

Agents :

Evaporative Air Cooler

Manual Instruction



Single phase with 50 speeds

Axial Fan

Use in :

FAD18-IQ FAD23-IQ

FAB18-IQ FAB23-IQ

FAU18-IQ FAU23-IQ

We reserve all modification rights of this manual.
manual content are change without prior notice.

Please read this instruction manual carefully before using

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Evaporative air cooler

XIV、 General failure and solution

Failure phenomenon	Possible causes	Solution
1、 Unable to on-off	1.No power connection 2.Button switch failure 3.Phase 4.Low voltage	1.Check power plug 2.Replace the control panel 3.Check phase 4.Check voltage
2、 Frequent bum- ing fuse	1.Water pump damaged 2.Drainage pump damage 3.Synchronous motor damage	1.Change water pump 2.Change drainage pump 3.Change the synchronous motor
3、 Water leakage	1.Place the machine off balance 2.Water leakage of water tank 3.Drainage valve damage 4.Water inlet damage 5.Water level is too high 6.Water distribution system is damaged 7.Evaporative cooling bad is dirty	1.Move the machine to flat floor 2.Repair or replace the water tank 3.Change drainage valve 4.Change the water inlet accessories 5.Adjust the float ball valve 6.Check the water distribution system 7.Clean the evaporative cooling bad
4、 Excessive noise	1.Fan blade dirty,deformed or damaged 2.Motor wear 3.The are sundries blocking the air outlet position	1.Change fan blade or adjust bracket 2.Replace motor 3.Clear the sundries
5、 No air supply or too small wind speed	1.The cooling pad or filter is blocked 2.The control panel is damaged 3.Mainboard is damaged 4.Fan button doesnot work 5.Motor phase	1.Clear or change the cooling pad and filter 2.Change the control panel 3.Change the electrical board 4.Check the motor 5.Check phase
6、 No cooling	1.Shortage of water 2.Water level system failure 3.Water pump damaged 4.Cool button doesnot work 5.Mainboard is damaged	1.Add water into water tank till water 2.Examine and repair water level sensor 3.Change water pump 4.Change the control panel 5.Change the electrical board
7.Inside water tank and filter screen with precipitation	High content mineral of water supply	Increase draingage frequency
8、 Malfunction code present"01" Malfunction code present"02" Malfunction code present"03" Malfunction code present"04" Malfunction code present"05" Malfunction code present"06" Malfunction code present"07" Malfunction code present"08"	1.Over current protection 2.Communications malfunction 3.Input over voltage 4.Input under voltage 5.UV overload 6.Swing overload 7.Water pump overload 8.Draining overload	1.Check whether the voltage and motor is normal ,Check whether the cooling bad and filter is bloced. 2.Check whether the signal line is connected well. 3.Check the voltage 4.Check the voltage 5.Check whether the UV lamp is damaged 6.Check whether the synchronous motor is damaged 7.Check whether the water pump is damaged 8.Check whether the draining pump is damaged

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Attention

Dear users :

Thank you very much for buying our evaporative air cooler. In order to ensure that you enjoy our free one year warranty service, please return the lower part of the attached warranty card to your dealer within five days of purchase.

Please save the upper part of the attached warranty card along with the invoice so that our maintenance staff can check your information and implement our service.

Franchiser: _____

Contact: _____ Tel: _____

Purchase Date: _____

Contact: _____ Tel: _____

Bar code: _____

The warranty service will be provided by your local maintenance station. If you want to know more about our local maintenance station, please contact your dealer.

1 .This part is the certificate of your one year warranty. Please send this part to your dealer .

2 .To insure that you are covered by our free one year warranty, please make sure that the information you provide is accurate. Thank you.

Evaporative air cooler

I 、 Safety notice

1. Do not put unnecessary things/objects into the air outlet. Because once hit during operation, it will lead to injury.
2. Do not climb up or stack things on the unit. Do not let the children touch the machine.
3. Do not place the burning apparatus that the unit can blow directly, or it may have led to carbon monoxide poisoning.
4. Do not unauthorized disassemble or modify the machine with unauthorized person.incorrect disassembly and modified operation could lead to water leakage, fire or electric shock.
5. Do not install the unit where there is inflammable and explosive gas, if there's a leakage of gas in different directions around the unit, it could easily cause fire.
6. Long-term non-use of the machine should unplug the power plug because the accumulation of dust may cause a short circuit or fire.
7. This unit must have a reliable earth wire connection. If the earth wire are connected to the unit incorrectly, it may cause electric shock or fire.

