

USB

chargeable  
battery

## Temperature, humidity & CO<sub>2</sub> logger E2228L



### Features

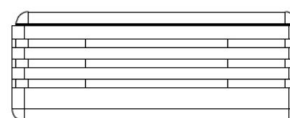
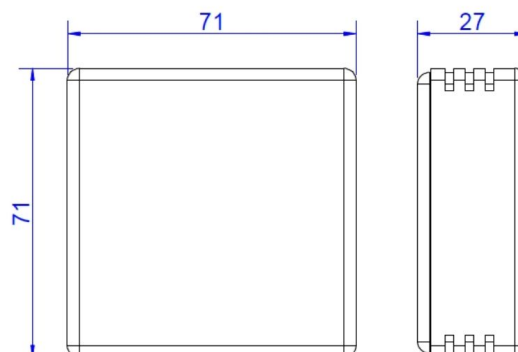
- Logging of temperature, humidity and CO<sub>2</sub>
- Ultra-low power consumption
- Memory for ca 150 000 (3×50000) measurements
- Wall or desk mounting
- USB interface

### Description

Air temperature, relative humidity and CO<sub>2</sub> logger E2228L is an easy to use device intended for operating in commercial, residential and public indoor spaces.

The device provides autonomous logging of air temperature, relative humidity and carbon dioxide concentration in a nonaggressive atmosphere.

The logger uses the latest achievements in digital humidity and temperature sensing and low-power NDIR CO<sub>2</sub> sensing technologies, providing excellent accuracy and reliability and unique long-term portable operation.



### Specifications

Ranges	0...5000 ppm CO <sub>2</sub> , 0...100 %RH, -10...+50 °C
Accuracy	CO <sub>2</sub> : ± (50 ppm + 3% of reading) In the range of 300~5000 ppm; RH: ±2,5 %; Temperature: ±0.3 °C
Logger internal memory	ca 150 000 (3×50000) measurements
Logging interval	Adjustable from 20 s to 12 hours
Operating conditions	Indoor spaces, dry rooms, -10...+50 °C
Power	Rechargeable 18650 battery
Enclosure	slotted white plastic
Dimensions	71×71×27 mm
PC interface	Mini-USB





# Air Quality Wireless Data Logger Panel E2230



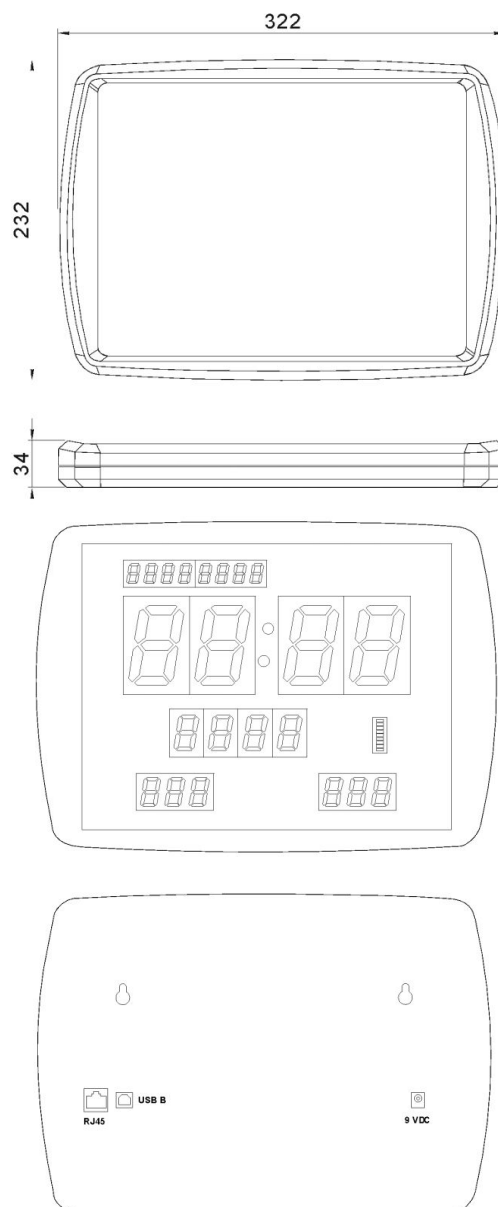
## Features

- Ambient temperature, relative humidity and CO<sub>2</sub>
- Real time clock and calendar
- Large bright LED display
- Datalogging and wireless connectivity functions
- Elegant slim wall-mount panel design

## Specifications

Measured parameters	Temperature, Humidity, CO2 level
Additional features	Clock, Calendar
Datalogging	10 s ... 1 h measurement interval, 16000 datasets memory, Wireless data transmission and time synchronization
Sensors	Digital RH and T sensors,
Measurement range	0...95 %RH, 0...+50 °C, 400...5 000 ppm CO <sub>2</sub>
Resolution	0,1% RH / 0,1 °C / 1 ppm CO <sub>2</sub>
Accuracy	±2,5% RH / ±0,3 °C / ±50 ppm CO <sub>2</sub>
Response time	~15 seconds
Power supply	9VDC, 90...265 VAC adapter
Power consumption	< 6 W
Digital interfaces	USB, RS485
Wireless interface	IEEE 802.15.4 Zigbee 2,4 GHz
Enclosure	Black ABS, wall mount,
protection class	IP40
Dimensions	H232 × W322 × D34 mm
Display	7-segment LED
Symbol height	Time - 58 mm Date - 14 mm CO <sub>2</sub> - 25 mm T, RH - 20 mm
Operating environment	Dry indoor spaces
Operating conditions	0...+50 °C, 0...95 %RH non-condensing

## Dimensions



Ask for other versions or custom designed products

## AIR QUALITY MONITOR E2250

### FEATURES

- CO<sub>2</sub>, temperature and humidity measurement
- Real time monitoring
- 5 V micro-USB charging
- 1600 mAh battery
- 3 LED indicators
- Sound alarm



### SPECIFICATIONS

Power source	Lithium battery with 1600 mAh capacity
Sensors	Digital RH and temperature sensor Optical (NDIR) sensor for CO <sub>2</sub>
Measurement range	- temperature -10...+50 °C - humidity 20...85 %RH - CO <sub>2</sub> 400...5000 ppm
Resolution	1 ppm / 1 °C / 1 %RH
Accuracy	±50 ppm CO <sub>2</sub> ± 5% reading value / ±1 °C / ±4 %RH
Sampling time	1,5 s
Battery charging	Via micro-USB
Operating conditions	-10...+60 °C
Screen brightness	6 levels
Dimensions	70 x 80 x 35 mm
LED indicators	Green (good) - 400...1000 ppm Orange (normal) - 1001...2000 ppm Red (poor) - 2001...5000 ppm
Sound alarm	Triggered from 1001 ppm and further rising of CO <sub>2</sub> concentration

\* ABC (Automatic Background Calibration) is based on 24-hour minimum concentration of CO<sub>2</sub>



# Carbon Dioxide Detector-Transmitter E2608-CO2



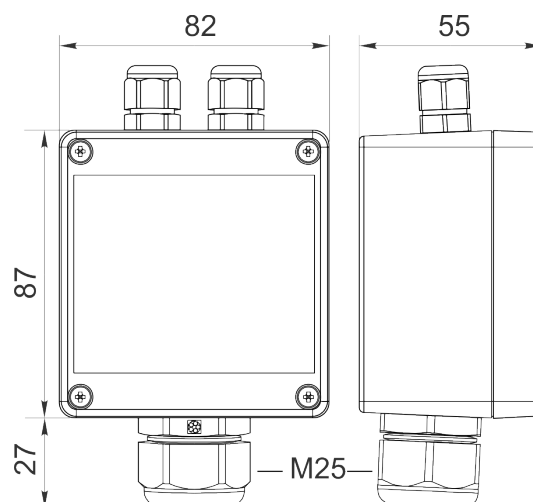
## Features

- Wall-mount or duct-mount version
- Industrial IP65 housing
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Two relays for alarm / ventilation control
- Attached or remote sensor

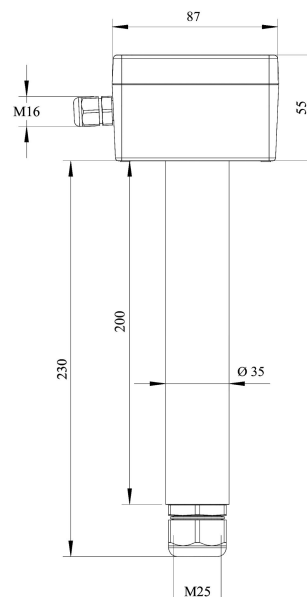
## Specifications

Calibration	Carbon dioxide CO <sub>2</sub>
Sensor type	Photoacoustic or Dual beam NDIR
Sampling method	Diffusion
Typical detection range	0...10 000 ppm (ordering code 10K) 0...40 000 ppm (ordering code 40K) 0...5% vol (ordering code 50KN) Up to 100% CO <sub>2</sub> on request
Resolution / digital unit	1 ppm for 10K 10 ppm for 40K 0.2% FS for 50KN
Response time	T60 ≤ 60 s for 10K/40K T50 ≤ 20 s; T90 ≤ 60 s for 50KN
Signal update	Every 5 seconds for 10K/40K Every 1 second for 50KN
Sensor lifetime	~ 10 years for 10K/40K ~ 5 years for 50KN
Maintenance interval	No field recalibration if ABC algorithm is enabled for 10K/40K 12 months for 50KN
Self-diagnostics	Full functionality check at start-up
Warm-up time	≤ 1 min
Power supply	11...30 VDC (default), 24 VAC or 90...265 VAC as options
Power consumption	< 2 VA
Digital interface	RS485, Modbus RTU protocol
Analog outputs	2 × 4-20 mA / 0-10 V, user settable
Output scale width	Recommended: 20-100% of the range; > 10 × resolution in any case
Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	Determined by user within 5-95% of the range
Enclosure	Light beige ABS plastic, wall mount, protection class IP65

