕ 9.52	1.6	1.0
ϕ 12.7	1.8	1.0
ϕ 16	2.2	2.0



Εικ.14

Ε: Μήκος του σωλήνα

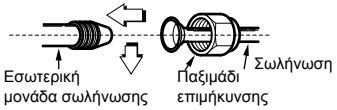
Μοντέλο	Btu/h	Μέγιστο μήκος σωλήνα ψυκτικού υγρού	Μέγιστο ύψος
R410A	<15000	25	10
	⩾15000~<24000	30	20
	⩾24000~<36000	50	25
	⩾36000~⩽60000	65	30



Εικ.15

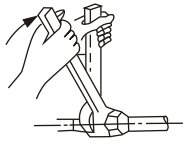
2. Σύνδεση

- Ευθυγραμμίστε τους σωλήνες που θα συνδέσετε
- Σφίξτε τα παξιμάδια αρχικά χειροκίνητα και έπειτα με ροπόκλειδο και γαλλικό κλειδί (Εικ.16 & 17)



Εικ.16

Εξωτ. διάμετρος	Ροπή σύσφιξης (N.cm)	Επιπρόσθετη ροπή σύσφιξης(N.cm)
ϕ6.35	1500 (153kgf.cm)	1600 (163kgf.cm)
ϕ9.52	2500 (255kgf.cm)	2600 (265kgf.cm)
ϕ12.7	3500 (357kgf.cm)	3600 (367kgf.cm)
ϕ 16	4500 (459kgf.cm)	4700 (479kgf.cm)



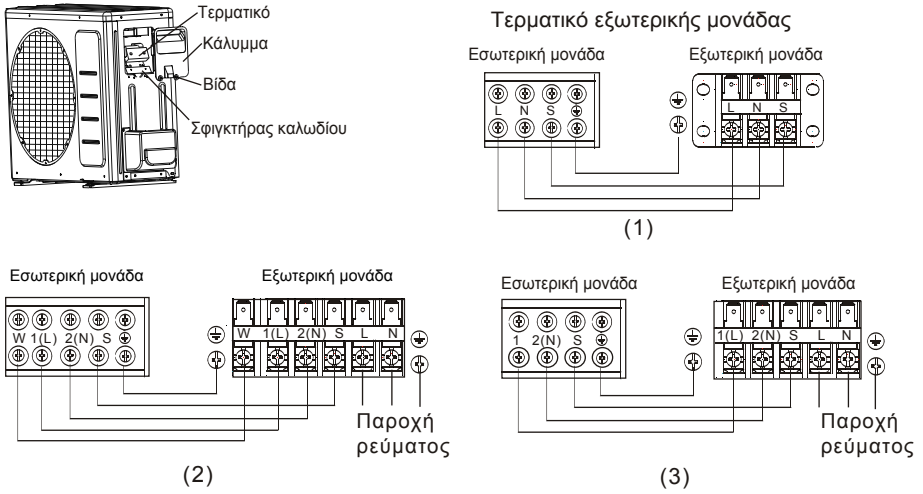
Εικ.17

ΠΡΟΣΟΧΗ:

- Υπερβολική ροπή μπορεί να προκαλέσει ράγισμα στο παξιμάδι ανάλογα τις συνθήκες εγκατάστασης

Σύνδεση καλωδίου στην εξωτερική μονάδα

1. Αφαιρέστε το κάλυμμα από την πλακέτα σύνδεσης της εξωτερικής μονάδας χαλαρώνοντας τη βίδα.
2. Συνδέστε τα καλώδια στις επαφές σύμφωνα με τα νούμερα που έχουν.
3. Ασφαλίστε το καλώδιο πάνω στην πλακέτα με σφιγκτήρα καλωδίου.
4. Για την αποφυγή εισόδου νερού, σχηματίστε ένα βρόγχο με τα καλώδια όπως φαίνεται στο διάγραμμα εγκατάστασης στην εσωτερική και εξωτερική μονάδα.
5. Τυλίξτε τα καλώδια που δεν χρησιμοποιούνται με μονωτική ταινία και βεβαιωθείτε πως δεν έρχονται σε επαφή με ηλεκτρικά ή μεταλλικά μέρη.



Εικ.18

Αφαίρεση αέρα

Αέρας και άλλα ξένα σώματα στο κύκλωμα ψυκτικού μπορεί να προκαλέσουν αύξηση της ανώμαλης πίεσης, η οποία μπορεί να προκαλέσει ζημιά στον εξοπλισμό, ακόμα και τραυματισμό. Ως εκ τούτου, η εσωτερική μονάδα και οι σωληνώσεις μεταξύ της εσωτερικής και της εξωτερικής μονάδας πρέπει να ελεγχθούν για διαρροές και να καθαριστούν.

Αφαίρεση αέρα με αντλία κενού

Η εσωτερική μονάδα καθώς και οι σωληνώσεις θα πρέπει να ελεγχθούν για διαρροές και θα πρέπει να γίνει κενό ωστε να απομακρυνθούν τυχόν σωματίδια και αέρας από το ψυκτικό κύκλωμα. Βεβαιωθείτε πως οι σωληνώσεις έχουν συνδεθεί σωστά και πως έχει ολοκληρωθεί ο έλεγχος των καλωδίων.
Μήκος σωληνώσεων και πλήρωση ψυκτικού υγρού:

Μήκος σωληνώσεων	Μεθοδολογία κενού	Επιπλέον πλήρωση ψυκτικού υγρού	
Λιγότερο από 5m	Χρησιμοποιήστε αντλία κενού	————	
Πάνω από 5m	Χρησιμοποιήστε αντλία κενού	Γραμμή υγρού: Φ6.35mm R22:(Μήκος σωληνώσεων-5)x30g/m R410A:(Μήκος σωληνώσεων-5)x20g/m	Γραμμή υγρού: Φ9.52mm R22:(Μήκος σωληνώσεων-5)x60g/m R410A:(Μήκος σωληνώσεων-5)x40g/m

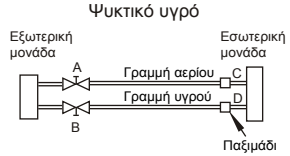
- Όταν μετακινήσετε τη μονάδα σε άλλο μέρος να κάνετε κενό με αντλία κενού.
- Για το μοντέλο με R410A ψυκτικό υγρό, βεβαιωθείτε πως το ψυκτικό υγρό που προστείθεται είναι σε υγρή μορφή.

ΠΡΟΣΟΧΗ

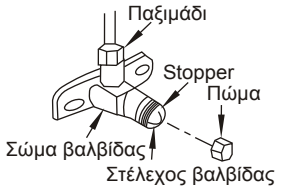
- Ανοίξτε το στέλεχος της βαλβίδας μέχρι να τερματήσει. Μην προσπαθήσετε να το ανοίξετε περισσότερο.
- Σφίξτε το κάλυμμα του στελέχους της βαλβίδας με γαλλικό κλειδί.
- Για την ροπή σύσφιξης δείτε τον αντίστοιχο πίνακα.