II 、 Product brief introduction

Evaporative air cooler has the following advantages :

Energy saving: Compared with the traditional conditioner, the energy saving can reach above 80%.

Environmental protection: when running, it will not emit harmful substances to the outside and non-freon.

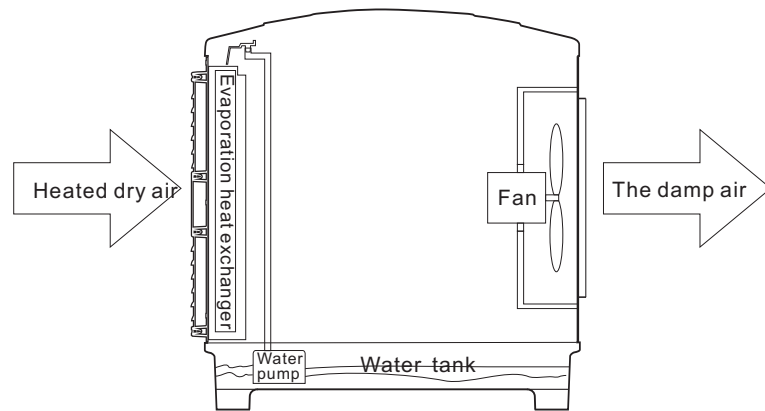
Efficient: The minimum energy produce the largest refrigeration purifying effect.

Evaporative air cooler is the combination of Asia's climatic conditions and the development of a new generation of products, suitable for use in most parts of Asia. The product uses a new generation of fan blade , high rotation speed, large airflow and good effect.

Its working theory is the fresh air high-pressure water gasify in a short period, a large number endothermic theory, research and development, design and manufacture energy-saving air conditioning products, new technology. When work, water pump the clean water in the water tank, through water distributor water-uniformly distributed to the special textile imports manufacturing evaporative heat exchanger, and the large flow of axial fan rotation make fresh outdoor air to a very high rate of heat transfer through evaporative heat exchanger.

Evaporative air cooler

Evaporative air cooler



Sketch Map of Operating Principle

III、Main parameter

Model	FAD18-IQ	FAD23-IQ	FAB18-IQ	FAB23-IQ	FAU18-IQ	FAU23-IQ
Max airflow	1800m ³ /h	2100m ³ /h	1800m ³ /h	2100m ³ /h	1800m ³ /h	2100m ³ /h
Voltage/Frequency	220-240V/50Hz					
Current	5A	6A	5A	6A	5A	6A
Power	1.1KW	1.3KW	1.1KW	1.3KW	1.1KW	1.3KW
Mot or	IPX4					
Fan type	Axial/50 speeds					
Water capacity	25L					
Dimension(mm)	1080×1080×980		1080×1080×980		1080×1080×1040	
Net weight	69kg		71kg		74kg	
Applicable Area(m ²)	100~150					
Air Outlet Size(mm)	670×670		690×700		670×670	
Noise	≤72dB	≤75dB	≤75dB	≤76dB	≤75dB	≤76dB
Water Consumption	5-25L/H					
Machine protection grade	IPX4					

Warranty card

Warranty Description

Purchasers of our evaporative air cooler receive a free one year warranty with the exceptions noted below. After the first year, we offer for a fee maintenance service for the life of the product. Any service that is needed after the expiration of the one year free warranty service or after any "malfunction" period will be a paid warranty service.