## Wall mount version



## Duct mount version



Ask for other versions or custom designed products

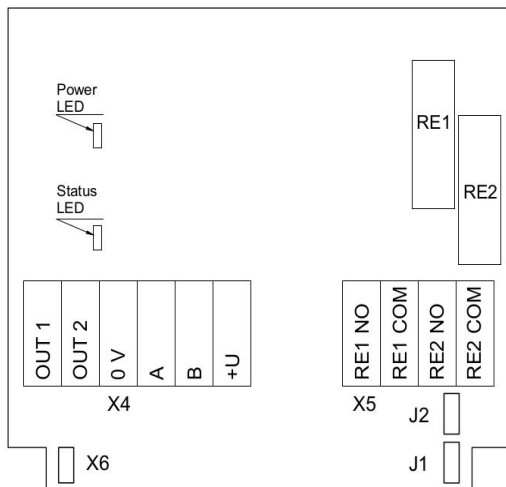


Dimensions	H87 × W82 × D55 mm
Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m
Operating environment	Industrial indoor and outdoor locations
Operating conditions	-40...+60 °C, 0...100 %RH; 0,9...1,1 atm; Explosion-safe areas; Non-aggressive atmosphere

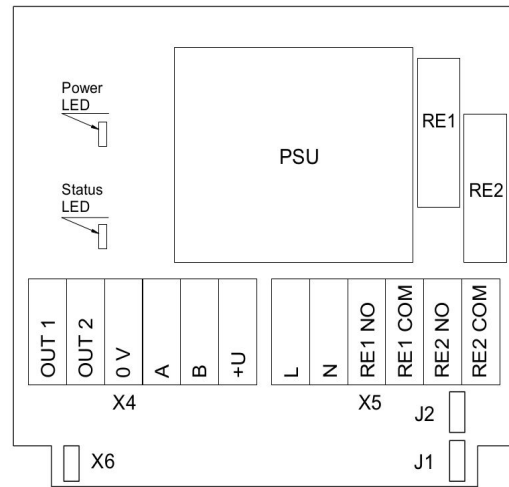
**Jumpers**

<b>J1</b>	OUT1 type (open: 4-20 mA; closed 0-10 V)
<b>J2</b>	OUT2 type (open: 4-20 mA; closed 0-10 V)
<b>X6</b>	Reset Modbus network parameters to default
<b>X4 terminals</b>	
<b>OUT1</b>	4-20 mA / 0-10 V output
<b>OUT2</b>	4-20 mA / 0-10 V output
<b>0V</b>	0 V / 24 VAC Neutral (optional)
<b>A</b>	RS485 A / Data +
<b>B</b>	RS485 B / Data -
<b>+U</b>	+24 VDC / 24 VAC Phase (optional)
<b>X5 terminals (optional)</b>	
<b>L</b>	90...265 VAC Phase
<b>N</b>	90...265 VAC Neutral
<b>RE1 NO</b>	Relay 1, normally open terminal
<b>RE1 COM</b>	Relay 1, common terminal
<b>RE2 NO</b>	Relay 2, normally open terminal
<b>RE2 COM</b>	Relay 2, common terminal

**Connection diagrams**

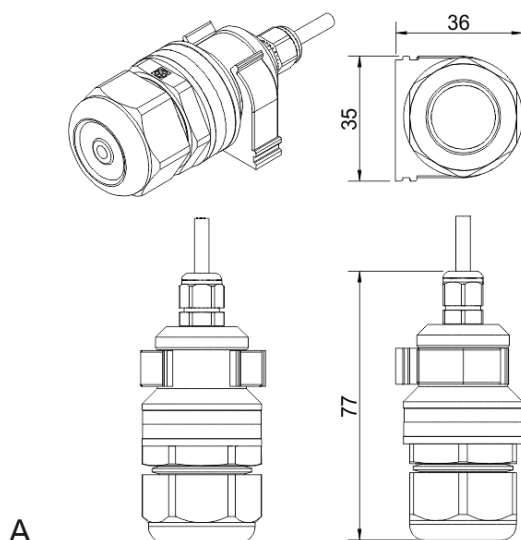


Version without PSU



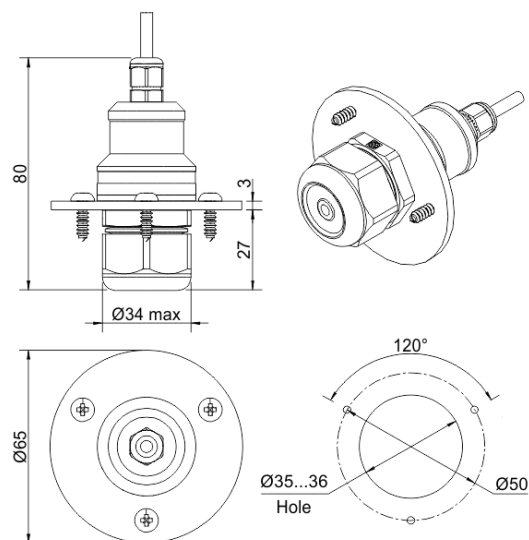
Version with PSU

**Remote probe**



A

Wall mount remote probe with fixing clamp (default version)

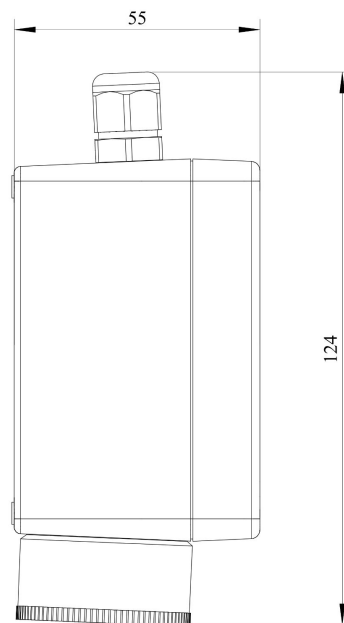
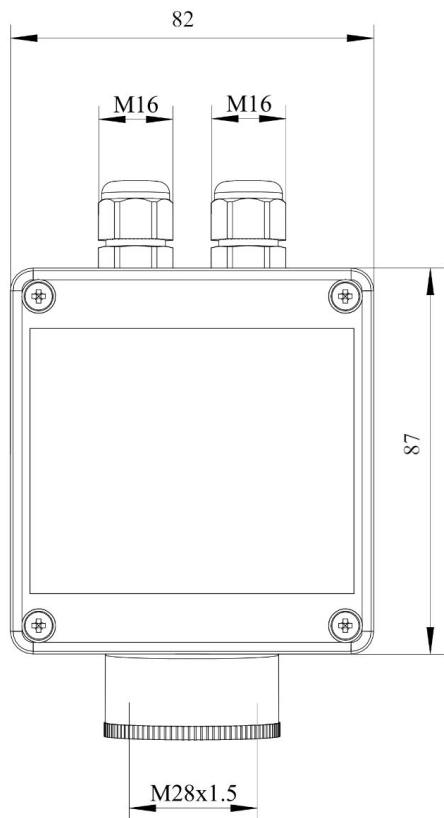


B

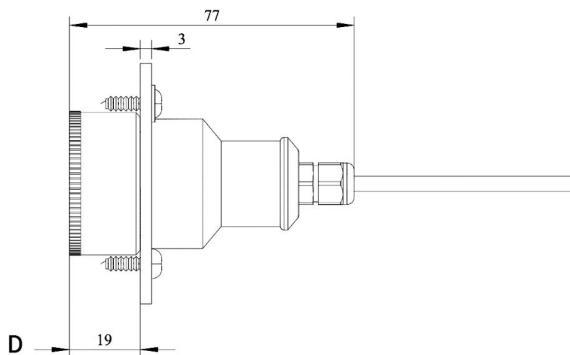
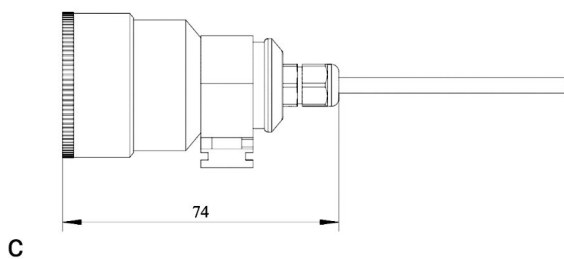
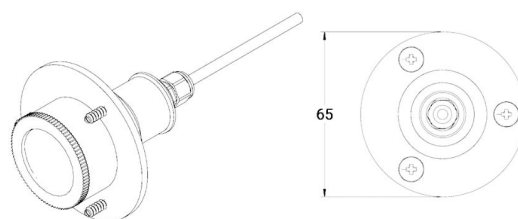
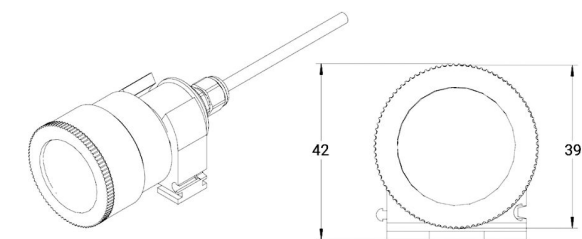
Remote probe with rubber flange and three self-tapping screws (on request)



### With 50KN sensor dimensions



### 50KN sensor Remote probe



Wall mount remote probe with fixing clamp (default version)

Remote probe with rubber flange and three self-tapping screws (on request)





# Carbon Dioxide Transmitter E2618-CO2



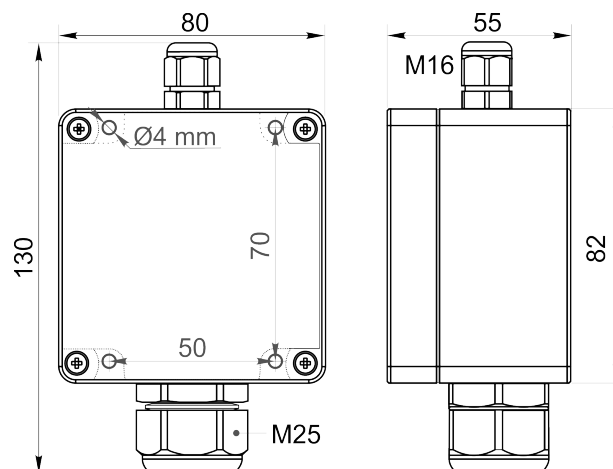
## Features

- Wall-mount or duct-mount version
- Industrial IP65 housing
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Attached or remote sensor