Χρήση της Αντλίας Κενού

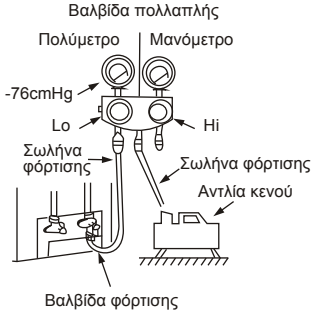
1. Σφίξτε τα παξιμάδια Α,Β,Γ,Δ. Συνδέστε το σωλήνα φόρτισης της βαλβίδας πολλαπλής στο άκρο φόρτισης της βαλβίδας χαμηλής πίεσης.
2. Συνδέστε τη σωλήνα φόρτισης με την αντλία κενού.
3. Ανοίξτε εντελώς τη λαβή της βαλβίδας Lo.
4. Λειτουργήστε την αντλία κενού για να γίνει εκκένωση. Αρχικά χαλαρώστε ελαφρώς το παξιμάδι της βαλβίδας χαμηλής πίεσης για να ελέγξετε ότι εισέρχεται αέρας στο εσωτερικό. (Αλλάζει ο ήχος της αντλίας κενού και η ένδειξη στο πολύμετρο γίνεται 0 αντί για μείον)
5. Αφού ολοκληρωθεί η διαδικασία, κλειστε τη λαβή Lo και σταματήστε τη λειτουργία της αντλίας κενού. Η εκκένωση θα πρέπει να γίνει για τουλάχιστον 15 λεπτά και ελέγξτε πως η ένδειξη στο πολύμετρο είναι -76cmHg(-1.0x105Pa).
6. Στρέψτε το στέλεχος της βαλβίδας Β για περίπου 45μοίρες με τη φορά τη ρολογιού για 6-7 δευτερόλεπτα από τη στιγμή που άρχισε να εξέρχεται αέριο. Έπειτα σφίξτε πάλι το παξιμάδι. Βεβαιωθείτε πως η πίεση που εμφανίζεται στο μανόμετρο είναι λίγο υψηλότερη από την ατμοσφαιρική.
7. Απομακρύνετε το σωλήνα φόρτισης από το άκρο φόρτισης της βαλβίδας χαμηλής πίεσης.
8. Ανοίξτε εντελώς τις βαλβίδες Β και Α
9. Σφίξτε το καπάκι της βαλβίδας χαμηλής πίεσης.



Εικ.19



Εικ.20



Εικ.21

3. Έλεγχος ασφαλείας και διαρροών

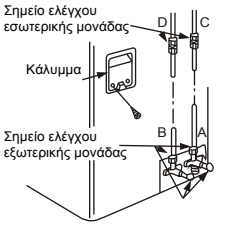
● Ηλεκτρικός έλεγχος ασφαλείας

Εκτελέστε το ηλεκτρικό έλεγχο ασφαλείας μετά την ολοκλήρωση της εγκατάστασης:
1. Εργασίες γείωσης
Μετά το τέλος της εργασίας με γείωση, μετρήστε την αντίσταση γείωσης με οπτική ανίχνευση και με μετρητή αντίστασης γειωσης. Βεβαιωθείτε ότι η αντίσταση γείωσης είναι μικρότερη από 4Ω.
2. Ηλεκτρικός έλεγχος διαρροής (εκτέλεση κατά τη διάρκεια της δοκιμής λειτουργίας)
Κατά τη διάρκεια της δοκιμαστικής λειτουργίας μετά την ολοκλήρωση της εγκατάστασης, ο συντηρητής μπορεί να χρησιμοποιήσει το ηλεκτρο καθετήρα και πολύμετρο για να εκτελέσει το ηλεκτρικό έλεγχο διαρροής. Απενεργοποιήστε αμέσως τη συσκευή εάν υπάρχει διαρροή. Ελέγξτε και ανακαλύψτε τους τρόπους λύσης ώστε η μονάδα να λειτουργήσει κανονικά.

● Έλεγχος διαρροών αερίου

1. Μέθοδος με σαπούνι και νερό:
Αλείψτε με σαπουνοδιάλυμα ή ουδέτερο απορρυπαντικό τις συνδέσεις στην εσωτερική και εξωτερική μονάδα χρησιμοποιώντας μια μαλακή βούρτσα. Εάν εμφανιστούν φυσαλίδες σημαίνει ότι υπάρχει διαρροή.
2. Ανιχνευτής διαρροών:
Χρησιμοποιήστε ανιχνευτή διαρροών.

ΠΡΟΣΟΧΗ:
Α: Lo βαλβίδα (χαμηλής), Β: Hi βαλβίδα (υψηλής)
Γ και Δ είναι τα άκρα των συνδέσεων της εσωτερικής μονάδας

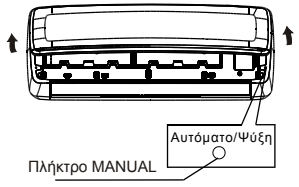


Εικ.22

Δοκιμαστική Λειτουργία

Μετά τον έλεγχο για διαρροές στις συνδέσεις και τον έλεγχο στην συνδεσμολογία, προχωρήσετε σε δοκιμαστική λειτουργία.

- Ελέγξτε ότι όλες οι συνδέσεις σωληνώσεων και καλωδίων έχουν γίνει σωστά.
- Ελέγξτε ότι οι βαλβίδες αερίου και υγρού είναι ανοιχτές.
- 1. Συνδέστε την παροχή ρεύματος και πιέστε το πλήκτρο ON/OFF στο ασύρματο τηλεχειριστήριο για να ενεργοποιηθεί η λειτουργία της μονάδας.
- 2. Με το πλήκτρο MODE επιλέξτε COOL (ΨΥΞΗ), HEAT (ΘΕΡΜΑΝΣΗ), AUTO (ΑΥΤΟΜΑΤΟ) και FAN (ΑΝΕΜΙΣΤΗΡΑΣ) για να ελέγξετε ότι όλες οι λειτουργίες λειτουργούν σωστά.
- 3. Όταν η εξωτερική θερμοκρασία περιβάλλοντος είναι πολλή χαμηλή (κάτω από 17ºC), δεν μπορεί να δοθεί εντολή στη μονάδα να λειτουργήσει σε ψύξη από το τηλεχειριστήριο, μόνο χειροκίνητα. Η
- χειροκίνητη λειτουργία θα πρέπει να χρησιμοποιείται μόνο όταν το ασύρματο τηλεχειριστήριο δεν λειτουργεί ή όταν γίνονται εργασίες συντήρησης.
- Κρατήστε το πάνελ και από τις 2 πλευρές και σηκώστε το μέχρι να ακούσετε έναν ήχο "κλικ".
- Εάν πιέσετε το πλήκτρο MANUAL για τα επιλέξετε λειτουργία AUTO ή COOL, η μονάδα θα λειτουργήσει σε αναγκαστική αυτόματη λειτουργία ή ψύξη (δείτε το εγχειρίδιο χρήσης για λεπτομέρειες).
- 4. Η δοκιμαστική λειτουργία θα πρέπει να διαρκέσει περίπου 30 λεπτά.



