Product show

CD701 Univeral Intelligent Temperature Controller

Brief Instroduction

CD701 series is latest generation univeral intelligent temperature controller,it is more reliable and convenient for high exactness control use,its main virtue is:wide range sensor singal input.wide range power supply,high excatness by PID ,high ability to prevent disturb ,etc.

The Main Technical Index

Input

varies of thermocouples(TC),thermoresistance(RTD)and standard current voltage signal(see the input type table)

Precision

Measuring precision: ±(0.5%FS+1 word)

Cold juction compesation error: ±2oC(within0-50oC you can revise the sofeware)

Resolving power:14Bit

Sampling term:0.5Sec

Display

process value(PV),setting value(SV): -1999~9999 output,alarm and self setting state show:LED

Control output

1)current output:DC0~10mA,4-20mA(RL < 500Ω)

2)voltage output:DC0~5V,DC1~5V(RL < 10KΩ)

3)relay output:contact capcity 250VAC3A(resistive load)

4)voltage impulse output:0~12(used in solid state relay SRS)

5)silicon control SCR output:over zero spark or phase-shifting spark(resistive load)

6)alarm function output:two groups output(12 modes) output contact capacity:250VAC3A(resistive load)

Setting range

setting value(SV):same range(PV)

proportion(P):0~the whole range(when set "0",it controled by "ON/OFF")

integral time(|):0~3600Sec(when set "0",no integral action)

differential calculus time (D) : 0 ~ 3600Sec (When set "0",no differential calculus action)

Proportion term(T):1 ~100Sec

position mode control output hysteresis width:1 ~100oC(or other PV unit)

Others

1)Insulation resistance: > 50MΩ(500VDC)

2)Insulation strength:1500VAC/minute

3)Power consumption: < 10VA

4)Usage enviroment:0~50oC,30-85% RH,non-corrosive gas forum.

5)Weight:about 0.5kg(CD901)

Dimension(Appearance Size and Hole Size)Table

Type	appearanc size(mm)			hole size(mm)	
	height	width	depth	height	width
CD101	48	48	110	45	45
CD401 (CH402)	96	48	110	92	45
CD501	48	96	110	45	92
CD701	72	72	110	68	68
CD901	96	96	110	92	92

Input Range Table

	input	measuring range	code	measuring range	code	measuring range	code
thermo couple	K	0~200oC	K01	0~400oC	K02	0~600oC	K03
		0~800oC	K04	0~1000oC	K05	0~1200oC	K06
		0~1372oC	K07	0~100oC	K13	0~300oC	K14
	J	0~200oC	J01	0~400oC	J02	0~600oC	J03
		0~800oC	J04	0~1000oC	J05	0~1200oC	J06
	R#1	0~1600oC	R01	0~1769oC	R02	0~1350oC	R04
	S#1	0~1600oC	S01	0~1769oC	S02		
	B#1	400~1800oC	B01	0~1769oC	B02		
	E	0~800oC	E01	0~1000oC	E02		
	N	0~1200oC	N01	0~1300oC	N02		
	T#2		T01	-199.9~100.0oC	T02	-100.0~200oC	T03
		0~350oC	T04				
thermore si stance	Pt100		D01	-199.9~200.0oC	D02	-100~50.0oC	D03
		-100~100oC	D04	-100~200.0oC	D05	0.0~50.0oC	D06
		0.0~100oC	D07	0.0~200.0oC	D08	0.0~300.0oC	D09
		0.0~500oC	D10				
	JPt100	-199.9~649.0oC	P01	-199.9~200.0oC	P02	-100~50.0oC	P03
		-100~100oC	P04	-100~200.0oC	P05	0.0~50.0oC	P06
		0.0~100oC	P07	0.0~200.0oC	P08	0.0~300.0oC	P09
		0.0~500oC	P10				
standard signal	0~5VDC	0.0~100oC	401				
	1~5VDC	0.0~100oC	601				
	0~20mA#3	0.0~100oC	701				
	4~20mA#3	0.0~100oC	801				

Operating of Parameter Setting Mode

After the meter is executed normally enter into parameter setting mode to find out parameter of data lock"LCK" and make its code set to "1000" with the final confirmation by pressing the "SET"key.Then put the "SET"key and key to be pressed simultaneously for about 3 seconds to make"Cod"shown on the PV display ,When God equals 0000,press"SET"key to make the following parameter achieved and displayed in turn.

Parameter detail see the below table

	setting value				instructon	the scope of range
dispaly symbol SL1	0	0	0	0	K	0~1372oC
	0	0	0	1	J	0~1200oC
	0	1	0	1	T	-200~400oC/-199.9~400oC
	0	0	1	1	E	0~800oC
	0	1	0	0	N	0~1300oC
	0	1	1	1	R	0~1769oC
	1	0	0	0	S	0~1769oC
	1	0	0	1	B	0~1820oC
	1	1	0	0	PT100	-200~650oC/-199.9~650oC
	1	1	0	1	CU50	-50~150oC/-50~150oC
	1	1	1	0	0-5V	-1999~9999
	1	1	1	1	1-5V	-1999~9999
	1	1	1	0	0-20mA	-1999~9999
	1	1	1	1	4-20mA	-1999~9999
SL2	0	0	0	0		
SL3	0	0	0	0		
SL4		0	0	0	not set the first group alarm function	the first alarm(AL1) type selection
		0	0	0	the maximum deviationg alarm	
		0	1	1	up/down deviation alarm	
		0	1	0	process value ceiling alarm	
		1	0	1	the minimum deviation alarm	
		1	1	1	with alarm(inarea alarm)	
		1	1	0	process value lower limit alarm	
	0			1	without stand-by alarm function	the first alarm stand -by function selection
	1				with stand-by alarm function	
SL5	0	0	0	0	setting of the second group alarm function	same as the first alarm
SL6				0	positive action control(refrigeartion)	seleting of main control positive reverce action
				1	reverce action(heat)	
		0			main control time proportion output	selecting of main control output type
		1			main control continuum output (4-20mA)	
SL7				0	stimulate alarm	stimulate alarm/no stimulate main
				1	no stimulate alarm	side of the first alarm
			0		stimulate alarm	stimulate alarm/no stimulate alarm
			1		no stimulate alarm	side of the second alarm
SL8	0	0	0	0		
SL9	0	0	0	0		
SL10	0	0	0	0		
SL11	0	0	0	0		