

Ammonia Detector-Transmitter E2608-NH3-E



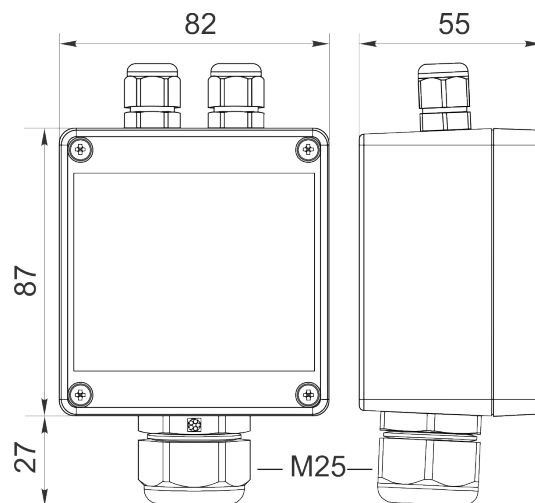
Features

- 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

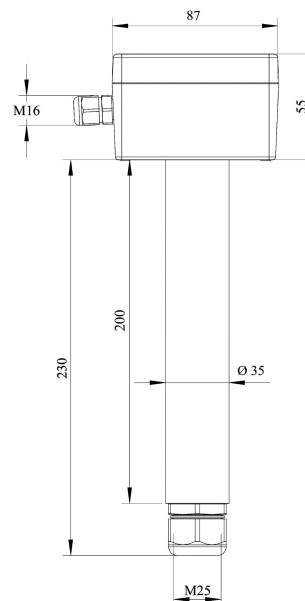
Specifications

Calibration	Ammonia NH ₃		
Sensor type	Electrochemical		
Sampling method	Diffusion		
Typical detection range	0...100 ppm	0...300 ppm	0...1000 ppm
Maximum overload	200 ppm	500 ppm	1500 ppm
Resolution	1 ppm		
Response time T90	< 75 s		
Signal update	Every 1 second		
Sensor lifetime	> 2 years		
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	For 0...100 ppm range: RE1 (LOW): set 25; release 20 ppm RE2 (HIGH): set 35; release 28 ppm For other ranges: defined by user within 5-95% of the detection range		
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	-40...+50°C, 15...90 %RH non-condensing; 0,9...1,1 atm; Explosion-safe areas; Non-aggressive atmosphere		
	NOTE! The device is not suitable for areas with constantly high ammonia concentration.		
	NOTE! We offer technical solutions for extreme humidity, please ask for more information.		

Wall mount version



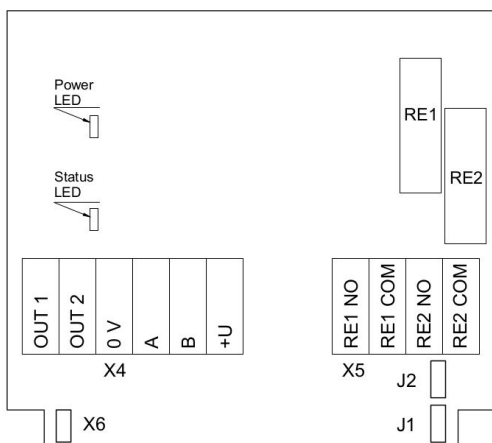
Duct mount version



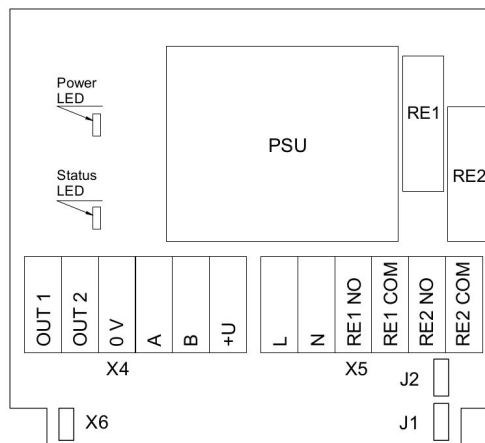
Ask for other versions or custom designed products



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

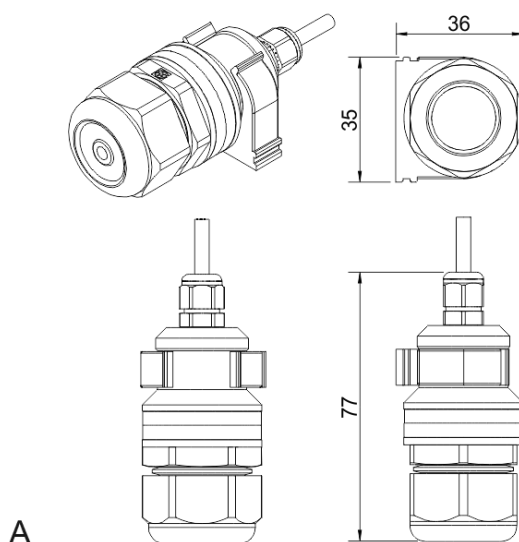
X4 terminals

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)

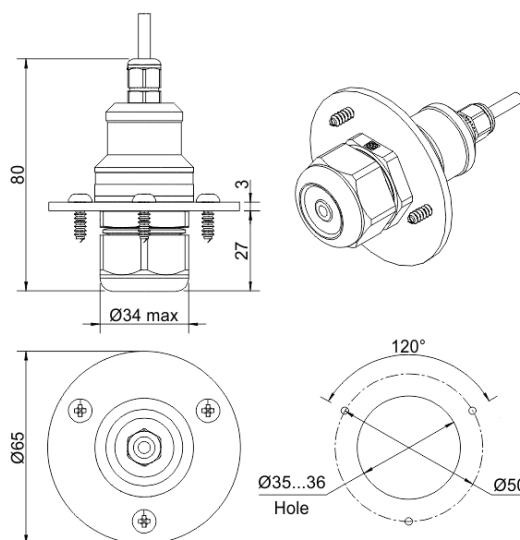
L	90...265 VAC Phase
N	90...265 VAC Neutral
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal

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)





Ammonia Detector-Transmitter E2608-NH3-P



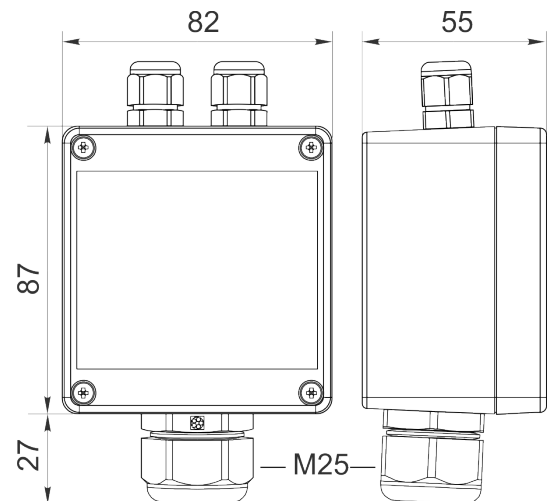
Features

- 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

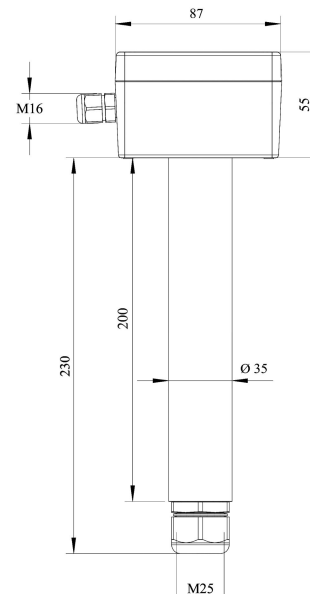
Specifications

Calibration	Ammonia NH ₃
Sensor type	Pellistor (catalytic bead)
Sampling method	Diffusion
Typical detection range	0...15%vol. (0...100%LEL NH ₃)
Resolution	0.1%vol. or 1%LEL
Response time T90	≤10 s
Sensor lifetime	> 3 years
Calibration 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), 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 Analog output scale can be set according to customer's requirement (e.g. 0...4%vol. NH ₃)
Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
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...+60 °C 95% RH non-condensing; 0.9...1,1 atm Explosion-safe areas Normal ambient oxygen level No strong mechanical shock, vibrations or EMI; Avoid exposure to corrosive gases or silicone containing products.

