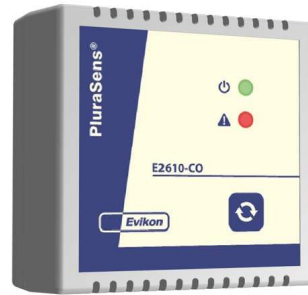## Description

Carbon Monoxide detector E2610-CO is a member of new PluraSens® family of multifunctional measurement instruments. The gas detector is intended for use in boiler houses, kitchens, garages and other confined spaces, where CO emissions may occur.

The instrument utilises novel fully calibrated and temperature compensated gas sensor with excellent repeatability, stability and long lifetime.
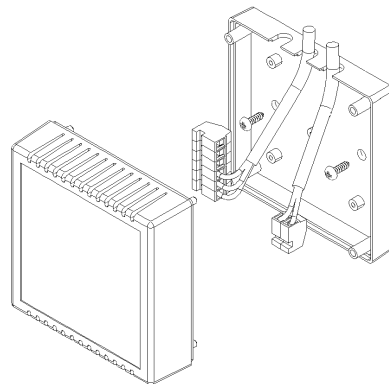
Specifications

Detection range	nominal 0...200 ppm vol CO, max 1000 ppm vol CO
Resolution	1 ppm CO
Accuracy	±(3% of detection range + 5 ppm CO)
Response time	~30 seconds, warm-up time < 1 minute
Sensor type	electrochemical cell, lifetime > 7 years
Operating conditions	dry rooms, -30...+70 °C, 0...95 %RH, non-condensing
Power supply	11...30 V DC/AC (version -24) or 90...265 VAC (version -230)
Electromagnetic compatibility	according to 89-336-EEC and EN61326-1 requirements
Wall-mount enclosure	interior use, light grey slotted ABS 71×71×27 mm, IP20
LEDs	green/red (operation/fault), red (gas alarm)
Buzzer	2 kHz, 85 dBi
Relays	2 × SPDT, max 5A, 30 VDC / 250 VAC
Default alarm setpoints	LOW RE1: 25 ppm
	HIGH RE2: 125 ppm

Installation

Detach the base of the enclosure by gently pulling along four guiding pins. Fix the base on the wall with two screws.
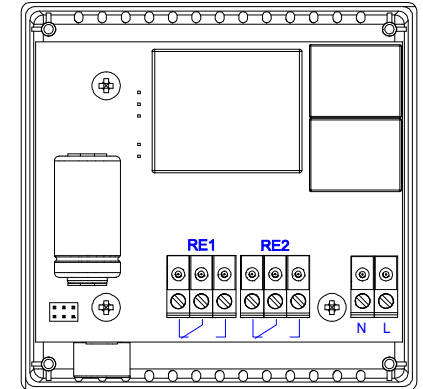
The terminal blocks are pluggable type for more convenient wiring. Detach the terminal blocks from the PCB board by pulling them off the pins. Connect power supply and relay output cables to the terminal blocks, attach the blocks back to the PCB and push the enclosure to the base.

Connections

Connect power terminals **N** and **L** to the 24 V AC/DC source if you are using detector version **-24** or to 230 VAC mains if you are using detector version **-230**.

Relay switch-over outputs may be used to control directly 24 V or 230 V powered alarm sirens, ventilation fans, shut-off valves or other actuators.

Operation

During first 30 seconds after powering on E2610-CO performs a warming-up and self-diagnostic routine, indicated by flashing each LED. The upper dual-color LED remains continuously green in normal operation and blinks red in case of device or sensor fault.

If CO level exceeds the LOW alarm setpoint, the bottom red LED starts flashing at a rate 1 Hz, and the relay RE1 switches over. The first alarm stops automatically when CO level falls below 80% of the LOW alarm setpoint.

If CO level exceeds the HIGH alarm setpoint, the bottom red LED starts flashing and the buzzer starts beeping at a rate 2 Hz, and also the relay RE2 switches over. The HIGH alarm stops automatically (option **-A**) or can be stopped only by brief pushing the button (option **-M**), on condition that the gas level has fallen below 80% of the LOW alarm setpoint.

Holding down the button for 3...9 seconds and releasing causes E2610-CO to reset and perform the self-diagnostic routine for testing purpoces.

When holding the button down for over 10 seconds, E2610-CO imitates the reaching of the HIGH setpoint with the respective light and sound indication and switching over the relays.

To ensure accuracy E2610-CO should be calibrated annually by qualified technician using standard calibration gas mixtures. Refer the manufacturer for calibration guides. The electrochemical CO sensor lifetime is over 7 years, the sensor is not replaceable.

Warranty

This product is warranted to be free from defects in material and workmanship for a period of one year from the date of original sale. During this warranty period Manufacturer will, at its option, either repair or replace product that proves to be defective. This warranty is void if the product has been operated in conditions outside ranges specified by Manufacturer or damaged by customer error or negligence or if there has been an unauthorised modification.