

OPERATING INSTRUCTION

GMF 432 E RS485-BUS-Sensor

CO - SENSOR with electrochemical Sensor



GMF 432 E

Important!

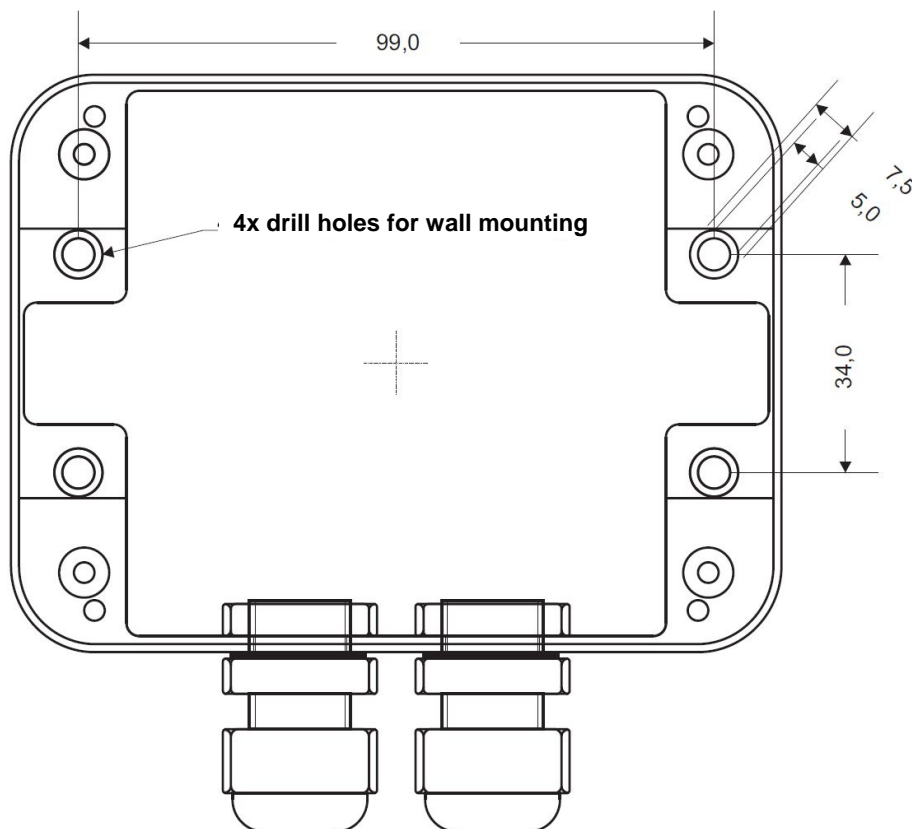
The handling of the device requires the knowledge and observance of this manual.

