




BRINK Co2 Sensor For Zone Ventilation Instruction Manual

[Home](#) » [BRINK](#) » BRINK Co2 Sensor For Zone Ventilation Instruction Manual 

Contents

- [1 BRINK Co2 Sensor For Zone Ventilation](#)
- [2 CO₂-sensor general](#)
- [3 Connecting and setting](#)
- [4 LED function on CO₂-sensor](#)
- [5 Failure](#)
- [6 Recycling](#)
- [7 Documents / Resources](#)
 - [7.1 References](#)
- [8 Related Posts](#)



BRINK Co2 Sensor For Zone Ventilation

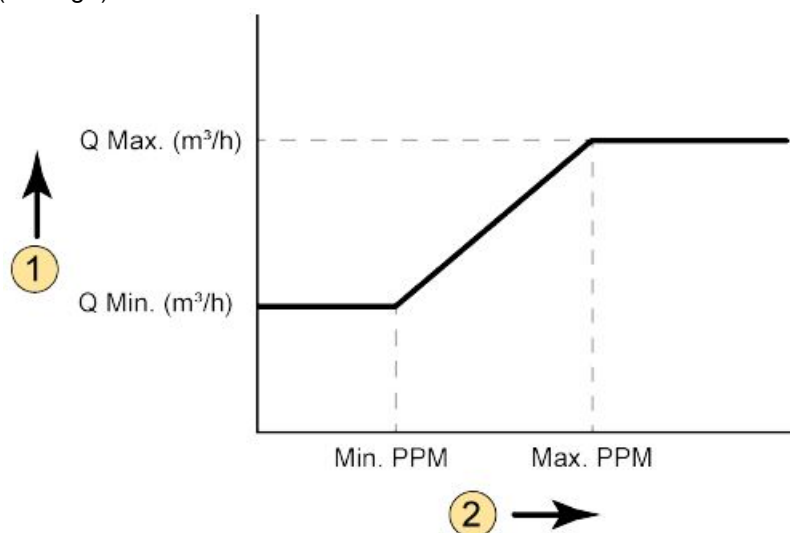


CO₂-sensor general

The eBus CO₂ sensor can be connected to all Flair appliances and all “plus versions” of the Renovent Excellent and Renovent Sky. A maximum of 4 CO₂ sensors can be connected.

The CO₂ sensors ensure optimum ventilation in the dwelling by automatically adjusting the air flow rate on the basis of the CO₂ content. The airflow rate is determined by the CO₂ sensor that requests the highest level. The CO₂ sensor(s) only regulates the appliance if the position switch/Air Control, if fitted, is in position 1, 2, or 3; when the position switch is at position 0 or fan symbol (holiday mode) the CO₂ control does not work.

Depending on the minimum and maximum (set) PPM value, the CO₂ control adjusts the airflow between setting 1 (set low) and setting 3 (set high).



