

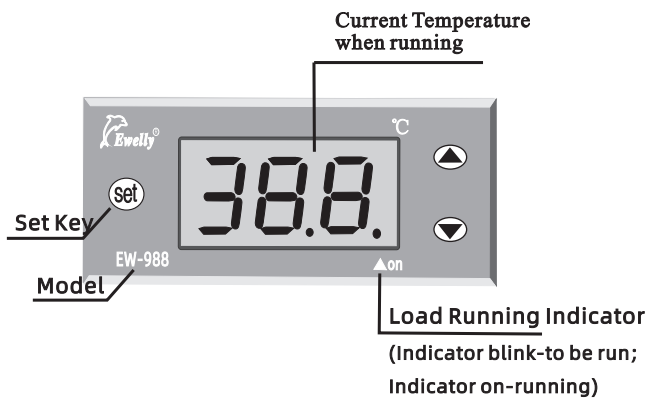
EW-988H Instruction Manuel

EW-988H is a fully intelligent temperature controller with strong versatility and stable performance. It has a resolution of 0.1°C and accuracy of $\pm 0.5^{\circ}\text{C}$. Products with cooling and heating switch, alarm output mode and more functions. It is equipped with compressor delay, temperature correction, fault alarm and other functions.

Technical Specifications:

- 1、Operating voltage: AC220V $\pm 10\%$ 50HZ/60HZ
- 2、Output Relay: 10A/220V/AC
- 3、Power Consumption: $\leq 3\text{W}$
- 4、Working Environment: $-10^{\circ}\text{C}\sim 50^{\circ}\text{C}$ RH $\leq 90\%$
- 5、Control Range: $-19.9^{\circ}\text{C}\sim 99.9^{\circ}\text{C}$
- 6、Resolution: 0.1°C
- 7、Accuracy: $\pm 0.5^{\circ}\text{C}$
- 8、Input Signal: One-way NTC sensor 20K $\times 2\text{mx}1$
- 9、Overall Dimension: 78(W) $\times$ 34(H) $\times$ 74(D)mm
- 10、Mounting Size: 71(W) $\times$ 29(H)mm

Display Panel



Pre-use-installation requirements

- 1.The voltage must accord with controller's demand. The voltage's deviation is no more than $\pm 10\%$.
- 2.The loop of sensor is possible to keep away from the loop of power.
- 3.The sequence of line's must have been connected Properly.

Operation Instruction

1.Temperature setting: Press **(set)** to display set temperature, then use **(▲)** or **(▼)** to change temperature values.

2.Parameter setting: Press **(set)** for 6 seconds to enter parameter setting, **HC** will be displayed. Then Press **(set)** to select different parameter codes "**HC—LS—HS—Pt—CA—d**", then use **(▲)** or **(▼)** to change set values.



Hold **(set)**, then press **(▼)** or **(▲)** simultaneously. Choose **HC**, **H** represents Warm Mode, **C** represent Cold Mode.



Hold **(set)**, then press **(▼)** or **(▲)** simultaneously. Choose lowest temperature limits: -19.9°C to setting temperature -1.0°C



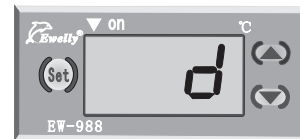
Hold **(set)**, then press **(▼)** or **(▲)** simultaneously. Choose highest temperature limits: setting temperature $+1.0^{\circ}\text{C}$ to 99.9°C



Hold **(set)**, then simultaneously press **(▼)** or **(▲)** to set delayed start time from 0 to 5 minutes.



Hold **(set)**, then press **(▼)** or **(▲)** simultaneously. Choose temperature correction: $-15.0^{\circ}\text{C}\sim 15.0^{\circ}\text{C}$



Hold **(set)**, then press **(▼)** or **(▲)** simultaneously. Choose return difference: $0.5^{\circ}\text{C}\sim 15.0^{\circ}\text{C}$



When the sensor is short circuit. Code "E1" will be displayed.

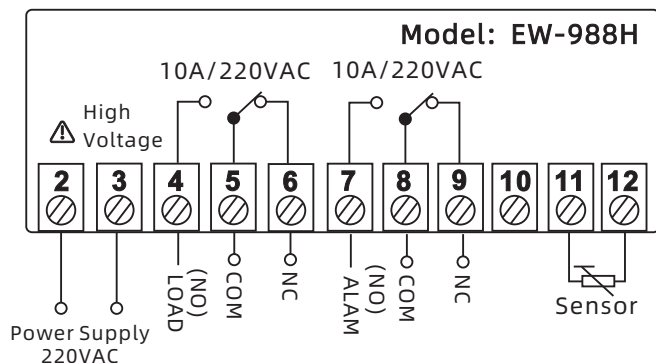


When the sensor temperature is higher than the HS setting value. Code "HH" will be displayed.