Ενεργοποιήστε την εγγύηση σας...

5 απλά **βήματα!**

Σκανάρετε εδώ
για τα έντυπα
των εγγυήσεων

Για την υποβολή
ηλεκτρονικών εγγυήσεων
πληκτρολογήστε
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http://www.
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CUPRINS

⚠ ATENTIE

* Contactați un tehnician de service autorizat pentru reparații sau întreținerea acestui aparat.
* Aparatul trebuie să fie instalat în conformitate cu reglementările naționale de cablare.
* Acest aparat nu este destinat utilizării de către persoane (inclusiv copii) cu capacitati fizice reduse, senzoriale sau mentale, sau lipsa de experiență și cunoștințe, cu excepția cazului în care acestea au fost supravegheate și instruite cu privire la utilizarea aparatului de către o persoană responsabilă pentru siguranța lor.
* Copiii trebuie supravegheați pentru a ne asigura că nu se joacă cu aparatul de aer conditionat. .
* Nu folosiți aparatul de aer conditionat intr-o camera umedă, cum ar fi o baie sau spălătorie.
* Lucrări de instalare de trebuie să fie efectuate în conformitate cu standardele naționale de cablare si numai de catre personalul autorizat.

* Citiți cu atentie măsurile de siguranță înainte de instalare.
* Instalarea incorectă datorită nerespectarii instrucțiunilor va dauna sau deteriorara aparatul, și gravitatea este clasificata dupa următoarele indicații.

⚠ AVERTIZARE	Acest simbol indica posibilitatea de deces sau vatamare grava.
⚠ ATENTIEC	Acest simbol indica posibilitatea de ranire sau pagube materiale.

Elementele care trebuie urmate sunt clasificate pe simboluri:

⃠	Simbolul pe fundal alb avertizeaza asupra unui lucru care este interzis.

⚠ AVERTIZARE

1) Angajati un specialist pentru instalare. Dacă instalarea se face de către beneficiar, acesta va provoca scurgeri de apă, electrocutare sau incendiu.

2) Instalați strict in conformitate cu aceast manual de instalare. Dacă instalarea este defectuoasa, aceasta va provoca scurgeri de apa, electrocutare sau incendiu.

3) Utilizați accesoriile, piesele și componentele specificate atașate pentru instalare. In caz contrar, va determina aparatul sa se defecteze, sa apara scurgeri de apa, șocuri electrice sau incendiu.

4) Instalați intr-o locație rezistenta și ferma care este capabila sareziste greutății aparatului. Dacă locatia nu este suficient de rezistenta sau instalarea nu se face corect, aparatul va cadea si poate provoca leziuni.

5) Pentru partea electrica, urmați standardul si reglementarile naționale de cablare impreuna cu aceste instrucțiuni de instalare. Trebuie să fie utilizat un circuit independent de evacuare.In cazul in care capacitatea circuit electric nu este suficienta sau cablarea s-a facut defectuos, aceasta va provoca șoc electric sau incendiu.

6) Utilizați cablul specificat și conectați bine și clema de cablu astfel încât nici o forță externă va actiona pe aceasta mufa. In cazul în care conexiunea nu este perfecta, aceasta va cauza o supra-incalzire sau incendiu la conexiune.

7) Cablarea de rutare trebuie să fie aranjata in mod corespunzător, astfel incat placa de control este fixata corect. Dacă capacul de la placa de control nu este fixat perfect, aceasta va provoca o supra-incalzire la mufa de conectare, incendiu sau electrocutare.

8) La conectarea tevilor, aveți grija sa nu patrunda substanțe nocive in conducte, altele decât freonul specificat care intra în ciclul de refrigerare. În caz contrar, aceasta va provoca o capacitate mai mică, presiune anormală mare în ciclul de refrigerare, explozie și vatamare corporala. ⃠

9) Nu modificați lungimea cablului de alimentare sau utilizati un prelungitor și nu in aceeași priză unică, cu alte aparate electrice. În caz contrar, aceast lucru va provoca incendiu sau electrocutare. ⃠

⚠ ATENTIE

1) Acest echipament trebuie să fie legat la pământ și instalat cu impamantare si întrerupător de curent. Aparatul poate cauza un șoc electric daca impamantarea nu este buna.

2) Nu instalați unitatea în locul unde se pot produce scurgeri de gaze inflamabile. În cazul in care exista scurgeri de gaze care se acumulează la jurul unității, acestea pot provoca un incendiu. ⃠

3) Trageti drenul de condens cum este menționat în instrucțiunile de instalare. Dacă drenajul nu este perfect, apa poate intra în cameră și deteriora mobilierul.

4) Pentru unitatile cu incalzitor electric auxiliar, sa se pastreze cel puțin 1 metru distanță de cele mai apropiate materialele combustibile.

Selectarea locului de instalare

Cititi in totalitate si urmati pas cu pas

Unitatea interioara

* Nu ar trebui să fie nici o sursă de căldură, gaz inflamabil sau aburi în apropierea aparatului.
* Nu ar trebui să existe obstacole care blochează circulația aerului.
* Un loc unde circulatia aerului din camera este buna.
* Un loc unde drenajul poate fi usor de facut.
* Un loc in care prevenirea zgomotului este luata in considerare.
* Nu instalati aparatul in apropierea usii.
* Asigurați-va ca restricțiile la instalare specificate in schitele pentru unitatea interioara sunt îndeplinite.
* Selectați o locație care este suficient de ferma pentru instalare, astfel incat dispozitivul nu este supus la vibrații.
* Dispozitivul trebuie instalat la o distanță de cel puțin 1 m de orice alte aparate și instalații electrice, de exemplu, TV, radio, calculator, etc.
* Nu ar trebui să fie nici o lumina directă a soarelui. Dacă acest lucru este inevitabil, prevenirea luminii soarelui trebuie să fie luata in considerare.

Unitatea exterioara

* Dacă o marchiză este construita pe unitate pentru a preveni lumina directă a soarelui sau apa de ploaie, aveți grijă ca radiația termică din condensator sa nu fie obstrucționata.
* In apropierea unitatii nu ar trebui să fie niciun animal sau planta, care ar putea fi afectate de evacuarea aerului cald.
* Asigurati-va ca exista spatiu suficient, in conformitate cu desenele de instalare.
* Nu așezați nici un obstacol care poate cauza un scurt circuit al aerului evacuat.
* Selectați o locație care evită cauzarea de neplăceri vecinilor de la emisiile de zgomot și aer cald de la unitatea exterioara.
* Selectați o locație care este suficient de bine ventilata.
* Nu acoperiți orificiile de admisie și de evacuare a aerului.
* Locația trebuie să fie suficient de ferma pentru montare și prevenirea vibrațiilor.
* Nu trebuie să existe nici un risc prezentat de gaze combustibile sau emisii de gaz, ca urmare a coroziunii.
* Evitați o locație unde există un conținut ridicat de sare.
* Evitati o locație care este puternic expusa la praf.
* Evitati o locație la care publicul larg are acces.

