

E2608 Series

Stationary detectors and transmitters

for combustible and toxic gases

E2608 Series

E2608-C2H4 E2608-NH3-E (低濃度) E2608-CH4 E2608-NH3-S(高濃度)

E2608-Cl2 E2608-NO

E2608-CO E2608-NO2

E2608-CO2-10K E2608-O2

E2608-CO2-50K E2608-O2-L

E2608-ETO E2608-O3

E2608-H2S E2608-PID

E2608-HFC E2608-SO2

E2608-LEL E2608-VOC

Order Informations

型號	氣體類型	安裝方式	電源	Relay	濃度範圍
E2608					
	如上表				
		W(壁掛式)			
		RP33-3(外拉3M)			
		RP33-10(外拉10M)			
		DM(風管式)			
			DC(11~30V DC)		
			AC(90~265V AC)		
				N(不需要)	
				設定點×2(請詳述)	
					範圍

EX: E2608-O3-W-DC-N 0~5ppm

Ethylene Detector-Transmitter E2608-C2H4













Features

- Wall-mount or duct-mount version
- Industrial IP65 housing
- · Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Attached or remote sensor

Specifications

Detected gas ethylene Calibration ethylene electrochemical Sensing method Sampling method diffusion

 $\begin{array}{l} 0...10 \; ppm \; C_2H_4 \, (peak \; 20ppm) \\ 0...200 \; ppm \; C_2H_4 \, (peak \; 500 \; ppm) \end{array}$ **Detection ranges**

0...1500 ppm C₂H₄ (peak 2000 ppm)

Resolution / digital unit 0,1 ppm C₂H₄

 $1\;ppm\;C_2H_4$ 1 ppm C₂H₄

Repeatability <2 %of signal Response time <60 seconds Maintenance interval 6 months Sensor lifetime 2 years

Self-diagnostics full functionality check at start-up

Warm-up time

11...30 VDC, 24 VAC or 90...265 VAC Power supply

Power consumption < 2 VA

Digital interface RS485, Modbus RTU protocol

 $2 \times 4-20$ mA / 0-10 V, user settable Analog outputs

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

Alarm set-points determined by user

within 5-95% of the detection range

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm

protection IP65, Remote sensor probe

shielded cable

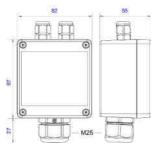
default cable length 3.0 m

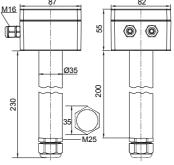
Operating environment industrial indoor and outdoor

locations

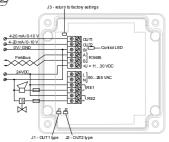
Operating conditions -20 to +50°C, 15...90 %RH;

pressure 0,9...1,1 atm; non ATEX rated spaces non aggressive atmosphere Wall mount version

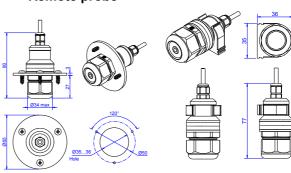




Duct mount version



Connection diagram





Methane Detector-Transmitter E2608-CH4











Features



- Wall-mount or duct-mount version
- Industrial IP65 housing
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Methane CH₄ Calibration

Sensor type metal-oxide semiconductor

catalytic bead on demand

Sampling method diffusion

MOS Sensor type catalytic Typical detection range 0...100% LEL 0...100% LEL Resolution / digital unit 0.1% LEL 1% LEL Response time T90 ca. 60 s 8 s Sensor lifetime > 5 years > 2 years Calibration interval 12 months 3...6 months

-30...+70 °C

<95 %RH, pressure 0,9...1,1 atm;

-20 to +60°C

non ATEX rated spaces

normal ambient oxygen level Operating conditions avoid strong mechanical shock,

vibrations or EMI;

avoid exposure to corrosive gases or

silicone containing products

Signal update every 1 second

Self-diagnostics full functionality check at start-up Warm-up time < 3 minutes, depending on unpowered period and atmosphere

Power supply 11...30 VDC, 24 VAC or 90...265 VAC

Power consumption

Digital interface RS485, Modbus RTU protocol Analog outputs $2 \times 4-20$ mA / 0-10 V, user settable Output scale width recommended: 20-100% of the range; > 10 × resolution in any case

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

LOW: set 20 %LEL, release 16% LEL; Default alarm set-points HIGH:set 50%LEL, release 40% LEL

Enclosure light grey ABS plastic, wall mount, protection class IP65

Dimensions H85 × W82 × D55 mm

Remote sensor probe protection IP65,

shielded cable

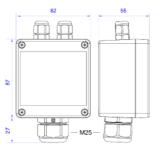
default cable length 3.0 m

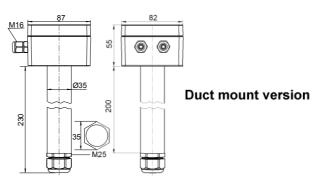
Operating environment industrial indoor and outdoor

locations

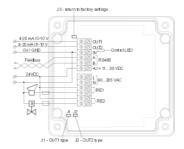
Ask for other versions or custom designed products