When the sensor temperature is lower than the LS setting value. Code "LL" will be displayed.

Wiring diagram



Parameters table

Code	Function	Setting Range	Ex-factory Value	Unit
HC	Cooling/Heating	H(Heating) /C(Cooling)	C	—
LS	Lower temperature limit	-19.9℃ to setting temperature -1.0℃	-19.9	℃
HS	Upper temperature limit	setting temperature +1.0℃ to 99.9℃	99.9	℃
PE	Delayed Time	0~5	1	Min
CA	Temperature Calibration	-15.0~15.0	00	℃
d	Temperature Return Difference	0.5~15.0	2	℃

Attentions : The upper value shall be larger than the set temperature + the return difference;
The lower value shall be smaller than the set temperature - the return difference.
Under the alarm mode, the alarm relay is on and the load relay is off.

Feature descriptions

Cooling: When the current temperature $\geq$ setting temperature + temperature return difference and delay the setting of the "delay time", the load relay On.

Stop cooling: When the current temperature $\leq$ setting temperature, the load relay Off.

Heating: When the current temperature $\leq$ the setting temperature - temperature return difference and delay the setting of the "delay time", the load relay On.

Stop heating: when the current temperature $\geq$ setting temperature, the load relay Off.

Notes: cooling and heating conversion set in the parameter "H / C", H is the heating system, C is cooling.

Trouble Shooting

Failure	Causes	Precautions
No display when power is on.	Check to see if the power is short circuit. The thermostat fails.	Check power supply and change fuse. Check if there is 220V power input or change thermostat with our distributor.
Machine does not work but display exits	The set temperature is higher than the present temperature. The heat protector is open circuit because the pressure is over loads.	Reset the necessary controlling temperature. Check the reasons for overload and overheating. After the trouble is solved, restart to work.
Displayed temperature is unstable or there exists misplay..	The sensor wiring is interfered, poorly contacted or is tied with other cables. The current is light because of damage in the wiring.	Separate sensor wiring with power cables or change shielded lines or check if the contact is tight or not.
Difference with temperature within storage and the displayed temperature is too big.	The locations for the sensors are not correct or sensor wiring is too long and its resistance is too big. The wiring contact is poor and the sensor's damag.	All sensors should be corrected at their locations. Enlarge the cross section of the expanded wires. Make sure the wiring sealing, is good. Change sensor.
Machine does not stop when the temperature reaches.	The sensor is not correctly installed and cannot measure the correct temperature. Compressor contactor fails.	Check if the sensor has accurately measured the temperature or not. Change compressor contactor.
Cooler works with overfrequency	Return difference value is too small or the setting for pressure protection is not correct.	Reset and enlarge return difference value. Adjust setting for pressure protection.
"EI" is displayed	The sensor wiring is short circuit or open circuit.	Check to see if the sensor wiring has good contact with coupling end or not.

Supplementary

- Please read this product instruction carefully and connect input/output plugs of power & sensor to the corresponding sockets strictly by following connection diagram, otherwise the usage & operations will be affected. Check again to make sure there is no mistake. Tighten all the screw of connection plugs again, and then connect it to the power for running.
- Keep away this product from moist or corrosive air and high magnetic field. Otherwise the normal operation of this product will be affected.
- All our products have passed strict quality inspections before leaving factory. We provide one-year warranty for this product which is limited to product itself, and our company is not responsible for any other joint and several liability.

If the products includes but not limited to the following damages caused by being used and installed in unsafe environment, being connected to the load exceeds the allowable range of the product, being disassembled and modified by the user, etc. Our company will not provide replacement or maintenance service within the warranty period. Meanwhile, we will not be liable for any direct or indirect damages caused.

The warranty certificate on the product is an important evidence for our product quality assurance. Any changes without authorization, damages, scratches and lose on the certificate, our company will not provide any replacement or maintenance service for theses products.

If you have any problem regarding to our products, please contact our dealers and we will provide you high-quality after-sale services. Thank you.



Official website

Guangzhou Ewelly Autocontrol Tech. Co., Ltd.
<http://www.gzewelly.com>