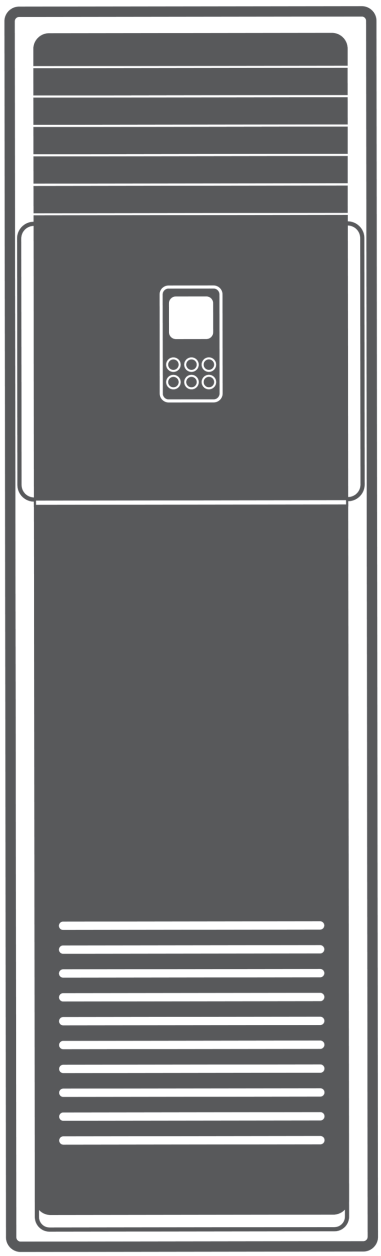
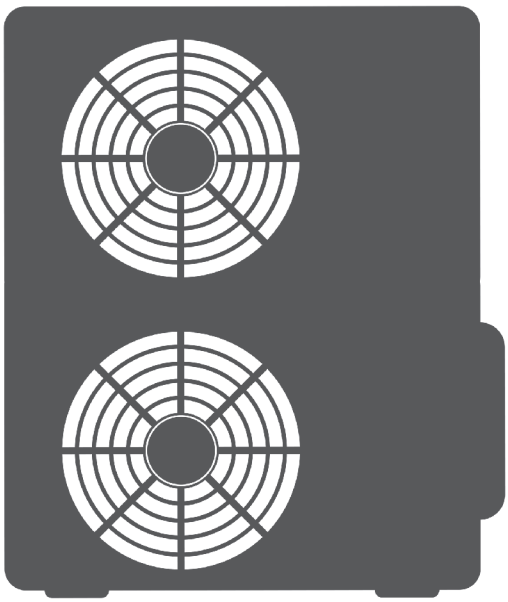
AIR CONDITIONING SYSTEMS

FLOOR STANDING



- **USER'S & INSTALLATION MANUAL**
- **ΕΓΧΕΙΡΙΔΙΟ ΧΡΗΣΗΣ & ΕΓΚΑΤΑΣΤΑΣΗΣ**
- **MANUAL UTILIZATORULUI & DE INSTALARE**



MODELS:
V5MFI32-60/V5MFO32-60

ENGLISH | ΕΛΛΗΝΙΚΑ | ROMANA

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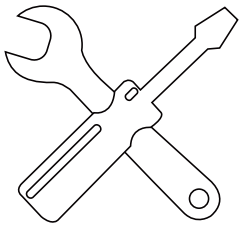
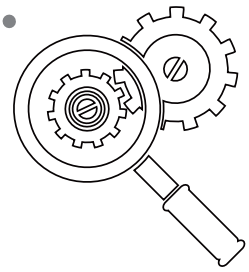
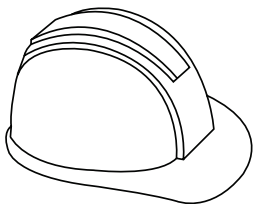
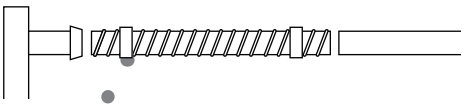
Operating Instructions

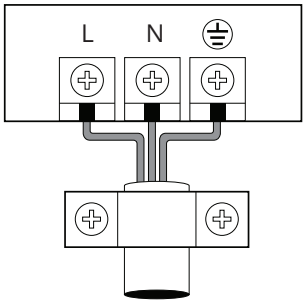


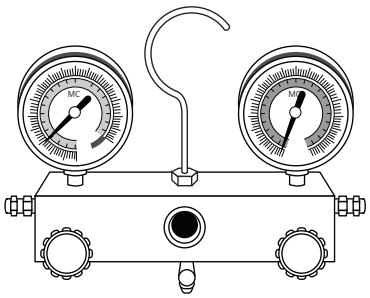


Installation Instructions









Caution : Risk of fire
(for R32/R290 refrigerant only)

WARNING:

Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants. (This is only required for the unit adopts R32/R290 Refrigerant)

Safety Precautions

1

Thank you for purchasing this air conditioner. This manual will provide you with information on how to operate, maintain, and troubleshoot your air conditioner. Following the instructions will ensure the proper function and extended lifespan of your unit.

Read Safety Precautions Before Installation

Incorrect installation due to ignoring instructions can cause serious damage or injury.
The seriousness of potential damage or injuries is classified as either a **WARNING** or **CAUTION.**

WARNING

Failure to observe a warning may result in death. The appliance must be installed in accordance with national regulations.

CAUTION

Failure to observe a caution may result in injury or equipment damage.

This symbol indicates that you must never perform the action indicated.

⚠ WARNING

1. Ask an authorized dealer to install this air conditioner. Inappropriate installation may cause water leakage, electric shock, or fire.
2. The warranty will be voided if the unit is not installed by professionals.
3. If abnormal situation arises (like burning smell), turn off the power supply and call your dealer for instructions to avoid electric shock, fire or injury.
4. DO NOT let the indoor unit or the remote control get wet. It may cause electric shock or fire.
5. DO NOT insert fingers, rods or other objects into the air inlet or outlet. This may cause injury, since the fan may be rotating at high speeds.
6. DO NOT use a flammable spray such as hair spray, lacquer or paint near the unit. This may cause fire or combustion.
7. The appliance shall be stored so as to prevent mechanical damage from occurring.
8. Compliance with national gas regulations shall be observed.
9. Carefully read the Safety Precautions before installation.
10. In certain functional environments, such as kitchens, server rooms, etc., the use of specially designed air-conditioning units is highly recommended.
11. Only trained and certified technicians should install, repair and service this air conditioning unit.
12. Improper installation may result in electrical shock, short circuit, leaks, fire or other damage to the equipment and personal property.
    (In North America,installation must be performed in accordance with the requirement of NEC and CEC by authorized personnel only.)
13. Strictly follow the installation instructions set forth in this manual.
14. Before you install the unit, consider strong winds, typhoons and earthquakes that might affect your unit and locate it accordingly. Failure to do so could cause the equipment to fail.

⚠ WARNING

15. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
16. Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
17. 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.
18. Children should be supervised to ensure that they do not play with the appliance.. (IEC Standard requirement)
19. If the supply cord is damaged, it must be replaced by the manufacturer,its service agent or similarly qualified persons in order to avoid a hazard.
20. The appliance shall be installed in accordance with national wiring regulations.
21. 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.
22. The appliance disconnection must be incorporated with an all-pole disconnection device in the fixed wiring in accordance with the wiring rules.
23. Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorises their competence to handle refrigerants safely in accordance with an industry recognised assessment specification.
24. Servicing shall only be performed as recommended by the equipment manufacturer.
25. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
26. The appliance shall be stored so as to prevent mechanical damage from occurring.
27. Keep ventilation openings clear of obstruction.
28. Do not turn on the power until all work has been completed.
29. When moving or relocating the air conditioner, consult experienced service technicians for disconnection and reinstallation of the unit
30. In certain functional environments, such as kitchens, server rooms, etc., the use of specially designed air-conditioning units is highly recommended.
31. Removal of the plug has to be such that an operator can check from any of the points to which he has access that the plug remains removed.
32. If this is not possible, due to the construction of the appliance or its installation, a disconnection with a locking system in the isolated position shall be provided.

⚠ CLEANING AND MAINTENANCE WARNINGS

1. Turn off the device and pull the plug before cleaning. Failure to do so can cause electrical shock.

⚠ CLEANING AND MAINTENANCE WARNINGS

2. Do not clean the air conditioner with excessive amounts of water.
3. Do not clean the air conditioner with combustible cleaning agents. Combustible cleaning agents can cause fire or deformation. Turn off the device and pull the plug before cleaning. Failure to do so can cause electrical shock.

⚠ ELECTRICAL WARNINGS

1. Only use the specified power cord. If the power cord is damaged, it must be replaced by the manufacturer or certified service agent.
2. Keep power plug clean. Remove any dust or grime that accumulates on or around the plug. Dirty plugs can cause fire or electric shock.
3. Do not pull power cord to unplug unit. Hold the plug firmly and pull it from the outlet. Pulling directly on the cord can damage it, which can lead to fire or electric shock.
4. Do not use an extension cord, manually extend the power cord, or connect other appliances to the same outlet as the air conditioner. Poor electrical connections, poor insulation, and insufficient voltage can cause fire.

NOTE: For the product air-to-air air conditioners and heat pumps which above 12 kW cooling power output, please see the technical information from Appendix .

⚠ CAUTION

- For units that have an auxiliary electric heater, do not install the unit within 1 meter (3 feet) of any combustible materials.
- Do not install the unit in a location that may be exposed to combustible gas leaks. If combustible gas accumulates around the unit, it may cause fire.
- Do not operate your air conditioner in a wet room such as a bathroom or laundry room. Too much exposure to water can cause electrical components to short circuit.

1. The product must be properly grounded at the time of installation, or electrical shock may occur.
2. Install drainage piping according to the instructions in this manual. Improper drainage may cause water damage to your home and property.
3. DO NOT touch the air outlet while the swing flap is in motion. Fingers might get caught or the unit may break down.
4. DO NOT inspect the unit by yourself. Ask an authorized dealer to perform the inspection.
5. To prevent product deterioration, do not use the air conditioner for preservation purposes (storage of food, plants, animals, works of art, etc.).
6. DO NOT touch the evaporator coils inside the indoor unit. The evaporator coils are sharp and may cause injury.
7. DO NOT operate the air conditioner with wet hands. It may cause electric shock.
8. DO NOT place items that might be affected by moisture damage under the indoor unit.
9. Condensation can occur at a relative humidity of 80%.
10. DO NOT expose heat-producing appliances to cold air or place them under the indoor unit.
11. This may cause incomplete combustion or deformation of the unit due to the heat.
12. After long periods of usage, check the indoor unit to see if anything is damaged. If the indoor unit is damaged, it may fall and cause injury.

⚠ CAUTION

13. If the air conditioner is used together with other heating devices, thoroughly ventilate the room to avoid oxygen deficiency.
14. DO NOT climb onto or place objects on top of the outdoor unit.
15. DO NOT operate the air conditioner when using fumigant insecticides. The chemicals may become layered with the unit and endanger those who are hypersensitive to chemicals.
16. DO NOT let children play with the air conditioner.
17. DO NOT operate the air conditioner in a wet room (e.g. bathroom or laundry room).
18. This can cause electrical shock and cause the product to deteriorate.
19. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

⚠ Cautions for using R32/R290 refrigerant

1. Installation (Space)
   - That the installation of pipe-work shall be kept to a minimum.
   - That pipe-work shall be protected from physical damage.
   - That compliance with national gas regulations shall be observed.
   - That mechanical connections shall be accessible for maintenance purposes.
   - In cases that require mechanical ventilation, ventilation openings shall be kept clear of obstruction.
   - When disposing of the product is used, be based on national regulations, properly processed.
   -The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
   -Spaces where refrigerant pipes shall be compliance with national gas regulations.
2. Servicing
   - Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorises their competence to handle refrigerants safely in accordance with an industry recognised assessment specification.
   - Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
3. Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
4. The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames,an operating gas appliance or an operating electric heater)
5. Do not pierce or burn.
6. Be aware that refrigerants may not contain an odour.
7. Be more careful that foreign matter(oil, water,etc) does not enter the piping. Also, when storing the piping, securely seal the opening by pinching, taping, etc.
   For indoor units, use R32 flareless joint assy only when connecting the indoor unit and

⚠ Cautions for using R32/R290 refrigerant

onnecting piping(when connecting indoors). Use of pipes, flareless nut or flare nuts other than specified, may cause product malfunction, burst piping, or injury due to high internal pressure of the refrigerant cycle caused by any inflow air.

8. Appliance shall be installed, operated and stored in a room with a floor area larger than X m² (Please see the following form). The appliance shall not be installed in an unventilated space, if that space is smaller than X m² (Please see the following form).

Model (Btu/h)	Amount of refrigerant to be charged (kg)	maximum installation height (m)	Minimum room area (m²)
≤30000	≤2.048	1.8m	4
≤30000	≤2.048	0.6m	35
30000-48000	2.048-3.0	1.8m	8
30000-48000	2.048-3.0	0.6m	80
>48000	>3.0	1.8m	9
>48000	>3.0	0.6m	80

Note about Fluorinated Gasses

1. This air-conditioning unit contains fluorinated greenhouse gasses. For specific information on the type of gas and the amount, please refer to the relevant label on the unit itself or the "Owner's Manual - Product Fiche " in the packaging of the outdoor unit. (European Union products only).
2. Installation, service, maintenance and repair of this unit must be performed by a certified technician.
3. Product uninstallation and recycling must be performed by a certified technician.
4. For equipment that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO2 equivalent or more, but of less than 50 tonnes of CO2 equivalent, If the system has a leak-detection system installed, it must be checked for leaks at least every 24 months.
5. When the unit is checked for leaks, proper record-keeping of all checks is strongly recommended.

Explanation of symbols displayed on the indoor unit or outdoor unia (applicable to the unit adopts R32/R290 Refrigerant only):

	**WARNING**	This symbol shows that this appliance uses a flammable refrigerant. If the refrigerant is leaked and exposed to an external ignition source, there is a risk of fire.
	**CAUTION**	This symbol shows that the operation manual should be read carefully.
	**CAUTION**	This symbol shows that a service personnel should be handling this equipment with reference to the installation manual.
	**CAUTION**	
	**CAUTION**	This symbol shows that information is available such as the operating manual or installation manual.

Indoor Unit Parts And Major Functions

2

Unit Parts

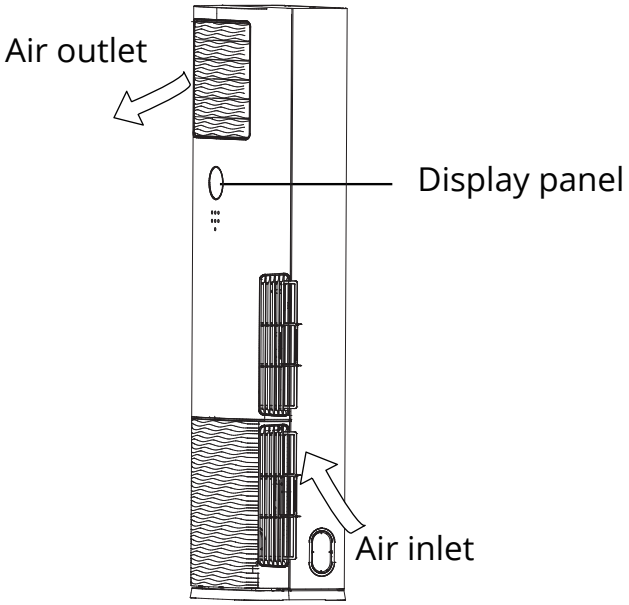


Fig. 2.1

Operating Conditions

Use the system under the following temperatures for safe and effective operation. If the air conditioner is used under different conditions, it may malfunction or become less efficient.

- **Inverter Split Type**

	COOL mode	HEAT mode	DRY mode
Room Temperature	17°C - 32°C(63°F - 90°F)	0°C - 30°C(32°F - 86°F)	10°C - 32°C(50°F - 90°F)
Outdoor Temperature	0°C - 50°C(32°F - 122°F)	-15°C - 30°C(5°F - 86°F)	0°C - 50°C(32°F - 122°F)
	-15°C - 50°C(5°F - 122°F) (For models with low temp. cooling systems.)		
	0°C - 52°C(32°F - 126°F) (For special tropical models)		0°C - 52°C(32°F - 126°F) (For special tropical models)

FOR OUTDOOR UNITS WITH AUXILIARY ELECTRIC HEATER

When outside temperature is below 0°C (32°F), we strongly recommend keeping the unit plugged in at all time to ensure smooth ongoing performance.

- **Fixed-speed Type**

	COOL Mode	HEAT mode	DRY mode
Indoor Temperature	17°-32°C (63°-90°F)	O°-30°C (32°-86°F)	10°-32°C (50°-90°F)
Outdoor Temperature	18°-43°C (64°-109°F)	-7°-24°C (19°-75°F)	11°-43°C (52°-109°F)
	-7°-43°C (19°-109°F) (low temperature cooling models)		18°-43°C (64°-109°F)
	18°-52°C (64°-126°F) (For special tropical models)		18°-52°C (64°-126°F) (For special tropical models)

Features

Default Setting

When the air conditioner restarts after a power failure, it will default to the factory settings (AUTO mode, AUTO fan, 24°C (76°F)). This may cause inconsistencies on the remote control and unit panel. Use your remote control to update the status.

Louver Angle Memory Function

Some models are designed with a louver angle memory function. When the unit restarts after a power failure, the angle of the horizontal louvers will automatically return to the previous position. The angle of the horizontal louver should not be set too small as condensation may form and drip into the machine. To reset the louver, press the manual button, which will reset the horizontal louver settings.

Auto-Restart

In case of power failure, the system will immediately stop. To restart the unit, press the **ON/OFF** button on the remote control. If the system has an auto restart function, the unit will restart using the same settings.

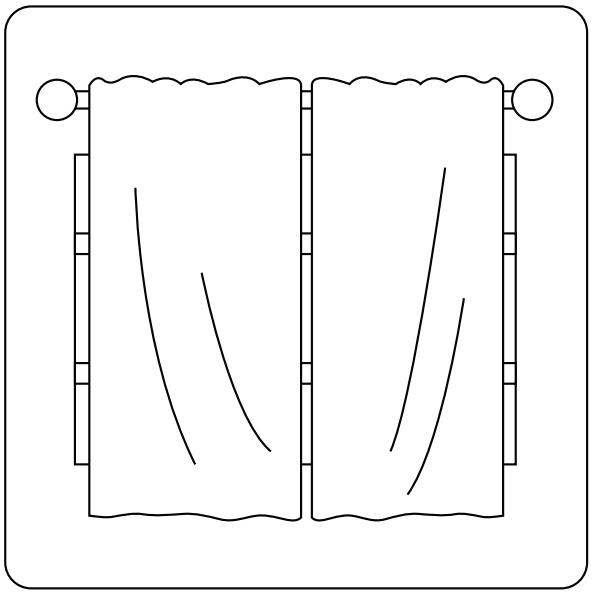
Refrigerant Leak Detection System

In the event of a refrigerant leak, the LCD screen will display "EC" and the LED indicator light will flash.

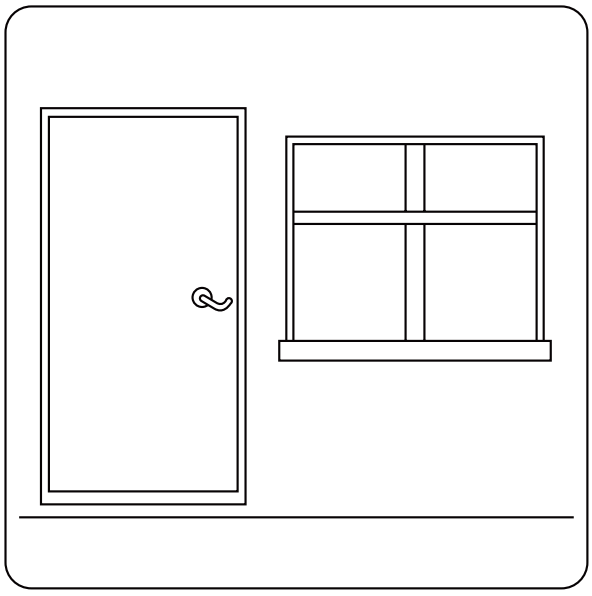
For a detailed explanation of each function, refer to the **Remote Control Manual.**

Energy Saving Tips

- **DO NOT** set the unit to excessive temperature levels.
- While cooling, close the curtains to avoid direct sunlight.
- Doors and windows should be kept closed to keep cool or warm air in the room.
- **DO NOT** place objects near the air inlet and outlet of the unit.
- Set a timer and use the built-in SLEEP/ECONOMY mode if applicable.
- If you don't plan to use the unit for a long time, remove the batteries from the remote control.
- Clean the air filter every two weeks.
- Adjust louvers properly and avoid direct airflow.



Closing curtains during heating also helps keep the heat in

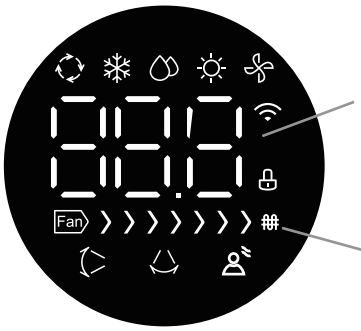


Doors and windows should be kept closed

Manual Operations

3

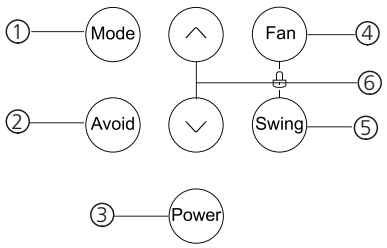
The display panel on the indoor unit can be used to operate the unit in cases when the remote control has been misplaced or is out of batteries.



Room Temp/Set Temp/Set Timer display

Fan speed operation display

- Auto operation
- Cooling operation
- Dry operation
- Heating operation
- Fan operation
- Vertical airflow
- Horizontal airflow
- Avoid direct
- Lock operation



Operation buttons

① **MODE** button: Press this button to select the appropriate operating mode. Each time the button is pressed, the operation mode is shifted in the direction of the arrow:

→AUTO→COOL→DRY→HEAT(for cooling & heating models only) → FAN ONLY

Mode indicators light up to signal the following mode settings.

Auto: Automatically chooses the operation mode by sensing the difference between the actual ambient room temperature and the set temperature on the remote controller. The fan speed is automatically controlled.
Cool: Enables you to enjoy the cooling effect at you preferred setting temperature (Temperature range:17°C~30°C).
Dry: Enables you to set the desired temperature at medium fan speed which provides you with the dehumidified surroundings (Temperature range: 17°C~30°C). In Dry mode, you cannot select Fan speed and Sleep mode.
Heat: Permits heating operation (For cooling & heating models only, temperature setting range: 17°C~30°C).
Fan only: Permits fan operation without cooling or heating. In this case, however, the setting temperature is not displayed and you cannot adjust the set temperature.

② **Avoid** button:

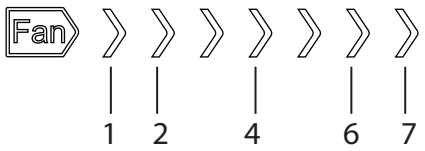
1. In any mode of boot, press the button to turn on the function.
2. Press "Power" "Swing" "Avoid", " " close this function.

③ **Power** button: Operation starts when this button is pressed and stops when you press the button again.

④ **Fan** button: This button is used to select the desired fan speed. Each time you push the button, the fan speed is shifted in the following sequence:

→ LOW → MED → HIGH → AUTO ┐

Fan speed display:



Select LOW fan speed and zones 1~2 will illuminate.
Select MED fan speed and zones 1~4 will illuminate.
Select HIGH fan speed and zones 1~6 will illuminate.
Select AUTO fan speed and zones 1~7 and "AU" will illuminate .
Note: When using the remote control to choose strong wind, wind speed 1~7 will illuminate.

⑤ **Swing** button:

1. This button is used to set the horizontal and vertical airflow.
2. Each time the airflow direction button is pressed, the settings change as follows: Set vertical airflow→ Cancel vertical airflow→ Set horizontal airflow→ Cancel horizontal airflow → Set simultaneous vertical and horizontal airflow→ Cancel simultaneous vertical and horizontal airflow→ Set horizontal airflow.

WARNING: Manually moving the horizontal and vertical airflow direction louvers could damage the air conditioner.

⑥ ⊙⊙ button

1. Under the Test Running mode, press " ⊙ " " ⊙ " to be able to check view indoor, outdoor, fault code .
2. When a failure occurs, E0, E1, E3, E4, E5, Eb, EC, E10, F1, F2, F5, P10, P11, P12, P15, P13, P14, P9. (for Fixed-speed Type only)
3. In other states,press the " ⊙ "and" ⊙ " to adjust the temperature within a range of 17°C~30°C , To cut to 17 °C again when press downward adjustments set temperature no longer change; To rise to press adjusted upward again when 30 °C set temperature no longer change. When setting the temperature, the key cannot adjust the temperature quickly, it can only be achieved by pressing up and down.

LOCK FEATURE: The lock feature is activated by pressing down and holding the fan speed and swing buttons simultaneously for a period of one second.

This feature is available both when the unit is turned on or off. The first time these buttons are pressed, the unit locks and all other buttons on the unit are disabled (apart from the unlock button). Please note that the remote control can still be used when the unit is locked. Press the button of the panel and the lock icon will blink for 5 seconds at 1HZ/SWhen these buttons are pressed again the unit is unlocked.

Commissioning function: Press " Mode " and " Swing " for one second to open the test run, the key is valid in any mode when it is turned on. On the first time, press this button to enter the test run state.Run the test run for 30 minutes, press this button again, turn off, and exit the test run condition.

The mode key, the wind speed key and the auxiliary function key are not valid, and all other keys are valid (including the key). Press up and down to select the display room (T1), outdoor (outdoor temperature), and protection code, and show "nA" when there is no failure or protection.

NOTE:

Trial operation conditions showed that temperature of T1, if the temperature is less than -15ºC or - 19ºC, display temperature of -15ºC or - 19ºC.

Trial operation conditions showed that T4 temperature, if the temperature is less than - 19ºC, show the temperature for - 19ºC.

Trial operation condition, T1, T4 showed highest temperature is 50ºC or 70ºC.

Under test mode, sensor fault can be detected.

Care And Maintenance

4

Safety Precautions

- Contact an authorized service technician for repair or maintenance. Improper repair and maintenance may cause water leakage, electrical shock, or fire, and may void your warranty.
- **DO NOT** substitute a blown fuse with a fusethat has a higher or lower amperage rating,as this may damage the circuit or cause anelectrical fire.
- Make sure the drain hose is set up according to the instructions. Failure to do so could cause leakage and result in personal property damage, fire and electric shock.
- Make sure that all wires are connected properly. Failure to connect wires according to instructions can result in electrical shock or fire.

Unit Maintenance

⚠ BEFORE CLEANING OR MAINTENANCE

- Always turn off your air conditioning system and disconnect its power supply before cleaning or maintenance.
- **DO NOT** use chemicals or chemically treated cloths to clean the unit.
- **DO NOT** use benzene, paint thinner, polishing powder or other solvents to clean the unit. They can cause the plastic surface to crack or deform.
- **DO NOT** wash the unit under running water. Doing so causes electrical danger.
- **DO NOT** use water hotter than 40°C (104°F) to clean the front panel. This can cause the panel to deform or become discolored.
- Clean the unit using a damp, lint-free cloth and neutral detergent. Dry the unit with a dry, lint-free cloth.

How To Clean The Air Filter

The filter prevents dust and other particles from entering the indoor unit. Dust buildup can reduce the efficiency of the air conditioner. For optimum efficiency, clean the air filter every two weeks or more frequently if you live in a dusty area. Replace the filter with a new one if it's heavily clogged and cannot be cleaned.

⚠ WARNING: DO NOT REMOVE OR CLEAN THE FILTER BY YOURSELF

Removing and cleaning the filter can be dangerous. Removal and maintenance must be performed by a certified technician.

NOTE: In households with animals, you will have toperiodically wipe down the grille to prevent animal hair blocking airflow.

Cleaning the dust filter located at the bottom of the unit:

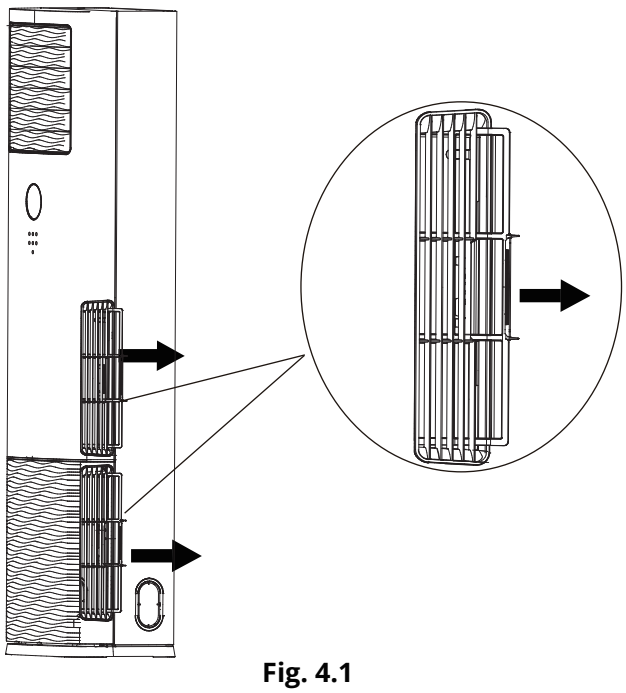


Fig. 4.1

Seize the left and right at the bottom of the strainer mesh put his hand to pull, remove the strainer mesh. Place the strainer mesh clean, dry in the shade. Packed strainer mesh .

4. Remove the air filter.
5. Clean the air filter by vacuuming the surface or washing it in warm water with mild detergent.

   A. If using a vacuum cleaner, the inlet side should face the vacuum.

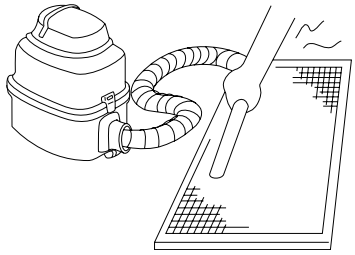


Fig. 4.2

   B. If using water, the inlet side should face down and away from the water stream.

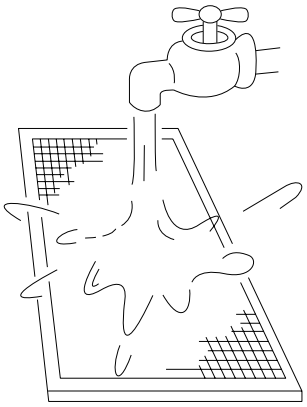


Fig. 4.3

6. Rinse the filter with clean water and allow it to air-dry. **DO NOT** let the filter dry in direct sunlight.
7. Reinstall the filter.

Repairing Refrigerant Leaks

⚠ WARNING

- If the refrigerant leaks, turn off the air conditioner and any combustible heating devices, ventilate the room and call your dealer immediately. Refrigerant is both toxic and flammable. **DO NOT** use the air conditioner until the leak is repaired.
- When the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit in the event of refrigerant leakage. Concentrated refrigerant causes a severe health and safety threat.

Refrigerant Leak Detection System

- In the event of a refrigerant leak, the LCD screen will display "EC" and the LED indicator light will flash.

Preparation For Periods Of Non-Use

Maintenance after Extended Non-Use

1. Remove any obstacles blocking the vents of both the indoor and outdoor units.
2. Clean the air filter and the front grille of the indoor unit. Reinstall the clean, dry air filter in its original position.
3. Turn on the main power switch at least 12 hours prior to operating the unit.

Storing the Unit While Not In Use

1. Run the appliance on FAN mode for 12 hours in a warm room to dry it and prevent mold.
2. Turn off the appliance and unplug it.
3. Clean the air filter according to the instructions in the previous section. Reinstall the clean, dry filter before storing.
4. Remove the batteries from the remote control.

Troubleshooting

5

⚠ CAUTIONS

If one of the following conditions occurs, switch off the power supply immediately and contact your dealer for further assistance.

- The operation light continues to flash rapidly after the unit has been restarted.
- The remote control buttons do not work.
- The unit continually trips fuses or circuit breakers.
- A foreign object or water enters the air conditioner.
- Other abnormal situations.

Common Problems

The following symptoms are not a malfunction and in most situations will not require repairs.

Problem	Possible Causes
Unit does not turn on when pressing ON/ OFF button	The unit has a 3-minute protection feature that prevents the unit from overloading. The unit cannot be restarted within three minutes of being turned off.
The unit changes from COOL mode to FAN mode	The unit changes its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will start operating again.
	The set temperature has been reached, at which point the unit turns off the compressor. The unit will resume operating when the temperature fluctuates again.
The indoor unit emits white mist	In humid regions, a large temperature difference between the room's air and the conditioned air can cause white mist.
Both the indoor and outdoor units emit white mist	When the unit restarts in HEAT mode after defrosting, white mist may be emitted due to moisture generated from the defrosting process.
The indoor unit makes noises	A squeaking sound is heard when the system is OFF or in COOL mode. The noise is also heard when the drain pump (optional) is in operation.
	A squeaking sound may occur after running the unit in HEAT mode due to expansion and contraction of the unit's plastic parts.
Both the indoor unit and outdoor unit make noises	A low hissing sound may occur during operation. This is normal and is caused by refrigerant gas flowing through both the indoor and outdoor units.
	A low hissing sound may be heard when the system starts, has just stopped running or is defrosting. This noise is normal and is caused by the refrigerant gas stopping or changing direction.
The outdoor unit makes noises	The unit will make different sounds based on its current operating mode.

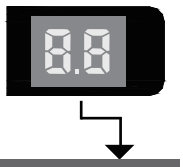
Problem	Possible Causes
Dust is emitted from either the indoor or outdoor unit	The unit may accumulate dust during extended periods of non-use, which will be emitted when the unit is turned on. This can be mitigated by covering the unit during long periods of inactivity.
The unit emits a bad odor	The unit may absorb odors from the environment (such as furniture, cooking, cigarettes, etc.) which will be emitted during operations.
	The unit's filters have become moldy and should be cleaned.
The fan of the outdoor unit does not operate	During operation, the fan speed is controlled to optimize product operation.

Troubleshooting Tips

When troubles occur, please check the following points before contacting a repair company.

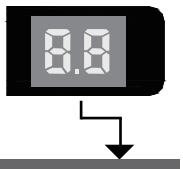
Problem	Possible Causes	Solution
The unit is not working	Power failure	Wait for the power to be restored
	The power switch is off	Turn on the power
	The fuse is burned out	Replace the fuse
	Remote control batteries are dead	Replace the remote control batteries
	The unit's 3-minute protection has been activated	Wait three minutes after restarting the unit
Poor cooling performance	Temperature setting may be higher than the ambient room temperature	Lower the temperature setting
	The heat exchanger on the indoor or outdoor unit is dirty	Clean the affected heat exchanger
	The air filter is dirty	Remove the filter and clean it according to instructions
	The air inlet or outlet of either unit is blocked	Turn the unit off, remove the obstruction and turn it back on
	Doors and windows are open	Make sure that all doors and windows are closed while operating the unit
	Excessive heat is generated by sunlight	Close windows and curtains during periods of high heat or bright sunshine
	Low refrigerant due to leak or long-term use	Check for leaks, re-seal if necessary and top off refrigerant
The unit starts and stops frequently	There's too much or too little refrigerant in the system	Check for leaks and recharge the system with refrigerant
	There is air, incompressible gas or foreign material in the refrigeration system.	Evacuate and recharge the system with refrigerant
	System circuit is blocked	Determine which circuit is blocked and replace the malfunctioning piece of equipment
	The compressor is broken	Replace the compressor
	The voltage is too high or too low	Install a manostat to regulate the voltage
Poor heating performance	The outdoor temperature is lower than 7°C (44.5°F)	Check for leaks and recharge the system with refrigerant
	Cold air is entering through doors and windows	Make sure that all doors and windows are closed during use
	Low refrigerant due to leak or long-term use	Check for leaks, re-seal if necessary and top off refrigerant

Error Codes



- **Inverter Split Type**

Number	Cause	Error Code
1	Indoor EEPROM error	E0
2	Indoor and outdoor communication failure	E 1
3	Indoor fan speed malfunction	E3
4	Indoor room temperature sensor open circuit or short circuit	E4
5	Evaporator coil temperature sensor open circuit or short circuit	E5
6	Refrigerant leakage detection malfunction	EC
7	Communication malfunction between two indoor units (for twins model)	E8
8	Other malfunction of twins model	E9
9	Display board and main control communication failure	Eb
10	Outdoor unit malfunction	Ed
11	Current overload protection	F0
12	Outdoor room temperature sensor open circuit or short circuit	F1
13	Outdoor condenser pipe temperature sensor error	F2
14	Discharging air temperature sensor error	F3
15	Outdoor EEPROM error	F4
16	Outdoor fan speed malfunction	F5
17	T2b sensor error	F6
18	Inverter module IPM protection	P0
19	High/Low voltage protection	P 1
20	Compressor top overheating protection	P2
21	Outdoor low temp. Protection	P3
22	Compressor drive error	P4
23	Compressor High/Low-pressure protection	P6
24	Outdoor IGBT sensor error	P7



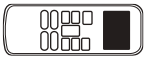
- **Fixed-speed Type**

Number	Cause	Error Code
1	Indoor EEPROM error	E0
2	Indoor and outdoor communication failure	E 1
3	Dc fan stall failure	E3
4	T1sensor error	E4
5	T2sensor error	E5
6	Display board and main control communication failure	Eb
7	Refrigerant leakage fault	EC
8	The compressor low pressure failure	E10
9	T4sensor error	F 1
10	T3sensor error	F2
11	Power failure or lack of phase phase sequence reverse fault	F5
12	Heating the cold wind off the indoor fan	P9
13	Compressor low voltage protection	P10
14	Compressor high pressure protection	P11
15	Compressor current overload protection	P12
16	The indoor evaporator protection closed compressor (high or low temperatures)	P13
17	Outdoor condenser heat protection compressor	P14
18	Outdoor high exhaust temperature closed compressor	P15
19	Frost	d F

Accessories

6

The air conditioning system comes with the following accessories. Use all of the installation parts and accessories to install the air conditioner. Improper installation may result in water leakage, electrical shock and fire, or equipment failure.

	Name	Shape	Quantity
Indoor unit installation	Self-tapping screw 3.9×25		2
	Flat washers		2
	Bushing-sleeve cover		1
Refrigeration Fittings	Soundproof/insulation sheath (some models)		2
Drainpipe Fittings	Drain hose (some models)		1
	Band (some models)		2
	Drain joint (some models)		1
	Seal ring (some models)		1
Installation Accessory (some models)	Connection cables		1
	Putty		1
	Rodent-proof mesh		1
	Self-tapping screw ST3.9×12		1
Remote controller & Its Frame (some models)	Remote controller		1
	Fixing screw for remote controller holder ST2.9 x 10		2
	Remote controller holder		1
	Dry battery AAA		2
	Remote controller illustration		1
	Owner's manual		1
	Installation manual		1
	Refrigerant Pipe (optional)		1

Installation Overview

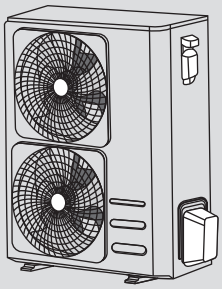
7

INSTALLATION ORDER

1

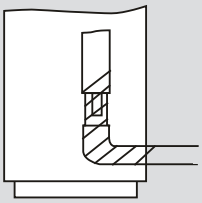
Install the indoor unit
(Page 22)

2



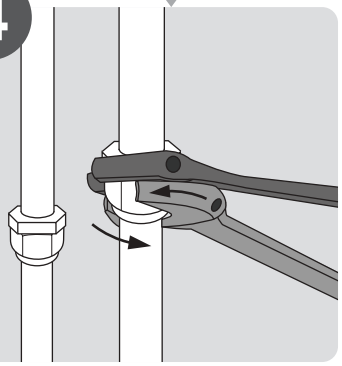
Install the outdoor unit
(Page 26)

3



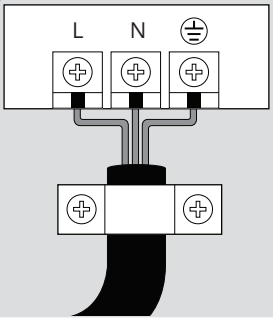
Install the drainpipe
(Page 29)

4



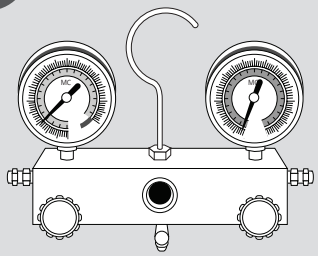
Connect the refrigerant pipes
(Page 30)

5



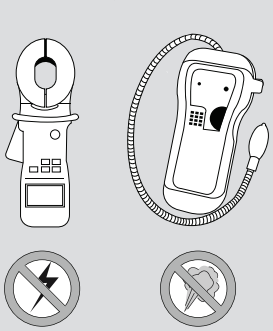
Connect the wires
(Page 33)

6



Evacuate the refrigeration system
(Page 35)

7



Perform a test run
(Page 37)

Indoor Unit Installation

8

Indoor Unit Parts

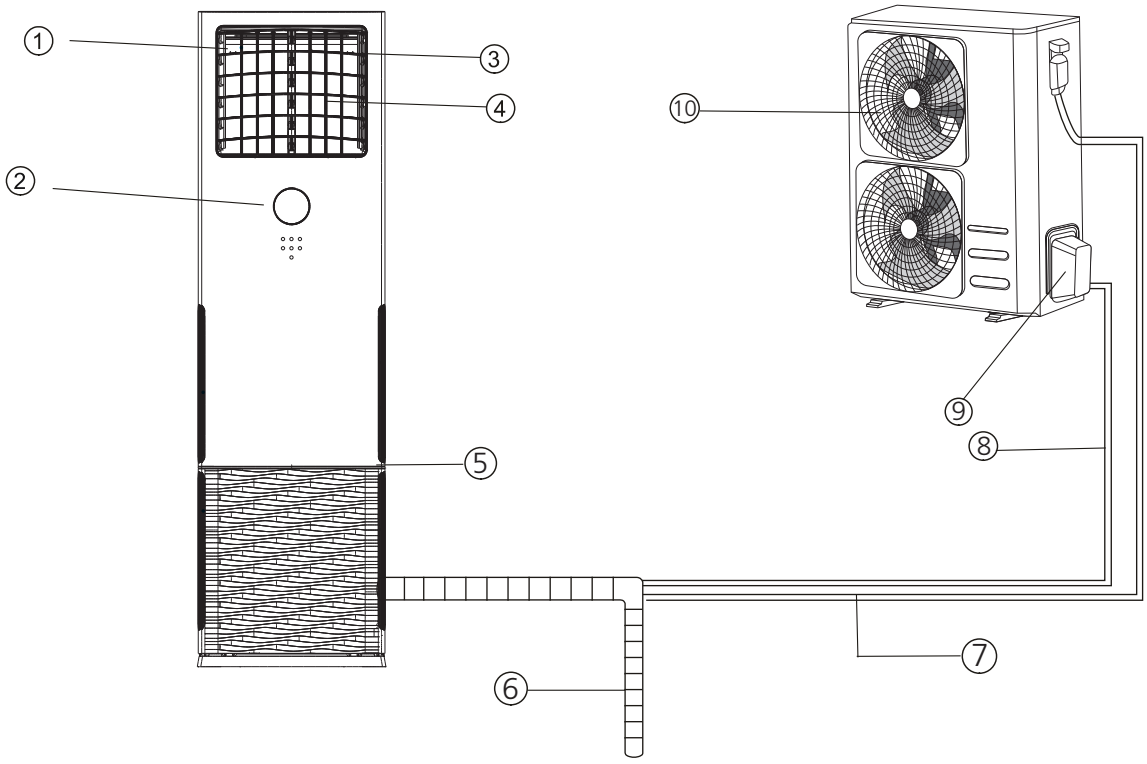


Fig. 8.1

Indoor unit

① Air outlet
② Operation panel
③ Horizontal airflow control louver
④ Vertical airflow control louver
⑤ Air inlet(2 sides)

Outdoor unit

⑥ Drain pipe, vent pipe
⑦ Connection cable
⑧ Connection pipe
⑨ Refrigerant pipe port
⑩ Air outlet

NOTE ON ILLUSTRATIONS

Illustrations in this manual are for explanatory purposes. The actual shape of your indoor unit may be slightly different. The actual shape shall prevail.

Indoor Unit Installation Instructions

PRIOR TO INSTALLATION

Before installing the indoor unit, refer to the label on the product box to make sure that the model number of the indoor unit matches the model number of the outdoor unit.

Step 1: Select installation location

Before installing the indoor unit, you must choose an appropriate location. The following are standards that will help you choose an appropriate location for the unit.

Proper installation locations meet the following standards:

- ☑ Good air circulation
- ☑ Convenient drainage
- ☑ Positioned such that noise from the unit will not disturb other people
- ☑ Firm and solid—the location will not vibrate
- ☑ Strong enough to support the weight of the unit
- ☑ Positioned at least one meter from all other electrical devices (e.g. TV, radio, computer)

<u>DO NOT</u> install unit in the following locations:

- ⊘ Near any source of heat, steam, or combustible gas
- ⊘ Near flammable items such as curtains or clothing
- ⊘ Near any obstacle that might block air circulation
- ⊘ Near the doorway
- ⊘ In a location subject to direct sunlight

NOTE ABOUT WALL HOLE:

If there is no fixed refrigerant piping: When choosing a location, be aware that you should leave ample room for a hole in the wall (see the step "Drill wall hole for connective piping") for the signal cable and refrigerant piping that connect the indoor and outdoor units. The default position for all piping is the right side of the indoor unit (while facing the unit). However, the unit can accommodate piping to both the left or the right.

Refer to the following diagram to ensure proper distance from walls and ceiling:

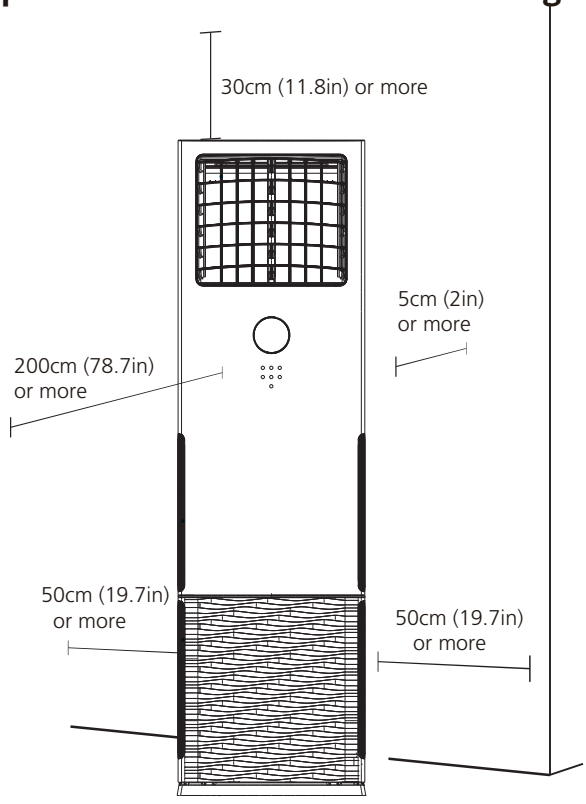


Fig. 8.2

Indoor Unit Mounting Dimensions

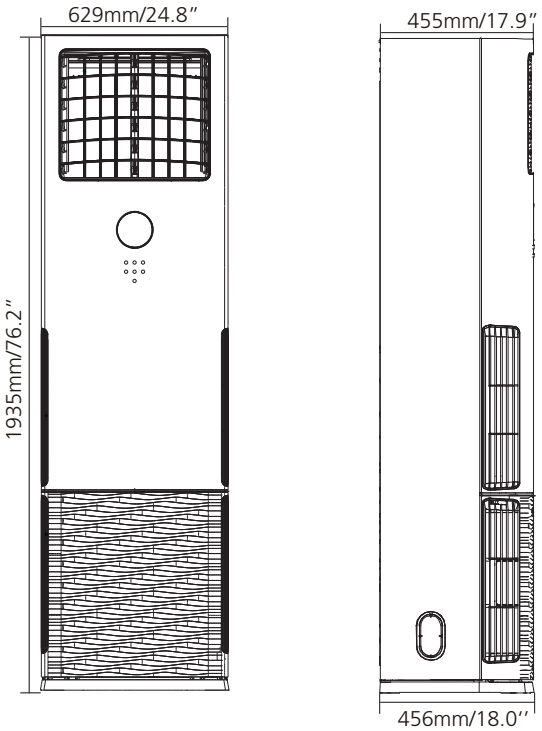


Fig. 8.3

Step 2: Unfastening the operation panel and detaching the filter

1. Open the packaging and take out the indoor unit. Remove the protective tape and any components.
2. Open the two boxes for storing the remote control found on either side of the indoor unit, then undo the screws on the operation panel.
3. Use both hands to gently hold the decorative part at the top of the operation panel, then lift it upwards to remove it along with the wire terminal which is connected to it.
4. Undo the two screws on the front of the filter.
5. Use both hands to hold the two sunken areas on either side of the filter and pull away from the unit. Lift the filter upwards to remove it.
6. Please take off the air-inlet grid before connecting the pipes/wires.
   First remove the screws cover, then remove the screws on the air-inlet grid, then take off the grid. (See Fig. 8.4)

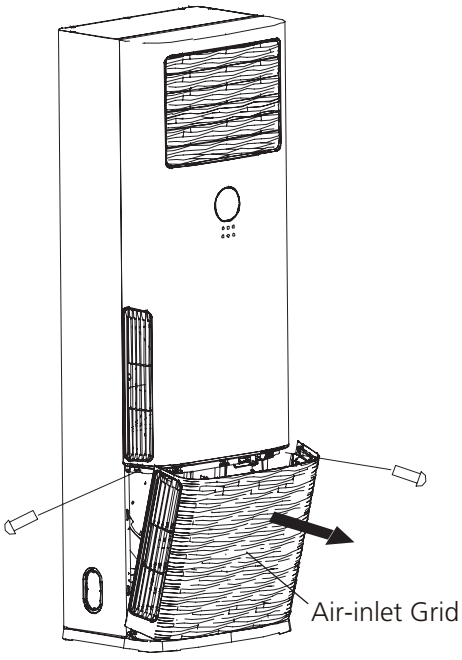


Fig. 8.4

7. Remove all of the accessories placed inside the bottom cavity of the indoor unit.
8. Check that all of the accessories match those found on the "Installation Diagrams and Accessories" as shown on the previous page.

Step 3. Remove the fasteners from the roller (only found on selected models)

1. Check to see whether the roller on the indoor unit has any fasteners holding it in place and tear off the notice sticker.
2. Remove the fasteners from the roller according to the directions on the sticker.

Step 4. Fastening the indoor unit (to prevent it from falling down)

1. Measure the position of the holes for installation.
2. Insert the M8 bolts into the unit while it is on the floor (the amount of bolts used depends on the number of holes on the unit's chassis). (See Fig. 8.5)
3. Lift up the indoor unit so that the installation holes cover the bolts, then fasten the nuts onto the bolts and tighten them.

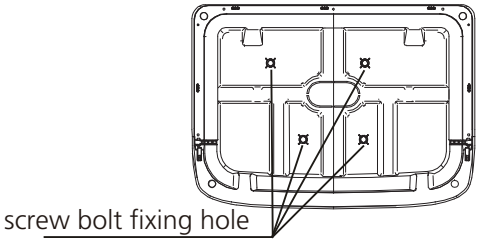


Fig. 8.5

⚠ CAUTION

If further support is needed to prevent the unit from falling down, a protective wedge can be installed. The installation procedure for this wedge is as follows:

- Take out the protective wedge and measure the correct size.
- Use the self-tapping screws to fasten the protective wedge to the top cover of the indoor unit.
- Fasten the other end of the wedge tightly to the wall using the self-tapping screws.

Step 5. Installing the rodent-proof mesh

1. Remove the metal rodent-proof mesh from the piping found on the unit by gently tapping on it.

2. Use a knife to cut a small hole by following the markings on the ratproof board.
   (See Fig. 8.6)
3. Insert the ratproof board into the unit and hold it in place tightly.

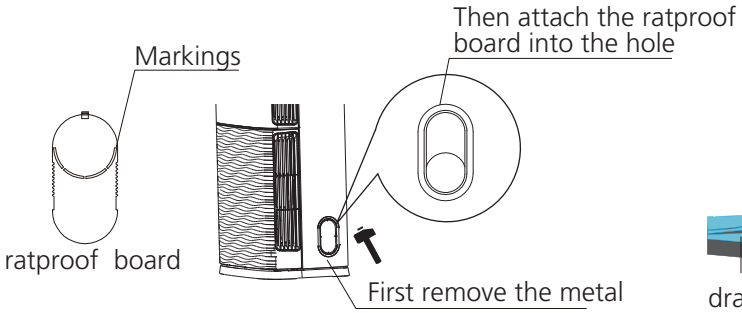
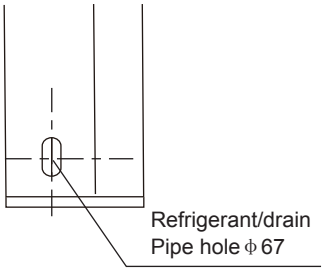


Fig. 8.6

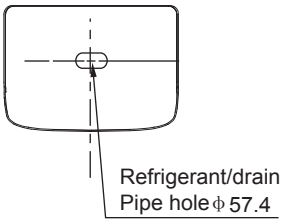
Step 6. Piping and binding

1. Lay the connecting piping flat on the ground. Place the drainage hose, refrigerant pipe, and all electrical wiring (making sure that both ends are arranged correctly) next to the piping.
2. Using the drainage hose as a guide, measure and adjust the length of the low voltage wiring, high voltage wiring, any other electrical wiring, and refrigerant pipe. Use cable ties to initially fasten them in place.
3. Arrange the piping so that the drainage hose is on the bottom, the connecting piping is in the middle, and the electrical wiring is at the top.
4. Use adhesive vinyl tape to begin binding the piping together. Start binding the tape at the bottom end of the drainage hose, and make sure that the connectors are secured tightly.

