

# Configuration Manual

e-Room ECO Modbus  
RC.674421-000

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## 1. Introduction

The present document describes the procedure to change the configuration parameters of the product ref. *RC.674421-000 – e-Room ECO Modbus*, throughout the configuration menu of the device.

The *e-Room ECO Modbus* is a room controller for fan-coils with 0-10V analog control, with a set of functions for room climate control in hotels and offices, in combination with room occupancy state and other room parameters described in this document. The device has a communication bus with Modbus RTU (RS-485) protocol to communicate with a building management system.

## 2. Scope of application

The information contained in this document can be applied to all products with firmware version 1.1.X, being X a number between 0 to 9.

## 3. Device reset

When voltage is applied to the device, the display starts with an internal verification of all segments of the display lighting all of them at the same time. Then the software version is shown with three digits.

When voltage is applied, several internal parameters are calibrated during the first 30 seconds. During this time the display shows the software version and the device is not accessible by the user.

## 4. Configuration of the device

The device is designed for flush mounting and includes a display and a fan-coil controller in a single device, including several inputs and outputs, among several functions to manage the climate control and lighting in an hotel room or office. The device is including a set of configuration parameters that can be configured depending on every installation request and can be adjusted using a configuration menu in the same display.

Alternatively, the device can be configured through the communication bus using an standard controller with Modbus RTU protocol. Be aware that any parameter sent through the bus will overwrite any parameter preciously configured through the configuration menu.

**CAUTION:** The configuration parameters in the device reside in a non volatile memory with a life cycle of 300.000 updates.

## 4.1 Configuration parameters of the device

The room controller *e-Room ECO Modbus* includes a set of configuration parameters that can be modified to adapt the operating functions of the device to the installation requests.

The configuration parameters are represented on the display of the device, with a set of characters to identify the configuration value of each parameter.

The following table resumes the configuration parameters included on the device:

Parameter	Description	Possible Values	Default value
1	Device Modbus Address	1.. 247	1
2	Modbus RS-485 speed: 1:1200; 2:2400; 3:4800; 4:9600; 5:19200; 6:38400; 7:57600; 8:115200	1.. 8	6
3	Modbus configuration: 1: 8E1; 2:801; 3:8N1; 4:8N2	1.. 4	3
4	Type of installation <sup>Note 1</sup>	1.. 6	1
5	HVAC changes to OFF or ECO mode when room changes to unoccupied state	OFF / ECO	OFF
6	Time to change the room to unoccupied state	0 Min .. 250 Min	1 Min
7	Time of output AUX activated for lighting control <sup>Note 2</sup>	0 sec .. 250 sec	20 sec
8	Fan-Coil low speed active when no demand in COOL mode	NO / YES	YES
9	Fan-Coil low speed active when no demand in HEAT mode	NO / YES	YES
10	COOL/HEAT mode changeover by setpoint/temperature difference	NO / YES	NO
11	COOL/HEAT mode changeover using Water Temperature Input <sup>Note 3</sup>	NO / YES	NO
12	Dead band temperature between COOL and HEAT mode	+0,5 °C .. + 6,0 °C	3,0 °C
13	Maximum real setpoint temperature	+22,0 °C .. +32,0 °C	28,0 °C
14	Minimum real setpoint temperature	+15,0 °C .. +21,0 °C	19,0 °C
15	Maximum user setpoint temperature	+22,0 °C .. +32,0 °C	32,0 °C
16	Minimum user setpoint temperature	+15,0 °C .. +21,0 °C	15,0 °C
17	Setpoint temperature in COOL mode in Occupied State	+15,0 °C .. +32,0 °C	23,0 °C
18	Setpoint temperature in COOL mode in ECO State	+15,0 °C .. +32,0 °C	26,0 °C
19	Setpoint temperature in HEAT mode in Occupied State	+15,0 °C .. +32,0 °C	21,0 °C
20	Setpoint temperature in HEAT mode in ECO State	+15,0 °C .. +32,0 °C	16,0 °C
21	Keep user setpoint after reset	NO / YES	NO
22	AutoOn in HEAT mode when ambient temperature is below the value set	+5,0 °C .. +32,0 °C	+5,0 °C
23	AutoOn in COOL mode when ambient temperature is over the value set	+5,0 °C .. +32,0 °C	+28,0 °C
24	AutoOn mode enabled in HEAT mode	NO / YES	NO
25	AutoOn mode enabled in COOL mode	NO / YES	NO
26	HVAC status after reset (OFF / ON) <sup>Note 4</sup>	OFF / ON	OFF
27	Internal HVAC mode after reset (COOL / HEAT)	CO / HE	CO
28	Celsius / Fahrenheit degrees to show on the display	C / F	C
29	Value to show on the display (Temperature/Setpoint)	tEP / Set	SEt
30	Temperature sensor used for HVAC control (Frontal/External)	Frt/Etn	Frt
31	Built in temperature sensor offset	-3,0 °C .. +3,0 °C	0,0 °C
32	External temperature sensor offset	-3,0 °C .. +3,0 °C	0,0 °C
33	Window contact input when closed	NO/NC	NC
34	Valve actuator state outputs with no demand	NO/NC	NO
35	Backlight display intensity	0 (OFF) .. 10 (MAX)	10
36	Lock the pushbuttons of the device: 0: No pushbuttons locked; 1: All locked except ON/OFF; 2: All locked.	0 .. 2	0
37	Backlight display state in standby mode: NO: OFF YES: ON (Low level)	NO/YES	YES
38	Proportional gain 'Kp' of the Fan-Coil 0-10V output in Cool mode <sup>Note 5</sup>	0.. 8,0 °C	2,0 °C
39	Integral time 'ti' of the Fan-Coil 0-10V output in Cool mode <sup>Note 6</sup>	0.. 120 Min	15 Min
40	Proportional gain 'Kp' of the Fan-Coil 0-10V output in Heat mode <sup>Note 5</sup>	0.. 8,0 °C	2,0 °C
41	Integral time 'ti' of the Fan-Coil 0-10V output in Heat mode <sup>Note 6</sup>	0.. 120 Min	15 Min
42	Minimum output value of the Fan-Coil 0-10V analog output(Resolution 0.1V)	0..100	10 (1,0 V)
43	Maximum output value of the Fan-Coil 0-10V analog output(Resolution 0.1V)	0..100	100 (10,0 V)
44	0-10V output voltage value for manual Fan-Coil speed I	0..100	33 (3,3 V)
45	0-10V output voltage value for manual Fan-Coil speed II	0..100	66 (6,6 V)
46	0-10V output voltage value for manual Fan-Coil speed III	0..100	100 (10,0 V)
47	Lighting output state after reset with room occupied. 0: Keep last state, 1: Switch ON, 2: Switch OFF	0..2	0
48	RESERVED for internal use		
49	RESERVED for internal use	0..100	10V
50	Set all parameters to factory values	NO / YES	NO

