

ET252 Dry Block Temperature calibrator

Product Manual



Hangzhou ZhongChuang Electron Co.,Ltd

1. Description

1.1 ET252-140 Dry block temperature calibrator adopts a high stability temperature controller, the heat block adopts a better thermal conductivity alloy material. It is technically synchronous with the advanced technology at home and abroad, in the depth of the insert, the level of temperature field, the vertical temperature field and other technical aspects, it is leading level. Used in the required temperature range, it is easy to set and accurately produce the required temperature. It has the characteristic of small volume, fast heating, stable temperature control, no pollution, etc. The temperature sensor and instrument can be integrally calibrated, so it is easy to carry, easy to use, easy to fast and reliable temperature calibration. It is widely used in machinery, chemical, food, pharmaceutical and other industries.

1.2 Features

1.2.1. A variety of insert tubes, to meet the different size and quantity of sensors testing and calibration.




1.2.2. Heating rate can be adjusted according to user's demand.

2. Operation method



2.1 turn on the power, check whether the mode switch is placed in the

middle "stop" gear. Then turn on the main power switch, fan switch.

2.2. Switch on the temperature controller (green), and the temperature controller starts to run. The interface seen is the basic interface of the temperature control indicator. 2.2. Set temperature point

In the basic interface, press the left-most confirmation key PAR, and then press the shift key , increase key , decrease key , and set the SV window value to the required temperature point, and then press the left-most confirmation key PAR to confirm and save the temperature point.

2.3. The specific operation of refrigeration/heating is as follows:



1) Hold down the PAR key at the leftmost end of the temperature controller for three seconds, and the Func value displayed in the p-v window of the instrument is the cooling/heating switch, use the decrease key  and increase key , and change the SV window to 0. The system is the heating mode. Set the SV window to 1 and the system is in cooling mode.

After setting the desired temperature and cooling/heating mode, hold down the left-most confirmation key PAR and hold it back for about 2 seconds, Go to the basic interface and set the end.

2) . Put the tested samples in turn, block the furnace with absorbent cotton, and then switch the mode selection switch to the "heating" gear, so as to heat up.

Otherwise, the mode selection switch is set to "refrigeration".

2.4. Temperature deviation correction Settings

1). Hold down the confirm key PAR at the leftmost end of the temperature control indicator and hold it for about 2 seconds. Then press the PAR key to find the cor parameter and set the temperature deviation in the SV window with the decrease key  and increase key .

2). When the actual furnace temperature of PV window is close to the set furnace temperature of SV window, thermocouple and thermal resistance can be detected.

3). After the test, put the mode selection switch in the "stop" gear. When the actual temperature returns to the indoor temperature, turn off the temperature controller switch, fan switch and main power switch successively, and cut off the power.

2.5. Open the electric furnace switch (red), The furnace began to heat up, constant temperature.

2.6. When the actual furnace temperature of PV window and the setting furnace temperature of SV window is close to (within $\pm 2\text{ }^{\circ}\text{C}$), the thermocouple can be detected.

2.7. After testing, turn off the electric switch, the thermostat switch (switch on), the temperature drop to 200 degrees, turn off the fan switch and cut off the power supply.

3. Indicator

Heat source: semiconductor refrigeration

Instrument accuracy: 0.2 grade

Display resolution: 0.1 degrees centigrade

The level of temperature: less than 0.1 degrees

Vertical temperature field from bottom to top: Well 30mm is not higher than 1 DEG

Depth: 160mm

Power: 400W

Power supply: 220V 50Hz

Size: 385 * 185 * 325mm

Weight: 12KG

4. Reference procedure

JJG351-1996 Verification regulation for working metal thermocouple

5.Setting

When use this product, the COR should be settled.

When -20°C, the COR value is -1.1

When -10°C, the COR value is -0.5

When 0°C, the COR value is 0

When 10°C, the COR value is 0.3

When 20°C, the COR value is

When 30°C, the COR value is 0.4

When 40°C, the COR value is 0.4

When 50°C, the COR value is 0.6

When 60°C, the COR value is 0.6

When 70°C, the COR value is 0.6

When 80°C, the COR value is 0.8

When 90°C, the COR value is 1.0

When 100°C, the COR value is 1.1

When 110°C, the COR value is 1.3

When 120°C, the COR value is 1.3

When 130°C, the COR value is 1.4

When 140°C, the COR value is 1.4

When 150°C, the COR value is 0

6.Precautions

1. When on site use, the power plug must be reliably grounded.
2. The thermocouple shall be aligned at the distance from the work end to 20cm and shall be lowered into the measuring hole.
3. When calibrating thermocouples, a standard thermocouple must be inserted to make a temperature reference.

