



# INTELLICOMFORT CH180RFWIFI

## WIRELESS TOUCHSCREEN PROGRAMMABLE THERMOSTAT WITH WIFI CONNECTION FOR REMOTE CONTROL

- Weekly program
- To control the heating, cooling and humidity systems
- Supervisor for Intellicomfort+ wireless multi-zone system
- Remote control through APP Intelliclima+ for Smartphone and Tablet



Temperature regulation range	2 ÷ 40 °C, increment 0.1°C
Humidity regulation range	30 ÷ 70%, increment 1%
Power supply	230V 50Hz
Contacts rating	5(3)A 250 Vca
WiFi connection	2,4 GHz (802.11 b/g/n)
Radio frequency	868 MHz
Adjustable differential	0.3 ÷ 5 K
Thermal gradient	4 K/h

## INSTALLATION

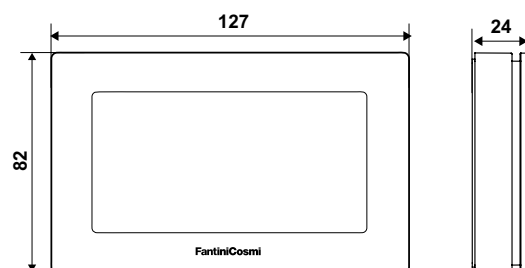
- CH180RFWIFI has to be installed on the wall or in a 3 modules or round flush mounting box, at about 1.5 meters above the floor.

## HOMOLOGATION AND STANDARD

- Complies with EN 60730-1 standards;
- Responding to Directive 2014/53 / EU (RED).
- ErP Classification (Reg. EU 811/2013 - 813/2013):
  - ◇ Class IV; 2%
  - ◇ Class VIII; 5% when used with O60RF actuators to create three or more heating zones.



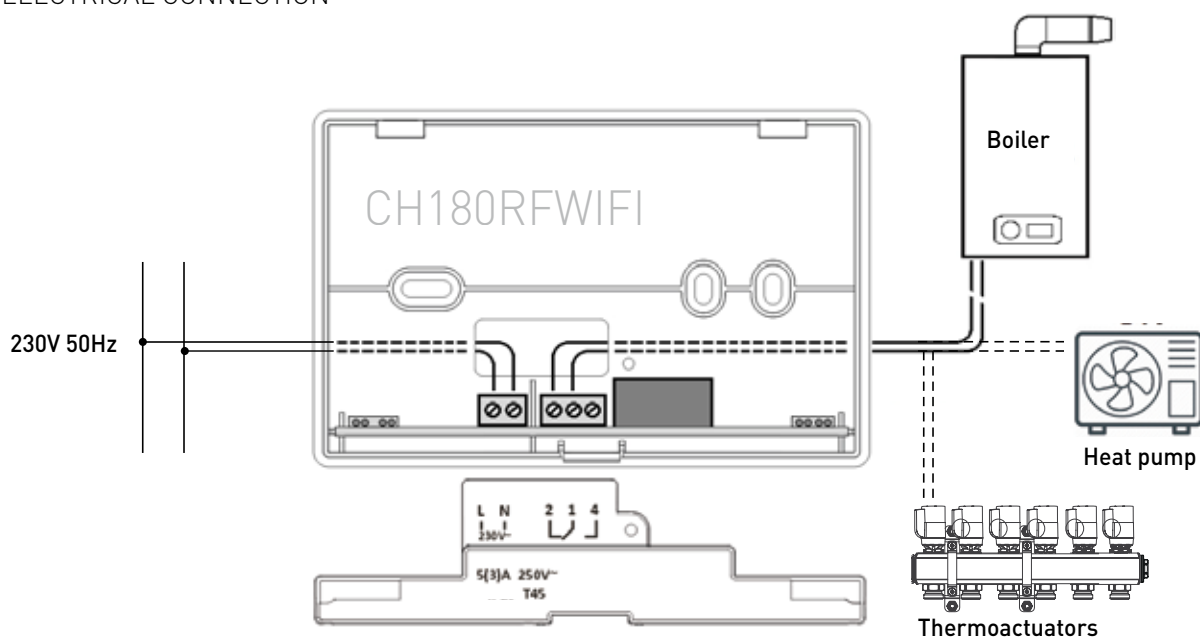
## DIMENSIONS mm



## ELECTRIC FEATURES

Power supply	230V-50Hz
Maximum absorbed power	5 W
Contacts rating	5(3)A 250 Vca
Type of action	1 B.U. (connection micro-switch)
Output type	<ul style="list-style-type: none"> <li>1 relay for heating/cooling or humidity systems (3 screw clamps (closed + open))</li> </ul>
Software	A class
Electric insulation	Double insulation
Pulse voltage	4000V