Pipe/wire-hole positions on both sides



Pipe/wire-hole position on the bottom



Pipe/wire-hole position on back side

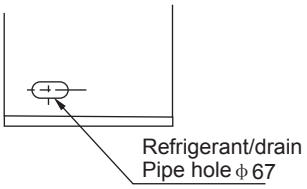


Fig. 8.7

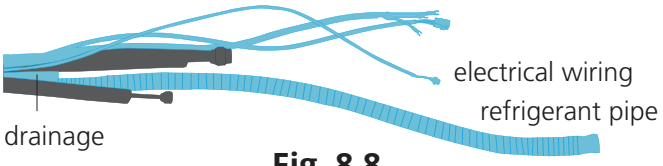


Fig. 8.8

⚠ CAUTION

The electrical wiring, drainage hose, and refrigerant pipe must exit the binding in a suitable place. All binding must be mutually connected, evenly applied, and aesthetically pleasing.

NOTE

- Only models with a ventilation function contain ventilation ducting.
- The amount and type of electrical wiring used may vary according to the specific model.
- The ends of the ventilation ducting and electrical wiring are different, please check carefully before starting to bind.

Step 7: Applying the sealant putty and installing the wall hole cover

1. Tidy up the already bound piping.
2. Evenly apply the sealant putty to the gaps between the piping and the wall, then press on the putty firmly.
3. Pull the wall hole cover apart to open it. After fastening tightly to the piping, push it into the hole in the wall to securely fasten it to the wall and complete the installation.

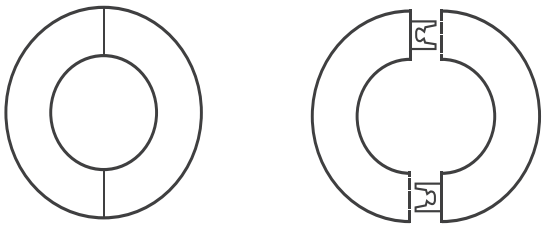


Fig. 8.9

Outdoor Unit Installation

9

Outdoor Unit Installation Instructions

Step 1: Select installation location.

The outdoor unit should be installed in the location that meets the following requirements:

- ☑ Place the outdoor unit as close to the indoor unit as possible.
- ☑ Ensure that there is enough room for installation and maintenance.
- ☑ The air inlet and outlet must not be obstructed or exposed to strong wind.
- ☑ Ensure the location of the unit will not be subject to snowdrifts, accumulation of leaves or other seasonal debris. If possible, provide an awning for the unit. Ensure the awning does not obstruct airflow.
- ☑ The installation area must be dry and well ventilated.
- ☑ There must be enough room to install the connecting pipes and cables and to access them for maintenance.
- ☑ The area must be free of combustible gases and chemicals.
- ☑ The pipe length between the outdoor and indoor unit may not exceed the maximum allowable pipe length.
- ☑ If possible, **DO NOT** install the unit where it is exposed to direct sunlight.
- ☑ If possible, make sure the unit is located far away from your neighbors' property so that the noise from the unit will not disturb them.
- ☑ If the location is exposed to strong winds (for example: near a seaside), the unit must be placed against the wall to shelter it from the wind. If necessary, use an awning. (See Fig. 9.1 & 9.2)
- ☑ Install the indoor and outdoor units, cables and wires at least 1 meter from televisions or radios to prevent static or image distortion. Depending on the radio waves, a 1 meter distance may not be enough to eliminate all interference.

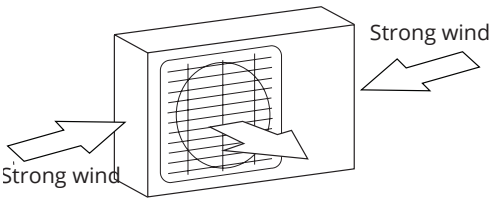


Fig. 9.1

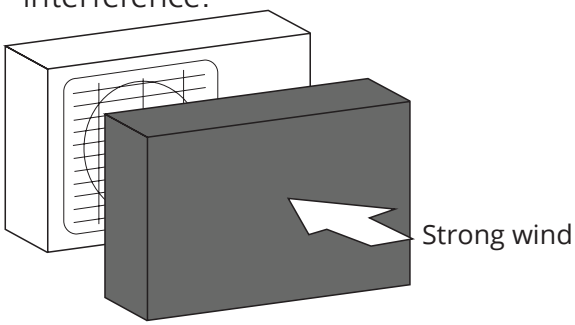


Fig. 9.2

Step 2: Install outdoor unit.

Fix the outdoor unit with anchor bolts (M10)

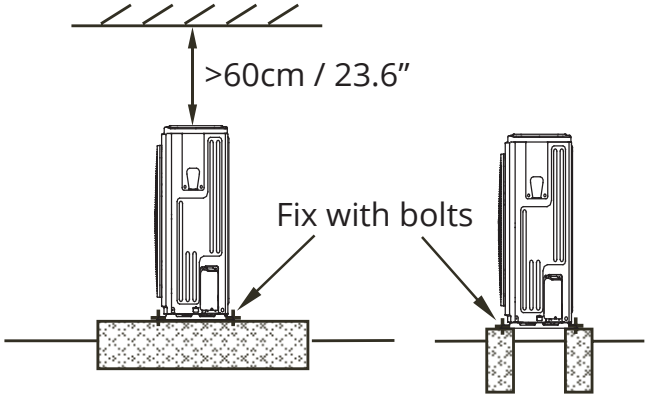


Fig. 9.3

⚠ CAUTION

- Be sure to remove any obstacles that may block air circulation.
- Make sure you refer to Length Specifications to ensure there is enough room for installation and maintenance.

Outdoor Unit Mounting Dimensions

The mounting dimensions vary among different outdoor units.
The fixing bolt head diameter should be more than 12mm.

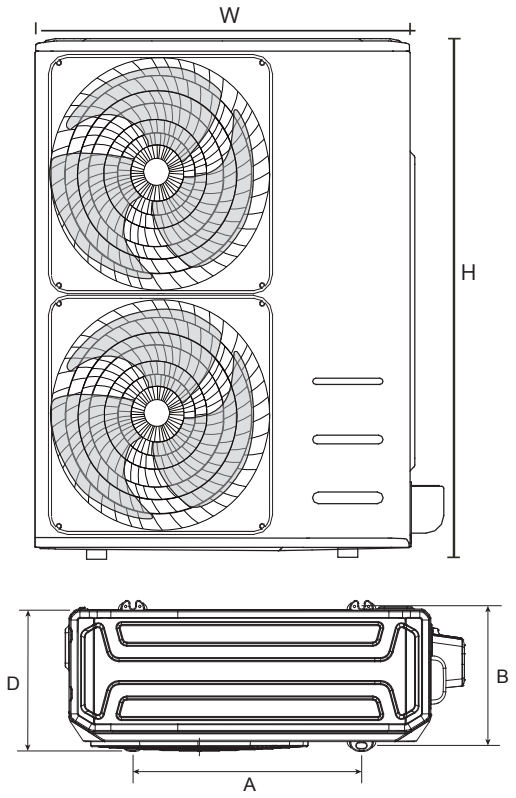


Fig. 9.3

Outdoor Unit Dimentsion (mm)			Mounting Dimentsion (mm)	
W	H	D	A	B
952	1333	415	634	404
900	1170	350	590	378

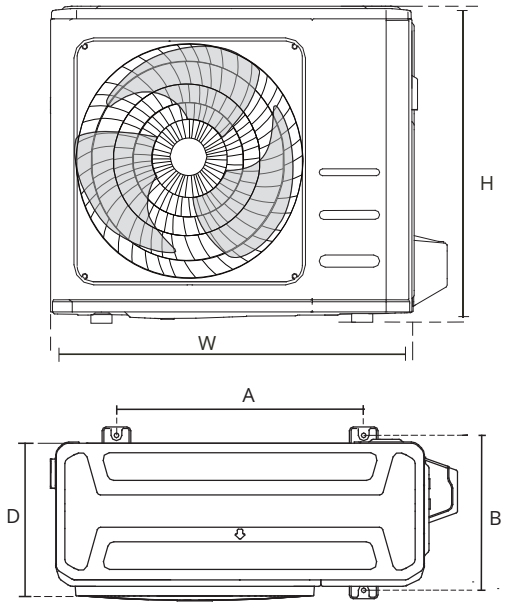


Fig. 9.4

Outdoor Unit Dimentsion (mm)			Mounting Dimentsion (mm)	
W	H	D	A	B
681	434	285	460	292
700	550	275	450	260
770	555	300	487	298
800	554	333	514	340
845	702	363	540	350
946	810	420	673	403

NOTE: The minimum distance between the outdoor unit and walls described in the installation guide does not apply to airtight rooms. Be sure to keep the unit unobstructed in at least two of the three directions (M, N, P) (See Fig. 9.5)

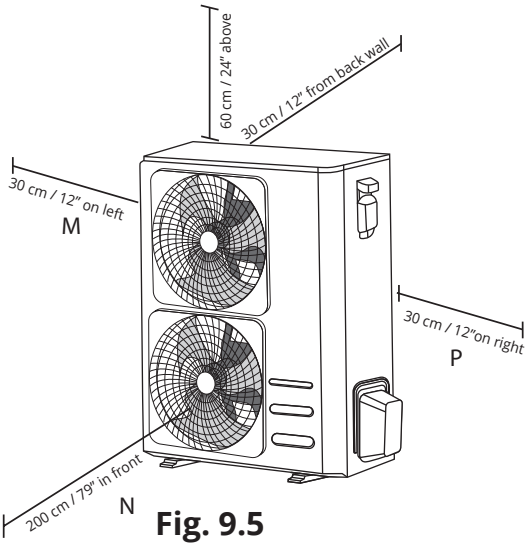


Fig. 9.5

Rows of series installation

The relations between H, A and L are as follows.

	L	A
L ≤ H	L ≤ 1/2H	25 cm / 9.8" or more
	1/2H < L ≤ H	30 cm / 11.8" or more
L > H	Can not be installed	

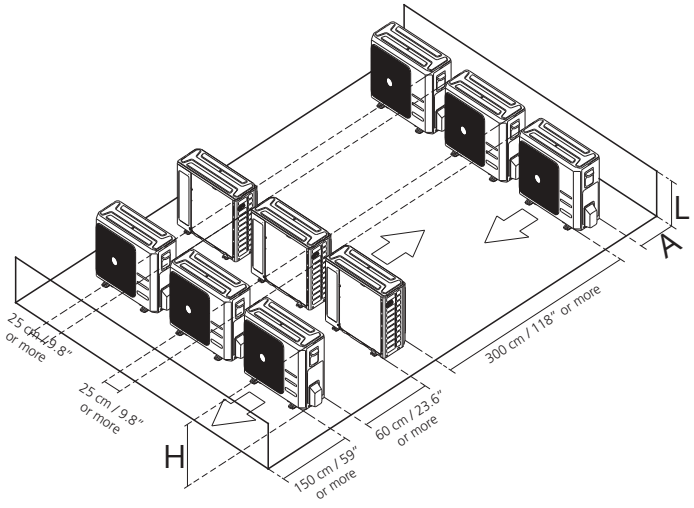


Fig. 9.6

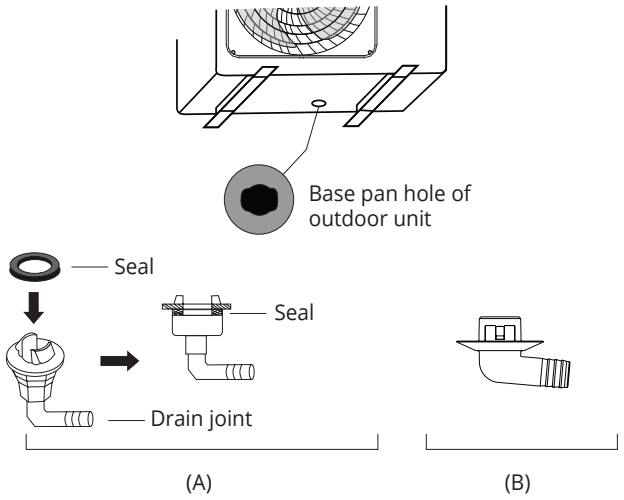


Fig. 9.7

Drain Joint Installation

If the drain joint comes with a rubber seal (see Fig. 9.7 - A), do the following:

1. Fit the rubber seal on the end of the drain joint that will connect to the outdoor unit.
2. Insert the drain joint into the hole in the base pan of the unit.
3. Rotate the drain joint 90° until it clicks in place facing the front of the unit.
4. Connect a drain hose extension (not included) to the drain joint to redirect water from the unit during heating mode.

If the drain joint doesn't come with a rubber seal (see Fig. 9.7 - B), do the following:

1. Insert the drain joint into the hole in the base pan of the unit. The drain joint will click in place.
2. Connect a drain hose extension (not included) to the drain joint to redirect water from the unit during heating mode.

NOTE: Make sure the water drains to a safe location where it will not cause water damage or a slipping hazard.

Notes On Drilling Hole In Wall

You must drill a hole in the wall for the refrigerant piping, and the signal cable that will connect the indoor and outdoor units.

1. Determine the location of the wall hole based on the location of the outdoor unit.
2. Using a 65-mm (2.5") core drill, drill a hole in the wall.

   NOTE: When drilling the wall hole, make sure to avoid wires, plumbing, and other sensitive components.

3. Place the protective wall cuff in the hole. This protects the edges of the hole and will help seal it when you finish the installation process.

Drainpipe Installation

10

The drainpipe is used to drain water from the unit. Improper installation may cause unit and property damage.

⚠ CAUTION

- Insulate all piping to prevent condensation, which could lead to water damage.
- If the drainpipe is bent or installed incorrectly, water may leak and cause a malfunction of the water- level switch.
- In HEAT mode, the outdoor unit will discharge water. Ensure that the drain hose is placed in an appropriate area to avoid water damage and slippage due to frozen drain water.
- **DO NOT**pull the drainpipe forcefully as this could cause it to disconnect.

NOTE ON PURCHASING PIPES

This installation requires a polyethylene tube (outside diameter = 3.7-3.9cm, inside diameter = 3.2cm), which can be obtained at your local hardware store or from your dealer.

Indoor Drainpipe Installation

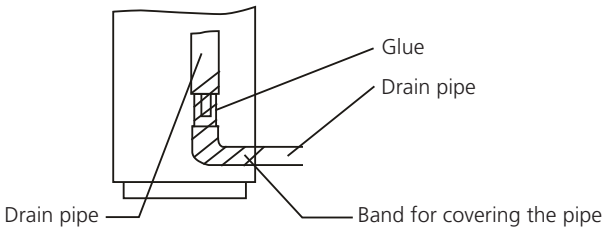


Fig. 10.1

1. Make sure the drain pipe is connected to the outdoor side downward.
2. The hard polyvinyl chloride(PVC)plastic pipe (external diameter 26 mm) sold in the market is suitable for the attached soft drain pipe.
3. Please connect the Soft Drain Pipe with the Drain Pipe, then fix it with band; if you have to connect the Drain Pipe indoors, to avoid condensing caused by air intake, you must cover the pipe with heat-insulation material (polyethylene with Specific Gravity of 0.03, at least 9 mm in thickness), and use Glue Band to fix it.
4. After the Drain Pipe has been connected, please check if the water drains out of the pipe efficiently and has no leakage.
5. Refrigerant Pipe and Drain Pipe should be heat-insulated to avoid condensing and water-dropping later on.
6. Using a 65-mm (2.5") core drill, drill a hole in the wall. Make sure that the hole is drilled at a slight downward angle, so that the outdoor end of the hole is lower than the indoor end by about 1cm (0.4"). This will ensure proper water drainage (See Fig. 10.2). Place the protective wall cuff in the hole. This protects the edges of the hole and will help seal it when you finish the installation process.

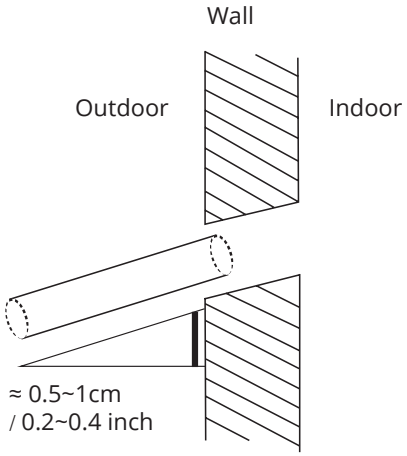


Fig. 10.2

NOTE: When drilling the wall hole, make sure to avoid wires, plumbing, and other sensitive components.

7. Pass the drain hose through the wall hole. Make sure the water drains to a safe location where it will not cause water damage or a slipping hazard.

NOTE: The drainpipe outlet should be at least 5cm (1.9") above the ground. If it touches the ground, the unit may become blocked and malfunction. If you discharge the water directly into a sewer, make sure that the drain has a U or S pipe to catch odors that might otherwise come back into the house.

Refrigerant Piping Connection

11

Safety Precautions

⚠ WARNING

- All field piping must be completed by a licensed technician and must comply with the local and national regulations.
- When the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration in the room from exceeding the safety limit in the event of refrigerant leakage. If the refrigerant leaks and its concentration exceeds its proper limit, hazards due to lack of oxygen may result.
- When installing the refrigeration system, ensure that air, dust, moisture or foreign substances do not enter the refrigerant circuit. Contamination in the system may cause poor operating capacity, high pressure in the refrigeration cycle, explosion or injury.
- Ventilate the area immediately if there is refrigerant leakage during the installation. Leaked refrigerant gas is both toxic and flammable. Ensure there is no refrigerant leakage after completing the installation work.

Refrigerant Piping Connection Instructions

⚠ CAUTION

- The branching pipe must be installed horizontally. An angle of more than 10° may cause malfunction.
- **DO NOT** install the connecting pipe until both indoor and outdoor units have been installed.
- Insulate both the gas and liquid piping to prevent water leakage.

Step1: Cut pipes

When preparing refrigerant pipes, take extra care to cut and flare them properly. This will ensure efficient operation and minimize the need for future maintenance.

1. Measure the distance between the indoor and outdoor units.
2. Using a pipe cutter, cut the pipe a little longer than the measured distance.

⚠ CAUTION

DO NOT deform pipe while cutting. Be extra careful not to damage, dent, or deform the pipe while cutting. This will drastically reduce the heating efficiency of the unit.

1. Make sure that the pipe is cut at a perfect 90° angle. Refer to Fig. 7.1 for examples of bad cuts

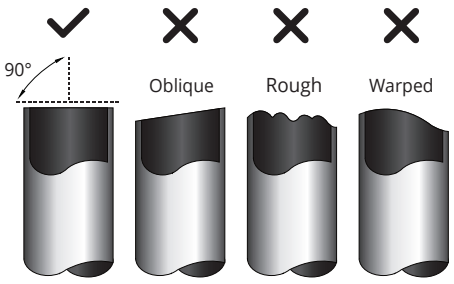


Fig. 11.1

Step 2: Remove burrs.

Burrs can affect the air-tight seal of refrigerant piping connection. They must be completely removed.

1. Hold the pipe at a downward angle to prevent burrs from falling into the pipe.
2. Using a reamer or deburring tool, remove all burrs from the cut section of the pipe.

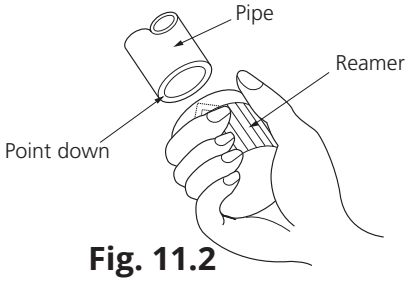


Fig. 11.2

Step 3: Flare pipe ends

Proper flaring is essential to achieve an airtight seal.

1. After removing burrs from cut pipe, seal the ends with PVC tape to prevent foreign materials from entering the pipe.
2. Sheath the pipe with insulating material.
3. Place flare nuts on both ends of pipe. Make sure they are facing in the right direction, because you can't put them on or change their direction after flaring. See Fig. 11.3

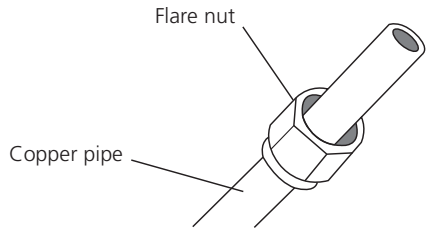


Fig. 11.3

4. Remove PVC tape from ends of pipe when ready to perform flaring work.
5. Clamp flare form on the end of the pipe. The end of the pipe must extend beyond the flare form.

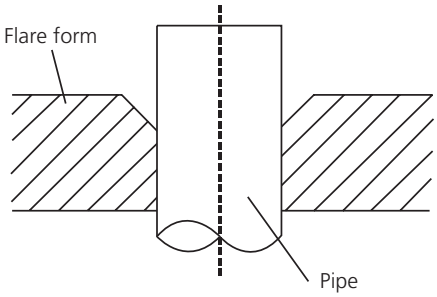


Fig. 11.4

6. Place flaring tool onto the form.
7. Turn the handle of the flaring tool clockwise until the pipe is fully flared. Flare the pipe in accordance with the dimensions shown in table 11.1.

Table 11.1: PIPING EXTENSION BEYOND FLARE FORM

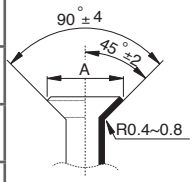
Pipe gauge	Tightening torque	Flare dimension (A) (Unit: mm/Inch)		Flare shape
		Min.	Max.	
Ø 6.4	18-20 N.m (183-204 kgf.cm)	8.4/0.33	8.7/0.34	
Ø 9.5	25-26 N.m (255-265 kgf.cm)	13.2/0.52	13.5/0.53	
Ø 12.7	35-36 N.m (357-367 kgf.cm)	16.2/0.64	16.5/0.65	
Ø 15.9	45-47 N.m (459-480 kgf.cm)	19.2/0.76	19.7/0.78	
Ø 19.1	65-67 N.m (663-683 kgf.cm)	23.2/0.91	23.7/0.93	
Ø 22	75-85N.m (765-867 kgf.cm)	26.4/1.04	26.9/1.06	

Fig. 11.5

8. Remove the flaring tool and flare form, then inspect the end of the pipe for cracks and even flaring.

Step 4: Connect pipes

Connect the copper pipes to the indoor unit first, then connect it to the outdoor unit. You should first connect the low-pressure pipe, then the high-pressure pipe.

1. When connecting the flare nuts, apply a thin coat of refrigeration oil to the flared ends of the pipes.
2. Align the center of the two pipes that you will connect.

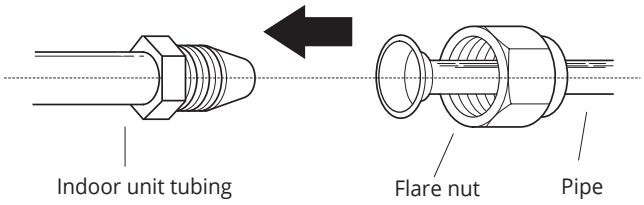


Fig. 11.6

3. Tighten the flare nut as tightly as possible by hand.
4. Using a spanner, grip the nut on the unit tubing.
5. While firmly gripping the nut, use a torque wrench to tighten the flare nut according to the torque values in table 11.1.

NOTE: Use both a spanner and a torque wrench when connecting or disconnecting pipes to/from the unit.

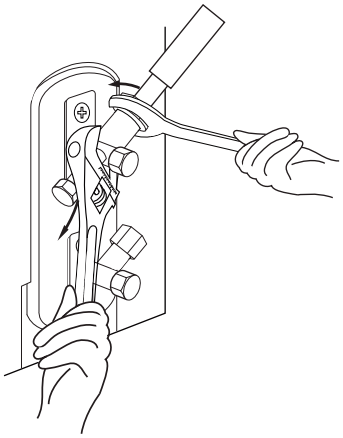


Fig. 11.7

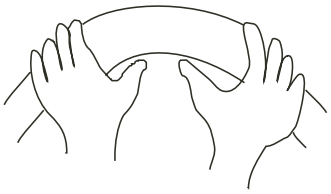
⚠ CAUTION

- Ensure to wrap insulation around the piping. Direct contact with the bare piping may result in burns or frostbite.
- Make sure the pipe is properly connected. Over tightening may damage the bell mouth and under tightening may lead to leakage.

NOTES ON MINIMUM BEND RADIUS

Carefully bend the tubing in the middle according to the diagram below. **DO NOT** bend the tubing more than 90° or more than 3 times.

Bend the pipe with thumb



min-radius 10cm (3.9")

Fig. 11.8

6. After connecting the copper pipes to the indoor unit, wrap the power cable, signal cable and the piping together with binding tape.

NOTE: DO NOT intertwine signal cable with other wires. While bundling these items together, do not intertwine or cross the signal cable with any other wiring.

7. Thread this pipeline through the wall and connect it to the outdoor unit.
8. Insulate all the piping, including the valves of the outdoor unit.
9. Open the stop valves of the outdoor unit to start the flow of the refrigerant between the indoor and outdoor unit.

⚠ CAUTION

Check to make sure there is no refrigerant leak after completing the installation work. If there is a refrigerant leak, ventilate the area immediately and evacuate the system (refer to the Air Evacuation section of this manual).

Wiring

12

Safety Precautions

⚠ WARNING

- Be sure to disconnect the power supply before working on the unit.
- All electrical wiring must be done according to local and national regulations.
- Electrical wiring must be done by a qualified technician. Improper connections may cause electrical malfunction, injury and fire.
- An independent circuit and single outlet must be used for this unit. **DO NOT** plug another appliance or charger into the same outlet.If the electrical circuit capacity is not enough or there is a defect in the electrical work, it can lead to shock, fire, unit and property damage.
- Connect the power cable to the terminals and fasten it with a clamp. An insecure connection may cause fire.
- Make sure that all wiring is done correctly and the control board cover is properly installed. Failure to do so can cause overheating at the connection points, fire, and electrical shock.
- Ensure that main supply connection is made through a switch that disconnects all poles, with contact gap of a least 3mm (0.118").
- **DO NOT** modify the length of the power cord or use an extension cord.

⚠ CAUTION

- Connect the outdoor wires before connecting the indoor wires.
- Make sure you ground the unit. The grounding wire should be away from gas pipes, water pipes, lightning rods, telephone or other grounding wires. Improper grounding may cause electrical shock.
- **DO NOT**connect the unit with the power source until all wiring and piping is completed.
- Make sure that you do not cross your electrical wiring with your signal wiring, as this can cause distortion and interference.

Follow these instructions to prevent distortion when the compressor starts:

- The unit must be connected to the main outlet. Normally, the power supply must have a low output impedance of 32 ohms.
- No other equipment should be connected to the same power circuit.
- The unit's power information can be found on the rating sticker on the product.

TAKE NOTE OF FUSE SPECIFICATIONS

The air conditioner's circuit board(PCB) is designed with a fuse to provide overcurrent protection. The specifications of the fuse are printed on the circuit board, such as:
Indoor unit: T5A/250VAC, T10A/250VAC. (applicable for unit adopts R32 or R290 refrigerant only)
Outdoor unit: T20A/250VAC(for <24000Btu/h unit), T30A/250VAC(for >24000Btu/h unit)

Outdoor Unit Wiring

⚠ WARNING

Before performing any electrical or wiring work, turn off the main power to the system.

1. Prepare the cable for connection
   a. You must first choose the right cable size before preparing it for connection. Be sure to use H07RN-F cables.

Table 12.1: Minimum Cross-Sectional Area of Power and Signal Cables in North America

Rated Current of Appliance (A)	AWG
≤ 7	18
7 - 13	16
13 - 18	14
18 - 25	12
25 - 30	10

Table 12.2: Other World Regions

Rated Current of Appliance (A)	Nominal Cross-Sectional Area (mm²)
≤ 6	0.75
6 - 10	1
10 - 16	1.5
16 - 25	2.5
25- 32	4
32 - 45	6

b. Using wire strippers, strip the rubber jacket from both ends of the signal cable to reveal approximately 15cm (5.9") of wire.
c. Strip the insulation from the ends.
d. Using a wire crimper, crimp u-lugs on the ends.

NOTE: When connecting the wires, strictly follow the wiring diagram found inside the electrical box cover.

2. Remove the electric cover of the outdoor unit. (See Fig. 12.1)

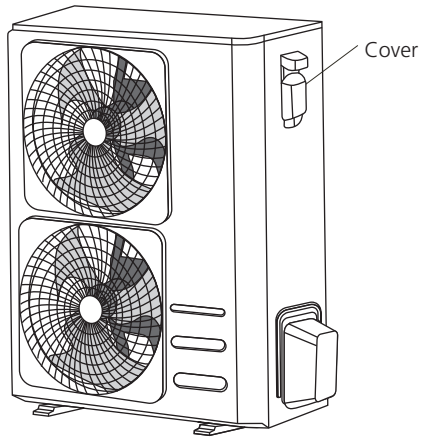


Fig. 12.1

3. Connect the u-lugs to the terminals
   Match the wire colors/labels with the labels on the terminal block, Firmly screw the u-lug of each wire to its corresponding terminal.
4. Clamp down the cable with the cable clamp.
5. Insulate unused wires with electrical tape. Keep them away from any electrical or metal parts.
6. Reinstall the cover of the electric control box.

Indoor Unit Wiring

1. Prepare the cable for connection
   a. Using wire strippers, strip the rubber jacket from both ends of the signal cable to reveal about 15cm (5.9") of the wire.
   b. Strip the insulation from the ends of the wires.
   c. Using a wire crimper, crimp the u-lugs to the ends of the wires.
2. Undo the screw on the cover of the electric control box and remove the cover.
3. Connect the u-lugs to the terminals.
   Match the wire colors/labels with the labels on the terminal block, Firmly screw the u-lug of each wire to its corresponding terminal. Refer to the Serial Number and Wiring Diagram located on the cover of the electric control box.

⚠ CAUTION

- While connecting the wires, please strictly follow the wiring diagram.
- The refrigerant circuit can become very hot. Keep the interconnection cable away from the copper tube.

4. Clamp down the cable with the cable clamp. The cable must not be loose or pull on the u-lugs.
5. Reattach the electric box cover.

Air Evacuation

13

Safety Precautions

⚠ CAUTION

- Use a vacuum pump with a gauge reading lower than -0.1MPa and an air discharge capacity above 40L/min.
- The outdoor unit does not need vacuuming. **DO NOT** open the outdoor unit's gas and liquid stop valves.
- Ensure that the Compound Meter reads -0.1MPa or below after 2 hours. If after three hours of operation and the gauge reading is still above -0.1MPa, check if there is a gas leak or water inside the pipe. If there is no leakage, perform another evacuation for 1 or 2 hours.
- **DO NOT** use refrigerant gas to evacuate the system.

Evacuation Instructions

Before using manifold gauge and vacuum pump, read their operation manuals to familiarize yourself with how to use them properly.

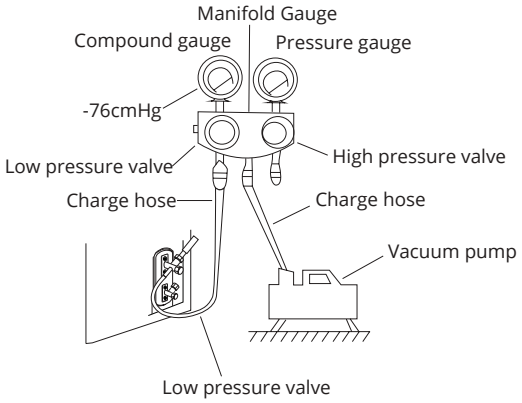


Fig. 13.1

1. Connect the charge hose of the manifold gauge to service port on the outdoor unit's low pressure valve.
2. Connect another charge hose from the manifold gauge to the vacuum pump.
3. Open the Low Pressure side of the manifold gauge.Keep the High Pressure side closed.
4. Turn on the vacuum pump to evacuate the system.
5. Run the vacuum for at least 15 minutes, or until the Compound Meter reads -76cmHG (-1x105Pa).
6. Close the Low Pressure side of the manifold gauge, and turn off the vacuum pump.
7. Wait for 5 minutes, then check that there has been no change in system pressure.

NOTE: If there is no change in system pressure, unscrew the cap from the packed valve (high pressure valve). If there is a change in system pressure, there may be a gas leak.

8. Insert hexagonal wrench into the packed valve (high pressure valve) and open the valve by turning the wrench in a 1/4 counterclockwise turn. Listen for gas to exit the system, then close the valve after 5 seconds.

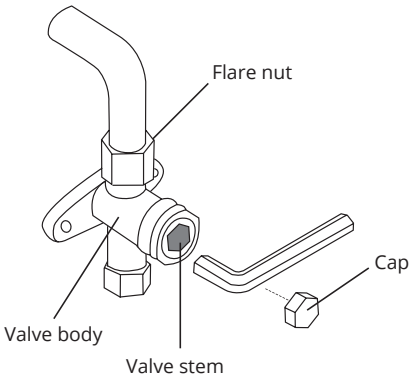


Fig. 13.2

9. Watch the Pressure Gauge for one minute to make sure that there is no change in pressure. The Pressure Gauge should read slightly higher than atmospheric pressure.
10. Remove the charge hose from the service port.
11. Using hexagonal wrench, fully open both the high pressure and low pressure valves.

OPEN VALVE STEMS GENTLY

When opening valve stems, turn the hexagonal wrench until it hits against the stopper. **DO NOT** try to force the valve to open further.

12. Tighten valve caps by hand, then tighten it using the proper tool.

Note On Adding Refrigerant

⚠ CAUTION

- Refrigerant charging must be performed after wiring, vacuuming, and the leak testing.
- **DO NOT** exceed the maximum allowable quantity of refrigerant or overcharge the system. Doing so can damage the unit or impact it's functioning.
- Charging with unsuitable substances may cause explosions or accidents. Ensure that the appropriate refrigerant is used.
- Refrigerant containers must be opened slowly. Always use protective gear when charging the system.
- **DO NOT** mix refrigerants types.
- For the R290 or R32 refrigerant model, make sure the condtions within the area have been made safe by control of flammable material when the refrigerant added into air conditioner.

Some systems require additional charging depending on pipe lengths. The standard pipe length varies according to local regulations. For example, in North America, the standard pipe length is 7.5m (25') In other areas, the standard pipe length is 5m (16'). The additional refrigerant to be charged can be calculated using the following formula:

	Liquid Side Diameter		
	ϕ6.35(1/4")	ϕ9.52(3/8")	ϕ12.7(1/2")
R22 (orifice tube in the indoor unit):	(Total pipe length - standard pipe length)x 30g (0.32oZ)/m(ft)	(Total pipe length - standard pipe length)x 65g(0.69oZ)/m(ft)	(Total pipe length - standard pipe length)x 115g(1.23oZ)/m(ft)
R22 (orifice tube in the outdoor unit):	(Total pipe length - standard pipe length) x15g(0.16oZ)/m(ft)	(Total pipe length - standard pipe length) x30(0.32oZ)/m(ft)	(Total pipe length - standard pipe length) x60g(0.64oZ)/m(ft)
R410A: (orifice tube in the indoor unit):	(Total pipe length - standard pipe length) x30g(0.32oZ)/m(ft)	(Total pipe length - standard pipe length) x65g(0.69oZ)/m(ft)	(Total pipe length - standard pipe length) x115g(1.23oZ)/m(ft)
R410A: (orifice tube in the outdoor unit):	(Total pipe length - standard pipe length) x15g(0.16oZ)/m(ft)	(Total pipe length - standard pipe length) x30g(0.32oZ)/m(ft)	(Total pipe length - standard pipe length) x65g(0.69oZ)/m(ft)
R32 :	(Total pipe length - standard pipe length)x 12g(0.13oZ)/m(ft)	(Total pipe length - standard pipe length)x 24g(0.26oZ)/m(ft)	(Total pipe length - standard pipe length)x 40g(0.42oZ)/m(ft)

Test Run

14

Before Test Run

A test run must be performed after the entire system has been completely installed. Confirm the following points before performing the test:

a) The indoor and outdoor units are properly installed.
b) Piping and wiring are properly connected.
c) Ensure that there are no obstacles near the inlet and outlet of the unit that might cause poor performance or product malfunction.
d) The refrigeration system does not leak.
e) The drainage system is unimpeded and draining to a safe location.
f) The heating insulation is properly installed.
g) The grounding wires are properly connected.
h) The length of the piping and the added refrigerant stow capacity have been recorded.
i) The power voltage is the correct voltage for the air conditioner.

⚠ CAUTION

Failure to perform the test run may result in unit damage, property damage or personal injury.

Test Run Instructions

1. Open both the liquid and gas stop valves.
2. Turn on the main power switch and allow the unit to warm up.
3. Set the air conditioner to COOL mode.
4. For the Indoor Unit
   a. Ensure the remote control and its buttons work properly.
   b. Ensure the louvers move properly and can be changed using the remote control.
   c. Double check to see if the room temperature is being registered correctly.
   d. Ensure the indicators on the remote control and the display panel on the indoor unit work properly.
   e. Ensure the manual buttons on the indoor unit works properly.
   f. Check to see that the drainage system is unimpeded and draining smoothly.
   g. Ensure there is no vibration or abnormal noise during operation.
5. For the Outdoor Unit
   a. Check to see if the refrigeration system is leaking.
   b. Make sure there is no vibration or abnormal noise during operation.
   c. Ensure the wind, noise, and water generated by the unit do not disturb your neighbors or pose a safety hazard.
6. Drainage Test
   a. Ensure the drainpipe flows smoothly. New buildings should perform this test before finishing the ceiling.
   b. Remove the test cover. Add 2,000ml of water to the tank through the attached tube.
   c. Turn on the main power switch and run the air conditioner in COOL mode.
   d. Listen to the sound of the drain pump to see if it makes any unusual noises.
   e. Check to see that the water is discharged. It may take up to one minute before the unit begins to drain depending on the drainpipe.
   f. Make sure that there are no leaks in any of the piping.
   g. Stop the air conditioner. Turn off the main power switch and reinstall the test cover.

NOTE: If the unit malfunctions or does not operate according to your expectations, please refer to the Troubleshooting section of the Owner's Manual before calling customer service.

European Disposal Guidelines

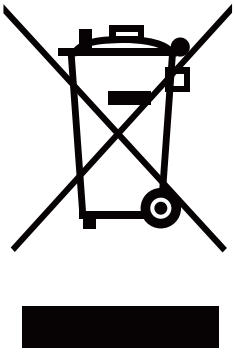
15

Users in European Countries may be required to properly dispose of this unit. This appliance contains refrigerant and other potentially hazardous materials. When disposing of this appliance, the law requires special collection and treatment. **DO NOT** dispose of this product as household waste or unsorted municipal waste.

When disposing of this appliance, you have the following options:

- Dispose of the appliance at designated municipal electronic waste collection facility.
- When buying a new appliance, the retailer will take back the old appliance free of charge.
- The manufacturer will also take back the old appliance free of charge.
- Sell the appliance to certified scrap metal dealers.

NOTE: Disposing of this appliance in the forest or other natural surroundings endangers your health and is bad for the environment. Hazardous substances may leak into the ground water and enter the food chain.



Information Servicing

(Required for the units adopt R32/R290 Refrigerant only)

16

1. Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

2. Work procedure

Works shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

3. General work area

All mintenance staff and others working in the local area shall be instructed on the nature of work being carried out. work in confined sapces shall be avoided. The area around the work space shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

4. Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. no sparking, adequately sealed or intrinsically safe.

5. Presence of fire extinguisher

If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry power or CO2 fire extinguisher adjacent to the charging area.

6. No ignition sources

No person carrying out work in relation to a refrigeration system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. NO SMOKING signs shall be displayed.

7. Ventilated area

Ensure that the area is in the open or that it it adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

8. Checks to the refrigeration equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer s maintenance and service guidelines shall be followed. If in doubt consult the manufacturer s technical department for assistance. The following checks shall be applied to installations using flammable refrigerants:

- the charge size is in accordance with the room size within which the refrigerant containing parts are installed;
- the ventilation machinery and outlets are operating adequately and are not obstructed;
- if an indirect refrigerating circuit is being used, the secondary circuits shall be checked for the presence of refrigerant; marking to the equipment continues to be visible and legible.
- marking and signs that are illegible shall be corrected;
- refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless
- the components are constructed of materials which are inherently resistant to being
- corroded or are suitably protected against being so corroded.

9. Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, and adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

- that capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking
- that there no live electrical components and wiring are exposed while charging, recovering or purging the system;
- that there is continuity of earth bonding.

10. Repairs to sealed components

10.1 During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

10.2 Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected.

This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.

- Ensure that apparatus is mounted securely.
- Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer' s specifications.

NOTE: The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Instrinsically safe components do not have to be isolated prior to working on them.

11. Repair to intrinsically safe components

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinscially safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

12. Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

13. Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch(or any other detector using a naked flame) shall not be used.

14. Leak detection methods

The following leak detection methods are deemed acceptable for systems containing flammable refrigerants. Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration.(Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25% maximum) is confirmed. Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected ,all naked flames shall be removed or extinguished. If a leakage of refrigernat is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated(by means of shut off valves) in a part of the system remote from the leak . Oxygen free nitrogen(OFN) shall then be purged through the system both before and during the brazing process.

15. Removal and evacuation

When breaking into the refrigerant circuit to make repairs of for any other purpose conventional procedures shall be used, However, it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:

- remove refrigerant;
- purge the circuit with inert gas;
- evacuate;
- purge again with inert gas;
- open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders. The system shall be flushed with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task.

Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system.

When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place.

Ensure that the outlet for the vacuum pump is not closed to any ignition sources and there is ventilation available.

16. Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed:

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
- Cylinders shall be kept upright.
- Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete(if not already).
- Extreme care shall be taken not to overfill the refrigeration system.
- Prior to recharging the system it shall be pressure tested with OFN. The system shall be leak tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

17. Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken.

In case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.

a) Become familiar with the equipment and its operation.

b) Isolate system electrically

c) Before attempting the procedure ensure that:

- mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- all personal protetive equipment is available and being used correctly;
- the recovery process is supervised at all times by a competent person;
- recovery equipment and cylinders conform to the appropriate standards.

d) Pump down refrigerant system, if possible.

e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.

f) Make sure that cylinder is situated on the scales before recovery takes place.

g) Start the recovery machine and operate in accordance with manufacturer' s instructions.

h) Do not overfill cylinders. (No more than 80% volume liquid charge).

i) Do not exceed the maximum working pressure of the cylinder, even temporarily.

j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.

k) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

18. Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

19. Recovery

- When removing refrigerant from a system, either for service or decommissioning, it is recommended good practice that all refrigerants are removed safely.
- When tranferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct numbers of cylinders for holding the total system charge are available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant(i.e special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order.
- Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
- The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants. In addition, a set of calibrated weighing scales shall be available
- and in good working order.
- Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.
- The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant Waste Transfer Note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.
- If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to retruning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

20. Transportation, marking and storage for units

1. Transport of equipment containing flammable refrigerants
   Compliance with the transport regulations
2. Marking of equipment using signs
   Compliance with local regulations
3. Disposal of equipment using flammable refrigerants
   Compliance with national regulations
4. Storage of equipment/appliances
   The storage of equipment should be in accordance with the manufacturer's instructions.
5. Storage of packed (unsold) equipment
   Storage package protection should be constructed such that mechanical damage to the equipment inside the package will not cause a leak of the refrigerant charge.
   The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.

All the pictures in the manual are for explanatory purposes only. The actual shape of the unit you purchased may be slightly different, but the operations and functions are the same.
The company may not be held responsible for any misprinted information. The design and the specifications of the product for reasons, such as product improvement, are subject to change without any prior notice.
Please consult with the manufacturer at +30 211 300 3300 or with the Sales agency for further details. Any future updates to the manual will be uploaded to the service website, and it is advised to always check for the latest version.

Scan here to download the latest version of this manual.
www.inventorairconditioner.com/media-library

Activate your Warranty

- Visit our web site and activate your warranty via the below link or by scanning the QR code

https://www.inventoairconditioner.com/warranty-inventor

- Fill all the fields as shown below

To activate the warranty card, please fill in the following fields

Owner details

Full Name*

Address*

Postal Code*

Phone Number*

E-mail*

Subscribe to Inventor's Newsletter

Unit details

Unit Type*

Serial Number of the indoor unit*

Serial Number of the outdoor unit*

Date of Purchase*

Invoice Number*

Additional Details

*** Required field**

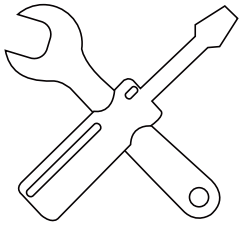
With the current warranty card you accept **the terms and conditions.**

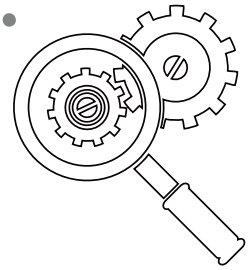
SEND

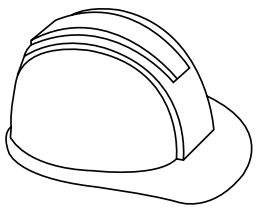
☑ once the warranty submission has been completed a confirmation message will be sent to your email

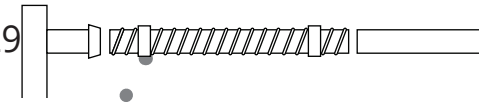
Πίνακας περιεχομένων

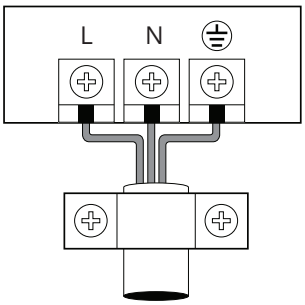
Εγχειρίδιο Χρήστη

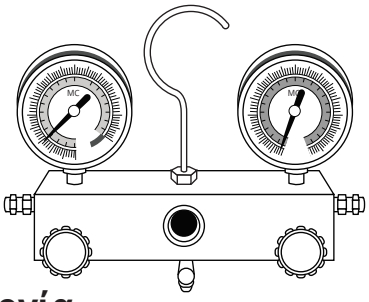












***Προσοχή:* Κίνδυνος πυρκαγιάς**

(ισχύει μόνον για το ψυκτικό μέσο R32/R290)

ΠΡΟΕΙΔΟΠΟΙΗΣΗ: Η παροχή υπηρεσιών εξυπηρέτησης (σέρβις) πραγματοποιείται μόνον σύμφωνα με τις συστάσεις του κατασκευαστή του εξοπλισμού. Εργασίες συντήρησης και επισκευής για τις οποίες απαιτείται συμμετοχή και άλλου ειδικευμένου προσωπικού θα πραγματοποιούνται υπό την επίβλεψη προσώπου εκπαιδευμένου στη χρήση εύφλεκτων ψυκτικών μέσων (η απαίτηση αυτή ισχύει μόνον για τις μονάδες που χρησιμοποιούν το ψυκτικό μέσο R32/R290).

Οδηγίες Ασφαλείας

1

Σας ευχαριστούμε που αγοράσατε αυτό το σύστημα κλιματισμού. Το εγχειρίδιο αυτό θα σας ενημερώσει σχετικά με τη λειτουργία, τη συντήρηση και την επίλυση προβλημάτων του κλιματιστικού σας. Ακολουθήστε τις οδηγίες ώστε να εξασφαλίσετε ότι το κλιματιστικό σας θα λειτουργεί σωστά για μεγάλο χρονικό διάστημα.

Διαβάστε τις Οδηγίες Ασφαλείας Πριν Εγκαταστήσετε το Κλιματιστικό σας

Εσφαλμένη εγκατάσταση λόγω άγνοιας των οδηγιών μπορεί να προκαλέσει σοβαρές βλάβες ή τραυματισμό.

Ο βαθμός σοβαρότητας της ενδεχόμενης βλάβης ή του τραυματισμού διακρίνεται σε δύο κατηγορίες με τη χρήση του όρου **ΠΡΟΕΙΔΟΠΟΙΗΣΗ** ή, αντίστοιχα, του όρου **ΠΡΟΣΟΧΗ**.

ΠΡΟΕΙΔΟΠΟΙΗΣΗ

Η μη τήρηση μιας προειδοποίησης ενδέχεται να έχει θανατηφόρες συνέπειες. Η εγκατάσταση του συστήματος πρέπει να γίνεται σύμφωνα με τους εθνικούς κανονισμούς.

ΠΡΟΣΟΧΗ

Η μη τήρηση ενημέρωσης που σημαίνεται με τον όρο ΠΡΟΣΟΧΗ ενδέχεται να οδηγήσει σε τραυματισμό ή βλάβη/φθορά του εξοπλισμού.

Το σύμβολο αυτό υποδεικνύει ότι απαγορεύεται αυστηρά η ενέργεια αυτή.

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΗ

1. Αναθέστε την εγκατάσταση του παρόντος συστήματος κλιματισμού σε εξουσιοδοτημένο αντιπρόσωπο. Η εσφαλμένη εγκατάσταση ενδέχεται να προκαλέσει διαρροή νερού, ηλεκτροπληξία ή πυρκαγιά.
2. Η εγγύηση δεν σας καλύπτει σε περίπτωση εγκατάστασης του κλιματιστικού από μη επαγγελματία.
3. Σε περίπτωση δυσλειτουργίας (μυρωδιά καμένου) κλείστε τον γενικό διακόπτη και επικοινωνήστε με τον αντιπρόσωπό σας για περαιτέρω οδηγίες ώστε να αποφευχθεί ο κίνδυνος ηλεκτροπληξίας, τραυματισμού ή πυρκαγιάς.
4. ΜΗΝ ΑΦΗΝΕΤΕ την εσωτερική μονάδα ή το τηλεχειριστήριο να βραχούν. Υπάρχει κίνδυνος ηλεκτροπληξίας ή πυρκαγιάς.
5. ΜΗΝ ΤΟΠΟΘΕΤΕΙΤΕ τα δάχτυλά σας, βέργες ή άλλα αντικείμενα στον αεραγωγό εισόδου/εξόδου. Υπάρχει κίνδυνος τραυματισμού καθώς ο ανεμιστήρας περιστρέφεται με μεγάλη ταχύτητα.
6. ΜΗΝ ΧΡΗΣΙΜΟΠΟΙΕΙΤΕ εύφλεκτα σπρέι, όπως για παράδειγμα λακ μαλλιών, βερνίκι ή μπογιά κοντά στη συσκευή. Κίνδυνος πυρκαγιάς ή ανάφλεξης.
7. Η συσκευή πρέπει να αποθηκεύεται προς αποφυγή μηχανικής ζημιάς/φθοράς.
8. Επιβάλλεται συμμόρφωση με τους εθνικούς κανονισμούς περί αερίων.
9. Πριν την εγκατάσταση, διαβάστε προσεκτικά τα μέτρα ασφαλείας.
10. Σε ορισμένα περιβάλλοντα λειτουργίας, όπως κουζίνες και αίθουσες εγκατάστασης εξυπηρετητών, συνιστάται θερμά η χρήση ειδικά σχεδιασμένων συστημάτων κλιματισμού.
11. Οι εργασίες εγκατάστασης, επισκευής και σέρβις του παρόντος συστήματος κλιματισμού πρέπει να πραγματοποιούνται αποκλειστικά και μόνον από εκπαιδευμένους και πιστοποιημένους τεχνικούς.
12. Η μη ορθή εγκατάσταση του κλιματιστικού ενδέχεται να προκαλέσει ηλεκτροπληξία, βραχυκύκλωμα, διαρροές, πυρκαγιά και λοιπές φθορές/ζημίες στον ίδιο τον εξοπλισμό και σε αντικείμενα προσωπικής ιδιοκτησίας. (Στη Βόρειο Αμερική, η εγκατάσταση του εξοπλισμού πρέπει να πραγματοποιείται σύμφωνα με τις απαιτήσεις NEC και CEC και μόνον από εξουσιοδοτημένο προσωπικό.)
13. Τηρείτε αυστηρά τις οδηγίες εγκατάστασης του παρόντος εγχειριδίου.
14. Πριν εγκαταστήσετε το σύστημα κλιματισμού, λάβετε υπ΄ όψιν σας φαινόμενα όπως ισχυρούς ανέμους, τυφώνες και σεισμούς που ενδέχεται να επηρεάσουν τη μονάδα και τοποθετήστε την κατάλληλα. Η

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΗ

άγνοια της προειδοποίησης αυτής δύναται να οδηγήσει σε πτώση του εξοπλισμού.

15. Η χρήση της παρούσας συσκευής ενδείκνυται για παιδιά άνω των οκτώ (8) ετών, ΑΜΕΑ, άτομα με νοητική υστέρηση και απουσία εμπειρίας ή γνώσεων εφόσον έχουν καθοδηγηθεί για την ασφαλή χρήση της συσκευής ή βρίσκονται υπό επίβλεψη και εφόσον κατανοούν τους κινδύνους που ενέχει η χρήση της. Η συσκευή αυτή δεν είναι παιχνίδι.

Απαγορεύεται ο καθαρισμός και η συντήρηση χρήστη της συσκευής από ανηλίκους χωρίς επίβλεψη.

16. Μην χρησιμοποιείτε μηχανικά ή άλλα μέσα για να επιταχύνετε τη διαδικασία απόψυξης ή καθαρισμού εκτός αυτών που συνιστώνται από τον κατασκευαστή.
17. Η συσκευή αυτή δεν πρέπει να χρησιμοποιείται από άτομα (συμπεριλαμβανομένων και παιδιών) με περιορισμένες φυσικές, αισθητηριακές ή νοητικές ικανότητες ή έλλειψη εμπειρίας και γνώσεων παρά μόνον μετά από κατάλληλη επίβλεψη και καθοδήγηση σχετικά με τη χρήση της συσκευής από άτομο υπεύθυνο για την ασφάλειά τους.
18. Η συσκευή αυτή δεν είναι παιχνίδι. Επιβλέπετε τα παιδιά σας ώστε να μην παίζουν με αυτήν.

