# RDY2000 Commercial Room Thermostat

## Description

The Siemens Series RDY2000 Commercial Room Thermostat is designed for light commercial HVAC systems that utilize 24 Vac control circuitry. It is compatible with forced air, hydronic, or steam systems fired by gas, oil or electricity. The thermostat can control up to three stages of heating and three stages of cooling in a conventional system and heat pumps systems with up to two compressors and two stages of auxiliary heat. The RDY2000 can interface with remote sensors and devices to completely manage all aspects of room comfort, including temperature, humidity, and air quality.

#### **Hardware Features**

- Compatible with conventional and heat pump applications
- Controls conventional systems with up to three stages of heating and three stages of cooling
- Controls heat pump systems with one or two compressors and up to two stages of auxiliary heat
- On-board temperature and humidity sensors
- Standard HVAC relay outputs:
  - Compressor 1 (Y1)
  - Compressor 2 (Y2)
  - Fan (G)
  - Heating 1 (W1)
  - Heating 2 (W2)
  - Reversing Valve (O/B)
- Additional relay outputs can be configured to manage up to three of the following:
  - Humidification
  - De-humidification
  - Economizer Enable
  - Occupancy Notification
  - Ventilation
- Four Configurable inputs\*:
  - Remote temperature sensor
    - Outdoor temperature
    - Supply/return temperature(s)
    - Indoor temperature (remote or averaging)
  - Remote humidity sensor
  - CO2 sensor
  - Occupancy sensor



#### **Control Features**

- Set-up Wizard enables rapid system configuration
- Fully programmable scheduling function:
  - 5+2 / 5+1+1 / 7-day capability
  - Two or four periods per day
- Real time clock retains time and date for up to 48 hours upon loss of input power
- System configuration data is stored indefinitely upon loss of input power
- Interlocks and timers specifically designed for equipment protection
- Password protected installer set-up menu deters unauthorized changes
- Programmable fan enables fresh air circulation when not in heating/cooling mode
- Selectable lockout levels to minimize tampering with setpoints and schedule.
- Programmable service reminders for humidifier pad, UV lamp, and air filter

#### **General Features**

- Sleek design with backlit 5" LCD touch screen
- Separable back plate with wiring terminals and mounting holes configured to match most conduit box configurations (screws and anchors included for drywall mounting).
- Thermostat secures to mounting base with screws to deter theft and vandalism.
- Designed for horizontal layout
  - 5-1/2" W × 4-1/3" H × 1-1/6" D
  - 11.5 oz.

<sup>\*</sup>Requires purchase of external sensor(s).

## **General Specifications**

Power Supply	24 Vac +/-20%, Class 2, 4A max.
Output Relay Ratings	Pilot duty, 1A max per output, 4A max total
Ambient Temperature Limitations	
Operating	23°F to 122°F (-5°C to 50°C)
Storage/Shipping	-13°F to 158°F (-25°C to 70°C)
Operating Relative Humidity	Up to 95% (non-condensing)
Enclosure	NEMA 1
Agency Approvals	UL (UL916) cUL (CSA C22.2 No. 205)
	FCC
	ICES (Canada)
	NOM-NYCE (Mexico)
	Regulatory Compliance Mark (Australia)
	CE
Shipping Dimensions	6" × 5" × 1.75" (15.25 × 10.2 × 4.5 cm)
Shipping Weight	14 ounces (0.4 kg)

# **Ordering Information - Thermostat**

Part Number	Description
RDY2000	Commercial Room Thermostat

## **Ordering Information -- Accessories**

Part Number	Description
QAA2330.EWNN	Remote Wall Mounted Sensor – Temperature Only
QFA33SS.EWNN	Remote Wall Mounted Temperature & Humidity Sensor
QAM2030.010	Duct Mounted Temperature Sensor
QFM2160U	Duct Mounted Temperature & Humidity Sensor
QPA2000	Wall Mounted CO2 Sensor
QPA2062	Wall Mounted Temperature + Humidity + CO2 Sensor
QPM2162	Duct Mounted Temperature + Humidity + CO2 Sensor
QAC2030	Outdoor Air Temperature Sensor
QAD2030	Surface Mount Pipe Temperature Sensor

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