WATTS Vision® System

Description and application guide

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CONNECT. CONTROL. CONSERVE.

WATTS Vision® System

General presentation of the system

WATTS Vision® is a wireless communication system for controlling heating and cooling system. It allows multi zones management of your electrical and hydraulic heating system.

It's made up of different families of products:

• Thermostat
• Electronic Thermostatic Head
• Single zone receiver
• Multi-zone receiver for hydraulic floor heating and cooling
• Central Unit

Table of contents

Name	Descriptive	Applications	Possible pairing
BT-A02 RF	RF thermostat with knob Batteries power supply	Electrical heating Hydraulic heating	BT-M6Z02 RF BT-FR02 RF BT-PR02 RF BT-WR02 RF BT-WR02 HC RF BT-CT02 RF
BT-D03 RF	Digital RF thermostat Batteries power supply	Electrical heating Hydraulic heating and cooling	BT-M6Z02 RF BT-FR02 RF BT-PR02 RF BT-WR02 RF BT-WR02 HC RF BT-CT02 RF
BT-D02 RH RF	Digital RF thermostat with relative humidity measurement Batteries power supply	Electrical heating Hydraulic heating and cooling	BT-M6Z02 RF BT-FR02 RF BT-PR02 RF BT-WR02 RF BT-WR02 HC RF BT-CT02 RF
BT-DP02 RF	Digital programmable RF thermostat Batteries power supply	Electrical heating Hydraulic heating and cooling	BT-M6Z02 RF BT-FR02 RF BT-PR02 RF BT-WR02 RF BT-WR02 HC RF BT-CT02 RF
BT-DP02 RH RF	Digital programmable RF thermostat with relative humidity measurement Batteries power supply	Electrical heating Hydraulic heating and cooling	BT-M6Z02 RF BT-FR02 RF BT-PR02 RF BT-WR02 RF BT-WR02 HC RF BT-CT02 RF
BT-TH02 RF	Electronic thermostatic head Batteries power supply	Hydraulic heating (radiator)	BT-CT02 RF
BT-M6Z02 RF	Connecting box driving actuators for water floor heating and cooling multi zones 24V or 230V power supply	Hydraulic heating and cooling (Water floor heating and cooling)	BT-M6Z02 RF BT-HCM02 RF BT-A02RF BT-D03 RF BT-DP02 RF BT-FR02 RF BT-PR02 RF BT-WR02 RF BT-CT02 RF Repeater
BT-S4Z02 RF	4 zones extension module for BT-M6Z02 RF	Hydraulic heating and cooling (Water floor heating and cooling)	BT-A02RF BT-D03 RF BT-DP02 RF

Name	Descriptive	Applications	Possible pairing
BT-S6Z02 RF	6 zones extension module for BT-M6Z02 RF	Hydraulic heating and cooling (Water floor heating and cooling)	BT-A02RF BT-D03 RF BT-DP02 RF
BT-HCM02 RF	Heat pump driving for water floor heating and cooling	Hydraulic heating and cooling (Water floor heating and cooling)	BT-M6Z02 RF
BT-PR02 RF	RF EU plug for driving electrical heater or electrical device. 230V power supply	Electrical heating Electrical device driving (ON/OFF)	BT-A02RF BT-D03 RF BT-DP02 RF BT-CT02 RF BT-M6Z02 RF
BT-WR02 RF	Wall receiver for driving an electrical heater, an actuator or an electrical device 230V power supply	Electrical heating Electrical device driving (ON/OFF) Hydraulic heating	BT-A02RF BT-D03 RF BT-DP02 RF BT-CT02 RF BT-M6Z02 RF
BT-FR02 RF	Flush receiver for driving an electrical heater, an electrical floor heating, an actuator or an electrical device 230V power supply	Electrical heating Electrical device driving (ON/OFF) Hydraulic heating	BT-A02RF BT-D03 RF BT-DP02 RF BT-CT02 RF BT-M6Z02 RF
BT-WR02 HC RF BT-WR02 FC RF	Wall receiver for driving a boiler, an heat pump or actuator 230V power supply (FC, Free Contact)	Hydraulic heating and cooling	BT-A02RF BT-D03 RF BT-DP02 RF BT-CT02 RF
BT-CT02 RF	Central Unit allowing configuration and control of electrical heating and hydraulic heating and cooling. Remote control with application and web site. 230V power supply	Electrical heating Hydraulic heating and cooling Electrical device control (ON/OFF)	BT-A02RF BT-D03 RF BT-DP02 RF BT-FR02 RF BT-PR02 RF BT-WR02 RF BT-WR02 HC RF BT-M6Z02 RF BT-TH02 RF BT-CT02 RF Repeater
Repeater	Allow to extend the RF range of your System 230V power supply	Electrical heating Hydraulic heating and cooling Electrical device control (ON/OFF)	BT-CT02 RF BT-M6Z02 RF

Systems

3.1 Hydraulic Systems with Central Unit

NOTE: Following representative examples and configurations are applicable only if Central Unit BT-CT02 RF Software Version ≥ V.03.01

3.1.1 A thermostat (mono zone) managing a boiler (or a heat pump).

Equipment:

- 1 Thermostat BT-D03 RF (or BT-A02 or BT-DP02 RF)
- 1 Receiver BT-WR02 FC RF
- 1 Central Unit BT-CT02 RF
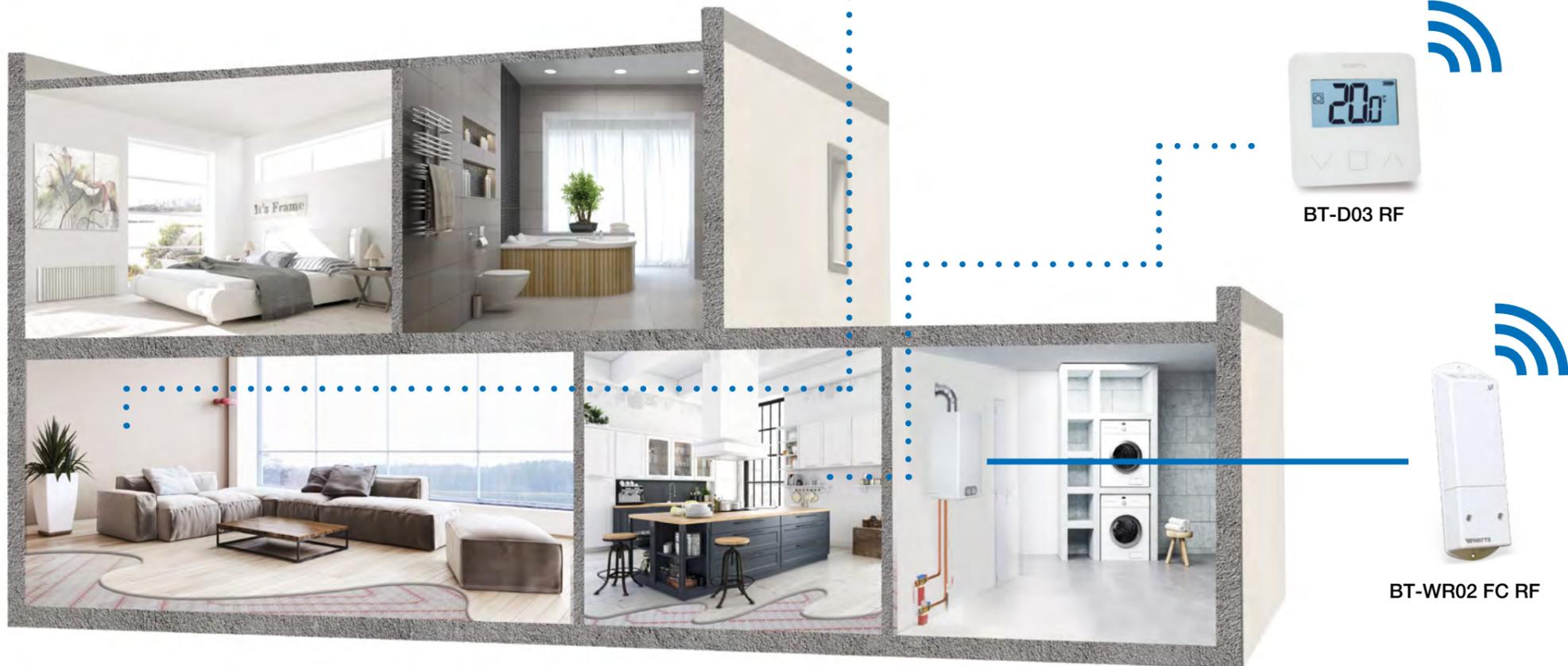
BT-CT02 RF

BT-D03 RF

BT-WR02 FC RF

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:
- Connect the receiver BT-WR02 FC RF to the heating relay of boiler (or heat pump).

