



Oxygen Detector-Transmitter E2608-O2



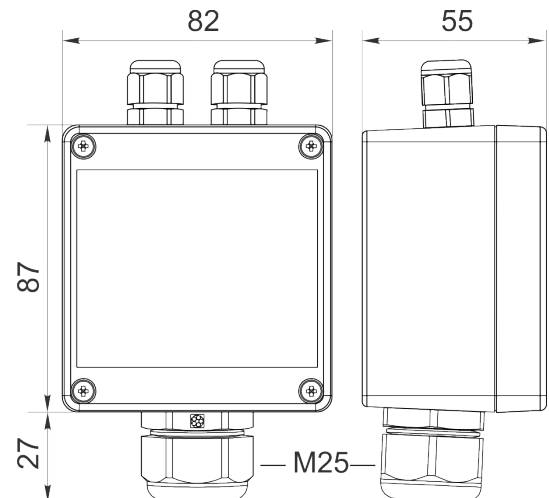
Features

- 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

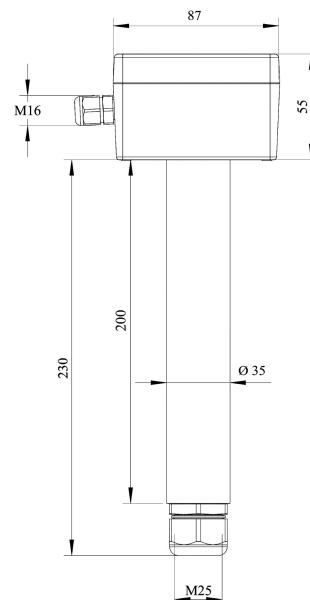
Specifications

Calibration	Oxygen O ₂
Sampling method	Diffusion
Sensor type	2-year Electrochemical 5-year Electrochemical (order code O2-5Y) O2-L (Optical)
Typical detection range	0...25% vol.
Resolution	0,01% vol.
Response time T90	<10 s 30 s (O2-L)
Signal update	Every 1 second
Sensor lifetime	> 2 years > 5 years (for O2-5Y and O2-L)
Maintenance interval	6 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: 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	RE1 (HIGH): set 19.5%, release 20.5% RE2 (LOW): set 18%, release 19%
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	15...90% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere -30...+50 °C -40...+60 °C (for O2-5Y) +10...+40 °C (for O2-L) NOTE! We offer technical solutions for extreme humidity, please ask for more information.

Wall mount version



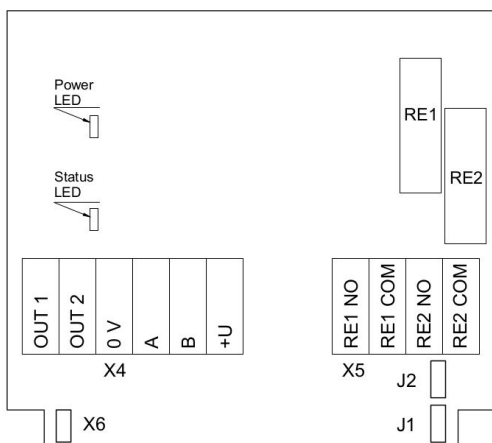
Duct mount version



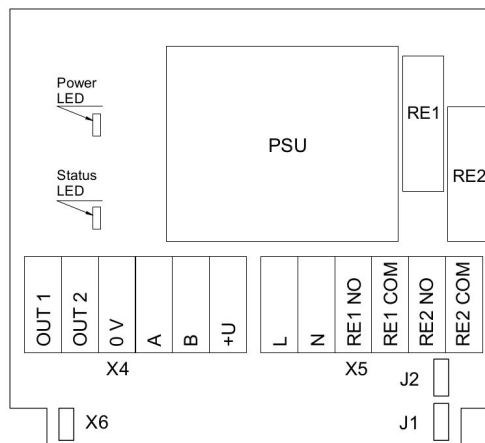
Ask for other versions or custom designed products



