



# Chlorine Detector-Transmitter E2608-Cl2



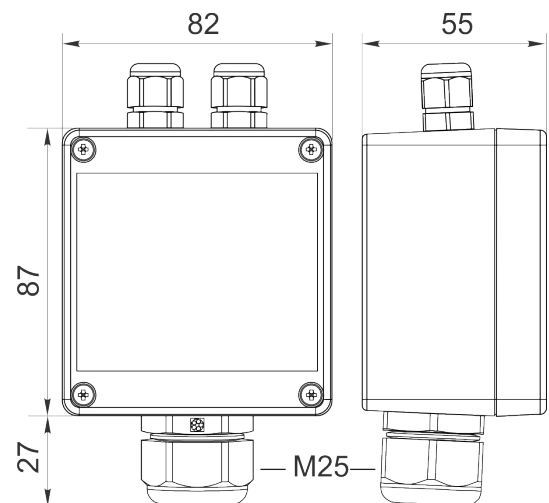
## Features

- 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

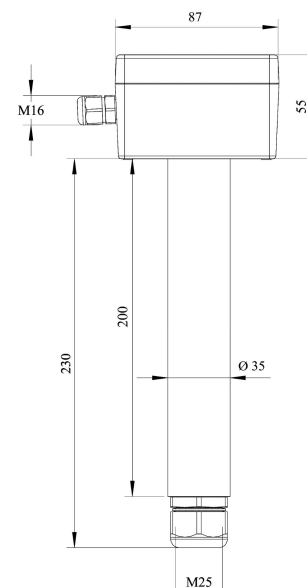
## Specifications

Calibration	Chlorine Cl <sub>2</sub>
Sensor type	Electrochemical
Sampling method	Diffusion
Typical detection range	0...10 ppm
Maximum overload	100 ppm
Resolution / digital unit	0.1 ppm
Response time T90	< 60 s
Signal update	Every 1 second
Sensor lifetime	> 1 year
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	LOW: set 0.5 ppm, release 0.4 ppm HIGH: set 1 ppm, release 0.8 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 <b>NOTE!</b> We offer technical solutions for extreme humidity, please ask for more information

### Wall mount version



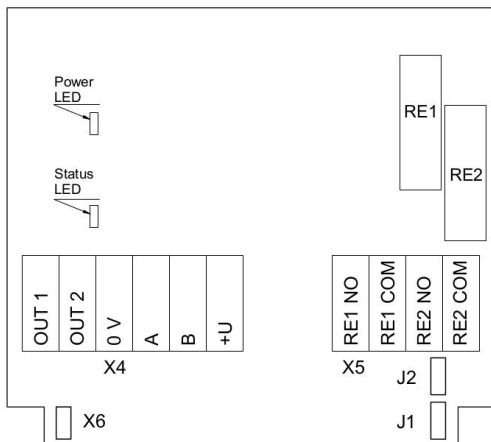
### Duct mount version



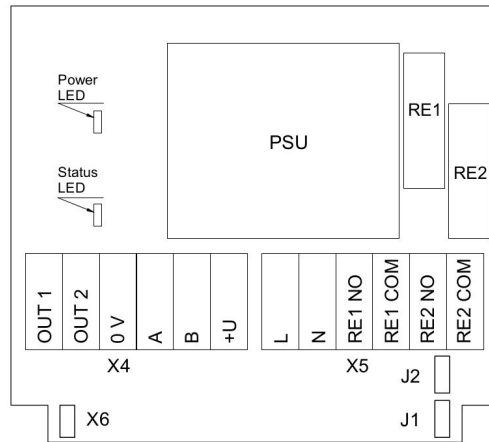
Ask for other versions or custom designed products



## Connection diagrams



Version without PSU



Version with PSU

### Jumpers

<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

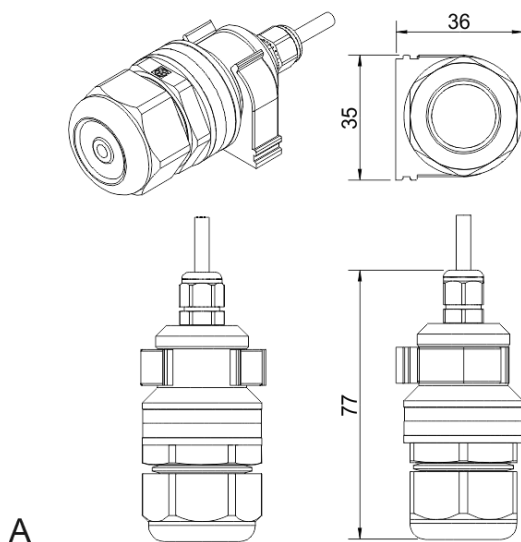
### X4 terminals

<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)

