

CWFL-800 | 1000 | 1500

Industrial Chiller USER MANUAL

GUANGZHOU TEYU ELECTROMECHANICAL CO., LTD.

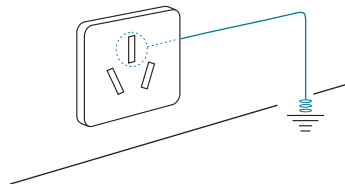
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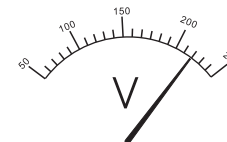
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CAUTIONS

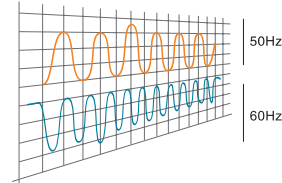
- 1** Please ensure that the power supply and electrical outlet are in good contact and the earth wire must be firmly grounded!



- 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 200 ~ 250V (110V model is of 100 ~ 130V). 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.

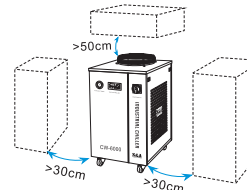


- 4** To protect the pump, it's strictly forbidden to run the chiller without water in the storage water tank!

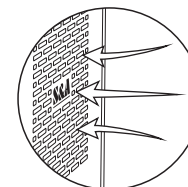
The new machine is packed after draining whole water in the tank, so please make sure the tank has water inside before machine starting, otherwise it's easily to have the pump damaged. When the water level is below the green (NORMAL) range of the water level gauge, the cooling capacity of our chiller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



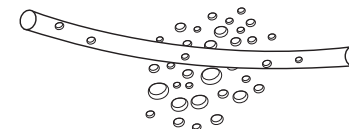
- 5** Please be sure that the air inlet and air outlet are in good ventilation!
There must be at least 50cm from obstructions to the air outlet which is on the top of the chiller, and should leave at least 30cm between obstructions and the side air inlet.



- 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.

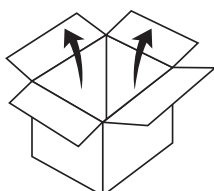
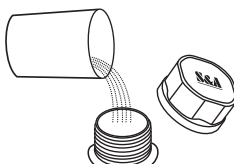
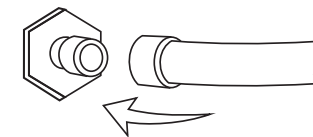
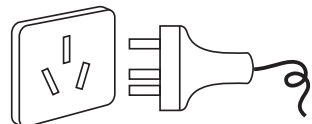
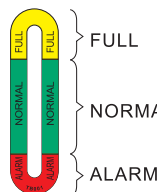
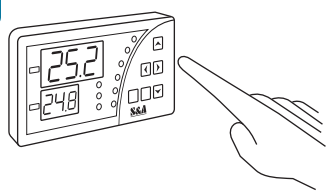


- 7** Please pay attention to the effect of the condensate water!
With greater ambient humidity, when the water temperature is lower than the ambient temperature, the condensate water will generate on the surface of water circular pipes and the cooled components. If above circumstance appears, it is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



INSTALLATION

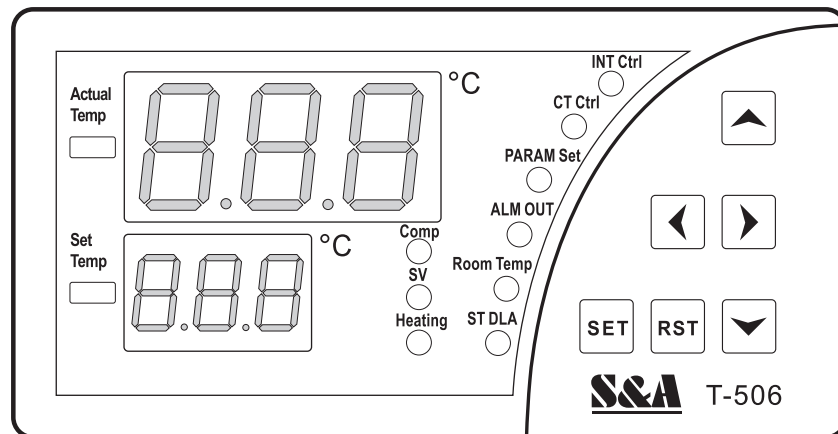
It is very simple to install this industrial cooling machine. The installation for the first time of the new machine can be carried out by following steps:

<p>1</p>  <p>Open the package to check if the machine is intact and all the necessary accessories are completed.</p>	<p>2</p>  <p>Open the injection port to feed cooling water. (Do not spill out the water!)</p> <p>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.</p>
<p>3</p>  <p>Connect the water inlet and outlet pipes well according to system conditions.</p>	<p>4</p>  <p>Plug in power and turn on the power switch. (Do not start up without water in the water tank!)</p> <p>(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.</p>
<p>5</p>  <p>CHECK THE WATER LEVEL IN THE WATER TANK.</p> <p>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.</p>	<p>6</p>  <p>Adjust parameters of temperature controller.</p> <p>CWFL-800/1000/1500 dual temperature and single pump series use an intelligent thermostat. Normally users do not need to adjust it. If it is really necessary, please refer to page 17, "Operating status and parameters adjustment".</p>






Operation and parameters adjustment

T-506 new temperature controller does not need to be adjusted the controlling parameters. It will self-adjust controlling parameters for meeting equipment cooling requirements. T-506H new intelligent temperature controller works in defaulted constant temperature control mode with water temperature set at 25℃ which can be adjusted as needed. T-506 and T-506H temperature controllers have the same functions and structure except default settings.



