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 windows pane is not cleaned or is damp, the sensor will not adhere to it for any lenght 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 device is considered electrical and electronic equipment for disposal in terms of the applicable European Directive and may not be disposed of as domestic garbage.

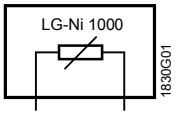
- Dispose of the device via the channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Technical data

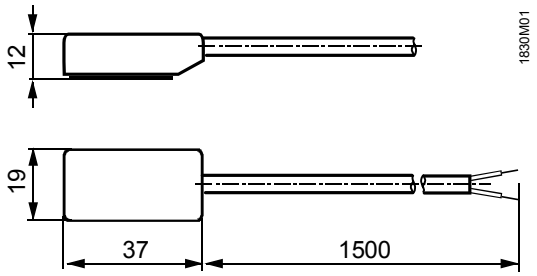
General sensor data	Range of use	−10...+50 °C
	Sensing element	LG-Ni 1000
	Measuring accuracy at 0 °C	±0.4 K
	Time constant	30 s
	Thermal coupling	93 %
	Permissible cable lenghts (2-core)	
	for a measuring offset of max. +0.6 K	
	Copper cable 2 × 0.34 mm²	25 m
	Copper cable 2 × 0.5 mm²	38 m
	Copper cable 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.
	Mechancal ambient conditions	Class 2M2
Directives and Standards	Product standard	EN 60730-1
		Automatic electrical controls for household and similar use
	EU conformity (CE)	8000073890 *)
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

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Building Technologies Division
International Headquarters
Gubelstrasse 22
6301 Zug
Switzerland
Tel. +41 58-724 24 24
www.siemens.com/buildingtechnologies