



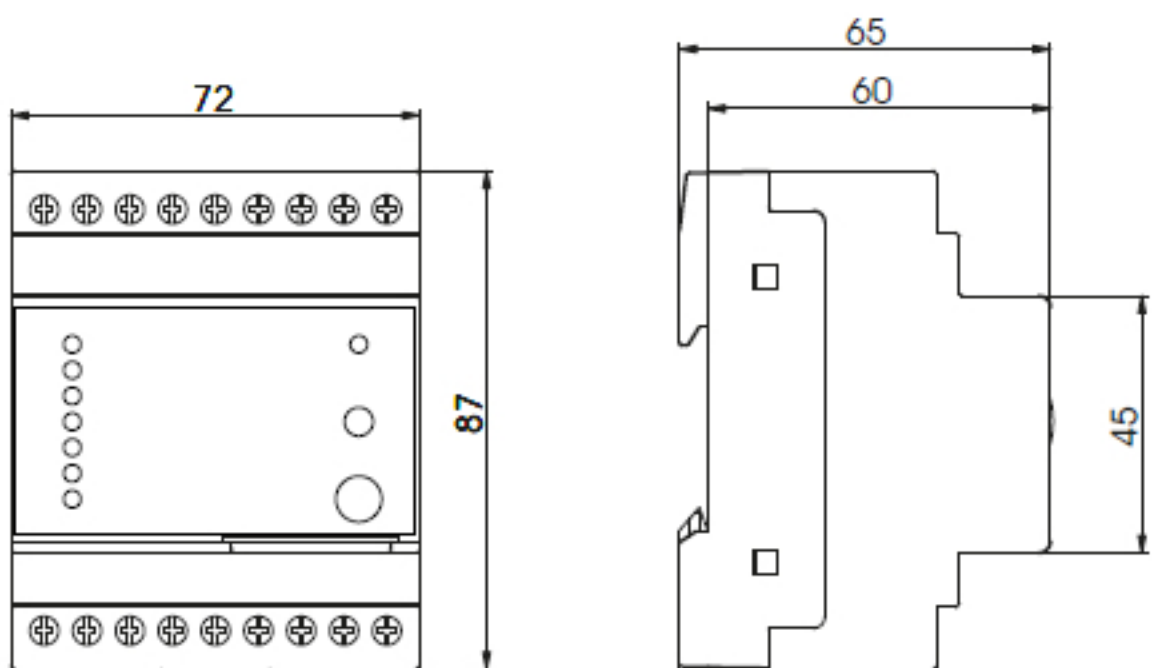
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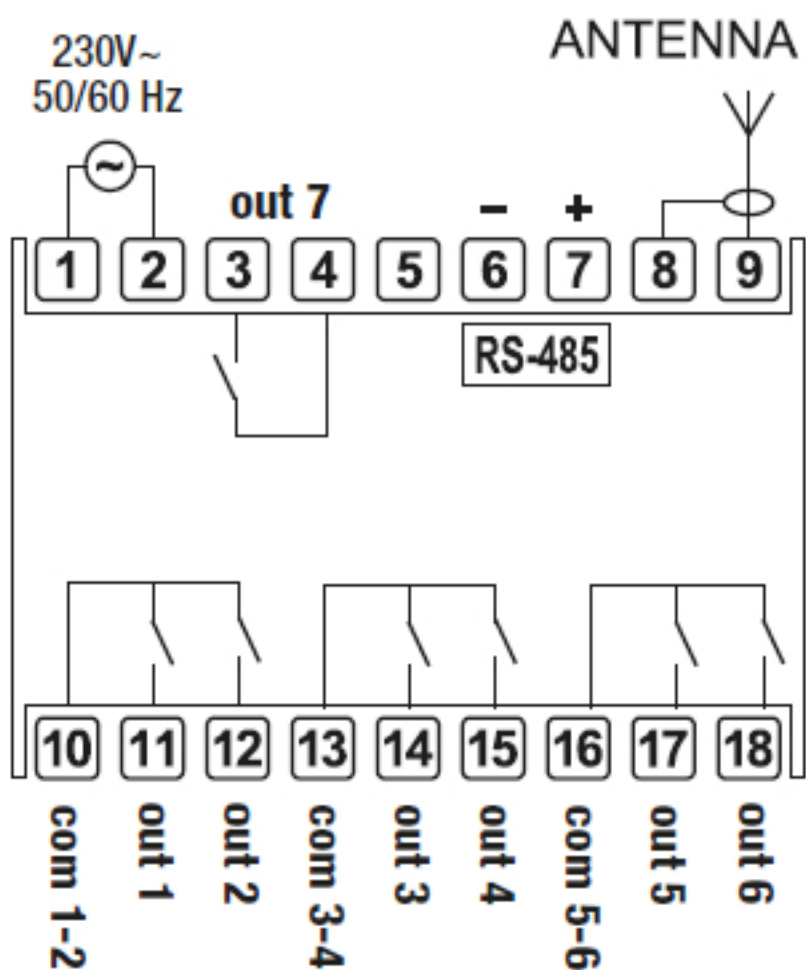
Mod. **P414**



