Microcomputer temperature controller

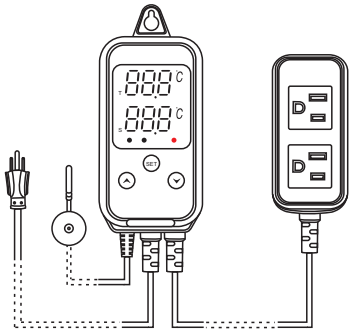
MEISAL-S10B product instruction manual

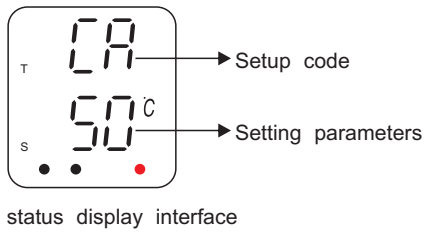
First of all, thank you for purchasing Shenzhen American Airlines' "MEISAL" microcomputer temperature controller. This product brings together a wide range of modern heating technologies and can be used Reptiles, pet breeding, hatching, barbecue, oven, turtle breeding, greenhouse temperature control, fish tank heating. Fermentation, germination and other heating and cooling environment control (If you have any good suggestions and comments about our products, please contact us and let us know. We will definitely improve the products to provide you with satisfaction service. if you are very satisfied with our products, please inform more friends, your feedback is definitely the greatest recognition for us, thank you!)

1、Technical Parameters:

1. Working voltage range: AC100V～AC250V±10%50/60HZ;　　Machine power consumption: ≤3W;
2. Standby function: ≤0.5W;
3. Temperature control range: -22℉～230℉ (-30-110℃);
4. Control accuracy: 0.5℉ (0.1℃)　Temperature hysteresis: adjustable between 1～20℉ (0.2-15℃);
5. Temperature probe: NTC77℉=10K B3435 ±1% (1.5 meters long);
6. Power cord: 1.5 meters long
7. Relay: 10A/AC220V*2;
8. Working environment temperature: -30℉-150℉; humidity, 90%RH, no frost;

2、Schematic diagram of thermostat:





Set status display interface

3、Button operation instructions:

1. Power on and perform full display for 2 seconds (the display will display all lights).
2. S key: the setting key. Press the SET key for 3 seconds to enter the program menu code mode and the code ES will be displayed (press and hold for 3 seconds in the setting state to exit out of the setting state). Continue to press the S key briefly to cycle through the parameter code ES-CA (with parameter code table attached), such as entering a certain code Adjust the adjustment parameters. When the code appears, please press the ▲ key or the ▼ key to change to the required value and then press the short S key to enter the next parameter setting. The same method Just set it up. (Press and hold the SET button for 3 seconds to exit the setting state, or no operation for 10 seconds will exit the setting state).
3. ▲ key or ▼ key: adjust parameter keys up or down. Press and hold to adjust parameters continuously.
4. Unit conversion: Press the ▲ and ▼ keys simultaneously for three seconds on the normal display interface to convert the temperature unit.

4、Thermostat parameter setting:

ES controls temperature setting: Enter parameter menu code mode, select code S, and press the ▲ or ▼ key to change to the desired setting.The set value will be automatically saved after 3 seconds. (Press and hold the ▲ or ▼ key for 2 seconds to quickly adjust the value in 1°C steps).

HD heating hysteresis setting: If set ES=25℃.HD=2℃. Turn on the heating function when the controller detects temperature <(25-2) Heating, the heating function stops when the temperature >= 25.
CD refrigeration hysteresis setting: If set ES=25℃.CD=3℃. When the controller detects temperature > (25+3), the refrigeration function is turned on, and when the temperature is <= 25, the heating function stops.
PU delayed start: This delay is only effective in cooling. It is the minimum required interval between when the relay stops cooling and when it starts cooling next time.
HA high temperature alarm temperature setting: When the device detection temperature > HA, the device will generate a high temperature alarm test, and the display will show HA and the temperature value are displayed alternately (the high temperature alarm value cannot be lower than ES, and the steps are 1°C when adjusting parameters quickly).
LA low temperature alarm temperature setting: When the device detection temperature < LA, the device will generate a low temperature alarm test, and the display will show LA and temperature value are displayed alternately (the low temperature alarm value cannot be higher than ES, and the steps for quick adjustment of parameters are 1°C).
CA calibration temperature setting: When there is a deviation between the controller test temperature and the actual temperature, you can calibrate it through this parameter, such as When the controller detects a temperature of 30°C and your actual temperature is only 28°C, you can set CA to -2°C.

5、**Parameter code table:**

Menu code (℃)	Code description	Range	Factory value/unit
ES	Temperature control	Set the temperature value to be controlled (-30--110℃)	25℃
HD	Heating hysteresis temperature	Setting temperature hysteresis value (0. 2--15)	2℃
CD	Refrigeration return difference temperature	0. 2--15	2℃
PU	delayed start	Delay starts the relay when the set parameters are reached (0--10 minutes)	00/Minute
HA	High temperature alarm	ES~110℃	110℃
LA	Low temperature alarm	-30℃~ ES	-30℃
CA	Calibration temperature	-10℃--+10℃	0℃

Menu code (℉)	Code description	Range	Factory value/unit
ES	Temperature control	-22--230℉	75℉
HD	Heating hysteresis temperature	1--30℉	3℉
CD	Refrigeration return difference temperature	1--30℉	3℉
PU	delayed start	0--10 Minute	00/Minute
HA	High temperature alarm	ES~230℉	230℉
LA	Low temperature alarm	-22℉~ ES	-22℉
CA	Calibration temperature	-10℉--+15℉	0℉

6、**Fault prompt:**

When the sensor is short-circuited or detects that the ambient temperature is higher than the upper temperature limit of 120°C, HHH is displayed and the output load is turned off;
When the sensor is open circuit or detects that the ambient temperature is lower than the lower temperature limit -40°C, LLL is displayed and the output load is turned off; the sensor

7、**Fault prompt:**

1. If you have different opinions or suggestions about our products, please email us after the sale (13622388626@163.com) We will attach great importance to your suggestions or opinions.
2. If the instruction manual is lost or you cannot operate it, please log in to our after-sales website (http://www.szmeihang.cn). Check the operation videos in the After-sales service column.