Wall mount version

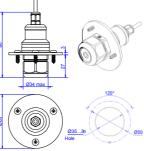


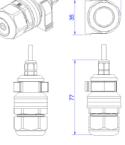


Connection diagram











Chlorine Detector-Transmitter E2608-CI2













Features

- Wall-mount or duct-mount version
- Industrial IP65 housing
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Detected gase Chlorine Cl₂
Calibration Chlorine Cl₂
Sensing method Electrochemical
Sampling method Diffusion
Typical detection range 0...10 ppm
Maximum overload 100 ppm
Resolution 0.1 ppm

Signal update Every 1 second
Response time <60 seconds
Maintenance interval 6 months
Sensor lifetime >2 years

Self-diagnostics Full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 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

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

Enclosure Grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm

Remote sensor probe protection IP65, shielded cable

Operating environment

default cable length 3.0 m

industrial indoor and outdoor

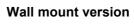
locations

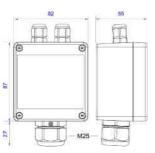
Operating conditions -20...+50 °C, 15...90 %RH,

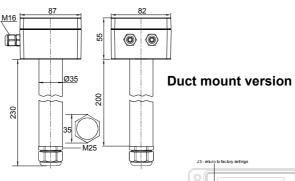
pressure 0,9...1,1 atm non ATEX rated areas

NOTE The sensor may exhibit sensitivity to hydrogen sulfide

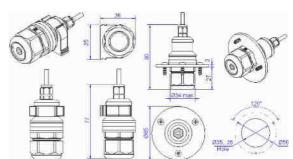
Ask for other versions or custom designed products







Connection diagram





Carbon Monoxide Detector-Transmitter E2608-CO







Features

- · Wall-mount or duct-mount version
- Industrial IP65 housing
- · Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Calibration Carbon Monoxide CO
Sensing method long-life electrochemical cell

Sampling method diffusion

Detection range 0...1000 ppm CO

Maximum overload 2000 ppm

Resolution 1 ppm CO

Repeatability <±5 %

Signal update every 1 second
Response time <30 seconds
Maintenance interval 6 months
Sensor lifetime > 6 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 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: 5-100% of the range;

> 10 × resolution in any case

Output relays 2 × SPST relays (closing contact),

250 VAC / 30 VDC, 5 A max

Default alarm set-points RE1 (LOW): set 25; release 20 ppm

RE2 (HIGH): set 35; release 28 ppm

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm

Remote sensor probe protection IP65,

shielded cable

default cable length 3.0 m

Operating environment industrial indoor and outdoor

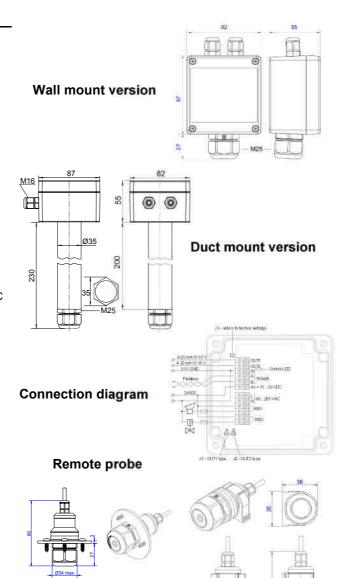
locations

Operating conditions -20...+50 °C, 15...95 %RH

pressure 0,9...1,1 atm non ATEX rated areas

NOTE The sensor may exhibit sensitivity to acetylene, etylene,

hydrogen and nitric oxide



Carbon Dioxide Detector-Transmitter E2608-CO2-10K







Features

- High selectivity
- · Industrial housing, attached or remote sensor
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- · RS485 Modbus RTU digital interface
- · Ambient pressure compensation option

Specifications

 $\begin{array}{lll} \mbox{Detected gas} & \mbox{carbon dioxide CO_2} \\ \mbox{Sensor type} & \mbox{optical (NDIR)} \\ \mbox{Sampling method} & \mbox{diffusion} \\ \mbox{Detection range} & \mbox{0...10 000 ppm} \end{array}$

Resolution / digital unit 1 ppm

Accuracy \pm (50 ppm + 3% of reading)

in the range 300...5000 ppm

Signal update every 2 seconds
Response time T90 ~ 2 minutes
Maintenance interval up to 5 years
Sensor lifetime ca. 10 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 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

2 × SPST relays (closing contact),

250 VAC / 30 VDC, 5 A max

Alarm set-points defined by user

within 5-95% of the detection range

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm

Remote sensor probe protection IP65,

shielded cable

default cable length 3.0 m

Operating environment industrial indoor and outdoor

locations

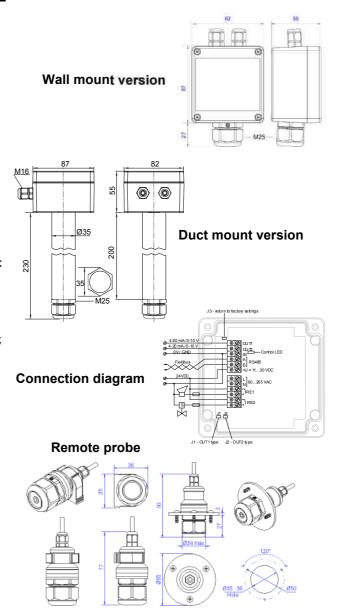
Operating conditions 0...+50 °C, 0...85 %RH

pressure 0,9...1,1 atm non ATEX areas

Pressure compensation 0,5...2 bar absolute pressure

(option)