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

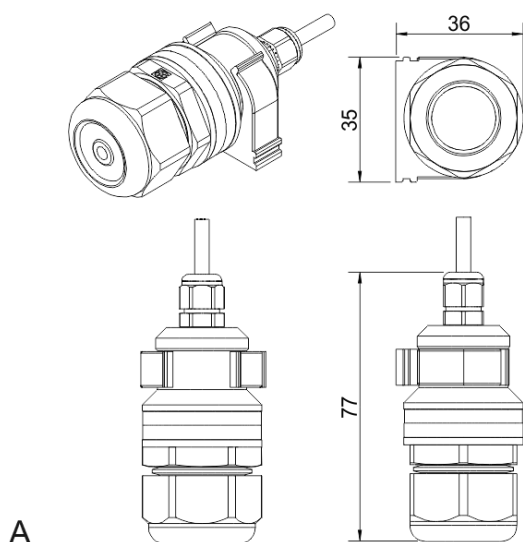
X4 terminals

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)

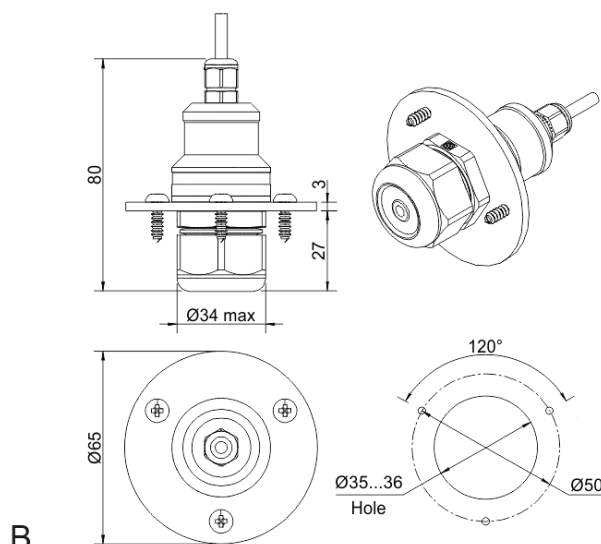
L	90...265 VAC Phase
N	90...265 VAC Neutral
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal

Remote probe



A

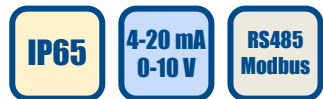
Wall mount remote probe with fixing clamp (default version)



B

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





Oxygen Transmitter E2618-O2



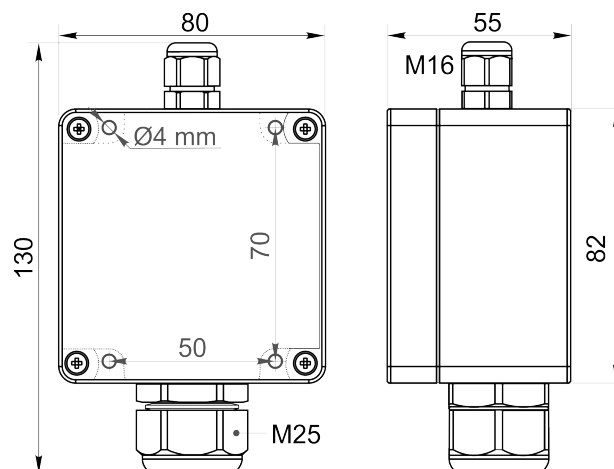
Features

- 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

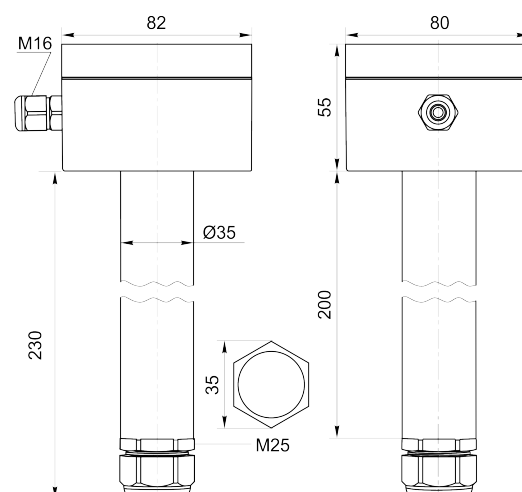
Specifications

Calibration	Oxygen O ₂
Sensor type	2-year Electrochemical 5-year Electrochemical (order code O2-5Y) O2-L (Optical)
Sampling method	Diffusion
Detection range	0...25% vol.
Resolution	0,01% vol.
Response time T90	<10 s 30 s (O2-L)
Signal update	Every 1 second
Sensor lifetime	> 2 years > 5 years (for O2-5Y and O2-L)
Maintenance interval	6 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: 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
Operating environment	Industrial indoor and outdoor locations
Operating conditions	15...90% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere -30...+50 °C -40...+60 °C (for O2-5Y) +10...+40 °C (for O2-L)
	NOTE! We offer technical solutions for extreme humidity, please ask for more information.

