

# XMT\*308 Series intelligence digital temperature control instrument

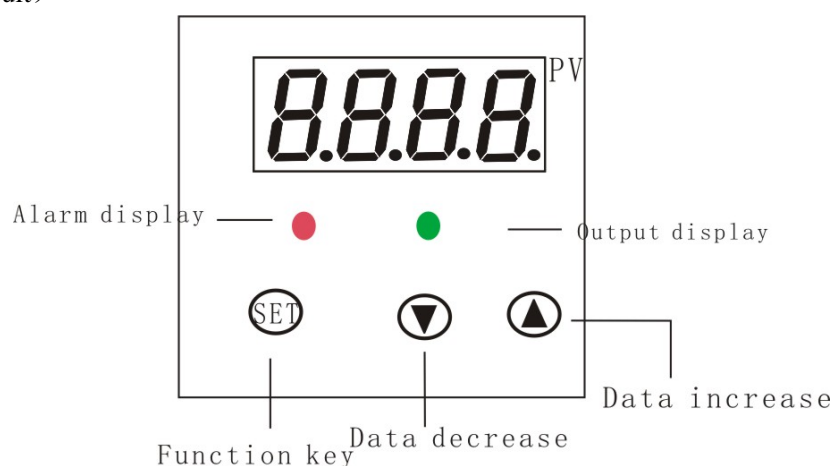
## Insruction Manual

### I、Main Technical Indexs

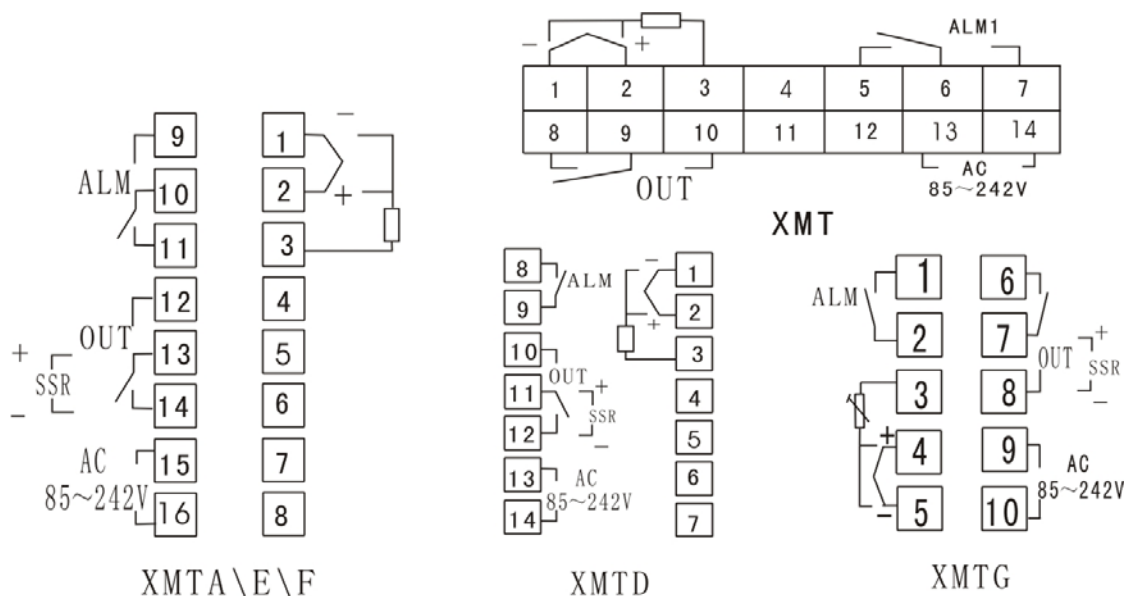
- 1、 Measurement deviation:  $\pm 0.5F \cdot S \pm 1$  ,Cold end compensating deviation  $\pm 1^{\circ}\text{C}$
- 2、 Input type(range): CU50(-50~150.0)、PT100 (-199.9~600.0)、K (-30~1300)、E (-30~700)、J (-30~900)、T (199~400)
- 3、 Relay output contact capacity: 7A(resistance load)
- 4、 Dring solid relay signal output: driving electric current > 15mA voltage >12V, period is 2S
- 5、 Driving controllable pulse output: >100mA, instantaneous big is 1A
- 6、 Power: 85V~242V, 50HZ
- 7、 Work environment: temperature 0~50.0 $^{\circ}\text{C}$ , relative humidity  $\leq 85\% \text{RH}$ , without corrode and strong electric radiation.