Accesorii

Unitatea interioara					
Ⓐ Placa de instalare	1		Ⓗ Filtru de improspatare a aerului (pentru instalarea in suportul de filtru aer)	1	
Ⓑ Clema de ancorare	5				
Ⓒ Surub pentru montaj fixare placă ST3.9x25	5		Ⓘ Etansator	1 (Numai pentru modelele cu functie de racire si incalzire)	
Ⓓ Telecomanda	1		Ⓙ Refnet de scurgere		
Ⓔ Suruburi de fixare a suportului de telecoamnda ST2.9x10	2	optional	Ⓚ Manualul utilizatorului	1	
			Ⓛ Manual de instalare	1	
Ⓕ Suport de telecomanda	1		Ⓜ Manual utilizare telecomanda	1	
Ⓖ Ansamblu de conectare pentru tevi	1		Ⓝ Baterii AAA.LR03	2	

NOTA: Utilizați accesoriile de instalare livrate în funcție de necesități. Elementele necesare pentru a instala acest aparat de aer conditionat nu sunt incluse trebuie să fie achiziționate separat.

Schita de instalare a unitatii interioare & exterioare

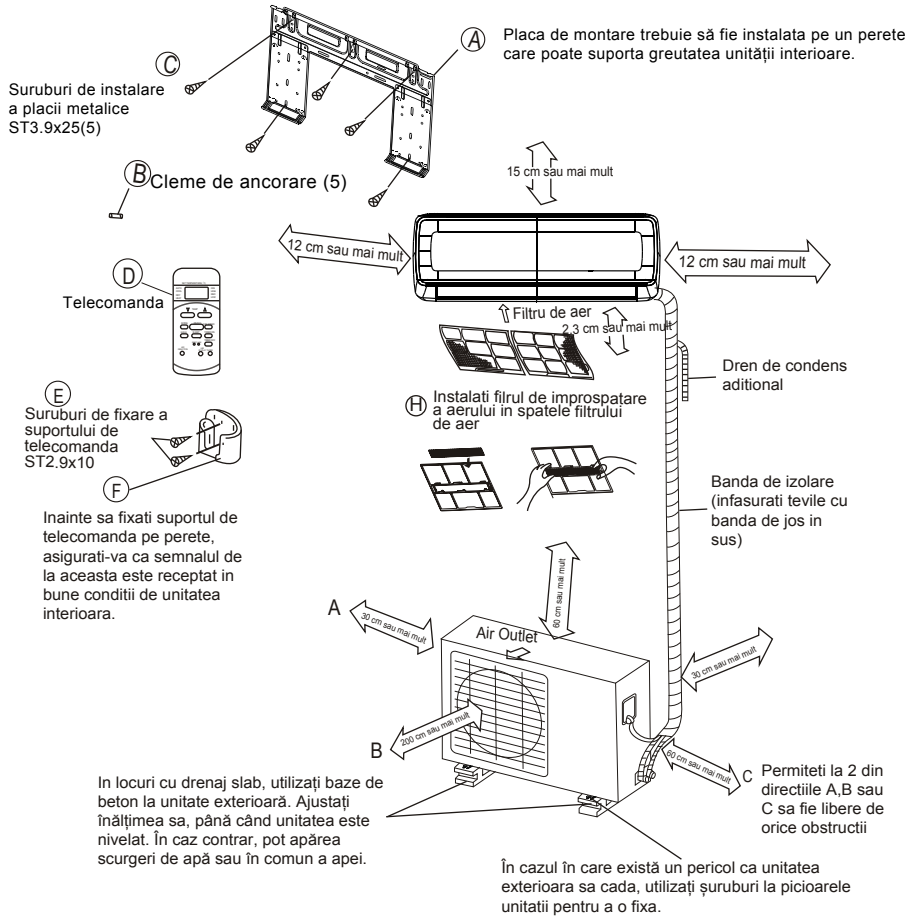


Fig.1

NOTA: Aspectul unitatii exterioare sau interioare poate diferi la unele modele. Forma actuală va prevala.

INSTALAREA UNITATII INTERIOARE

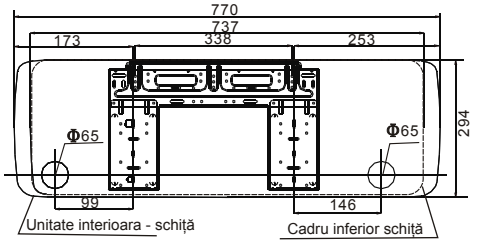
Scoateți placa de instalare din unitatea interioară. Placa de instalare trebuie să fie instalata pe un perete care poate suporta greutatea unității interioare.

1. Instalarea Placii de Fixare

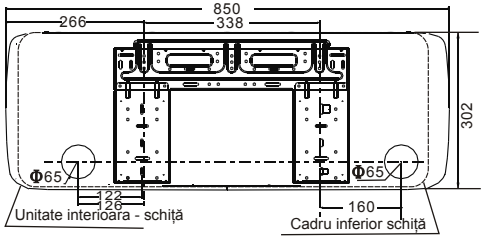
1. Montați placa de instalare orizontal pe părți structurale ale peretelui cu spatii jurul placii de instalare.
2. Dacă peretele este din caramida, beton sau altele asemenea, perforati orificii cu diametrul de 5 mm în perete și introduceți clema de ancorare pentru șuruburi de montare adecvate.
3. Fixați placa de instalare pe perete cu șuruburi.

NOTA:

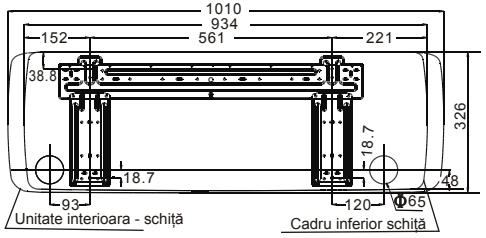
Montați placa de instalare și găuriti peretele în conformitate cu structura peretelui și cu punctele de fixare corespunzătoare pe placa de instalare. Placa de instalare furnizata diferă de la aparat la aparat.
(Dimensiunile sunt în mm dacă nu se precizează altfel)



Model A

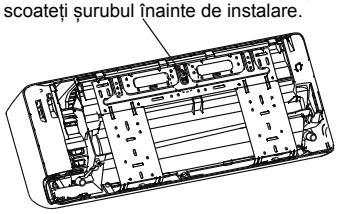


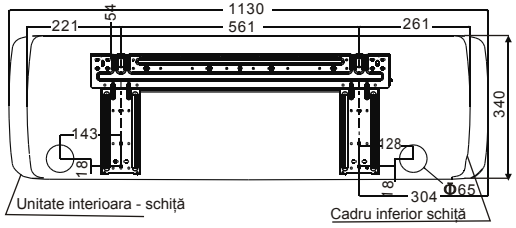
Model B



Model C

Placa de instalare este fixată cu un șurub pentru comoditate la transport, vă rugăm să scoateți șurubul înainte de instalare.