Wall mount version



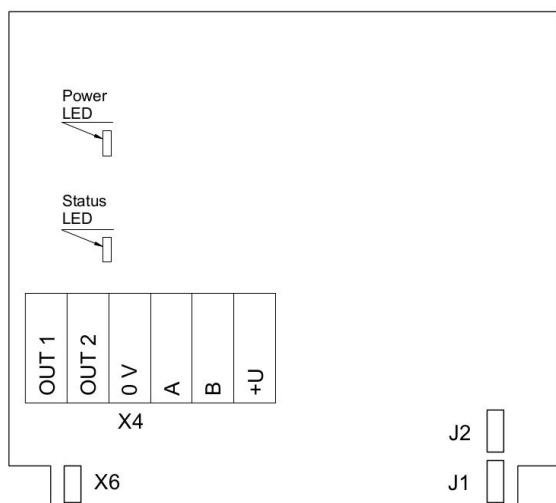
Duct mount version



Ask for other versions or custom designed products



Connection diagram



PCB without PSU and relays

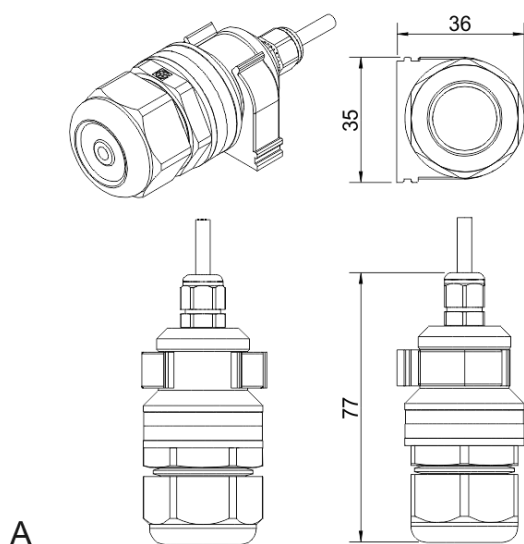
Jumpers

- 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

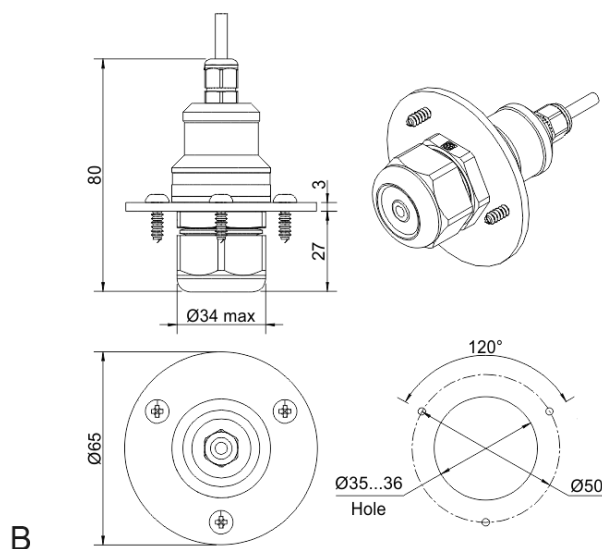
X4 terminals

- 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

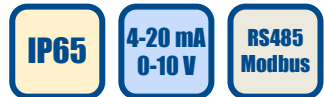


Wall mount remote probe with fixing clamp (default version)



