



# Carbon Monoxide Detector-Transmitter E2638-CO



## Features

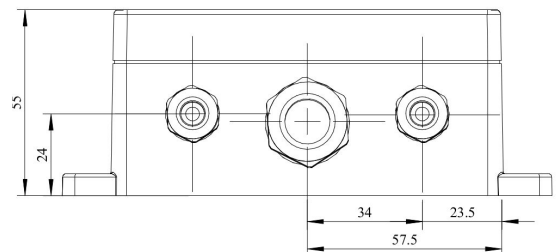
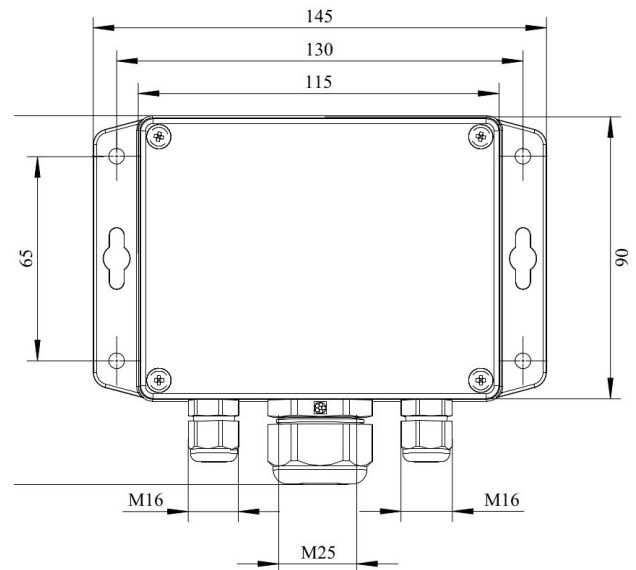
- Accurate and stable measurement
- Easy to install robust enclosure
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Relay option
- Attached or remote sensor
- LCD indicator option

## Specifications

|                         |   |
|-------------------------|---|
| Calibration             | Carbon monoxide CO  |
| Sensor type             | Electrochemical   |
| Sampling method         | Diffusion   |
| Typical detection range | 0...300 ppm    0...1000 ppm   |
| Maximum overload        | 2000 ppm  |
| Resolution              | 1 ppm   |
| Repeatability           | < ± 5 %   |
| Response time T90       | < 30 s  |
| Signal update           | Every 1 second  |
| Maintenance interval    | 12 months   |
| Sensor lifetime         | > 10 years  |
| Self-diagnostics        | Full functionality check at start-up  |
| Warm-up time            | ≤ 1 min   |
| Power supply            | 12...36 VDC (default)<br>24 VAC or 230 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;<br>> 10 × resolution in any case  |
| Enclosure               | Grey ABS plastic, wall mount,<br>protection class IP65  |
| Dimensions              | H90 × W145 × D50 mm (housing only)<br>H140 with cable glands  |
| Operating environment   | Industrial indoor and outdoor locations   |
| Operating conditions    | -20...+50 °C, 0.9...1,1 atm<br>0...90% RH non condensing<br>Explosion-safe areas<br>Non-aggressive atmosphere |

**NOTE!** We offer technical solutions for extreme humidity, please ask for more information.

## Dimensions



## 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 RE1 (LOW): set 25; release 20 ppm  
RE2 (HIGH): set 35; release 28 ppm

### 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

Protection class IP50 (both for built-in and remote LCD  
options)