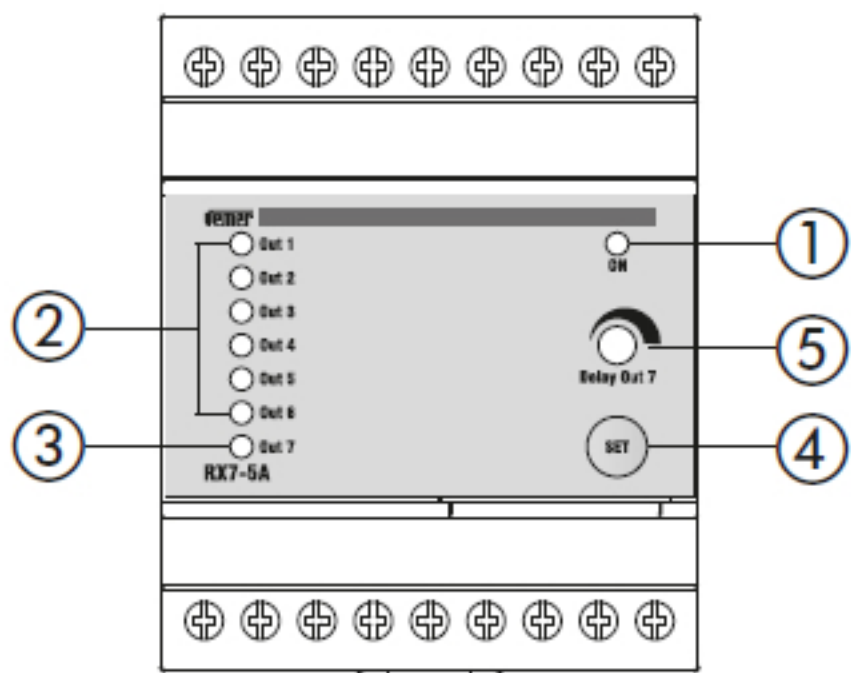
### Dimensions



### Connection diagram



### Description



## User Manual

### REMOTE ACTUATOR MODEL P414

**⚠ Read all the instructions carefully**

- The remote actuator **P414** is an electronic independently mounted automatic control for heating and air conditioning applications, designed for communications in the range of Icma thermostat and programmable thermostat via radiofrequency or via bus.
- It provides a type 1B actions and it is designed for household and similar use with overvoltage category III and pollution level 2 (EN 60730-1).

### SAFETY WARNINGS

*During product installation and operation, the following safety instructions should be respected:*

- 1) *The instrument should be installed by qualified personnel*
- 2) *Before touching the terminals, make sure there is no power supply to the electric wires*
- 3) *Do not power or connect the instrument if any part of it is damaged*
- 4) *Follow the connection diagrams described on this manual and over the instrument*
- 5) *The electrical system of the building in which the instrument is to be installed should have a switch and a protective device against over-currents.*
- 6) *The instrument must be installed and activated in compliance with current electric systems standards*
- 7) *After installation, inaccessibility to the connection terminals without appropriate tools must be granted.*

Code	Model	Description
<b>P414</b>	88P4140653	Remote actuator

### TECHNICAL SPECIFICATIONS

- Power supply: 230 VAC (-15%/+10%) 50/60 Hz
- Absorption: 3 W (8 VA)
- Outputs:
  - 6 relays with normally open contact 5A/250 V AC for zone valves activation
  - 1 relays with normally open contact 5A/250 V AC for pump activation
  - terminals to connect an external antenna (included in the box)
- Relay 7 switching delay setting from 3 second to 5 minutes by trimmer
- Terminals for cable with 6 mm<sup>2</sup> maximum section
- Operating temperature: 0°C ÷ 50°C
- Storage temperature: -10°C ÷ 65°C
- Operating humidity: 20 ÷ 90% non condensing
- Enclosure: 4 module DIN
- Protection degree: IP20 (IP40 when correctly installed in an electrical panel)
- Insulation: reinforced among frontal and all other terminals

### OPERATION

- ① GREEN LED: operation function (power supply)
- ② RED LED: relay status (output 1 - 6)
- ③ YELLOW LED: relay status (output 7)
- ④ SET KEY for programming and reset channel
- ⑤ TRIMMER to set the relay 7 switching delay

### OPERATION

- In starting phase, the red leds and yellow led flashes twice for some seconds (switching on-sequence).
- At the end of the switching on-sequence, the green LED signal normal device operation and the red LEDs relay status (light on = relay ON).  
If at least one of the zone valve output (relay 1 ... relay 6) is turn on, automatically is also activated the pump output (relay 7), with a delay that can be set from 3 seconds to 5 minutes by trimmer on the front of the instrument.

