IP65 | 4-20 mA 0-10 V | RS485 Modbus

Solvent Vapours Detector-Transmitter E2608-PID

CE

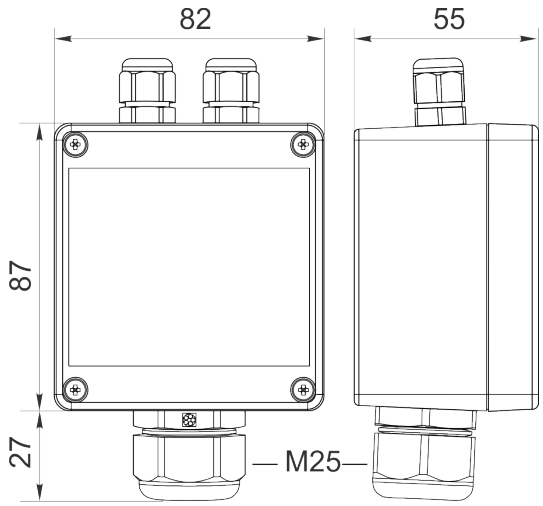
Features

- Highly sensitive Photo Ionization Detector
- 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

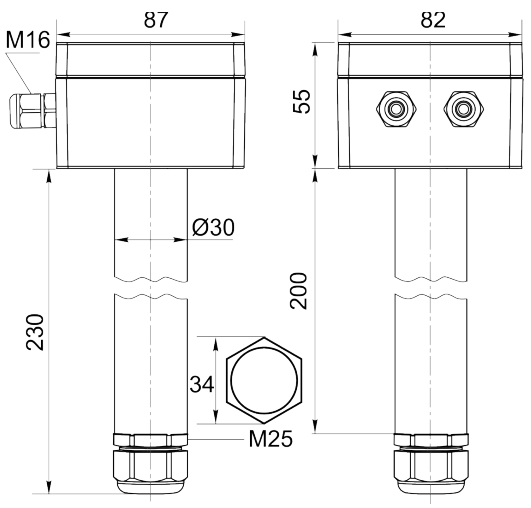
Specifications

Detected gases	VOCs with ionisation potential < 10.6 eV	
Default calibration	Isobutylene	
Sensor type	Photo ionization detector (PID)	
Sampling method	Diffusion	
	E2608-PID-40	E2608-PID-200
Detection range	0...40 ppm (isobutylene)	0...200 ppm (isobutylene)
Minimum detection level	1 ppb	< 50 ppb
Response time	< 3 s	
Signal update	Every 1 second	
Sensor lifetime	> 5 years	
Maintenance interval	Monthly or more frequently depending on operating conditions	
Self-diagnostics	Full functionality check at start-up	
Time to full stabilisation	20 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 setpoint	Determined by user within 5-95% of the 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...+55°C; 0...95% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere	