Output relays



Carbon Dioxide Detector-Transmitter E2608-CO2-50K













Features

230

- · High selectivity
- · Industrial housing, attached or remote sensor
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Ambient pressure compensation option

Specifications

Detected gas carbon dioxide CO₂
Sensor type optical (NDIR)
Sampling method diffusion

Detection range 0...50 000 ppm

up to 100% CO2 on request

Resolution / digital unit 100 ppm

Accuracy \pm (70 ppm + 5% of reading)

Signal update every 1 second
Response time T90 ~ 2 minutes

Maintenance interval up to 5 years
Sensor lifetime ca. 10 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 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

To Tocolation in any case

Output relays 2 × SPST relays (closing contact),

250 VAC / 30 VDC, 5 A max

Alarm set-points defined by user

within 5-95% of the detection range

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm

Remote sensor probe protection IP65, shielded cable

default cable length 3.0 m

industrial indoor and outdoor

locations

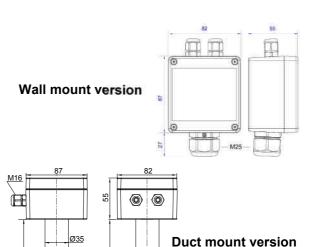
Operating conditions -25...+50 °C, 0...95 %RH

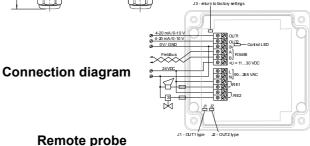
pressure 0,9...1,1 atm non ATEXrated areas non-aggressive atmosphere

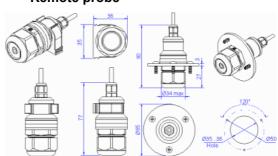
Other options

Operating environment

Pressure compensation 0,5...2 bar absolute pressure









Ethylene Oxide Detector-Transmitter E2608-ETO







Features

- · Wall-mount or duct-mount version
- Industrial IP65 housing
- · Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Attached or remote sensor

Specifications

Sampling method diffusion

Typical detection range 0...20 ppm 0...100 ppm

Maximum overload 100 ppm 200 ppm

Resolution / digital unit 0.1 ppm 1 ppm

Outputs scale 0-200 0-100

Response time T90 < 120 s <140s

Alarm setpoints LOW: set 2; defined by user release 1.6 ppm within 5-95% of

HIGH: set 5; within 5-95%

release 4 ppm

Maintenance interval 6 months
Sensor lifetime 2 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 11...30 VDC, 24 VAC or 90...265 VAC

Power consumption < 2 VA

Enclosure

Remote sensor probe

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 case2 × SPST relays (closing contact),

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

light grey ABS plastic, wall mount, protection class IP65

protection class in oc

Dimensions H85 × W82 × D55 mm

protection IP65, shielded cable

default cable length 3.0 m

Operating environment industrial indoor and outdoor

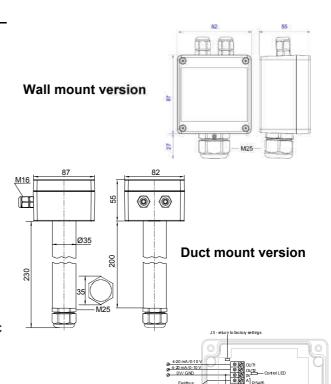
locations

Operating conditions -20...+50 °C, 15...95 %RH

pressure 0,9...1,1 atm non ATEX rated areas

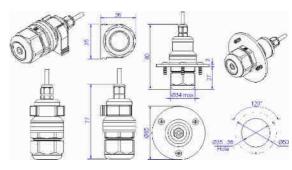
NOTE The sensor may exhibit considerable sensitivity to carbon monoxide, toluene and other organic compounds

Ask for other versions or custom designed products



Remote probe

Connection diagram





Hydrogen Sulfide Detector-Transmitter E2608-H2S











Features



- Wall-mount or duct-mount version
- Industrial IP65 housing
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Sampling method diffusion

Typical detection range 0...100 ppm 0...2000 ppm Maximum overload 500 ppm nd Resolution 0,1 ppm 2 ppm Response time T90 < 30 seconds < 25 seconds Output scale 0-1000 0-1000 -40...+50 °C Operating temperature -30...+50 °C

Signal update every 1 second
Response time < 30 seconds
Maintenance interval 6 months
Sensor lifetime > 2 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 11...30 VDC, 24 VAC or 90...265 VAC

Power consumption < 2 VA

Digital interface RS485, Modbus RTU protocol Analog outputs $2 \times 4-20 \text{ mA} / 0-10 \text{ V}$, 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 set-points for 0...100 ppm range:

