EC TECHNOLOGY

CAP-CO2/EC

INTELLIGENT CONTROL FOR EQUIPMENT REGULATION
WITH EC TECHNOLOGY FANS, WITH INTERNAL CO_2 PROBE

- AUTOMATIC REGULATION BASED ON CO_2 SENSOR READING
- BUILT-IN CO_2 SENSOR
- WALL-MOUNTED
- TIME PROGRAMMING
- WIFI CONNECTION

SODECA®

INTELLIGENT CONTROL FOR
REGULATING UNITS WITH EC
TECHNOLOGY FANS

CO_2 is one of the contaminants most often found in building interiors, especially in high-occupancy buildings such as schools, restaurants and offices

This is because 4% of human exhalation is carbon dioxide (CO_2)

In closed environments with large volumes of people, where there is inadequate ventilation, the amount of CO_2 gradually increases. This increase in CO_2 leads to headaches, fatigue, loss of concentration and a reduction in performance. Measuring and reducing it in closed areas is **essential to maintain the good quality of the interior air**, prevent respiratory diseases and maintain a healthy environment.

The more efficient and effective way to reduce CO_2 in closed areas is to ventilate them by means of controlled mechanical ventilation systems.

BENEFITS OF CONTROLLED MECHANICAL VENTILATION

01.
Reduction in the air-conditioning system energy consumption, as ventilation is only used when necessary.

02.
Reduction in the ventilation system energy consumption, as the fan is regulated based on the CO_2 reading.

03.
Possibility of maintaining a **constant CO_2 level**.

04.
Automation of the system, making human intervention unnecessary.

05.
Possibility of directing the flow to ensure the **homogeneity of the interior air quality**.

CAP-CO2/EC

The CAP-CO2/EC control panel is ideal for air ventilation systems fitted with EC Technology motors with the electronics built-in to the motor itself.

This control incorporates all the functions required for automatic regulation of the ventilation system, adjusting the rotational speed parameters of the fan based on the sensor reading and the objective CO_2 value.

There are **two control options**: a simple one called CAP-CO2/EC-S and another with Wi-Fi connectivity called CAP-CO2/EC-W.

CAP-CO2/EC-S

The CAP-CO2/EC-S is a wall-mounted control with the following features:

- **Proportional regulation based on set point and CO_2 measurement**
- **Time programming**
- **Built-in CO_2 sensor**

CAP-CO2/EC-W

The CAP-CO2/EC-W has all the above features and is also fitted with a Wi-Fi system that permits cloud connection through the platform.

- **Remote control**
- **Wi-Fi**
- **Data monitoring**
- **Secure environment**

The platform covers the extensive IoT field for monitoring data received from the equipment, as well as offering the possibility of acting with respect to said data. The ecosystem is made up of the IoT hardware, servers, cloud controls and the different user interfaces for interacting with the equipment.

All the above is developed and designed to take place in a secure environment, protected by a legal framework that provides the customer with a compact, functional and safe end product.

CAP-CO2/EC

Intelligent control for the regulation of EC Technology fan units with internal CO_2 sensor

Intelligent control designed for the regulation of EC Technology ventilation equipment, depending on the reading of the integrated CO_2 sensor.

Characteristics of the main unit:
- LCD display with LED Backlight.
- Automatic regulation 0-10 V set point according to CO_2 probe reading.
- Integrated CO_2 sensor.
- Time programming.
- Remote safety stop.
- Alarm visualisation on display.
- Configuration of air renewals.
- Modbus RTU communications channel.
- Mounted on the wall or on the fan itself.
- Power supply 230 V 50/60 Hz.
- Version W: with WiFi connectivity.

Inputs:
- 1 input for remote stop voltage-free contact.

Outputs:
- 1 output 0-10 V for proportional regulation according to setpoint and CO_2 measurement.
- 1 output for all/nothing regulation according to setpoint and CO_2 measurement.
- 1 control output 0-10 V.
- 1 output for air quality display alarm.

Order code

CAP-CO2/EC — W

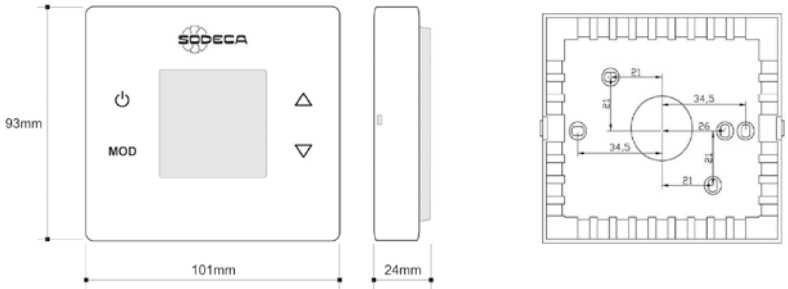
CAP-CO2/EC: Intelligent control for the regulation of EC Technology fan units with internal CO_2 sensor

Control options
S: Single
W: with WiFi connectivity

Technical characteristics

Model	Supply voltage	Nominal current	Control output	Operating temperature	Approx. weight	Protection class
	(V)	(A)	(V)	(ºC)	(Kg)	
CAP-CO2/EC	230 V AC 50/60 Hz	0.2	0-10	0 a +50	0.9	IP20

Dimensions mm



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