### X5 terminals (optional)

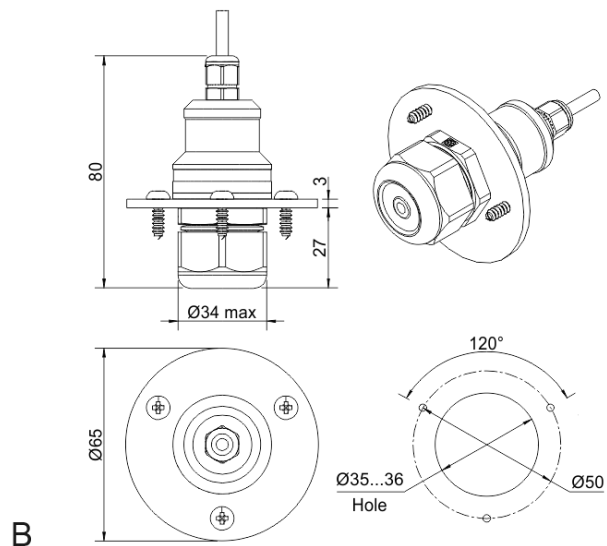
<b>L</b>	90...265 VAC Phase
<b>N</b>	90...265 VAC Neutral
<b>RE1 NO</b>	Relay 1, normally open terminal
<b>RE1 COM</b>	Relay 1, common terminal
<b>RE2 NO</b>	Relay 2, normally open terminal
<b>RE2 COM</b>	Relay 2, common terminal

## 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)





# Chlorine Transmitter E2618-CI2



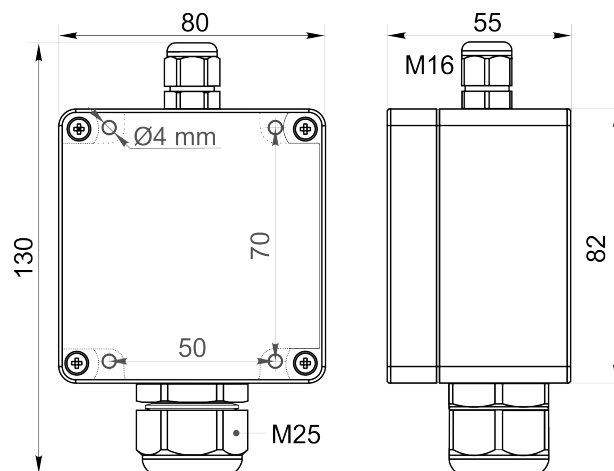
## Features

- 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

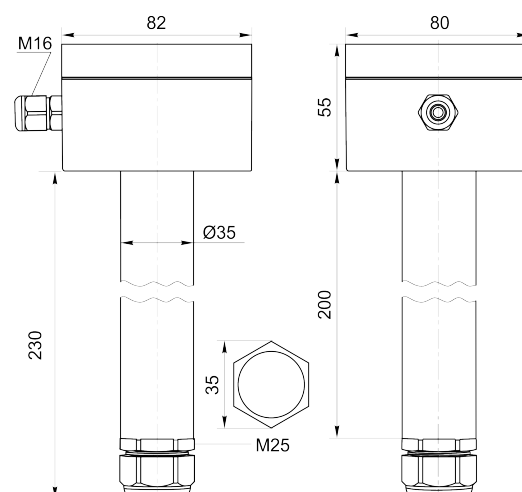
## Specifications

Calibration	Chlorine Cl <sub>2</sub>
Sensor type	Electrochemical
Sampling method	Diffusion
Typical detection range	0...10 ppm
Maximum overload	100 ppm
Resolution	0.1 ppm
Response time T90	< 60 s
Signal update	Every 1 second
Sensor lifetime	> 1 year
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	-20...+50 °C, 0.9...1,1 atm 15...90% RH non condensing Explosion-safe areas Non-aggressive atmosphere <b>NOTE!</b> We offer technical solutions for extreme humidity, please ask for more information.

