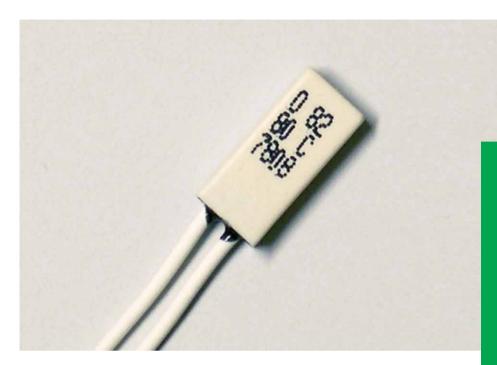
# Thermo switch O



(normally open)



### Area of Application

The thermo switch O is used whenever switch-on function is needed, caused by overheating or increasing temperature.

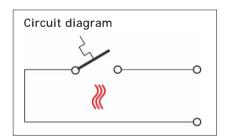
Specific applications include: cooling fan, alarm signal, controller, timer.

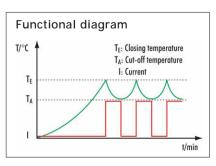
After cooling down and reaching the cut-off temperature  $T_A$ , the bimetal disk will automatically return into its original position and open the contact. The electric circuit is opened again.

- → very compact size
- → mould-proof housing
- → excellent thermal conduction characteristics due to homogenous constructional size
- → good temperature sensitivity
- → fast response time

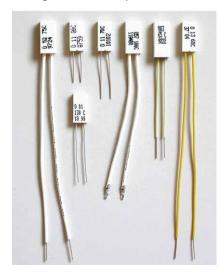
#### **Function**

The thermo switch O operates independent from any current supply. Temperature detection is effected by means of a bimetal disk which was first dimensioned in accordance with the required switch-on temperature  $T_E$ . When this fixed switch-on temperature  $T_E$  is reached, this bimetal disk will snap over, closing a contact system and thereby closing the electric circuit of the device to be started.





### Configuration examples



## Technical specifications thermo switch O

Breaking capacity: 250 V; 1,0 A / 50 Hz

Min. current: 20 mA

Switching temperature:  $50^{\circ}\text{C} - 130^{\circ}\text{C} \ (\pm 10)$ 

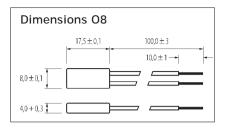
in 5 Kelvin steps

Switching differential: 10 K to 60 K depending

from switch on temperature

max. ambient temperature: 160°C / 200°C, 1 minute

Approvals: VDE (EN 60730), conform to RoHS



alternative:

5 housing type:

L 4,0 x W 8,0 x H 16,0

1 housing type:

L 3,6 x W 8,0 x H 14,5

#### **Technical Data**

The housing of this switch consists of a single part bag housing which is closed at its end by resin (O8 housing type); this makes the switch mould-proof. This mould-proof switch may thus also be used in "tough" environments subject to the detrimental influences of humidity or dirt. Alternative housing types: unsealed version (O5) or plate bar version (O1).

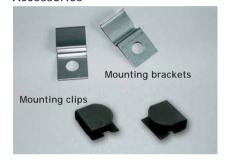
All housing types are voltage-free. Due to its constructional size the O switch is one of the most compact thermostats available. This ensures a very fast response rate.

Its rectangular homogenous constructional size provides excellent thermal conduction characteristics. The housing is resistant against temperatures (permanent temperature: 160°C), with a temporary increase in temperature up to 200°C max. being permissible for a short period only.

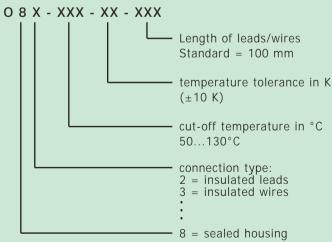
The standard version is equipped with 100 mm long (length of stripped isolation: 10 mm) insulated leads or wire connection (AWG 24).

Special leads or wire (larger diameter to AWG 22) or different lengths available on request.

#### Accessories



## Type reference O switch (normally open type)



Example for type reference:

082-125-10-100

thermo switch

insulated lead (standard AWG 24)

125°C switch-on temperature

tolerance ±10 K

100 mm lead length (10 mm stripped length)



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