IP65 | 4-20 mA 0-10 V | RS485 Modbus

Carbon Monoxide Detector-Transmitter E2608-CO

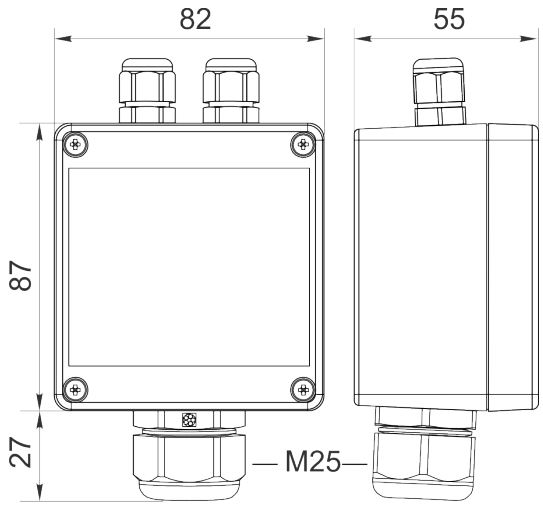
Features

- 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

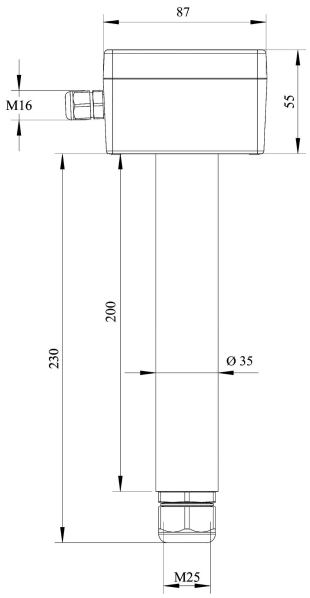
Specifications

Calibration	Carbon monoxide CO
Sensor type	Electrochemical
Sampling method	Diffusion
Typical detection range	0...300 ppm 0...1000 ppm
Maximum overload	2000 ppm
Resolution / digital unit	1 ppm
Repeatability	< ± 5 %
Response time T90	< 30 s
Signal update	Every 1 second
Sensor lifetime	> 10 years
Maintenance interval	12 months
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: 5-100% 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	RE1 (LOW): set 25; release 20 ppm RE2 (HIGH): set 35; release 28 ppm
Enclosure	Light beige ABS plastic, wall mount, protection class IP65
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	-20...+50 °C, 0.9...1,1 atm 15...90% RH non-condensing Explosion-safe areas Non-aggressive atmosphere **NOTE!** We offer technical solutions for extreme humidity, please ask for more information

Wall mount version

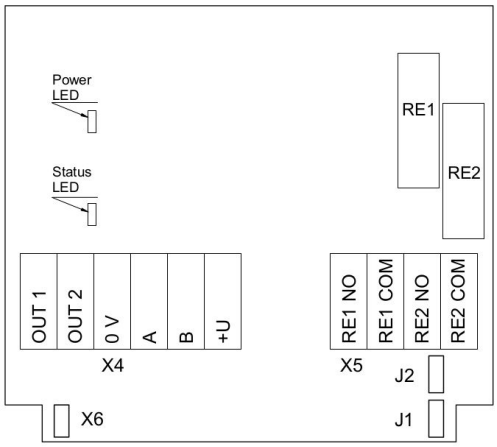


Duct mount version

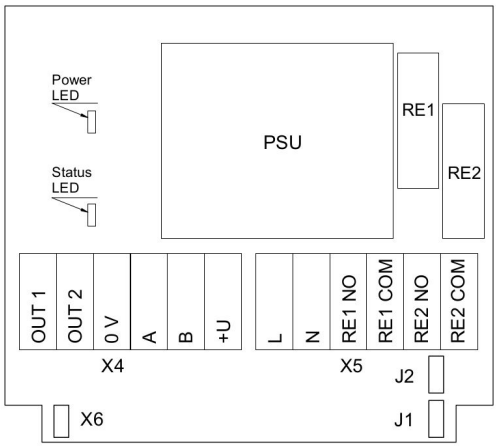


Ask for other versions or custom designed products

Connection diagrams



Version without PSU



Version with PSU

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

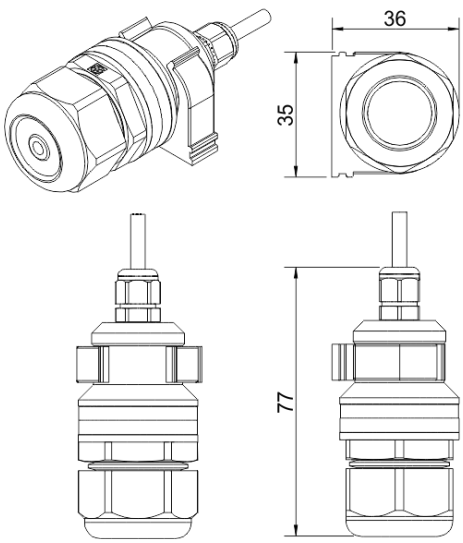
X4 terminals

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)

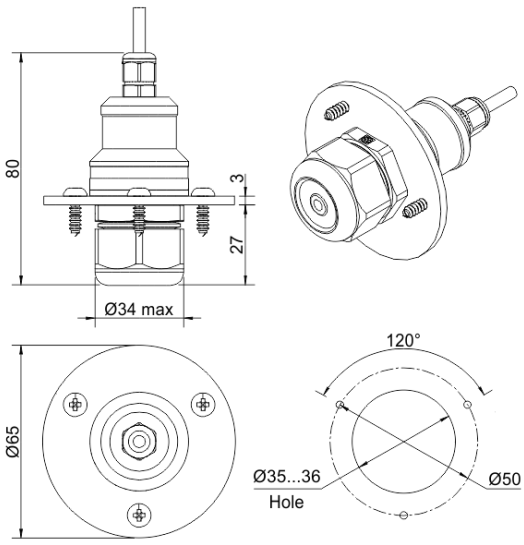
L	90…265 VAC Phase
N	90…265 VAC Neutral
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal

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)

Carbon Monoxide Detector
E2610-CO

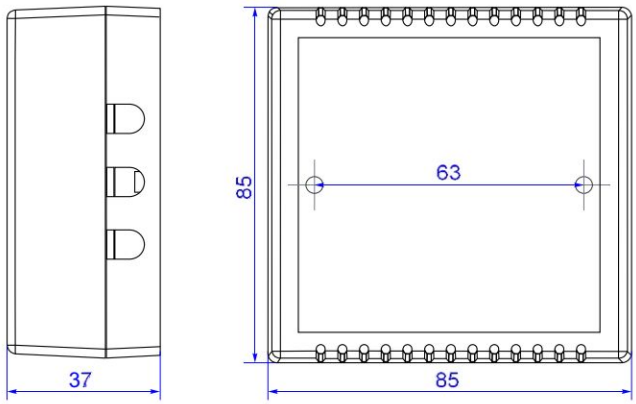
Features

- Selective, sensitive and stable CO detection
- Compact housing providing optimal airflow
- Visual and acoustic alarms
- Two output relays for alarm / ventilation control

Specifications

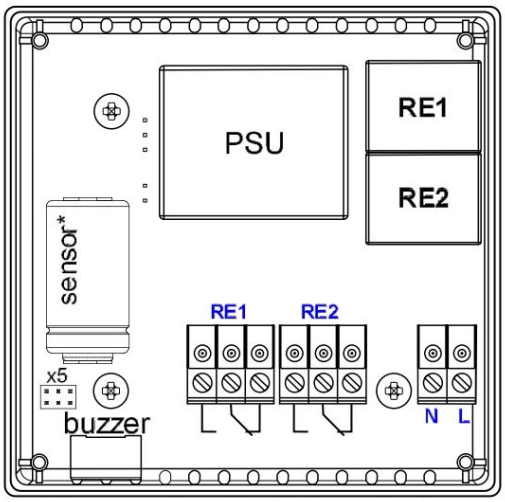
Calibration	Carbon monoxide CO
Sensor type	Electrochemical
Sampling method	Diffusion
Typical detection range	Standard 0...200 ppm high 0...1000 ppm CO
Accuracy	± (3% of range + 5 ppm CO)
Response time	ca. 30 s
Signal update	Every 1 second
Sensor lifetime	> 10 years
Maintenance interval	12 months
Self-diagnostics	Full functionality check at start-up
Warm-up time	≤ 1 min
Power supply	24 VAC/DC or 90...265 VAC
Power consumption	< 2 VA
Digital interface	UART
Output relays	2 relays with switch-over contact (SPDT), 250 VAC / 30 VDC, 5 A max
Default alarm set-points for 0...200 ppm range for 0...1000 ppm range	Release - LOW - HIGH 18 - 25 - 125 ppm 88 - 125 - 250 ppm
Alarms	Blinking LED, buzzer 85 dB
Enclosure	ABS plastic with ventilation slots, protection class IP20
Dimensions	H 85 × W 85 × D 37 mm
Operating conditions	-20…+50 °C 15...95% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere

Dimensions



Ask for other versions or custom designed products

Connection diagram



*Sensors may have different shape and/or size

Terminals	
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE1 NC	Relay 1, normally closed terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal
RE2 NC	Relay 2, normally closed terminal
L	90…265 VAC Phase (optional 24 VAC / VDC)
N	90…265 VAC Neutral (optional 24 VAC / VDC)

IP20 or IP65

4-20 mA 0-10 V

CE

Carbon Monoxide Transmitter
E2615-CO

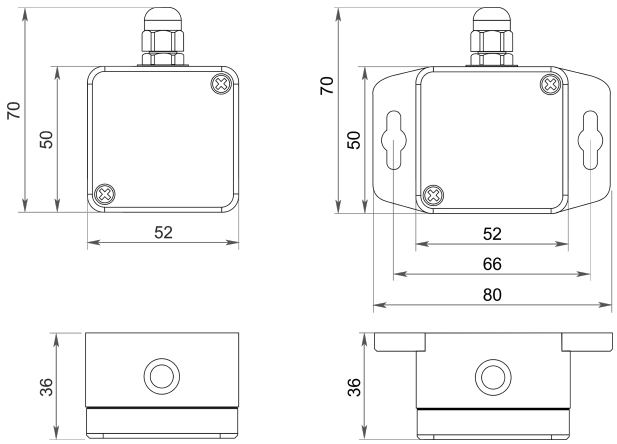
Features

- Maintenance free sensor
- User selectable output 4-20 mA / 0-10 V
- Range of compact wall mount enclosures
- Low cost for volume HVAC applications

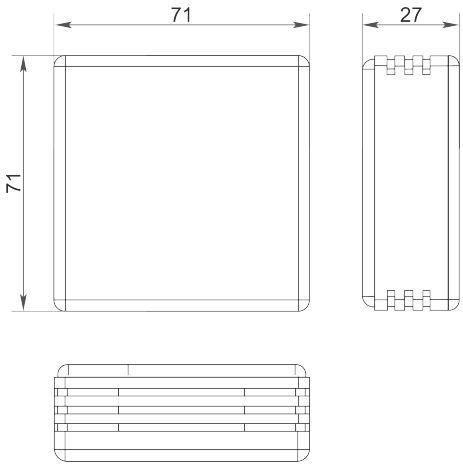
Specifications

Sensor type	Electrochemical
Sampling method	Diffusion
Detection range	0-300 ppm
Resolution	1 ppm
Maximum overload	1000 ppm
Response time T90	< 45 s
Sensor protection	Microporous PTFE dust filter
Warm-up time	≤ 1 min
Analog output	4-20 mA / 0-10 V, user settable
Power supply	24 VDC ± 20%
Power consumption	< 1 W
Sensor lifetime	≥ 10 years
Sensitivity drift	< ± 20% in 5 years
Indoors enclosure IP20 version	White, ivory or black ABS plastic, wall mount, protection class IP20
Weatherproof enclosure IP65 version	Light or dark grey ABS plastic, wall mount, protection class IP65
Operating conditions	-20...+40 °C recommended -20...+50 °C intermittently 10...95 %RH non-condensing, pressure 0,9...1,1 atm
EMC Emissions	To EN 61000-6-3, EN 61326-1
EMC Immunity	To EN 61000-6-1, EN 61000-6-2

IP65 Enclosures

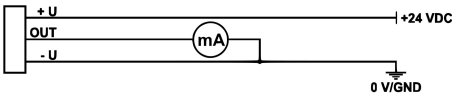


IP20 Enclosures

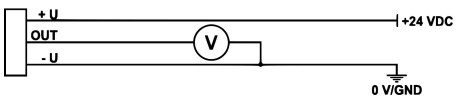


Connection diagrams

3-wire 4-20 mA output



3-wire 0-10 V output



Ask for other versions or custom designed products

IP65 | 4-20 mA 0-10 V | RS485 Modbus

CE

Carbon Monoxide Transmitter
E2618-CO

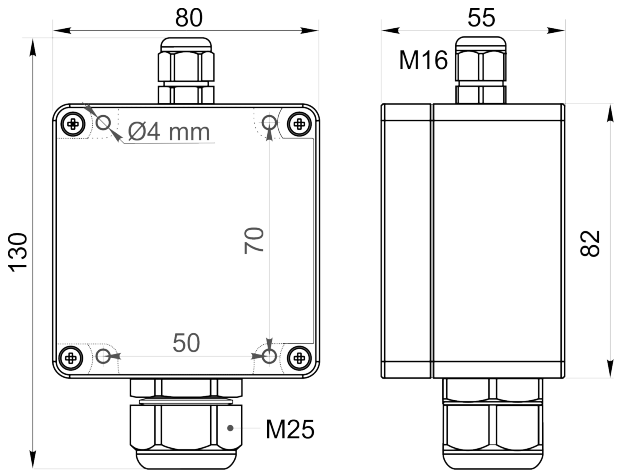
Features

- 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

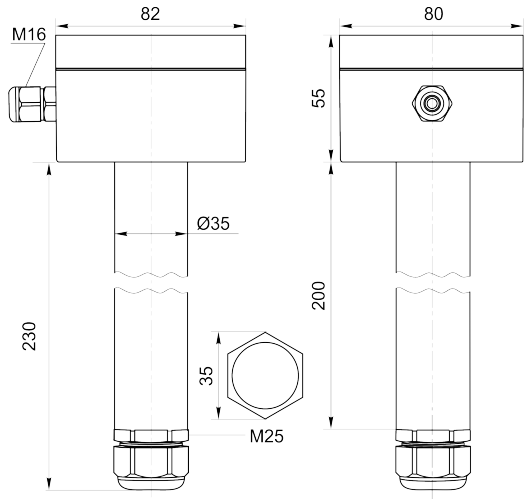
Specifications

Calibration	Carbon 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
Sensor lifetime	> 10 years
Maintenance interval	12 months
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: 5-100% 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
Operating environment	Industrial indoor and outdoor locations
Operating conditions	-20...+50 °C, 0.9...1,1 atm 0...90% RH non condensing Explosion-safe areas Non-aggressive atmosphere **NOTE!** We offer technical solutions for extreme humidity, please ask for more information.