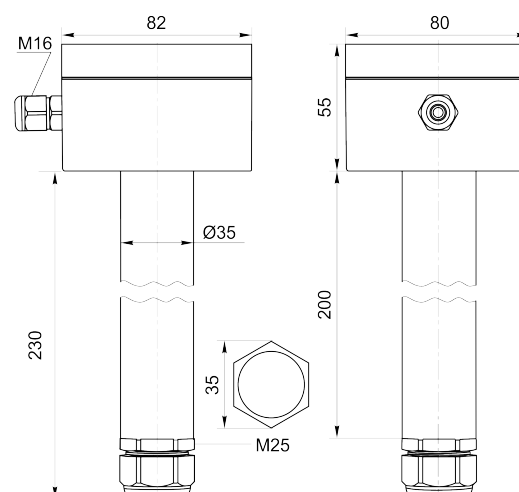
## Specifications

Calibration	Carbon dioxide CO <sub>2</sub>
Sensor type	Photoacoustic or Dual beam NDIR
Sampling method	Diffusion
Typical detection range	0...10 000 ppm (ordering code 10K) 0...40 000 ppm (ordering code 40K) 0...5% vol (ordering code 50KN) Up to 100% CO <sub>2</sub> on request
Resolution / digital unit	1 ppm for 10K 10 ppm for 40K 0.2% FS for 50KN
Response time	T60 ≤ 60 s for 10K/40K T50 ≤ 20 s; T90 ≤ 60 s for 50KN
Signal update	Every 5 seconds for 10K/40K Every 1 second for 50KN
Sensor lifetime	~ 10 years for 10K/40K ~ 5 years for 50KN
Maintenance interval	No field recalibration if ABC algorithm is enabled for 10K/40K 12 months for 50KN
Self-diagnostics	Full functionality check at start-up
Warm-up time	≤ 1 min
Power supply	11...30 VDC or 24 VAC
Power consumption	< 2 VA
Digital interface	RS485, Modbus RTU protocol
Analog outputs	2 × 4-20 mA / 0-10 V, user settable
Output scale width	Recommended: 20-100% of the range; > 10 × resolution in any case
Enclosure	Grey ABS plastic, wall mount, protection class IP65
Dimensions	H82 × W80 × D55 mm
Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m

### Wall mount version

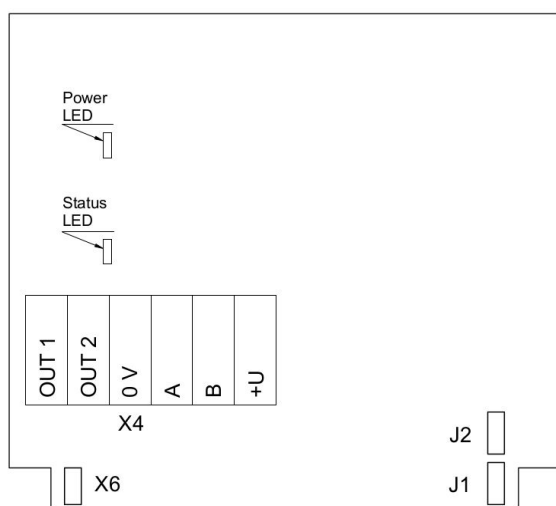


### Duct mount version



Operating environment	Industrial indoor and outdoor locations
Operating conditions	-40...+60 °C, 0...100 %RH; 0,9...1,1 atm; Explosion-safe areas; Non-aggressive atmosphere

## Connection diagram



PCB without PSU and relays

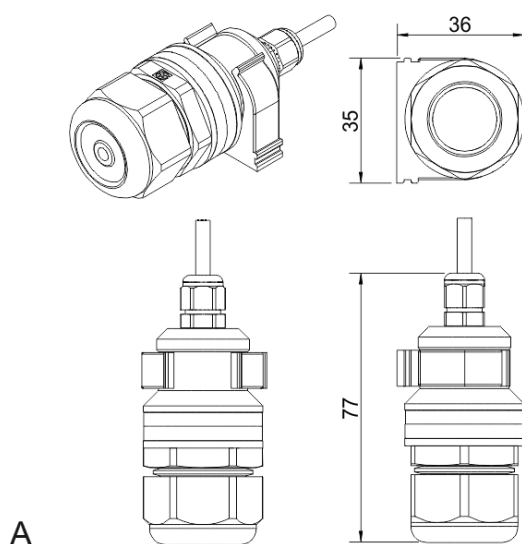
### Jumpers

<b>J1</b>	OUT1 type (open: 4-20 mA; closed 0-10 V)
<b>J2</b>	OUT2 type (open: 4-20 mA; closed 0-10 V)
<b>X6</b>	Reset Modbus network parameters to default

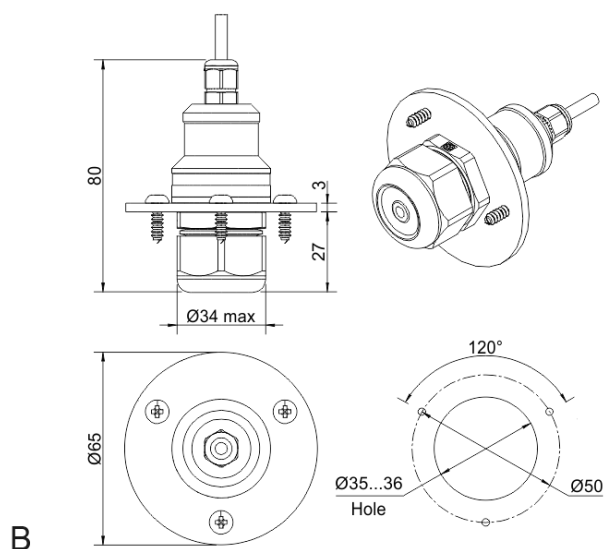
### X4 terminals

<b>OUT1</b>	4-20 mA / 0-10 V output
<b>OUT2</b>	4-20 mA / 0-10 V output
<b>0V</b>	0 V / 24 VAC Neutral (optional)
<b>A</b>	RS485 A / Data +
<b>B</b>	RS485 B / Data -
<b>+U</b>	+24 VDC / 24 VAC Phase (optional)

## Remote probe



Wall mount remote probe with fixing clamp (default version)

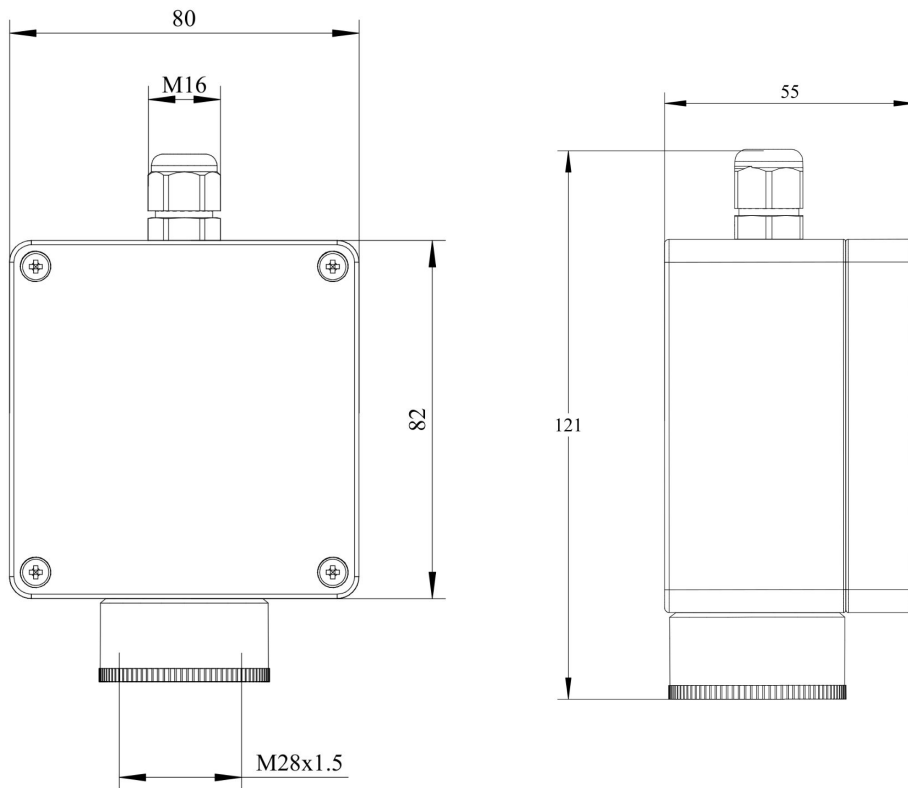


Remote probe with rubber flange and three self-tapping screws (on request)

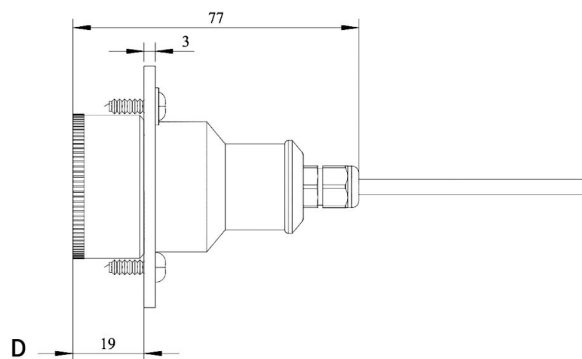
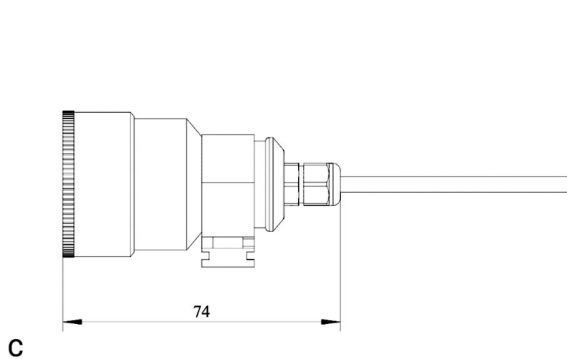
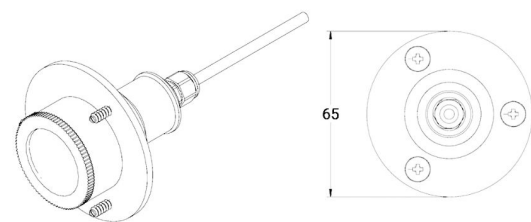
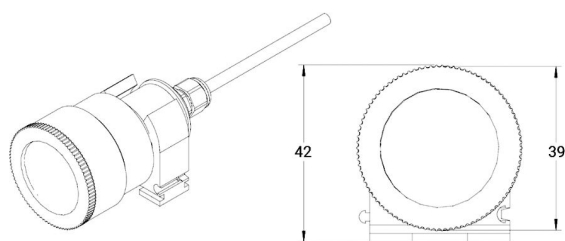