Table 1. Configurable parameters on the device

### NOTES:

- 1) Configure the "Type of installation" parameter depending on the input/output required for the installation of the device.

- 2) If this parameter is 0 seconds, the AUX output is ON when the room is occupied and changes to OFF when the room turns to unoccupied state.
- 3) This parameter has priority over parameter P10. (Only for configurations of "Type of Installation" with water temperature input)
- 4) When this parameter is configured as ON, if parameter P5 is configured in ECO mode and the room is unoccupied, the device starts in ECO mode.
- 5) The proportional gain defines the difference between the setpoint temperature and the ambient temperature mean value, which gives as a result a value of 100% (10V).
- 6) The integral time defines the time required for the contribution of the integral gain to have the same effect as that of the proportional gain.

## 4.2 Installation Types

Parameter P4 is used to configure one of the installation types preconfigured into the device, that automatically reconfigure all the inputs and outputs of the device, to adapt it to the corresponding installation.

The following tables shows the different installation types:

Type of Installation	Number of Pipes	Inputs terminals			
		1 - 2	3-4	5 - 6	7 - 8
Option 1	2	Keycard contact	Window contact	Lighting Pushbutton	T <sup>a</sup> Ext.
Option 2	2	Keycard contact	Window contact	T <sup>a</sup> Water	T <sup>a</sup> Ext.
Option 3	4	Keycard contact	Window contact	T <sup>a</sup> Water	T <sup>a</sup> Ext.
Option 4	2	Motion Sensor	Window contact	Door Contact	Lighting Pushbutton
Option 5	2	Motion Sensor	Window contact	Door Contact	T <sup>a</sup> Ext.
Option 6	4	Motion Sensor	Window contact	Door Contact	T <sup>a</sup> Ext.