### Wall mount version



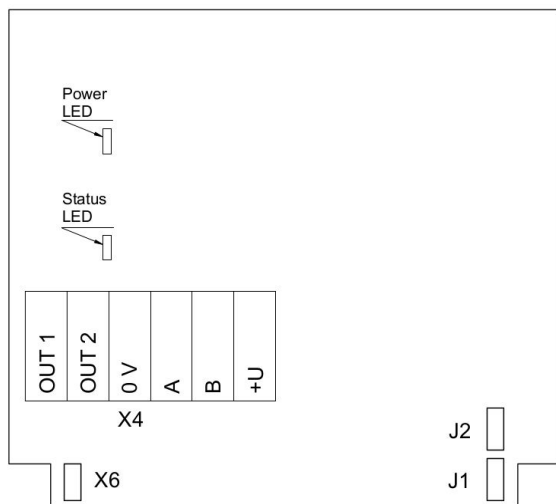
### Duct mount version



Ask for other versions or custom designed products



## Connection diagram



PCB without PSU and relays

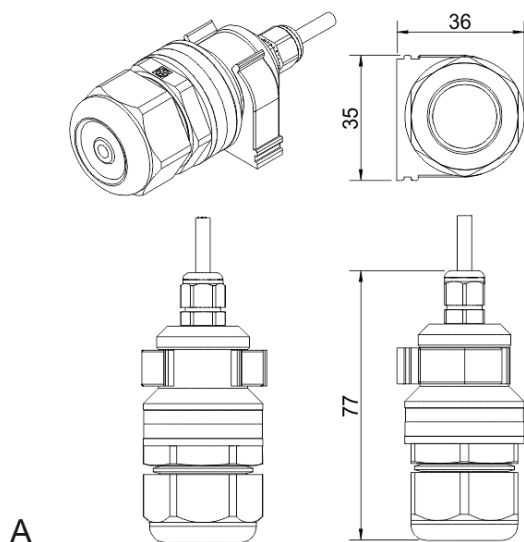
### Jumpers

- 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

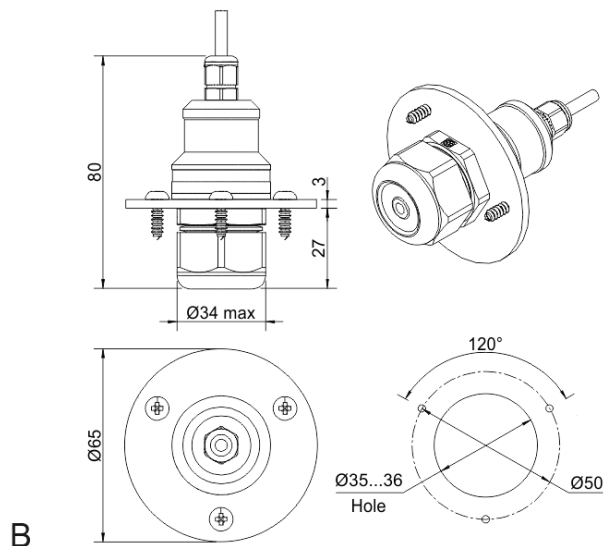
### X4 terminals

- 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)





# Chlorine Detector-Transmitter E2638-CI2



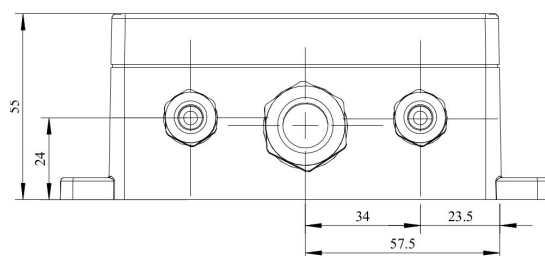
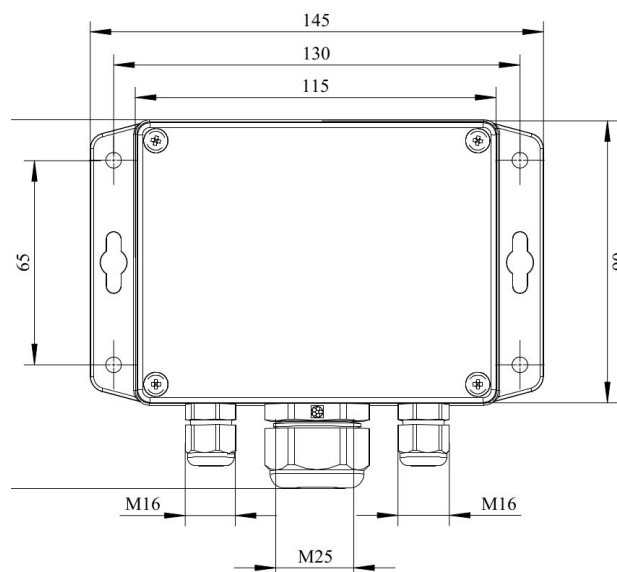
## Features