Wall mount version

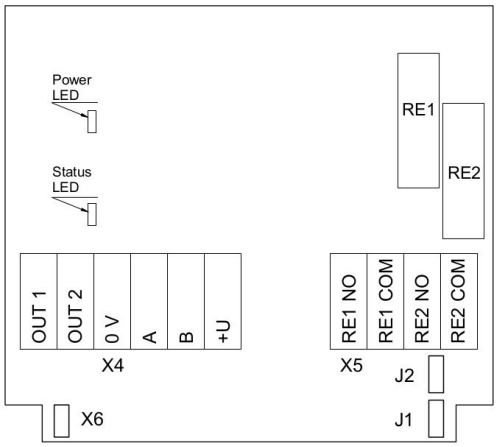


Duct mount version

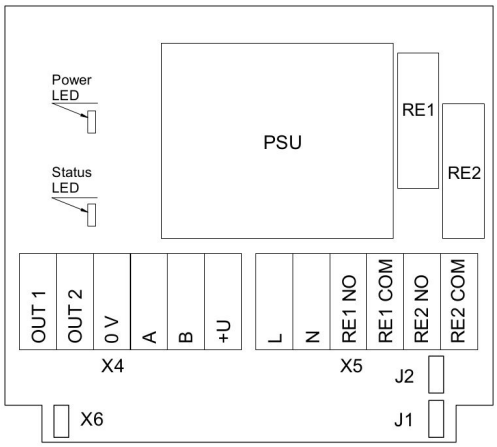


Ask for other versions or custom designed products

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

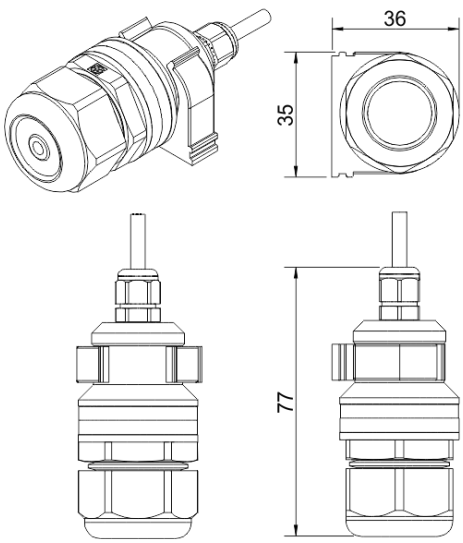
X4 terminals

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)

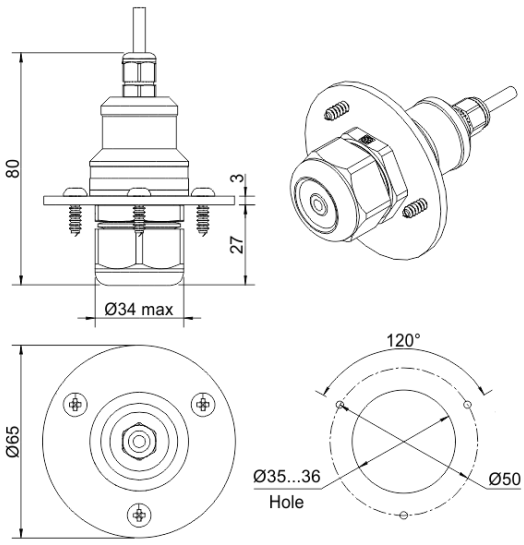
L	90…265 VAC Phase
N	90…265 VAC Neutral
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal

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)

IP65 | 4-20 mA 0-10 V | RS485 Modbus

Solvent Vapor Detector-Transmitter E2608-VOC

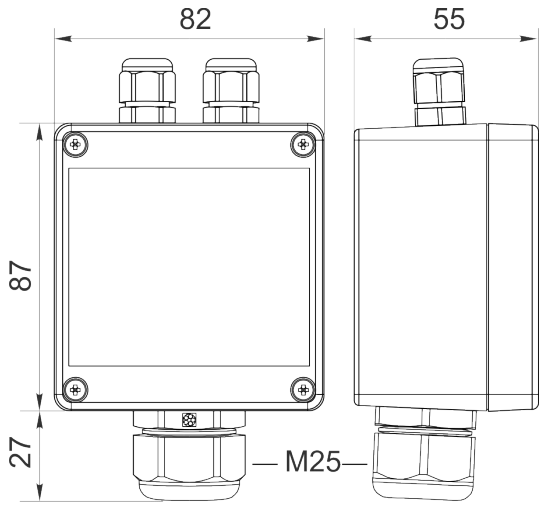
Features

- 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

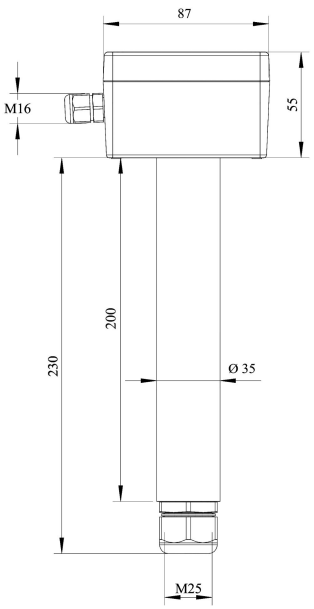
Specifications

Detected gases	Toluene, xylene,ethanol etc
Default calibration	Toluene
Sensor type	Metal oxide semiconductor
Sampling method	Diffusion
Typical detection ranges	Up to 0...1000 ppm (toxic range) 0...100% LEL (flammable range)
Resolution	1 ppm for toxic ranges 0,1 % LEL for flammable range
Response time	< 120 s
Signal update	Every 1 second
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 (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	LOW: set 100 , release 80 ppm HIGH: set 300, release 240 ppm LOW: set 20 , release 16 %LEL HIGH: set 50, release 40 %LEL (for flammability 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…+70 °C; 15...95% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Normal ambient oxygen level Avoid exposure to corrosive gases or volatile silicone containing products.