RE1 (LOW): set 10; release 8 ppm RE2 (HIGH): set 20; release16 ppm

for 0...2000 ppm range:

defined by user

within 5-95% of the detection range

Enclosure Light grey ABS plastic, wall mount,

protection class IP65

Dimensions $H85 \times W82 \times D55 \text{ mm}$ Remote sensor probe protection IP65,

shielded cable

default cable length 3.0 m

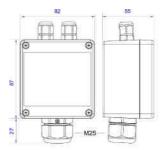
Operating environment industrial indoor and outdoor

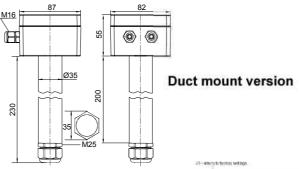
locations

Operating conditions 15...90 %RH,

pressure 0,9...1,1 atm; non ATEX rated areas

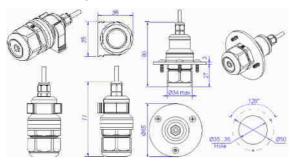
Wall mount version





Connection diagram

C. 430 mA M-10 V C. 42 mA M-10 V C. 42 mA M-10 V C. 00 V C. 00





Refrigerant Detector-Transmitter E2608-HFC













Features

- · Wall-mount or duct-mount version
- Industrial IP65 housing
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Detected gases R-12, R-123, R-125, R-134a, R-143,

R-22, R-404a, R-407c, R-410a etc

Sensing method long-life metal-oxide gas sensor

Sampling method diffusion

Detection range 0...1000 ppm halocarbon gas

Resolution / digital unit 1 ppm halocarbon gas Signal update every 1 second

Response time ~60 seconds

Maintenance interval 12 months

Sensor lifetime > 5 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 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

Output relays 2 × SPST relays (closing contact),

250 VAC / 30 VDC, 5 A max

Default alarm set-points LOW: set 100 ppm, release 80 ppm

HIGH: set 500 ppm release 400 ppm

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × 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 -30...+70 °C, 15...95% RH

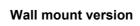
pressure 0,9...1,1 atm; non ATEX areas;

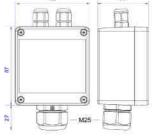
normal ambient oxygen level; no strong mechanical shock,

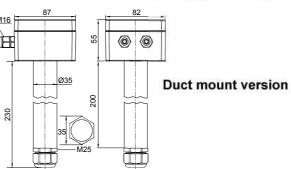
vibrations or EMI;

avoid exposure to corrosive gases or silicone containing products

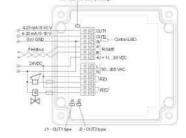
Ask for other versions or custom designed products







Connection diagram







Combustible Gases Detector-Transmitter E2608-LEL











Features



- Wall-mount or duct-mount version
- Industrial IP65 housing
- · Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Detected gases hydrogen, methane, acetylene,

propane, butane

Default calibration methane CH₄

metal-oxide semiconductor (MOS) Sensor type

catalytic (pellistor) on demand* * not suitable for acetylene

diffusion Sampling method

MOS Sensor type catalytic Typical detection range 0...100% LEL 0...100% LEL Resolution / digital unit 0.1% LEL 1% LEL Response time T90 ca. 60 s 8 s

Sensor lifetime > 5 years > 2 years Calibration interval 12 months 3...6 months

> -30...+70 °C -20 to +60°C

<95 %RH, pressure 0,9...1,1 atm; non ATEX rated spaces

Operating conditions normal ambient oxygen level avoid mechanical shock and EMI;

> avoid exposure to corrosive gases or silicone containing products

Signal update every 1 second

Self-diagnostics full functionality check at start-up Warm-up time

< 3 minutes, depending on unpowered period and atmosphere

Power supply 11...30 VDC, 24 VAC or 90...265 VAC

Power consumption < 2 VA

Digital interface RS485, Modbus RTU protocol Analog outputs $2 \times 4-20$ mA / 0-10 V, user settable Output scale width recommended: 20-100% of the range;

> 10 × resolution in any case

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

LOW: set 20, release 16 %LEL

Default alarm set-points HIGH: set 50, release 40 %LEL

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm Remote sensor probe protection IP65,

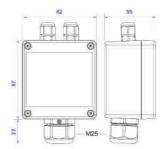
shielded cable

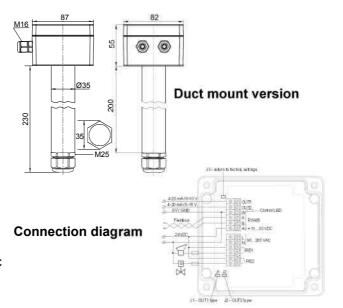
default cable length 3.0 m

industrial indoor and outdoor Operating environment

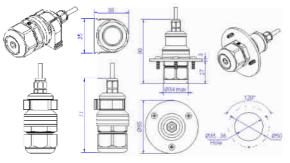
locations

Wall mount version





Remote probe





Ammonia Detector-Transmitter E2608-NH3-E











Features

- Wall-mount or duct-mount version
- Industrial IP65 housing
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Calibration Ammonia NH₃
Sensor type Electrochemical cell