VIRTUAL – RF CONNECTION:
- Create a virtual room on Central Unit BT-CT02 RF
- Pair as Heating Device the thermostat to the Central Unit BT-CT02 RF
- Pair in heating mode the receiver BT-WR02 FC RF to the Central Unit BT-CT02 RF

ZONE 1

1

BT-D03 RF

2

BT-CT02 RF
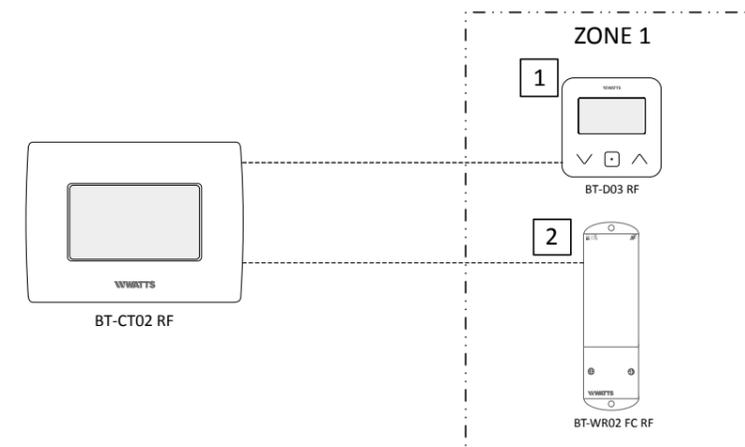
BT-WR02 FC RF

3.1.2 Water floor heating (mono zone) managing hydraulic circuit and a boiler.

Equipment:

- 1 Thermostat BT-D03 RF (or BT-A02 or BT-DP02 RF)
- 1 Wall Receiver BT-WR02 RF (or BT-FR02 RF) for driving an actuator
- 1 Central Unit BT-CT02 RF
- 1 Receiver BT-WR02 FC RF for driving a boiler, or an heat pump (BT-WR02 RF if driving a pump)

BT-CT02 RF

BT-WR02 FC RF

BT-D03 RF

BT-WR02 FC RF

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:
- Connect first receiver to the actuator (eg. 22C – 22CX series)
- Connect second receiver to the bolier (or pump)

VIRTUAL – RF CONNECTION:
- Create a virtual room (zone 1) on the Central Unit BT-CT02 RF
  1. Pair as Heating Device the thermostat to the Central Unit BT-CT02 RF.
  2. Pair as Heating Device the first receiver that drives the actuator (BT-WR02 RF or BT-FR02 RF) to the Central Unit BT-CT02 RF (Heating Parameter = Hydraulic).
  3. Pair the other receiver BT-WR02 FC RF (or RF BT-WR02 RF if driving a pump) to the Central Unit BT-CT02 RF as a hydraulic circuit then select the hydraulic circuit.
     Devices configuration: go in the zone, select the information menu, select the receiver and the hydraulic type, then the hydraulic circuit (refer to HYDRAULIC SYSTEM PAIRING chapter on Central Unit user guide).

BT-WR02 FC RF

3

BT-CT02 RF

ZONE 1

1

BT-D03 RF

2   BT-WR02 FC RF
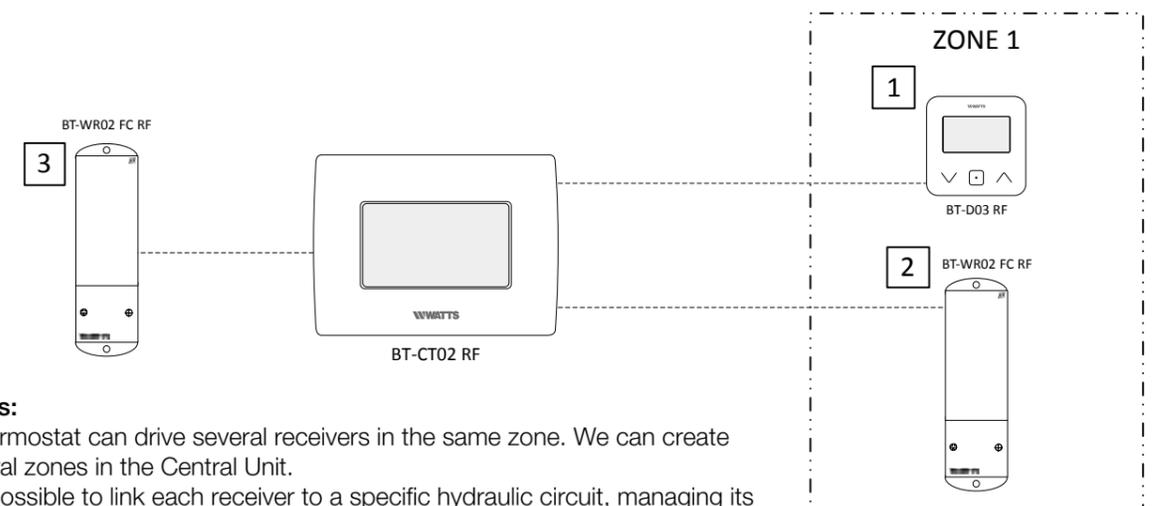
Notes:
A thermostat can drive several receivers in the same zone. We can create several zones in the Central Unit.
It is possible to link each receiver to a specific hydraulic circuit, managing its pump by the Central Unit.

3.1.3 Hydraulic radiator valve (multi zones) managing a boiler (or a pump).

Equipment:

- 1 (or more) Thermostatic Head BT-TH02 RF
- Option : BT-A02 RF or BT-D03 RF or BT-DP02 RF thermostats
- 1 Central Unit BT-CT02 RF
- 1 receiver BT-WR02 FC RF for driving a boiler or an heat pump
  (or a BT-WR02 RF for driving a pump)

BT-CT02 RF

BT-D03 RF

BT-WR02 FC RF

BT-TH02 RF

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:
- Connect the receiver to the pump (boiler or heat pump)

VIRTUAL – RF CONNECTION:
- Create the virtual rooms in the Central Unit BT-CT02 RF
  1. Option : Pair as Heating device a thermostat in each virtual room created in the Central unit BT-CT02 RF
  2. Pair as Heating Device each thermostatic head BT-TH02 RF in each virtual room created in the Central Unit BT-CT02 RF by selecting the hydraulic circuit. It's possible to pair several BT-TH02 RF in the same room.
  3. Pair the BT-WR02 FC RF (or BT-WR02 RF) receiver to the Central Unit BT-CT02 RF as a hydraulic circuit then select the hydraulic circuit.
     Devices configuration: go in the zone, select the information menu, select the receiver and the hydraulic type, then the hydraulic circuit (refer to HYDRAULIC SYSTEM PAIRING chapter on Central Unit user guide).

BT-WR02 FC RF

3

ZONE 1

1

BT-D03 RF

2 BT-TH02 RF
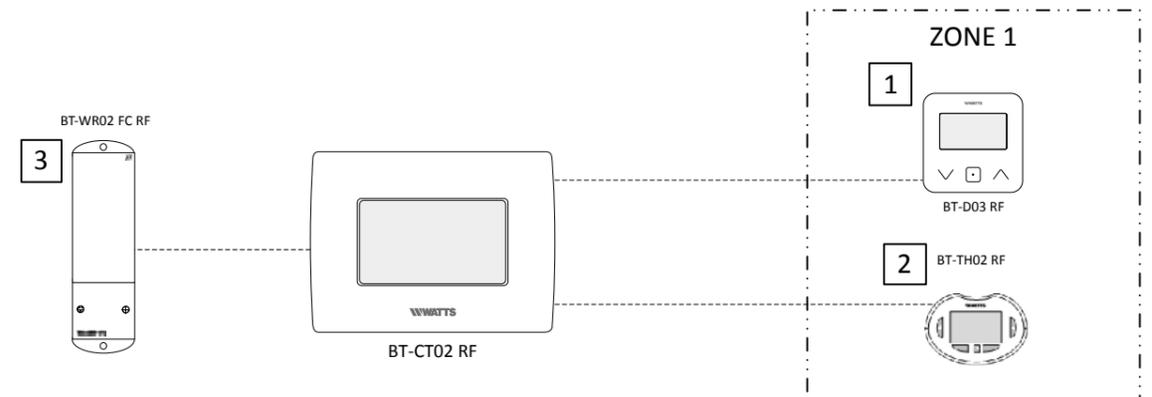
BT-CT02 RF

3.1.4 Water floor heating (multi zones) with several BT-M6Z02 RF and pump management.

Equipment:

- 2 Connecting Boxes BT-M6Z02 RF
- 2 (or more) Thermostats BT-D03 RF (or BT-A02 RF, or BT-DP02 RF)
- 1 Central Unit BT-CT02 RF
- OPTION – If necessary = in case manifold is too far from boiler:
  1 Receiver BT-WR02 FC RF to drive a boiler (or BT-WR02 RF to drive a pump)
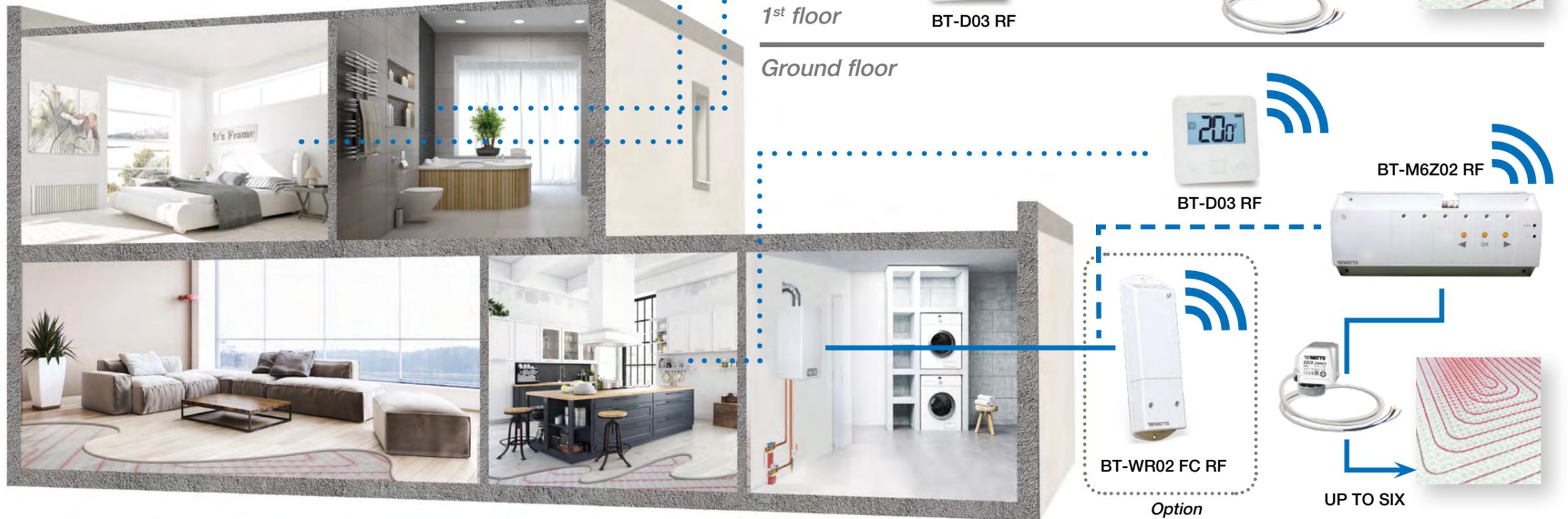
BT-M6Z02 RF

BT-CT02 RF

UP TO SIX

1st floor

BT-D03 RF

Ground floor

BT-D03 RF

BT-M6Z02 RF

BT-WR02 FC RF

UP TO SIX

Option

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:

- Connect the actuators (eg. 22C – 22CX series) to the connecting box BT-M6Z02 RF
- Connect the connecting box BT-M6Z02 RF (ZONE 1) to the heating relay of boiler

or

- OPTION – if not possible (eg. the manifold is too far) connect a Receiver BT-WR02 FC RF to the heating relay of boiler

VIRTUAL – RF CONNECTION:

1-2 Pair each thermostat to each zone of the BT-M6Z02 RF.
   One thermostat can drive several zones.
3 Pair the two BT-M6Z02: In this configuration, one BT-M6Z02-RF (called "Main") will centralize the information of the other BT-M6Z02-RF (called "Sub"). Refer to Centralized Installation of the user guide
4 Pair in master mode the BT-M6Z02 RF (Zone 1) to the Central Unit BT-CT02 RF. Name the virtual rooms in the BT-CT02 RF and select the hydraulic circuit.
5 OPTION - Pair the BT-WR02 FC RF (or BT-WR02 RF) receiver to the BT-CT02 RF as a hydraulic circuit then selects the hydraulic circuit.
   Devices configuration: go in the zone, select the information menu, select the receiver and the hydraulic type, then the hydraulic circuit (refer to HYDRAULIC SYSTEM PAIRING chapter on Central Unit user guide).

BT-CT02 RF

5

4

BT-WR02 FC RF

Option

ZONE 1

1

BT-D03 RF

ZONE 2

2

BT-D03 RF

3

BT-M6Z02 RF
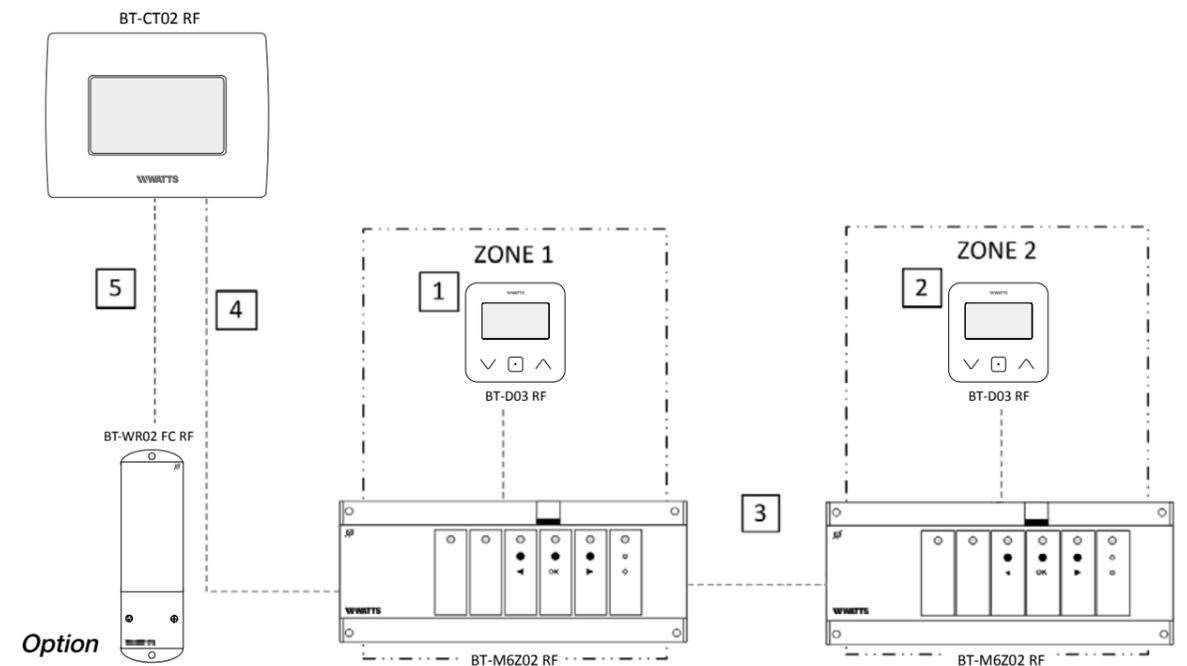
BT-M6Z02 RF

3.1.5 Water floor heating and cooling (multi zones).

Equipment:

- 2 Connecting boxes BT-M6Z02 RF
- 2 (or more) Thermostats BT-D03 RF (or BT-A02 RF, BT-DP02 RF, BT-D02 RH RF) **
- 1 Connecting box BT-HCM02 RF to drive the heating or cooling mode
- 1 Central Unit BT-CT02 RF
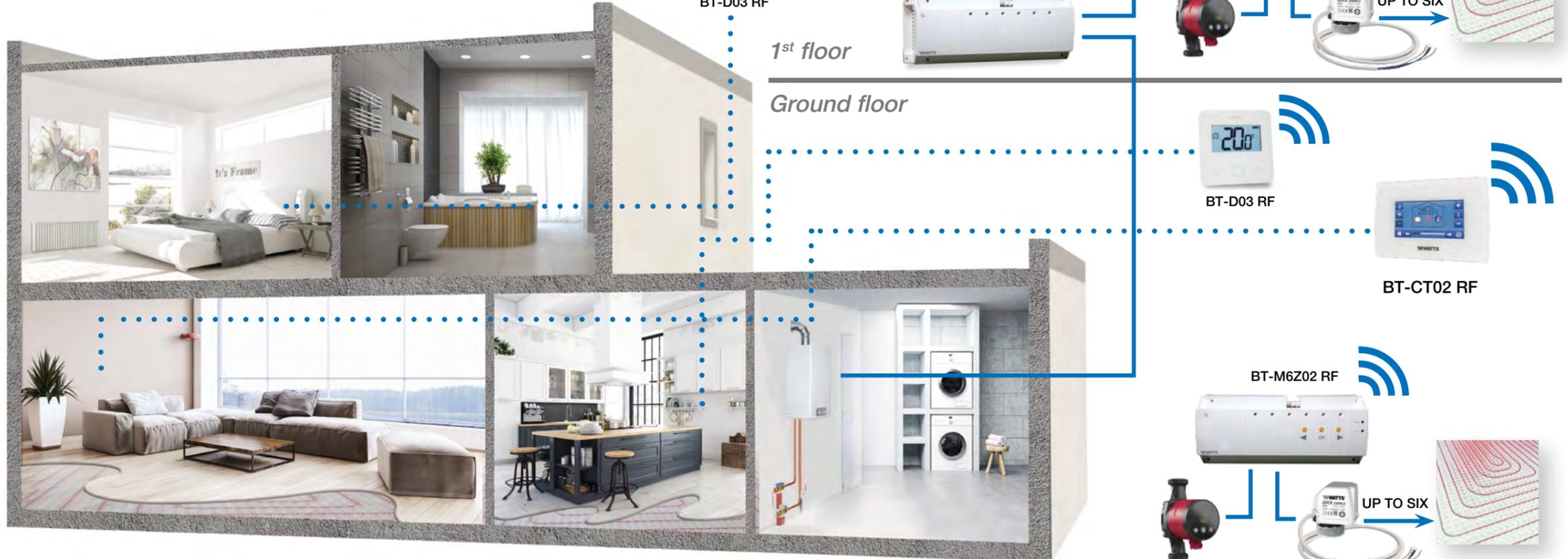
BT-M6Z02 RF

