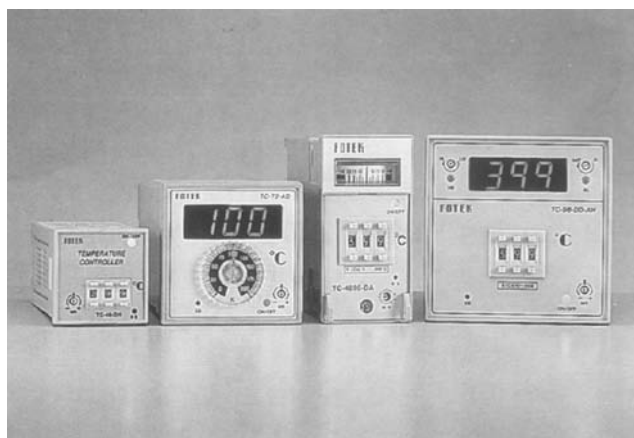


- * High Reliability by S.M.T. & TQC.
- * With Cold Junction Compensation,
Suited to Operated at -20 C ~ +60 C
- * All type with Sensor Break Alarm LED.
- * With P+D Control to Control Temperature Easily.
- * High Accuracy of Displaying & Setting
Less than 0.5% of F.S.
- * With Stand-by/Over-heat Alarm.(Optioned).
- * With Heater Break Alarm.(Optioned).
- * 表面貼焊技術及全面品管，提供最可靠性產品
- * 具冷接點補償，適用於周圍溫度 -20 C ~ +60 C
- * 全機種具有測溫體斷線警報
- * P+D 控制易於控溫
- * 高精度的顯示及設定精度，低於全刻度 0.5%
- * 具有待機／過熱警報功能（選擇機種）
- * 具有加熱器斷線警報功能（選擇機種）



■ Guiding of Model

Ex. TC - 4896 DA - PT - R 3 - F - S - A

① ② ③④ ⑤ ⑥⑦ ⑧ ⑨ ⑩

① Product 產品代號

TC = Temperature Controller

② Outline 外型

48 = 48(W) X 48(H) mm X mm
4896 = 48(W) X 96(H) mm X mm
72 = 72(W) X 72(H) mm X mm
96 = 96(W) X 96(H) mm X mm

③ Method of Setting 設定方式

D = Digital Swith
A = Trimmer

④ Method of Display 顯示方式

A = Analog Deviation Meter
D = Digital LED Display
N = Without Display

⑤ Type of Sensor 感溫線種類

PT = RTD PT-100 Ω
J = J Type Thermocouple
Non = K Type Thermocouple

⑥ Method of Output 輸出方式

R = Relay (5A/250VAC)
V = Voltage (20mA/12V)
L = Linear (4~20mA)

⑦ Range of Setting 設定範圍

Digital Switch

0 = -99 ~ + 99
1 = 0 ~ +199
3 = 0 ~ +399
5 = 0 ~ +599
9 = 0 ~ +999
11 = 0 ~ +1199

Trimmer

05 = -50 ~ +50
1 = 0 ~ +100
2 = 0 ~ +200
4 = 0 ~ +400
6 = 0 ~ +600
12 = 0 ~ +1200

⑧ Unit of Degree 刻度單位

F = F
non = C

⑨ Method of Control 控制方式

S = ON/OFF
non = P+D ON/OFF

⑩ Alarm 警報

A = With Stand-by / Over Heat Alarm
AH = With Stand-by / Over Heat Alarm
& Heater Break Alarm
Non = Without Alarm

