# SIEMENS



### **Room Thermostat**

### **RAA11**

Tamperproof for heating only or cooling only

Two-position control Switching voltage AC 24...250 V

### Use

The RAA11 room thermostat is used in heating only or cooling only systems to maintain the selected room temperature where a tamperproof housing is needed.

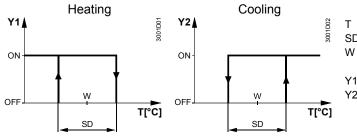
Typical use:

- Schools
- Public buildings
- Storage rooms
- Maintenance rooms

### Functions

The RAA11 room thermostat has separate outputs for heating only and cooling only. If the room temperature falls below the selected setpoint, the heating contact will close. If the room temperature exceeds the selected setpoint, the cooling contact will close.

### **Function diagrams**



Room temperature

- SD Switching differential
  - Room temperature setpoint
- '1 Output signal "Heating"
- Y2 Output signal "Cooling"

### Equipment combinations

| Type of unit                              | Type reference | Data sheet |
|---|----------------|------------|
| Motoric on/off actuator                   | SFA21          | 4863       |
| Thermal actuator (for radiator valve)     | STA21          | 4893       |
| Thermal actuator (for small valve 2,5 mm) | STP21          | 4878       |

### Accessories

| Description  | Type reference | • |
|--|----------------|---|
| Adapter plate 120 x 120 mm for 4" x 4" conduit boxes | ARG70          |   |
| Adapter plate 96 x 120 mm for 2" x 4" conduit boxes  | ARG70.1        |   |
| Adapter plate for surface wiring 112x130 mm          | ARG70.2        |   |

### **Technical design**

Key features of the RAA11 room thermostat:

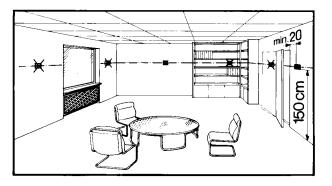
- Two-position control
- Gas-filled diaphragm
- No external adjustment facility

### Notes

## Mounting, installation and commissioning

The thermostat should be located where the air temperature can be sensed as accurately as possible, without getting adversely affected by direct solar radiation or other heat or refrigeration sources.

Mounting height is about 1.5 m above the floor.



The unit can be fitted to most commercially available recessed conduit boxes or directly on the wall.

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| AC 250 V          | Only authorised personnel may open the unit to perform service.<br>The unit must be isolated from the mains supply before opening.  |
|-------------------|---|
|                   | When installing the unit, fix the baseplate first, then hook on the thermostat body and make the electrical connections. Then fit the cover and secure it also refer to separate mounting instructions. |
|                   | The thermostat must be mounted on a flat wall.  |
|                   | The local electrical regulations must be complied with.   |
|                   | If there are thermostatic radiator valves in the reference room, set them to their fully open position.   |
| Maintenance       | The room thermostat is maintenance-free.  |
| Mechanical design | The diaphragm is filled with environmentally friendly gas.  |
|                   | The thermostat housing is made of plastic.  |

### Ordering

| Typ (ASN) | Partnumber (SSN) | Description           |
|-----------|------------------|-----------------------|
| RAA11     | S55770-T219      | Room thermostat RAA11 |

### **Technical data**

| Power supply             | Switching capacity<br>Voltage<br>Current<br>Frequency   | AC 24250 V<br>0.26(2.5) A<br>50 or 60 Hz                                       |
|--------------------------|---|--|
|                          | Screw terminals for   | 2 x 1.5 mm <sup>2</sup> (min. 0.5 mm <sup>2</sup> )                            |
| Operational data         | Switching differential SD   | ≤1K  |
|                          | Setpoint setting range  | 830 °C   |
| Environmental conditions | Operation<br>Climatic conditions<br>Temperature<br>Humidity<br>Pollution degree                           | to IEC 721-3-3<br>Class 3K5<br>0…+50 °C<br><95 % r.h.<br>normal, to EN 60730-1 |
|                          | Transport / Storage<br>Climatic conditions<br>Temperature<br>Humidity<br>Mechanical conditions            | to IEC 721-3-2<br>Class 2K3/1K3<br>-20…+50 °C<br><95 % r.h.<br>Class 2M2       |
| Industry standards       | Electromagnetic compatibility<br>Emissions (Residential, business and<br>commercial)                      | EN55014  |
|                          | C€- Conformity<br>EMC guidelines<br>Low voltage directive   | 2004/108/EC<br>2006/95/EC  |
|                          | <ul> <li>Conformity<br/>Australian EMC Framework</li> <li>Radio Interference Emission Standard</li> </ul> | CISPR 14-1: 2009   |
|                          | Environmental compatibility<br>The product environmental declaration                                      | 2002/95/EC (RoHS)  |
|                          | Safety standard<br>Degree of protection of housing  | II to EN 60730-1<br>IP30 to EN 60529   |
|                          | Weight  | 0.14 kg  |
|                          | Colour  | white, NCS S 0502-G (RAL 9003)   |

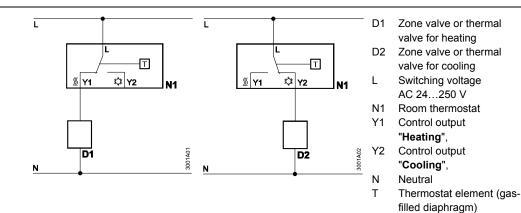
### Disposal



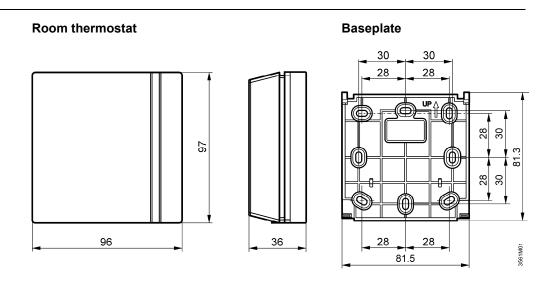
Dispose of the device as electronic waste in compliance with European directive 2002/96/EEC (WEEE) and not as municipal waste. Observe all relevant national regulations and dispose of the unit correctly. Observe all local and applicable laws.

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### **Connection diagrams**



### Dimensions



### Remarks

### Heating:

Because of the unavoidable self heating effects of the electrical current, any loads of more than 3 Amperes connected to the unit can influence the control behavior and temperature accuracy in a negative way.

### Cooling:

Because of the unavoidable self heating effects of the electrical current, any loads of more than 1 Amperes connected to the unit can influence the control behavior and temperature accuracy in a negative way.

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