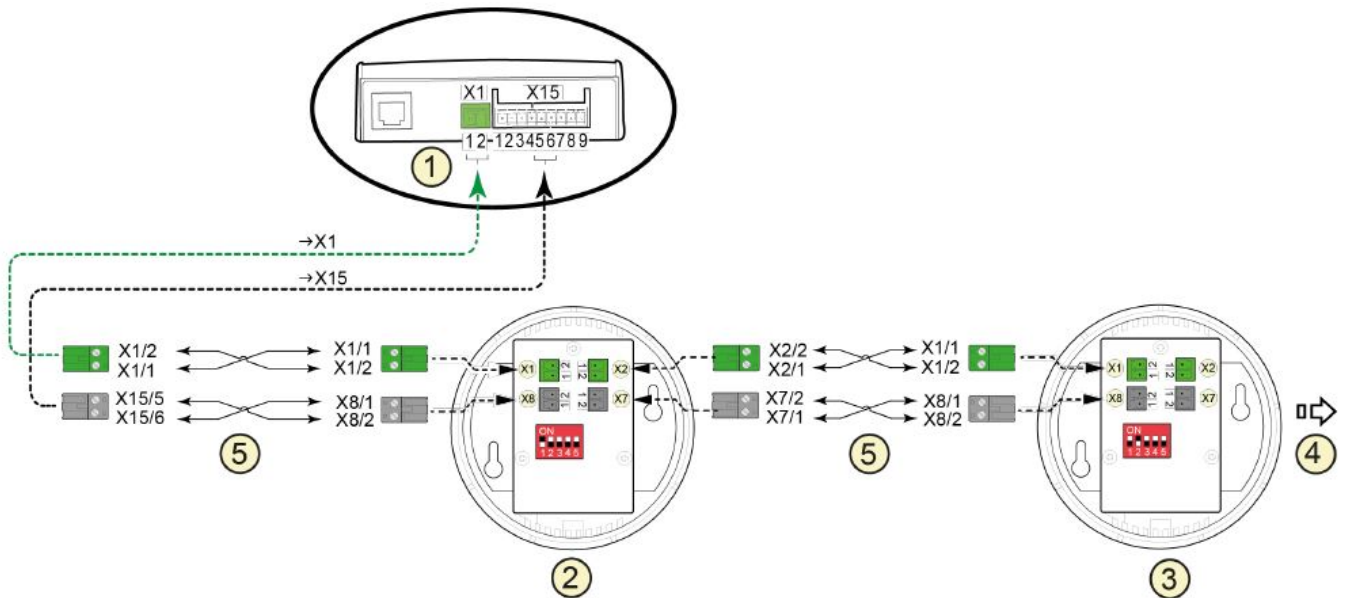
- 1 = Air flow rate
- 2 = Amount of CO₂ in area where CO₂ sensor is situated
- Q Min = Minimum airflow setting 1; for example Flair 325 (Plus) factory setting step no1.2 = 100 m³/h
- Q Max = Maximum airflow setting 3; for example Flair 325 (Plus) factory setting step no1.4 = 250 m³/h
- Min. PPM = Minimum (set) PPM value; for example Flair 325 (Plus) factory setting step no. 6.2 = 400 PPM

- Max. PPM = Maximum (set) PPM value; for example Flair 325 (Plus) factory setting step no. 6.3 = 1200 PPM

