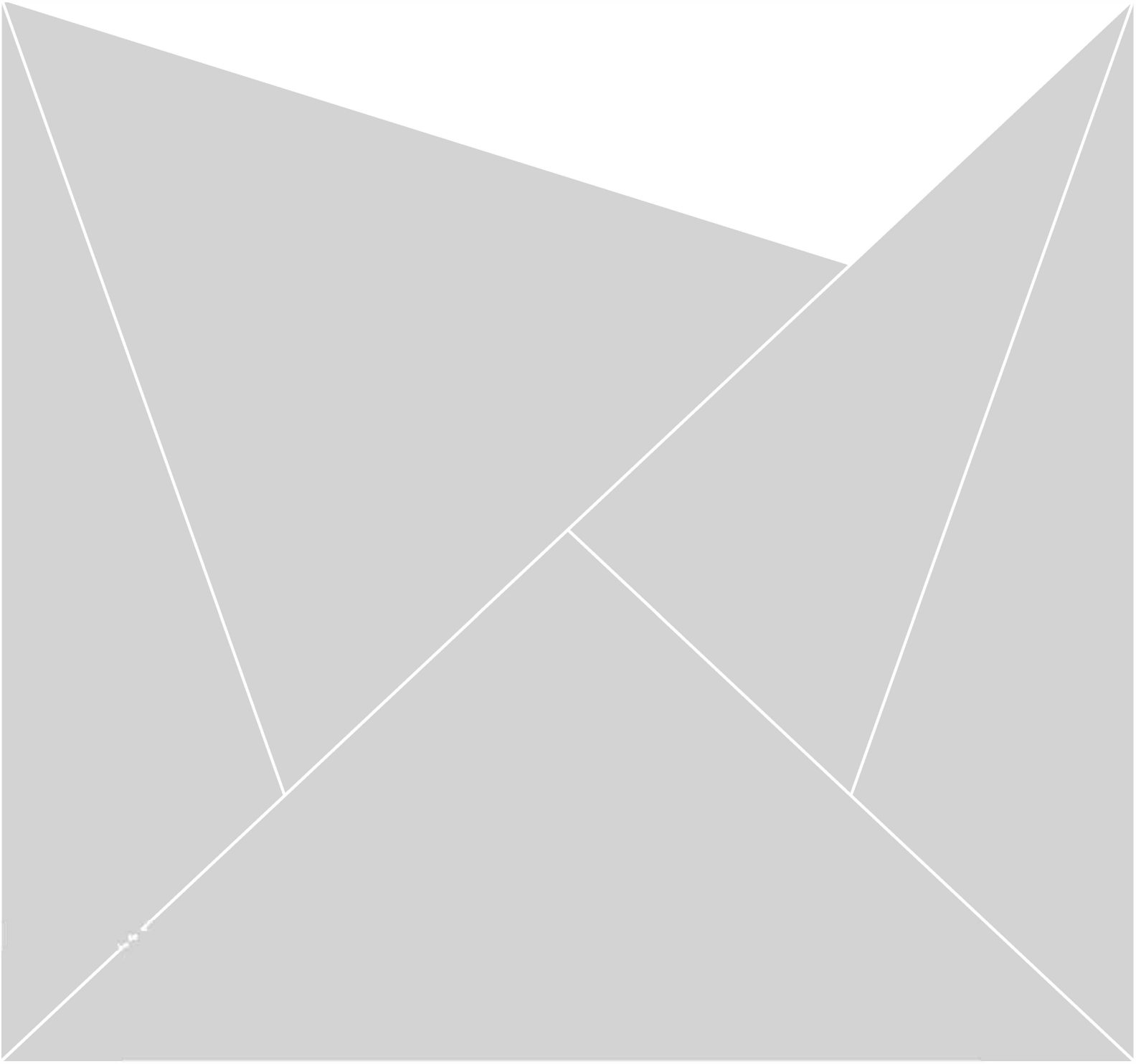
Qoltec®



OPERATING INSTRUCTIONS

10A shut-off thermostat

Model: 54505

Introduction

The Qoltec closing thermostat is designed to regulate the temperature in electrical enclosures, control cabinets and other enclosed spaces. The device automatically closes the circuit (turns on the connected device) when the ambient temperature exceeds the set value. The thermostat is equipped with a bimetallic sensor that reacts to temperature changes.

When the set temperature is exceeded, the contacts are closed and the device is switched on.

When the temperature drops (taking into account hysteresis), the contacts are opened and the device is switched off.

The product is designed for:

- control cabinets,
- electrical enclosures,
- ventilation systems,
- industrial installations,
- overheating protection systems.