(Απαίτηση Προτύπου IEC)

19. Προς αποφυγή κινδύνου, σε περίπτωση φθοράς του καλωδίου τροφοδοσίας, η αντικατάστασή του πρέπει να γίνεται από τον κατασκευαστή, τον αντιπρόσωπο σέρβις ή άλλο κατάλληλα εξουσιοδοτημένο πρόσωπο.
20. Η εγκατάσταση του συστήματος πρέπει να γίνεται σύμφωνα με τους εθνικούς κανονισμούς καλωδίωσης.
21. Συνιστάται η ενσωμάτωση συσκευής αποσύνδεσης όλων των πόλων με ελάχιστο διάκενο 3mm από όλους τους πόλους (για ρεύμα διαρροής που ενδέχεται να υπερβαίνει τα 10mA, ενώ η συσκευή προστασίας ρεύματος διαρροής (RCD) πρέπει να έχει ονομαστικό ρεύμα λειτουργίας διαρροής που να μην υπερβαίνει τα 30mA) και κατάλληλου διακόπτη στη σταθερή συρμάτωση σύμφωνα με τους κανονισμούς καλωδίωσης (συρμάτωσης).
22. Ο διακόπτης της συσκευής και η ενσωματωμένη συσκευή αποσύνδεσης όλων των πόλων πρέπει να ενσωματώνονται στη σταθερή συρμάτωση σύμφωνα με τους ισχύοντες κανονισμούς καλωδίωσης (συρμάτωσης).
23. Τα πρόσωπα που πραγματοποιούν εργασίες ή ανοίγουν ψυκτικά κυκλώματα πρέπει να διαθέτουν έγκυρο πιστοποιητικό βιομηχανικά αναγνωρισμένου φορέα αξιολόγησης με το οποίο αναγνωρίζεται η ικανότητά τους να χειρίζονται ψυκτικά μέσα με ασφάλεια σύμφωνα με τα πρότυπα αξιολόγησης που ισχύουν στον επαγγελματικό τους τομέα.
24. Η παροχή υπηρεσιών εξυπηρέτησης (σέρβις) πραγματοποιείται μόνον σύμφωνα με τις συστάσεις του κατασκευαστή του εξοπλισμού.
25. Εργασίες συντήρησης και επισκευής για τις οποίες απαιτείται συμμετοχή και άλλου ειδικευμένου προσωπικού θα πραγματοποιούνται υπό την επίβλεψη προσώπου εκπαιδευμένου στη χρήση εύφλεκτων ψυκτικών μέσων.
26. Η συσκευή πρέπει να αποθηκεύεται προς αποφυγή μηχανικής ζημιάς/φθοράς.
27. Διατηρείτε τις οπές αερισμού ανοικτές και χωρίς εμπόδια.
28. Μην ανοίγετε το ρεύμα πριν ολοκληρωθούν πλήρως οι εργασίες στο κλιματιστικό σύστημα.
29. Εάν επιθυμείτε να μετακινήσετε ή να επανατοποθετήσετε το κλιματιστικό σας, απευθυνθείτε σε έμπειρους τεχνικούς σέρβις για τις εργασίες αποσύνδεσης και επανεγκατάστασης της συσκευής.
30. Σε ορισμένα περιβάλλοντα λειτουργίας, όπως κουζίνες και αίθουσες εγκατάστασης εξυπηρετητών, κ.λπ. συνιστάται θερμά η χρήση ειδικά σχεδιασμένων συστημάτων κλιματισμού.
31. Η αποσύνδεση του ρευματολήπτη πρέπει να γίνεται με τέτοιο τρόπο ώστε ο χειριστής να είναι σε θέση να ελέγχει από οποιοδήποτε σημείο στο οποίο έχει πρόσβαση ότι ο ρευματολήπτης παραμένει αποσυνδεδεμένος.
32. Σε περίπτωση που αυτό δεν είναι εφικτό λόγω κατασκευής ή τρόπου τοποθέτησης της συσκευής, συνιστάται η χρήση διακόπτη με σύστημα κλειδώματος στη θέση «0».

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΕΙΣ ΠΟΥ ΑΦΟΡΟΥΝ ΤΟΝ ΚΑΘΑΡΙΣΜΟ ΚΑΙ ΤΗ ΣΥΝΤΗΡΗΣΗ

1. Πριν καθαρίσετε τη συσκευή θέστε την εκτός λειτουργίας και αποσυνδέστε τον ρευματολήπτη. Η μη τήρηση της παρούσας προειδοποίησης ενέχει κίνδυνο ηλεκτροπληξίας.

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΕΙΣ ΠΟΥ ΑΦΟΡΟΥΝ ΤΟΝ ΚΑΘΑΡΙΣΜΟ ΚΑΙ ΤΗ ΣΥΝΤΗΡΗΣΗ

2. Μην χρησιμοποιείτε μεγάλες ποσότητες νερού για να καθαρίσετε το κλιματιστικό σας.
3. Μην καθαρίζετε το κλιματιστικό σας με εύφλεκτα καθαριστικά. Η χρήση εύφλεκτων καθαριστικών ενδέχεται προκαλέσει πυρκαγιά ή παραμόρφωση. Πριν καθαρίσετε τη συσκευή θέστε την εκτός λειτουργίας και αποσυνδέστε τον ρευματολήπτη. Η μη τήρηση της παρούσας προειδοποίησης ενέχει κίνδυνο ηλεκτροπληξίας.

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΕΙΣ ΠΟΥ ΑΦΟΡΟΥΝ ΤΟΝ ΗΛΕΚΤΡΙΣΜΟ

1. Χρησιμοποιείτε μόνο καλώδια που συμμορφώνονται με τις προδιαγραφές. Σε περίπτωση φθοράς του καλωδίου, πρέπει να αντικαθίσταται από τον κατασκευαστή ή εξουσιοδοτημένο αντιπρόσωπο σέρβις.
2. Διατηρείτε το καλώδιο τροφοδοσίας καθαρό. Αφαιρείτε σκόνη ή βρωμιά που συσσωρεύεται επάνω ή γύρω από το καλώδιο. Η χρήση βρώμικων καλωδίων ενέχει κίνδυνο πυρκαγιάς ή ηλεκτροπληξίας.
3. Μην αποσυνδέετε τη μονάδα τραβώντας δυνατά το καλώδιο τροφοδοσίας. Κρατήστε σταθερά τον ρευματολήπτη και τραβήξτε τον από τον ρευματοδότη. Το τράβηγμα του καλωδίου ενδέχεται να προκαλέσει φθορά και ενέχει κίνδυνο πυρκαγιάς ή ηλεκτροπληξίας.
4. Μην χρησιμοποιείτε επέκταση καλωδίου ρεύματος, μην τεντώνετε με τα χέρια το καλώδιο για να το προεκτείνετε και μην συνδέετε άλλες συσκευές στον ρευματοδότη που τροφοδοτεί το κλιματιστικό σας. Ανεπαρκείς ηλεκτρικές συνδέσεις, μόνωση και τάση ενδέχεται να προκαλέσουν πυρκαγιά.

ΣΗΜΕΙΩΣΗ: Για κλιματιστικά και αντλίες θερμότητας αέρα-αέρα με ψυκτική ικανότητα που υπερβαίνει τα 12 kW παρακαλούμε συμβουλευτείτε τις τεχνικές πληροφορίες του Παραρτήματος.

⚠ ΠΡΟΣΟΧΗ

⊘ Όσον αφορά τα κλιματιστικά που διαθέτουν βοηθητική ηλεκτρική συσκευή θέρμανσης, μην εγκαθιστάτε τη συσκευή σε απόσταση μικρότερη του ενός (1) μέτρου (τριών ποδιών) από εύφλεκτα υλικά.

⊘ Μην εγκαθιστάτε τη συσκευή σε σημείο όπου είναι πιθανή η έκθεσή της σε διαρροή εύφλεκτων αερίων. Σε περίπτωση συσσώρευσης εύφλεκτων αερίων γύρω από τη συσκευή, ενδέχεται να προκληθεί πυρκαγιά.

⊘ Μην θέτετε το κλιματιστικό σας σε λειτουργία σε υγρά δωμάτια, όπως είναι το λουτρό και το πλυσταριό. Η υπερβολική έκθεση στο νερό μπορεί να προκαλέσει βραχυκύκλωμα στα ηλεκτρικά εξαρτήματα της μονάδας.

1. Το προϊόν πρέπει να γειώνεται κατάλληλα κατά τη στιγμή της εγκατάστασης. Κίνδυνος ηλεκτροπληξίας.
2. Οι σωληνώσεις αποστράγγισης πρέπει να τοποθετούνται σύμφωνα με τις οδηγίες του παρόντος εγχειριδίου. Η ανεπαρκής αποστράγγιση ενέχει κίνδυνο φθοράς στο σπίτι και την περιουσία σας εξαιτίας της συσσώρευσης νερού.
3. ΜΗΝ ΕΡΧΕΣΤΕ ΣΕ ΕΠΑΦΗ με την έξοδο αέρα ενόσω τα πτερύγια του κλιματιστικού βρίσκονται σε κίνηση. Κίνδυνος παγίδευσης των δακτύλων στη μονάδα ή πρόκλησης βλάβης.
4. ΜΗΝ ΕΠΙΘΕΩΡΕΙΤΕ τη μονάδα προσωπικά. Ζητήστε τη βοήθεια εξουσιοδοτημένου αντιπροσώπου.
5. Για να αποφύγετε τη φθορά του προϊόντος, μην χρησιμοποιείτε το κλιματιστικό σας για συντήρηση (αποθήκευση φαγητού, συντήρηση φυτών, ζώων και έργων τέχνης).
6. ΜΗΝ ΑΚΟΥΜΠΑΤΕ τον εναλλάκτη του εξατμιστήρα στο εσωτερικό της μονάδας εσωτερικού χώρου. Ο εναλλάκτης είναι αιχμηρός και ενδέχεται να προκαλέσει τραυματισμό.
7. ΜΗΝ ΛΕΙΤΟΥΡΓΕΙΤΕ το κλιματιστικό με βρεγμένα χέρια. Κίνδυνος ηλεκτροπληξίας.
8. ΜΗΝ ΤΟΠΟΘΕΤΕΙΤΕ αντικείμενα που ενδέχεται να φθαρούν από την υγρασία κάτω από την εσωτερική μονάδα.
9. Σε περίπτωση σχετικής υγρασίας 80% δημιουργείται συμπύκνωση (υγροποίηση).
10. ΜΗΝ ΕΚΘΕΤΕΤΕ συσκευές παραγωγής θερμότητας σε κρύο αέρα και μην τις τοποθετείτε κάτω από την εσωτερική μονάδα.
11. Κίνδυνος ανεπαρκούς έναυσης ή παραμόρφωσης της μονάδας λόγω θερμότητας.
12. Ελέγχετε πάντοτε την εσωτερική μονάδα μετά από μακροχρόνια χρήση για να βεβαιωθείτε ότι δεν έχει φθαρεί ή υποστεί ζημία. Σε περίπτωση φθοράς/βλάβης της εσωτερικής μονάδας υπάρχει κίνδυνος πτώσης και πρόκλησης τραυματισμών.

⚠ ΠΡΟΣΟΧΗ

13. Εάν το κλιματιστικό χρησιμοποιείται σε συνδυασμό με άλλες θερμαντικές συσκευές, φροντίστε να αερίζεται ο χώρος καλά ώστε να αποφεύγεται η έλλειψη οξυγόνου.
14. ΜΗΝ ΣΚΑΡΦΑΛΩΝΕΤΕ και μην τοποθετείτε αντικείμενα πάνω στην εξωτερική μονάδα.
15. ΜΗΝ ΛΕΙΤΟΥΡΓΕΙΤΕ το κλιματιστικό παράλληλα με τη χρήση καπνιστικών εντομοκτόνων. Τα χημικά ενδέχεται να συσσωρευτούν στη μονάδα και να θέσουν και κίνδυνο την υγεία ατόμων υπερευαίσθητων στις χημικές ουσίες.
16. ΜΗΝ ΕΠΙΤΡΕΠΕΤΕ στα παιδιά να παίζουν με το κλιματιστικό.
17. ΜΗΝ ΘΕΤΕΤΕ ΤΟ ΚΛΙΜΑΤΙΣΤΙΚΟ ΣΑΣ ΣΕ ΛΕΙΤΟΥΡΓΙΑ σε υγρά δωμάτια, όπως είναι το λουτρό και το πλυσταριό.
18. Κίνδυνος ηλεκτροπληξίας αλλά και φθοράς του προϊόντος.
19. Η χρήση της παρούσας συσκευής ενδείκνυται για παιδιά άνω των οκτώ (8) ετών, ΑΜΕΑ, άτομα με νοητική υστέρηση και απουσία εμπειρίας ή γνώσεων εφόσον έχουν καθοδηγηθεί για την ασφαλή χρήση της συσκευής ή επιβλέπονται κατά τη χρήση αυτής και εφόσον κατανοούν τους κινδύνους που ενέχει η χρήση της. Η συσκευή αυτή δεν είναι παιχνίδι. Απαγορεύεται ο καθαρισμός και η συντήρηση χρήστη της συσκευής από ανηλίκους χωρίς κατάλληλη επίβλεψη.

⚠ ΜΕΤΡΑ ΠΡΟΦΥΛΑΞΗΣ ΚΑΤΑ ΤΗ ΧΡΗΣΗ ΤΟΥ ΨΥΚΤΙΚΟΥ R32/R290

1. Χώρος εγκατάστασης
   - Ελαχιστοποίηση της εγκατάστασης σωληνώσεων.
   - Προστασία των σωληνώσεων από φυσική φθορά.
   - Συμμόρφωση με τους εθνικούς κανονισμούς περί αερίων.
   - Εξασφάλιση της προσβασιμότητας στις μηχανολογικές συνδέσεις για λόγους συντήρησης.
   - Σε περίπτωση που καθίσταται αναγκαίος ο μηχανικός αερισμός, οι οπές αερισμού πρέπει να παραμένουν ελεύθερες από εμπόδια.
   - Κατά την απόρριψη του προϊόντος, επιβάλλεται η συμμόρφωση με τους εθνικούς κανονισμούς και η κατάλληλη επεξεργασία του.
   - Η συσκευή πρέπει να αποθηκεύεται σε καλά αεριζόμενο χώρο το μέγεθος του οποίου αντιστοιχεί στο εμβαδόν του χώρου τον οποίο η συσκευή είναι προορισμένη να εξυπηρετεί σύμφωνα με τις προδιαγραφές.
   - Χώροι με σωλήνες ψυκτικού μέσου πρέπει να συμμορφώνονται με τους εθνικούς κανονισμούς περί αερίων.
2. Εξυπηρέτηση/Σέρβις
   - Τα πρόσωπα που πραγματοποιούν εργασίες ή ανοίγουν ψυκτικά κυκλώματα πρέπει να διαθέτουν έγκυρο πιστοποιητικό βιομηχανικά αναγνωρισμένου φορέα αξιολόγησης με το οποίο αναγνωρίζεται η ικανότητά τους να χειρίζονται ψυκτικά μέσα με ασφάλεια σύμφωνα με τα πρότυπα αξιολόγησης που ισχύουν στον επαγγελματικό τους τομέα.
   - Η παροχή υπηρεσιών εξυπηρέτησης (σέρβις) πραγματοποιείται μόνον σύμφωνα με τις συστάσεις του κατασκευαστή του εξοπλισμού. Εργασίες συντήρησης και επισκευής για τις οποίες απαιτείται συμμετοχή και άλλου ειδικευμένου προσωπικού θα πραγματοποιούνται υπό την επίβλεψη προσώπου εκπαιδευμένου στη χρήση εύφλεκτων ψυκτικών μέσων.
3. Μην χρησιμοποιείτε μηχανικά ή άλλα μέσα για να επιταχύνετε τη διαδικασία απόψυξης ή καθαρισμού εκτός αυτών που συνιστώνται από τον κατασκευαστή.
4. Η συσκευή πρέπει να αποθηκεύεται σε χώρο από τον οποίο απουσιάζουν πηγές ανάφλεξης συνεχούς λειτουργίας (για παράδειγμα: γυμνές φλόγες, συσκευή που λειτουργεί με αέριο ή ηλεκτρική θερμάστρα).
5. Μην τρυπάτε και μην καίτε τη συσκευή.
6. Λάβετε υπ' όψιν ότι πολλά ψυκτικά μέσα είναι άοσμα.
7. Συνιστάται ιδιαίτερη προσοχή ώστε να αποφεύγεται η είσοδος ξένων ουσιών/σωμάτων (λαδιού, νερού, κ.λπ.) στις σωληνώσεις. Κατά την αποθήκευση των σωληνώσεων, σφραγίστε ερμητικά το άνοιγμα με πώμα ή τσιμπίδα. Όσον αφορά τις εσωτερικές μονάδες χρησιμοποιείτε διατάξεις άρθρωσης χωρίς άνοιγμα για αέριο R32 μόνον όταν συνδέετε την εσωτερική μονάδα και τις σωληνώσεις (εσωτερικές συνδέσεις).

⚠ ΜΕΤΡΑ ΠΡΟΦΥΛΑΞΗΣ ΚΑΤΑ ΤΗ ΧΡΗΣΗ ΤΟΥ ΨΥΚΤΙΚΟΥ R32/R290

Χρήση σωλήνων και περικοχλίων με και χωρίς άνοιγμα εκτός των προδιαγεγραμμένων ενδέχεται να οδηγήσει σε δυσλειτουργία του προϊόντος, διάρρηξη σωλήνα ή τραυματισμό λόγω της υψηλής εσωτερικής πίεσης του κύκλου ψυκτικού μέσου που θα προκληθεί από τυχόν εισροή αέρα.

8. Η εγκατάσταση, λειτουργία και αποθήκευση του συστήματος πρέπει να γίνεται σε χώρο με εμβαδόν δαπέδου μεγαλύτερο των X m2 (παρακαλούμε συμβουλευτείτε το ακόλουθο έντυπο). Το σύστημα δεν πρέπει να τοποθετείται σε μη αεριζόμενο χώρο εάν ο χώρος αυτός είναι μικρότερος από X m2 (παρακαλούμε συμβουλευτείτε το ακόλουθο έντυπο).

Μοντέλο (Btu/h)	Ποσότητα απαιτούμενου ψυκτικού μέσου (σε Kg)	Μέγιστο ύψος εγκατάστασης	Ελάχιστο εμβαδόν χώρου (σε m2)
<30000	<2,048	1,8m	4
<30000	<2,048	0,6m	35
30000-48000	2,048-3,0	1,8m	8
30000-48000	2,048-3,0	0,6m	80
>48000	>3,0	1,8m	9
>48000	>3,0	0,6m	80

Σημείωση περί μη φθοριωμένων αερίων

1. Αυτή η μονάδα κλιματισμού περιέχει φθοριωμένα αέρια θερμοκηπίου. Για εξειδικευμένες πληροφορίες σχετικά με το είδος και την ποσότητα του αερίου, παρακαλούμε ανατρέξτε στη σχετική σήμανση που βρίσκεται επάνω στη μονάδα ή στο «Φυλλάδιο Προϊόντος» του «Εγχειριδίου του Χρήστη» που θα βρείτε στη συσκευασία της εξωτερικής μονάδας. (Μόνον για προϊόντα που διατίθενται στην Ευρωπαϊκή Ένωση)
2. Η εγκατάσταση, το σέρβις, η συντήρηση και η επισκευή του κλιματιστικού αυτού πρέπει να πραγματοποιούνται από πιστοποιημένο τεχνικό.
3. Η απεγκατάσταση του προϊόντος και η διάθεσή του προς ανακύκλωση πρέπει να πραγματοποιούνται από πιστοποιημένο τεχνικό.
4. Όσον αφορά εξοπλισμό που περιέχει φθοριωμένα αέρια θερμοκηπίου σε ποσότητες που φτάνουν ή υπερβαίνουν τους πέντε (5) τόνους διοξειδίου του άνθρακα αλλά αντιστοιχούν σε λιγότερους από πενήντα (50) τόνους ισοδυνάμων διοξειδίου του άνθρακα, εφόσον το σύστημα διαθέτει διάταξη ανίχνευσης διαρροής θα πρέπει να γίνεται έλεγχος διαρροής κάθε δύο (2) έτη.
5. Σε περίπτωση ελέγχου της μονάδας για διαρροή, σας συνιστούμε θερμά να τηρείτε κατάλληλο ημερολόγιο ελέγχου.

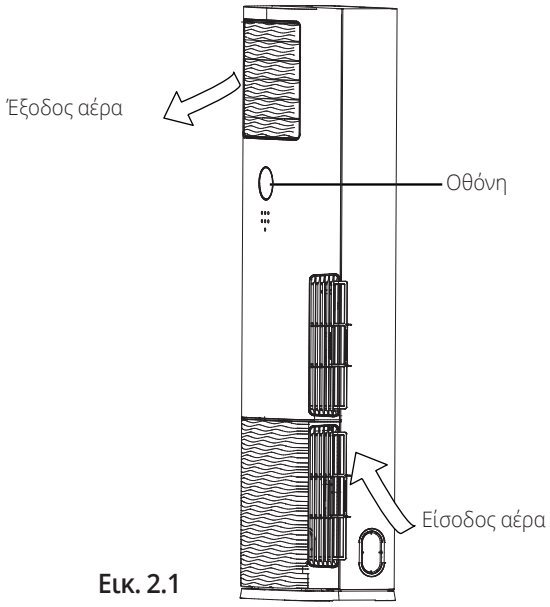
Επεξήγηση των συμβόλων που απεικονίζονται στην εσωτερική/εξωτερική μονάδα (ισχύει μόνον για μονάδες που λειτουργούν με ψυκτικό R32/R290):

	**ΠΡΟΕΙΔΟ-ΠΟΙΗΣΗ**	Το σύμβολο αυτό υποδεικνύει ότι η συσκευή αυτή λειτουργεί με εύφλεκτο ψυκτικό μέσο. Σε περίπτωση διαρροής του ψυκτικού και έκθεσής του σε εξωτερική πηγή ανάφλεξης, ενδέχεται να προκληθεί πυρκαγιά.
	**ΠΡΟΣΟΧΗ**	Το σύμβολο αυτό υποδεικνύει ότι καλό είναι να διαβάσετε προσεκτικά το εγχειρίδιο λειτουργίας.
	**ΠΡΟΣΟΧΗ**	Το σύμβολο αυτό υποδεικνύει ότι συνιστάται ο χειρισμός της συσκευής να γίνεται από ειδικευμένο προσωπικό σέρβις σύμφωνα με τις υποδείξεις του εγχειριδίου εγκατάστασης.
	**ΠΡΟΣΟΧΗ**	
	**ΠΡΟΣΟΧΗ**	Το σύμβολο αυτό υποδεικνύει ότι υπάρχουν διαθέσιμες πληροφορίες (εγχειρίδιο λειτουργίας/εγχειρίδιο εγκατάστασης). με τις λειτουργίες στο εγχειρίδιο χρήστη & το εγχειρίδιο εγκατάστασης.

Μέρη της εσωτερικής μονάδας και κύριες λειτουργίες

2

Μέρη της μονάδας



Εικ. 2.1

Συνθήκες λειτουργίας

Για ασφαλή και αποτελεσματική λειτουργία, χρησιμοποιείτε το σύστημα εντός του εύρους θερμοκρασιών που ακολουθεί. Εάν το κλιματιστικό χρησιμοποιηθεί σε συνθήκες άλλες πέραν των αναφερόμενων, ενδέχεται να προκληθεί δυσλειτουργία ή μειωμένη αποδοτικότητα.

• Διαιρούμενου τύπου (Inverter)

	ΨΥΞΗ	ΘΕΡΜΑΝΣΗ	ΑΦΥΓΡΑΝΣΗ
Θερμοκρασία Δωματίου	17˚C - 32˚C (63˚F - 90˚F)	0˚C - 30˚C (32˚F - 86˚F)	10˚C - 32˚C (50˚F - 90˚F)
Εξωτερική Θερμοκρασία	0˚C - 50˚C (32˚F - 122˚F)	-15˚C - 30˚C (5˚F - 86˚F)	0˚C - 50˚C (32˚F - 122˚F)
	-15˚C - 50˚C (5˚F - 122˚F) Για μοντέλα με συστήματα ψύξης χαμηλής θερμοκρασίας		
	0˚C - 52˚C (32˚F - 126˚F) Για ειδικά μοντέλα		0˚C - 52˚C (32˚F - 126˚F) Για ειδικά μοντέλα

ΓΙΑ ΕΞΩΤΕΡΙΚΕΣ ΜΟΝΑΔΕΣ ΜΕ ΒΟΗΘΗΤΙΚΗ ΗΛΕΚΤΡΙΚΗ ΣΥΣΚΕΥΗ ΘΕΡΜΑΝΣΗΣ

Όταν η εξωτερική θερμοκρασία είναι κάτω των 0°C (32°F), συνιστούμε να διατηρείτε συνδεδεμένη την μονάδα συνεχώς ώστε να εξασφαλίζεται η ομαλή συνεχής λειτουργία του συστήματος.

• Σταθερής ταχύτητας

	ΨΥΞΗ	ΘΕΡΜΑΝΣΗ	ΑΦΥΓΡΑΝΣΗ
Θερμοκρασία Δωματίου	17˚-32˚C (63˚-90˚F)	O˚-30˚C (32˚-86˚F)	10˚-32˚C (50˚-90˚F)
Εξωτερική Θερμοκρασία	18˚-43˚C (64˚-109˚F)	-7˚-24˚C (19˚-75˚F)	11˚-43˚C (52˚-109˚F)
	-7˚-43˚C (19˚-109˚F) Για μοντέλα με συστήματα ψύξης χαμηλής θερμοκρασίας		18˚-43˚C (64˚-109˚F)
	18˚-52˚C (64˚-126˚F) Για ειδικά μοντέλα		18˚-52˚C (64˚-126˚F) Για ειδικά μοντέλα

Χαρακτηριστικά

Προεπιλεγμένη ρύθμιση
Όταν το κλιματιστικό πραγματοποιεί επανεκκίνηση μετά από διακοπή ρεύματος, επιστρέφει στις εργοστασιακές του ρυθμίσεις (Λειτουργία AUTO, ανεμιστήρας AUTO, θερμοκρασία 24°C (76°F)). Αυτό μπορεί να προκαλέσει ανακολουθίες σε επίπεδο οθόνης μονάδας και τηλεχειριστηρίου. Χρησιμοποιήστε το τηλεχειριστήριό σας για να ενημερώσετε την κατάσταση της συσκευής.

Λειτουργία μνήμης γωνίας περσίδων
Ορισμένα μοντέλα διαθέτουν λειτουργία μνήμης γωνίας περσίδων. Κατά την επανεκκίνηση της συσκευής μετά από διακοπή ρεύματος, η γωνία των οριζόντιων περσίδων επανέρχεται αυτόματα στην πρότερη θέση της. Η γωνία της οριζόντιας περσίδας δεν πρέπει να είναι πολύ μικρή καθώς υπάρχει κίνδυνος να δημιουργηθεί συμπύκνωση και να σταλάξει υγρό εντός της συσκευής. Για να επαναφέρετε τις περσίδες, πιέστε το πλήκτρο χειροκίνητης λειτουργίας.

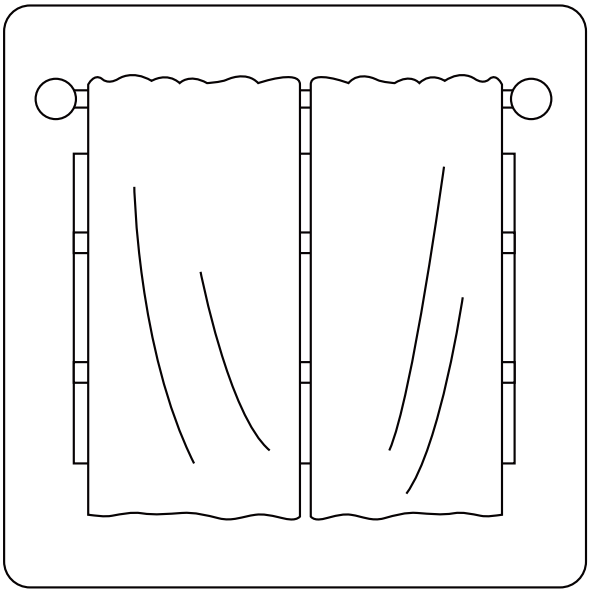
Αυτόματη επανεκκίνηση
Σε περίπτωση διακοπής ρεύματος, η λειτουργία του συστήματος σταματά αμέσως. Για να επανεκκινήσετε τη συσκευή, πιέστε το πλήκτρο ON/OFF του τηλεχειριστηρίου. Εάν το σύστημα διαθέτει λειτουργία αυτόματης επανεκκίνησης, η μονάδα τίθεται αυτόματα σε λειτουργία με τις ίδιες ρυθμίσεις.

Σύστημα Ανίχνευσης Διαρροής Ψυκτικού Μέσου
Σε περίπτωση διαρροής ψυκτικού μέσου, η οθόνη υγρών κρυστάλλων θα απεικονίσει την ένδειξη "EC" και η ενδεικτική λυχνία LED θα αρχίσει να αναβοσβήνει.

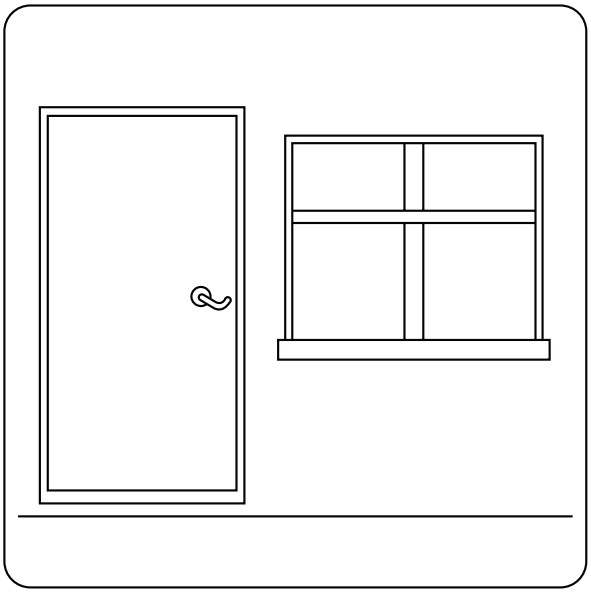
Για λεπτομερή επεξήγηση κάθε λειτουργίας, ανατρέξτε στο Εγχειρίδιο Λειτουργίας από Απόσταση.

Χρήσιμες συμβουλές για εξοικονόμηση ενέργειας

- ΜΗΝ ΧΡΗΣΙΜΟΠΟΙΕΙΤΕ τη μονάδα σε ακραίο θερμοκρασιακό εύρος.
- Όταν η συσκευή βρίσκεται σε λειτουργία ψύξης κλείνετε τις κουρτίνες για να αποτρέψετε την άμεση ηλιακή ακτινοβολία.
- Πόρτες και παράθυρα πρέπει να παραμένουν κλειστά ώστε να διατηρείτε ο ψυχρός και αντίστοιχα ο θερμός αέρας στο δωμάτιο.
- ΜΗΝ ΤΟΠΟΘΕΤΕΙΤΕ αντικείμενα κοντά στον αεραγωγό εισόδου/εξόδου της μονάδας.
- Χρησιμοποιείτε όταν πρέπει τον χρονοδιακόπτη αλλά και την ενσωματωμένη λειτουργία SLEEP/ECONOMY.
- Εάν δεν προγραμματίζετε να χρησιμοποιήσετε τη μονάδα για μεγάλο χρονικό διάστημα, αφαιρέστε τις μπαταρίες από το τηλεχειριστήριο. αποφεύγετε να σας κτυπάει απευθείας ο αέρας από τη συσκευή.



Κλείνετε τις κουρτίνες όταν η συσκευή βρίσκεται σε θέρμανσης για να διατηρήσετε τη θερμότητα στον χώρο

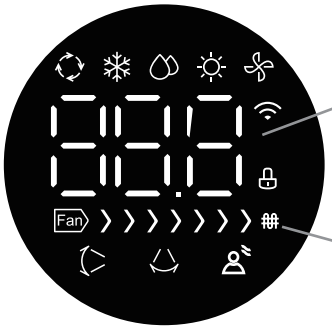


Πόρτες και παράθυρα πρέπει να παραμένουν κλειστά

Εντολές χειροκίνητης λειτουργίας

3

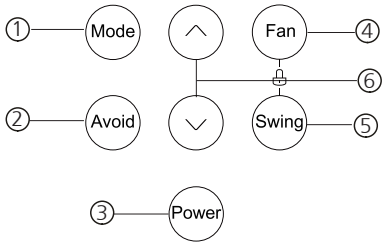
Η οθόνη απεικόνισης της εσωτερικής μονάδας μπορεί να χρησιμοποιηθεί για να ρυθμίσετε τη λειτουργία της συσκευής σε περίπτωση προσωρινής απώλειας του τηλεχειριστηρίου ή όταν εξαντληθούν οι μπαταρίες.



Θερμοκρασία δωματίου / Ρύθμιση θερμοκρασίας / Ρύθμιση ώρας

Ένδειξη ταχύτητας ανεμιστήρα

- Αυτόματη λειτουργία (Auto)
- Λειτουργία ψύξης
- Λειτουργία ξηρού αέρα
- Λειτουργία θέρμανσης
- Λειτουργία ανεμιστήρα
- Κάθετη ροή αέρα
- Οριζόντια ροή αέρα
- Αποφυγή άμεσης επαφής με τη ροή αέρα
- Λειτουργία κλειδώματος



Πλήκτρα λειτουργίας

① Πλήκτρο **MODE (Λειτουργία):** Πιέστε το πλήκτρο αυτό για να επιλέξετε τον επιθυμητό τρόπο λειτουργίας. Με κάθε πίεση του πλήκτρου, αλλάζει ο τρόπος λειτουργίας προς την κατεύθυνση του βέλους:

→AUTO→COOL→DRY→HEAT (για μοντέλα με λειτουργία ψύξης και θέρμανσης) FAN ONLY → FAN

Φωτεινές ενδεικτικές λυχνίες ανάβουν για να υποδείξουν την επιλογή των ακόλουθων τρόπων λειτουργίας.

Αυτόματη (Auto): Αυτόματη επιλογή του τρόπου λειτουργίας μέσω αισθητήρα που προσλαμβάνει τη διαφορά μεταξύ πραγματικής θερμοκρασίας περιβάλλοντος και ρύθμισης της θερμοκρασίας μέσω τηλεχειριστηρίου. Αυτόματος έλεγχος της ταχύτητας του ανεμιστήρα.

Ψύξη: Σας δίνει τη δυνατότητα να δροσιστείτε επιλέγοντας τη θερμοκρασία που προτιμάτε (Θερμοκρασιακό εύρος: 17°C~30°C).

Αφύγρανση (Dry): Επιλέξτε τη θερμοκρασία που προτιμάτε και ενδιάμεση ταχύτητα ανεμιστήρα. Με αυτό τον τρόπο απομακρύνετε την υγρασία από το περιβάλλον. (Θερμοκρασιακό εύρος:

17°C~30°C). Στη λειτουργία Dry δεν μπορείτε να επιλέξετε ταχύτητα ανεμιστήρα και λειτουργία ύπνου (Sleep mode).

Θέρμανση (Heat): Χρησιμοποιείστε το κλιματιστικό σας ως θερμαντικό σώμα (μόνον για μοντέλα με λειτουργία ψύξης και θέρμανσης, εύρος θερμοκρασιακής ρύθμισης: 17°C~30°C).

Ανεμιστήρας (Fan only): Λειτουργία του ανεμιστήρα χωρίς ψύξη ή θέρμανση. Σε αυτή την περίπτωση, δεν απεικονίζεται η ρύθμιση της θερμοκρασίας και δεν μπορείτε να την προσαρμόσετε.

② **Πλήκτρο αποφυγής (Avoid)**

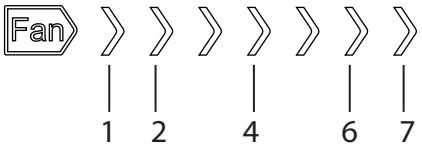
1. Σε οποιαδήποτε λειτουργία εκκίνησης, πιέστε το πλήκτρο για να την επιλέξετε.
2. Πιέστε "Power", "Swing", "Avoid" για να τερματίσετε αυτή τη λειτουργία.

③ **Πλήκτρο Έναρξη (Power):** Πιέστε το πλήκτρο αυτό για να θέσετε τη συσκευή σε λειτουργία και πιέστε το πάλι για να τερματίσετε τη λειτουργία.

④ **Πλήκτρο Ανεμιστήρας (Fan):** Με το πλήκτρο αυτό μπορείτε να επιλέξετε την επιθυμητή ταχύτητα ανεμιστήρα. Με κάθε πίεση του πλήκτρου, η ταχύτητα ανεμιστήρα αλλάζει προς την κατεύθυνση του βέλους:

→ AUTO/ΧΑΜΗΛΗ → ΜΕΤΡΙΑ → ΥΨΗΛΗ → ΑΥΤΟΜΑΤΗ

Απεικόνιση της ταχύτητας ανεμιστήρα:



Επιλέξτε τη ΧΑΜΗΛΗ (LOW) ταχύτητα ανεμιστήρα και θα φωτιστούν οι Ζώνες 1~2.
Επιλέξτε τη ΜΕΤΡΙΑ (MED) ταχύτητα ανεμιστήρα και θα φωτιστούν οι ζώνες 1~4.
Επιλέξτε την ΥΨΗΛΗ (HIGH) ταχύτητα ανεμιστήρα και θα φωτιστούν οι Ζώνες 1~6.
Επιλέξτε την ΑΥΤΟΜΑΤΗ (AUTO) ταχύτητα ανεμιστήρα και θα φωτιστούν οι Ζώνες 1~7 και «AU».
Σημείωση: Όταν χρησιμοποιείτε το τηλεχειριστήριο για να επιλέξετε την υψηλή ταχύτητα (strong wind) ανάβουν οι Ζώνες ταχύτητας ανέμου 1~7.

⑤ Πλήκτρο **Ταλάντωσης (Swing):**

1. Χρησιμοποιήστε το πλήκτρο αυτό για να ρυθμίσετε την οριζόντια και κάθετη ροή αέρα.
2. Με κάθε πίεση του πλήκτρου κατεύθυνσης της ροής αέρα, οι ρυθμίσεις αλλάζουν ως εξής:

Ρύθμιση κάθετης ροής αέρα → Ακύρωση κάθετης ροής αέρα → Ρύθμιση οριζόντιας ροής αέρα → Ακύρωση οριζόντιας ροής αέρα
Ρύθμιση ταυτόχρονης κάθετης και οριζόντιας ροής αέρα → Ακύρωση της ταυτόχρονης κάθετης και οριζόντιας ροής αέρα → Ρύθμιση οριζόντιας ροής αέρα

ΠΡΟΕΙΔΟΠΟΙΗΣΗ: Η χειροκίνητη μετακίνηση των πτερυγίων κατεύθυνσης της οριζόντιας και κάθετης ροής αέρα ενδέχεται να προκαλέσει βλάβη/φθορά στο κλιματιστικό σας.

⑥ Πλήκτρο ⌃⌄

1. Όταν η συσκευή βρίσκεται σε κατάσταση δοκιμαστικής λειτουργίας (Test Running mode), πιέστε«⌃» «⌄» για να μπορέσετε να ελέγξετε την απεικόνιση του κωδικού εσωτερικής/εξωτερικής / λειτουργίας σφάλματος.
2. Σε περίπτωση αστοχίας, E0, E1, E3, E4, E5, Eb, EC, E10, F1, F2, F5, P10, P11, P12, P15, P13, P14, P9. (Μόνον για κλιματιστικά σταθερής ταχύτητας)
3. Όταν η συσκευή βρίσκεται σε άλλο τρόπο λειτουργίας, πιέστε τα πλήκτρα «⌃» «⌄» για να ρυθμίσετε τη θερμοκρασία εντός του θερμοκρασιακού εύρους 17°C~30°C. Όταν πιέζετε το κάτω βέλος η θερμοκρασία σταματά να αλλάζει στους 17°C καθώς δεν διατίθεται χαμηλότερη ρύθμιση. Αντίστοιχα, όταν πιέζετε το επάνω βέλος, η θερμοκρασία σταματά να αλλάζει στους 30 °C. Κατά τη ρύθμιση της θερμοκρασίας, το πλήκτρο δεν είναι σε θέση να προσαρμόσει τη θερμοκρασία γρήγορα. Αυτό μπορεί να επιτευχθεί μόνον εάν πιέσετε το πλήκτρο πάνω και κάτω.

ΛΕΙΤΟΥΡΓΙΑ ΚΛΕΙΔΩΜΑΤΟΣ: Για να ενεργοποιήσετε τη δυνατότητα κλειδώματος πιέστε ταυτόχρονα το πλήκτρο ταχύτητας ανεμιστήρα (fan speed) και τα πλήκτρα ταλάντωσης (swing buttons) και κρατήστε πατημένα για ένα δευτερόλεπτο.

Η δυνατότητα αυτή διατίθεται τόσο όταν η συσκευή βρίσκεται σε λειτουργία, όσο και όταν βρίσκεται εκτός λειτουργίας. Την πρώτη φορά που θα πιέσετε αυτά τα πλήκτρα, η συσκευή κλειδώνει και όλα τα άλλα πλήκτρα απενεργοποιούνται (εκτός από το πλήκτρο ξεκλειδώματος).
Παρακαλούμε σημειώστε ότι ακόμα και όταν η συσκευή είναι κλειδωμένη μπορείτε να χρησιμοποιήσετε το τηλεχειριστήριο. Πιέστε το πλήκτρο της οθόνης και το εικονίδιο κλειδώματος θα αναβοσβήσει για πέντε (5) δευτερόλεπτα στα 1HZ/S. Όταν πιέσετε και πάλι ταυτόχρονα τα ίδια πλήκτρα, η συσκευή ξεκλειδώνει.

Λειτουργία θέσης σε λειτουργία: Πιέστε ταυτόχρονα τα πλήκτρα " (Mode) " & " (Swing) " για ένα (1) δευτερόλεπτο για να ενεργοποιήσετε τη δοκιμαστική λειτουργία. Το πλήκτρο αυτό είναι ενεργό σε οποιοδήποτε τρόπο λειτουργίας όταν είναι ενεργοποιημένο. Την πρώτη φορά, πιέστε το πλήκτρο αυτό για να εισέλθετε σε κατάσταση δοκιμαστικής λειτουργίας. Τρέξτε τη δοκιμαστική λειτουργία για τριάντα (30) λεπτά της ώρας και κατόπιν πιέστε το ίδιο πλήκτρο, απενεργοποιήστε και θα εξέλθετε από την κατάσταση δοκιμαστικής λειτουργίας. Το πλήκτρο δοκιμαστικής λειτουργίας όπως και το πλήκτρο ταχύτητας ανέμου (wind speed) και βοηθητικής λειτουργίας (auxiliary function) δεν είναι ενεργοποιημένα. Όλα τα άλλα πλήκτρα είναι ενεργοποιημένα (συμπεριλαμβανομένου και του πλήκτρου). Πιέστε πάνω ή κάτω για να επιλέξετε τον χώρο απεικόνισης (T1), την εξωτερική θερμοκρασία και τον κωδικό προστασίας καθώς και την επιλογή απεικόνισης "nA" σε περίπτωση που δεν υφίσταται αστοχία ή προστασία.

ΣΗΜΕΙΩΣΗ:
Σε συνθήκες δοκιμαστικής λειτουργίας απεικονίζεται η ένδειξη T1. Εάν η θερμοκρασία είναι χαμηλότερη από -15°C ή -19°C, τότε απεικονίζεται η ένδειξη -15°C ή -19°C. Σε συνθήκες δοκιμαστικής λειτουργίας απεικονίζεται η ένδειξη T4. Εάν η θερμοκρασία είναι χαμηλότερη από -19°C, απεικονίζεται η θερμοκρασία -19°C. Σε συνθήκες δοκιμαστικής λειτουργίας, T1, T4 η υψηλότερη απεικονιζόμενη θερμοκρασίας είναι 50°C ή 70°C.
Σε συνθήκες δοκιμαστικής λειτουργίας είναι δυνατή η ανίχνευση σφάλματος στους αισθητήρες.

Φροντίδα και Συντήρηση

4

Οδηγίες Ασφαλείας

• Για επισκευή και συντήρηση απευθυνθείτε σε εξουσιοδοτημένο τεχνικό σέρβις. Ακατάλληλη επισκευή και συντήρηση ενέχει κίνδυνο διαρροής, ηλεκτροπληξίας ή πυρκαγιάς και ακυρώνει την εγγύηση της συσκευής.
• **ΜΗΝ** ΑΝΤΙΚΑΘΙΣΤΑΤΕ καμένη ασφάλεια με ασφάλεια υψηλότερης ή χαμηλότερης έντασης καθώς ενδέχεται να προκαλέσει βλάβη στο κύκλωμα ή ηλεκτρική πυροδότηση. Βεβαιωθείτε ότι ο εύκαμπτος σωλήνας αποστράγγισης έχει τοποθετηθεί σύμφωνα με τις οδηγίες.
•Σε περίπτωση μη συμμόρφωσης ενδέχεται να προκληθεί διαρροή και συνακόλουθη φθορά της περιουσίας σας, πυρκαγιά και ηλεκτροπληξία. Το φίλτρο εμποδίζει την είσοδο σκόνης και άλλων σωματιδίων στην εσωτερική μονάδα.
• Βεβαιωθείτε ότι όλα τα καλώδια είναι σωστά συνδεδεμένα. Εάν τα καλώδια δεν συνδεθούν σύμφωνα με τις οδηγίες ενδέχεται να προκληθεί ηλεκτροπληξία ή πυρκαγιά.

Συντήρηση της Συσκευής

⚠ ΠΡΙΝ ΠΡΟΧΩΡΗΣΕΤΕ ΣΕ ΚΑΘΑΡΙΣΜΟ Ή ΣΥΝΤΗΡΗΣΗ ΤΗΣ ΣΥΣΚΕΥΗΣ

- Απενεργοποιείτε και αποσυνδέετε πάντοτε το κλιματιστικό σας από την παροχή ρεύματος πριν προχωρήσετε στον καθαρισμό ή τη συντήρηση του.
- **ΜΗΝ** χρησιμοποιείτε χημικά ή υφάσματα εμποτισμένα με χημικά για να καθαρίσετε τη συσκευή.
- **ΜΗΝ** χρησιμοποιείτε βενζίνη, διαλυτικό χρώματος, στιλβωτικό σε σκόνη ή άλλα διαλυτικά για να καθαρίσετε τη συσκευή. Ενδέχεται να προκαλέσουν ρήγματα και παραμόρφωση της πλαστικής επιφάνειας.
- **ΜΗΝ** τοποθετείτε τη συσκευή κάτω από τρεχούμενο νερό για να την πλύνετε. Υπάρχει κίνδυνος ηλεκτροπληξίας.
- **ΜΗΝ** χρησιμοποιείτε ζεστό νερό σε θερμοκρασία υψηλότερη των 40°C (104°F) για τον καθαρισμό της πρόσοψης. Ενδέχεται να παραμορφωθεί ή να αποχρωματιστεί το πάνελ.
- Καθαρίζετε τη συσκευή με ένα υγρό πανί χωρίς χνούδι και απορρυπαντικό με ουδέτερο pH. Στεγνώνετε τη συσκευή με στεγνό πανί χωρίς χνούδι.

Πώς να καθαρίσετε το φίλτρο αέρα

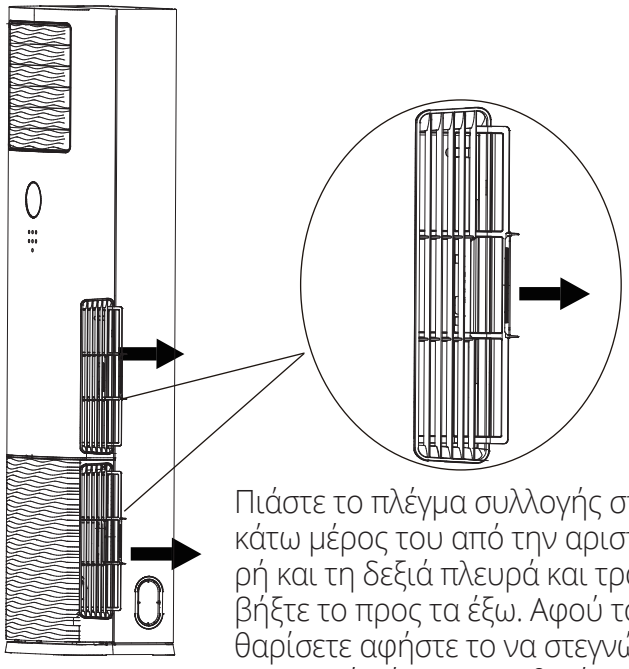
Το φίλτρο εμποδίζει την είσοδο στην εσωτερική μονάδα σκόνης και άλλων σωματιδίων. Η συσσώρευση σκόνης ενδέχεται να μειώσει την απόδοση του κλιματιστικού σας. Για να εξασφαλίσετε τη βέλτιστη δυνατή απόδοση, καθαρίζετε το φίλτρο αέρα ανά δεκαπενθήμερο ή και συχνότερα αν κατοικείτε σε περιοχή με πολλή σκόνη. Εάν οι πόροι του φίλτρου έχουν κλείσει από τη σκόνη και δεν μπορείτε να το καθαρίσετε, αντικαταστήστε το με καινούργιο.

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΗ: ΜΗΝ ΑΦΑΙΡΕΙΤΑΙ ΚΑΙ ΜΗΝ ΚΑΘΑΡΙΖΕΤΕ ΤΟ ΦΙΛΤΡΟ ΜΟΝΟΙ ΣΑΣ

Η αφαίρεση και ο καθαρισμός του φίλτρου ενέχουν κινδύνους. Η αφαίρεση και η συντήρηση πρέπει να πραγματοποιούνται από πιστοποιημένο τεχνικό.

ΣΗΜΕΙΩΣΗ: Εάν έχετε κατοικίδια στο σπίτι, συσήνεται ο συχνός καθαρισμός του πλέγματος (της μάσκας) της συσκευής ώστε να αποφύγετε τον κίνδυνο απόφραξης της κυκλοφορίας αέρα από τρίχες.

Καθαρισμός του φίλτρου σκόνης που βρίσκεται στη βάση της συσκευής:

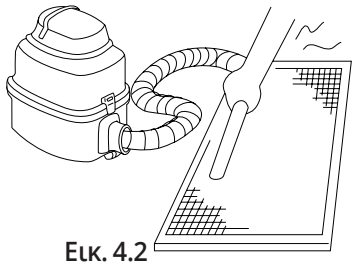


Εικ. 4.1

Πιάστε το πλέγμα συλλογής στο κάτω μέρος του από την αριστερή και τη δεξιά πλευρά και τραβήξτε το προς τα έξω. Αφού το καθαρίσετε αφήστε το να στεγνώσει σε σκιερό μέρος. Τοποθετήστε το πλέγμα συλλογής στη θέση του.

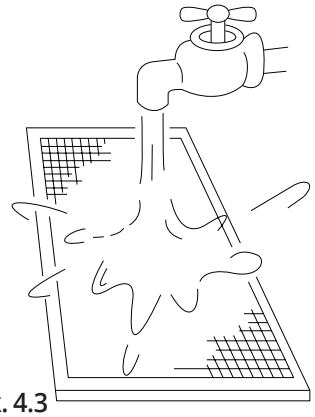
4. Αφαιρέστε το φίλτρο αέρα.
5. Καθαρίστε το φίλτρο αέρα περνώντας την επιφάνειά του με την ηλεκτρική σκούπα ή πλένοντάς το με ζεστό νερό με ήπιο απορρυπαντικό.

A. Σε περίπτωση χρήσης ηλεκτρικής σκούπας, η πλευρά εισόδου πρέπει να είναι στραμμένη προς την ηλεκτρική σκούπα.



Εικ. 4.2

B. Σε περίπτωση χρήσης νερού, η πλευρά εισόδου πρέπει να είναι στραμμένη προς τα κάτω σε απόσταση από τη ροή νερού.



Εικ. 4.3

6. Ξεπλύνετε το φίλτρο με καθαρό νερό και αφήστε το για να στεγνώσει στον αέρα. **ΜΗΝ** ΤΟΠΟΘΕΤΕΙΤΕ το φίλτρο να στεγνώσει στον ήλιο.
7. Τοποθετήστε το φίλτρο στη θέση του.

Επισκευή των διαρροών ψυκτικού μέσου

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΗ

- Σε περίπτωση διαρροής ψυκτικού μέσου, απενεργοποιήστε το κλιματιστικό καθώς και κάθε θερμαντικό σώμα που λειτουργεί με καύση, αερίστε το δωμάτιο και επικοινωνήστε άμεσα με τον επίσημο αντιπρόσωπο. Το ψυκτικό μέσο είναι τοξικό και εύφλεκτο. ΜΗΝ ΧΡΗΣΙΜΟΠΟΙΕΙΤΕ το κλιματιστικό πριν ολοκληρωθεί η επισκευή της διαρροής.
- Εάν το κλιματιστικό είναι εγκατεστημένο σε μικρών διαστάσεων χώρο, συνίσταται λήψη μέτρων ώστε σε περίπτωση διαρροής ψυκτικού η συγκέντρωση ψυκτικού να μην υπερβεί τα όρια ασφάλειας.

Οι συγκεντρώσεις ψυκτικού ενέχουν σοβαρό κίνδυνο για την υγεία και την ασφάλεια.

Σύστημα Ανίχνευσης Διαρροής Ψυκτικού Μέσου

- Σε περίπτωση διαρροής ψυκτικού μέσου, η οθόνη υγρών κρυστάλλων θα απεικονίσει την ένδειξη "EC" και η ενδεικτική λυχνία LED θα αρχίσει να αναβοσβήνει.

Προετοιμασία για περιόδους μη χρήσης της συσκευής

Συντήρηση μετά από παρατεταμένη παραμονή της συσκευής εκτός χρήσης

1. Απομακρύνετε τυχόν εμπόδια από τις εξόδους αέρα τόσο της εσωτερικής, όσο και της εξωτερικής μονάδας.
2. Καθαρίστε το φίλτρο αέρα και τη μάσκα της εσωτερικής μονάδας. Επανατοποθετήστε το καθαρό και στεγνό φίλτρο στην αρχική του θέση.
3. Ο γενικός διακόπτης παροχής ηλεκτρικού ρεύματος πρέπει να έχει ενεργοποιηθεί τουλάχιστον δώδεκα (12) ώρες πριν θέσετε τη συσκευή σε λειτουργία.

Αποθήκευση της μονάδας όταν δεν χρησιμοποιείται

1. Αφήστε τη συσκευή να λειτουργήσει σε λειτουργία ανεμιστήρα (FAN) για τουλάχιστον 12 ώρες σε ζεστό δωμάτιο για να στεγνώσει και να μην μουχλιάσει.
2. Απενεργοποιήστε τη συσκευή και βγάλτε την από την πρίζα (αποσυνδέστε την).
3. Καθαρίστε το φίλτρο αέρα σύμφωνα με τις οδηγίες του προηγούμενου κεφαλαίου. Επανατοποθετήστε το καθαρό και στεγνό φίλτρο πριν αποθηκεύσετε.
4. Αφαιρέστε τις μπαταρίες από το τηλεχειριστήριο.

