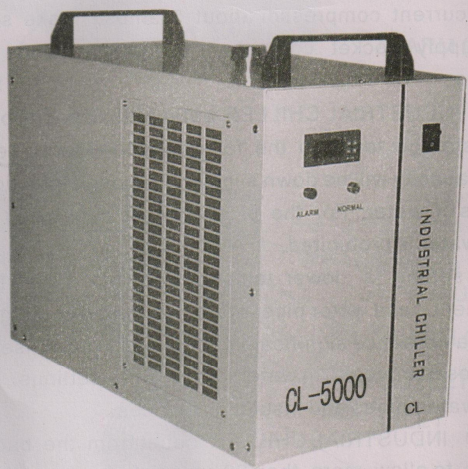


# CL-5000 INDUSTRIAL CHILLER

## USER MANU



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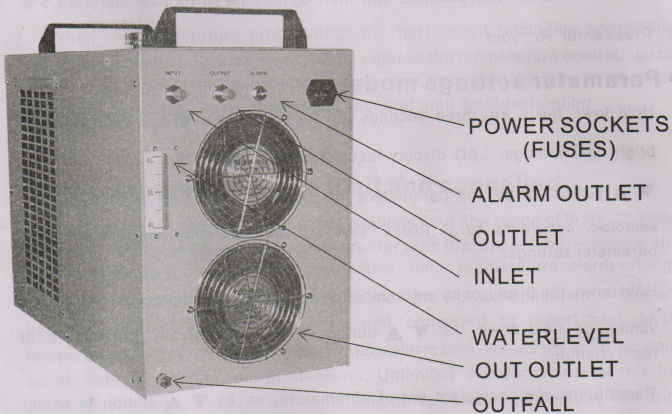
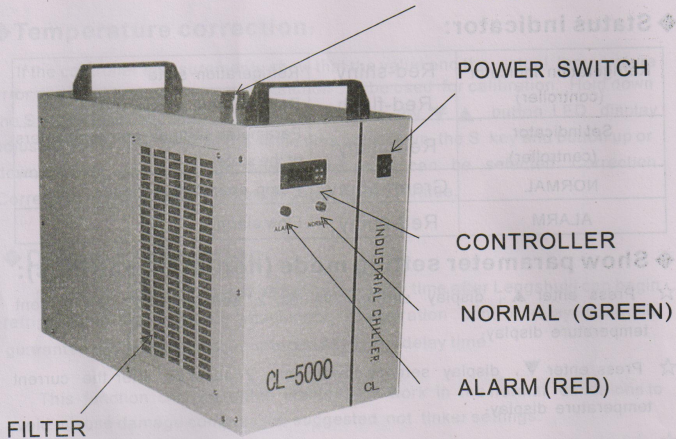
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## 一、 CAUTION

1. CL-5000 INDUSTRIAL CHILLER work only 1-2 amps, but the start-up current compressor about 5 amps. Make sure the power supply socket contacts and good ground reliable grounding.
2. CL-5000 INDUSTRIAL CHILLER water tank capacity of 6 liters, if water storage tanks in the following four liters, Lengshuiji cooling capacity will be down slightly. Proposed injection about five liters of water, For the protection of circulating pumps, running water is prohibited.
3. When setting a lower temperature and high humidity environment, and water pipes were circulating cooling device surface can produce significant quantities of condensed water. The proposed increase in water temperature settings, or to be cooling water pipes and insulation devices.
4. CL-5000 INDUSTRIAL CHILLER outlet from the back of the obstacles to allow more than 20 cm distance from the outlet side of the barrier requirements in the distance more than 5 cm.
5. Tuyere into the filter must be cleaned regularly.



一、 PARTS INTRODUCED



### 三、PERATION AND PARAMETER ADJUSTMENT

#### ◆ Status indicator:

Refrigeration indicator (controller)	Red-shiny	Refrigeration state
	Red-flash	Delayed state refrigeration
Set indicator (controller)	Red-shiny	Parameter settings and parameters of the state
NORMAL	Green-shiny	Pump operating normally
ALARM	Red-shiny	Flow alarm

#### ◆ Show parameter setting mode (non-state settings):

- ☆ Press enter ▲, display settings values, 2 seconds after the current temperature display;
- ☆ Press enter ▼, display settings lower limit, 2 seconds after the current temperature display;
- ☆ Press enter S, Show time delay, two seconds revealed that over-temperature alarm limit values, two seconds and then display the current temperature;
- ☆ Press enter R, void.