Wall mount version

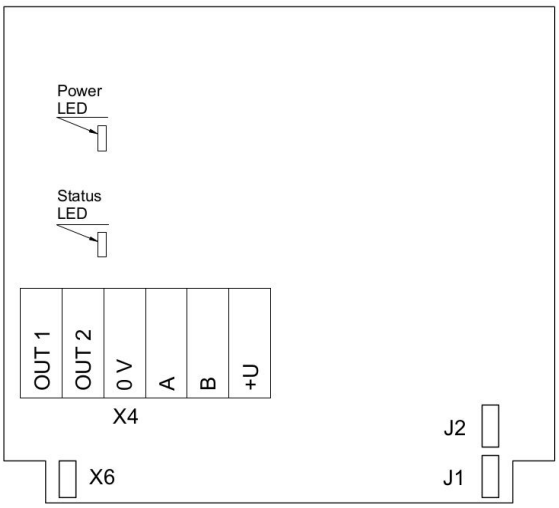


Duct mount version



Ask for other versions or custom designed products

Connection diagram



PCB without PSU and relays

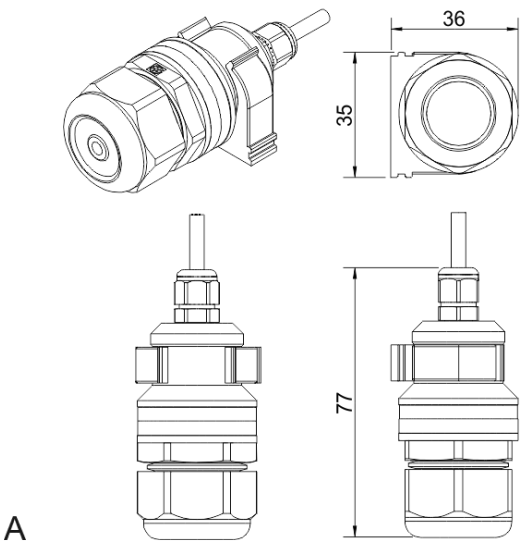
Jumpers

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

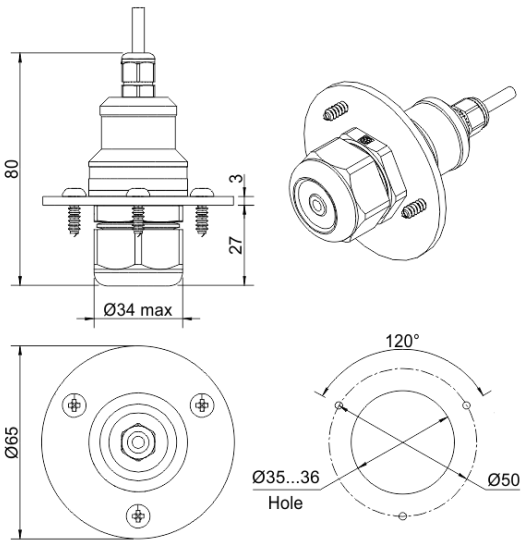
OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 24 VAC Phase (optional)

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)

Carbon Monoxide Detector
E2630-CO

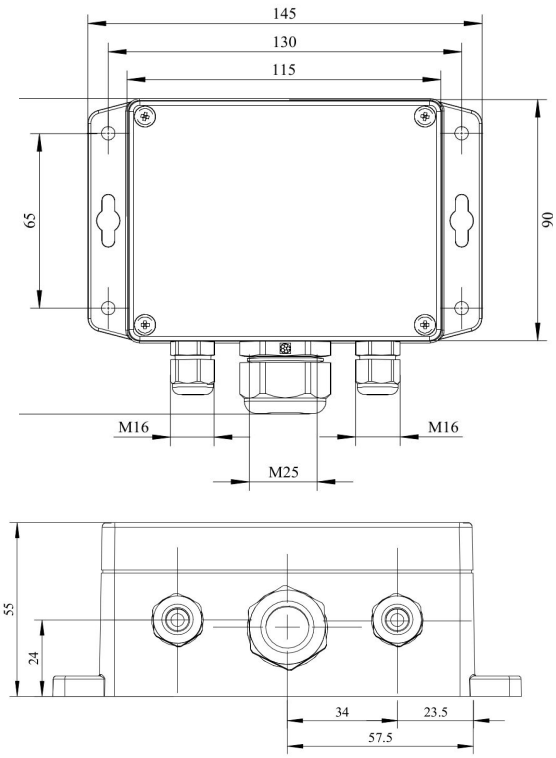
Features

- Accurate and stable measurement
- Wall-mount IP65 protected housing
- Visual and acoustic alarms
- Two output relays for alarm / ventilation control

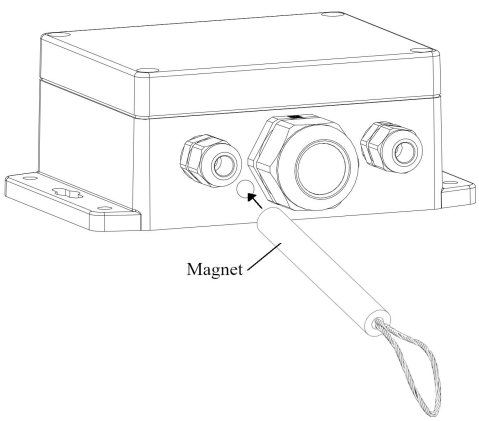
Specifications

Calibration	Carbon monoxide CO
Sensor type	Electrochemical
Sampling method	Diffusion
Typical detection range	Standard 0...200 ppm high 0...1000 ppm CO
Response time	ca. 30 s
Signal update	Every 1 second
Sensor lifetime	> 10 years
Maintenance interval	12 months
Self-diagnostics	Full functionality check at start-up, testing by magnetic switch
Warm-up time	≤ 1 min
Power supply	24 VAC/DC or 90...265 VAC
Power consumption	< 2 VA
Digital interface	UART
Output relays	2 relays with switch-over contact (SPDT), 250 VAC / 30 VDC, 5 A max
Default alarm set-points for 0...200 ppm range for 0...1000 ppm range	Release - LOW - HIGH 18 - 25 - 125 ppm 88 - 125 - 250 ppm
Alarms	Blinking LED, buzzer 85 dB
Enclosure	Grey ABS plastic, wall mount, protection class IP65
Dimensions	H140 × W145 × D55 mm
Operating conditions	-20…+50 °C 0...90% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere

Dimensions

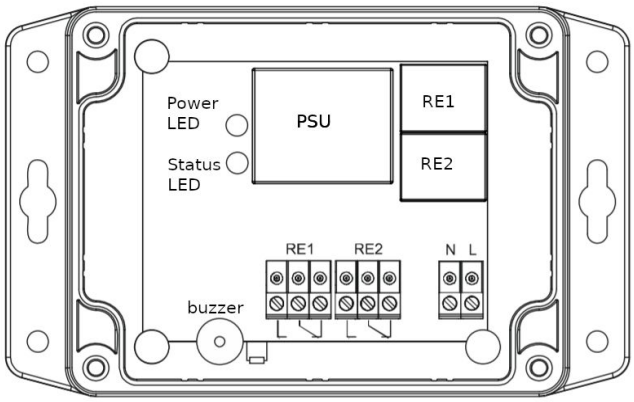


Magnet key



Ask for other versions or custom designed products

Connection diagram



Terminals

RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE1 NC	Relay 1, normally closed terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal
RE2 NC	Relay 2, normally closed terminal
L	90…265 VAC Phase (optional 24 VAC / VDC)
N	90…265 VAC Neutral (optional 24 VAC / VDC)