Επίλυση Προβλημάτων

5

⚠ ΠΡΟΣΟΧΗ

Σε περίπτωση που διαπιστώσετε ένα από τα παρακάτω, αποσυνδέστε άμεσα την παροχή ρεύματος και επικοινωνήστε με τον αντιπρόσωπό σας για περαιτέρω οδηγίες.

- Η ενδεικτική λυχνία λειτουργίας συνεχίζει να αναβοσβήνει γρήγορα μετά την επανεκκίνηση της συσκευής.
- Δεν λειτουργούν τα πλήκτρα του τηλεχειριστηρίου.
- Η μονάδα ρίχνει την ασφάλεια ή τον διακόπτη.
- Έχει εισέλθει ξένο σώμα ή νερό στο κλιματιστικό.
- Λοιπές ασυνήθεις καταστάσεις.

Κοινά Προβλήματα

Τα ακόλουθα προβλήματα δεν αποτελούν δυσλειτουργίες και στις περισσότερες περιπτώσεις δεν χρίζουν επισκευής.

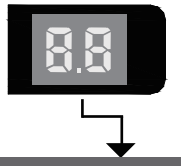
Πρόβλημα	Πιθανά Αίτια
Η μονάδα δεν τίθεται σε λειτουργία όταν πιέζετε το πλήκτρο ON/OFF	Η μονάδα διαθέτει σύστημα προστασίας τριών (3) λεπτών που εμποδίζει την υπερφόρτισή της. Η μονάδα δεν πραγματοποιεί επανεκκίνηση αν δεν περάσουν τρία (3) λεπτά από την απενεργοποίησή της.
Η μονάδα μεταβαίνει από τον τρόπο λειτουργίας ψύξης COOL στον τρόπο λειτουργίας ανεμιστήρα (FAN)	Η συσκευή αλλάζει τις ρυθμίσεις της για να αποτρέψει τον σχηματισμό πάγου στη μονάδα. Μόλις ανέβει η θερμοκρασία, η μονάδα τίθεται εκ νέου σε λειτουργία.
	Η επιλεγμένη θερμοκρασία έχει επιτευχθεί και ο συμπιεστής της μονάδας τέθηκε εκτός λειτουργίας. Η μονάδα θα αρχίσει και πάλι να λειτουργεί όταν η θερμοκρασία πάψει να είναι σταθερή.
Η εσωτερική μονάδα εκπέμπει λευκή αχλή	Σε περιοχές με υγρό κλίμα, η μεγάλη διαφορά θερμοκρασίας μεταξύ του αέρα του δωματίου και του κλιματισμένου αέρα μπορεί να προκαλέσει σχηματισμό λευκής αχλής.
Τόσο η εσωτερική, όσο και η εξωτερική μονάδα εκπέμπουν λευκή αχλή	Κατά την επανεκκίνηση της μονάδας σε λειτουργία θέρμανσης (HEAT) μετά την απόψυξη, ενδέχεται να σχηματιστεί λευκή αχλή λόγω της υγρασίας που δημιουργήθηκε κατά τη διαδικασία απόψυξης.
Η εσωτερική μονάδα παράγει ασυνήθιστους θορύβους	Ακούγεται σύριγμα κάθε φορά που το σύστημα είναι εκτός λειτουργίας (OFF) ή σε λειτουργία ψύξης (COOL). Ο θόρυβος αυτός ακούγεται και όταν η αντλία αποστράγγισης (προαιρετικό αξεσουάρ) βρίσκεται σε λειτουργία.
	Ακούγεται σύριγμα μετά την εκκίνηση της συσκευής σε λειτουργία θέρμανσης (HEAT) λόγω της διαστολής και της συστολής των πλαστικών μερών της.
Τόσο η εσωτερική, όσο και η εξωτερική μονάδα εκπέμπουν θορύβους	Ενόσω η συσκευή βρίσκεται σε λειτουργία ενδέχεται να εκπέμπει χαμηλό μακρόσυρτο βόμβο. Ο βόμβος αυτός είναι φυσιολογικός καθώς προκαλείται από την κυκλοφορία ψυκτικών αερίων στο εσωτερικό τόσο της εσωτερικής, όσο και της εξωτερικής μονάδας.
Η εσωτερική ή η εξωτερική μονάδα εκπέμπουν σκόνη κατά τη λειτουργία	Οταν η συσκευή δεν χρησιμοποιείται για μεγάλα χρονικά διαστήματα συγκεντρώνει σκόνη. Η σκόνη αυτή εκπέμπεται όταν τη θέσετε σε λειτουργία. Για να αμβλύνετε το φαινόμενο, σκεπάζετε τη συσκευή όταν δεν τη χρησιμοποιείτε για πολύ καιρό.
Η συσκευή εκπέμπει δυσάρεστη μυρωδιά	Η συσκευή απορροφά τις μυρωδιές του περιβάλλοντος χώρου (επίπλωση, μαγείρεμα, κάπνισμα, κλ.π.) και τις εκπέμπει όταν τεθεί σε λειτουργία.
	Τα φίλτρα της συσκευής μούχλιασαν και χρειάζονται καθαρισμό..
Ο ανεμιστήρας της εξωτερικής μονάδας δεν λειτουργεί	Η συσκευή διαθέτει έλεγχο ταχύτητας ανεμιστήρα με σκοπό τη βελτιστοποίηση της λειτουργίας του προϊόντος.

Συμβουλές επίλυσης προβλημάτων

Όταν προκύπτει κάποιο πρόβλημα, παρακαλούμε ελέγξτε πρώτα τα ακόλουθα πριν επικοινωνήσετε με την εταιρεία παροχής υπηρεσιών επισκευής:

Πρόβλημα	Πιθανά Αίτια	Λύση
Η μονάδα δεν λειτουργεί	Διακοπή ρεύματος	Περιμένετε να επανέλθει το ρεύμα
	Ο διακόπτης τροφοδοσίας βρίσκεται σε θέση off	Ανεβάστε τον διακόπτη
	Έχει καεί η ασφάλεια	Αντικαταστήστε την ασφάλεια
	Οι μπαταρίες του τηλεχειριστηρίου είναι άδειες	Αντικαταστήστε τις μπαταρίες
	Έχει ενεργοποιηθεί η λειτουργία τρίλεπτης προστασίας της μονάδας	Περιμένετε τρία (3) λεπτά πριν επανεκκινήσετε τη μονάδα
Η λειτουργία ψύξης είναι ανεπαρκής	Η θερμοκρασιακή ρύθμιση ενδέχεται να είναι υψηλότερη από τη θερμοκρασία του δωματίου	Ρυθμίστε τη θερμοκρασία προς τα κάτω
	Ο εναλλάκτης θερμότητας της εσωτερικής ή της εξωτερικής μονάδας είναι βρώμικος	Καθαρίστε τον εναλλάκτη θερμότητας
	Το φίλτρο αέρα είναι βρώμικο	Αφαιρέστε το φίλτρο και καθαρίστε το σύμφωνα με τις οδηγίες μας
	Ο αεραγωγός εισόδου ή εξόδου της εσωτερικής ή της εσωτερικής μονάδας έχει υποστεί απόφραξη	Απενεργοποιήστε τη μονάδα, αφαιρέστε το αντικείμενο (α) που προκαλούν απόφραξη και επανεκκινήστε την
	Τα παράθυρα/πόρτες είναι ανοικτά	Βεβαιωθείτε ότι όλες οι πόρτες και τα παράθυρα παραμένουν κλειστά κατά τη λειτουργία της μονάδας
	Υπάρχει απευθείας έκθεση στην ηλιακή ακτινοβολία	Κλείστε τα παράθυρα και τις κουρτίνες όταν έχει πολλή Ζέστη ή λάμπει ο ήλιος
	Η στάθμη του ψυκτικού είναι χαμηλή λόγω διαρροής ή μακροχρόνια χρήσης	Ελέγξτε για τυχόν διαρροές, σφραγίστε εκ νέου και γεμίστε με ψυκτικό μέσο
Η μονάδα τίθεται εντός και εκτός λειτουργίας συχνά	Η στάθμη του ψυκτικού του συστήματος είναι είτε πολύ χαμηλή, είτε πολύ υψηλή	Ελέγξτε για διαρροές και γεμίστε εκ νέου το σύστημα με ψυκτικό εφόσον απαιτείται
	Υπάρχει αέρας, ασυμπίεστα αέρια ή ξένα σώματα στο σύστημα ψύξης	Εκκενώστε και ξαναγεμίστε το σύστημα με ψυκτικό μέσο
	Κάποιο από τα κυκλώματα του συστήματος είναι μπλοκαρισμένο	Εντοπίστε το σύστημα που είναι μπλοκαρισμένο και αντικαταστήστε το ελαττωματικό εξάρτημα.
	Ο συμπιεστής έχει υποστεί βλάβη	Αντικαταστήστε τον συμπιεστή
	Πολύ υψηλή ή χαμηλή τάση	Τοποθετήστε ρυθμιστή τάσης για να ρυθμίσετε την τάση
Η λειτουργία θέρμανσης είναι ανεπαρκής	Η εξωτερική θερμοκρασία είναι χαμηλότερη από 7°C (44.5°F)	Ελέγξτε για διαρροές και γεμίστε εκ νέου το σύστημα με ψυκτικό εφόσον απαιτείται
	Κρύος αέρας εισέρχεται από τις πόρτες και τα παράθυρα	Βεβαιωθείτε ότι όλες οι πόρτες και τα παράθυρα είναι κλειστά όταν η συσκευή λειτουργεί
	Η στάθμη του ψυκτικού είναι χαμηλή	Ελέγξτε για τυχόν διαρροές, σφραγίστε εκ νέου λόγω διαρροής ή μακροχρόνια χρήσης και γεμίστε με ψυκτικό μέσο

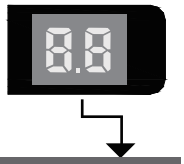
Κωδικός Σφάλματος



• Διαιρετού τύπου (Inverter)

Αριθμός	Αίτιο	Κωδικός σφάλματος
1	Εσωτερικό σφάλμα EEPROM	E0
2	Εσωτερικό και εξωτερικό σφάλμα επικοινωνίας	E 1
3	Δυσλειτουργία ταχύτητας ανεμιστήρα εσωτερικής μονάδας	E3
4	Ανοικτό κύκλωμα ή βραχυκύκλωμα στον αισθητήρα θερμοκρασίας δωματίου της εσωτερικής μονάδας	E4
5	Ανοικτό κύκλωμα ή βραχυκύκλωμα στον αισθητήρα θερμοκρασίας στο πηνίο του εξατμιστήρα	E5
6	Δυσλειτουργία που αφορά ανίχνευση διαρροής ψυκτικού μέσου	EC
7	Δυσλειτουργία επικοινωνίας μεταξύ δύο εσωτερικών μονάδων (για το μοντέλο με δίδυμες μονάδες)	E8
8	Λοιπές δυσλειτουργίες μοντέλου με δίδυμες μονάδες	E9
9	Αδυναμία επικοινωνίας οθόνης και κεντρικού πίνακα ελέγχου	Eb
10	Δυσλειτουργία της εξωτερικής μονάδας	Ed
11	Προστασία υπερφόρτισης	F0
12	Ανοικτό κύκλωμα ή βραχυκύκλωμα στον αισθητήρα θερμοκρασίας δωματίου της εξωτερικής μονάδας	F1
13	Σφάλμα στον αισθητήρα θερμοκρασίας του σωλήνα πυκνωτή της εξωτερικής μονάδας	F2
14	Σφάλμα στον αισθητήρα θερμοκρασίας εκκένωσης αέρα	F3
15	Σφάλμα EEPROM της εξωτερικής μονάδας	F4
16	Δυσλειτουργία ταχύτητας ανεμιστήρα εξωτερικής μονάδας	F5
17	Σφάλμα στον αισθητήρα T2b	F6
18	Προστασία του δομοστοιχείου IPM του μετατροπέα	P0
19	Προστασία υψηλής/χαμηλής τάσης	P 1
20	Προστασία υπερθέρμανσης της κεφαλής του συμπιεστή	P2
21	Προστασία από εξωτερική χαμηλή θερμοκρασία	P3
22	Σφάλμα στον κινητήριο μηχανισμό του συμπιεστή	P4
23	Προστασία από υψηλή ή χαμηλή πίεση συμπιεστή	P6
24	Σφάλμα στον αισθητήρα IGBT της εξωτερικής μονάδας	P7

• Σταθερής ταχύτητας

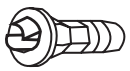
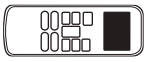


Αριθμός	Αίτιο	Κωδικός σφάλματος
1	Εσωτερικό σφάλμα EEPROM	E0
2	Εσωτερικό και εξωτερικό σφάλμα επικοινωνίας	E 1
3	Αστοχία στον ανεμιστήρα συνεχούς ρεύματος	E3
4	Σφάλμα στον αισθητήρα T1	E4
5	Σφάλμα στον αισθητήρα T2	E5
6	Αδυναμία επικοινωνίας οθόνης και κεντρικού πίνακα ελέγχου	Eb
7	Σφάλμα από διαρροή ψυκτικού μέσου	EC
8	Αστοχία που οφείλεται σε χαμηλή πίεση του συμπιεστή	E10
9	Σφάλμα στον αισθητήρα T4	F 1
10	Σφάλμα στον αισθητήρα T3	F2
11	Διακοπή ρεύματος ή σφάλμα λόγω απουσίας ακολουθίας αντίστροφης φάσης	F5
12	Θέρμανση του ψυχρού αέρα που εξέρχεται από τον ανεμιστήρα της εσωτερικής μονάδας	P9
13	Προστασία του συμπιεστή από χαμηλή τάση	P10
14	Προστασία του συμπιεστή από υψηλή πίεση	P11
15	Προστασία του συμπιεστή από υπερφόρτιση	P12
16	Η προστασία του εξατμιστήρα της εσωτερικής μονάδας απενεργοποίησε τον συμπιεστή (υψηλή ή χαμηλή θερμοκρασία)	P13
17	Προστασία από υπερθέρμανση του πυκνωτή του συμπιεστή της εξωτερικής μονάδας	P14
18	Απενεργοποίηση του συμπιεστή λόγω υψηλής θερμοκρασίας της εξάτμισης της εξωτερικής μονάδας	P15
19	Ψύξη	d F

Εξαρτήματα

6

Το σύστημα κλιματισμού συνοδεύεται από τα ακόλουθα εξαρτήματα (αξεσουάρ). Χρησιμοποιήστε όλα τα κύρια μέρη αλλά και τα εξαρτήματεα του κλιματιστικού κατά την εγκατάσταση. Η μη ορθή εγκατάσταση ενδέχεται να οδηγήσει σε διαρροή νερού, ηλεκτροπληξία και πυρκαγιά ή αστοχία του εξοπλισμού:

	Όνομα	Σχήμα	Ποσότητα
Εγκατάσταση εσωτερικής μονάδας	Λαμαρινόβιδα 3,9x25		2
	Επίπεδοι παράκυκλοι (ροδέλες)		2
	Περίβλημα καλωδίου		1
Εξαρτήματα ψύξης	Ηχομονωτικό/μονωτικό χιτώνιο (σε ορισμένα μοντέλα)		2
Εξαρτήματα σωλήνα αποστράγγισης	Εύκαμπτος σωλήνας αποστράγγισης (σε ορισμένα μοντέλα)		1
	Ταινία (σε ορισμένα μοντέλα)		2
	Σύνδεσμος σωλήνα		1
	Στεγανοποιητικός δακτύλιος (σε ορισμένα μοντέλα)		1
Εξαρτήματα εγκατάστασης (σε ορισμένα μοντέλα)	Καλώδια σύνδεσης		1
	Στόκος		1
	Πλέγμα προστασίας από τρωκτικά		1
	Λαμαρινόβιδα ST3.9x12		1
Τηλεχειριστήριο και η βάση του (σε ορισμένα μοντέλα)	Τηλεχειριστήριο		1
	Κοχλίας (βίδα) στερέωσης για βάση τηλεχειριστηρίου ST2.9 x 10		2
	Βάση τηλεχειριστηρίου		1
	Ξηρά μπαταρία AAA		2
	Φυλλάδιο τηλεχειριστηρίου		1
	Εγχειρίδιο του κατασκευαστή		1
	Εγχειρίδιο εγκατάστασης		1
	Σωλήνας ψυκτικού (προαιρετικό)		1

Σύνοψη Εγκατάστασης

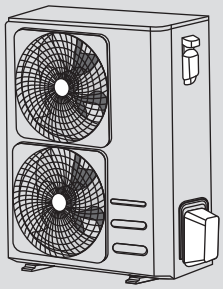
7

ΣΕΙΡΑ ΕΓΚΑΤΑΣΤΑΣΗΣ

1

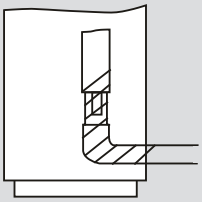
Εγκαταστήστε την εσωτερική μονάδα (Σελίδα 22)

2



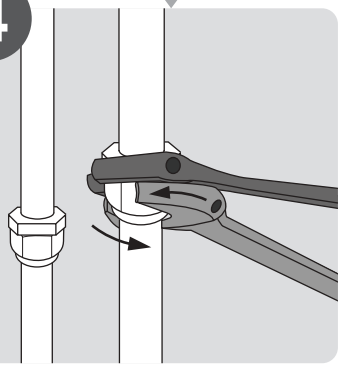
Εγκαταστήστε την εξωτερική μονάδα (Σελίδα 26)

3



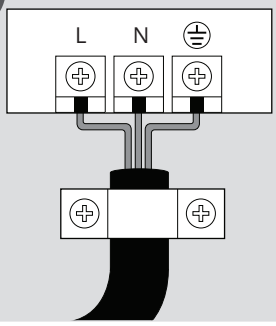
Εγκαταστήστε τον σωλήνα αποστράγγισης (Σελίδα 29)

4



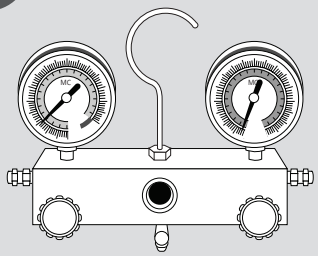
Συνδέστε τους σωλήνες του ψυκτικού μέσου (Σελίδα 30)

5



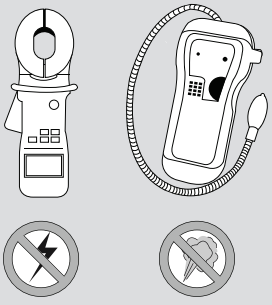
Συνδέστε τα καλώδια (Σελίδα 33)

6



Εκκενώστε το σύστημα Ψύξης (Σελίδα 35)

7

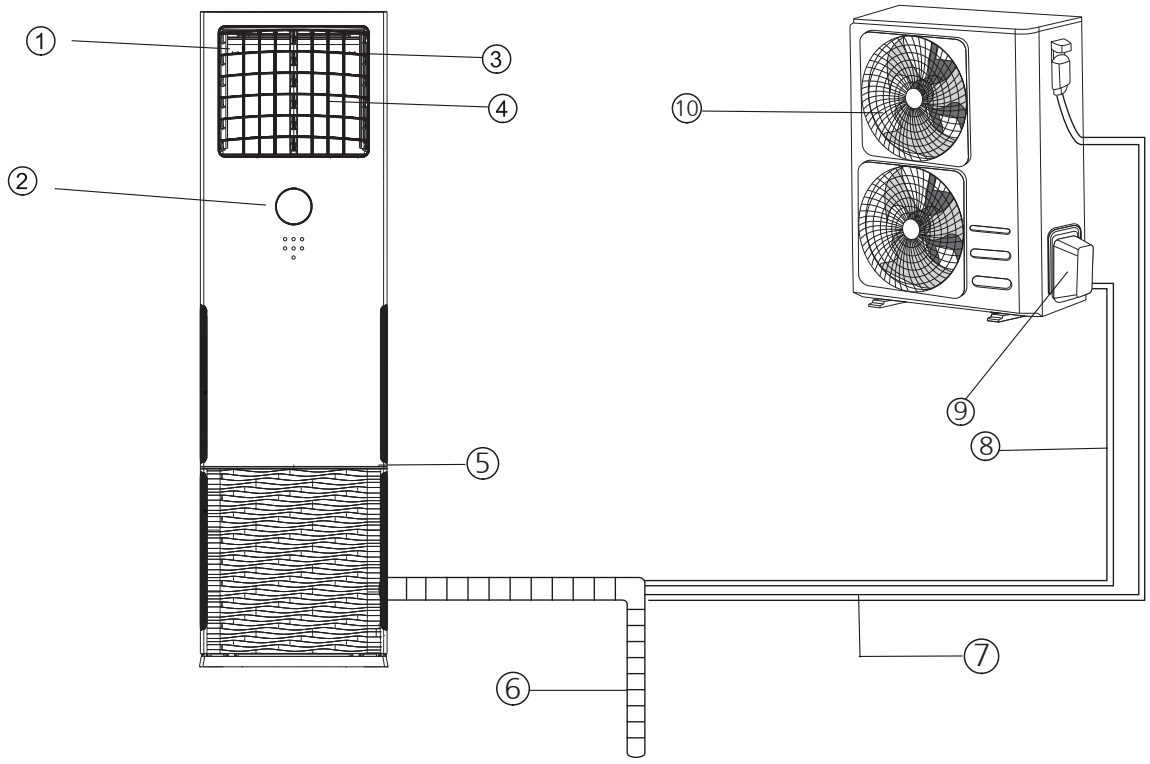


Τρέξτε δοκιμαστικά το σύστημα (Σελίδα 37)

Εγκατάσταση της εσωτερικής μονάδας

8

Μέρη της εσωτερικής μονάδας



Εικ. 8.1

Εσωτερική μονάδα

① Αεραγωγός εξόδου
② Πίνακας ελέγχου
③ Περσίδα ελέγχου οριζόντιας ροής αέρα
④ Περσίδα ελέγχου κάθετης ροής αέρα
⑤ Αεραγωγός εισόδου (και από τις δύο πλευρές)

Εξωτερική μονάδα

⑥ Σωλήνας αποστράγγισης, στόμιο εξαερισμού
⑦ Καλώδιο σύνδεσης
⑧ Σωλήνας σύνδεσης
⑨ Θυρίδα εισόδου του σωλήνας ψυκτικού
⑩ Αεραγωγός εξόδου

ΣΗΜΕΙΩΣΗ ΣΧΕΤΙΚΗ ΜΕ ΤΙΣ ΕΙΚΟΝΕΣ

Οι εικόνες του παρόντος εγχειριδίου εξυπηρετούν σκοπούς επεξήγησης. Το πραγματικό μέγεθος της εσωτερικής σας μονάδας ενδέχεται να διαφέρει ελαφρώς. Ισχύει το μέγεθος της μονάδας που προμηθευτήκατε.

Οδηγίες εγκατάστασης της εσωτερικής μονάδας

ΠΡΙΝ ΑΠΟ ΤΗΝ ΕΓΚΑΤΑΣΤΑΣΗ

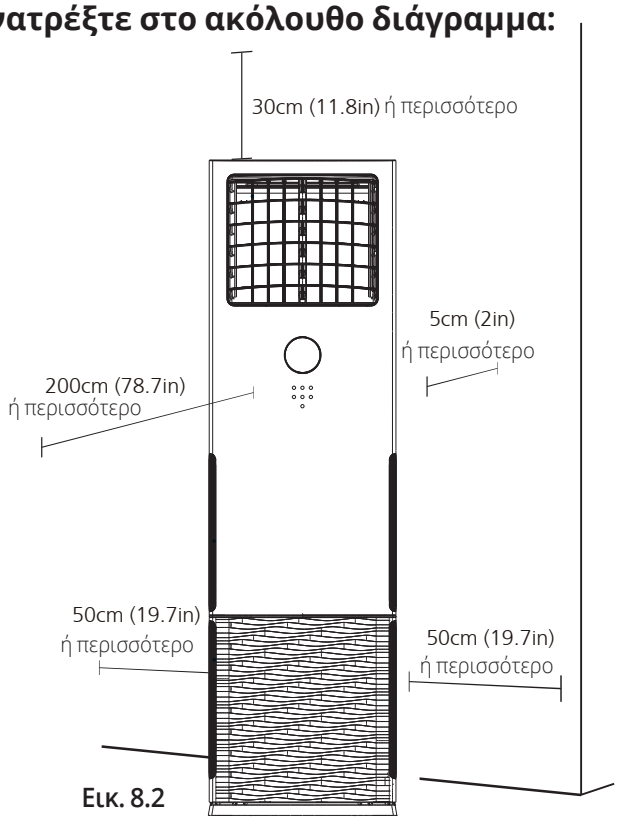
Πριν εγκαταστήσετε την εσωτερική μονάδα συμβουλευτείτε τη σήμανση της συσκευασίας του προϊόντος για να βεβαιωθείτε ότι ο αριθμός μοντέλου της εσωτερικής μονάδας αντιστοιχεί με τον αριθμό μοντέλου της εξωτερικής μονάδας.

Βήμα 1: Επιλέξτε το σημείο εγκατάστασης
Πριν εγκαταστήσετε την εσωτερική μονάδα, επιλέξτε το κατάλληλο σημείο για αυτό. Ακολουθούν ορισμένες αρχές που θα σας βοηθήσουν να επιλέξετε το καταλληλότερο σημείο.

Για να είναι κατάλληλο ένα σημείο πρέπει να πληροί τις ακόλουθες προϋποθέσεις:

- ☑ Καλή κυκλοφορία αέρα
- ☑ Εύκολη αποστράγγιση
- ☑ Να είναι η θέση τέτοια ώστε ο θόρυβος από τη μονάδα να μην ενοχλεί τρίτα άτομα.
- ☑ Να είναι στέρεο και σταθερό - προς αποφυγή κραδασμών.
- ☑ Να είναι αρκετά ανθεκτικό ώστε να αντέχει το βάρος της μονάδας.
- ☑ Το σημείο πρέπει να βρίσκεται τουλάχιστον ένα (1) μέτρο από κάθε άλλη ηλεκτρική συσκευή (π.χ. ραδιόφωνο, υπολογιστή, τηλεόραση).

Για τον υπολογισμό της σωστής απόστασης από τοίχους και οροφή, ανατρέξτε στο ακόλουθο διάγραμμα:



Εικ. 8.2

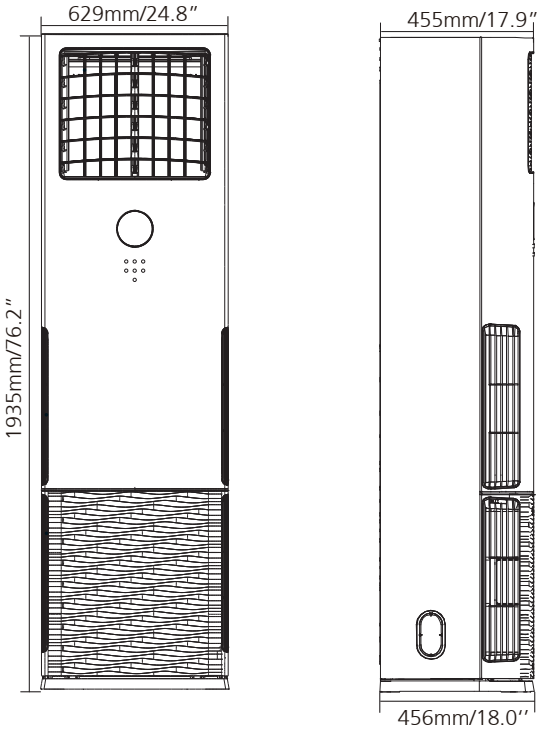
ΜΗΝ ΕΓΚΑΘΙΣΤΑΤΕ τη μονάδα στα ακόλουθα σημεία:

- ⊘ Πλησίον πηγών θερμότητας, ατμού ή αερίων καύσεως
- ⊘ Πλησίον εύφλεκτων αντικειμένων, όπως κουρτίνες ή ρούχα
- ⊘ Πλησίον εμποδίων που ενδέχεται να φράξουν την κυκλοφορία του αέρα
- ⊘ Πλησίον της εισόδου αέρα
- ⊘ Σε τοποθεσία με άμεση έκθεση στο ηλιακό φως

ΣΗΜΕΙΩΣΗ ΓΙΑ ΤΗΝ ΟΠΗ ΣΤΟΝ ΤΟΙΧΟ:

Σε περίπτωση απουσίας μόνιμων σωληνώσεων ψυκτικού:
Όταν επιλέγετε το σημείο εγκατάστασης του κλιματιστικού σας, αφήστε άφθονο χώρο για την διάνοιξη οπής στον τοίχο (βλέπε το βήμα «Ανοίξτε οπή στον τοίχο για τις σωληνώσεις σύνδεσης») από την οποία θα περάσετε το καλώδιο μεταφοράς σήματος και τις σωληνώσεις ψυκτικού που συνδέουν την εσωτερική με την εξωτερική μονάδα. Η προεπιλεγμένη θέση για κάθε είδους σωληνώσεις είναι η δεξιά πλευρά της εσωτερικής μονάδας (κοιτάζοντας τη μονάδα). Παρ' όλα αυτά, υπάρχει χώρος για σωληνώσεις τόσο στα αριστερά, όσο και στα δεξιά της εσωτερικής μονάδας.

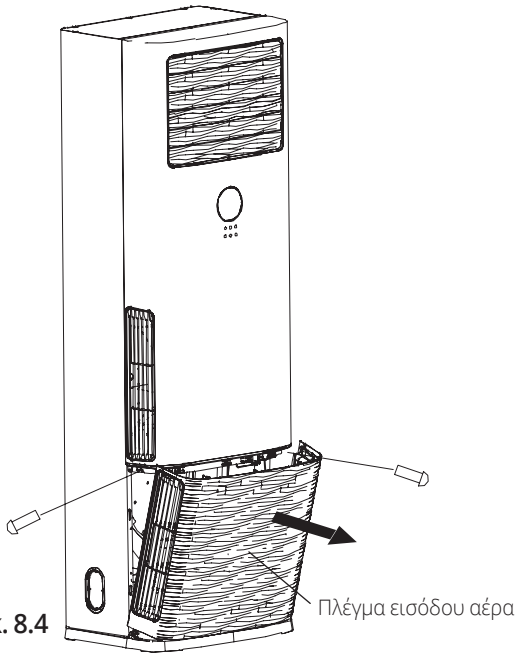
Διαστάσεις συναρμολόγησης εσωτερικής μονάδας



Εικ. 8.3

Βήμα 2: Ξεκουμπώστε τον πίνακα ελέγχου και βγάλτε το φίλτρο

1. Ανοίξτε τη συσκευασία και βγάλτε την εσωτερική μονάδα Αφαιρέστε την προστατευτική ταινία και τυχόν εξαρτήματα.
2. Ανοίξτε τα κουτιά αποθήκευσης του τηλεχειριστηρίου που είναι τοποθετημένα εκατέρωθεν της εσωτερικής μονάδας και ξεβιδώστε τις βίδες που συγκρατούν τον πίνακα ελέγχου.
3. Με τα δυο χέρια κρατήστε απαλά το διακοσμητικό μέρος στην κορυφή του πίνακα ελέγχου και σηκώστε το προς τα πάνω για να το αφαιρέσετε μαζί με το τερματικό καλωδίων που είναι συνδεδεμένο με τον πίνακα.
4. Ξεβιδώστε τις δύο βίδες στο μπροστινό μέρος του φίλτρου.
5. Τοποθετήστε τα χέρια σας στα δυο βαθουλώματα που βρίσκονται εκατέρωθεν του φίλτρου και τραβήξτε το προς τα έξω. Σηκώστε το φίλτρο προς τα πάνω για να το αφαιρέσετε.
6. Παρακαλούμε πριν συνδέσετε τους σωλήνες/τα καλώδια αφαιρέστε το πλέγμα του αεραγωγού εισόδου. Αφαιρέστε πρώτα τις βίδες του περιβλήματος, κατόπιν τις βίδες του πλέγματος του αεραγωγού εισόδου και τέλος αφαιρέστε το ίδιο το πλέγμα (Βλέπε σχήμα 8.4)



Εικ. 8.4

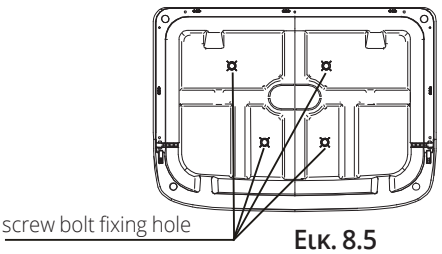
7. Αφαιρέστε όλα τα εξαρτήματα (αξεσουάρ) που είναι τοποθετημένα στην κάτω κοιλότητα της εσωτερικής μονάδας.
8. Βεβαιωθείτε ότι τα εξαρτήματα που συνοδεύουν τη μονάδα ταιριάζουν με εκείνα του κεφαλαίου «Διαγράμματα Εγκατάστασης και Εξαρτήματα» όπως φαίνεται στην προηγούμενη σελίδα.

Βήμα 3. Αφαιρέστε τους συνδετήρες από τον κύλινδρο (μόνον σε επιλεγμένα μοντέλα)

1. Ελέγξτε για να διαπιστώσετε εάν ο κύλινδρος της εσωτερικής μονάδας είναι στερεωμένος με συνδετήρες και αφαιρέστε τραβώντας το ενημερωτικό αυτοκόλλητο.
2. Αφαιρέστε τους συνδετήρες από τον κύλινδρο σύμφωνα με τις οδηγίες του ενημερωτικού αυτοκόλλητου.

Βήμα 4. Στερέωση της εσωτερικής μονάδας (αποτροπή πτώσης)

1. Υπολογίστε τη θέση των οπών εγκατάστασης.
2. Εισάγετε τους κοχλίες (βίδες) M8 στη μονάδα ενόσω βρίσκεται στο έδαφος (ο αριθμός των κοχλιών που θα χρησιμοποιήσετε εξαρτάται από τον αριθμό των οπών στο εξωτερικό περίβλημα της συσκευής.
3. Σηκώστε την εσωτερική μονάδα ώστε οι οπές εγκατάστασης να καλύψουν τους κοχλίες, έπειτα σφίξτε τα περικόχλια στους κοχλίες.



Εικ. 8.5

⚠ ΠΡΟΣΟΧΗ

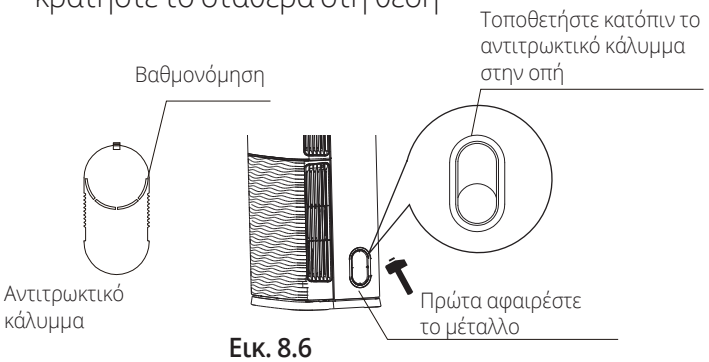
Σε περίπτωση που απαιτείται λήψη συμπληρωματικών μέτρων υποστήριξης της μονάδας για πρόληψη πτώσης, τοποθετήστε μια προστατευτική σφήνα. Η διαδικασία τοποθέτησης της σφήνας είναι η εξής:

- Βγάλτε την προστατευτική σφήνα και υπολογίστε μετρώντας το κατάλληλο μέγεθος.
- Χρησιμοποιήστε λαμαρινόβιδες για να στερεώσετε την προστατευτική σφήνα στο επάνω περίβλημα της εσωτερικής μονάδας.
- Στερεώστε καλά την άλλη άκρη της σφήνας στον τοίχο με λαμαρινόβιδες.

Βήμα 5. Εγκατάσταση του πλέγματος προστασίας από τρωκτικά

1. Αφαιρέστε το μεταλλικό πλέγμα προστασίας από τρωκτικά από τις σωληνώσεις της μονάδας κτυπώντας το απαλά με ένα σφυράκι.

2. Ανοίξτε με ένα μικρό μαχαίρι ή κόφτη μια μικρή οπή ακολουθώντας τις διαγραμμίσεις στο αντιτρωκτικό κάλυμμα. (Βλέπε Σχήμα 8.6)
3. Εισάγετε το αντιτρωκτικό κάλυμμα στη μονάδα κρατήστε το σταθερά στη θέση

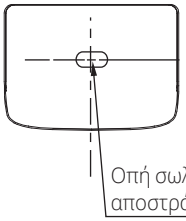


Εικ. 8.6

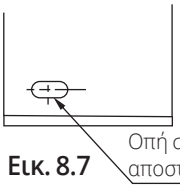
Βήμα 6. Σωληνώσεις και συνδέσεις

1. Τοποθετήστε τον σωλήνα σύνδεσης στο έδαφος, Τοποθετήστε τον εύκαμπτο σωλήνα αποστράγγισης, τον σωλήνα του ψυκτικού μέσου και όλα τα ηλεκτρικά καλώδια (αφού σιγουρευτείτε ότι τα άκρα τους είναι σωστά τοποθετημένα) δίπλα στις σωληνώσεις.
2. Χρησιμοποιήστε τον εύκαμπτο σωλήνα αποστράγγισης ως οδηγό για να υπολογίσετε και να προσαρμόσετε το μήκος των καλωδίων χαμηλής και υψηλής τάσης, των λοιπών καλωδίων και του σωλήνα ψυκτικού μέσου. Χρησιμοποιήστε σφικτήρες καλωδίων (δέστρες) για να τα τοποθετήσετε αρχικά στη σωστή θέση.
3. Τακτοποιήστε τους αγωγούς έτσι ώστε ο εύκαμπτος σωλήνας αποστράγγισης να βρίσκεται κάτω, οι σωληνώσεις σύνδεσης στη μέση και τα ηλεκτρικά καλώδια επάνω.
4. Για την τελική συγκράτηση (σύνδεση) των αγωγών χρησιμοποιήστε συγκολλητική ταινία βινυλίου. Αρχίστε τη σύνδεση με την ταινία στο κάτω μέρος του εύκαμπτου σωλήνα αποστράγγισης. Βεβαιωθείτε ότι οι συνδετήρες είναι ασφαλισμένοι και σφικτοί. Θέση των οπών σωληνώσεων/καλωδίων και στις δύο πλευρές.

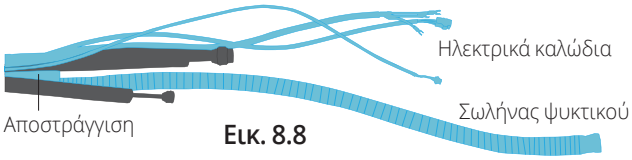
Οπή σωλήνα/καλωδίων στο κάτω μέρος



Θέση σωλήνα/καλωδίων στο πίσω μέρος



Εικ. 8.7



Εικ. 8.8

⚠ ΠΡΟΣΟΧΗ

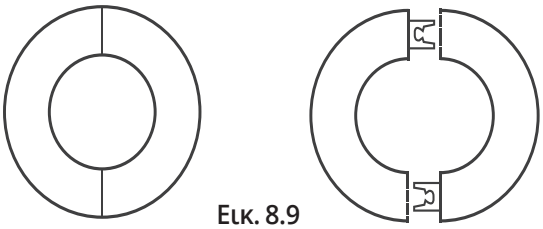
Τα ηλεκτρικά καλώδια, ο εύκαμπτος σωλήνας αποστράγγισης και ο σωλήνας ψυκτικού μέσου πρέπει να εξέρχονται από τη σύνδεση σε κατάλληλο σημείο. Οι συνδέσεις πρέπει να είναι ομοιόμορφες, να εφαρμόζουν καλά και να είναι εύκολα προσβάσιμες.

ΣΗΜΕΙΩΣΗ

- Μόνο μοντέλα με λειτουργία αερισμού περιέχουν αγωγούς αερισμού.
- Η ποσότητα και το είδος των χρησιμοποιούμενων ηλεκτρικών καλωδίων ενδέχεται να αλλάξει ανάλογα με το μοντέλο.
- Τα άκρα των αγωγών αερισμού είναι διαφορετικά από εκείνα των ηλεκτρικών καλωδίων. Παρακαλούμε ελέγξτε προσεκτικά πριν αρχίσετε τη διαδικασία σύνδεσης.

Βήμα 7: Εφαρμογή και τοποθέτηση στεγανωτικού καλύμματος στις οπές του τοίχου

1. Τακτοποιήστε τους συνδεδεμένους αγωγούς.
2. Απλώστε ομοιόμορφα το υλικό στεγανοποίησης στα κενά ανάμεσα στις σωληνώσεις και τον τοίχο και εφαρμόστε τον καλά.
3. Τραβήξτε τα δύο άκρα του καλύμματος της οπής στον τοίχο για να το ανοίξετε. Αφού το στερεώσετε καλά στις σωληνώσεις, σπρώξτε το μέσα στην οπή που έχετε ανοίξει στον τοίχο ώστε να στερεωθεί και αυτό καλά. Ολοκληρώστε την εγκατάσταση.



Εικ. 8.9

Εγκατάσταση της Εξωτερικής Μονάδας

9

Οδηγίες Εγκατάστασης της εξωτερικής μονάδας

Βήμα 1: Επιλέξτε το σημείο εγκατάστασης

Η εγκατάσταση της εξωτερικής μονάδας πρέπει να γίνει σε σημείο που να πληροί τις ακόλουθες προϋποθέσεις:

☑ Τοποθετήστε την εξωτερική μονάδα όσο το δυνατόν πιο κοντά στην εσωτερική μονάδα.

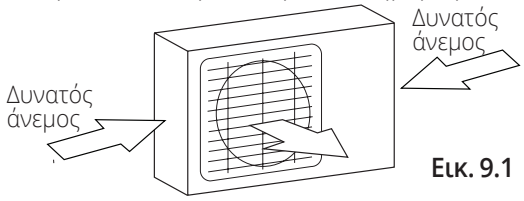
☑ Βεβαιωθείτε ότι ο διαθέσιμος χώρος επαρκεί για την εγκατάσταση και τη συντήρησή της.

☑ Φροντίστε να μην υπάρχουν εμπόδια εμπρός από τους αεραγωγούς εισόδου και εξόδου και να εξασφαλίστε ότι δεν υπάρχει έκθεση σε δυνατούς ανέμους.

☑ Φροντίστε η θέση της μονάδας να μην την εκθέτει σε ριπές χιονιού, συλλογή φύλλων ή άλλα εποχιακά απορρίμματα. Εφόσον είναι δυνατόν τοποθετήστε στέγαστρο πάνω από τη μονάδα. Το στέγαστρο δεν πρέπει να εμποδίζει την ελεύθερη κυκλοφορία του αέρα.

☑ Ο χώρος εγκατάστασης πρέπει να είναι στεγνός και να αερίζεται καλά.

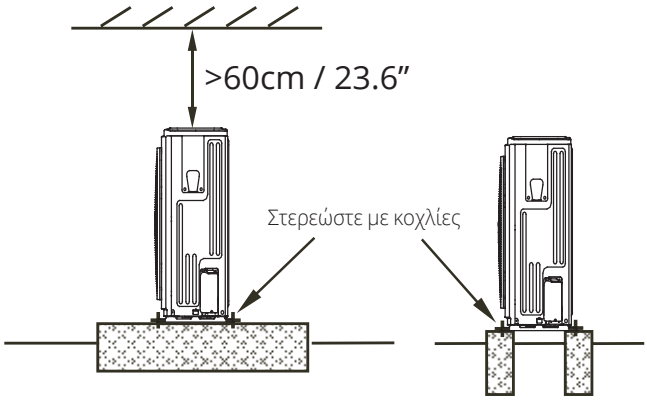
☑ Φροντίστε να υπάρχει άφθονος χώρος για την εγκατάσταση των σωληνώσεων σύνδεσης και των καλωδίων καθώς και ελεύθερη πρόσβαση σε αυτά για τις ανάγκες της συντήρησης.



Εικ. 9.1

Βήμα 2: Εγκατάσταση της εξωτερικής μονάδας.

Στερεώστε την εξωτερική μονάδα με κοχλίες αγκίστρωσης(M10)



☑ Ο χώρος πρέπει να είναι απαλλαγμένος από αέρια καύσης και χημικά.

☑ Το μήκος των σωλήνων μεταξύ της εξωτερικής και της εσωτερικής μονάδας δεν πρέπει να υπερβαίνει το μέγιστο επιτρεπόμενο μήκος σωλήνα.

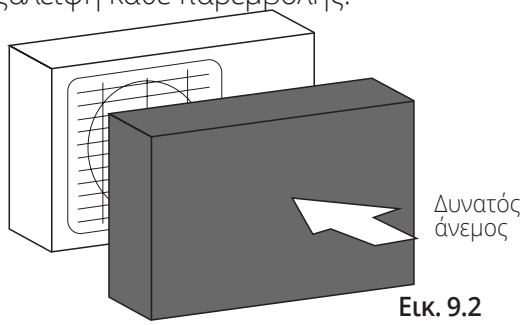
☑ Εφόσον είναι εφικτό, ΜΗΝ ΕΓΚΑΘΙΣΤΑΤΕ τη μονάδα σε σημείο όπου θα είναι εκτεθειμένη στο άμεσο ηλιακό φως.

☑ Εφόσον είναι δυνατόν, φροντίστε να τοποθετείτε τη μονάδα μακριά από τις γειτονικές κατοικίες ώστε να μην ενοχλεί τους γείτονές σας ο θόρυβος που εκπέμπει.

☑ Εάν το σημείο είναι εκτεθειμένο σε ισχυρούς ανέμους (για παράδειγμα όταν βρίσκεται σε παραθαλάσσιο σημείο) η μονάδα πρέπει να τοποθετείται κόντρα στον τοίχο για λόγους προφύλαξης από τον άνεμο. Εάν το κρίνετε απαραίτητο, χρησιμοποιήστε στέγαστρο. (Βλέπε Σχήματα 9.1 & 9.2)

☑ Εγκαταστήστε την εσωτερική και την εξωτερική μονάδα αλλά και τα καλώδια και τους αγωγούς σε απόσταση τουλάχιστον ενός (1) μέτρου από συσκευές τηλεόρασης και ραδιοφώνου ώστε να αποτρέψετε φαινόμενα στατικών παρεμβολών ή παραμόρφωσης ειδώλου.

Ανάλογα με τα ραδιοκύματα, η απόσταση του ενός (1) μέτρου ενδέχεται να μην επαρκεί για την εξάλειψη κάθε παρεμβολής.



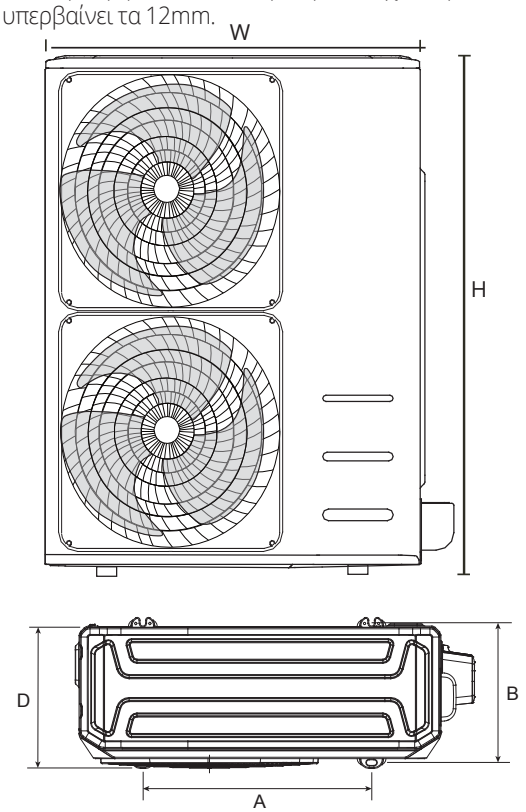
Εικ. 9.2

⚠ ΠΡΟΣΟΧΗ

- Βεβαιωθείτε ότι έχετε αφαιρέσει κάθε εμπόδιο που ενδέχεται να εμποδίζει την κυκλοφορία του αέρα.
- Συμβουλευτείτε τις προδιαγραφές που αφορούν στο μήκος ώστε να εξασφαλίσετε ότι υπάρχει αρκετός χώρος τόσο για την εγκατάσταση, όσο και για τη συντήρηση

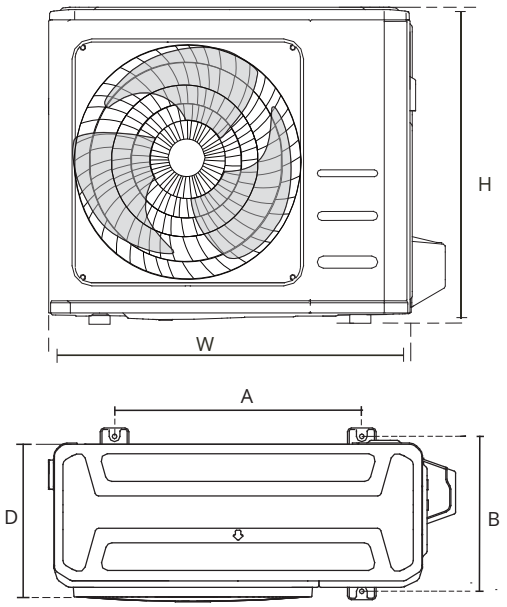
Διαστάσεις Συναρμολόγησης της Εξωτερικής Μονάδας

Οι διαστάσεις συναρμολόγησης κυμαίνονται ανάλογα με το είδος της εξωτερικής μονάδας. Η κεφαλή του κοχλία πρόσδεσης πρέπει να υπερβαίνει τα 12mm.



Εικ. 9.3

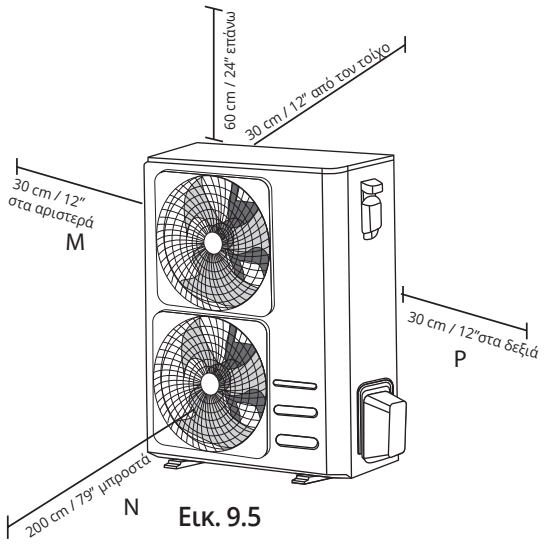
Διαστάσεις Εξωτερικής μονάδας (mm)			Διαστάσεις συναρμολόγησης (mm)	
Π	**Υ**	**Β**	**Α**	**Β**
952	1333	415	634	404
900	1170	350	590	378



Εικ. 9.4

Διαστάσεις Εξωτερικής μονάδας (mm)			Διαστάσεις συναρμολόγησης (mm)	
Π	**Υ**	**Β**	**Α**	**Β**
681	434	285	460	292
700	550	275	450	260
770	555	300	487	298
800	554	333	514	340
845	702	363	540	350
946	810	420	673	403

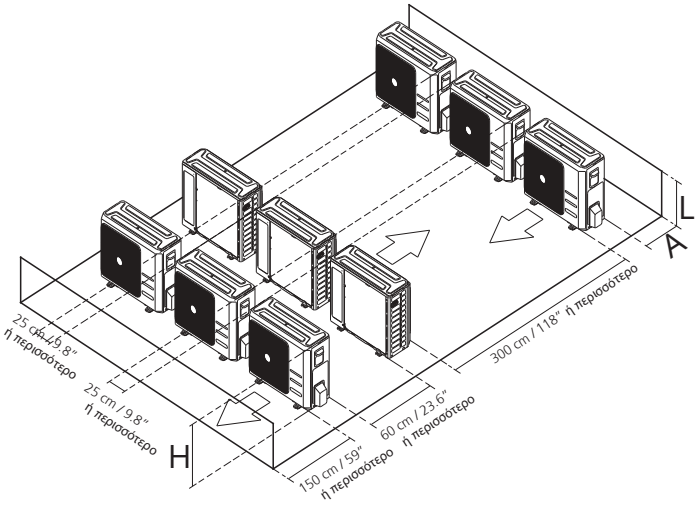
ΣΗΜΕΙΩΣΗ: Η ελάχιστη απόσταση μεταξύ εξωτερικής μονάδας και τοίχων όπως αυτή ορίζεται στον οδηγό εγκατάστασης δεν ισχύει για αεροστεγείς χώρους. Φροντίστε να παραμένει η μονάδα ελεύθερη τουλάχιστον ως προς δύο από τις τρεις διαστάσεις (M, N, P) (Βλέπε Σχήμα 9.5)



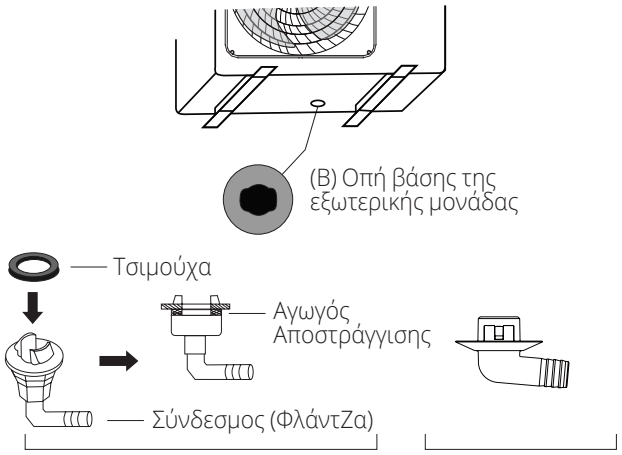
Εικ. 9.5

Εγκατάσταση συσκευών σε σειρά
Οι σχέσεις μεταξύ H, A και L έχουν ως εξής:

	L	A
L ≤ H	L ≤ 1/2H	25 cm / 9.8"ή περισσότερο
	1/2H < L ≤ H	30 cm / 11.8"ή περισσότερο
L > H	Η εγκατάσταση είναι αδύνατη	



Εικ. 9.6



Εικ. 9.7

Εγκατάσταση Αγωγού Αποστράγγισης

Εάν ο αγωγός αποστράγγισης συνοδεύεται από στεγανοποιητικό δακτύλιο (φλάντζα) (βλέπε Σχήμα 9.7 - A), ακολουθήστε τα εξής βήματα:

1. Προσαρμόστε τη φλάντΖα στο άκρο του του αγωγού αποστράγγισης που θα συνδεθεί με την εξωτερική μονάδα.
2. Εισάγετε τον αγωγό αποστράγγισης στην οπή που βρίσκεται στη βάση της εξωτερικής μονάδας.
3. Περιστρέψτε τον αγωγό αποστράγγισης κατά 90° μέχρις ότου έρθει στη θέση του (με ένα κλικ) ώστε να βλέπει το μπροστινό μέρος της μονάδας.
4. Συνδέστε μια προέκταση εύκαμπτου σωλήνα αποστράγγισης (δεν περιλαμβάνεται) στον αγωγό αποστράγγισης για να στέλνετε το νερό εκεί που εσείς θέλετε όταν η συσκευή βρίσκεται σε λειτουργία θέρμανσης.

