Fan coil 2- and 4-pipe P+I controller

RTA03

Description

The RTA03 controller is designed to control fan coil heating and cooling systems. RTA03 controls the heating and / or cooling valves and fan speeds for 2- and 4-pipe 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 sensor is located inside the controller and can be replaced by an optional remote sensor.
Available commands: setpoint adjustment knob, Comfort / Economy mode setting button, manual fan speed selector.

Technical specifications

- 2-4 pipes fan coil applications (by jumper selection)
- Proportional + integral digital controller
- 3 fan speed control by manual setting
- Possibility of thermostatic fan or continuous operation by jumper
- ON-OFF control action for actuators
- Digital input for 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		10…30°C	
Power supply		230 V AC, 50/60 Hz	
Output		On-Off	
		3 speed output, 230 V AC. Max 6 A	
Knob and selectors			
	Fan	1-2-3	3-position selector
	Set point	Temperature 10...30C + OFF position	knob
Analog inputs			
	Room temperature	Return air sensor (remote)	NTC10K
	Water temperature	Contact or strap-on/immersion sensor	NTC10K
Digital inputs			
		Presence / timing program	
		Window contact	
Proportional band		2 K	
Applications		2- or 4-pipe fan coil	
Housing		Single housing	
Protection degree		IP30	
Working temperature		0...45°C	
Storage temperature		-10...+50°C	
Working range RH		20...80% RH (non-condensing air)	

Eatec srl - Loc. Förche 20 - I-39040 Naz/Sciaves (BZ) - Tel. +39 0472 055617 - Fax +39 0472 089807 - info@eatec.it - www.eatec.it

Input and outputs

Ingressi digitali

Presence or Timing program:
The open contact indicates the presence in the room (occupied room) and activates the Comfort mode set point.

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 activates a 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.

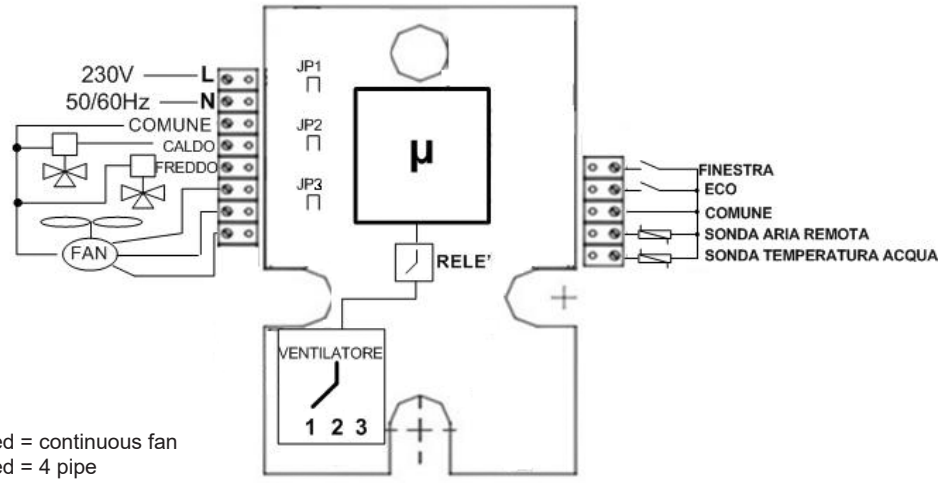
Water temperature sensor
Summer/winter changeover: The sensor detects the water temperature of the fan coil. If the water temperature drops below 16°C, summer operation is activated. If the water temperature rises above 35°C, winter operation is activated.
It is also possible to connect to the same input a contact for summer/winter switching. The closed contact indicates the presence of hot water in the pipes. This causes the switch to winter operation.
If the water temperature is maintained between the values set above, the controller switches to OFF and starts the frost protection.
The same sensor also works as a minimum fan operating temperature as well.

Digital and analog outputs

Fan:
3 speed manual fan control. Output 230 V AC, 50 Hz max 6 A.

Valve actuator heat/cool:
Output for 4 ON-OFF actuators at 230 V AC, 0,8 A

Electrical wiring



JP1: closed = continuous fan
JP2: closed = 4 pipe
JP3: closed = contact NC

Dimensions