Model D

Fig.2

2. Perforati peretele

1. Determinați pozițiile de gaurire conform plăcii de instalare in stânga și in dreapta.Centrul găurii este obținut prin măsurarea distanței așa cum se arată în schita Fig.2.
2. Gauriti placa de conducte cu 65mm.
3. Faceti o gaura pentru conducte fie la dreapta sau in stânga și gaura ar trebui să fie ușor înclinată spre partea exterioară, astfel încât capătul exterior este mai mic decât în interiorul, vezi Fig.3.
4. Luați întotdeauna măsuri pentru a proteja tevile la găurire in grinda de metal, placă de metal sau altele asemenea.

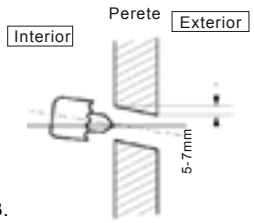


Fig.3.

Fig.3

3. Instalarea tevilor de conectare

1. Pentru scoaterea tevilor pe partea stanga sau dreapta, indepartati capacul de conducte din panoul lateral.
2. Pentru partea din spate dreapta și stânga spate a conductelor, instalați tubulatura așa cum se arată in schita.

NOTA:

Ambele parti de drenaj vin in standard. Pentru aparatele cu posibilitate de drenaj pe ambele părți, acesta poate fi ales pentru dreapta, stânga sau conexiune pe ambele părți. Dacă se alege o conexiune a drenajului pe ambele părți, este nevoie de un alt furtun de evacuare corespunzătoar, deoarece există doar un furtun de evacuare oferit de fabrica. Dacă alege o conexiune de scurgere pe o singura parte, asigurați-vă că orificiul de scurgere este bine conectat. Pentru modele de 9K / 12K, dacă alegeti stanga sau stanga-spate, vă rugăm să alegeți o conexiune stanga pentru o scurgere laterala. Conexiunea furtunului de evacuare ar trebui să fie făcuta de către un instalator calificat în caz de scurgeri de apa.

3. Atașați furtunul de evacuare la partea inferioară a conductelor de agent frigorific cu bandă adezivă de vinil.
4. Infasurati conductele de agent frigorific și de scurgere cu bandă de izolare.
5. Deschideți panoul frontal, apoi deschideți capacul cutiei electrice pentru conectarea cablurilor.
6. Infasurati conductele, cablul de conectare, precum și de scurgere cu bandă, uniform asa cum se arată în figura din dreapta.
7. Treceți-le prin gaura din perete.

Deoarece apa condensată din spatele unității interioare este adunata în tava de condens. Nu puneți nimic altceva în acea zona.

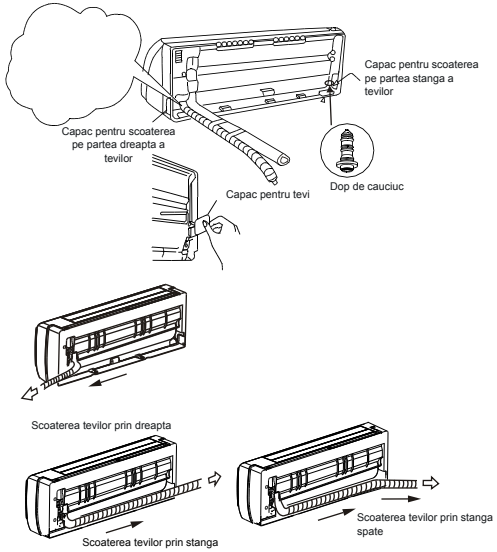


Fig.4

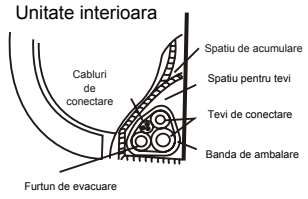


Fig.5

ATENȚIE

* Conectați unitatea interioară, apoi unitatea exterioară.
* Nu permit conductelor să iasa din partea din spate a unității interioare.
* Aveți grijă să nu lasati moale furtunului de evacuare.
* Izolarea termică ar trebui să fie făcuta pentru furtunul de evacuare a unității interioare.
* Asigurați-vă că furtunul de evacuare este situat in partea de jos a fasciculului. Localizarea la partea superioară poate provoca o scurgere a condensului in interiorul unității.
* Nu infasurati cablul de alimentare cu orice alt cablaj.

4. Evacuarea condensului

1. Conectați furtunul de evacuare așa cum este descris în Fig.6. Furtunul de evacuare trebuie să fie înclinat în jos.
2. Când furtunul de evacuare necesită extindere, să achizitionati un furtun prelungitor disponibil pe piata locala. Asigurați-vă că ati izolat termic secțiunea interioară a furtunului de prelungire. Nu lasati moale furtunului de evacuare.
3. Scoateți filtrul de aer și se toarnă puțină apă în tava de scurgere pentru a verifica daca fluxul de apă este lin.

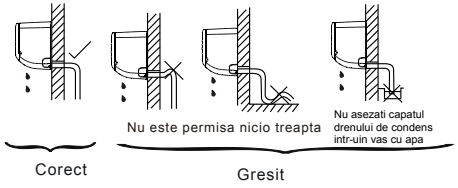


Fig.6

5. Conectarea cablurilor la unitatea interioara

Partea electrica

Reglementările electrice de siguranță pentru instalarea inițială
1. Dacă există o problemă serioasă de securitate cu privire la sursa de alimentare, tehnicienii ar trebui să refuze să instalați aparatul de aer condiționat și să explice clientului până când problema este rezolvată.
2. Tensiunea de alimentare trebuie să fie în intervalul de la 90% ~ 110% din tensiunea nominală.
3. Protecția la supratensiune și întrerupătorul principal, cu o capacitate de 1,5 ori Max. Actuală a unității trebuie să fie instalat în circuitul de alimentare. Asigurați-vă că instalația de aer condiționat este împamantata bine.
4. Aparatul trebuie să fie instalat în conformitate cu reglementările naționale de cablare. Nu folosiți aparatul de aer conditionat intr-o camera umedă, cum ar fi o baie sau o spălătorie.
5. Un dispozitiv de deconectare multi-poli, care are cel puțin distanțe de 3mm pe toți polii, și au o scurgere de curent care poate depăși 10mA, dispozitivul curent rezidual (RCD) cu un curent de operare rezidual nominal care nu depășește 30 mA, și deconectare trebuie să fie încorporat în cablajul fix, în conformitate cu normele de cablare.
6. Pentru unitatatile cu incalzitor electric auxiliar, să păstreze cel puțin 1 metru distanță de cele mai apropiate materialele combustibile.
7. Conform schemei de conectare electrică atașată situata pe panoul de unității interioare și la exterioara pentru a conecta cablul.
8. Toate cablajele trebuie să respecte codurile electrice locale și naționale și să fie instalate de electricieni calificați.
9. Fiecare fir trebuie să fie conectat ferm. Sârma nu ar trebui să poată să atingă tevile de agent frigorific, compresorul, sau orice piesa în mișcare.
10. Cablurile libere pot duce la supraîncălzire sau duce la defectarea unitatii. Un pericol de incendiu poate exista de asemenea. Prin urmare, asigurați-vă că toate cablurile sunt conectate strâns si legat.
9. Un circuit individual și unic folosit numai pentru acest aparat de aer conditionat trebuie sa fie disponibil. Vezi tabelul de mai jos pentru dimensiuni de sârmă propuse și specificații siguranțelor:

Sectiune transversală minimă a conductorilor:

Curentul nominal de aparat (A)	Zona nominală a secțiunii transvers (mm2)
>3 and ≤6	0.75
>6 and ≤10	1
>10 and ≤16	1.5
>16 and ≤25	2.5
>25 and ≤32	4
>32 and ≤40	6

NOTA:

* Dimensiunea cablului de alimentare și firele interconectate, curentul, siguranța sau întrerupătorul sunt determinate de curentul maxim indicat pe plăcuța de identificare care este situata pe panoul lateral al unității. Vă rugăm să consultați plăcuța înainte de a selecta dimensiunea cablului, siguranța sau întrerupătorul.
* Controlerul aparatului de aer conditionat proiectat cu o funcție de protecție în condiții anormale, specificațiile siguranța au imprimate pe placa de circuit, cum ar fi: T3.15A / 250VAC, T5A / 250VAC, etc.

Conecatarea cablurilor la unitatea interioara

NOTA:

Înainte de a efectua orice lucrare electrică, opriți alimentarea principală a sistemului.
1. Tipul cablului de alimentare la interior este H05VV-F sau H05V2V2-F, cablul de alimentare la exterioara și cablu de interconectare este de tipul H07RN-F.
2. Ridicați capacul de la unitatea interiora in sus, scoateți capacul cutiei de fire prin slăbirea șurubului.
3. Scoateți clema de cablu. Potriviti firele pe culori cu numerele terminalelor pe interior si exterior și înșurubați ferm firele la terminalele corespunzătoare.
4. Conectați capătul cablului de conectare prin introducerea totala în blocul de borne.
5. Fixați cablul cu o clemă de cablu.
NOTĂ: Conectarea cablajului este diferita de la aparat la aparat, vă rugăm să consultați pagina 12

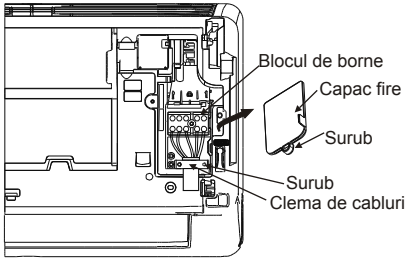
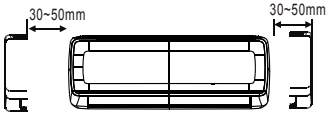


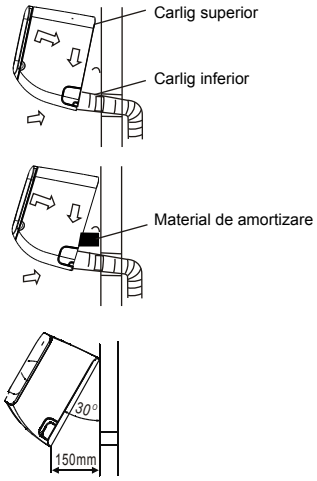
Fig.7

Instalarea unitatii interioare

1. Se trec țevile prin gaura din perete.
2. Prindeți unitatea interioară pe partea superioară a plăcii de instalare (Fixati unitatea interioară pe marginea superioară a plăcii de instalare). Asigurați-vă că cârligele sunt așezate corect pe placa de instalare, deplasându-l în stânga și dreapta.
3. Tevile pot fi ușor realizate prin ridicarea unitatii interioare cu un material de amortizare între unitatea interioară și perete. Scoateti acest material după ce tragti tevile. Când folosiți o țeavă incorporata in perete, unitatea interioară poate fi mutata spre stânga sau spre dreapta pentru 30 ~ 50 mm (în funcție de model), oferind suficient spațiu pentru a aranja conductele și asigură unitatea interioară complet aproape de perete după instalare.
4. Apăsați in partea de jos pe stânga și pe dreapta unității până cârlige cuplează cu sloturile lor.



Mutati stanga dreapta



Teava incorporata in perete

Fig.8

INSTALAREA UNITATII EXTERIOARE
Masuri de precautie la instalarea unitatii exterioare

* Montați unitatea exterioară pe o bază rigidă, pentru a preveni creșterea nivelului de zgomot și a vibrațiilor.
* Determina direcția de evacuare a aerului în care aerul evacuat nu este blocat.
* În cazul în care locul de instalare este expus la vânt puternic, cum ar fi la malul mării, asigurați-vă că ventilatorul funcționează corespunzător prin punerea unitatii de-a lungul peretelui sau folosind un paravan sau un scut. În special în zona vânt, instalați unitatea pentru a preveni admisia de vânt. Dacă este nevoie de suspendare la instalare, suportul de instalare ar trebui să corespundă cerințelor tehnice din diagrama suportului de instalare.
* Perete de instalare trebuie să fie de caramida solida, beton, sau in caz contrar se impun acțiuni de consolidare. Conexiunea dintre suport și de perete, suport și aer condiționat trebuie să fie ferma, stabila și de încredere.
* Asigurați-vă că nu există nici un obstacol care blochează aerul refulat.

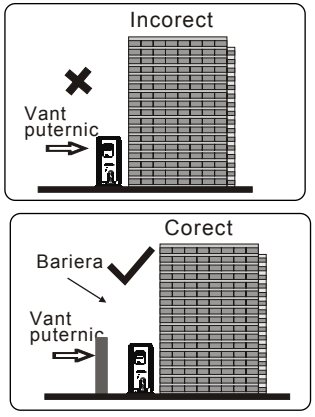


Fig.9

Asezarea unitatii exterioare

* Ancorati unitatea exterioară cu un șurub și piuliță de 10 sau 8 strâns și orizontal pe beton sau perete rigid.

NOTĂ: Unitatea exterioară ati cumparat-o poate fi ca unul dintre următoarele modele. Instalați unitatea exterioară conform dimensiunii așa cum este indicat în tabelul de mai jos:

Dimensiuni unitate exterioara (LxlxA)	Dimensiuni de instalare	
	A(mm)	B(mm)
685x430x260	460	276
700x540x240	458	250
780x540x250	549	276
760x590x285	530	290
845x700x320	560	335
810x558x310	549	325
900x860x315	590	333
945x810x395	640	405

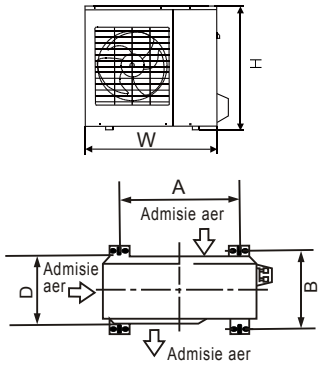


Fig.10

Instalarea drenului de condens

NOTĂ: Drenul de evacuare este ușor diferit în funcție de unitatea exterioară.