Two Channel Gas Detectors
E2632

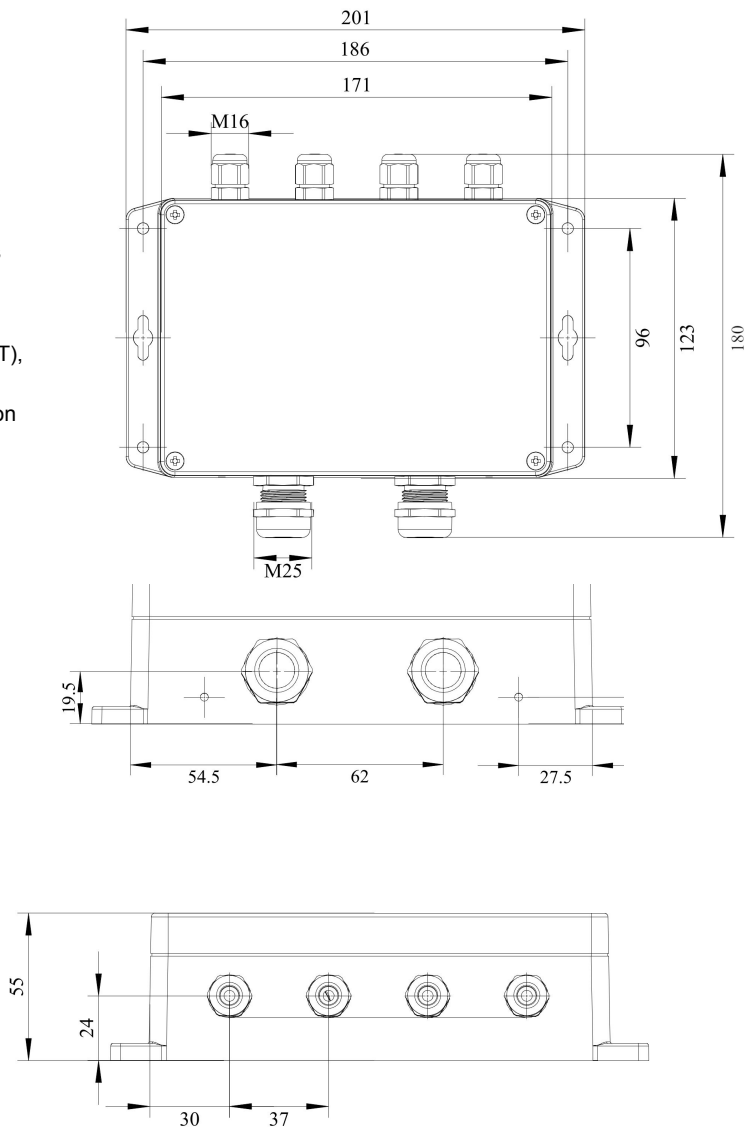
Features

- Simultaneous detection of two gases
- Accurate and stable measurement
- Wall-mount IP65 protected housing
- Visual and acoustic alarms
- Two output relays for alarm / ventilation control

Specifications

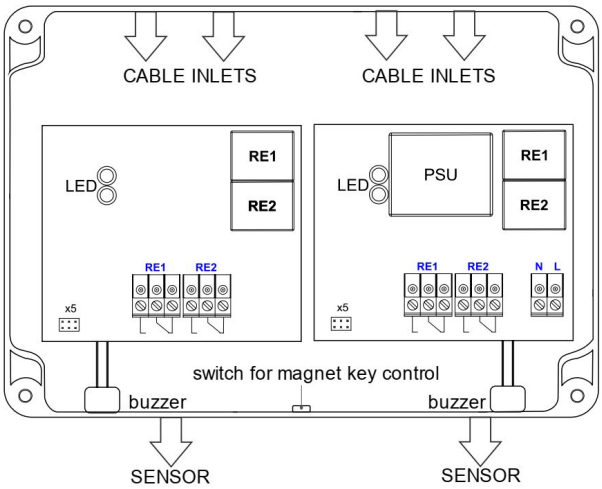
Sensor type	Depends on detected gases available are: metal oxide sensors, electrochemical sensors
Sampling method	Diffusion
Signal update	Every 1 second
Warm-up time	≤ 1 min
Power supply	11...30 VDC 24 VAC/DC or 90...265 VAC as options
Power consumption	< 4 VA
Digital interface	UART
Output relays	2 relays with switch-over contact (SPDT), 250 VAC / 30 VDC, 5 A max
Alarm set-points	Depending on target gas and application
Alarms	Blinking LED, buzzer 85 dB
Enclosure	Grey wall-mount ABS plastic, protection class IP65
Dimensions	H123 × W201 × D55 mm
Output cable	Max Ø8 mm
Operating environment	Residential, business and industrial indoor spaces
Operating conditions	15...95 %RH, atmospheric pressure ±10% Non-ATEX rated areas temperature depends on the sensor

Dimensions



Ask for available gas combinations and possible limitations

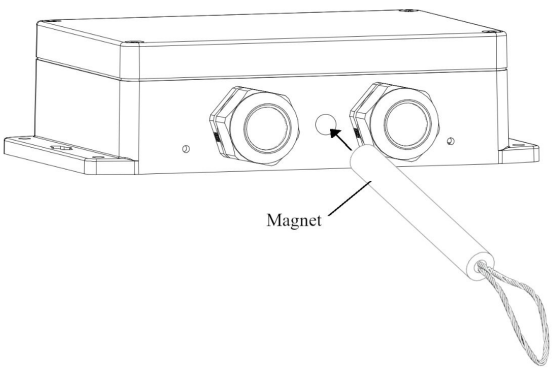
Connection diagram



Terminals

RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE1 NC	Relay 1, normally closed terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal
RE2 NC	Relay 2, normally closed terminal
L	90…265 VAC Phase (optional 24 VAC / VDC)
N	90…265 VAC Neutral (optional 24 VAC / VDC)

Magnet key



Carbon Monoxide Detector-Transmitter E2638-CO

Features

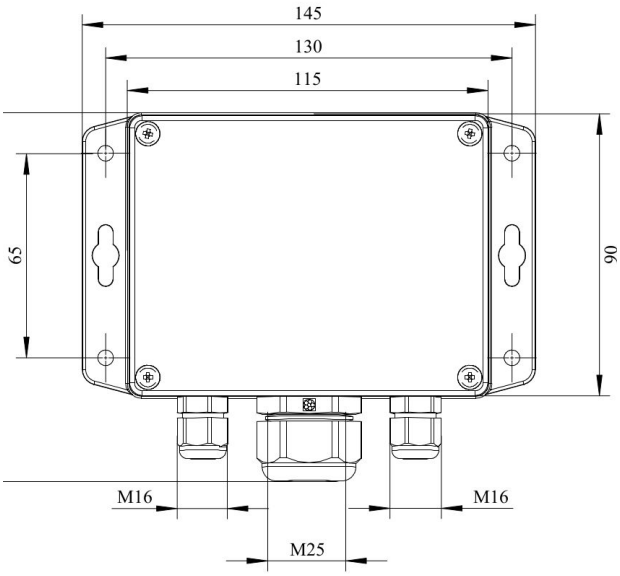
- Accurate and stable measurement
- Easy to install robust enclosure
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Relay option
- Attached or remote sensor
- LCD indicator option

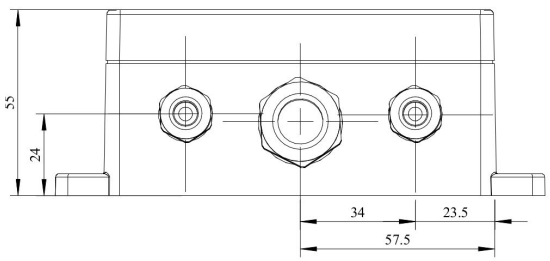
Specifications

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	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
Operating environment	Industrial indoor and outdoor locations
Operating conditions	-20...+50 °C, 0.9...1,1 atm 0...90% RH non condensing Explosion-safe areas Non-aggressive atmosphere

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

Dimensions





Ask for other versions or custom designed products

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

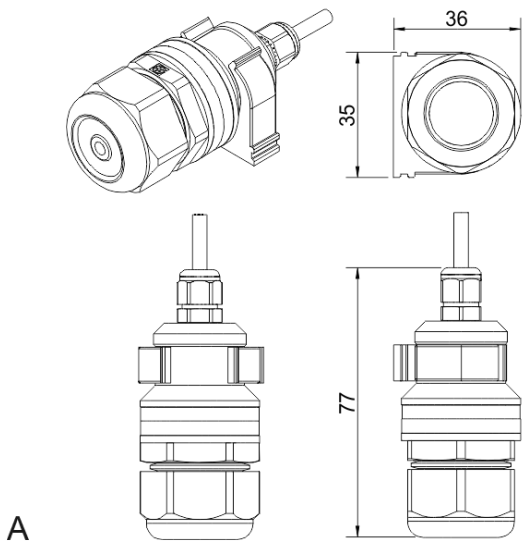
LCD indicator

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

NOTE! Only one analog output is available for a version with LCD.
NOTE! LCD and LEDs can not be chosen simultaneously.

