

XMT*JK two-way series temperature controller

Instruction manual

□、Summary

XMT*JK series two-way temperature controller can connect two sensors synchronously and conveniently, diminish the instrument's volume. It has a separate auto-tune mode and PID parameter function with more precision and more reliability in whole machine control.

□、Primary technical standard:

1、Input signal: CU50 (-50.0 ~ 150.0°C), Pt100 (-19.9 ~ 600.0°C), K (0 ~ 1300°C),

E (0 ~ 700.0°C), J (0 ~ 900.0°C)

2、Accuracy: $\pm 0.5\%F.S \pm \text{byte}$

3、Output method: relay AC220V 3A(resistance load)

4、control mode: difference control-on/off and PID control

5、Input power: AC85~242V 50/60Hz

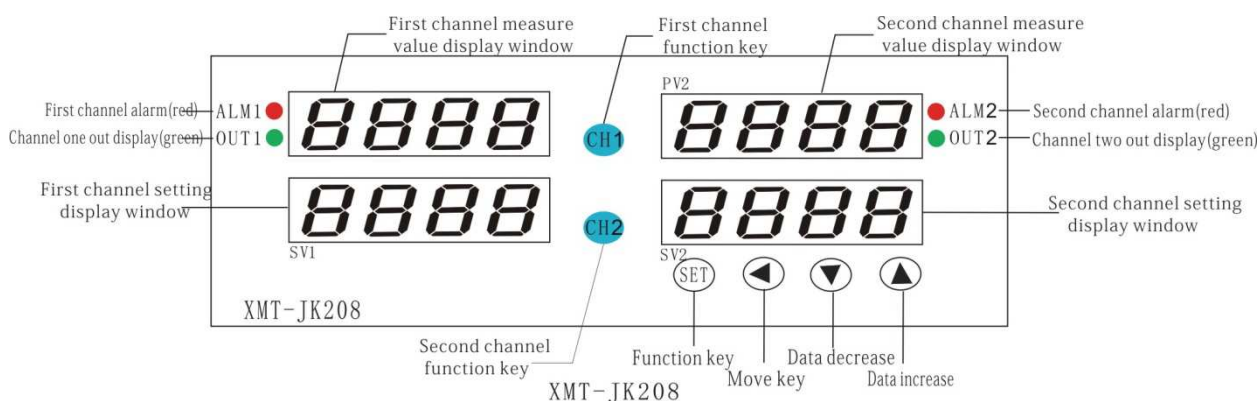
6、Environment Temperature: 0 to 50°C, Humidity: $\leq 85\%RH$

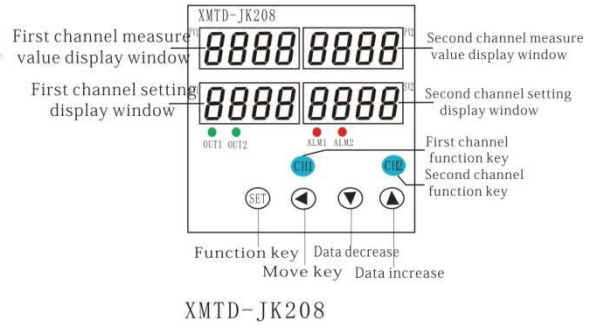
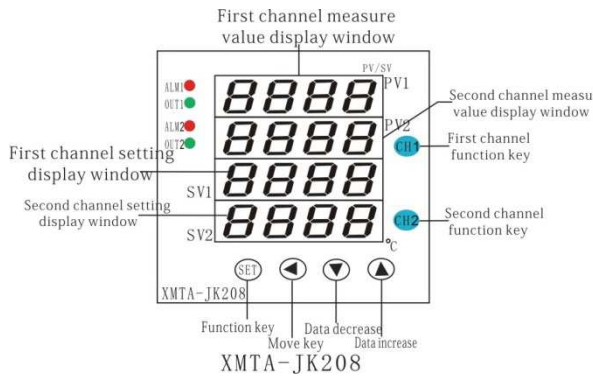
7、Face Size: 160×80×110 mm Hole Size : 152×76 mm

96×96×110 mm Hole Size : 92×92 mm

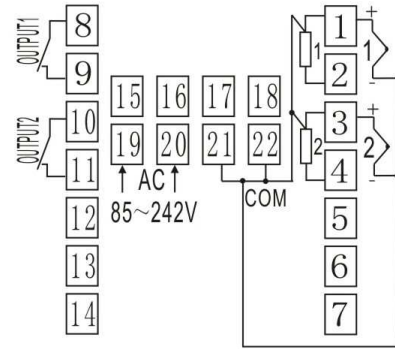
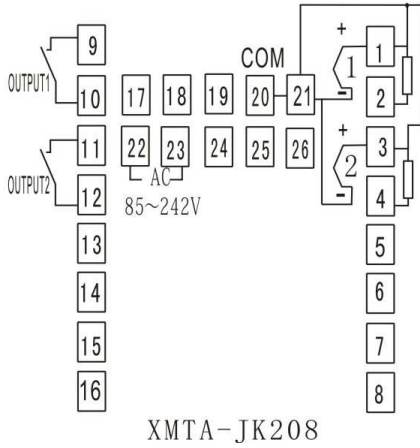
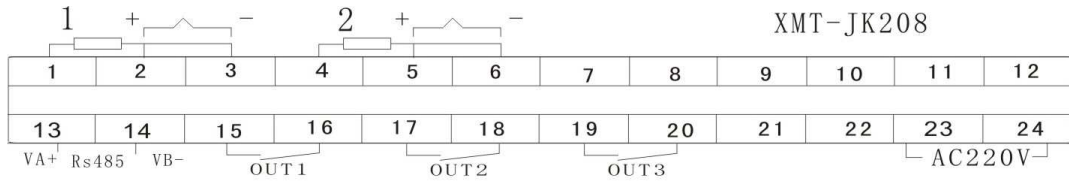
72×72×110 mm Hole Size : 68×68 mm