Connecting and setting

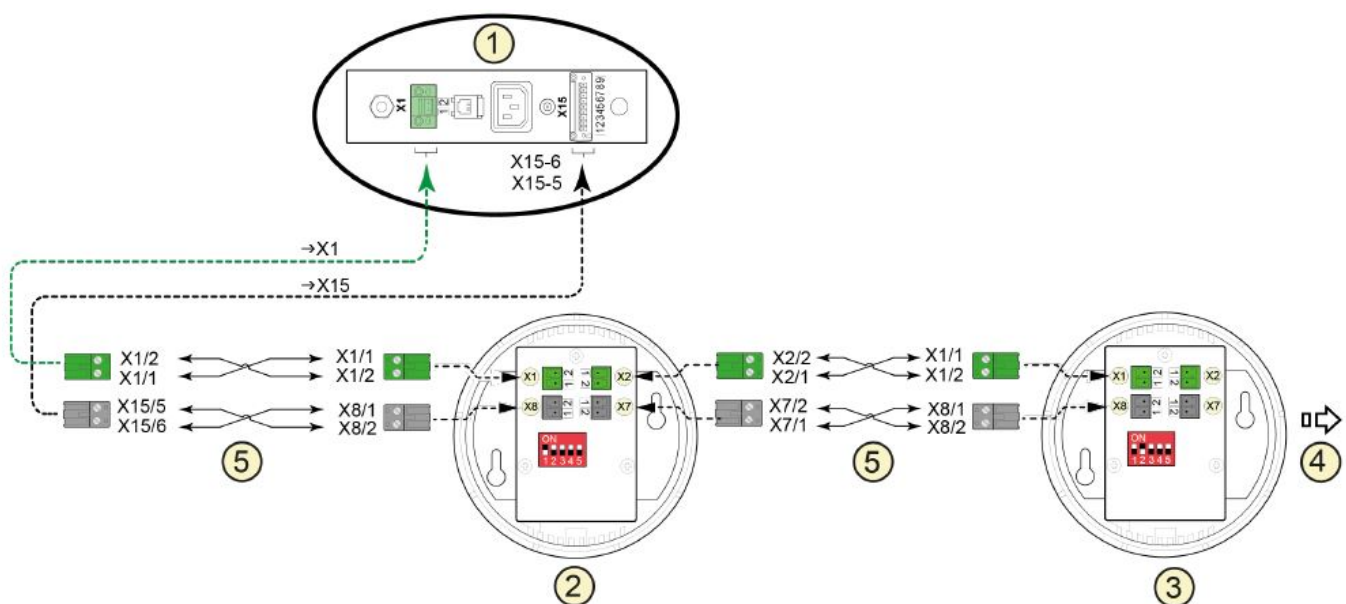
Step 1 Electrical connection

Connect CO₂-sensor to Renovent Excellent appliance



1. Renovate Excellent appliance
2. First connected CO2 sensor
3. Second connected CO2 sensor
4. Optionally, 3rd and 4th connected CO2 sensors (A maximum of 4 CO2 sensors can be connected)
5. 2-wire control cable (Green plugs = eBus connection; black plugs = 24V.)

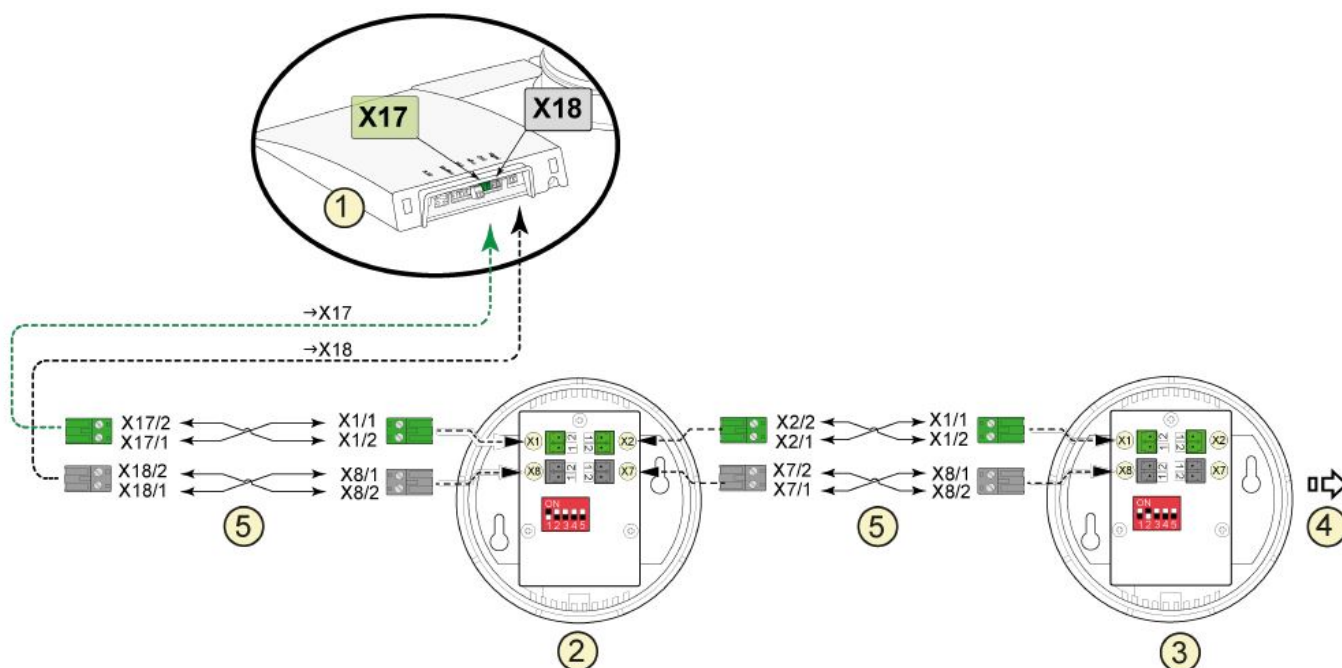
Connect CO₂-sensor to Renovent Sky appliance



1. Renovate Sky appliance
2. First connected CO2 sensor

3. Second connected CO2 sensor
4. Optionally, 3rd and 4th connected CO2 sensors (A maximum of 4 CO2 sensors can be connected)
5. 2-wire control cable (Green plugs = eBus connection; black plugs = 24V.)

