

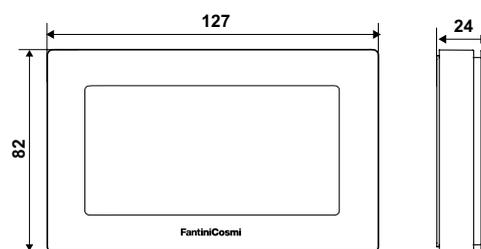
# Intellicomfort CH180RF

## Weekly wireless touch screen programmable thermostat Intellicomfort+ system

Electronic weekly programmable thermostat, white positive backlight, LCD touch screen. CH180RF "MASTER" programmable thermostat monitors the various zones in the home (up to 8), communicating with the CH120RF room thermostats and the O60RF wireless radiator actuators, or with the boiler actuators or CH175 zone solenoid valve. CH180RF uses a program that allows you to set the temperature, humidity and time profiles for each zone.



Dimensions (mm)



	Power supply	Temperature range	Displayed temperature	Num max. zone	Transceiver frequency	Contact rating
CH180RF	2 batteries AA 1,5V	2 ÷ 40 °C	-50 ÷ 50 °C	8	Wireless 868MHz	5(3)A 250Vca

\* Differential values are related to a thermal gradient of 4K/

## ELECTRICAL CHARACTERISTICS

- Power supply: 2 batteries AA 1,5V;
- Contacts rating 5(3)A / 250Vac – free potential contacts;
- Type of action: 1BU (micro disconnection)
- Electrical insulation: double insulation
- Pulse voltage: 4000V;
- Connection to boiler heating/air-conditioning systems or dehumidifier: 3 screw terminals (contact switching NC and NO);
- Software: A class
- 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 VIII; 5% (Reg. EU 811/2013 - 813/2013);

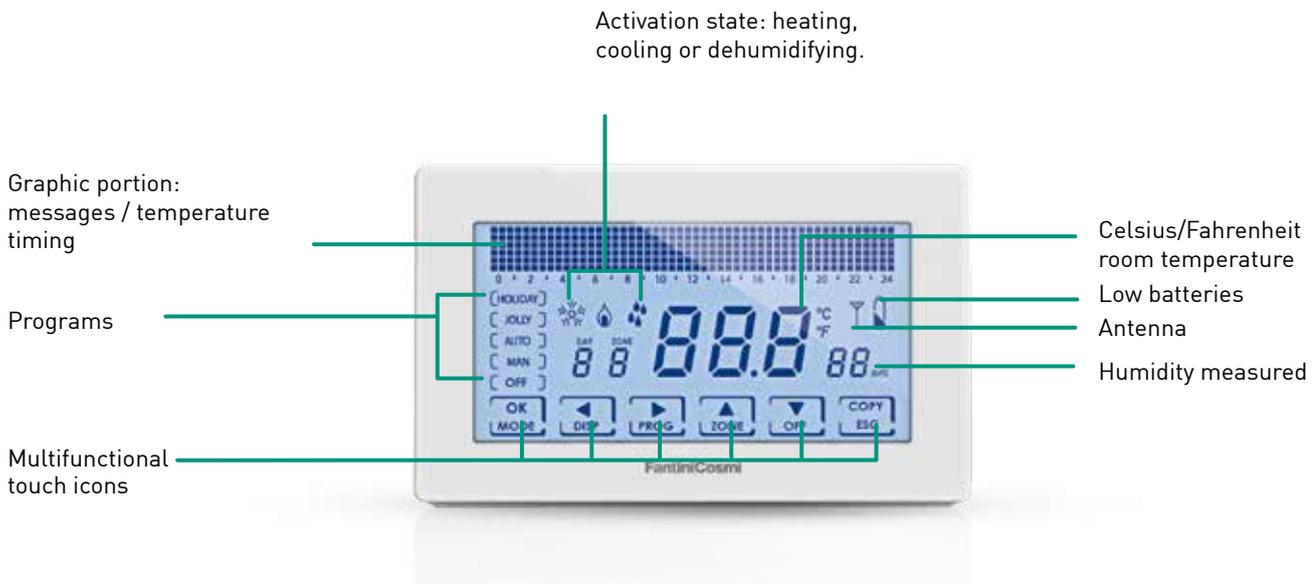


# INSTALLATION

- Intellicomfort CH180RF has to be installed on the wall or in a 3 modules or round flush mounting box, at about 1,5 meters above the floor.

