Digital Temperature Controller

**Features**

- DIN(48X48mm) Temperature Controller
- Support multi sensor input (K,S,Wre,T,E,J,B,N,CU50,PT100)
- Wide control range -50~1300°C (K sensor)
- Indication and control accuracy 0.1°C, high measurement accuracy ±0.2%FS
- PID and ON/OFF control mode
- Output and alarm format can be set by user
- Built-in digital filter reduce interfere
- Self calibration technology, keep stabilization
- 0.39” height LED, prevent dazzle, highly visible display
- Switching power supply and low consumption

**Safety Precautions**

- This product must be mounted on the panel, avoid electric shock.
- When the power is turned on, is not connecting the terminal, avoid electric shock.
- Ensure the product within the specification.
- Never disassemble, repair or modify the product, if needed please contact agent or us
- Do not use the product in locations subject to gases, dust, vibration, corrosive direct sunlight, water and oil, strong EMI

**Specification**

- Power and input: The power supply and input circuit are isolated.
- Voltage(Ordering): AC 100-240V ±10% 50/60Hz ≤5VA
- AC/DC 12-24V ±10% ≤4VA
- Character: PV: 4 digital 9.9mm height, high light red LED
- SV: 4 digital 8.0mm height, high light green LED
- Unit: °C
- Range: -50~1300
- Wt: -50~1700
- -2000~2500
- 0~1000
- J: 0~1000
- B: 0~1800
- N: 0~1300
- CU50: -50~150
- PT100: -200~600
- Input digital filter: 35~85% RH

**Contact output(D1S-2R):**

- AC 250V 3A (Resistive load) NO/NC.
- Alarm 1 AC250V 3A (Resistive load) NO/NC.
- Life expectancy: Mechanical: 10,000,000 operations min. Electrical: 100,000 operations min.
- Sampling period: 0.5 S
- Indication accuracy: ±0.2%FS 0.1°C (under 1000°C); 1°C (over 1000°C)
- Data storage: 10 years
- Temperature compensating: 0-50°C
- Cutout size: 45X45 mm
- Mounting Method: Flush mounting and screw terminals
- Weight: Approx. 140g
- Ambient temperature: Operating: -10~55°C (with no icing or condensation)
- Storage: -25~65°C (with no icing or condensation)
- Ambient humidity: 35~85% RH

Thank you very much for selecting SESTOS products, Please read and understand this MANUAL before using this unit.
Alarm function table (T1)

<table>
<thead>
<tr>
<th>Alarm Type</th>
<th>Setting Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper limit output AL1</td>
<td>0</td>
</tr>
<tr>
<td>Lower limit output AL1</td>
<td>0</td>
</tr>
<tr>
<td>Upper limit output AL1</td>
<td>0</td>
</tr>
<tr>
<td>Lower limit output AL1</td>
<td>0</td>
</tr>
<tr>
<td>Upper limit(deviation) output AL1</td>
<td>0</td>
</tr>
<tr>
<td>Lower limit(deviation) output AL1</td>
<td>0</td>
</tr>
<tr>
<td>Note:  Can set alarm in combination format, choice the requirement functions and sum of the value setting in ALP.</td>
<td></td>
</tr>
</tbody>
</table>

Operation Procedures:

1/ Press SET key 2 second into the function mode, after return to the operation mode. If no any change after 10 second automatic return.
2/ For temperature setting, press the UP or Down key change the value, after 10 second operate the new setting.
3/ First operate the Auto adjustment, press AT key 2 second, SV display blink AT, finally into PID control mode. Press the AT key 2 second to abandon Auto adjustment.
4/ If successful the first Auto adjustment, can not use AT key for Auto adjustment again. It need change function setting Ctrl to 2 to operated again.
5/ Auto adjustment needs from few second to few hour.

Suggestions:

1/ If use SSR or SCR for control part, setting control period prefer 4 second or shorter.
2/ If use relay for control part, setting control period prefer 20 second or longer for extend the relay life.

### Dimensions with Flush Mounting Adapter

- **Dimensions**

![Dimensions Diagram]

- **Flush Mounting Adapter**

![Flush Mounting Adapter Diagram]

- **Panel Cutouts**

![Panel Cutouts Diagram]

- All units are in millimeters unless otherwise indicated.
- Flush mounting adapter: YX-Y1 (Provided)

### Terminal Arrangement

- **D1S-VR**

![D1S-VR Terminal Diagram]

- **D1S-2R**

![D1S-2R Terminal Diagram]

### Precautions

- Separate the input signal cables from the power line.
- Short connecting wire from the sensor to the product is the best, if not please using shield cable.
- Use and store the product within the ratings specified for temperature and humidity.

Specifications and design subject to modifications without notice.

SESTOS (H.K.) ELECTRONICS CO.
http://www.sestos-hk.com  E-mail: sestos@sestos-hk.com