

# CONTROLLERS AND THERMOSTATS FOR FAN-COIL APPLICATIONS



Room thermostat with touch display and communication for fan-coil applications, 230 V AC on/off outputs

Slim electronic fan-coil thermostat for room temperature control. Automatic or manual change-over between heating and cooling. The thermostat has a function for 3-speed fan control (for fan-coil), a built-in temperature sensor, backlit touch display, and an input for a hotel key card or an occupancy detector.



Technical data	
Supply voltage	230 V ~ (207...253 V ~ 50/60 Hz)
Power consumption	< 3 VA
Protection class	IP30
Ambient humidity	10...90 % RH (non-condensing)
Ambient temperature	0...50 °C
Measuring range, temperature	0...50 °C
Sensor element, temperature	NTC
Accuracy, temperature	±0.5 K
Output signal, temperature	NTC
Display	Built-in
Display type	LED-backlit LCD
Setpoint adjustment	5...35 °C
Mounting	Room (flush-mounted with screw distance cc 60 mm)
Installation	Fan-coils, 2- or 4-pipe
Dimensions, external (WxHxD)	95 x 95 x 50.5 mm

## MODELS

Article	DI	DO	AI	Note
RCFD-230C	1	5	1	

Article	Note
E-CABLE2-USB	
CONVERTERTCP	



RCF...

### Fan-coil thermostat with on/off outputs

Electronic fan-coil thermostats for room temperature control. Automatic or manual change-over between heating and cooling. The thermostats have a function for 3-speed fan control (for fan-coil), a built-in temperature sensor, backlit display, and an input for a window contact or an occupancy detector.

RCF-230CD\*, RFC-230CAD\*, RCF-230CTD\* and RCF-230CTD-EC\* are BTL listed. PICS documents and more information are available at [www.bacnetinternational.net](http://www.bacnetinternational.net)



RCFM...

Technical data	
Supply voltage	230 V AC $\pm 10$ %, 50/60 Hz
Power consumption	< 3 VA
Setpoint	5...35 °C
Hysteresis	$\pm 0.5$ K (adjustable)
Digital outputs (DO)	Three relay outputs for fan control, 230 V AC, 3 A / Two triac outputs for valve actuators, 230 V AC, 300 mA
Analogue inputs (AI)	One PT1000
Digital inputs (DI)	One closing potential-free contact
Universal inputs (UI)	One PT1000 or closing potential-free contact
Mounting	Room
Protection class	IP20



Article	Description	Installations	Change-over function	Note
RCF-230D	Fan-coil thermostat	2- or 4-pipe	Automatic	
RCF-230CD	Fan-coil thermostat with communication via RS485 (Modbus, BACnet or EXOline)	2- or 4-pipe	Automatic	
RCFM-230D	Fan-coil thermostat	2-pipe	Manual	



RCF...

### Fan-coil controller for thermal or 3-point actuators

Electronic fan-coil controllers for room temperature control with PI controller. Automatic or manual change-over between heating and cooling. The controllers have a function for 3-speed fan control (for fan-coil), a built-in temperature sensor, backlit display, and an input for a window contact or an occupancy detector. RCF-230TD and RCF-230CTD also have a function for control of an electric heater.

RCF-230CD\*, RFC-230CAD\* and RCF-230CTD\* are BTL listed. PICS documents and more information are available at [www.bacnetinternational.net](http://www.bacnetinternational.net)



RCFM...

Technical data	
Supply voltage	230 V AC $\pm 10\%$ , 50/60 Hz
Power consumption	< 3 VA
Setpoint	5...35 °C
P-band	10°C
Hysteresis	$\pm 0.5$ K
I-time	300 s
Digital outputs (DO)	Three relay outputs for fan control, 230 V AC, 3 A / Two triac outputs for valve actuators, 230 V AC, 300 mA
Analogue inputs (AI)	One PT1000
Digital inputs (DI)	One closing potential-free contact
Universal inputs (UI)	One PT1000 or closing potential-free contact
Mounting	Room
Protection class	IP20



Article	Description	Installations	Change-over function	Note
RCF-230TD	Fan-coil controller	2- or 4-pipe	Automatic	
RCF-230CTD	Fan-coil controller with communication via RS485 (Modbus, BACnet or EXOline)	2- or 4-pipe	Automatic	



### EC fan controller for thermal or 3-point actuators

Electronic fan-coil controller for control of EC fans. With PI controller. Automatic or manual change-over between heating and cooling. The controller has a function for EC fan control, a built-in temperature sensor, backlit display, and an input for a window contact or an occupancy detector. It also has a function for control of an electric heater.

