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.

- → 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°C – 130°C (±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

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 mouldproof switch may thus also be used in "tough" environments subject to the detrimental influences of humidity or dirt. Alternative housing types: unsealed version (05) or plate bar version (01). 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.



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

Accessories



Type reference O switch (normally open type)



Example for type reference: **O 8 2 – 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)



