

CW-5000 | 5200

SERIES

Industrial Chiller USER MANUAL

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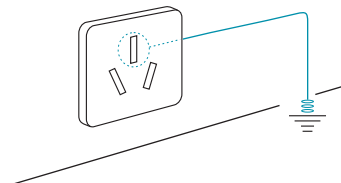
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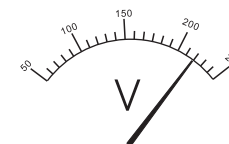
CAUTIONS

- 1** Please ensure that the power supply and electrical outlet are in good contact and the earth wire must be firmly grounded!

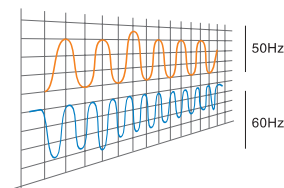


- 2** Please make sure there is stable and normal voltage for the working chiller!

As the refrigeration compressor is more sensitive to the power supply and voltage, so the operating voltage of our standard product is of 210 ~ 240V (110V model is of 100 ~ 120V). If you do need a wider operating voltage range, customization is available for us.



- 3** Unmatched power frequency can cause the chiller damage!
Please choose model of 50Hz or 60Hz according to actual circumstance.

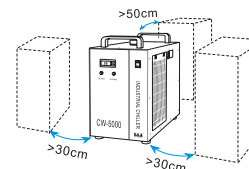


- 4** To protect the pump, it's strictly forbidden to run the chiller without water in the storage water tank!

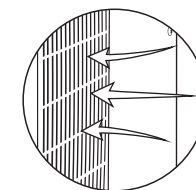
The new machine is packed after draining whole water in the tank, so please make sure the tank has water inside before machine starting, otherwise it's easily to have the pump damaged. When the water level is below the green (NORMAL) range of the water level gauge, the cooling capacity of our chiller will go down slightly. Hence please ensure the water level is within the green (NORMAL) range. To drain through circulating pump is strictly prohibited!



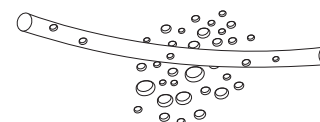
- 5** Please be sure that the air inlet and air outlet are in good ventilation!
There must be at least 50cm from obstructions to the air outlet which is in the back of the chiller, and should leave at least 30cm between obstructions and the side air inlet.



- 6** The filter screen must be regularly cleaned!
It's essential to unpick and wash the dust gauze, or the serious blockage will cause breakdown to the chiller.



- 7** Please pay attention to the effect of the condensate water!
With greater ambient humidity, when the water temperature is lower than the ambient temperature, the condensate water will generate on the surface of water circular pipes and the cooled components. If above circumstance appears, it is recommended to set a higher water temperature or keep pipes and cooled parts warm.



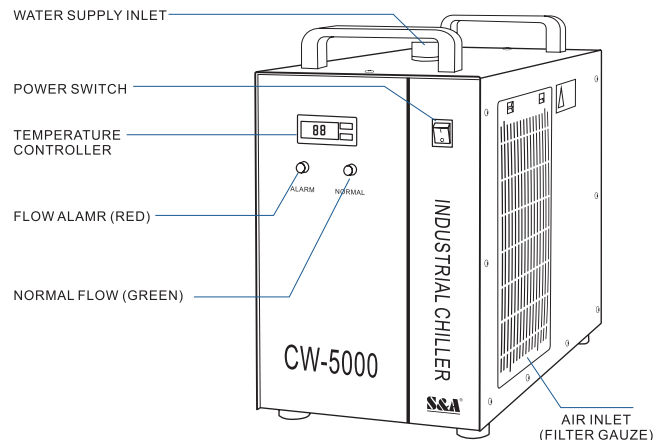
PROFESSIONAL USE ONLY!



