



Ventilación inteligente



SIBER®

WIRELESS CO₂ SENSOR

Installation and operation manual

SIBER®

WIRELESS CO₂ SENSOR



Country: ES



Children under 8 years, persons who have acquired little experience or expertise or those with physical or mental disabilities that may hinder their ability to operate this system must do so under supervision or once made aware of the risks and dangers associated with operating the system and how to safely use it.

Keep the system out of reach of children under the age of 3 and always supervise children near the system.

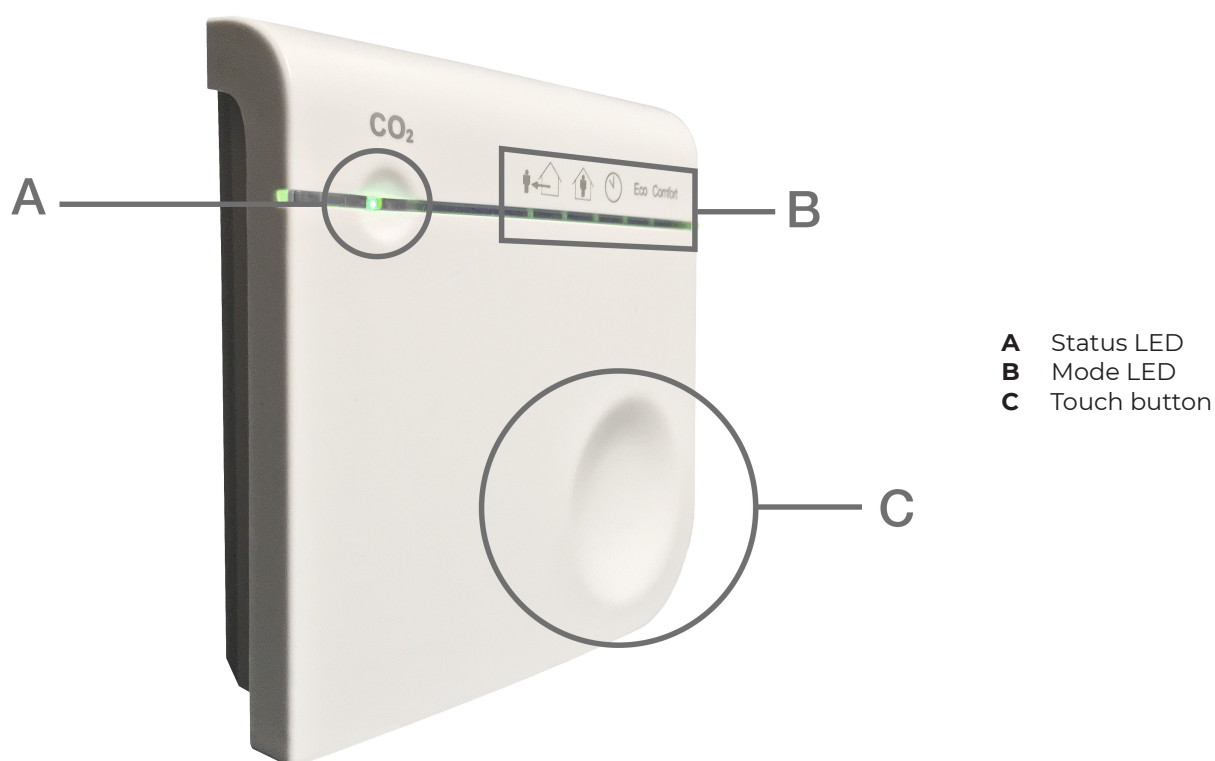
Children between the ages of 3 and 8 can only turn the system on and off when either supervised or having been made aware of safety precautions, possible dangers, and when the system has been installed properly for normal use. Children aged between 3 and 8 should not unplug or plug in the system, clean the system, make changes to its settings, or carry out any maintenance tasks on the system which are normally carried out by the user. Children must not play with the system.

