



Zhengzhou Fenghua Industrial Co., Ltd. ZHENGZHOU FENGHUA INDUSTRIAL  
CO., LTD

Instructions for use of constant temperature  
and humidity storage cabinet

# Constant temperature and humidity storage cabinet

send

need

try to persuade

bright

write

Zhengzhou Fenghua Industrial Co., Ltd



Zhengzhou Fenghua Industrial Co., Ltd. ZHENGZHOU FENGHUA INDUSURY  
CO., LTD

Instructions for use of constant temperature  
and humidity storage cabinet

**catalogue**

1. summary .....	3
1. Main performance parameters .....	3
2 How to work .....	3
3. Electrical control system .....	4
2. Product use and description .....	4
3. Hofting and handling requirements .....	8
4. Installation requirements .....	9
5. After-sales maintenance .....	10
Vi. Precautions .....	11
Vii. Warranty policy .....	11

## 1. summary

Constant temperature and humidity storage cabinet, the selection of famous brand piston compressor, internal thread copper pipe hydrophilic aluminum wing type high efficiency heat exchanger and other refrigeration accessories. With superior performance, high energy efficiency, simple operation, stable control, beautiful appearance and other characteristics, widely used in the cultural relics warehouse with high requirements for cultural relics storage, as an independent space to maintain stable temperature and humidity.



### 1. Main performance parameters

Name: constant temperature and humidity storage cabinet power supply: AC220V / 50Hz

Dehumidifier capacity: 50g / h compressor power: 120 W

Refrigerant: R134a humidification amount: 20g / h

Air volume: 132 m<sup>3</sup>/h temperature control range: 18~24 ± 1°C

Maximum power: 260 W Wet control range: 40~60 ± 5% RH

Maximum current: 2A external dimension: 27007501900mm

### 2 How to work

The return air passes through the low temperature surface of the evaporator. Because the surface temperature of the evaporator is lower than the dew point temperature of the return air, there will be condensate water precipitation, reducing the water carried in the return air, so as to achieve the purpose of dehumidification. The air supply only contacts with the clean evaporator in the evaporator, and completely separates from the refrigerant, which is much safer than the dehumidification method of salt solution, completely avoid the pollution of the



## Instructions for use of constant temperature and humidity storage cabinet

salt steam to the air supply in the dehumidification method of salt solution, and ensure the clean and safety of the air supply. The compressor refrigeration method is used to keep the evaporator surface always in the temperature range suitable for dehumidification. The compressor refrigeration workflow is as follows:

Compressor air-cooled condenser throttle device evaporator compressor.

The compressor from the evaporator absorbs low temperature, low pressure refrigerant steam compression into high pressure, high temperature gas to the condenser, At this time, the refrigerant vapor warms up due to the compression, In addition is the heat added to the thermal equivalent of the motor, Transfer heat together to the cooler condenser, The refrigerant steam that loses heat is condensed into a liquid refrigerant; The throttling device supplements the condensed liquid refrigerant to the evaporator in moderation, After the liquid refrigerant is reduced by the throttling device, To the gas-liquid two-phase state at low temperature and low pressure, Phase transition due to boiling due to reduced pressure, The refrigerant steam which changes to low temperature and low pressure after absorbing heat in the evaporator returns to the compressor, The whole working process is about taking the heat of the low-temperature evaporator environment, Forced to high temperature condenser ambient air, Through the combination of the precise adjustment of the air volume by the frequency conversion fan and the system solenoid valve regulation of the compressor, Keep the evaporator surface always at a temperature suitable for dehumidification, So as to achieve the "surface cold dehumidification" effect.