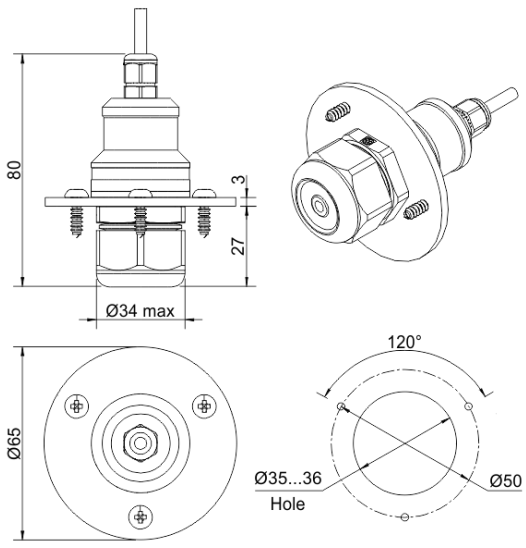
Version with LCD indicator

Remote probe



A

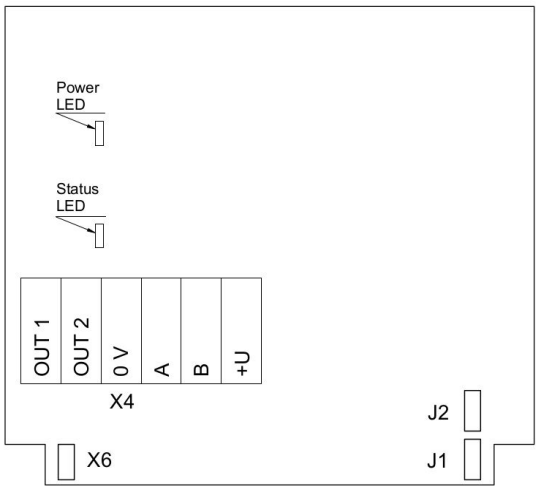
Wall mount remote probe with fixing clamp (default version)



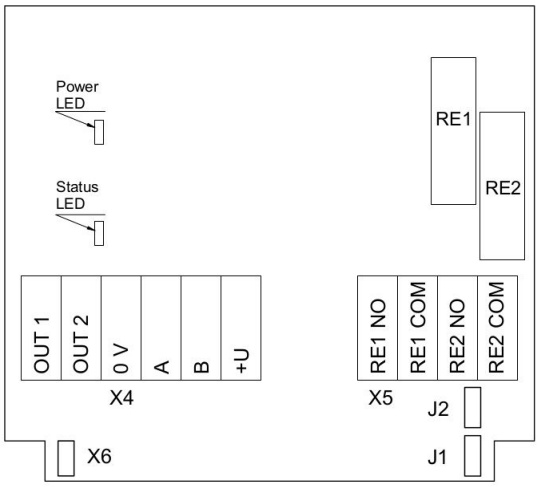
B

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

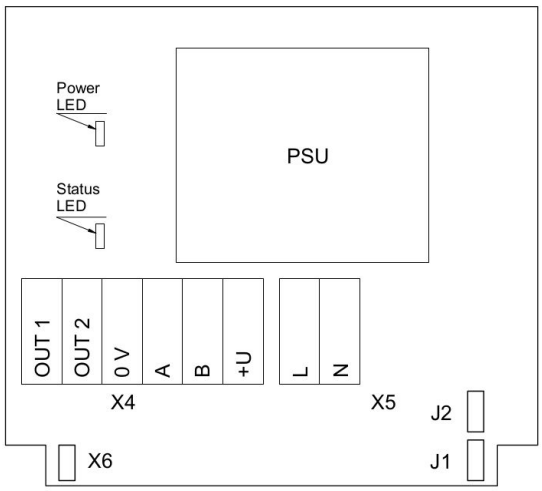
Connection diagrams



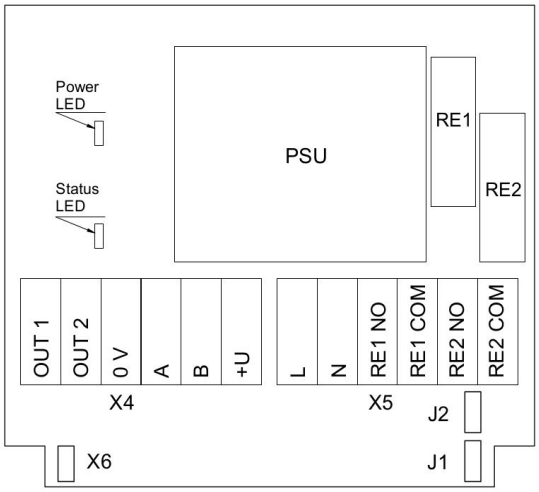
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

Jumpers	
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

IP66 | 4-20 mA 0-10 V | RS485 Modbus

Carbon Monoxide Detector-Transmitter E2648-CO

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 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
Sensor lifetime	> 10 years
Maintenance interval	12 months
Signal update	Every 1 second
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: 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	-20...+50 °C, 0.9...1,1 atm 0...90% RH non condensing Explosion-safe areas Non-aggressive atmosphere **NOTE!** We offer technical solutions for extreme humidity, please ask for more information

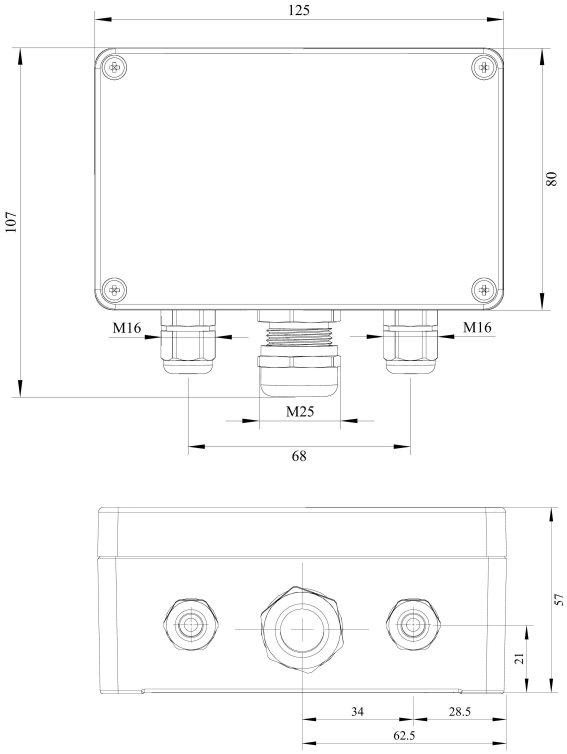
Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	RE1 (LOW): set 25; release 20 ppm RE2 (HIGH): set 35; release 28 ppm

Other options

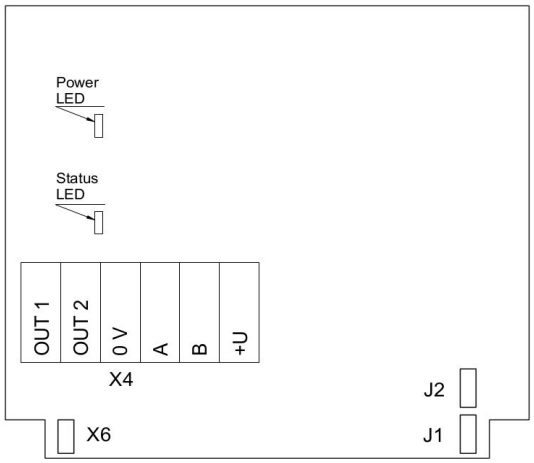
Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m