If a new power cable is needed, contact Siber Zone S.L.U. for a replacement. To avoid dangerous situations, only qualified experts can replace damaged electrical wiring and connections.

Keep the instruction manual in a safe place.

CONTENTS

1 ABOUT THIS MANUAL	4
1.1 About the device.....	4
1.2 How to use this manual	4
1.4 Warnings.....	4
2 SAFETY.....	5
2.1 Directives.....	5
2.2 Unit marketings	5
2.3 General safety instructions.....	5
3 DESCRIPTION	5
3.1 Intended use.....	5
3.2 Operating principle.....	5
3.2.1 Ventilation modes and speeds.....	6
3.2.2 Levels of CO ₂	6
3.3 Visual indications.....	7
4 OPERATION	7
4.1 Show status.....	7
4.2 Settings mode.....	7
5 INSTALLATION	8
5.1 Preparation	8
5.2 Installation process	8
5.3 Start-up	9
6 CONFIGURATION	9
6.1 Configure settings.....	9
7 TECHNICAL DATA	10



1 ABOUT THIS MANUAL

1.1 ABOUT THE DEVICE

The Wireless CO₂ Sensor is a CO₂ sensor and control device for the ventilation system. The device communicates information about ventilation speed and the system status wirelessly with the central control device.

1.2 HOW TO USE THIS MANUAL

This manual is a reference for qualified fitters installing **the Wireless CO₂ Sensor** (hereinafter called the “device”) and users using the device as intended. Ensure that you have read and fully understood this manual before installing or using the device.

1.3 ORIGINAL INSTRUCTIONS

The original instructions for this manual were written in Spanish. Versions in other languages are a translation of these original instructions.

1.4 ADVERTENCIAS



NOTE

This is used to highlight additional information.



WARNING

This identifies a danger that could result in personal injury including death.

2 SAFETY

2.1 DIRECTIVES

This device meets the following EU directives:

- EMC Directive: 2004/108/EC
- Low Voltage Directive: 2006/95/EC
- RTTE Directive: 1999/5/EC
- RoHS Directive: 2002/95/EC
- WEEE Directive: 2002/96/EC

2.2 UNIT MARKINGS



Warning: As a precaution, review the instruction manual.



Danger: Risk of electric shock.



Electrical Protection IEC 61140 Class II (double insulation)



CE Conformity Marking



The use of this device may not be legal in all member states.



Dispose of in accordance with the European Community Directive. 2002/96 / EC (WEEE)

2.3 GENERAL SAFETY INSTRUCTIONS

- This product was designed and manufactured to provide the maximum safety possible during installation, operation, and servicing.
- Always read the safety instructions before installing, maintaining, or repairing the product and strictly follow these instructions.
- Parts of the device connect to a power supply whose voltage is lethal.
- Disconnect the power supply from mains, the circuit breaker, and the fuse box before installing, repairing, or removing the device.
- The device is only designed for indoor use. Do not expose the device to rain or humidity to avoid short circuits.
- A short circuit can cause fires or electric shocks.
- Operate the device between 0 °C and 40 °C.
- Only use a soft and damp cloth to clean the device.
- Never use abrasive or chemical cleaning products. Do not paint the device..

3 DESCRIPTION

3.1 INTENDED USE

The device is designed for the following uses:

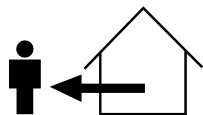
1. To establish the level of ventilation through the ventilator as set by the user or according to the measured humidity level.
2. Configure settings for the ventilation control. Any other use or additional use is not the intended use of the device.

3.2 PRINCIPIO DE FUNCIONAMIENTO

The device communicates with the control device wirelessly to control ventilation. The button and the LEDs can be used to configure the settings of the ventilation system and see the current status of the ventilation system. When in Eco Mode or Comfort Mode, the device can set the ventilation level according to the quantity of CO₂ in the air.

