



# Temperature Controller

## 溫度控制器



### Features

1. **Terminal Design** : adopts a special design with strong stress, providing good connection. It's also suitable for vibrating machinery.
2. **PCBs** : whole series use double-sided PCBs, quality can be assured.
3. **PCBs' location** : be fixed by vertical type so that it will not be affected by environment.
4. **Cold-junction Compensation** : by external type of high accuracy.
5. **Control Action** : cooling/heating system can be made according to the requirement.

### SPECIFICATION

**Power Supply** : AC 110V/220V,  $\pm 10\%$   
**Input** : K, J, Pt100 $\Omega$ (DIN), R  
**Output** : RELAY(250V/5A), DC24V for SSR drive, 4-20mA  
**Control mode** : ON/OFF, P, PD  
**Proportional Band** : 3% full Scale  
**Cycle Time** : RELAY(16sec.), SSR(2Sec.)  
**Accuracy** :  $\pm 0.3\%$  Full Scale  
**Ambient Temperature** : -10~55°C, below 90% humidity  
**Power Consumption** : RELAY(6W), SSR(5W)  
**Input Impedance** : 20M ohm 500V DC  
**High/Low Alarm** :  $\pm 10\%$  full Scale Adjustable

### 特性

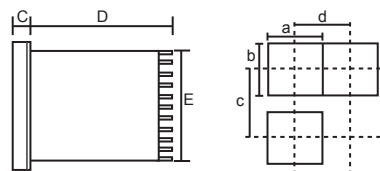
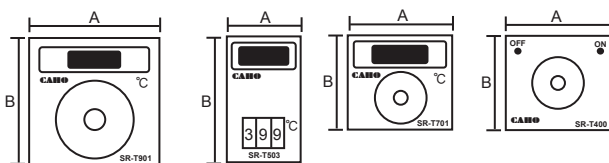
1. **端子接點設計** : 特殊的彈片應力設計，達到更好的接觸效果。
2. **電路板** : 全系列雙面板設計，防空焊，品質有保障。
3. **電路板位置設計** : PCB採兩側直立式設計，對於環境不良場所，較能延長腐蝕壽命。
4. **溫度補償** : 採外露式冷接點補償，故補償更精準。
5. **系統控制模式** : 可選擇訂製加熱或冷卻系統。

### 規格說明

**電源** : AC 110V/220V,  $\pm 10\%$   
**輸入** : K, J, Pt100 $\Omega$ (DIN), R  
**輸出** : 繼電器接點(250V/5A), DC24V, 4-20mA  
**控制方式** : ON/OFF, P, PD 動作  
**比例帶** : 3% 全刻度  
**週期時間** : 繼電器接點(16秒), SSR(2秒)  
**精準度** :  $\pm 0.3\%$  全刻度  
**環境溫濕度** : 濕度低於90%，常溫介於零下10度至55度  
**消耗電力** : 繼電器接點(6W), SSR(5W)  
**輸入阻抗** : 20M ohm 500V DC  
**上/下限警報** :  $\pm 10\%$  全刻度可調整