Type of Installation	Number of Pipes	Outputs terminals			
		9 -10	11-12	13 - 14	15 - 16
Option 1	2	0-10V Output	Lighting	x	EV HEAT/COOL
Option 2	2	0-10V Output	Lighting	x	EV HEAT/COOL
Option 3	4	0-10V Output	Lighting	EV HEAT	EV COOL
Option 4	2	0-10V Output	Lighting	x	EV HEAT/COOL
Option 5	2	0-10V Output	Lighting	x	EV HEAT/COOL
Option 6	4	0-10V Output	Lighting	EV HEAT	EV COOL

## 5. Operating instructions to modify the configuration parameters

### 5.1 Introduction

The configuration menu is designed to access to any parameter of the device to modify its value without changing the configuration of the rest ones. Thus, the menu includes a submenu to select the desired parameter and access to change its value. The configuration parameter is shown on the display with the letter P followed by a number corresponding to the parameter shown on the first column of the table 1 above.

The pushbuttons FAN (Enter) and ON/OFF (Cancel) are used to confirm the values modified or cancel the operation and leave the parameter without changing its value.

The last parameter (RESET) provides a mechanism to set all the parameters of the device to a predefined factory value, represented on the column “By default” on table 1 above.

### 5.2 Control pushbuttons

The device includes 4 pushbuttons that are used to access the configuration menu and change the parameters of the device that come with default values from factory.

The pushbuttons have the following operating:

- UP: Increment the value in numeric parameters  
Changes to YES in binary parameters
- DOWN: Decrement the value in numeric parameters



- Changes to NO in binary parameters
- FAN: ENTER
  - ON/OFF: CANCEL

### 5.3 Access to the Configuration Menu

To enter in the configuration menu and modify any of the parameters on the device, follow the procedure described below:

- Press the ON/OFF pushbutton to switch off the device. The display must be OFF and the green LED indicator of the front panel ON.
- Press simultaneously the UP and DOWN pushbuttons during 5 seconds, until the displays shows the text P1. When pressing the pushbuttons simultaneously the text CON (CONfig) is shown on the device.
- Release de pushbuttons when the text P1 is shown on the display.

### 5.4 Changing the parameter value

To modify the value of a configuration parameter, select the parameter following the procedure explained in chapter 4. and press the ENTER (FAN) pushbutton to read the value. When the ENTER pushbutton is pressed the value of the parameter is shown blinking on the display.

Press the UP or DOWN pushbuttons to change the value of the parameter.

Press the ENTER (FAN) pushbutton to confirm the value. When the ENTER pushbutton is pressed the device saves the value in the internal memory and the display will show the value again.

To cancel the operation before saving it, press the CANCEL (ON/OFF) pushbutton to abort the operation. The LCD will show the original value and the new value introduced will not be saved on the memory.

### 5.5 Leaving the Configuration Mode

To leave the Configuration menu do one of the following possibilities:

- o Disconnect the device from the mains.
- o Press the CANCEL (ON/OFF) pushbutton when the display is showing the P letter following the number of the parameter.
- o The device leaves automatically the configuration menu when no pushbuttons are pressed during 60 seconds.

Leaving the Configuration menu causes the device to Reset and apply all new values to the device. The Reset process takes 15 seconds.

### 5.6 Configuring the device to factory values

Select the last parameter to reset de configuration parameters to Factory values. Change the status of the parameter to YES and press the ENTER (FAN) pushbutton to accept the action.

**WARNING:** This is a non-reversible operation. Pressing YES and then the ENTER pushbutton, the device configures all the parameters to the factory default values defined in Table 1.

## 5.7 Device Reset

When supply voltage is applied on the device, the display shows the firmware version number first. The first available version is 110. During this process, some parameters on the device are on calibration process during the first 60 seconds and the firmware version is shown on the display. At this time the device is not available for operating.

## 6. Device configuration examples

The following chapter shows the sequence to modify the value of any configuration parameter:

### 6.1 Changing the display value to °F

The following process describes how to change the factory default value °C to Fahrenheit degrees.

- 1) Switch off the climate control by pressing the ON/OFF pushbutton. The display must be OFF.
- 2) Press the UP and DOWN pushbuttons during 5 seconds until the P1 text is shown on the display.
- 3) Press the UP arrow pushbutton repeatedly until the parameter to modify will be shown on the display.
- 4) Press the ENTER (FAN) pushbutton to enter on the parameter, to modify the value. Pressing the pushbutton will show the C letter blinking on the display, indicating the actual value configured.
- 5) Press the UP pushbutton to select the °F option. When the pushbutton is pressed the F letter is shown blinking on the display.
- 6) Press the ENTER (FAN) pushbutton to confirm the operation. The value will be saved on the internal memory and the display will stop blinking, showing the parameter number again.
- 7) Press the CANCEL (ON/OFF) pushbutton to leave the configuration menu.