Dimensions

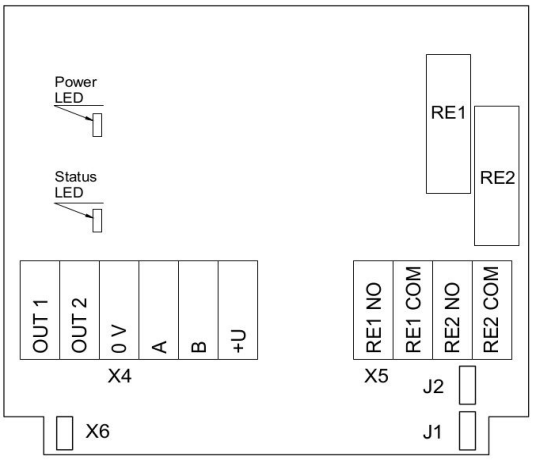


Ask for other versions or custom designed products

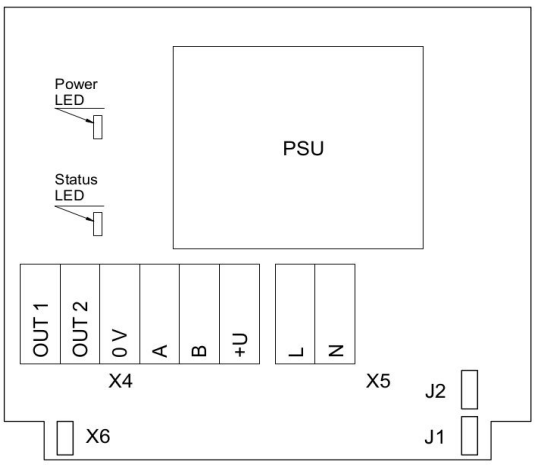
Connection diagrams



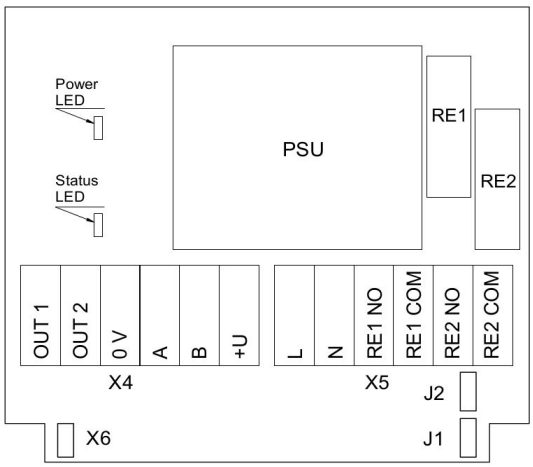
Version without PSU and relays



Version without PSU and with relays



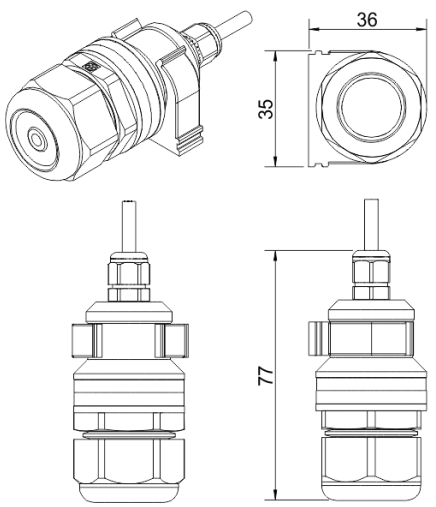
Version with PSU and without relays



Version with PSU and relays

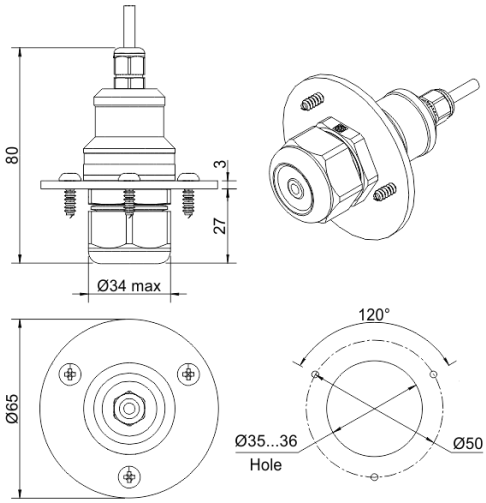
Jumpers	
J1	OUT1 type (open: 4-20 mA; closed 0-10 V)
J2	OUT2 type (open: 4-20 mA; closed 0-10 V)
X6	Reset Modbus network parameters to default
X4 terminals	
OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 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

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)

Flameproof Carbon Monoxide Detector-Transmitter E2658-CO

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 monoxide CO
Sensor type	Electrochemical
Sampling method	Diffusion
Typical detection range	0...300 ppm 0...1000 ppm
Maximum overload	2000 ppm
Resolution / digital unit	1 ppm
Repeatability	< ± 5 %
Response time T90	< 30 s
Sensor lifetime	> 10 years
Maintenance interval	12 months
Signal update	Every 1 second
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: 5-100% 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	-20...+50 °C, 0.9...1,1 atm 0...95% RH non condensing Explosion-safe areas Non-aggressive atmosphere **NOTE!** We offer technical solutions for extreme humidity, please ask for more information.
Relay option (ordering code R)	
Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	RE1 (LOW): set 25; release 20 ppm RE2 (HIGH): set 35; release 28 ppm

Approvals

Enclosure:

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

Glands:

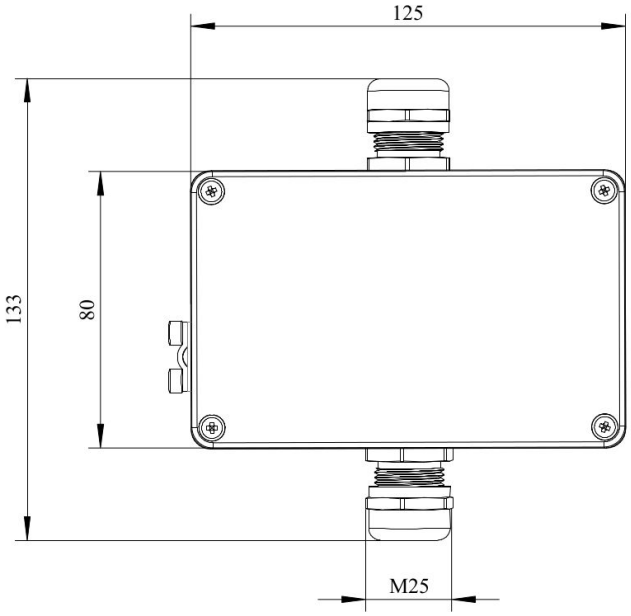
ATEX / IECEx
EESF 19 ATEX 023X
Ex II 2G Ex db IIC Gb
Ex II 2D Ex tb IIIC Db IP66

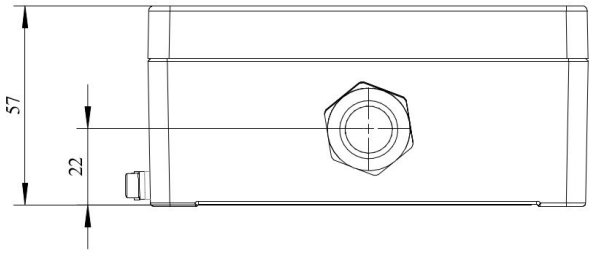
CE conformity

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

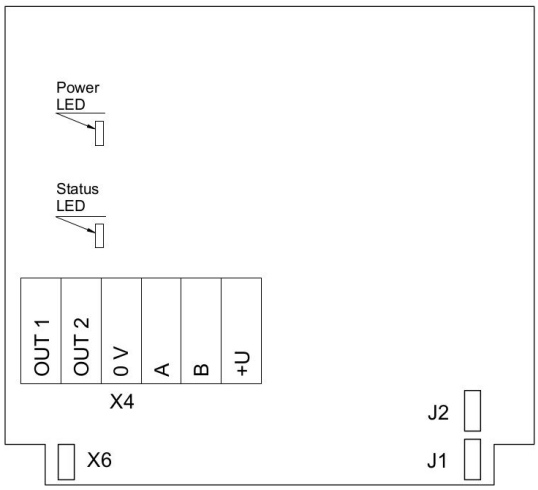
Ask for other versions or custom designed products