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





Oxygen Detector-Transmitter E2638-O2



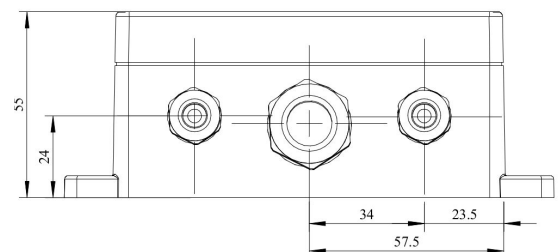
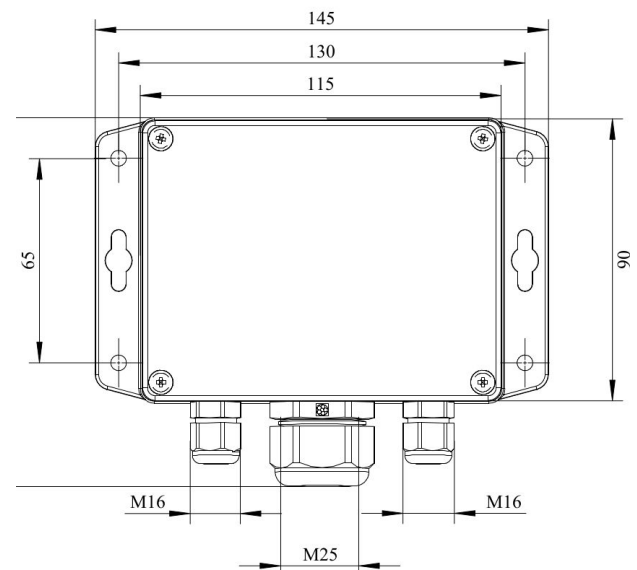
Features

- 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	Oxygen O ₂
Sensor type	2-year Electrochemical 5-year Electrochemical (order code O2-5Y) O2-L (Optical)
Sampling method	Diffusion
Detection range	0...25% vol.
Resolution	0.01 % vol.
Response time T90	< 10 s 30 s (O2-L)
Signal update	Every 1 second
Sensor lifetime	> 2 years > 5 years (for O2-5Y and O2-L)
Maintenance interval	6 months
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	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	5...90% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere -30...+50 °C -40...+60 °C (for O2-5Y) +10...+40 °C (for O2-L) 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 (HIGH): set 19.5%, release 20.5% RE2 (LOW): set 18%, release 19%

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

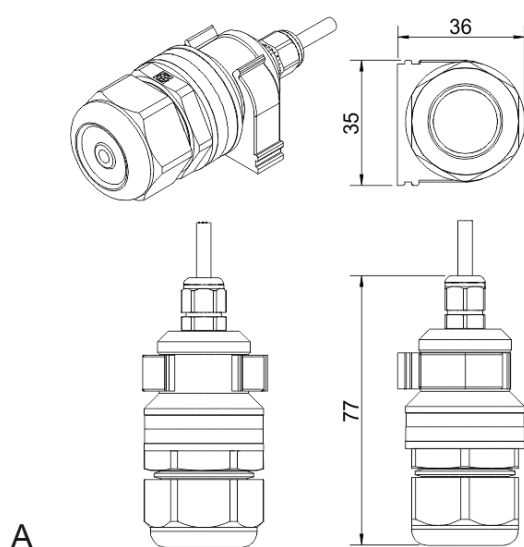
NOTE! Only second analog output (OUT2) is available for a version with LCD.

NOTE! LCD and LEDs can not be chosen simultaneously.

Version with LCD indicator

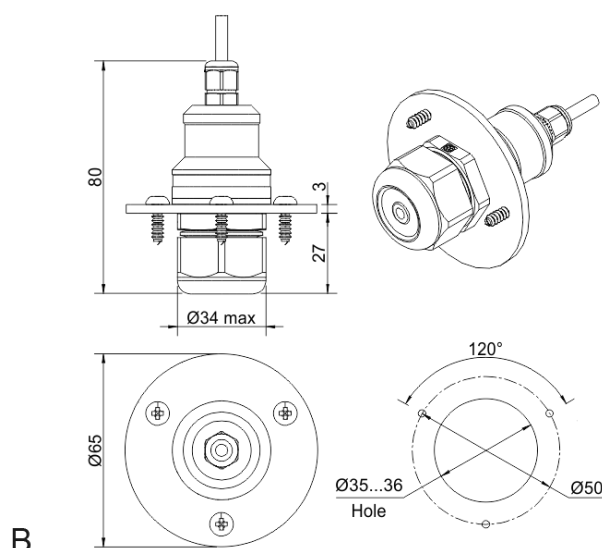


Remote probe



A

Wall mount remote probe with fixing clamp (default version)