Αν ο αγωγός αποστράγγισης δεν συνοδεύεται από φλάντζα (βλέπε Σχήμα 9.7 - B), ακολουθήστε τα εξής βήματα:

1. Εισάγετε τον αγωγό αποστράγγισης στην οπή που βρίσκεται στη βάση της εξωτερικής μονάδας. Ο αγωγός αποστράγγισης θα μπει στη θέση του (με ένα κλικ).
2. Συνδέστε μια προέκταση εύκαμπτου σωλήνα αποστράγγισης (δεν περιλαμβάνεται) στον αγωγό αποστράγγισης για να στέλνετε το νερό εκεί που εσείς θέλετε όταν η συσκευή βρίσκετε σε λειτουργία θέρμανσης.

ΣΗΜΕΙΩΣΗ: Φροντίστε η απορροή του νερού να γίνεται σε σημείο ασφαλές όπου δεν μπορεί να προκαλέσει φθορές ή κίνδυνο ολίσθησης.

Σημειώσεις που αφορούν τη διάνοιξη οπής στον τοίχο

Η διάνοιξη οπής στον τοίχο είναι απαραίτητη για να περάσετε τις σωληνώσεις του ψυκτικού μέσου και το καλώδιο μεταφοράς σήματος που θα συνδέσει την εσωτερική με την εξωτερική μονάδα.

1. Προσδιορίστε τη θέση της οπής με βάση τη θέση της εξωτερικής μονάδας.
2. Χρησιμοποιήστε ένα τρυπάνι 65-mm (2,5") για να ανοίξετε την οπή στον τοίχο.

ΣΗΜΕΙΩΣΗ: Κατά τη διάνοιξη της οπής φροντίστε να αποφύγετε καλώδια, την υδραυλική εγκατάσταση και άλλα ευαίσθητα εξαρτήματα.

3. Τοποθετήστε το προστατευτικό κολάρο στην οπή. Με αυτό τον τρόπο προστατεύεται το χείλος της οπής και παράλληλα καθίσταται ευκολότερη η σφράγιση της οπής μετά το πέρας της διαδικασίας εγκατάστασης.

Εγκατάσταση του Σωλήνα Αποστράγγισης 10

Ο σωλήνας αποστράγγισης απομακρύνει το νερό από τη μονάδα. Η μη ορθή τοποθέτησή του ενδέχεται να προκαλέσει φθορές τόσο στη μονάδα, όσο και σε άλλα περιουσιακά στοιχεία.

⚠ ΠΡΟΣΟΧΗ

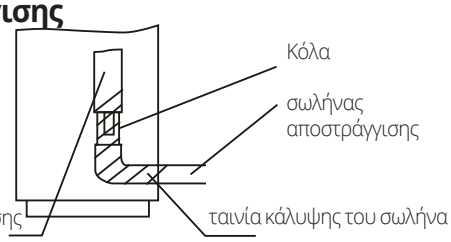
- Μονώστε όλους τους σωλήνες ώστε να αποφύγετε τη δημιουργία συμπυκνώματος που ενδέχεται να προκαλέσει φθορές.
- Εάν ο σωλήνας αποστράγγισης είναι λυγισμένος ή δεν εγκατασταθεί σωστά, υπάρχει κίνδυνος διαρροής και συνεπακόλουθης δυσλειτουργίας του διακόπτη στάθμης νερού.
- Όταν η συσκευή βρίσκεται σε λειτουργία θέρμανσης (HEAT), από την εξωτερική μονάδα απορρέει νερό. Βεβαιωθείτε ότι ο εύκαμπτος σωλήνας αποστράγγισης είναι τοποθετημένος έτσι ώστε να αποφεύγονται φθορές από το νερό αλλά και κίνδυνος ολίσθησης λόγω του παγωμένου απορρέοντος νερού.
- **ΜΗΝ** ΤΡΑΒΑΤΕ δυνατά τον σωλήνα αποστράγγισης. Κίνδυνος αποσύνδεσής του.

ΣΗΜΕΙΩΣΗ ΠΕΡΙ ΑΓΟΡΑΣ ΣΩΛΗΝΩΝ

Για την εγκατάσταση αυτή χρειάζεστε σωλήνα πολυαιθυλενίου (εξωτερική διάμετρος = 3,7-3,9cm, εσωτερική διάμετρος = 3,2cm). Τον σωλήνα αυτό μπορείτε να τον προμηθευτείτε από το τοπικό κατάστημα σιδηρικών ή από τον αντιπρόσωπό σας.

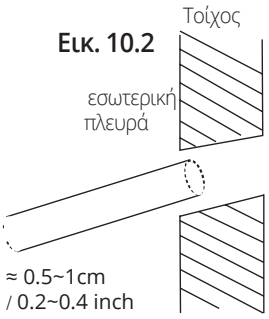
Εγκατάσταση του Εσωτερικού Σωλήνα Αποστράγγισης

Εικ. 10.1



1. Βεβαιωθείτε ότι ο σωλήνας αποστράγγισης είναι συνδεδεμένος με την εξωτερική πλευρά με φορά προς τα κάτω.
2. Ο σκληρός πλαστικός σωλήνας από πολυβινυλοχλωρίδιο (PVC) (εξωτερική διάμετρος 26mm) που διατίθεται στο εμπόριο είναι κατάλληλος για να τον συνδέσετε με τον εύκαμπτο σωλήνα αποστράγγισης.
3. Παρακαλούμε συνδέστε τον εύκαμπτο σωλήνα αποστράγγισης με τον σωλήνα αποστράγγισης και στερεώστε τους με ταινία. Εάν πρέπει να συνδέσετε τον σωλήνα αποστράγγισης σε εσωτερικό χώρο και προς αποφυγή συμπύκνωσης λόγω πρόσληψης αέρα, καλύψτε τον σωλήνα με θερμομονωτικό υλικό (πολυαιθυλένιο ειδικού βάρους 0,03 και ελάχιστου πάχους 9 mm) και στερεώστε τη μόνωση με αυτοκόλλητη ταινία.
4. Μετά τη σύνδεση του σωλήνα αποστράγγισης, παρακαλούμε ελέγξτε κατά πόσον το νερό απορρέει με επάρκεια από τον σωλήνα και βεβαιωθείτε ότι δεν υπάρχουν διαρροές.
5. Ο σωλήνας ψυκτικού μέσου και ο σωλήνας αποστράγγισης πρέπει να είναι θερμομονωμένοι για να αποφευχθεί η συμπύκνωση και συνεπακόλουθα ο σχηματισμός σταγόνων νερού.
6. Χρησιμοποιήστε ένα τρυπάνι 65-mm (2,5") για να ανοίξετε την οπή στον τοίχο. Φροντίστε να την ανοίξετε ώστε να βλέπει ελαφρά προς τα κάτω. Το εξωτερικό της άκρο πρέπει να βρίσκεται χαμηλότερα από το εσωτερικό της άκρο κατά περίπου ένα (1) cm (0,4"). Με αυτό τον τρόπο εξασφαλίζεται η ορθή αποστράγγιση (βλέπε Σχήμα 10.2). Τοποθετείστε το προστατευτικό κολάρο στην οπή. Με αυτό τον τρόπο προστατεύεται το χείλος της οπής και παράλληλα καθίσταται ευκολότερη η σφράγιση της οπής μετά το πέρας της εγκατάστασης.

Εικ. 10.2



ΣΗΜΕΙΩΣΗ: Κατά τη διάνοιξη της οπής φροντίστε να αποφύγετε καλώδια, την υδραυλική εγκατάσταση και άλλα ευαίσθητα εξαρτήματα.

7. Περάστε τον εύκαμπτο σωλήνα αποστράγγισης από την οπή στον τοίχο. Φροντίστε η απορροή του νερού να γίνεται σε σημείο ασφαλές όπου δεν μπορεί να προκαλέσει φθορές ή κίνδυνο ολίσθησης.

ΣΗΜΕΙΩΣΗ: Η έξοδος του σωλήνας αποστράγγισης πρέπει να βρίσκεται τουλάχιστον 5cm (1.9") πάνω από το έδαφος. Σε περίπτωση που ακουμπά στο έδαφος μπορεί να δημιουργηθεί απόφραξή της που θα οδηγήσει σε δυσλειτουργία. Σε περίπτωση αποστράγγισης του νερού απευθείας στην αποχέτευση, φροντίστε η αποχέτευση να διαθέτει σωλήνα απορροής σχήματος U ή S για την ανάσχεση της άσχημης μυρωδιάς που ενδέχεται διαφορετικά να διαχέεται στους εσωτερικούς χώρους της κατοικίας.

Σύνδεση Σωληνώσεων Ψυκτικού Μέσου 11

Οδηγίες Ασφαλείας

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΗ

- Οι εγκαταστάσεις των σωληνώσεων πρέπει να γίνονται από εξουσιοδοτημένο τεχνικό και πρέπει να συμμορφώνονται με τους τοπικούς και εθνικούς κανόνες.
- Εάν το κλιματιστικό είναι εγκατεστημένο σε μικρών διαστάσεων χώρο, συνίσταται λήψη μέτρων ώστε σε περίπτωση διαρροής ψυκτικού η συγκέντρωση ψυκτικού να μην υπερβεί τα όρια ασφάλειας. Σε περίπτωση διαρροής ψυκτικού και υπέρβασης των προκαθορισμένων ορίων συγκέντρωσης ενδέχεται να προκληθεί κίνδυνος εξαιτίας της έλλειψης οξυγόνου.
- Κατά την εγκατάσταση του συστήματος ψύξης, λάβετε μέτρα ώστε να αποφύγετε την είσοδο αέρα, σκόνης, υγρασίας ή ξένων σωμάτων στο κύκλωμα του ψυκτικού μέσου. Η μόλυνση του συστήματος ενέχει κίνδυνο ανεπαρκούς λειτουργικής δυναμικότητας, υψηλής πίεσης στο κύκλωμα ψυκτικού, έκρηξης και τραυματισμών.
- Αερίζετε τον χώρο αμέσως σε περίπτωση διαρροής ψυκτικού μέσου κατά την εγκατάσταση. Το ψυκτικό μέσο είναι τοξικό και εύφλεκτο. Μετά την ολοκλήρωση των εργασιών εγκατάστασης βεβαιωθείτε ότι δεν υπάρχει διαρροή ψυκτικού μέσου.

Οδηγίες για τη Σύνδεση των Σωληνώσεων Ψυκτικού Μέσου

⚠ ΠΡΟΣΟΧΗ

- Ο σωλήνας διακλάδωσης πρέπει να εγκαθίσταται οριζόντια. Γωνία που υπερβαίνει τις 10° ενδέχεται να προκαλέσει δυσλειτουργία.
- **ΜΗΝ** ΕΓΚΑΘΙΣΤΑΤΕ τον σωλήνα σύνδεσης πριν ολοκληρώσετε την εγκατάσταση τόσο της εσωτερικής, όσο και της εξωτερικής μονάδας.
- Μονώστε τόσο τους σωλήνες αερίου, όσο και τους σωλήνες υγρού για να αποφύγετε τυχόν διαρροές.

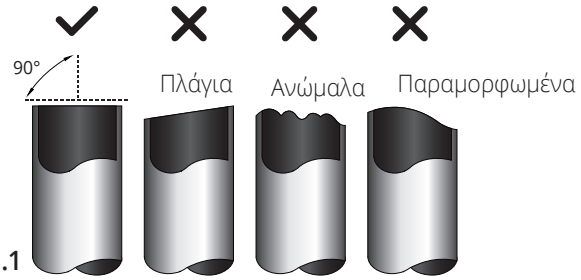
Βήμα 1: Κοπή των σωλήνων

Κατά την προετοιμασία των σωλήνων ψυκτικού μέσου, ιδιαίτερη προσοχή πρέπει να δοθεί στην κοπή και τη διαμόρφωσή τους. Με αυτό τον τρόπο εξασφαλίζεται η αποδοτική λειτουργία της συσκευής και ελαχιστοποιείται η ανάγκη συντήρησης στο μέλλον.

1. Μετρήστε την απόσταση μεταξύ εσωτερικής και εξωτερικής μονάδας.
2. Χρησιμοποιήστε έναν κόφτη σωλήνων για να κόψετε το σωλήνα λίγο μακρύτερο από το μέγεθος που μετρήσατε.

⚠ ΠΡΟΣΟΧΗ

ΜΗΝ ΠΑΡΑΜΟΡΦΩΝΕΤΕ το σωλήνα ενώ τον κόβετε. Ενώ κόβετε το σωλήνα, προσέξτε ιδιαίτερα ώστε να μην προκαλέσετε φθορές, να μην τον βαθουλώσετε και να μην τον παραμορφώσετε. Κάθε μορφής παραμόρφωση μειώνει σε μεγάλο βαθμό τη θερμαντική απόδοση της συσκευής.



Εικ. 11.1

1. Φροντίστε ο σωλήνας να κοπεί αυστηρά υπό γωνία 90° Για παραδείγματα κακής κοπής ανατρέξτε στο Σχήμα 11.1.

Βήμα 2: Αφαιρέστε τα γρέζια.

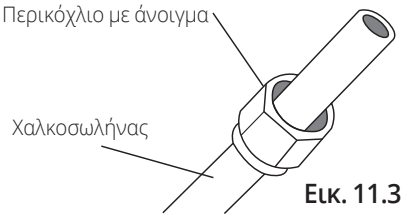
Τα γρέζια ενδέχεται να επηρεάσουν αρνητικά την αεροστεγή στεγανοποίηση της σύνδεσης ψυκτικού μέσου. Ως εκ τούτου πρέπει να αφαιρούνται ολοσχερώς.

1. Κρατήστε τον σωλήνα ώστε να βλέπει προς τα κάτω για να μην πέσουν τα γρέζια στο εσωτερικό του.
2. Χρησιμοποιήστε έναν περικοπτήρα (αλεζουάρ) ή ένα εργαλείο/μηχάνημα αφαίρεσης των γρεζιών για να αφαιρέσετε όλα τα γρέζια από το σημείο όπου κόψατε τον σωλήνα.

Εικ. 11.2

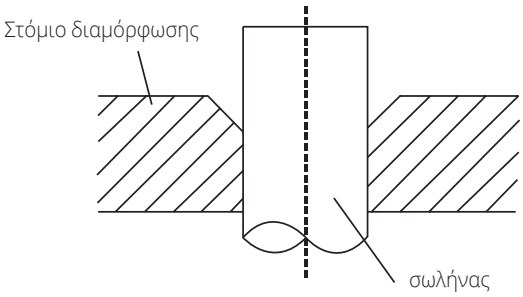
Βήμα 3: Διαμόρφωση των άκρων του σωλήνα
Η κατάλληλη διαμόρφωση είναι απαραίτητη για την επίτευξη αεροστεγούς στεγανοποίησης.

1. Μετά την αφαίρεση των γρεζιών από τον κομμένο σωλήνα, σφραγίστε τα άκρα με ταινία PVC ώστε να μην εισέρχονται ξένα σώματα/ υλικά στον σωλήνα.
2. Τυλίξτε τον σωλήνα με μονωτικό υλικό.
3. Τοποθετήστε περικόχλια με άνοιγμα και στα δύο άκρα του σωλήνα. Φροντίστε να είναι στραμμένα προς τη σωστή κατεύθυνση γιατί δεν μπορείτε μετά τη διαμόρφωση να τα τοποθετήσετε ή να αλλάξετε την κατεύθυνσή τους. Βλέπε Σχήμα 11.3



Εικ. 11.3

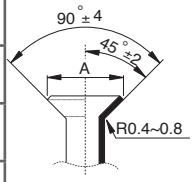
4. Αφαιρέστε την ταινία PVC από τα άκρα του σωλήνα όταν είστε έτοιμοι να τον διαμορφώσετε.
5. Στερεώστε το στόμιο διαμόρφωση στην άκρη του σωλήνα. Το άκρο του σωλήνα πρέπει να ξεπερνά το στόμιο.



Εικ. 11.4

6. Τοποθετήστε το εργαλείο διαμόρφωσης πάνω στο στόμιο.
7. Γυριστέ το χερούλι του εργαλείου κατασκευής στομίου δεξιόστροφα μέχρι να ολοκληρωθεί η διαμόρφωση του σωλήνα. Διαμορφώστε τον σωλήνα σύμφωνα με τις διαστάσεις του πίνακα 11.1

Πίνακας 11.1: ΠΡΟΕΚΤΑΣΗ ΤΗΣ ΣΩΛΗΝΩΣΗΣ ΠΕΡΑ ΑΠΟ ΤΟ ΣΤΟΜΙΟ ΔΙΑΜΟΡΦΩΣΗΣ

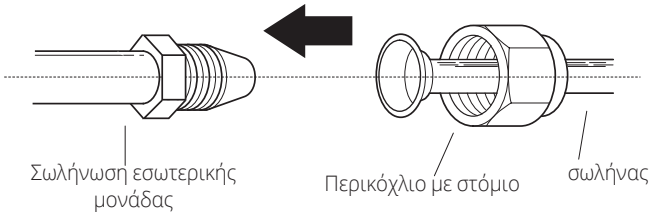
Πάχος σωλήνα	Δυναμομετρικό κλειδί σύσφίξης	Μέγεθος στομίου (A) (Μον. μέτρησης: mm/Inch)		Σχήμα Στομίου
		Ελάχιστο	Μέγιστο	
Ø 6.4	18-20 N.m (183-204 kgf.cm)	8.4/0.33	8.7/0.34	
Ø 9.5	25-26 N.m (255-265 kgf.cm)	13.2/0.52	13.5/0.53	
Ø 12.7	35-36 N.m (357-367 kgf.cm)	16.2/0.64	16.5/0.65	
Ø 15.9	45-47 N.m (459-480 kgf.cm)	19.2/0.76	19.7/0.78	
Ø 19.1	65-67 N.m (663-683 kgf.cm)	23.2/0.91	23.7/0.93	
Ø 22	75-85N.m (765-867 kgf.cm)	26.4/1.04	26.9/1.06	

Εικ. 11.5

8. Αφαιρέστε το εργαλείο και το στόμιο διαμόρφωσης και επιθεωρήστε το άκρο του σωλήνα για τυχόν ρωγμές. Βεβαιωθείτε ότι η διαμόρφωση είναι ομοιόμορφη.

Βήμα 4: Σύνδεση των σωλήνων
Συνδέστε τους χάλκινους σωλήνες πρώτα με την εσωτερική μονάδα. Συνδέστε κατόπιν την εσωτερική μονάδα με την εξωτερική. Συνδέστε πρώτα τον σωλήνα χαμηλής και κατόπιν τον σωλήνα υψηλής πίεσης.

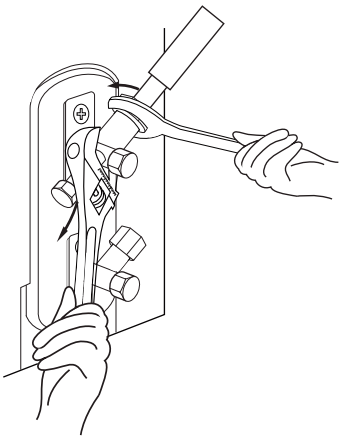
1. Κατά τη σύνδεση των περικοχλίων με στόμιο, απλώστε ένα λεπτό στρώμα ψυκτικού ελαίου στα διαμορφωμένα άκρα των σωλήνων.
2. Ευθυγραμμίστε το κέντρο των δύο σωλήνων που πρόκειται να συνδέσετε.



Εικ. 11.6

3. Σφίξτε το περικόχλιο με στόμιο όσο το δυνατόν περισσότερο με το χέρι.
4. Χρησιμοποιήστε περικοχλιοστρόφιο για να πιάσετε το περικόχλιο του σωλήνα της μονάδας.
5. Ενώ κρατάτε σταθερά το περικόχλιο χρησιμοποιήστε ένα δυναμομετρικό κλειδί σύσφιξης για να σφίξετε το περικόχλιο με στόμιο σύμφωνα με τις τιμές ροπής στρέψης του πίνακα 11.1.

ΣΗΜΕΙΩΣΗ: Χρησιμοποιήστε περικοχλιοστρόφιο και δυναμομετρικό κλειδί σύσφιξης για να συνδέσετε τους σωλήνες με τη μονάδα ή να τους αποσυνδέσετε από αυτήν.



Εικ. 11.7

⚠ ΠΡΟΣΟΧΗ

- Βεβαιωθείτε ότι έχετε τυλίξει τους σωλήνες με θερμομονωτικό υλικό. Η άμεση επαφή με τους γυμνούς σωλήνες μπορεί να προκαλέσει εγκαύματα ή κρυοπαγήματα.
- Βεβαιωθείτε ότι ο σωλήνας έχει συνδεθεί σωστά. Το υπερβολικό σφίξιμο του σωλήνα ενδέχεται να προκαλέσει φθορά στον εκχειλωμένο σωλήνα ενώ το ανεπαρκές σφίξιμο ίσως προκαλέσει διαρροή.

ΣΗΜΕΙΩΣΕΙΣ ΠΕΡΙ ΕΛΑΧΙΣΤΗΣ ΑΚΤΙΝΑΣ ΚΑΜΨΕΩΣ

Κάμψτε με προσοχή τον σωλήνα στη μέση σύμφωνα με το ακόλουθο διάγραμμα.
ΜΗΝ ΚΑΜΠΤΕΤΕ τους σωλήνες υπό γωνία που υπερβαίνει τις 90° ή για περισσότερες από τρεις 3 φορές.

Εικ. 11.8

6. Αφού συνδέσετε τους χαλκοσωλήνες με την εσωτερική μονάδα, τυλίξτε το καλώδιο ισχύος, το καλώδιο σήματος και τις σωληνώσεις συνδέοντάς τα με συνδετική ταινία.

ΣΗΜΕΙΩΣΗ: ΜΗΝ ΤΥΛΙΓΕΤΕ το καλώδιο σήματος με άλλα σύρματα. Κατά την ομαδοποίηση των στοιχείων αυτών, μην τυλίγετε και μην διασταυρώνετε το καλώδιο σήματος με άλλα καλώδια ή σύρματα.

7. Περάστε τον αγωγό από τον τοίχο και συνδέστε τον με την εξωτερική μονάδα.
8. Μονώστε όλες τις σωληνώσεις, συμπεριλαμβανομένων και των βαλβίδων της εξωτερικής μονάδας.
9. Ανοίξτε τις βαλβίδες απομόνωσης της εξωτερικής μονάδας για να αρχίσει η ροή ψυκτικού ανάμεσα στην εσωτερική και την εξωτερική μονάδα.

⚠ ΠΡΟΣΟΧΗ

Μετά την ολοκλήρωση των εργασιών εγκατάστασης βεβαιωθείτε ότι δεν υπάρχει διαρροή ψυκτικού μέσου. Σε περίπτωση διαρροής ψυκτικού μέσου, αερίστε τον χώρο αμέσως και εκκενώστε το σύστημα (συμβουλευτείτε το κεφάλαιο με τίτλο Εκκένωση Αέρα του παρόντος εγχειριδίου).

Καλωδίωση

12

Οδηγίες Ασφαλείας

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΗ

- Πριν πραγματοποιήσετε οποιαδήποτε εργασία στο σύστημα, αποσυνδέσετε την παροχή ηλεκτρικού ρεύματος.
- Οι εργασίες καλωδίωσης πρέπει να γίνονται σύμφωνα με τις τοπικές και εθνικές κανονιστικές ρυθμίσεις.
- Η ηλεκτρική καλωδίωση πρέπει να γίνεται από πιστοποιημένο τεχνικό. Ανεπαρκείς/εσφαλμένες συνδέσεις ενέχουν κίνδυνο ηλεκτρικής δυσλειτουργίας, τραυματισμού και πυρκαγιάς.
- Για το σύστημα αυτό απαιτείται ανεξάρτητο κύκλωμα και μεμονωμένη έξοδος. **ΜΗΝ** ΣΥΝΔΕΕΤΕ δεύτερο ρευματολήπτη ή φόρτιση στον ίδιο ρευματοδότη. Εάν η δυναμικότητα του ηλεκτρικού κυκλώματος δεν επαρκεί ή οι συνδέσεις είναι ελαττωματικές υπάρχει κίνδυνος ηλεκτροπληξίας, πυρκαγιάς καθώς και φθοράς της συσκευής και άλλων περιουσιακών στοιχείων.
- Συνδέστε το καλώδιο τροφοδοσίας με τα τερματικά και σφίξτε το με σφικτήρα. Μη ασφαλισμένη σύνδεση ενέχει κίνδυνο πυρκαγιάς.
- Βεβαιωθείτε ότι όλες οι εργασίες καλωδίωσης γίνονται ορθά και ότι το κάλυμμα του πίνακα ελέγχου έχει τοποθετηθεί επίσης ορθά.
- Οποιαδήποτε αστοχία ενδέχεται να προκαλέσει υπερθέρμανση στα σημεία σύνδεσης, πυρκαγιά και ηλεκτροπληξία.
- Βεβαιωθείτε ότι η σύνδεση με την κεντρική παροχή γίνεται μέσω διακόπτη που αποσυνδέει όλους τους πόλους και διαθέτει διάκενο επαφής τουλάχιστον 3mm (0,118").
- **ΜΗΝ** ΤΡΟΠΟΠΟΙΕΙΤΕ το μήκος του καλωδίου τροφοδοσίας και μην χρησιμοποιείτε επέκταση καλωδίου ρεύματος.

⚠ ΠΡΟΣΟΧΗ

- Συνδέστε τα εξωτερικά καλώδια πριν συνδέσετε τα εσωτερικά καλώδια.
- Βεβαιωθείτε ότι έχετε γειώσει το σύστημα. Το καλώδιο της γείωσης πρέπει να απέχει από σωλήνες φυσικού αερίου και νερού, ράβδους κεραυνίτης προστασίας, τηλεφωνικά καλώδια και άλλα καλώδια γείωσης. Η ανεπαρκής γείωση της συσκευής ενέχει κίνδυνο ηλεκτροπληξίας.
- **ΜΗ** ΣΥΝΔΕΕΤΕ τη συσκευή με την παροχή ρεύματος πριν ολοκληρώσετε όλες τις εργασίες καλωδίωσης και τοποθέτησης των σωληνώσεων.
- Βεβαιωθείτε ότι δεν έχετε διασταυρώσει τα καλώδια τροφοδοσίας με τα καλώδια σήματος καθώς μπορεί να προκληθεί παραμόρφωση του σήματος και παρεμβολές.

Ακολουθήστε αυτές τις οδηγίες για να αποφύγετε την παραμόρφωση όταν τεθεί ο συμπιεστής σε λειτουργία.

- Η συσκευή πρέπει να είναι συνδεδεμένη με την κεντρική παροχή. Συνήθως, η παροχή ρεύματος πρέπει να έχει χαμηλή σύνθετη αντίσταση εξόδου 32 ohm.
- Μην συνδέετε άλλον εξοπλισμό στο ίδιο κύκλωμα.
- Πληροφορίες για την ισχύ τροφοδοσίας της συσκευής αναγράφονται στο αυτοκόλλητο με τα ονομαστικά μεγέθη που βρίσκεται πάνω στο προϊόν.

ΣΗΜΕΙΩΣΕΙΣ ΠΟΥ ΑΦΟΡΟΥΝ ΤΙΣ ΠΡΟΔΙΑΓΡΑΦΕΣ ΗΛΕΚΤΡΙΚΗΣ ΑΣΦΑΛΕΙΑΣ

Η πλακέτα τυπωμένου κυκλώματος (PCB) του κλιματιστικού περιέχει ασφάλεια τήξης για προστασία από την υπερφόρτιση. Οι προδιαγραφές της ασφάλειας τήξης είναι τυπωμένες στην πλακέτα τυπωμένου κυκλώματος, ειδικότερα αναγράφονται τα εξής:

Εσωτερική μονάδα: T5A/250VAC, T10A/250VAC. (ισχύει για συσκευές που λειτουργούν αποκλειστικά με ψυκτικό μέσο R32 ή R290)

Εξωτερική μονάδα: T20A/250VAC(για μονάδες <24000Btu/h), T30A/250VAC(για μονάδες>24000Btu/h)

Καλωδίωση της εξωτερικής μονάδας

⚠ ΠΡΟΕΙΔΟΠΟΙΗΣΗ

Πριν πραγματοποιήσετε εργασίες καλωδίωσης ή άλλες ηλεκτρικές εργασίες, αποσυνδέστε την κεντρική παροχή ρεύματος.

1. Προετοιμάστε το καλώδιο για τη σύνδεση.

a. Επιλέξτε το σωστό μέγεθος καλωδίου πριν ετοιμάσετε το καλώδιο για να το συνδέσετε. Βεβαιωθείτε ότι χρησιμοποιείτε καλώδια H07RN-F.

Πίνακας 12.1: Ελάχιστη επιφάνεια διατομής καλωδίων ισχύος και καλωδίων σήματος στη Β. Αμερική

Ονομαστική ισχύς της συσκευής (A)	AWG
≤ 7	18
7 - 13	16
13 - 18	14
18 - 25	12

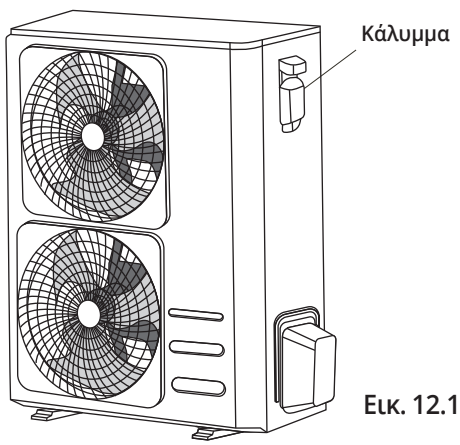
Πίνακας 12.2: Λοιπές περιοχές του κόσμου

Ονομαστική ισχύς της συσκευής (A)	AWG
≤ 6	0.75
6 - 10	1
10 - 16	1.5
16 - 25	2.5
25- 32	4
32 - 45	6

b. Χρησιμοποιήστε απογυμνωτές καλωδίων για να αφαιρέσετε το ελαστικό περίβλημα από αμφότερα τα άκρα του καλωδίου σήματος σε μήκος περίπου 15cm (5,9").
c. Αφαιρέστε τη μόνωση από τα άκρα.
d. Χρησιμοποιήστε πένσα σύσφιξης για να δημιουργήσετε ωτία σε σχήμα u στα άκρα.

ΣΗΜΕΙΩΣΗ: Κατά τη σύνδεση των καλωδίων ακολουθείτε με προσήλωση το διάγραμμα συρμάτωσης που θα βρείτε στην εσωτερική πλευρά του καλύμματος του ηλεκτρικού κιβωτίου.

2. Αφαιρέστε το ηλεκτρικό κάλυμμα της εξωτερικής μονάδας (βλέπε Σχήμα 12.1).



Εικ. 12.1

3. Συνδέστε τα άκρα σε σχήμα u με τις τερματικές απολήξεις. Ταιριάξτε τα χρώματα/ετικέτες σήμανσης των καλωδίων με τις ετικέτες της συστοιχίας τερματικών απολήξεων. Βιδώστε και στερεώστε τα άκρα του κάθε καλωδίου στην αντίστοιχη τερματική απόληξη.
4. Σφίξτε το καλώδιο με τον σφικτήρα καλωδίων.
5. Μονώστε τα καλώδια που δεν χρησιμοποιήσατε με ηλεκτρική ταινία. Διατηρήστε τα μακριά από κάθε είδους ηλεκτρικό ή μεταλλικό εξάρτημα.
6. Επανατοποθετήστε το κάλυμμα του ηλεκτρικού κιβωτίου.

Καλωδίωση της εσωτερικής μονάδας

1. Προετοιμάστε το καλώδιο για τη σύνδεση.
a. Χρησιμοποιήστε απογυμνωτές καλωδίων για να αφαιρέσετε το ελαστικό περίβλημα από αμφότερα τα άκρα του καλωδίου σήματος σε μήκος περίπου 15cm (5,9").
b. Αφαιρέστε τη μόνωση από τα άκρα των καλωδίων.
c. Χρησιμοποιήστε πένσα σύσφιξης για να δημιουργήσετε σχήμα u στα άκρα.
2. Χαλαρώστε τον κοχλία στο κάλυμμα του ηλεκτρικού κιβωτίου και αφαιρέστε το κάλυμμα.
3. Συνδέστε τα άκρα σε σχήμα u με τις τερματικές απολήξεις.
Ταιριάξτε τα χρώματα/ετικέτες σήμανσης των καλωδίων με τις ετικέτες της συστοιχίας τερματικών απολήξεων. Βιδώστε και στερεώστε το άκρο σε σχήμα u του κάθε καλωδίου στην αντίστοιχη τερματική απόληξη. Ανατρέξτε στο διάγραμμα Σειριακών Αριθμών και Καλωδίωσης που βρίσκεται στο εσωτερικό του καλύμματος του ηλεκτρικού κιβωτίου της συσκευής.

⚠ ΠΡΟΣΟΧΗ

- Κατά τη σύνδεση των καλωδίων ακολουθείτε με προσήλωση το διάγραμμα συρμάτωσης.
- Το κύκλωμα ψυκτικού μέσου μπορεί να αναπτύξει υψηλές θερμοκρασίες. Διατηρείτε το καλώδιο διασύνδεσης μακριά από τον χάλκινο σωλήνα.

4. Σφίξτε το καλώδιο με τον σφικτήρα καλωδίων. Το καλώδιο δεν πρέπει ούτε να είναι χαλαρό ούτε να ασκεί τάση στα ωτία σε σχήμα u.
5. Τοποθετήστε στη θέση του το κάλυμμα του ηλεκτρικού κιβωτίου.

Εκκένωση του Αέρα

13

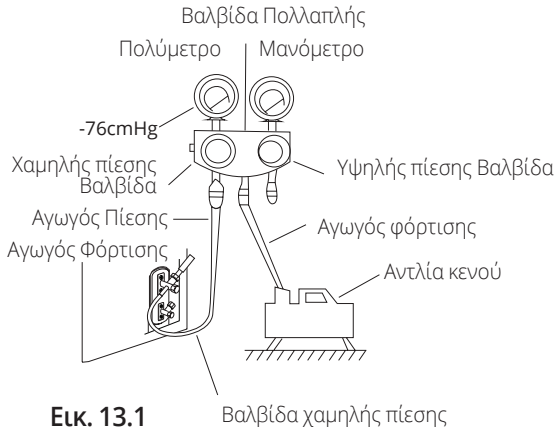
Οδηγίες Ασφαλείας

ΠΡΟΣΟΧΗ

- Χρησιμοποιήστε αντλία κενού με ενδείξεις πίεσης κάτω του - 0.1MPa και ικανότητα εκκένωσης αέρα άνω των 40L/min.
- Η εξωτερική μονάδα δεν χρειάζεται εκκένωση. **ΜΗΝ** ΑΝΟΙΓΕΤΕ τις βαλβίδες απομόνωσης αερίου και υγρών της εξωτερικής μονάδας.
- Βεβαιωθείτε ότι μετά από δύο (2) ώρες, η ένδειξη του μετρητή είναι -0.1MPa ή χαμηλότερη. Εάν μετά από τρεις (3) ώρες λειτουργίας η ένδειξη του μετρητή παραμένει υψηλότερη από - 0.1MPa, ελέγξτε για τυχόν διαρροή αερίου ή νερού εντός των σωληνώσεων. Σε περίπτωση που δεν υπάρχει διαρροή, επαναλάβετε την εκκένωση για 1 ή 2 ώρες.
- **ΜΗΝ** ΧΡΗΣΙΜΟΠΟΙΕΙΤΕ ψυκτικό μέσο για την εκκένωση του συστήματος.

Οδηγίες εκκένωσης

Πριν χρησιμοποιήσετε την πολλαπλή και την αντλία κενού διαβάστε τα εγχειρίδια λειτουργίας του για να εξοικειωθείτε με την ορθή τους χρήση.

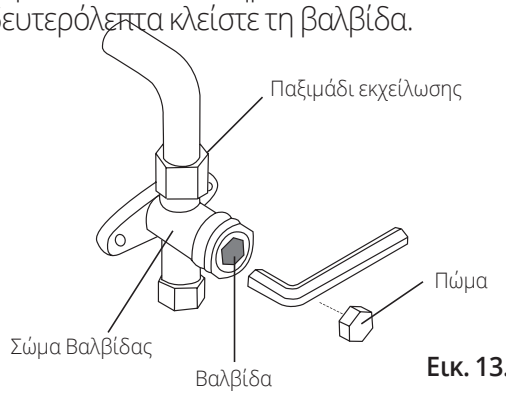


Εικ. 13.1

1. Συνδέστε τον εύκαμπτο σωλήνα πλήρωσης της πολλαπλής στο στόμιο εξαγωγής της βαλβίδας χαμηλής πίεσης της εξωτερικής μονάδας.
2. Συνδέστε την πολλαπλή με την αντλία κενού με έναν ακόμα εύκαμπτο σωλήνα πλήρωσης.
3. Ανοίξτε την πλευρά χαμηλής πίεσης της πολλαπλής. Διατηρείτε την πλευρά υψηλής πίεσης κλειστή.
4. Θέστε σε λειτουργία την αντλία κενού για να εκκενώσετε το σύστημα.
5. Αφήστε την αντλία να λειτουργήσει για τουλάχιστον δεκαπέντε (15) λεπτά της ώρας ή μέχρι ο μετρητής περιεχομένου να αναγράψει -76cmHG (-1x105Pa).
6. Κλείστε την πλευρά χαμηλής πίεσης της πολλαπλής και απενεργοποιήστε την αντλία κενού.
7. Περιμένετε για πέντε (5) λεπτά και κατόπιν ελέγξτε εάν υπάρχει αλλαγή στην πίεση του συστήματος.

ΣΗΜΕΙΩΣΗ: Εάν η πίεση του συστήματος παραμένει αμετάβλητη, ξεβιδώστε το κάλυμμα της κλειστής βαλβίδας (υψηλής πίεσης). Εάν και τότε δεν υπάρξει μεταβολή στην πίεση του συστήματος, ενδέχεται να υπάρχει διαρροή αερίου.

8. Εισάγετε το δυναμομετρικό κλειδί στη βαλβίδα υψηλής πίεσης και ανοίξτε τη βαλβίδα στρέφοντας το κλειδί αριστερόστροφα κατά % του κύκλου. Ακούστε για να αντιληφθείτε αν υπάρχει διαφυγή αερίου από το σύστημα. Μετά από πέντε (5) δευτερόλεπτα κλείστε τη βαλβίδα.



Εικ. 13.2

9. Παρακολουθήστε το μανόμετρο για ένα (1) λεπτό για να βεβαιωθείτε ότι η πίεση δεν έχει αλλάξει. Η ένδειξη του μανομέτρου πρέπει να είναι κατά τι υψηλότερη από την ατμοσφαιρική πίεση.
10. Αφαιρέστε τον εύκαμπτο σωλήνα πλήρωσης από το στόμιο εξαγωγής.
11. Με τη βοήθεια του δυναμομετρικού κλειδιού ανοίξτε τελείως τόσο τη βαλβίδα της χαμηλής, όσο και τη βαλβίδα της υψηλής πίεσης.

ΑΝΟΙΞΤΕ ΤΟΥΣ ΜΙΣΧΟΥΣ ΤΩΝ ΒΑΛΒΙΔΩΝ

Καθώς ανοίγετε τους μίσχους των βαλβίδων, γυρίστε το δυναμομετρικό κλειδί μέχρι το τέρμα. **ΜΗΝ** ΠΡΟΣΠΑΘΗΣΕΤΕ να πιέσετε τη βαλβίδα να ανοίξει και άλλο.

12. Σφίξτε τα προστατευτικά καλύμματα των βαλβίδων με το χέρι και μετά με το κατάλληλο εργαλείο.

Σημείωση σχετικά με την πλήρωση με ψυκτικό μέσο

⚠ ΠΡΟΣΟΧΗ

- Η πλήρωση με ψυκτικό μέσο πρέπει να γίνεται μετά την ολοκλήρωση της καλωδίωσης, της εκκένωσης του συστήματος και της δοκιμής ανίχνευσης διαρροών.
- **ΜΗΝ** ΥΠΕΡΒΑΙΝΕΤΕ τη μέγιστη επιτρεπόμενη ποσότητα ψυκτικού μέσου και μην υπερπληρώνετε το σύστημα. Η υπερπλήρωση ενδέχεται να προκαλέσει φθορά στο σύστημα ή να επηρεάσει αρνητικά τη λειτουργία του.
- Η πλήρωση του συστήματος με ακατάλληλες ουσίες ενδέχεται να προκαλέσει εκρήξεις ή ατυχήματα. Βεβαιωθείτε ότι χρησιμοποιείτε το κατάλληλο ψυκτικό μέσο.
- Τα δοχεία ψυκτικού μέσου πρέπει να ανοίγονται αργά. Κατά την πλήρωση του συστήματος με ψυκτικό μέσο, χρησιμοποιείτε πάντοτε ατομικά μέσα προστασίας.
- **ΜΗΝ** ΑΝΑΜΙΓΝΕΙΕΤΕ διάφορα είδη ψυκτικών μέσων.
- Όσον αφορά το μοντέλο που λειτουργεί με R290 ή R32, βεβαιωθείτε ότι οι συνθήκες στο χώρο είναι ασφαλείς ελέγχοντας ότι δεν υπάρχουν εύφλεκτες ουσίες σε κοντινή απόσταση κατά την πλήρωση του κλιματιστικού με ψυκτικό μέσο.

Σε ορισμένα συστήματα και ανάλογα με το μήκος των σωλήνων απαιτείται επιπλέον ψυκτικό μέσο. Το τυπικό μήκος σωλήνα κυμαίνεται και εξαρτάται από τις κατά τόπους κανονιστικές ρυθμίσεις. Στη Βόρειο Αμερική, για παράδειγμα, το τυπικό μήκος σωλήνος είναι 7,5m (25') ενώ σε άλλες περιοχές το τυπικό μήκος σωλήνος είναι 5m (16'). Η επιπλέον ποσότητα ψυκτικού μέσου που πρέπει να χρησιμοποιήσετε για την πλήρωση του συστήματος μπορεί να υπολογιστεί με βάση τον ακόλουθο μαθηματικό τύπο:

Διάμετρος πλευράς υγρού

	ϕ6.35(1/4")	ϕ9.52(3/8")	ϕ12.7(1/2")
R22 Ακροφύσιο σωλήνα της εσωτερικής μονάδας):	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα 30g (0,32oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα 65g (0,69oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα 115g (1,23oZ)/ m(ft)
R22 Ακροφύσιο σωλήνα της εξωτερικής μονάδας):	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα 15g (0,16oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα^30g (0,32oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα^60g (0,64oZ)/ m(ft)
R410A: Ακροφύσιο σωλήνα της εσωτερικής μονάδας):	(Συνολικό μήκος σωλήνα - τυπικό μήκος σωλήνα 30g (0,32oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα^65g (0,69oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα^115g (1,23oZ)/ m(ft)
R410A: Ακροφύσιο σωλήνα της εξωτερικής μονάδας):	(Συνολικό μήκος σωλήνα - τυπικό μήκος σωλήνα^ 15g (0,16oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα^30g (0,32oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα^65g (0,69oZ)/ m(ft)
R32	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα^ 12g (0,13oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα 24g (0,26oZ)/ m(ft)	(Συνολικό μήκος σωλήνα -τυπικό μήκος σωλήνα^40g (0,42oZ)/ m(ft)

Δοκιμαστική λειτουργία

14

Πριν τη δοκιμαστική λειτουργία

Μετά την ολοκλήρωση της εγκατάστασης του συστήματος πρέπει να προχωρήσετε σε δοκιμαστική λειτουργία. Πριν από τη δοκιμή αυτή, ελέγξτε τα ακόλουθα σημεία:

a) Έχει γίνει ορθή εγκατάσταση τόσο της εσωτερικής, όσο και της εξωτερικής μονάδας.
b) Έχει γίνει ορθή εγκατάσταση των σωληνώσεων και των καλωδίων.
c) Δεν υπάρχουν εμπόδια πλησίον της εισόδου και της εξόδου της μονάδας, τα οποία ενδέχεται να προκαλέσουν δυσλειτουργία ή να μειώσουν την απόδοσή του.
d) Δεν υπάρχει διαρροή στο σύστημα ψύξης.
e) Το σύστημα αποστράγγισης είναι ελεύθερο και η αποστράγγιση πραγματοποιείται σε ασφαλές σημείο.
f) Έχει τοποθετηθεί ορθά η θερμομόνωση.
g) Τα καλώδια γείωσης είναι ορθά συνδεδεμένα.
h) Έχετε καταγράψει το μήκος των σωληνώσεων και την επιπλέον χωρητικότητα ψυκτικού μέσου. Η τάση συστήματος είναι κατάλληλη για το συγκεκριμένο κλιματιστικό.

⚠ ΠΡΟΣΟΧΗ

Η μη πραγματοποίηση δοκιμαστικής λειτουργίας ενδέχεται να οδηγήσει σε φθορά της συσκευής, ζημίες σε περιουσιακά στοιχεία και τραυματισμό.

Οδηγίες για την πραγματοποίηση της δοκιμαστικής λειτουργίας

1. Ανοίξτε τις βαλβίδες υγρού και τις βαλβίδες απομόνωσης αερίου.
2. Ανεβάστε τον κεντρικό διακόπτη και αφήστε το σύστημα να «Ζεσταθεί».
3. Ρυθμίστε το κλιματιστικό σε λειτουργία ψύξης (COOL).
4. Εσωτερική μονάδα:
   a. Βεβαιωθείτε ότι το τηλεχειριστήριο
   b. Βεβαιωθείτε ότι οι περσίδες κινούνται όπως πρέπει και ανταποκρίνονται στις εντολές του τηλεχειριστηρίου.
   c. Βεβαιωθείτε ότι η θερμοκρασία δωματίου καταγράφεται ορθά.
   d. Βεβαιωθείτε ότι οι ενδεικτικές λυχνίες του τηλεχειριστηρίου και της οθόνης απεικόνισης της εσωτερικής μονάδας λειτουργούν ορθά.
   e. Βεβαιωθείτε ότι τα πλήκτρα χειροκίνητης λειτουργίας της εσωτερικής μονάδας λειτουργούν ορθά.
   f. Βεβαιωθείτε ότι το σύστημα αποστράγγισης είναι ελεύθερο και η αποστράγγιση πραγματοποιείται ομαλά.
5. Βεβαιωθείτε ότι ενόσω η συσκευή λειτουργεί δεν υπάρχουν κραδασμοί ή μη φυσιολογικοί θόρυβοι. Εξωτερική μονάδα:
   a. Ελέγξτε για διαρροές στο σύστημα ψύξης.
   b. Βεβαιωθείτε ότι ενόσω η συσκευή λειτουργεί δεν υπάρχουν κραδασμοί ή μη φυσιολογικοί θόρυβοι.
   c. Βεβαιωθείτε ότι ο αέρας, ο θόρυβος και το νερό που παράγει η συσκευή σας δεν ενοχλούν τους γείτονες και δεν δημιουργούν θέματα ασφάλειας.
6. Δοκιμή αποστράγγισης
   a. Βεβαιωθείτε ότι το υγρό ρέει ομαλά από τον σωλήνα αποστράγγισης. Σε νέα κτίρια, η δοκιμή αυτή πρέπει να γίνεται πριν ολοκληρωθεί η επεξεργασία της οροφής.
   b. Αφαιρέστε το κάλυμμα δοκιμής. Προσθέστε 2.000ml νερού στο ντεπόζιτο με τη βοήθεια του σωλήνα που βρίσκεται σε αυτό.
   c. Ανεβάστε τον κεντρικό διακόπτη και ρυθμίστε το κλιματιστικό σε λειτουργία ψύξης (COOL).
   d. Ακούστε για να βεβαιωθείτε ότι η αντλία αποστράγγισης δεν εκπέμπει ασυνήθεις θορύβους.
   e. Ελέγξτε για να βεβαιωθείτε ότι η αποστράγγιση νερού πραγματοποιείται ομαλά. Ανάλογα με τον σωλήνα αποστράγγισης, ίσως περάσει ως και ένα (1) λεπτό της ώρας μέχρι να αρχίσει η αποστράγγιση του συστήματος.
   f. Βεβαιωθείτε ότι δεν υπάρχει διαρροή στις σωληνώσεις.
   g. Απενεργοποιήστε το κλιματιστικό. Κατεβάστε τον γενικό διακόπτη και επανατοποθετήστε το κάλυμμα δοκιμής.

ΣΗΜΕΙΩΣΗ: Σε περίπτωση δυσλειτουργίας ή ανεπαρκούς λειτουργίας του κλιματιστικού, παρακαλούμε, πριν επικοινωνήσετε με την εξυπηρέτηση πελατών (σέρβις), ανατρέξτε στο κεφάλαιο περί Επίλυσης προβλημάτων του Εγχειριδίου του Κατασκευαστή.

Ευρωπαϊκοί Κανονισμοί για την Απόρριψη

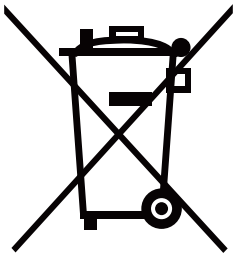
15

Οι χρήστες που κατοικούν σε χώρες εντός της Ευρωπαϊκής Ένωσης οφείλουν να σέβονται τις διατάξεις περί απόρριψης της παρούσας συσκευής. Η παρούσα συσκευή περιέχει ψυκτικό μέσο και άλλα δυνητικά επικίνδυνα υλικά. Σύμφωνα με τη νομοθεσία περί απόρριψης, η συσκευή αυτή πρέπει να παραδίδεται προς επεξεργασία. **ΜΗΝ** ΑΠΟΡΡΙΠΤΕΤΕ το προϊόν αυτό ως οικιακό απόβλητο ή ως αδιαχώριστο αστικό απόβλητο.

Επιλέγετε μία από τις ακόλουθες εναλλακτικές λύσεις για την απόρριψη της συσκευής:

- Απόρριψη της συσκευής σε ειδικό κέντρο συλλογής ηλεκτρικών συσκευών του δήμου.
- Με την αγορά μιας νέας συσκευής, το κατάστημα υποχρεούται να αποσύρει την παλαιά δωρεάν.
- Ο κατασκευαστής υποχρεούται να αποσύρει την παλαιά σας συσκευή δωρεάν.
- Μπορείτε τέλος να πωλήσετε τη συσκευή σας σε πιστοποιημένες εμπόρους παλαιοσιδήρων.

ΣΗΜΕΙΩΣΗ: Η απόρριψη της συσκευής αυτής σε δασική περιοχή και γενικά στη φύση θέτει σε κίνδυνο την υγεία σας και είναι βλαβερή για το περιβάλλον. Οι επικίνδυνες ουσίες που περιέχει ενδέχεται να μολύνουν τα υπόγεια ύδατα και να εισέλθουν στην τροφική αλυσίδα.



Πληροφορίες εξυπηρέτησης (σέρβις)
(Απαιτείται μόνον για συσκευές που λειτουργούν με ψυκτικό R32/R290)

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1. Έλεγχοι της περιοχής
Πριν αρχίσετε εργασίες σε συστήματα που περιέχουν εύφλεκτα ψυκτικά μέσα, απαιτείται η πραγματοποίηση ελέγχων ασφαλείας ώστε να ελαχιστοποιείται ο κίνδυνος ανάφλεξης. Κατά την επισκευή του συστήματος ψύξης πρέπει να λαμβάνονται τα ακόλουθα μέτρα ασφαλείας πριν την έναρξη των εργασιών επισκευής του συστήματος.

2. Μέθοδος εργασίας
Οι εργασίες πρέπει να πραγματοποιούνται με ελεγχόμενο τρόπο ώστε να ελαχιστοποιείται ο κίνδυνος παρουσίας εύφλεκτου αερίου ή ατμού στη διάρκεια των εργασιών.

3. Χώρος εργασίας (γενικά)
Το προσωπικό συντήρησης καθώς και όλοι όσοι εργάζονται στον ίδιο χώρο πρέπει να ενημερώνονται για το είδος της εργασίας που πρόκειται να πραγματοποιηθεί. Να αποφεύγονται οι εργασίες σε κλειστούς χώρους. Συνίσταται αποκλεισμός της περιοχής γύρω από τον χώρο εργασίας. Βεβαιωθείτε ότι ο συνθήκες στον χώρο είναι ασφαλείς (έχει διαπιστωθεί απουσία εύφλεκτων υλικών).

4. Έλεγχος για παρουσία ψυκτικού μέσου
Η περιοχή πρέπει να ελέγχεται με κατάλληλο εργαλείο ανίχνευσης ψυκτικού πριν αλλά και κατά τη διάρκεια των εργασιών. Ο τεχνικός κατ' αυτόν τον τρόπο διαπιστώνει κατά πόσον υφίστανται δυνητικά εύφλεκτα υλικά στην ατμόσφαιρα. Βεβαιωθείτε ότι ο εξοπλισμός ανίχνευσης διαρροών που χρησιμοποιείτε είναι κατάλληλος για εύφλεκτα ψυκτικά: δεν δημιουργούνται σπινθήρες, είναι κατάλληλα στεγανοποιημένος και είναι αντιεκρηκτικός.

5. Ύπαρξη διαθέσιμου πυροσβεστήρα
Σε περίπτωση εργασιών εν θερμώ στον εξοπλισμό ψύξης ή σε συναφή εξαρτήματα, φροντίστε να υπάρχει διαθέσιμος εξοπλισμός πυρόσβεσης. Τοποθετήστε δίπλα στο σημείο πλήρωσης πυροσβεστήρα ξηρού υλικού ή διοξειδίου του άνθρακα.

