SIEMENS 3003



# **Room Thermostat**

**RAA30...** 

Adjustable room thermostat for heating only or cooling only systems

Room thermostat with manual ON/OFF switch Two-position control Switching voltage AC 24...250 V

#### Use

The RAA30... room thermostat is used in heating only or cooling only systems to maintain the selected room temperature.

#### Typical use:

- · Residential buildings
- Light industrial buildings

In conjunction with

- zone valves, thermal valves
- gas or oil burners
- fans
- pumps

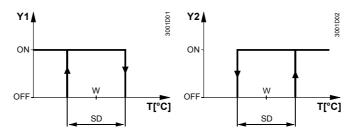
### **Functions**

The front of the unit carries an ON/OFF switch.

OFF ON In the OFF position, the input voltage is physically separated from the output voltage.

The RAA30... room thermostat has separate ouputs 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**



T Room temperature

SD Switching differential

W Room temperature setpoint

Y1 Output signal "Heating"

Y2 Output signal "Cooling"

#### Type summary

Functionality	Order number (ASN)
Thermostat for heating or cooling application with	RAA30
ON/OFF switch	
Operating voltage AC 24250 V	
Thermostat for heating or cooling application with	RAA30.16/GR
ON/OFF switch and operation mode indication (LED)	
Operating voltage AC 230 V + 10/-15 %.	
With instruction in Greek	
Thermostat for heating or cooling application with	RAA30.26/GR
ON/OFF switch and operation mode indication (LED) and	
independent ON/OFF switch	
Operating voltage AC 230 V + 10/-15 %.	
With instruction in Greek	

#### **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 RAA30... room thermostat:

- Two-position control
- Manual ON/OFF switch
- Gas-filled diaphragm

## **Adjustments**

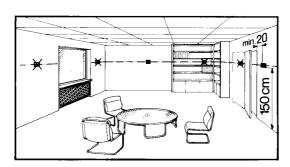
The required temperature is selected by a setpoint adjuster on the front of the thermostat.

The setpoint setting range can be mechanically limited by means of setpoint limiter under the cover.

# Mounting, installation and commissioning

The room 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 (Caution: AC 250 V). 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 Mechanical design The room thermostat is maintenance-free.

The diaphragm is filled with environmentally friendly gas.

The thermostat housing is made of plastic.

#### **Technical Data**



#### Switching capacity

 $D \wedge \wedge \wedge \wedge$ 

Voltage

• RAA30	AC 24250 V
<ul> <li>RAA30.16/GR / 30.26/GR</li> </ul>	AC 230 V +10/-15 %
Power consumption of each LED	0.5 VA (Only RAA30.16/30.26)
Current	0.26 (2) A
Frequency	50 or 60 Hz
Switching differential SD	≤1 <b>K</b>
Setpoint setting range	830 °C
Operation	to IEC 721-3-3
Climatic conditions	class 3K5
Temperature	0+50 °C
Humidity	<95 % r.h.
Pollution degree	Normal, to EN 60730
Transport / storage	to IEC 721-3-2
Climatic conditions	class 2K3/1K3
Temperature	-20+50 °C
Humidity	<95 % r.h.
Mechanical conditions	class 2M2

AC 04 050 V

Operational data

**Environmental conditions** 

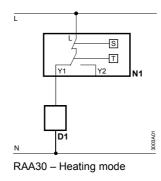
Packaging

single packaging / min. order 20 pieces

#### Norms and standards

<b>C</b> € conformity	
Low voltage directive	73/23/EEC and 93/68/EEC
Product standard	EN 60730
CN474 C-Tick conformity to	
EMC emission standard	AS/NSZ 4251.1:1994
Safety standard	II to EN 60730
Degree of protection	IP30 to EN 60529
Screw terminals for	2 x 1.5 mm <sup>2</sup> or 1 x 2.5 mm <sup>2</sup> , min. ( 0.5 mm <sup>2</sup> )
Weight	0.14 kg
Colour of top cover	white, NCS 50502-G (RAL 9003)

# Connection diagrams



S T Y2 D2 RAA30 - Cooling mode

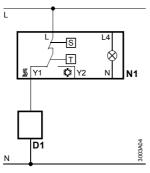
- D1 Zone valve or thermal valve for heating
- D2 Zone valve or thermal valve for cooling
- Switching voltage AC 24...250 V (RAA30 only) AC 230 V (RAA30.16/GR / 26/GR only)
- N1 Room thermostat
- ON/OFF switch
- Y1 Control output "Heating", AC 24...250 V (RAA30 only) AC230V (RAA30.16/GR / 26/GR only)
- Y2 Control output "Cooling", AC 24...250 V (RAA30 only) AC230V (RAA30.16/GR / 26/GR only)

Input AC 230 V

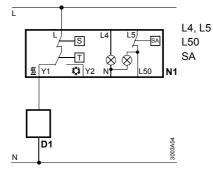
Auxiliary switch

- Neutral Ν
- Thermostat element (gas-filled diaphragm)

Output



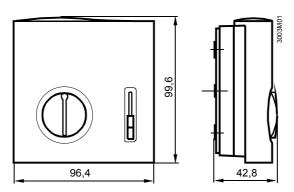
RAA30.16/GR - Heating mode



RAA30.26/GR - Heating mode

**HVAC Products** 

# Unit



# Baseplate

