SIEMENS

RDY2000 Commercial Room Thermostat

usa.siemens.com/infrastructure-cities

Meet the RDY2000

The RDY2000 is a thermostat designed for North American commercial HVAC systems.

- Pre-loaded applications for multi-stage conventional systems and heat pumps
  - Conventional systems up to 3H / 3C
  - Heat Pumps up to 4H / 2C (2 Aux Heat.)
- Timers & interlocks prevent short cycling and other undesirable situations
- Fully programmable with commercial building schedule profiles
- Onboard temperature and humidity sensors
- No special tools required for installation and commissioning
- Ideal for *small commercial* facilities such as…
  - Medical / Financial / Insurance offices
  - Retail establishments
 - Sandwich / coffee shops
  - Light manufacturing facilities
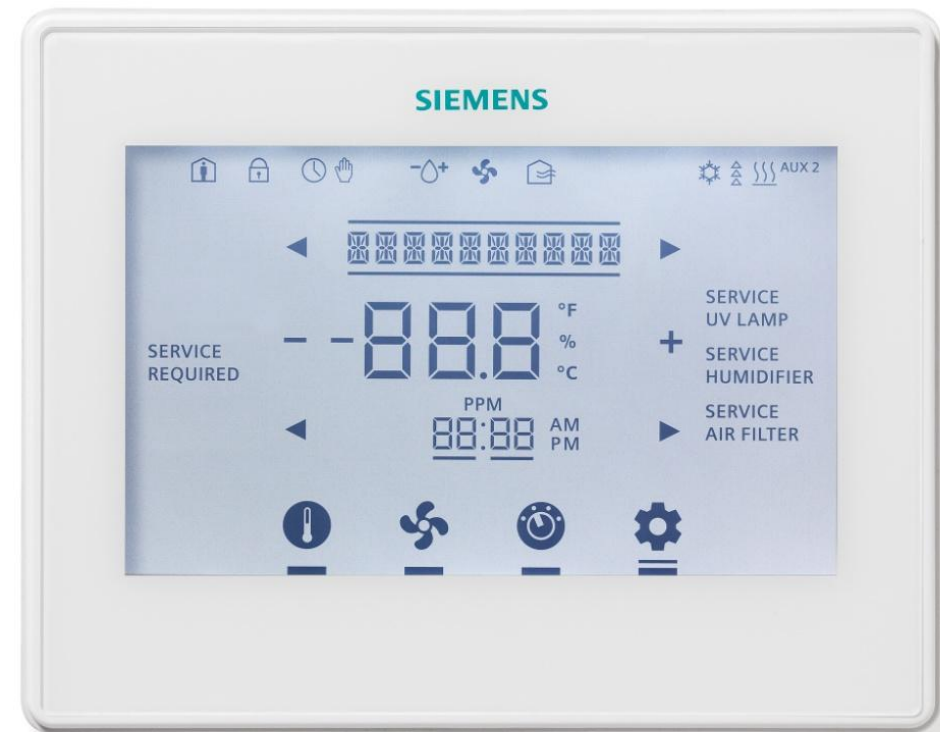
24Vac Outputs

"Typical" HVAC outputs
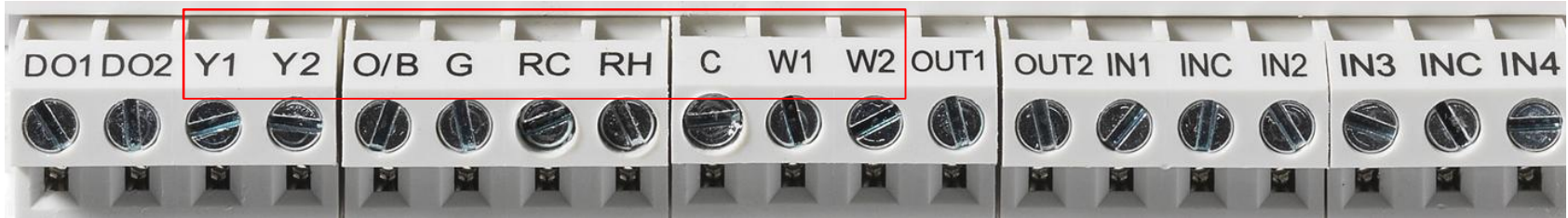
3 Configurable outputs

- OUT1 and OUT2 are switchable 24Vac

- OUT3 is switchable 24Vac but can be converted to dry contact by removing jumper (24V / 1A max.)

