



ENH3 display



ENH3 Wall



ENH3 Duct



Features

- The superior solution to semiconductor
- High accuracy, selectivity and reliability
- Automatic drift and temperature compensation
- Stable within a wide temperature range
- Comfortable calibration with selective access release
- Life expectancy >10 years
- 4-20mA or 2-10Vdc output signal selectable
- Digital measurement value processing incl. temperature compensation
- No maintenance
- Reacts quickly on ammonia leakage
- Good resistance to poisoning
- Two-beam infrared gas sensor (NDIR)

Technical Data

Gas	Ammonia (NH3)
Detection principle	Two-beam infrared (NDIR)
Response time	t90 <30sec.
Accuracy	< 4% of reading
Repeatability	< 4% of reading
Resolution	10 ppm
Long term zero-pointdrift	< 2% of reading/year
Long term outdrift	< 2% of reading/year
Sensor coverage	Approx.100m2
Storage time	6 months
Mounting height	Under the ceiling
Output signal	
(0)4-20mA	Load < 500ohm overload and short circuit proofed
(0)2-10Vdc	Load < 50kohm overload and short circuit proofed
Starting point 0/20%	Proportional
Relay 1	30Vac/dc, 0,5A, pot.free SPDT
Relay 2	Dito SPNO/SPNC
Wiring distance	Current signal cirka 500m Voltage signal cirka 200m
Cable entry	1 x M20
Serial interface	RS485 19200 Baud(9600Modbus)
Power supply	18-28Vac/dc reverse polarity prot.
Power consumption	45mA, max (1,1VA) without option
Expected lifetime	>10 years,normal operating
Humidity range	0-95%rH non-condensing
Operating range	Continuous -30 up to +50C
Rating	IP65 Protection Class
Pressure range	800-1100hPa

These products meet the CE-approval

Application

For detection leakages in refrigeration plants with ammonia as refrigerant and also within a wide range of commercial and industrial applications.

Due to the analogue signal and the RS-485 serial interface the NH3 transmitter is compatible to monitoring units by AP, as well as any others controllers or automation systems.

Ordering Codes

Wall Mounting

Manual calibration and adresssing

NH3 1000VC 0-1000ppm (0)4-20mA/ (0)2-10Vdc sel.

Calibration and adresssing by service tool

NH3 1000VCT 0-1000ppm (0)4-20mA/ (0)2-10Vdc sel.

/MOD	Protocol for Modbus
/CUST	Protocol for customers specifications
/GCD	Protocol for GCD-series
/REL 1	Relay pack see rear side
/DUCT	Duct Mounting
/LCD	Two lines, 16 characters each
CAL 2	Calibration Kit for Tox-transmitters
/HEAT	Temp.controlled heating element 3C +/-2C0,3VA
/BUZZ	Internal warning summer 85dB
/STAIN	Enclosure of stainless steel
/SERV	Service Tool with Keyapad and LCD-display
/AIN	4-20mA analogue input
GAS 17	Calibration gas 17 liter
REG	Pressure regulator flow adjusted to 0,5 lit/min.
Warning devices	See special datasheet
Warning signs	See special datasheet



Relay Package

With the NH3 relay package two potential-free contacts are available for the connection to external devices.

The switching thresholds of these relays are selectable via potentiometer in the range of 10 - 90% of NH3 concentration.

The hysteresis is programmable via jumpers.

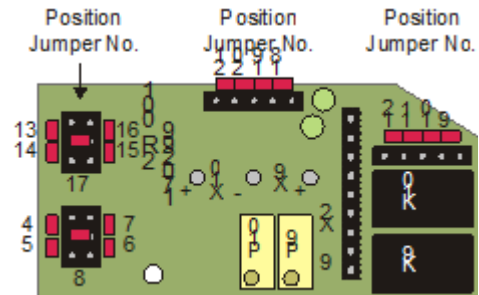
Additionally the relay mode, open-circuit or closed circuit, is selectable.

The status of the two relays is displayed via LED

Add analogue input 4-20mA is not possible.

For standard RS 485 fixed thresholds - please specify when ordering.

For Modbus RS 485 thresholds with software changeable



Relay Package

Threshold standard as stand alone

Threshold

Relay 5NH 0-1000ppm 200 resp 800 ppm

Connecting Diagram

