



## Combustible Gases Detector-Transmitter E2638-LEL



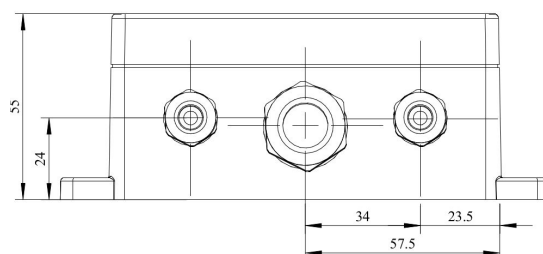
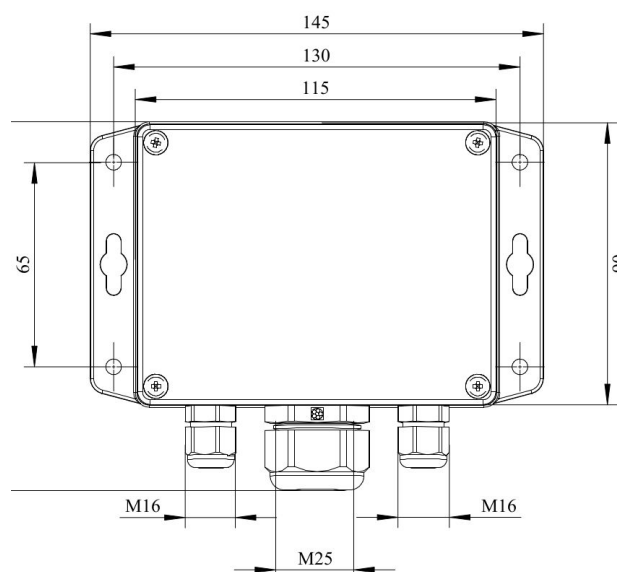
### Features

- 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

|                         |                                                                                                                                                                                                                                                                        |              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Detected gases          | Hydrogen, methane, acetylene, propane, butane                                                                                                                                                                                                                          |              |
| Default calibration     | Methane CH <sub>4</sub>                                                                                                                                                                                                                                                |              |
| Sensor type             | Metal-oxide semiconductor<br>Pellistor (catalytic bead) on demand                                                                                                                                                                                                      |              |
| Sampling method         | Diffusion                                                                                                                                                                                                                                                              |              |
| Sensor                  | MOS                                                                                                                                                                                                                                                                    | Pellistor    |
| Typical detection range | 0...100% LEL                                                                                                                                                                                                                                                           | 0...100% LEL |
| Resolution              | 0.1% LEL                                                                                                                                                                                                                                                               | 1% LEL       |
| Response time T90       | ca. 60 s                                                                                                                                                                                                                                                               | ≤10 s        |
| Sensor lifetime         | > 5 years                                                                                                                                                                                                                                                              | > 5 years    |
| Maintenance interval    | 12 months                                                                                                                                                                                                                                                              | 6 months     |
| Operating temperature   | -40...+70 °C                                                                                                                                                                                                                                                           | -40...+70 °C |
| Signal update           | Every 1 second                                                                                                                                                                                                                                                         |              |
| Self-diagnostics        | Full functionality check at start-up                                                                                                                                                                                                                                   |              |
| Warm-up time            | ≤ 1 min                                                                                                                                                                                                                                                                |              |
| Power supply options    | 11...30 VDC<br>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;<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    | (operating temperature is specified above)<br>≤ 95% RH non condensing; 0.9...1,1 atm<br>Explosion-safe areas<br>Normal ambient oxygen level<br>Avoid strong mechanical shock, vibrations or EMI;<br>Avoid exposure to corrosive gases or silicone containing products. |              |

### Dimensions



## Additional options

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

### Relay outputs

|                          |                                                                                            |
|--------------------------|--------------------------------------------------------------------------------------------|
| Output relays            | 2 × SPST relays (closing contact),<br>250 VAC / 30 VDC, 5 A max                            |
| Default alarm set-points | LOW: set 20 , release 16 %LEL<br>HIGH: set 50, release 40 %LEL<br>(for flammability 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     |

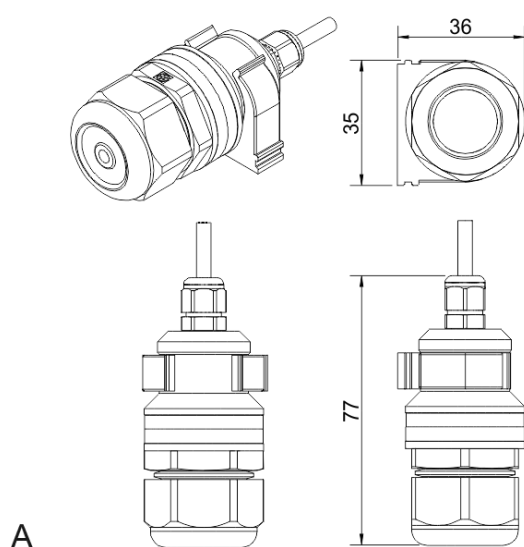
**NOTE!** Only one analog output is available for a version with LCD.

