



## Room Temperature Sensor

## QAA64

**Vandalproof though concealed mounting**

### Use

Acquisition of room temperature in spaces where the detector needs to be protected against damage or destruction by people.  
Such spaces are public buildings like schools, administrative buildings, multi-purpose halls, etc.

### Ordering

Indicate device name and type designation on order:  
Room temperature sensor **QAA64**

### Equipment combinations

All systems and devices that are capable of acquiring and handling the sensor's analog passive LG-Ni 1000 output signal.

### Function

The sensor acquires the air temperature via its sensing element whose resistance changes as a function of the temperature.  
The signal is delivered to a suitable controller for further handling.

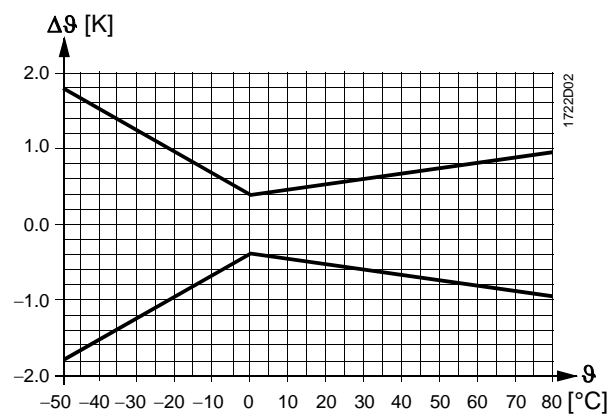
## Sensing element

Characteristic:

LG-Ni 1000



Accuracy:



## Legend

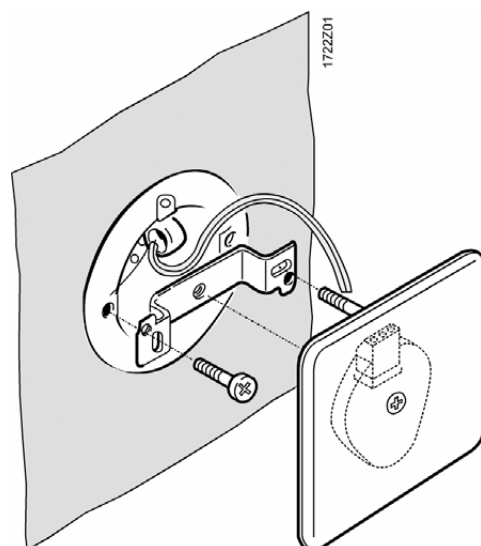
$R$  Resistance value in Ohm  
 $\theta$  Temperature in degrees Celsius  
 $\Delta\theta$  Temperature differential in Kelvin

## Mechanical design

The QAA64 has been designed specifically for installation on recessed conduit boxes having a fixing hole circle dia. of 60 or 69 mm.

The unit consists of a plastic cover and a fixing bracket made of metal. The rear of the cover carries the connecting terminal strip and a measuring element LG-Ni 1000.

The fixing bracket is fitted inside the recessed conduit box. A captive screw is used to secure the cover to the bracket.



## Engineering notes

For the permissible lengths of lines and measured value errors, refer to "Basic System Data" of the respective control system.

If, for some reason, the detector cannot be mounted in a location where it can correctly acquire the room temperature, a resistor can be mounted to correct or adjust the measurement. For this purpose, the detector has an auxiliary terminal (for details, contact SBT service personnel).

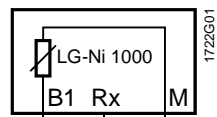
## Fitting and installation notes

Location	On an inner wall of the space to be heated, if possible on the wall opposite the heating unit. Not in recesses or shelves, not above or near heat sources. The end of the conduit at the detector must be sealed to prevent false measurements due to draughts through the conduit. The connecting wires are interchangeable.
Installation instructions	Installation instructions are supplied with the unit.

## Technical data

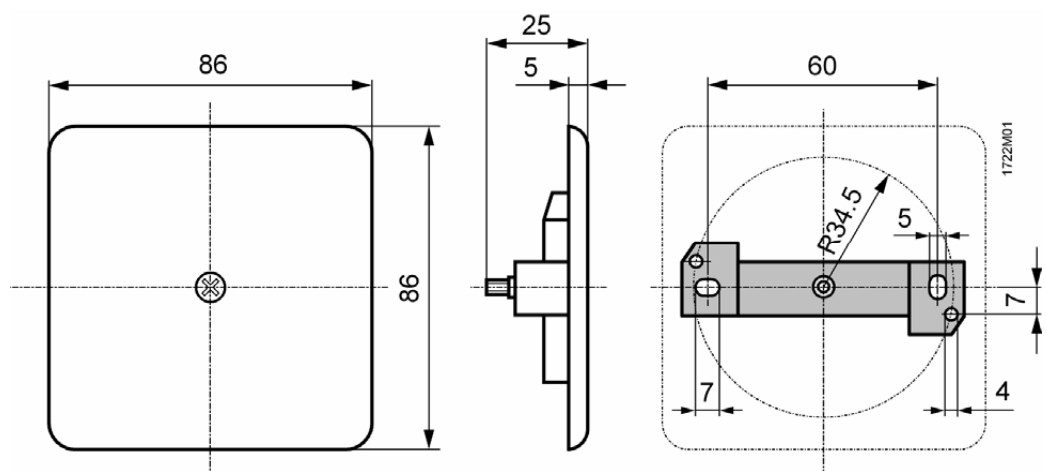
Functional data	Measuring range	0...50 °C
	Sensing element	LG-Ni 1000
	Time constant	6.5 min (depending on air movement and thermal coupling to the wall)
	Measuring accuracy	refer to "Function"
	Type of measurement and output	passive
Protective data	Protection standard of casing	IP 40 to EN 60 529
	Safety class	III to EN 60 730
Electrical connections	Connecting terminals for	2 x 1.5 mm <sup>2</sup> or 1 x 2.5 mm <sup>2</sup>
	Perm. cable lengths	refer to "Engineering notes"
Environmental conditions	Operation	IEC 721-3-3
	Climatic conditions	class 3K5
	Temperature	0...50 °C
	Humidity	0...95 % r. h. (noncondensing)
	Mechanical conditions	class 3M2
	Transport	IEC 721-3-2
	Climatic conditions	class 2K3
	Temperature	-25...+65 °C
Materials and colors	Humidity	<95 % r. h.
	Mechanical conditions	class 2M2
	Cover	insulating plastic, RAL 9010 (pure white)
	Fixing bracket	Steel, nickel-plated
Weight	Packaging	grey cardboard
	Sensor (complete assembly)	silicone-free
	Incl. packaging	approx. 0.06 kg

## Internal diagram



B1 Room temperature measuring signal  
M Measuring neutral  
Rx Auxiliary terminal

## Dimensions



Dimensions in mm