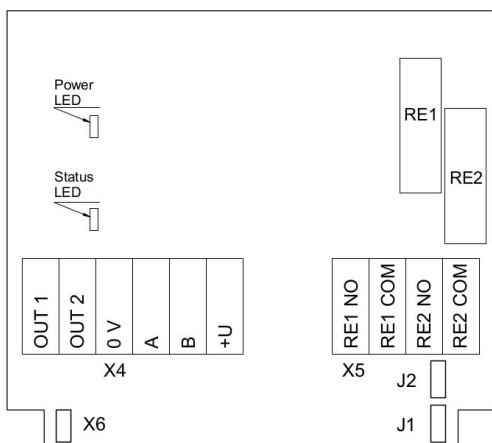
Wall mount version



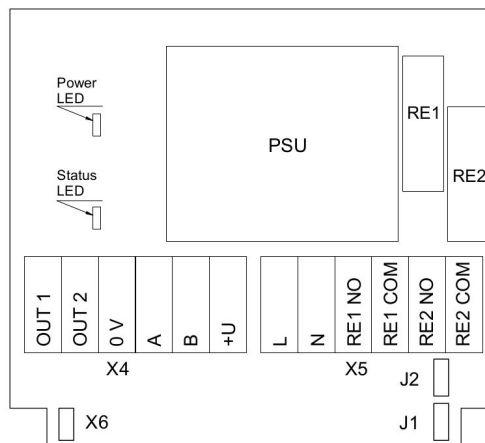
Duct mount version



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

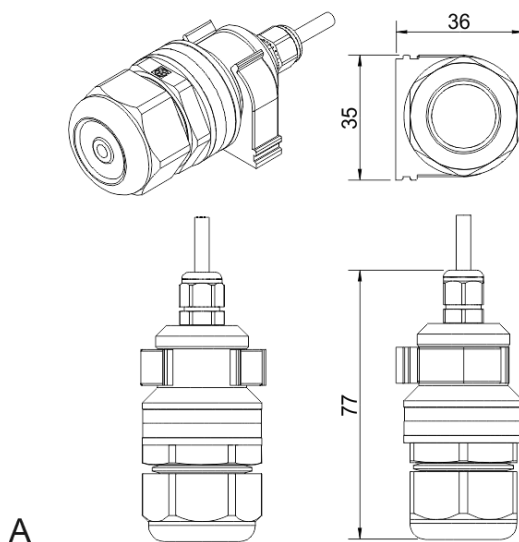
RE2 NO

Relay 2, normally open terminal

RE2 COM

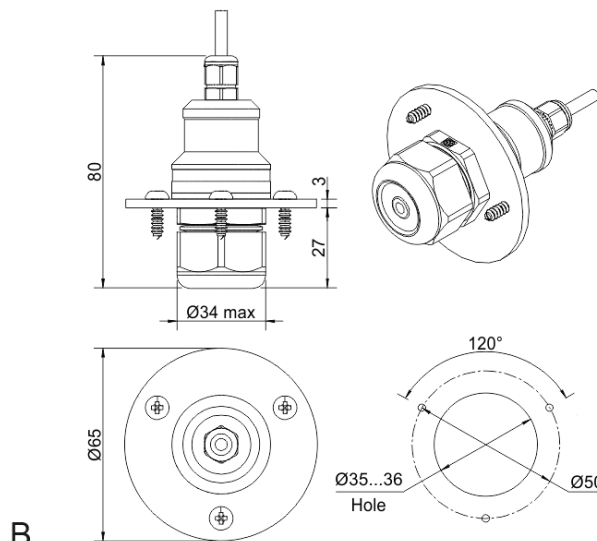
Relay 2, common terminal

Remote probe



A

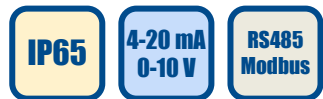
Wall mount remote probe with fixing clamp (default version)



B

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





Ammonia Transmitter E2618-NH3-E



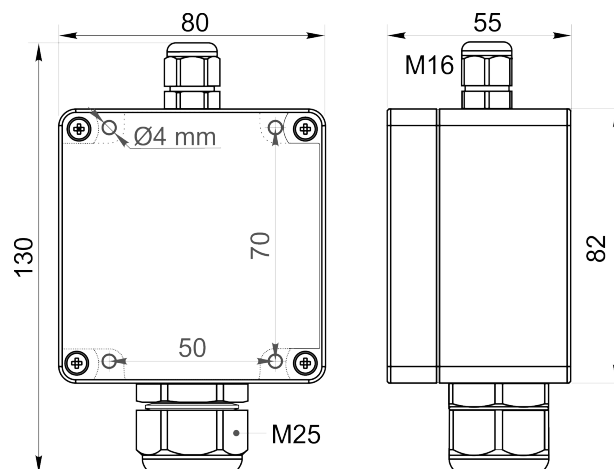
Features

- 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

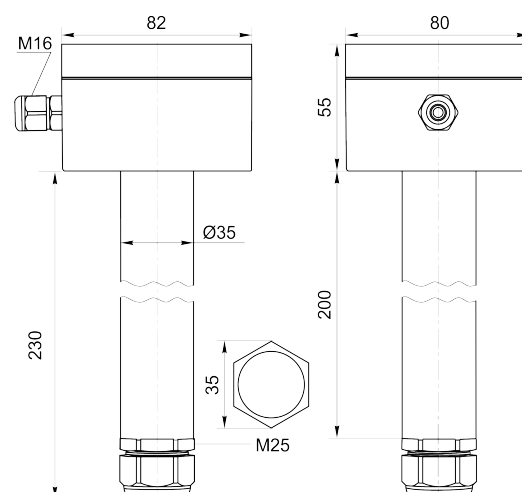
Specifications

Calibration	Ammonia NH ₃		
Sensor type	Electrochemical		
Sampling method	Diffusion		
Typical detection range	0...100 ppm	0...300 ppm	0...1000 ppm
Maximum overload	200 ppm	500 ppm	1500 ppm
Resolution	1 ppm		
Response time T90	< 75 s		
Signal update	Every 1 second		
Sensor lifetime	> 2 years		
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	-40...+50°C, 15...90 %RH non-condensing; 0,9...1,1 atm; Explosion-safe areas; Non-aggressive atmosphere		
	NOTE! The device is not suitable for areas with constantly high ammonia concentration;		
	NOTE! We offer technical solutions for extreme humidity, please ask for more information.		

Wall mount version



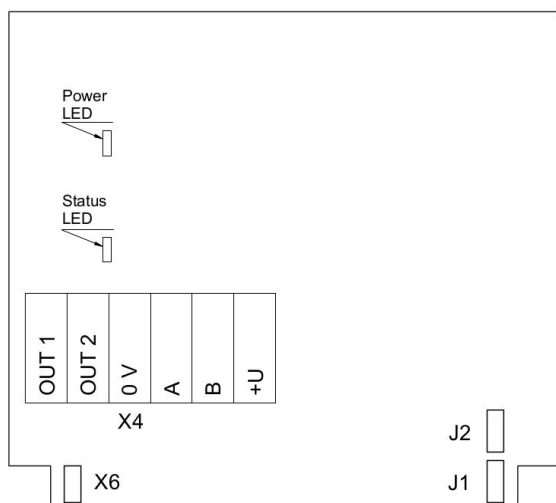
Duct mount version



Ask for other versions or custom designed products



Connection diagram



PCB without PSU and relays

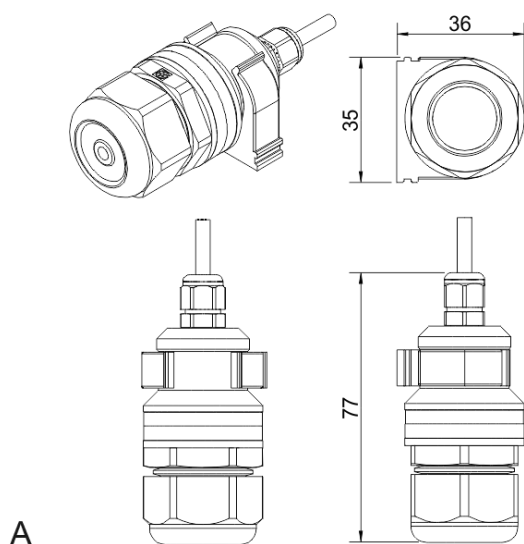
Jumpers

- 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

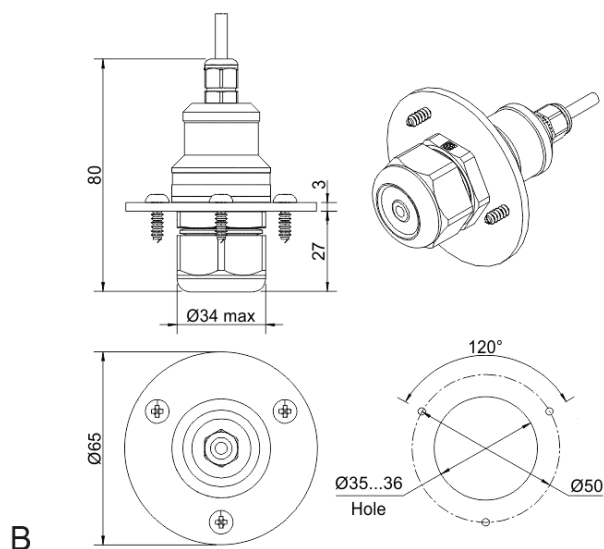
X4 terminals

- 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)