**With 50KN sensor dimensions**



**50KN sensor Remote probe**



Wall mount remote probe with fixing clamp (default version)

Remote probe with rubber flange and three self-tapping screws (on request)





# Carbon Dioxide Detector-Transmitter E2638-CO<sub>2</sub>



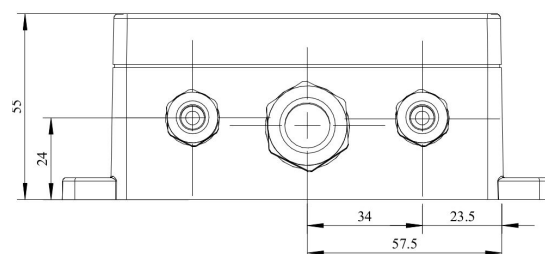
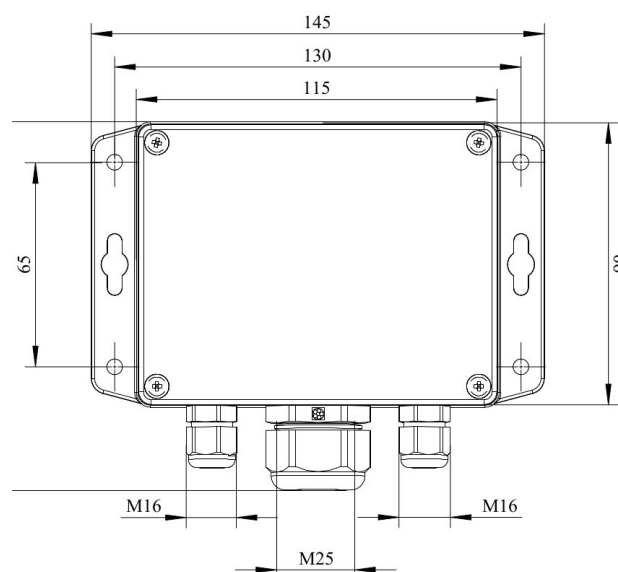
## Features

- Accurate and stable measurement
- Easy to install robust enclosure
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Relay option
- Attached or remote sensor
- LCD indicator option

## Specifications

Calibration	Carbon dioxide CO <sub>2</sub>
Sensor type	Photoacoustic or Dual beam NDIR
Sampling method	Diffusion
Typical detection range	0...10 000 ppm (ordering code 10K) 0...40 000 ppm (ordering code 40K) 0...5% vol (ordering code 50KN) Up to 100% CO <sub>2</sub> on request
Resolution / digital unit	1 ppm for 10K 10 ppm for 40K 0.2% FS for 50KN
Response time	T60 ≤ 60 s for 10K/40K T50 ≤ 20 s; T90 ≤ 60 s for 50KN
Signal update	Every 5 seconds for 10K/40K Every 1 second for 50KN
Sensor lifetime	~ 10 years for 10K/40K ~ 5 years for 50KN
Maintenance interval	No field recalibration if ABC algorithm is enabled for 10K/40K 12 months for 50KN
Self-diagnostics	Full functionality check at start-up
Warm-up time	≤ 1 min
Power supply	11...30 VDC 24 VAC or 90...265 VAC as options
Power consumption	< 2 VA
Digital interface	RS485, Modbus RTU protocol
Analog outputs	2 × 4-20 mA / 0-10 V, user settable
Output scale width	Recommended: 5-100% of the range; > 10 × resolution in any case
Enclosure	Grey ABS plastic, wall mount, protection class IP65
Dimensions	H90 × W145 × D50 mm (housing only) H140 with cable glands

## Dimensions



Operating environment	Industrial indoor and outdoor locations
Operating conditions	-40...+60 °C, 0...100 %RH; 0,9...1,1 atm; Explosion-safe areas; Non-aggressive atmosphere

## Version with LCD indicator



## Additional options

Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m
Self-test button	Triggers both relays simultaneously; push-button switch

### Relay outputs

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm set-points	Determined by user within 5-95% of the range

### Alarm signalling

Visual	Red and green LEDs
Acoustic	Buzzer 85 dB

### LCD indicator

Operating temperature	0...+50 °C
Display dimensions	72 × 36 mm
Number of digits	3.5 7-segment
Character height	14 mm
Other features	Backlight

**NOTE!** Only one analog output is available for a version with LCD.

**NOTE!** LCD and LEDs can not be chosen simultaneously.

## Connections table

### Jumpers

J1	OUT1 type (open: 4-20 mA; closed 0-10 V)
J2	OUT2 type (open: 4-20 mA; closed 0-10 V)
X6	Reset Modbus network parameters to default

### X4 terminals

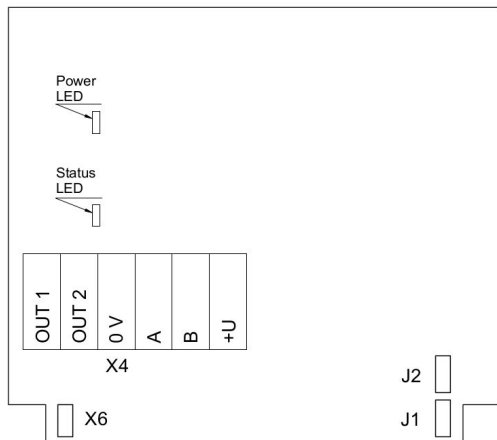
OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 24 VAC Phase (optional)

### X5 terminals (optional)

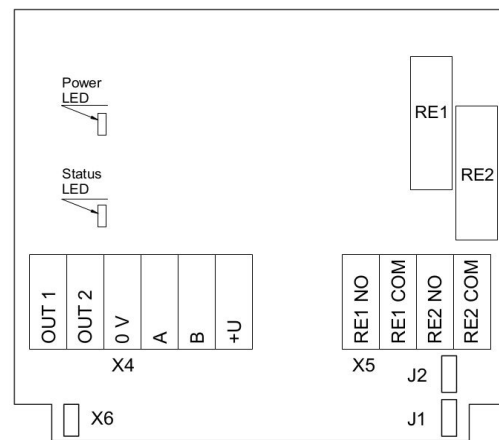
L	90...265 VAC Phase
N	90...265 VAC Neutral
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal



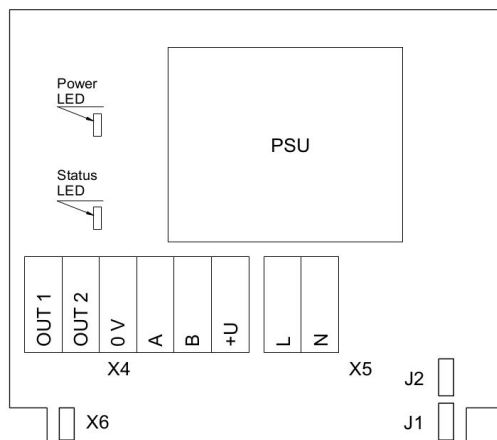
## Connection diagrams



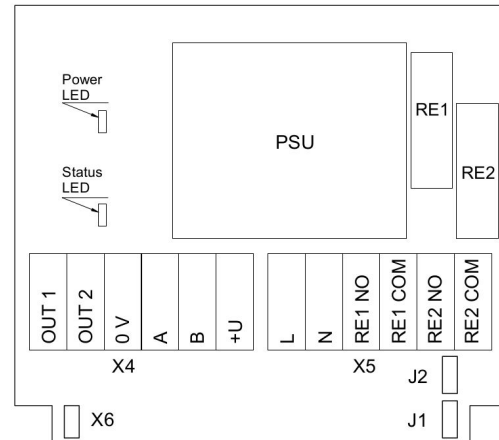
Version without PSU and relays



Version without PSU and with relays

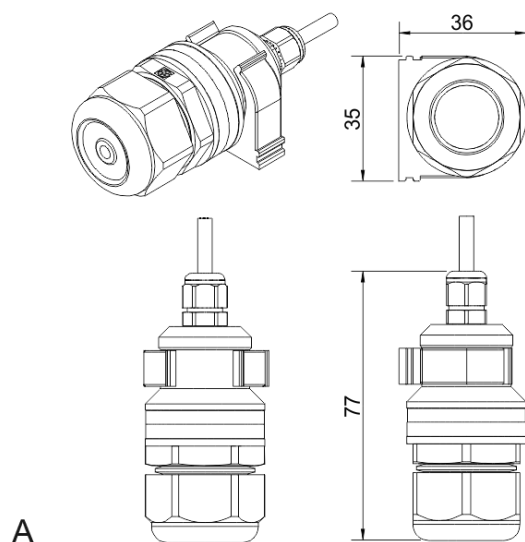


Version with PSU and without relays



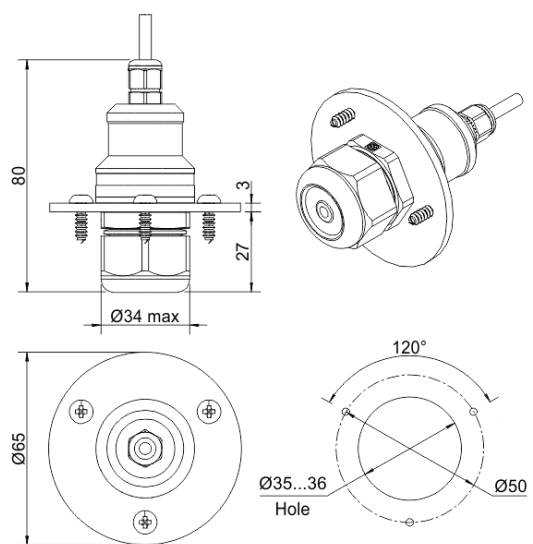
Version with PSU and relays

## Remote probe



A

Wall mount remote probe with fixing clamp (default version)