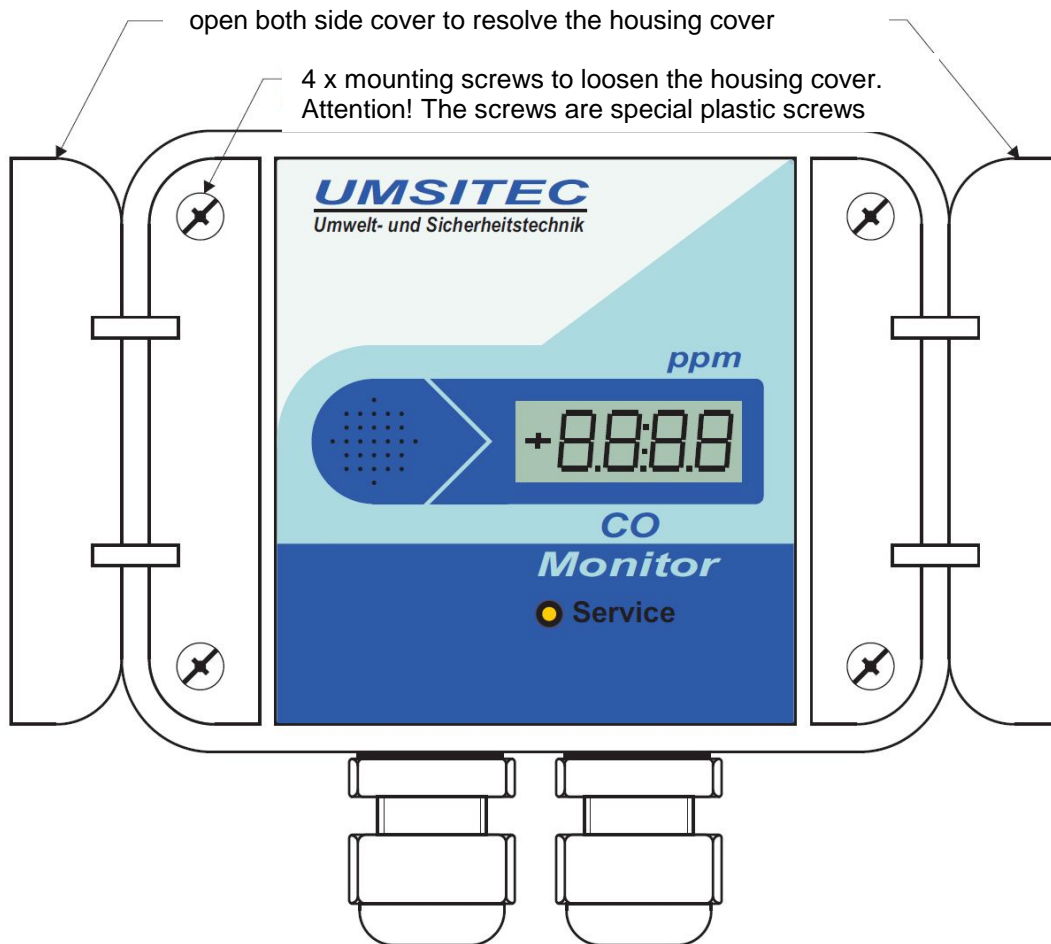
Sensor Technology

The sensor GMF 432 IR is powered by infrared sensors.
The sensor signal is processed digitally and is available as information for reading via the RS 485 BUS and analysis via a BUS center.

Mounting

The sensor is suitable for surface wall mounting





Sensor connection

The gas sensor GMF 432 E can be operated with an unregulated DC voltage of 12-35V.

For connection, the shielded cable JY (St) 2x2x0.8 mm is used.

The wire colors can be assigned as follows:

Terminal 1: +24V	=> red
Terminal 2: RS485 Terminal A	=> white
Terminal 3: RS485 Terminal B	=> yellow
Terminal 4: 0V	=> black
Terminal 5: shield cable bushing	=> drain wire

The drain wire in the cable is connected to the shield.

CAUTION: When installing, make sure that bare wire and the bare drain wire be covered with insulation and can not come into contact with the circuit.

Maintenance

The sensor is preset at the factory with calibration gas.
Regular maintenance is required to obtain its functionality.