Safety rules

1. The device should only be installed by qualified personnel with the appropriate authorisation, in accordance with applicable standards and legal regulations for electrical installations.
2. An adequate level of protection against accidental contact with live parts must be ensured by correctly installing the device in an enclosure or switchboard that meets safety requirements.
3. It is strictly forbidden to exceed the permissible technical parameters specified by the manufacturer, in particular the maximum voltage and load current.
4. All installation, connection and maintenance work must be carried out only when the power supply is disconnected and after ensuring that the circuit is not live.

Precautions

1. Do not use in a humid environment.
2. Do not open the device housing.
3. Do not exceed the permissible load of 10A.
4. Install only when the power supply is disconnected.
5. This product is intended for indoor use.

Electrical connection

Maximum voltage: 250V AC

Maximum load current: 10A

Do not exceed the permissible current and voltage parameters.

For higher loads, use an intermediate contactor.

Settings and hysteresis

Hysteresis (switching difference) must be taken into account:

NO and NC versions:

7 K ± 4 K

Changeover version:

4 K ± 1.5 K

Hysteresis refers to the difference between the switch-on temperature and the switch-off temperature.

The device switches on when the set temperature is exceeded.

Temperature control

Use the control knob to set the desired temperature (range 0–60°C).

The thermostat will start operating automatically.

Adjust the setting if necessary.

Due to hysteresis, the device switches on at a temperature higher than the set temperature.

Installation guidelines

The temperature controller is designed to measure the temperature inside enclosures (e.g. control cabinets).

Installation in heating applications:

- Install in the upper part of the enclosure
- As far away from heat sources as possible

Installation in cooling applications:

- Install in the lower part of the enclosure
- As far away as possible from the cooling device

Important information

- Maximum voltage: 250V AC
- Maximum current: 10A
- For higher loads, use an intermediate contactor
- Installation only when disconnected from the power supply, installation on a 35 mm DIN rail in accordance with EN50022.

Note:

- Ventilation openings must not be covered.
- Operating temperature range: -20°C to +80°C.

Internal diagram – contact operation

The first diagram shows the operating principle and terminal markings.

Illustrations 1 and 2

Markings:

1 and 2 – thermostat connection terminals

L – phase wire

N – neutral wire

NO (blue) – normally open contact (closing)

Fan symbol – controlled device

Principle of operation

The thermostat is of the NO (Normally Open) type.

At temperatures below the set point, contact 1–2 is open (device switched off).

When the set temperature is exceeded, contact 1–2 closes (device switched on).

In other words: When the temperature rises above the set value, the thermostat supplies power to the device.

Connection diagram in the installation

Illustration 2

The second figure shows an example of connecting a device (e.g. a signal lamp or fan).

1. Connect the phase wire (L) to terminal 1 of the thermostat.
2. The phase wire to the device (e.g. fan, lamp) comes out of terminal 2.
3. Connect the neutral wire (N) directly to the device.
4. Connect the protective conductor (if required) in accordance with installation standards.

Example for a fan:

1. Set the temperature to, for example, 35°C.
2. When the temperature in the control cabinet exceeds 35°C → the thermostat closes the circuit.
3. The fan receives power and starts operating.
4. After the temperature drops (taking hysteresis into account), the circuit opens and the fan switches off.

Technical data

Parameter	Value

Manufacturer	Qoltec
Sensor type	Bimetallic
Maximum voltage	250 V AC
Maximum current	10 A
Mounting	DIN rail TH35
Ingress protection	IP20
Temperature control range	0°C – 60°C
Operating temperature	-20°C ~ +80°C
Hysteresis	7°C ± 4°C
Material	Plastic
Colour	White
Dimensions	60 x 33 x 43 mm
Net weight	0.040 kg

Maintenance

The device does not require any special maintenance.

Periodically check that electrical connections are correct and that the surrounding area is clean.

Disposal

Do not dispose of the used device in municipal waste.

The product should be taken to an appropriate collection point for electrical and electronic equipment.

Warranty

The product is covered by a 24-month manufacturer's warranty.

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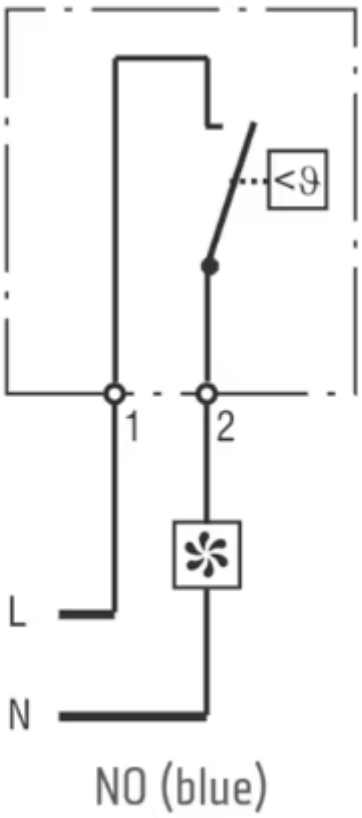

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