The following exceptions are not included in the free one year warranty of our evaporative air coolers:

1. Changing the exchanger of the cooling pads (except for a quality problem);
2. Malfunctions or damage caused by the users when the users change the original components of the internal machine;
3. Malfunctions or damage caused by an unsuitable environment of the user, such as the instability of the voltage, water containing impurities, or the serious pollution of outside air quality, etc.
4. Malfunctions or damage caused by "Force Majeure" (extraordinary events or circumstances beyond the control of the parties, such as a war, strike, riot, crime, or an event described by the legal term "act of God" (e.g., flooding, earthquake, volcano);
5. Malfunctions or damage caused by the faulty installation;
6. Malfunctions or damage caused by lack of maintaining the unit properly;
7. Malfunctions or damage caused by lack of maintaining the unit properly, such as obstructing the evaporative exchanger and dust screens, not replacing burnt fuses, using a faulty fan, using faulty electrical connections, etc.;
8. Any other negligent acts by the user that damages the unit.

User's Information

Model : _____ Bar code : _____

User name: _____

Address: _____

Tel : _____ contact person : _____

Dealer : _____ contact person : _____

Tel: _____ purchase date : _____

Address: _____

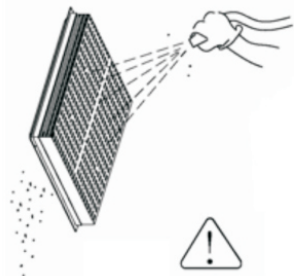
Evaporative air cooler

XIII、Cleaning and maintenance

◆Clean the cooling pad and filter screen



Unplug the power plug, use a screwdriver to screw off 6 screws from air-inlet grille upper, hold the upper of cooling pad, haul cooling pad out (tote up a little) detach off the cooling pad.



Attention:

When washing hydraulic pressure can not be too high, do not use acid or alkaline cleaning detergent to wash the cooling pad.

◆Clean the water tank

Cleaning method:

1. Pull the power plug, screw out the screws of the upper part of grille, take off air-inlet shutter grille.
2. Manually reverse drainage ball valve;
3. Clean the batholith with a soft cloth or brush;
4. Wash the dirt on the water level control sensor with a small wet cloth;
5. Clean the dirt on the water pump and filter screen.

◆Clean the Cabinet

Clean with moderate and soft cloth. (Do not use a bubble of cleaning fluid, volatile solvents or hard cleaning brush for cleaning, the wrong method of cleaning will result on equipment damage or accident.)

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IV、Applicable range

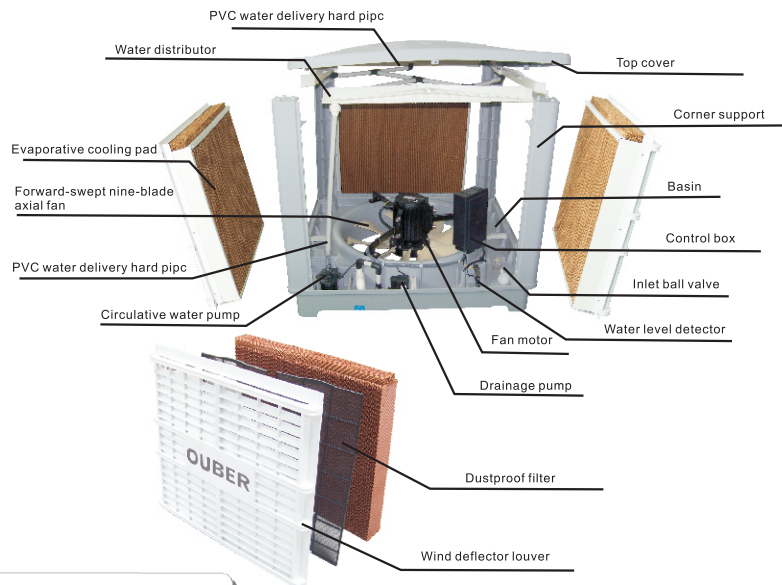
Owing to evaporative air cooler with an outstanding advantages of refrigeration, adding humidification, clean, energy-saving ventilation advantages, they are appropriate for more ventilation and cooling places. the products are mainly applied to the following places:

1. Electronics, electroplating, shoe-making, dyeing and printing, plastics, clothing, printing, packaging and food processing industry etc;
2. Textiles, machinery, ceramics, fine chemicals, metallurgy, glass, metal, leather manufacturing;
3. Hospital, clinic, schools, waiting rooms, internet bar, shopping malls, supermarkets, laundry;
4. The kitchen, vegetable markets, large-scale entertainment center, underground parking, stations and other public places;
5. Greenhouse, flowers, livestock, farming and other types of farms;
6. On the use of requirement of higher humidity indoor places.