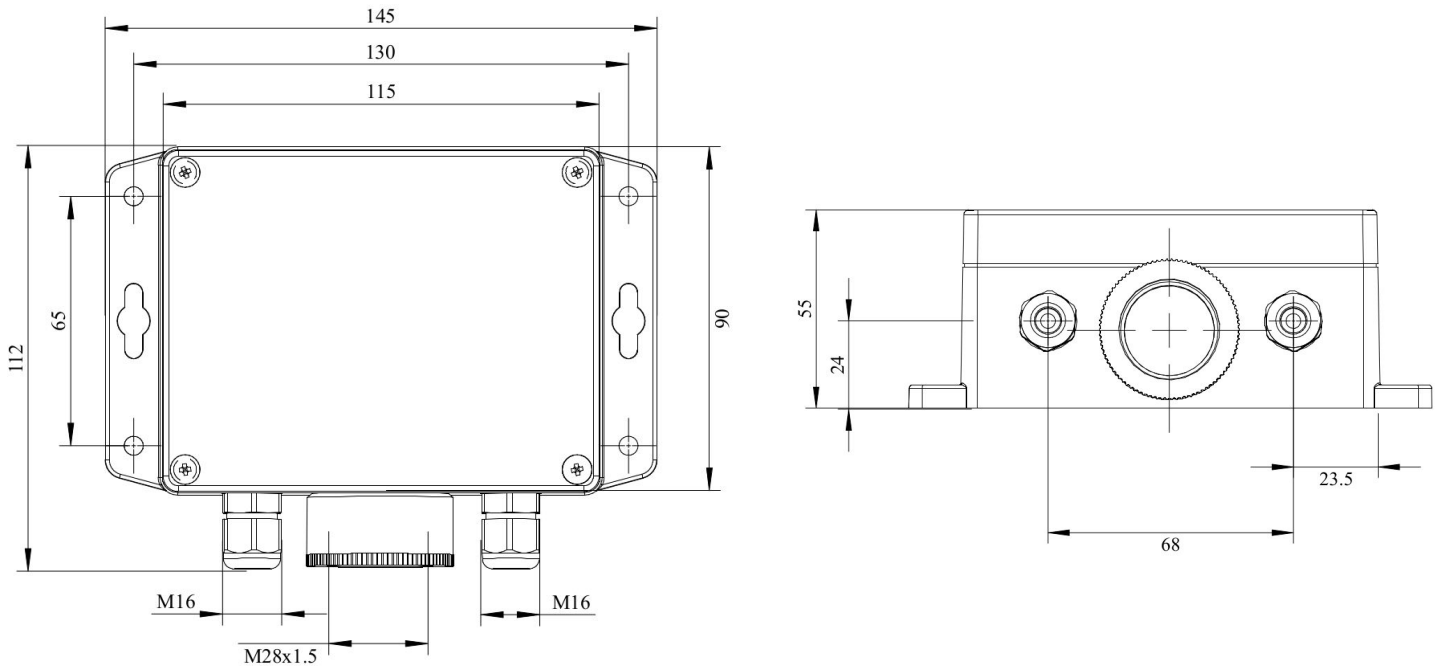


B

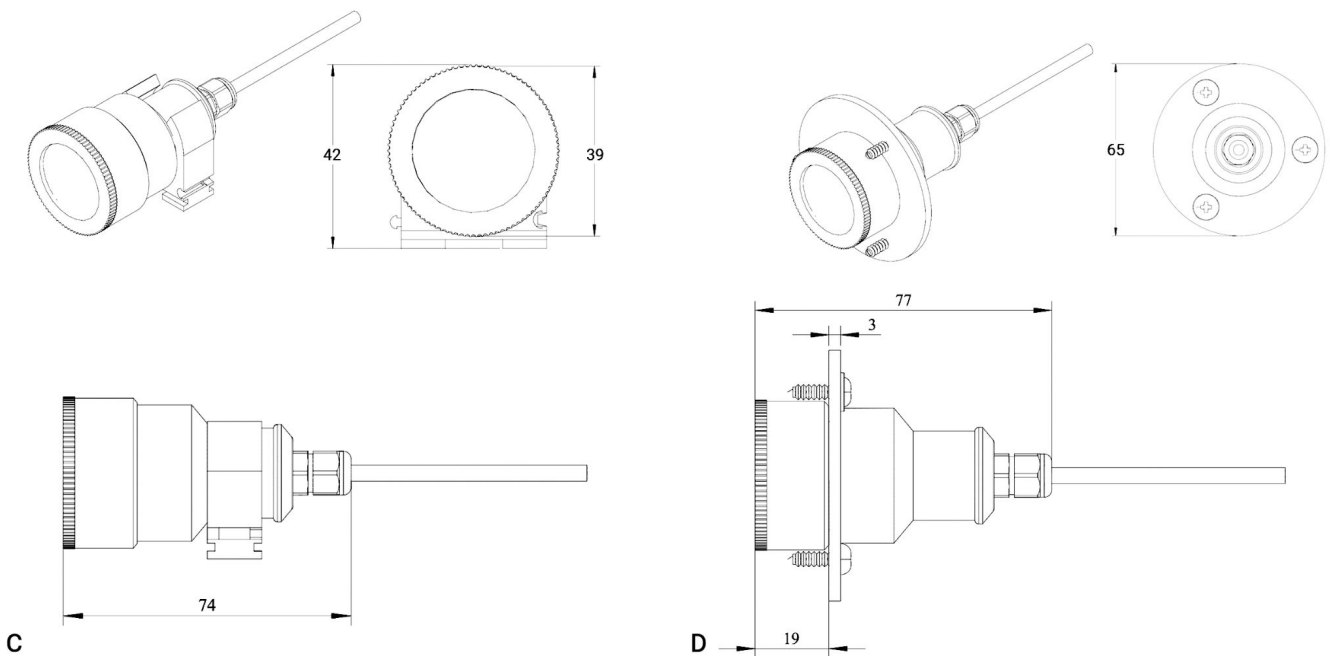
Remote probe with rubber flange and three self-tapping screws (on request)



**With 50KN sensor dimensions**



**50KN sensor Remote probe**



Wall mount remote probe with fixing clamp (default version)

Remote probe with rubber flange and three self-tapping screws (on request)





## Carbon Dioxide Detector-Transmitter E2648-CO<sub>2</sub>



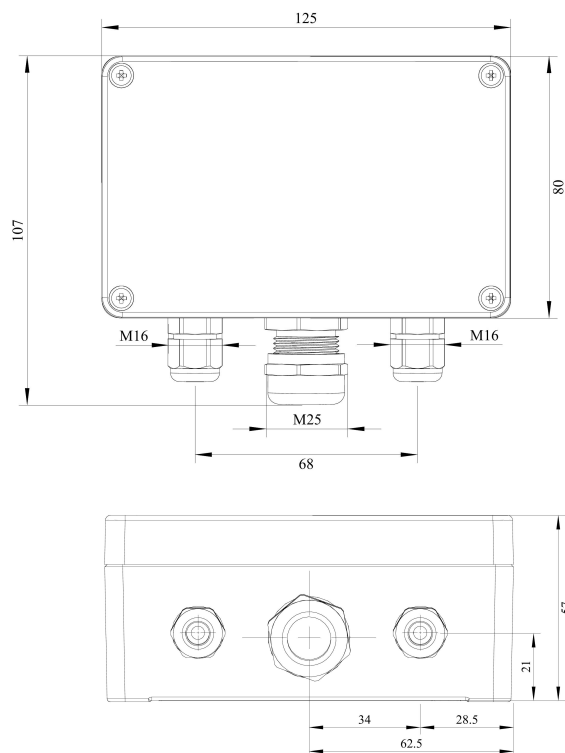
### Features

- Accurate and stable measurement
- Industrial IP66 wall mount housing
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Two relays for alarm / ventilation control (option)
- Attached or remote sensor

### Specifications

Calibration	Carbon dioxide CO <sub>2</sub>
Sensor type	Photoacoustic or Dual beam NDIR
Sampling method	Diffusion
Typical detection range	0...10 000 ppm (ordering code 10K) 0...40 000 ppm (ordering code 40K) 0...5% vol (ordering code 50KN) Up to 100% CO <sub>2</sub> on request
Resolution / digital unit	1 ppm for 10K 10 ppm for 40K 0.2% FS for 50KN
Response time	T60 ≤ 60 s for 10K/40K T50 ≤ 20 s; T90 ≤ 60 s for 50KN
Signal update	Every 5 seconds for 10K/40K Every 1 second for 50KN
Sensor lifetime	~ 10 years for 10K/40K ~ 5 years for 50KN
Maintenance interval	No field recalibration if ABC algorithm is enabled for 10K/40K 12 months for 50KN
Self-diagnostics	Full functionality check at start-up
Warm-up time	≤ 1 min
Power supply options	11...30 VDC, 24 VAC or 90...265 VAC
Power consumption	< 2 VA
Digital interface	RS485, Modbus RTU protocol
Analog outputs	2 × 4-20 mA / 0-10 V, user settable
Output scale width	Recommended: 20-100% of the range; > 10 × resolution in any case
Enclosure	Die-cast aluminium, wall mount, protection class IP66
Dimensions	H120 × W125 × D57 mm
Operating environment	Industrial indoor and outdoor locations
Operating conditions	-40...+60 °C, 0...100 %RH; 0,9...1,1 atm; Explosion-safe areas; Non-aggressive atmosphere

