1. Application

This specification is applied themperature-sensing and thermal protector to be used for prevention of excessive temperature rise.

2. Model No

PT-01

3. Type of standard model

Automatic temperature controller taking advantage of snapping of disc type Bimetal.

4. Electrical Specification

4.1. Rating Voltage / Rating Current (Resistive) : AC 125V / 15.0A
AC 250V / 7.5A

4.2. Minimum Current : 50 mA

4.3. Rating Frequency : 50 / 60 Hz

5. Performance

5.1. OPEN TEMPERATURE (OFF) : 40~150℃±5℃

5.2. CLOSE TEMPERATURE (ON) : -10℃(from OPEN TEMP.)±15℃

5.3 Temperature calibration :
When temperature rise or fall at the rate of 1℃/2 min, the no-load, the wind velocity of 1~2m/sec and in constant temperature chamber, we calibrate point the above temperature(the off point & the on point).

5.4. Electrical strength :
AC 1500V for 1 min and above or AC 1800V for 1 sec and above between non live metal parts and terminals.

5.5 Insulation resistance :
100MΩ or more with DC 500V between non-live metal parts and terminals. (at normal temperature and humidity)

5.6. Contact resistance :
100mΩ or less across the terminals

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6. Endurance Test

6.1 Humidity test :
After thermostat remain for 96 hours at 40±3℃, 90~95% RH and removethe moisture, the Insulation Resistance is more than 100MΩ(DC 500V), and the Dielectric Voltage Withstand is AC 1500V for 1 min. and above or AC 1800V for 1 sec.

6.2 vibration test :
Vibration, with an amplitude 2㎜ and 500~1500 CPM, should be taken from each 20 vertical direction for 30 sec.

6.3 Impact test :
Drop downward the thermostat packing box form 1M height to the Concrete Base.

6.4 Heating test :
Let a thermostat for 24 hours at 180±3℃.

6.5 Thermal shock test :
Repeat 10 cycles, 1 cycle is that remain for 30 min. at -20℃ and then For 30 min. at 180℃.

6.6 Cold endurance test :
Thermostat remain for 96 hours at -20℃(surround temperature).

6.7 Life test :
Operating temperature change after operating at the rate load 6,000 times :
within ±5℃ of the initial value for operating temperature less than 100℃,
within ±5% of the initial value for 100℃ or more.
Contact resistance must be 100mΩ or less
Electrical and Mechanical life :
AC 250V/7.5A 6,000 times or more.
After life test, insulation resistance is more than 100MΩ (DC 500V), and Dielectric Voltage Withstand is AC 1500V for 1 min and above or AC 1800V for 1 sec, without breakdown.

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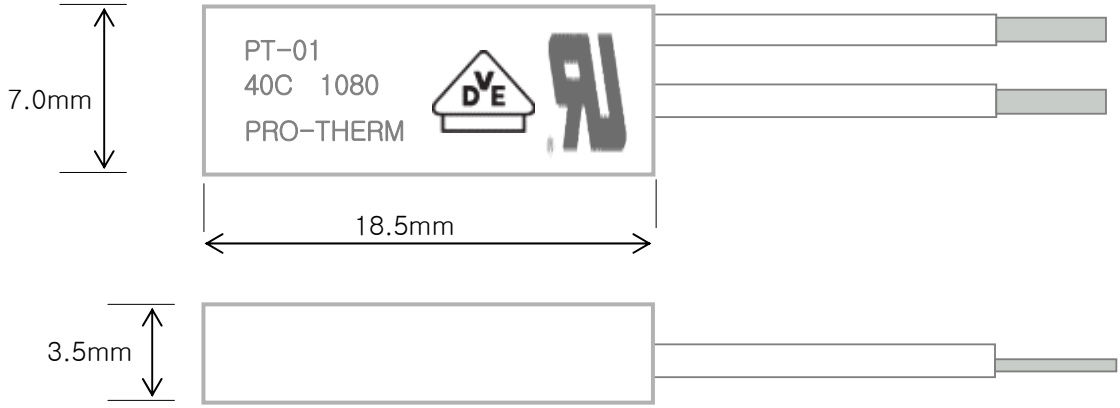
7. Out line dimension and Marking (for example)



※ LEAD : UL 1569 AWG 22 – White, Blue, Black, Red

7.1 Model : PT-01

7.2 Open Temperature: 40℃

7.3 TRADE MARK : PRO-THERM

7.4 LOT NO. : mm / dd / yy– serial
month : jan ~ sep (1 ~ 9), Oct(X), Nov(Y), Dec(Z)
day : 1 ~ 31 (01 ~ 31)
year : 2010 (0)

7.5 Approval Mark :

- UL & CUL (File No. E242267)
- VDE (File No. 40012643)
- VDE (File No. 40014809)

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