

Thermal Protectors | TP1 Series

The TP1 Series Thermal Protector from Calco Electric offers rapid response motor protection.

Features

- Rhomboid shape small size
- Good pressure resistance
- High switching capacity
- Minimal contact resistance
- Temperature and current sensitive
- Rapid response

Applications

- AC motors
- Coils
- Electromagnets
- Water boilers
- DC motors
- Generators
- Hot air dryers
- Liquid pumps
- Transformers
- Ballasts



Technical Data

Rated voltage : 50/60HZ, 250V, AC

Rated Current : 2.5 (1.6)A, COSφ 1.0(0.6)

Rated Open Temp range : +60°C~+160°C

Resetting temperature: Lower than rated open temp (+5°C ~+70°C)

Certification

AGENCY	STANDARD NO.	APPLICATION
VDE	EN 60730-2-2	Motor Protection
UL	UL2111	Motor Protection

Ordering Info

TP1 130 05

Rated Tolerance:
+/- 5K

Rated opening temperature

Device Number



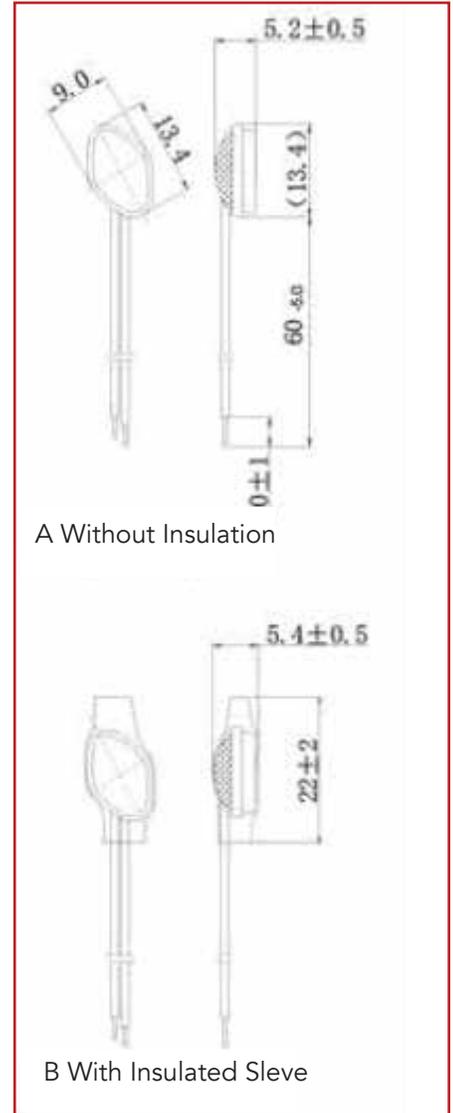
Phone: 330-966-3796
Fax: 330-408-7085
sales@calcoelectric.com
2381 Locust St. S., Unit #6
Canal Fulton OH, 44614
www.calcoelectric.com

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Technical Data

Type		TP1
Rated voltage 50/60Hz		250 Volts
Rated Current	COS Φ =1.0	2.5A
	COS Φ =0.6	1.6A
AC Max .load COS Φ =1.0	500V 50/60HZ	3.5A
	380V 50/60HZ	4.0A
	250V 50/60HZ	6.3A
	110V 50/60HZ	10.0A
DC Max. Load	60V	1.0A
	42V	1.2A
	6V 12V 24V	1.5A
Contact type	Normally Closed Normally Open	
Rated Open temp range	+60°C - +160°C	
Tolerance	±5°C ±8°C ±10°C	
Resetting temperature	(+5°C--+70) Lower than rated open temp	
Resetting temp.tolerance	± 15°C	
Contact resistance	≤50m Ω	
Proof tracking index	PT1 175	
protection agains electric shock class	Class I	
Degree of protection	IP00	
Automatic action feature	Type 3C action for motor	
Limited short-circuit capability	250V ~ 200A, Fuse rated current 15A	
Dielectric Strength	AC 1500V 50/60HZ 1MIN	
Cross section of the connecting leads	0.20 mm ² to 0.75 mm ² (24AWG to18AWG)	
Case material	Stainless steel	
Coating material	Hard epoxy	
Endurance	10000	

