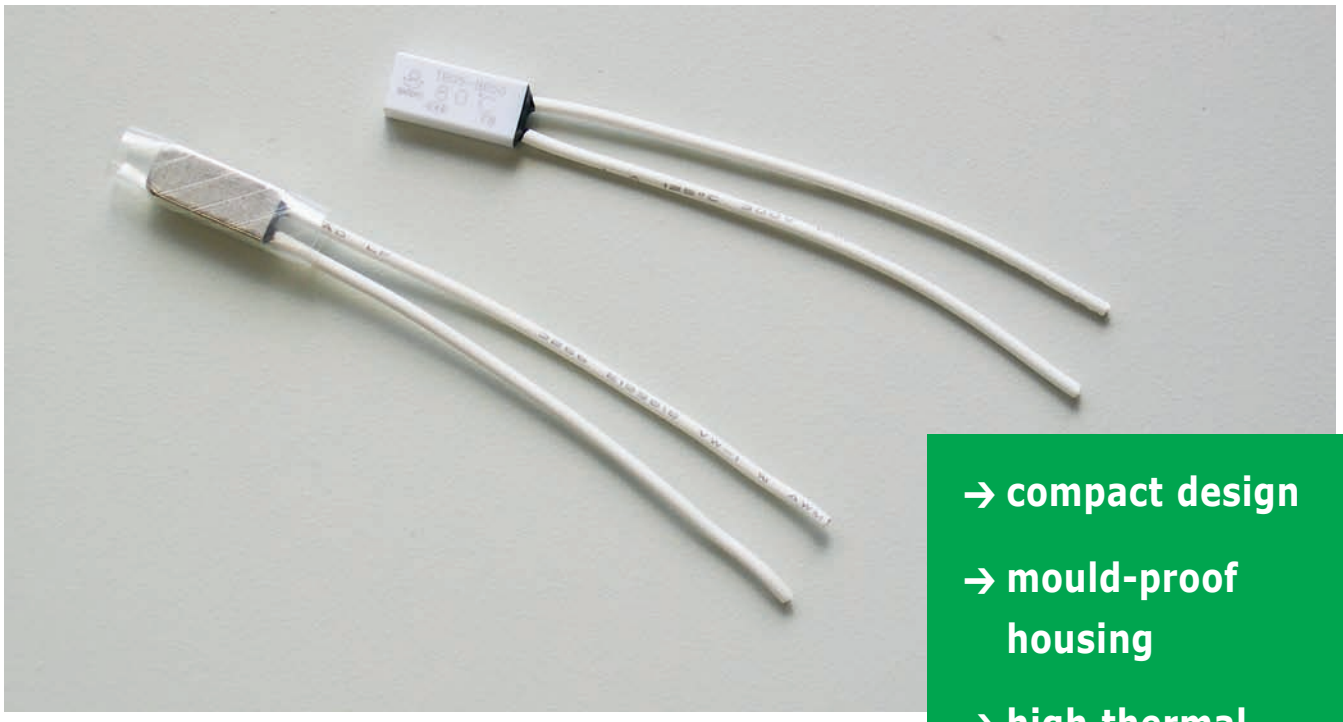
Thermal Protector TB 05

Limitor
Temperature, Current, Time under Control



- → compact design
- → mould-proof housing
- → high thermal sensitivity
- → high mechanical stability (especially metal housing)

Applications

Thermal overload protection of small electrical equipment, small electric motors, heating appliances, fluorescent lighting ballasts and others.

After cooling down to the snap-back temperature of the bimetal disk, the protector returns to its initial position automatically.

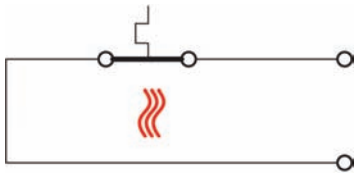
Function

The thermal protector TB 05 normally operates not current sensitive. Temperature detection is realized by a bimetal snap disk.

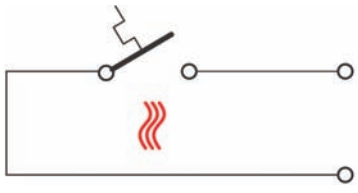
Using high-impedance bimetal material, the response time of the protector can be reduced (moderate current sensitivity).

The thermal protector is available with normally closed (NC) as well as normally opened (NO) contacts.

