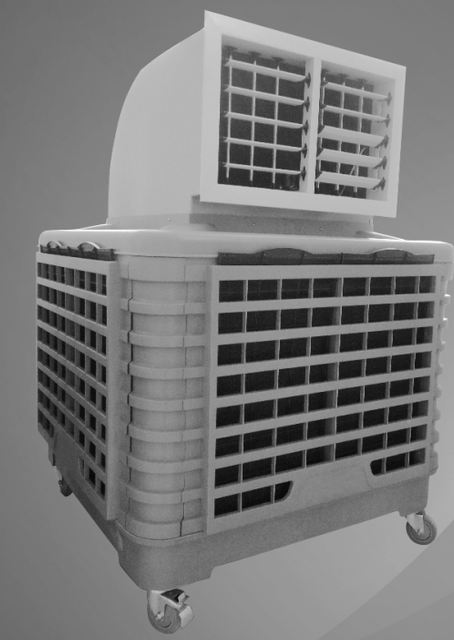
Health and fresh!

	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.

MODEL : T9



OWNER'S MANUAL

READ AND SAVE THESE INSTRUCTIONS

- ***Read all instructions carefully before setting up and operating this unit.***
- ***This manual is designed to provide you with important information needed to setup, operate, maintain, and troubleshoot your cooler.***
- ***Due to continuous research and development the specifications herein are subject to change without notice.***

PREFACE

We really appreciate you credit and support in advance. Our evaporative air cooler will bring you breeze health with least energy.
Adopting the most advanced evaporative cooling technology in the world and the contemporary production management system, this installation manual is specific for KT9 evaporative air cooler. To ensure the optimal efficiency, we recommend you to read the manual carefully before use.

Application Areas of Evaporative Air C ooler

1. Relative dry and hot areas

Most of the areas which need to reduce temperature and increase ventilation can use our product, such as mall, supermarket, office, hotel, Hospital, station, gymnasium, exhibition, restaurant, dancing room, hall, school and factory.

2. Relative humid areas

Evaporative air cooler is also suitable for the high-temperature or peculiar smelly factories, such as textile mill, dress mill, printing and dyeing mill, tannery, shoes mill, plastic mill, steel works, electronic manufacture and chemical plant. You can use our cooler to full cooling. Our cooler is also suitable for the fuggy areas such as game or disco parlor, kitchens, refectory or hotel, you can use the cooler to cooling and vent.

Tips of evaporative air cooler

The evaporative air cooler should not be used in enclosed spaces. It must be kept level and there must be water in the water tank. The room should have doors and windows opened to allow free air flow. The evaporative air cooler works best when placed near an open window, so that outside air is drawn into the evaporative air cooler, the air circulates in the room, and exits via the door. The maximum cooling effect is felt when a person is in the flow of air coming out of the evaporative air cooler. The evaporative air cooler is not an air conditioner as it does not use a compressor or refrigerant gas. It should not be expected to cool as to a selected, fixed temperature like a refrigerated air conditioner

Storage

If you plan not to use the unit for a long period of time, drain the water tank and wipe clean. Clean the filter and water curtain. Operate the unit in normal fan mode for approximately 30~60 minutes on a sunny day. This will dry the interior and prevent mold from growing. It is recommended to pack the unit in its original box and store in a dry, cool place

T9 Technical S pecification s

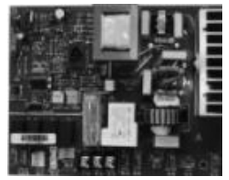
Model NO.	T9
Voltage	220V
Frequency	50Hz
Wattage	1.1KW
Max airflow	18000 m3/h
Fan type	axial flow
Water consumption	15-20 L/h
Water tank capacity	30L
Cooling media	Honeycomb
Effective area	up to 100-150 square meters
Net Weight	75kg
Gross Weight	85kg

Product D issection and Spare Parts

Main components:

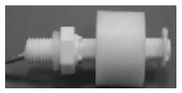
Motor :

- z High quality sealed aluminium motor. Water proof and good heat dissipation performance.
- z Overload protection



Control Box:

- z Micro-computer control, easy upgrade, custom design is available.
- z High reliability, suit for used in various industrial environments
- z High protective control box, networked control system
- z N-hour automatic cleaning and drainage functions, keep the evaporative air coolers blow fresh and cool air



Water Level P robe :

- z Detect the water lever
- z Protect the pump damage from the lack of water.