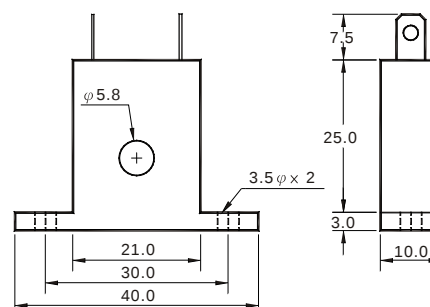
General Data & Attachment

TC
Series

General Data 共同規格	Sensor Type 感溫線	K < CA > , J < IC > or PT-100 Ω
	Output Method 輸出方式	Relay < 5A / 250VAC > , Voltage < 20mA / 12V > , Linear < 4~20mA >
	Control Method 控制方式	P+D ON/OFF , ON/OFF or Proportion
	Proportion Band 比例帶	Appro 2.5% of F.S.
	Cycle Time 動作週期	2 Sec or 20 Sec < ON+OFF >
	Manual Reset 偏移修正	Trimmer, Range $\pm 10^{\circ}$
	Unit of Degree 單位	$^{\circ}\text{C}$ or $^{\circ}\text{F}$
AL Alarm AI警報	Setting Method 設定方式	Trimmer (AL)
	Setting Range 設定範圍	$0 \sim +50^{\circ}$, $0 \sim -50^{\circ}$ or $-50^{\circ} \sim +50^{\circ}$ of Setting Value
	Output Method 輸出方式	Relay , 0.5A/250VAC
HB Alarm Hb警報	Setting Method 設定方式	Trimmer (HB)
	Setting Range 設定範圍	0.5A~25A ; 1.0A~50A
	Output Method 輸出方式	Relay , 0.5A/250VAC
Electrical Data 電氣規格	Power Supply 工作電壓	110 / 220 VAC $\pm 20\%$ 50 / 60Hz
	Current Consumption 耗電流	2.5VA max.
	Insulation Resistance 絕緣阻抗	Over 50M Ω / 500 VDC Between Power And Another Terminal
	Dielectrical Strength 耐壓強度	Over 2.5KV / 1min Between Power And Another Terminal
Mechanical Data 機械規格	Operating Temp./Hum 工作環境	$-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$; 35%~85% RH
	Vibration Resistance 耐振動	10~55Hz / 1.5mm , 2Hrs in X.Y.Z Direction
	Panel Thickness 面板厚度	1.0~8.0mm

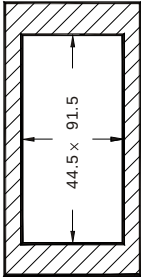
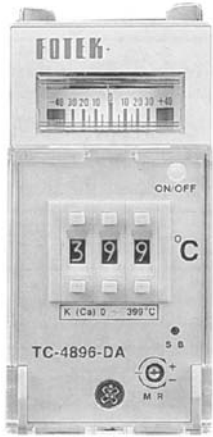
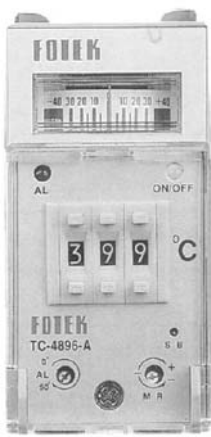
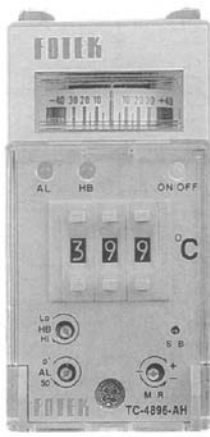
Attachment/附件

CT provided with Heater Break Alarm type only.
只有加熱器斷線警報功能機種附 CT



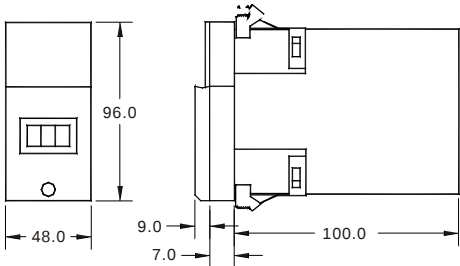
TC-4896
Series

DIN 48X96
Temperature Controller

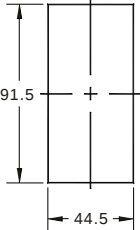
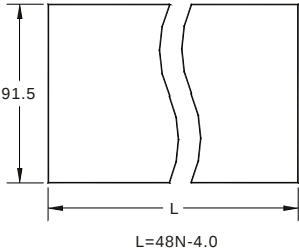
	Model	TC-4896-DA-□-□	TC-4896-DA-□-□-A	TC-4896-DA-□-□-AH
	DIN48 X 96 			
	Alarm 警報	Non	AL Alarm	AL+HB
Display 顯示方式	Method 方式	Analog Deviation Meter		
	Tolerance 誤差	1.0% of F.S.		
	Range 範圍	± 40°		
Setting 設定方式	Method 方式	Digital Switch < 3 Digits >		
	Tolerance 誤差	0.5% of Setting Range		
	Range 範圍	-99~+99 , 0~199 , 0~399 , 0~599 , 0~999		

