

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

Approvals

Enclosure:

ATEX / IECEx

DEMKO 13 ATEX 1327771U

II 2 G Ex c IIC Gb

II 2 D Ex tb IIIC Db IP66

Glands:

ATEX / IECEx

IBExU08ATEX 1063 X Ex II 1D Ex tD A20 IP 6x Ex

II 2G Ex e II IP68

CE conformity

Flameproof to IEC EN 60079-1

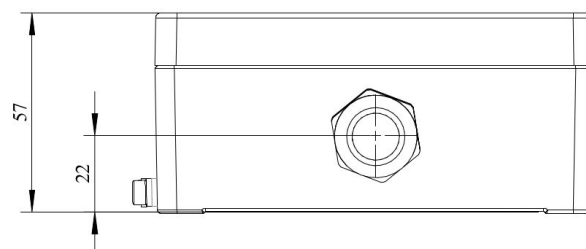
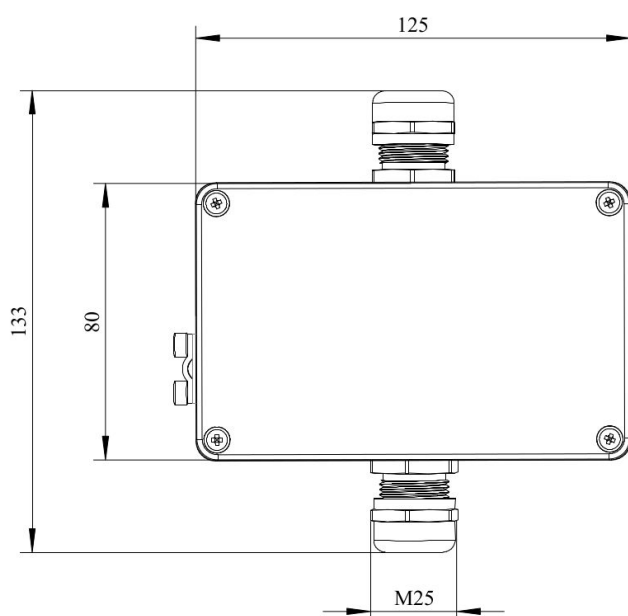
Increased safety to IEC EN 60079-7

EMC Emissions to EN 61000-6-3, EN 61326-1

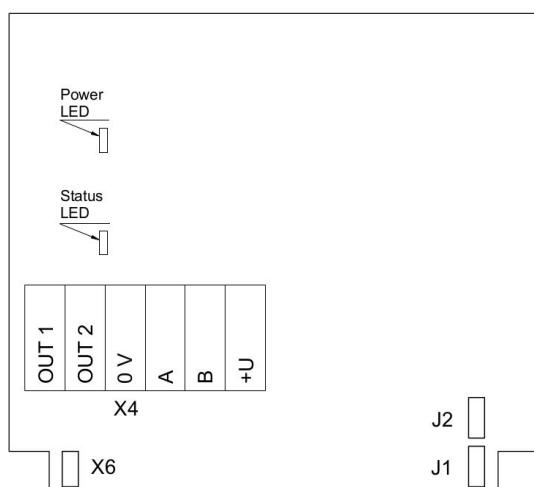
EMC Immunity to EN 61000-6-1, EN 61000-6-2



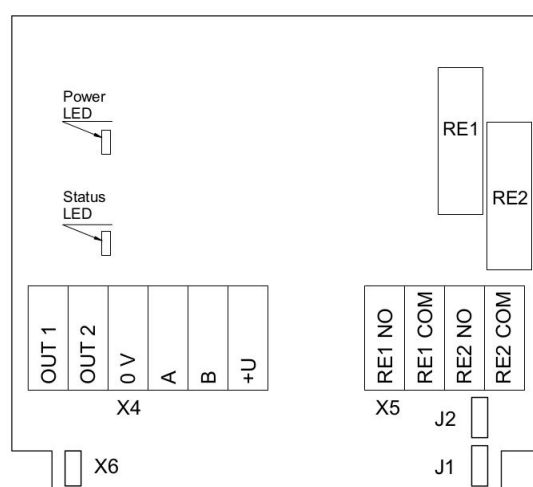
Dimensions



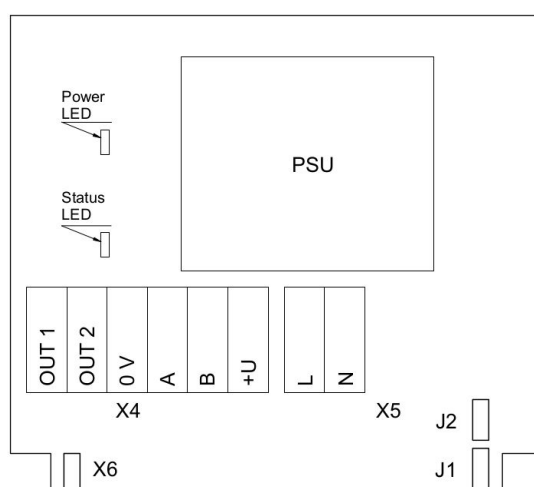
Connection diagrams



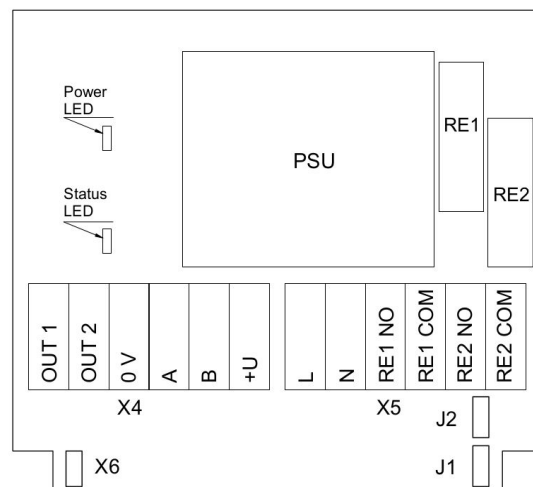
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



Version with PSU and relays