V、Environmental Conditions

1. Ambient temperature: 25°C ~ 45°C;
2. Environment relative humidity environment: $\leq 90\%$;
3. Water should be soften, 0 °C < water temperature < 45 °C, the water supply pressure: 0.15 ~ 0.6 MPa;
4. Bias of voltage does not exceed rated voltage of $\pm 10\%$;
5. Air quality of the usage environment should achieve ambient air quality standard GB3095-1996 for more than three (including three) standards;
6. No corrosive gases.

VI、 Brief diagram of structure



VII、 packing list

Serial number	Name	Quantity
1	Evaporative air cooler	one
2	Operation manual	one
3	Warranty card	one

VIII、 Note in use

In order to prevent harm or damage to users and other people's personal safety and property, make sure to comply with the following

- ⚠ This symbol, referring to please be careful - "to draw attention to"
- 🚫 This symbol, referring to not done - "banned"
- 📌 This symbol, referring to the need to implement - "mandatory"

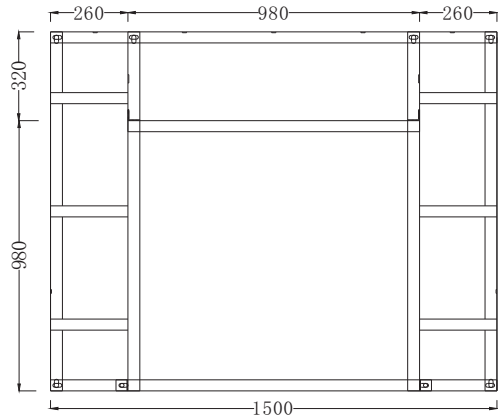
2. Important Notice for Installation

Read instruction manual carefully before installing air cooler and carry out the work by strictly complying with the project plan.

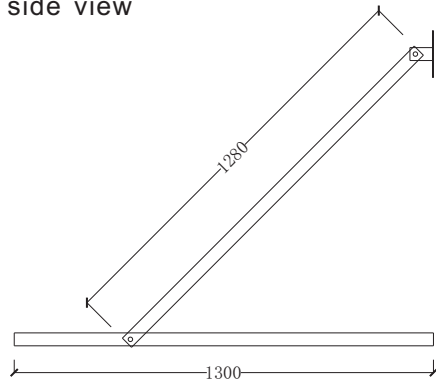
- (1) The equipment is suitable to be used in an open space. If it is required to be used in a closed space, the air exhaust hole must be installed to keep the balance of air exhaust volume and air input volume.
- (2) Before installing the bracket of the air cooler, measure the right position and write a level line with level bar. The bracket shall be installed horizontally without slant, and the spacing between machine body and the wall is 280-330mm. (It varies from different locations) the indoor controller shall be at least 1.5m high from the ground, and the soldering and installation of mounting bracket should be stable. The air cooler must be installed outdoor and horizontally without slant. The bracket have to be able to load dynamic weight not less than 250kg. If the bracket is installed 3 meters high from the ground, it must be added with guard rail. The water inlet pipe and drainage pipe shall be properly installed. The water inlet pipe should be installed with afilter, so as to keep the water clean. The drainage pipe must keep unblocked. The water inlet pipe and drainage pipe should be made from PVC tube and installed with fast glue.
- (3) Duct normally be within 45 meters distance, when the air supply duct send nozzle or duct area not less than 1m in length and size must be made in accordance with design standards . Duct into the wall distance from the ground after the nozzle is generally not less than 2.2 meters (except in exceptional circumstances).
- (4) If there is branch air pipe, the air deflector must be installed on the branch pipe to regulate or balance the air volume, so as to make the air volume of the branch pipe reach the design value.
- (5) If it is required for low noise, the silencing elbows shall be used, so as to meet the requirement.
- (6) Leak-proof treatment is required for the wind pipe. As for the bottom air discharge model, four 10mm drainage vents shall be opened on the bottom of waterproof elbow. When the wind pipe is connected to the room through the top of iron canopy or the building top, leak-proof treatment is required for the iron canopy and building top, so as to avoid the rainwater running into the room along the wind pipe.
- (7)When the outdoor unit is installed on the exterior wall without window or far from window, an maintenance ladder shall be installed near the unit (the ideal material is stainless steel), so as to facilitate the maintenance.
- (8)When the outdoor unit is installed under the windowsill, the glass window should be movable, so as to open it when necessary. If an anti-burglary net is installed on the windowsill, try to install a movable door with lock on the anti-burglary net in case of any maintenance.
- (9) Before testing the machine, check whether the water level is between the leakage opening and the water inlet of submersible water pump. If the water level is excessively high or low, the ball float should be adjusted. Discharge the dust and impurity in the water pipe, check whether the power supply is normal and whether there is leakage on the water inlet/outlet pipe, then the testing can start.

