

Title: Automatic air quality control

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Objectives of Carbon Dioxide Sensor :

The main objectives of CO₂ sensor is to detect the CO₂ accurately in room, office , industry.

Function of Carbon Dioxide Sensor :

The measurement is performed by NDIR-sensor, within a range of 0...2000 ppm. The measured results are converted into a standardized analogue output signal (0-10 V, 4-20 mA). The standard series covers different measuring ranges. Additionally a passive temperature sensor can be connected. Optionally our sensors are also available with an additional energy efficiency E-paper display.

Note: The sensor is designed for normal ambient conditions (ambient air), aggressive gases can destroy him. The location has a decisive effect on the measurement accuracy. Windows (cold outer wall) or near door (drafts) should be avoided.

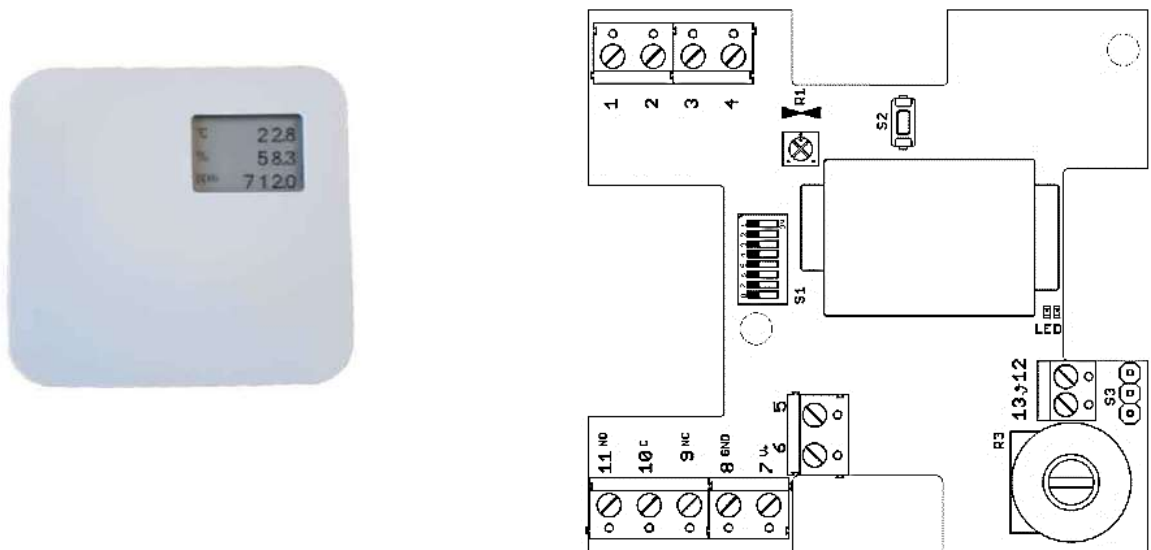


Fig: Carbon Dioxide Sensor and Electrical connection diagram

Technical Specification of Carbon Dioxide Sensor :

- 1) Power supply : At 0 ... 10V: 15 ... 36VDC or 24V / AC at 4 ... 20mA: 15 ... 36V / DC ■
Current consumption : 9 mA
- 2) Electrical connection : screw
- 3) Output : 0 ... 10V or 4-20mA
- 4) Measuring range : CO₂ 0...5 000 ppm
- 5) Accuracy : ± 0.5 ° C
- 6) Operating temp. : 0 ° C ... + 50 ° C
- 7) humidity : 10 to 95% RH
- 8) protection : IP20
- 9) Casing : Material AB

Area of Application of carbon dioxide sensor :

- 1) Office .
- 2) Room.
- 3) Pharmaceuticals Industry.
- 4) Garments Industry.
- 5) Foods and Beverage Industry.

Additional device to control load :

- 1) Programmable Logic Controller (PLC) – 1pcs



- 2) 24VDC power supply – 1pcs



3) DC relay with base (According to control load)



4) Magnetic Contractor (According to control load)



Project Charge including Programming and Installation :

Serial no.	Name of device	Quantity	Unit price in BDT	Total price in BDT	Remark
01	Carbon dioxide sensor	1	16850	16850	
02	PLC (OBA 8)	1	12000	12000	
03	Power supply	1	2500	2500	
04	Magnetic contactor/ DC relay with base	1	2800/480	2800/480	Quantity depends on load (Above 10A load must be use Magnetic contactor)
06	Installation and program charge				depends on the project size

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