



## THERMPRO TECHNOLOGY CO., LTD.

---

Specializing in thermal control products

QUALITY   RELIABILITY   EFFICIENCY

# TP1

## Thermal Protector



### APPLICATIONS

AC/DC motors, Coils, Electromagnets, Water boilers, Generators, Hot air dryers, Liquid pumps, Transformers etc.

### FEATURES

- Snap-action design, quick break/quick make switching action.
- Good pressure resistance.
- Normally open or normally closed according to request.
- Ultra compact design with a high switching contact rating.
- Preset calibration temperature, not field adjustable.
- Rapid response to high-sensitive temperature and current.

### CONTACT RATINGS

- 2.5AMPS/250VAC, 10 AMPS/250VAC

These ratings are applicable for 10,000 cycles

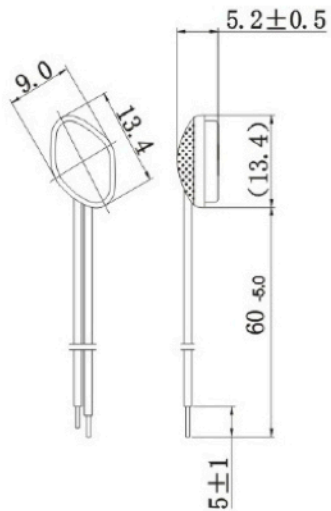
Certifications : UL&VDE

### CALIBRATION TEMPERATURE RANGE

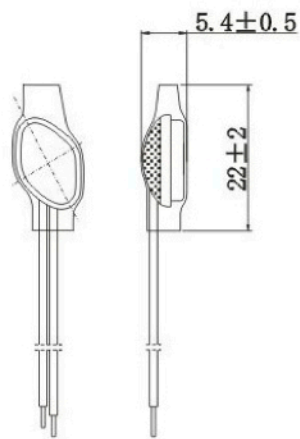
- Available from 60°C to 160°C in 5°C increments with a standard Tolerance of +/- 5°C.
- Reset temperature: Lower than rated open temp minus (5°C~70°C).

### PARAMETERS

Type	TP1		
Rated Voltage:50/60HZ	220-250V		
Rated Current	COSΦ=1.0	2.5A	10.0A
	COSΦ=0.6	1.6A	6.3A
AC Max.load AC COSΦ=1.0	500V 50/60HZ	3.5A	8.0A
	380V 50/60HZ	4.0A	10.5A
	250V 50/60HZ	6.3A	16A
	110V 50/60HZ	10.0A	36.0A
DC Max.load	60V	1.0A	4.0A
	42V	1.2A	4.8A
	6V 12V 24V	1.5A	6.0A
Contact arrangement	Normally Closed Normally Open		
Rated Open temp.range	+60°C~+160°C,In steps of 5°C		
Tolerance	±5K ±8K ±10K		
Resetting temperature	Lower than rated open temp minus(5°C~+70°C)		
Resetting temp.tolerance	±15K		
Contact resistance	≤50mΩ		
Proof tracking index	PT1 175		
Class protection agains electric shock	ClassI		
Degree of protection	IP00		
Reset characteristics for cut-out action	Type 3 action		
Limited short-circuit capability	250V~200A,Fuse rated current 15A		
Endurance	10000		
Temp.limits of the switch head	+180°C		
Insulation class of connecting leads	A、 E、 B、 F、 H is available on request.		
Cross section of the connecting leads	0.2 0.3 0.5mm <sup>2</sup> or on request	0.5 0.75mm <sup>2</sup> or on request	
Housing insulation	Different heat shrink sleeve of insulation class or PBT plastic housing is available on request		
Dielectric Strength	AC 1500V 50/60HZ 1MIN		



