

TP3

5 channel digital indicator

- Indicates 5 contacts temperature with 1 instrument
- Temperature deviation compensation function in each channel
- Channel fix/channel automatic switch selection
- Automatic switching time selection in each channel



A
Temperature
Controller

Suffix code

| Model | Code | Description |
|----------------------|---|---|
| TP3- | <input type="checkbox"/> <input type="checkbox"/> | 5 channel indication thermometer 96(W) X 48(H) |
| Input | K | K thermocouple |
| | J | J thermocouple |
| | P | Resistance Temperature Detector(RTD) Pt 100 Ω (IEC) |
| Power supply voltage | P4 | 100 - 240 V AC 50 - 60 Hz |

Specification

| Input | |
|------------------------------------|---|
| Input | by the suffix code (same input 5 contacts) |
| Thermocouple | K, J |
| RTD | Pt100 Ω (IEC) |
| Input sampling time | 500 ms |
| Input display resolution | Usually less than 1 °C |
| Input impedance | Thermocouple and DC voltage input (mV) : 1 MΩ min, DC rated voltage(V) : approx. 1 MΩ |
| Allowable signal source resistance | Thermocouple (250 Ω max), DC voltage (2 kΩ max) |
| Allowable wiring resistance | RTD 10 Ω max (but resistances among 3 wires should be same) |
| Allowable input voltage | Within ±10 V (thermocouple, RTD, DC voltage(mV)), within ±20 V (DC voltage(V)) |
| Input compensation | Compensation by internal parameter |
| Cold junction compensation error | ±2.0 °C (0 ~ 50 °C) |

| Performance | | |
|-----------------------|--|--|
| Display accuracy | Thermocouple | ±(0.5% of indicated value ±1 Digit) or ±3 °C (bigger one) |
| | RTD | ±(0.5 % of indicated value ±1 Digit) or ±2 °C (bigger one) |
| Insulation resistance | 20 MΩ min(500 V DC) | |
| Dielectric strength | 2000 V AC 50 / 60 Hz for 1 min (between the different recharging part) from each other | |



General specification

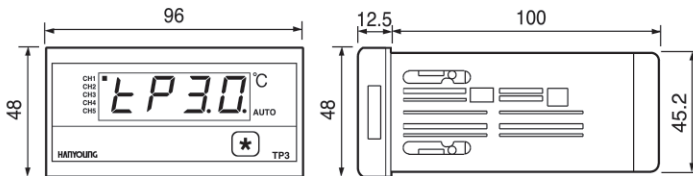
| | |
|----------------------|---|
| Power Supply Voltage | 100 – 240 V AC 50 – 60 Hz |
| Voltage fluctuation | ±10 % of power supply voltage |
| Power consumption | 5 VA max |
| Ambient temperature | 0 ~ 50 °C |
| Ambient humidity | 35 ~ 85% RH (without dew condensation) |
| Storage temperature | -25 ~ 65 °C |
| Vibration resistance | 10 – 55 Hz, peak amplitude 0.76 mm for 2 min each in 3 axis direction |
| Shock resistance | 300 ㎉, to the 6 direction each 3 times |
| Weight | 400 g |

Range and input code chart

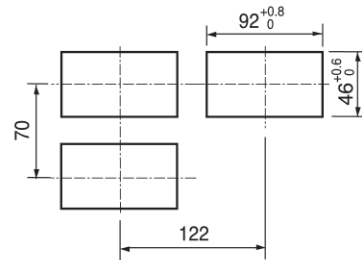
| Classification | Code | Input type | Range(°C) | Accuracy |
|----------------|------|------------|-------------|---|
| Thermocouple | K | K | -50 ~ 1,200 | ±(0.5% of indicated value ±1 Digit) or ±3 °C (bigger one) |
| | J | J | -50 ~ 800 | |
| RTD | P | Pt100 Ω | -100 ~ 400 | ±(0.5% of indicated value ±1 Digit) or ±2 °C (bigger one) |

Dimension and panel cutout (Unit : mm)

Dimension



Panel cutout



Connection diagram

