

PID TEMPERATURE CONTROLLER



```
Code1 = Left(InputCodeNO, 3)
Code2 = Mid(InputCodeNO, 3, 1)
Code3 = Mid(InputCodeNO, 4, 1)
Code4 = Mid(InputCodeNO, 5, 5)
Code5 = Mid(InputCodeNO, 10, 1)
```

```
If Val(Code4) >= xlsApp.Range("P17").Value And Val(Code4) < 99999 Then
    JumpNO = xlsApp.Range("R17")
```

```
If Code4 Mod JumpNO = 0 Then
    Key4 = True
Else
    Key4 = False
End If
```

INTRODUCTION

- PID control function
- Autotuning
- Relay output or voltage output (for SSR drive) select by DIP switch
- Use for thermocouple and RTD sensor input
- Heating or cooling function
- Key protection provide
- Sensor disconnection and temperature out of range detection

SPECIFICATIONS

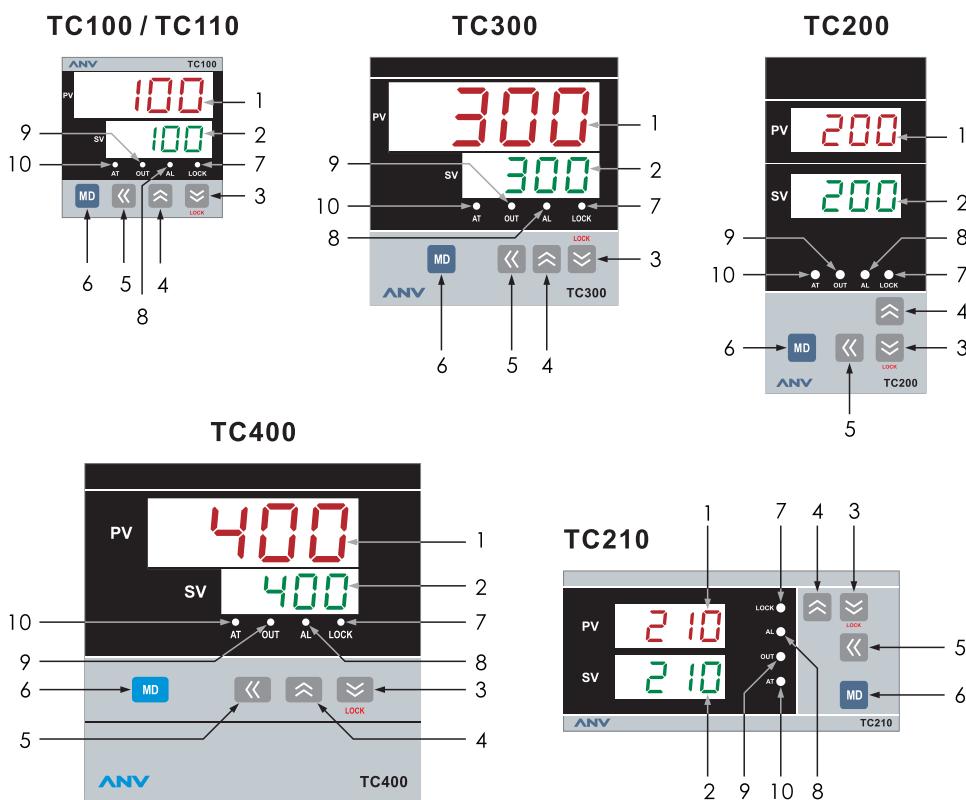
Model	TC100 TC110-10 TC110-11 TC110-20 TC110-21	TC200	TC210	TC300	TC400
Dimension(mm)	48H×48W×93D	96H×48W×93D	48H×96W×93D	72H×72W×93D	96H×96W×93D
Rated Voltage	100~240VAC 50/60Hz or 24VDC				
Voltage Range	Rated 90~110%				
Accuracy	0.5% of F.S.				
Input	K, J, Pt100				
Output	Relay : 6A 250VAC (TC100, TC110 NO 5A/NC 2A 250VAC) resistive load Voltage : DC24V (for SSR drive)				
Alarm Mode	See ALARM MODE table				
Electrical Life	100000 times or more (Under the rated load)				
Control Algorithms	PID, ON/OFF				
Isolated Resistance	100MΩ or more between input terminals and case (ground) at DC 500V				
Dielectric Strength	1000V AC for 1 minute between input terminals and case (ground) 1500V AC for 1 minute between output terminals and case (ground)				
Power Consumption	Approx.3VA	Approx.4VA	Approx.4VA	Approx.3VA	Approx.4VA
Ambient Temperature	-10~+50℃				
Ambient Humidity	35~85%RH				
Weight	Approx.130g	Approx.200g	Approx.200g	Approx.200g	Approx.260g

ORDER INFORMATION

TYPE	OUTPUT	ALARM	INPUT TYPE	POWER
TC300	1	1	1	A
TC100	0	0	See Input Type table	A
TC110	1	1		D
TC200	2			
TC210				
TC300				
TC400				

PARTS DESCRIPTION

SYMBOL	NAME		FUNCTION	SYMBOL	NAME		FUNCTION
PV	1	Present Value	Displays PV	MD	6	Mode Key / Save and Exit Key	Use for parameter calling up and set value registration
SV	2	Setting Value	Displays SV	LOCK	7	Lock Indicator	Lights when lock is activated
⇓	3	Down Key / Lock Key	Decrease numerals / Press more then 3 seconds to lock key or unlock key	AL	8	Alarm Indicator	Lights when Auto tuning is activated
⇑	4	UP Key	Increase numerals	OUT	9	Output Indicator	Lights when alarm is activated
⇐	5	Shift Key	Shift digits when settings are changed	AT	10	Auto tuning Indicator	Lights when output is activated