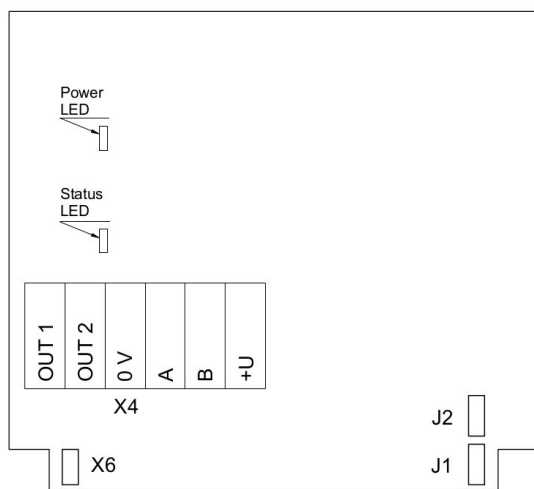


B

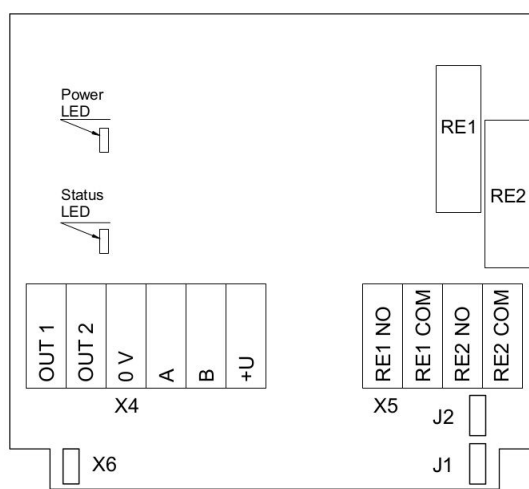
Remote probe with rubber flange and three self-tapping screws (on request)