3.2.1 VENTILATION MODES AND SPEEDS

The ventilation system operates in one of the following modes. In each of these modes, the control device adjusts the ventilation system to a set ventilation level.



AWAY MODE:

When the property is empty, the heat recovery unit will function at its lowest capacity.



AT-HOME MODE:

This mode is for the usual occupancy of the property. In this mode, the heat recovery system operates knowing that there is at least one person in the room or the property. It will set the speed to a predefined level.



TIMED MODE:

High speed ventilation for a restricted period of time. Upon pressing the button, the heat recovery unit will operate at maximum speed for 30 minutes.

Eco

ECO MODE:

Automatic ventilation according to sensor readings. In ECO, the system will start at the highest level of CO₂ with the same ventilation as **COMFORT**.

Comfort

COMFORT MODE:

Automatic ventilation according to sensor readings. The system will increase ventilation speed according to a preset CO₂ level.

The control device will operate the ventilation according to the upper values received from the connected wireless sensors. When activated from the device, ventilation will be activated for 30 minutes.

3.2.2 LEVELS OF CO₂


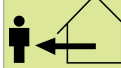


The device continually measures the level of CO₂ in the air and compares the average value to that of a predetermined threshold. The device controls the ventilation in order to maintain the level of CO₂ below said level. In COMFORT MODE, the level is equal to the configured value. In ECO mode, the level is 250 ppm above the set value.



NOTA

The device stores the ventilation speed values from the control device and requests them from it. The device stores the CO₂ setting value and does not communicate this with any other device.

3.3 VISUAL INDICATIONS

		LED STATUS	LED MODES				
						Eco	Comfort
Start-up							
		SOLID WHITE	ON	ON	ON	ON	ON
System status							
SOLID GREEN		<800 PPM					
SOLID YELLOW		800-1.900 PPM					
RED	SOLID	>1.900 PPM					
	1 Flash	Communication error					
	2 Flashes	Dirty filter					
	3 Flashes	Ventilator error					
	4 Flashes	CO2 sensor error					
	5 Flashes	Low battery					
Selection							
AWAY MODE		OFF	•				
AT-HOME MODE				•			
TIMED MODE					•		
ECO MODE						•	
COMFORT MODE							•

4 OPERATION

4.1 SHOW STATUS

1. Press the button.

The status and mode LEDs will show the system status. The button can also be used to change setting errors.

4.2 SETTINGS MODE

From the status display:

1. Press the button. The mode LED will show the following selection.
2. If necessary, press the button after 2 seconds, repeat until the desired mode is shown.
3. Wait 2 seconds. The device will apply the desired mode.

The status and mode LEDs will show the system status.

5 INSTALLATION

5.1 PREPARATION



DANGER

Disconnect the power supply from mains, the circuit breaker, and the fuse box before installing the device.

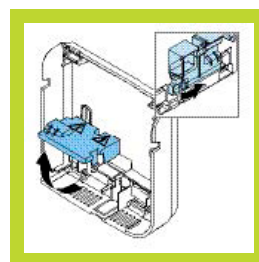


NOTA

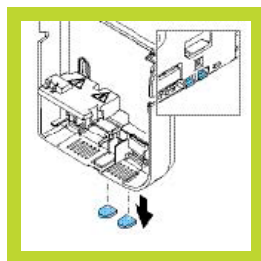
Do not place the device in metal casing.



1. Press in the clip and pull the upper section away from the lower section.



2. Open the safety cover. Use a small flathead screwdriver to loosen the clip.



When not placing the device in a wall-mounted box:

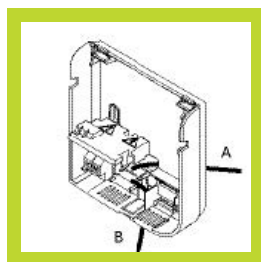
1. Prepare the wall if necessary. Use the mounting plate as a guide.
2. Remove the detachable plastic from the cable entry on the case.