### **3. Electrical control system**

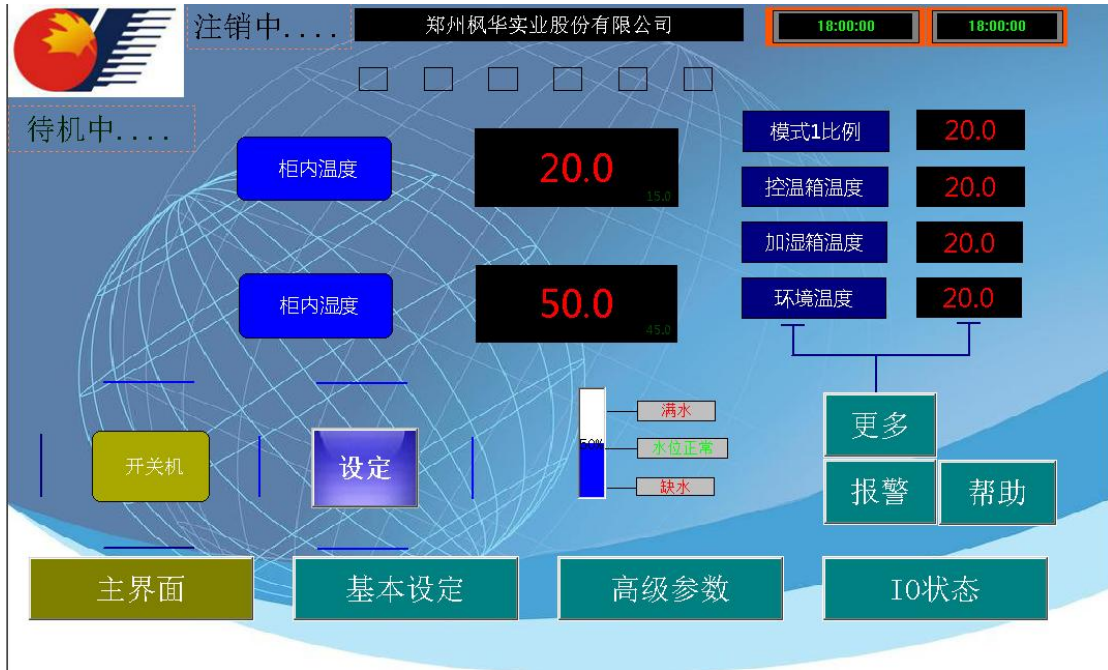
It is composed of color LCD touch screen and main control board. Using a large screen display screen, Chinese display, easy to use the operation.

## **2. Product use and description**

**main interface:**

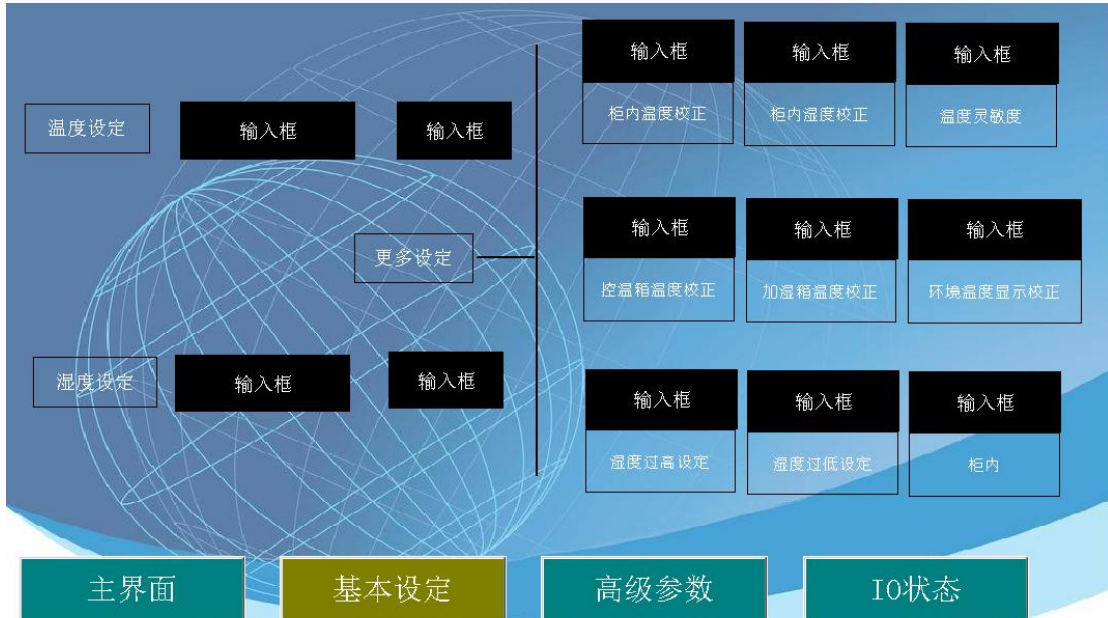


Instructions for use of constant temperature and humidity storage cabinet



Press "Set" to set the temperature and humidity. After setting, press "switch" to switch the equipment.