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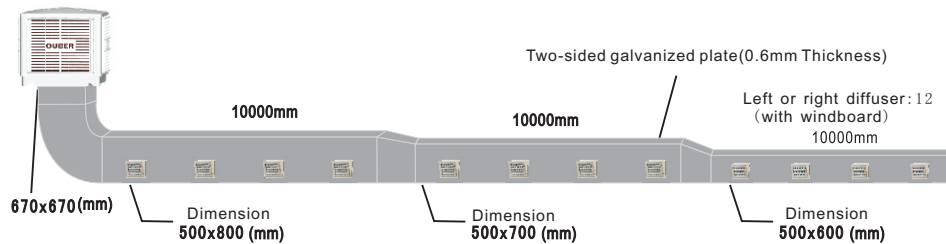
Installing bracket planform



Installing bracket side view



Sketch map of axial fan duct distribution



Evaporative air cooler

Non-professional or non-authorized repair personnel, will not be permitted to be repaired or modified this machine!

prohibit detaching

Will lead to a fire, abnormal actions make you get injured.

Do not use voltage expectant AC 220~240V ± 10% !

forbid

AC 220-240V

Easy to cause fire, electric shock.

please solely use rated current above 10A socket!

When use combined with other electrical appliances, the plug board may be abnormal heat, resulting a fire.

This machine should be used with single-phase two pole grounded electrical outlet and to ensure its reliable grounding! Grounding device is not installed, it could lead to airframe and other metal parts with electrostatic induction.

Ensure grounding

when occurs failure or leakage, there is danger of electric shock.

Make sure to unplug the power plug from stock when cleaning the water tank and cooling pad, moving the machine or long time non-use.

May get an electric shock and injury.

Do not damage, destroy, strong bend, twisted wiring or band power cord; please do not put heavy objects on the power cord! Aging, tie a knot, damage power cord, should immediately stop using.

forbid

Easily cause power wire damaged, fire and electric shock.

Use 0.15 ~ 0.6 MPa water pressure ! No longer exceed 45 °C temperature.

forbid

≤ 45 °C

May be cooling pad dissolved and plastic product deformation, damage and affect the performance.

The power cord of this machine damage, in order to avoid the risk, must be designated by the factory maintenance or similar to be replacement of full-time staff.

Easily to occur negative effect.

