

BI series temperature controller user manual



- Features:**
 3 digit dual display
 SV value set by key, one key for one digit
 Easy operation and long use life
 Fuzzy PID control output
 Economic for simple control

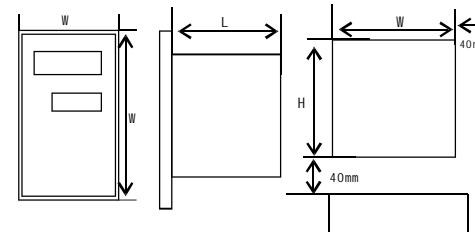
1.Ordering code

BI 7 - R - K ——— Input signal K:K type P:PT100
 ——— Output R:relay output Q:SSR output
 ——— Dimension 4:48H*48W 6:96H*48W
 7:72H*72W 9:96H*96W
 ——— BI series intelligent temperature controller

2.Technical parameters

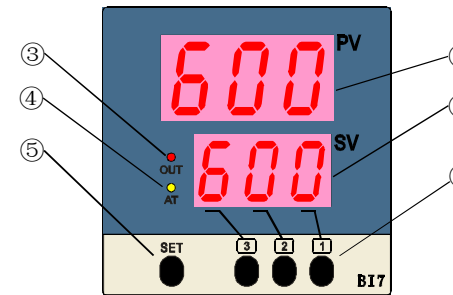
Input type	K:K Type input(range:0-600℃) P:PT100 Type input(range:0-600℃)
Display range	E:E Type input(range:0-400℃) J:J Type input(range:0-600℃) Cu:Cu50 Type input(range:0-150℃)
Deviation	0.8%F.S ±3Digit
Resolution	1℃
Control mode	PID control or ON/OFF control set by key
Control output	Relay : AC250V3A SSR: DC8-15V
Power	AC220V±20% 100—240VAC/DC (Customized)
Ambient temperature	0-50℃ 45-85%(No freezing)

3.Mounting dimensions (mm)



BI 4	48X48	45X45X64	45.6X45.6
BI 6	96X49	90X45X63	91X45.6
BI 7	72X72	65X65X63	66X66
BI 9	96X96	89X89X63	90X90

4.Panel instructions

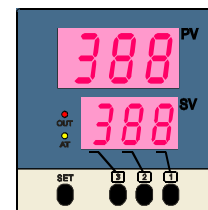


- ①: Measure value
- ②: Set value
- ③: OUT indicate lamp
- ④: AT indicate lamp
- ⑤: Set/Confirm key (SET)
- ⑥: ①②③ Increase key

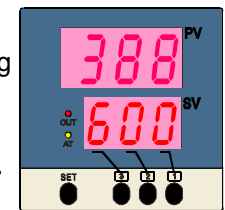
5.Operating instructions

A: SV value setting process

Temperature setting



Press one of ①②③ keys, one of SV digit flashing, each press the value keep increasing
 Stop pressing when you set the value as you want, after 4 flashings, the new SV set down.



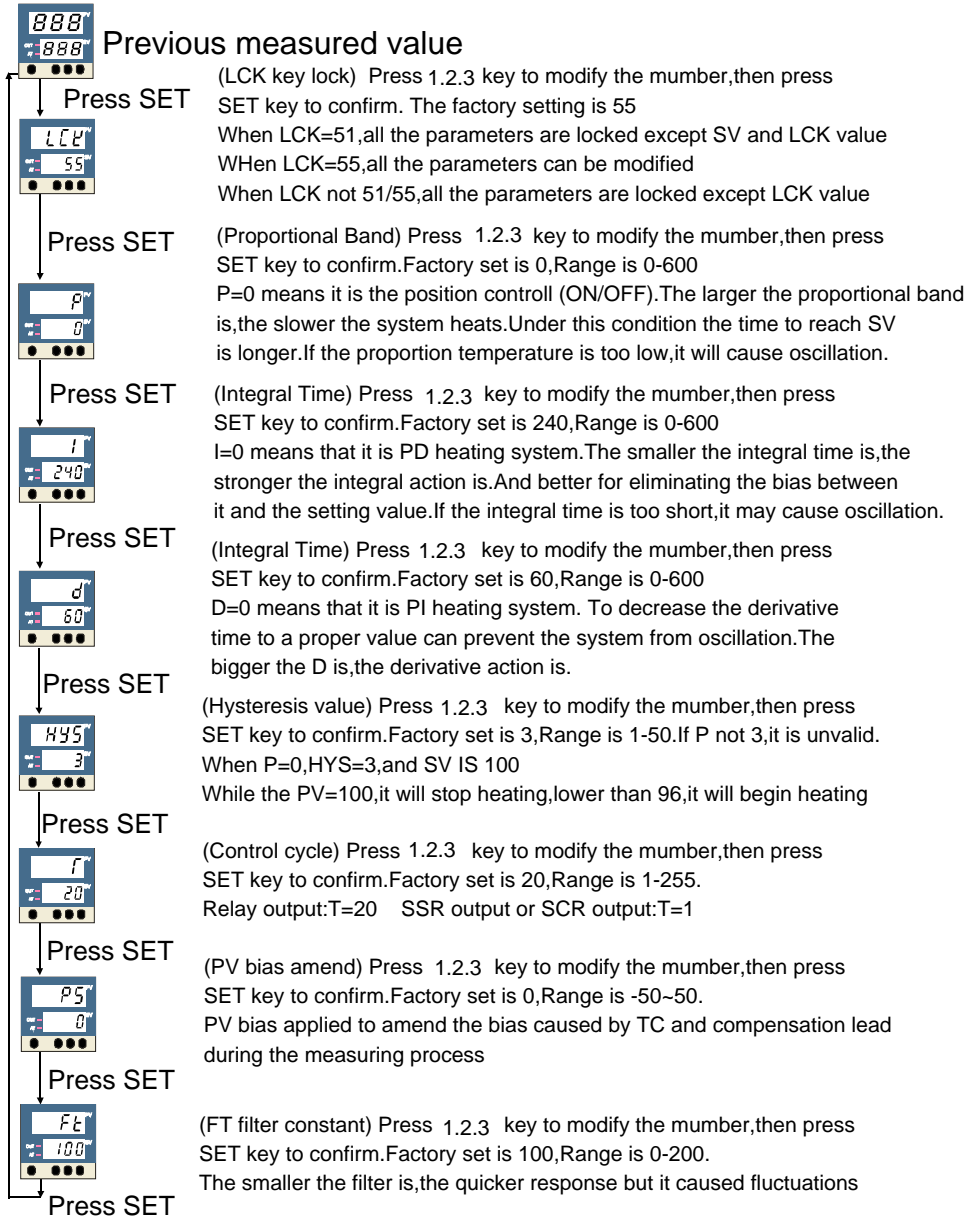
Remarks:If the control temperature is not good, please start AT autotuning function.(Press SET and No.3 key at the same time, AT lamp will be on)
 PV value should not more than 80% of SV value, otherwise autotuning run error.
 For example, when the SV is100, the PV should less than 80.