BT-HCM02 RF

BT-D03 RF

UP TO SIX

1st floor

Ground floor

BT-D03 RF

BT-CT02 RF

BT-M6Z02 RF

UP TO SIX

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:

- Connect the actuators (eg. 22C – 22CX series) to the connecting box BT-M6Z02 RF
- Connect the circulating pumps to the related connecting box BT-M6Z02 RF (*)
- Connect the Hot/Cool Module to the load (eg. A/C system) and to the heating relay of the boiler

VIRTUAL – RF CONNECTION:

1-2 Pair each thermostat to each zone of the BT-M6Z02 RF.
   One thermostat can drive several zones.
3   Pair the BT-HCM02 RF to the BT-M6Z02 RF.
   Note – Only one Hot/Cool module BT-HCM02 RF per System (**).
4   Pair in master mode each BT-M6Z02 RF to the Central Unit BT-CT02 RF.
   Name the virtual rooms in the BT-CT02 RF and select the hydraulic circuit.

*) In this application each BT-M6Z02 RF is connected to a circulating pump. **DIP SWITCH #1 Configuration: OFF = LOCAL**. In case of an installation with more than one BT-M6Z02 RF connecting box and only 1 circulating pump, **DIP SWITCH #1 Configuration: ON = GLOBAL** on the BT-M6Z02 RF that drives the circulating pump (= BT-M6Z02 Master).

ZONE 1

BT-D03 RF

BT-CT02 RF

ZONE 2

BT-D03 RF

BT-M6Z02 RF

BT-HCM02 RF

BT-M6Z02 RF
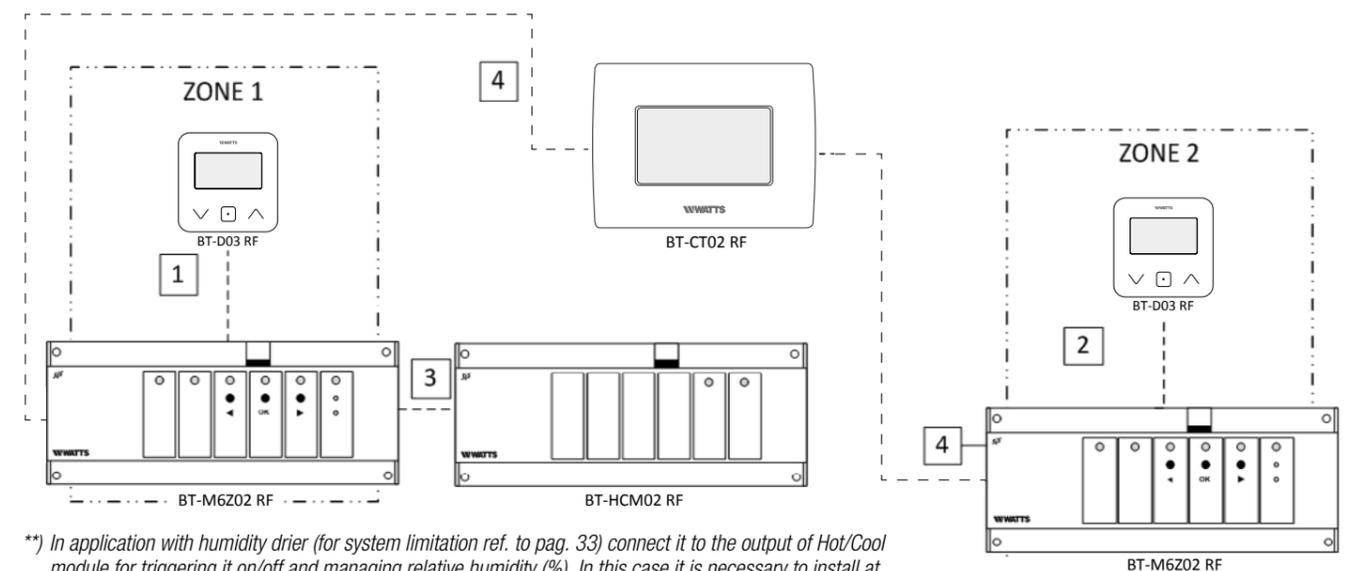
**) In application with humidity drier (for system limitation ref. to pag. 33) connect it to the output of Hot/Cool module for triggering it on/off and managing relative humidity (%). In this case it is necessary to install at least 1 thermostat BT-D03 RF with Humidity Sensor and locate it in a central area of the installation.

3.2 Hydraulic Systems without Central Unit

3.2.1 A thermostat (mono zone) managing a boiler or a heat pump.

Equipment:

- 1 Thermostat BT-D03 RF (or BT-A02 RF or BT-DP02 RF)
- 1 Receiver BT-WR02 FC RF

BT-D03 RF

BT-WR02 FC RF

3.2.2 Single circuit water floor heating, managing actuator and pump (boiler or heat pump).

Equipment:

- 1 Thermostat BT-D03 RF (or BT-A02 RF, BT-DP02 RF)
- 1 Receiver BT-WR02 RF (or BT-FR02 RF)

BT-WR02 RF

BT-D03 RF

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:
- Connect the receiver BT-WR02 FC RF to the heating relay of boiler (or heat pump).

VIRTUAL – RF CONNECTION:
- Pair the thermostat to the BT-WR02 FC RF

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:
- Connect the receiver BT-WR02 RF (or BT-FR02 RF) to the actuator (eg. 22C – 22CX series)

VIRTUAL – RF CONNECTION:
- Pair the thermostat to the receiver

A thermostat can control several receivers. In this case, repeat the installation procedure above.

3.2.3 Water floor heating (only 1 BT-M6Z02 RF).

Equipment:

- 1 Connecting Box BT-M6Z02 RF
- 1 Thermostat BT-D03 RF (or BT-A02 RF or BT-DP02 RF)
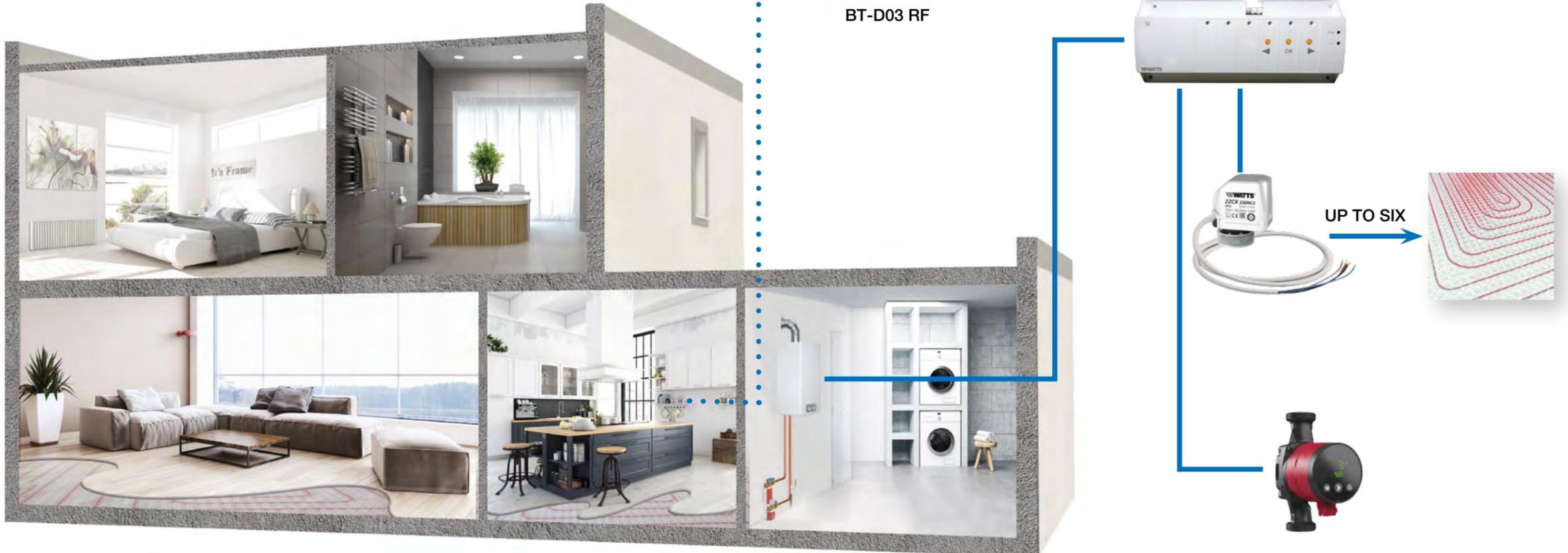
BT-D03 RF