### ■ ELECTRICAL CONNECTION

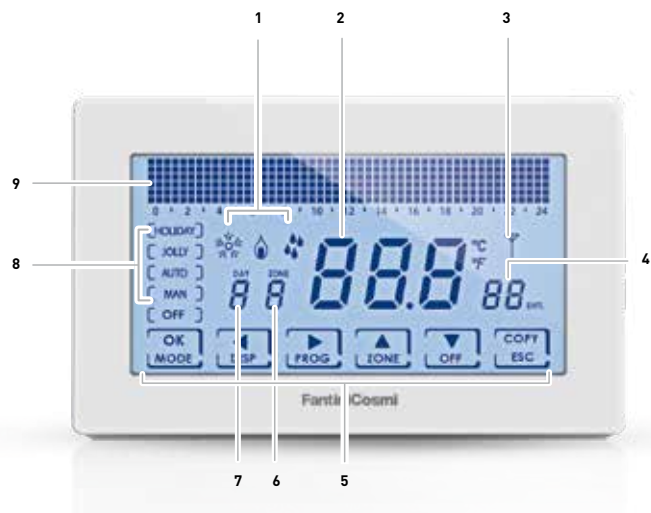


## GENERAL FEATURES

Temperature regulation range	2 ÷ 40 °C, increment 0.1°C
Measurement humidity scale/room T display	30 ÷ 70%, increment 1%
Measurement temperature scale/room T display	- 50 ÷ + 50 °C
Relative humidity adjustment range	0 ÷ 100%
Differential	0.3 ÷ 5 K
Thermal gradient	4 K/h
Maximum room temperature	45°C
WiFi connection	2.4 GHz (802.11 b/g/n)
Radio frequency	868 Mhz
Maximum radio frequency power transmitted	< 10mW
Managements	<ul style="list-style-type: none"> <li>■ General heating, cooling and humidity control</li> <li>■ Zone heating, cooling and humidity control</li> <li>■ Maximum 8 control zone</li> <li>■ Maximum management of 15 devices directly connected to the CH180RFWIFI</li> <li>■ Maximum management of 114 devices directly connected to network</li> <li>■ Alarm management to exceed minimum and maximum temperature</li> <li>■ System lock management to overcome the minimum and maximum temperature threshold</li> <li>■ Cooling management by activating the dehumidifier through dew point control or via a predetermined UR% threshold</li> <li>■ Summer time / Standard time</li> <li>■ Remote change over (only with APP)</li> <li>■ Summer / Winter</li> <li>■ Auxiliary ON / OFF control for electric users (only with CH175)</li> </ul>
Viewing of energy consumption	
Display showing system fault anomalies	
Correction of the offset of the temperature read	
Possibility to associate the names to all the zones	
Storage temperature	-10°C ÷ +60°C
Protection degree	IP40
Pollution degree	2
Display	Italian, English, French, Spanish, German, Russian
Screen lock of CH180RFWIFI and the connected CH120RF	With password and for display cleaning

## OPERATION

- CH180RFWIFI "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)
- On the white positive backlight, LCD touch screen is possible view, through an intuitive graph, the energy consumption of the entire system. CH180RFWIFI has 6 touch-keys, which function depends on the situation and is described by the symbol that appears on the display.
- CH180RFWIFI programmable thermostat allows different modes of use, called programs:
  - MAN Manual program
  - AUTO Weekly program
  - HOLIDAY Daily program
  - JOLLY Temporary program
  - OFF Switched off system or antifreeze program



1	Activation status: heating, cooling or dehumidification
2	Temperatura misurata Celsius / Fahrenheit
3	Antenna
4	Measured humidity
5	Multifunctional touch icons
6	Zone
7	Day
8	Operating mode
9	Graphic portion: messages / temperature timing

### [ MAN ]

#### ■ MANUAL PROGRAM

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

TMAN 21°C



24:00 h

TMAN adjustable temperature from 2°C to 40°

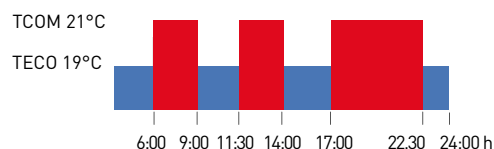
**[AUTO]**■ **AUTO - WEEKLY PROGRAM**

CH180RFWIFI 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 to 40 °C

TECO adjustable temp. from 2 to 40 °C

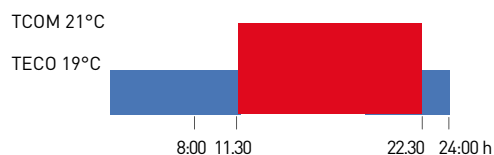
Note: TCOM > TECO (winter)

