# **CH130RR-CH130RFR** Room thermostats for fan-coils, 3 speeds

CH130 model is a fan-coil 4- or 2-pipe thermostat that allows you to control the ambient temperature both in the heating and cooling modes. Is able to drive one or two valves and also control a 3-speed fan-coil motor. CH130RR has a separately activation unit with two-wire connection, while the CH130RFR model has the separately activation unit with which communicates via radio frequency (wireless).



### KIT COMPOSITION TABLE

KIT CODE	THERMOSTAT CODE	ACTUATOR CODE	FAN SPEED	CONNECTION TYPE
CH130RR	CH130R	CH172D	manual	2 wires
CH130RFR	CH130RF	CH172DRF	manual	wireless

			2 WIRES		5 40 40 40 40 40 40 40 40 40 40 40 40 40	CE 00 00 11	
	Mounting	Temperature regulation range	Body admissible temperature	Power supply	N° relay	Power supply	Protection degree
CH130R	wall mounting	2 ÷ 40 °C	45 °C	actuator CH172D	-	-	IP20
CH172D	6-module DIN rail		45 °C	230V-50Hz	5	5(3)A 250Vac	IP00
CH172DS*	6-module DIN rail		45 °C	230V-50Hz	5	5(3)A 250Vac	IP00

\*CH172DS is used to control more fan-coils.

### CH130RFR RADIO FREQUENCY KIT MADE UP OF: CH130RF THERMOSTAT + CH172DRF ACTUATOR

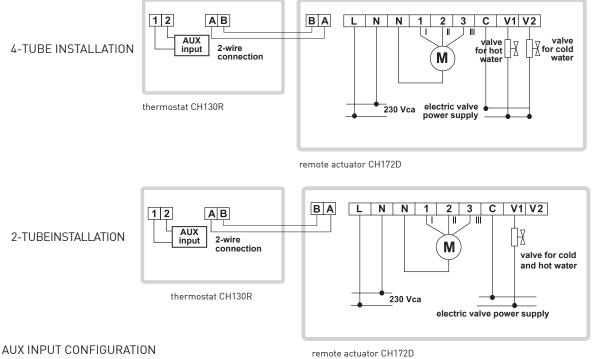
	Favrini Созмі * 20.9°с △ * ش ۵ ▽	lt It	WIRELESS		i II II II ● ● ● ● ● 5(7)A 250V- T45 ●		
				NOND	30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 (11)	
	Mounting	Temperature regulation range	Body admissible temperature	Power supply	N° relay	Power supply	Protection degree
CH130RF	Mounting wall mounting	regulation	admissible	Power supply 2 batteries AA 1,5V			

\*To control more fan-coils, always use CH172DRF actuator.

### CH130RR ELECTRICAL FEATURES

Power supply from a remote actuator. Remote actuator with 5 output relays, voltage 250 Vac.

Contacts rating 5(3)A.



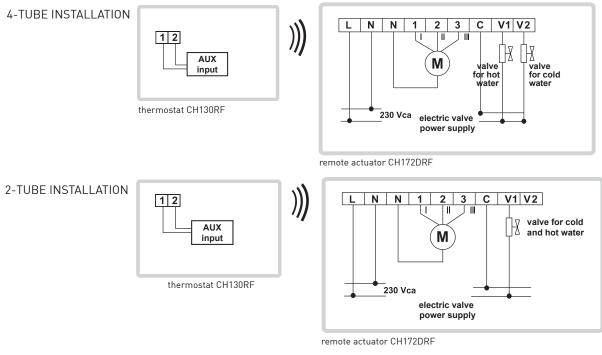
not used

minimum window/thermostat contact

reverse contact (minimum window/thermostat)

### CH130RFR ELECTRICAL FEATURES

Power supply from 2 AA type batteries of 1,5V. Remote actuator with 5 output relays, voltage 250 Vac. Contacts rating 5(3)A.



### AUX INPUT CONFIGURATION

not used

- minimum window/thermostat contact
- reverse contact (minimum window/thermostat )

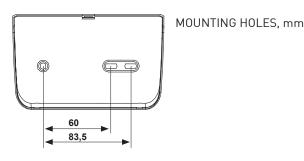
### HOMOLOGATION AND STANDARDS

Complies with EN 60730-2-9 standards ErP: ErP Class IV; 2% (Reg. EU 811/2013 -813/2013)

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### INSTALLATION

The thermostat is supplied complete with a base suitable for mounting on the wall, as well in rectangular or round built-in 3-seat boxes (503).



### OPERATION

CH130RR is supplied from the actuator and is able to drive two valves and also control a 3-speed fan-coil motor.

CH130RFR is supplied with two AA batteries of 1,5V and is able to drive two valves and also control a 3-speed fan-coil motor by means of CH172DRF actuator.

The wide display shows the measured temperature, fan speed, the running program and the selected season.

The settings and data are stored in a permanent (nonvolatile) memory capable of keeping them even in the absence of power supply or when the batteries are not inserted (according to the model).

