



Synco™ living

Meteo Sensor

QAC910

-
- **Wireless sensor for acquiring outside temperature and atmospheric pressure**
 - **RF communication based on KNX standard (868 MHz, unidirectional)**
 - **Battery-powered by commercially available 1.5 V batteries**

Use

- For integration into the Siemens Synco living system
- Acquisition of outside temperature and atmospheric pressure in HVAC plant
- Especially suited for:
 - Renovation projects (old buildings, museums, churches, historical buildings, etc.)
 - Difficult wall-mounting situations (sandstone, glass, etc.)
 - New houses or buildings

Equipment combinations

The QAC910 meteo sensor is designed for use with the Siemens Synco living system. For more detailed information about equipment combinations, refer to the Data Sheet covering the central apartment unit (CE1N2707en).

Ordering

When ordering, please give quantity, product name and type reference.

Scope of delivery

The QAC910 consists of outside sensor and RF transmitter. Each QAC910 is supplied complete with alkaline batteries, fixing material and Mounting Instructions.

Note

Not included in the scope of delivery is the cable required for the connection between outside sensor and RF transmitter.

Product documentation

The Operating and Commissioning Instructions for the QAC910 are contained in the product documentation of the central apartment unit.

Functions

Main function

In operation, the QAC910 forwards the acquired outside temperature and atmospheric pressure to the central apartment unit, either periodically or when changes occur.

Binding

The binding is used by the QAC910 to sign on at the central apartment unit, thus ensuring integration into the RF system. The binding process is triggered via the multifunction button. It is indicated by the multifunction LED.

Status query

The multifunction button can be used to query the batteries' capacity. Indication is by the multifunction LED.

RF binding test

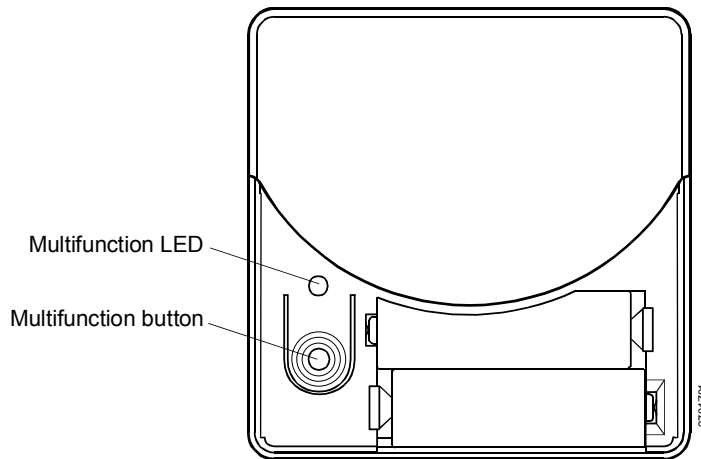
The multifunction button can be used to trigger a binding test. This test is made to check the radio link to the central apartment unit. The RF binding test is indicated by the multifunction LED.

Error and maintenance messages

All error and maintenance messages are forwarded to the central apartment unit where they appear on the display.

The following messages are delivered by the QAC910:

| Error messages | Maintenance message |
|---------------------------------------------|-------------------------------------------------------|
| Sensor error (failure of outside sensor) | Batteries exhausted (battery life \leq 3 months) |



Overview of functions of the indicating and operating elements of the QAC910:

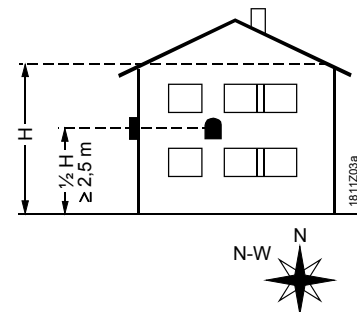
| Multifunction LED | Multifunction button |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Battery state • Binding process | <ul style="list-style-type: none"> • Battery state query • Binding • RF binding test |

For more detailed information about the functions and operation of the QAC910, refer to the product documentation covering the central apartment unit.

Notes on engineering and operation

Mounting location for outside sensor

- The outside sensor is to be mounted on an outer wall, at half the height of the house, at least 2.5 m above ground
- The outside sensor should be mounted on the coldest wall of the house (normally the North wall)

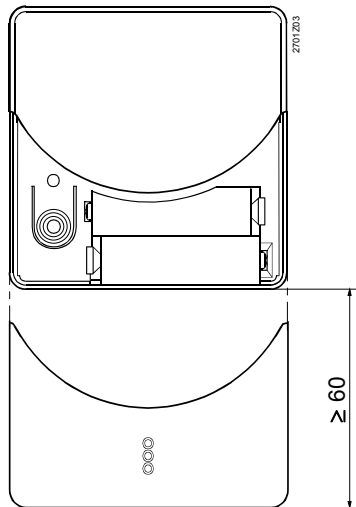


- Temperature acquisition must not be adversely affected by direct solar radiation, air drafts, or other heat or refrigeration sources
- The outside sensor must not be mounted:
 - Above windows, doors, air exhausts or other heat sources
 - Below balconies or eaves
- To avoid measuring errors due to air drafts, the end of the conduit at the sensor is to be sealed off with a grommet, cable gland or sealing compound
- The permissible environmental conditions must be observed

Mounting location for RF transmitter

- The RF transmitter must be mounted inside the house or building
- It must not be exposed to dripping water and the permissible environmental conditions must be observed
- For notes relating to engineering and mounting RF devices of the Siemens Synco living system, refer to Data Sheet CE1N2708en.