- Outputs configured via Installer Setup Menu

  - Humidification

  - Dehumidification

  - Economizer enable

  - Occupancy

  - Ventilation

Remove jumper RC-C3 for unpowered output at OUT3 and wire common to C3
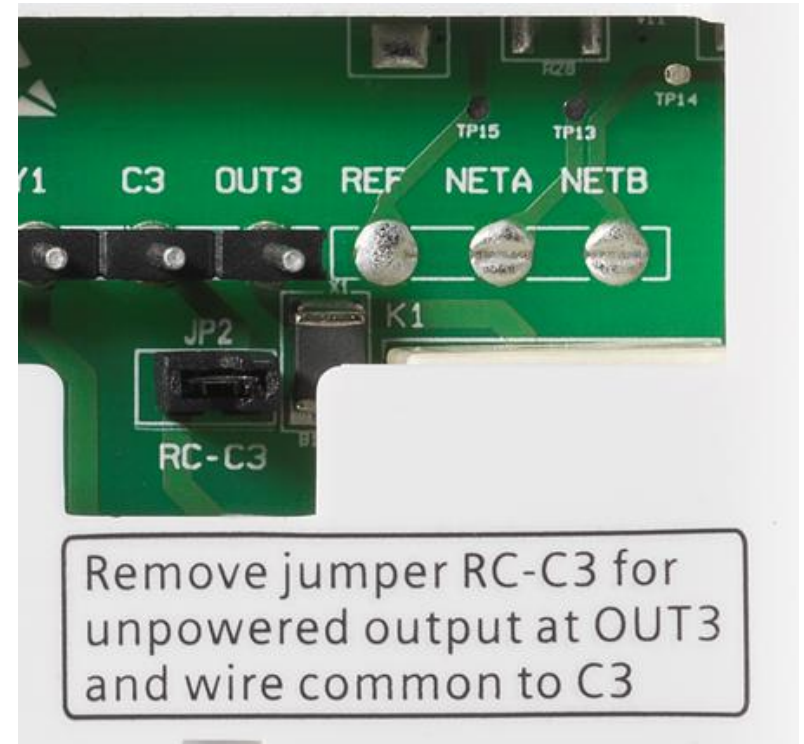
Configurable Outputs

- *Humidification & Dehumidification*
  - Can be configured to run independently of heating / cooling relays
- *Economizer Enable*
  - Relay energizes when space is occupied, or there is a call for cooling.
  - Can be configured to enable economizer and energize fan relay prior to start of occupancy period
- *Air Quality / Ventilation*
  - When measured CO_2 > setpoint, fan relay and ventilation relay are energized
  - Requires additional sensor (QPA2000)
- *Occupancy*
  - Relay is energized per schedule or if external sensor indicates human presence
  - Can interface with lighting systems, waterscaping, signage, etc.

Configurable Inputs

4 Configurable Inputs Configure via Installer Setup Menu

Configurable Option	Purpose	Input Format
Remote Indoor Temp	Enables thermostat to be mounted in a secure location. Onboard sensor is disabled.	• 10k Ω Type II thermistor • 0-10V
Average Indoor Temp	Enables remote temp sensor to be averaged with onboard temp sensor.	
Supply/Return Temp	Enables display of supply and/or return temperatures for system troubleshooting.	
Outdoor Temp	Enables display of outdoor temperature at thermostat. Also enables heat pump aux. heat.	
Remote Humidity	Enables thermostat to be mounted in a secure location. Onboard sensor is disabled.	• 0-10V (0-100%)
Air Quality	Ventilation relay will be energized when measured CO_2 exceeds setpoint.	• 0-10V (0-2000ppm)
Occupancy	Thermostat will override schedule and go to "comfort" temperature setpoint	• Digital input (relay)

A True Commercial Thermostat

SIEMENS

- Schedule profile designed for commercial buildings
    - Heating mode: warm during day / set-back at night
    - Cooling mode: cool during day / set-back at night