Wall mount version

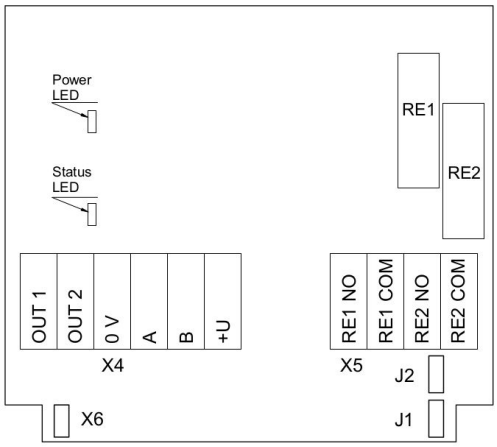


Duct mount version

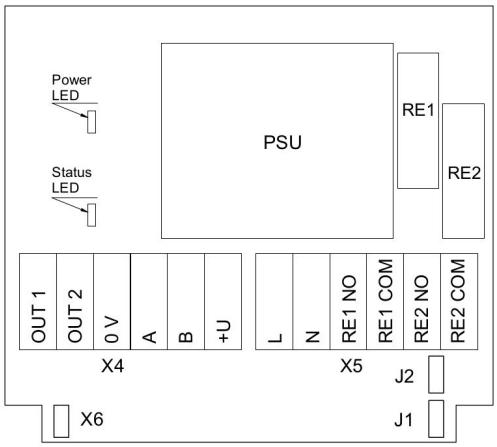


Ask for other versions or custom designed products

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

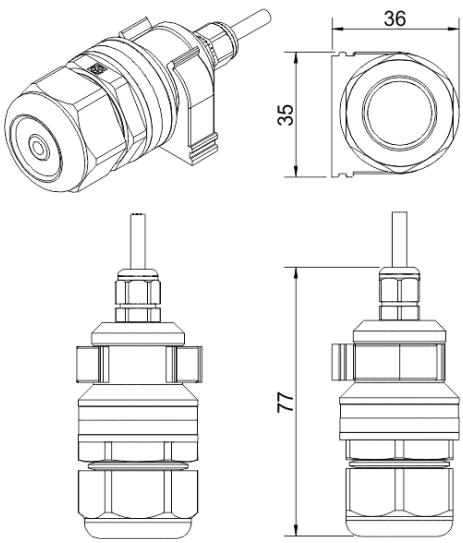
X4 terminals

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)

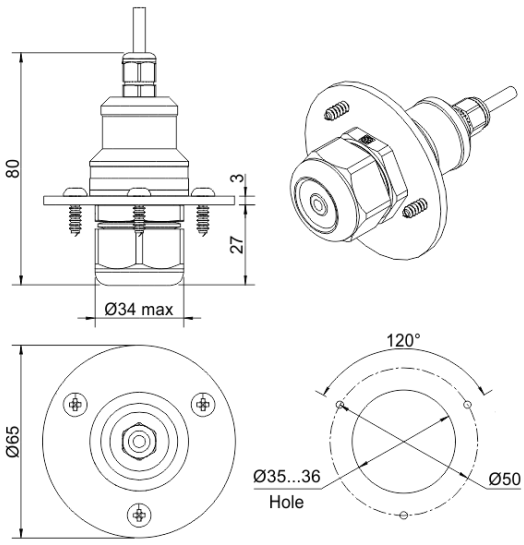
L	90…265 VAC Phase
N	90…265 VAC Neutral
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal

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)

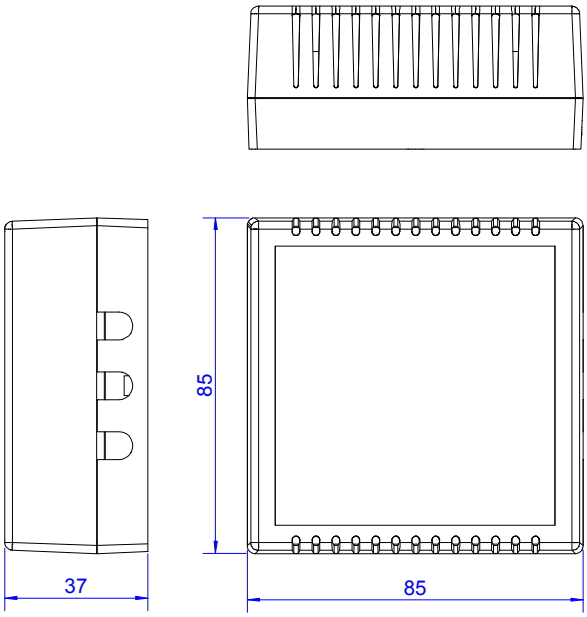
Solvent Vapor Detector-Transmitter
E2611-VOC

