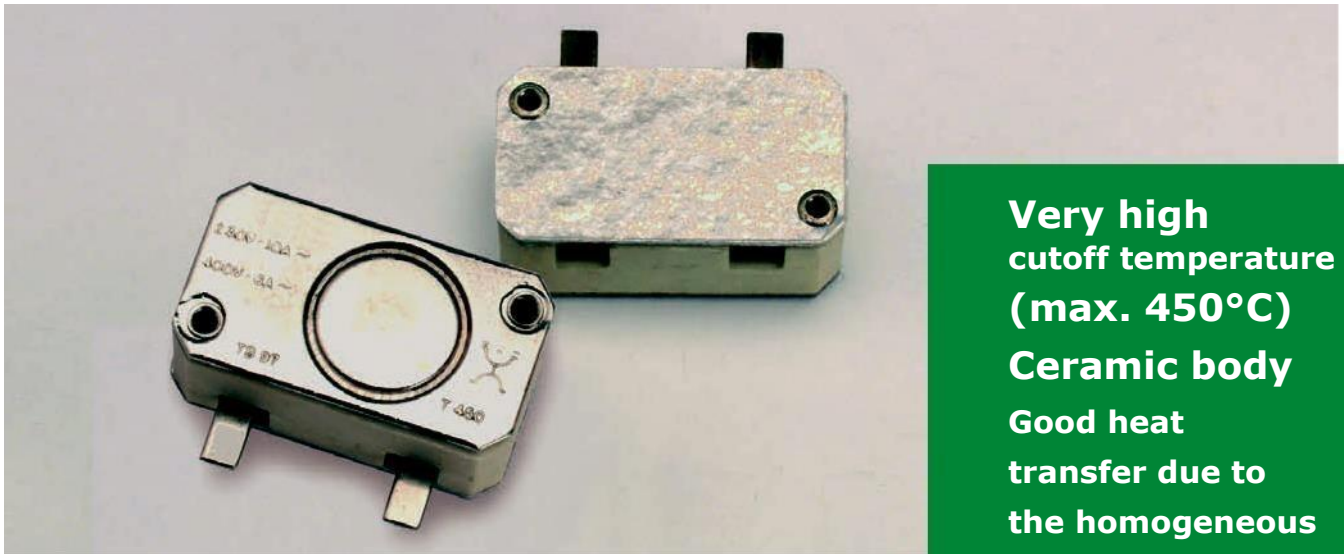


# High Temperature Limiter TB 97



**Very high cutoff temperature (max. 450°C)**  
**Ceramic body**  
**Good heat transfer due to the homogeneous construction**  
**High temperature sensitivity**  
**Fast reaction time**  
**High contact rating**

## Description

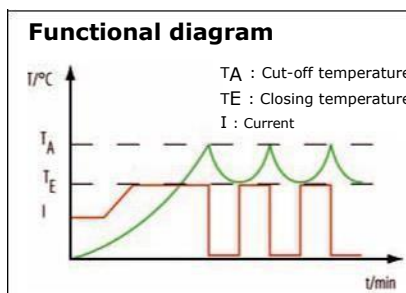
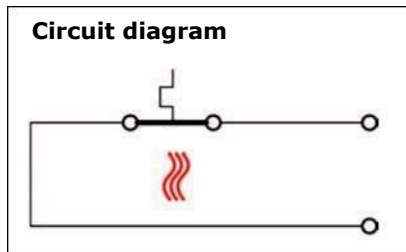
If thermal overload protection is in demand: simple in function, reliable in technology and competitive in price, take the thermal overload protector TB 97. The TB 97 is based on reliable bimetal snap-disc technology and is specially designed for applications where high temperature is needed, with a maximum switching temperature of 450°C.

Even if the operating temperature is more than 400°C, the operating temperature is within a 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 will return to its original position (automatically reset function). Within its nominal power condition, the limiter TB 97 works independent from any current supply.



## 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	$\leq 50 \text{ m}\Omega$

Toff: 5Kelvin steps,  $\pm 5\%$ , Differential 50...200°K dependon Toff,

special request on demand

Indication of purpose: operating control

Construction of control: incorporated control

Type of action: 1B

Pollution degree: 2

Maximum ambient temperature: 400°C

### Coding system

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

- Type**
- Function**  
normally closed **97**  
normally opened (no approvals) **98**
- Rated operating temperature**
- Tolerance ±%**
- Connection type**  
welding terminals parallel **15**  
welding terminals linear **16**  
tab 6,3 x 0,8 parallel **25**  
tab 6,3 x 0,8 linear **26**  
•  
•

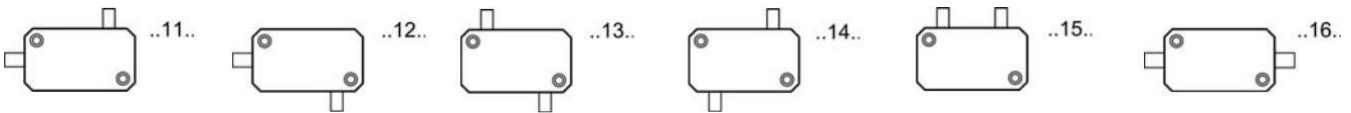
- Lead specification**  
**11** leads, UL 5107, AWG 18, 450°C  
•  
•
- Lead wire length (mm)**
- Attachment type**  
**1** without (standard)  
**3** fixed flange  
**4** screw M4x6  
•  
•

### Example: TB 97 - 200 - 5 - 65 - 1 - 700 - 10HA

Type TB  
 Contacts normally closed  
 Switch off temperature 200°C  
 Tolerance ±5% (190-210°C)

Reset temperature 150°C ±20K  
 Leads, parallel  
 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)  
 leads (65/66): AWG 18

#### Attachment type

#### Dimension drawing (TB97 standard)