- Local user access can be limited

    - Schedule override time & temp can be limited or completely restricted

    - Three levels of touchscreen lockout

        1. Unrestricted: (Installer menu remains password protected)

        2. Partial: (only temp setpoint can be adjusted – within set limits)

        3. Total Lockout: No user adjustments possible
- HVAC unit number can be displayed on home screen…

Easy to Install and Configure

Universal Mounting Plate

- Fits any 2" x 4" North American electrical box

- Includes screws and anchors for mounting direct to wall

- Clearly marked terminal block attached to mounting plate

- Mounting plate has molded in UP arrow

- Thermostat secured to plate with screws

- 1/32" pins are virtually unbendable

- Same footprint as many other thermostats
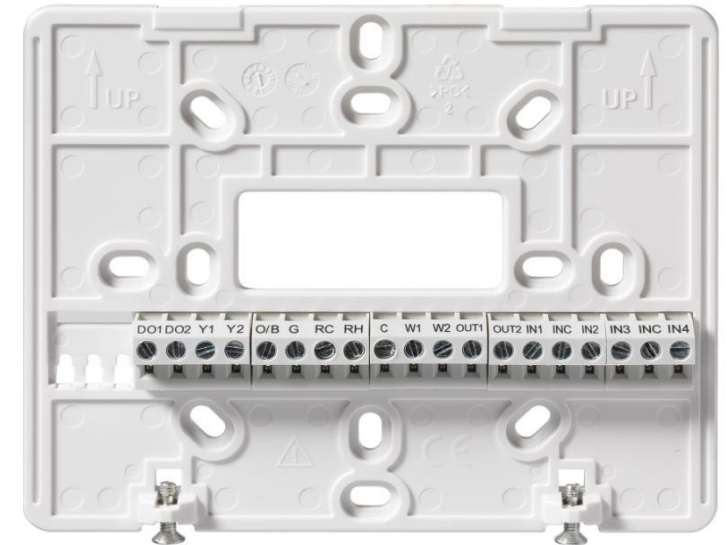
Setup Wizard enables rapid commissioning

- Appears at initial power-up

- Walks installer through common parameters that are critical to basic system start up.
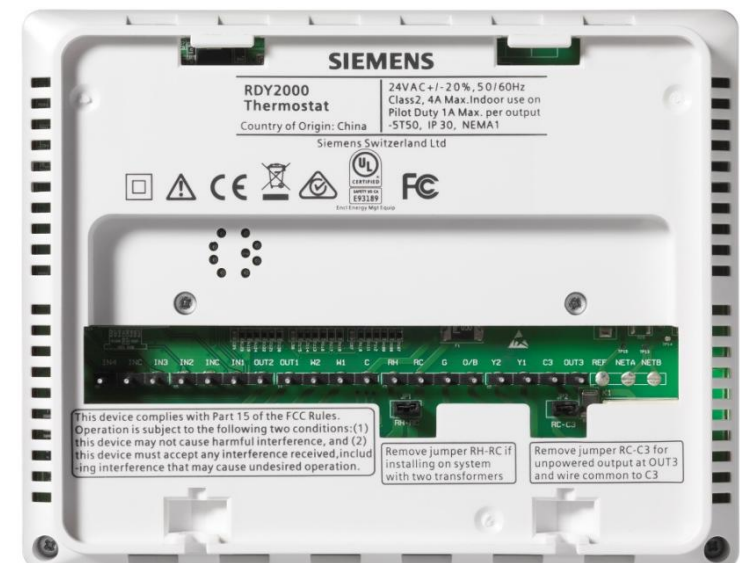
How does the RDY2000 compare?

The RDY2000 outperforms similarly priced competitors.

Brand	Model Number	Conventional Heating Stages	Heat Pump Auxiliary Stages	Cooling Stages	Set-Up Wizard	Onboard Humidity Sensor	Configurable I/O	Economizer Enable	Humidification	Dehumidification	Ventilation Control	Remote Sensor Inputs	Unpowered DO
Siemens	RDY2000	3	2	3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4	1
Honeywell	TH8321R1001	2	2[1]	2	No	Yes	No	Yes	Yes	Yes	Yes[2]	1	0
Honeywell	T7351F2010	2	2	3	No	Yes	No	Yes	Yes	Yes	No	2	0
Honeywell	TH9421C1004	2	2	2	No	Yes	No	Yes	Yes	Yes	Yes	2	0
White Rodgers	1F95-1280	2	2	2	No	No	No	Yes	No	No	No	1	0
White Rodgers	1F95-1291	2	2	2	No	Yes	No	No	Yes	Yes	No	1	0

[1] Additional I/O module required

[2] Can control two of three devices (humidification / dehumidification / ventilation)

Optional Sensors for RDY2000

SIEMENS

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
TBD	Occupancy Sensor*

*Must be capable of switching 24Vac

The RDY2000 Advantage

Wholesalers

- Offer a unique product that is not available in DIY stores
- Provide your customers with an alternative to "just another thermostat"
- Maximize your Siemens purchases for optimum benefits

Installers

- Delight your customers with big-time HVAC control strategies in a small economical package
- Easy to install and configure
- Unparalleled flexibility to meet any HVAC challenge
- Siemens is a trusted name in the HVAC business and highly respected by end users
- Unleash your inner HVAC geek!

End Users

- Clean, modern appearance blends in with any décor and does not attract attention
- Commercial oriented scheduler profiles make it easy to tailor comfort to business hours
- Non-volatile memory retains schedule and set-up parameters for at least 48 hours of power interruption
- Maximize customer & employee satisfaction with optimized temperature, humidity and air quality
- Multiple options to deter theft, vandalism, and unauthorized adjustments

RDY2000 Commercial Room Thermostat

SIEMENS

Thank You