BT-M6Z02 RF

UP TO SIX

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:

- Connect the actuators (eg. 22C – 22CX series) to the connecting box BT-M6Z02 RF
- Connect the circulating pump to the connecting box BT-M6Z02 RF
- Connect the connecting box BT-M6Z02 RF to the heating relay of the boiler

VIRTUAL – RF CONNECTION:

1 Pair each thermostat to each zone of the BT-M6Z02 RF.
  One thermostat can drive several zones

ZONE 1

1
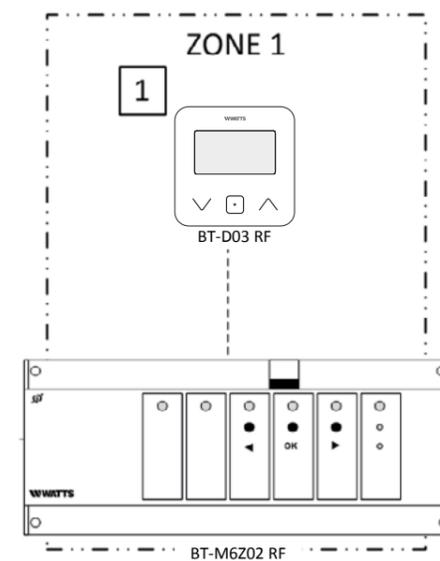
BT-D03 RF

BT-M6Z02 RF

3.2.4 Water floor heating (multi zones) with several BT-M6Z02 RF and only 1 boiler.

Equipment:

- 2 Connecting Boxes BT-M6Z02 RF
- 2 Thermostats BT-D03 RF (or BT-A02 RF or BT-DP02 RF)

BT-M6Z02 RF

BT-D03 RF

UP TO SIX

1st floor

Ground floor

BT-D03 RF

BT-M6Z02 RF

UP TO SIX

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:

- Connect the actuators (eg. 22C – 22CX series) to the connecting boxes BT-M6Z02 RF
- Connect the circulating pumps to the related connecting box BT-M6Z02 RF (*)
- Connect both connecting boxes BT-M6Z02 RF to the heating relay of the boiler

VIRTUAL – RF CONNECTION:

1-2 Pair each thermostat to each zone of the BT-M6Z02 RF.
      One thermostat can drive several zones.
3 **   OPTION - Pair the two BT-M6Z02: in this configuration, one BT-M6Z02 RF (called "Main") will centralize the information of the other BT-M6Z02 RF (called "Sub").

Refer to Centralized Installation of the user guide

*   In this application each BT-M6Z02 RF is connected to a circulating pump.
    DIP SWITCH #1 Configuration: OFF = LOCAL.

** In case of an installation with more than one BT-M6Z02 RF connecting box and only 1 circulating pump, *DIP SWITCH #1 Configuration: ON = GLOBAL* on the BT-M6Z02 RF that drives the circulating pump (= BT-M6Z02 Master) and NO NEED TO WIRE other BT-M6Z02 Slave to the heating relay of the boiler.

ZONE 2

2

BT-D03 RF

ZONE 1

1

3

BT-D03 RF

BT-M6Z02 RF   BT-M6Z02 RF
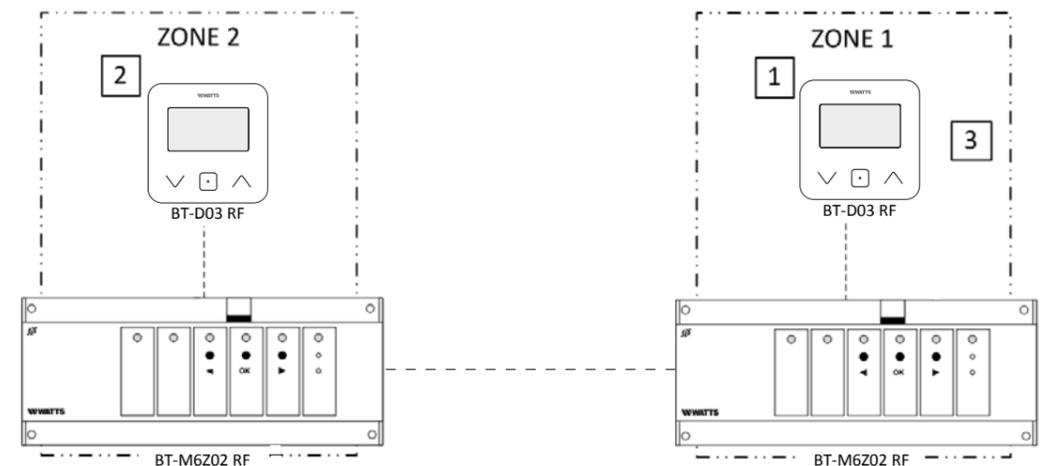
3.2.5 Water floor heating (multi zones) with several BT-M6Z02 RF and only 1 boiler.

Equipment:

- 2 Connecting Boxes BT-M6Z02 RF
- 2 (or more) Thermostats BT-D03 RF (or BT-A/DP02RF or BT-D/DP02 RH RF) **
- 1 Connecting box BT-HCM02 RF to drive the heating or cooling mode

BT-HCM02 RF

BT-D03 RF

BT-M6Z02 RF

UP TO SIX

BT-D03 RF

BT-M6Z02 RF

UP TO SIX

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:

- Connect the actuators (eg. 22C – 22CX series) to the connecting boxes BT-M6Z02 RF
- Connect the circulating pumps to the related connecting box BT-M6Z02 RF
- Connect the Hot/Cool Module to the load (eg. A/C system) and to the heating relay of the boiler

VIRTUAL – RF CONNECTION:

1-2 Pair each thermostat to each zone of the BT-M6Z02 RF.
     One thermostat can drive several zones
  3 Pair the two BT-M6Z02: In this configuration, one BT-M6Z02-RF (called "Main") will centralize the information of the other BT-M6Z02-RF (called "Sub").
     Refer to Centralized Installation of the user guide
  4 Pair in slave mode the BT-HCM02 RF to the BT-M6Z02 RF master.

* In this application each BT-M6Z02 RF is connected to a circulating pump.
   DIP SWITCH #1 Configuration: OFF = LOCAL. In case of an installation with more than one BT-M6Z02 RF connecting box and only 1 circulating pump, **DIP SWITCH #1 Configuration: ON = GLOBAL** on the BT-M6Z02 RF that drives the circulating pump (= BT-M6Z02 Master).

** In application with humidity drier (for system limitation ref. to pag. 33) connect it to the output of Hot/Cool module for triggering it on/off and managing relative humidity (%). In this case it is necessary to install at least 1 thermostat BT-D03 RF with Humidity Sensor and locate it in a central area of the installation.

Note: one humidity drier per System – refer to SYSTEM LIMITATIONS (pag. 33).

ZONE 1

1

BT-D03 RF

ZONE 2

2

BT-D03 RF

4

3

BT-HCM02 RF   BT-M6Z02 RF   BT-M6Z02 RF
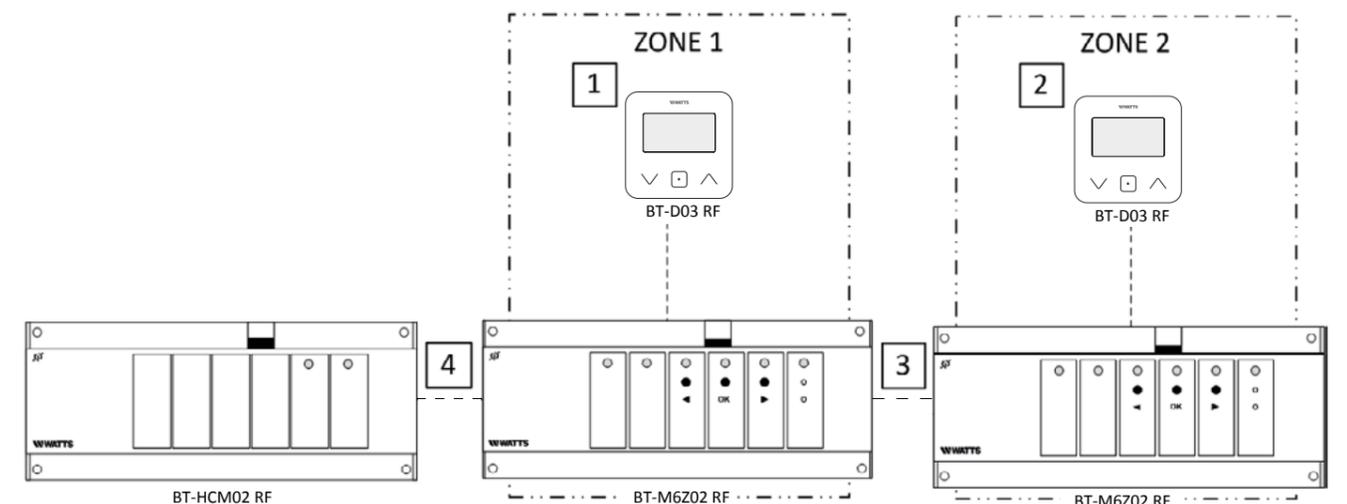
3.3 Electrical heating System