**Basic setting interface:**



Press the Basic Set position to enter the page and press Enter the box position to enter the parameter setting. The parameters are described as follows:

option	Windows default	explanatory note
Temperature setting	20	Display case temperature target value



Instructions for use of constant temperature and humidity storage cabinet

Humidity setting	50%	Shcase humidity target value
Temperature setting correction in the cabinet	0	Set the temperature in the calibration cabinet
Humidity setting correction in the cabinet	0	Set the humidity in the calibration cabinet
temperature sensitivity	3	Adjust the temperature fluctuation range
Temperature control box temperature correction	0%	Correct the temperature detection deviation of the temperature control box
Humidification box temperature correction	0%	Correct the humidification box temperature detection deviation
Environmental temperature correction	0%	Correction for the ambient temperature detection deviation
High humidity setting	0%	Set the alarm value of too high humidity in the cabinet
Humidity is set too low	0%	Correct the alarm value of too low humidity in the cabinet

**Advanced parameter interface:**

0	A	B	C	D
1	参数初始化*			
2	地址*			
3	掉电自启动*			
4				
5				

主界面      基本设定      高级参数      IO状态

Press "Advanced parameters" to enter this interface and set the corresponding parameters. Users need to note: "parameter initialization" and "power drop since start" options are set in the table below:

option	Windo ws default	explanatory note
postal address	6	The native address for the



Instructions for use of constant temperature and humidity storage cabinet

		communication with the upper computer computer
Parameter initialization	OFF	Definition is as follows: OFF: Keep the set parameters before the power loss when the unit is powered off ON: Keep the default set parameters when the power is cut off
Off-power start-up	yes	Definition is as follows: Yes: after the unit power and then the power automatically restore the state before the power No: This feature is not enabled For example, set to Yes, if the power drops during operation, the unit will automatically start to keep the unit in the running state; If the unit stops, the unit will be stopped after power.

IO status interface:



Press "IO state" to enter the interface, which displays the operating state of the main electrical equipment. Users do not have to care about this page, it is generally used for maintenance personnel to observe.



Zhengzhou Fenghua Industrial Co., Ltd. ZHENGZHOU FENGHUA INDUSURY  
CO.,LTD

Instructions for use of constant temperature  
and humidity storage cabinet

Help interface:



Press the "Help" of the main interface to enter this interface, through this interface, you can contact the company to provide help.

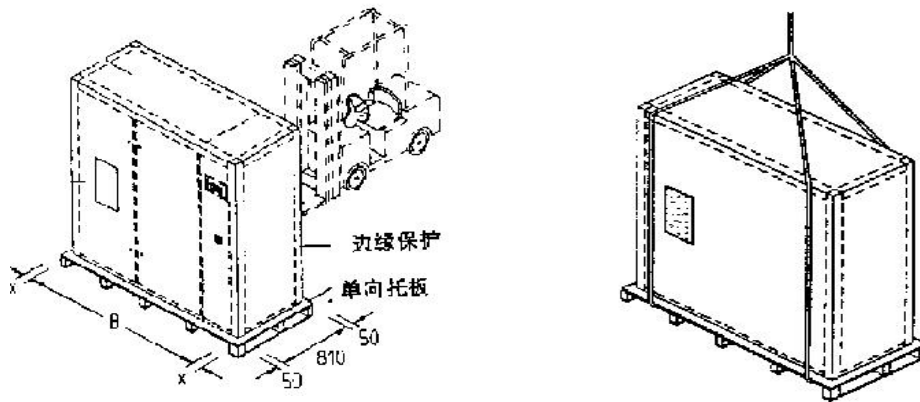
### 3. Hofting and handling requirements

If the equipment is lifted by forklift or crane, it must be lifted with transport belts or steel cables, to ensure that the upper part of the machine or packing box is not under pressure, and place the wooden strips around the machine at certain intervals to protect the machine from injury. Do not use any parts of the equipment as a fulcrum of force.

