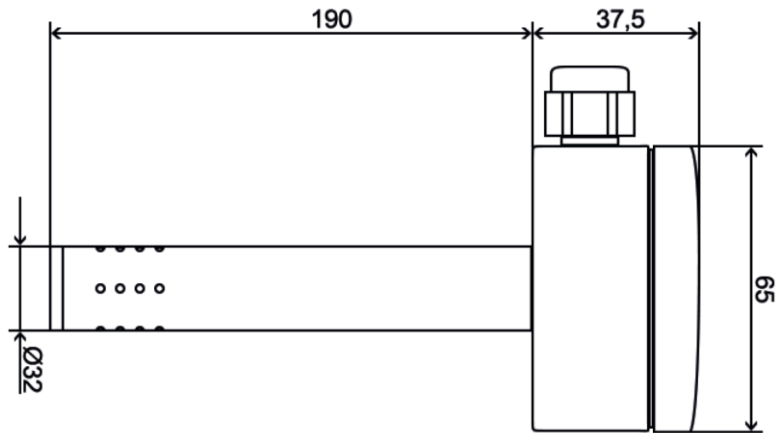


Technical Drawing



DDCtech

°C Temperatur % Feuchte CO² Luftqualität Pa Druck

D-CO2.....

DUCT SENSOR FOR CARBON DIOXIDE MEASUREMENTS



Made in Germany

Application

Our D-CO2 records the ambient air's CO₂ concentration in air ducts of air-conditioning systems. The D-CO2 converts the values measured in the ranges of optionally 0-2000 ppm or 0-5000 ppm into a linear 0-10 V output signal. The CO₂ value is measured via the NDIR sensor, which is able to compensate possible pollution with the help of its 2-ray measuring principle. Optionally, our D-CO2 is available with an additional sensor for measuring temperature and humidity.

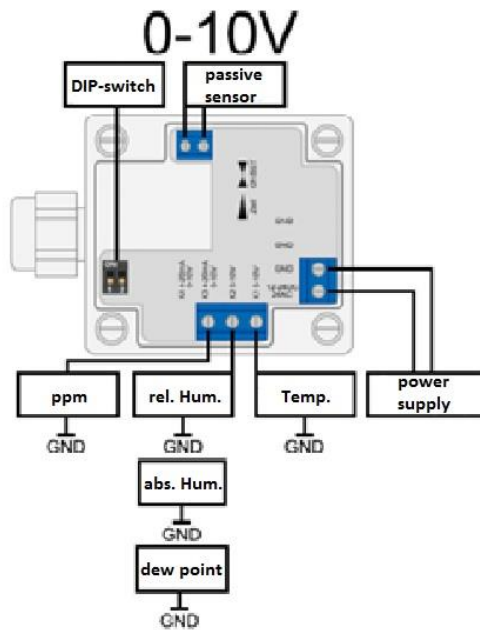
Type Selection

Article No.	Output PPM.	Output TEMP.	Output Hum.
D-CO2T-A-10	0-10V	-	-
D-CO2T-A-1010	0-10V	0-10V	-
D-CO2T-A-101010	0-10V	0-10V	0-10V
D-CO2T-A-20	4-20mA	-	-
D-CO2T-A-2020	4-20mA	4-20mA	-

Technical Data:

Power supply:	at 0...10V: 16...24VDC or 24V / AC
	at 4...20mA: 16...24V / DC
current consumption:	< 9 mA
electrical connection Anschluss:	screw clamps
output:	0...10 V or 4-20mA
sensor element:	NDIR-Sensor with auto calibration Dual Beam method
measurement range CO2:	0...2000 ppm
accuracy:	< ± (50ppm + 2% of value) at 25°C and 1013 mbar
optional:	
temperature:	0...10 V or 4-20mA / -30°C...+70°C
accuracy:	± 0,5°C
humidity:	0...10 V or 4-20mA / 0...100% r.F.
accuracy :	< ± 3% or 25°C between 10...90% r.F.
operation temperature:	-20°C...+50°C
humidity:	10...95% r.F.
protection class:	IP65 (case)
case:	plastic housing
mounting material (included):	mounting flange

Electrical Connection



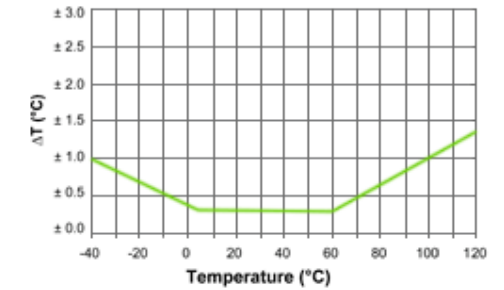
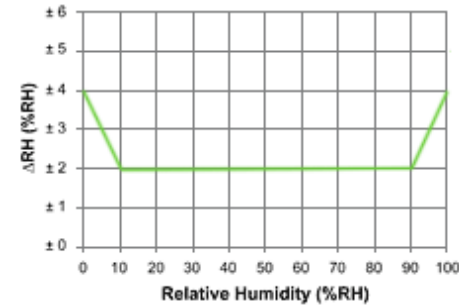
Notes:

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.

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accuracy



DIP-Switch

- ON** Relative Humidity (0-100%):
P 1 = Off
P 2 = Off
- ON** Absolute Humidity (0-30g/m³):
P 1 = Off
P 2 = On
- ON** Dew Point (-50°C up to 100°C):
P 1 = On
P 2 = Off

General Information

- Installation of the equipment must be performed by qualified personnel.
- The units may be connected with the power off.
- The safety of the VDE, the states, the TÜV and the local energy supply company must be observed.
- The EMC guidelines must be observed. It can be used shielded connecting lines, laying parallel with current-carrying.
- Lines should be avoided.
- The operating near devices that do not comply with EMC directives may adversely affect the operation of the equipment.
- The buyer is responsible for ensuring compliance with the applicable building and safety guidelines.
- This product should not be used for safety-related tasks, such as for the protection of persons and emergency stop switch on equipment.
- Improper use of any defects and damages are excluded from the warranty and liability.
- Consequential damages caused by a fault in this device are excluded from warranty or liability.
- It Only the technical data and connecting conditions of installation and operating instructions supplied with the instrument. Changes are always possible in terms of technical progress and the improvement of the products.
- Changes of the device by the user, all warranty claims.