6. Απουσία πηγών ανάφλεξης
Άτομα που εργάζονται σε συστήματα ψύξης κατά την αποκάλυψη σωληνώσεων που περιέχουν ή περιείχαν εύφλεκτα ψυκτικά μέσα απαγορεύεται να χρησιμοποιούν πηγές ανάφλεξης με τρόπο τέτοιο ώστε να προκαλείται κίνδυνος πυρκαγιάς ή έκρηξης. Κάθε δυνητική πηγή ανάφλεξης, συμπεριλαμβανομένου και του καπνίσματος, πρέπει να παραμένει σε απόσταση ασφαλείας από το σημείο εγκατάστασης, επισκευής, απεγκατάστασης και απόρριψης καθόσον υπάρχει κίνδυνος έκλυσης εύφλεκτων ψυκτικών μέσων στον περιβάλλοντα χώρο. Πριν από κάθε εργασία, επιθεωρήστε την περιοχή γύρω από τον εξοπλισμό ώστε να βεβαιωθείτε ότι δεν υφίστανται εύφλεκτα υλικά ή κίνδυνος ανάφλεξης. Επιβάλλεται η τοποθέτηση ενδείξεων ΑΠΑΓΟΡΕΥΕΤΑΙ ΤΟ ΚΑΠΝΙΣΜΑ.

7. Αερισμός της περιοχής
Βεβαιωθείτε ότι η τοποθεσία εγκατάστασης είναι ανοικτή ή έχει εξαεριστεί επαρκώς πριν ανοίξετε το σύστημα ή κάνετε εργασίες εν θερμώ. Φροντίστε ο εξαερισμός να συνεχίζεται καθ' όλη τη διάρκεια πραγματοποίησης των εργασιών. Ο εξαερισμός δύναται να διαλύσει κάθε τυχόν διαρρέοντα ψυκτικά μέσα και να τα οδηγήσει κατά προτίμηση στην ατμόσφαιρα.

8. Έλεγχοι του εξοπλισμού ψύξης
Σε περίπτωση αλλαγής των ηλεκτρικών εξαρτημάτων, επιλέξτε εξαρτήματα κατάλληλα για τον σκοπό και με τις ορθές προδιαγραφές. Οι οδηγίες συντήρησης και σέρβις του κατασκευαστή πρέπει να τηρούνται πάντοτε. Σε περίπτωση αμφιβολίας, συμβουλευτείτε το τεχνικό τμήμα του κατασκευαστή για περαιτέρω βοήθεια. Σε εγκαταστάσεις που λειτουργούν με εύφλεκτα ψυκτικά δέον όπως πραγματοποιούνται οι ακόλουθοι έλεγχοι:

- Το μέγεθος πλήρωσης συμμορφώνεται με το μέγεθος του δωματίου στο οποίο θα γίνει η εγκατάσταση των εξαρτημάτων που περιέχουν ψυκτικό μέσο.
- Ο εξοπλισμός και οι έξοδοι εξαερισμού λειτουργούν επαρκώς και δεν είναι αποφραγμένα. Σε περίπτωση χρήσης έμμεσου ψυκτικού κυκλώματος, τα δευτερογενή κυκλώματα πρέπει να ελέγχονται για παρουσία ψυκτικού. Οι σημάνσεις του εξοπλισμού εξακολουθούν να είναι ορατές και ευανάγνωστες.
- Δυσανάγνωστες σημάνσεις και ενδείξεις πρέπει να ανανεώνονται. Ο σωλήνας ή τα εξαρτήματα ψυκτικού πρέπει να τοποθετούνται σε σημείο τέτοιο ώστε να αποκλείεται η έκθεσή τους σε ουσίες που ενδέχεται να διαβρώσουν τα εξαρτήματα που περιέχουν ψυκτικό με εξαίρεση την περίπτωση που τα εξαρτήματα είναι κατασκευασμένα από υλικά που από τη φύση τους είναι ανθεκτικά στη διάβρωση ή είναι επαρκώς προστατευμένα από αυτήν.

9. Έλεγχοι στις ηλεκτρικές συσκευές

Η επισκευή και η συντήρηση των ηλεκτρικών εξαρτημάτων περιλαμβάνει αρχικούς ελέγχους ασφαλείας καθώς και διαδικασίες επιθεώρησης των ίδιων των εξαρτημάτων. Σε περίπτωση σφάλματος που θέτει σε κίνδυνο την ασφάλεια, απαγορεύεται η τροφοδότηση του συστήματος με ηλεκτρική ενέργεια μέχρι την ικανοποιητική διευθέτηση του προβλήματος. Εάν το σφάλμα δεν δύναται να διευθετηθεί άμεσα αλλά είναι απαραίτητη η συνέχιση της λειτουργίας του συστήματος, αναζητήστε και εφαρμόστε επαρκή προσωρινή λύση. Κάθε τέτοιο συμβάν πρέπει να κοινοποιείται στον κατασκευαστή του εξοπλισμού ώστε να ενημερώνονται όλοι οι ενδιαφερόμενοι.

Οι αρχικοί έλεγχοι ασφάλειας περιλαμβάνουν:

- Έλεγχο αποφόρτισης των πυκνωτών: Η διαδικασία αυτή πρέπει να γίνεται με ασφάλεια ώστε να αποφεύγεται κάθε κίνδυνος δημιουργίας σπινθήρα.
- Απουσία ηλεκτρικών εξαρτημάτων που τροφοδοτούνται ή εκτεθειμένων καλωδίων κατά την πλήρωση την ανάκτηση ή τον καθαρισμό (εκκένωση) του συστήματος.
- Συνέχεια του συστήματος γείωσης.

10. Επισκευές σε στεγανοποιημένα εξαρτήματα

10.1 Κατά την επισκευή των στεγανοποιημένων εξαρτημάτων πρέπει να αποσυνδέεται κάθε μορφή τροφοδότησης του εξοπλισμού που πρόκειται να επισκευαστή πριν από την αφαίρεση των καλυμμάτων στεγανοποίησης, κτλ.

10.2 Εφόσον η τροφοδότηση των εξαρτημάτων κατά το σέρβις είναι απολύτως απαραίτητη, τοποθετήστε μόνιμο εξοπλισμό ανίχνευσης διαρροών στο πλέον κρίσιμο σημείο ώστε να σας προειδοποιεί για τυχόν επικίνδυνες καταστάσεις.

10.3 Ιδιαίτερη προσοχή δέον όπως δίδεται στα ακόλουθα ώστε να διασφαλίζεται ότι κατά την πραγματοποίηση εργασιών στα ηλεκτρικά εξαρτήματα δεν θα τροποποιείται το περίβλημα με τέτοιο τρόπο ώστε να επηρεάζεται αρνητικά το επίπεδο προστασίας. Τέτοιου είδους αλλαγές είναι, μεταξύ άλλων, φθορές σε καλώδια, υπέρ το δέον αριθμός συνδέσεων, τερματικές απολήξεις που δεν συμμορφώνονται με τις προδιαγραφές, φθορά των στεγανοποιήσεων, εσφαλμένη/ανεπαρκής τοποθέτηση των στυπιοθλιπτών.

- Βεβαιωθείτε ότι η συσκευή έχει συναρμολογηθεί με ασφάλεια.
- Βεβαιωθείτε ότι τα σημεία και τα υλικά στεγανοποίησης δεν έχουν υποστεί φθορές ώστε να μην είναι πλέον κατάλληλα να αποτρέψουν την είσοδο εύφλεκτων αερίων υπό πίεση. Τα χρησιμοποιούμενα ανταλλακτικά πρέπει να συμμορφώνονται με τις προδιαγραφές του κατασκευαστή.

ΣΗΜΕΙΩΣΗ: Η χρήση στεγανοποιητικού σιλικόνης ενδέχεται να αναστείλει την αποτελεσματικότητα ορισμένων μορφών εξοπλισμού ανίχνευσης διαρροών. Τα αντιεκρηκτικά εξαρτήματα δεν χρήζουν μόνωσης προ της πραγματοποίησης εργασιών σε αυτά.

11. Επισκευή αντιεκρηκτικών εξαρτημάτων

Μην εφαρμόζετε μόνιμα φορτία επαγωγικά ή χωρητικότητας στο κύκλωμα πριν διασφαλίσετε ότι δεν θα υπάρξει υπέρβαση της επιτρεπόμενης τάσεως και ισχύος για τον εξοπλισμό αυτόν. Ο αντιεκρηκτικός εξοπλισμός είναι ο μόνος εξοπλισμός επί του οποίου επιτρέπεται οποιαδήποτε εργασία παρουσία εύφλεκτων αερίων. Η συσκευή δοκιμής πρέπει να έχει βαθμονομηθεί σωστά.

Αντικαταστήστε τα εξαρτήματα μόνον με γνήσια ανταλλακτικά σύμφωνα με τις προδιαγραφές του κατασκευαστή. Χρήση άλλων εξαρτημάτων ενέχει κίνδυνο ανάφλεξης του ψυκτικού που έχει διαρρεύσει στον περιβάλλοντα χώρο.

12. Καλωδίωση
Ελέγξτε ότι η καλωδίωση δεν έχει υποστεί φθορές ή διάβρωση και ότι δεν υπόκειται σε υπερβολική πίεση, κραδασμούς, αιχμηρά άκρα ή άλλες αντίξοες περιβαλλοντικές επιρροές. Ο έλεγχος πρέπει να επεκτείνεται στην επίδραση της γήρανσης καθώς και των συνεχών κραδασμών από πηγές όπως συμπιεστές ή ανεμιστήρες.

13. Ανίχνευση εύφλεκτων ψυκτικών μέσων
Μην χρησιμοποιείτε σε καμιά περίπτωση πιθανές πηγές ανάφλεξης κατά την αναζήτηση ή την ανίχνευση διαρροών ψυκτικού μέσου. Μην χρησιμοποιείτε λάμπα αλογόνου ή άλλο παρόμοιο εργαλείο ανίχνευσης με γυμνή φλόγα.

14. Μέθοδοι ανίχνευσης διαρροών
Οι ακόλουθες μέθοδοι ανίχνευσης διαρροών θεωρούν αποδεκτές για συστήματα που περιέχουν εύφλεκτα ψυκτικά μέσα: Οι ηλεκτρονικοί ανιχνευτές διαρροών είναι κατάλληλοι για την ανίχνευση εύφλεκτων ψυκτικών αν και η ευαισθησία τους είναι ανεπαρκής ή απαιτείται εκ νέου βαθμονόμησή τους (ο εξοπλισμός ανίχνευσης πρέπει να βαθμονομείται σε χώρος ελεύθερο ψυκτικού μέσου). Βεβαιωθείτε ότι ο ανιχνευτής δεν συνιστά πιθανή πηγή ανάφλεξης και είναι κατάλληλος για το ψυκτικό μέσο. Ο εξοπλισμός ανίχνευσης διαρροών πρέπει να ρυθμίζεται ως επί τοις εκατό ποσοστό του LFL του ψυκτικού, πρέπει να βαθμονομείται σύμφωνα με το χρησιμοποιούμενο ψυκτικό και να επιβεβαιώνεται το κατάλληλο ποσοστό επί τοις εκατό αερίου (μέγιστη περιεκτικότητα 25%). Τα υγρά ανίχνευσης διαρροών είναι κατάλληλα προς χρήση με τα περισσότερα ψυκτικά μέσα. Η χρήση ωστόσο απορρυπαντικών που περιέχουν χλωρίνη δέον όπως αποφεύγεται καθώς η χλωρίνη ενδέχεται να αντιδράσει με το ψυκτικό και να προκαλέσει διάβρωση των χαλκοσωλήνων.
Σε περίπτωση υπόνοιας διαρροής, κάθε γυμνή φλόγα πρέπει να σβήνει ή να απομακρύνεται άμεσα. Σε περίπτωση ανίχνευσης διαρροής ψυκτικού για την αντιμετώπιση του οποίου απαιτούνται εργασίες συγκόλλησης, πραγματοποιείστε αμέσως εκκένωση του ψυκτικού από το σύστημα ή απομόνωσή του με τη βοήθεια βαλβίδων απομόνωσης. Το ψυκτικό πρέπει να οδηγείται σε σημείο του συστήματος μακριά από τη διαρροή. Πριν και κατά τη διαδικασία της συγκόλλησης στο σύστημα πρέπει να κυκλοφορεί άζωτο απαλλαγμένο από οξυγόνο (OFN).

15. Αφαίρεση και εκκένωση
Κατά την είσοδο στο κύκλωμα ψυκτικού για επισκευές ή για άλλον λόγο μπορείτε να χρησιμοποιήσετε τις συνήθεις διαδικασίες. Καλό είναι ωστόσο να εφαρμόζετε τις βέλτιστες πρακτικές εξαιτίας της ευφλεκτότητας του συστήματος. Συνιστάται η τήρηση της ακόλουθης διαδικασίας:
- Αφαίρεση ψυκτικού μέσου
- Καθαρισμός του συστήματος με αδρανές αέριο,
- Εκκένωση
- Επανάληψη του καθαρισμού με αδρανές αέριο
- Διάρρηξη του κυκλώματος μέσω κοπής ή συγκόλλησης.

Το περιεχόμενο ψυκτικό μέσο θα ανακτάται μέσω κατάλληλων κυλίνδρων ανάκτησης ψυκτικού. Θα πραγματοποιείται έκπλυση του συστήματος με OFN ώστε να καταστεί ασφαλές. Η διαδικασία αυτή ίσως χρειαστεί να επαναληφθεί αρκετές φορές.
Μην χρησιμοποιείτε για την έκπλυση πεπιεσμένο αέρα ή οξυγόνο.
Η έκπλυση πραγματοποιείται με τη διάρρηξη του κενού στο σύστημα με OFN. Η πλήρωση συνεχίζεται μέχρις ότου επιτευχθεί η πίεση εργασίας. Κατόπιν πραγματοποιείται εξαέρωση προς τα έξω και τέλος επαναφορά του κενού.
Η διαδικασία αυτή επαναλαμβάνεται ως ότου εξαλείφθεί κάθε ίχνος ψυκτικού από το σύστημα. Μετά την τελευταία έκπλυση με OFN, αερίστε το σύστημα ώστε να φτάσει σε ατμοσφαιρική πίεση και να καταστεί δυνατή η πραγματοποίηση εργασιών. Η διαδικασία αυτή είναι θεμελιώδους σημασίας σε περίπτωση εργασιών συγκόλλησης στις σωληνώσεις. Βεβαιωθείτε ότι η έξοδος της αντλίας κενού δεν έχει κλείσει από πηγές ανάφλεξης και ότι ο χώρος αερίζεται.

16. Διαδικασίες πλήρωσης

Εκτός των συμβατικών διαδικασιών πλήρωσης, δέον όπως τηρούνται και οι παρακάτω απαιτήσεις:

- Βεβαιωθείτε ότι δεν προκύπτει ανάμειξη ψυκτικών μέσω κατά τη χρήση του εξοπλισμού πλήρωσης. Οι εύκαμπτοι σωλήνες και οι γραμμές πρέπει να είναι όσο το δυνατόν κοντύτεροι ώστε να ελαχιστοποιείται η ποσότητα ψυκτικού που περιέχουν.
- Οι κύλινδροι πρέπει να παραμένουν σε όρθια θέση
- Βεβαιωθείτε ότι το σύστημα ψύξης έχει γειωθεί πριν πληρώσετε με ψυκτικό μέσο
- Μετά την /ολοκλήρωση της πλήρωσης τοποθετήστε την κατάλληλη σήμανση στο σύστημα (εφόσον δεν υπάρχει ήδη)
- Προσέχετε ιδιαίτερα να μην παραγεμίσετε το σύστημα ψύξης.
- Πριν την επαναπλήρωση του συστήματος, δέον όπως πραγματοποιείται δοκιμή πίεσης με OFN. Μετά την ολοκλήρωση της πλήρωσης και πριν την έναρξη λειτουργίας του το σύστημα πρέπει να ελέγχεται για τυχόν διαρροές. Πριν την αναχώρησή σας πραγματοποιήστε άλλη μια δοκιμή διαρροής.

17. Παροπλισμός του συστήματος

Πριν παροπλίσει το σύστημα, ο τεχνικός πρέπει να είναι πλήρως εξοικειωμένος με τον εξοπλισμό σε όλες του τις λεπτομέρειες Καλή πρακτική συνιστά η ανάκτηση με ασφάλεια όλων των ψυκτικών μέσων. Πριν την πραγματοποίηση οποιασδήποτε εργασίας, πάρετε δείγματα ελαίου και ψυκτικού Ενδέχεται να χρειαστεί ανάλυση των δειγμάτων πριν επαναχρησιμοποιηθεί το ανακτημένο ψυκτικό. Πρέπει να διατίθεται τροφοδοσία σε ηλεκτρική ισχύ πριν την έναρξη των εργασιών παροπλισμού.

a) Εξοικειωθείτε με τον εξοπλισμό και τη λειτουργία του.
b) Απομονώστε το σύστημα από τον ηλεκτρισμό.
c)Πριν επιχειρήσετε οποιαδήποτε εργασία φροντίστε:

- Να έχετε στη διάθεση σας εξοπλισμό μηχανικού χειρισμού για τον χειρισμό των κυλίνδρων ανάκτησης ψυκτικού μέσου,
- Να έχετε στη διάθεσή σας ατομικά μέσα προστασίας και να τα χρησιμοποιείτε ορθά,
- Να υπάρχει συνεχής επίβλεψη της διαδικασίας ανάκτησης από εξειδικευμένο άτομο,
- Ο εξοπλισμός ανάκτησης και οι κύλινδροι να συμμορφώνονται με τα ισχύοντα πρότυπα.

d) Να εκκενώσετε εντελώς, εφόσον είναι δυνατόν, το σύστημα ψυκτικού μέσου.
e) Σε περίπτωση που η πλήρης εκκένωση δεν είναι εφικτή, δημιουργήστε πολλαπλή ώστε το ψυκτικό να απομακρύνεται από διάφορα σημεία του συστήματος.
f) Φροντίστε να τοποθετήσετε τον κύλινδρο στην κλίμακα πριν τη διαδικασία ανάκτησης.
g) Ξεκινήστε το μηχάνημα ανάκτησης και λειτουργήστε το σύμφωνα με τις οδηγίες του κατασκευαστή.
h) Μην υπερπληρώνετε τους κυλίνδρους. (το μέγιστο υγρό φορτίο δεν πρέπει να υπερβαίνει το 80% του όγκου).
i) Μην υπερβαίνετε τη μέγιστη πίεση λειτουργίας του κυλίνδρου ακόμα και προσωρινά.
j) Μετά την ορθή πλήρωση των κυλίνδρων και την ολοκλήρωση της διαδικασίας, βεβαιωθείτε ότι τόσο οι κύλινδροι, όσο και ο εξοπλισμός θα απομακρύνονται αμέσως από τον χώρο ενώ οι βαλβίδες απομόνωσης του εξοπλισμού παραμένουν κλειστές.
k)Μην τοποθετείτε το ανακτημένο ψυκτικό σε άλλο σύστημα ψύξης πριν το καθαρίσετε και το ελέγξετε.

18. Σήμανση

Ο εξοπλισμός πρέπει να φέρει σήμανση, στην οποία πρέπει αναφέρεται ότι έχει παροπλιστεί και δεν περιέχει ψυκτικό μέσο. Η σήμανση αυτή πρέπει να φέρει ημερομηνία και υπογραφή. Βεβαιωθείτε ότι ο εξοπλισμός φέρει σήμανση στην οποία αναφέρεται ότι περιέχει εύφλεκτο ψυκτικό μέσο.

19. Ανάκτηση

- Κατά την αφαίρεση του ψυκτικού από το σύστημα για λόγους σέρβις ή παροπλισμού, σας συνιστούμε ως καλή πρακτική την ασφαλή απομάκρυνση όλων των ψυκτικών μέσων.
- Μην χρησιμοποιείτε ακατάλληλους κυλίνδρους ανάκτησης κατά τη μεταφορά ψυκτικού στους κυλίνδρους ανάκτησης ψυκτικού. Βεβαιωθείτε ότι διατίθεται επαρκής αριθμός κυλίνδρων για το σύνολο του φορτίου ψυκτικού μέσου του συστήματος. Όλοι οι κύλινδροι προς χρήση πρέπει να είναι κατάλληλοι για το συγκεκριμένο ψυκτικό μέσο και να διαθέτουν την απαραίτητη σήμανση (π.χ. ειδικοί κύλινδροι ανάκτησης ψυκτικού μέσου). Οι κύλινδροι πρέπει να φέρουν απαραιτήτως ανακουφιστική βαλβίδα καθώς και τις αντίστοιχες βαλβίδες απομόνωσης σε καλή κατάσταση.
- Οι άδειοι κύλινδροι ανάκτησης εκκενώνονται και, εφόσον είναι δυνατόν, ψύχονται πριν τη διαδικασία ανάκτησης.
- Ο εξοπλισμός ανάκτησης δέον όπως βρίσκεται σε καλή κατάσταση λειτουργίας και συνοδεύεται από οδηγίες σχετικές με τον ίδιο των εξοπλισμό. Ο εξοπλισμός δέον όπως είναι κατάλληλος για την ανάκτηση εύφλεκτων ψυκτικών μέσων. Πρέπει εξάλλου να διατίθεται και από σετ δύο (2) βαθμονομημένες Ζυγαριές σε καλή κατάσταση λειτουργίας.
- Οι εύκαμπτοι σωλήνες πρέπει να συνοδεύονται από συνδέσμους αποσύνδεσης χωρίς διαρροές και σε καλή κατάσταση. Πριν χρησιμοποιήσετε τον εξοπλισμό ανάκτησης φροντίστε να βρίσκεται σε ικανοποιητική κατάσταση λειτουργίας, να έχει γίνει συντήρησή του και να έχουν στεγανοποιηθεί όλα τα συνδεδεμένα ηλεκτρικά εξαρτήματα ώστε να αποτραπεί πιθανή ανάφλεξη σε περίπτωση απελευθέρωσης ψυκτικού. Σε περίπτωση αμφιβολίας συμβουλευτείτε τον κατασκευαστή.
- Το ανακτημένο ψυκτικό θα επιστρέφεται στον προμηθευτή ψυκτικού μέσου σε κατάλληλο κύλινδρο ανάκτησης και συνοδευόμενο από κατάλληλο Δελτίο Παράδοσης Αποβλήτων. Μην αναμειγνύετε ψυκτικά μέσα στις μονάδες ανάκτηση και ειδικά στους κυλίνδρους.
- Σε περίπτωση αφαίρεσης των συμπιεστών ή των ελαίων συμπιεστή, φροντίστε η εκκένωση να γίνεται σε αποδεκτά επίπεδα ώστε να αποκλείεται η παραμονή εύφλεκτου ψυκτικού στο λιπαντικό υγρό. Η διαδικασία εκκένωσης πρέπει να ολοκληρώνεται πριν την επιστροφή του συμπιεστή στους προμηθευτές. Για την επιτάχυνση της διαδικασίας δέον όπως χρησιμοποιείται μόνον η ηλεκτρική θέρμανση του σώματος του συμπιεστή. Η αποστράγγιση ελαίου από το σύστημα δέον όπως πραγματοποιείται με ασφάλεια.

20. Μεταφορά, σήμανση και αποθήκευση των μονάδων

1. Μεταφορά εξοπλισμού που περιέχει εύφλεκτα ψυκτικά μέσα Συμμόρφωση με τους κανονισμούς μεταφοράς
2. Σήμανση του εξοπλισμού με ενδείξεις που αναφέρουν ότι συμμορφώνεται με τους τοπικούς κανονισμούς
3. Απόρριψη του εξοπλισμού που λειτουργεί με εύφλεκτα ψυκτικά μέσα: Συμμόρφωση με τους εθνικούς κανονισμούς
4. Αποθήκευση εξοπλισμού/συσκευών Η αποθήκευση του εξοπλισμού πρέπει να συμμορφώνεται με τις οδηγίες του κατασκευαστή του.
5. Αποθήκευση συσκευασμένου (αδιάθετου) εξοπλισμού Η συσκευασία του εξοπλισμού πρέπει να είναι τέτοια ώστε να αποφεύγεται η διαρροή ψυκτικού μέσου εξαιτίας μηχανικής φθοράς του εξοπλισμού εντός της συσκευασίας του. Ο μέγιστος αριθμός στοιχείων εξοπλισμού που αποθηκεύονται μαζί καθορίζεται από τους τοπικούς κανονισμούς.

Όλες οι εικόνες στο παρόν εγχειρίδιο εξυπηρετούν επεξηγηματικούς σκοπούς.
Το προϊόν που προμηθευτήκατε μπορεί να εμφανίζει ορισμένες διαφορές ως προς το σχήμα, ωστόσο οι λειτουργίες και τα χαρακτηριστικά παραμένουν ίδια.
Η εταιρεία δεν φέρει ευθύνη για τυχόν τυπογραφικά λάθη. Ο σχεδιασμός και οι προδιαγραφές του προϊόντος μπορεί να τροποποιηθούν χωρίς προηγούμενη ειδοποίηση με σκοπό τη βελτίωση των προϊόντων.
Για λεπτομέρειες, απευθυνθείτε στον κατασκευαστή στο 211 300 3300 ή στον αντιπρόσωπο.
Τυχόν ενημερώσεις του εγχειριδίου θα αναρτηθούν στην ιστοσελίδα του κατασκευαστή, παρακαλούμε να ελέγξετε για την πιο πρόσφατη έκδοση.

Σαρώστε εδώ για να κατεβάσετε την τελευταία έκδοση του εγχειριδίου.
www.inventoraircondition.gr/media-library

Υποβολή Εγγύησης

- **Επισκεφθείτε τη σελίδα μας και ενεργοποιήστε την εγγύησή σας μέσω του παρακάτω link ή σκανάροντας το QR code**

https://www.inventoraircondition.gr/egiisi-inventor

- **Συμπληρώστε όλα τα πεδία όπως φαίνονται παρακάτω**

Για να ενεργοποιήσετε την εγγύηση, παρακαλούμε συμπληρώστε τα παρακάτω πεδία

Στοιχεία ιδιοκτήτη

Ονοματεπώνυμο*

Διεύθυνση*

Τ.Κ.*

Τηλέφωνο*

Διεύθυνση email*

Να εγγραφώ στο newsletter της Inventor

Στοιχεία μηχανήματος

Τύπος μηχανήματος*

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Σειριακός αριθμός εξωτερικού μηχανήματος*

Ημερομηνία αγοράς μηχανήματος*

Αριθμός παραστατικού*

Επιπλέον στοιχεία

*** Απαραίτητο πεδίο**

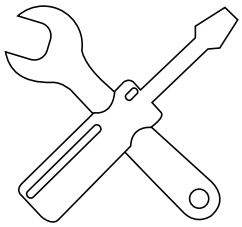
Αποστέλλοντας τη φόρμα εγγύησης αποδέχεστε τους **όρους και τις προϋποθέσεις.**

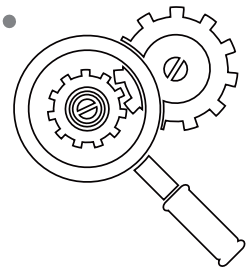
ΑΠΟΣΤΟΛΗ

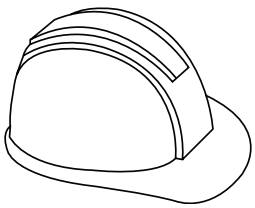
☑ Μόλις ολοκληρωθεί η υποβολή της εγγύησης θα λάβετε την επιβεβαίωση κατοχύρωσης στο email σας

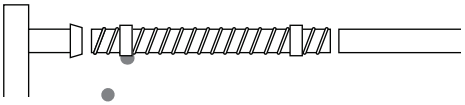
Cuprins

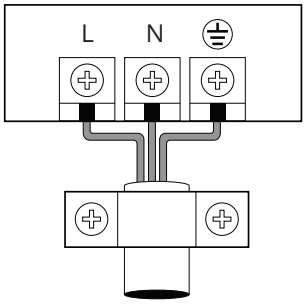
Instrucţiuni privind funcţionarea

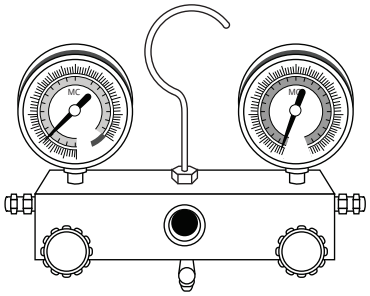












Atenţie: Risc de incendiu

(doar pentru agent frigorific tip R32/R290)

AVERTIZARE: Întreţinerea se efectuează numai conform recomandărilor producătorului de echipamente. Întreţinerea şi reparaţia care necesită asistenţă din partea altui personal calificat se efectuează sub supravegherea persoanei competente în utilizarea agenţilor frigorifici inflamabili. (Acest lucru este valabil pentru aparatele care utilizează agent frigorific de tip R32/R290).

Precauții privind siguranța

1

Vă mulțumim pentru achiziția acestui aparat de aer condiționat. Prezentul manual vă oferă informații cu privire la funcționarea, întreținerea și rezolvarea problemelor aparatului dvs. de aer condiționat. Urmarea instrucțiunilor va asigura o funcționare adecvată și o durată de viață mai mare pentru aparatul dvs.

Citiţi precauţiile privind siguranţa înainte de instalare

Instalarea incorectă datorată ignorării instrucțiunilor poate duce la daune însemnate sau vătămare gravă.

Gradul de seriozitate pentru daune sau vătămare este clasificat fie cu **AVERTIZARE** fie cu **ATENȚIE**.

ΠΡΟΕΙΔΟΠΟΙΗΣΗ

Dacă nu respectați o avertizare, acest lucru poate duce la deces. Acest aparat trebuie instalat în conformitate cu reglementările naționale.

ΠΡΟΣΟΧΗ

Nerespectarea simbolului Atenție poate duce la vătămare sau avarierea echipamentului.

Acest simbol indică faptul că nu trebuie să efectuați niciodată acțiunea indicată.

⚠ AVERTIZARE

1. Cereți unui distribuitor autorizat să instaleze acest aparat de aer condiționat. Instalarea necorespunzătoare poate provoca scurgeri de apă, șocuri electrice sau incendii.
2. Garanția va fi anulată dacă unitatea nu este instalată de profesioniști.
3. În cazul în care apare o situație anormală (cum ar fi miros de ars), opriți alimentarea cu energie electrică și contactați distribuitorul pentru instrucțiuni pentru a evita electrocutarea, incendiul sau vătămarea.
4. NU permiteți ca unitatea interioară sau telecomanda să se ude. Pot cauza electrocutare sau incendiu.
5. NU introduceți degete, bețe sau alte obiecte în admisia sau evacuarea de aer. Acest lucru poate cauza vătămare, deoarece ventilatorul se poate roti la viteze mari.
6. NU utilizați spray inflamabil, de genul fixativului, lac sau vopsea în apropierea aparatului. Acest lucru poate cauza incendiu sau explozie.
7. Aparatul trebuie depozitat astfel încât să se evite avarierea mecanică.
8. Se va respecta conformitatea cu reglementările locale privind gazele.
9. Citiți cu atenție Precauțiile privind Siguranța înainte de instalare.
10. În anumite medii funcționale, de genul bucătăriilor, camerelor de server, etc., este puternic recomandată utilizarea unor aparate de aer condiționat special concepute.
11. Numai tehnicieni calificați pot instala, repara sau efectua service asupra acestui aparat de aer condiționat.
12. Instalarea neadecvată poate duce la electrocutare, scurtcircuit, scurgeri, incendiu sau alte daune asupra echipamentului și proprietății personale. (În America de Nord, instalarea trebuie realizată în conformitate cu cerințele NEC și CEC și doar de către personal autorizat.)
13. Urmați cu strictețe instrucțiunile de instalare din prezentul manual.
14. Înainte de instalarea aparatului, luați în considerare vânturi puternice, taifunuri, și cutremure care

⚠ AVERTIZARE

pot să afecteze aparatul dvs. și poziționați-l în consecință. Nerespectarea acesteia poate duce la nefuncționarea echipamentului.

15. Acest aparat poate fi utilizat de copiii cu vârsta de cel puțin 8 ani și de persoane cu capacități fizice, senzoriale sau mentale reduse sau cu lipsa de experiență și cunoștințe dacă au fost supravegheate sau instruite cu privire la utilizarea aparatului într-un mod sigur și dacă înțeleg pericolele implicate. Copiii nu se pot juca cu aparatul. Curățarea și întreținerea realizate de utilizator nu trebuie efectuate de copii fără supraveghere.
16. Nu utilizați alte mijloace de a accelera procesul de dezghețare sau de a curăța în afară de cele recomandate de producător.
17. Aparatul nu este destinat utilizării de către persoane (inclusiv de către copii) cu capacități fizice, senzoriale sau mentale reduse sau cu lipsa de experiență și cunoștințe dacă au fost supravegheate sau instruite cu privire la utilizarea aparatului de către o persoană responsabilă pentru siguranța acestora.
18. Copiii trebuie supravegheați pentru a vă asigura că nu se joacă cu aparatul. (Cerință a standardului CEI)
19. Dacă este avariat cablul de alimentare, acesta trebuie înlocuit de către producător, de vânzător sau persoane calificate în acest sens, pentru a evita un pericol.
20. Aparatul trebuie instalat în conformitate cu reglementările naționale privind cablarea.
21. Un dispozitiv de deconectare multipolar, care are clești de cel puțin 3 mm în toți polii și care are un curent de scurgere care poate depăși 10 mA, dispozitiv de curent rezidual (RCD) având un curent de funcționare reziduală nominală care nu depășește 30 mA și deconectare trebuie încorporate în cabluri fixe în conformitate cu normele de cablare.
22. Deconectarea aparatului trebuie să fie încorporată cu un dispozitiv de deconectare multipolar în cablajul fix, în conformitate cu regulile de cablare.
23. Orice persoană care se implică în lucrul la sau în circuitul de agent frigorific ar trebui să dețină un certificat valabil actual de la o autoritate de evaluare acreditată de către industrie, care autorizează competența lor de a manipula frigidere în siguranță, în conformitate cu o specificație de evaluare recunoscută de industrie.
24. Intervențiile de service trebuie realizate doar conform recomandărilor producătorului de echipament.
25. Întreținerea și reparația care necesită asistența unui alt personal calificat se efectuează sub supravegherea persoanei competente în utilizarea agenților frigorifici inflamabili.
26. Aparatul trebuie depozitat astfel încât să fie evitată apariția daunelor mecanice.
27. Păstrați deschiderile de ventilare libere de blocaje.
28. Nu porniți aparatul decât după ce toate lucrările au fost finalizate.
29. Când mutați sau relocați aparatul de aer condiționat, consultați tehnicieni experimentați pentru deconectarea și reinstalarea aparatului.
30. În anumite medii funcționale de genul bucătăriilor, camerelor pentru servere, etc. utilizarea unor aparate de aer condiționat speciale este recomandată.
31. Îndepărtarea prizei trebuie să se facă în așa fel încât un operator să poată verifica oricare din punctele în care are acces că priza rămâne îndepărtată.
32. În cazul în care acest lucru nu este posibil, datorită construirii aparatului sau a instalării acestuia, trebuie prevăzută o deconectare cu un sistem de blocare în poziția izolată.

⚠ AVERTIZĂRI PRIVIND CURĂȚAREA ȘI ÎNTREȚINEREA

1. Opriți aparatul și trageți-l din priză înainte de curățare. Nerespectarea acesteia poate cauza electrocutare.

⚠ AVERTIZĂRI PRIVIND CURĂȚAREA ȘI ÎNTREȚINEREA

2. Nu curățați aparatul de aer condiționat cu cantități excesive de apă.
3. Nu curățați aparatul de aer condiționat cu agenți de curățare combustibili. Agenții de curățare combustibili pot provoca incendii sau deformări. Opriți aparatul și trageți-l din priză înainte de curățare. Nerespectarea acesteia poate cauza electrocutare.

⚠ AVERTIZĂRI ELECTRICE

1. Utilizați doar cablul de alimentare specificat. Dacă acesta este avariat, trebuie să fie înlocuit de către producător sau agentul de service certificat.
2. Păstrați cablul de alimentare curat. Scoateți orice praf sau murdărie care se acumulează pe sau în jurul ștecherului. Ștecherele murdare pot provoca incendii sau șocuri electrice.
3. Nu trageți de cablu pentru a-l scoate din priză. Țineți bine de ștecher și trageți-l din priză. Trasul direct de cablu îl poate avaria, și poate duce la incendiu sau electrocutare.
4. Nu folosiți prelungitor, nu măriți manual cablul de alimentare și nu introduceți alte electrocasnice în aceiași priză cu aparatul de aer condiționat. Legăturile electrice slabe, izolarea neadecvată și tensiunea insuficientă pot duce la incendiu.

NOTĂ: Pentru produsele de climatizare și pentru pompele de căldură care au o putere de răcire de peste 12 kW, vă rugăm consultați informațiile tehnice din Anexă

⚠ ATENȚIE

⊘ Pentru aparatele care au un radiator suplimentar, nu instalați aparatul la o distanță mai mică de 1 m (3 picioare) de orice materiale combustibile.

⊘ Nu instalați aparatul într-un loc ce poate fi expus scurgerilor de gaze inflamabile. Dacă se acumulează gaze inflamabile în jurul aparatului, acest lucru poate duce la incendiu.

⊘ Nu puneți în funcțiune aparatul de aer condiționat într-o cameră cu umiditate mare de genul unei băi sau unei spălătorii. Expunerea excesivă la apă poate duce la un scurtcircuit al componentelor electrice.

1. Produsul trebuie să fie adecvat împământat în momentul instalării, în caz contrar poate apărea electrocutare.
2. Instalați conducta de evacuare adecvat conform cu instrucțiunile din acest manual. O evacuare improprie poate duce la daune cauzate de apă asupra casei sau bunurilor dvs.
3. NU atingeți evacuarea de aer când fanta de oscilare este în mișcare. Vă puteți prinde degetele sau aparatul se poate defecta.
4. NU analizați singuri aparatul. Cereți unui vânzător autorizat să realizeze inspecția.
5. Pentru a preveni deteriorarea produsului, nu utilizați aparatul de aer condiționat în scopuri de conservare (depozitare de mâncare, plante, animale, lucrări artistice, etc.).
6. NU atingeți bobinele vaporizatorului din interiorul unității interioare. Bobinele vaporizatorului sunt ascuțite și pot provoca vătămări.
7. NU puneți în funcțiune aparatul de aer condiționat cu mâinile umede. Poate duce la electrocutare.
8. NU amplasați obiecte ce pot fi afectate de umezeală sub unitatea interioară.
9. Condensul poate să apară la o umiditate relativă de 80%.
10. NU expuneți aparatele de producere a căldurii la aerul rece și nu le puneți sub unitatea interioară.
11. Acest lucru poate cauza arderea incompletă sau deformarea a unității datorită căldurii.
12. După perioade lungi de utilizare, verificați dacă este deteriorată unitatea interioară. Dacă unitatea interioară este deteriorată, aceasta poate cădea și poate provoca vătămări.

⚠ ATENȚIE

13. Dacă aparatul de aer condiționat este utilizat împreună cu alte dispozitive de încălzire, ventilați bine camera pentru a evita deficiența de oxigen.
14. NU vă urcați pe și nu amplasați obiecte pe unitatea exterioară.
15. NU porniți aparatul când utilizați insecticid fumigant. Produsele chimice pot fi stratificate cu unitatea și pot pune în pericol pe cei care sunt hipersensibili la substanțele chimice.
16. NU permiteți copiilor să se joace cu aparatul de aer condiționat.
17. NU puneți în funcțiune aparatul într-o cameră cu umiditate (de ex. baia sau spălătoria).
18. Acest lucru poate duce la electrocutare și la avarierea produsului.
19. Acest aparat poate fi utilizat de copiii cu vârsta de cel puțin 8 ani și de persoane cu capacități fizice, senzoriale sau mentale reduse sau cu lipsa de experiență și cunoștințe dacă au fost supravegheate sau instruite cu privire la utilizarea aparatului într-un mod sigur și dacă înțeleg pericolele implicate. Copiii nu se pot juca cu aparatul. Curățarea și întreținerea realizate de utilizator nu trebuie efectuate de copii fără supraveghere.

⚠ Precauții în utilizarea agentului frigorific R32/ R290

1. Instalare (spațiu)
   - Instalarea conductelor va fi păstrată la minim.
   - Conductele vor fi protejate de daune fizice.
   - Va fi respectată conformitatea cu reglementările naționale privind gazul.
   - Legăturile mecanice vor fi accesibile doar în scopuri de întreținere.
   - În cazurile în care este necesară ventilarea mecanică, deschiderile ventilației vor fi ferite de blocaje.
   - La aruncarea aparatului uzat, asigurați-vă că respectați reglementările naționale prin procesare adecvată.
   - Aparatul va fi depozitat într-o încăpere bine aerisită unde dimensiunea camerei corespunde dimensiunii speficiate pentru funcționare.
   - Spațiile în care se află conductele de agent frigorific vor fi în conformitate cu reglementările naționale privind gazul.
2. Service
   - Orice persoană care se implică în lucrul la sau în circuitul de agent frigorific ar trebui să dețină un certificat valabil actual de la o autoritate de evaluare acreditată de către industrie, care autorizează competența lor de a manipula frigidere în siguranță, în conformitate cu o specificație de evaluare recunoscută de industrie.
   - Intervențiile de service trebuie realizate doar conform recomandărilor producătorului de echipament. Întreținerea și reparația care necesită asistența unui alt personal calificat se efectuează sub supravegherea persoanei competente în utilizarea agenților frigorifici inflamabili.
3. Nu utilizați alte mijloace de a accelera procesul de dezghețare sau de a curăța în afară de cele recomandate de producător.
4. Aparatul trebuie să fie depozitat într-o încăpere fără surse de aprindere continuă (de exemplu: flăcări deschise, un aparat de funcționare cu gaz sau un încălzitor electric în funcțiune)
5. Nu găuriți și nu ardeți.
6. Aveți grijă deoarece agenții frigorifici pot fi inodori.
7. Aveți mare grijă ca materiile străine (ulei, apă, etc) să nu pătrundă în conducte. De asemenea, atunci când depozitați tubulatura, sigilați bine deschiderea prin prindere, fixare, etc.

   Pentru unitățile interioare, utilizați conductă fără îmbinări tip R32 numai atunci când conectați țeava de

⚠ Precauții în utilizarea agentului frigorific R32/ R290

legătură la unitatea interioară (la conectarea din interior). Utilizarea altor conducte, piulițe fără îmbinare sau piulițe de racord în afara celor specificate poate duce la defecțiune, spargerea conductelor, sau vătămare datorată presiunii interne mari a ciclului de răcire cauzat de aerul intrat.

8. Aparatul trebuie să fie instalat, operat și depozitat într-o încăpere cu o suprafață mai mare de X m² (Consultați tabelul următor). Aparatul nu va fi instalat într-un spațiu neaerisit dacă spațiul este mai mic de X m² (Consultați tabelul următor).

Model (Btu/h)	Cantitate agent frigorific de încărcat (kg)	Înălțime maximă de instalare (m)	Dimensiune minimă a camerei (m²)
<30000	<2,048	1,8m	4
<30000	<2,048	0,6m	35
30000-48000	2,048-3,0	1,8m	8
30000-48000	2,048-3,0	0,6m	80
>48000	>3,0	1,8m	9
>48000	>3,0	0,6m	80

Notă cu privire la gazele fluorurate

1. Această unitate de climatizare conține gaze fluorurate cu efect de seră. Pentru informații specifice privind tipul de gaz și cantitatea, vă rugăm să consultați eticheta corespunzătoare de pe unitatea în sine sau "Manualul de utilizare - fișă de produs" în ambalajul unității exterioare. (Numai pentru produsele din Uniunea Europeană).
2. Instalarea, service-ul, întreținerea și repararea acestui aparat trebuie efectuate de un tehnician autorizat.
3. Dezinstalarea și reciclarea produsului trebuie efectuate de un tehnician autorizat.
4. În cazul echipamentelor care conțin gaze fluorurate cu efect de seră în cantități de cel puțin 5 tone echivalent CO2, dar mai puțin de 50 de tone echivalent CO2, în cazul în care sistemul are un sistem de detectare a scurgerilor, acesta trebuie verificat pentru scurgeri cel puțin o dată la 24 luni.
5. Când unitatea este verificată pentru scurgeri, se recomandă insistent înregistrarea corespunzătoare a tuturor verificărilor.

Explicația simbolurilor afișate pe ecranul unității interioare sau unității exterioare (aplicabile doar aparatelor care utilizează agent frigorific R32/R290):

	**AVERTIZARE**	Acest simbol arată că aparatul a utilizat un agent frigorific inflamabil. Dacă agentul frigorific se scurge și este expus unei surse de aprindere, există riscul de incendiu.
	**ATENȚIE**	Acest simbol arată că manualul de utilizare trebuie citit cu atenție.
	**ATENȚIE**	Acest simbol arată că personalul calificat trebuie să manipuleze acest echipament cu respectarea manualului de utilizare.
	**ATENȚIE**	
	**ATENȚIE**	Acest simbol arată că sunt disponibile informații cum ar fi manualul de utilizare sau manualul de instalare

Componente și funcții principale unitate interioară

2

Componentele unității

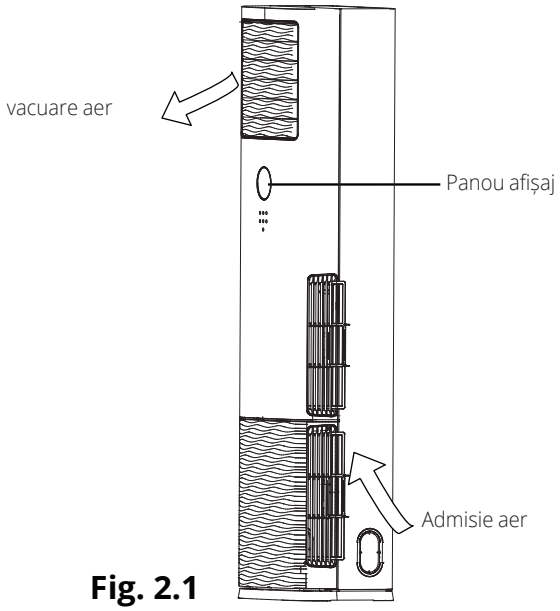


Fig. 2.1

Condiții de funcționare

Utilizați sistemul la următoarele temperaturi pentru o funcționare sigură și eficientă. Dacă aparatul de aer condiționat este utilizat în condiții diferite, acesta poate funcționa defectuos sau poate deveni mai puțin eficient.

• Invertor de tip split

	Modul Răcire (COOL)	Modul Încălzire (HEAT)	Modul Dezumidificare (DRY)
Temperatură cameră	17˚C - 32˚C (63˚F - 90˚F)	0˚C - 30˚C(32˚F - 86˚F)	10˚C-32˚C (50˚F - 90˚F)
Temperatură exterioară	0˚C - 50˚C(32˚F - 122˚F)	-15˚C - 30˚C(5˚F - 86˚F)	0˚C - 50˚C (32˚F - 122˚F)
	-15˚C - 50˚C(5˚F - 122˚F) (Pentru modele cu sisteme de răcire cu temp. joasă)		
	0˚C - 52˚C(32˚F - 126˚F) (Pentru modele tropicale speciale)		0˚C - 52˚C(32˚F - 126˚F) (Pentru modele tropicale speciale

PENTRU UNITĂȚI EXTERIOARE CU RADIATOR ELECTRIC AUXILIAR

Când temperatura externă este sub 0°C (32°F), recomandăm insistent să păstrați aparatul conectat în permanență pentru a vă asigura performanță continuă.

• De tip cu viteză fixă

	Modul Răcire (COOL)	Modul Încălzire (HEAT)	Modul Dezumidificare (DRY)
Temperatura interioară	17˚-32˚C (63˚-90˚F)	O˚-30˚C (32˚-86˚F)	10˚-32˚C (50˚-90˚F)
Temperatura exterioară	18˚-43˚C (64˚-109˚F)	-7˚-24˚C (19˚-75˚F)	11˚-43˚C (52˚-109˚F)
	-7˚-43˚C (19˚-109˚F) (modele cu temp. de răcire joasă)		18˚-43˚C (64˚-109˚F)
	18˚-52˚C (64˚-126˚F) (Pentru modele tropicale speciale)		18˚-52˚C (64˚-126˚F) (Pentru modele tropicale speciale)

Caracteristici

Setare implicită
Când aparatul de aer condiționat repornește după o cădere de tensiune, va merge implicit la setările din fabrică (Modulul AUTO, ventilator AUTO, 24°C (76°F)). Acest lucru poate crea neconcordanțe pe telecomandă și pe panoul aparatului. Folosiți telecomanda pentru a actualiza statusul.

Funcție Memorie Unghi Fantă
Unele modele sunt prevăzute cu memorarea unghiului fantei. Când aparatul repornește după o cădere de tensiune, unghiul fantelor orizontale vor reveni automat la poziția anterioară. Unghiul fantei orizontale nu trebuie setat prea mic deoarece se poate forma condens care se scurge din aparat. Pentru a reseta fanta, apăsați butonul manual care va reseta setările fantei orizontale.

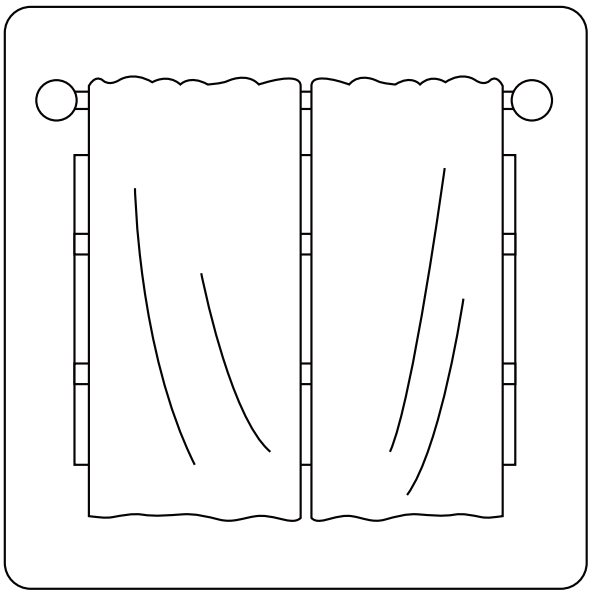
Auto-repornire
În cazul unei căderi de tensiune, sistemul se va opri imediat. Pentru a reporni aparatul, apăsați butonul Pornit/ Opri (ON/OFF) de pe telecomandă. Dacă sistemul are funcție de auto-repornire, aparatul va reporni folosind aceleași setări.

Detectarea scurgerilor de agent frigorific
În cazul unor scurgeri de agent frigorific, ecranul LCD va afișa „EC", iar indicatorul LED se va aprinde intermitent.

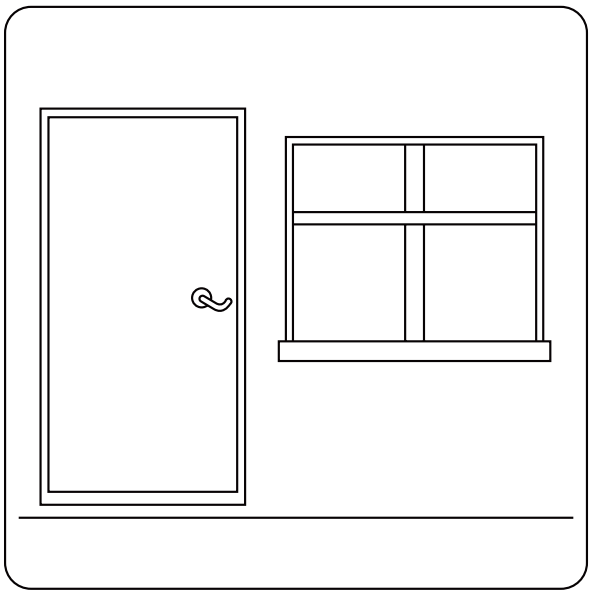
Pentru o explicație detaliată a fiecărei funcții, consultați Manualul Telecomenzii.

Sfaturi pentru economisirea energiei

- NU setați aparatul la niveluri excesive de temperatură.
- În timpul răcirii, închideți draperiile pentru a evita lumina soarelui.
- Ușile și ferestrele trebuie ținute închise pentru a păstra aerul rece sau cald în cameră.
- NU puneți obiecte lângă admisia și evacuarea aerului aparatului.
- Setați temporizatorul și utilizați modulul integrat În Așteptare (SLEEP/ECONOMY) dacă este cazul.
- Dacă nu plănuiți să utilizați aparatul o perioadă lungă de timp, înlăturați bateriile din telecomandă.
- Curățați filtrele de aer o dată la fiecare două săptămâni.
- Potriviți adecvat fantele pentru a evita fluxul direct de aer.



Închiderea draperiilor şi în timpul încălzirii, ajută la păstrarea căldurii la interior

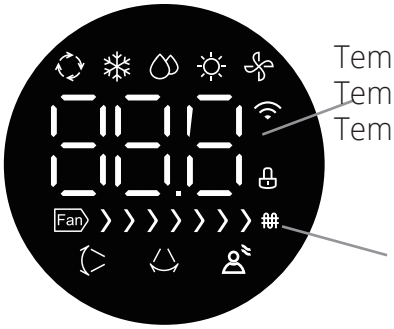


Uşile şi ferestrele trebuie să fie închise

Funcționarea manuală

3

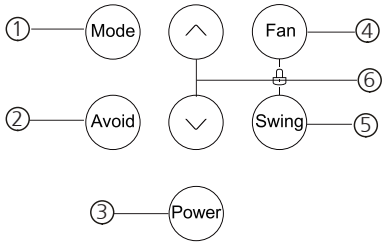
Panoul de afișaj de pe unitatea interioară poate fi utilizat pentru a pune în funcțiune aparatul în cazul în care telecomanda a fost pierdută sau a rămas fără baterii.



Temp cameră/ Setare Temp/ Setare afișare Temporizator

Afișare funcționare viteză ventilator

- Funcționare automată
- Funcționare Răcire Funcționare
- Dezumidificare
- Funcționare Încălzire
- Funcționare ventilare
- Flux de aer vertical
- Flux de aer orizontal
- Evitare flux de aer direct
- Funcționarea Blocare



Butoane operațiuni

① Butonul Modul **(MODE):** Apăsaţi acest buton pentru a alege modulul de funcţionare adecvat. De fiecare dată când apăsaţi butonul, modulul se schimbă în direcţia săgeţii:

AUTO → COOL → DRY → HEAT (doar modele cu încălzire și răcire) FAN ONLY → DOAR FAN

Se aprind mai mulţi indicatori pentru a semnaliza setarea modulelor.