# OPERATION

- CH180RF "MASTER" programmable thermostat monitors the various zones in the home (up to 8), communicating with the CH120RF room thermostats and the O60RF wireless radiator actuators, or with the boiler actuators or CH175 zone solenoid valve. CH180RF uses a program that allows you to set the temperature, humidity and time profiles for each zone.
- It has the function of zone thermostat with the possibility of controlling the O60RF and CH175 actuators.
- It has a custom temperature, humidity and time profile program for each zone, which can be modified as needed.
- It is also possible to correct the offset of the read temperature from each zone (i.e. if the zone is controlled by O60RF head placed in the wrong position)
- Intellicomfort CH180RF has 6 touch-keys, which function depends on the situation and is described by the symbol that appears on the display.



On the CH180RF you can activate and display the main operating modes for the whole system or for a single zone (you can have each zone in a different operation mode).

- MAN Manual program
- AUTO Weekly program
- HOLIDAY Daily program
- JOLLY Temporary program
- OFF Switched off system or antifreeze program

### MAN - MANUAL PROGRAM

CH180RF programmable thermostat adjust the room temperature using the temperature set in 24 hours.

TMAN Adjustable temperature from 2°C to 40°



- **AUTO - WEEKLY PROGRAM**

CH180RF programmable thermostat manages the set temperatures according to the time programs on the weekly profile.

You can set a different weekly profile for each zone

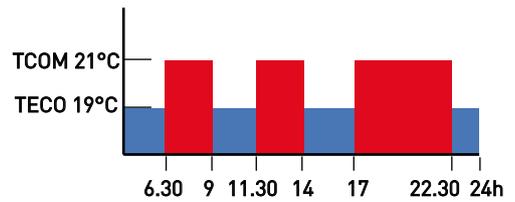
It is provided with preset winter programs and preset summer programs.

In the Auto mode it is possible to set 2 temperature levels TCOM e TECO (comfort temperature and economy temperature).

- TCOM adjustable temp. from 2°C to 40°C
- TECO adjustable temp. from 2°C to 40°C

Note: TCOM > TECO

EXAMPLE OF AUTO PROGRAMMING



- **HOLIDAY - SPECIAL DAILY PROGRAM**

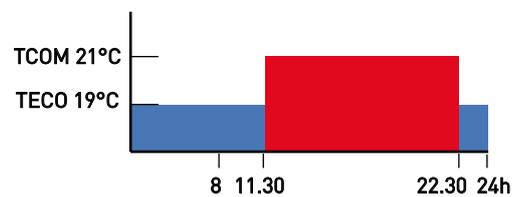
If you stay at home on a public holiday, you can set an extra daily profile ("H") for each zone. This mode stops when it is selected another operating mode.

In the Holiday mode it is possible to set 2 temperature levels TCOM e TECO (comfort temperature and economy temperature).

- TCOM adjustable temp. from 2°C to 40°C
- TECO adjustable temp. from 2°C to 40°C

Note: TCOM > TECO

EXAMPLE OF HOLIDAY PROGRAMMING



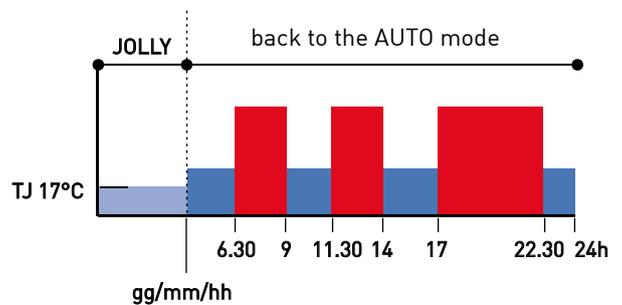
- **JOLLY - TEMPORARY PROGRAM**

The weekly programmable thermostat manages the system using 1 set temperature over a variable period of time (sets the time and day to which the set temperature is to be kept). At the end of the set time, the programmable thermostat returns to the previously used operation mode.

This function can be excluded at any time by setting a different operation mode.

- TJ adjustable temp. from 2°C to 40°C

EXAMPLE OF JOLLY PROGRAMMING



- **OFF - SWITCHED OFF SYSTEM OR ANTIFREEZE PROGRAM**

The selected system or zone is switched off. During WINTER mode keeps the temperature antifreeze.