3.3.1 One (or several) electrical heaters in multi zones with centralized remote control.

Equipment:

- 1 (or more) Thermostat BT-D03 RF (or BT-A02 RF or BT-DP02 RF)
- Several receivers : BT-FR02 RF, BT-PR02 RF or BT-WR02 RF
- 1 Central Unit BT-CT02 RF
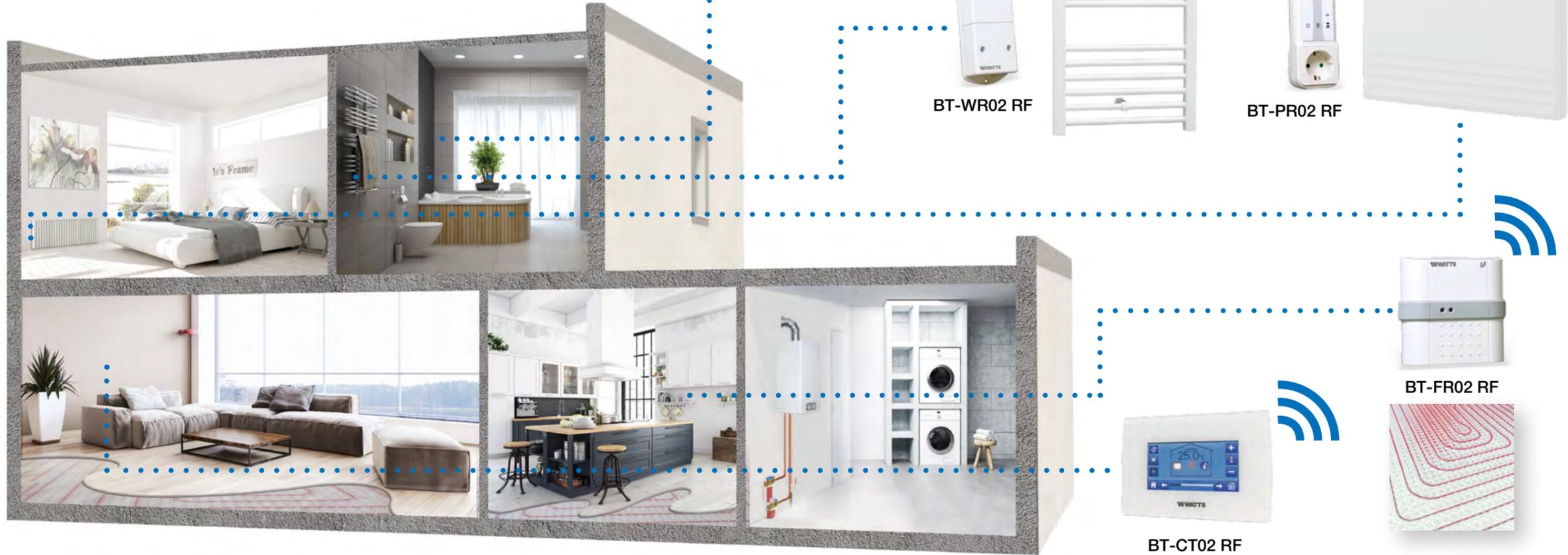
BT-D03 RF

BT-WR02 RF

BT-PR02 RF

BT-FR02 RF

BT-CT02 RF

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:
- Connect each receiver (BT-FR02 RF, BT-PR02 RF and/or BT-WR02 RF) to related electrical device

VIRTUAL – RF CONNECTION:
- Create the virtual rooms in the Central Unit BT-CT02 RF
  1 Pair each thermostat as a Heating device in each virtual room in the Central Unit BT-CT02 RF
- 2-3-4 Pair each receiver in each virtual room of the Central Unit BT-CT02 RF as a Heating device and select electrical heating mode in the Heating Parameter

BT-D03 RF

BT-CT02 RF

BT-WR02 RF
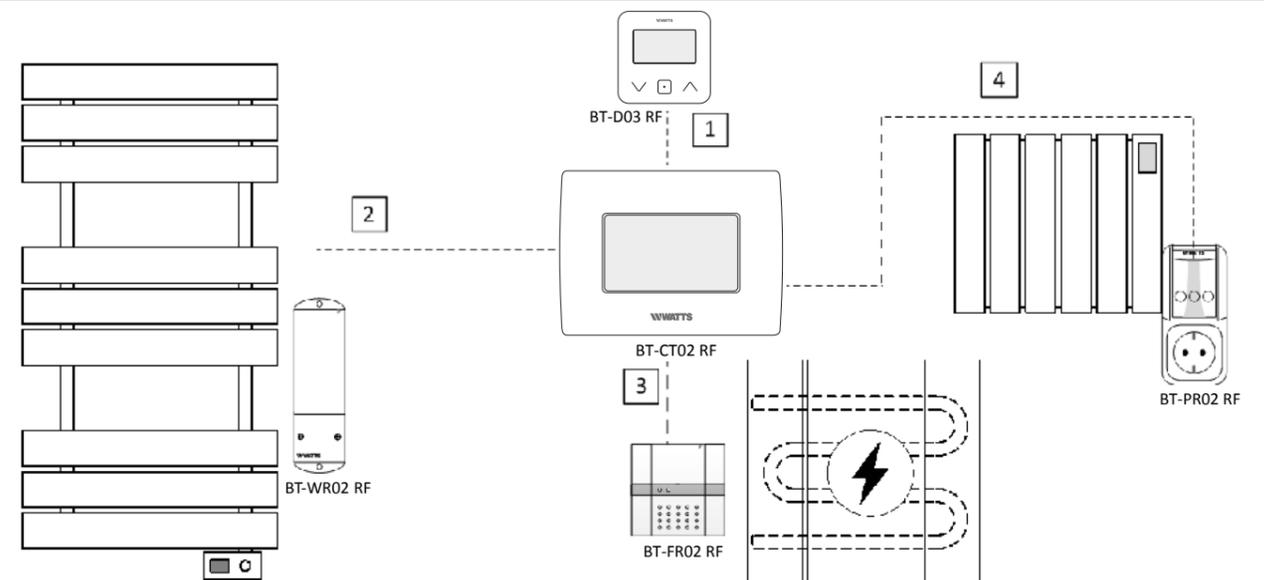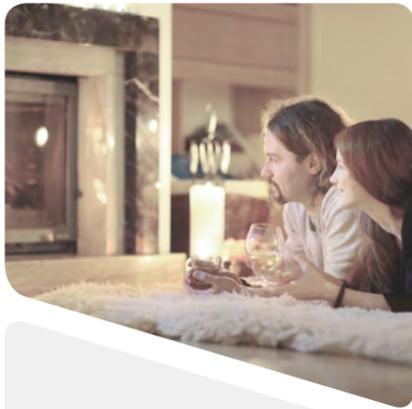
BT-FR02 RF

BT-PR02 RF

3.3.2 One (or several) electrical heaters (1 zone).

Equipment:

- 1 Thermostat BT-D03 RF (or BT-A02 RF or BT-DP02 RF)
- Several Receivers: BT-FR02 RF, BT-PR02 RF or BT-WR02 RF

BT-WR02 RF

BT-PR02 RF

BT-FR02 RF

BT-D03 RF

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:
- Connect each receiver (BT-FR02 RF, BT-PR02 RF and/or BT-WR02 RF) to related electrical device

VIRTUAL – RF CONNECTION:
- 1   Pair the thermostat to the receiver
- 2-3-4 In case of several receivers e linked to the same thermostat, make again the operation above for each receiver

