

## **RF006**

RF

## WIRELESS-TRANSMISSION CENTRAL CONTROL UNIT FOR UNDERFLOOR HEATING/COOLING

Control from 6 to 8 output channels supplied by 230V or 24V for "NO" or "NC" thermoelectric actuators



### Main features

- Room-by-room temperature control in heating and cooling mode. -Independant control and protection of the circulation pump
- Application
  - Underfloor heating/cooling
  - Reversible heat pump
  - Boiler

- and of each of electrothermic actuator
  - Product + points
  - Fully automated system, does not require that any settings be set and is straightforward to set up. No need to balance the hydraulic circuit
  - Bi-directional switching between heating and cooling
  - Two-color LED (light-emitting diode) pilot lights enable you to monitor how the system is operating and to verify the pairing of emitters with the system's receiver.
  - Endowed with a revolutionary integrated power supply system; very low energy use in standby mode, in compliance with the EUP Directive

# **Functional specifications**

......

0

Use	
Receiving a Heating mode or Cooling mode command	Wired input via a voltage-free contact or wirelessly, by means of radio-wave signals
Receiving a command to lower the Eco mode set temperature	Wired input via a voltage-free contact or wirelessly, by means of radio-wave signals
Sending a Heating mode or Cooling mode command	Commands are sent to a reversible heat pump: - By wired means, via a voltage-free switch contact - Wirelessly, by means of radio-wave signals
Commands are sent to a circulation pump	By means of a wired output, via a relay contact (2A), or wirelessly, by means of radio-wave signals
Servo-control of a wall-mounted boiler	Commands are sent to a boiler: - By wired means, via a voltage-free switch contact - Wirelessly, by means of radio-wave signals
Bathroom feature	Cooling mode removed, for use in the bathroom only
Safety	<ul> <li>Anti-lock fonction of thermoelectric actuators and circulation pump. A prolonged shutdown causes automatic switch on</li> <li>Frost protection of the pump : In case of loss of radio contact, a protection mode allows a minimum maintenance of operation outputs</li> <li>The outputs of thermoelectric actuators are protected against short-circuit</li> </ul>

The electric heat motor outputs are protected against short circuits

### Installation

Central control unit set-up when used in conjunction with a reversible heat pump or with a wall-mounted boiler

2 mounting options: Attachment on a DIN rail or by means of screws (for wall mounting) or in a box

Quick-connect screwless terminal blocks

Quick-on attachment of cables by means of clipping them down screwlessly

2 secured interfaces dedicated to installer: settings and wiring

### Wireless transmission by means of radio waves: Reliability, performance, flexibility and modulability

Approved Europe-wide, highly resistant to external sources of interference Signals can go through walls and ceilings The wireless aspect means that you can change the lay-out of areas without having to make any changes at all to wiring

IMHOTEP<sup>\*</sup> ZI Montplaisir - 258 rue du Champ de Courses - 38780 Pont-Evêque - France - Tél. : +33 (0)4 74 58 39 56 - Fax : +33 (0)4 74 58 39 57 - contact@imhotepcreation.com - www.imhotepcreation.com





Electronic analog room thermostat

Sold separately

### Advanced settings

Setting of output voltage

Set-up of electric heat motors

#### Pairing the central control unit with a circulation pump or with a reversible heating pump

This enables data from your central control unit to be saved and viewed on a PC, as follows:

Switch NO (normally open at rest) / NC (normally closed at rest), (NC default)

- Data is transferred via a USB port (this is an optional extra)
- The status of emitter-receiver pairings, the type of each emitter paired
  As regards each channel, the active mode (Heating or Cooling, Comfort, Eco (economy), Anti-Freeze, Stand-By)
- As regards each thermostat, the temperature measured, battery power levels and the set (desired) temperature value
- Whether the circulation pump is on or off

Switch: 230V /24V ; (Factory setting : 230V)

Set-up when the central control unit is used in conjunction with a reversible heat pump or with a wall-mounted boiler

## Technical specifications

Dimensional and finish specific	cations	
Height	118 mm	
Width	350 mm	
Depth	66,5 mm	
Color	White RAL 9016	
Net weight	2,14 Kg	
Power supply		
Power consumption revolutionary integrate	d system, a very low standby, according to the EUP directive	
Operating voltage	230V AC +/-10% 50Hz	
Outputs	<ul> <li>Circulation pump (PUMP): 2A 230V AC (500W) relay contact</li> <li>Heating/Cooling (H/C-C/0): reversing contact, 3 terminals: common (COM), 1 contact closed when quiescent (not in use) (R), 1 contact open when quiescent (T) 5A 230V AC relay</li> <li>Regulation channels:</li> <li>From C1 to C6: Two 230V or 24V AC (2x3W) thermal actuators per channel C7 and C8: One 230V or 24V AC (3W) Electrothermic actuators</li> </ul>	
Consumption		
Consumption	1W under 230V(AC) and under 24V(AC)	
Control		
Control type	PI	
Radio-wave transmission		
Frequency	Radio transmitter, frequency 868.3 Mhz. Can be used throughout Europe	
Transmission	When change of state, every hour otherwise	
Environment		
Protection rating	IP42	
Class	Class II	
Operating temperature	0°C to +60°C	
Storage temperature	-20°C to +70°C	
Max. humidity level	85% at +25°C (without condensation)	
Applicable directives		
RED	2014/53/EU	
RoHS	RoHS 2011/65/EU, amended by Directives 2015/863/EU and 2017/2102/EU	
Applicable standards		
Safety	EN62311 ; EN60730-1 ; EN60730-2-9	
EMC	EN301489-1 ; EN301489-3	
Radio	EN300220-2	
RoHS	EN IEC 63000	
Manufacturing	On certified site ISO 9001 V2015	





Sold separately



Analog remote control

+

Sold separately

# Product codes

Codes	References
RPIRF6CIMHA	Wireless central control unit for underfloor heating, 6 230V channels, 24V/230V electrothermal actuators
RPIRF8CIMHA	Wireless central control unit for underfloor heating, 8 230V channels, 24V/230V electrothermal actuators
RPIRF10CIMHA	Wireless central control unit for underfloor heating, 10 230V channels, 24V/230V electrothermal actuators

## Compatible product(s) (sold separately)

Codes	References
Remote external receiver	
ACARFIMHA	Remote 868.3Mhz external receiver