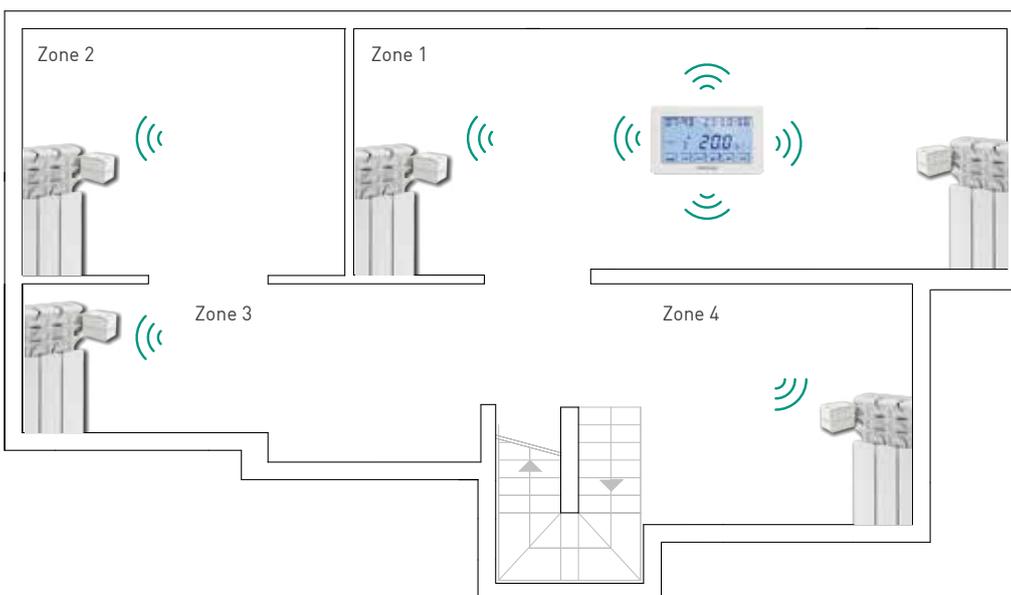
- TA antifreeze adjustable temp from 0 to 7 °C

# CHARACTERISTICS

- General heating, cooling and humidity control
- Zone heating, cooling and humidity control
- Maximum 8 control zone;
- Maximum management of 15 devices directly connected to the CH180RF;
- Possibility to associate different names to all zones;
- Viewing of energy consumption;
- Operating mode: MAN manual, AUTO weekly, HOLIDAY, JOLLY programmable up to 90 days, OFF system shut down or with antifreeze program;
- Screen lock password for CH180RF and all connected CH120RF;
- Lock function with Password;
- External probe management;
- Alarm management to exceed minimum and maximum temperature;
- System lock management to overcome the minimum and maximum temperature threshold;
- Cooling management by activating the dehumidifier through dew point control or via a predetermined UR % threshold;
- Display showing system fault anomalies;
- Standard time management;
- Summer/winter mode;
- Correction of the offset of the temperature read by the various zones;
- Temperature regulation range:  $2 \div 40$  °C, by step  $0,1$  °C;
- Thermal differential for regulation  $0,3 \div 5,0$  K;
- Range of temperature indication:  $-50 \div +50$  °C;
- Reference thermal gradient:  $4$  K/h;
- Humidity regulation range:  $30 \div 70$  %, by step  $1$  %;
- Range of humidity indication:  $0 \div 100$  %;
- Protection degree: IP40;
- Pollution degree: 2;