Automat (Auto): Alege automat modulul de funcţionare prin simţirea diferenţei dintre temperatura ambientală reală a camerei şi temperatura setată pe telecomandă. Viteza de ventilare este controlată în mod automat.

Răcire (Cool): Vă permite să vă bucuraţi de efectul de răcire la setarea de temperatură preferată de dvs. (Interval temperatură: 17°C~30°C).

Dezumidificare (Dry): Vă permite să setaţi temperatura dorită la o viteză medie de ventilare, care vă oferă dezumidificarea ambientului (Interval temperatură: 17°C~30°C). În modulul Dezumidificare (Dry), nu puteţi alege viteza de ventilare şi modulul În Aşteptare (Sleep).

Încălzire (Heat): Permite funcţionarea în modulul Încălzire (Doar pentru modele cu răcire & încălzire, intervalul de setare a temperaturii: 17°C~30°C).

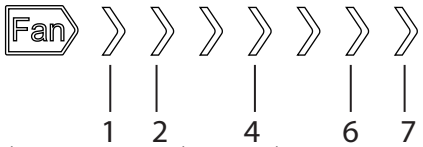
Doar Ventilare (Fan): Permite funcţionarea ventilatorului fără răcire sau încălzire. Însă, în acest caz, setarea temperaturii nu este afişată şi nu puteţi ajusta temperatura setată.

② Butonul **Evitare (Avoid):**
1. În orice modul de funcționare amplificată, apăsați butonul pentru a porni această funcție.
2. Apăsați "Power", "Swing", "Avoid" pentru a închide această funcție.

③ Butonul **Putere (Power):** Funcționarea pornește când apăsați acest buton și se oprește când apăsați din nou butonul.

④ Butonul **Ventilare (Fan):** Acest buton este utilizat pentru a alege viteza dorită de ventilare. De fiecare dată când apăsați acest buton, viteza de ventilare se schimbă în următoarea ordine:
→ SCĂZUTĂ → MEDIE → MARE → AUTOMATĂ

Afișare viteză ventilare:



Alegeți viteza de ventilare Scăzută (LOW) și zonele 1~2 se vor aprinde.
Alegeți viteza de ventilare Medie (MED) și zonele 1~4 se vor aprinde.
Alegeți viteza de ventilare Mare (HIGH) și zonele 1~6 se vor aprinde.
Alegeți viteza de ventilare Automată (AUTO) și zonele 1~7 și „AU" se vor aprinde.
Notă: Când folosiți telecomanda pentru a alege ventilarea puternică, se vor aprinde vitezele 1~7.

⑤ Butonul **Oscilare (Swing):**
1. Acest buton este utilizat pentru a seta fluxul de aer orizontal și vertical.
2. De fiecare dată când este apăsat butonul de schimbare direcție flux de aer, setările se modifică după cum urmează: Setare flux de aer vertical → Anulare flux de aer vertical → Setare flux de aer orizontal → Anulare flux de aer orizontal → Setare flux de aer orizontal și vertical în același timp → Anulare flux de aer orizontal și vertical în același timp → Setare flux de aer orizontal.

AVERTIZARE: Mutarea manuală a fantelor de setare direcție aer orizontale și verticale pot avaria aparatul de aer condiționat.

⑥ Butoanele ⌃ ⌄
1. În modul de testare funcționare, apăsați «⌃» «⌄» pentru a verifica codul de eroare interior, exterior .
2. Când apare o eroare, E0, E1, E3, E4, E5, Eb, EC, E10, F1, F2, F5, P10, P11, P12, P15, P13, P14, P9. (doar pentru modelul cu viteză fixă)
3. În alte module, apăsați «⌃» «⌄» pentru a seta temperatura în intervalul 17°C~30°C, Când se ajunge la 17°C când se apasă setare în jos pentru temperatură, aceasta nu se mai schimbă; Pentru a crește se apasă în sus, iar când se ajunge la 30°C, temperatura setată nu se mai schimbă. Când se setează temperatura, butonul nu poate seta rapid temperatura, acest lucru se poate realiza doar apăsând în sus și în jos.

FUNCȚIA BLOCARE (LOCK): Funcția blocare se activează prin apăsarea și menținerea apăsată timp de o secundă, simultan, a butoanelor ventilare (fan) și oscilare (swing).

Această funcție este disponibilă și când aparatul este pornit și când este oprit. Prima oară când sunt apăsate aceste butoane, aparatul blochează celelalte butoane de pe aparat (cu excepția butonului de deblocare). Vă rugăm să rețineți că telecomanda tot poate fi utilizată când aparatul este blocat. Apăsați butonul de pe panou și iconița blocare (lock) se va aprinde intermitent 5 secunde la 1HZ/S. Când se apasă iar aceste butoane, aparatul este deblocat.

Funcția de punere în funcțiune: Apăsați « (Mode) " & « (Swing) « pentru o secundă pentru a deschide funcționarea de test, butoanele sunt valabile în orice modul când aparatul este pornit. Prima oară, apăsați butoanele pentru a intra în modulul de funcționare de test. Faceți testul timp de 30 de minute, apăsați din nou butoanele, opriți aparatul și ieșiți din funcția de testare a funcționării.
Butonul modul (mode), butonul de viteză flux aer și butonul de funcție suplimentară nu sunt funcționale, în timp ce toate celelalte butoane sunt valabile (inclusiv butonul). Apăsați în sus și în jos pentru a alege afișarea temperaturii din cameră (T1), exterioară (temperatura exterioară), și codul de protecție și se va afișa „nA" când nu există erori sau protecție.

NOTĂ:
Condițiile funcționării de test au arătat că temperatura pentru T1, dacă temperatura este mai mică de -15°C sau - 19°C se va afișa temperatura de -15°C sau - 19°C
Condițiile funcționării de test au arătat că temperatura pentru T4, dacă temperatura este mai mică de -19°C arată temperatura ca fiind - 19°C
În condiții de funcționare de test, T1, T4 au arătat că cea mai mare temperatură este 50°C sau 70°C În modulul de testare, eroarea de senzor poate fi detectată.

Îngrijire și întreținere

4

Precauții privind siguranța

- Contactați un tehnician de service autorizat pentru reparații sau întreținere. Repararea și întreținerea necorespunzătoare pot provoca scurgeri de apă, electrocutare sau incendii și pot anula garanția.
- NU înlocuiți o siguranță fuzibilă cu o siguranță care are o valoare a amperajului mai mare sau mai mică, deoarece aceasta ar putea deteriora circuitul sau ar cauza un incendiu electric.
- Asigurați-vă că furtunul de evacuare este configurat conform instrucțiunilor. În caz contrar, se pot produce scurgeri și pot rezulta daune materiale, incendii și electrocutare.
- Asigurați-vă că toate cablurile sunt conectate corespunzător. Nerespectarea legării cablurilor conform instrucțiunilor poate provoca șocuri electrice sau incendii.

Întreținere aparat

⚠ ÎNAINTE DE CURĂȚARE SAU ÎNTREȚINERE

- Întotdeauna opriți aparatul dvs. de aer condiționat și trageți-l din priză înainte de curățare sau întreținere.
- NU folosiți chimicale sau cârpe tratate chimic pentru a șterge aparatul.
- NU folosiți benzen, diluant, pudră abrazivă sau alți solvenți pentru a curăța aparatul. Aceștia pot cauza crăparea sau deformarea suprafeței de plastic.
- NU spălați aparatul sub jet de apă. Acest lucru provoacă un pericol electric.
- NU folosiți apă mai fierbinte de 40°C (104°F) pentru a curăța panoul frontal. Aceasta poate duce la deformarea sau decolorarea panoului.
- Curățați aparatul cu o cârpă moale fără scame și un detergent neutru. Uscați aparatul cu o cârpă uscată fără scame.

Modul de curățare a filtrului de aer

Filtrul împiedică praful și alte particule să intre în unitatea interioară. Depunerea prafului poate reduce eficiența aparatului de aer condiționat. Pentru o eficiență optimă, curățați filtrul de aer la fiecare două săptămâni sau mai frecvent dacă locuiți într-o zonă cu praf. Înlocuiți filtrul cu unul nou dacă este foarte înfundat și nu poate fi curățat

⚠ NU ÎNLĂTURAȚI ȘI NU CURĂȚAȚI FILTRUL DE UNUL SINGUR

Scoaterea și curățarea filtrului pot fi periculoase. Îndepărtarea și întreținerea trebuie efectuate de un tehnician autorizat.

NOTĂ: În gospodăriile cu animale, va trebui să ștergeți periodic grilajul pentru a preveni blocajele de aer cu păr de animal.

Curățarea filtrului de praf din partea de jos a aparatului:

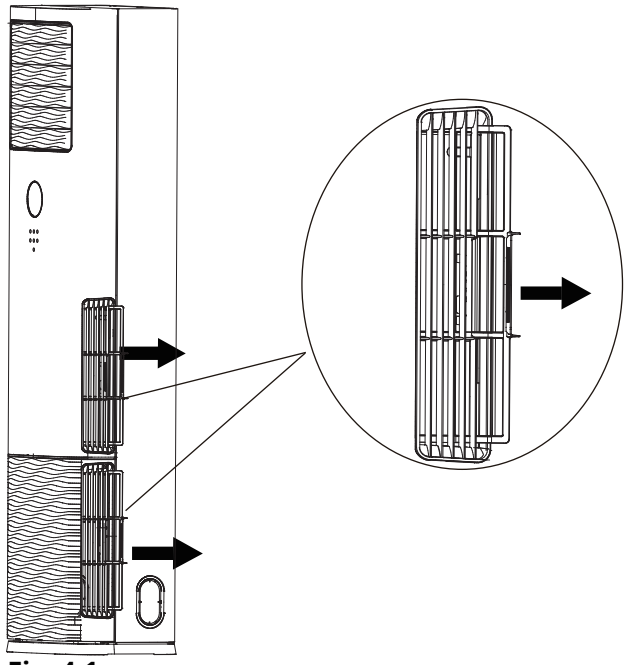


Fig. 4.1

Apucați de dreapta și stânga din capetele plasei de filtrare, trageți cu mâna, îndepărtați plasa de filtrare. Puneți plasa de filtrare curată și uscată la umbră. Plasă de filtrare întărită.

4. Îndepărtați filtrul de aer.
5. Curățați filtrul de aer prin aspirare sau spălare cu apă călduță și detergent blând.

A. Dacă utilizați un aspirator, partea de admisie este care trebuie să fie direcționată către aspirator.

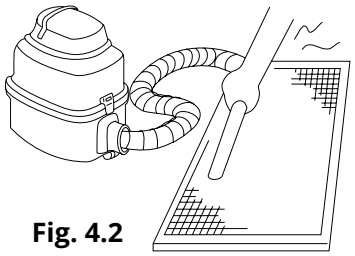


Fig. 4.2

B. Dacă utilizați apă, partea de admisie trebuie să fie în jos, opus față de jetul de apă.

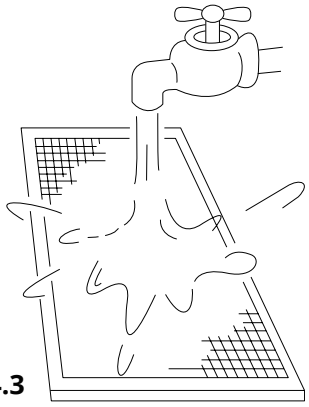


Fig. 4.3

6. Clătiți filtrul cu apă curată și permiteți uscarea lui. NU lăsați filtrul să se usuce în lumina directă a soarelui.
7. Reinstalați filtrul.

Repararea scurgerilor de agent frigorific

⚠ AVERTIZARE

- Dacă există scurgeri de agent frigorific, opriți aparatul de aer condiționat, și orice dispozitive de încălzire cu aprindere, aerisiți camera și sunați imediat vânzătorul. Agentul frigorific este și toxic și inflamabil. NU utilizați aparatul de aer condiționat până ce scurgerile nu sunt reparate.
- Când aparatul de aer condiționat este instalat într-o cameră mică, trebuie luate măsuri pentru a preveni ca agentul frigorific să depășească limita de siguranță în caz de scurgeri de agent frigorific. Agentul frigorific concentrat cauzează pericole grave asupra sănătății și siguranței.

Sistem de detectare scurgeri agent frigorific

- În cazul scurgerilor de agent frigorific, ecranul LCD va afișa „EC" iar indicatorul LED se va aprinde intermitent.

Pregătirea pentru perioadele de neutilizare

Întreținerea după neutilizare îndelungată

1. Înlăturați orice blocaje la ventilarea unității interioare și exterioare.
2. Curățați filtrul de aer și grilajul frontal al unității interioare. Reinstalați filtrele de aer curate și uscate în poziția inițială.
3. Porniți comutatorul electric principal cu cel puțin 12 ore înainte de a pune în funcțiune aparatul.

Depozitarea aparatului când nu este utilizat

1. Porniți funcționarea aparatului timp de 12 ore în modulul Ventilare, într-o cameră încălzită, pentru a preveni mucegaiul.
2. Opriți și trageți din priză aparatul.
3. Curățați filtrul de aer conform cu instrucțiunile din secțiunea anterioară. Reinstalați filtrul de aer curat și uscat înainte de depozitare.
4. Înlăturați bateriile din telecomandă.

Depanare

5

⚠ ATENȚIE

Dacă una din următoarele situații apare, opriți alimentarea principală imediat și contactați vânzătorul dvs. pentru asistență.

- Indicatorul de funcționare continua să se aprindă intermitent și rapid după repornirea aparatului.
- Butoanele telecomenzii nu funcționează.
- Aparatul declanșează continuu siguranțe sau întrerupătoare de circuit.
- Un corp străin sau apă pătrunde în aparat.
- Alte situații anormale.

Probleme comune

Următoarele simptome nu reprezintă o defecţiune şi nu vor necesita reparaţii.

Problemă	Cauze posibile
Aparatul nu porneşte la apăsarea butonului Pornire/ Oprire (ON/OFF)	Aparatul are o funcţie de protecţie de 3 minute care previne supraîncărcarea aparatului. Astfel, aparatul nu poate fi repornit în primele trei minute de la oprirea lui.
Aparatul trece din modulul Răcire (COOL) în modulul Ventilare (FAN)	Aparatul îşi poate schimba setările pentru a preveni formarea de gheaţă pe unitate. De îndată ce temperatura creşte, aparatul va reîncepe să funcţioneze în modulul anterior selectat.
	Temperatura setată a fost atinsă, moment în care aparatul opreşte compresorul. Aparatul va continua să funcţioneze când temperatura va începe din nou să fluctueze.
Din unitatea interioară iese o ceaţă albă	În regiuni cu umiditate mare, o diferenţă mare de temperatură între aerul din cameră şi aerul condiţionat poate duce la formarea de ceaţă albă.
Atât din unitatea interioară cât şi din cea exterioară iese o ceaţă albă	Când aparatul reporneşte în modulul Încălzire (HEAT) după degivrare, poate să iasă ceaţă albă datorită umezelii generate din procesul de degivrare.
Unitatea interioară emite sunete	Un sunet de scârţâit se aude când aparatul este oprit sau în modulul Răcire (COOL). Zgomotul se aude de asemenea când pompa de evacuare (opţională) este în funcţiune.
	Un sunet de scârţâit se poate auzi după funcţionarea în modulul Încălzire (HEAT) datorită dilatării şi contractării componentelor din plastic ale aparatului.
Atât unitatea interioară cât şi unitatea exterioară emit zgomote	Zgomot redus de scurgere în timpul funcţionării: Acest lucru este normal şi provine din gazul frigorific ce curge atât prin unitatea interioară cât şi prin cea exterioară. Zgomot redus de scurgere când porneşte sistemul, când abia s-a oprit sau când degivrează: Acest lucru este normal şi provine din gazul frigorific ce se opreşte sau îşi schimbă direcţia.
Unitatea exterioară emite sunete	Aparatul va emite diverse sunete ce variază pe baza modulului de funcţionare.
Iese praf fie din unitatea interioară, fie din cea exterioară	Aparatul poate acumula praf în perioade extinse de neutilizare, care va fi emis atunci când aparatul este pornit. Acest lucru poate fi evitat prin acoperirea aparatului pe perioade lungi de inactivitate.
Aparatul emite un miros urât	Aparatul absoarbe mirosuri din mediul înconjurător (de genul mobilierului, de la gătit, ţigări, etc.) care se va simţi în timpul funcţionării.
	Filtrele aparatului au început să mucegăiască şi trebuie curăţate.
Ventilatorul unităţii exterioare nu funcţionează	În timpul funcţionării, viteza ventilatorului este controlată pentru a optimiza funcţionarea produsului.

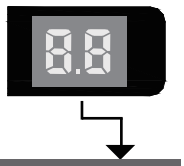
Sfaturi privind depanarea

Când apar probleme vă rugăm consultaţi următoarele puncte înainte de a solicita reparaţii.

Problemă	Cauze posibil	Soluţie
Aparatul nu funcţionează	Pană de curent	Aşteptaţi revenirea alimentării electrice
	Aparatul este oprit	Porniţi aparatul
	Siguranţa este arsă	Înlocuiţi siguranţa
	Bateriile telecomenzii nu mai funcţionează	Înlocuiţi bateriile
	Protecţia de 3 minute a aparatului a fost activată	Aşteptaţi trei minute după repornirea aparatului
Performanţă slabă de răcire	Temperatura setată poate fi mai mare decât temperatura ambientală	Scădeţi temperatura setată
	Schimbătorul de căldură din unitatea interioară sau exterioară poate fi murdar	Curăţaţi schimbătorul de căldură afectat
	Filtrul de aer este murdar	Scoateţi filtrul şi curăţaţi-l conform instrucţiunilor
	Admisia sau evacuarea de aer de la oricare din unităţi este blocată	Opriţi aparatul, îndepărtaţi blocajul şi porniţi-l din nou
	Uşile şi ferestrele sunt deschise	Asiguraţi-vă că toate uşile şi ferestrele sunt închise când funcţionează aparatul
	Căldura excesivă este generată de lumina soarelui	Închideţi ferestrele şi trageţi draperiile în perioade de căldură mare sau soare puternic
	Agent frigorific redus din cauza scurgerilor sau utilizării îndelungate	Verificaţi scurgerile, resigilaţi dacă este nevoie şi completaţi cu agent frigorific
Aparatul porneşte şi se opreşte frecvent	Există prea mult sau prea puţin agent frigorific în sistem	Verificaţi dacă sunt scurgeri şi reîncărcaţi agentul frigorific
	Aer, gaz incompresibil sau umezeală au intrat în sistemul de răcire	Goliţi şi reîncărcaţi sistemul cu agent frigorific
	Circuitul de sistem este blocat	Stabiliţi care circuit este blocat şi înlocuiţi piesa nefuncţională
	Compresorul este stricat	Înlocuiţi compresorul
	Tensiunea nominală este prea mare sau prea mică	Instalaţi un manostat pentru a regla tensiunea
Performanţă slabă de încălzire	Temperatura de afară este mai mică de 7°C (44.5°F)	Verificaţi existenţa scurgerilor şi reîncărcaţi sistemul cu agent frigorific
	Aerul rece pătrunde prin uşi şi ferestre	Asiguraţi-vă că toate uşile şi ferestrele sunt închise în timpul utilizării aparatului
	Agent frigorific redus din cauza scurgerilor sau utilizării îndelungate	Verificaţi scurgerile, resigilaţi dacă este nevoie şi completaţi cu agent frigorific

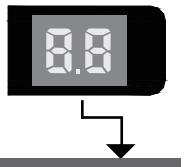
Coduri de eroare

• Invertor de tip split



Număr	Cauză	Cod eroare
1	Eroare EEPROM unitate interioară	E0
2	Eroare comunicare unitate interioară și exterioară	E 1
3	Avarierea vitezei de ventilare – unitate interioară	E3
4	Circuit deschis sau scurtcircuit senzor temperatură unitate interioară	E4
5	Circuit deschis sau scurtcircuit temperatură bobină de vaporizator	E5
6	Avarierea detectării scurgerilor de agent frigorific	EC
7	Defectare comunicare între două unități interioare (pentru modele duble)	E8
8	Alte defecțiuni ale modelelor duble	E9
9	Defecțiune comunicare panou afișaj și panou control principal	Eb
10	Defectarea unității exterioare	Ed
11	Protecție supraîncărcare electrică	F0
12	Circuit deschis sau scurtcircuit senzor temperatură unitate exterioară	F1
13	Eroare senzor temperatură conductă condensator extern	F2
14	Eroare senzor descărcare temperatură aer	F3
15	Eroare EEPROM unitate exterioară	F4
16	Defecțiune ventilator unitate exterioară	F5
17	Eroare senzor T2b	F6
18	Protecție invertor modul IPM	P0
19	Protecție tensiune mare/ mică	P 1
20	Protecție supraîncălzire compresor din partea de sus	P2
21	Protecție temperatură joasă unitate exterioară	P3
22	Eroare motor compresor	P4
23	Protecție compresor presiune mare/ joasă	P6
24	Eroare senzor IGBT unitate exterioară	P7

• Tip viteză fixă

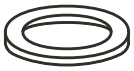
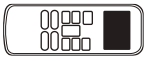
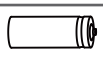


Număr	Cauză	Cod eroare
1	Eroare EEPROM unitate interioară	E0
2	Eroare comunicare unitate interioară și exterioară	E 1
3	Defecțiune stand ventilator DC	E3
4	Eroare senzor T1	E4
5	Eroare senzor T2	E5
6	Defecțiune comunicare panou afișaj și panou control principal	Eb
7	Defectare scurgeri agent frigorific	EC
8	Defecțiune presiune scăzută compresor	E10
9	Eroare senzor T4	F 1
10	Eroare senzor T3	F2
11	Cădere tensiune sau defecțiune lipsă secvență de fază inversă	F5
12	Încălzire flux aer rece pe ventilatorul unității interioare	P9
13	Protecție tensiune joasă compresor	P10
14	Protecție tensiune mare compresor	P11
15	Protecție compresor la supraîncărcare electrică	P12
16	Protecția vaporizatorului de interior a închis compresorul (temperatură mică sau mare)	P13
17	Compresor protecție încălzire condensator exterior	P14
18	Compresor închis temperatură mare evacuare exterioară	P15
19	Îngheț	d F

Accesorii

6

Sistemul de aer condiționat este livrat împreună cu următoarele accesorii. Utilizați toate componentele și accesoriile de instalare pentru a instala aparatul de aer condiționat. Instalarea necorespunzătoare poate duce la evacuarea apei, la electrocutare și la incendiu sau la defectarea echipamentului.

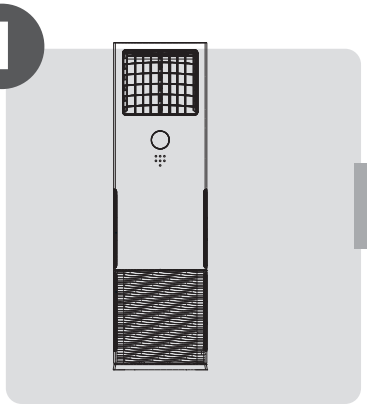
	Denumire	Formă	Cantitate
Instalarea unității interioare	Şurub autoportant 3.9×25		2
	Şaibe plate		2
	Bucşă cu manşon şi capac		1
Accesorii frigorifice	Izolaţie fonoizolantă / izolaţie (unele modele)		2
Racorduri conducte de evacuare	Furtun de evacuare (unele modele)		1
	Bandă (unele modele)		2
	Racord evacuare (unele modele)		1
	Garnitură etanşare (unele modele)		1
Accesorii instalare (unele modele)	Cabluri de legătură		1
	Chit		1
	Plasă anti-rozătoare		1
	Şurub autoportant ST3.9×12		1
Telecomandă şi cadrul acesteia (unele modele)	Telecomandă		1
	Şurub de fixare pentru suport telecomandă ST2.9 x 10		2
	Suport telecomandă		1
	Baterie tip AAA		2
	Manual telecomandă		1
	Manual de utilizare		1
	Manual de instalare		1
	Conductă agent frigorific (opţional)		1

Generalități instalare

7

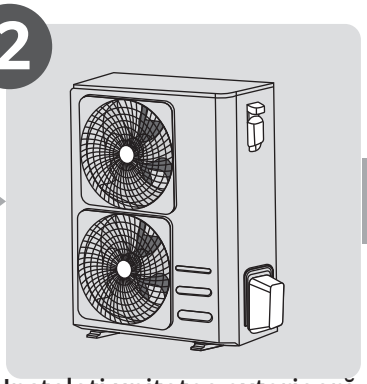
ORDINEA DE INSTALARE

1



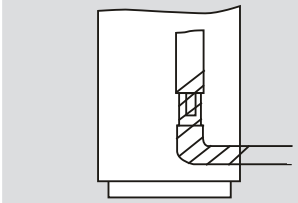
Instalați unitatea interioară (Pagina 22)

2



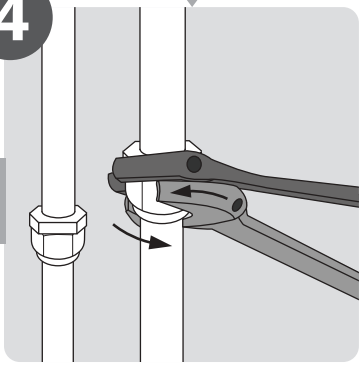
Instalați unitatea exterioară (Pagina 26)

3



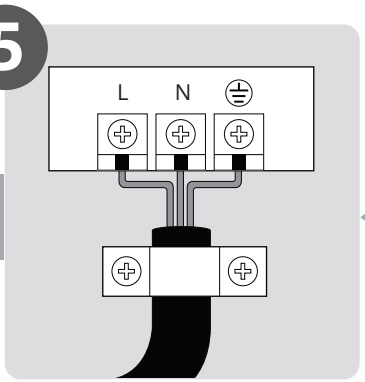
Instalați conducta de evacuare (Pagina 29)

4



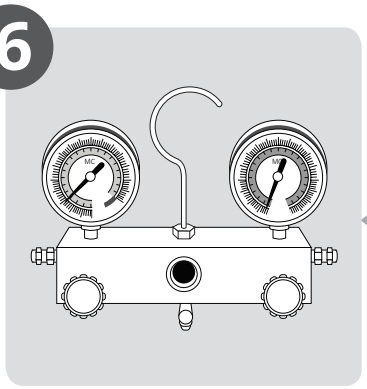
Conectați conductele de agent frigorific (Pagina 30)

5



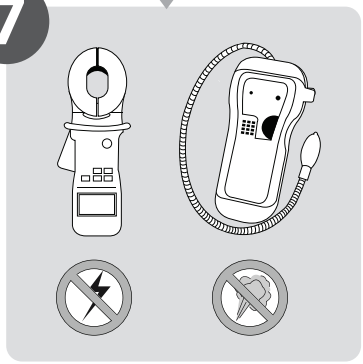
Conectați cablurile (Pagina 33)

6



Evacuați sistemul agentului frigorific (Pagina 35)

7



Realizați o testare a funcționării (Pagina 37)

Instalare unitate interioară

8

Componente unitate interioară

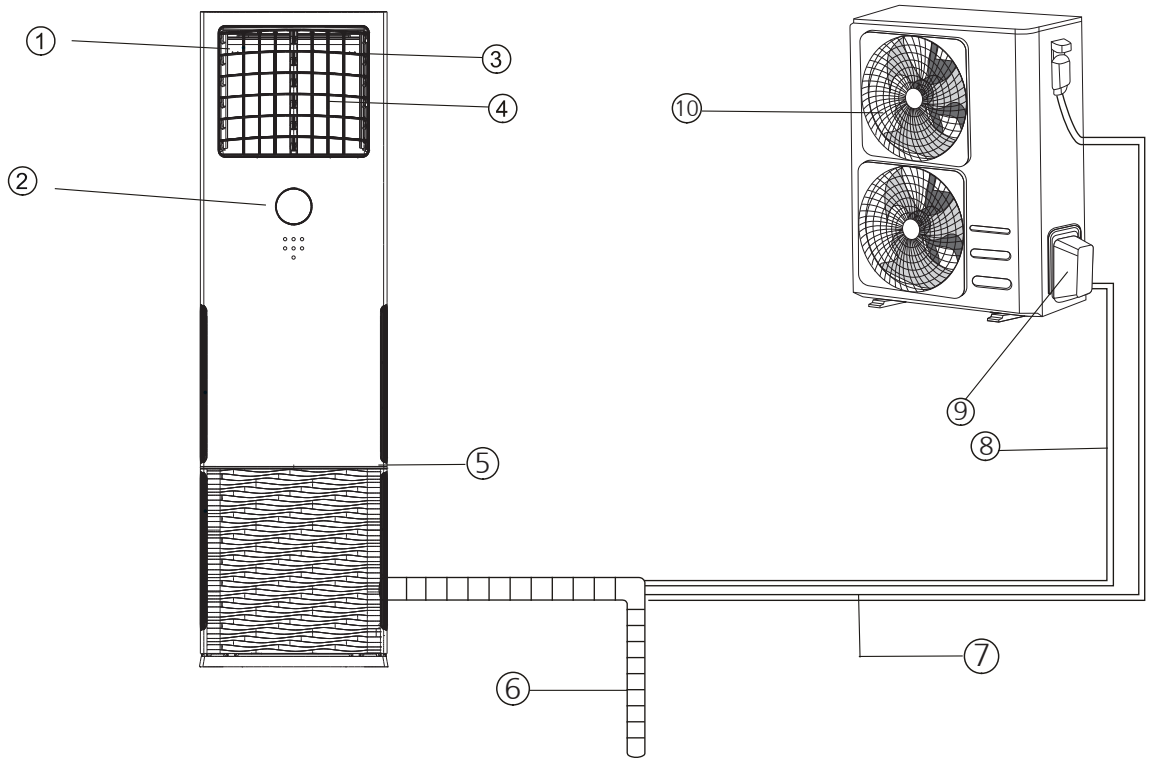


Fig. 8.1

Unitatea interioară

① Evacuare aer
② Panou operare
③ Fantă control flux orizontal
④ Fantă control flux vertical
⑤ Admisie aer (2 părți)

Unitatea exterioară

⑥ Conductă evacuare, conductă ventilare
⑦ Cablu de conexiune
⑧ Conductă de conexiune
⑨ Port conductă agent frigorific
⑩ Evacuare aer

NOTĂ CU PRIVIRE LA IMAGINI

Ilustrațiile din prezentul manual au doar scop informativ. Forma reală a unității dvs. interioare poate fi ușor diferită. Forma reală va fi cea care va prevala.

Instrucțiuni de instalare unitate interioară

ÎNAINTE DE INSTALARE

Înainte de instalarea unității interioare, consultați eticheta de pe cutia produsului pentru a vă asigura că numărul modelului unității interioare se potrivește cu numărul modelului unității exterioare.

Etapa 1: Alegeți locația pentru instalare
Înainte de a instala unitatea interioară, trebuie să alegeți o locație adecvată. Următoarele reprezintă standarde ce vă vor ajuta în alegerea unei locații adecvate pentru aparat.

Locațiile adecvate pentru instalare trebuie să îndeplinească următoarele condiții:

- ☑ O circulație bună a aerului
- ☑ O evacuare convenabilă
- ☑ Zgomotul produs de aparat nu va deranja alți oameni
- ☑ Un loc ferm și solid – locația nu va vibra
- ☑ Destul de solidă pentru a suporta greutatea aparatului
- ☑ O locație la cel puțin 1 m distanță de toate dispozitivele electrice (de exemplu televizor, aparat radio, calculator).

Consultați diagrama următoare pentru a asigura distanța adecvată de pereți și tavan:

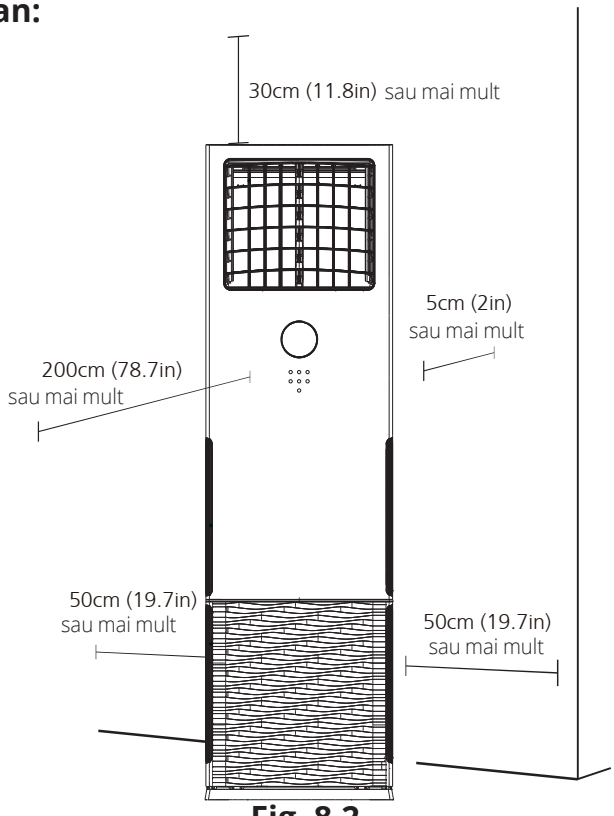


Fig. 8.2

<u>NU</u> instalați aparatul în următoarele locații:

- ⃠ În apropierea unei surse de căldură, aburi sau gaze inflamabile
- ⃠ Lângă obiecte inflamabile de genul hainelor sau perdelelor
- ⃠ Lângă orice elemente care pot bloca circulația aerului
- ⃠ Aproape de ușă
- ⃠ Într-o locație expusă luminii directe a soarelui

NOTĂ CU PRIVIRE LA ORIFICIUL DIN PERETE

Dacă nu există conducte de agent frigorific fixe: Atunci când alegeți o locație, vă rugăm să țineți cont de faptul că trebuie să lăsați spațiu suficient pentru un orificiu în perete (consultați etapa „Realizare orificiu în perete pentru conectare conducte") pentru cablul de semnal și conducta de agent frigorific ce leagă unitățile interioare și exterioare. Poziția implicită pentru toate conductele este pe partea dreaptă a unității interioare (atunci când vă uitați la aparat). Însă, aparatul poate suporta legarea conductelor pe stânga sau pe dreapta.

Dimensiuni montare unitate interioară:

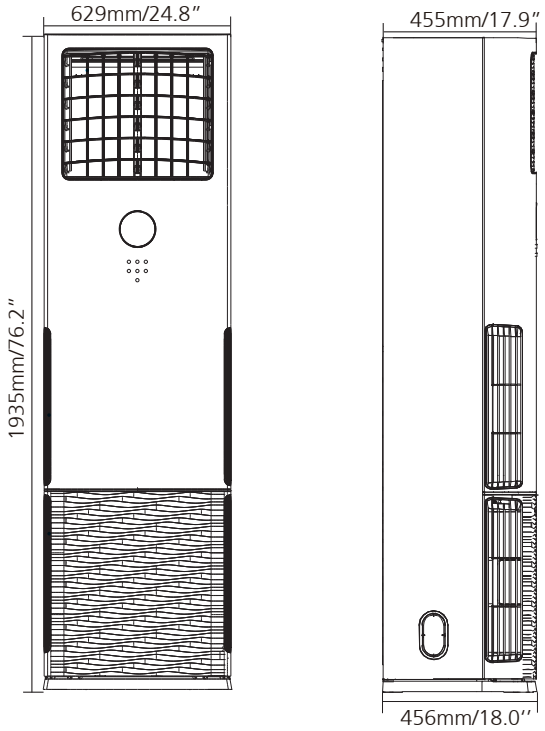


Fig. 8.3

Etapa 2: Desfacerea panoului de comandă și detașarea filtrului

1. Deschideți ambalajul și scoateți unitatea interioară. Scoateți banda protectoare și toate componentele.
2. Deschideți cele două cutii pentru depozitarea telecomenzii găsite pe fiecare parte a unității interioare, apoi desfaceți șuruburile de pe panoul de comandă.
3. Utilizați ambele mâini pentru a ține ușor partea decorativă din partea superioară a panoului de operare, apoi ridicați-o în sus pentru a o scoate împreună cu terminalul de cablu care este conectat la acesta.
4. Desfaceți cele două șuruburi de pe fața filtrului.
5. Folosiți ambele mâini pentru a ține cele două zone înfundate de pe ambele părți ale filtrului și trageți-l departe de aparat. Ridicați filtrul în sus pentru a-l scoate.
6. Vă rugăm scoateți grilajul admisiei de aer înainte de a conecta conductele/ cablurile. Mai întâi scoateți capacul șuruburilor, apoi scoateți șuruburile de pe grilajul de admisie a aerului, apoi scoateți grilajul. (Vedeți Fig. 8.4)

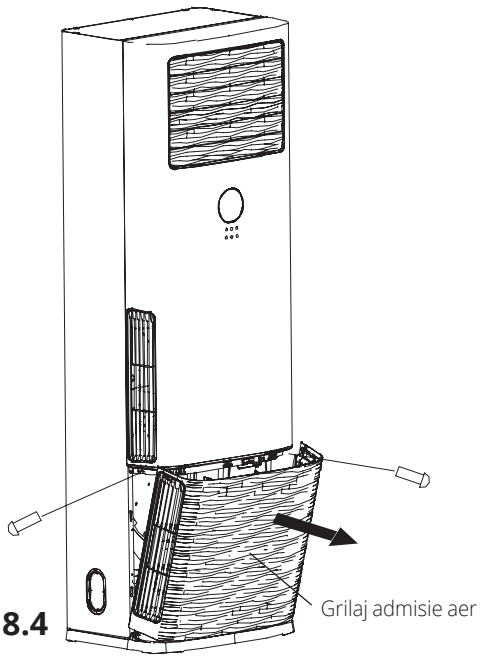


Fig. 8.4

7. Scoateți toate accesoriile plasate în interiorul cavității inferioare a unității interioare.
8. Verificați dacă toate accesoriile se potrivesc cu cele găsite în "Diagramele de instalare și accesoriile" așa cum este indicat pe pagina anterioară.

Etapa 3. Scoateți dispozitivele de fixare de pe cilindru (găsite numai pe modele selectate)

1. Verificați dacă cilindrul din unitatea interioară are niște dispozitive de fixare care îl țin în loc și scoateți autocolantul.
2. Scoateți dispozitivele de fixare de pe cilindru conform direcției de pe autocolant.

Etapa 4. Fixarea unităţii interioare (pentru a preveni căderea ei)

1. Măsurați poziția orificiilor pentru montare.
2. Introduceți șuruburile M8 în aparat în timp ce se află pe podea (cantitatea de șuruburi utilizate depinde de numărul de găuri de pe șasiul unității). (Vedeți Fig. 8.5)
3. Ridicați unitatea interioară astfel încât orificiile de montare să acopere șuruburile, apoi fixați piulițele pe șuruburi și strângeți-le.

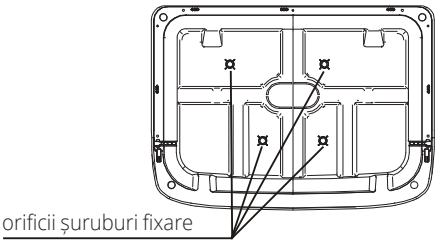


Fig. 8.5

⚠ ATENŢIE

Dacă este necesar un suport suplimentar pentru a preveni căderea aparatului, poate fi instalată o margine de protecție. Procedura de instalare pentru această margine este după cum urmează:

- Scoateți marginea de protecție și măsurați dimensiunea corectă.
- Folosiți șuruburile autoportante pentru a fixa marginea de protecție pe capacul superior al unității interioare.
- Fixați celălalt capăt al pantei strâns pe perete folosind șuruburile autoportante.

Etapa 5. Instalarea plasei anti-rozătoare

1. Îndepărtați plasa de metal anti-rozătoare de pe conductele aparatului prin apăsarea ușoară pe aceasta.

2. Utilizați un cuțit pentru a tăia o mică gaură, urmând marcajele de pe placa rezistentă la rozătoare. (Vedeți Fig. 8.6)
3. Introduceți placa rezistentă la rozătoare în unitate și țineți-o în poziție strânsă

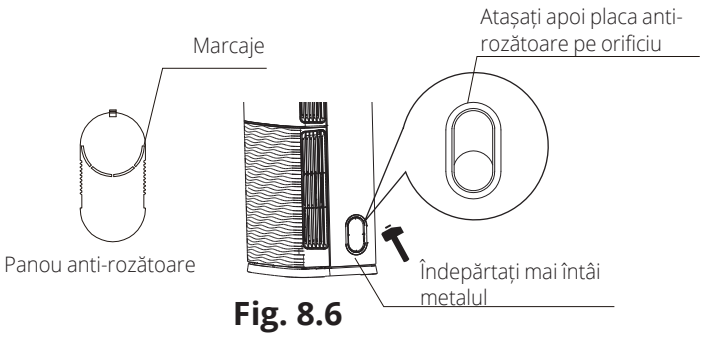


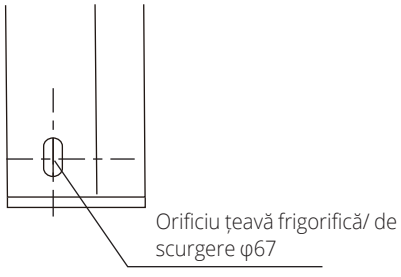
Fig. 8.6

Etapa 6. Tragere și legare tubulatură

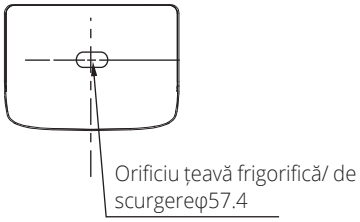
tapa 6. Tragere și legare tubulatură

1. Așezați tubulatura de legătură la sol. Așezați furtunul de evacuare, conducta de agent frigorific și toate cablurile electrice (asigurându-vă că ambele capete sunt aranjate corect) de lângă tubulatură.
2. Folosind furtunul de drenaj ca ghidaj, măsurați și reglați lungimea cablului de joasă tensiune, a cablului de înaltă tensiune, a oricărui alt cablu electric și a conductei de agent frigorific. Utilizați legăturile de cablu pentru a le fixa inițial pe poziție.
3. Aranjați tubulatura astfel încât furtunul de drenaj să fie în partea inferioară, conductele de legătură să fie în mijloc și cablajul electric să fie în partea de sus.
4. Folosiți banda adezivă de vinilin pentru a începe să strângeți tubulatura. Începeți legarea benzii de la capătul inferior al furtunului de evacuare și asigurați-vă că conectorii sunt fixați bine.

Pozițiile orificiilor țeavă/ cabluri pe ambele părți



Pozițiile orificiilor țeavă/ cablu jos



Poziție orificiu țeavă/ cablu pe spate

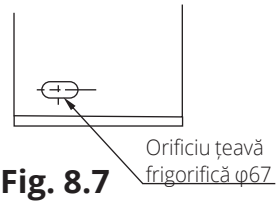


Fig. 8.7

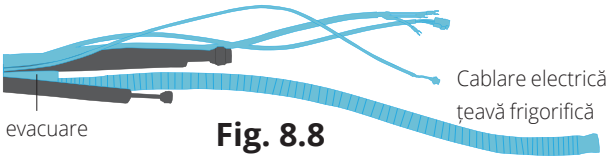


Fig. 8.8

⚠ ATENŢIE

Cablajul electric, furtunul de evacuare și conducta de agent frigorific trebuie să iasă din legătură într-un loc adecvat. Toate legăturile trebuie să fie conectate reciproc, aplicate uniform și plăcute din punct de vedere estetic.

NOTĂ

- Numai modelele cu funcție de ventilație conțin tuburi de ventilație.
- Cantitatea și tipul cablului electric utilizat pot varia în funcție de modelul specific.
- Capetele conductelor de ventilație și cablurile electrice sunt diferite, verificați cu atenție înainte de a începe să le legați.

Etapa 7: Aplicarea chitului de etanșare și instalarea capacului orificiului de perete.

1. Aranjați tubulatura deja legată.
2. Aplicați uniform chiturile de etanșare la golurile dintre conducte și perete, apoi apăsați ferm pe chit.
3. Trageți capacul orificiului pentru a-l deschide. După ce ați fixat strâns tubulatura, împingeți-l în orificiul din perete pentru al fixa în siguranță pe perete și pentru a finaliza instalarea

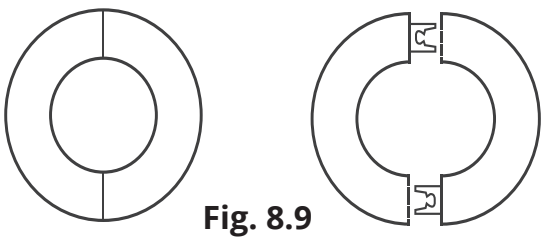


Fig. 8.9

Instalarea unitate exterioară

9

Instrucțiuni instalare unitate exterioară

Etapa 1: Alegeți locație pentru instalare.

Unitatea exterioară trebuie instalată în locația care îndeplinește următoarele cerințe:

☑ Așezați unitatea exterioară cât mai aproape posibil de unitatea interioară.

☑ Asigurați-vă că există suficient spațiu pentru instalare și întreținere.

☑ Orificiul de intrare și evacuare a aerului nu trebuie obstrucționat sau expus la vânt puternic.

☑ Asigurați-vă că amplasarea unității nu este supusă zăpezii, acumulării frunzelor sau a altor reziduuri sezoniere. Dacă este posibil, asigurați o copertină pentru unitate. Asigurați-vă că acea copertină nu împiedică fluxul de aer.

☑ Zona de instalare trebuie să fie uscată și bine aerisită.

☑ Trebuie să existe suficient spațiu pentru a instala conductele și cablurile de conectare și pentru a le accesa pentru întreținere

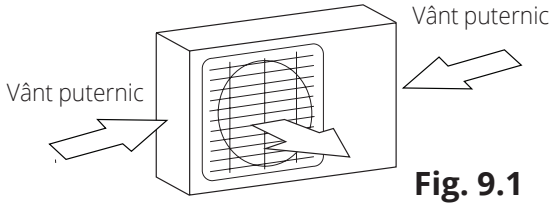


Fig. 9.1

Etapa 2: Instalare unitate exterioară

Fixați unitatea exterioară cu șuruburi cu diblu (M10)

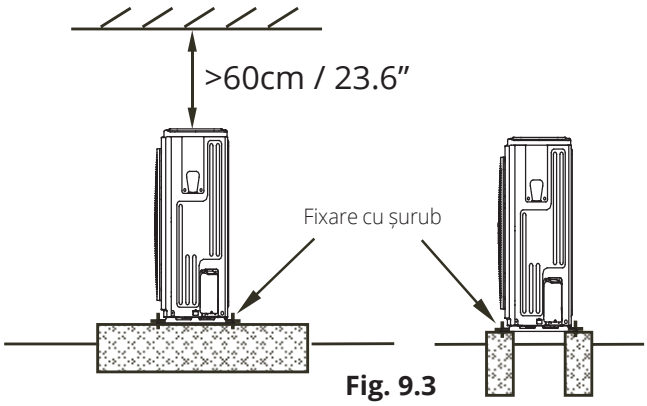


Fig. 9.3

☑ Zona nu trebuie să conțină gaze și substanțe chimice combustibile.

☑ Lungimea conductei dintre unitatea exterioară și cea interioară nu trebuie să depășească lungimea maximă permisă a țevii.

☑ Dacă este posibil, NU instalați aparatul unde este expus direct luminii soarelui.

☑ Dacă este posibil, asigurați-vă că unitatea este amplasată departe de proprietatea vecinilor dvs., astfel încât zgomotul de la unitate să nu-i deranjeze.

☑ Dacă locația este expusă la vânt puternic (de exemplu: în apropierea unei litorale), unitatea trebuie așezată pe perete pentru a fi adăpostită de vânt. Dacă este necesar, utilizați o copertină. (Vedeți Fig. 9.1 & 9.2)

☑ Instalați cablurile unităților interioare și exterioare la cel puțin 1 metru de televizoare sau radiouri pentru a preveni distorsiunea statică sau a imaginii. În funcție de undele radio, distanța de 1 metru poate să nu fie suficientă pentru a elimina toate interferențele.

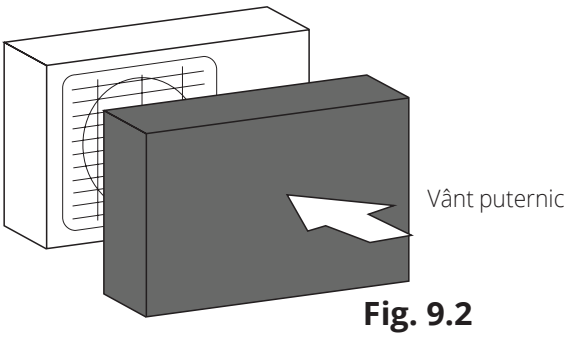


Fig. 9.2

⚠ ATENȚIE

- Asigurați-vă că îndepărtați orice obstacol care poate bloca circulația aerului.
- Asigurați-vă că respectați Specificațiile de lungime pentru a vă asigura că există suficient spațiu pentru instalare și întreținere.

Dimensiuni montare unitate exterioară

Dimensiunile de montare variază între diferitele unităţi exterioare. Diametrul capului şurubului de fixare trebuie să fie mai mare de 12 mm.

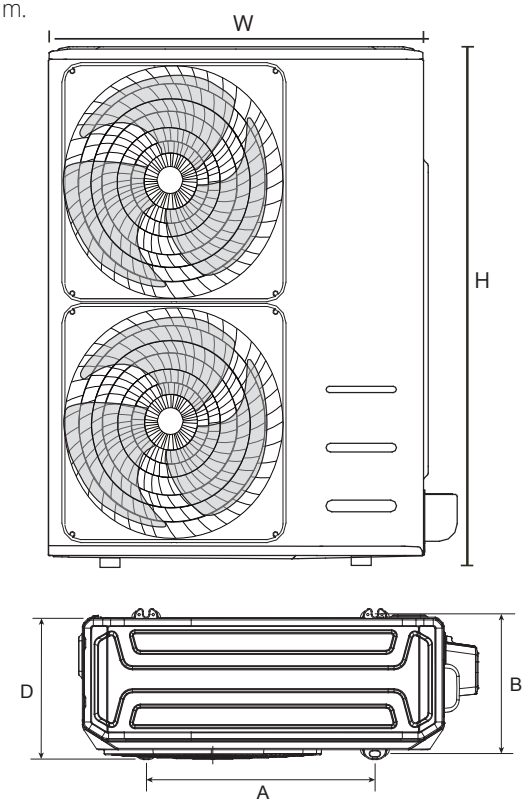


Fig. 9.3

Dimensiuni unitate exterioară (mm)			Dimensiuni montare (mm)	
П	Y	B	A	B
952	1333	415	634	404
900	1170	350	590	378

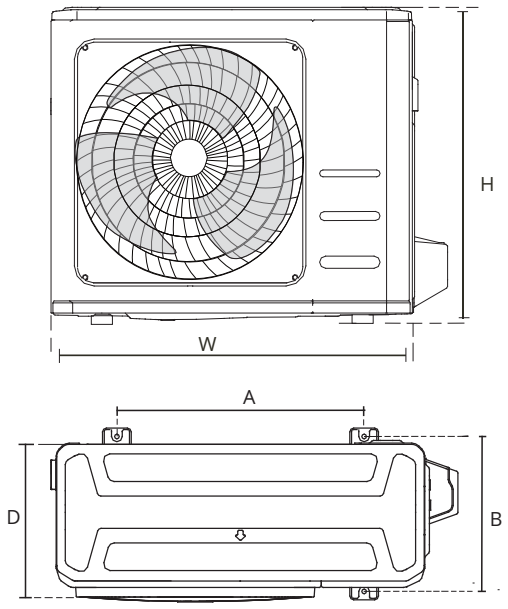


Fig. 9.4

Dimensiune unitate exterioară (mm)			Dimensiune montare (mm)	
П	Y	B	A	B
681	434	285	460	292
700	550	275	450	260
770	555	300	487	298
800	554	333	514	340
845	702	363	540	350
946	810	420	673	403

NOTĂ: Distanța minimă dintre unitatea exterioară și pereți descrisă în ghidul de instalare nu se aplică camerelor etanșe. Asigurați-vă că păstrați unitatea fără obstacole în cel puțin două din cele trei direcții (M, N, P). (Vedeți Fig. 9.5)

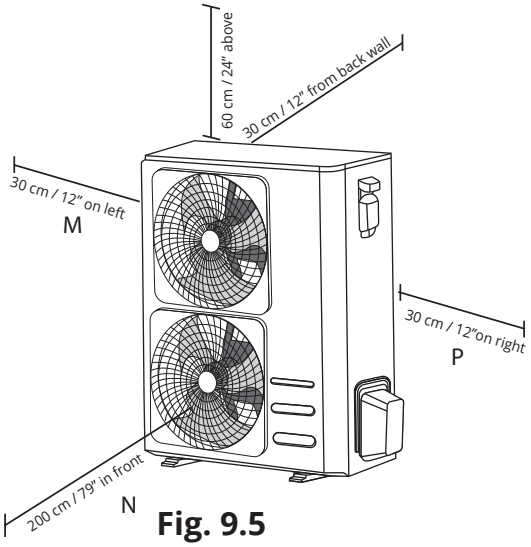


Fig. 9.5

Rânduri de instalare în serie
Legătura dintre H, A și L este următoarea.