Dimensions

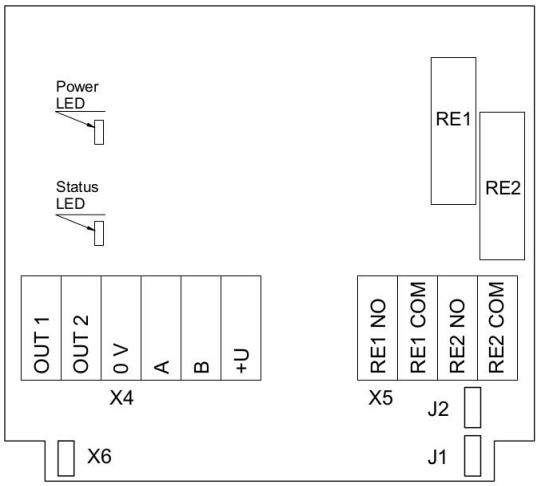




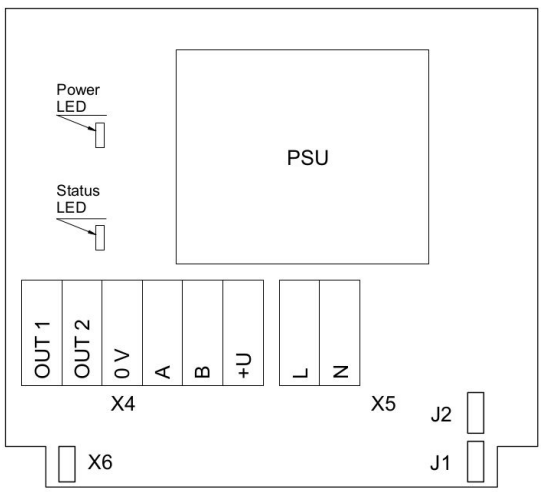
Connection diagrams



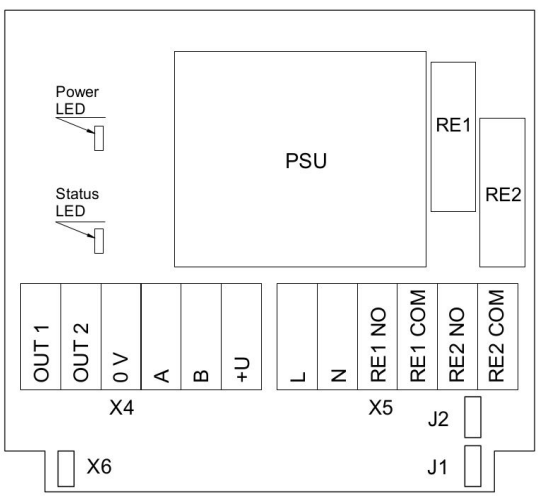
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

Jumpers	
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

IP65 | 4-20 mA 0-10 V | RS485 Modbus

CE

Dual Gas Transmitter
E2660-CO-CO2

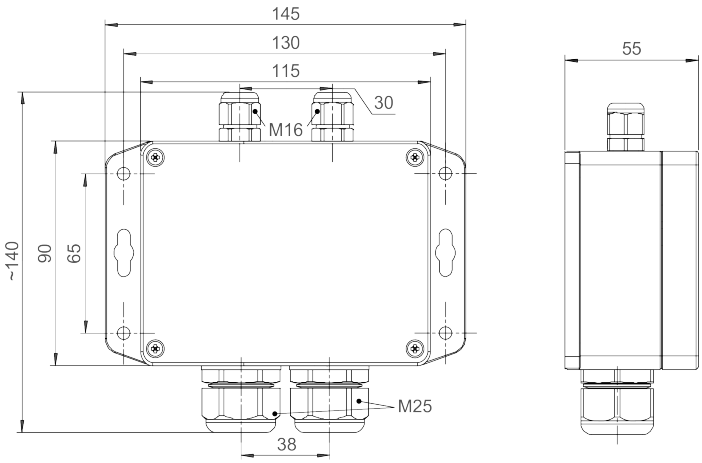
Features

- CO and CO_2 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

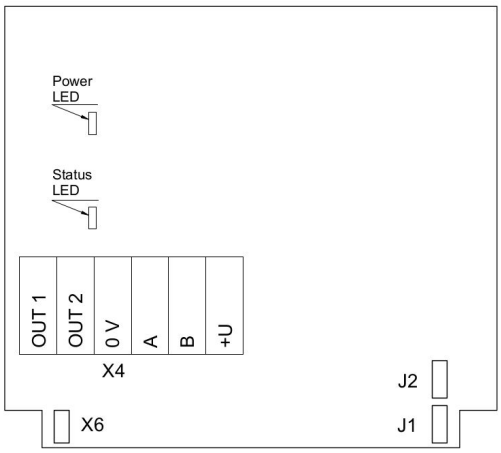
Calibration	Carbon monoxide CO Carbon dioxide CO_2
Sensors	CO: long-life electrochemical cell CO_2: photoacoustic sensor
Sampling method	Diffusion
Detection ranges	0...300 ppm, 0...1000 ppm CO 0...10 000 ppm CO_2 other ranges on request
Resolution	1 ppm CO 1 ppm CO_2
Response time	CO: T90 ≤ 30 s; CO_2: T60 ≤ 60 s
Signal update	Every 1 second for CO; every 5 seconds for CO_2
Maintenance interval	CO: 12 months CO_2: no field recalibration if ABC algorithm is enabled
Sensor lifetime	CO: > 10 years (replaceable) CO_2 : > 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_2 -**NOTE!** we offer technical solutions for extreme humidity, please contact us for details.

Dimensions

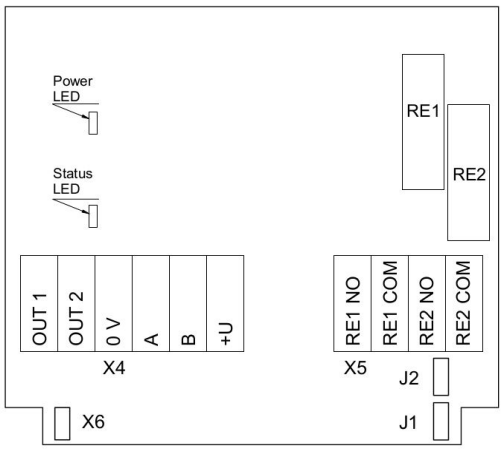


Ask for other versions or custom designed products

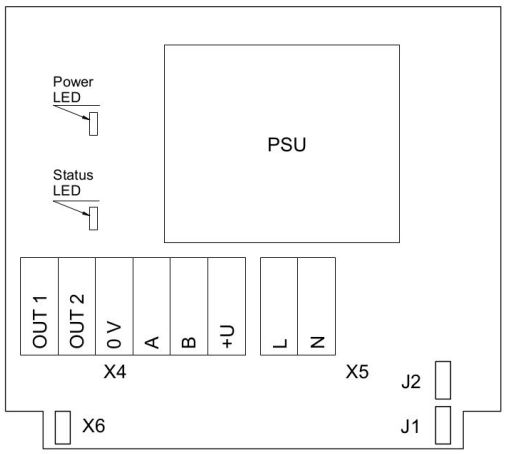
Connection diagram



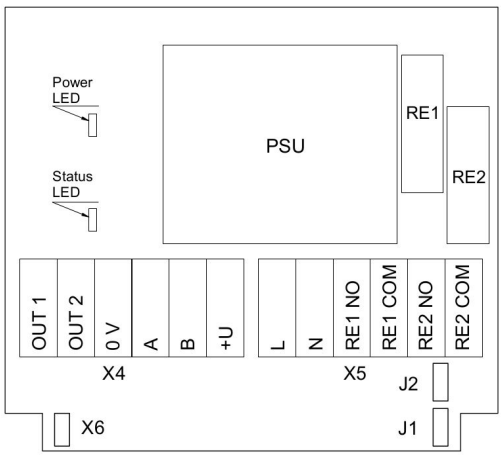
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

Jumpers

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

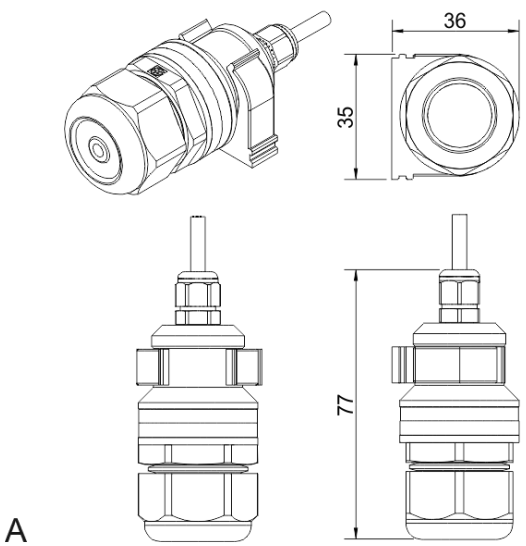
X4 terminals

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)

