

Temperature detector P



Area of Application

The temperature detector P is used wherever protection against overtemperature is required. Specific applications include: protection of primary windings in transformers, winding protection in small electric motors, and general temperature protection of small electric equipments.

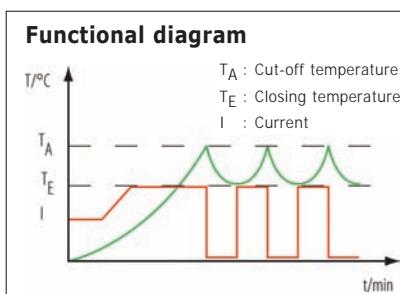
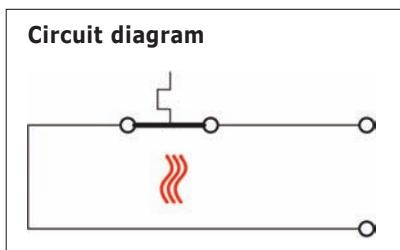
Function

The temperature detector P 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 cut-off temperature T_A . When this fixed cut-off temperature T_A is reached, this bimetal disk will snap over, breaking a contact

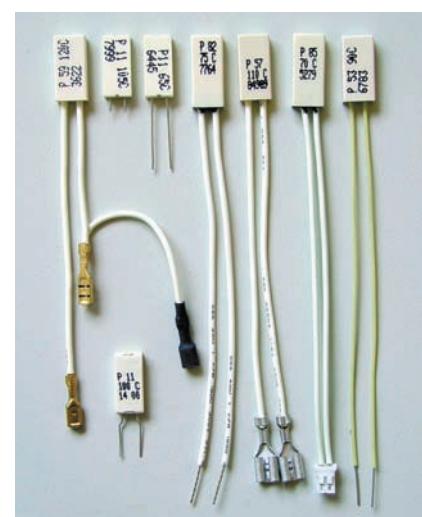
system and thereby interrupting the electric circuit of the device to be protected.

After cooling down and reaching the closing temperature T_E , the bimetal disk will automatically return into its original position and thus make the contact. The electric circuit is closed again.

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



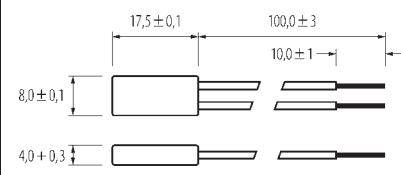
Configuration examples



Technical Specifications Temperature detector P

Breaking capacity:	250 V; 2,5 (1,6) A / 50 Hz
Min. current:	20 mA
Switching temperature:	40°C – 150°C, (±5 or ±10), in 5 Kelvin steps
Max. breaking capacity:	2,5 A cos Φ 1,00 / 250 V, 150°C 4,0 A cos Φ 0,45 / 250 V, 135°C
Switching differential:	10 K ... 60 K depending on the cut-off temperature
Type of action:	2.B (max. drift ±5 K)
max. ambient temperature:	160°C / 200°C, 1 minute
Approvals:	VDE (EN 60730) UL 2111, conform to RoHS

Dimensions P8



alternativ:

P5 housing type:

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

P1 housing type:

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

Technical Data

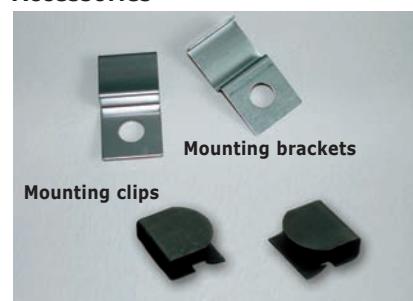
The housing of this switch consists of a single part bag housing which is closed at its end by resin (P8 housing type); this makes the switch mould-proof. This mould-proof switch may thus also be used in "tough" environments subject to the detrimental influences of humidity or dirt. Alternative housing types: unsealed version (P5) or plate bar version (P1). All housing types are voltage-free. Due to its constructional size the P 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).

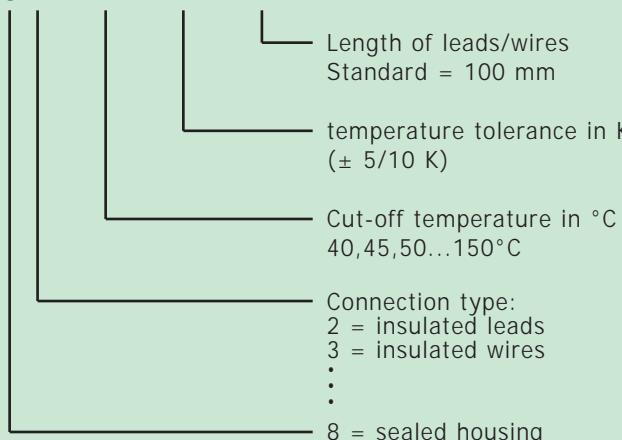
Special leads or wire (larger diameter to AWG 22) or different lengths available on request.

Accessories



Type reference P switch (temperature detector with automatic reset function)

P 8 X - XXX - XX - XXX



Example for type reference:

P 8 2 – 125 – 05 – 100

temperature detector

insulated lead (standard AWG 24)

125°C cut-off temperature

tolerance ±5 K

100 mm lead length
(10 mm stripped length)