Ammonia Transmitter E2618-NH3-P



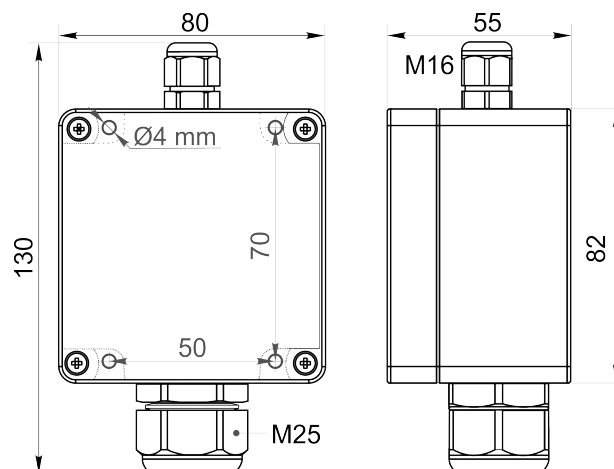
Features

- 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

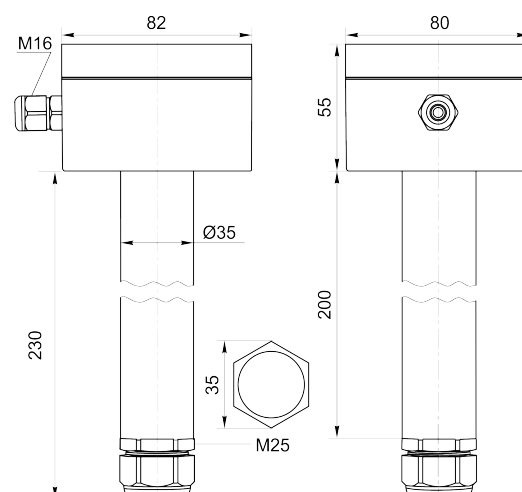
Specifications

Calibration	Ammonia NH ₃
Sensor type	Pellistor (catalytic bead)
Sampling method	Diffusion
Typical detection range	0...15%vol. (0...100%LEL NH ₃)
Resolution	0.1%vol. or 1%LEL
Response time T90	≤10 s
Sensor lifetime	> 3 years
Maintenance interval	6 months
Operating temperature	-20...+60°C
Signal update	Every 1 second
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 Analog output scale can be set according to customer's requirement (e.g. 0...4%vol. NH ₃)
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	(operating temperature is specified above) ≤ 95% RH non condensing; 0.9...1,1 atm Explosion-safe areas; Normal ambient O ₂ level; Avoid exposure to corrosive gases or silicone containing products.

Wall mount version



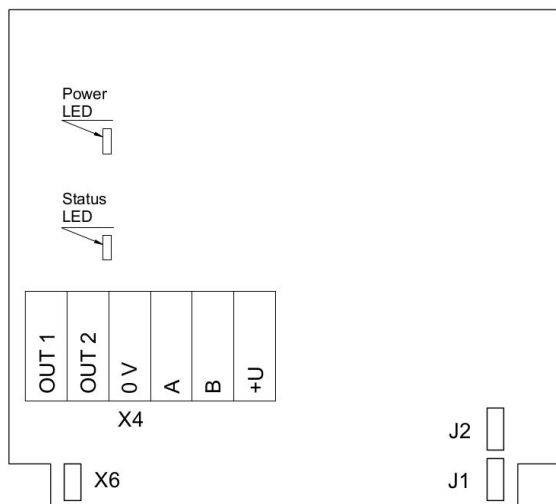
Duct mount version



Ask for other versions or custom designed products



Connection diagram



PCB without PSU and relays

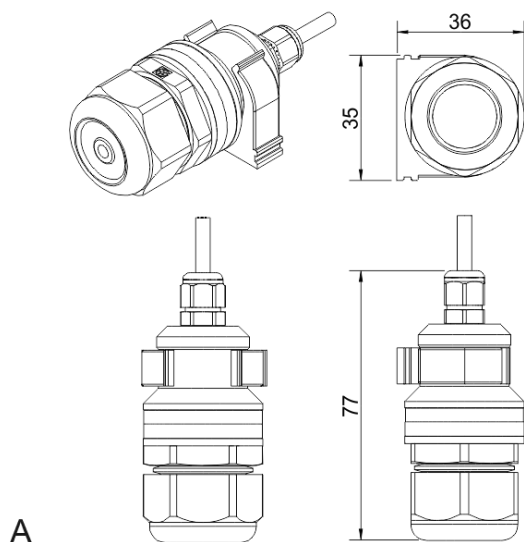
Jumpers

- 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

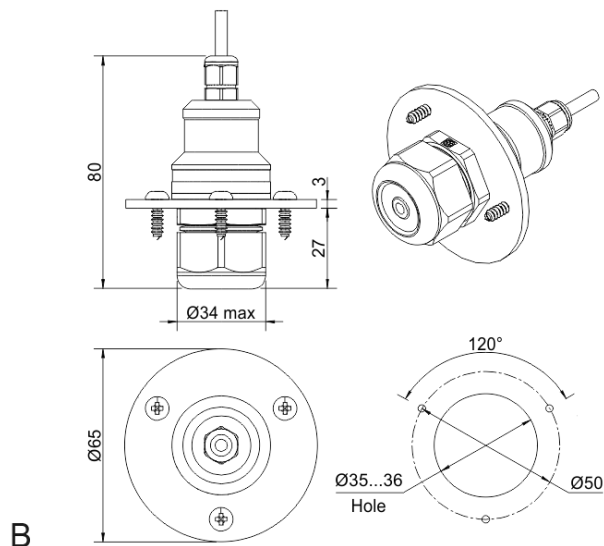
X4 terminals

- 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)





Ammonia Detector-Transmitter E2638-NH3-E



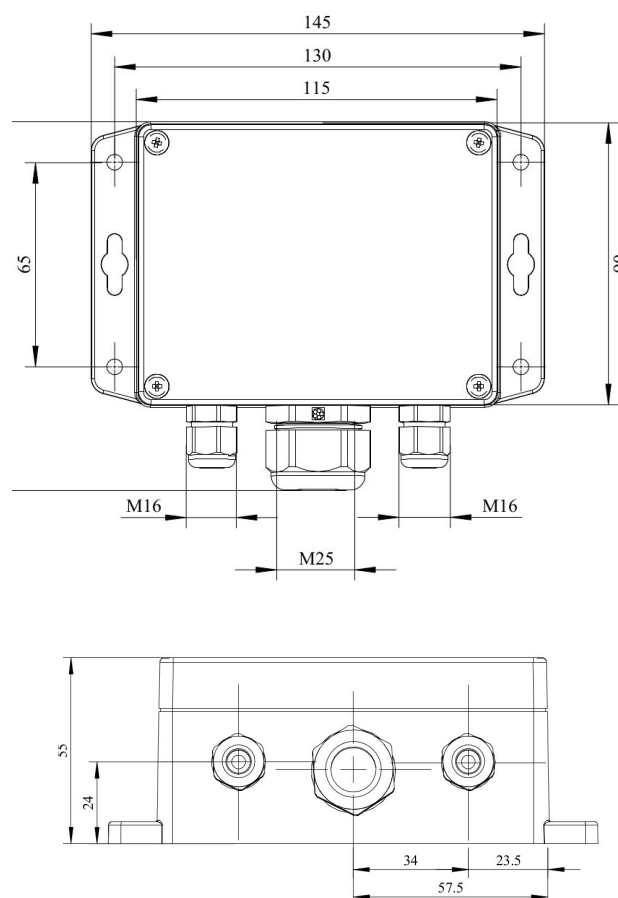
Features

- 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	Ammonia NH ₃		
Sensor type	Electrochemical		
Sampling method	Diffusion		
Typical detection range	0...100 ppm	0...300 ppm	0...1000 ppm
Maximum overload	200 ppm	500 ppm	1500 ppm
Resolution	1 ppm	1 ppm	1 ppm
Response time T90	< 75s		
Signal update	Every 1 second		
Sensor lifetime	> 2 years		
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	-40...+50°C, 15...90 %RH non-condensing; 0,9...1,1 atm; Explosion-safe areas; Non-aggressive atmosphere		
	NOTE! The device is not suitable for areas with constantly high ammonia concentration;		
	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	For 0...100 ppm range: RE1 (LOW): set 25; release 20 ppm RE2 (HIGH): set 35; release 28 ppm For other ranges: defined by user within 5-95% of the detection 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 digit 7-segment
Character height	14 mm
Other features	Backlight

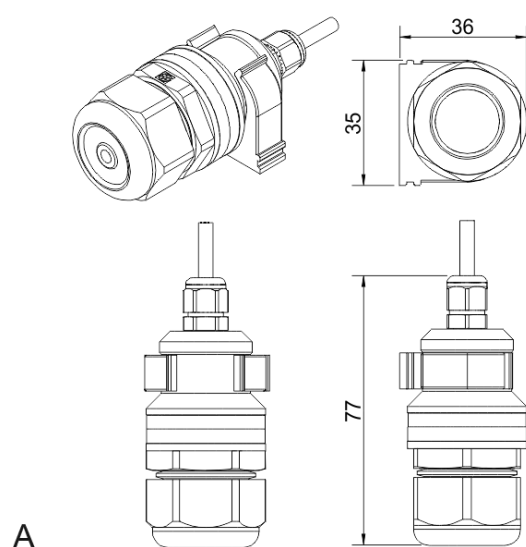
NOTE! Only second analog output (OUT2) is available for a version with LCD.