LCD Controller and Remote C ontrol:

- Temperature and humidity control function,
- To control power supply and components, and implement instructions from the MCU(Micro Control Unit)
- With programmed, the wall control will default to the previous settings.
- Large LCD displays all information.

Fan B lade:

- High-rigid and fibrous plastic blade. 6 blades or 3 blades
- Adjustable blade
- Optimize for big volume and quiet

Float Valve :

- This valve is designed to fully open when the water level reaches the preset low level and to close drip-tight when the level reaches the preset high point.
- Fully adjustable to maintain desired water level settings
- Design features prevent clogging, jamming and overflow
- Smooth operation that prevents water hammer

Circulation Water Pump :

- Quiet, high lift and reliable design.
- Low power consumption, and maximum safety provided by thermal protection against overheating
- Permanent magnetic synchro motor inside

Check Up and A djustment before Operation

1. Is the cooler installed horizontally?
2. Is drain pipe connected to the machine?
3. Is the water supply leaking?
4. Adjust water level in the sump?
5. Is the power supply connected correctly (particularly for three phase machine)?
6. Is the power line for the control panel correctly connected?
7. Is the operation current within the rated range?
8. Is there unwanted object in the vent?
9. Is the voltage correct?
10. Does cooler vibrates noticeably while operating?
11. Are there any foreign objects in the pump?

Important Notes

1. The best effect is achieved when the unit is used in a well ventilated and dry place, where the unit takes in 100% fresh air from outside and no re-circulation occurs.
2. Avoid discharging cool air into closed spaces. There must be enough space for discharged air, even use exhaust fans
3. For a place without powered exhaust, 0.8m? of exhaust area is needed for every 3600m?/h air discharge. When using a powered exhaust, the designed exhaust volume shall not be less than 85% of air intake.
4. Keep the unit away from welding sparks or any source of fire during the installation and when the unit is running.
5. The unit must be tested and adjusted. E.g.: adjusting water level floats before operation. Ensure that the unit is operating within the rated electrical currency.
6. Ensure correct wiring of the power and controller. The section in the power socket shall not be less than 1.5mm?. The units shall use a dedicated power line instead of sharing a power line with other equipments.
7. Voltage of power supply shall be within 10% vibration from the rated voltage. Lower voltage may cause motor start failure or undue frequent starts and stops. Long-term low voltage or high voltage will cause damage to the motor.
8. The controller and its wire shall be kept away form strong electronic and magnetic interference, such as frequency converter, silicon speed and temperature controller, high frequency heater circuit or high power motor. Avoid wiring the power supply lines parallel to these sources. In the case of unavoidability, the power line must maintain a distance of more than 30cm from parallel interference source.

Packing and Transportation

1. Packed in carton on wood pallet.
2. Keep dry and upright.
3. Do not pile more than 2 units.
4. Keep the unit vertical during transportation. The tilt angle shall be less than 60 degrees.

Operating Instructions

Installing the casters :

Locate the casters inside of the cooler and attach them to the cabinet bottom. Start all bolts into nuts before tightening. The rigid casters mount at the front and the swivel casters mount at the back.

Connecting the water:

Move the cooler to an area where it can be filled with water and drained. The cooler should be located on level ground. Connect to a water supply using a commercial grade garden hose connected to the adapter on the float valve and turn on the water. Verify water tight connections by visually examining both the float/hose connection and drain plug.

Turn on the water supply to the cooler. The hose connection to the float valve provides an automatic method of refilling the water supply as water is evaporated.
For best results, turn the pump on a few minutes before turning on the blower fan. This allows the cooling pads to pre-wet best efficiency.

Whenever possible operate the blower fan at low speed for maximum cooling. When cooling is not required you can operate the unit as a fan only by turning on the blower fan and leaving the pump turned off.
The water can be adjusted by tightening of loosening the clamp that pinches the water supply tube. Adjust the water flow clamp so that adequate water is supplied to the aspen pads without excess water splashing out of the trough during normal operation.

Maintenance

(1).It is to be noted to change the water while the cooler is in work to avoid incrustation.
(2).The filter pads should be cleaned more often to keep the cooling efficient. Do not use water above 40℃. Banister brush can be used softly to scrub away the dust on the pads.
(3)The water supply should be shut off to avoid bacteria as well as cold weather. It is also recommended covering to protect the cooler in some dusty and snowy cities.