### Dimensions



**Relay option (ordering code R)**

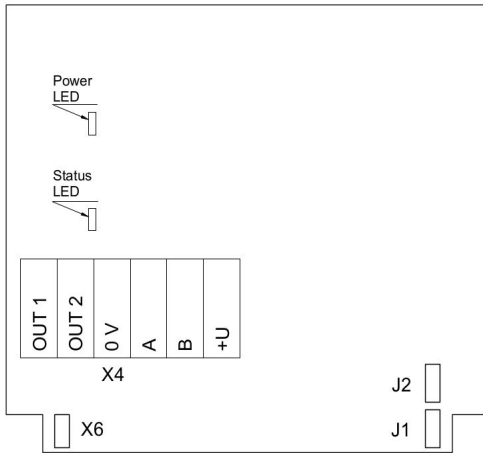
Output relays 2 × SPST relays (closing contact),  
250 VAC / 30 VDC, 5 A max

Default alarm setpoints Determined by user  
within 5-95% of the range

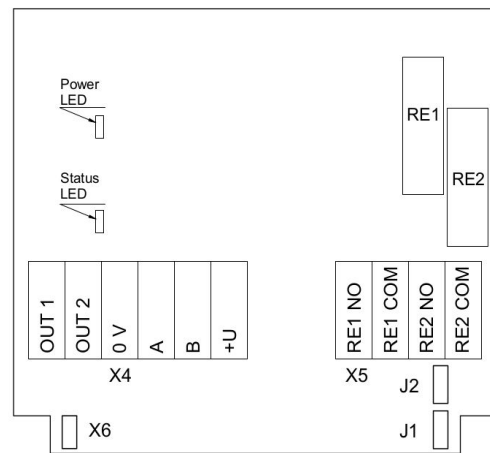
**Other options**

Remote sensor probe Protection IP65, shielded cable  
default cable length 3.0 m

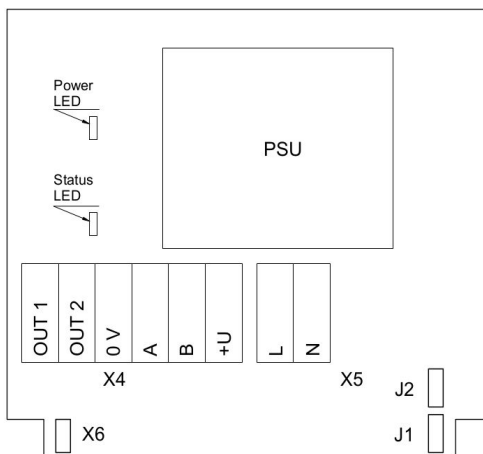
**Connection diagrams**



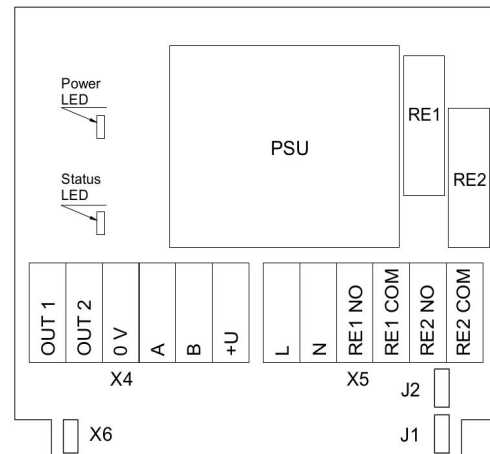
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays



**Jumpers**

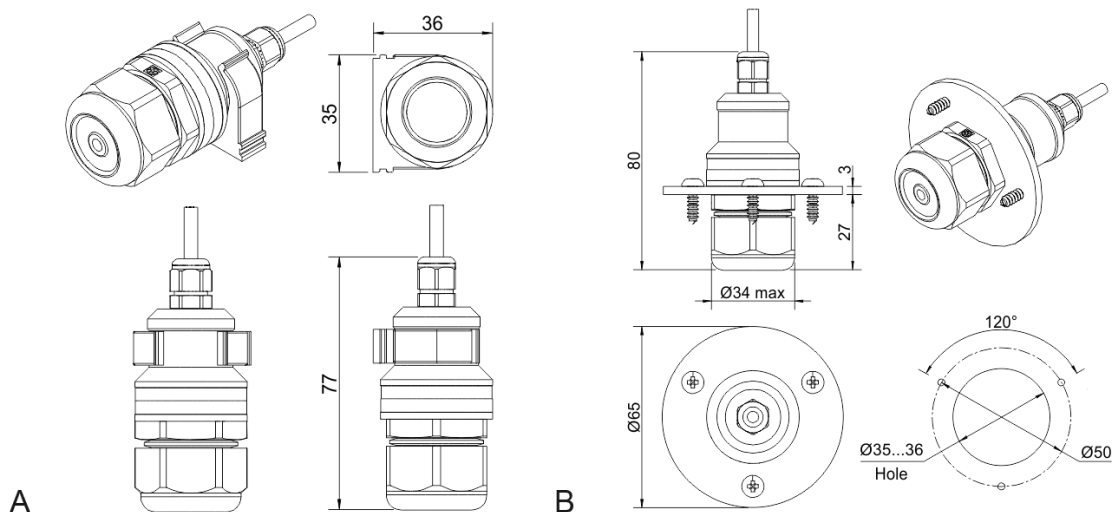
<b>J1</b>	OUT1 type (open: 4-20 mA; closed 0-10 V)
<b>J2</b>	OUT2 type (open: 4-20 mA; closed 0-10 V)
<b>X6</b>	Reset Modbus network parameters to default

**X4 terminals**

<b>OUT1</b>	4-20 mA / 0-10 V output
<b>OUT2</b>	4-20 mA / 0-10 V output
<b>0V</b>	0 V / 24 VAC Neutral (optional)
<b>A</b>	RS485 A / Data +
<b>B</b>	RS485 B / Data -
<b>+U</b>	+24 VDC / 24 VAC Phase (optional)

**X5 terminals (optional)**

<b>L</b>	90...265 VAC Phase
<b>N</b>	90...265 VAC Neutral
<b>RE1 NO</b>	Relay 1, normally open terminal
<b>RE1 COM</b>	Relay 1, common terminal
<b>RE2 NO</b>	Relay 2, normally open terminal
<b>RE2 COM</b>	Relay 2, common terminal

**Remote probe**

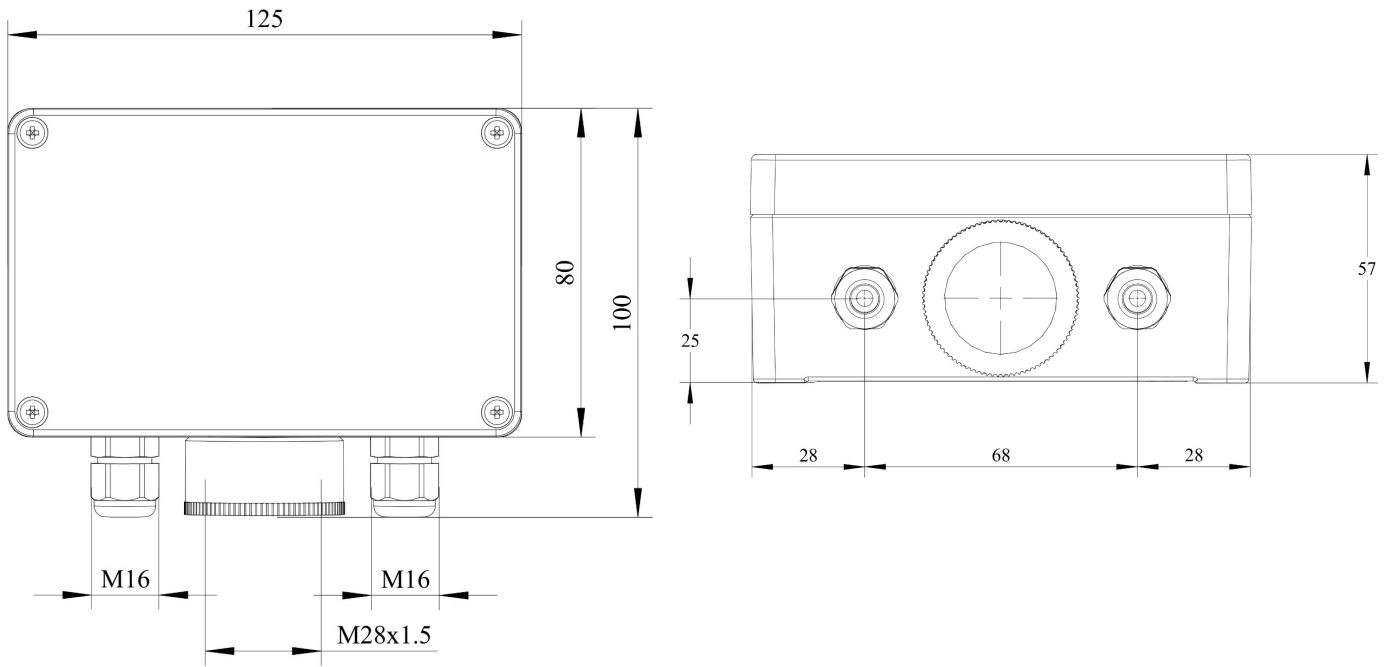
Wall mount remote probe with fixing clamp (default version)

Remote probe with rubber flange and three self-tapping screws (on request)