Pentru drenul scurgere cu garnitura (Fig.11 (A)), mai intai se fixeaza sigiliul de scurgere, apoi introduceți drenul în orificiul din baza unității exterioare, rotiti 90 grade pentru a le asambla în siguranță. Pentru a instala drenul de evacuare așa cum este prezentat în Fig.11 (B), se introduce drenul de scurgere în orificiul din baza unității exterioare până când acesta rămâne fixat cu un clic. Conectati drenul de evacuare cu la furtun de evacuare (achiziționate de pe piata locala), pentru a drena apa din unitatea exterioară în timpul modului de încălzire.

NOTĂ: În zonele reci, nu folositi un furtun de scurgere la unitatea exterioară (în caz contrar, apa poate înghețа)

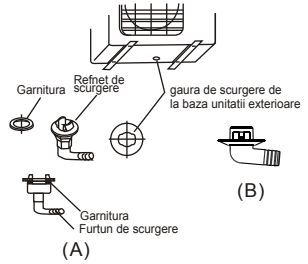


Fig.11

Conectarea tevilor de freon

NOTĂ: Lungimea tevilor va afecta eficiența capacitatii și eficienta energetica a unității. Eficiența curentului nominal este testata în baza lungimii conductei de 5 metri. Consultati tehnicienii pentru a cumpăra dimensiunea corectă a țeavilor pentru aparatul dvs.

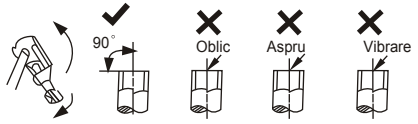


Fig.12

1. Bercluirea tevilor

Principala cauza a scurgerilor de agent frigorific se datorează defectelor de bercluire. Pentru o bercluire corecta, urmati sfarutile de mai jos:

A: Taiati tevile si cablul

1. Utilizați kit-ul de tevi sau conductele achiziționate la nivel local.
2. Măsurați distanța dintre unitatea interioara și unitatea exterioară.
3. Tăiați țevile un pic mai mult decât distanța măsurată.
4. Tăiați cu 1,5 m de cablu mai mult decât lungimea de țeavă.

B: Indepartarea excrescentelor

1. Eliminati complet toate excrescentele de pe secțiunea de tăiere transversală a țevii / conductei.
2. Puneți capătul tevii de cupru / conducta într-o direcție descendentă în timp ce eliminti excrescentele pentru a evita caderea lor înuntrul tevilor.

C: Fixarea piulitei

Scoateți piulițele atașate la unitatea interioara si exterioara, apoi fixatile pe țeavă / conducte cu îndepărtarea completa a excrescentelor. (Nu este posibila fixarea lor după bercluire)

D: Bercluirea tevilor

Țineți ferm țeavă de cupru într-o matriță de dimensiunea prezentată în tabelul de mai jos.

Diametru exterior (mm)	A(mm)	
	Max.	Min.
ϕ 6.35	1.3	0.7
ϕ 9.52	1.6	1.0
ϕ 12.7	1.8	1.0
ϕ 16	2.2	2.0

E: Lungimea tevilor

Model	Capacitate (Btu/h)	Lungime maxima de traseu frigorific (m)	Diferenta maxima de inaltime (m)
Aparat aer conditionat cu freon R410A	<15000	25	10
	⩾15000~<24000	30	20
	⩾24000~<36000	50	25
	⩾36000~⩽60000	65	30

2. Strangerea conexiunilor

* Alinierea centrului tevilor.
* Strângeti piulița cu mana, și apoi strângeți-l cu o cheie așa cum se arată în Fig.16 și 17.

Diamentrul exterior	Cuplu strangere (N.cm)	Cuplu strangere suplimentar (N.cm)
ϕ 6.35	1500 (153kgf.cm)	1600 (163kgf.cm)
ϕ 9.52	2500 (255kgf.cm)	2600 (265kgf.cm)
ϕ 12.7	3500 (357kgf.cm)	3600 (367kgf.cm)
ϕ 16	4500 (459kgf.cm)	4700 (479kgf.cm)

Atenție

O strangere excesiva poate rupe piuliță în funcție de condițiile de instalare.

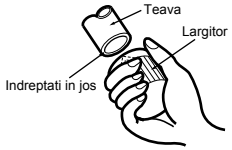


Fig.13

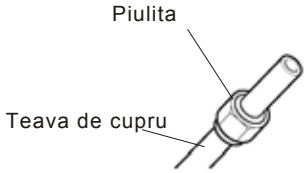


Fig.14

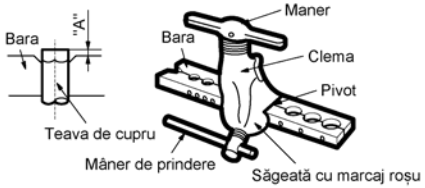


Fig.15

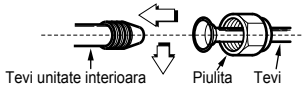


Fig.16

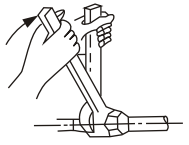
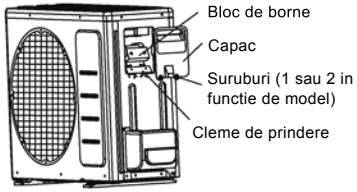


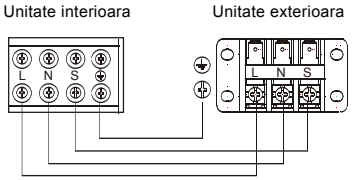
Fig.17

Conectarea cablului la unitatea exterioara

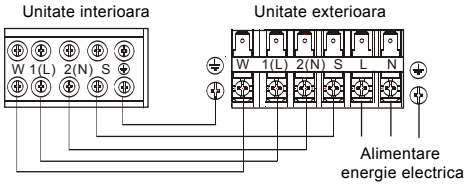
1. Scoateți capacul instalatiei electrice de la unitatea exterioară prin slăbirea șuruburilor.
2. Conectați cablurile la terminalele identificate cu numere lor corespondente pe bornele unității interioare și exterioare.
3. Fixați cablul pe placa de control cu clema de cablu.
4. Pentru a preveni pătrunderea apei, formati o buclă de cablu așa cum este ilustrat în schitele de instalare ale unităților interioare și exterioare.
5. Izolați firele neutilizate (conductori) cu banda PVC. Le izolati astfel încât acestea să nu atingeți piesele electrice sau metalice.



