

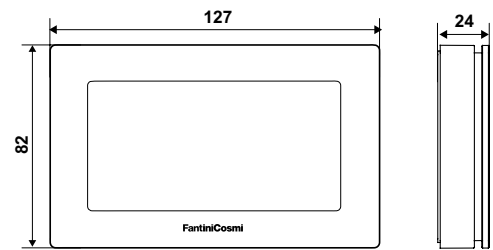
# CH120RF

## Touch screen room thermostat Intellicomfort+ system

Electronic room thermostat with white positive backlight LCD touch screen, to control heating, cooling and humidity management. The CH120RF is able to operate alone (single zone) as a room thermostat or can be plugged into the Intellicomfort + wireless multizone system.



Dimensions (mm)

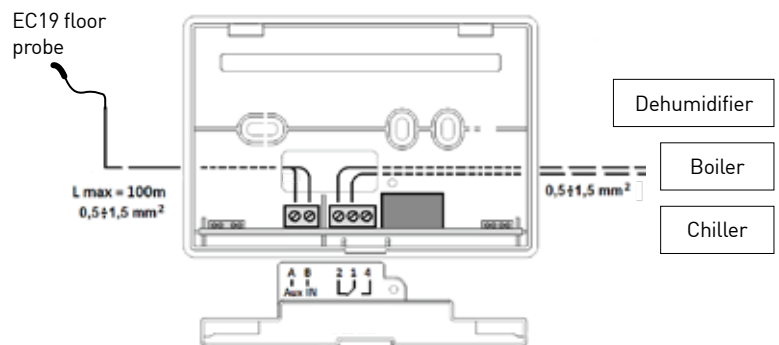


	Power supply	Differential* K	Temperature range	Transceiver frequency	Contact rating
CH120RF	2 batterie AA 1,5V	0.3 ÷ 5	-50 ÷ 50 °C	Wireless 868MHz	5(3)A 250Vca

\* Differential values are referred to a thermal gradient of 4K/h.

## ELECTRICAL CHARACTERISTICS

- Power supply: 2 batteries AA 1,5V;
- Contacts rating 5(3)A / 250Vac
- Free voltage contacts
- Connection to boiler heating/air-conditioning systems or dehumidifier: 3 screw terminals (contact switching NC and NO);
- Type of action: 1BU (micro disconnection);
- Software: A class
- Auxiliary input for floor probe;
- Electrical insulation: double insulation
- Pulse voltage: 4000V;
- Transceiver frequency: 868MHz
- Maximum radio frequency power transmitted < 10mW



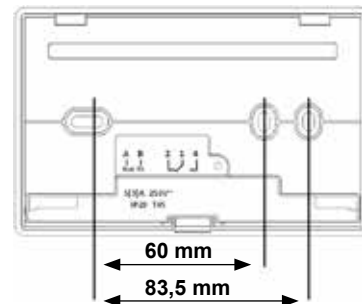
## HOMOLOGATION AND STANDARDS

- Complies with EN 60730-1 standards;
- Responding to Directive 2014/53 / EU (RED)
- ErP Class IV; 2% (Reg. UE 811/2013 - 813/2013).



## INSTALLATION

- Wall mounting or in 3-module embedded box (503) or in round box with axle spacing of 60 mm.
- It is supplied with a base suitable for installation in embedded (503) rectangular or round boxes, or on the wall.
- No changes are necessary to the existing system.



## OPERATION

- The CH120RF, equipped with a temperature sensor and relative humidity is a thermostat for the thermo-hygrometric control of the environment both in winter and summer.
- It has a configurable internal relay and can operate, via wireless connection, up to 15 CH175 relay actuators;
- It can control up to 15 actuators O60RF on radiators via wireless connection.
- It can operate alone (single zone) as a room thermostat or can be inserted into the Intellicomfort + wireless multizone system.

### FUNCTIONING AS A SINGLE AREA:

- ☀️ TCOM adjustable temp. from 2°C to 40°C
- 🌙 TECO adjustable temp. from 2°C to 40°C
- ⏻ TOFF, OFF temperature set in the "regulation" mode from 0 to 7°C to ensure frost protection function.
- Relative humidity RH% (adjustable from 30 to 70% or OFF);
- Summer/winter mode;

### OPERATION AS A COMPONENT OF MULTIZONA INTELICOMFORT + SYSTEM:

- The CH120RF obtain the operating mode, the temperature set-point and relative humidity from CH180RF;
- The CH120RF can locally change the temperature set-point values and changes can be temporary or permanent;
- Possibility in areas controlled by CH120RF to enable or disable the cooling and dampening;
- Keypad lock with command sent by the CH180RF.