□、Panel board instruction(consult)





□、connection scheme(consult)



□、Code setting mode

Series	Code	Name	Setting range	Manual	Remarks	
First	0	LOC K	Code lock	0 ~ 50	18-all the parameter can be revised,	18
	1	Sn	Input type	—	CU50, Pt100, K, E, J	K
	2	DT	The preset temperature value	±180.0	When the temperature difference control effectively	
	3	CA L	Temperature limit alarm	±180.0	When the temperature difference control effectively	
	4	t	Output cycle	0 ~ 120 S	relay control action cycle setting	10 S
	5	dp	display accuracy	0~1	0. no decimal; 1.have decimal	0
Menu	6	P-SH	Upper limit	P-SL ~ full range	this parameter resreict enactment value's upper	according request
	7	P-SL	lower limit	Range jumping-off ~ P-SH	this parameter resreict enactment value's low	according request
	8	OPA	control method	0 ~ 1	0 : Dual control instrument ; 1 : Temperature control	

	9	DIS	The difference between the display mode	0 ~ 1	0 : normal 1 : PV2 Display the temperature SV2 Display setting temperature	
	10	Add	address	1 ~ 64 (1 ~ 9999 分)	Meter's NO (in minitype as print times)	1

	11	bt	baud rate	0 ~ 3	0 : 1200 ; 1 : 2400 ; 3 : 4800 ; 4 : 9600	9600
first channel parameters						
Second	10	SP1	The first channel control setpoint	Range by P-SL, P-SH decide	Control value setting	default
	11	LA1	Alarm value setting	Range by P-SL, P-SH decide	Output mode decide by 'AL-P'	default
Menu	12	SC1	Sensor error amendment	±20.0	The sensor have deviation can use item to revisal	0.0
	13	P1	Proportion modulus	0 ~ 100	When P↑, proportion function↓, clash↓, but too big will add the heating time When P=0, the instrument is ON/OFF control.	15.0
	14	I1	Calculus time	0 ~ 3000	Set integral time so as to unchain residual deflection caused by proportion control. To increase it, the static difference will be reduced, but when it is too high ,thestatic difference will drift instability.	240
	15	D1	differential time	0 ~ 200S	Set differential time to avoid fluctuation of output so as to improve the steady of control.	30
	16	Hy1	Main control by drop in level	0.1 ~ 50.0	It only controls at ON/OFF	1.0
	17	At1	Setting itself	0~1	0 : close setting itself function 1 : open setting itself function	0
Second channel parameters						
		SP2	The Second channel control setpoint	Range by P-SL, P-SH decide	Control value setting	default
		LA2	Alarm value setting	Range by P-SL, P-SH decide	Output mode decide by 'AL-P'	default
		SC2	Sensor error amendment	±20.0	The sensor have deviation can use item to revisal	0.0
		P2	Proportion modulus	0 ~ 100	When P↑, proportion function↓, clash↓, but too big will add the heating time When P=0, the instrument is ON/OFF control.	15.0

		12	Calculus time	0 ~ 3000	Set integral time so as to unchain residual deflection caused by proportion control. To increase it, the static difference will be reduced, but when it is too high ,thestatic difference will drift instability.	240
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	D2	differential time	0 ~ 200S	Set differential time to avoid fluctuation of output so as to improve the steady of control.	30
	Hy2	Main control by drop in level	0.1 ~ 50.0	It only controls at ON/OFF	1.0
	At2	Setting itself	0~1	0 : close setting itself function 1 : open setting itself function	0

□、 Technical indexes

1. Accurately connect wires according as connect indicator, power on.
2. Press 'SET key' for 3 seconds, enter into first menu. then the channel measure value window display parameter and the channel setting window display parameter value, you can adjust these parameters value by pressing '▲', '▼', '◀', and save the setting by press 'function key', every parameter should be saved after setting, then enter next parameter set.
3. You can press 'CH1', 'CH2' for 3 seconds to enter into second menu. After finished one parameter set, press 'SET' to save it, then enter into next parameter set.

□、 Setting itself

The meter use in the first time or the surroundings have changer, finding it control not good, in this time you need use the setting itself. For example: The first set the AT=1, A-M light flickered, the meter enter into setting itself, press the SET key enter into parameter setting. Set the Hy is 0.5 ~ 1°C, if the output is relay set the t=2S, the meter have three times vibrate, automatic preserved P, I, D parameter and the A-M light off, the setting itself finish.

□、 Fault Analysis and Clearance

XMT*JK208 series 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 7-1 is the usual fault of XMT*JK208 series in the daily application :

Sheet8-1 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 with the facts. (display 'HH' or	1、 Sensor model mismatch	1、 check sensor model and meter interior input parameter

'LL')	2、 wrong signal connect ion	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>				