RCF-230CD\*, RFC-230CAD\*, RCF-230CTD\* and RCF230CTD-EC\* are BTL listed. PICS documents and more information are available at [www.bacnetinternational.net](http://www.bacnetinternational.net)



Technical data	
Supply voltage	230 V AC $\pm 10\%$ , 50/60 Hz
Power consumption	< 3 VA
Setpoint	5...35 °C
Hysteresis	$\pm 0.5$ K
P-band	10°C
I-time	300 s
Analogue outputs (AO)	One for EC fan control, 0...10 V DC, max. 1 mA
Digital outputs (DO)	Two triac outputs for valve actuators, 230 V AC, 300 mA
Analogue inputs (AI)	One PT1000
Digital inputs (DI)	One closing potential-free contact
Universal inputs (UI)	One PT1000 or closing potential-free contact
Mounting	Room
Protection class	IP20

Article	Description	Installations	Change-over function	Note
RCF-230CTD-EC	Fan-coil controller for EC fans with communication via RS485 (Modbus, BACnet or EXOline)	2- or 4-pipe	Automatic	



## Fan-coil controller with 0...10 V control signal

Electronic fan-coil thermostats for room temperature control. With PI controller. The controllers have automatic change-over between heating and cooling and can be used for 2- or 4-pipe systems. They have a function for control of a 3-speed fan (for fan-coil), a built-in temperature sensor, backlit display, and an input for a window contact or an occupancy detector.

RCF-230CD\*, RFC-230CAD\*, RCF-230CTD\* and RCF230CTD-EC\* are BTL listed. PICS documents and more information are available at [www.bacnetinternational.net](http://www.bacnetinternational.net)



Technical data	
Supply voltage	230 V AC $\pm 10$ %, 50/60 Hz
Power consumption	< 3 VA
Outputs	Relays for fan control, 230 V AC, 3 A fan-coil. Actuator, 0...10 V DC, max. 1 mA.
Setpoint	5...35 °C
Hysteresis	$\pm 0.5$ K
P-band	10°C
I-time	300 s
Analogue outputs (AO)	Two for valve actuators, 0...10 V DC, max. 1 mA
Digital outputs (DO)	Three relay outputs for fan control, 230 V AC, 3 A
Analogue inputs (AI)	One PT1000
Digital inputs (DI)	One closing potential-free contact
Universal inputs (UI)	One PT1000 or closing potential-free contact
Mounting	Room
Protection class	IP20

Article	Description	Change-over function	Installations	Note
RCF-230AD	Fan-coil controller	Automatic	2- or 4-pipe	
RCF-230CAD	Fan-coil controller with communication via RS485 (Modbus, BACnet or EXoline)	Automatic	2- or 4-pipe	

## RCF model overview

Article	Communication	Installations	Change-over function	EC fan control	Värme- & kylstyrning	AI	DI	UI	AO	DO	Note
RCF-230D	-	2- or 4-pipe	Automatic	-	On/Off	1	1	1	-	5	
RCF-230CD	RS485: Modbus, EXoline (using automatic detection/switching) or BACnet	2- or 4-pipe	Automatic	-	On/Off	1	1	1	-	5	
RCFM-230D	-	2-pipe	Manual	-	On/Off	1	1	1	-	5	
RCF-230TD	-	2- or 4-pipe	Automatic	-	3 position or thermal actuator	1	1	1	-	5	
RCF-230CTD	Modbus, BACnet & EXoline	2- or 4-pipe	Automatic	-	3 position or thermal actuator	1	1	1	-	5	
RCFM-230TD	-	2-pipe	Manual	-	3 position or thermal actuator						
RCF-230CTD-EC	Modbus, BACnet & EXoline	2- or 4-pipe	Automatic	X	On/Off or thermal actuator	1	1	1	1	2	
RCF-230AD	-	2- or 4-pipe	Automatic	-	0...10 V	1	1	1	2	3	
RCF-230CAD	Modbus, BACnet & EXoline	2- or 4-pipe	Automatic	-	0...10 V	1	1	1	1	3	