DPWQ40200

CO_2 sensor

Features

- Self-calibrating sensor with microprocessor control for measuring carbon dioxide content in the air within the range from 0 to 2.000 million^{-1} (parts per million).

Design

- **DPWQ40200** CO_2 sensor has 2 analogue outputs: 0–10 V and 4–20 mA. An analogue output provides for stepless fan speed control (requires an EC motor fan or a frequency drive).
- With stepless control the fan speed is changed in proportion to carbon dioxide concentration changes. The CO_2 content in the air is measured by means of a non-dispersive infrared analyser (NDIR).

Mounting

- The sensor is mounted onto a wall or a mounting box inside the serviced space. The unit is powered from a 24 VAC/VDC low-current electric mains.

SENSORS

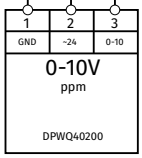
Technical data

Parameters	Values
Power source	24 VAC/VDC
Gas analyser	optical (NDIR)
CO_2 measurement range	0–2.000 million^{-1} (parts per million) of CO_2
CO_2 output signal	0–10 V
CO_2 measurement precision	± 30 million^{-1} (parts per million), ± 5 % of maximum value
Operating conditions	0–50 °C; 10–90 % relative humidity without condensate
Protection class	IP55
Dimensions	95x97x30 mm

Connection diagram

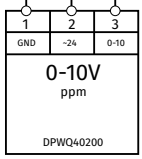
KOMFORT Roto EC D/S

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
gnd	R+	R-	GND~	~24V	0-10V	GND	~24V	NO	NO	NO	NO	2	1	2	1	TS1	TS1	PE	N	L	N	L1



Civic EC L

1	2	3	4	5		6	7		8		9
PE	N	L	NC	L	L	L	~24V	~24V	GND	GND	B5



Civic EC D

1	2	3	4	5	6	7		8		9	10		11		12	13
GND	0-10V	TACH	0-10V	TACH	NO	GND	GND	~24V	~24V	NO	L	L	L	L	L	0-10V