Multi DCI user's manual

In line with the company's policy of continuous product improvement, the esthetic and dimensional characteristics, technical data and accessories of this appliance may be changed without notice.

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The product in this manual may be different to the actual one, according to different models. Some models have a display and others models do not have a display. Please refer to actual model for the position and shape of the display.

CONFORMITY AND RANGE

GENERAL INFORMATION

The air conditioner you have purchased conforms with American Directive UI1995:

/!\ Please read this owner's manual carefully before operating the unit and retain it for reference purposes.

!\ Only use the air conditioner as instructed in this booklet. These instructions are not intended to cover every possible condition and situation. As with any electrical household appliance, common sense and caution are therefore always recommended for installation, operation and maintenance.

NAMES OF THE PARTS

GENERAL INFORMATION

DUO14:

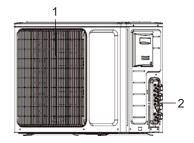
Warning

■ Be sure to cut off the power supply before cleaning the air conditioner; otherwise there is danger of electric shock.



- Wetting of air conditioner may cause the risk of electric shock. Make sure not to wash your air conditioner in any circumstances.
- Volatile liquids such as thinner or gasoline will cause damage to the appearance of air conditioner (use only a soft dry cloth moist cloth to clean the air conditioner cabinet).
- This product must not be disposed of together with the domestic waste.
- This product has to be disposed of at an authorized site for recycling of electrical and electronic appliances.
- The temperature of refrigerant circuit will be high. Please keep the interconnection cable away from the copper pipe.

OUTDOOR UNIT				
No.	Description			
1	Air outlet grille			
2	Valve			



Note: the above figures are only intended to be a simple diagram of the appliance and may not correspond to the appearance of the units that have been purchased.

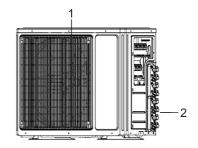
mm

Trio 18, Quattro 30:

Warning

- If the power supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- Be sure to cut off the power supply before cleaning the air conditioner; otherwise there may be danger of electric shock.
- Wetting of air conditioner may cause the risk of electric shock. Make sure not to wash your air conditioner in any circumstances.
- Volatile liquids such as thinner or gasoline will cause damage to the appearance of air conditioner. (Only use soft dry cloth moist cloth clean the air conditioner cabinet).Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
- The temperature of refrigerant circuit will be high. Please keep the interconnection cable away from the copper pipe.

OUTDOOR UNIT				
No.	Description			
1	Air outlet grille			
2	Valve			



Note: the above figures are only intended to be a simple diagram of the appliance and may not correspond to the appearance of the units that have been purchased.



TECHNICAL DATA		GENERAL INFORMATION	
MODE		DUO 14	
Electrical data			
Electricity supply		220-240V,50Hz	
Fuse or air switch		25	
Minimum power cord section		2.5	mm²
Refrigerant gas(R410A)		1400	g
Size and clearance			
P	L	818	mm
H	Р	378	mm

TECHNICAL DATA		GENERAL INFORMATION	
MODE			
Electrical data		Trio 18, Quattro 30	
Electricity supply		220-240V,50Hz	
Fuse or air switch		40	
Minimum power cord section		4.0	mm ²
Refrigerant gas(R410A)		2200	g
Size and clearance			
, p	L	890	mm
	Р	362	mm
	Н	700	mm

OUTDOOR UNIT WORKING TEMPERATURE RANGE GENERAL INFORMATION

	Outdoor side DB/WB(°C)
Maximum cooling	43/26(T1)
Minimum cooling	21/-
Maximum heating	24/18
Minimum heating	-5/-6

3 NAME OF PARTS

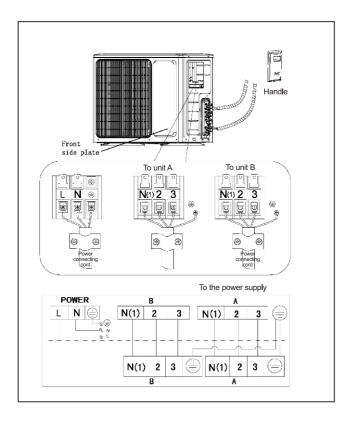
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ELECTRICAL CONNECTIONS

INSTALLER

DUO 14:

- 1. Remove the handle on the right side plate of the outdoor unit (one screw).
- 2. Remove the cable clamp, connect the power connection cable with the terminal at the row of connection and fix the connection. The fitting line distributing must be consistent with the indoor unit. Terminal of line bank wiring should meet that of indoor unit.
- 3. Fix power connection wire by wire clamp.
- 4. Ensure wire has been fixed well.
- 5. Install the handle.



An all-polarity disconnection switch having a contact separation of at least 3mm at all poles should be connected in fixed wiring.