	L	A
L ≤ H	L ≤ 1/2H	25 cm / 9.8" sau mai mult
	1/2H < L ≤ H	30 cm / 11.8" sau mai mult
L > H	Nu poate fi instalată	

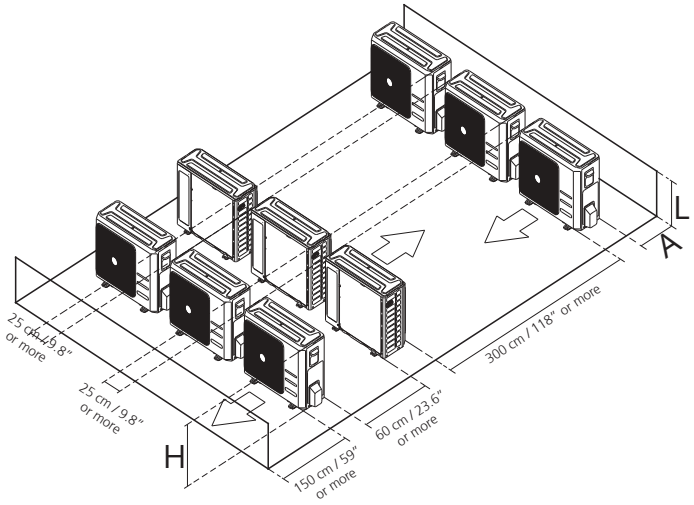


Fig. 9.6

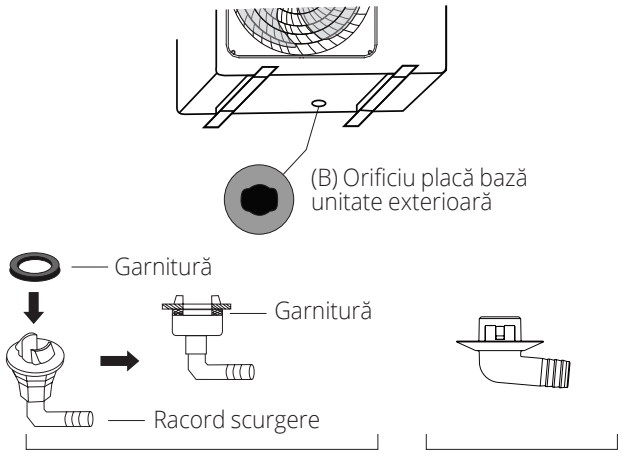


Fig. 9.7

Instalare racord de evacuare

Dacă racordul de evacuare are o garnitură de cauciuc (vedeţi Fig. 9.7 - A), faceţi următoarele:

1. Montați garnitura din cauciuc la capătul racordului de evacuare care se va conecta la unitatea exterioară.
2. Introduceți racordul de evacuare în orificiul din partea de bază a unității.
3. Rotiți racordul de evacuare la 90° până când se fixează cu fața în partea din față a unității.
4. Conectați o prelungire a furtunului de evacuare (nu este inclusă) la îmbinarea de evacuare pentru a redirecționa apă din aparat în timpul modulului Încălzire.

Dacă racordul de evacuare nu are o garnitură de cauciuc (vedeţi Fig. 9.7 - B), faceţi următoarele:

1. Introduceți racordul de evacuare în orificiul din partea de bază a unității. Racordul de evacuare va face clic când va fi pe poziție.
2. Conectați o prelungire a furtunului de evacuare (nu este inclusă) la îmbinarea de evacuare pentru a redirecționa apă din aparat în timpul modulului Încălzire

NOTĂ: Asigurați-vă că apa curge într-o locație sigură unde nu va provoca daune sau pericol de alunecare.

Note cu privire la realizarea orificiului în perete

Trebuie să forați o gaură în perete pentru conductele de agent frigorific și cablul de semnal care va conecta unitățile interioare și exterioare.

1. Stabiliți locația găurii de perete în funcție de amplasarea unității exterioare.
2. Folosind un burghiu de 65-mm (2.5") realizați un orificiu în perete.

NOTĂ: Când găuriți orificiul de perete, asigurați-vă că evitați cablurile, instalațiile sanitare și alte componente sensibile.

3. Așezați manșeta de protecție în orificiul din perete. Acest lucru protejează marginile găurii și vă va ajuta să le sigilați când finalizați procesul de instalare.

Instalare conductă de evacuare

10

Conducta de evacuare este utilizată pentru a scurge apa din aparat. Instalarea necorespunzătoare poate provoca defectarea aparatului materiale şi materiale.

⚠ ATENȚIE

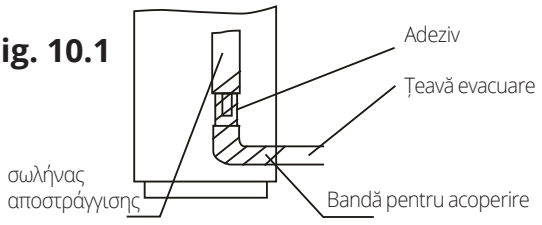
- Izolați toate conductele pentru a preveni condensarea, ceea ce ar putea duce la daune din cauza apei.
- Dacă conducta de evacuare este îndoită sau instalată incorect, apa poate scurge și poate cauza o defecțiune a comutatorului pentru nivelul apei.
- În modulul Încălzire (HEAT), unitatea exterioară va descărca apă. Asigurați-vă că furtunul de evacuare este amplasat într-o zonă adecvată pentru a evita deteriorarea și alunecarea datorită apei de scurgere înghețate.
- **NU** trageți de conducta de scurgere în mod forțat deoarece se poate deconecta.

NOTĂ CU PRIVIRE LA ACHIZIȚIA DE CONDUCTE

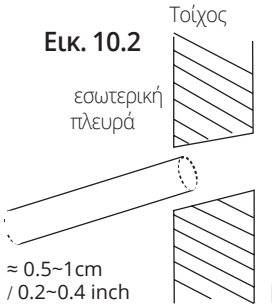
Această instalare necesită un tub din polietilenă (diametru exterior = 3,7-3,9cm, diametru interior = 3,2cm), care poate fi achiziționat la magazinul local de bricolaj sau la vânzătorul dvs. local.

Instalarea interioară a conductei de evacuare

Fig. 10.1



1. Asigurați-vă că conducta de evacuare este conectată la partea exterioară în jos.
2. Țevile de plastic de pe piață din policlorură de vinil (PVC) (diametru exterior 26 mm) sunt potrivite pentru conducta de evacuare flexibilă.
3. Conectați conducta flexibilă de evacuare la țeava de evacuare și fixați cu bandă; dacă trebuie să conectați conducta de evacuare la interior, pentru a evita condensul din aer, trebuie să acoperiți conducta cu material de izolare termică (polietilenă cu greutate specifică de 0,03, grosime minimă de 9 mm), și să folosiți bandă adezivă pentru fixare.
4. După conectarea țevii de evacuare, verificați dacă apa se scurge din conductă în mod eficient și nu are scurgeri.
5. Țeava de agent frigorific și țeava de evacuare trebuie izolate termic pentru a evita condensul și căderea apei mai târziu.
6. Folosind un burghiu de 65-mm (2.5"), faceți un orificiu în perete. Aveți grijă ca acesta să aibă un unghi înclinat ușor în jos, astfel încât capătul exterior al orificiului să fie cu aprox. 1cm (0.4") mai jos decât capătul interior. Acest lucru va asigura evacuarea adecvată a apei (Vedeți Fig. 10.2). Așezați manșeta de protecție în orificiul din perete. Acest lucru protejează marginile găurii și vă va ajuta să le sigilați când finalizați procesul de instalare.



NOTĂ: Când găuriți orificiul de perete, asigurați-vă că evitați cablurile, instalațiile sanitare și alte componente sensibile.

7. 7. Treceți furtunul de evacuare prin orificiu. Asigurați-vă că apa curge într-o locație sigură unde nu va provoca daune de la apă sau pericol de alunecare.

NOTE: Evacuarea conductei de scurgere trebuie să fie la cel puțin 5cm (1.9") deasupra pământului. Dacă atinge solul, aparatul se poate bloca și poate funcționa defectuos. Dacă evacuați apa direct într-un canal, asigurați-vă că scurgerea are o conductă U sau S pentru a capta mirosurile care altfel ar putea ajunge în casă.

Legarea conductei de agent frigorific

11

Precauții privind siguranța

⚠ AVERTIZARE

- Toată tubulatura de la locație trebuie realizată de un tehnician autorizat și trebuie să respecte reglementările locale și naționale.
- Când aparatul de aer condiționat este instalat într-o încăpere mică, trebuie luate măsuri pentru a preveni depășirea limitei de siguranță a concentrației agentului frigorific în încăpere în caz de scurgeri de agent frigorific. Dacă agentul frigorific se scurge și concentrația depășește limita corespunzătoare, pot rezulta pericole datorate lipsei de oxigen.
- La instalarea sistemului de răcire, asigurați-vă că aerul, praful, umiditatea sau substanțele străine nu intră în circuitul de refrigerare. Contaminarea în sistem poate cauza o capacitate slabă de operare, o presiune ridicată în ciclul de răcire, explozie sau vătămare.
- Aerisiți zona imediat dacă există scurgeri de agent frigorific în timpul instalării. Gazul de răcire scurs este atât toxic cât și inflamabil. Asigurați-vă că nu există scurgeri de agent frigorific după finalizarea lucrărilor de instalare.

Instrucțiuni conectare conductă agent frigorific

⚠ ATENŢIE

- Țeava de ramificare trebuie montată orizontal. Un unghi mai mare de 10° poate cauza funcționarea defectuoasă.
- NU instalați conducta de conectare până când nu au fost instalate atât unitățile interioare cât și cele exterioare.
- Izolați ambele conducte de gaz și lichid pentru a preveni scurgerile de apă.

Etapa 1: Tăiere țevi

Atunci când pregătiţi conductele de agent frigorific, aveţi grijă să le tăiaţi şi să le expandaţi adecvat. Acest lucru va asigura o funcţionare eficientă şi va reduce la minimum nevoia de întreţinere viitoare.

1. Măsurați distanța dintre unitatea interioară și exterioară.
2. Folosind un dispozitiv de tăiat țevi, tăiați țeava puțin mai mare decât distanța măsurată

⚠ ATENȚIE

NU deformați țeava în timpul tăierii. Aveți grijă să nu deteriorați, să nu loviți sau să deformați țeava în timpul tăierii. Acest lucru va reduce drastic eficiența de încălzire a aparatului.

1. Aveți grijă să tăiați țeava la un unghi perfect de 90° Consultați Fig. 7.1 pentru exemple de tăiere greșită.

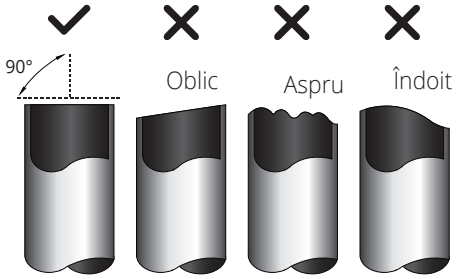


Fig. 11.1

Etapa 2: Îndepărtați bavura.

Bavura poate afecta etanşarea perfectă a conexiunii conductei de agent frigorific. Trebuie complet îndepărtată.

1. Țineți țeavă într-un unghi descendent pentru a împiedica bavurile să cadă în conductă.
2. Folosind un instrument de tăiere sau debavurare, îndepărtați toată bavura din secțiunea tăiată a țevii.

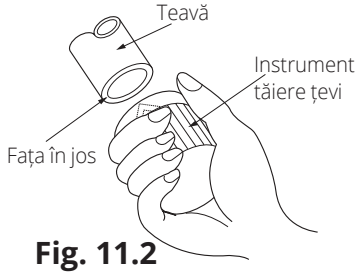


Fig. 11.2

Etapa 3: Expandare capete conductă

O expandare este esențială pentru a avea o etanșare bună.

1. După îndepărtarea bavurii din țeava tăiată, etanșați capetele cu bandă din PVC pentru a preveni ca materiile străine să pătrundă în conductă.
2. Acoperiți țeava cu material de izolare.
3. Atașați piulițe la ambele capete ale conductei. Asigurați-vă că sunt îndreptate în direcția corectă, deoarece nu le puteți instala și nu le puteți schimba direcția după expandare. Vedeți Fig. 11.3

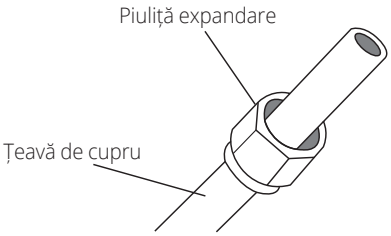


Fig. 11.3

4. Îndepărtați banda din PVC din capetele conductei atunci când trebuie să realizați expandarea.
5. Atașați expansorul la capătul conductei. Capătul conductei trebuie să depășească marginea expansorului.

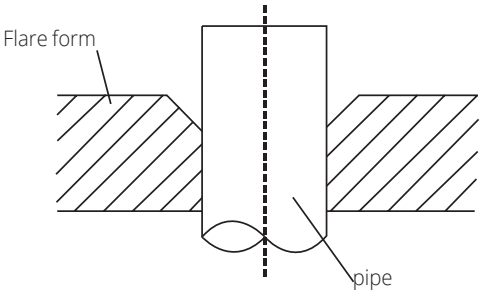


Fig. 11.4

6. Puneți expansorul pe forma de expandare.
7. Rotiți mânerul expansorului în sensul acelor de ceasornic până ce conducta este expandată complet. Expandați conducta conform cu dimensiunile din tabelul 11.1.

Tabelul 11.1: EXTENSIE CONDUCTĂ DUPĂ EXPANDARE

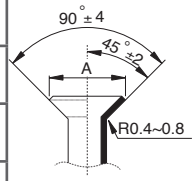
Diametru țeavă	Cuplu de strângere	Dimensiuni expandare (A) (Unitate: mm/Inci)		Formă expandare
		Min.	Max.	
Ø 6.4	18-20 N.m (183-204 kgf.cm)	8.4/0.33	8.7/0.34	
Ø 9.5	25-26 N.m (255-265 kgf.cm)	13.2/0.52	13.5/0.53	
Ø 12.7	35-36 N.m (357-367 kgf.cm)	16.2/0.64	16.5/0.65	
Ø 15.9	45-47 N.m (459-480 kgf.cm)	19.2/0.76	19.7/0.78	
Ø 19.1	65-67 N.m (663-683 kgf.cm)	23.2/0.91	23.7/0.93	
Ø 22	75-85N.m (765-867 kgf.cm)	26.4/1.04	26.9/1.06	

Fig. 11.5

8. Îndepărtați expansorul și forma de expandare, apoi inspectați capătul conductei pentru crăpături și expandare uniformă.

Etapa 4: Legare conducte

Conectați țevile de cupru mai întâi la unitatea interioară, apoi la cea exterioară. Mai întâi trebuie să conectați conducta de joasă presiune, apoi conducta de înaltă presiune.

1. Când atașați piulițele de expandare, aplicați un strat subțire de ulei frigorific la capătul expandat al țevilor.
2. Aliniați centrul țevilor pe care le conectați.

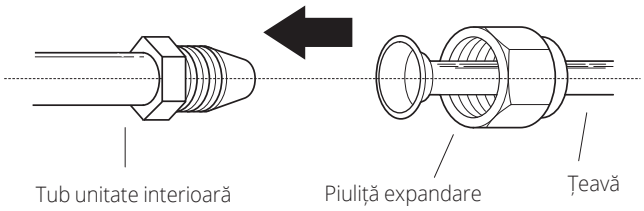


Fig. 11.6

3. Strângeți piulița de expandare pe cât de mult posibil cu mâna.
4. Utilizând o cheie de buloane apucați piulița de pe conducta unității.
5. După ce apucați ferm piulița, utilizați o cheie dinamometrică pentru a strânge piulița conform cu valorile de torsiune din cerințele cuplului de torsiune din tabelul 11.1.

NOTĂ: Folosiți atât o cheie de buloane cât și o cheie dinamometrică la legarea sau deconectarea conductelor la/ de la aparat.

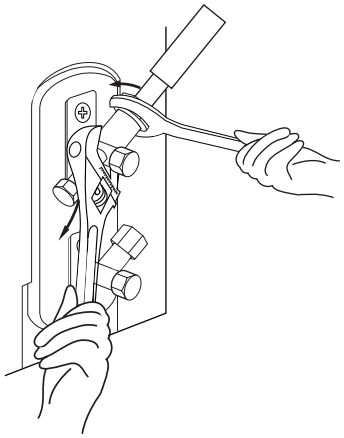


Fig. 11.7

⚠ ATENŢIE

- Asigurați-vă că ați înfășurat izolația în jurul tubulaturii. Este posibil ca contactul direct cu tubulatura goală duce la arsuri sau degeraturi.
- Asigurați-vă că conducta este conectată corect. Înălțimea de strângere poate deteriora clopotul și în strângere poate duce la scurgere.

NOTE CU PRIVIRE LA RAZA MINIMĂ DE ÎNDOIRE

Îndoiți cu grijă țeava în mijloc conform imaginii de mai sus. **NU** îndoiți țeava mai mult de 90° sau de mai mult de 3 ori.

Fig. 11.8

6. După conectarea conductelor de cupru la unitatea interioară, înfășurați cablul de alimentare, cablul de semnal și tubulatura împreună cu bandă de legare.

NOTĂ: NU întrepătrundeți cablu de semnal cu alte fire. În timp ce îmbinați aceste elemente împreună, nu amestecați sau treceți cablul de semnal cu/peste alte cablaje.

7. Înșurubați această conductă prin perete și conectați-o la unitatea exterioară.
8. Izolați toate conductele, inclusiv supapele unității exterioare.
9. Deschideți supapele de oprire ale unității exterioare pentru a porni fluxul agentului frigorific între unitatea interioară și cea exterioară.

⚠ ATENŢIE

Verificați pentru a vă asigura că nu există scurgeri de agent frigorific după finalizarea lucrărilor de instalare.
Dacă există scurgeri de agent frigorific, aerisiți imediat zona și evacuați sistemul (consultați secțiunea Evacuarea aerului din acest manual).

Cablarea

12

Precauții privind siguranța

⚠ AVERTIZARE

- Asigurați-vă că deconectați alimentarea electrică înainte de a lucra la acest aparat.
- Toate cablările electrice trebuie realizate în conformitate cu reglementările locale și naționale.
- Cablarea electrică trebuie efectuată de un tehnician calificat. Legăturile necorespunzătoare pot provoca defecțiuni electrice, vătămare și incendii.
- Trebuie să utilizați un circuit independent și o singură priză pentru alimentare electrică. Nu conectați alte aparate la aceeași priză. O capacitate electrică insuficientă sau defecte ale lucrărilor electrice pot duce la electrocutare sau incendiu, avarierea aparatului sau a bunurilor.
- Conectați toate cablurile și terminalele și prindeți-le cu o clemă. O conexiune nesigură poate duce la incendiu.
- Asigurați-vă că toată cablarea este realizată corect și că este bine instalat capacul panoului de control. Nerespectarea acestui lucru poate provoca supraîncălzirea la punctele de conexiune, incendiu și șocuri electrice.
- • Asigurați-vă că conexiunea de alimentare principală este realizată printr-un întrerupător care deconectează toți poli, cu un spațiu de contact de cel puțin 3 mm (0.118").
- NU modificați lungimea cablului de alimentare și nu folosiți un prelungitor.

⚠ ATENŢIE

- Conectați firele exterioare înainte de a conecta firele interioare.
- Asigurați-vă că ați împământat aparatul. Firul de împământare trebuie să fie departe de conducte de gaz, conducte de apă, paratrăsnete, telefon sau alte cabluri de împământare. împământare necorespunzătoare poate duce la electrocutare.
- **NU** conectați aparatul la electricitate până ce nu sunt finalizate cablările și tragerea conductelor.
- Asigurați-vă că nu intersectați cablajul electric cu cablajul de semnal, deoarece acest lucru poate provoca distorsiuni și interferențe.

Urmaţi aceste instrucţiuni pentru a preveni distorsiunea atunci când porneşte compresorul:

- Unitatea trebuie conectată la priza principală. În mod normal, sursa de alimentare trebuie să aibă o impedanță redusă de ieșire de 32 ohmi.
- Nici un alt echipament nu trebuie legat la același circuit electric.
- Informațiile referitoare la puterea unității pot fi găsite pe eticheta de informare de pe produs.

ȚINEȚI CONT DE SPECIFICAȚIILE SIGURANȚEI

Placa de circuite (PCB) a aparatului de aer condiționat este proiectată cu o siguranță pentru a asigura o protecție la supracurent. Specificațiile siguranței sunt tipărite pe placa de circuite, cum ar fi:

Unitatea interioară: T5A/250VAC, T10A/250VAC. (aplicabil doar pentru aparate cu agent frigorific R32 sau R290)

Unitatea exterioară: T20A/250VAC (pentru aparatul <24000Btu/h), T30A/250VAC (pentru aparatul >24000Btu/h)

Cablare unitate exterioară

⚠ AVERTIZARE

Înainte de a efectua lucrări electrice sau de cablare, opriți alimentarea electrică a aparatului.

1. Pregătiți cablul pentru conexiune

a. Mai întâi trebuie să alegeți dimensiunea corectă a cablului înainte de a-l pregăti pentru conectare. Asigurați-vă că utilizați cabluri H07RN-F.

Tabelul 12.1: Suprafața minimă a secțiunii transversale a cablurilor de alimentare și semnal în America de Nord

Tensiune nominală aparat (A)	AWG
≤ 7	18
7 - 13	16
13 - 18	14
18 - 25	12
25 - 30	10

Tabelul 12.2: Alte regiuni

Tensiune nominală aparat (A)	Secțiune transversală (mm²)
≤ 6	0.75
6 - 10	1
10 - 16	1.5
16 - 25	2.5
25- 32	4
32 - 45	6

b. Utilizând un instrument de îndepărtat izolație cabluri, îndepărtați stratul de cauciuc de la ambele capete ale cablului de semnal pentru a avea liber cablu de aproximativ 15cm (5.9").
c. Îndepărtați izolația de la capetele cablurilor.
d. Utilizând o mașină de ambutisat cabluri ambutisați caneluri de tip U la capetele cablurilor.

NOTĂ: când legați cablurile, urmați doar diagrama de circuit care se găsește pe capacul cutiei electrice.

2. Îndepărtați panoul electric al unității exterioare. (Vedeți Fig. 12.1)

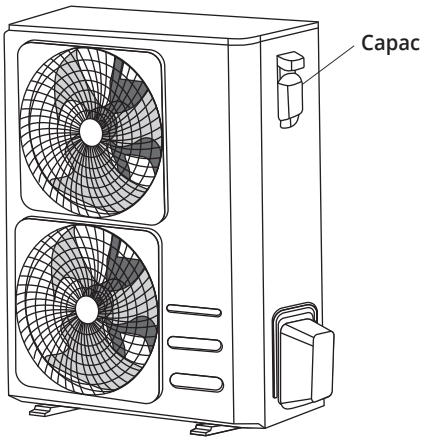


Fig. 12.1

3. Conectați canelurile tip U la terminale.Potriviți culorile cu etichetele de pe blocul terminal, conectați ambutisarea sub formă de U și înșurubați ferm fiecare cablu la terminalul său corespunzător.
4. Folosind clema pentru cabluri strângeți cablul.
5. Izolați cablurile neutilizate cu bandă izolatoare. Aranjați-le astfel încât să nu atingă nicio parte electrică sau metalică.
6. Reinstalați capacul cutiei electrice.

Cablare Unitate interioară

1. Pregătiți cablul pentru legare
   a. Utilizând un instrument de îndepărtat izolație cabluri, îndepărtați stratul de cauciuc de la ambele capete ale cablului de semnal pentru a avea liber cablu de aproximativ 15cm (5.9").
   b. Îndepărtați izolația de la capetele cablurilor.
   c. Utilizând o mașină de ambutisat cabluri ambutisați caneluri de tip U la capetele cablurilor.
2. Îndepărtați șurubul capacului cutiei electrice și scoateți capacul.
3. Conectați canelurile tip U la terminale. Potriviți culorile cu etichetele de pe blocul terminal, conectați ambutisarea sub formă de U și înșurubați ferm fiecare cablu la terminalul său corespunzător. Consultați numărul de serie și diagrama de cablare de pe capacul cutiei electrice.

⚠ ATENȚIE

- Când legați cablurile, urmați doar diagrama de circuit.
- Circuitul agentului frigorific poate deveni foarte fierbinte. Țineți cablul de legătură departe de țeava de cupru.

4. Folosind clema pentru cabluri strângeți cablul. Cablul nu trebuie să fie larg sau să tragă de canelurile tip U.
5. Reatașați capacul cutiei electrice.

Evacuarea aerului

13

Precauții privind siguranța

⚠ ATENȚIE

- Folosiți o pompă de vid cu nivel de citire sub -0.1MPa și o capacitate de evacuare aer de 40L/min.
- Unitatea exterioară nu are nevoie de evacuare. **NU** deschideți supapele de gaze și apă ale unității exterioare.
- Asigurați-vă că se poate citi valoarea de -0.1MPa sau mai puțin după 2 ore. Dacă după trei ore de funcționare se citește tot peste -0.1MPa, verificați dacă există gaze sau apă pe conductă. Dacă nu există scurgeri, mai realizați încă o evacuare pentru 1 sau 2 ore.
- **NU** utilizați agent frigorific pentru a evacua sistemul.

Instrucțiuni pentru evacuare

Înainte de utilizarea supapei colectoare și a pompei de vid, citiți manualul lor de utilizare pentru a vă familiariza cu modul de utilizare adecvată a acestora.

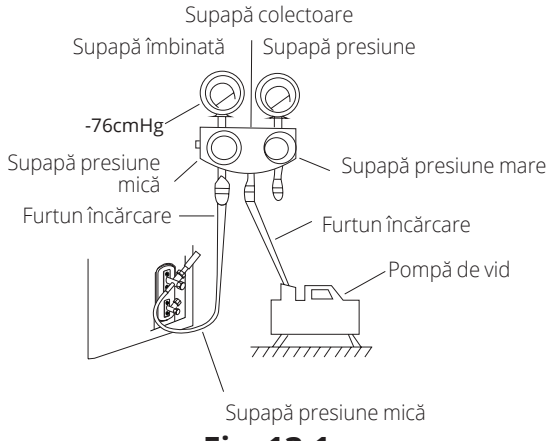


Fig. 13.1

1. Conectați furtunul de încărcare la supapa colectoare din portul de service al supapei de presiune mică a unității exterioare.
2. Conectați un alt furtun de încărcare din supapa colectoare la pompa de vid.
3. Deschideți partea de presiune mică a supapei colectoare. Păstrați partea de presiune mare închisă.

Porniți pompa de vid pentru a evacua sistemul.

4. Lăsați pompa să acționeze timp de cel puțin 15 minute sau până ce contorul integral indică -76cmHG (-1x105Pa).
5. Închideți partea de presiune joasă de pe supapa colectoare apoi opriți pompa de vid.
6. Așteptați 5 minute, apoi verificați dacă există schimbări în presiunea sistemului..

NOTĂ: Dacă nu există schimbări în presiunea sistemului, deșurubați capacul supapei incluse (supapei de presiune mare). Dacă există schimbări în presiunea sistemului, poate fi o scurgere de gaze.

7. Introduceți o cheie hexagonala în supapa inclusă (supapa de presiune mare) și deschideți supapa prin rotirea cheii cu 1/4 rotire în sensul invers acelor de ceasornic. Ascultați ieșirea gazului din sistem, apoi închideți supapa după 5 secunde.

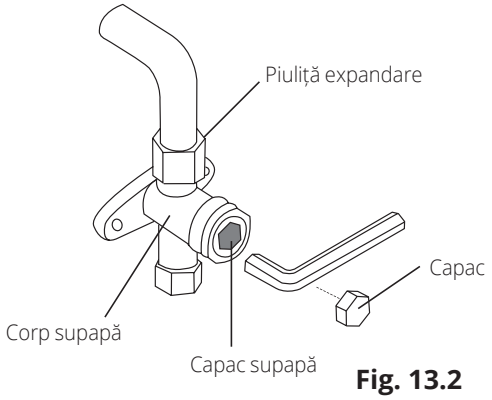


Fig. 13.2

8. Monitorizați indicatorul de presiune timp de un minut pentru a vă asigura că nu există schimbări ale presiunii. Indicatorul de presiune trebuie să arate opresiune ușor mai mare decât presiunea atmosferică.
9. Îndepărtați furtunul de încărcare de la portul de service.
10. Cu o cheie hexagonala, deschideți atât supapa de presiune mare cât și supapa de presiune mică.

DESCHIDEȚI ÎNCET TIJELE SUPAPEI

Atunci când deschideți tijele supapei, rotiți cheia hexagonala până ce atinge opritorul. Nu încercați să forțați supapa să se deschidă mai mult de atât.

11. Strângeți capacele supapelor cu mâna, apoi strângeți cu o unealtă.

Notă cu privire la adăugarea de agent frigorific

⚠ ATENŢIE

- Încărcarea de agent frigorific trebuie efectuată după legarea cablurilor, aspirare și verificarea pentru scurgeri.
- **NU** depășiți cantitatea maxim permisă de agent frigorific sau nu supraîncărcați sistemul. Acest lucru poate avaria aparatul sau poate afecta funcționarea sa.
- Încărcarea cu substanțe nepotrivite poate cauza explozie sau accidente. Asigurați utilizarea agentului frigorific adecvat.
- Containerele cu agent frigorific trebuie deschise încet. Folosiți întotdeauna echipament de protecție la încărcarea sistemului.
- **NU** amestecați tipurile de agenți frigorifici.
- Pentru modelele cu agent frigorific R290 sau R32 asigurați-vă că condițiile din zonă sunt sigure prin controlarea materialului inflamabil atunci când agentul frigorific este adăugat în aparatul de aer condiționat.

Unele sisteme necesită încărcare suplimentară pe baza lungimii conductei. Lungimea standard a țevii variază în funcție de reglementările locale. De exemplu, în America de Nord, lungimea standard a țevii este de 7,5m (25'). În alte zone, lungimea standard a țevii este de 5m (16'). Cantitatea suplimentară de agent frigorific ce trebuie încărcat poate fi calculat folosind următoarea formulă:

Diametru parte lichid

	ϕ6.35(1/4")	ϕ9.52(3/8")	ϕ12.7(1/2")
R22 (tub orificiu în unitatea interioară):	(Lungime totală țeavă - lungime standard țeavă)x 30g (0.32oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă)x 65g(0.69oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă)x 115g(1.23oZ)/m(ft)
R22 (tub orificiu în unitatea exterioară):	(Lungime totală țeavă - lungime standard țeavă) x15g(0.16oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă) x30(0.32oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă) x60g(0.64oZ)/m(ft)
R410A: (tub orificiu în unitatea interioară):	(Lungime totală țeavă - lungime standard țeavă) x30g(0.32oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă) x65g(0.69oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă) x115g(1.23oZ)/m(ft)
R410A: (tub orificiu în unitatea exterioară)	(Lungime totală țeavă - lungime standard țeavă) x15g(0.16oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă) x30g(0.32oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă) x65g(0.69oZ)/m(ft)
R32 :	(Lungime totală țeavă - lungime standard țeavă)x 12g(0.13oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă)x 24g(0.26oZ)/m(ft)	(Lungime totală țeavă - lungime standard țeavă)x 40g(0.42oZ)/m(ft)

Testare funcționare

14

Înainte de testarea funcționării

O testare a funcţionări trebuie efectuată după ce întreg sistemul a fost complet instalat. Confirmaţi următoarele puncte înainte de realizarea testului:

a) Unitatea interioară și cea exterioară sunt adecvat instalate.
b) Conductele și cablurile sunt legate adecvat.
c)Asigurați-vă că nu există blocaje lângă admisia și evacuarea de aer ale aparatului, ce pot duce la o funcționare defectuoasă sau nefuncționarea produsului.
d) Sistemul de răcire nu are scurgeri.
e) Sistemul de evacuare este într-o poziție sigură și se scurge în siguranță.
f) Izolarea pentru căldură este adecvat instalată.
g) Cablurile de împământare sunt conectate adecvat.
h) Lungimea tubulaturii și capacitatea de încărcare a agentului frigorific au fost înregistrate.
i) Tensiunea de alimentare este tensiunea corectă pentru aparatul de aer condiționat.

⚠ ATENŢIE

Neefectuarea testării poate duce la deteriorarea unității, daune materiale sau vătămări corporale.

Instrucțiuni testare de funcționare

1. Deschideți ambele supape de oprire lichid și gaz.
2. Porniți comutatorul principal și permiteți încălzirea aparatului.
3. Setați aparatul de aer condiționat pe modulul Răcire (COOL).
4. Pentru unitatea interioară
   a. Asigurați-vă că telecomanda și butoanele sale funcționează adecvat.
   b. Asigurați-vă că fantele lucrează adecvat și că pot fi schimbate cu ajutorul telecomenzii.
   c. Verificați de două ori dacă se înregistrează corect temperatura camerei.
   d. Asigurași-vă că indicatorii de pe telecomandă și de pe ecranul unității interioare funcționează corect.
   e. Asigurați-vă că butoanele manuale de pe unitatea interioară funcționează corect.
   f. Verificați dacă sistemul de evacuare este într-o poziție sigură și se scurge în siguranță.
   g. Asigurați-vă că nu există vibrații sau zgomote anormale în timpul utilizării.
5. Pentru unitatea exterioară:
   a. Verificați dacă sistemul de răcire are scurgeri.
   b. Asigurați-vă că nu există vibrații sau zgomote anormale în timpul utilizării.
   c. Asigurați-vă că aerul, zgomotul și apa generate de aparat nu vă deranjează vecinii sau nu ridică un pericol pentru siguranță.
6. Test de scurgeri
   a. Asigurați-vă că țevile de evacuare curg ușor. Clădirile noi ar trebui să efectueze acest test înainte de a termina plafonul.
   b. Înlăturați capacul de test. Adăugați 2.000 ml de apă în bazin prin tubul atașat.
   c. Porniți comutatorul principal și puneți aparatul în funcția Răcire (COOL).
   d. Ascultați sunetul pompei de evacuare pentru a vedea dacă scoate zgomote anormale.
   e. Verificați să vedeți dacă apa este golită. Poate dura până la un minut până ce aparatul începe să scoată apă în funcție de țeava de evacuare.
   f. Asigurați-vă că nu există scurgeri în niciuna dintre țevi.
   g. Opriți aparatul de aer condiționat. Opriți comutatorul principal și reinstalați capacul de test.

NOTĂ: Dacă aparatul funcționează defectuos sau nu funcționează conform așteptărilor dvs., vă rugăm să consultați secțiunea de depanare a Manualului de Utilizare înainte de a apela serviciul de relații cu clienții

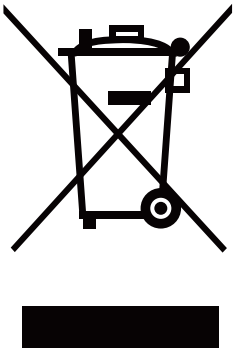
Prevederi Europene privind aruncarea 15

Utilizatorii din Uniunea Europeană trebuie să arunce acest aparat în mod corect. Acest aparat conţine agent frigorific şi alte materiale potenţial periculoase. La eliminarea acestui aparat, legea cere colectarea şi tratarea specială. Nu aruncaţi acest produs ca şi deşeu menajer sau deşeu municipal nesortat.

Când aruncaţi acest aparat, aveţi următoarele opţiuni:

- Aruncați aparatul la o unitate de colectare a deșeurilor electronice municipale.
- La achiziționarea unui nou aparat, agentul de vânzări va prelua în mod gratuit vechiul aparat.
- Producătorul va primi înapoi vechiul aparat în mod gratuit.
- Vindeți aparatul la dealerul de fier vechi.

NOTĂ: Eliminarea acestui aparat în pădure sau în alte împrejurimi naturale vă pune în pericol sănătatea și este dăunător pentru mediul înconjurător. Substanțele periculoase pot pătrunde în apele freatice și pot intra în lanțul alimentar.



Informații despre service
(Doar pentru aparatele care utilizează agent frigorific de tip R32/R290)

16

1. Verificări ale zonei

Înainte de a începe lucrările la sistemele care conțin agenți frigorifici inflamabili, sunt necesare verificări de siguranță pentru a se minimiza riscul de aprindere. Pentru repararea sistemului de răcire, trebuie respectate următoarele măsuri de precauție înainte de efectuarea lucrărilor la sistem.

2. Procedura de lucru

Lucrările se efectuează în cadrul unei proceduri controlate astfel încât să se reducă la minimum riscul prezenței unui gaz inflamabil sau a vaporilor în timpul lucrului.

3. Zona generală de lucru

Tot personalul de întreținere și toți ceilalți care lucrează în zona locală trebuie instruiți cu privire la natura muncii care se desfășoară. Lucrul în spații închise trebuie evitat. Zona din jurul spațiului de lucru trebuie izolată. Asigurați-vă că condițiile din zonă au fost prevăzute a fi sigure prin controlul materialului inflamabil.

4. Verificarea prezenței agentului frigorific

Zona trebuie verificată cu un detector corespunzător de agent frigorific înainte și în timpul lucrului, pentru a se asigura că tehnicianul este conștient de atmosfere potențial inflamabile. Asigurați-vă că echipamentul de detectare a scurgerilor care este utilizat este adecvat pentru utilizarea cu agenți frigorifici inflamabili, adică fără scânteiere, sigilat adecvat sau cu siguranță intrinsecă.

5. Existența unui stingător de incendiu

În cazul în care trebuie efectuată o lucrare la cald la echipamentul de refrigerare sau la orice piese asociate, trebuie să fie disponibile echipamente adecvate de stingere a incendiilor. Să aveți un stingător de incendiu cu pulbere uscată sau cu CO2, adiacent zonei de încărcare.

6. Fără surse de aprindere

Nicio persoană care efectuează lucrări în legătură cu un sistem de refrigerare care implică expunerea oricărei lucrări de conducte care conține sau are agent frigorific inflamabil nu va folosi nicio sursă de aprindere în așa fel încât să nu conducă la riscul de incendiu sau explozie. Toate posibilele surse de aprindere, inclusiv fumatul, ar trebui să fie păstrate suficient de departe de locul de instalare, reparare, îndepărtare și eliminare, în timpul cărora agentul frigorific inflamabil poate fi eliberat în spațiul înconjurător. Înainte desfășurarea lucrului, zona din jurul echipamentului trebuie să fie supravegheată pentru a vă asigura că nu există pericole inflamabile sau riscuri de aprindere. Vor fi afișate indicatoare cu FUMATUL INTERZIS.

7. Zonă aerisită

Asigurați-vă că zona este deschisă sau că este suficient aerisită înainte de a intra în sistem sau de a efectua orice lucru la cald. Suficientă ventilație va continua în timpul perioadei în care se efectuează lucrările. Ventilația ar trebui să disperseze în siguranță orice agent de răcire eliberat și, de preferință, să îl expulzeze în exterior în atmosferă.

8. Verificări la echipamentul agentului frigorific

În cazul în care componentele electrice sunt schimbate, acestea trebuie să fie adecvate scopului și specificațiilor corecte. În orice moment se respectă instrucțiunile producătorului de întreținere și de service. Dacă aveți dubii, consultați departamentul tehnic al producătorului pentru asistență.
Următoarele verificări se aplică instalațiilor care utilizează agenți frigorifici inflamabili:

- cantitatea încărcării este în conformitate cu dimensiunea camerei în care sunt instalate componentele care conțin agent frigorific;
- aparatele de ventilație și orificiile de evacuare funcționează corespunzător și nu sunt obstrucționate;
- dacă se utilizează un circuit de răcire indirect, circuitele secundare trebuie verificate pentru prezența agenților frigorifici; marcarea pe echipament continuă să fie vizibilă și lizibilă.
- marcajul și semnele care sunt ilizibile vor fi corectate;
- instalațiile de răcire sau componentele sunt instalate într-o poziție în care este puțin probabil ca acestea să fie expuse la orice substanță care poate coroda componentele care conțin agent frigorific, cu excepția cazului în care componentele sunt construite din materiale rezistente la corodare sau protejate corespunzător împotriva corodării.

9. Verificări ale dispozitivelor electrice

Repararea și întreținerea componentelor electrice trebuie să includă verificări inițiale de siguranță și proceduri de inspecție a componentelor. Dacă există o defecțiune care ar putea compromite siguranța, atunci nu trebuie conectată nicio sursă de alimentare la circuit până când nu este tratată în mod satisfăcător. Dacă defecțiunea nu poate fi corectată imediat, dar este necesară continuarea funcționării, trebuie utilizată o soluție temporară adecvată. Acest lucru trebuie raportat proprietarului echipamentului, astfel încât toate părțile să fie înștiințate.
Verificările inițiale pentru siguranță vor include:

- golirea condensatoarelor: acest lucru se face într-o manieră sigură pentru a evita posibilitatea apariției de scântei
- să nu existe componente electrice legate la alimentare și cabluri electrice expuse în timpul încărcării, recuperării sau curățării sistemului;
- că există continuitatea împământării.

10. Reparații la componente etanșate

10.1 În timpul reparațiilor la componentele etanșe, toate sursele de energie electrică trebuie să fie deconectate de la echipamentul la care se lucrează înainte de îndepărtarea capacelor etanșate etc. Dacă este absolut necesar să existe o sursă de alimentare electrică a echipamentelor în timpul lucrărilor de întreținere, atunci o formă permanentă de detectare a scurgerilor trebuie localizată în punctul critic pentru a avertiza asupra unei situații potențial periculoase.

10.2 Se acordă o atenție deosebită următoarelor aspecte pentru a se asigura că, prin lucrul la componentele electrice, carcasa nu este modificată în așa fel încât nivelul de protecție să fie afectat. Acestea includ deteriorarea cablurilor, numărul excesiv de conexiuni, terminalele care nu au fost conform cu specificațiile lor inițiale, deteriorarea sigiliilor, montarea incorectă a manșoanelor, etc.

- Asigurați-vă că aparatura este montată în siguranță.
- Asigurați-vă că garniturile sau materialele de etanșare nu au fost degradate astfel încât acestea să nu mai funcționeze în scopul prevenirii intrării de atmosfere inflamabile. Piesele de schimb trebuie să fie în conformitate cu specificațiile producătorului.

NOTĂ: Utilizarea materialului de etanșare din silicon poate inhiba eficiența anumitor tipuri de echipamente de detectare a scurgerilor. Componentele cu siguranță intrinsecă nu trebuie izolate înainte de a lucra la ele.

11. Reparații componente cu siguranță intrinsecă

Nu aplicați nici o sarcină permanentă inductivă sau de capacitate în circuit fără a vă asigura că nu va depăși tensiunea și curentul admis permis pentru echipamentul utilizat. Componentele cu siguranță intrinsecă sunt singurele tipuri pe care se pot lucra în timp ce se află în prezența unei atmosfere inflamabile. Aparatul de testare trebuie să fie evaluat corect.
Înlocuiți componente numai cu piesele specificate de producător. Alte componente pot duce la aprinderea agentului frigorific din atmosferă datorită unei scurgeri.

12. Cablarea

Verificați dacă cablarea nu este supusă uzurii, coroziunii, presiunii excesive, vibrațiilor, muchiilor ascuțite sau altor efecte adverse din mediu. De asemenea, verificarea trebuie să ia în considerare efectele îmbătrânirii sau vibrațiilor continue din surse cum ar fi compresoarele sau ventilatoarele.

13. Detectarea agenților frigorifici inflamabili

În nici un caz nu trebuie utilizate surse potențiale de aprindere în căutarea sau detectarea scurgerilor de agent frigorific. O lampă cu halogen (sau orice alt detector care utilizează o flacără deschisă) nu se utilizează.

14. Metode de detectare scurgeri

Următoarele metode de detectare a scurgerilor sunt considerate acceptabile pentru sistemele care conțin agenți frigorifici inflamabili. Detectoarele electronice de scurgere vor fi utilizate pentru a detecta agenții frigorifici inflamabili, dar sensibilitatea poate să nu fie adecvată sau pot necesita re-calibrare.(Echipamentul de detecție trebuie să fie calibrat într-o zonă fără agenți frigorifici.) Asigurați-vă că detectorul nu este o sursă potențială de aprindere și că este adecvat pentru agentul frigorific. Dispozitivele de detectare a scurgerilor se fixează la un procent din LFL al agentului frigorific și se calibrează la agentul frigorific utilizat și se confirmă procentajul corespunzător de gaze (maxim 25%). Soluțiile de detectare a scurgerilor sunt potrivite pentru utilizare cu majoritatea agenților frigorifici, dar utilizarea detergenților care conțin clor trebuie evitată deoarece clorul poate reacționa cu agentul frigorific și poate coroda conducta de cupru.
În cazul în care se suspectează o scurgere, toate flăcările deschise trebuie îndepărtate sau stinse.
Dacă se constată o scurgere de agent frigorific care necesită sudură tare, tot agentul frigorific trebuie recuperat din sistem sau izolat (prin intermediul unor supape de închidere) într-o parte a sistemului aflat la distanță de scurgere. Azotul fără oxigen (OFN) va fi apoi folosit la curățarea sistemului atât înainte, cât și în timpul procesului de sudură tare.

15. Îndepărtare și evacuare

La pătrunderea în circuitul de agent frigorific pentru reparații în orice alt scop se vor folosi proceduri convenționale. Cu toate acestea, este important ca cele mai bune practici să fie respectate, deoarece inflamabilitatea trebuie luată în considerare. Se va pune în practică următoarea procedură:
- Îndepărtați agentul frigorific;
- Curățați sistemul cu un gaz inert;
- Evacuați agentul frigorific;
- Curățați din nou cu gaz inert;
- Deschideți circuitul prin tăiere sau sudură tare.

Încărcarea agentului frigorific se recuperează în cilindrii de recuperare corespunzători. Sistemul trebuie spălat cu OFN pentru a face unitatea sigură. Este posibil ca acest proces să fie repetat de mai multe ori. Aerul comprimat sau oxigenul nu trebuie utilizate pentru această sarcină.
Spălarea se realizează prin ruperea vidului în sistem cu OFN și continuarea umplerii până la atingerea presiunii de lucru, apoi aerisirea în atmosferă și, în final, tragerea la vid. Acest proces se repetă până

când nu se află deloc agent frigorific în sistem. Atunci când este utilizată încărcarea finală de OFN, sistemul trebuie să fie ventilat până la presiunea atmosferică pentru a permite efectuarea lucrărilor. Această operație este absolut vitală dacă trebuie să se desfășoare operațiunile de sudură tare pe conducte.
Asigurați-vă că evacuarea pentru pompa de vid nu este închisă pentru orice sursă de aprindere și există ventilație disponibilă.

16. Proceduri de încărcare

Pe lângă procedurile convenționale de încărcare, trebuie respectate următoarele cerințe:

- Asigurați-vă că nu se produce contaminarea diferiților agenți frigorifici atunci când se utilizează echipamente de încărcare. Furtunurile sau liniile trebuie să fie cât mai scurte posibil pentru a minimiza cantitatea de agent frigorific conținut în acestea.
- Cilindrii trebuie păstrați în picioare.
- Asigurați-vă că sistemul de răcire este împământat înainte de încărcarea sistemului cu agent frigorific.
- Etichetați sistemul când încărcarea este completă (dacă nu este deja).
- Trebuie să se acorde o atenție să nu supraîncărcați sistemul de refrigerare.
- Înainte de reîncărcarea sistemului, acesta trebuie testat cu OFN. Sistemul trebuie să fie testat pentru scurgeri la finalizarea încărcării, dar înainte de punerea în funcțiune. Trebuie să se efectueze un al doilea test de scurgeri înainte de plecarea de la locație.

17. Dezafectarea

Înainte de a efectua această procedură, este esențial ca tehnicianul să fie complet familiarizat cu echipamentul și cu toate detaliile acestuia. Se recomandă ca și bună practică ca toți agenții frigorifici să fie recuperați în siguranță. Înainte de efectuarea lucrării, se prelevă o mostră de ulei și de agent frigorific. În cazul în care este necesară o analiză înainte de reutilizarea agentului frigorific regenerat, este esențial ca energia electrică să fie disponibilă înainte de începerea lucrării.

a) Familiarizați-vă cu echipamentul și funcționarea sa.
b) Izolați din punct de vedere electric sistemul
c)Înainte de a încerca procedura asigurați-vă că:

- sunt disponibile echipamente de manipulare mecanică, dacă este necesar, pentru manipularea cilindrilor de răcire;
- toate echipamentele de protecție personală sunt disponibile și utilizate corect;
- procesul de recuperare este supravegheat în permanență de o persoană calificată;
- echipamentul de recuperare și buteliile sunt conforme cu standardele corespunzătoare.

d) Goliți cu pompa sistemul de refrigerare, dacă este posibil.
e) Dacă nu este posibil o vidare, realizați un colector astfel încât agentul frigorific să poată fi scos din diferite părți ale sistemului.
f) Asigurați-vă că cilindrul este situat pe cântar înainte de a începe recuperarea.
g) Porniți mașina de recuperare și operați în conformitate cu instrucțiunile producătorului.
h) Nu umpleți prea mult cilindrii (O încărcare mai mică de 80% lichid).
i) Nu depășiți presiunea maximă de lucru a cilindrului, chiar și temporar.
j) Când cilindrii au fost umpluți corect și procesul a fost finalizat, asigurați-vă că cilindrii și echipamentul sunt îndepărtați rapid din locație și că toate supapele de izolare de pe echipament sunt închise.
k) Refrigerentul recuperat nu trebuie încărcat în alt sistem de răcire decât dacă a fost curățat și verificat.

18. Etichetarea

Echipamentul trebuie să fie etichetat cu mențiunea că a fost demontat și golit de agentul frigorific. Eticheta trebuie să fie datată și semnată. Asigurați-vă că pe echipament există etichete care să ateste că echipamentul conține agent frigorific inflamabil.

19. Recuperarea

- Atunci când scoateți agentul frigorific dintr-un sistem, fie pentru service, fie pentru dezafectare, se recomandă ca și bună practică ca toți agenții frigorifici să fie îndepărtați în siguranță.
- Când transferați agentul frigorific în cilindri, asigurați-vă că sunt folosiți numai cilindri de recuperare a agentului frigorific. Asigurați-vă că este disponibil un număr corect de cilindri pentru păstrarea încărcării totale a sistemului. Toți cilindrii care urmează să fie utilizați sunt destinați agentului frigorific recuperat și etichetați pentru agentul frigorific (adică, cilindrii speciali pentru recuperarea agentului frigorific). Cilindrii trebuie să fie complet echipați cu supapă de presiune și supapele de închidere asociate în stare bună de funcționare.
- Cilindrii de recuperare goi sunt evacuați și, dacă este posibil, răciți înainte de recuperare. Echipamentul de recuperare trebuie să fie în stare bună de funcționare cu un set de instrucțiuni privind echipamentul disponibil și trebuie să fie adecvat pentru recuperarea agenților frigorifici inflamabili. În plus, un set de cântare calibrate trebuie să fie disponibile și în stare bună de funcționare.
- Furtunurile trebuie să fie complete cu cuplaje de deconectare fără scurgeri și în stare bună. Înainte de a utiliza mașina de recuperare, verificați dacă aceasta este în stare de funcționare satisfăcătoare, a fost întreținută corespunzător și dacă toate componentele electrice asociate sunt etanșate pentru a preveni aprinderea în cazul eliberării de agent frigorific. Consultați producătorul dacă există îndoieli.
- Agentul frigorific recuperat va fi returnat furnizorului de agent frigorific în cilindrul de recuperare corect și va fi întocmită nota de transfer a deșeurilor. Nu amestecați agenții frigorifici în unitățile de recuperare și mai ales nu în cilindri.

Dacă compresoarele sau uleiurile de compresor trebuie îndepărtate, asigurați-vă că au fost evacuate la un nivel acceptabil pentru a vă asigura că agentul frigorific inflamabil nu rămâne în lubrifiant. Procesul de evacuare trebuie efectuat înainte de a returna compresorul furnizorilor. Numai încălzirea electrică a corpului compresorului trebuie utilizată pentru a accelera acest proces. Atunci când uleiul este scos dintr-un sistem, acesta trebuie să fie efectuat în siguranță.

20. Transportul, marcarea și depozitarea aparatelor

1. Transportul echipamentelor care conțin agent frigorific inflamabil
   Conformarea cu reglementările de transport
2. Marcarea echipamentelor prin folosirea simbolurilor
   Conformarea cu reglementările locale
3. Aruncarea aparatelor care conțin agent frigorific inflamabil
   Conformarea cu reglementările naționale
4. Depozitarea echipamentului/ aparaturii
   Depozitarea echipamentului trebuie să fie în conformitate cu instrucțiunile producătorului.
5. Depozitarea echipamentului ambalat (nevândut) Protecția pachetului de protecție trebuie construită astfel încât deteriorarea mecanică a echipamentului din interiorul ambalajului să nu cauzeze o scurgere a încărcăturii agentului frigorific. Numărul maxim de bucăți de echipamente care pot fi depozitate împreună va fi determinat de reglementările locale.

Toate imaginile din acest manual, au scop pur informativ. Forma reala a produsului pe care l-ati cumparat poate fi usor diferita insa functiile si operatiile sunt aceleasi.
Compania nu isi asuma nici o responsabilitate pentru greselile de tipar. Aspectul fizic si specificatiile tehnice se pot schimba fara o notificare prealabila datorita imbunatatirii continue a echipamentelor noastre. Pentru mai multe detalii, va rugam sa contactati producatorul la numarul de telefon: +30 211 300 3300, sau vanzatorul echipamentului. Toate actualizarile acestui manual vor fi disponibile pe website-ul nostru si va recomandam sa verificati intotdeauna pentru aparitia unei noi versiuni.

Scanati codul QR pentru a descarca ultima versiune a manualului.
www.inventoraerconditionat.ro/biblioteca-media

Activati-va garantia

- **Accesati link-ul de mai jos sau scanati codul QR pentru a va activa garantia pe site-ul nostru.**

https://www.inventoraerconditionat.ro/certificatul-de-garantie-inventor-aer-conditionat-si-electrocasnice

- **Completati toate campurile conform exemplului de mai jos**

Pentru a activa garantia, va rugam sa completati urmatoarele campuri

Detalii propietar

Nume complet*

Adresa*

Cod Postal*

Numar de telefon*

E-mail*

Abonati-va la Newsletter-ul Inventor

Detalii unitate

Tip aparat*

Numărul serial al unității interioare*

Numărul serial al unității exterioare*

Data de achizitie*

Numar Factura*

Detalii aditionale

* Camp obligatoriu

Cu acest certificat de garantie acceptati **Termenii si Conditiile.**

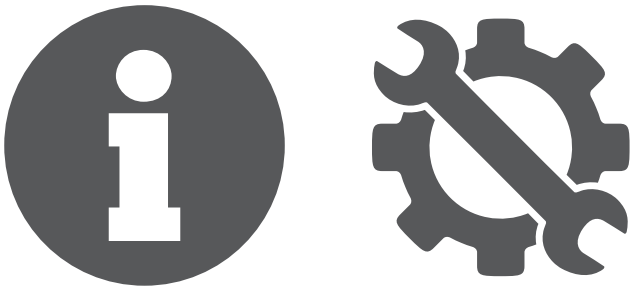
TRIMITE

☑ Odata ce garantia a fost activata, veti primi un email de confirmare

NOTES

AIR CONDITIONING SYSTEMS

FLOOR STANDING



Please check the applicable models, F-GAS and manufacturer information from
the “Owner’s Manual - Product Fiche” in the packaging of the outdoor unit. (European Union products only).