



# Ammonia Detector-Transmitter

## E2648-NH3-E



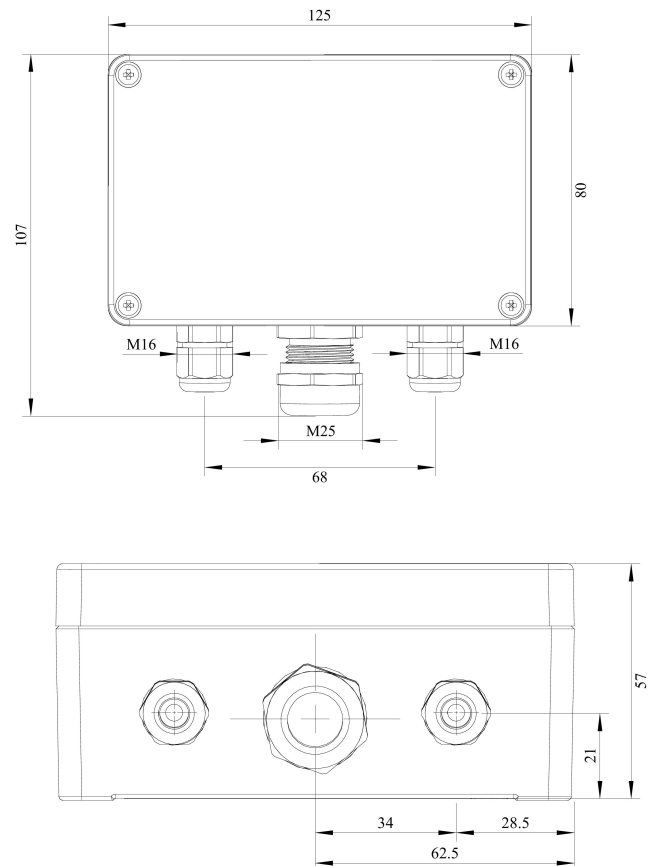
### Features

- 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 <sub>3</sub>			
Sensor type	Electrochemical			
Sampling method	Diffusion			
Detection ranges, ppm	0...100	0...300	0...1000	0...5 000
Maximum overload, ppm	200	500	1500	10 000
Response time T90, s	< 75	< 75	< 75	< 120
Resolution, ppm	1			
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	12...36 VDC (default) 24 VAC or 230 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, -30...+50°C (for 0...5 000 ppm), 15...90 %RH non-condensing; 0,9...1,1 atm; Explosion safe areas; Non-aggressive atmosphere <b>NOTE!</b> The device is not suitable for areas with constantly high ammonia concentration. <b>NOTE!</b> We offer technical solutions for extreme humidity, please ask for more information			

### Dimensions



Ask for other versions or custom designed products



## Additional options

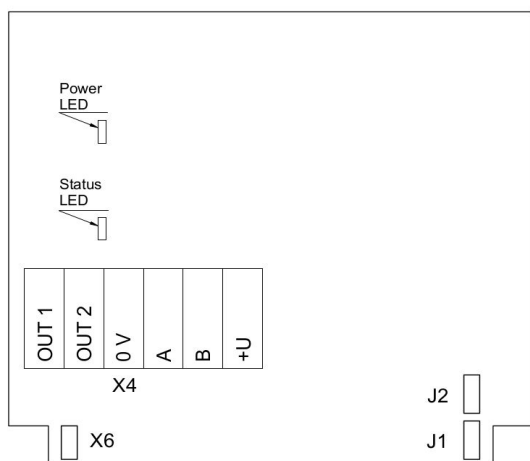
### Relay option (ordering code R)