1. Temperature control panel introduction



Comp	ON, compressor working
SV	ON, solenoid valve working
Heating	ON, heating rod working
INT Ctrl	ON, controller working in intelligent control mode
CT Ctrl	ON, controller working in constant temperature control mode
PARAM Set	ON, controller working in parameters setting mode
ALM OUT	ON, alarm output status
Room Temp	ON, displaying room temperature
ST DLA	ON, starting up delay status

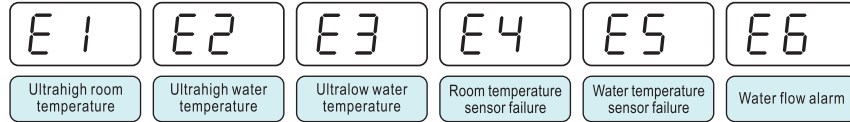
- (1) Press  button to show the room temperature, seconds later default display restored. (Meanwhile, Room Temp light is on, displaying room temperature).
- (2)   buttons are for modifying parameters values and   buttons are for switching parameter items.
- (3) **RST** button: confirm.
- (4) **SET** button: setting function.

2. Restore to factory settings

Before machine startup, press and hold   buttons until the controller displays rE, 6 seconds later after releasing the buttons, the controller works in normal order. All parameters values settings of the controller have been restored to factory settings.

3. Alarm function

(1) Alarm Display:



When alarm occurs, the error code and the temperature will be alternately displayed.

(2) To suspend the alarm:

In alarming state, the alarm sound could be suspended by pressing any button, but the alarm display remains until the alarm condition is eliminated.

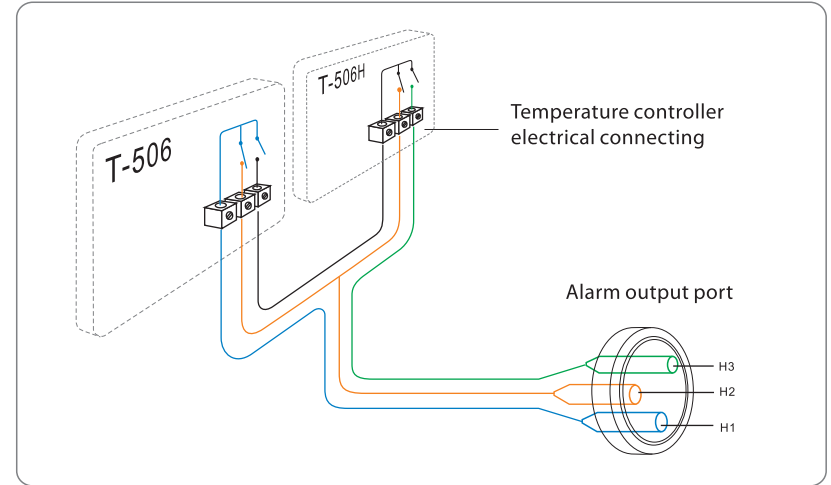
4. Thermostat parameters list

Order	Code	Item	Range	High temperature water tank T-506 controller factory setting	Low temperature water tank T-506H controller factory setting	Notes
1	F0	Temperature setting	F9~F8	30	25	Constant temperature control effecting
2	F1	Temperature difference values	-15~+5	-2	-2	Intelligent control effecting
3	F2	Cooling hysteresis	0.1~3.0	0.3	0.3	
4	F3	Way of control	0~1	1	0	1: intelligent 0: constant temperature
5	F4	Alarm for over high water temperature	1~20	10	10	
6	F5	Alarm for over low water temperature	1~20	15	15	
7	F6	Alarm for over high room temperature	40~50	45	45	
8	F7	Password	00~99	8	8	
9	F8	The allowed highest water temperature	(F9+1)~40	35	30	
10	F9	The allowed lowest water temperature	1 ~ (F8-1)	20	20	

ALARM AND OUTPUT PORTS

In order to guarantee the equipment will not be damaged while cooling water circulation is out of control, CWFL-800/1000/1500 dual temperature and single pump series chillers possess alarm protection.

1. Alarm output port and wiring diagram.



2. Alarm causes and working status table.

Condition	Display	Alarm code	Buzzer	OUT H1 H2	OUT H1 H3
Circulating pump works properly				Disconnection	Breakover
Blocked cooling water circulation loop		E6	Sounds	Breakover	Disconnection
Alarm of water shortage		E6	Sounds	Breakover	Disconnection
Faulted circulating pump		E6	Sounds	Breakover	Disconnection
Ultrahigh room temp		E1	Sounds	Breakover	Disconnection
Ultrahigh water temp		E2	Sounds	Breakover	Disconnection
Ultralow water temp		E3	Sounds	Breakover	Disconnection
Faulted room temp sensor (Constant temperature invalid)		E4	Sounds	Breakover	Disconnection
Faulted water temp sensor		E5	Sounds	Breakover	Disconnection
Chiller power failure				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.