## Fan coil 2 or 4 pipes P+I controller

# RTA04

## Description

The RTA04 controller is designed to control fan coil heating and cooling systems. RTA04 controls the heating and / or cooling valves and fan speeds for 2 or 4 pipes fan coil. The proportional + integral (P + I) action available ensures accurate temperature control in all operating conditions.

The controller can be mounted on the wall or on the fan coil frame using the optional remote air sensor.

In 2-pipe systems it is possible to activate the summer/winter changeover by a switching contact or a sensor mounted on the pipe at the fan coil inlet.

The room probe is located inside the controller and can be replaced by an optional remote sensor.

Available commands: setpoint adjustment knob, Comfort / Economy mode setting button, button s/w changeover, manual fan speed selector and controller turn off.

### Technical specifications

- · 2 or 4 pipes fan coil applications
- · Proportional + integral digital controller
- · 3 fan speed control
- · ON-OFF control action for actuators
- Digital input for s/w changover, window, presence/timing program
- · Analog input for water temperature sensor, remote room temperature sensor
- · Output voltage for valves 230 V AC, fan motor 230 V AC
- Power supply 230 V AC, 50/60 Hz
- · CE certification



#### Technical characteristics

Control range		1030°C	
Power supply		230 V AC, 50/60 Hz	
Outputs (hot and cold water)		On-Off	
		3 speed output, 230 V AC. Max 1,25 A	
Knob and selectors			
	Operation mode	Summer / Winter	Button with led / Digital or analogue input
		Comfort / Economy	Button with led
	Fan	Auto-0-1-2-3	5-position selector
	Set point	Temperature 1030°C	Knob
Analog inputs			
	Room temperature	internal or remote air sensor	NTC10K
	Water temperature	strap-on or immersion	NTC10K
Digital inputs			
		summer/winter changeover	
		window	
		presence / timing program	
Proportional band		2 K	
Applications		2-pipe fan coil	
Housing		Single housing	
Protection class		IP30	<del></del>
Working temperature		045°C	
Storage temperature		-10+50°C	
Working range RH		2080% RH (non-condensing air)	<del></del>



#### Input and outputs

#### Digital inputs

#### Summer/winter changeover:

The closed contact indicates the presence of hot water in the pipes. This causes the change to winter operation. Summer/winter changeover can also be done using a temperature sensor connected to the terminals 10 and 11.

#### Presence or Timing program:

The open contact indicates the presence in the room (occupied area) and activates the set point of Comfort mode.

#### Window:

The open contact indicates the closed window and normal operation. The closing of the contact indicates the opening of the window and the transition to frost protection operation. This causes valve closure and fan stop. The frost protection is activated, which inserts an room set point of 4°C.

#### Analog inputs

#### Air temperature sensor

This sensor, normally placed on the fancoil return air, has priority over the controller's internal sensor.

#### Water temperature sensor

Summer/winter changeover: The sensor detects the water temperature of the fan coil. If the water temperature drops below 16°C, summer operation is activated. If the water temperature rises above 35°C, winter operation is activated. If the water temperature is maintained between the values set above, the controller switches to OFF and starts the frost protection.

#### Digital and analog outputs

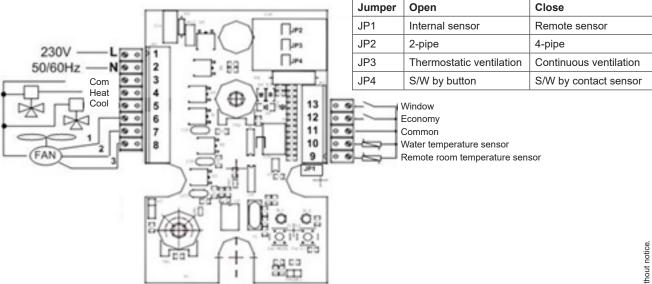
#### FAN:

3 speed fan control. Output 230 V AC, 50 Hz max 1,2 (1) A.

VALVE ACTUATOR HEAT/COOL:

Output for 4 ON-OFF actuators at 230 V AC, 0,4 A

#### Electrical wiring



#### Dimensions