- The remote control (relay commutation ON/OFF) request from thermostats and programmable thermostats take place only after channel setting-up.

- The radio connection break down for more than 15 minutes between the transmitter and the receiver disconnects the relay/relays and the red LED/LEDs lightened. Restore of operations is automatic.

#### Channel setting-up

- During normal operation, press the SET key-button for almost three seconds to enter in modality-configuration. Green LED switch-off, red LED flash. Press the SET key-button to select the output relay.
- The instrument keep on modality-configuration for a maximum of 60 seconds within the actuator should receive a string configuration (see thermostats or programmable thermostats instructions for string start-up modality).
- On receipt of string, channel is setted-up and the actuator is on standard functioning.
- For re-setting up, repeating the procedure.
- To reset channel setting-up, plug into configuration modality with SET button, then push the same one for three seconds and wait for green led switching on.

### SERIAL OUTPUT

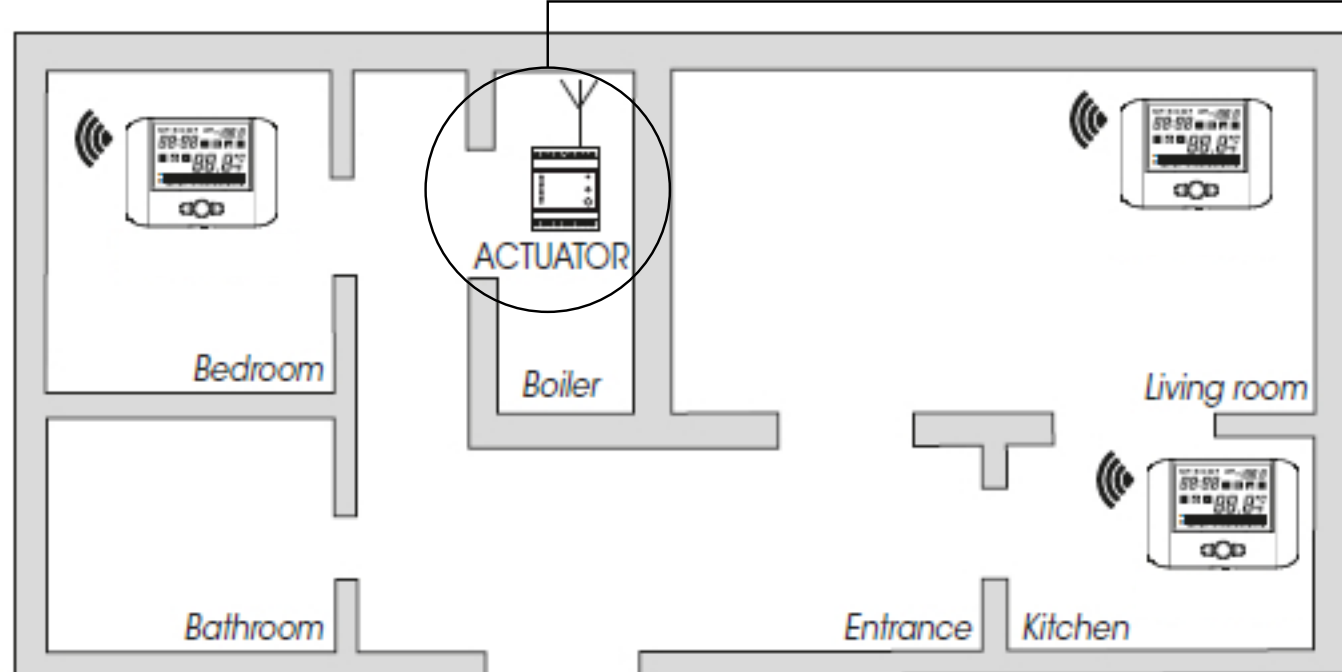
**P414** features an insulated serial output RS 485 for communication. It is possible to connect up to 31 instruments up to a maximum distance of 40 m.

### STANDARDS REFERENCE

Conformity to the EU directives:  
2006/95/EC (Low Voltage)  
2004/108/EC (Electromagnetic Compatibility)  
is declared with reference to the following harmonized standard:

- **EN 60730-1**
- **EN 301 489-1/3** and **EN 300 220-1/2**

### Network example



**Bedroom, Living Room, Kitchen** probe: built into **P413**