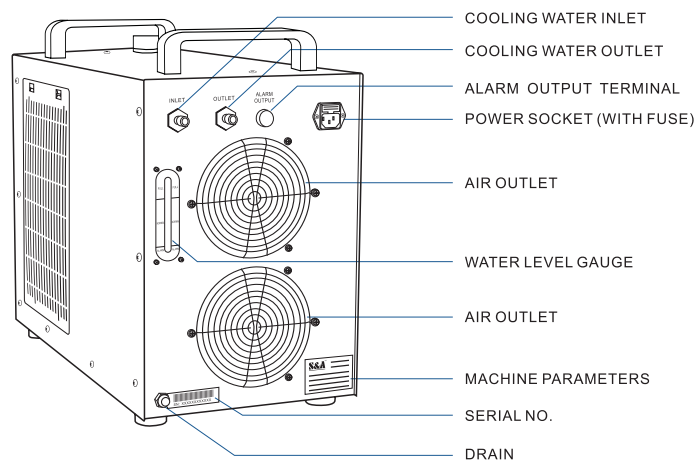
The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction, children being supervised not to play with the appliance!

CONTOUR AND PARTS INTRODUCTION

Front



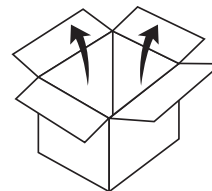
Back



INSTALLATION

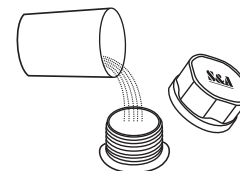
It is very simple to install this industrial cooling machine. The installation for the first time of the new machine can be carried out by following steps:

1



Open the package to check if the machine is intact and all the necessary accessories are completed.

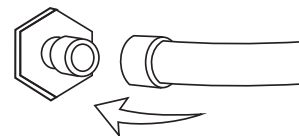
2



Open the injection port to feed cooling water. (Do not spill out the water!)

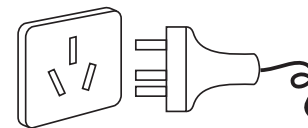
Observing the water level gauge and adding water slowly, be careful not to have the water overflowed! For the cooling of carbon steel equipment, the water should be added an appropriate amount of cooling water additive (anti-corrosion water aqua). Users in cold area should use noncorrosive antifreeze fluid.

3



Connect the water inlet and outlet pipes well according to system conditions.

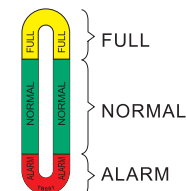
4



Plug in power and turn on the power switch. (Do not start up without water in the water tank!)

(1) Power switch turned on, the circulation pump of the chiller starts working. The first time of operating may cause more bubbles in the pipe leading to a flow alarming occasionally, but running for a few minutes later, it will go back to normal.
(2) After the first boot, you must immediately check whether the water pipe leaks.
(3) Power switched on, if the water temperature is below the set value, it is normal that fans and other components of the machine do not work. The temperature controller will automatically control the working conditions of the compressor, magnetic valve, fans and other parts based on the set controlling parameters.
(4) As it takes a longer time to start over the compressor and other components, according to different conditions, the time is range from seconds to minutes, so do not turn off the power and again on frequently.

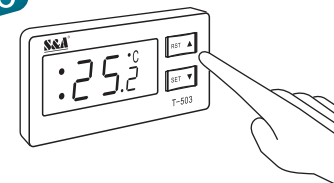
5



Check the water level in the water tank.

The first startup of the new chiller empties the air in the water pipe, leading a slight water level decline, but in order to keep the water level in the green area, it's allowed to add adequate water again. Please observe and record the current water level, and inspect it again after the chiller running for a period of time, if the water level drops obviously, please re-inspect the water pipeline leakage.

