Thermal Protector TB 05



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.

- → high thermal sensitivity
- → high mechanical stability (especially metal housing)









Technical Data Thermal Protector TB 05

Switching Capacity	250 V / 50 Hz, 5 A
Minimum Current	50 mA
Max. Switching Capacity 10.000 Cycles	250 VAC, 5 A 24 VDC, 10 A
Action Type	3 C
Switching Temperature	30°C - 155°C (± 5 K)
Switching Differential	10 - 50 k (± 15 K) depending on Switching Temperature
Max.	
Ambient Temperature	160°C
Approvals	UL; VDE 60730-2-3; CQC

Dimensions TB 05





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

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.

Tripping Temperature vs. Current

Current vs. Tripping Time





Coding system TB 05 - B - B 5 D - XXX Operating temperature Bimetal: D low resistance value Type case: 1 metal case, 5 plastic case A temperature protection, B current-/temperature protection Contact configuration: B normally closed, K normally open Item: 5 Amp.