Document No. 154-013P25 September 12, 2017

# **RAA Series Room Thermostats**

### **Product Numbers**

Product Number	Mounting Style		Scale	
	Electrical Wall Box	Drywall	Fahrenheit	Celsius
RAA20U		•	•	•
RAA20UW	•		•	•

#### **Features**

- Two-point control algorithm (on-off).
- Two mounting styles: electrical wall box or drywall.
- Wall plate adapter (ARG70) included with RAA20UW.
- Dual setpoint temperature scale.
- Heating only or cooling only control.

## **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 upper and lower limit stops settable in twodegree increments. Thermostat shall be as manufactured by Siemens Industry, Inc.

## **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

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  $2 \times 16$  AWG or  $1 \times 14$  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

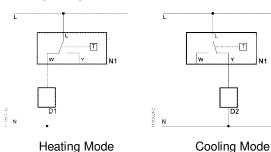
### **Accessories**

q ARG70 Wall Plate Adapter

NOTE: An ARG70 Wall Plate Adapter must be used to

meet UL and cUL requirements.

## **Wiring Diagrams**



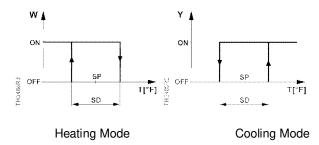
D1 Heating device
D2 Cooling device
Operating voltage

L Operating voltageN Neutral

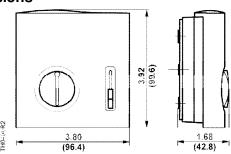
N1 Room thermostat T Thermal switch

W Heating control output
Y Cooling control output

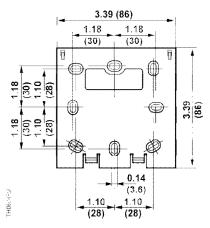
# **Operating Diagrams**



## **Dimensions**



RAA... Thermostat



Base Plate

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