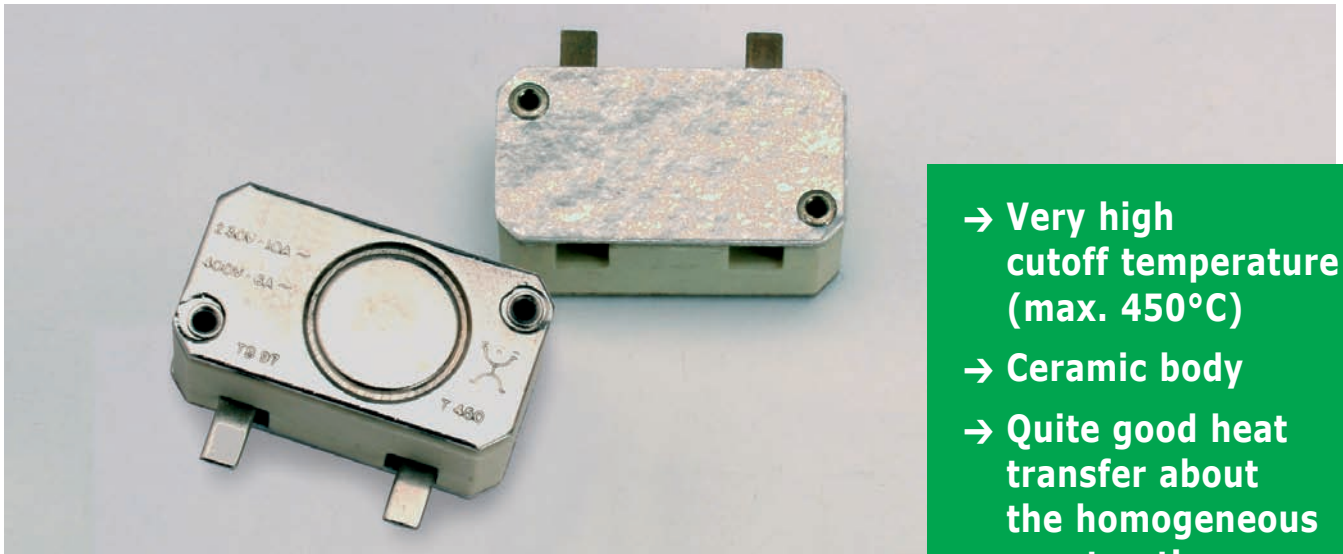


High Temperature Limiter TB 97



- Very high cutoff temperature (max. 450°C)
- Ceramic body
- Quite good heat transfer about the homogeneous construction
- High temperature sensitivity
- Fast reaction time
- High contact rating

Description

If thermal overload protection in demand: simple in function, reliable in technology and competitive in price take the thermal overload protector TB 97. The TB 97 based on reliable bimetal snap-disc technology and is specially designed for application where high temperature are needed, with a maximum switching temperature of 450°C. Even if the operating temperature is more than 400°C the operating temperature is within tolerance of $\pm 5\%$.

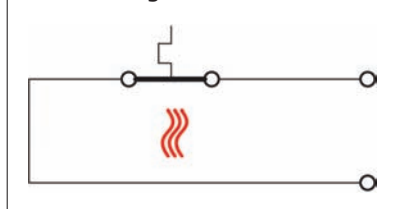
Function

When temperature rises and will reach the fixed operating temperature, a contact system will open (NC) or close (NO) the electrical current circuit. After cooling down the contact

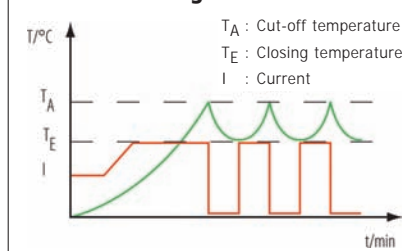
system return back in its original position (automatically reset function).

Within its nominal power conditions the limiter TB 97 works independent from any current supply.

Circuit diagram



Functional diagram



Typical application

- Electrical oven, Heating elements,
- Barbecue equipment
- Irons, Iron machines
- Industrial usage, Welding machines, Soldering machines, etc.

