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

<table>
<thead>
<tr>
<th>Heating</th>
<th>Cooling</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Heating Diagram" /></td>
<td><img src="image2" alt="Cooling Diagram" /></td>
</tr>
</tbody>
</table>

**Equipment combinations**

<table>
<thead>
<tr>
<th>Type of unit</th>
<th>Type reference</th>
<th>Data sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motoric on/off actuator</td>
<td>SFA21...</td>
<td>4863</td>
</tr>
<tr>
<td>Thermal actuator (for radiator valve)</td>
<td>STA21...</td>
<td>4893</td>
</tr>
<tr>
<td>Thermal actuator (for small valve 2,5 mm)</td>
<td>STP21...</td>
<td>4878</td>
</tr>
</tbody>
</table>

*The documents can be downloaded from [http://siemens.com/bt/download](http://siemens.com/bt/download).*

**Accessories**

<table>
<thead>
<tr>
<th>Description</th>
<th>Type reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter plate 120 x 120 mm for 4&quot; x 4&quot; conduit boxes</td>
<td>ARG70</td>
</tr>
<tr>
<td>Adapter plate 96 x 120 mm for 2&quot; x 4&quot; conduit boxes</td>
<td>ARG70.1</td>
</tr>
<tr>
<td>Adapter plate for surface wiring 112x130 mm</td>
<td>ARG70.2</td>
</tr>
</tbody>
</table>

**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.
Only authorised personnel may open the unit to perform service. 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.

**Warning!**

*No internal line protection for supply lines to external consumers (Y1, Y2)*

Risk of fire and injury due to short-circuits!
- Adapt the line diameters as per local regulations to the rated value of the installed overcurrent protection device.

**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

<table>
<thead>
<tr>
<th>Type (ASN)</th>
<th>Part number (SSN)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAA11</td>
<td>S55770-T219</td>
<td>Room thermostat RAA11</td>
</tr>
</tbody>
</table>

### 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 waste.

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

### Technical data

#### Power supply

- **Switching capacity**
  - **Voltage**: AC 24…250 V
  - **Current**: 0.2…6(2.5) A
  - **Frequency**: 50 or 60 Hz

- **No internal fuse**
  - External preliminary protection with max. C 10 A circuit breaker in the supply line required under all circumstances

- **Screw terminals for**: 2 x 1.5 mm² (min. 0.5 mm²)

#### Operational data

- **Switching differential SD**: ≤1K
- **Setpoint setting range**: 8…30 °C

#### Environmental conditions

**Operation** to IEC 60721-3-3

- **Climatic conditions**: Class 3K5
- **Temperature**: 0…+50 °C
- **Humidity**: <95 % r.h.
- **Pollution degree**: normal, to EN 60730-1

**Transport / Storage** to IEC 60721-3-2

- **Climatic conditions**: Class 2K3/1K3
- **Temperature**: -20…+50 °C
- **Humidity**: <95 % r.h.
- **Mechanical conditions**: Class 2M2

#### Industry standards

- **EU Conformity (CE)**: CE1T3561xx
- **RCM Conformity**: CE1T3561en_C1
The product environmental declaration CE1E3561 contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).

Safety standard II to EN 60730-1
Degree of protection of housing IP30 to EN 60529
Weight 0.14 kg
Colour white, NCS S 0502-G (RAL 9003)

*) The documents can be downloaded from http://siemens.com/bt/download.

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.