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

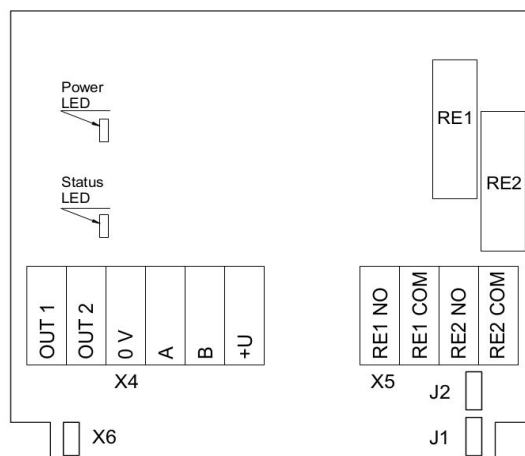
### Other options

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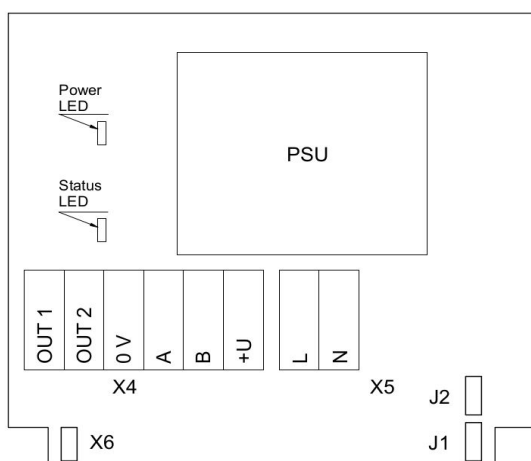
## Connection diagrams



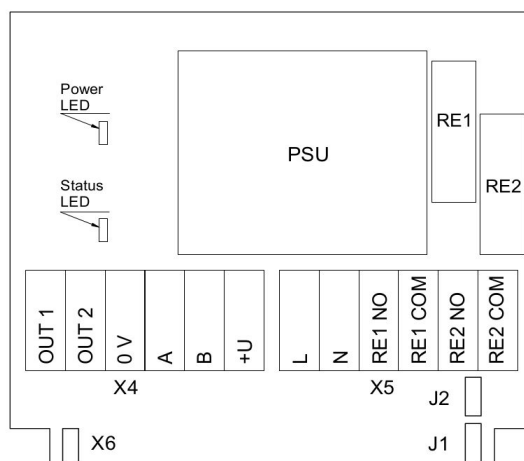
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays



**Jumpers**

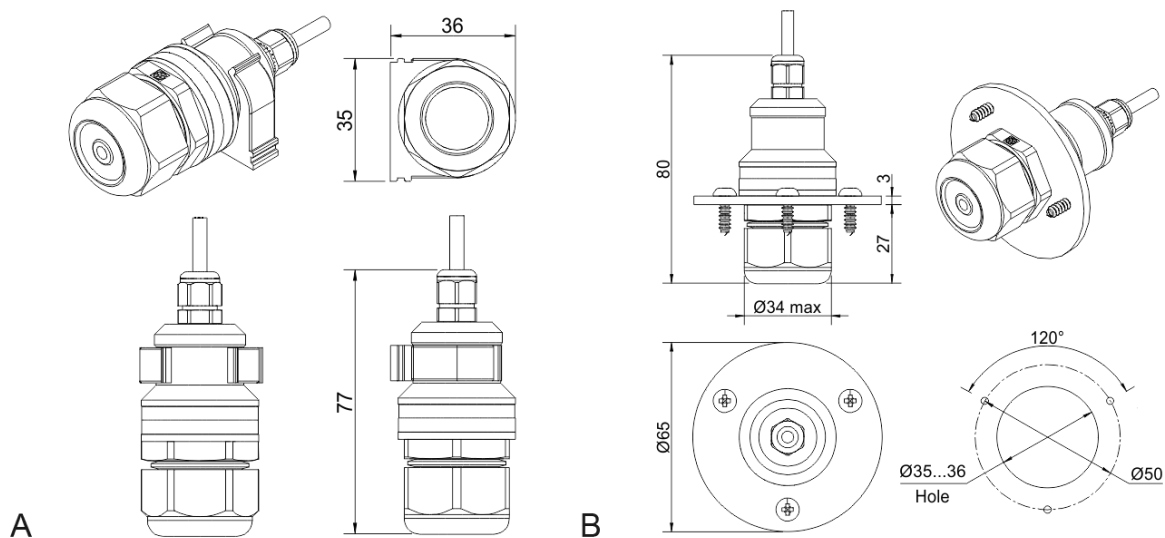
<b>J1</b>	OUT1 type (open: 4-20 mA; closed 0-10 V)
<b>J2</b>	OUT2 type (open: 4-20 mA; closed 0-10 V)
<b>X6</b>	Reset Modbus network parameters to default

**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)