5.2 INSTALLATION PROCESS

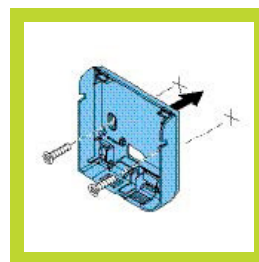


DANGER

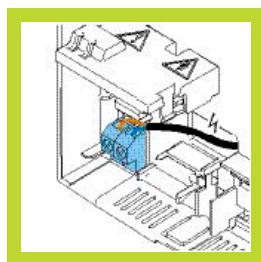
Ensure that the power supply is turned off.



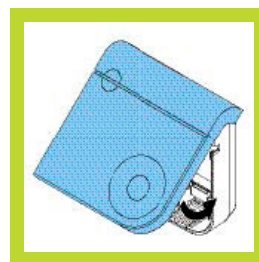
1. Pass the power supply cable through the opening on the back (A) or the cable entry point (B).



2. Replace the lower section of the device.
3. Secure the lower section with the screws.



4. Connect the power supply cable to the screw terminals.



5. Attach the upper section of the device to the lower section.
 - a. Position the clips.
 - b. Press closed until it clicks.

5.3 START-UP

1. Turn on the 230 V power supply.

All the LEDs will light up for 3 seconds.

2. Wait until the status LED displays connection mode.

If the device shows another status, the device is already connected. See 6.2 on how to reset the device.





3. Ensure that the ventilator box is in connection mode.

4. Press the button. The device will try to connect to the control device.

The result will be reflected in the status LED.

If the connection fails, make sure that the control device is in connection mode and try again.

6 CONFIGURATION

		LED STATUS	LED MODES				
						Eco	Comfort
Configuration							
LOW SPEED		OFF	.				
MEDIUM SPEED				.			
HIGH SPEED					.		
CO ₂ FIXED POINT						.	
CONNECTING							.
VALUE	Blue/Red	Low speed	Off	10%	20%	30%	40%
	Blue/Green	Medium speed	30%	40%	50%	60%	70%
	Red/Green/Blue	High speed	60%	70%	80%	90%	100%
	Blue (flashing)	CO2 fixed point	700 ppm	800 ppm	900 ppm	1000 ppm	1100 ppm
	Red/Green	Connecting					

6.1 CONFIGURE SETTINGS

From the status display (see 4.1):

1. Press the button. The mode LED will show the following selection.

2. If necessary, press the button after 2 seconds, repeat until the desired element to be configured is displayed.

3. Keep the button pressed until the status LED flashes white.

4. Release the button. The status LED will show the selected element and the mode LED will show its current value.

5. If necessary, press the button for 10 seconds until the mode LED displays the desired value.



NOTE

When setting the ventilation speeds, ensure that the medium speed of the ventilation is between the slow speed and high speed settings for the ventilation.

6. Wait 10 seconds and the device will apply the settings. The status and mode LEDs will show the system status.

7 TECHNICAL DATA

SIBER® WIRELESS CO ₂ SENSOR			
TOTAL DIMENSIONS		100 x 100 x 25 mm (height x width x depth)	
WEIGHT		± 125g	
ENVIRONMENTAL CONDITIONS	Temperature	During operation	0 a 40 °C
		During transportation and storage	-20 a 55°
	Relative humidity		0 - 90%, without condensation
	Electrical protection (IEC 60529):		IP30
ELECTRICAL SPECIFICATION	Main power supply		195 - 253 VAC, 50Hz.
	Maximum energy consumption		4 VA
	Cable diameter		0,25 a 2,5 mm ²
CO₂ MEASUREMENT SPECIFICATIONS	Optimum measurement range		Measurement precision (within optimum range, >10 minutes of operation): 400 to 2000 PPM.
	Stabilisation period following start-up		40 PPM + 2% of measurement at 20 °C for 2 minutes.