Dimension & Fixed Hole外型及固定孔尺寸

Outline



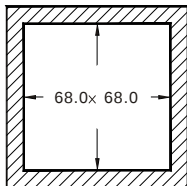
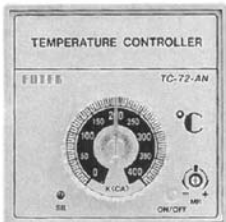
Fixed Hole (Thickness 1~8mm)
Single Cutout Multi Juxtaposed Cutout
單個開孔 多個並排開孔

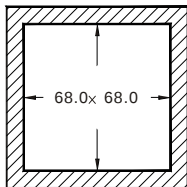
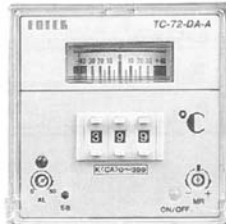



N	2	3	4	5	6
L	92.0	140.0	188.0	236.0	284.0

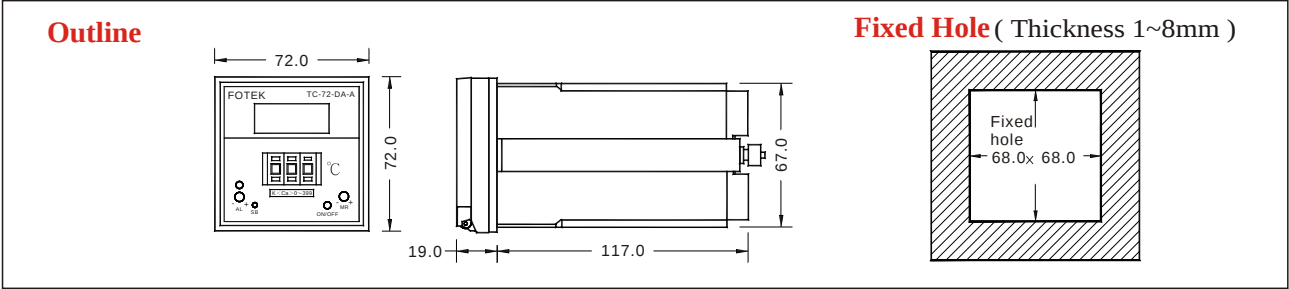
DIN 72X72
Temperature Controller

TC-72
Series

	Model	TC-72-AN-□-□	TC-72-AA-□-□	TC-72-AA-□-□-A
Outline 外型	DIN72 X 72 			
	Alarm 警報	Non	Non	AL Alarm
Display 顯示方式	Method 方式	Non	Analog Deviation Meter	
	Tolerance 誤差	Non	1.0% of F.S.	
	Range 範圍	Non	± 40°	
Setting 設定方式	Method 方式	Trimmer < Variable Resister >		
	Tolerance 誤差	1.0% of Setting Range		
	Range 範圍	0~100 , 0~200 , 0~400 , 0~600 , 0~1200		

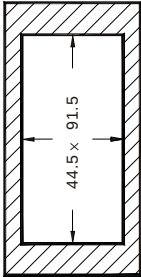
	Model	TC-72-DN-□-□	TC-72-DA-□-□	TC-72-DA-□-□-A
Outline 外型	DIN72 X 72 			
	Alarm 警報	Non	Non	AL Alarm
Display 顯示方式	Method 方式	Non	Analog Deviation Meter	
	Tolerance 誤差	Non	1.0% of F.S.	
	Range 範圍	Non	± 40°	
Setting 設定方式	Method 方式	Digital Switch		
	Tolerance 誤差	0.5% of Setting Range		
	Range 範圍	-99 ~+99 , 0~199 , 0~399 , 0~599 , 0~999 , 0~1199		