#### ◆ Parameter settings mode:

- ☆ Hold down, the S key three seconds into the parameters of the choice model. bright light settings: LED display last adjusted parameters;
- ☆ ▼▲ button or by the parameters of choice (F1……F5), the parameters selected, according to S Press that the corresponding parameters and parameter settings;
- ☆ Hold down the S key, or by a combination of bond ▼▲ button set parameter values, or hold down the ▼▲ button, it will automatically parameters of rapid change;
- ☆ Parameters of a complete set of parameters, or by ▼▲ button to select other parameters of repeating the above steps to set parameter values;



- ☆ Upon completion of all the parameters set by R and reset button to confirm, set up lights eliminate. Without any buttons, 30 seconds later, the machine automatically recognized and stored reduction, eliminate light settings.

### ◆ Temperature correction:

If the controller measurements show that the value and the actual temperature error, the temperature correction function can be used for calibration. Hold down the S key three seconds into the settings, or by ▼▲ button LED display adjusted to F3, this time, at the same time hold down the S key and button up or down, within  $\pm 5^{\circ}\text{C}$  an appropriate value can be selected. Correction Correction revealed that the former show = +MCF value.

### ◆ Delayed protection:

Machinery electricity, must be set by the delay time after Lengshuiji can begin refrigeration. Ohmic state machinery, refrigeration control relay controller guarantee two movements  $\geq$  interval set by the delay time.

This function can guarantee compressor work in the normal conditions to avoid misuse damage compressor, suggested not tinker settings.

### ◆ Probe Faults warning:

When the temperature probe circuit or short circuit (including connecting with the mainframe no good), state police entered the temperature control. buzzer sound, LED display "44" and flashing. Press any button at this time to eliminate the alarm sound. If by keys, the police continued until troubleshooting.

### ◆ Over-temperature alarm limit and cancelled:

Overheating of the controller alarm settings limit the range of 0-20 °C-When the temperature probe measurements greater than the upper limit + temperature alarm set value or less than the lower limit - limit temperature alarm settings, temperature control for alarm, buzzer sound, the digital scintillation. Press any button to eliminate alarm. If not by, and continued to report back to the temperature range. When over-temperature alarm limit values set at 20 °C, could be abolished unlimited alarm functions, Unlimited non-functional at this time alarm functions that buzzer will sound, digital temperature display of numerical not flicker.

### ◆ Super-measuring range instructions:

Thermostat monitoring range of  $-40^{\circ}\text{C}$  -  $+50^{\circ}\text{C}$ . Temperature  $>50^{\circ}\text{C}$ , LED display, "HH", temperature  $<-40^{\circ}\text{C}$ , LED display, "L.L."

CODE	FUNCTION	SCOPE	DEFAULT	UNIT	NOTE
F1	limit	$-39-+50$	30	$^{\circ}\text{C}$	Temperature control ceiling
F2	Minimum	$-40-+49$	20	$^{\circ}\text{C}$	Minimum temperature control
F3	calibration	+5	0	$^{\circ}\text{C}$	And the actual temperature correction when there are deviations
F4	Delay adjustment	0-9	1	min	Compressor delay the start time (do not propose to change)
F5	Over-temperature alarm	0-20	10	$^{\circ}\text{C}$	On the water temperature exceeds a certain threshold value Alarm

### ◆ Traffic police and output ports:

In order to ensure the cooling water circulation anomalies do not affect the safety of the cooling device, the CL-5000 INDUSTRIAL CHILLER unique flow alarm protection.

	Normal flow indicator	Alarm flow indicator	Buzzer	Output ports H1, H2	Output ports H1,H3
Normal pump work	ON	OFF	NOT RING	OPENING	CONDUCTION
Plug the loop cooling water cycle	OFF	ON	RING	CONDUCTION	OPENING
Circulating Water Pump Failure	OFF	ON	RING	CONDUCTION	OPENING
power interruption				CONDUCTION	OPENING

CAUTION: Alarm flow connecting a group of port machinery normally open, normally closed contacts, not more than 10A.



## 四、 Technical parameters

### CL-5000 AG:

- 1、 Power : AC220-240 V、 50 Hz
- 2、 Current : 1.4-2.1 A
- 3、 Tank capacity : 6 L
- 5、 Compressor : HITACHI BSA645CV
- 6、 Cooling capacity : 2361 Btu/h
- 7、 Refrigerants : R-134a
- 8、 Charge amount : 340 g
- 9、 PumP lift : 10 M
- 10、 Dimension : 550 X 280 X 430 mm
- 11、 Weight : approx.31 Kg

### CL-5000 BG:

- 1、 Power : AC208-230 V、 60 H2
- 2、 Current : 1.4-2.1 A
- 3、 Tank capacity : 6 L
- 5、 Compressor : HITACHI BSA418CN
- 6、 Cooling capacity : 2999 Btu/h
- 7、 Refrigerants : R-134a
- 8、 Charge amount : 340 g
- 9、 Pump lift : 10 M
- 10、 Dimension : 550 X 280 X 430 mm
- 11、 Weight : approx.31 Kg