

THERMOSTATS & CONTROLLERS

BACNET OR CONVENTIONAL COMMERCIAL ROOM THERMOSTAT

RDY2000, RDY2000BN



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. The **RDY2000BN** is BACnet MS/TP compatible for communication with other network devices.

NEW!

SIEMENS



RDY2000

FEATURES

- *Compatible with conventional and heat pump applications*
- *Controls conventional systems with up to three stages of heating and three stages of cooling*
- *On-board temperature and humidity sensors*
- *Set-up Wizard enables rapid system configuration*
- *Remote Sensors (Occ, CO2, RH, Temp, Doorswitch)*
- *BACnet MS/TP version available (RDY2000BN)*
- *Programmable, 7 day, 4 periods/day*
- *CO2 sensor input to start fan and ventilation*
- *Password protected installer set-up menu deters unauthorized changes*
- *Selectable lockout levels to minimize tampering with set points and schedule*
- *Sleek design with backlit 5" LCD touch screen*

SPECIFICATIONS

Supply Voltage	24 VAC \pm 20%, Class 2, 4A max.	MS/TP Load	1/8 (96 K), internal network bias
Amp Load per Contact	1.0A	Fan Switch	AUTO-ON
Battery	3AA (included), required	Comfort/Economy	Programmable, 7 day, 5+2, 5+1+1
Keypad Lock	Yes, 3 levels	Comfort Periods	Up to 4 per day
System Compatibility		Operating Temperature	23° to 122°F (-5° to 50°C)
Conventional	3H/3C	Operating Humidity	Up to 95% RH, non-condensing
Heat Pump	4H/2C	Enclosure	NEMA 1
Protection Delay	Adjustable, 1-10 min.	Output	Pilot duty, 1A max per output, 4A max total
Minimum Run Time	Adjustable, 1-10 min.	Storage Temperature	-13° to 158°F (-25° to 70°C)
Case Size	4.3"H x 5.5"W x 1.2"D (10.9 x 14.0 x 3.05 cm)	Approvals	cUL File # E35198, FCC, ICES (Canada), NOM-NYCE (Mexico), Regulatory Compliance Mark (Australia), CE
Remote Sensor	Optional (temp/humidity/CO2/Motion)	Product Weight	0.72 lb (0.33 Kg)
Temperature Display	45° to 95°F (7° to 35°C)	Product Dimensions	4.3"H x 5.5"W x 0.2"D (10.9 x 14.0 x 0.5 cm)
Display Size	2.5"H x 4.3"W (6.4 x 10.9 cm)	Shipping Weight	0.88 lb (0.4 Kg)
Temp Resolution	1°F (0.5°C)	Shipping Dimensions	5.0"H x 6.0"W x 1.75"D (10.2 x 15.25 x 4.5 cm)
Economy Offset	Programmable		
Differential	Adjustable, 1° to 10°F (0.5° to 5°C)		
Deadband	Adjustable, 1° to 10°F (0.5° to 5°C)		
System Switch	OFF-COOL-HEAT-AUTO		
Communication	BACnet MS/TP		
MS/TP Communications	9600, 19200, 38400, 57600, 76800, 115200, baud rate		

THERMOSTATS & CONTROLLERS

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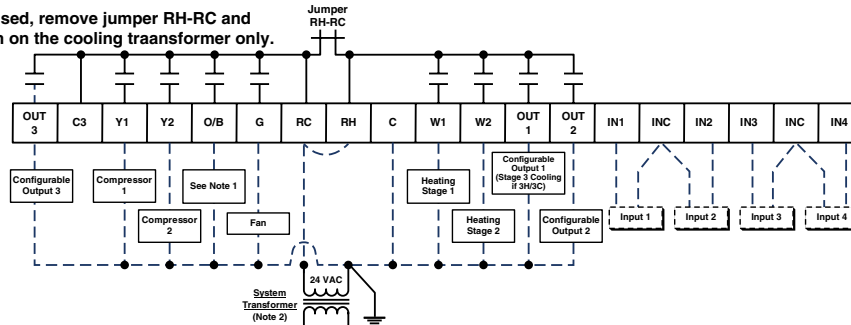
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WIRING

Conventional System

If dual transformers are used, remove jumper RH-RC and connect C to the common on the cooling transformer only.

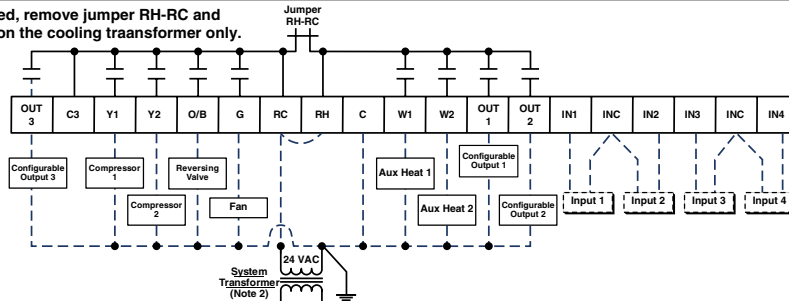


NOTE 1:
O/B Terminal Function in 3 Stage Conventional Systems

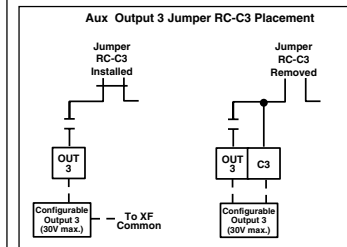
System Configuration	O/B Terminal Function
0H/3C	Stage 3 Cooling
1H/3C	Stage 3 Cooling
2H/3C	Stage 3 Cooling
3H/0C	Stage 3 Heating
3H/1C	Stage 3 Heating
3H/2C	Stage 3 Heating
3H/3C	O/B: Stage 3 Heating (OUT1: Stage 3 Cooling)

Heat Pump

If dual transformers are used, remove jumper RH-RC and connect C to the common on the cooling transformer only.



Wiring Schematic, Heat Pump



Note 2: 24VAC Class 2 Control Transformer: Maximum transformer load 80% (4A rating maximum load 3.2A).
Install with mounting feet to grounded equipment chassis. Connect common to grounded equipment chassis at transformer

ORDERING INFORMATION

MODEL
RDY2000
RDY2000BN

DESCRIPTION
3H/3C & HP Commercial Programable Room Thermostat with Remote Sensor Inputs
3H/3C & HP Commercial Programable Room Thermostat, BACnet with Remote Sensor Inputs

ACCESSORIES
QAA2330.EWNN Remote wall mounted sensor - temperature only
QAC2030 Outdoor air temperature sensor
QAD2030 Surface mount pipe temperature sensor
QAM2030.010 Duct mounted temperature sensor
QFA33SS.EWNN Remote wall mounted temperature & humidity 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