Dimension & Fixed Hole/外型及固定孔尺寸

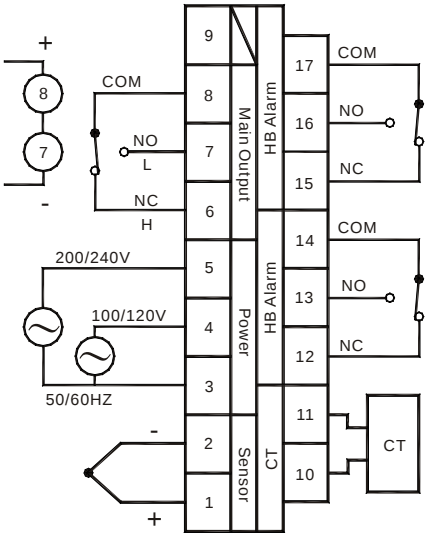
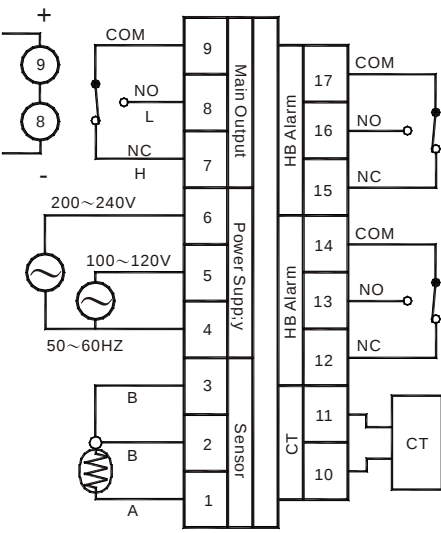
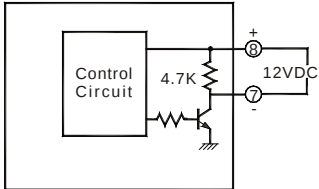
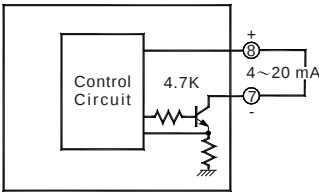


DIN 48X96
Temperature Controller

TC-4896
Series

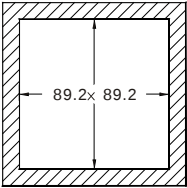
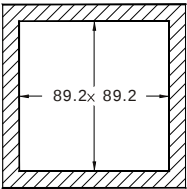
	Model	TC-4896-DD-□-□	TC-4896-DD-□-□-A	TC-4896-DD-□-□-AH
Outline 外型	DIN48 X 96 			
	Alarm 警報	Non	AL Alarm	AL+HB
Display 顯示方式	Method 方式	14 mm 7 Segment Red LED		
	Tolerance 誤差	0.5% of F.S. + 1 Digit		
	Range 範圍	-99~+99 , 0~999		
Setting 設定方式	Method 方式	Digital Switch < 3 Digits >		
	Tolerance 誤差	0.5% of Setting Range		
	Range 範圍	-99~+99 , 0~199 , 0~399 , 0~599 , 0~999		

■ Connection Diagram & Output Circuit/接線圖及輸出回路

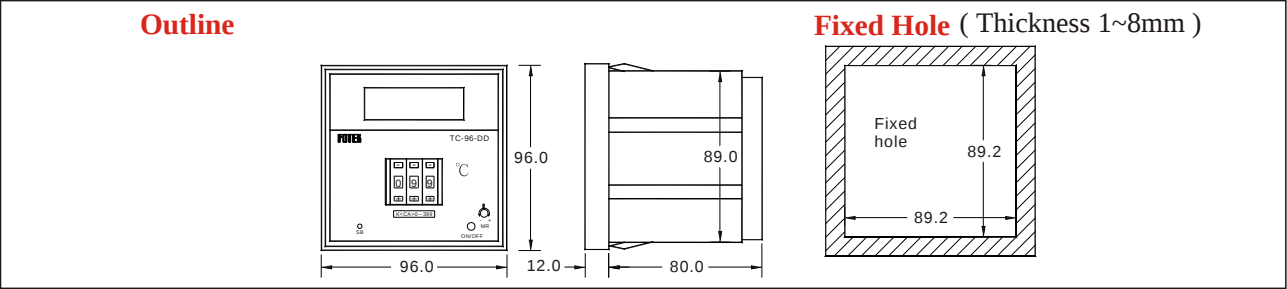
Thermocouple Type < K or J >	RTD PT-100 Ω Type	Voltage Output
		
