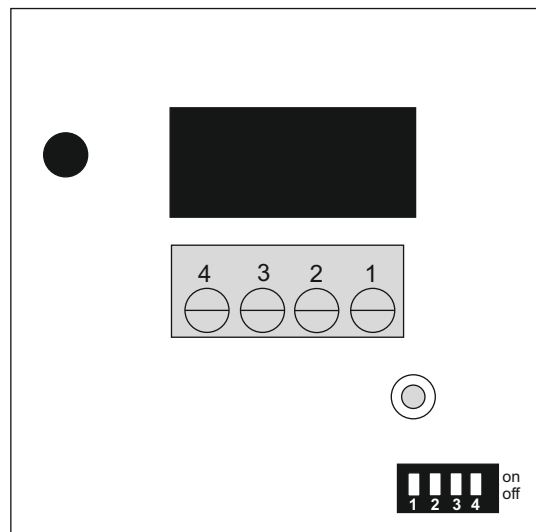


CO₂, Temp. & Humidity Sensor Modbus / ES 1099



Clamps:
 1: MOD-BUS A
 2: MOD-BUS B
 3: GND / 0Volt
 4: 12-24V DC

MOD-BUS interface. Setting by DIP switches.

DP2	DP3	DP4	Node-ID
0	0	0	101
1	0	0	102
0	1	0	103
1	1	0	104
0	0	1	105
1	0	1	106
0	1	1	4
1	1	1	5

Available Data:

Register	Description	Formatting
30000	CO ₂ Level (0-2000ppm)	0 = 0ppm, 2000 = 2000ppm
30001	Temperature (0.0-50.0°C)	0 = 0,0°C, 500 = 50,0°C
30002	RF (0-100%)	0 = 0%, 100 = 100%
30003	Intern PCB temp. 0.0-50.0°C)	0 = 0,0°C, 500 = 50,0°C
30004	Firmware Version	

Dip switch DP1 chooses the baud rate for ES1099

DP1	Baud rate
0	9600
1	19200

Other MOD-BUS Settings

Mode: RTU
 Data bits: 8
 Parity: Even
 Stop bit(s): 1

Technical data:

Supply: 12 - 24V DC
 Power Consumption: 12V: 100mA - 24V: 50mA
 Operating Temperature: 0°C - 45°C accuracy 2%
 Operating RF: 11-89% accuracy 3%
 Operating CO₂: 400-2000ppm accuracy 3% (40ppm)
 Bus type: MODBUS
 Enclosure: IP 30
 Dimension: 70x70x30mm

Description:

Combination Modbus Sensor available in 2 versions. Product number 48401 is a Modbus combination sensor, which measures CO₂, temperature and humidity. Product number 48402 is also a Modbus combination sensor. However, this sensor is only measuring temperature and humidity - not CO₂. The latter meaning that if product t 48402 is chosen the register 3000 CO₂ Level will always be 0.

For instructions on connecting MODBUS please refer to www.modbus.org

Product number 48401 Modbus combination sensor with CO₂ measurement uses the widely used ABC algorithm, which ensures long life without calibration. Only the room cannot be used constantly, but must regularly get sufficient airflow to lower the CO₂ to fresh air level.

Adjustment:

No adjustments available. However sensor must be set-up using the dip switches, see diagram.

Mounting:

To be mounted directly on a wall or a mounting socket for wall.

Drawing: 950-206889 CO2Humidity-Humidity-SensorModbus_ES1099
 Version / Rev. 1.2
 Date: 10/6-20
 Drawn by: BSJ/df
 Manufactured by: **LS Control A/S**
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