Sampling method Diffusion

 Typical detection ranges
 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 T90
 < 40 s</td>
 < 40 s</td>
 < 60 s</td>

Signal update Every 1 second

Maintenance interval 6 months

Sensor lifetime > 2 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 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

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

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm Remote sensor probe protection IP65,

shielded cable

default cable length 3.0 m

Operating environment industrial indoor and outdoor

locations

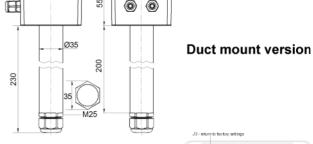
Operating conditions -40...50 °C, 15...90 %RH,

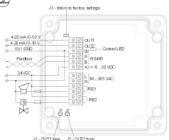
pressure 0,9...1,1 atm non ATEXrated areas, non-aggressive atmosphere

NOTE The sensor may exhibit considerable sensitivity to hydrogen sulfide, nitrogen dioxide and sulfur dioxide

NOTE The device is intended for the control of eventual leakages (e.g. in refregerating systems). Do not use the device in the areas with constantly high concentration of ammonia, like cattle and poultry farms.

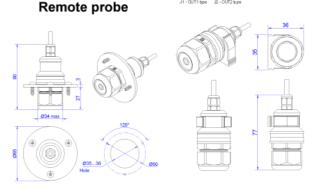
Wall mount version





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Connection diagram



Ammonia Detector-Transmitter E2608-NH3-S





RS485

Modbus



Features

- · Wall-mount or duct-mount version
- Industrial IP65 housing
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Calibration Ammonia NH₃

Sensor type Metal oxide semiconductor (MOS)

Sampling method Diffusion

Typical detection range 0...1000 ppm

Resolution / digital unit 1 ppm

Response time T90 ca. 60 s

Signal update Every 1 second

Maintenance interval 12 months

Sensor lifetime > 5 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 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

Output relays 2 × SPST relays (closing contact),

250 VAC / 30 VDC, 5 A max

Default alarm set-points RE1 (LOW): set 25; release 20 ppm

RE2 (HIGH): set 35; release 28 ppm

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm

Remote sensor probe protection IP65, shielded cable

Operating environment

default cable length 3.0 m

industrial indoor and outdoor

locations

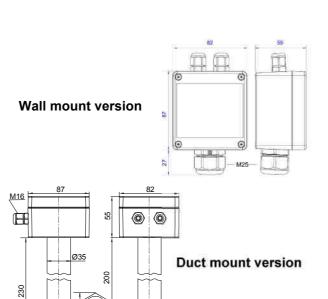
Operating conditions -40...+50 °C; <95 %RH, pressure 0.9...1,1 atm;

Non ATEX rated spaces
Normal ambient oxygen level
no strong mechanical shock,

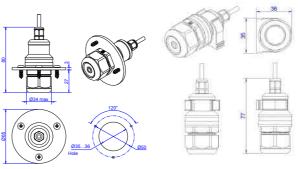
vibrations or EMI;

avoid exposure to corrosive gases or silicone containing products

Ask for other versions or custom designed products









Nitric Oxide Detector-Transmitter E2608-NO







Features

- · Wall-mount or duct-mount version
- Industrial IP65 housing
- · Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Calibration Nitric Oxide NO Sensing method electrochemical sensor

Sampling method diffusion Detection range 0...250 ppm NO

Resolution 1 ppm NO Signal update every 1 second < 60 seconds Response time Maintenance interval 6 months Sensor lifetime > 12 months

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

11...30 VDC, 24 VAC or 90...265 VAC Power supply

< 2 VA Power consumption

Output relays

Enclosure

Default alarm set-points

Digital interface RS485, Modbus RTU protocol $2 \times 4-20$ mA / 0-10 V, user settable Analog outputs Output scale width recommended: 20-100% of the range;

> 10 × resolution in any case

2 × SPST relays (closing contact),

250 VAC / 30 VDC, 5 A max

RE1 (LOW): set 10, release 8 ppm

RE2 (HIGH):set 25, release 20 ppm

light grey ABS plastic, wall mount, protection class IP65

Dimensions H85 × W82 × D55 mm

Remote sensor probe protection IP65,

shielded cable

default cable length 3.0 m

Operating environment industrial indoor and outdoor

locations

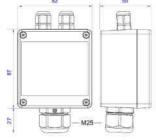
Operating conditions -30...50 °C, 15...90 %RH;

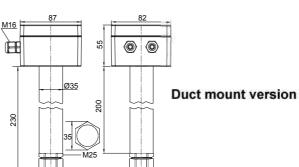
pressure 0,9...1,1 atm; non ATEXrated areas; non-aggressive atmosphere

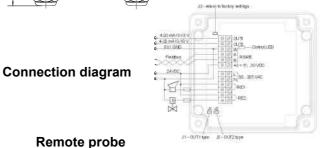
NOTE The sensor may exhibit considerable sensitivity to hydrogen sulfide and nitrogenr dioxide