		Linear Output
		

DIN 96X96
Temperature Controller

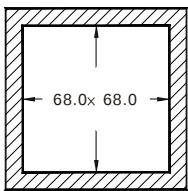
TC-96
Series

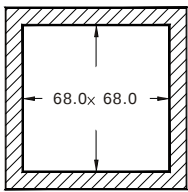
	Model	TC-96-AD-□-□	TC-96-AD-□-□-A	TC-96-AD-□-□-AH
Outline 外型	DIN96 X 96 			
	Alarm 警報	Non	AL Alarm	AL+HB Alarm
Display 顯示方式	Method 方式	14mm 7 Segment Red LED		
	Tolerance 誤差	0.5% of F.S.		
	Range 範圍	-99 ~+99 , 0~999 , 0~1200		
Setting 設定方式	Method 方式	Trimmer < Variable Resister >		
	Tolerance 誤差	1.0% of F.S.		
	Range 範圍	-50 ~+50 , 0~100 , 0~200 , 0~400 , 0~600 or 0~1200		
	Model	TC-96-DD-□-□	TC-96-DD-□-□-A	TC-96-DD-□-□-AH
Outline 外型	DIN96 X 96 			
	Alarm 警報	Non	AL Alarm	AL+HB Alarm
Display 顯示方式	Method 方式	14mm 7 Segment Red LED		
	Tolerance 誤差	0.5% of F.S.		
	Range 範圍	-99 ~+99 , 0~999 , 0~1200		
Setting 設定方式	Method 方式	Digital Switch		
	Tolerance 誤差	0.5% of F.S.		
	Range 範圍	-99 ~+99 , 0~199 , 0~399 , 0~599 , 0~999 , 0~1199		

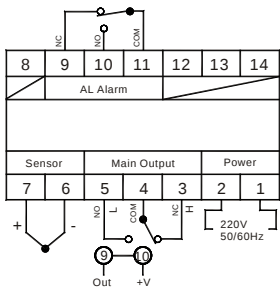
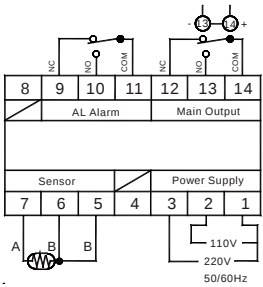
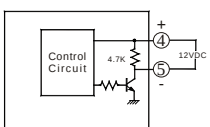
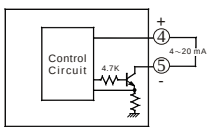
Dimension & Fixed Hole/外型及固定孔尺寸



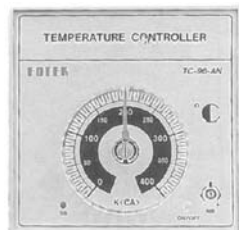
TC-72 Series

	Model	TC-72-AD-□-□	TC-72-AD-□-□-A
Outline 外型	DIN72 X 72 		
	Alarm 警報	Non	AL Alarm
Display 顯示方式	Method 方式	14mm 7 Segment Red LED	
	Tolerance 誤差	0.5% of F.S.	
	Range 範圍	0~999 or 0~1999	
Setting 設定方式	Method 方式	Trimmer < Variable Resister >	
	Tolerance 誤差	1.0% of F.S.	
	Range 範圍	0~100 , 0~200 , 0~400 , 0~600 , 0~1200	

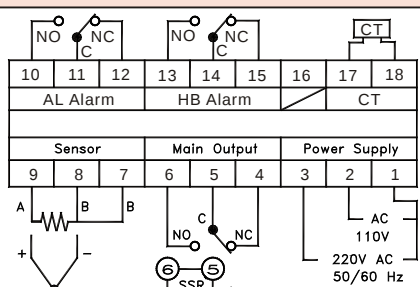
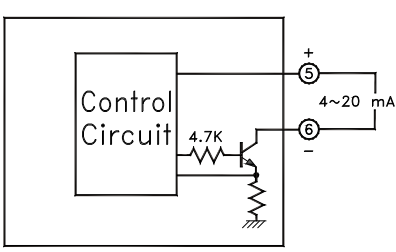
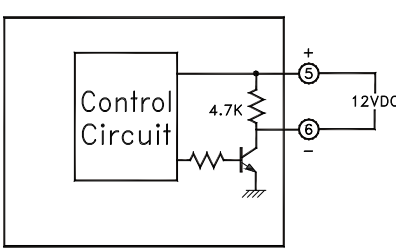
	Model	TC-72-DD-□-□	TC-72-DD-□-□-A
Outline 外型	DIN72 X 72 		
	Alarm 警報	Non	AL Alarm
Display 顯示方式	Method 方式	14mm 7 Segment Red LED	
	Tolerance 誤差	0.5% of F.S.	
	Range 範圍	-99~99 , 0~999 or 0~1999	
Setting 設定方式	Method 方式	Digital Switch	
	Tolerance 誤差	0.5% of Setting Range	
	Range 範圍	-99 ~+99 , 0~199 , 0~399 , 0~599 , 0~999 , 0~1199	

