The RCF range

Controllers and thermostats for fan-coil units

REGIN

THE CHALLENGER IN BUILDING AUTOMATION

Energy-efficient control of fan-coil units

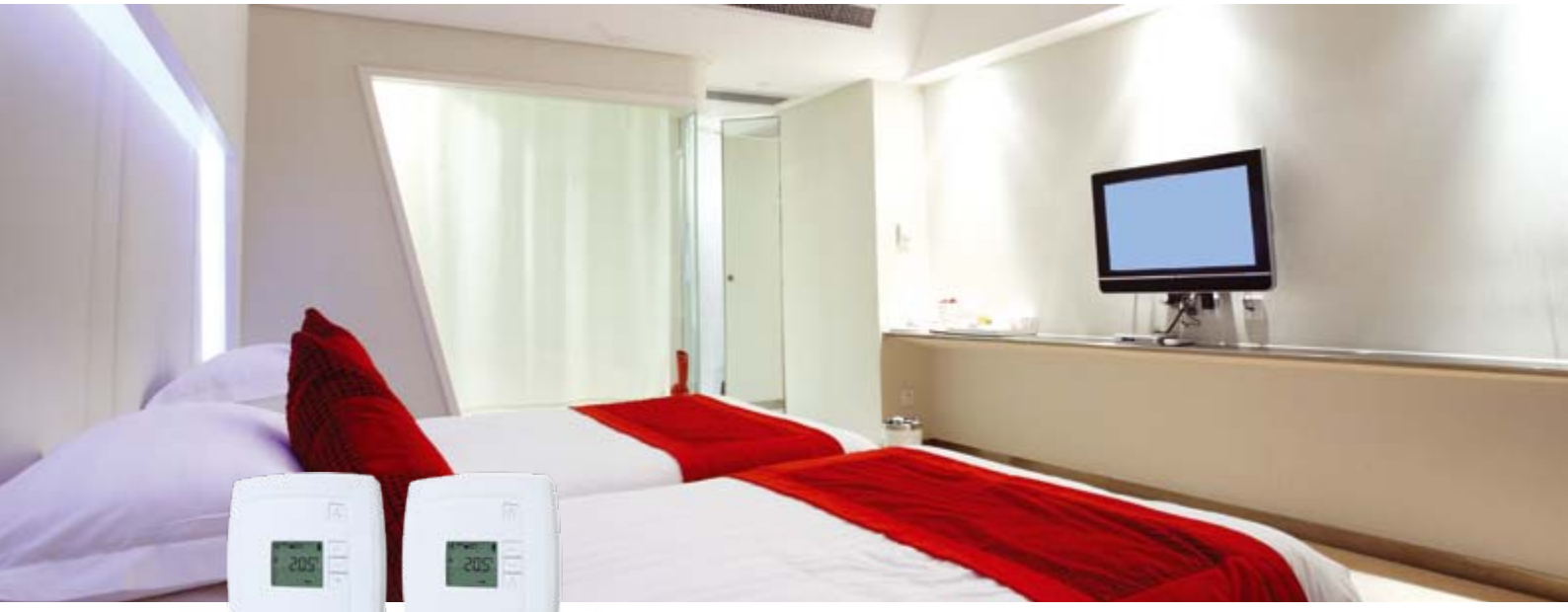
The RCF range's stand-alone controllers and thermostats for fan-coil units can be used for zone control of heating and/or cooling.

Rooms that are heated or cooled when unoccupied, or when a window is open, are a pure waste of energy. By connecting RCF to an occupancy detector, a keycard switch or a window contact, temperature and air flow are controlled automatically from the occupancy in the room. If a window is open, heating and cooling will be blocked. This way, room comfort is maintained at a comfortable level at the same time as saving energy.

Systems:
- Heating/cooling water
- Electric heating
- 2-pipe systems
- 2- or 4-pipe systems

Control of:
- 3-position actuators
- Thermal actuators
- On/Off actuators
- 0…10 V DC actuators

Functions:
- 3-speed fan
- Connection of occupancy detector, keycard switch or window contact
- Automatic or manual (M models) change-over between heating/cooling
- Automatic valve exercise
- Models with communication (EXOline, BACnet or Modbus)



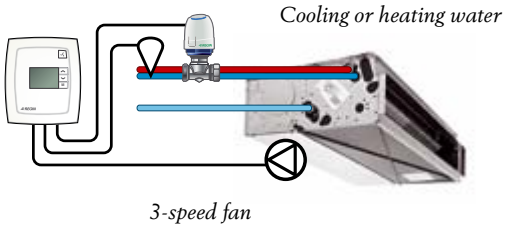
The RCF range has a stylish design inspired by the award-winning Regio range.

For all types of fan-coil units and premises

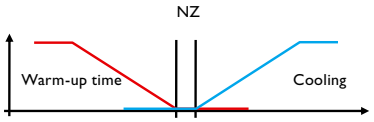
The RCF range can control all types of fan-coil units and is suitable in applications where a high comfort level and low energy consumption is desired.

