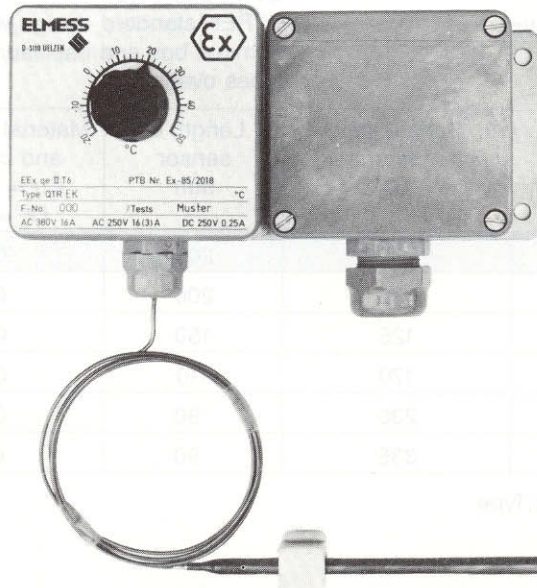


Approvals

Certificate of Conformity PTB-no. Ex-85/2018/TUEV Wien Ex-88/010.
Approved for all IIA, IIB and IIC hazardous area in EEC countries and Austria.

Illustration

Standard execution
Type QTREK

16 A, 380 V ~, AC 1

Application

The -temperature regulator serves as 2-step controller for the regulating of temperatures of spaces, mediums and surfaces within hazardous areas.

Design

In a casing made of impact resistant polyester a temperature regulator is installed and filled with pure mineral material. The sensor as well as the electric connection are led through screw couplings, which cannot be opened.

The terminals are in an EEx e-terminal box made of the same material. Both casings are fixed on a non-corrosive installation sheet, made of stainless steel.

Installation

The temperature regulator is mounted by means of screws at the flat wall or suitable place of plant support, machine parts or similar.

The capillary tubes may not be kinked. It must be assembled in that way that is sufficiently protected against mechanical damage. The bending radius may not be below 5 mm. Two clamps for the mounting of the sensor are attached to the space temperature regulator (range of adjustment -20 ... +50 °C).

At the execution with sealed flexible lead assembly (no terminal box), the temperature regulator is fixed at the existing clips.

The admissible ambient temperature according to VDE 0165 is -25 ... + 40 °C. In case of mechanically protected mounting an ambient temperature of -40 ... + 75 °C is admissible.

Types of protection

Ignition Type "Powder Filling" and "Increased Safety" EEx qe II T6 according to EN 50014-77 (VDE 0171).

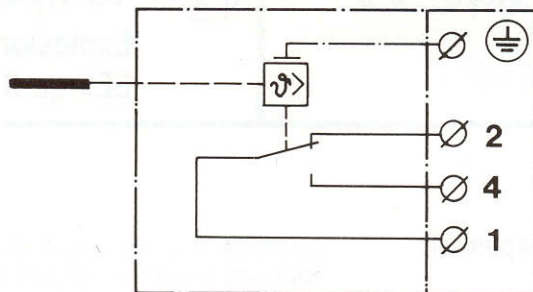
Test certificate PTB-no. Ex-85/2018 (Certificate of Conformity).

Protection type at least IP 54 according to DIN 40050 resp. IEC 144.

Protection class I according to VDE 0106 part 1 and VDE 0631.

Electrical connection

16 A, 380 V ~ resp. 0,25 A, 250 V—
 Cross section for nominal connection
 2,5 mm²
 cable inlet PG 16
 for cable diameter 8 – 15 mm



Selection Table

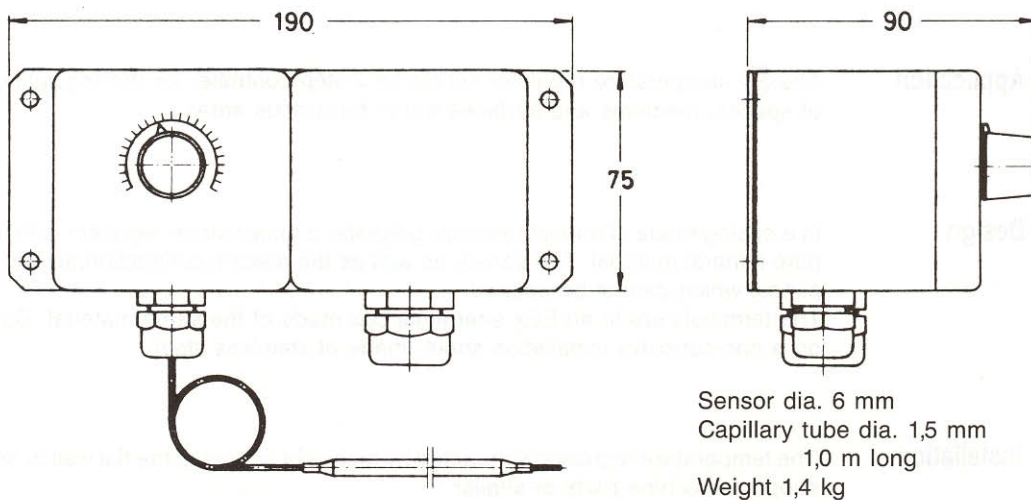
model designation

QTR.. basic type
 QTREK standard design with
 terminal box and capillary
 tubes overhung

| Range of adjustment °C | Sensor limit temperature °C | Length of sensor mm | Material of sensor and capillary Cu = copper Cr = CrNi | Switching difference K |
|------------------------|-----------------------------|---------------------|--|------------------------|
| -20 ... + 50 | 75 | 200 | Cu | 1,25 |
| 0 ... 70 | 95 | 200 | Cu | 1,75 |
| 0 ... 100 | 125 | 150 | Cu | 2,5 |
| 0 ... 150 | 170 | 110 | Cu | 3,75 |
| 0 ... 190 | 230 | 90 | Cu | 5,0 |
| 40 ... 290 | 335 | 90 | Cr | 7,5 |

Stock Type

Dimensions



Execution

Standard execution as shown with external control knob and terminal box with terminals. Executions without control knob with fixed temperature nominal value also usable as temperature limiter in connection with a contactor circuit without automatic reset.
 Other executions for example without terminal box but with sealed flexible lead assembly or bigger terminal box with larger terminals resp. other ranges of adjustment upon request.

Maintenance

Special maintenance of the device is not necessary. Testing of well-functioning of the heating system to be controlled in suitable periods of time (approx. half-yearly). Repairs of the thermostat are not permissible as the casing can only be opened by destroying it and therewith the ignition type is terminated.

Subject to technical modification.