K type	PT type	Voltage Output
 Standard Power Supply Is 220VAC If Need 110VAC, Please Change It On, The Inner PC Board.	 110V 220V 50/60Hz	 Control Circuit 4.7K 12VDC
		Linear Output
		 Control Circuit 4.7K 4~20mA

TC-96 Series

TC-96-AN-□-□	TC-96-AA-□-□	TC-96-AA-□-□-A	TC-96-AA-□-□-AH
			
Non	Non	AL Alarm	AL+HB Alarm
Non	Analog Deviation Meter		
Non	1.0% of F.S.		
Non	± 40°		
Trimmer < Variable Resister >			
1.0% of F.S.			
-50 ~+50 , 0~100 , 0~200 , 0~400 , 0~600 or 0~1200			

TC-96-DN-□-□	TC-96-DA-□-□	TC-96-DA-□-□-A	TC-96-DA-□-□-AH
			
Non	Non	AL Alarm	AL+HB Alarm
Non	Analog Deviation Meter		
Non	1.0% of F.S.		
Non	± 40°		
Digital Switch			
0.5% of F.S.			
-99 ~+99 ,0~199 ,0~399 ,0~599 ,0~999 ,0~1199			

Connection Diagram 接線圖	Linear Output 線性輸出	Voltage Output 電壓輸出
		

■ Control Output 控制輸出

ON/OFF LED Turn to Green Color , Control Output Turn ON.

綠色動作燈，表示控制輸出動作。

ON/OFF LED Turn to Red Color , Control Output Turn OFF.

紅色動作燈，表示控制輸出復歸。

but , Linear Output Type That ON/OFF LED Turn to Green Color.