NOTE! LCD and LEDs can not be chosen simultaneously.

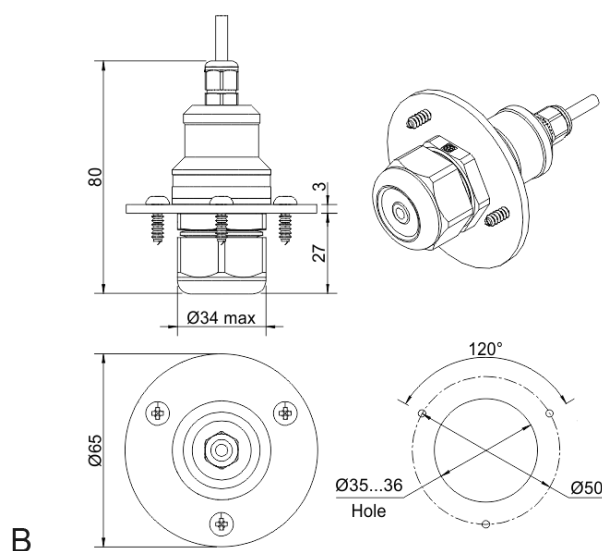
Version with LCD indicator



Remote probe



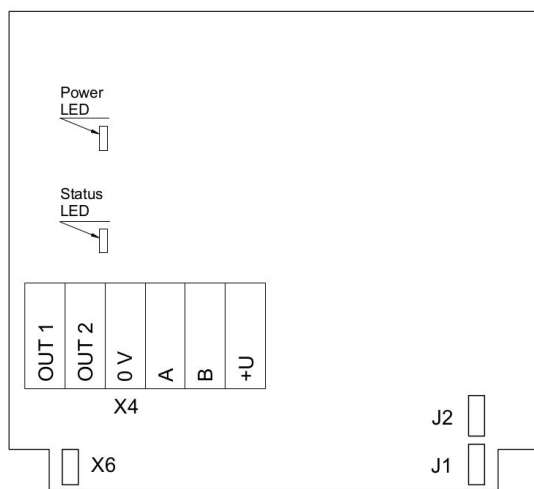
Wall mount remote probe with fixing clamp (default version)



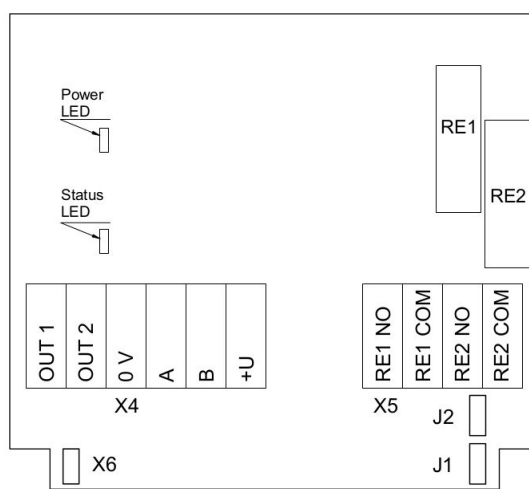
Remote probe with rubber flange and three self-tapping screws (on request)



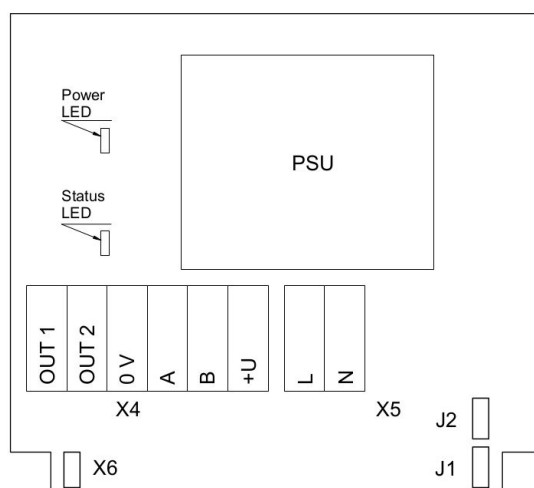
Connection diagrams



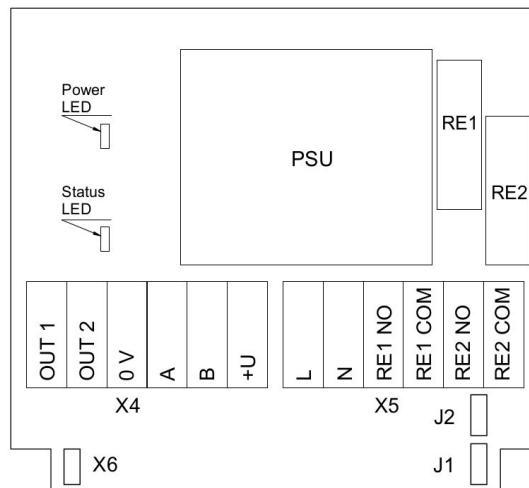
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

Jumpers

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

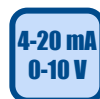
X4 terminals

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





Ammonia Detector-Transmitter E2638-NH3-P



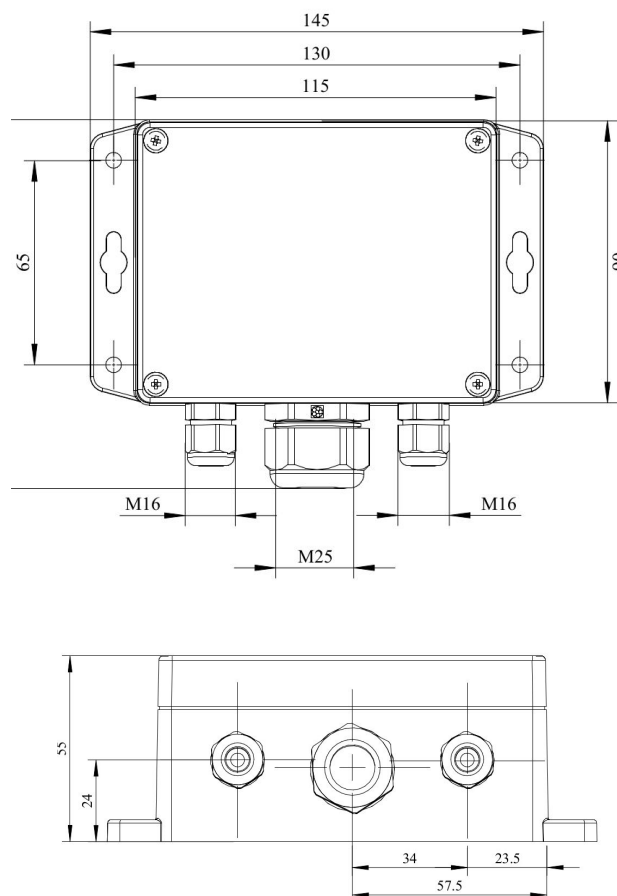
Features

- Accurate and stable measurement
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- RS485 Modbus RTU digital interface
- Relay option
- Attached or remote sensor
- LCD indicator option

Specifications

Calibration	Ammonia NH ₃
Sensor type	Pellistor (catalytic bead)
Sampling method	Diffusion
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Resolution	0.1%vol. or 1%LEL
Response time T90	≤10 s
Sensor lifetime	> 3 years
Maintenance interval	6 months
Operating temperature	-20...+60 °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 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 Analog output scale can be set according to customer's requirement (e.g. 0...4%vol. NH ₃)
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	(operating temperature is specified above) ≤ 95% RH non condensing; 0.9...1,1 atm Explosion-safe areas Normal ambient oxygen level Avoid strong mechanical shock, vibrations or EMI; Avoid exposure to corrosive gases or silicone containing products.