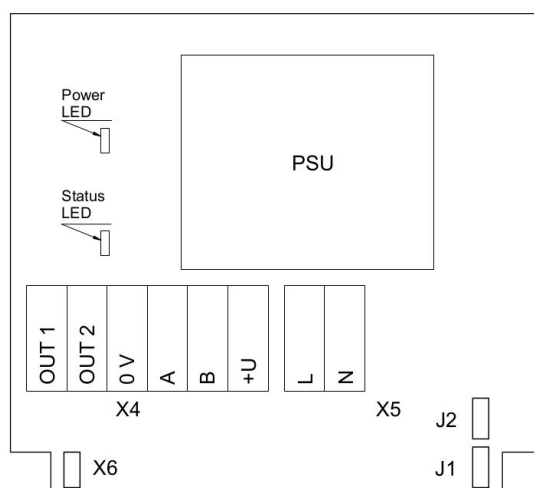
Connection diagrams



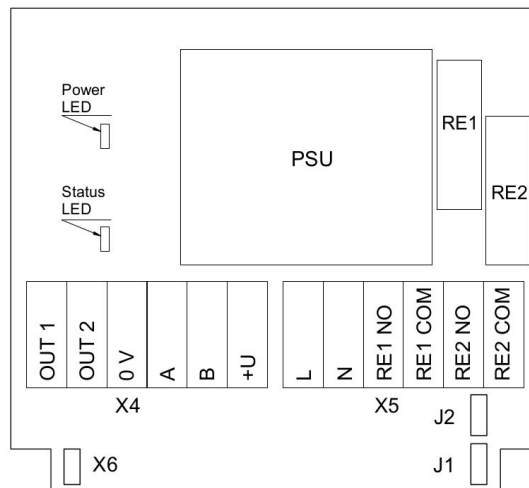
Version without PSU and relays



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





Oxygen Detector-Transmitter E2648-O2



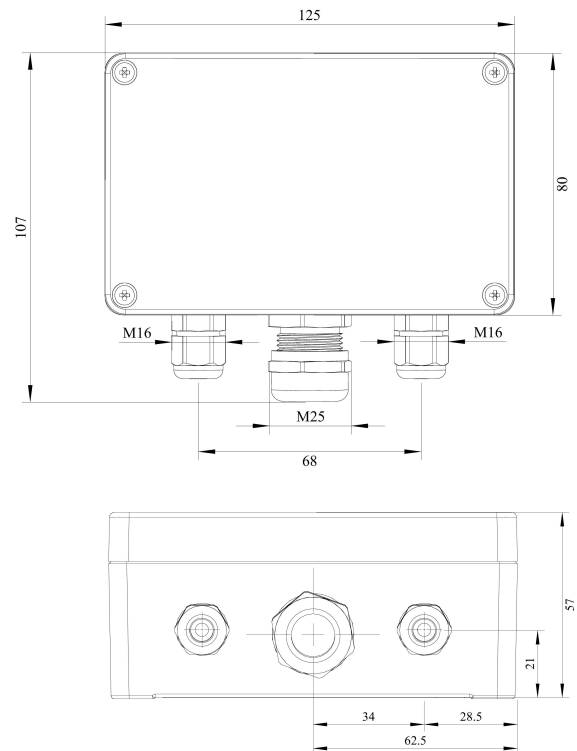
Features

- 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	Oxygen O ₂
Sampling method	Diffusion
Sensor type	2-year Electrochemical 5-year Electrochemical (order code O2-5Y) O2-L (Optical)
Typical detection range	0...25% vol.
Resolution	0,01% vol.
Response time T90	< 10 s 30 s (O2-L)
Sensor lifetime	> 2 years > 5 years (for O2-5Y and O2-L)
Maintenance interval	6 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	15...90% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere -30...+50 °C -40...+60 °C (for O2-5Y) +10...+40 °C (for O2-L) 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 (HIGH): set 19.5%, release 20.5% RE2 (LOW): set 18%, release 19%
Other options	
Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m

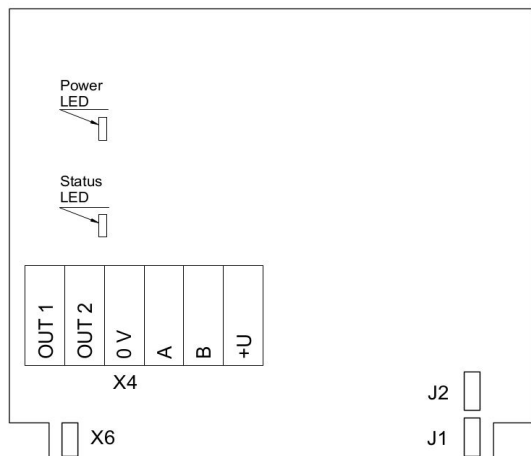
Dimensions



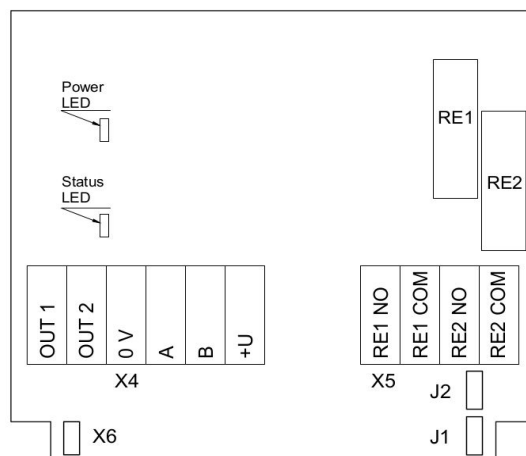
Ask for other versions or custom designed products