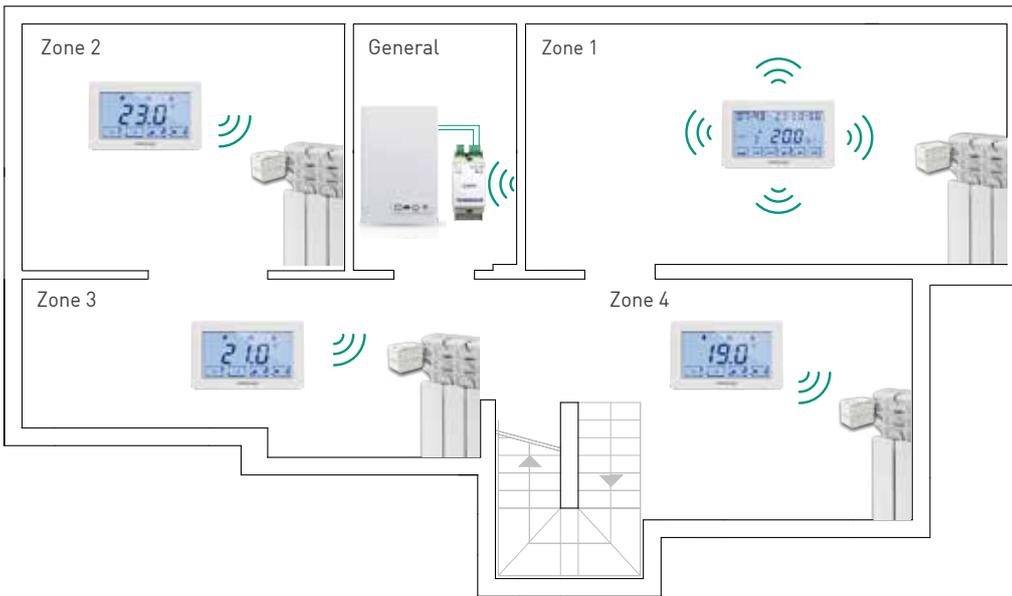
# SYSTEM EXAMPLE

## CENTRALIZED SYSTEM WITH RADIATORS



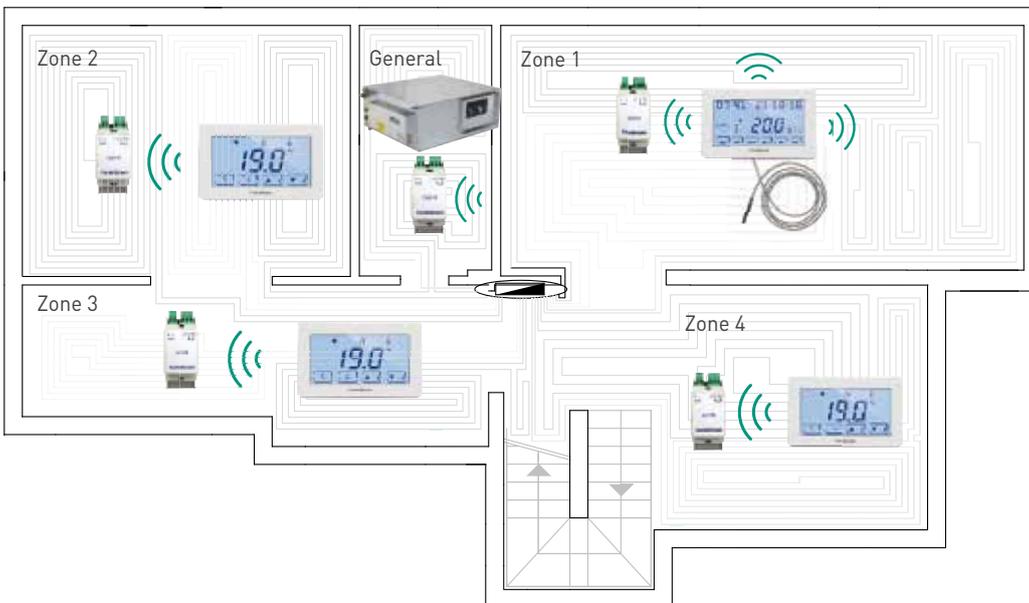
- CH180RF "MASTER" programmable thermostat directly controls the O60RF radiator actuators.
- The O60RF receive the current set point from the programmable thermostat and regulate the temperature according to data detected by their internal sensors.

## AUTONOMOUS SYSTEM WITH BOILER AND RADIATORS (POSITIONED IN NOT OPTIMAL LOCATION)



- 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.

## HOT/COLD WATER RADIATOR SYSTEM



- Weekly programmable thermostat CH180RF “MASTER” manages the heating and cooling of a floor system through actuators CH175 which controls the zone solenoid valves.
- A general dehumidifier or one for each zone, control in cooling mode the condensate formation.

## SYSTEM CONFIGURATION

- Once powered, the "MASTER" CH180RF must be included in the Intellicomfort + wireless network to be able to work; 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 at the point indicated by the device to be configured and make contact recognition.
- For more details refer to the Intellicomfort + system installation manual.



## ACCESSORIES

- Intellicomfort CH180RF is predisposed for connecting external probes.



EC18 external probe



EC19 floor probe



EC20 ambient probe