



50Hz

# KUBALIK-CO<sub>2</sub>

AIR RENEWAL AND CO<sub>2</sub> REDUCTION KIT

[www.casals.com](http://www.casals.com)



# KUBALIK-CO<sub>2</sub>

## > OPERATION

- ✓ KUBALIK-CO<sub>2</sub> by Casals is a simple ventilation system for **continuous and slow air renovation that hardly alters the indoor temperature** of a room.
- ✓ Formed by two **reversible** fans such as KUBALIK (the same fan allows air to be supplied or extracted as configured) and a **CO<sub>2</sub> sensor** called SCO<sub>2</sub> IAQ.
- ✓ KUBALIK-CO<sub>2</sub> allows any indoor space where people from different bubbles co-exist (an office, a school, a bar, etc.) to have **good air quality** thanks to the controlled renovation that this equipment allows.
- ✓ In an economical, easy and versatile way, the user will be able to give a solution to the CO<sub>2</sub> load of your establishment and constantly see the air quality you breathe. Comfort within everyone's reach.

> **Get with KUBALIK-CO<sub>2</sub> the indoor air quality in balance and in a controlled way without headaches or spending a fortune** <

## CARBON DIOXIDE CAUSES POOR INDOOR AIR QUALITY

- ✓ Outdoors, when we breathe **clean air** it is close to **400 ppm** (particles per million) of CO<sub>2</sub>; in cities 700ppm.
- ✓ Inside, taking into account that when humans breathe, we **exhale 4% carbon dioxide** (CO<sub>2</sub>), in a short time we are breathing air that another person has already exhaled in the same place where we are. From **700ppm** the environment becomes uncomfortable, unhealthy and makes us feel unwell. At that time it is necessary to ventilate, **renew the air** to reduce the concentration of CO<sub>2</sub>.
- ✓ The **maximum recommended** value for indoor is 1,000 ppm and in offices the limit value is **1,500 ppm**. It is important to know that these values are very easily reached.
- ✓ What **sensations** do we have with a high concentration of CO<sub>2</sub>? Basically headache, tiredness, loss of concentration and poor performance. Without ventilation in an office workers will quickly drop performance and be burdened soon. In a bar, the entrance and exit of people from different bubbles breathing in the same space for a long period of time, added to the smoke and smells of the kitchen, quickly turn the place into an uncomfortable and highly loaded place that does not invite to stay.

**We breathe air that other people have already exhaled and the longer we are in an indoor space with more people, the more CO<sub>2</sub> accumulates and ends up causing discomfort and headaches.**

- ✓ KUBALIK-CO<sub>2</sub> allows you to sweep the air from the entire room and renew it with new air every time the accumulation of CO<sub>2</sub> is harmful to health. At all times, the user can see on a **screen the amount of accumulated dioxide** and how it is reduced thanks to the intervention of the KUBALIK fan. In addition, the supply of clean air will be done so gently that it will not cause a high temperature reduction in winter.



## > APPLICATIONS

- ✓ Any indoor space where several people coexist for long periods of time:
  - Offices** or any working place
  - Commercial spaces such as **bars, restaurants and shops**
  - Learning centres such as **schools and classrooms** in general
  - Meeting spaces and waiting rooms**
  - Gyms y changing rooms**



## > RANGE OF APPLICATION

- ✓ KUBALIK-CO<sub>2</sub> allows to renew the air and reduce the accumulation of CO<sub>2</sub> in spaces of up to 16m<sup>2</sup>, 34m<sup>2</sup> and 72m<sup>2</sup>.
- ✓ In the following table you can find out what size KUBALIK fan will be needed depending on the room size (in square meters) to ventilate for a height of 2.5m. The calculations made are based on 2 renovations per hour, although the necessary renovations should be assessed in each case based on the occupation (number of people in the space).

\*\*\* Contact the Casals team to find out the best option for other heights, surfaces of the premises and number of renovations \*\*\*

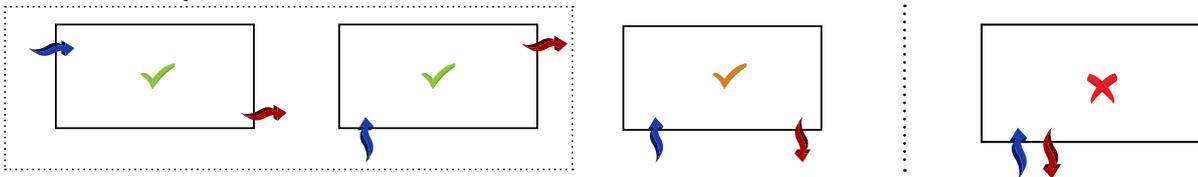
Model	m <sup>2</sup>	Air flow m <sup>3</sup> /h	Height	Renovations
KUBALIK 150	40	200	2,5	2
KUBALIK 230	85	425	2,5	2
KUBALIK 300	180	900	2,5	2

## > POSSIBLE INSTALLATIONS

- ✓ In order for the KUBALIK-CO<sub>2</sub> kit to operate correctly, the KUBALIK fans must be installed with an inverse configuration (one for supplying and one for extracting) and in different planes. The air could not move and be cleaned properly if the two fans are placed on the same window or wall.
- ✓ If the application requires it, more than two fans managed by the same CO<sub>2</sub> sensor can be installed.



### recommended options



## > EASY CONFIGURATION

- ✓ KUBALIK-CO<sub>2</sub> is a quick, easy and inexpensive solution that allows you to see the evolution of the carbon dioxide accumulation or reduction at all times. When installing, just leave the sensor panel in a visible place.
- ✓ In addition to installing the fans at two different points in the room (on the wall or window), it will be necessary to connect the fans to the probe and to the electrical supply according to the desired direction of rotation. Subsequently, the **set-point** and **hysteresis** values will be established.
- ✓ In this **video** of the wiring and configuration of the sensor you will be able to check the ease of use of this system. Just tag the QR code and watch the video.





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