### EXTRA FUNCTIONS (ALWAYS VALID)

- Display lock function for cleaning.
- Anti-condensate function;
- Corrected reading temperature ( $\pm 4$  ° C);
- Min and max lock setting temperature set-point (winter / summer);
- Static adjustment differential (0.3 ÷ 5 ° C);
- Auxiliary input for floor probe management (EC19);
- Configurable relay output (heating only, cooling only, heating + cooling humidistat);
- Display of the status of other devices associated with the CH120RF (useful for starting).

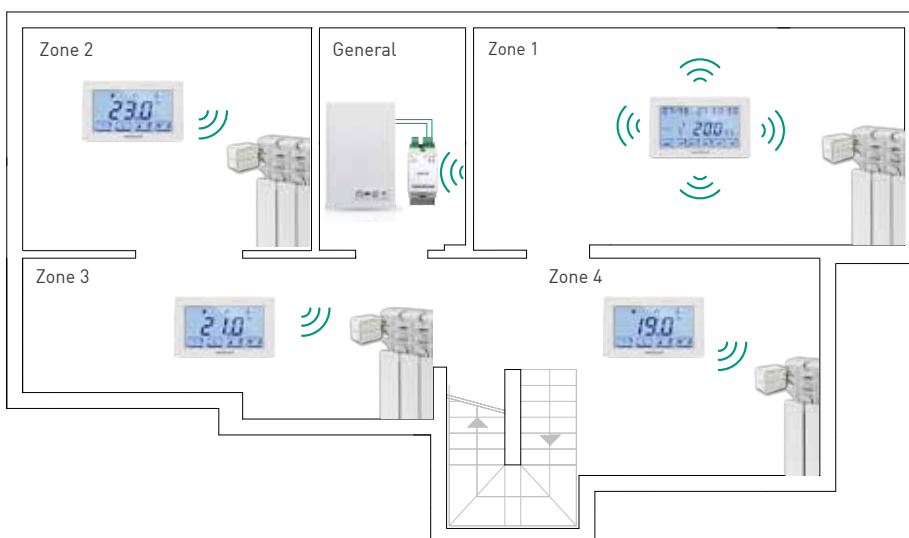
## SYSTEM CONFIGURATION

- If the CH120RF is inserted into the Intellicomfort + wireless multizone system or if it works a single zone connected to the O60RF or CH175 wireless actuators, it must be configured to start. This operation requires the use of the configurator (code 1590880) which, through the display supplied with it, provides the operating instructions.
- When asked by the message on the display, the configurator tip must be approached to the point indicated by the device to be configured and make contact recognition.
- For more details refer to the Intellicomfort + system installation manual.



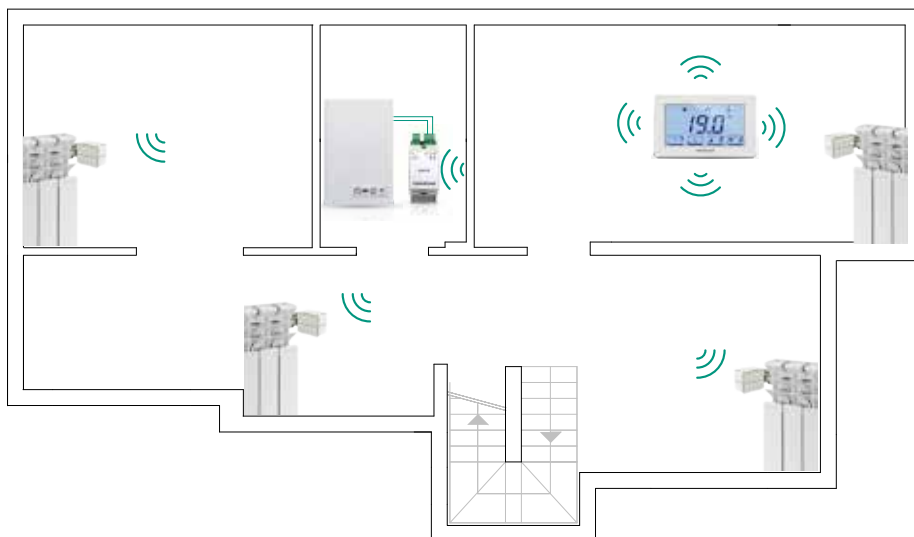
## SYSTEM EXAMPLE

OPERATION AS A COMPONENT OF THE MULTIZONA INTELLICOMFORT + SYSTEM  
(autonomous system with boiler and radiators located in non-optimal areas)



- CH180RF "MASTER" controls CH120RF zone thermostats which regulate the temperature in the zone and communicate with the O60RF actuators in the same zone.
- O60rf receives the set point and regulates the temperature according to the data detected by the zone thermostat
- CH175 actuator activates the boiler and also acts as a repeater for the wireless network of the Intellicomfort+ system, extending the range of the system.

## FUNCTIONING AS A SINGLE AREA



## ACCESSORIES

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- CH120RF is predisposed for connecting floor probe.



EC19 floor probe