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
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

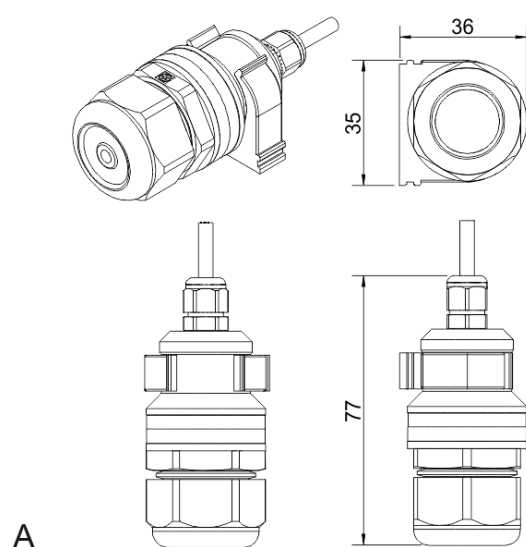
NOTE! Only one analog output is available for a version with LCD.

NOTE! LCD and LEDs can not be chosen simultaneously.

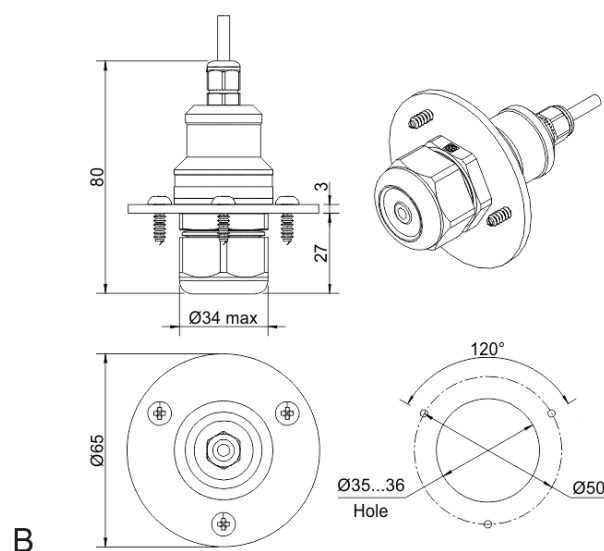
Version with LCD indicator



Remote probe



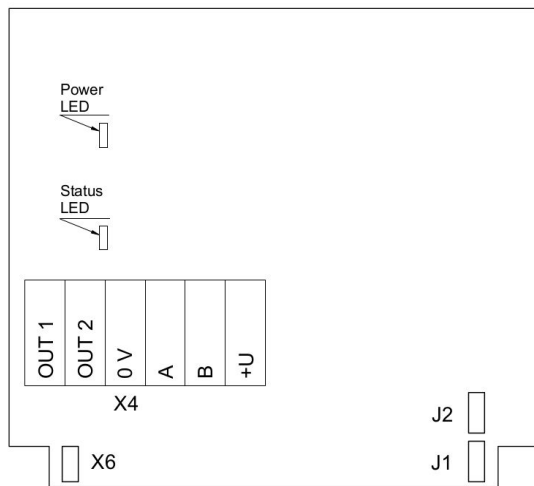
Wall mount remote probe with fixing clamp (default version)



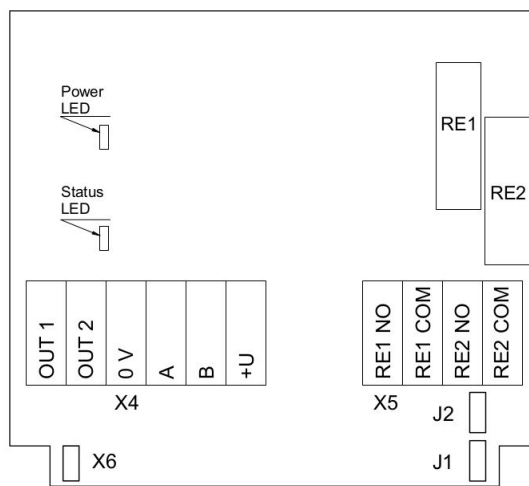
Remote probe with rubber flange and three self-tapping screws (on request)



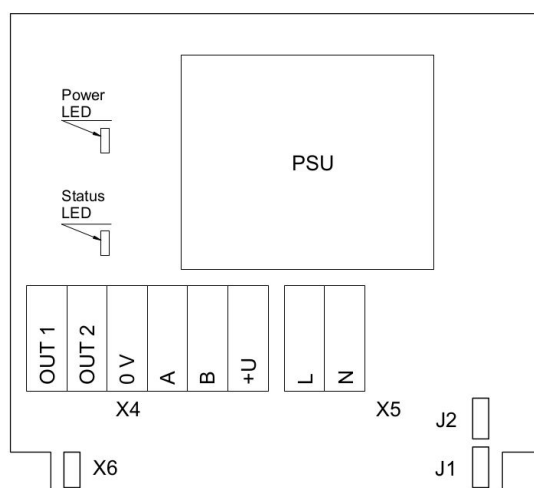
Connection diagrams



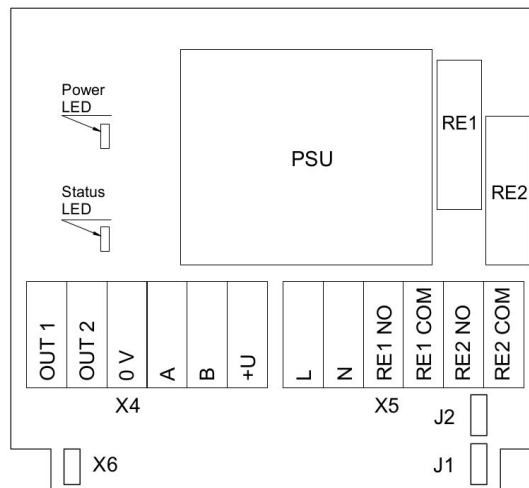
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

Jumpers

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





Ammonia Detector-Transmitter E2648-NH3-E



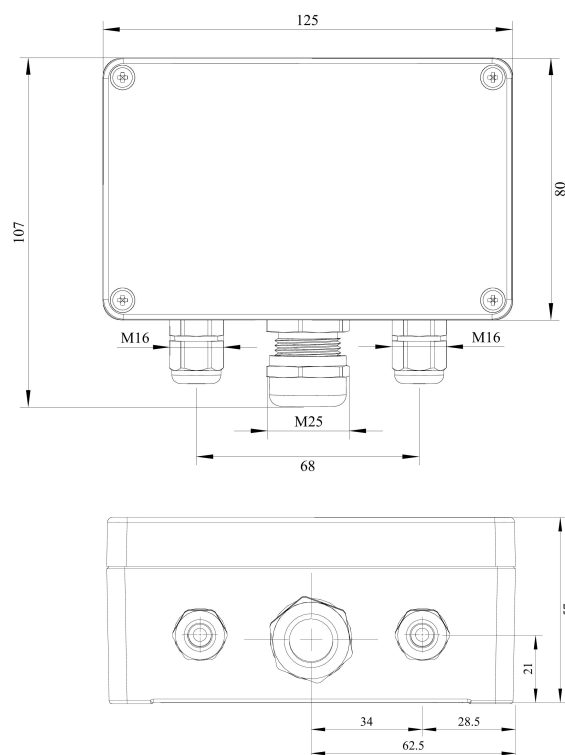
Features

- 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	Ammonia NH ₃		
Sensor type	Electrochemical		
Sampling method	Diffusion		
Typical detection ranges	0...100 ppm	0...300 ppm	0...1000 ppm
Maximum overload	200 ppm	500 ppm	1500 ppm
Resolution	1 ppm	1 ppm	1 ppm
Response time T90	<75 s		
Sensor lifetime	> 2 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	-40...+50°C, 15...90 %RH non-condensing; 0,9...1,1 atm; explosion safe areas; Non-aggressive atmosphere		
	NOTE! The device is not suitable for areas with constantly high ammonia concentration.		
	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	For 0...100 ppm range: RE1 (LOW): set 25; release 20 ppm RE2 (HIGH): set 35; release 28 ppm For other ranges: defined by user within 5-95% of the detection range		
Other options			
Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m		