Cleaning :
(1).All the type of this series has the function of auto timing cleaning. (The cooler will operates auto cleaning function after accumulative 8 hours under persistence power supply.)
(2).We recommend to clean the pad every month to keep the cooler under best condition.
to our related standard.

Temperature of Evaporative A ir Cooler

Vent℃ / OUTSIDE℃	Relative humidity (%)								
	10	20	30	40	50	60	70	80	90
10	3.2	4.0	4.8	5.6	6.4	7.2	8.0	8.6	9.4
15	6.6	7.8	8.8	9.8	10.8	11.7	12.6	13.4	14.3
20	10.1	11.4	12.8	13.9	15.2	16.2	17.2	18.2	19.2
25	13.4	15.0	16.6	18.0	19.4	20.6	21.8	22.9	24.0
30	16.6	18.6	20.4	22.0	23.6	25.0	26.4	27.7	28.9
35	19.8	22.2	24.2	26.2	28.0	29.6	31.0	32.4	33.7
40	23.0	25.6	28.1	30.4	32.3	33.9			
45	25.9	29.2	32.0	34.3					
50	29	32.7	35.8						

General Problems

Number	PROBLEM	PROBLEM CAUSE	SUGGESTED REMEDY	NOTE
1	Air cooler fails to run and no response to all buttons, and the indicator fails to flash	Power cut or incorrect input power supply connect with electricity	Check input pressure and reconnect as requirement	Suggest to check using pressure meter
		Fuse or switch break	Replace fuse or reopen switch	Check over current protection
		Check the connection of wall control and cooler	Check the joint wire	
2	Air cooler fails to run and three indicators flash together	The joint wire of 2 and 3 point break or touch badness	Check the joint wire	
		Electronic box failure	Replace the electronic box	
3	Press the button “fan” but no airflow into room and “fan” indicator flash	Fan motor main circuit break or joint write loose	Check the joint of fan motor main circuit	
		Fan motor control relay failure	Replace the relay	When replace note the current capacity and pressure
4	Pump indicator flash and the cooling efficiency is not	Water supply system failure, not assure normal water level	check water pipe, water pressure and water level control valve	

	good	Incorrect installation of water level probe or loose	Check probe connection and wire	
5	Inadequate cooling	Insufficient air discharge openings		
		Inadequate exhaust of area being cooled causing high humidity and discomfort	Make sure adequate openings are provided to exhaust the incoming cool air, open windows, doors	
		The power of air cooler is too low	Replace with large model or install more coolers	
		Clogged or dirty filter pads	Clean or replace	
		Dry pads or lack of water while air cooler is operating	Check water distributor system for obstructions; check pump is operating	
		Excessive humidity	On days during summer when the humidity is high, the remedy is to shut the pump off and increase venting	
6	Pump fails to operate	Pump motor failure	Replace complete pump	
		Loose electrical connections	Tighten connections	
7	Pump run but does not circulate water or pads lack water	Pump strainer clogged or dirty	Clean stainer	
		Blocked water supply tubing	Clean the tubing	
		Blocked water distributor a top of pad frames	Clean the water distributor	
8	Continuous overflow of water	Incorrect float valve adjustment	Adjust float valve	
9	Nosily air cooler	Fan out of balance due to dirt, bent blade	Clean fan, adjust blades if possible: replace fan	
		Air cooler delivering more air than required	Adjust any beffles or balance flow to reduce airflow	
		Ducting is too small and the velocity is too quick	Replace the ducting	
10	Water being thrown into the area being cooled	Old filter pads have developed thin spots	Replace with new filter pads	

		Filter pad fibre sticking through netting causing water to be sucked off pad	Remove any fibre protruding through netting	
		Too much water to pads	Check the cover of water distributes	
11	Unpleasant odor	Air cooler located near the source of unpleasant odor or algae in tank water	Allow fan to run for a further 10 minutes after pump has been shut off	
12	Formation of white deposits tank and on pads	High mineral content water supply	Increase the bleed rate	

Notice:

1. The above is only for your reference, if the problems cannot be found in the table, please contact us or a qualified technician for further inspection.
2. Do NOT open and repair the unit by yourself