- 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	Chlorine Cl <sub>2</sub>
Sensor type	Electrochemical
Sampling method	Diffusion
Typical detection range	0...10 ppm
Maximum overload	100 ppm
Resolution	0.1 ppm
Response time T90	< 60 s
Signal update	Every 1 second
Maintenance interval	6 months
Sensor lifetime	> 1 years
Self-diagnostics	Full functionality check at start-up
Warm-up time	≤ 1 min
Power supply options	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	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 15...90% RH non condensing Explosion-safe areas Non-aggressive atmosphere <b>NOTE!</b> 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
<b>Relay outputs</b>	
Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm set-points	LOW: set 0.5 ppm, release 0.4 ppm HIGH: set 1 ppm, release 0.8 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

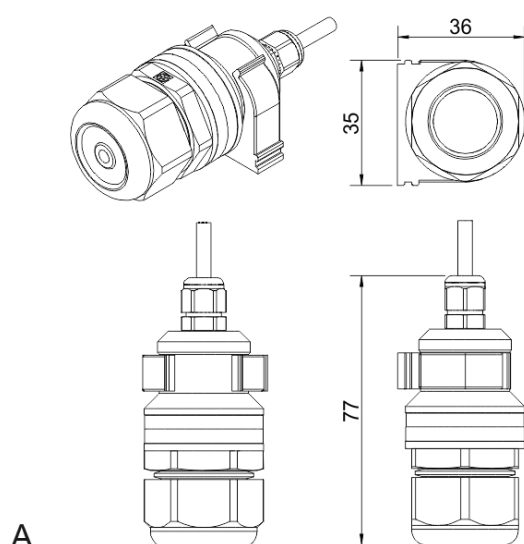
**NOTE!** Only one analog output is available for a version with LCD.

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

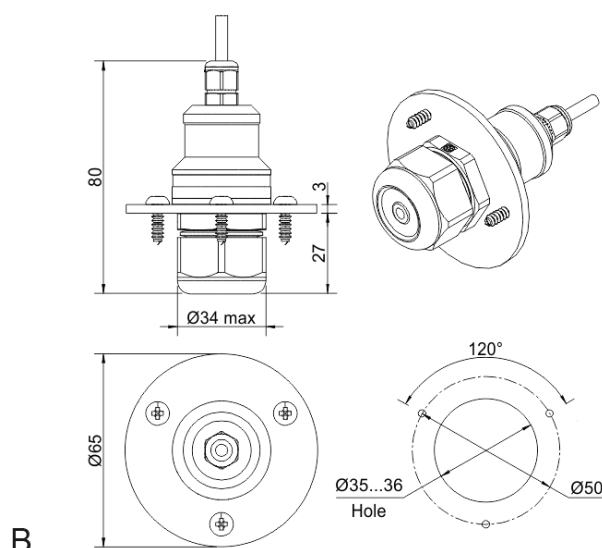
## Version with LCD indicator



## Remote probe



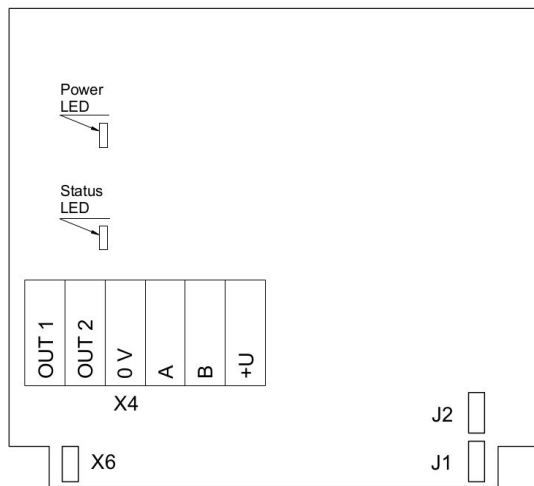
Wall mount remote probe with fixing clamp (default version)



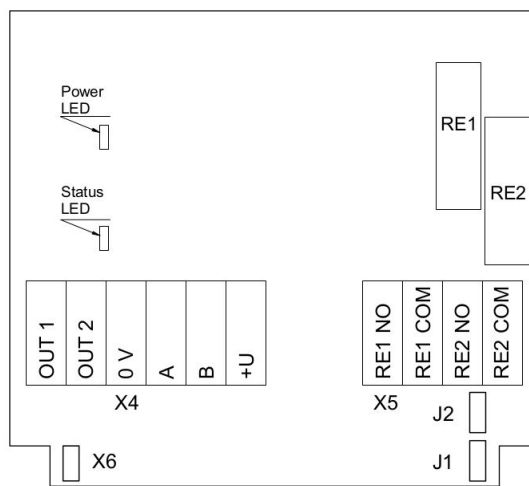
Remote probe with rubber flange and three self-tapping screws (on request)