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

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

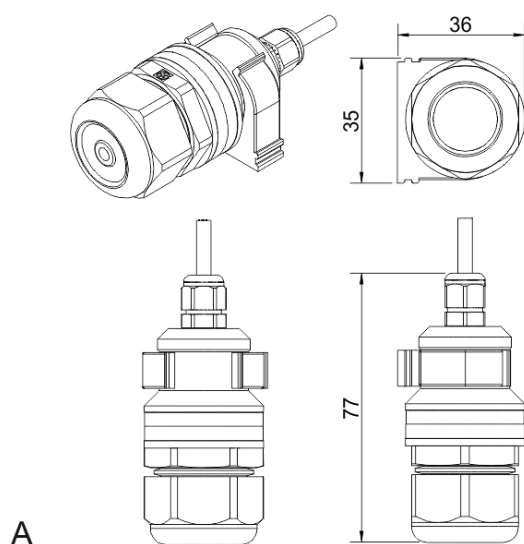
## Version with built-in LCD indicator



## Version with remote LCD indicator

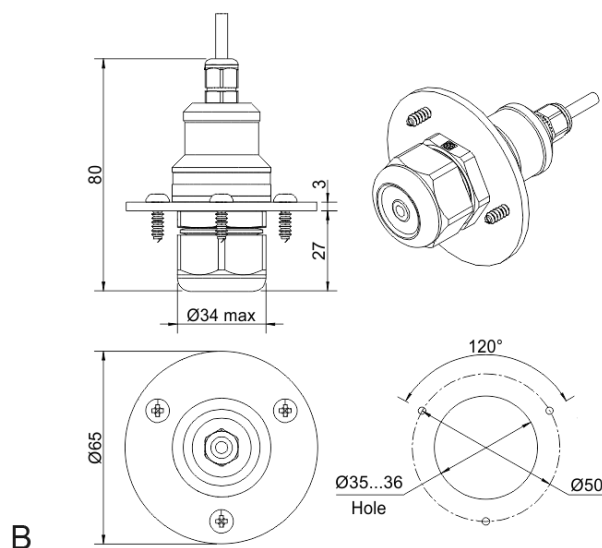


## Remote probe



A

Wall mount remote probe with fixing clamp (default version)

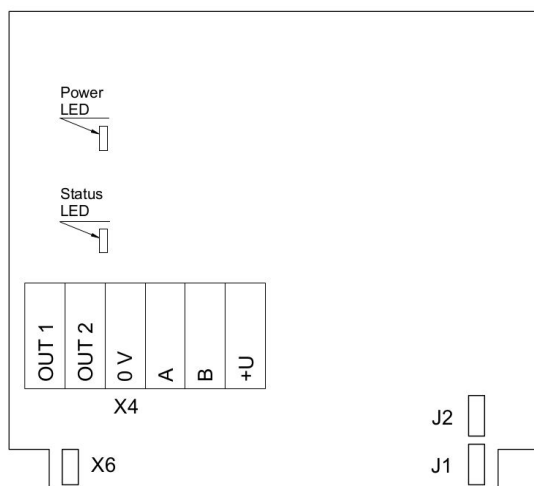


B

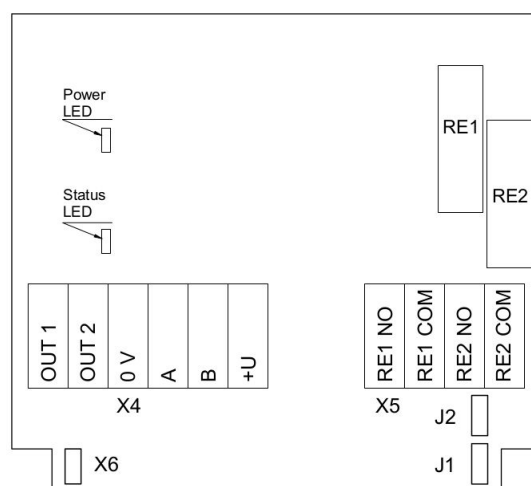
Remote probe with rubber flange and three self-tapping screws (on request)



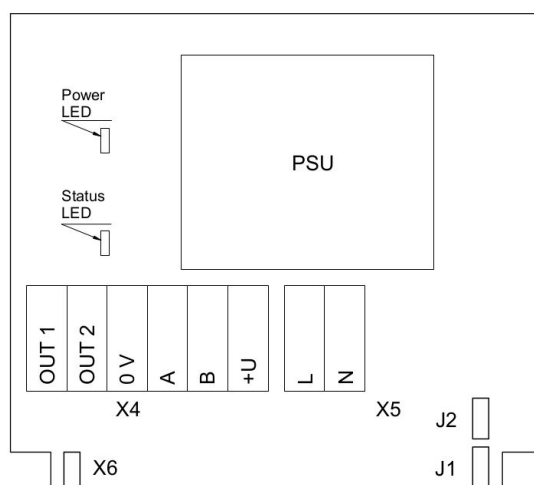
## Connection diagrams



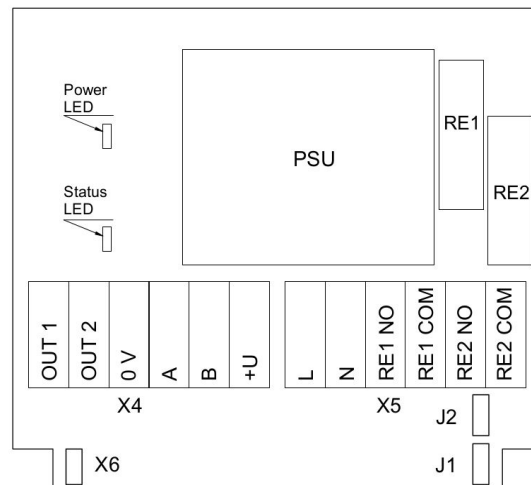
Version without PSU and relays



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                   |