TECO > TCOM (summer)

**[ HOLIDAY ]**■ **HOLIDAY - SPECIAL DAILY PROGRAM**

If you stay at home on a public holiday, you can set an extra daily profile ("H") different 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 to 40 °C

TECO adjustable temp. from 2 to 40 °C

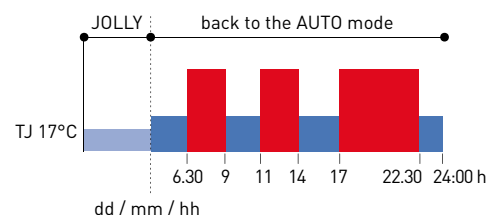
Note: TCOM > TECO (winter)

TECO > TCOM (summer)

**[JOLLY]**■ **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

\* 90 days maximum and 30 minutes resolution

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

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



TA antifreeze adjustable temp from 2 to 7 °C

## INTELLICOMFORT+ SYSTEM CONFIGURATION

Once powered, the "MASTER" CH180RFWIFI 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



## REMOTE CONTROL THROUGH APP Intelliclima+

The Intelliclima+ APP can be free downloaded from a smartphone or tablet. With Intelliclima+ you can:

- Switch the heating / cooling system ON or OFF;
- Check the temperature and humidity set in each zone;
- Check the state of your system in real time;
- Choose ideal temperature at any time and until when it set;
- Create the weekly or daily program or choose from those preset for each zone;
- Optimise comfort and save energy;
- Receive push notifications of generic alarms and anomalies system;
- Manages ON / OFF an auxiliary electrical utility through the temperature timing;
- Monitoring the energy consumption of the system;
- Share the programmable thermostat with multiple users.

### ■ EXAMPLE OF INFORMATIONS FOR MULTI-ZONE HEATING SYSTEM



The Intelliclima+ APP is available for free on:



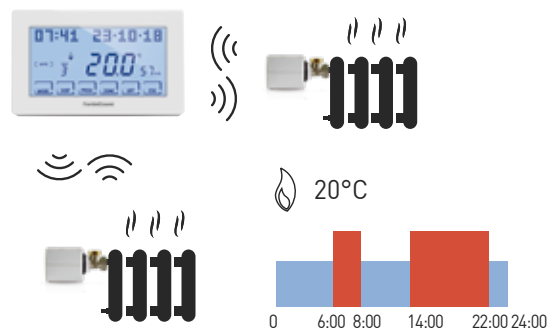
## SYSTEM EXAMPLES

### CENTRALIZED SYSTEM WITH RADIATORS

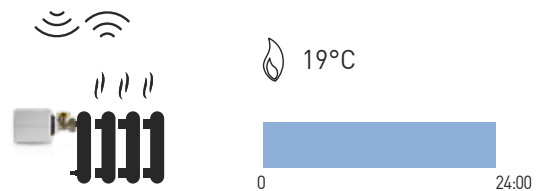
- CH180RFWIFI “MASTER” programmable thermostat directly controls the O60RF radiator actuators.
- The O60RF receive the current set point from the programmable thermostat and regulate the temperature according to data detected by their internal sensors.
- CH180RFWIFI manages an auxiliary utility (ex. the irrigation system).



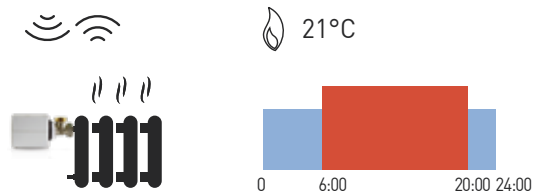
#### ZONE 1



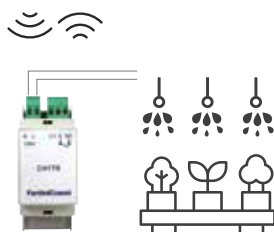
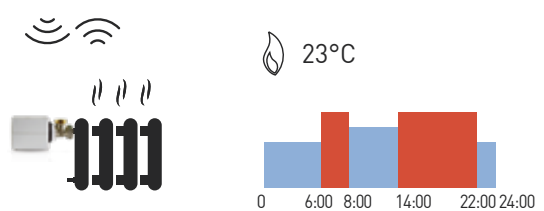
#### ZONE 2



