

# Specification

Name of Product: Temperature Controller

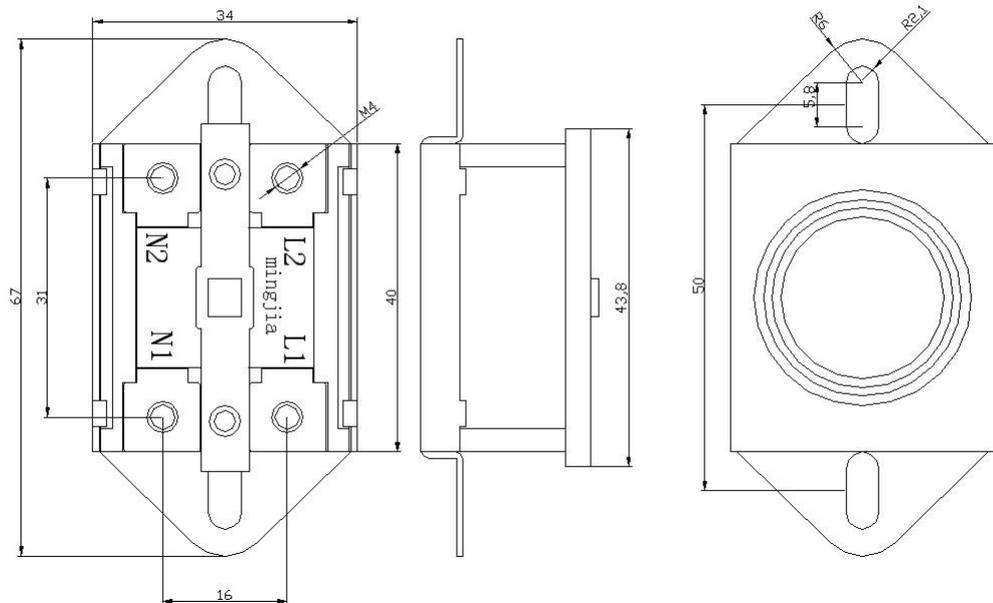
## Specification

### 1.Scope of Application:

This specification is applied to production and test of temperature controller.

### 2.External Dimension and Structure:

2.1 See the following figures



2.2 Terminal Strength: Terminals can bear tensile force of 80N and thrust of 80N.

3. Electric Property: 250V voltage rating and 45A current rating.

4. Initial Property

4.1 Working Temperature:  $70\text{--}90\pm 3^\circ\text{C}$  manual reset

Detect up and down working temperatures at the rate of not greater than  $0.5^\circ\text{C}$  a minute in an air trough. The signal current is not greater than 20 mA.

4.2 Contact Resistance: The resistance between two terminals is not greater than  $50\text{m}\Omega$ .

4.3 Electric Resistance: The electric strength between terminals and outer shell can bear 1800V for one minute without breakdown.

4.4 Insulation Resistance: The insulation resistance between terminals and outer shell is greater than  $100\text{M}\Omega$

5. Environmental Adaptation:

5.1 Thermo-stability: The variation of temperature characteristic and initial value is not greater than  $5^\circ\text{C}$ , after laying in an air of  $130^\circ\text{C}$  for 24 hours.

5.2 Cold Endurance: The variation of temperature characteristic and initial value is not greater than  $5^\circ\text{C}$ , after laying in an air of  $-20^\circ\text{C}$  for 24 hours.

5.3 Moisture-proof Insulation: The insulation resistance is greater than 10 MΩ, after laying at the temperature of  $40\pm 3^{\circ}\text{C}$  and moisture of  $90\pm 2\%$  for 24 hours and then in atmospheric temperature for 2 hours.

5.4 Cold Endurance and Heat Endurance: The variation of temperature characteristic and initial value is not greater than  $3^{\circ}\text{C}$ , after 10 cycles of laying in an air  $-10\pm 3^{\circ}\text{C}$  for 15 minutes and then in an air of  $125\pm 3^{\circ}\text{C}$  for 15 minutes.

5.5 Vibration strength: The variation of temperature characteristic and initial value is not greater than  $5^{\circ}\text{C}$ , after vibrating separately along the X, Y and Z directions at the amplitude of 1.5mm and the vibration frequency of 30Hz for 60 minutes.

5.6 Shock-proof: The variation of temperature characteristic and initial value is not greater than  $3^{\circ}\text{C}$ , after dropping freely from the height of 1 meter in a package.

## 6. Marks, Package, Transportation and Storage

6.1 Each product must be marked with the following marks.

- A. Name or trademark of the manufacturer;
- B. Model of product;
- C. Operating voltage and current.

6.2 Products shall be packaged in a dry packing box, with reliable moisture-proof and fixation, the gross weight of each box must not be more than 25Kg.

6.3 The outside of a packing box shall be marked with the following

marks.

6.3.1 Name of product, model mark and name of manufacturer.

6.3.3 Quantity, gross weight and external dimension of products.

6.3.3 “Handle with care”, “keep dry”, etc for caution.

6.3.4 Date of production and other necessary marks.

6.4 The package of products must be applied to various transport vehicles without any damage and protect products against direct rain and snow drops.

6.5 Products shall be stored in a warehouse with good ventilation, dry and non-corrosive gas.