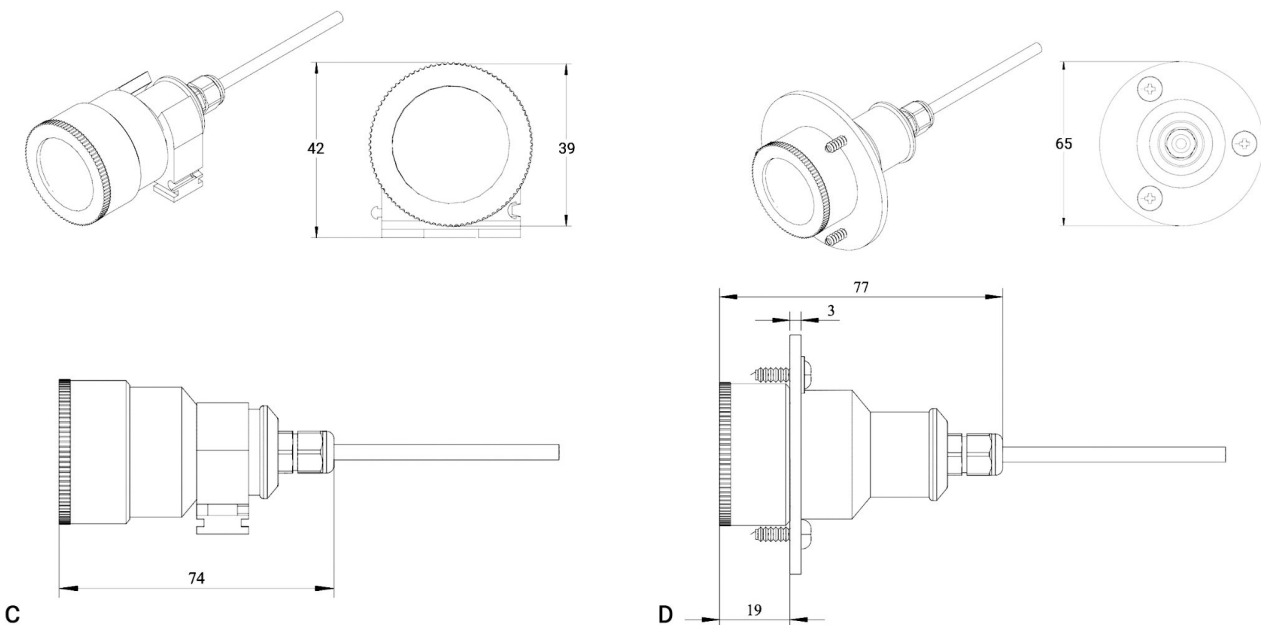




**With 50KN sensor dimensions**



**50KN sensor Remote probe**



Wall mount remote probe with fixing clamp (default version)

Remote probe with rubber flange and three self-tapping screws (on request)



# Flameproof Carbon Dioxide Detector-Transmitter E2658-CO2



## Features

- Wall mount robust flameproof metal enclosure
- Suitable for ATEX Zones 2 and 22
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Relay option

## Specifications

Calibration	Carbon dioxide CO <sub>2</sub>
Sensor type	Photoacoustic
Sampling method	Diffusion
Typical detection range	0...10 000 ppm (ordering code 10K) 0...40 000 ppm (ordering code 40K) Up to 100% CO <sub>2</sub> on request
Resolution / digital unit	1 ppm for 10K range 10 ppm for 40K range
Response time T60	≤ 60 s
Signal update	Every 5 seconds
Maintenance interval	No field recalibration if ABC algorithm is enabled for 10K/40K
Sensor lifetime	~ 10 years
Self-diagnostics	Full functionality check at start-up
Warm-up time	≤ 1 min
Power supply	11...30 VDC (default), 24 VAC or 90...265 VAC as options
Power consumption	< 2 VA
Digital interface	RS485, Modbus RTU protocol
Analog outputs	2 × 4-20 mA / 0-10 V, user settable
Output scale width	Recommended: 20-100% of the range; > 10 × resolution in any case
Enclosure	Grey die-cast aluminium, protection class IP66
Dimensions	H80 × W125 × D57 / H80 × W175 × D80 mm
Operating environment	Industrial indoor and outdoor locations
Operating conditions	-40...+60 °C, 0...100 %RH; 0,9...1,1 atm; Safe areas and ATEX Zones 2 and 22 Non-aggressive atmosphere
<b>Relay option (ordering code R)</b>	
Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	Determined by user within 5-95% of the range
<b>Other options</b>	
Ambient pressure compensation	In the range 0,5...2 bar of absolute pressure

## Approvals

### Enclosure:

ATEX / IECEx  
DEMKO 13 ATEX 1327771U  
 II 2 G Ex e IIC Gb  
 II 2 D Ex tb IIIC Db IP66

### Glands:

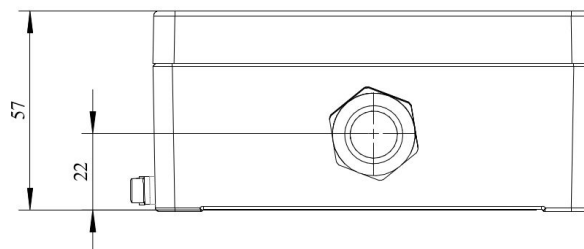
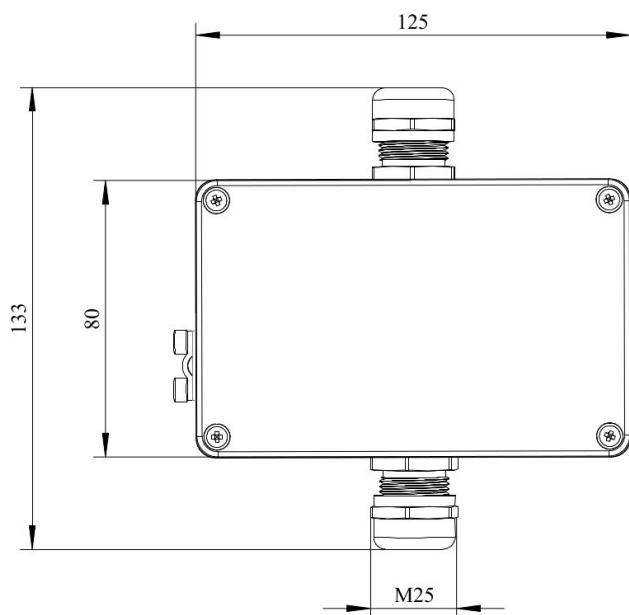
ATEX / IECEx  
EESF 19 ATEX 023X  
 II 2 G Ex db IIC Gb  
 II 2 D Ex tb IIIC Db IP66

### CE conformity

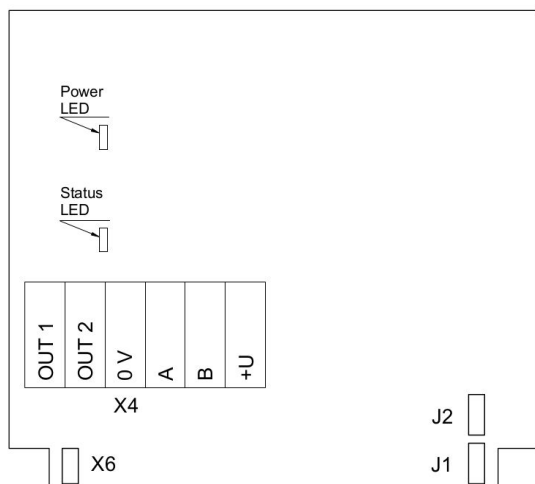
Flameproof to IEC EN 60079-1  
Increased safety to IEC EN 60079-7  
EMC Emissions to EN 61000-6-3, EN 61326-1  
EMC Immunity to EN 61000-6-1, EN 61000-6-2



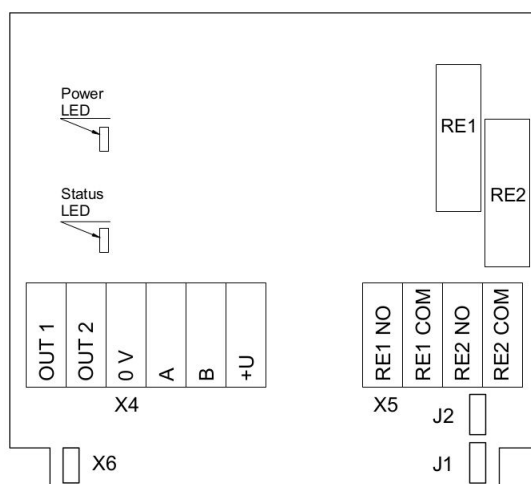
## Dimensions



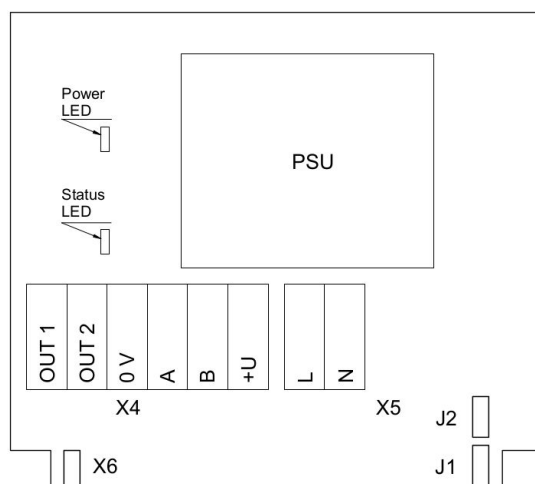
## Connection diagrams



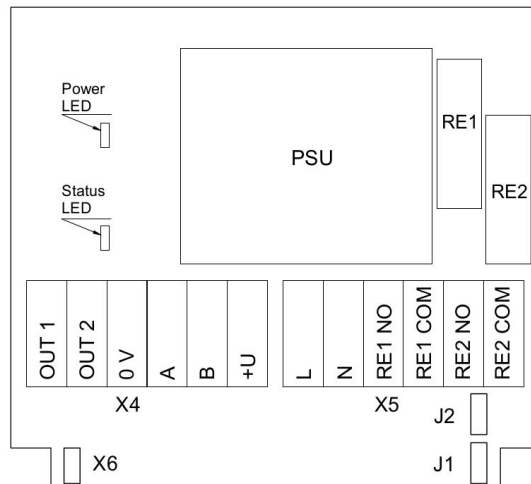
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays



**Jumpers**

<b>J1</b>	OUT1 type (open: 4-20 mA; closed 0-10 V)
<b>J2</b>	OUT2 type (open: 4-20 mA; closed 0-10 V)
<b>X6</b>	Reset Modbus network parameters to default
<b>X4 terminals</b>	
<b>OUT1</b>	4-20 mA / 0-10 V output
<b>OUT2</b>	4-20 mA / 0-10 V output
<b>0V</b>	0 V / 24 VAC Neutral (optional)
<b>A</b>	RS485 A / Data +
<b>B</b>	RS485 B / Data -
<b>+U</b>	+24 VDC / 24 VAC Phase (optional)
<b>X5 terminals (optional)</b>	
<b>L</b>	90...265 VAC Phase
<b>N</b>	90...265 VAC Neutral
<b>RE1 NO</b>	Relay 1, normally open terminal
<b>RE1 COM</b>	Relay 1, common terminal
<b>RE2 NO</b>	Relay 2, normally open terminal
<b>RE2 COM</b>	Relay 2, common terminal





# Dual Gas Transmitter E2660-CO-CO<sub>2</sub>



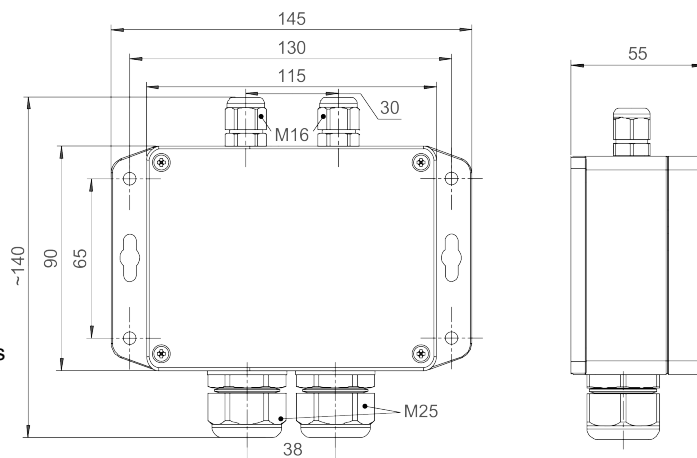
## Features

- CO and CO<sub>2</sub> monitoring in underground garages
- Two analog outputs 4-20 mA and 0-10 V
- RS485 Modbus RTU digital interface
- Wall mount IP65 protected housing
- Attached or remote sensor

## Specifications

Calibration	Carbon monoxide CO Carbon dioxide CO <sub>2</sub>
Sensors	CO: long-life electrochemical cell CO <sub>2</sub> : photoacoustic sensor
Sampling method	Diffusion
Detection ranges	0...300 ppm, 0...1000 ppm CO 0...10 000 ppm CO <sub>2</sub> other ranges on request
Resolution	1 ppm CO 1 ppm CO <sub>2</sub>
Response time	CO: T90 ≤ 30 s; CO <sub>2</sub> : T60 ≤ 60 s
Signal update	Every 1 second for CO; every 5 seconds for CO <sub>2</sub>
Maintenance interval	CO: 12 months CO <sub>2</sub> : no field recalibration if ABC algorithm is enabled
Sensor lifetime	CO: > 10 years (replaceable) CO <sub>2</sub> : > 10 years (non-replaceable)
Self-diagnostics	Full functionality check at start-up
Warm-up time	≤ 1 min
Power supply	11...30 VDC (default), 24 VAC or 90...265 VAC
Power consumption	< 2 VA
Digital interface	RS485, Modbus RTU protocol
Analog outputs	2 × 4-20 mA / 0-10 V, user settable
Output scale width	Recommended: 20-100% of the range; > 10 × resolution in any case
Enclosure	Light grey ABS plastic, wall mount, protection class IP65
Dimensions	H90 × W145 × D55 mm
Sensor heads	M25
Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m
Operating conditions	Explosion-safe areas; Non-aggressive atmosphere without condensation; 0,9...1,1 atm; -20...+50 °C, 15...90 %RH non condensing for CO -40...+60 °C, 0...100 %RH for CO <sub>2</sub> <b>-NOTE!</b> we offer technical solutions for extreme humidity, please contact us for details.

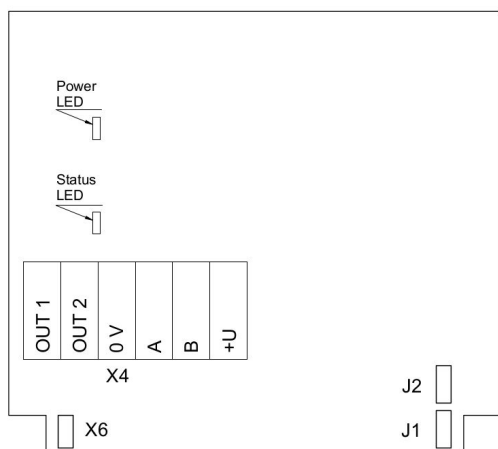
## Dimensions



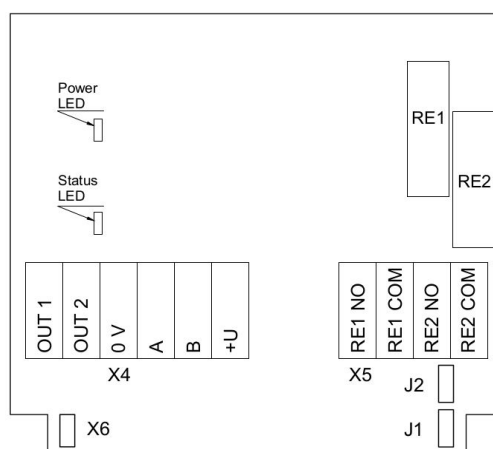
Ask for other versions or custom designed products



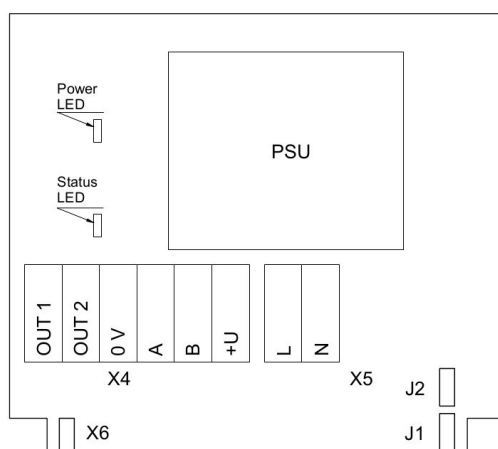
## Connection diagram



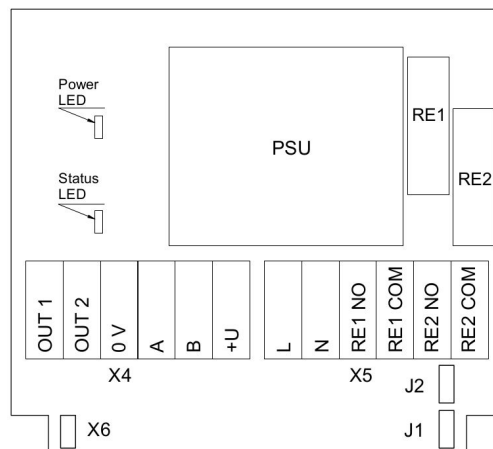
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

### Jumpers

<b>J1</b>	OUT1 type (open: 4-20 mA; closed 0-10 V)
<b>J2</b>	OUT2 type (open: 4-20 mA; closed 0-10 V)
<b>X6</b>	Reset Modbus network parameters to default

### X4 terminals

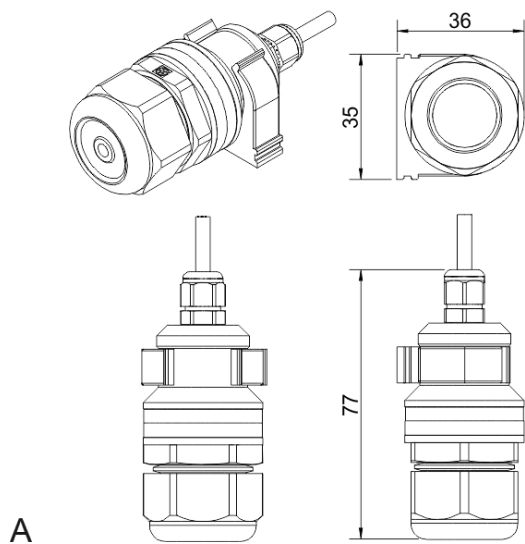
<b>OUT1</b>	4-20 mA / 0-10 V output
<b>OUT2</b>	4-20 mA / 0-10 V output
<b>0V</b>	0 V / 24 VAC Neutral (optional)
<b>A</b>	RS485 A / Data +
<b>B</b>	RS485 B / Data -
<b>+U</b>	+24 VDC / 24 VAC Phase (optional)

### X5 terminals (optional)

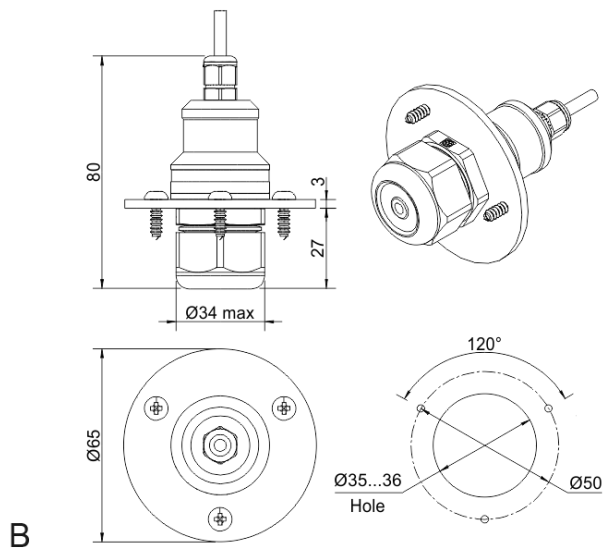
<b>L</b>	90...265 VAC Phase
<b>N</b>	90...265 VAC Neutral
<b>RE1 NO</b>	Relay 1, normally open terminal
<b>RE1 COM</b>	Relay 1, common terminal
<b>RE2 NO</b>	Relay 2, normally open terminal
<b>RE2 COM</b>	Relay 2, common terminal



## Remote probe



A  
Wall mount remote probe with fixing clamp (default version)



B  
Remote probe with rubber flange and three self-tapping screws (on request)