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

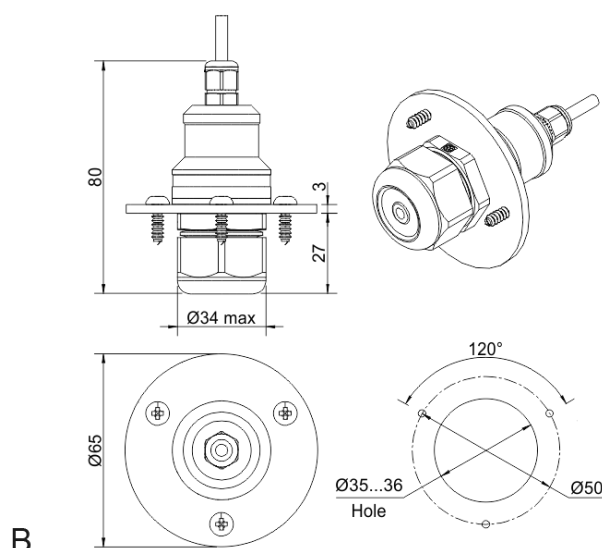
## Version with LCD indicator



## Remote probe



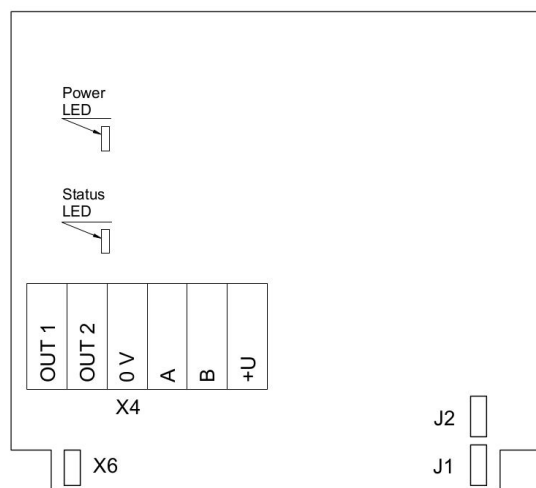
Wall mount remote probe with fixing clamp (default version)



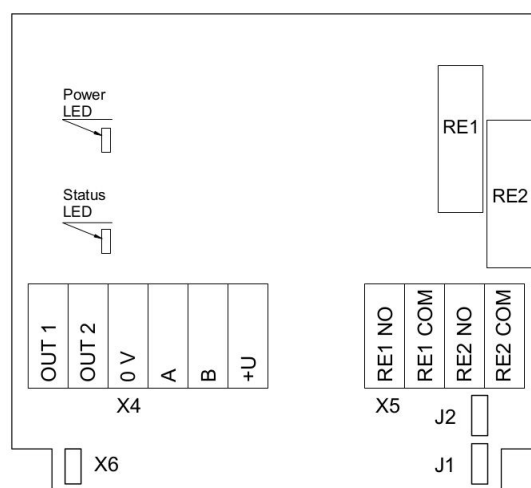
Remote probe with rubber flange and three self-tapping screws (on request)



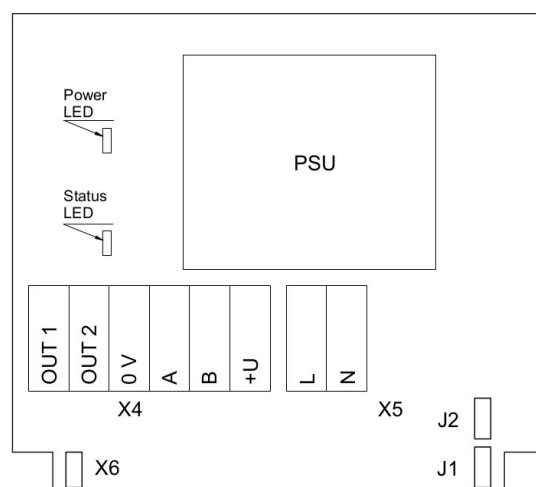
## Connection diagrams



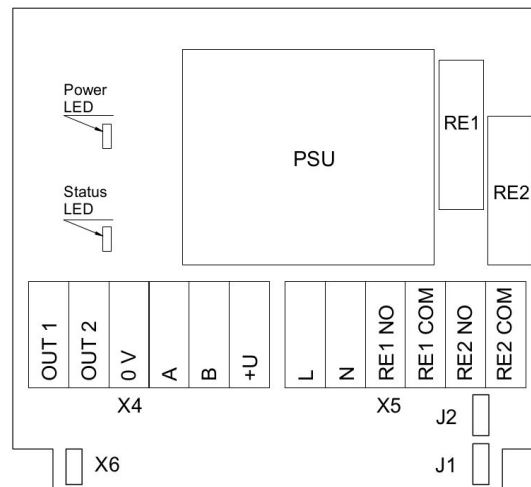
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