Evaporative air cooler

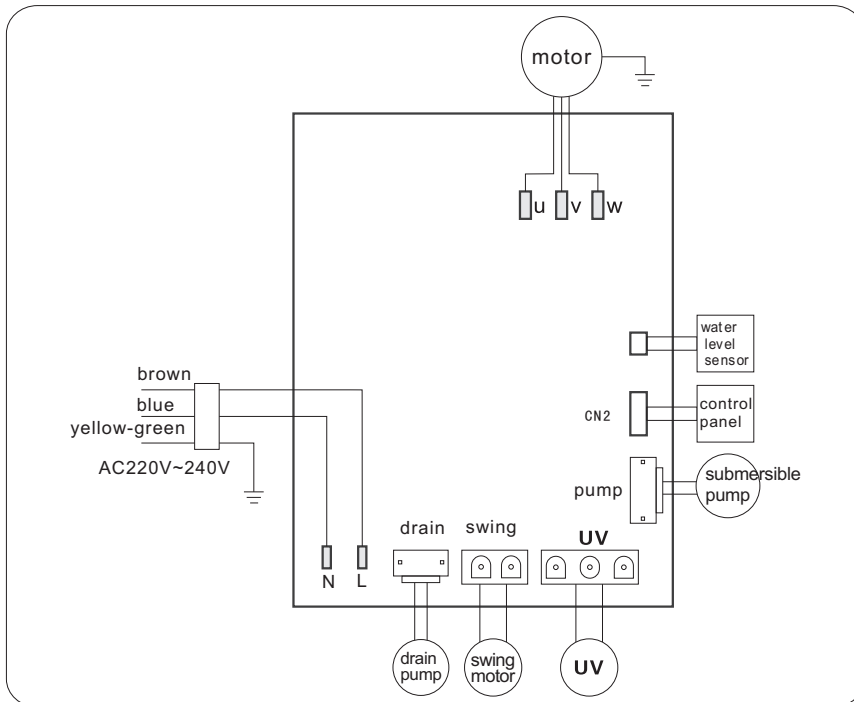
- ⚠ This machine applied to indoor use.
- ⚡ Strictly prohibit use in the flammable and explosive gas environment, and to avoid long-term direct sunlight .
- ⚠ Do not put on tilted or other imbalance places, so as the machine not to fall down , causing damage of the machine body and internal parts.
- ⚠ Do not let the machine be closed to wall, curtain and other material, or it will block up the airflow and air supply effect.
- ⚠ Do not put and move the machine tilted and impacted after adding water. As moving the machine, please move from side to promote slowly so as not to spill water.
- ⚠ Maintenance products must be qualified maintenance personnel for maintenance.
- ⚠ 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.

Correct Disposal of this product



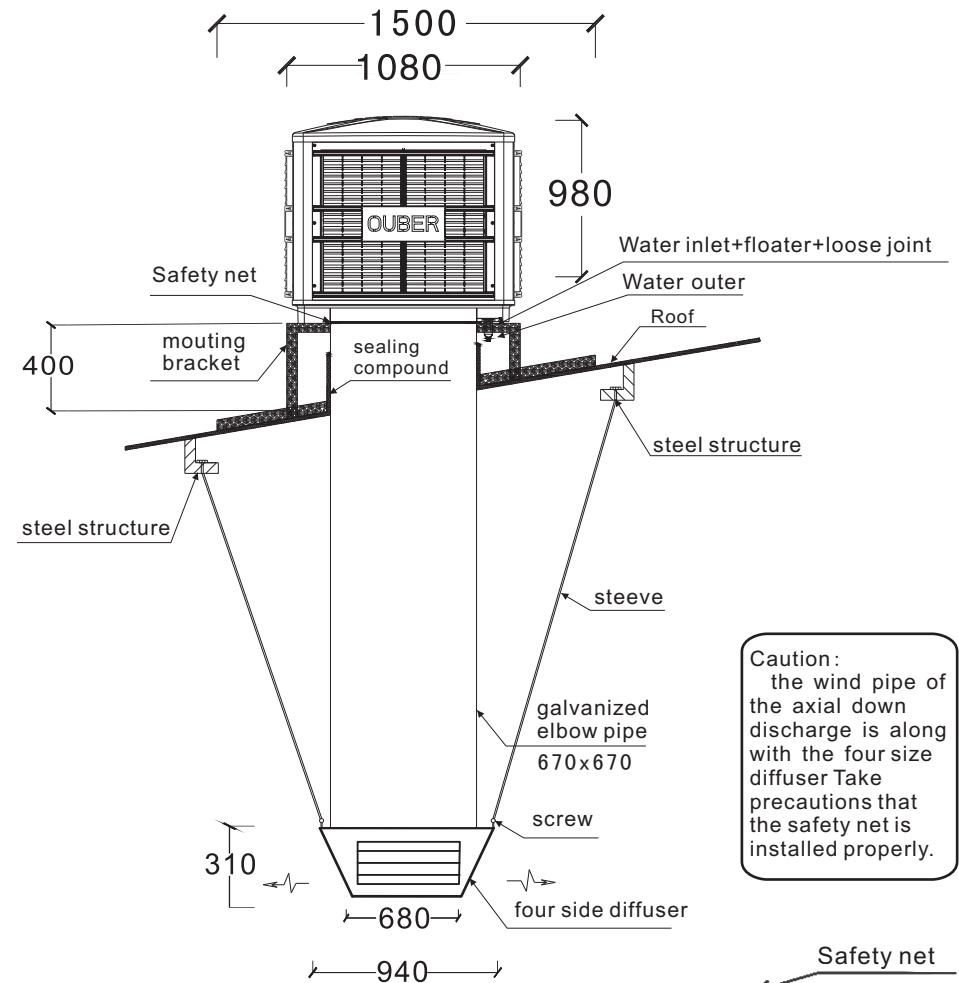
This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