Features

- Accurate and stable measurement
- Compact housing providing optimal airflow
- Acoustic alarm
- Two relays for alarm / ventilation control
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface

Specifications

Target gases	Toluene, Xylene, Ethanol
Default calibration	Toluene
Sensing method	long-life metal-oxide gas sensor
Sampling method	diffusion
Detection range options	0...100 to 0...1000 ppm 0...100% LEL
Resolution	3 ppm toluene
Signal update	every 1 second
Response time	<120 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 or 90...265 VAC
Power consumption	< 2 VA
Digital interface	RS485, Modbus RTU protocol
Alarm	buzzer 85 dBi
Analog outputs	2 × 4-20 mA / 0-10 V, user settable
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	ABS plastic with ventilation slots, wall mount, protection class IP20
Dimensions	H85 × W85 × D37 mm
Operating environment	residential, business and industrial indoor spaces
Operating conditions	-30...+70 °C, <95 %RH, without condensation non ATEX areas non-aggressive atmosphere



IP65 | 4-20 mA 0-10 V | RS485 Modbus

Solvent Vapours Transmitter
E2618-PID

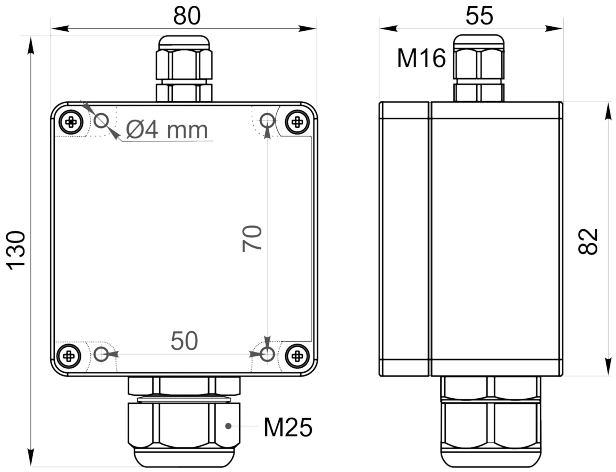
Features

- Highly sensitive Photo Ionization Detector
- 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

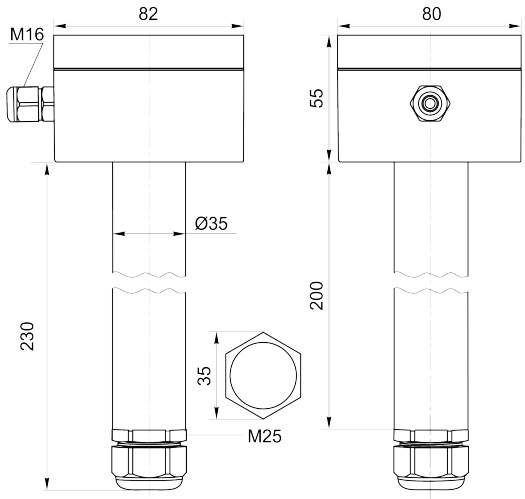
Specifications

Detected gases	VOCs with ionisation potential < 10.6 eV	
Default calibration	Isobutylene	
Sensor type	Photo ionization detector (PID)	
Sampling method	Diffusion	
	E2608-PID-40	E2608-PID-200
Detection range	0...40 ppm (isobutylene)	0...200 ppm (isobutylene)
Minimum detection level	1 ppb	1 ppm
Response time T90	< 3 s	
Signal update	Every 1 second	
Sensor lifetime	> 5 years	
Maintenance interval	Monthly or more frequently depending on operating conditions	
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...+65°C; 0...95% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere	