Ask for other versions or custom designed products

Wall mount version











Nitrogen Dioxide Detector-Transmitter E2608-NO2













Features

- · Wall-mount or duct-mount version
- Industrial IP65 housing
- · Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Calibration Nitrogen Dioxide NO₂ Sensing method electrochemical sensor

Sampling method diffusion

Typical detection range 0...20 ppm 0...200 ppm 1000 ppm Maximum overload 100 ppm Resolution / digital unit 0.1 ppm 1 ppm Response time T90 < 60 s <40 s Operating conditions -30...50 °C -20...50 °C

15...90 %RH; pressure 0,9...1,1 atm

non ATEXrated areas, non-aggressive atmosphere NOTE The sensor may exhibit considerable sensitivity to Cl2 (as well as H₂S, SO₂, O₃ for 0...200 ppm range)

Signal update every 1 second Maintenance interval 6 months Sensor lifetime > 2 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 11...30 VDC, 24 VAC or 90...265 VAC

Power consumption < 2 VA

Digital interface RS485, Modbus RTU protocol $2 \times 4-20$ mA / 0-10 V, user settable Analog outputs Output scale width recommended: 20-100% of the range; > 10 × resolution in any case

2 × SPST relays (closing contact),

Output relays 250 VAC / 30 VDC, 5 A max

RE1 (LOW): 3 / 2.4 ppm Alarm setpoints RE2 (HIGH): 6 / 4 ppm (set / release)

for 0...200 ppm determined by user

within 5-95% of the range

Enclosure light grey ABS plastic, wall mount,

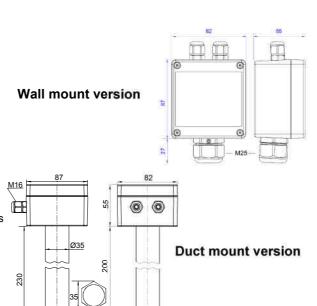
protection class IP65

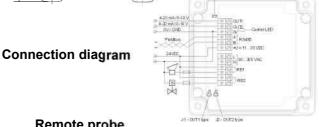
Dimensions H85 × W82 × D55 mm protection IP65, Remote sensor probe

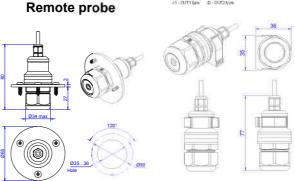
shielded cable

default cable length 3.0 m

Operating environment indoor and outdoor locations











Oxygen Detector-Transmitter E2608-O2











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 Oxygen O₂ Sampling method Diffusion

Sensor type 2-year Electrochemical

5-year Electrochemical (order code O2-5Y)

Typical detection range 0...25% vol. Resolution 0.01% vol. Response time T90 <10 s

Signal update Every 1 second Sensor lifetime > 2 years

> 5 years (for O2-5Y)

Maintenance interval 6 months

Self-diagnostics Full functionality check at start-up

Warm-up time

Power supply 11...30 VDC (default),

24 VAC or 90...265 VAC as options

Power consumption < 2 VA

Output relays

Enclosure

Digital interface RS485, Modbus RTU protocol Analog outputs $2 \times 4-20$ mA / 0-10 V, user settable Recommended: 20-100% of the range; Output scale width

> 10 × resolution in any case 2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max

Default alarm setpoints RE1 (HIGH): set 19.5%, release 20.5%

RE2 (LOW):set 18%, release 19% Light beige ABS plastic, wall mount,

protection class IP65

H87 × W82 × D55 mm **Dimensions**

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

Operating environment Industrial indoor and outdoor locations

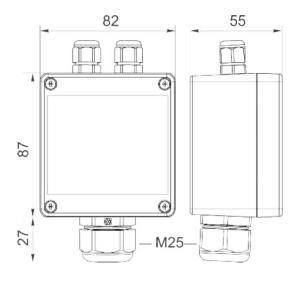
Operating conditions 15...90% RH non-condensing; 0,9...1,1 atm;

Explosion-safe areas Non-aggressive atmosphere

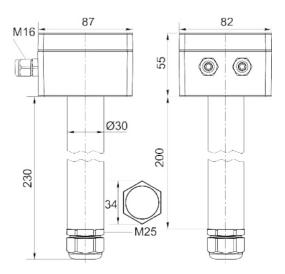
-40...+60 °C (for O2-5Y)

NOTE! We offer technical solutions for extreme humidity, please ask for more information.