BT-D03 RF

1   2   3

BT-WR02 RF

BT-PR02 RF

BT-FR02 RF
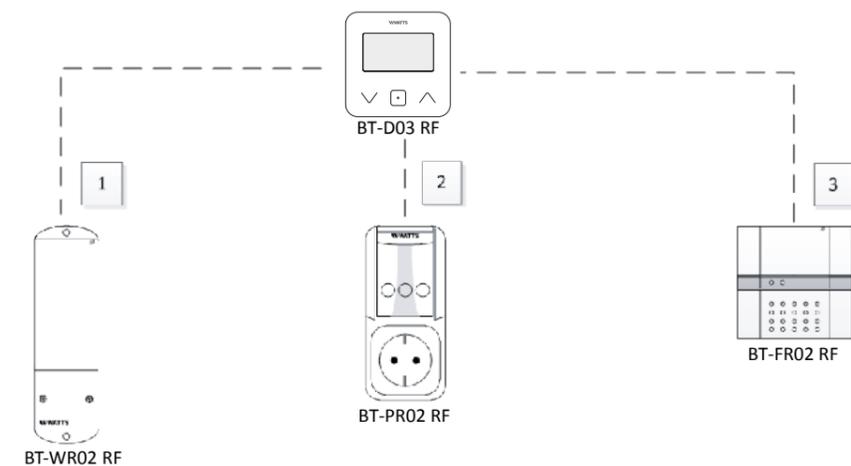
3.4 Mixed System - combining several modes of heating with centralized remote control

3.4.1 Water floor heating and hydraulic radiator.

Equipment:

- Connecting Box BT-M6Z02 RF
- Thermostats BT-D03 RF (or BT-A02 RF, BT-DP02 RF, BT-D02 RH RF, BT-DP02 RH RF)
- Central Unit BT-CT02 RF
- Receiver BT-WR02 FC RF (or BT-WR02 RF) to control the pumps
- 1 (or more)Thermostatic Heads BT-TH02 RF

BT-CT02 RF

BT-M6Z02 RF

UP TO SIX

BT-TH02 RF

BT-D03 RF

BT-WR02 FC RF

BT-D03 RF

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:
- Connect BT-M6Z02 RF to the actuators (eg. 22C – 22CX series)
- Connect the circulating pump to the connecting box BT-M6Z02 RF (and boiler if needed)
- Connect the receivers BT-WR02 FC RF to the boiler

VIRTUAL – RF CONNECTION:
1. Pair each thermostat to each zone of the BT-M6Z02 RF. One thermostat can drive several zones
2. Pair in master mode each BT-M6Z02 RF to the BT-CT02 RF. Name the virtual rooms in the BT-CT02 RF and select the hydraulic circuit. **Devices configuration**: go in the zone, select the information menu, select the receiver and the hydraulic type, then the hydraulic circuit (refer to HYDRAULIC SYSTEM PAIRING chapter on Central Unit user guide).
3. Pair the BT-WR02 FC RF (or BT-WR02 RF if driving a pump) receivers to the BT-CT02 RF as a hydraulic circuit then selects the hydraulic circuit.
4. Option : Pair as Heating Device a thermostat in each virtual room created in the BT-CT02 RF containing a hydraulic radiator

5. Pair as Heating Device each BT-TH02 RF in each virtual room created in the BT-CT02 RF by selecting the hydraulic circuit. We can pair several BT-TH02 RF in the same room. **Devices configuration**: go in the zone, select the information menu, select the receiver and the hydraulic type, then the hydraulic circuit (refer to HYDRAULIC SYSTEM PAIRING chapter on Central Unit user guide).
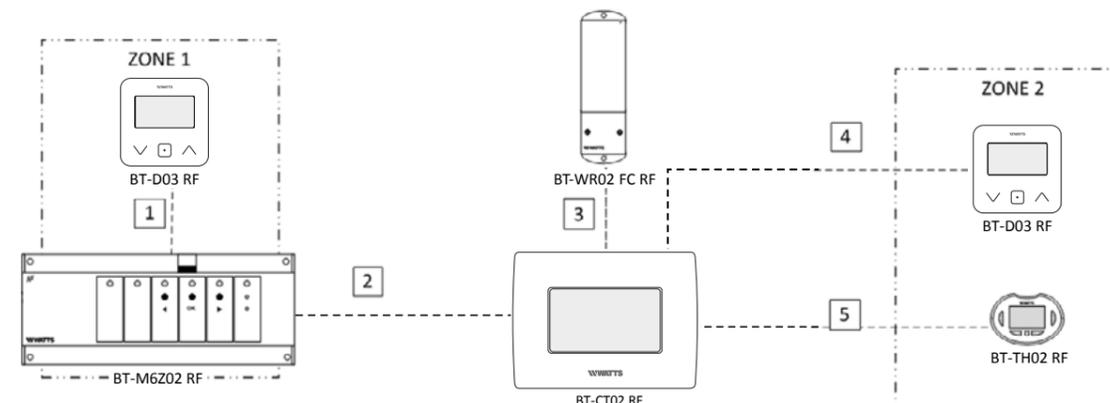
3.4.2 Water floor heating, hydraulic radiator and electrical heaters.

Equipment:

- Connecting Box BT-M6Z02 RF
- Thermostats BT-D03 RF (or BT-A02 RF, BT-DP02 RF, BT-D02 RH RF, BT-DP02 RH RF)
- Central Unit BT-CT02 RF
- Receivers BT-WR02 FC RF to control the boiler
- Receivers BT-WR02 RF (or BT-FR02 RF) to control the pumps (if needed)
- Receivers BT-WR02 RF (or BT-FR02 RF) to control the electrical heaters
- Thermostatic Heads BT-TH02 RF
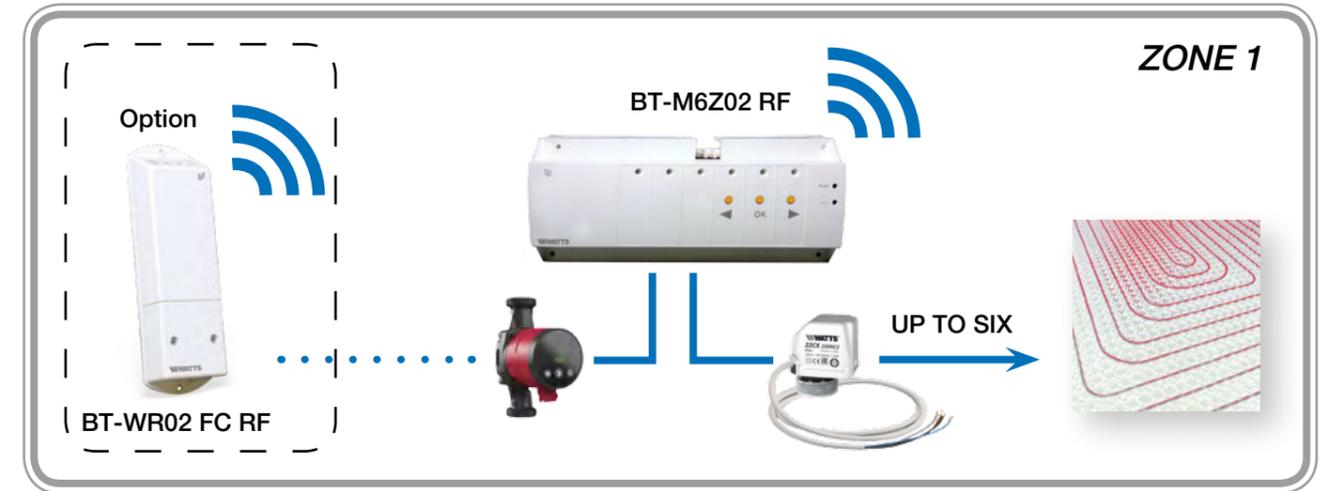
ZONE 1

Option

BT-M6Z02 RF

UP TO SIX

BT-WR02 FC RF

BT-CT02 RF

BT-WR02 FC RF

ZONE 2

BT-D03 RF

BT-TH02 RF

ZONE 3

BT-D03 RF

BT-WR02 FC RF

For a correct installation, refer to dedicated user guides of each product, then:

WIRING CONNECTION:

- Connect BT-M6Z02 RF to the actuators (eg. 22C – 22CX series)
- Connect the circulating pump to the connecting box BT-M6Z02 RF (*)
- Connect the receivers BT-WR02 FC RF to the heating relay of the boiler
- Connect the receivers BT-WR02 RF (or BT-FR02 RF) to electrical heaters and to the pump (if needed – option)

VIRTUAL – RF CONNECTION:

Zone 1 1 Pair each thermostat to each zone of the BT-M6Z02 RF.
One thermostat can drive several zones.
2 Pair in master mode each BT-M6Z02 RF to the Central Unit BT-CT02 RF.
Name the virtual rooms in the BT-CT02 RF and select the hydraulic circuit.

Devices configuration: go in the zone, select the information menu, select the receiver and the hydraulic type, then the hydraulic circuit (refer to HYDRAULIC SYSTEM PAIRING chapter on Central Unit user guide).

3 Option: Pair the BT-WR02 RF receiver to the BT-M6Z02 RF as a slave link.

Zone 2 4 Option: Pair a thermostat in each virtual room created in the BT-CT02 RF containing a radiator

5 Pair each BT-TH02 RF in each virtual room created in the BT-CT02 RF by selecting the hydraulic circuit. We can pair several BT-TH02 RF in the same room

Devices configuration: go in the zone, select the information menu, select the receiver and the hydraulic type, then the hydraulic circuit (refer to HYDRAULIC SYSTEM PAIRING chapter on Central Unit user guide).