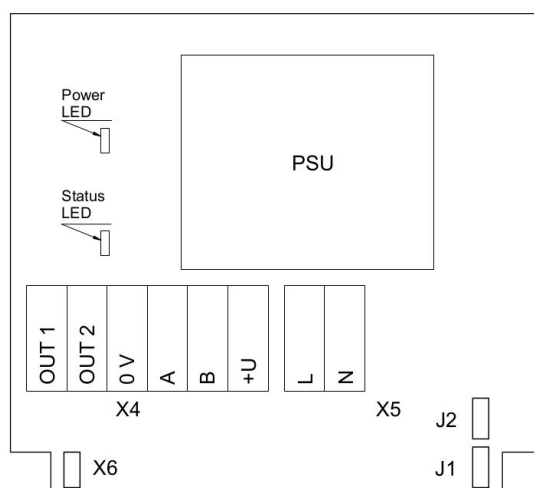
## Connection diagrams



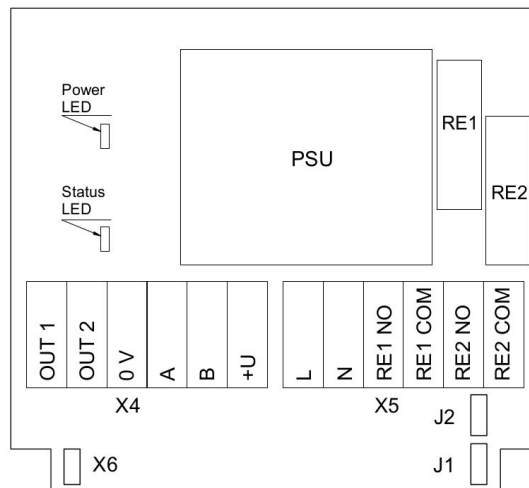
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

### 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

### X4 terminals

<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)

### X5 terminals (optional)

<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





# Chlorine Detector-Transmitter E2648-CI2



## 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	Chlorine Cl <sub>2</sub>
Sensor type	Electrochemical
Sampling method	Diffusion
Typical detection range	0...10 ppm
Maximum overload	100 ppm
Resolution	0.1 ppm
Response time T90	< 60 s
Sensor lifetime	> 1 years
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	-20...+50 °C, 0.9...1,1 atm 15...90% RH non condensing Explosion-safe areas Non-aggressive atmosphere <b>NOTE!</b> We offer technical solutions for extreme humidity, please ask for more information

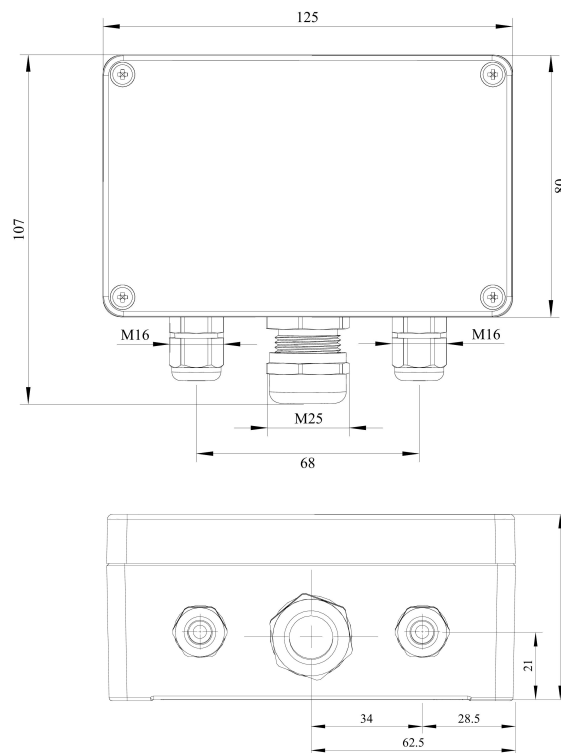
### Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	LOW: set 0.5 ppm, release 0.4 ppm HIGH: set 1 ppm, release 0.8 ppm