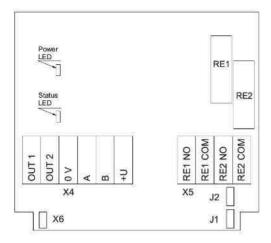
Wall mount version



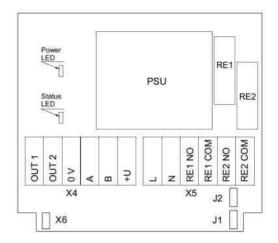
Duct mount version



Connection diagrams

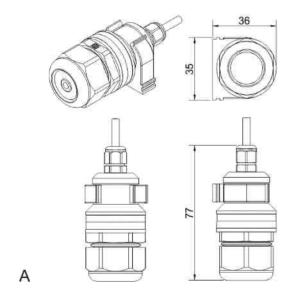




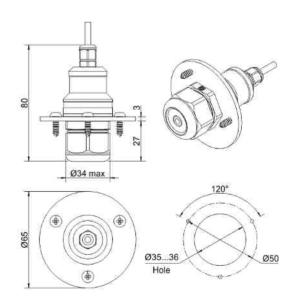


Version with PSU

Remote probe



Wall mount remote probe with fixing clamp (default version)



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

В

Fluorescence-based **Oxygen Detector-Transmitter** E2608-O2-L







Features

- Maintenance free* optical sensor
- Wall-mount or duct-mount version
- Industrial housing, attached or remote sensor
- Two analog outputs settable to 4-20 mA or 0-10 V
- Two relays for alarm / ventilation control
- RS485 Modbus RTU digital interface
- · High selectivity to oxygen

0

Specifications

Calibration Oxygen O₂

Optical (fluorescence based) Sensing method

Sampling method Diffusion 0...25 %vol O₂ Detection range Resolution 0.01 %vol O₂ Accuracy < 2% FS Signal update every 1 second Response time < 30 seconds

Maintenance interval Maintenance free sensor*

Sensor lifetime > 5 years

Self-diagnostics full functionality check at start-up

Warm-up time

11...30 VDC, 24 VAC or 90...265 VAC Power supply

Power consumption < 2 VA

Digital interface RS485, Modbus RTU protocol Analog outputs $2 \times 4-20$ 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 set-points RE1 (HIGH): set 19.5%, release 20.5%

RE2 (LOW):set 18%, release 19%

Enclosure Light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm

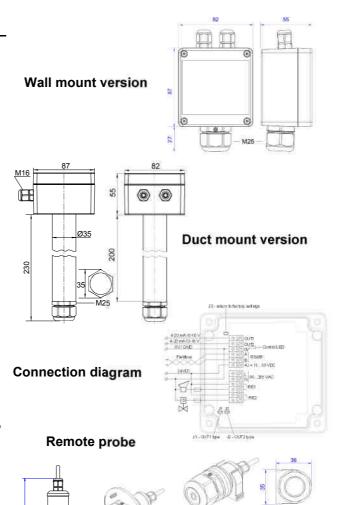
protection IP65, Remote sensor probe shielded cable

default cable length 3.0 m

Industrial indoor and outdoor locations

Operating environment Operating conditions -30...60 °C, 15...90 %RH;

pressure 0,9...1,1 atm; non ATEXrated areas; non-aggressive atmosphere





^{*}if no thermal fluctuations occur Ask for other versions or custom designed products

Ozone Detector-Transmitter E2608-O3







Features

- Wall-mount or duct-mount version
- Industrial IP65 housing
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Detected gase Ozone O₃ Calibration Ozone

Sensing method electrochemical

Sampling method diffusion

Detection range 0...5 ppm O₃ (peak 50 ppm)

Digital unit 0.01 ppm O₃ Repeatability < 2 % of signal Signal update every 1 second <60 seconds Response time Maintenance interval 6 months Sensor lifetime 2 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 11...30 VDC, 24 VAC or 90...265 VAC

Power consumption < 2 VA

Digital interface RS485, Modbus RTU protocol Analog outputs $2 \times 4-20$ mA / 0-10 V, user settable Output scale width recommended: 20-100% of the range;

> 10 × resolution in any case

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

Default alarm set-points RE1 (LOW): set 0.3, release 0.24 ppm RE2 (HIGH):set 1ppm, release 0.8 ppm

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm Remote sensor probe

protection IP65. shielded cable

default cable length 3.0 m

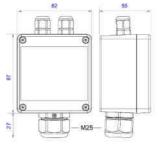
Operating environment industrial indoor and outdoor locations

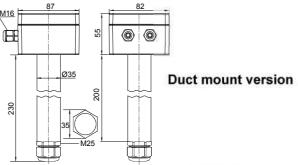
Operating conditions 0...50 °C, 15...90 %RH;

pressure 0,9...1,1 atm; non ATEXrated areas; non-aggressive atmosphere

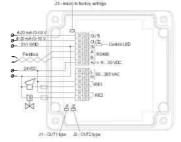
NOTE The sensor may exhibit considerable sensitivity to chlorine and nitrogen dioxide

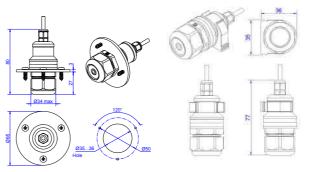
Wall mount version





Connection diagram







Solvent Vapours Detector-Transmitter E2608-PID













Features

- Highly sensitive Photo Ionization Detector
- Wall-mount or duct-mount version
- Industrial housing, attached or remote sensor
- Two analog outputs settable to 4-20 mA or 0-10 V
- · Two relays for alarm / ventilation control
- RS485 Modbus RTU digital interface