Main Circuit

6 Pair the BT-WR02 FC RF receiver to the BT-CT02 RF as a hydraulic circuit then select the hydraulic circuit.

Zone 3 7 Pair thermostat in virtual room in the Central Unit BT-CT02 RF

8 Pair each receiver in each virtual room of the Central Unit BT-CT02 RF by selecting the electrical device.

* DIP SWITCH #1 Configuration : OFF = LOCAL
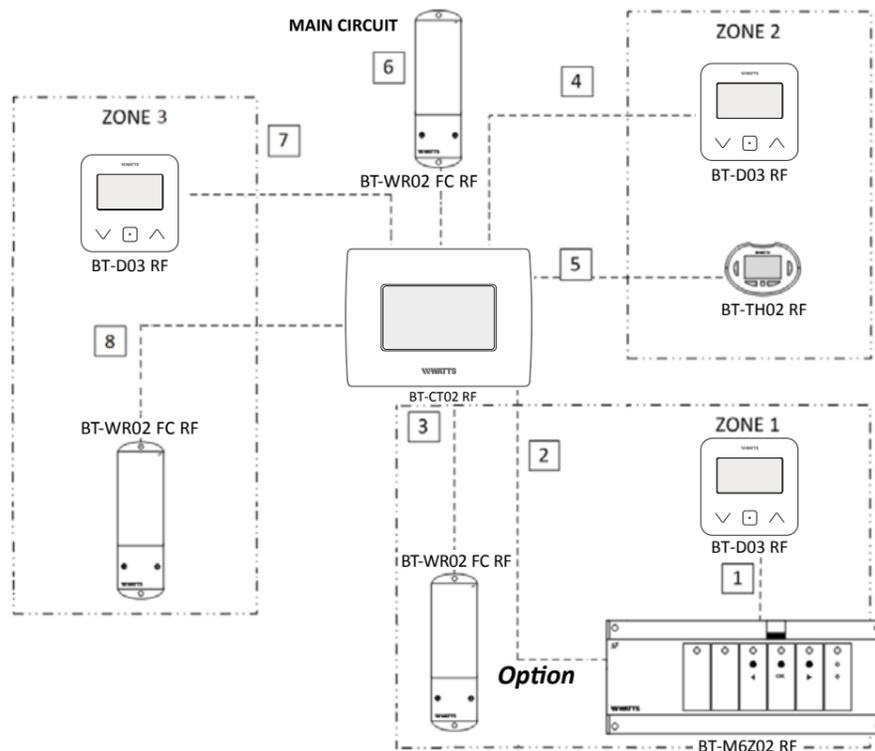
System limitations

- Only one Hot-Cool module BT-HCM02 RF per System – 1 output only for humidity drier
- 4 hydraulic circuits per System
- Only zones containing only electrical heaters can do heating when the System is in cooling mode
- Mix different modes of heating in the same room is not recommended as the regulations embedded in each receiver are not synchronized
- With a Central Unit BT-CT02 RF, it is highly recommended to use devices paired in hydraulic circuit directly on the BT-CT02 RF. Output usage of BT-M6Z02 RF and BT-HCM02 RF is only possible on small System (Only 1 BT-M6Z02 RF and 1 BT-HCM02 RF)

BT-CT02 RF software update

On www.wattswater.eu homepage, you can find files allowing updating the software of the Central Unit BT-CT02 RF. The procedure should be performed while the BT-CT02 RF is plugged to the 230V wall support.

- Unzip in a microSD the 3 files (wifi.ini, wifi.hex, update.bin)
- Insert the microSD
- Press on Update Firmware in the installation menu
- Wait the end of the software Update procedure and wait at least 1mn before removing the microSD

Configuration of the remote control of the central

Except the installation configuration, all the functions of the Central Unit are available on:

- The web site www.wattswater.eu
- On Watts Vision application available on Apple store (iOS)
- On Watts Vision application available on Play store (Android)

The remote control configuration should be performed in 3 steps after configuration of you heating and cooling system.

1 Connect the central to a wifi router. Menu Installation/wifi. The connection can be manual or automatic. When the wifi connection succeeds, the wifi menu displays 1/2 status and a green flag.

2 From the web site or the application, create an account with your email and a password

3 Link your central to your account. In the application, request the sending of a pairing code on your mail box. Enter the code in the wifi menu.

4 After a few minutes, your central should be displayed in the application. The wifi menu of the central should display 2/2 status.

More detailed explanation available on BT-CT02 RF dedicated user guide.

Problems and solutions

Devices	Symptom	Remedy (Try 1. In case of failure, try 2. etc...)
Wifi central unit	No connection on Wifi network. Status 0/2.	1. Check that you have the last software on the central unit, update available on www.wattswater.eu if needed. 2. Reduce the range between the central and your Wifi Router. 3. Check your Wifi hotspot with an other wifi device. Open network are not supported, nor configuration requesting a registration on a web page. Only Channels 1 to 11 in 2,4GHz are supported. WPA2 encryption key type is recommended. WPA auto or WPA mixed mode configured on the wifi router are not supported (Please force an encryption key type on the router, WPA2 is recommended). 4. Trigger first the research network (Check Protected Access Key Type/ Password). If your desired WiFi network is still not displayed, enter the WiFi settings manually.
Wifi central unit	No connection on the server. Status 1/2.	1. Check that you have the last software on the central unit, update available on www.wattswater.eu if needed. 2. Request a new twining code on the application, via www.wattswater.eu or directly on the website http://smarthome.wattselectronics.com. 3. Switch OFF/ON the central unit. 4. Wait for getting a wifi connection (status 1/2) and a valid IP address, then wait 1 additional minute. 5. Enter the new twining code and wait 30s. 6. Check that the status becomes 2/2 (require to refresh the screen). 7. If the status remains 1/2, check the wifi connection. 8. If the status is 0/2, please refer to the «No connection on Wifi network. Status 0/2» symptom in the FAQ.
Wifi central unit	No Wifi function.	1. Check that your central supports the wifi. 2. Format a Micro SD card in FAT32 and put the wifi.ini and wifi.hex files on the SD card. 3. Insert the Micro SD card and switch OFF/ON the central unit. 4. Wait at least 1mn and check that wifi icon is recovered.
Wifi central unit and any devices (receiver or thermostat)	RF lost and RF error alarms displayed on the central unit. Alarm on receiver.	1. Check Power supply or battery on receiver. 2. Modify setpoint on the thermostat or press any button on the device. 3. Switch OFF/ON the central unit. 4. Reinstall the device: Delete the device in the central, reset the device. (See the the device manual to know how to proceed) then pair the device.
Wifi central unit and application	No reception of email for account creation and central unit pairing	1. Check Spam mail box 2. Use your personal mailbox instead of company server or any kind of private server
Wifi central unit and application	Rooms do not appear in the application	1. Check Wifi connection on the central. Status 2/2 is required. 2. Check that you have the last sofware on the central unit, update available on www.wattswater.eu if needed 3. Make sure that you use the last version of the application on your smartphone

Devices	Symptom	Remedy (Try 1. In case of failure, try 2. etc...)
Wifi central unit and any devices (receiver or thermostat)	Pairing failure between the device and the central unit	1. Check compatibility: only Watts Vision devices are compatibles. update available on www.wattswater.eu if needed. 2. Check the compatibility of the configuration: for heating, the device measuring the temperature should be paired first in the room. 3. Reset the device. 4. Check RF range. The device needs to be not too closed or too far from the the central unit. RF repeater may be useful in case pf long distance.
BT-TH02 RF	Bad regulation	1. Check compatibility of the thermostatic head with the valve. 2. In case of program usage, avoid a too big difference between the eco setpoint and the comfort setpoint.
BT-TH02 RF	Alarm on the boiler	1. Activate the bypass function on at least one BT-TH02 RF
Wifi central unit and any devices (receiver or thermostat)	There is no communication between some devices and the central unit after a software update on the central unit.	Check whether special characters or mutated vowels are used in the name of zones / rooms or devices. In such case there might be a malfunction if a central unit with initial software version lower than 3.00 is updated to software higher than 3.00. Remedy: remove the special characters and rename the mutated vowels (ae, oe and ue instead of ä, ö and ü etc.) in the respective names.
RF-Thermostat and any devices (receiver, connecting box, central unit, ...)	In the extended parameter menu some functions are no longer available. Cause: If a radio thermostat is not paired with a radio receiver BT-FR02 RF, then e.g. in parameter # 20 the two options « FLr « and « FLL « are no longer available.	Reset in the extended parameter menu: Parameter # 36 « CLr .. « and carry out the reset by holding down the (OK) button for several seconds until the display changes. ATTENTION: By the reset the radio pairing with other devices is canceled. This must be carried out again.
Wifi central unit and any devices (receiver or thermostat)	The error message «Device already installed» appears during the radio initialization (radio pairing) with the central unit.	Check that the device has been accidentally selected incorrectly. If necessary, the device can be deleted and reassigned via the menu «Delete a device».