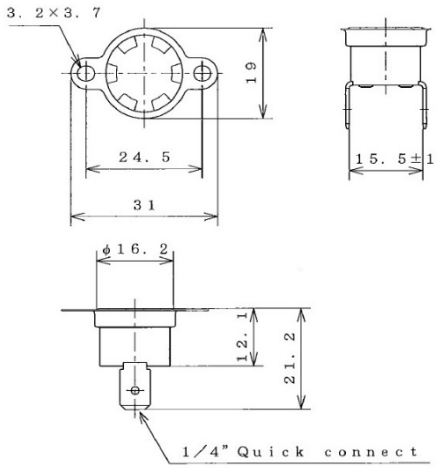
PROTHERM Wärmeschutz GmbH

Technical Data Bimetal Temperature Automatic Reset Type 03EN

example of use



version	**03EN**
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	0°C until 150°C
max. ambient temperature	24h at 150°C (according to internal test setup)
standard-tolerance range	< 110°C = ±3K to ±4K > 110°C = ±5K
standard reset temperature	< 100°C differential = 10K (tolerance ±4K to ±5K) below NST > 100°C differential = 15K to 20K (tolerance ±6K to ±7K) below NST
rated voltage	230 VAC (U_N 50/60Hz) 125 VAC
rated current at U_N ohmic cos φ = 1,0	15A / 125 VAC for 100.000 cycles (acc. C-UL) 10A / 240 VAC for 100.000 cycles (acc. C-UL) 10A / 250 VAC for 100.000 cycles (acc. VDE) 16A / 250 VAC for 30.000 cycles (acc. VDE) (recommended minimum current = 1A)
approvals	C-UL (#E43273), VDE (#40004992)
connection and mounting	see separate configuration card
high voltage insulation	2 kV for 1 second
degree of protection	equivalent to IP00
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 03EN

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)

Connectivity and 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 03EN 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 terminals and 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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