Specifications

Detection range

Output relays

Minimum detection level

Detected gases VOCs

with ionisation potential < 10.6 eV

Default calibration Isobutylene

Sensor type Photo Ionization Detector

Sampling method Diffusion

E2608-PID-40 E2608-PID-200

0...40 ppm 0...200 ppm (isobutylene) (isobutylene)

1 ppb < 50 ppb

Signal update every 1 second
Response time < 3 seconds
Sensor lifetime 5 years

Maintenance interval Monthly or more frequently

depending on operating conditions

Self-diagnostics Full functionality check at start-up

Full stabilisation time 20 min

Power supply 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

2 × SPST relays (closing contact),

250 VAC / 30 VDC, 5 A max

Alarm set-points defined by user

within 5-95% of the detection range

Enclosure Light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm

Remote sensor probe protection IP65,

shielded cable

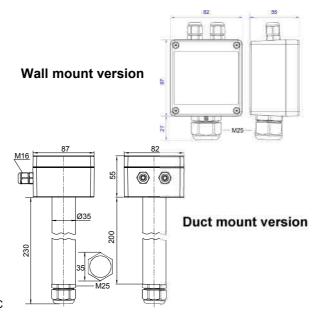
default cable length 3.0 m

Operating environment industrial indoor and outdoor

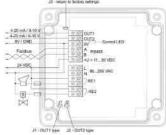
locations

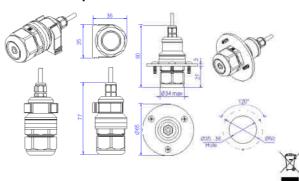
Operating conditions -40...+55 °C, 0...95 %RH

pressure 0,9...1,1 atm non ATEX rated areas









Sulfur Dioxide Detector-Transmitter E2608-SO2













Features

- Wall-mount or duct-mount version
- Industrial IP65 housing
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Detected gase Sulfur dioxide
Sensor type electrochemical
Sampling method diffusion

Typical detection range 0...50 ppm 0...2000 ppm

Maximum overload 75 ppm 10 000 ppm

Resolution / digital unit 0.1 ppm 1.5 ppm/1 ppm

Response time T90 <35 s

Signal update every 1 second

Maintenance interval 6 months

Sensor lifetime > 2 years

Self-diagnostics full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 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

0 ... ODOT malayar /alasinan asanta at

Output relays 2 × SPST relays (closing contact),

250 VAC / 30 VDC, 5 A max

Alarm set-points defined by user

within 5-95% of the detection range

Enclosure light grey ABS plastic, wall mount,

protection class IP65

Dimensions $H85 \times W82 \times D55 \text{ mm}$

Remote sensor probe protection IP65, shielded cable

default cable length 3.0 m

deladit cable length 5.0 m

Operating environment industrial indoor and outdoor

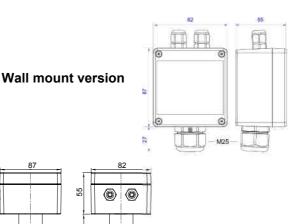
locations

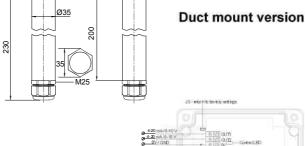
Operating conditions -30...50; 15...90 %RH

pressure 0,9...1,1 atm non ATEXrated areas non-aggressive atmosphere

NOTE The sensor may exhibit considerable sensitivity to nitrogen dioxide, chlorine, ethylene,hydrogen sulfide

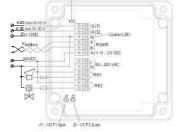
Ask for other versions or custom designed products



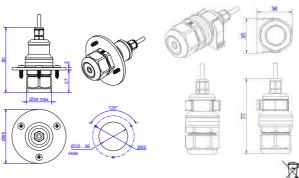




M16







Solvent Vapours Detector-Transmitter E2608-VOC









Features

- · Wall-mount or duct-mount version
- Industrial IP65 housing
- · Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- · Attached or remote sensor

Specifications

Detected gases Toluene, Xylene, Ethanol etc

Default calibration Toluene

Sensor type Metal-oxide semiconductor

Sampling method Diffusion

Detection ranges 0...100 to 0...1000 ppm (toxic ranges)

0...100% LEL (flammable range)

Resolution 1 ppm / 0.1% LEL
Signal update every 1 second
Response time < 120 seconds
Sensor lifetime > 5 years
Maintenance interval 12 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

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 set-points LOW: set 100 , release 80 ppm

HIGH: set 300, release 240 ppm (for the range 0...500 ppm)

LOW: set 20 , release 16 %LEL HIGH: set 50, release 40 %LEL

Enclosure Light grey ABS plastic, wall mount,

protection class IP65

Dimensions H85 × W82 × D55 mm

Remote sensor probe protection IP65,

shielded cable

default cable length 3.0 m

Operating conditions -30...+70 °C, <95 %RH

pressure 0,9...1,1 atm; non ATEX rated spaces; normal ambient oxygen level avoid mechanical shock or EMI; avoid exposure to corrosive gases or silicon containing products

