# **SIEMENS**

## **Technical Instructions**

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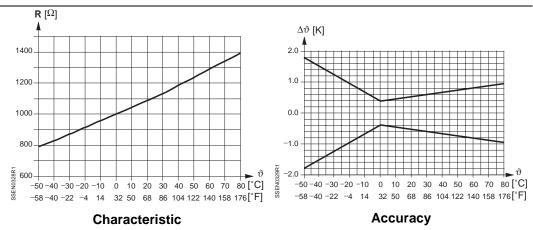
# QAC22

# **Outdoor Sensor**



Description	The outdoor sensor measures the outside temperature and, to a lesser degree, solar radiation, the effect of wind and the temperature of the wall.	
Application	The sensor is used as a:	
	Reference sensor for weather-dependent flow temperature control.	
	<ul> <li>Measuring sensor for optimization functions, value display or for connection to a building management system.</li> </ul>	
Product Number	QAC22	
Ordering	When ordering, specify quantity, product number and description.	
Equipment Combinations	The QAC22 is suitable for use with all types of controllers that can handle analog passive sensor signals.	
Mechanical Design	The sensor has a plastic casing with a removable cover. The connection terminals can be accessed after removing the cover. Cable entry is either from the rear (concealed wiring) or from below (surface-run wires). A cable entry gland PG11 can be screwed into the bottom of the casing.	
Specifications	Measuring range	−58°F to 158°F (−50°C to 70°C)
	Sensing element	LG-Ni 1000 $\Omega$ thin film element
	Accuracy	±0.4K @ 32°F (0°C)
	Time constant	Approximately 14 minutes
	Permissible ambient conditions	
	Storage/transportation Temperature Humidity Operation	-13°F to 149°F (-25°C to 65°C) <85% rh
	Temperature Humidity	-58° to 158°F (-50°C to 70°C) 0 to 100% rh
	Electrical connections	Terminals (interchangeable)
	Cable entry gland	PG11 (can be fitted)
	Weight	0.2 lb. (0.76 kg)
	Color	White

## LG-Ni 1000 Sensing Element



The sensing element changes its resistance value as a function of the temperature.

### **Engineering**

The controller used with the sensor determines the permissible cable length. See the controller's datasheet for cable length.

#### Installation

### **Mounting Location**

Locate the sensor based on its use. Do not expose to the morning sun. If in doubt, mount on the north or northwest wall.

- For control, mount on the occupied room's wall with windows.
- For optimization, mount on the coldest wall of the building (normally the north wall).

#### **Mounting Height**

Mount preferably in the middle of the building or heating zone, but at least 8 feet (2.5 m) above the ground.

Do not install above windows, doors, air diffusers or other heat sources.

Seal the cable conduit at the sensor to prevent measuring errors due to air circulation. Do not paint over the sensor.

Mounting instructions are printed on the packaging.

#### **Dimensions**

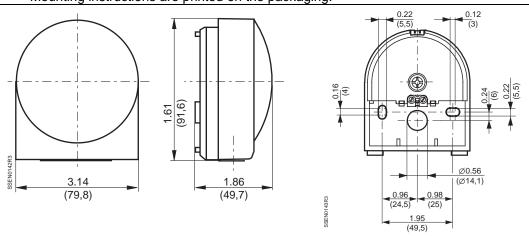


Figure 1. Dimensions in Inches (Millimeters).

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