Approvals TB 97

Standard 60730-1; 2-9, VDE certificate 131955, UL file E 96862, conform to RoHS

Dimensions:

L 27,5 mm x **B** 15,5 mm x **T** 12,5 mm

Technical data

Switching Temperature	Power Capacity	Dielectric Strength	Durability	Contact Resistance
180°C - 450°C	10A (230VAC); 6A (400VAC)	3.000 V	10.000 cycles	$\leq 50 \text{ m}\Omega$
180°C - 350°C	13A (120VAC)	2.500 V	10.000 cycles	$\leq 50 \text{ m}\Omega$

In 5 Kelvin steps; tolerance: $\pm 5\%$, reset temperature: $T_A - 100^\circ\text{K}$, $\pm 20\text{K}$

Special differential on inquiry!

Indication of purpose: operating control

Construction of control: incorporated control

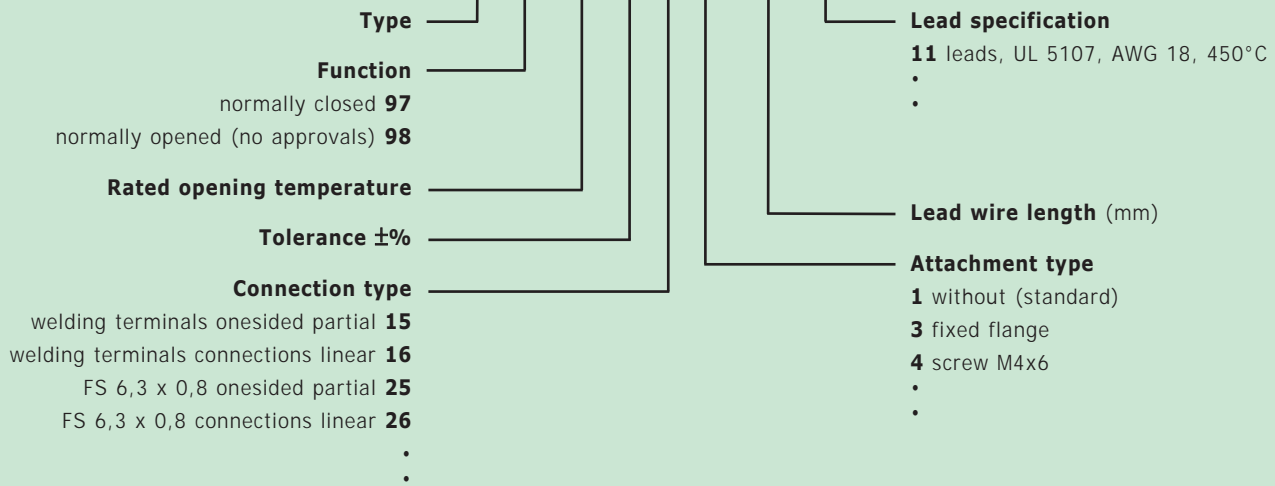
Type of action: 1B

Polution degree: 2

Maximum ambient temperature: 400°C

Coding system

TB XX XXX X XX X (XXX XX) or (XXXX) - customized



Example: TB 97 - 200 - 5 - 15 - 1 - 700 - 11

■ Type TB

■ Contacts normally closed

■ Switch off temperature 200°C

■ Tolerance ±5% (190-210°C)

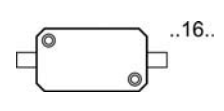
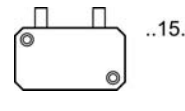
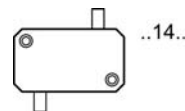
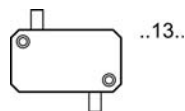
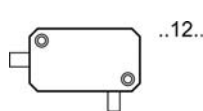
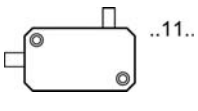
■ Reset temperature 100°C ±20K

■ Welding terminals, parallel, partial

■ Lead wire length 700 mm, 10 mm semi stripped

■ Lead UL 5107, AWG 18, 600 V, 450°C

Connection configuration

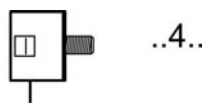
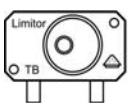
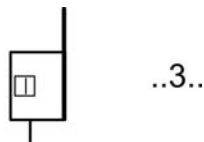
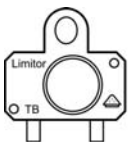
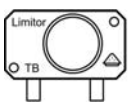


Standard connection: welding terminals 11-16
alternative: FS 6,3 x 0,8 straight (21-26)

screwed connection M3 straight (41-46)

welded on leads (65/66): AWG 14-18, others on inquiry

Attachment type



Dimension drawing (TB97 standard)