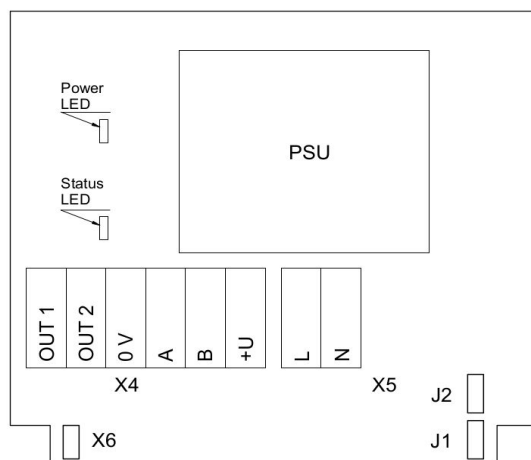
Connection diagrams



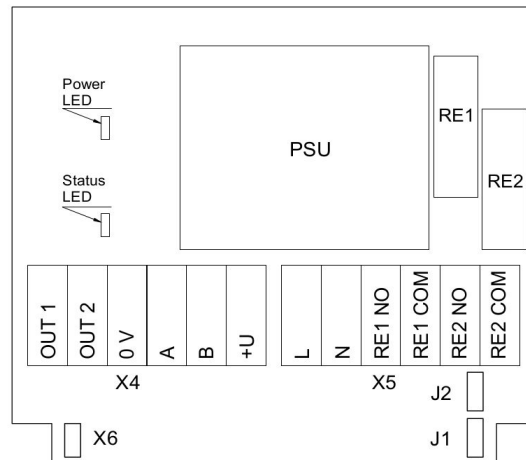
Version without PSU and relays



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

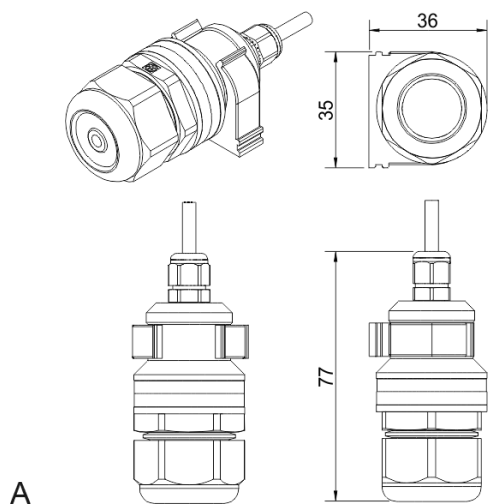
- OUT1** 4-20 mA / 0-10 V output
- OUT2** 4-20 mA / 0-10 V output
- 0V** 0 V / 24 VAC Neutral (optional)
- A** RS485 A / Data +
- B** RS485 B / Data -
- +U** +24 VDC / 24 VAC Phase (optional)

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

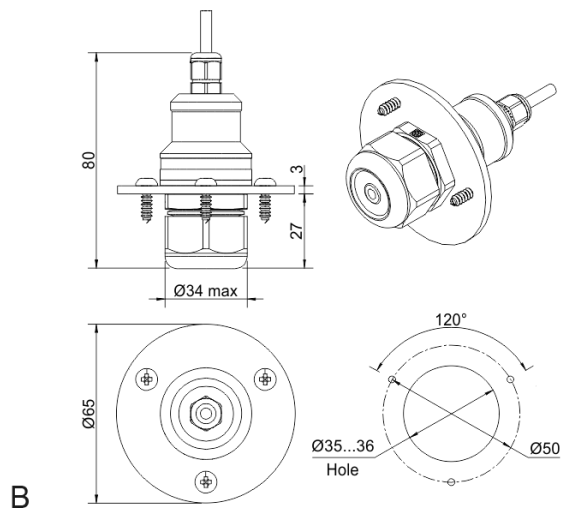


Remote probe



A

Wall mount remote probe with fixing clamp (default version)



B

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



Flameproof Oxygen Detector-Transmitter E2658-O2



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	Oxygen O ₂
Sampling method	Diffusion
Sensor type	2-year Electrochemical 5-year Electrochemical (order code O2-5Y)
Typical detection range	O2-L (Optical) 0...25% vol.
Resolution	0,01% vol.
Response time T90	< 10 s 30 s (O2-L)
Signal update	Every 1 second
Sensor lifetime	> 2 years > 5 years (for O2-5Y and O2-L)
Maintenance interval	6 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: 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	15...90% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere -30...+50 °C -40...+60 °C (for O2-5Y) +10...+40 °C (for O2-L)
	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 (HIGH): set 19.5%, release 20.5% RE2 (LOW): set 18%, release 19%

Approvals

Enclosure:

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

Glands:

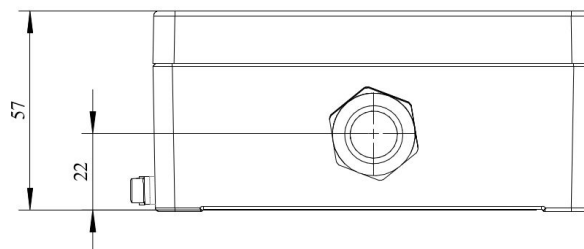
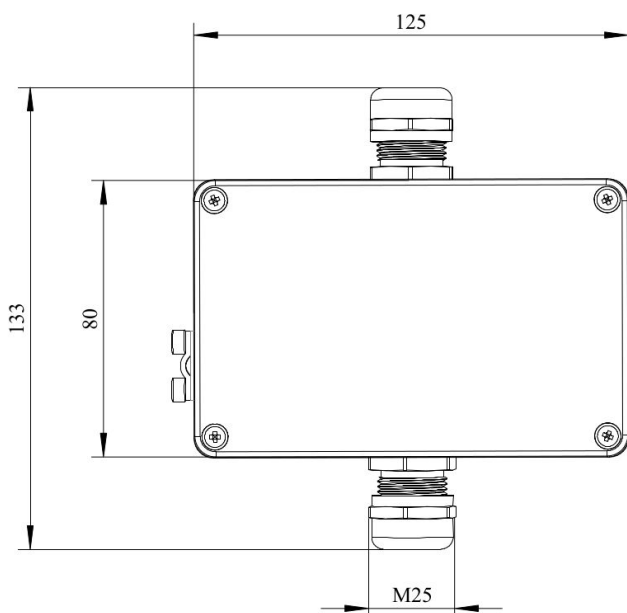
ATEX / IECEx
EESF 19 ATEX 023X
 II 2 G Ex db IIC Gb
 II 2 D Ex tb IIIC Db IP66