B:Autotuning function

Autotuning starts by press SET and No.3 key, AT lamp on. And finished AT lamp off. (All parameters can be modified only after autotuning finished.)

C:Parameters setting

In the measuring estate, Press and hold SET key for 5 seconds, enter parameter setting area.

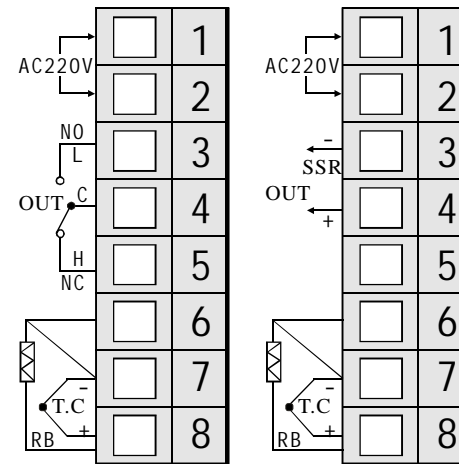


6. Connection drawing

Connection Caution

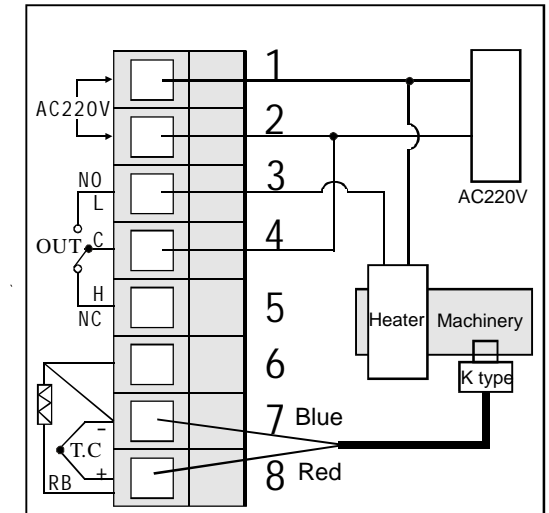
1. When input TC, should use the corresponding compensation lead.
2. Input signal wire should be far away from other noise source to avoid interference.
3. Attention to Min/Max of the input T/C, Wrong connect probably cause burning out.

Terminal connection (Note: Please refer to the product connection drawing)



Remarks:

1. Relay capacity: AC 3A/250V
2. SSR DC8-15V, Max 30mA



7. Caution

1. Installed in the following environments:

- A: Atmospheric pressure: 86-106Kpa, Ambient temperature: 0-50 degree, Humidity: 35%-85% (no freeze)
- B: Dramatic changes in the ambient temperature may cause condensation, corrosive, flammable gases, the main structure of direct vibration or shock water, oil, chemicals, smoke or steam excessive dust pollution, salt or metal powders, air conditioning blowing straight direct sun, thermal radiation accumulation place
- C: Instrument should be stored in dry and ventilated, non-corrosive gas application with the case of complete package

2. Warranty

- A: Meter sold within one year from the date of billing, failure due to manufacturing quality full warranty by the factory responsible for, damage caused by improper use of the repair costs from the factory charge a fee

3. About Error

- A: If the PV display "Err" or "HHH", it means it is out of range or TC/RTD does not work
- B: If the parameters can not be changed, please check if the LCK value is 55.
- C: The PV value display abnormal fluctuations, please increase the parameter FT value.