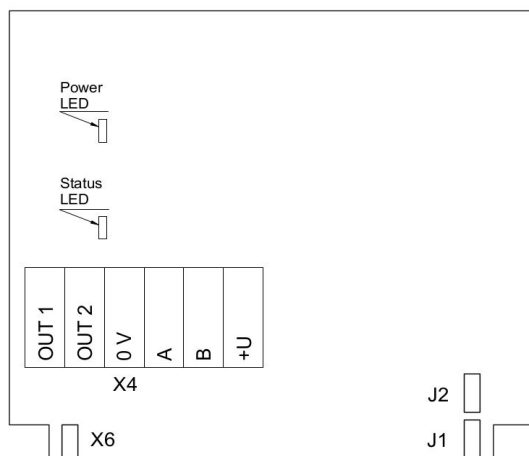
Dimensions



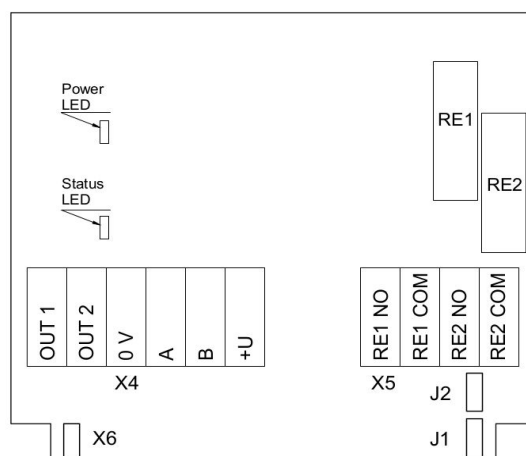
Ask for other versions or custom designed products



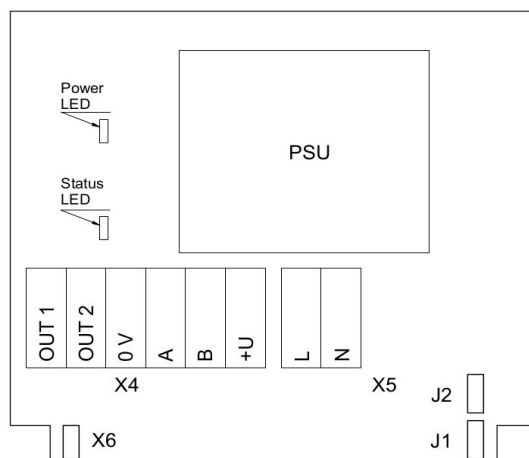
Connection diagrams



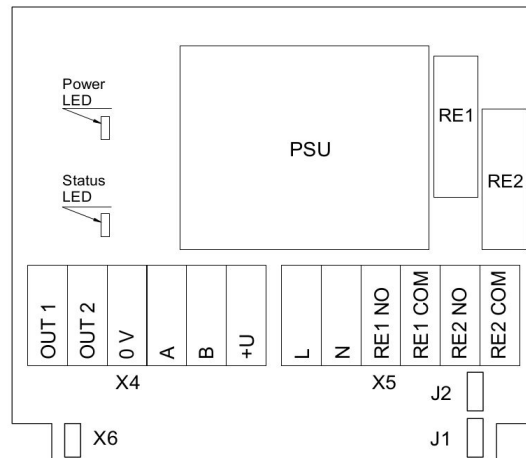
Version without PSU and relays



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

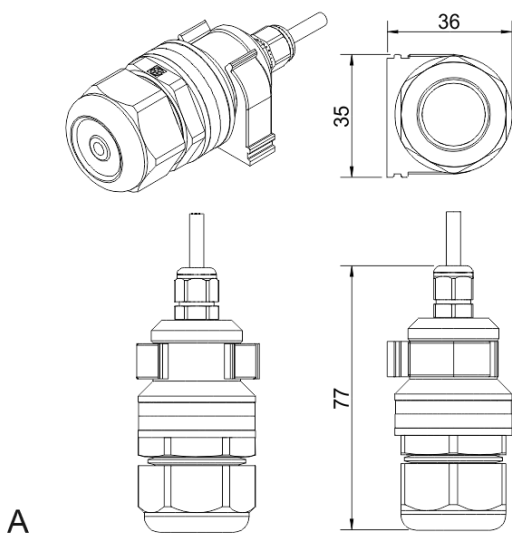
OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 24 VAC Phase (optional)

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

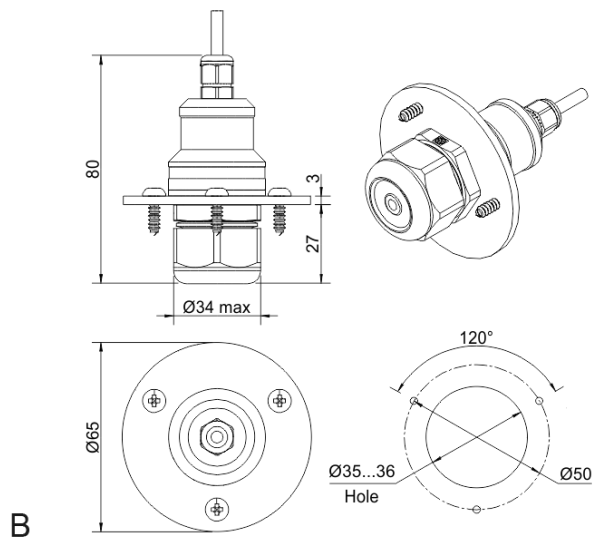


Remote probe



A

Wall mount remote probe with fixing clamp (default version)



B

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





Ammonia Detector-Transmitter E2648-NH3-P



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	Ammonia NH ₃
Sensor type	Pellistor (catalytic bead)
Sampling method	Diffusion
Typical detection range	0...15%vol. (0...100%LEL NH ₃)
Resolution	0.1%vol. or 1%LEL
Response time T90	≤10 s
Sensor lifetime	> 3 years
Maintenance interval	6 months
Operating temperature	-20...+60 °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, 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 Analog output scale can be set according to customer's requirement (e.g. 0...4%vol. NH ₃)
Enclosure	Die-cast aluminium, wall mount, protection class IP66
Dimensions	H120 × W125 × D57 mm
Operating environment	Industrial indoor and outdoor locations
Operating conditions	(operating temperature is specified above) <95% RH non condensing; 0.9...1,1 atm Explosion-safe areas; normal ambient O ₂ level Avoid exposure to corrosive gases or silicone containing products

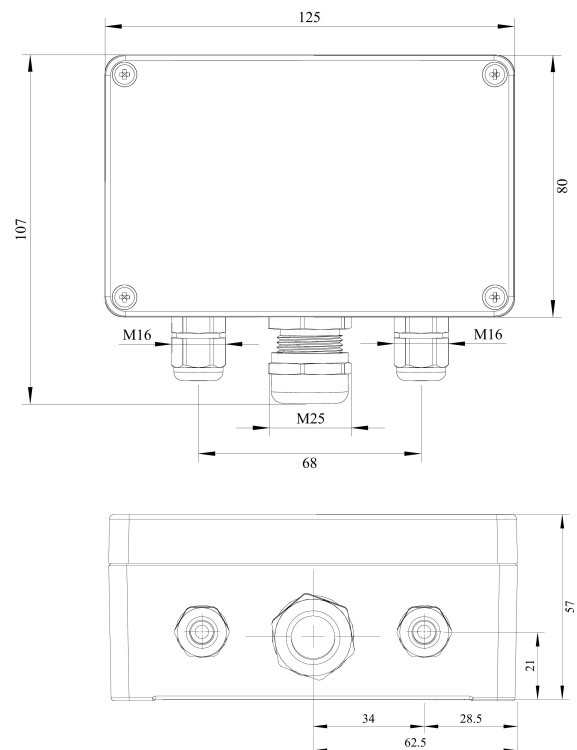
Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
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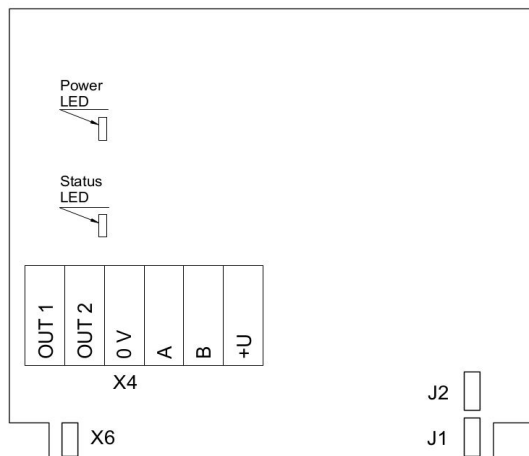
Other options

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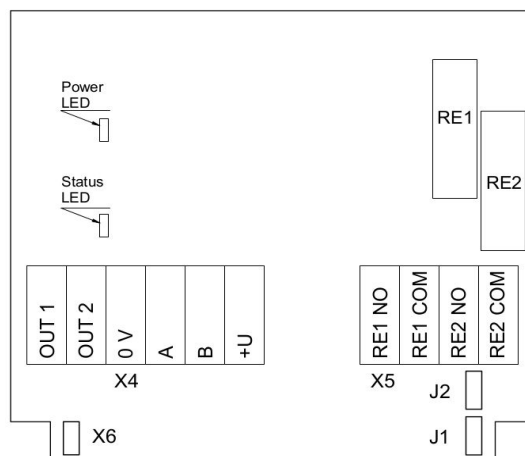
Dimensions



