

## NL-ECO-CO2-230 | Room sensor CO<sub>2</sub> 230V

Room sensor NL-ECO-CO2-230V is used for indoor air quality monitoring and for effective control of ventilation (HVAC) systems according to actual air quality. The sensor measures concentration of carbon dioxide (CO<sub>2</sub>) in air. It can be effectively used in offices, classrooms, shopping centers, homes, restaurants, fitness centers, commercial buildings, etc.

- > measures CO<sub>2</sub>
- > precise optical principle NDIR
- > LED indication with automatic turn off at night
- > analog voltage output 0-10V
- > output relay NO/C
- > maintenance or calibration not required during operation
- > long-term stability
- > verified lifetime >10 years

### Description

The measuring of CO<sub>2</sub> is based on the principle of infrared radiation attenuation dependence on the CO<sub>2</sub> concentration in the air (Non Dispersive Infra Red).

Built-in auto-calibration function ensures very good long term stability.

The sensor has one analog output for the actual CO<sub>2</sub> concentration.

Ventilation and heat recovery units can be effectively controlled based on the output signal of the sensor in very efficient way.

The trigger level of CO<sub>2</sub> concentration output relay is set by a rotary element.

Current air quality can be easily checked by three LED indicators with built-in automatic shut-off at night.

Explanation of abbreviations and technical terms can be found on our website in the [Glossary](#) section.



### Technical data

Parameter	Value	Unit
Power supply	230	V AC
Power consumption	max 1,5	W
CO <sub>2</sub> measuring range <sup>1)</sup>	400 – 1000	ppm
	400 – 2000	
	400 – 5000	
CO <sub>2</sub> accuracy <sup>2)</sup>	- for ranges 400 – 1000 and 400 - 2000 ppm	± 40 ppm + ±4 % of reading
	- for range 400 - 5000 ppm	± 60 ppm + ±4 % of reading
CO <sub>2</sub> relay - hysteresis	5 % from range (100ppm/250ppm)	
CO <sub>2</sub> rate rise	max 1	min
CO <sub>2</sub> step response	(90 %) 80	s
Voltage output <sup>3)</sup>	0 – 10	V DC
Max. switching voltage	250/30	V AC / V DC
Max. switching current	5/5	A AC / A DC
Working humidity non condensing	0 – 95 %	RH
Working temperature	0 to +50	°C
Storage temperature	-20 to +60	°C
Expected lifetime	10	years
Ingress protection	IP20	
Dimensions	90x80x31	mm
<sup>1)</sup> Measuring range can be chosen by jumper setting. Default range is 400 - 2000ppm.		
<sup>2)</sup> At 15 – 35 °C, 0-80% RH.		
<sup>3)</sup> Minimum achievable output value corresponds to minimum value of the measuring range.		