### 6.2 Changing the setpoint temperature in Occupied Cool mode

The following process describes how to change the setpoint temperature in occupied cool mode, to change it to 21.0°C.

- 1) Switch off the climate control by pressing the ON/OFF pushbutton. The display must be OFF.
- 2) Press the UP and DOWN pushbuttons during 5 seconds until the P1 text is shown on the display.
- 3) Press the UP pushbutton repeatedly until the parameter to modify will be shown on the display.
- 4) Press the ENTER (FAN) pushbutton to enter on the parameter to modify the value. Pressing the pushbutton will show the 23.0 °C number blinking on the display, indicating the actual value configured. If this value has been modified previously, the last value is shown.
- 5) Press the DOWN pushbutton several times until the 21.0 °C number is shown blinking on the display.
- 6) Press the ENTER (FAN) pushbutton to confirm the operation. The value will be saved on the internal memory and the display will stop blinking, showing the parameter number again.
- 7) Press the CANCEL (ON/OFF) pushbutton to leave the configuration menu.

### 6.3 Configuring the device to Factory values

The following process describes how to configure the device to factory values defined in table 1.

- 1) Switch off the climate control by pressing the ON/OFF pushbutton. The display must be OFF.
- 2) Press the UP and DOWN pushbuttons during 5 seconds until the P1 text is shown on the display.
- 3) Press the UP pushbutton repeatedly until the last parameter is shown on the display.

- 4) Press the ENTER (FAN) pushbutton to enter on the parameter to modify the value. Pressing the pushbutton will show the NO text blinking on the display.
- 5) Press the UP pushbutton to change the value to YES. Pressing the pushbutton will show the YES text blinking on the display.
- 6) Press the ENTER (FAN) pushbutton to confirm the operation. Pressing the pushbutton, all parameters will change to factory values, the display will stop blinking and the device will reset automatically.

**ATTENTION:** This change is non reversible.

## 7. Definition of the configuration parameters on the device

### 7.1 Device Modbus address

This parameter is used to set the Modbus address of the device in a Modbus network.

The default value is 1.

### 7.2 Modbus RS-485 speed

This parameter is used to set the Modbus communication speed of the device, measured in Bauds.

The default value is 38400 Bauds.

### 7.3 Modbus configuration

This parameter is used to configure the Modbus port, according to the following parameters:

- Length frame (8 bits by default)
- Parity (No parity / Even / Odd)
- Stop bits (1 / 2)

The default value on the device is 8N1 (8 bits, No parity, 1 stop bit)

### 7.4 Type of Installation

Configures the Inputs and Outputs of the device according to the table defined in section 4.2.

The default value is Type 1.

### 7.5 HVAC changes to OFF or ECO mode when room changes to unoccupied state

Configures the device to change the state when the room turns to unoccupied state

Possible configuration values are STOP (OFF) or ECONOMY (ECO). With the OFF value the device stops operating. With the ECO value the device changes the setpoint values to the ones configured in parameters P16 or P18 depending on the COOL or HEAT mode of the device.

The default value is ECO.

### 7.6 Time to change HVAC to OFF or ECO mode when room changes to unoccupied state

Configures the time in which the device changes to OFF or ECO mode. The time starts counting when the door is closed and there is no motion detected on the room.

The default value is 20 seconds.

### 7.7 Time of output AUX activated for lighting control.

Configures the time that the AUX lighting output is active. The time starts counting when the room becomes occupied. When time expires the output changes to off.

A value between 1 and 250 seconds allows to use the output as courtesy light. If a value of 0 sec is configured, the AUX output stays active when room is occupied. The output changes to off when the room turns to unoccupied and the time defined in P3 expires.

The default value is 20 seconds.

### 7.8 Fan-Coil low speed active when no demand in Cool mode

Configures the device to keep the minimum Fan-Coil speed active when there is no demand in cool mode.

The default value is active (YES) when there is no demand.

### 7.9 Fan-Coil low speed active when no demand in Heat mode

Configures the device to keep the minimum Fan-Coil speed active when there is no demand in heat mode.

The default value is active (YES) when there is no demand.

### 7.10 COOL/HEAT mode changeover by setpoint/temperature difference

Configures the device to automatically change to COOL or HEAT mode and vice versa when the temperature difference between the setpoint temperature and the measured temperature is over the dead band configured value between COOL and HEAT (Parameter P12).