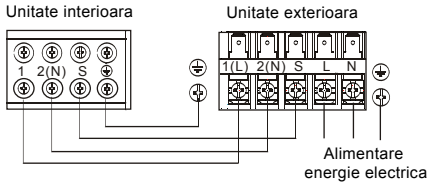
Panoul de borne de la unitatea exterioara



(1)



(2)



(3)

Fig.18

Purificarea aerului

Aerul și alte materii străine în circuitul de agent frigorific cauzează o creștere anormala a presiunii , ceea ce poate duce la deteriorarea echipamentului și chiar accidentare. Prin urmare, unitatea interioară și tevile dintre unitatea interioară și cea exterioara trebuie să fie testate și evaluate pentru a elimina orice urma de condens și umezeala din instalatie.

1. Vacumarea aerului cu pompa de vacum

* Pregătire

Verificați dacă fiecare teava (ambele tevi de lichid și gaz) între unitățile interioare și exterioare au fost conectate corect și toate cablurile de testare au fost finalizate. Scoateți capacele supapelor atât de gaz și de lichid de la unitatea exterioară. Rețineți ca supapele se păstrează închise în această etapă.

* Lungimea țeavii de agent frigorific si cantitatea necesara:

Lungime traseu frigorific	Metoda vacumare	Cantitate aditionala de freon de adaugat	
Mai putin de 5m	Folositi pompa de vacum	———	
Mai mult de 5m	Folositi pompa de vacum	Teava lichid: Φ 6.35 R22: (Lungime teava-5)x30g/m R410A: (Lungime teava-5)x15g/m	Teava lichid: Φ 9.52 R22: (Lungime teava-5)x60g/m R410A: (Lungime teava-5)x30g/m

* Când se mute unitatea intr-un alt loc, efectuați evacuarea freonului folosind pompa de vid.
* Asigurați-vă că agentul frigorific adăugat în instalația de aer condiționat este sub formă lichidă, în orice caz. (Nu se aplică la unitățile cu freon R22)

Masuri de precautie in manevrarea valvei

* Deschideți tija supapei până când atinge opritorul. Nu încercați să-l deschideti în continuare.
* Strângeți bine capacul tijei supapei cu o cheie sau ceva asemanator.
* Stangeti capacul valvei (vezi tabelul de Cuplu strângere din pagina anterioară).

2. Cand se foloseste pompa de vacum

(Pentru metoda de a folosi o teava cu supape, consultați manualul de operare.)
1. Strângeți complet piulițele A, B, C, D. Conectați furtunul de încărcare cu supape la una din mufele de incarcare ale valvelor de joasa presiune de pe teava de gaz.
2. Conectați racordul furtunului de încărcare la pompa de vid.
3. Deschideti complet mânerul supapei galeriei.
4. Acționați pompa de vid pentru a evacua aerul. După inceperea evacuarii, deschideti ușor piulița supapei de pe teava de gaz și verificați dacă aerul intră (Zgomot de functionare a pompei de vid se modifica și un manopetrul indică 0 în loc de minus)
5. După ce evacuarea aerului este completă, închideți complet mânerul supapei multiple și a opriti funcționarea pompei de vid. Evacuarea aerului se face timp de 15 minute sau mai mult și verificați dacă contorul compus indică -76cmHg (-1x105Pa).
6. Rotiți tija supapei B aproximativ 45 de grade invers acelor de ceasornic timp de 6 ~ 7 secunde iar după ce gazul iese, strângeți din nou piulița.
Asigurați-vă că afișajul de presiune în indicatorul de presiune este un pic mai mare decât presiunea atmosferei.
7. Scoateți furtunul de încărcare de la valva de presiune scăzută.
8. Desschideti complet robinetul B și A.
9. Strângeți bine capacul supapei.

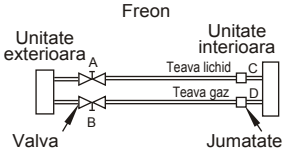


Fig.19

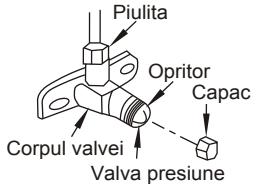


Fig.20

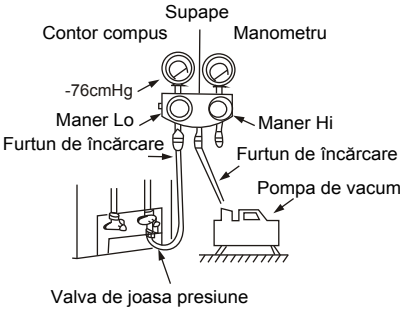


Fig.21

3. Siguranța și verificare a scurgerilor

Verificare de siguranță electrică

Efectuați verificarea de siguranță electrică după terminarea instalării:
1. Impământarea
După terminarea impamantarii, măsurați rezistența de împământare prin detectarea vizuală și prin testerul de rezistență la împământare. Asigurați-vă că rezistența de împământare este mai mică de 4.
2. Verificați daca exista scurgeri electrice (în timpul testului de functionare) În timpul funcționării de probă după terminarea instalării, tehnicianul poate utiliza sonda electro și multimetrul pentru a efectua verificarea scurgerilor electrice. Opriți aparatul imediat dacă exista astfel de scurgeri. Verificati in identificati soluțiile corecte până cand unitatea funcționează în mod corespunzător.

Detectarea scurgerilor de gaz

1. Metoda Apă cu Săpun:
Aplicați o solutie de apă cu săpun sau un lichid dintr-un detergent neutru, pe conexiunile unitatii interioare și conexiunile de la unitatea exterioara cu o perie moale pentru a verifica scurgerile la punctele de legătură ale conductelor. Dacă ies bule, indică faptul că țevile au scurgeri.
2. Detector scurgere freon Utilizați detectorul de scurgere pentru a verifica daca exista scurgeri.

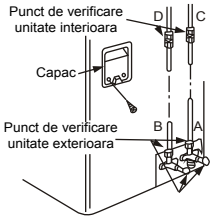


Fig.22

ATENTIE

A: Lo supapă B: valva Hi
C și D sunt capetele de conectare la unitatea interioară.

TEST DE FUNCTIONARE

Efectuați testul de functionare după finalizarea verificarii scurgerilor de gaze la conexiunile piulitelor și verificarea electrica de siguranță.
* Verificați dacă toate tevile și cablurile au fost conectate corect.
* Verificați dacă valvele de gaz și lichid sunt complet deschise.
1. Conectați alimentarea, apăsați butonul ON / OFF de pe telecomandă pentru a porni aparatul.
2. Utilizați butonul MODE pentru a selecta COOL, HEAT, AUTO și FAN pentru a verifica dacă toate funcțiile funcționează bine.
3. Când temperatura ambiantă este prea scăzută (mai mică decât 17OC), unitatea nu poate fi controlată de către telecomanda pentru a rula în modul de răcire, doar la o comanda manuală. Acesta este folosita doar atunci când telecomanda este dezactivată sau cand se impune o mentenanta.
* Țineți laturile panoului ridicate până la un unghi când acesta rămâne fixat cu un sunet de click.
Apăsați butonul Manual de comandă pentru a selecta AUTO sau COOL, si unitatea va opera fortat sub modul AUTO sau modul COOL (vezi Manual de utilizare pentru detalii).
4. Funcționarea de probă ar trebui să dureze aproximativ 30 de minute.