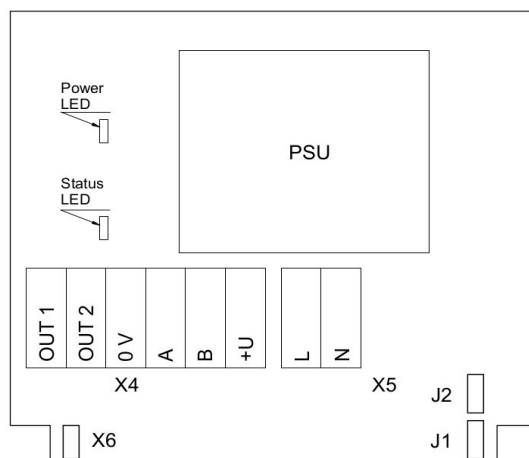
Connection diagrams



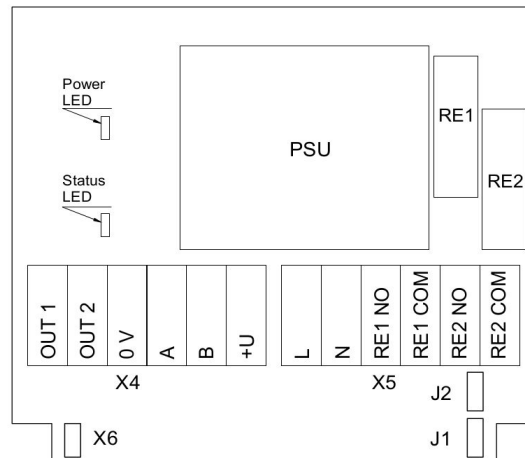
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



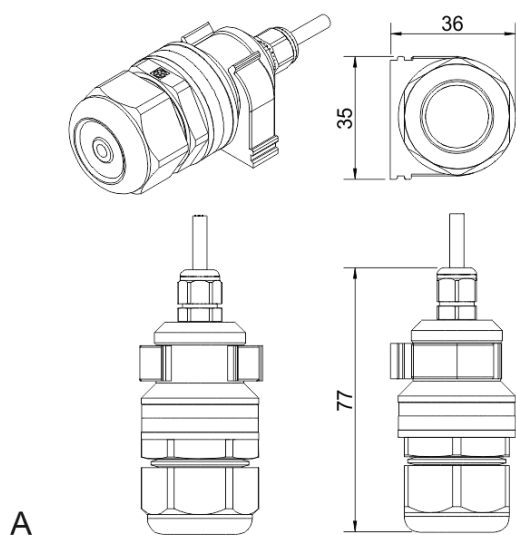
Version with PSU and relays

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

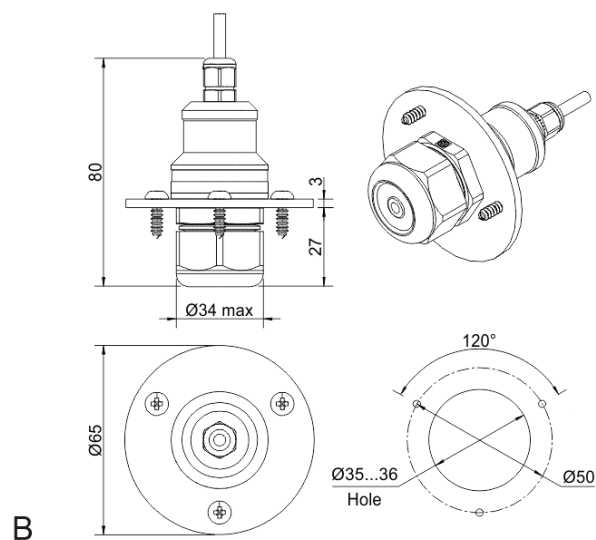


Remote probe



A

Wall mount remote probe with fixing clamp (default version)



B

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



Flameproof Ammonia Detector-Transmitter E2658-NH3-E



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	Ammonia NH ₃		
Sensor type	Electrochemical		
Sampling method	Diffusion		
Typical detection range	0...100 ppm	0...300 ppm	0...1000 ppm
Maximum overload	200 ppm	500 ppm	1500 ppm
Resolution / digital unit	1 ppm	1 ppm	1 ppm
Response time T80	< 75 s		
Sensor lifetime	> 2 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), 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	-40...+50°C, 15...90 %RH non-condensing; 0,9...1,1 atm; Explosion-safe areas; Non-aggressive atmosphere		
	NOTE! The device is not suitable for areas with constantly high ammonia concentration.		
	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	For 0...100 ppm range: RE1 (LOW): set 25; release 20 ppm RE2 (HIGH): set 35; release 28 ppm For other ranges: defined by user within 5-95% of the detection range



Ask for other versions or custom designed products

Approvals

Enclosure:

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

Glands:

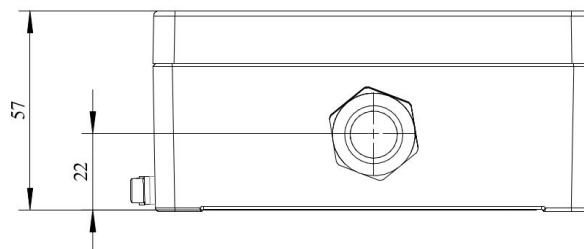
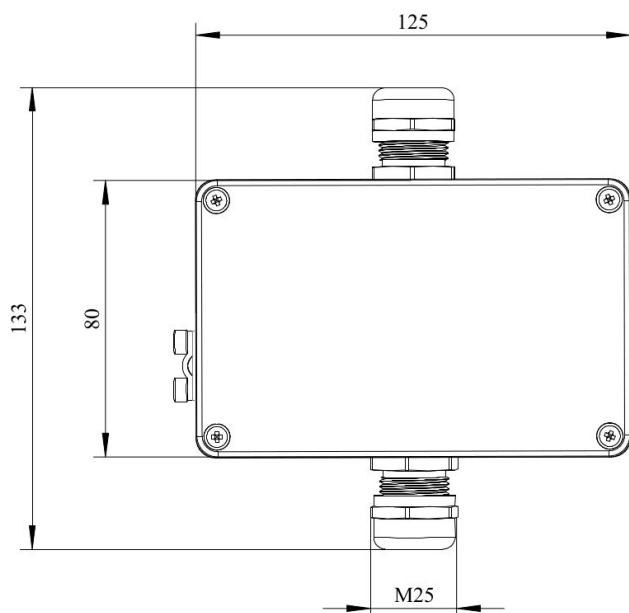
ATEX / IECEx
EESF 19 ATEX 023X
 II 2 G Ex db IIC Gb
 II 2 D Ex tb IIIC Db IP66

CE conformity

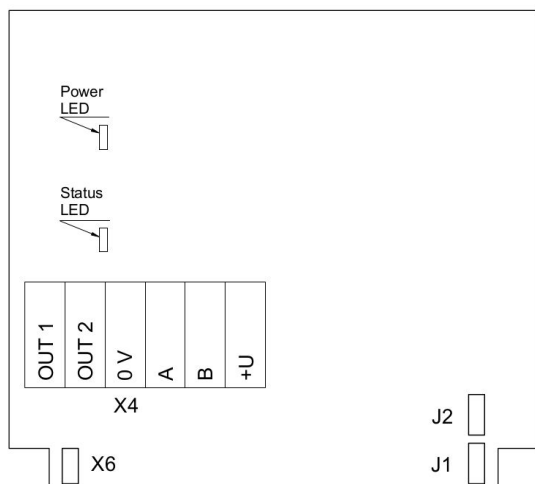
Flameproof to IEC EN 60079-1
Increased safety to IEC EN 60079-7
EMC Emissions to EN 61000-6-3, EN 61326-1
EMC Immunity to EN 61000-6-1, EN 61000-6-2