- *Hotels*
- *Conference rooms*
- *Offices*
- *Shops*
- *Schools*
- *Hospitals etc.*

Control of a ceiling convector, 2-pipe system

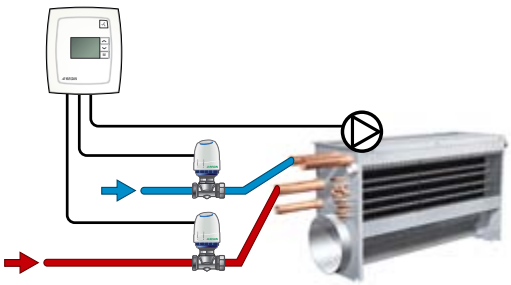


One circuit is used for heating/cooling in sequence. Automatic change-over between heating and cooling using a temperature sensor (TG-A1/PT1000) on the supply circuit. There is also a model with manual change-over between cooling and heating.

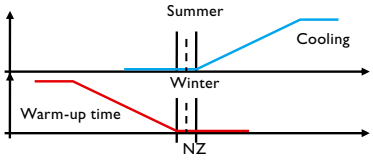


Change-over heating/cooling, 2-pipe system

Control of a window convector, 4-pipe system

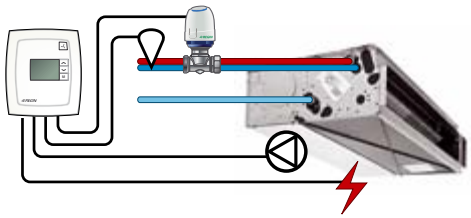


4-pipe system with cooling and heating circuits, controlled by separate outputs on the controller/thermostat.



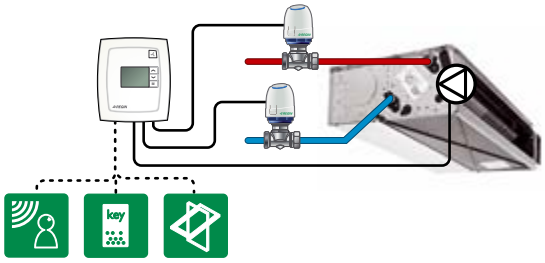
Change-over heating/cooling, 4-pipe system

Control of an electric heating ceiling convector in combination with heating/cooling water



Electric heating in steps in combination with cooling water during the summer. Change-over to electric heating in combination with heating water during the winter.

Occupancy detector or keycard switch for saving energy



By connecting an occupancy detector or a keycard switch to a digital input, you can alternate between Comfort and Economy mode. This way, the temperature is controlled from requirement, making it possible to save energy while maintaining the temperature at a comfortable level.

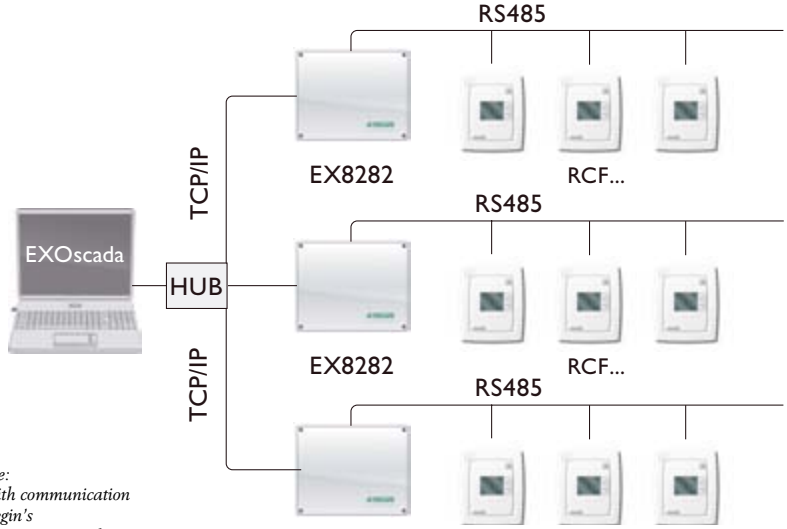
Using occupancy detection, you can delay activation and/or inactivation of Comfort mode in order to avoid switching mode if someone temporarily enters or leaves the room.

Another option is to connect a window contact to the input. This will set the controller/thermostat to “Off” mode if a window is opened, thereby minimising energy consumption.

RCF with communication

RCF models with communication can be connected to BACnet, Modbus or EXOline in order to communicate with a central SCADA system via RS485. The models are pre-programmed, but can be configured using Regin's software Regio tool©. RCF-230CD, RCF-230CTD and RCF-230CAD are BTL listed from software version 1.2-1-00 (BACnet stack 3.0.4).

Regio tool© can be downloaded free of charge from Regin's website



System example:
RCF models with communication connected to Regin's TCP/IP gateway EX8282. The SCADA system EXOscada.

Modbus
EXOline
BACnet
BTL

Model overview

	Model	Control of			Communi-cation	Systems	
		On/Off actuators	Thermal or 3-position actuators	0…10 V DC actuators (analogue)		2-pipe	4-pipe
Automatic change-over heating/cooling via a PT1000 sensor	RCF-230D	x				x	x
	RCF-230CD	x			x	x	x
	RCF-230TD		x			x	x
	RCF-230CTD		x		x	x	x
	RCF-230AD			x		x	x
	RCF-230CAD			x	x	x	x
Manual change-over heating/cooling	RCFM-230D	x				x	
	RCFM-230TD		x			x	

Complete solutions

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