## PROTHERM Wärmeschutz GmbH

## **Technical Data Bimetal Temperature Automatic Reset Type 60EC**

example of use	24. 5 31 6±2 300±20
version	60EC
contact version	automatic disconnection and connection of a circuit within the defined control range (temperature control)
contact type	NC = normally closed / NO = normally open
housing material	Phenol
nominal switching temperature	40°C until 100°C
max. ambient temperature	24h at 100°C and 24h at -30°C (according to internal test setup)
standard-tolerance range	±3K to ±4K
standard reset temperature	10K (tolerance $\pm$ 4K to $\pm$ 5K) below NST
rated voltage	230 VAC (U <sub>N</sub> 50/60Hz) 125 VAC
rated current at $U_N$ ohmic $\cos \phi = 1,0$	3A / 125 VAC for 10.000 cycles 3A / 250 VAC for 10.000 cycles (recommended minimum current = 50mA)
approvals	without
connection	wire
and mounting	see separate configuration card
high voltage insulation	2 kV for 1 second
degree of protection	equivalent to IP64
contact resistance	<30mΩ

The indicated pictures, drawings and dates are exemplary. Depending on the switch configuration it may differ. Thermostats are safety components! For the use in a specific application technical guidelines, requirements or approvals must be considered and the thermostats must be tested in real environmental conditions. Please consider also the electrical power in relation with the voltage supply of your application. The approvals also differ depending on the various nominal voltage. We will be glad to help you, please ask.

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## **Bimetal Temperature Automatic Reset Type 60EC**

## **Functions & Types**

#### **Bimetal switch as Automatic Reset Type**

After reaching its factory-adjusted **N**ominal **S**witching **T**emperature (NST) the bimetal disc suddenly turns over from its stable initial position into a stable end position and thereby activates the switching device. The electrical circuit is disconnected (NC-type) or connected (NO-type). The bimetal disc turns back automatically in its initial position to close or open the circuit again.

#### Normally closed (NC)

At rising temperature contacts **open** and disconnect the electric circuit. (Interruption of the signalling pathway at temporary overheating, for example temperature control of a switch cabinet)

#### Normally open (NO)

At rising temperature contacts **close** and activate the electric circuit. (Connection of a signal transmitter or an air cooler)

#### Mounting options pursuant to our configuration card

### **Important Information**

An Automatic Reset Type is not developed for final shut down because of no permanent end switch. The listed specifications and information are based on tests and test series. They are of a standard nature and therefore deviations may occur in connection with specific applications. Please note that outside influences like moisture, gas formation, ultraviolet radiation, magnetic fields or vibrations can affect the function of the thermostat. Especially any influence of silicon must be avoided.

## **Benefits & Advantages**

The outstanding quality level of our Automatic Reset Type 60EC satisfies highest demands for safety and reliability. They are provided with a patented, fully developed and reliable switching device system.

Standard type diameter 16,2mm (half-inch) and hole spacing 24,5mm

Save, reliable & durable 100% tests while production process / 100% final test if required

Temperature sensitive mechanical unstressed and electrically unloaded bimetallic disk

Fast reaction excellent heat transfer induced by an ideal placed bimetallic disk

Flexible use many mountings are available as well as specific customer

requests (see configuration card)

The manufacturing and production of our Thermostats is DIN ISO 9001 certified and of course the current RoHS-conformity is complied.

Our friendly team will give you detailed information of all our products. Of course, we want to help you, to find the best solution for your application. Please call us for further information.

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