This parameter does not have effect if the P11 parameter is configured as active YES.

The default value is NO (the temperature difference does not modify the device mode)

### 7.11 COOL/HEAT mode changeover using Water Temperature Input

Configures the device to automatically change to COOL or HEAT mode and vice-versa depending on the Water Temperature Input state.

This parameter has priority over P10.

The default value is NO (the input does not change the mode of the device).

### 7.12 Dead band temperature between COOL and HEAT mode

Defines the temperature difference between the measured temperature and the setpoint fixed by the user, to automatically change the mode between COOL and HEAT. This parameter takes effect when the device is configured to automatically change the device mode for temperature difference between Setpoint/Temperature (Parameter P10).

The default value is 3,0°C.

### 7.13 Maximum real setpoint temperature

This parameters sets the maximum setpoint limit used by the device to control the real temperature in the room.

The default value is 28,00°C

### 7.14 Minimum real setpoint temperature

This parameters sets the minimum setpoint limit used by the device to control the real temperature in the room.

The default value is 19,00°C

### 7.15 Maximum setpoint adjustable by the guest

Configures the maximum setpoint value that the user can modify with the pushbuttons.

The default value is 32,0°C.

### 7.16 Minimum setpoint adjustable by the guest

Configures the minimum setpoint value that the user can modify with the pushbuttons.

The default value is 15,0°C.

### 7.17 Setpoint temperature in Cool mode in Occupied State

Configures the setpoint temperature in Cool mode when power is applied to the device. This value applies when the device is in Occupied mode.

The default value is 23,0°C.

### 7.18 Setpoint temperature in Cool mode in ECO State

Configures the setpoint temperature in Cool mode when the device changes to ECO state.

The default value is 26,0°C.

### 7.19 Setpoint temperature in Heat mode in Occupied State

Configures the setpoint temperature in Heat mode when power is applied to the device. This value applies when the device is in Occupied mode.

The default value is 21,0°C.

### 7.20 Setpoint temperature in Heat mode in ECO State

Configures the setpoint temperature in Heat mode when the device changes to ECO state.

The default value is 16,0°C.

### 7.21 Keep user setpoint after device resets

This parameter keeps the setpoint value fixed by the user, after a power failure.

The default value is NO.

### 7.22 AutoOn in HEAT mode

This parameter sets the temperature to automatically switch-on the device in HEAT mode when the parameter P24 is configured as “YES”. When the ambient temperature is near the set-point configured, the controller will automatically switch-on in HEAT mode only if the controller is switched off and the room is in unoccupied state.

The default value is 5,0°C.

### 7.23 AutoOn in COOL mode

This parameter sets the temperature to automatically switch on the device in COOL mode when the parameter P25 is configured as “YES”. When the ambient temperature is near the set-point configured, the controller will automatically switch-on in COOL mode only if the controller is switched off and the room is in unoccupied state.

The default value is 28,0°C

#### 7.24 AutoON mode enabled in HEAT mode

This parameter enables the AutoOn function in HEAT mode.

The default value is NO.

#### 7.25 AutoON mode enabled in COOL mode

This parameter enables the AutoOn function in COOL mode.

The default value is NO.

#### 7.26 HVAC status after reset

Configures the state at which the device will start after applying power. The device can start in OFF state or ON state. If the device is configured to start in ON state and the parameter P5 is configured in ECO mode, the device will start in ECO mode when the room is unoccupied.

If the device is configured to start in ON state and the room is occupied, the device will automatically switch on when power is applied to the device.

The default value is ON.

#### 7.27 HVAC mode after reset

Configures the mode COOL/HEAT/LAST\_STATE at which the HVAC will start when power is applied to the device.

The default value is COOL (CO).

#### 7.28 Celsius / Fahrenheit degrees visualization

Configures the device to show the temperature on the display in degrees Celsius or Fahrenheit.

The default value is °C

#### 7.29 Value to show on the display

Configures the display to show the temperature measured value or the setpoint value defined by the user.

The default value is Setpoint (SEt).

#### 7.30 Temperature sensor used for HVAC control

This parameter is used to define the temperature sensor used for the HVAC control algorithm. The device can take the temperature measured by the built-in front display sensor or by the external input temperature sensor (terminals 7-8).

The default value is Frontal (built in sensor).

#### 7.31 Built in temperature sensor offset

Adjusts the built in temperature sensor offset with respect to the measured value.