Incorrect wire connection may cause a malfunction of some electric components. After fixing cable, ensure that

leads between connection and fixed point have some space.



The connection pipes and the connection wirings of unit A and unit B must correspond to each other correctly.



The appliance shall be installed in accordance with national wiring

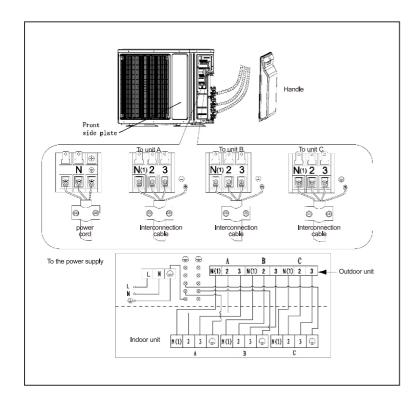
Note: the above figures are only intended to be a simple diagram of the appliance and may not correspond to the appearance of the units that have been purchased.

ELECTRICAL CONNECTIONS

INSTALLER

Trio 18:

- 1. Remove the handle on the right side panel of the outdoor unit (one screw).
- 2. Remove the cable clamp, connect the power connection cable with the terminal at the connection row and fix the connection. The fitting line distributing must be consistent with the indoor unit. Terminal of line bank wiring should meet that of indoor unit.
- 3. Fix power connection wire using wire clamp.
- 4. Ensure wire has been fixed well.
- Install the handle.



An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.



Incorrect wire connection may cause a malfunction of some electric components. After fixing the cable, ensure that leads between connection and fixed point have some space.



The connection pipes and the connection wirings of units A, B and C must correspond to each other properly.



The appliance shall be installed in accordance with national wiring regulations.



Do not install the outdoor unit where it is exposed to sunlight.

Note: the above figures are only intended to be a simple diagram of the appliance and may not correspond to the appearance of the units that have been purchased.

ELECTRICAL CONNECTIONS

INSTALLER

Quattro 30:

- 1. Remove the handle on the right side panel of the outdoor unit (one screw).
- 2. Remove the cable clamp, connect the power connection cable with the terminal at the connection row and fix the connection. The fitting line distributing must be consistent with the indoor unit. Terminal of line bank wiring should meet that of indoor unit.
- 3. Fix power connection wire using wire clamp.
- 4. Ensure wire has been fixed well.
- 5. Install the handle.

An all-pole disconnection switch having a contact separation of at least 3mm in all pole should be connected in fixed wiring.

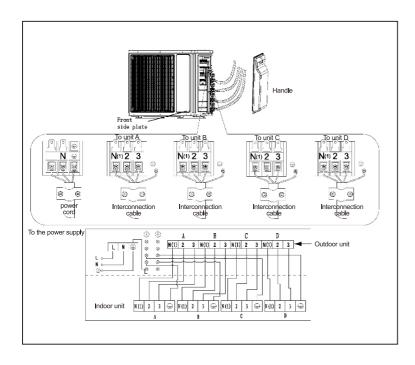
Incorrect wire connection may cause malfunction of some electric components. After fixing cable, ensure that leads between connection to fixed point have some space.

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The connection pipes and the connection wirings of unit A, B, C and D must be correspond to each other correctly.

The appliance shall be installed in accordance with national wiring regulations.

Do not install the outdoor unit where it is exposed to sunlight.



HANDLING USER

After having removed the packaging, check that the contents are intact and complete.

The outdoor unit must always be kept upright.

Handling must be done by suitably equipped qualified technical personnel using equipment that is suitable for the weight of the appliance.

INSTALLING THE OUTDOOR UNIT

INSTALLER

Location



Use bolts to secure the unit to a flat, solid floor. When mounting the unit on a wall or the roof, make sure the support is firmly secured so that it cannot move in the event of intense vibrations or a strong wind.

Do not install the outdoor unit in pits or air vents Installing the pipes

Installing the pipes

Use suitable connecting pipes and equipment for the refrigerant R410A.

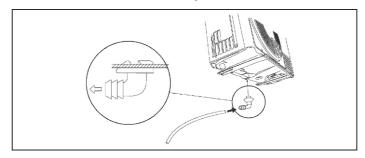
The refrigerant pipes must not exceed a maximum length of 10m.

Wrap all the refrigerant pipes and joints.

Tighten the connections using two wrenches working in opposite directions.

Caution: Installation must be performed in accordance with the NEC/CEC by authorized personnel only. Install the drain fitting and the drain hose (for model with heat pump only)

Condensation is produced and flows from the outdoor unit when the appliance is operating in heating mode. In order not to disturb neighbors and to protect the environment, install a drain fitting and a drain hose to channel the condensate water. Install the drain fitting and rubber washer on the outdoor unit chassis and connect a drain hose to it as shown in the figure.