#### ZONE 3

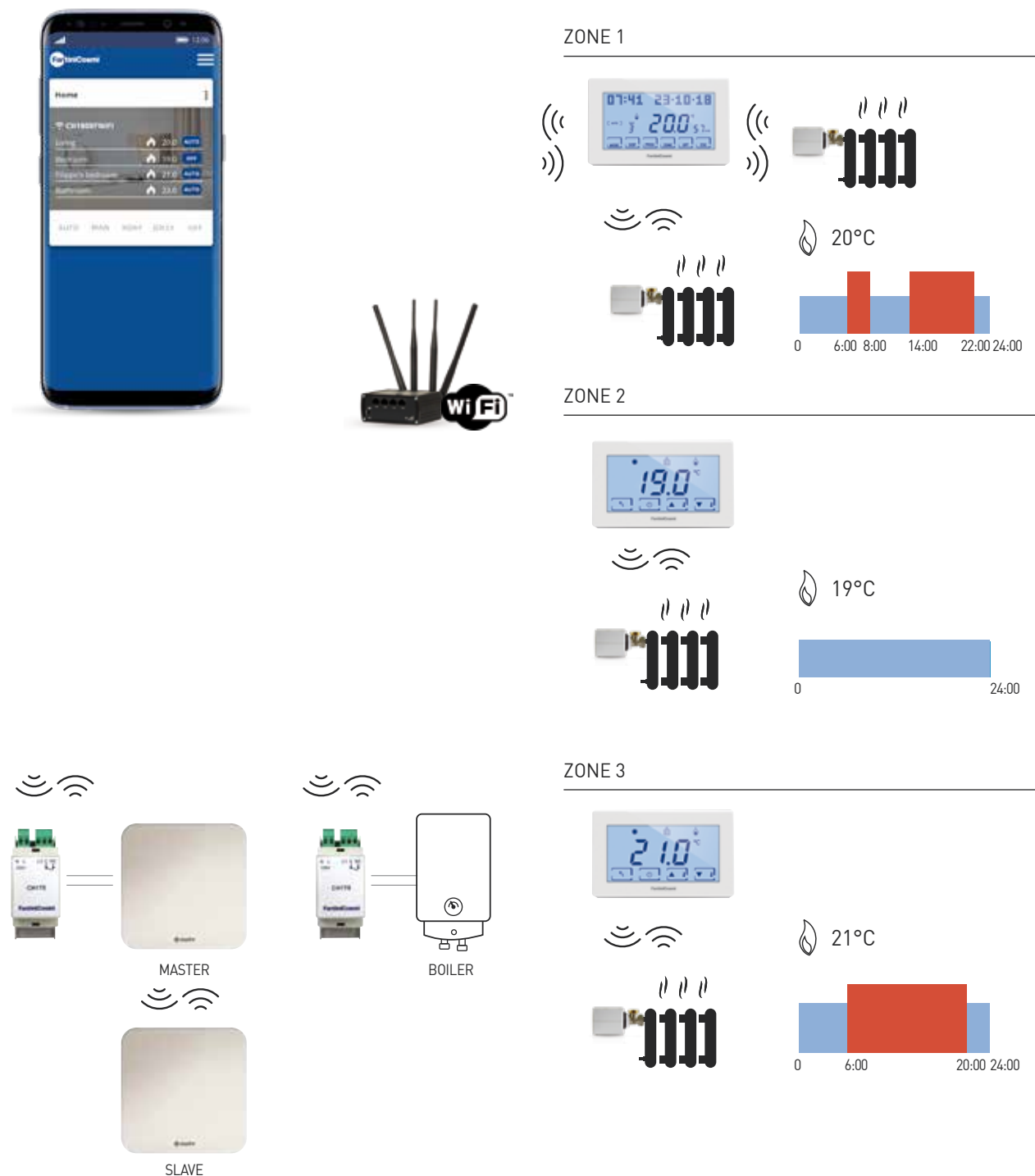


#### ZONE 4



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

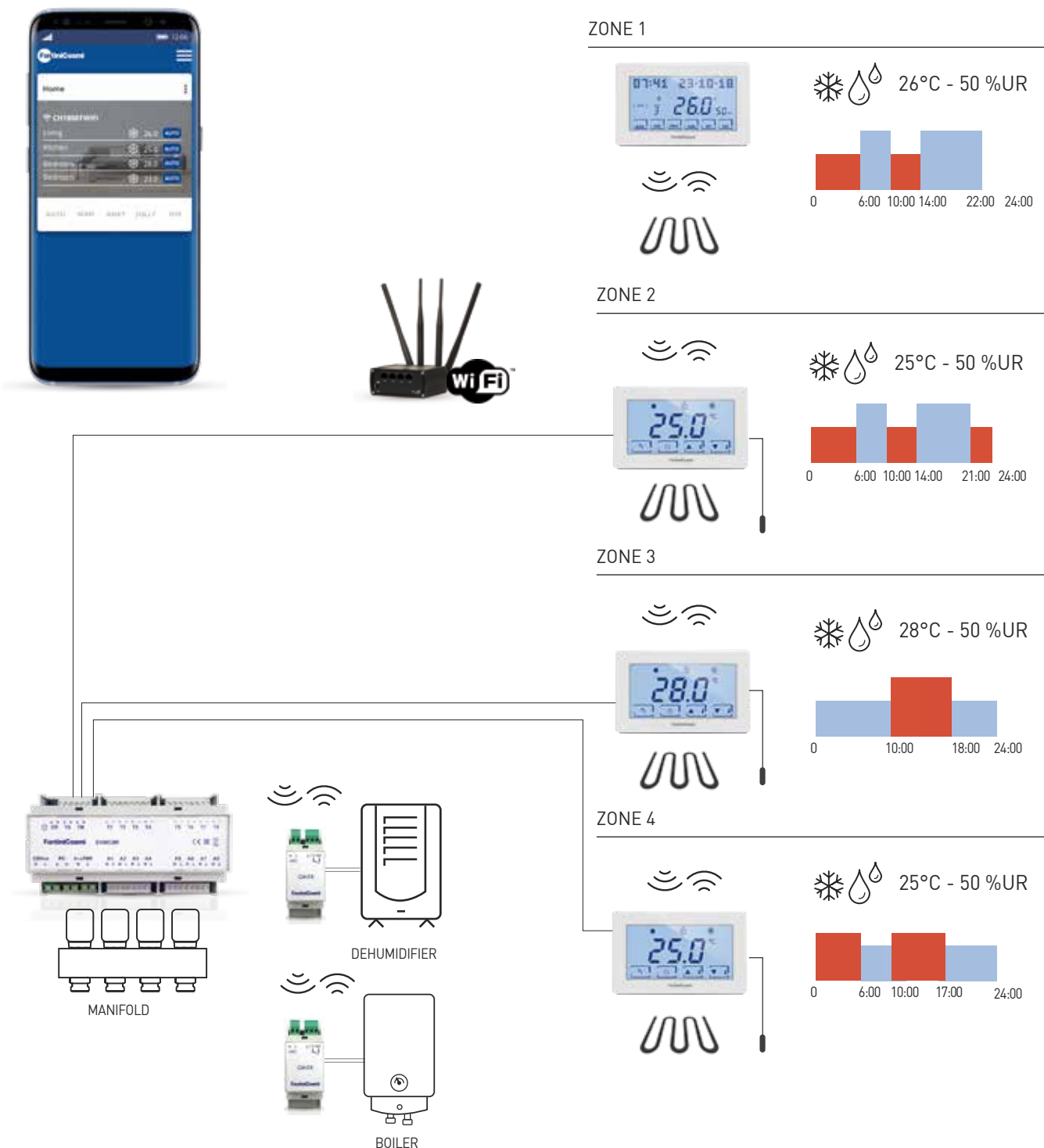
- CH180RF "MASTER" controls CH120RF zone thermostats which regulate the temperature in the zone and communicate with the O60RF actuators in the same zone.
- O60RF receives the set point and regulates the temperature according to the data detected by the zone thermostat
- CH175 actuator activates the boiler and also acts as a repeater for the wireless network of the Intellicomfort+ system, extending the range of the system.
- CH180RFWIFI manages an auxiliary utility (ex. heat recovery unit).





## HEATING SYSTEM, COOLING WITH HUMIDOREGULATION, AUTONOMOUS OR CENTRALIZED ON THE FLOOR, MULTIZONE

- Weekly programmable thermostat CH180RFWIFI "MASTER" manages the heating and cooling of a floor system through actuators CH175 which controls the zone solenoid valves.
- Each device, via the integrated relay, controls the zone solenoid valve.
- A general dehumidifier or for single zone controls in cooling mode the condensation formation.



## ACCESSORIES



### CH120RF

WIRELESS TOUCHSCREEN ROOM THERMOSTAT



### O60RF

WIRELESS RADIATOR ACTUATOR



### CH175

WIRELESS 1 RELAY ACTUATOR



### EVWC8R

WIRING CENTER SUITABLE FOR 8 CHANNELS



### EC19

FLOOR PROBE



### 1590880

CONFIGURATOR



The features referring to the units described in this catalogue are not binding. Fantini Cosmi S.p.A. reserves the right to make modifications without prior notice, owing to technological advances, commercial and normative developments, notwithstanding to keep the main functional features of the described products.