- The base of the RF transmitter must be fitted on a flat wall
- Minimum clearance at the bottom should be 60 mm to ensure that the battery compartment is easily accessible



Installation

Installation of both units with base for wall mounting:

The RF transmitter can be fitted to most commercially available conduit boxes or directly to the wall.

Note

Install the outside sensor first and then – inside the house – the RF transmitter. Then, connect the outside sensor to the RF transmitter (connecting cable not included). Only then may the batteries be inserted in the RF transmitter.

Commissioning

Prior to commissioning, check to ensure that the outside sensor is correctly mounted on the recommended side of the building.

Also check to see if the cable is correctly connected to the respective terminals of both units and if the RF transmitter uses correctly working batteries.

Maintenance / battery change

The QAC910 is maintenance-free.

The system indicates when batteries must be replaced. The batteries are located in the battery compartment of the RF transmitter. Batteries can be changed without removing the sensor from the wall and there is no need for using tools (reversed polarity protection).

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 garbage.

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

Warranty


Technical data on the application applies exclusively to use with only Siemens products. Siemens rejects any and all warranties in the event that third-party products are used.

Technical data QAC910 – outside sensor

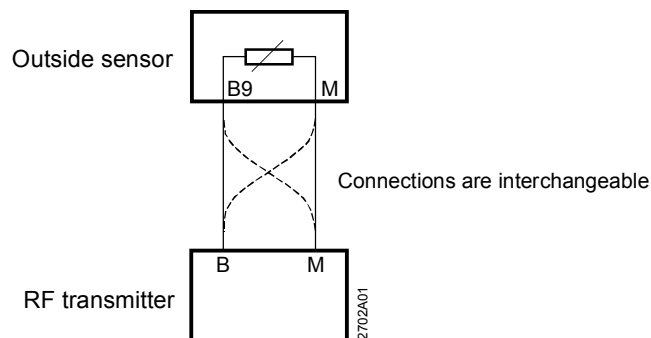
| | | |
|----------------------------------|-----------------|---------------------|
| Temperature sensor ¹⁾ | Sensing element | NTC 1 kOhm resistor |
| | Measuring range | -50...50 °C |
| | Time constant | 12 minutes |

¹⁾ For a more detailed information, refer to CE1N1811E ²⁾

Technical data QAC910 – RF transmitter

| | | | | |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------|
| Power supply | Type of battery | 2 x alkaline batteries LR6 (AA) 1.5 V | | |
| | Battery life (capacity ≥ 2.5 Ah) | 3 years | | |
| RF | Frequency | 868 MHz (unidirectional) | | |
| | Range | typically 30 m inside buildings | | |
| | Protocol | KNX RF-compatible  | | |
| Pressure sensor Electrical connection outside sensor | Sensing element | RS5534B (Intersema) | | |
| | Screw terminals for | 0.1... 1.5 mm ² (connections interchangeable) | | |
| | Permissible cable length | max. 10 m | | |
| Standards, directives and approvals | Product standard | EN 60730-1 | Automatic electrical controls for household and similar use | |
| | Electromagnetic compatibility (Applications) | For use in residential, commerce, light-industrial and industrial environments | | |
| | EU conformity (CE) | CE1T2702 ²⁾ | | |
| | EAC conformity | Eurasia conformity | | |
| Protection | Safety class | III | | |
| | Housing | IP40 ³⁾ to EN 60529 | | |
| | Degree of pollution | 2 to EN 60730 | | |
| Environmental compatibility | Product environmental declaration (contains data on RoHS compliance, materials composition, packaging, environmental benefit, disposal) | CE1E2702en ²⁾ | | |
| | | ²⁾ The documents can be downloaded from http://siemens.com/bt/download . | | |
| | | ³⁾ Completely mounted | | |
| Dimensions | | refer to “Dimensions” | | |
| Weight | Unit complete with accessories | 0.331 kg | | |
| Housing material | | plastic ASA+PC | | |
| Housing color | | white NCS S 0502-G | | |
| Environmental conditions | | operation | transport | storage |
| | | IEC 60721-3-3 | EN 60721-3-2 | EN 60721-3-1 |
| | Climatic conditions | class 3K5 | class 2K3 | class 1K3 |
| | Temperature | 0...+50 °C | -25...+70 °C | -20...+65 °C |
| | Humidity | 5...95 % r.h. (noncondensing) | <95 % r.h. | 5...95 % r.h. |
| | Mechanical conditions | class 3M2 | class 2M2 | class 1M2 |
| | Elevation above sea level | min. 700 hPa, corresponding to max. 3000 m above sea level | | |

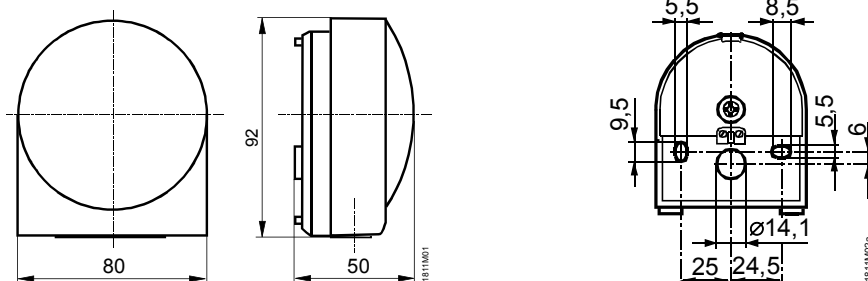
Connection diagram



Dimensions

Dimensions in mm

Outside sensor



RF transmitter