但，線性輸出型，動作燈亮綠色。

■ Sensor Break Alarm (SB) 測溫體斷線指示燈

SB LED Turn ON when Sensor Break 測溫體斷線時，SB燈會亮著。

■ Stand-by/Over-heat Alarm (AL) 待機／過熱警報

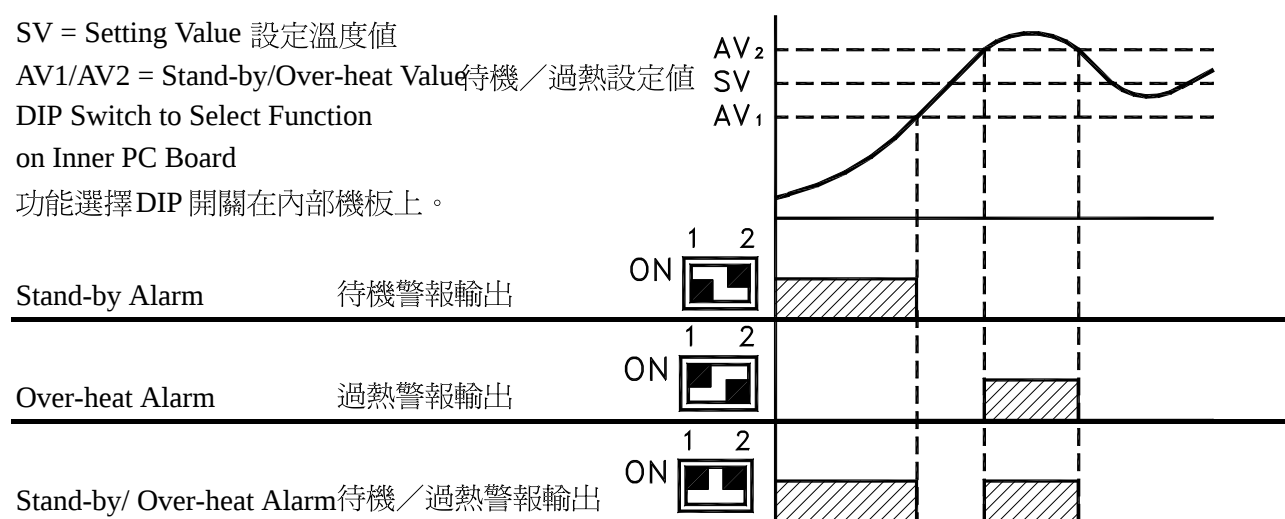
SV = Setting Value 設定溫度值

AV1/AV2 = Stand-by/Over-heat Value 待機／過熱設定值

DIP Switch to Select Function

on Inner PC Board

功能選擇DIP 開關在內部機板上。



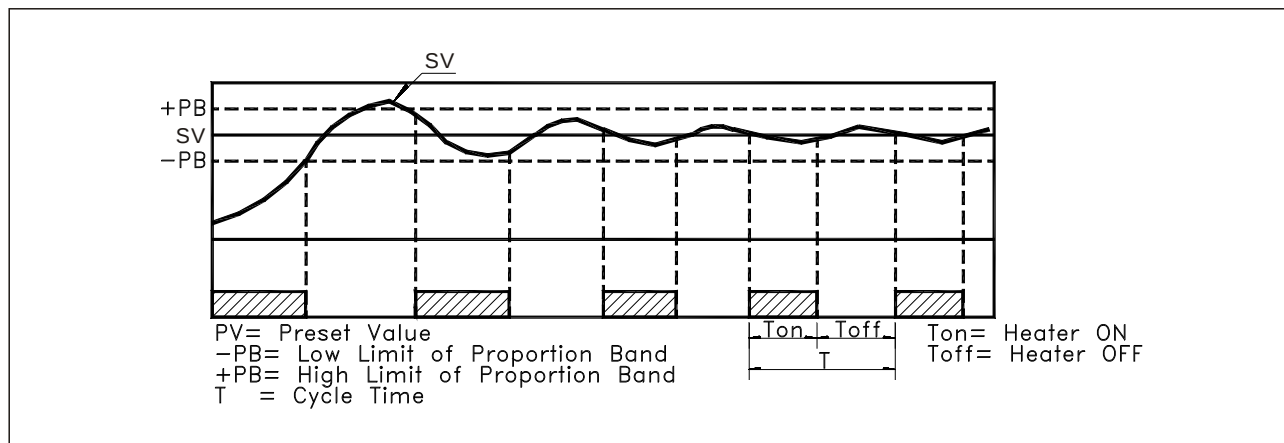
■ Heater Break Alarm (HB) 加熱器斷線警報

Heater Break Alarm Output Turns ON when the Current of Heater Lower than Setting Value that may set at Front Panel. (0.5A~25A standard/1.0A~50A Optioned)

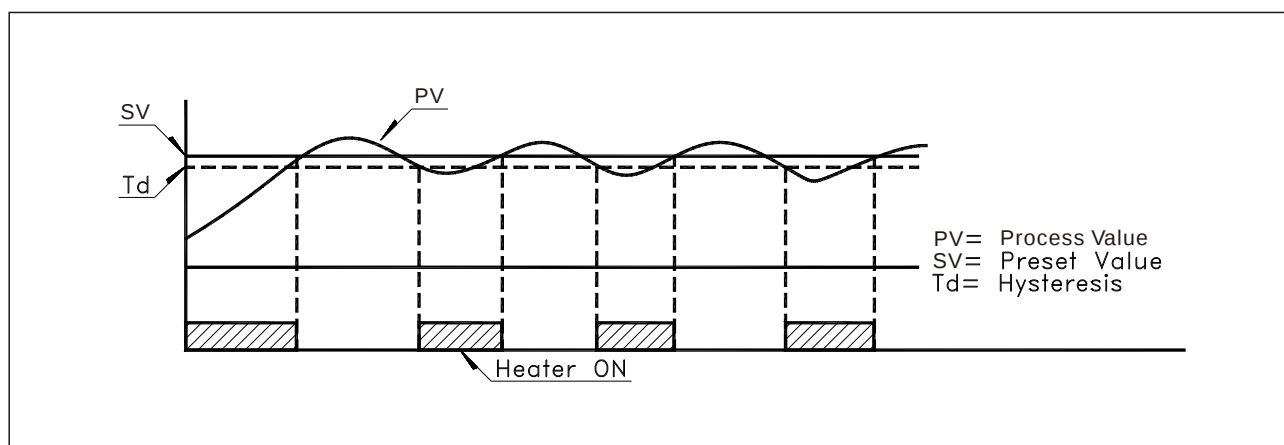
當加熱器電流低於設定值時，加熱器斷線警報即動作，設定值可在面板設定，標準 0.5A~25A，訂做 1.0A~50A

■ Illustration/説明

P+D ON/OFF



ON/OFF (S)



Proportion