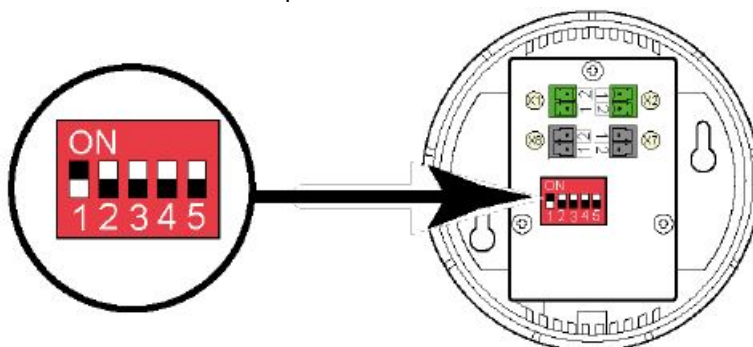
Connect CO₂-sensor to Flair appliance



1. Flair appliance
2. First connected CO2 sensor
3. Second connected CO2 sensor
4. Optionally, 3rd and 4th connected CO2 sensors (A maximum of 4 CO2 sensors can be connected)
5. 2-wire control cable (Green plugs = eBus connection; black plugs = 24V.)

Step 2 Setting CO₂-sensor

The CO₂ sensors are fitted with five DIP switches at the backside. Set the DIP switches according to the table below so that each CO₂ sensor has its own unique set combination.



	Dipswitch				
Sensor	1	2	3	4	5
CO2-sensor 1	ON	OFF	OFF	OFF	OFF
CO2-sensor 2	OFF	ON	OFF	OFF	OFF
CO2-sensor 3	ON	ON	OFF	OFF	OFF
CO2-sensor 4	OFF	OFF	ON	OFF	OFF

It is advisable to mark the CO2 sensors as soon as dip switches are set (for example, by recording the number a using waterproof marker on the inside of the CO2 sensor) and to fill in the list below where the CO2 sensor in question will be placed. When reading the PPM values of CO2 sensors it is then easy to deduce for which area the read value applies.

	Area in which CO2 sensor is placed
CO ₂ -sensor 1	
CO ₂ -sensor 2	
CO ₂ -sensor 3	
CO ₂ -sensor 4	

Step 3 Settings of CO₂-sensor on ventilation appliance

To activate the connected CO2 sensor(s), the setting of the CO2 sensor must be set to “ON” in the settings menu of the relevant ventilation appliance. To change settings in the settings menu, see the installation instructions for the appliance in question.

If desired, the minimum and maximum PPM values on which the CO2 sensors are controlled can also be set in the settings menu.

CO2- settings at Renovent Excellent and Renovent Sky appliance

Step no.	Description	Factory setting	Setting range	Step
35	Switching ON and OFF eBus CO2 sensor	OFF	ON – OFF	–
36	Minimum PPM eBus CO2-sensor 1	400	400 – 1200	25
37	Maximum PPM eBus CO2-sensor 1	1200		
38	Minimum PPM eBus CO2-sensor 2	400		
39	Maximum PPM eBus CO2-sensor 2	1200		
40	Minimum PPM eBus CO2-sensor 3	400		
41	Maximum PPM eBus CO2-sensor 3	1200		
42	Minimum PPM eBus CO2-sensor 4	400		
43	Maximum PPM eBus CO2-sensor 4	1200		

CO2- settings at Flair appliance				
Step no	Description	Factory setting	Setting range	Step
6	CO2-sensor			
6.1	Switching ON and OFF eBus CO2 sensor	OFF	ON – OFF	–
6.2	Minimum PPM eBus CO2-sensor 1	400	400 – 1200	25
6.3	Maximum PPM eBus CO2-sensor 1	1200		
6.4	Minimum PPM eBus CO2-sensor 2	400		
6.5	Maximum PPM eBus CO2-sensor 2	1200		
6.6	Minimum PPM eBus CO2-sensor 3	400		
6.7	Maximum PPM eBus CO2-sensor 3	1200		
6.8	Minimum PPM eBus CO2-sensor 4	400		
6.9	Maximum PPM eBus CO2-sensor 4	1200		

Step 4 To check CO₂ values on the ventilation appliance

In the readout menu (for Renovent Excellent and Renovent Sky with Plus print) or information menu (for all Flair appliances) the values of the connected CO2 sensors can be read out. With this, you can also check the proper operation of the connected CO2 sensors.