Maintenance aids

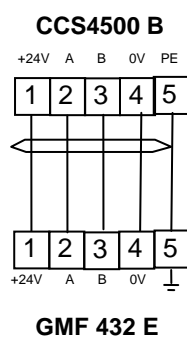
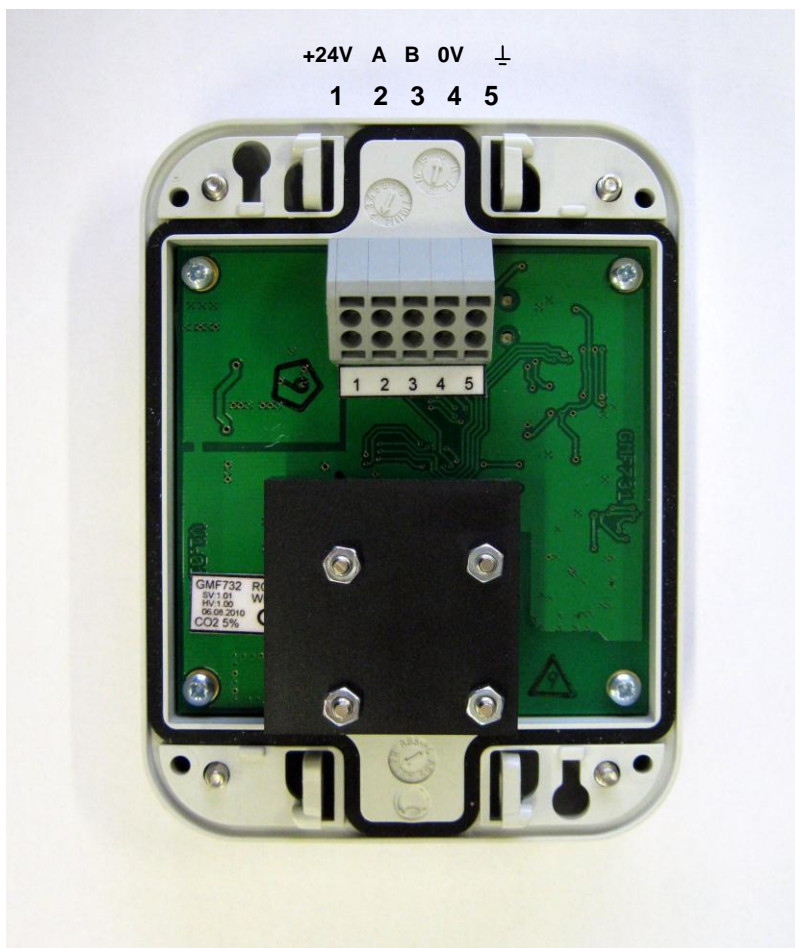
Operating element "Service Handy 3"
Test gas ((known CO-concentration)
Gas feed adapter
Flow controller, flow meter 0-1 liters / min

Justage

The sensor can be calibrated using any known gas concentration:

1. For this, the Service Handy 3 is logged on the sensor.
2. Use test gas adapter for feeding test gas (about. 0,2 l/min)
3. Via Service-Handy 3 the sensor is calibrated to the gas concentration

Connecting diagram



Specifications: GMF 432 E

Suitability:	residential and office areas
Measuring principle:	electrochemical
Gas type:	CO
Measuring range:	CO: 0..300 ppm
Accuracy:	<+-1% of measuring range
Response time T90:	< 30 sec
Temperature range:	-20..+55°C (ambient)
Humidity range:	5..95% RH
Pressure range:	700-1300 hPa
Housing:	glass reinforced plastic, LxWxD: 118x120x50mm
Protection type:	housing: IP66, sensor: IP44
Gas entry:	diffusion
Output signal:	digital via RS 485 BUS
Life time:	>5 years (warranty: 2 years)
CE-conformity:	emission: residential area, immunity: industrial area
Weight:	260g
Supply:	12..36 V DC
Connection line:	up to 1200 m: JY (ST) Y 2x2x0,8 mm ²
Current consumption:	9,3mA @ 12 V DC 8,4mA @ 14 V DC 7,7mA @ 16 V DC 7,3mA @ 18 V DC 6,9mA @ 20 V DC 6,7mA @ 22 V DC 6,4mA @ 24 V DC 6,3mA @ 26 V DC 6,2mA @ 28 V DC 6,1mA @ 30 V DC

Commissioning

The setting of the sensor must be checked during commissioning by a test gas feeding.

Maintenance

Maintenance is required at certain intervals for maintaining the function security. The maintenance interval can be seen from the test sticker on the controller. There is a maximum of 1 year.

Decommissioning

If the sensor is for longer than 4 weeks out of operation, it must be checked after a week uptime using test gas or be recalibrated.

Status January 2011

Subject to technical changes