### Other options

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

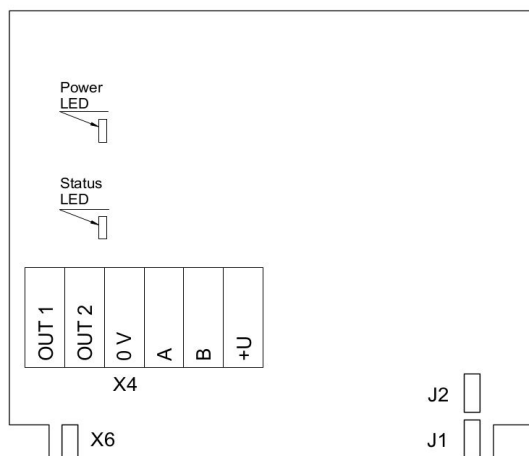


Ask for other versions or custom designed products

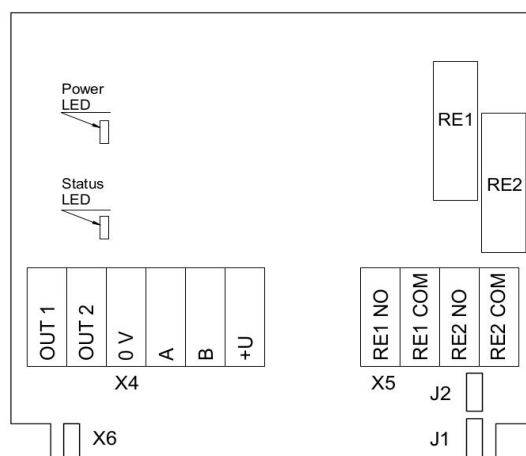




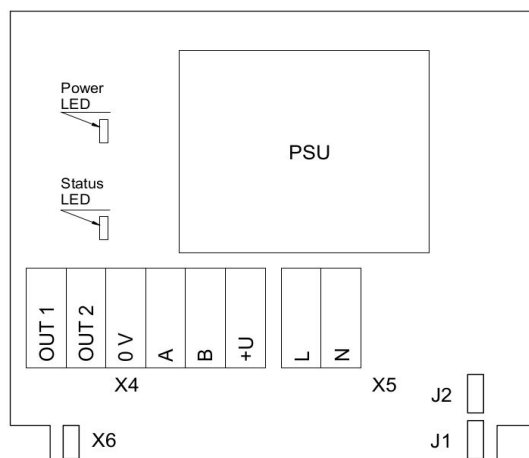
## Connection diagrams



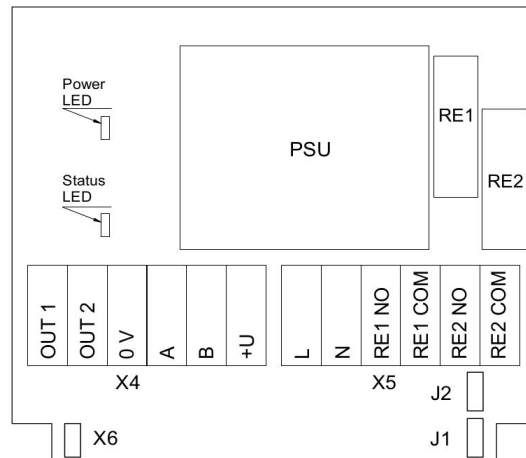
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

### Jumpers

<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

### X4 terminals

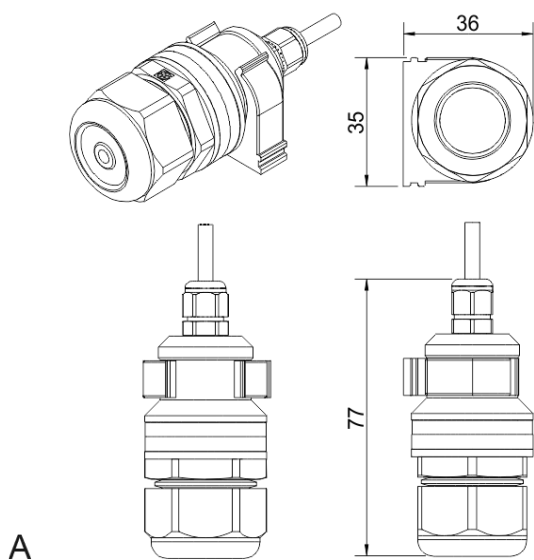
<b>OUT1</b>	4-20 mA / 0-10 V output
<b>OUT2</b>	4-20 mA / 0-10 V output
<b>0V</b>	0 V / 24 VAC Neutral (optional)
<b>A</b>	RS485 A / Data +
<b>B</b>	RS485 B / Data -
<b>+U</b>	+24 VDC / 24 VAC Phase (optional)