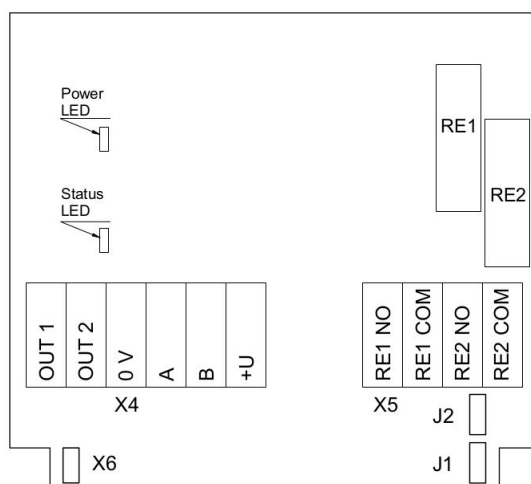
Dimensions



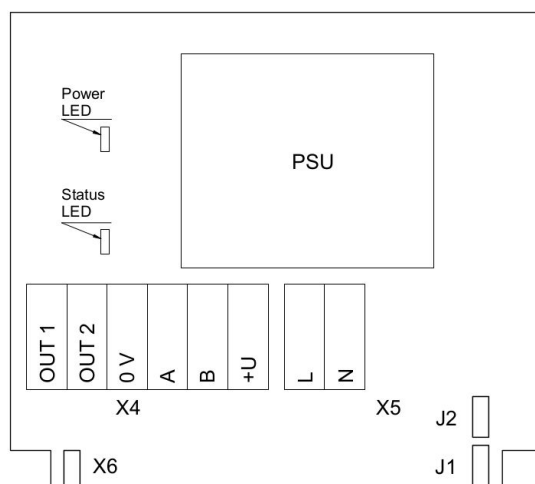
Connection diagrams



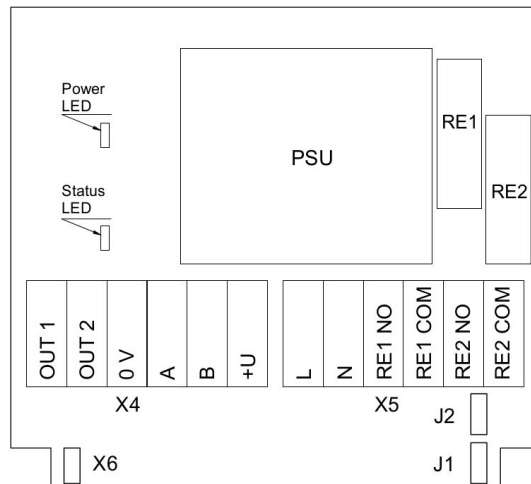
Version without PSU and relays



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



Flameproof Ammonia Detector-Transmitter E2658-NH3-P



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	Ammonia NH ₃
Sensor type	Pellistor (catalytic bead)
Sampling method	Diffusion
Typical detection range	0...15%vol. (0...100%LEL NH ₃)
Resolution	0.1%vol. or 1%LEL
Response time T90	≤10 s
Sensor lifetime	> 3 years
Calibration interval	6 months
Operating temperature	-20...+60 °C
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 Analog output scale can be set according to customer's requirement (e.g. 0...4%vol. NH ₃)
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	(operating temperature is specified above) ≤ 95% RH non condensing; 0.9...1,1 atm Explosion-safe areas; Normal ambient oxygen level; Avoid exposure to corrosive gases or silicone containing products.

Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
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Approvals

Enclosure:

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

Glands:

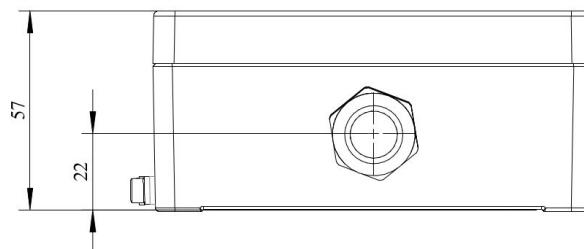
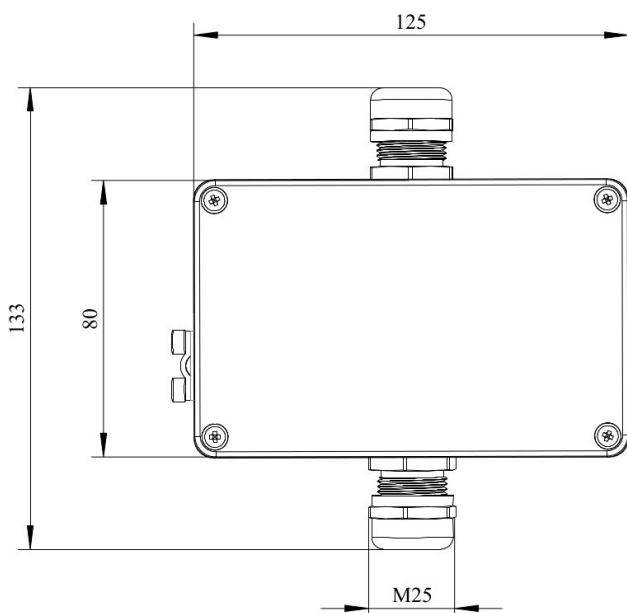
ATEX / IECEx
EESF 19 ATEX 023X
 II 2 G Ex db IIC Gb
 II 2 D Ex tb IIIC Db IP66

CE conformity

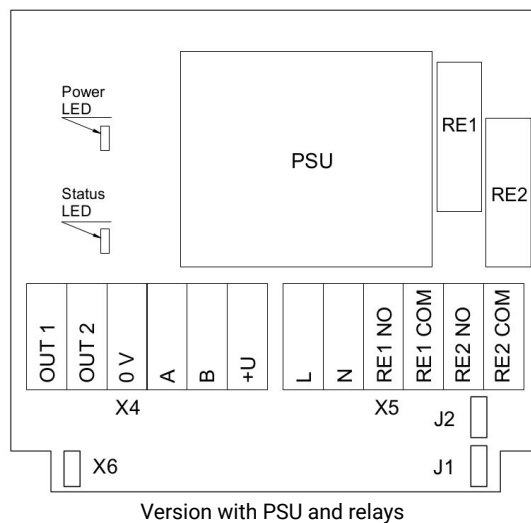
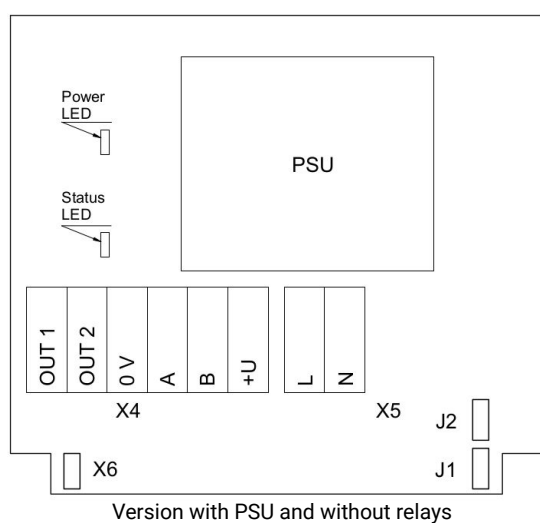
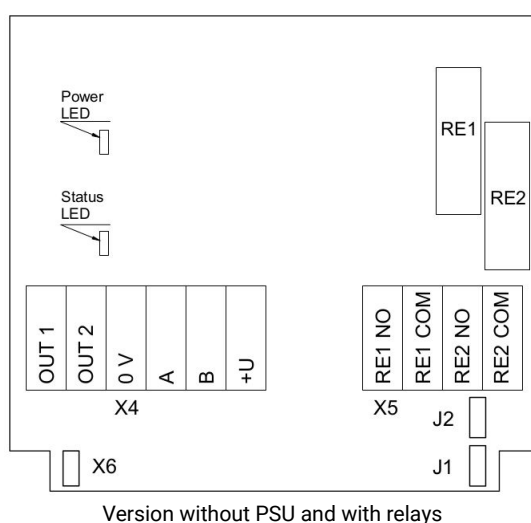
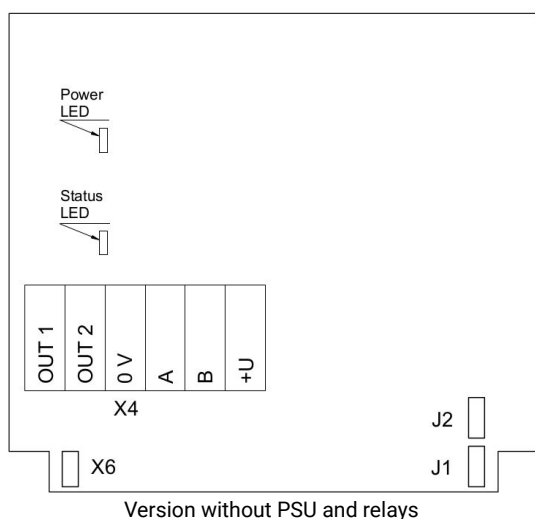
Flameproof to IEC EN 60079-1
Increased safety to IEC EN 60079-7
EMC Emissions to EN 61000-6-3, EN 61326-1
EMC Immunity to EN 61000-6-1, EN 61000-6-2



Dimensions



Connection diagrams



Jumpers

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