The default value is 0,0°C.



### 7.32 External temperature sensor offset

This parameter is used to configure an offset temperature for the value measured by the External temperature Input (terminals 7-8).

The default value is 0,0°C.

### 7.33 Window contact input

Configures the window contact input state when the window is closed.

When the window is closed the HVAC system can operate. When the window is opened, the HVAC system stops operating. The input can be configured in NO or NC state.

The default value is NC (when window is closed the contact is closed and HVAC can operate).

### 7.34 Valve actuator state outputs with no demand

Configures the state of the valve actuator outputs when there is no demand. It can be configured for Normally Closed or Normally Open valves.

When there is no demand and the parameter is configured as NO, the valve actuator control outputs are in open contact. When there is no demand and the parameter is configured a NC, the valve actuator control outputs are in closed contact.

The default value is Normally Open (NO).

### 7.35 Backlight display intensity

Configures the backlight intensity of the display. The backlight can be turned off configuring the parameter to 0 or to a maximum value configuring the parameter to 10.

The default value is 10.

### 7.36 Lock the pushbuttons

This parameter is used to lock the pushbuttons of the device in order to avoid the user modify the values. Three different possibilities are available:

- Unlock (0): The pushbuttons are unlocked, the user can change any value.
- All except ON/OFF (1): The +Setpoint, -Setpoint and Fan-Coil Speed pushbuttons are locked and the user can only change the ON/OFF status of the device.
- All (2): All pushbuttons are locked. The device can't change any value.

The default value is Unlocked.

### 7.37 Backlight display state in stand-by mode

The backlight display led can be switched on at a minimum level or switched off, when the climate control is enabled and after 5 seconds of the last pushbutton pressed.

The default value is ON (Low level)

### 7.38 Proportional gain 'Kp' of the 0-10V output in Cool mode

The proportional control provides a value on the 0-10V output proportional to the error between the setpoint temperature and the room temperature. This error is multiplied by the proportional gain Kp and applied to the output. This parameter is only valid for Cool mode.

### 7.39 Integral time 'ti' of the 0-10V output in Cool mode

The integral time 'ti' eliminates the error produced in the proportional control, cumulating the error in time and reducing the error of the output to 0. This parameter is valid for Cool mode.

### 7.40 Proportional gain 'Kp' of the 0-10V output in Cool mode

The proportional control provides a value on the 0-10V output proportional to the error between the setpoint temperature and the room temperature. This error is multiplied by the proportional gain Kp and applied to the output. This parameter is only valid for Cool mode.

### 7.41 Integral time 'ti' of the 0-10V output in Cool mode

The integral time 'ti' eliminates the error produced in the proportional control, cumulating the error in time and reducing the error of the output to 0. This parameter is valid for Cool mode.

### 7.42 Minimum output value of the Fan-Coil 0-10V analog output

This parameter sets the minimum voltage level of the 0-10V output. The resolution of the parameter is 0,1 V.

### 7.43 Maximum output value of the Fan-Coil 0-10V analog output

This parameter sets the maximum voltage level of the 0-10V output. The resolution of the parameter is 0,1 V.

### 7.44 0-10V analog output voltage for manual fan-coil speed I

This parameter defines the voltage level of the 0-10V output for manual speed 1 fixed using the FAN pushbutton or through the bus.

### 7.45 0-10V analog output voltage for manual fan-coil speed II

This parameter defines the voltage level of the 0-10V output for manual speed 2 fixed using the FAN pushbutton or through the bus.

### 7.46 0-10V analog output voltage for manual fan-coil speed III

This parameter defines the voltage level of the 0-10V output for manual speed 3 fixed using the FAN pushbutton or through the bus.

### 7.47 Lighting output state after reset

This parameter defines how the AUX lighting output will operate after a reset and if the room is in occupied state. The possible values are:

- Keep the last state
- Switch ON the output
- Switch OFF the output

## 7.48 Reserved

## 7.49 Reserved

### 7.50 Set all parameters to factory values

Changes the configuration parameters of the device to factory values.

The default value is always NO.

NOTE: To configure the device at Factory settings change to parameter to YES and press ENTER (FAN).

WARNING: This is a non-reversible operation. Pressing YES and then the ENTER pushbutton, the device configures all the parameters to the factory default values defined in Table 1.

## 8. Revisions history

Revision	Date	Author	Description
0	6/7/2020	RFH	Creation for Firmware Version 1.1.0