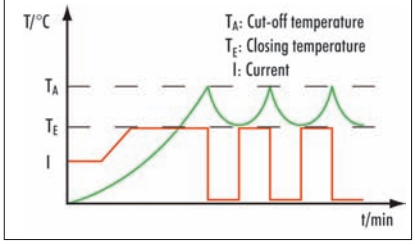
Circuit diagram (NC)



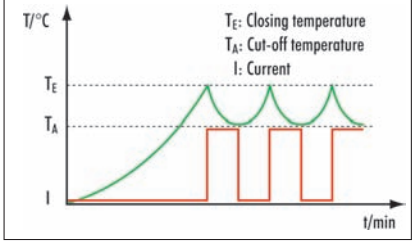
Circuit diagram (NO)



Functional diagram (NC)



Functional diagram (No)

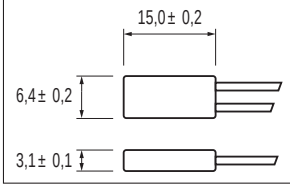


Technical Data Thermal Protector TB 05

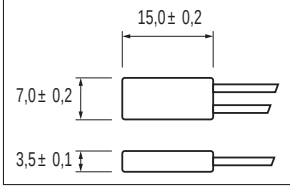
Switching Capacity	250 V / 50 Hz, 5 A
Minimum Current	50 mA
Max. Switching Capacity	250 VAC, 5 A
10.000 Cycles	24 VDC, 10 A
Action Type	3 C
Switching Temperature	50°C – 155°C (±5K)
Switching Differential	10 – 50 k (±15K) depending on Switching Temperature
Max. Ambient Temperature	160°C
Approvals	UL; VDE 60730-2-3; CQC

Dimensions TB 05

TB 05 metal housing



TB 05 plastic housing



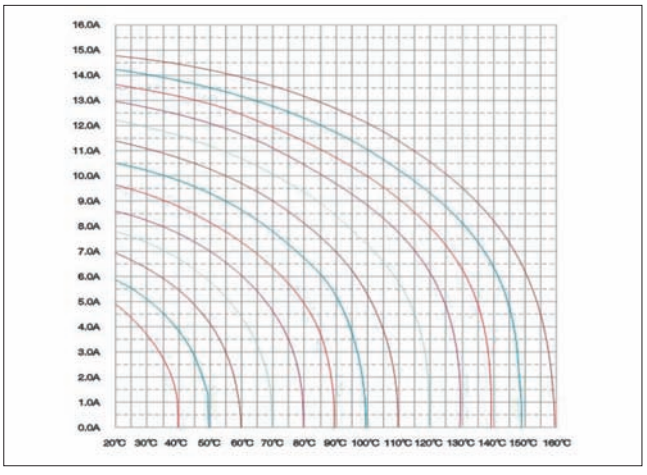
Technical Informations

The thermal protector TB 05 is enclosed by a mould-proof housing which is available as metal or plastic type.

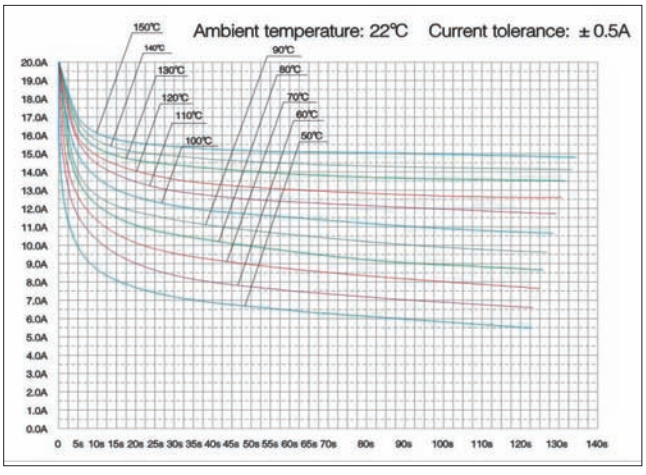
Electrical insulation of the metal housing is possible by means of insulation tubes. Its rectangular homogeneous design provides efficient and fast temperature transfer.

Standard leads are 70 mm (20/22 AWG).
Other leads (diameter, stripped etc.) are available on request.

Tripping Temperature vs. Current



Current vs. Tripping Time



Coding system

TB 05 - BB 5 D - 105

- operating temperature (example: 105°C ±5K)
- bimetal: **D** low resistance value
- type case: **1** metal case, **5** plastic case
- function: **BB** normally closed type (NC)
  KA normally open type (NO)
- item: **5 Amp.**

Limitor
Temperature, Current, Time under Control

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