



Window Pane Temperature Sensor

QAT22

Use

Indoor swimming pools in which the relative humidity is controlled as a function of the window temperature to prevent condensation on the walls and windows. The control is such that the window temperature is used as a compensating variable for relative humidity control.

Mechanical design

Flat, plastic housing with connecting cable. A nickel resistor is used as the sensing element. The latter together with one end of the connecting cable is embedded in the housing by means of synthetic resin. A self-adhesive aluminium foil on the lower side of the QAT22 is used to secure the sensor to the window pane. The sensor housing is white, and the adhesive foil is highly polished in order to reflect direct sunlight and as a protection against other radiated heat.

Mounting notes

Mounting location

If possible, on a north facing window; if no north facing window is available, select the window which remains in the shadow for the longest period of time.
The QAT22 should be affixed to the inner pane of the window and in the vicinity of the upper edge.

Installation

The sensor is attached to the window by means of its self-adhesive foil. Prior to applying the foil, make sure that the pane is cleaned with the cloth supplied with the sensor and completely dry.

Note!

If the window pane is not cleaned or is damp, the sensor will not adhere to it for any length of time.

Mounting position

Vertically, with the connecting cable entering from above – or horizontally. In the horizontal position, the cable is to be laid such that the self-adhesive foil is subjected to as little strain as possible.

Disposal

The devices are considered electronics devices for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic waste.

- Dispose of the device via the channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Technical data**General sensor data**

Range of use –10...+50 °C

Sensing element LG-Ni 1000

Measuring accuracy at 0 °C ±0.4 K

Time constant 30 s

Thermal coupling 93 %

Permissible cable lengths (2-core)

for a measuring offset of max. +0.6 K

Copper cable 2 × 0.34 mm² 25 m

Copper cable 2 × 0.5 mm² 38 m

Copper cable 2 × 1 mm² 75 m

Copper cable 2 × 1.5 mm² 110 m

Copper cable 2 × 2.5 mm² 185 m

Connecting cable 2-core, interchangeable, with ferrules

Cable length approx. 1.5 m

Degree of protection

Protection class III according to EN 60730-1

Environmental conditions

Operation to IEC 721-3-3

Climatic conditions class 3K5

Temperature –5...+55 °C

Humidity 5... 95 % r. h.

Transport and storage to IEC 721-3-2

Climatic conditions class 2K3

Temperature –25...+70 °C

Humidity <95 % r. h.

Mechanical ambient conditions class 2M2

Directives and Standards

Product standard EN 60730-1

Automatic electrical controls for household and similar use

Environmental compatibility

The product environmental declaration CE1E1701^{*)} contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).

Materials and colors

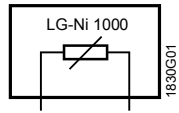
Housing SPA, RAL 9016 (white)

Weight

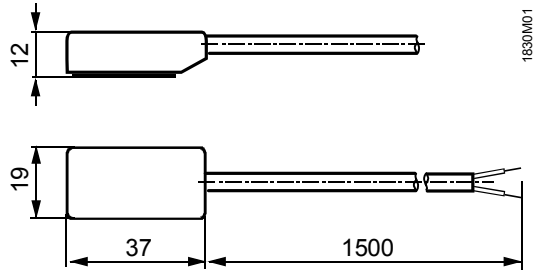
With packaging 0.03 kg

*) The documents can be downloaded from <http://siemens.com/bt/download>.

Internal diagram



Dimensions



Dimensions in mm