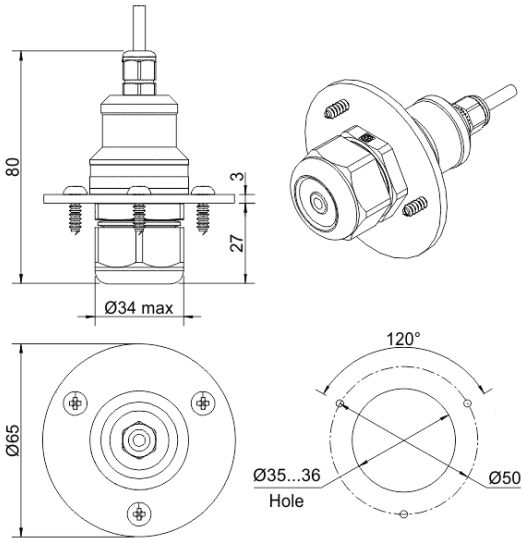
L	90…265 VAC Phase
N	90…265 VAC Neutral
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal

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)

IP65 | 4-20 mA 0-10 V | RS485 Modbus

Dual Gas Transmitter
E2660-CO-NO

Features

- CO and NO monitoring in underground parking
- Two analog outputs 4-20 mA and 0-10 V
- RS485 Modbus RTU digital interface
- Wall mount IP65 protected housing
- Attached or remote sensor
- Relay option

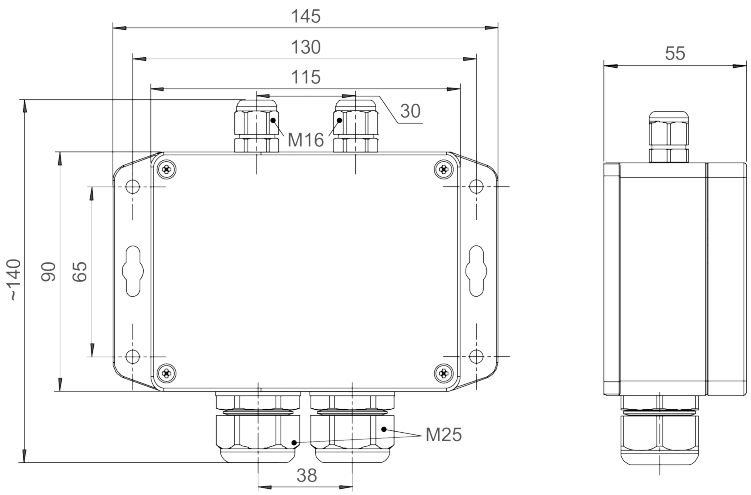
Specifications

	CO	NO
Sensor type	Electrochemical	Electrochemical
Sampling method	Diffusion	Diffusion
Detection ranges	0-300, 0-1000 ppm	0...250 ppm
Max. overload	2000 ppm	1000 ppm
Resolution	1 ppm	1 ppm
Response time T90	ca. 30 s	<40 s
Maintenance interval	12 months	6 months
Sensor lifetime	> 10 years	> 12 months
Signal update	Every 1 second	
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	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, 0...85 %RH	
	NOTE! we offer technical solutions for extreme humidity, please contact us for details.	

Relay option (ordering code R)

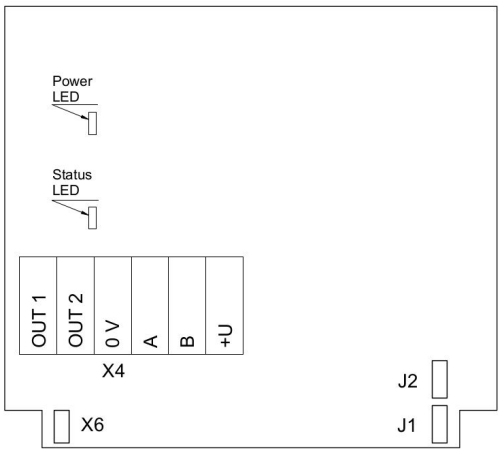
Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	RE1: set 25 ppm, release 20 ppm
	RE2: set 10 ppm, release 8 ppm

Dimensions

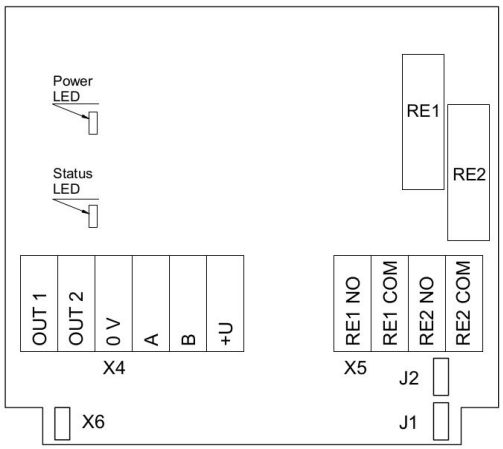


Ask for other versions or custom designed products

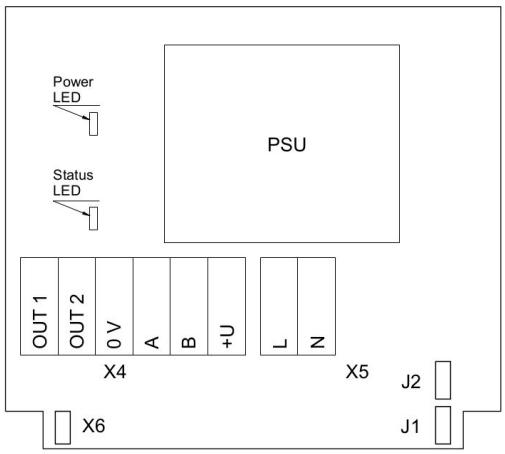
Connection diagram



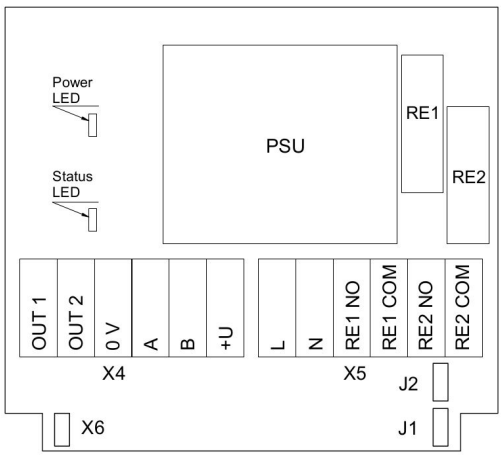
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

Jumpers

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

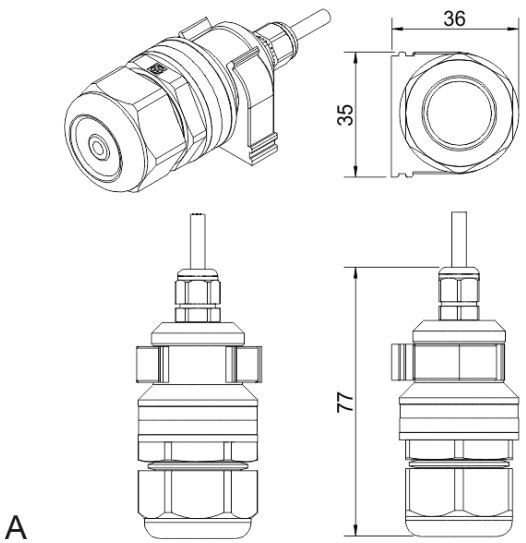
X4 terminals

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)

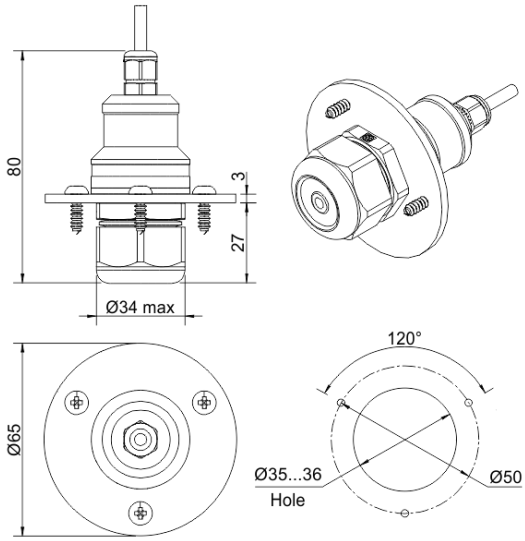
L	90…265 VAC Phase
N	90…265 VAC Neutral
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal

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)