### X5 terminals (optional)

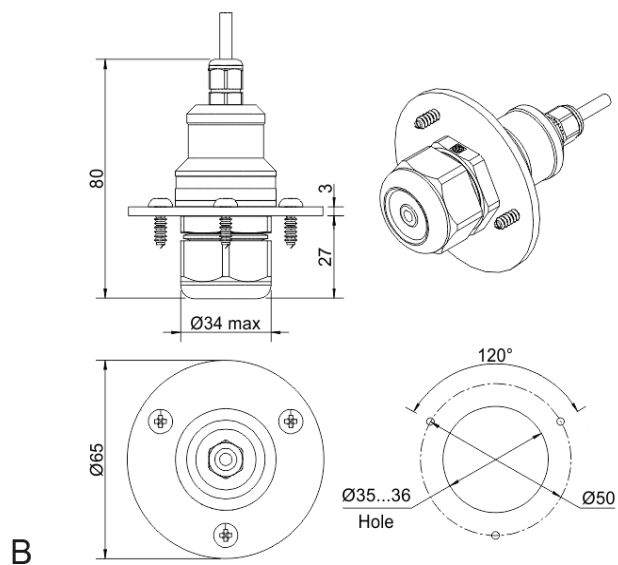
<b>L</b>	90...265 VAC Phase
<b>N</b>	90...265 VAC Neutral
<b>RE1 NO</b>	Relay 1, normally open terminal
<b>RE1 COM</b>	Relay 1, common terminal
<b>RE2 NO</b>	Relay 2, normally open terminal
<b>RE2 COM</b>	Relay 2, common terminal



## Remote probe



Wall mount remote probe with fixing clamp (default version)



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



# Flameproof Chlorine Detector-Transmitter E2658-CI2



## 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	Chlorine Cl <sub>2</sub>
Sensor type	Electrochemical
Sampling method	Diffusion
Typical detection range	0...10 ppm
Maximum overload	100 ppm
Resolution / digital unit	0.1 ppm
Response time T90	< 60 s
Sensor lifetime	> 1 years
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 (default),
Power consumption	24 VAC or 90...265 VAC as options
Digital interface	< 2 VA
Analog outputs	RS485, Modbus RTU protocol
Output scale width	2 × 4-20 mA / 0-10 V, user settable
Enclosure	Recommended: 20-100% of the range; > 10 × resolution in any case
Dimensions	Grey die-cast aluminium, protection class IP66
Operating environment	H80 × W125 × D57 / H80 × W175 × D80 mm
Operating conditions	Industrial indoor and outdoor locations -20...+50 °C, 0.9...1,1 atm 15...90% RH non condensing Explosion-safe areas Non-aggressive atmosphere
<b>Relay option (ordering code R)</b>	
Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	LOW: set 0.5 ppm, release 0.4 ppm HIGH: set 1 ppm, release 0.8 ppm

## Approvals

### Enclosure:

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

### Glands:

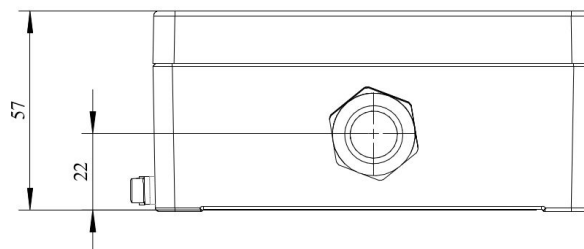
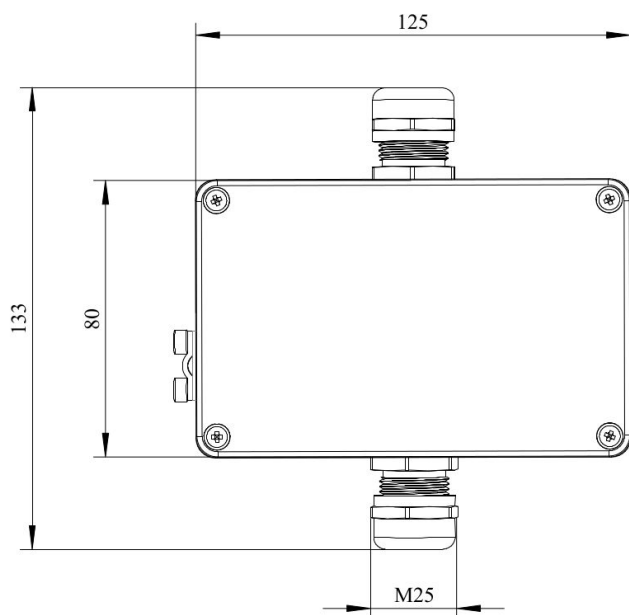
ATEX / IECEx  
EESF 19 ATEX 023X  
 II 2 G Ex db IIC Gb  
 II 2 D Ex tb IIIC Db IP66