IX、 Power principle diagram

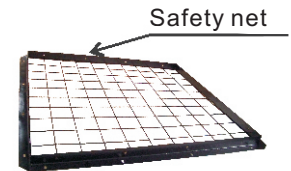


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Installation roof view of down discharge

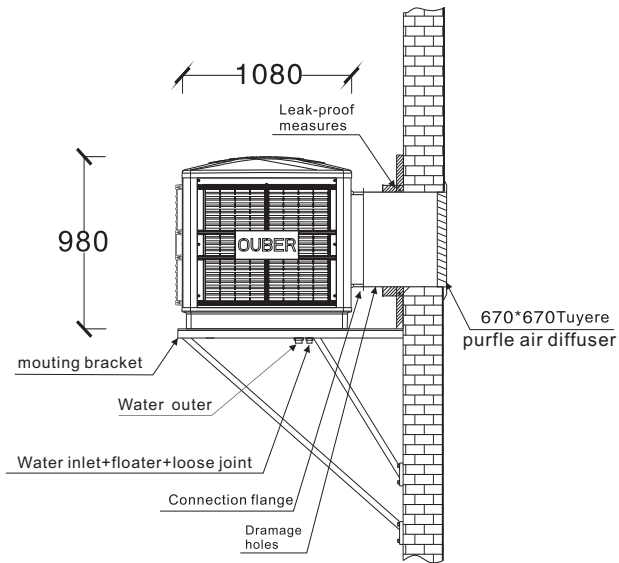


Caution:
the wind pipe of the axial down discharge is along with the four size diffuser Take precautions that the safety net is installed properly.

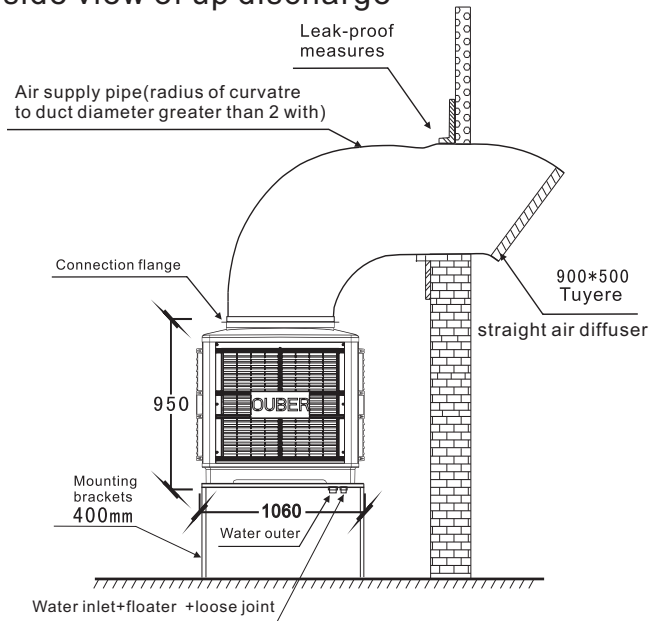


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Installation side view of side discharge