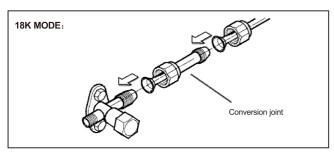
BLEEDING INSTALLER

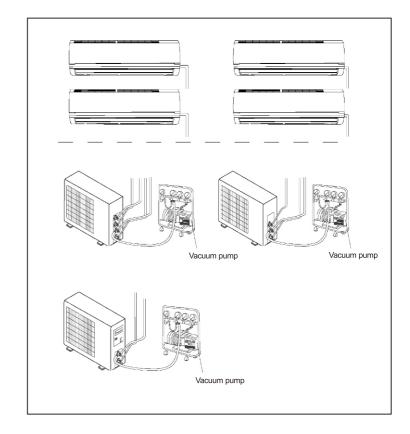
Humid air remaining inside the refrigerant circuit can cause a compressor malfunction. After having connected the indoor and outdoor units, bleed the air and humidity from the refrigerant circuit using a vacuum pump.

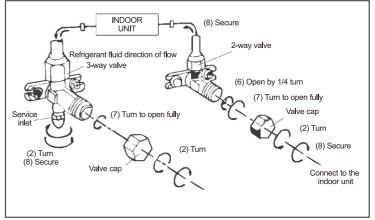
- (1) Unscrew and remove the caps from the 2-way and 3- way valves.
- (2) Unscrew and remove the cap from the service valve.
- (3) Connect the vacuum pump hose to the service valve.
- (4) Operate the vacuum pump for 10-15 minutes until an absolute vacuum of 10 mmHg has been reached.
- (5) With the vacuum pump still in operation, close the low-pressure knob on the vacuum pump coupling. Stop the vacuum pump.
- (6) Open the 2-way valve by a 1/4 turn and then close it after 10 seconds. Check all the joints for leaks using liquid soap or an electronic leak device.
- (7) Turn the body of the 2-way and 3-way valves. Disconnect the vacuum pump hose.
- (8) Replace and tighten all the caps on the valves.

Diameter (mm)	Twisting moment (N.m)
06	15-20
09.52	35-40
0 16	60-65
012	45-50
019	70-75

18K unit need to be installed the indoor unit







11 BLEEDING 12

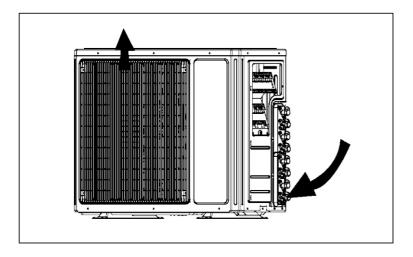
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MAINTENANCE INSTALLER

① Use suitable instruments for refrigerant R41 0A.

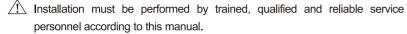
Do not use any refrigerant other than R41 0A.

Do not use mineral oils to clean the unit.



INSTALLATION DIMENSION DIAGRAM

INSTALLER

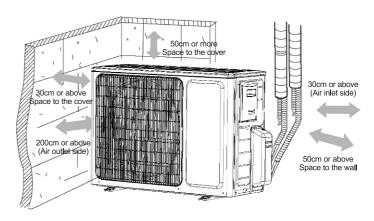


Contact service center before installation to avoid a malfunction due to unprofessional installation.

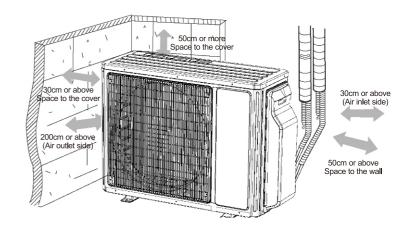
When picking up and moving the units, you must be guided by a trained and qualified person.

1 Ensure that the recommended space is left around the appliance.

DUO 14



Trio 18, Quattro 30



This is just a schematic diagram. Please refer to the actual product.

13 MAINTENANCE 14

CHECK AFTER INSTALLATION

INSTALLER

Check Items	Problems owing to improper Installation
Is the installation reliable?	The unit may drop, vibrate or make noises
Has the gas leakage been checked?	May cause unsatisfactory cooling (heating) effect
Is the thermal insulation of the unit	May cause condensation and water dropping
sufficient?	
Is the drainage smooth?	May cause condensation and water dropping
Does the power supply voltage	The unit may break down or the components
correspond with the rated voltage	may burn out
specified on the nameplate?	
Are the lines and pipelines correctly	The unit may break down or the components
installed?	may burn out
Has the unit been safely grounded?	Risk of electrical leakage
Do the layouts of lines conform with	The unit may break down or the components
requirements?	may burn out
Are there any obstacles near the air	The unit may break down or the components
inlet and outlet of the indoor and	may burn out
outdoor units?	
Have the length of refrigerating pipe	It is not easy to decide the volume of
Have the length of refrigerating pipe and refrigerant volume been	It is not easy to decide the volume of refrigerant.