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MB– Systemtechnik
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Datasheet: CO$_2$ - Sensor housing CO$_2$ –F 300

Description

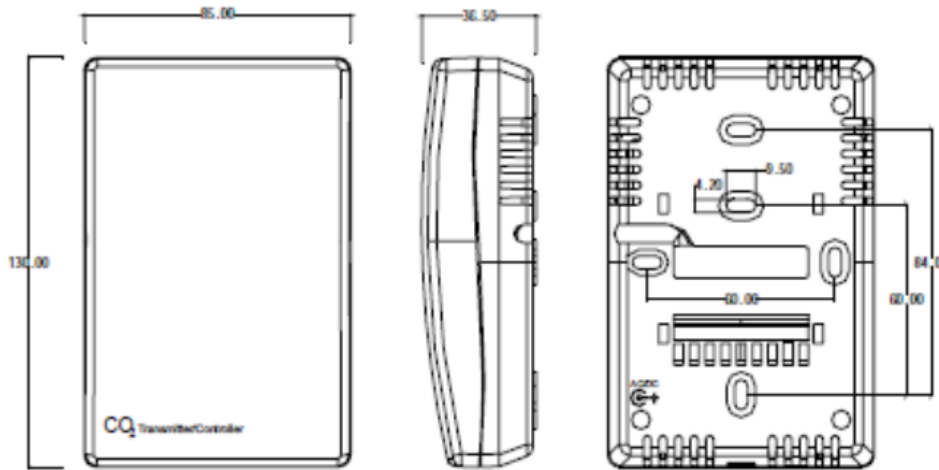The CO2 F300 combination sensor is used to record CO2 concentrations, room temperature and relative humidity.
The microprocessor-controlled CO2 measuring device detects the CO2 content of the room air in the range from 0 to 5,000 ppm.
The CO2 sensor with infrared sensor has a service life of 15 years. As standard, the sensor has the output signals 0-15V and 4-20mA, which can be set by means of jumpers.
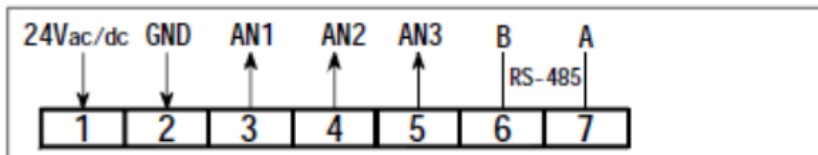
Technical Data	CO$_2$ –F 300 (Wall mounting)
Measuring method	Dual Wavelength NDIR
Measuring area	0-5.000ppm
Measurement accuracy	+/- 40 ppm + 3% from the measured value 22°C +72% rH
responsiveness	<5 minutes for 90% step change
Measuring interval	2 sec
Temperature depence	0,2%/°C
Temperature Sensor	NTC 5K thermistance
Temperature area	0-50°C/ ± 0,5°C bei 25°C
Humidity sensor	HS Serie capactiver Sensor
Humit´dity measuring range	0-100% RH
Humidity measurement deviation	± 3% RH (40% RH~60%, 25°C)
Temperature calibration	Self compensation
Warm-up time	48 hours for initial commissioning 5 minutes in all other cases
Power supply	24 V AC/DC (power supply unit not included in the scope of delivery)
Electrical connection	Terminal point or mains plug
Power consumption	1.8 W maximum, 1.2 W mean value
Output CO$_2$	3x analogue output
Temperature, Humidity	0-10 V (set), 4-20mA or 0-20mA, adjustable with jumper
Dimensions	130x85x36,5
Weight	210g
Mounting	Wall mounting or on flush-mounted box
Protection class	IP 30
technical modifications reserved	

CE RoHS

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Anschlussklemmen

	Connection	Function	Electrical description
1	24V ac(dc	Voltage +	24VAC/24VDC(+)
2	GND	Ground (-)	24VAC/24VDC(-)
3	OUT 3 CO2	Analogue Output (+)	0-10VDC linear 0-5.000ppm set 4-20mA linear 0-5.000ppm
4	OUT 2 Te,p	Analogue Output (+)	0-10 VDC linear 0-50°C set 4-20mA linear 0-50°C
5	OUT 1 RH	Analogue Output (+)	0-10 VDC linear 0-100% r.F set 4-20mA linear 0-100% r.H

Set analogue output:
The analogue outputs CO2, temperature and relative humidity are set to 0-10V at the factory. Subsequently, they can be set to 4-20mA or 0-20 mA.
Remove the sensor from the power supply
In the housing, set all jumpers S1 to S6 downwards, row designation I. All jumpers up, row designation V corresponds to 0-10 V output.
The jumper J1 positioned at the top left has no connection, corresponding to 0-10 V or 0-20mA outputs. If it is closed, the output signals are 2-10 V or 4-20 mA. The other jumpers J2 to J4 are only for manufacturing purposes.

Öffnen des Gehäuses