# Temperature Controller 溫度控制器

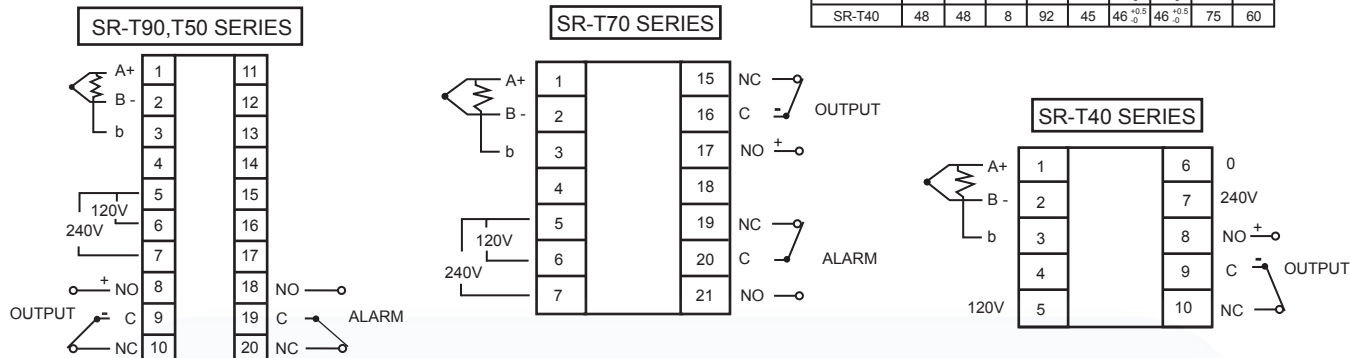
## DIMENSION 尺寸圖



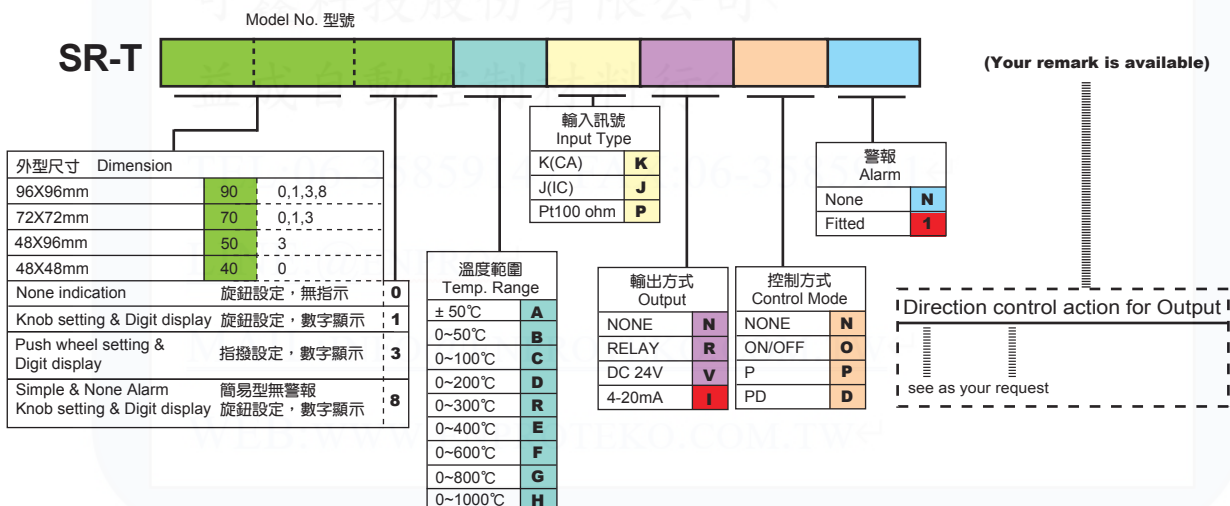
Panel Cutout 開孔尺寸 (Unit: mm)

| SERIES 系列 | A  | B  | C  | D  | E  | a                                | b                                | c   | d   |
|-----------|----|----|----|----|----|----------------------------------|----------------------------------|-----|-----|
| SR-T90    | 96 | 96 | 12 | 92 | 91 | 92 <sup>+0.5</sup> <sub>-0</sub> | 92 <sup>+0.5</sup> <sub>-0</sub> | 120 | 110 |
| SR-T70    | 72 | 72 | 12 | 92 | 67 | 68 <sup>+0.5</sup> <sub>-0</sub> | 68 <sup>+0.5</sup> <sub>-0</sub> | 100 | 85  |
| SR-T50    | 48 | 96 | 12 | 92 | 91 | 46 <sup>+0.5</sup> <sub>-0</sub> | 92 <sup>+0.5</sup> <sub>-0</sub> | 120 | 60  |
| SR-T40    | 48 | 48 | 8  | 92 | 45 | 46 <sup>+0.5</sup> <sub>-0</sub> | 46 <sup>+0.5</sup> <sub>-0</sub> | 75  | 60  |

## WIRING DIAGRAM 接線圖



## ORDERING CODE 訂貨編號



| Model 型號               | SR-T900                   | SR-T901                                                           | SR-T903                                                        | SR-T908          | SR-T400          | SR-T700                   | SR-T701                                      | SR-T703                                                        | SR-T503                                                        |
|------------------------|---------------------------|-------------------------------------------------------------------|----------------------------------------------------------------|------------------|------------------|---------------------------|----------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|
| Dimension 外型尺寸         | 96 X 96mm (SR-T90 SERIES) |                                                                   |                                                                |                  | 48 X 48mm        | 72 X 72mm (SR-T70 SERIES) |                                              |                                                                | 48 X 96mm                                                      |
| Input 輸入信號             | K, J, Pt100               | K, J, Pt100                                                       | K, J, Pt100                                                    | K                | K, J, Pt100      | K, J, Pt100               | K, J, Pt100                                  | K, J, Pt100                                                    | K, J, Pt100                                                    |
| Temperature Range 溫度範圍 | 0-200℃<br>0-400℃          | ±50℃/Pt100<br>0-100℃<br>0-200℃<br>0-300℃<br>0-400℃<br>0-800℃/K, J | 0-99.9℃<br>0-199℃<br>0-399℃<br>0-599℃/K, J<br>0-799℃<br>0-999℃ | 0-300℃<br>0-400℃ | 0-200℃<br>0-400℃ | 0-200℃<br>0-400℃          | 0-100℃<br>0-200℃<br>0-400℃<br>0-800℃/K, J    | 0-99.9℃<br>0-199℃<br>0-399℃<br>0-599℃/K, J<br>0-799℃<br>0-999℃ | 0-99.9℃<br>0-199℃<br>0-399℃<br>0-599℃/K, J<br>0-799℃<br>0-999℃ |
| Output 輸出方式            | Relay, SSR                | Relay, SSR, 4-20mA                                                | Relay, SSR, 4-20mA                                             | Relay            | Relay, SSR       | Relay, SSR                | Relay, SSR, 4-20mA                           | Relay, SSR, 4-20mA                                             | Relay, SSR, 4-20mA                                             |
| Control 控制方式           | ON/OFF, P, PD             |                                                                   |                                                                | ON/OFF           | ON/OFF, P, PD    |                           |                                              |                                                                |                                                                |
| Option 選用              | None                      | Input DC1-5V<br>Input 4-20mA<br>Hi/Low Alarm                      | Input DC1-5V<br>Input 4-20mA<br>Hi/Low Alarm                   | None             | None             | None                      | Input DC1-5V<br>Input 4-20mA<br>Hi/Low Alarm | Input DC1-5V<br>Input 4-20mA<br>Hi/Low Alarm                   | Input DC1-5V<br>Input 4-20mA<br>Hi/Low Alarm                   |

附注: 1. Relay 輸出能選用ON/OFF, P, PD控制  
2. S.S.R. 輸出能選用P, PD控制  
3. 4-20mA輸出只能用P控制  
4. 所有的警報都是偏差警報

Note: 1. Relay-output can be suitable with control mode ON/OFF, P or PD  
2. S.S.R.-output can be suitable with control mode P or PD  
3. 4-20mA-output only can be suitable with P control  
4. All the Alarm function are Deviation (Hi/Low) Alarm