Shape & Size



A Without Insulation

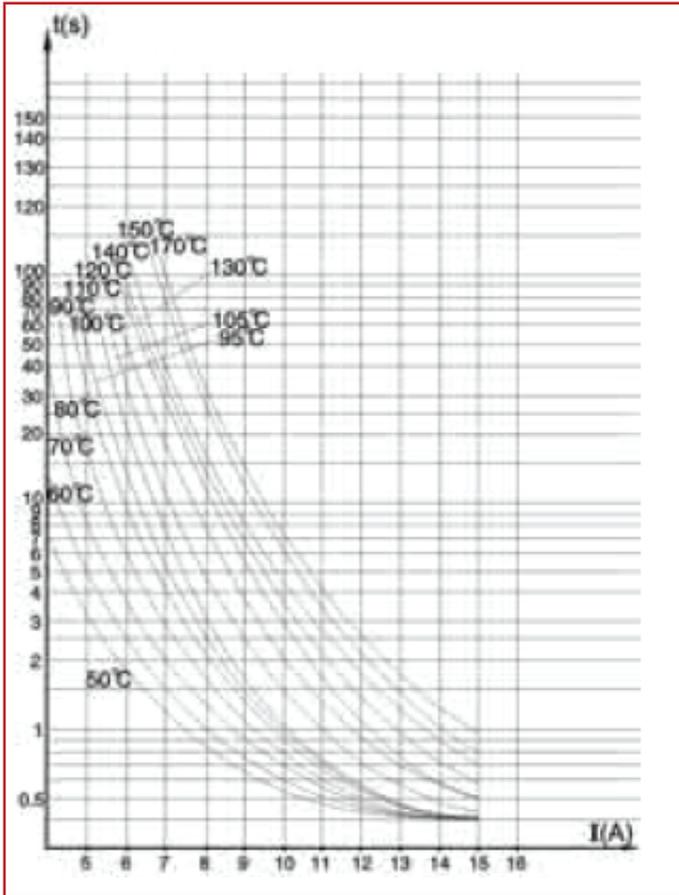
B With Insulated Sleeve



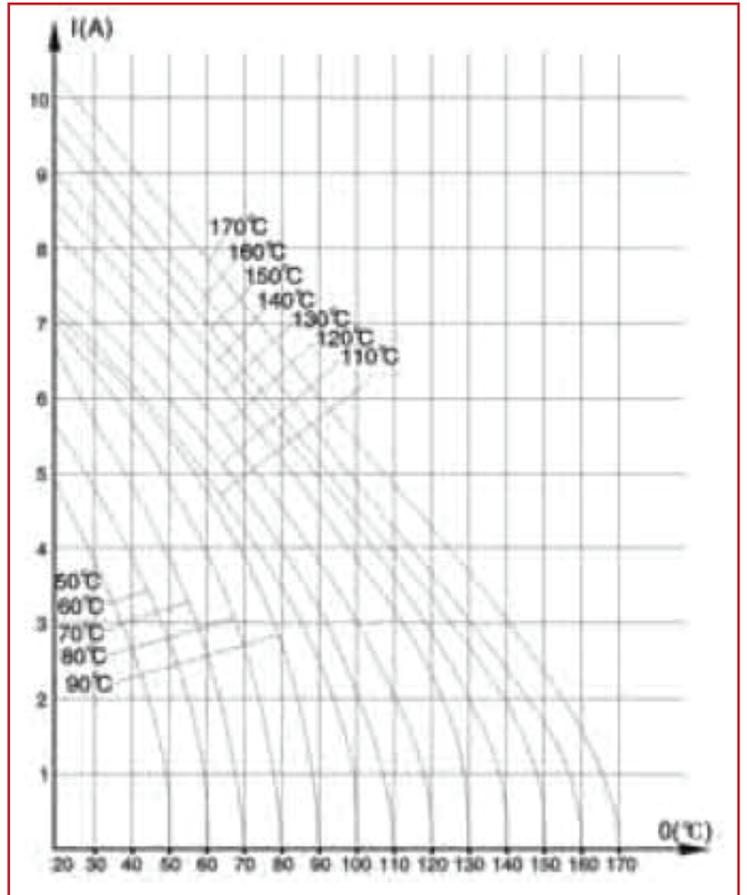
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Graph 1: TP1 2.5A Average First Cycle Tripping Time vs. Current (ambient is 25°C)



Graph 2: TP1 2.5A Ultimate Trip current vs. Ambient Temperature



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