The background features a large, stylized grey shape resembling a Z-fold or a series of connected horizontal bars with diagonal cutouts. This shape is set against a white background with teal horizontal bars at the top and bottom. The text is centered within the grey shape.

# TC-I series hot-channel temperature control box uses Langshu.

Professional manufacturer of hot duct temperature control box

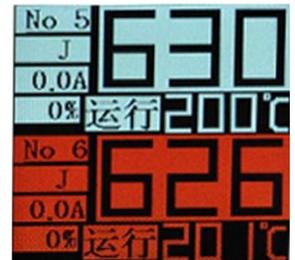
One-card dual control, highly integrated

## I. product introduction

Model: MTC-I series



A module display  
A,Btwo temperature  
control zones~



Functional analysis: fuse damage detection Over-temperature power-off protection

Thermocouple abnormality prompt Power supply error protection.

Alarm prompt function

Scope of use: hot duct molds, various plastic molds, heat treatment equipment, etc.

- ## II. Advantages
- 1.Chinese/English colorscreen.
  - 2.Small and exquisite, highly integrated.
  - 3.One module controls two temperature control areas.
  - 4.The parameter setting is simple and the equipment is stable and reliable
  - 5.One-carddual-control stability system
  - 6.Modular design
  - 7.Jinghuai temperature control, dislocation protection

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### Specifications and parameters

- 1.Control temperature difference; +1°C
- 2.Cold-end compensation error:  $\leq +1^\circ\text{C}$  temperature coefficient
- 3.Temperature control range K-type force thermoelectric 0-450°C
- 4.Total output power: 66KW (maximum)
- 5.Single maximum output current: 15A
- 6.Alarm Fan Guo: 0-100°C free setting
- 7.Suitable for thermocouple model K, type
8. Working power supply AC220V (three-phase four-wire 380v)
9. Digital PID adjustment
10. Working environment: -10°C-60°C relative temperature, 35% -85% relative humidity
- 11.The maximum number of control circuits in a single unit 128

### Technical indicators

- 1.color screen display
- 2.Chinese information alarm
- 3.Current and output ratio display
- 4.Tips for fuse damage
- 5.Thermal and electrical fault detection
- 6.Heating pipe fault detection
- 7.All-industrial electronic components
- 8.Linear voltage control output for better protection Heating pipe
9. Overvoltage alarm
10. Chinese/English color screen display

### III. Knob-type operation temperature control module display

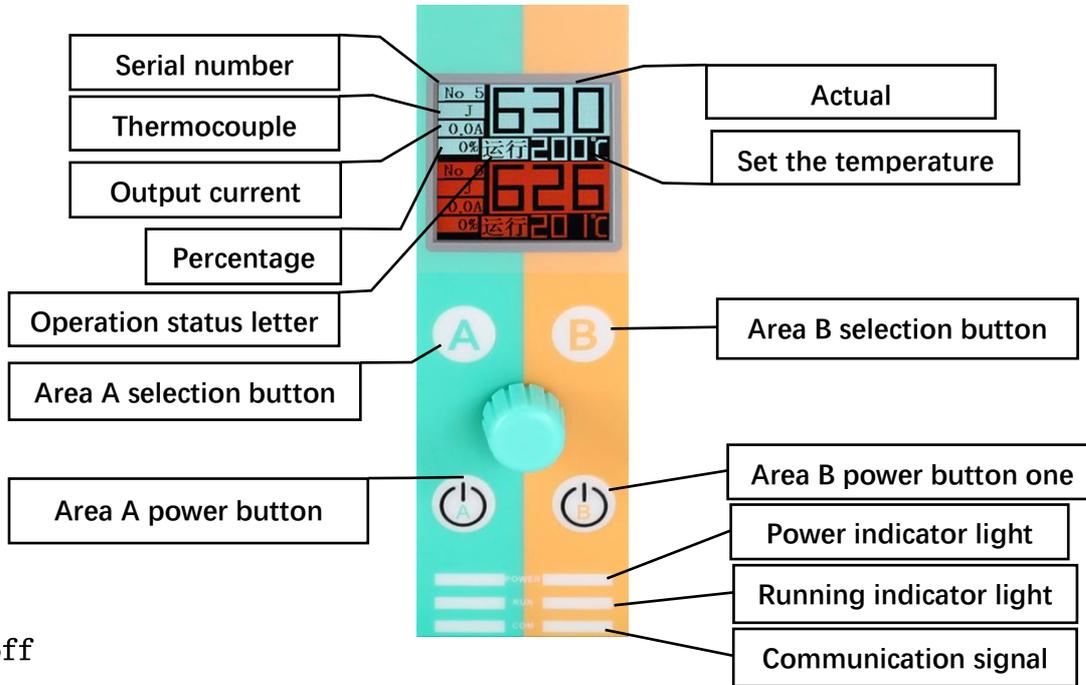
The temperature and other operations are set on the temperature control module by rotating the knob. The LCD display of the temperature control module is displayed in full A/central text. The temperature control serial number, thermocouple model, current, current output ratio, operation status and fault information are displayed on the screen. There are operation knobs, power status indicators and communication indicators on the panel. The temperature control module can be used in any temperature control area. Interchange.