CE conformity

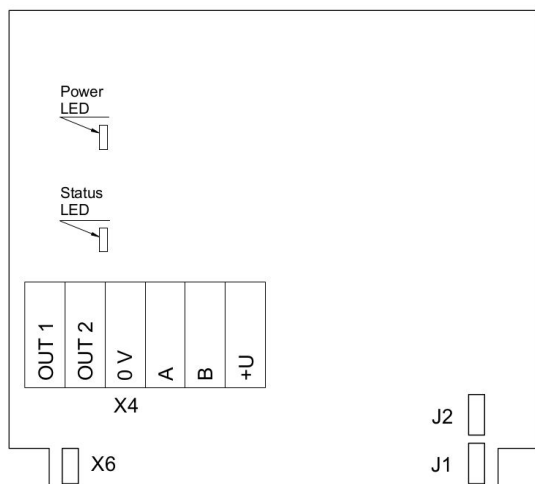
Flameproof to IEC EN 60079-1
Increased safety to IEC EN 60079-7
EMC Emissions to EN 61000-6-3, EN 61326-1
EMC Immunity to EN 61000-6-1, EN 61000-6-2



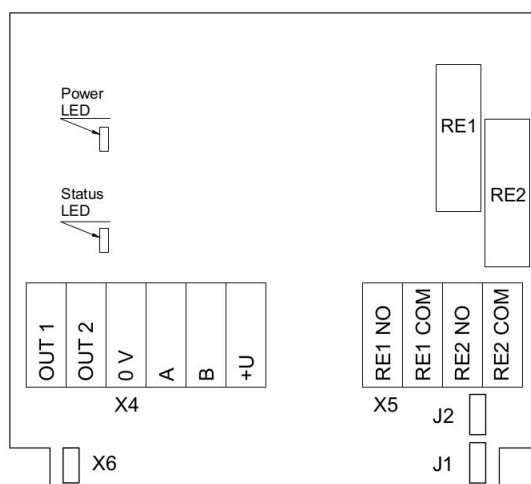
Dimensions



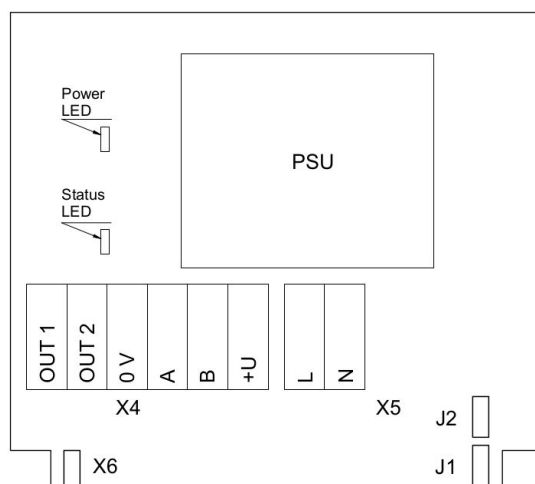
Connection diagrams



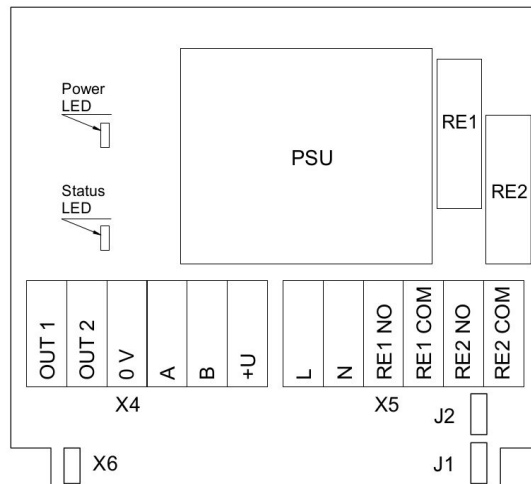
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays



Jumpers

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