Wall mount version

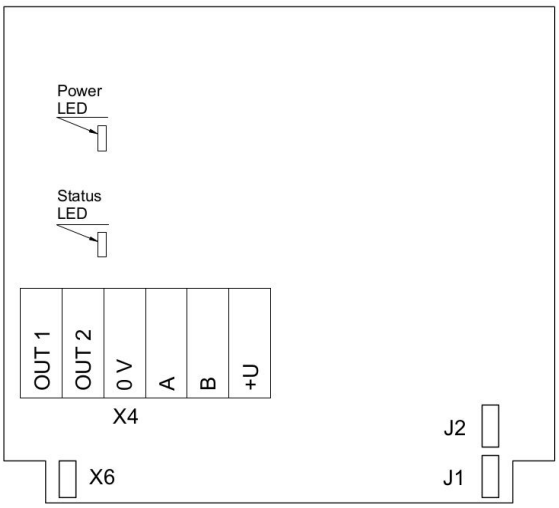


Duct mount version



Ask for other versions or custom designed products

Connection diagram



PCB without PSU and relays

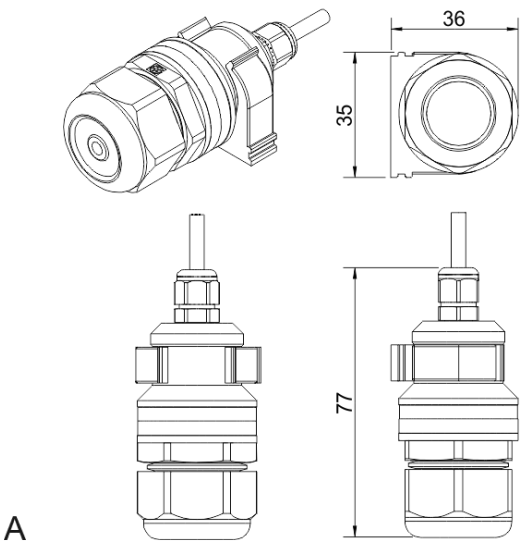
Jumpers

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

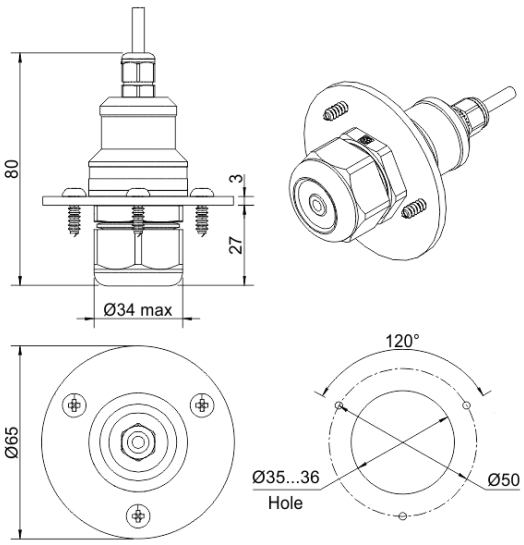
OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 24 VAC Phase (optional)

Remote probe



A

Wall mount remote probe with fixing clamp (default version)



