

RCFD-230C ...

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.

- ✓ Backlit touch display with 230 V AC supply voltage
- ✓ 3 built in relays for 3-speed fan and 2 for heat/cool control
- ✓ Available in white or black
- ✓ Various control modes for reduced energy consumption
- ✓ Input for presence detector and/or key card
- ✓ Flush mounting for low profile installations
- ✓ Modbus communication

Application

This is a room thermostat suitable for every kind of building where reduced energy consumption and high comfort need to be met. The ability to switch between control modes depending on occupancy, makes it particularly suitable for public spaces, such as hotel rooms, offices, schools and hospitals etc.

Function

The room thermostat regulates the heating and/or cooling in a room via on/off outputs for 2- or 4 pipe installations, and has a function for three-speed fan control. The large LCD touch display shows the status and is also used to

access all parameters, such as setpoint, hysteresis, fan speed etc.

The unit has a built-in temperature sensor for controlling the room temperature. The change-over function can be controlled using an external PT1000 sensor or via a digital input connected to any potential free contact. Functions such as mould protection and automatic valve exercise ensures a proper functionality and a problem free installation over time.

Installation

The modular design makes it easy to install and the flush mounting gives the unit a discreet appearance. The unit can operate in standalone mode or through Modbus,

HEAD OFFICE SWEDEN

Phone: +46 31 720 02 00
Web: www.regincontrols.com
E-mail: info@regincontrols.com

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which makes it possible to integrate with other systems such as SCADA or DDC. The configuration can be made via the display where a parameter list is used, or through communication.

Technical data

Supply voltage	230 V ~ (207...253 V ~ 50/60 Hz)
Power consumption	< 2 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
Display	Built-in
Display type	LED-backlit LCD
Output signal, temperature	NTC
Setpoint adjustment	5...35 °C
Mounting	Room (flush-mounted with screw distance cc 60 mm)
Installation	Fan-coils, 2- or 4-pipe
Digital inputs (DI)	1 x Closing potential-free contact
Digital outputs (DO)	3 x Relay outputs for 3-step fan control, 230 V AC, Max. 5 A 2 x Relay outputs for On/Off valve actuators, 230 V AC, Max. 5 A
Analogue inputs (AI)	1 x PT1000
Change-over function	Automatic
Communication port	1
Internal serial port, type	RS485
Internal serial port, built-in protocol	Modbus (RTU)
Internal serial port, communication speed	9600 bps (4800...38400 bps)
Internal serial port, parity	Even (Even, Odd, None)
Internal serial port, stop bit	1 (1 or 2)
Cable connection	Screw terminals max. 1.5 mm ² (AWG 16)
Dimensions, external (WxHxD)	95 x 95 x 50.5 mm
Weight, incl. packaging	0.24 kg



This product carries the CE-mark. More information is available at www.regincontrols.com.

Material

Material, housing and base	Polycarbonate, PC
Material, fire resistance	UL 94 V-0

Models

Model	Colour housing
RCFD-230C	RAL 9003, Signal white
RCFD-230C-BLACK	RAL 9005, Jet black

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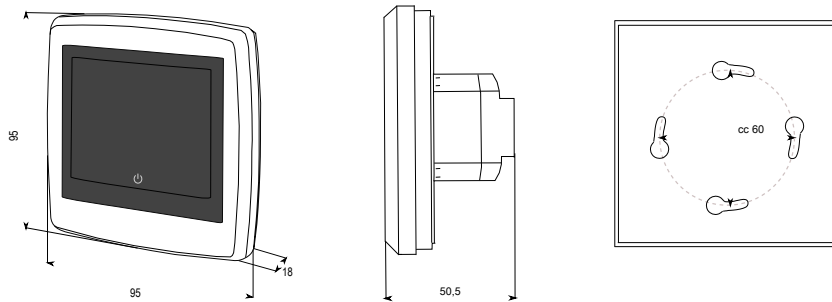
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Accessories

Article	Description
E-Cable2-USB	PC-cable for communication, with USB connection
ConverterTCP	Serial adapter for Modbus, RS485 to TCP

Dimensions



[mm]

Wiring

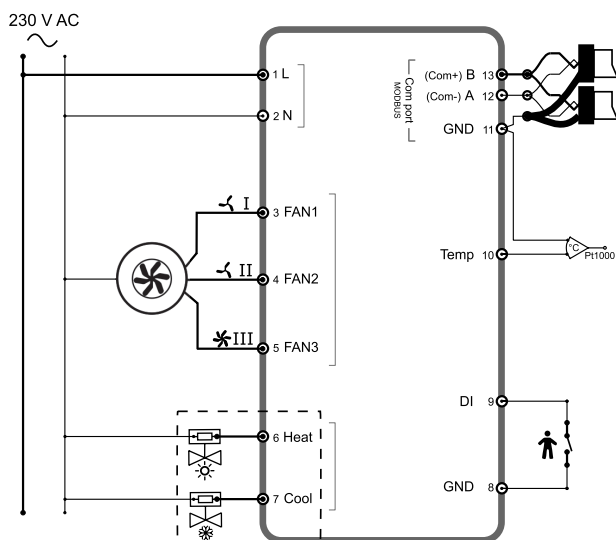


Fig. 1 4-pipe wiring

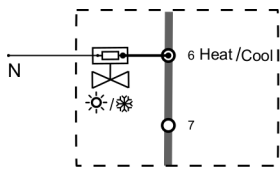


Fig. 2 2-pipe wiring

Documentation

All documentation can be downloaded from www.regincontrols.com.