ALARM MODE

CODE	FUNCTION
1	Deviation high alarm
2	Deviation low alarm
3	Deviation high and low alarm
4	Deviation high alarm (The first no-alarm)
5	Deviation low alarm (The first no-alarm)
6	Deviation high and low alarm (The first no-alarm)

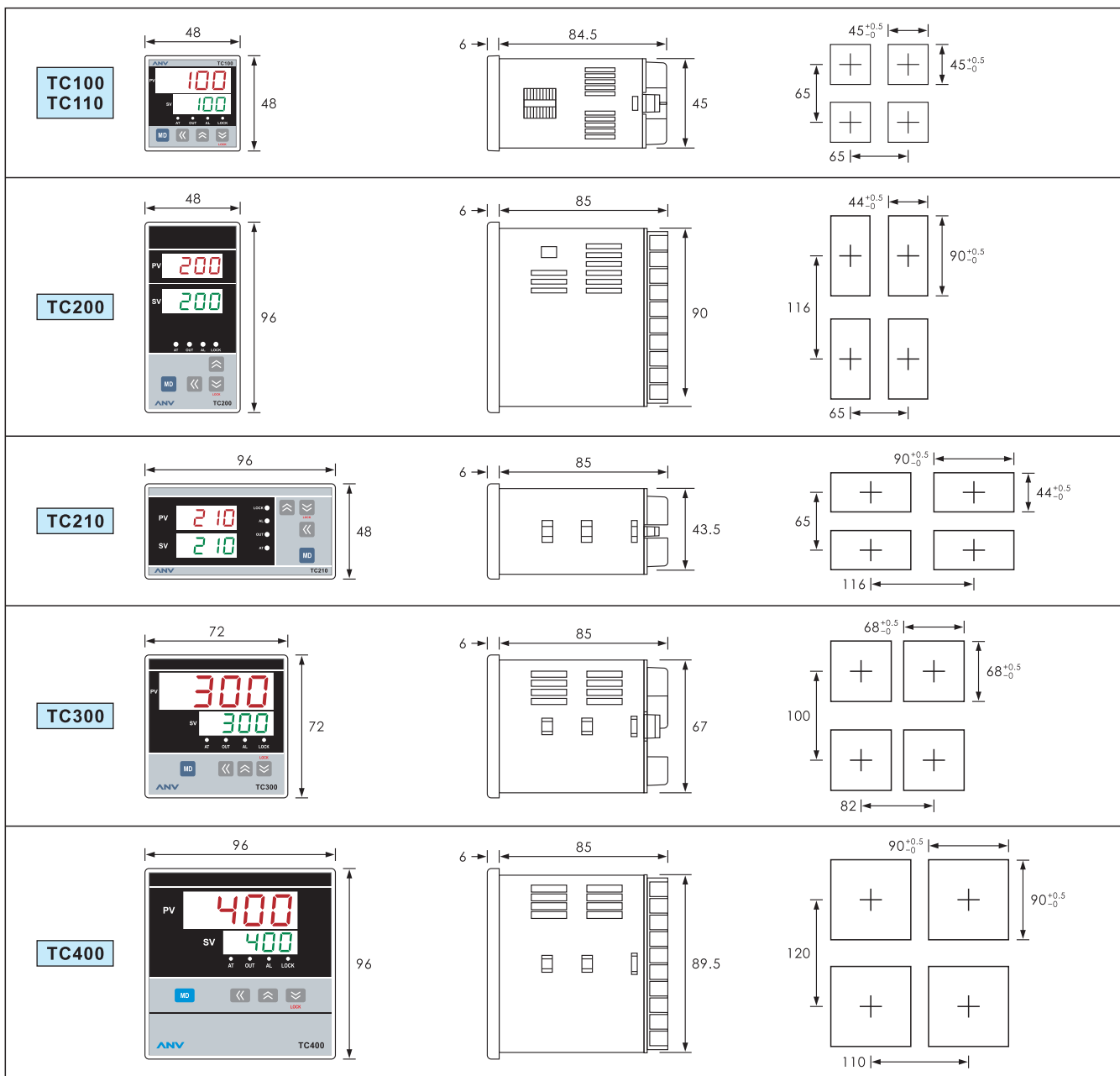
DIP SWITCH FUNCTION

DIP SWITCH DESCRIPTION			
	ON ↑	OFF ↓	
DIP Switch Number	1	2	3
K, J Type Thermocouple	ON	OFF	---
Pt100 Type RTD	OFF	ON	---
SSR Output	---	---	ON
Relay Output	---	---	OFF

INPUT TYPE TABLE

INPUT TYPE	CODE	RANGE (°C)	RANGE (°F)
K	℄1	1	0.0 ~ 400.0°C
	℄2	2	0 ~ 1200°C
J	℄1	3	0.0 ~ 400.0°C
	℄2	4	0 ~ 1200°C
Pt100	P℄1	5	-50.0 ~ 400.0°C
	P℄2	6	-50 ~ 600°C

DIMENSIONS



CONNECTION DIAGRAMS

