- **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.

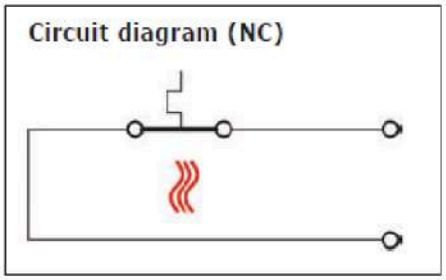
Function

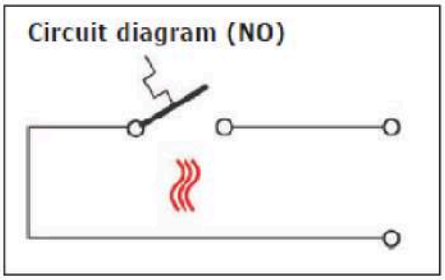
The thermal protector TB 05 normally operates not current sensitive. Temperature detection is realized by a bimetal snap disk.

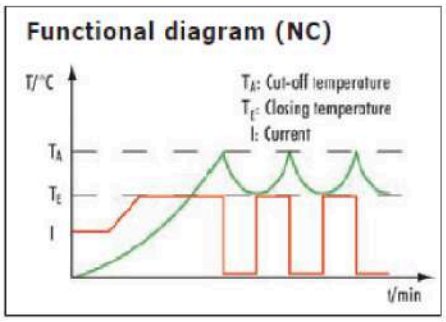
Using high-impedance bimetal material, the response time of the protector can be reduced (moderate current sensitivity).

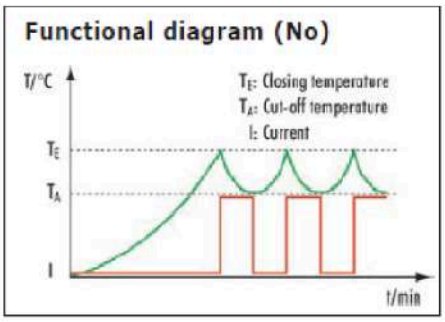
The thermal protector is available with normally closed (NC) as well as normally opened (NO) contacts.

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









THERMAL PROTECTOR TB 05

Technical specifications	
Switching capacity	250V / 50Hz, 5A
Min. current	50mA
Max. switching capacity	250 VAC, 5A
10,000 cycles	24 VDC, 10A
Action type	3 C
Switching temperature	50° C - 155° C (±5K)
Switching differential	10 - 50 k (±15 K) depending on switching temperature
Max. ambient temperature	160° C
Approvals	UL, VDE 60730-2-3, CQC

Technical information

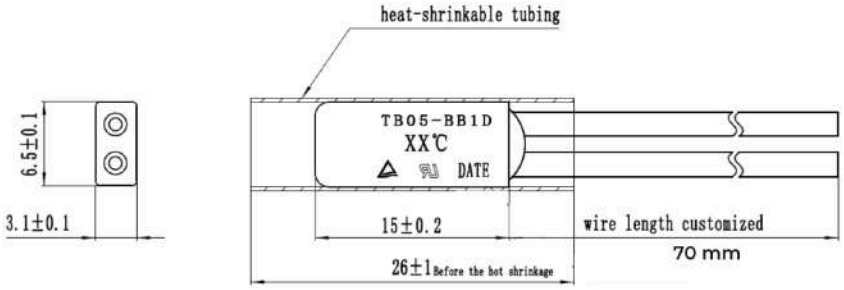
The thermal protector TB 05 is enclosed by a mould-proof housing which is available as metal or plastic type.

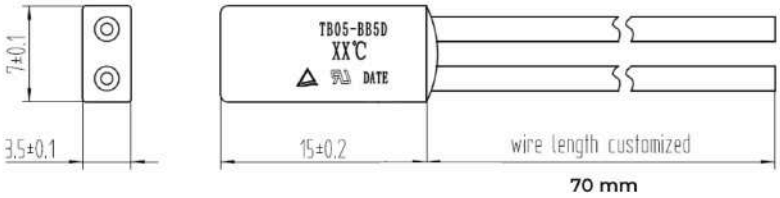
Electrical insulation of the metal housing is possible by means of insulation tubes.

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.

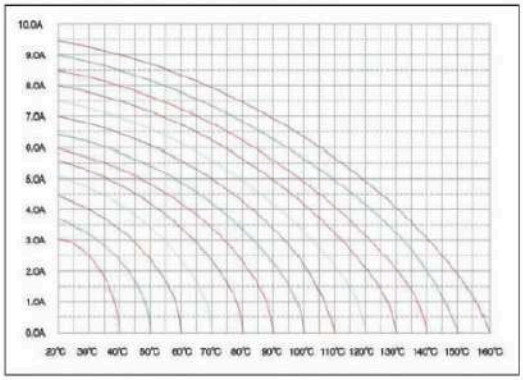
Dimensions



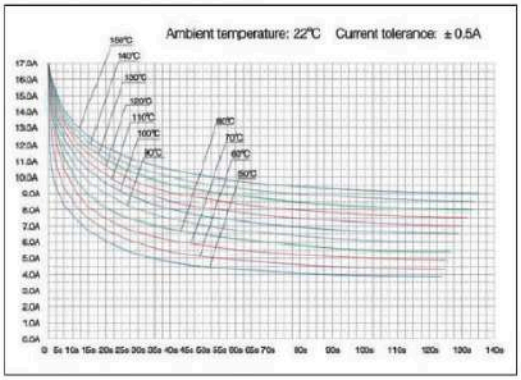


Temp. range	Wire type
50°C - 120°C	UL3266 AWG22# white
125°C - 160°C	UL3135 AWG20# red

Tripping Temperature vs. Current



Current vs. Tripping Time



Ordering information (Please use the characters in the chart below to construct your product code)

Sample code TB 05 - BB - 5 D - 105

Switch type

5 Amp

Function

BB = Normally closed type (NC)

KA = Normally open type (NO)

Housing type

1 = Metal case

5 = Plastic case

Bimetal

D = Low resistance value

Operating temp

e.g.: 105°C ± 5K

If you require a customized solution for your program contact our sales team.