RAA Series Room Thermostats

Product Numbers

	Mounting Style		Control		Switch			Scale	
Product Number	Electrical Wall Box	Drywall	Heating only or Cooling only	Heating and Cooling	On/off	Heat/off/cool	Tamperproof	Fahrenheit	Celsius
RAA10C		•	•				•		•
RAA10CW	•		•				•		•
RAA20U		•	•					•	•
RAA20UW	•		•					•	•
RAA30U		•	•		•			•	•
RAA30UW	•		•		•			•	•
RAA40U		•		•		•		•	•
RAA40UW	•			•		•		•	•

NOTE: Drywall style models are available without logo. To order, change the suffix to "/U/NL". Example: RAA20/U/NL.

Features

- Two-point control algorithm (on-off)
- Two mounting styles: electrical wall box or drywall
- Wall plate adapter (ARG70) included with electrical wall box mounting styles
- Dual setpoint temperature scale.
- Tamperproof (concealed) setpoint (RAA10...)
- On/off switch (RAA30...)
- Changeover switch (RAA40...)

Typical Specifications

Thermostat shall provide control of room space for simple heating or cooling, two-pipe applications where fan speed is not controlled. There shall be one control output sequence: two-position, on/off control output. When wired for heating only, switch contact shall break open on increase in temperature. When wired for cooling application, thermostat switch shall make contact on increase in temperature. Thermostat shall have a setpoint adjustment range of 50°F to 85°F (10°C to 30°C). The setpoint dial shall have a dual scale graduated in degrees Fahrenheit and Celsius. Switching differential shall be fixed at 1.8°F (1.0°C). Thermostat must conform to UL 873. Thermostat shall not contain mercury or other environmentally unfriendly metals or gases. Thermostat shall employ a gas vapor sensing switch and tamper-resistant, upper and lower limit stops settable in two-degree increments. Thermostat shall be as manufactured by Siemens Building Technologies.

Description

Two-wire, gas diaphragmbased room thermostats for use in heating and/or cooling (two-pipe) systems.



Technical Data

Operating voltage 24 to 120 Vac, 277 Vac

Frequency 50/60 Hz

Setpoint range 50°F to 85°F (10°C to 30°C) Setpoint limit stops are adjustable (except RAA10...)

Switching differential (SD) <1.8°F (1°C), fixed

Switch rating 6A RES, 3.5A FLA, 12A LRA
Switch action Single-pole, Double-throw
Output Two-position (on/off)
Weight 5 oz. (0.14 kg)
Color Ivory white (housing)

Gray (selector knobs)

Ambient conditions

Operation temp. 32°F to 122°F (0°C to 50°C)

Operation rh <95%

Transportation temp. -4°F to 122°F (-20°C to 50°C)

Transportation rh <95%

Housing

Material Plastic Enclosure rating NEMA1

Bellows Environmentally-friendly gas

Wiring

Screw terminals 2 × 16 AWG or 1 × 14 AWG

Minimum 20 AWG

Agency certification Conforms to CE requirements

UL listed to 873 (E35918) cUL listed to Canadian standard

C22.2 No. 24-93

Accessories

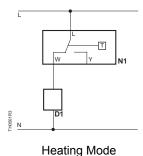
o ARG70 Wall Plate Adapter

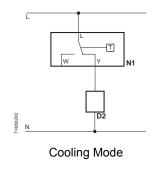
NOTE: An ARG70 Wall Plate Adapter must be used to

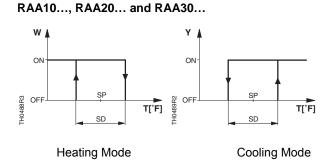
meet UL and cUL requirements.

Wiring Diagrams

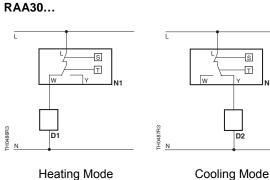
RAA10... and **RAA20...**

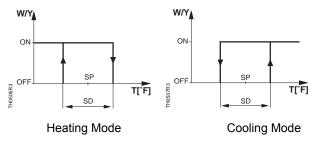






Operating Diagrams





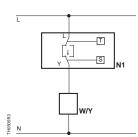
D1 Heating device Cooling device

Thermal switch

Operating voltage Ν Neutral

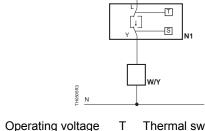
W Heating control output

RAA40...



Room thermostat

Cooling control output



Operating voltage

Neutral Ν

Room thermostat N1 W/Y Heating/cooling device

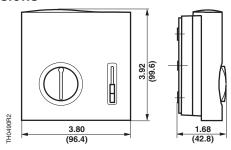
Thermal switch

Heat/Off/Cool switch S

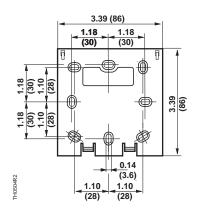
Heating or cooling control output

Dimensions

RAA40...



RAA... Thermostat



Base Plate

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