6



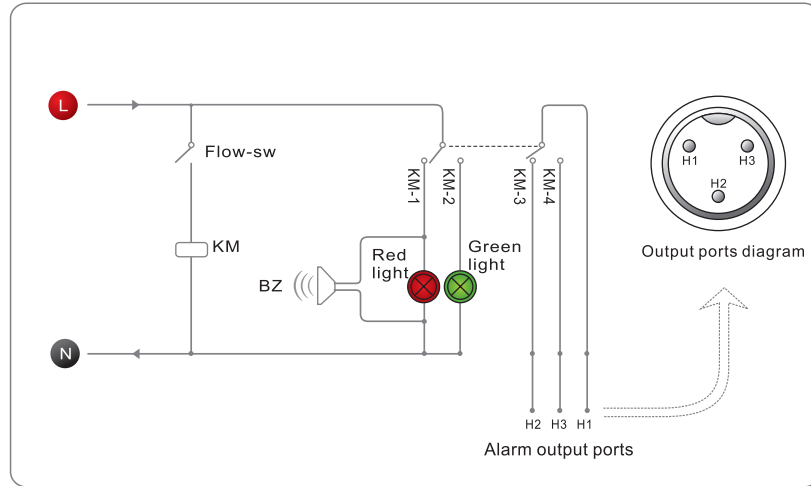
Adjust parameters of temperature controller.

CW-5000/5200 series use an intelligent thermostat. Normally users do not need to adjust it. If it is really necessary, please refer to page 19, "Operating status and parameters adjustment".

FLOW ALARM AND OUTPUT PORTS

In order to guarantee the equipment will not be damaged while cooling water circulation is out of control, CW-5000/5200 series chillers possess a low flow alarm protection.

1. Flow alarm output ports and the wiring diagram



2. Flow alarm causes of circulating cooling water and working state

DISPLAY CONDITION	Normal flow indicator	Flow alarm indicator	BUZZER	OUT H1、H2	OUT H1、H3
Circulating pump works properly	● On	⊗ Off	⊗ No sound	⊗ Disconnection	■ Breakover
Blocked cooling water circulation loop	⊗ Off	● On	⊗ Sounds	■ Breakover	⊗ Disconnection
Alarm of water shortage	⊗ Off	● On	⊗ Sounds	■ Breakover	⊗ Disconnection
Faulted circulating pump	⊗ Off	● On	⊗ Sounds	■ Breakover	⊗ Disconnection
Power interruption				■ Breakover	⊗ Disconnection

Note: the flow alarm is connected to the normally open relay and normally closed relay contacts, requiring operating current less than 5A, working voltage less than 300V.

SIMPIE TROUBLESHOOTING

FAILURE	FAULT CAUSE	APPROACH
Machine turned on but unelectrified	Power cord is not plugged in place	Check and ensure the power interface and the power plug is plugged in place and in good contact.
	Fuse burnt-out	Replace the protective tube in the power socket on the back of chiller.
Flow Alarm (panel red light is on) use a water pipe directly connect to the water outlet and inlet but still without water flowing	Water level in the storage water tank is too low	Check the water level gauge display, add water until the level shown in the green area; And check whether water circulation pipe leaks.
Flow alarm occurs while running with other equipment (panel red light is on), but there is water flowing and no alarm when use a water pipe directly connected to the chiller water outlet and inlet.	Water circulation pipes are blocked or a pipe bending deformation.	Check water circulation pipe
Ultrahigh water temperature alarm (controller displays E2)	Blocked dust gauze, bad thermolysis	Unpick and wash the dust gauze regularly
	Poor ventilation for air outlet and inlet	To ensure a smooth ventilation for air outlet and inlet
	Voltage is extremely low or astable	To improve the power supply circuit or use a voltage regulator
	Improper parameter settings on thermostat	To reset controlling parameters or restore factory settings
	Switch the power frequently	To ensure there is sufficient time for refrigeration (more than 5 minuets)
	Excessive heat load	Reduce the heat load or use other model with larger cooling capacity
Ultrahigh room temperature alarm (controller displays E1)	The working ambient temperature is too high for the chiller	To improve the ventilation to guarantee that the machine is running under 40°C.
Serious problem of condensate water	Water temperature is much lower than ambient temperature, with high humidity	Increase water temperature or to preserve heat for pipeline
Water drains slowly from drainage nozzle during water changing	Water supply inlet is not open	Open the water supply inlet

PACKING LIST

1 1 unit of industrial chiller 	2 1 copy of user manual 	3 1 pc of power cord 	4 1 pc of connection hose
5 2 pcs of sealed hoop (optional) 	6 1 pc of alarm signal output plug 	7 1 pc of spare fuse (Held in the spare fuseholder of power socket) 	