Installation side view of up discharge

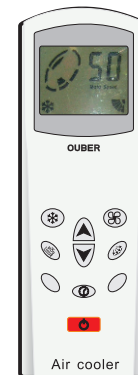


Evaporative air cooler

X. Control panel brief introduction

1. LCD screen
2. “” Cleaning mode
3. “” Contol the swing
4. “” Ventilation mode
5. “” Temperature setting(optional function)
6. “” Humidity setting(optional function)
7. “” Setting the current of the motor (refer to the page15)
8. Signal received
9. “” Increase the wind speeds:under the operating condition,press this button to increase the wind speeds.
10. “” Reset button(optional function)
11. “” Cooling mode
12. “” ON/OFF
13. “” Reduce the wind speeds:under the operating condition,press this button to reduce the wind speeds.
14. “” Auto cleaning setting
15. The motor on this machine is single-phase with frequency control. The maximum range of the setting current(unit is 0.1A) is 50-90 (5-9A) with a default of 65 which equal 6.5A, The factory setting is 5A with the model FAD18-IQ,FAB18-IQ,FAU18-IQ,The factory setting is 6A for models FAD23-IQ,FAB23-IQ,FAU23-IQ. (Attention: we have adjusted and set up the factory current during the inspection. Customers are not allowed to adjust this factory current setting to help prevent failure of the machine)

LCD remote control



1. “” ON/OFF
2. “” Increase the wind speeds
3. “” Reduce the wind speeds
4. “” Cooling mode
5. “” Ventilation mode
6. “” Cleaning mode
7. “” Contol the swing
8. “” Reserve

Evaporative air cooler

XI. Operating instruction

1. After pouring water in, water inflow and water level will be controlled by float valve.
2. While connect the power supply, Evaporative air cooler is in standby status, press "⏻" to start the machine; and then press "⏻" to turn off the machine, return to standby status.
3. Switch on, press "❄️" in cooling mode. If water level is the low, it will alarm, water pump will stop running and fan will run directly; If water level is high, water pump will run, fan will run after 5 seconds delay (Attention: Turn off under cooling mode, fan will be off after 20 minutes delay, press "off" button 2 times to turn off forcibly).
4. Water pump start, and after 5 minutes UV lamp will start to disinfect (Show "UV" on LCD), then water pump will be off after UV lamp running 20 minutes.
5. Switch on, press "🌀" to ventilation mode, and only start fan.
6. Switch on, it will be cleaned automatically (discharge sewage) once for each 8 hours' running without Off memory. Under status of power on, press "🧼" for continual 5 seconds, can set up automatic cleaning schedule from 2 to 72 hours, initial default of system is 8 hours. Press "🧼" to set manual draining mode (clean), drain valve power on, after 120 seconds will be closed, and machine will be on standby.
7. On standby status, press "🌡️" for continual 5 seconds (beeper go off once), set up temperature: 1~49 degree (selective function).
8. On standby status, press "💧" for continual 5 seconds (beeper go off once), set up lowest humidity H0 limit: 20%~99; press "💧" for continual 3 seconds (beeper go off twice), set up highest humidity limit H1: 20%~99%. Attention: If set H0 and not set H1, then H1 will be H0+5%. (selective function)
9. "🚗" "Automatic mode: controlled by set temperature and humidity controlling. (selective function)

Indoor temperature (compare with setting temperature)	Indoor humidity > setting humidity H1	Indoor humidity < humidity H0
lower 2 degree	not run	run on 5speed ventilation mode
higher 0 degree	run on 10speed ventilation mode	run on 10speed cooling mode
higher 1 degree	run on 20speed ventilation mode	run on 20speed cooling mode
higher 2 degree	run on 30speed ventilation mode	run on 30speed cooling mode
higher 3 degree	run on 40speed ventilation mode	run on 40speed cooling mode
higher 4 degree	run on 45speed ventilation mode	run on 45speed cooling mode
higher 5 degree	run on 50speed ventilation mode	run on 50speed cooling mode

Attention: 1. Restart from power off: run same as setting condition before power off. (Power off/on reset function)

2. Ventilation and cooling mode change into Min Cycle: 10 minutes.

Evaporative air cooler

10. Float valve control automatic water inlet and water level, "📊" shows water level: One block, means no enough water; Two block, means poor contact with signal wire; Three block, water level meet requirement. In lack water level, it will alarm, at the same time water pump will be closed. Please keep water inlet running.
11. Machine working without cooling pads is prohibited.
12. In winter or for long time not use machine, please keep water tank empty, run for 10 minutes under ventilation status to dry cooling pad, and then power off and cover machine with hood. Please remove hood before using machine.

XII. Installation method of the air cooler

Installation side view of down discharge