### SUMMER/WINTER SELECTION

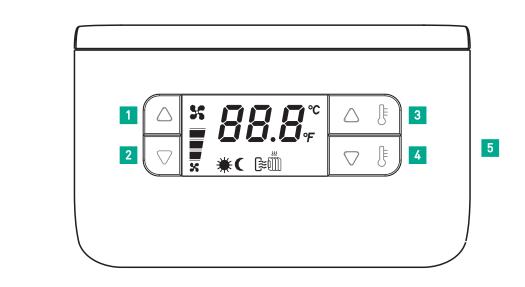
To switch from the "Winter" operation (i.e. heating system) to the "Summer" operation (i.e. cooling system), and vice versa, press the 1+2 button combination. The selected operation mode will be indicated on the display by the "Winter" or "Summer" icons.

### **BUTTONS COMBINATIONS**

- 1 fan speed increase button
- 2 fan speed decrease button
- 1+2 SUMMER/WINTER switch
- 3 temperature value increase button for the selected program
- 2+4 Celsius/Fahrenheit switch
- 3+4 COMFORT/ECONOMY switch
- 4 temperature value decrease button for the selected program
- 5 thermostat reset button

### VISUALIZATION (SIGNALS)

- measured temperature
- COMFORT symbol
- ECONOMY symbol
- SUMMER symbol
- WINTER symbol
- fan speed symbol



### OPERATING MODES

CH130... thermostats have 3 different manual operating modes:

- With the COMFORT operating mode, the thermostat regulates the heating or cooling installation operation in order to always keep the same prescribed comfort temperature.
- With the ECONOMY operating mode, the thermostat regulates the heating or cooling installation operation in order to always keep the same prescribed economy temperature.
- (OFF) function can be achieved by setting the fan speed to zero. In this case, the thermostat does not perform the regulation. The system will switch OFF completely and on display will appear the message "OFF".

#### FAN SPEED SELECTION

The fan speed can be set manually to free fixed levels (minimum, medium, maximum). CH130... thermostats have available a TECHNICAL MENU for adapting to different system types.

#### TECHNICAL MENU

SYSTEM TYPE

- 2-tube system: the thermostat will drive only the valve (ON/OFF type) used for heating both during the heating and the cooling; in fact, the valve will control both hot water and cold water.
- 4-tube system: the thermostat will drive one valve (ON/OFF type) used for heating, plus one additional valve (ON/OFF type) used for cooling, based on the needs of the environment.

#### EXTERNAL PROBE

- MINIMUM WINDOW/THERMOSTAT CONTACT: when the contact is open, the thermostat performs temperature control, when it is closed does not perform temperature control.
- MINIMUM WINDOW/THERMOSTAT REVERSE CONTACT: the window contact functions with inverted logic regarding the affirmation made in the 1st step.
- NONE: external sensor input is not controlled by the thermostat.

#### DISPLAY VISUALIZATION

- AMBIENT TEMPERATURE: the ambient temperature will be shown on the display.
- SET-POINT: the current set-point will be shown on the display.

#### AMBIENT TEMPERATURE CORRECTION

It can be adjusted from -4,0 to +4,0°C. This parameter is used to correct the acquired ambient temperature.

#### WINTER LOWER LIMIT SET-POINT TEMPERATURE

It can be adjusted from 2,0 to 40,0°C. It represents the lower limit for all set-points (comfort and economy) in the heating mode.

#### WINTER UPPER LIMIT SET-POINT TEMPERATURE

It can be adjusted from 2,0 to 40,0°C. It represents the upper limit for all set-points (comfort and economy) in the heating mode.

#### SUMMER LOWER LIMIT SET-POINT TEMPERATURE

It can be adjusted from 2,0 to 40,0°C. It represents the lower limit for all set-points (comfort and economy) in the cooling mode.

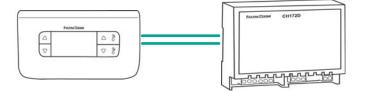
#### SUMMER UPPER LIMIT SET-POINT TEMPERATURE

It can be adjusted from 2,0 to 40,0°C. It represents the upper limit for all set-points (comfort and economy) in the cooling mode.

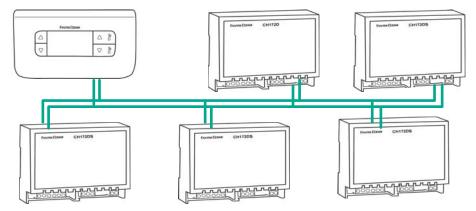
A CH130RR can control up to 5 fan-coil units simultaneously, using only two cables for connecting to the actuators. One of these actuators must be a CH172D, while others, maximum four, will be CH172DS.

A CH130RFR can control an unlimited number of actuators provided that they are located within reception range of 30 meters.

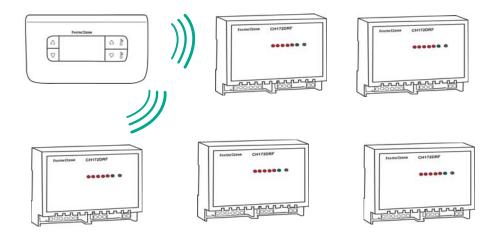
CONNECTION EXAMPLE BETWEEN CH130R+CH172D AND 1 FAN-COIL



CONNECTION EXAMPLE BETWEEN CH130R+CH172D+CH172DS AND FEW FAN-COILS (FROM 2 TO 5)



CONNECTION EXAMPLE BETWEEN CH130RF+CH172DRF AND 4 FAN-COILS



### FEATURES

Auxiliary input for minimum window and/or thermostat contact using an external probe. Screwed terminals. double insulation. Dimensions 135 X 83 X 21 mm.