Only values can be read in this readout menu or information menu; changing settings is not possible. For more information regarding the readout menu/information menu, see the installation instructions for the appliance in question.

Readout menu at Renovent Excellent and Renovent Sky:

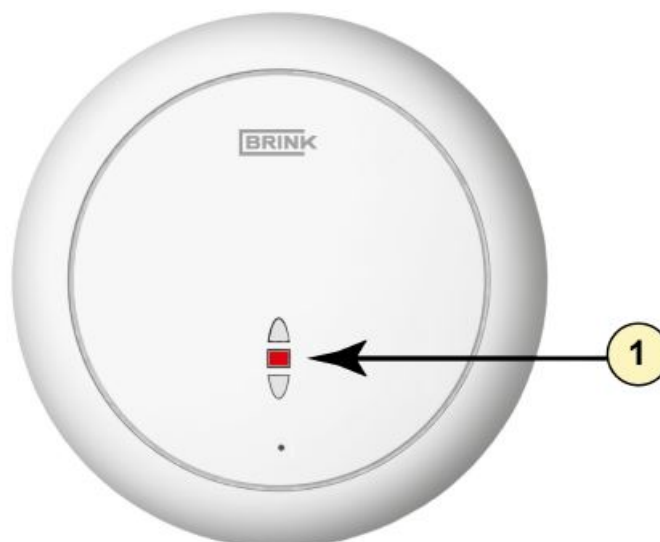
Step no. read out value	Description of readout value	Unity
10	Read out CO2-sensor 1	PPM
11	Read out CO2-sensor 2	PPM
12	Read out CO2-sensor 3	PPM
13	Read out CO2-sensor 4	PPM

Information menu at Flair appliances:

Press the info button  on the display and use the  and  button to go to the reading values of the CO2 sensors.

LED function on CO₂-sensor

The CO₂ sensor has a red LED on the front.



1 = Red LED on front CO₂ sensor

This red LED on the CO₂ sensor has the following functions:

Led on CO ₂ -sensor	Description
Led is constantly on:	CO ₂ sensor is defective.
Led is constantly off:	CO ₂ sensor is off (no power) or the CO ₂ sensor is operating normally.
Led lights up and phases out slowly every 4 seconds:	The CO ₂ sensor is warming up during the power-up phase.
Led lights red for a short period every half of a second:	The sensor detected a failure or it is not being read on the eBus. i.e. it has no eBus connection or heat recovery appliance is not set for reading CO ₂ sensors or demand control 2.0 does not detect the CO ₂ sensor.
The led blinks; the light is long on and short off every 2 seconds	This is a search option. This can be used in demand control 2.0 to ease the process of finding the right sensor during assigning it to a zone using the control unit.

Failure

When there is a problem with the CO₂ sensor at a Renovent Excellent or Sky appliance, the error message E109 will appear on the screen.

Multiple error messages are possible with Flair devices; this error message always comes in combination with the

wrench symbol  on the display.

Fault code	Description
152	Sensor must be replaced.
160	Internal connection with sensor element is poor.
161	Sensor element is defective.

An error message can also be displayed by means of a red LED on the front of the CO2 sensor (® LED function on CO₂-sensor).

Recycling

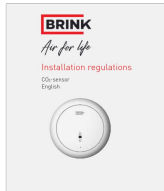
Sustainable materials are used in the manufacture of this appliance. The packaging should be disposed of in a responsible manner and in accordance with governmental regulations.



Brink Climate Systems B.V.

- P.O. Box 11, NL-7950AA Staphorst T: +31 (0) 522 46 99 44
- E: info@brinkclimatesystems.nl
- W: www.brinkclimatesystems.nl.

Documents / Resources

	<p>BRINK Co2 Sensor For Zone Ventilation [pdf] Instruction Manual Co2 Sensor For Zone Ventilation, Sensor For Zone Ventilation, Zone Ventilation, Ventilation</p>
---	---

References

-  [Brink Climate Systems - Breathe Excellence, Flourish in Life](#)