Mi uses one-card dual-control control mode to reduce the volume of the machine by 50% compared with its counterpart products, achieving a highly integrated and small size. It is exquisite, and the interior adopts the design of dual interface and dual card holder, so as to achieve a stable temperature control mechanism.



## IV. Operation instructions



### 1. On/off

First, connect the power supply line and the mold connection cable. After checking that all the connections are correct, open the back of the machine and press the  or  button on the front panel. At this time, the corresponding circuit power supply of the machine is turned on and will enter the heating working state. If there is an alarm, it will not enter the heating working state.

Note: If you don't use this machine for a long time, please turn off the back air switch!

### 2 Temperature setting

Press  /  to select the corresponding temperature control area that needs to set the temperature, and then rotate the knob  to set the temperature. After the setting is completed, please press the knob  to confirm, and finally complete the temperature setting.

### 3. Parameter setting

Press  or  to select the corresponding temperature control area where the parameters need to be set. Press and hold the knob  for 2 seconds, and then enter the parameter setting, clockwise or Rotate the knob  counterclockwise, enter the parameter selection, find the required parameter, press the knob  to enter this parameter, turn the knob to select the corresponding value, set it,

and then press the knob  to confirm the setting. Then press the  or  key on the front panel to exit the homepage.

#### **4. Restore factory settings**

Enter the P20 parameter, select this parameter as confirmation, and then press the knob  to restore all operations and numbers to the initial value.

#### **5. Replace the temperature control card**

First remove the panel fixing screw, then pull out the temperature grab card, then insert the new temperature control card and unscrew the screw.

## Control parameter table

- P1 mode setting automatic/manual
- P2 manual output 0%-100%
- P3 model J/K
- P4 alarm function alarm/disable
- P5 over-temperature range 0-50°C
- P6 Low temperature range 0-50°C
- P7 temperature correction -50°C-50°C
- P8 temperature unit°C/°F
- P9 signal output mode continuous/pulse
- P10 soft start time 0-99min
- P11 soft start output 0-100%
- P12 temperature compensation value ambient temperature (cannot be set)
- P13 P parameter initial value (can be set)
- P14 I parameter initial value (can be set)
- P15 D parameter initial value (can be set)
- P16 D2 parameter initial value (setable)
- P17 PID mode position/self-tuning/incremental (if you encounter unstable temperature control, you can turn on the self-tuning function)
- P18 Serial Number 001-128
- P19 Current Limit 5.0A-16.0A
- P20 Restore Factory Settings Cancel/Reset
- P21 communication settings cancellation/communication (touch screen version use)
- P22 Language Settings Chinese/EN
- P23 short-circuit detection 20-99 (if you encounter a boot prompt heater short-circuit alarm prompt, just turn this parameter up)
- P24 follow disable/0-128 (touch screen version use)

## Distribution of power lines

Red (3 pieces)—Fire Blue (1 piece)—zero line Yellow and green (1)—ground wire

## Common fault handling methods

1. After turning on the air switch, the temperature control card screen emits a continuous red alarm sound zero line and the fire line is reversed or lacks zero line.
2. After booting, the temperature control card makes a continuous alarm sound. The thermocouple is disconnected, and the heater is short-circuited or open. Please check the thermocouple and Heater or check whether the connection cable is loose.
3. After starting up, the temperature keeps rising, and the output current remains unchanged until the high-temperature alarm silicon control short circuit and control card appear It needs to be repaired.
4. The temperature control is unstable and the output current value fluctuates greatly and there is a lack of zero wire. Please check the power supply plug to troubleshoot.
5. If the POWER signal light of the temperature control card is not on, please check whether the power supply is turned on or whether there is a missing phase.
6. If the startup prompts the heating short circuit, please check whether the temperature sensor and heater are reversed. If there is no area connection, just adjust the P23 parameter.
7. If the temperature control is stable, you can turn on the self-trition function of P17.