### CE conformity

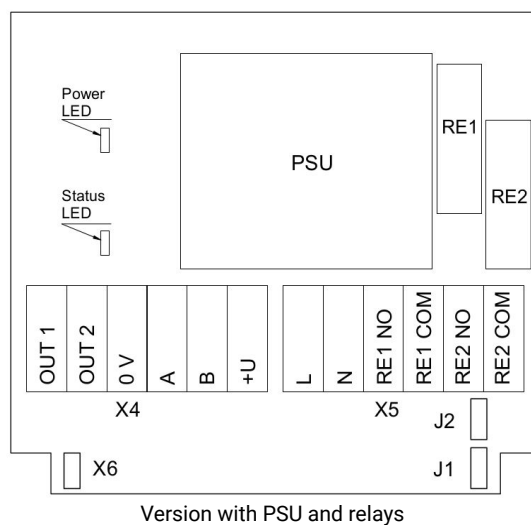
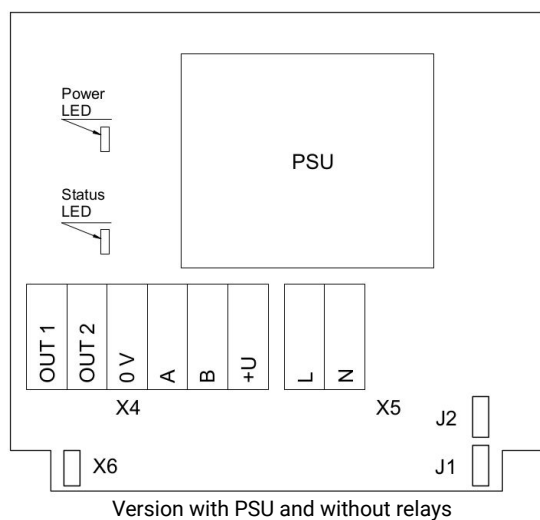
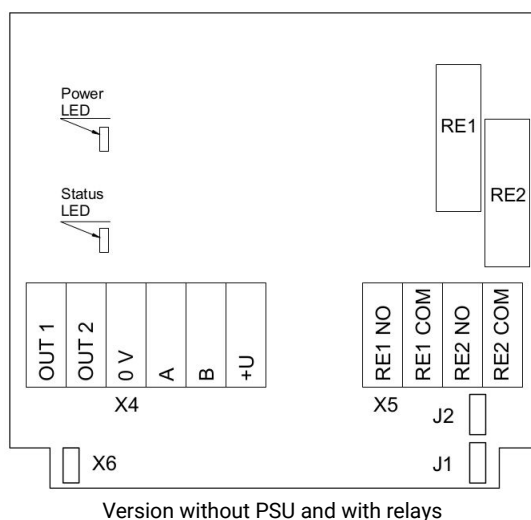
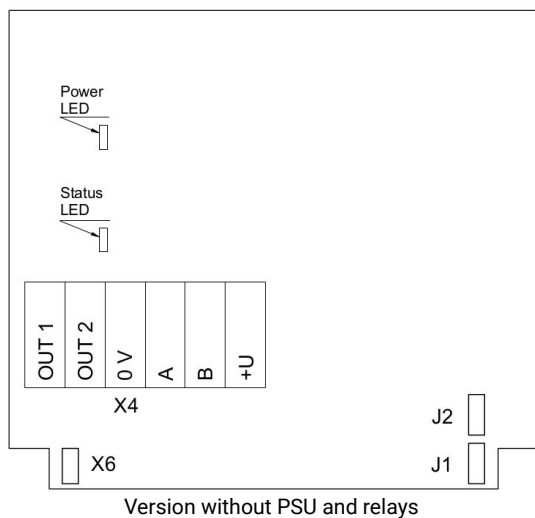
Flameproof to IEC EN 60079-1  
Increased safety to IEC EN 60079-7  
EMC Emissions to EN 61000-6-3, EN 61326-1  
EMC Immunity to EN 61000-6-1, EN 61000-6-2



## Dimensions



## Connection diagrams



**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