### II、Instrument panel and connection scheme

Instrument panel (consult)



connection scheme(consult)



### III、Technical Indexes

Series	Attention	Name	Setting range	Remark	Ex-Factory	
First menu	0	—	Appointed data	Determined by dIL dIH	Press▲or ▼3 second and set the temperature point you need	—
	1	AL	High-limit Alarm	Determined by dIL dIH	—	Random
	2	SC	Measurement deviation	-20~20	Measuring value can be modified through increasing or decreasing this data.	0
	3	P	Proportion area	0~99.9~200	When the P ↑ ,the proportion and differential function ↑ ; If the P ↓ ,the proportion and differential function ↓ When P=0, the meter is ON/OFF	15.0
	4	I	Calculus time	0~999	It's used to adjust static difference. To increse it ,the static difference will bereduced,but when it is too high,the static difference will drift instability.	240
	5	d	Differential time	0~200	It's used to adjust the overshoot in the First time,to increase it can reduce the overshoot.	30
	6	t	Control period	2~ 120S	Control relay output period	—
	7	HY	Main control by drop in level	0.1~50.0	It has only control at 2 postion	1.0
	Menu	8	At	Parameter setting itself	on/off	off—shut itself function ; on—open itself function Select 'on' only can adjust for one time , and then turn back to 'off'.
9		Loc	Electronics lock	0~50	Loc=0 all the parameter can be revised Loc=1 only the SP can be revised	0
Second Menu	9	Loc	Electronics lock	0~50	Loc=0 all the parameter can be revised Loc=1 only the SP can be revised	0
	10	Sn	Input specification	—	CU50、PT100、K、E、J、T;	—
	11	dP	point	0~1	dP =0 display no point, dP =1 display point	0
	12	dIL	Set upper limit	0~dIL	—	—
	13	dIH	Set lower limit	dIL~span	—	—

#### IV、Operation

- 1、 Electrify after take into the power,sensor ang control circuit according to the connection scheme,and then the

instrument start testing itself for 1 second.

2、 Set the set value

Press ▲ or ▼ key 3 second upper row display tested value, underside row SV display the set value. press ▲ or ▼ key to modify, for long time to press the key can accelerate. After modification, press SET to save and exit. if you don't do this operation, it can be done itself.

3、 Interior Technical Indexes setting (Technical Indexes refer to the sheet)

(1) The first menu

Press SET key 3 second enter into the first menu, the upper window display Indexe symbol, underside window display Index value. Press ▲ or ▼ key to modify, for long time to press the key can accelerate. After modification, press SET to save and enter into next Indexs setting. if you don't do this operation, it can be done itself.

(2) The second menu

Press SET and ▲ key to enter into the second menu, and the setting method is the same as the first menu.

4. Set by itself

First, set the setting value, and enter the menu, set *Rel* to *ON*, and the light turn on, the meter enter the condition setting itself, this time the meter adopt on/off control mode, after three times surge (first time, measure value and *Rel0* display by turns; second time, measure value and *Rel1* display by turns; second time, measure value and *Rel2* display by turns), the meter confirm new *P, I, d* and save it, the meter reset and (display *8888*, *CL* by turns) enter control condition.

V、 Model Sense

XMT□—3 □ 8 □  
1 2 3 4 5

1:Size

**Empty:** 160×80×85 Installation hole 152×76 **A:** 96×96×80 Installation hole 92×92  
**D:** 72×72×90 Installation hole 68×68 **E:** 48×96×75 Installation hole 44×92  
**F:** 96×48×75 Installation hole 92×44 **G:** 48×48×100 Installation hole 44×44  
**S:** 80×160×85 Installation hole 76×152 **C:** 76×34×72 Installation hole 72×24

**2.operation display method:** '6' 3-key gentel push-switch setting, double row digital display, have PID adjustment

3: an additional alarm

Blank or '0': indicates no alarm; '1' upper limit touch alarm; '3' upper and lower limit touch alarm

**4: Input signal classification:** '8' input signal can interchange free

**5:suffix** empty: relay output **G:** solid state relay output

**A:** mono-phase over zero trigger output

VI、 Fault Analysis and Clearance

XMT\*308 adopt advanced production process, and have the strict test before leaving factory, it improve the reliability of the meter. The usual fault caused by the wrong operation or parameter setting. If you find the fault couldn't be cope with, please record it, and contact with the agent or us. Sheet 6-1 is the usual fault of XMT\*308 in the daily application:

Sheet6-1 Common fault disposal

Fault symptom	Analysis of causes	Disposal measurement
Abnormal power	1、 poor contact of power cord 2、 power switch without lose	Check the power
Signal display do not correlate	1、 Sensor model mismatch	1、 check sensor model and meter interior

with the facts. (display 'HH' or 'LL')	2、 wrong signal connect ion	input parameter 2、 check signal wire
Abnormal control output	wrong connection of output wire	Check output connection

★Remark: Our company will improve product technology, design and specification, it is confirm to the object.

**Attached 1: Statement of meter's parameter attention letter and English letter**

A	B	C	D	E	F	G	H	I	J	K	L	M
<i>A</i>	<i>b</i>	<i>C</i>	<i>d</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>I</i>	<i>J</i>	<i>K</i>	<i>L</i>	<i>M</i>
N	O	P	Q	R	S	T	U	Y				
<i>n</i>	<i>o</i>	<i>P</i>	<i>q</i>	<i>r</i>	<i>S</i>	<i>t</i>	<i>u</i>	<i>y</i>				