Without insulated sleeve



With insulated sleeve

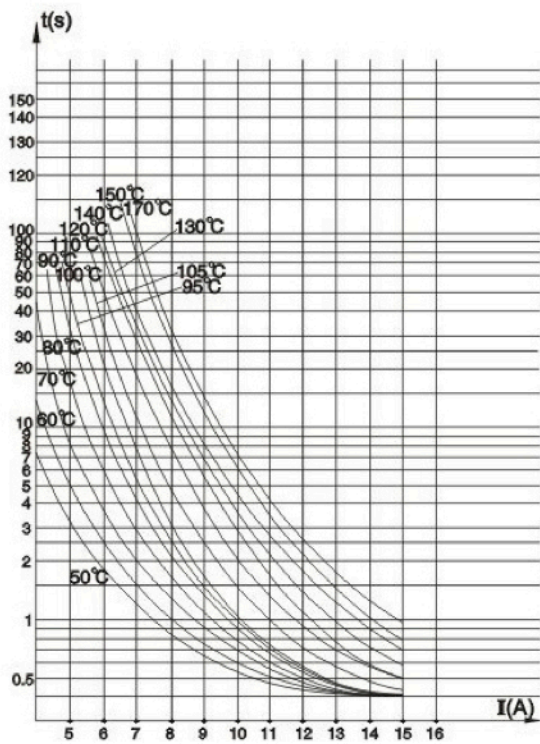


Figure 1 - TP1(2.5A)

Average 1<sup>st</sup> cycle tripping time VS. current (ambient:25°C)

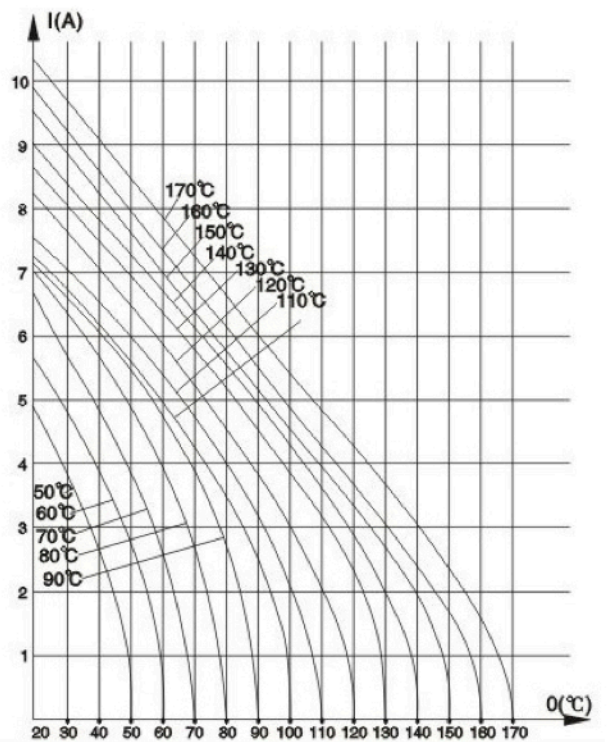
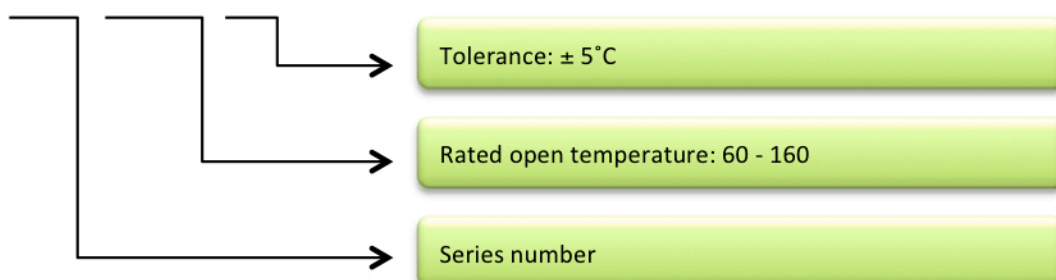


Figure 2 - TP1(2.5A)

Ultimate tripping current VS. ambient temperature

**PRODUCT CODE**

**TP1 X X X 05**



# THERMPRO

THERMPRO TECHNOLOGY CO., LTD.  
BLDG 6 Lane 12 Rui He Yuan Avenue Qing He  
Zhong RD Panyu Guangzhou, China

[www.thermpro-tech.com](http://www.thermpro-tech.com)