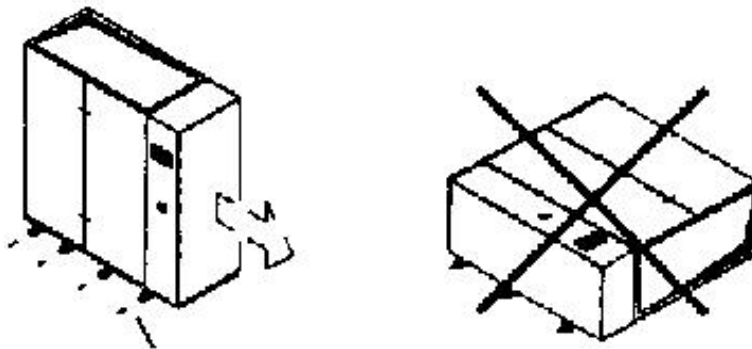




## Instructions for use of constant temperature and humidity storage cabinet



Transport schematic diagram



Note: do not move backwards. The steel pipe can be placed on the lower part of the unit. The number and size of the lower steel pipe of the unit are determined according to the needs. If possible, the steel pipe should be placed directly under the chassis.

### 4. Installation requirements

1. Power supply: the storage cabinet should have an independent power supply, which cannot be shared with other power consumption equipment. The section of the wire should match the power of the unit.

2. Installation position: ensure the level of the ground, prevent the equipment vibration caused by uneven ground, reduce the service life of the equipment, after the equipment is in place, the caster should be fixed to the ground to prevent movement.

3. Air duct: the throat hoop at the connection of the air duct between the cabinet should be fixed firmly to ensure the sealing. The air duct should be well insulated to prevent condensation



## Instructions for use of constant temperature and humidity storage cabinet

at the air duct.

4. Installation space: the space at the side and back of the equipment should be greater than 800mm to ensure the good heat dissipation of the equipment, which is more conducive to energy saving and stable operation. The front space of the equipment should be greater than 1500mm to ensure that the cabinet door is open smoothly.

5. Installation environment: Do not install the equipment in a place that will affect the working and living environment. It will produce sound due to the normal operation of the equipment. The use environment should be clean and dust-free, to prevent the control equipment from being affected by the dust, reduce the service life, and affect the service performance.

6. Start up: After the equipment is in place, leave it for 24 hours.

## 5. After-sales maintenance

Common fault analysis table:

phenomenon	Possible cause	processing method
The temperature cannot reach the set value for a long time	Use the ambient temperature is too high, or the heat dissipation area return air short circuit, the machine heat dissipation is not good	Reduce the ambient temperature and check whether the return air in the cooling area is unobstructed
Humidity does not reach the set value for a long time	The water tank is short of water	Water tank hydrating
Temperature and humidity can not reach the set value for a long time	Storage cabinet is not well sealed	Check whether the cabinet door is closed in place, whether the ventilation pipe is fixed firmly, and whether the storage cabinet is sealed
The machine is not wet	Check the power supply	Check for electricity
	Whether the compressor is started	Check the compressor circuit for electrical power
The machine is not humidified	Whether the atomizer is started	Check the atomizer circuit for electricity and whether the water level is normal
The screen is not displayed	Power supply or electric leakage protector	Whether the power supply is connected or whether the leakage protection jumps away



## Vi. Precautions

Be sure to power it on under the normal power supply.

Be sure to add pure water to this equipment.

Do not add any chemical agent to the water, we are not responsible for the loss caused by improper use.

Pay attention to the regular check of various alarm lights of the equipment and timely processing in accordance with the maintenance process. It is best to conduct remote real-time monitoring through the company's monitoring software.

If there is found under the box, unplug the power cord first.

Do not remove the box of the equipment live.

Please use the equipment within the specified temperature range to ensure the normal operation of the equipment to achieve good performance.

For safety reasons, please pay attention to place the equipment in a well-ventilated place, or have a confined space with a cooling fan to ensure the timely heat dissipation of the equipment.

Do not place inflammable and explosive items around the equipment.

## Vii. Warranty policy

This equipment from the date of sale, free warranty for one year, and responsible for maintenance.

After-sales telephone number: 0371-67602008

Fax: 0371-67600046