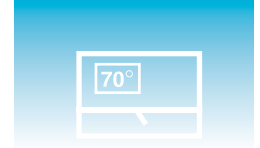


HVAC CONTROLS

ROOM THERMOSTAT PROPORTIONAL CONTROLLER MODEL RTC-2P



DESCRIPTION

The **Model RTC-2P Room Thermostat Proportional Controller** features two proportional outputs (heating and cooling). The Proportional plus Integral (PI) control is suitable for pressure dependent VAV box control, as well as fan coil, baseboard, or air handler applications. The occupant controls include a digital display and buttons for set point adjustment and night setback/setup override. The **Model RTC-2P** comes with a remote setback input for use with BAS systems and a changeover input for one-pipe system applications. Field setup is through push buttons with adjustments for setback temperatures, deadband, and °F or °C display.

FEATURES

- *Digital display for °F or °C*
- *Set point adjustment buttons*
- *Night setback manual button or clock input*
- *Remote sensor input*
- *Changeover input*
- *Two proportional outputs for heating and cooling*
- *PI control algorithm*
- *0-10V or 2-10V outputs*

Kele



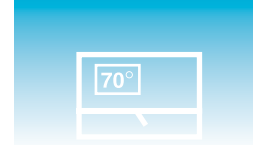
APPLICATION

The stand-alone **Model RTC-2P** is ideal for use when a central temperature control system may not be possible. Applications include any pressure dependent VAV box control. The H/C output can also be used for modulating control of discharge air, mixed air, fan coil valves, or baseboard heat.

SPECIFICATIONS

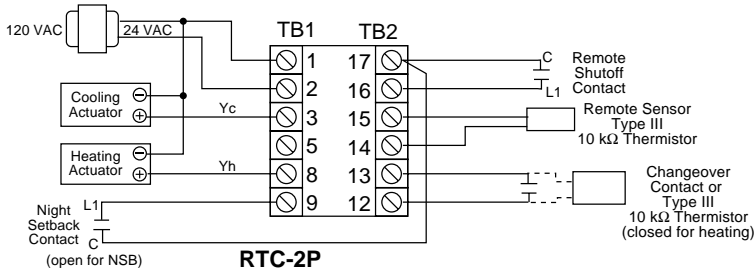
Voltage	24 VAC \pm 20%, 50/60 Hz	Display	0.35" (0.89 cm), two-digit LCD
Power	3 VA	Proportional band	Cooling, 1.8°F (1.0°C) Heating, 2.7°F (1.5°C)
Outputs	Proportional, 0-10V, 2-10V selectable PI control algorithm	Reset integral time	15 min.
Inputs		Changeover	Contact or 80°F (26.6°C) with a Type III thermistor
Remote sensor	Type III thermistor	Deadband	-1.8° to 9.0°F (-1.0° to 5.0°C)
Changeover	Contact or thermistor	Weight	4 oz (140 g)
Setback	Isolated 24V contact	Dimensions	4.9"W x 4.0"H x 1.2"D (12.45 x 10.16 x 3.05 cm)
Shutdown	Isolated 24V contact		
Controls	Set point buttons up/down 40° to 90°F (4° to 32°C) Setback-enable button or 30-min override		

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WIRING



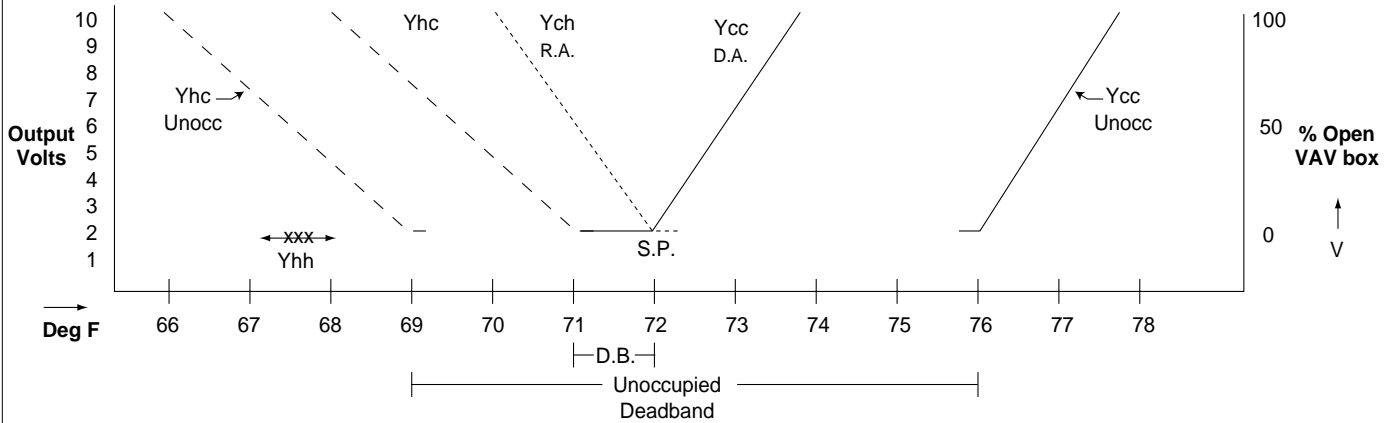
- TB1-1 = Common
 - TB1-2 = 24 VAC
 - TB1-3 = Cooling 0-10V*
 - TB1-5 = N/C
 - TB1-8 = Heating 0-10V*
 - TB1-9 = Setback, remote
 - TB2-17 = Common
 - TB2-16 = Remote Shutoff
 - TB2-15 = Remote Space Sensor
 - TB2-14 = Remote Space Sensor
 - TB2-13 = Heat/Cool Changeover
 - TB2-12 = Heat/Cool Changeover
- (TB1-1 and TB2-17 are connected internally.)
- * 0-10V or 2-10V selectable by 42.2K resistor installation; resistor provided

OPERATION

Adjustable	Parameters	Example (Factory default):
S.P.	Set Point 40° to 90°F (4° to 35°C)	S.P. 72°F
D.B.	Deadband -1.8° to 9°F (-1° to 5°C)	D.B. 1°F
Unocc. Htg	50° to 90°F (10° to 30°C)	Unocc. Htg 69°F
Clg	50° to 90°F (10° to 30°C)	Clg 76°F
Outputs	0-10V or 2-10V	Outputs 2-10V
Display	°F or °C	Display °F

OUTPUT TYPE	SIGNAL	CHANGEOVER MODE	ACTION
Ycc	—————	Cooling	D.A.
Yhc	- - - - -	Cooling	R.A.
Ych	· · · · ·	Heating	R.A.
Yhh	→xxx← remaining @ minimum	Heating	N/A

Note: Output type $\begin{matrix} Y_{cc} \\ Y_{L} \end{matrix}$ mode



ORDERING INFORMATION

MODEL	DESCRIPTION
RTC-2P	Room Temperature Controller, Two-Output H/C Proportional Thermostat

Related Products	
ST-U3	Universal duct and immersion sensor 10 kΩ type III thermistor
ST-R3S	Pipe strap-on sensor 10 kΩ type III thermistor
ST-S3E	Room sensor 10 kΩ type III thermistor