B

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

IP65 | 4-20 mA 0-10 V | RS485 Modbus

CE

Solvent Vapours Transmitter
E2618-VOC

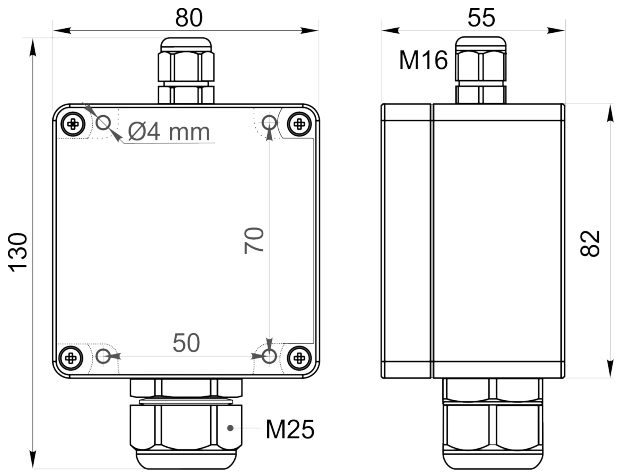
Features

- 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

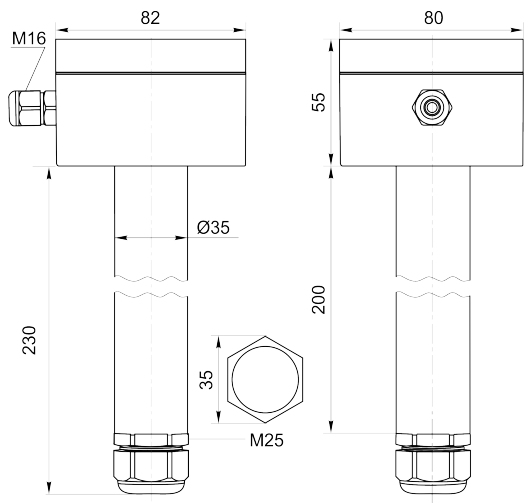
Specifications

Detected gases	Toluene, xylene,ethanol etc
Default calibration	Toluene
Sensor type	Metal-oxide semiconductor
Sampling method	Diffusion
Typical detection ranges	Up to 0...1000 ppm (toxic range) 0...100% LEL (flammable range)
Resolution	1 ppm for toxic ranges 0,1 % LEL for flammable range
Response time T90	< 120 s
Sensor lifetime	> 5 years
Maintenance interval	12 months
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
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…+70 °C; <95% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Normal ambient oxygen level Avoid exposure to corrosive gases or volatile silicone containing products.

Wall mount version

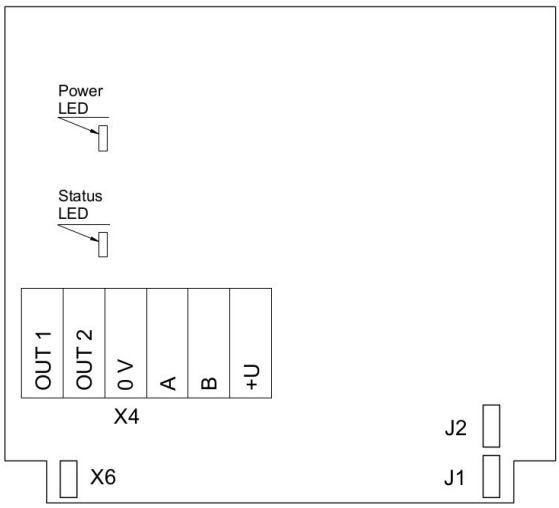


Duct mount version



Ask for other versions or custom designed products

Connection diagram



PCB without PSU and relays

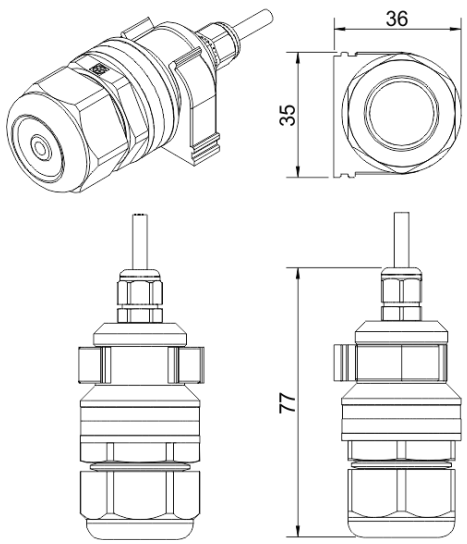
Jumpers

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

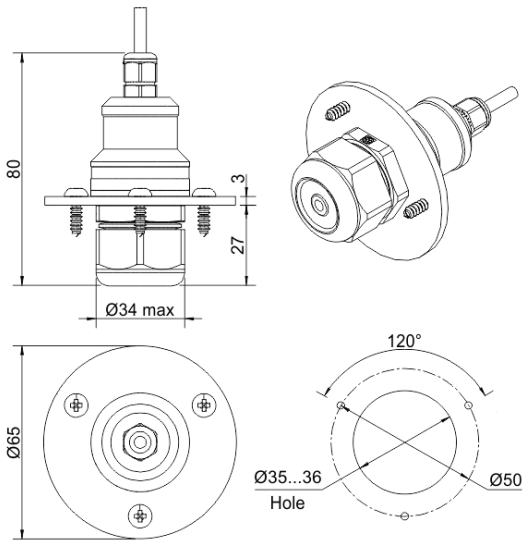
OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 24 VAC Phase (optional)

Remote probe



A

Wall mount remote probe with fixing clamp (default version)



B

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

Solvent Vapor Detector
E2630-VOC

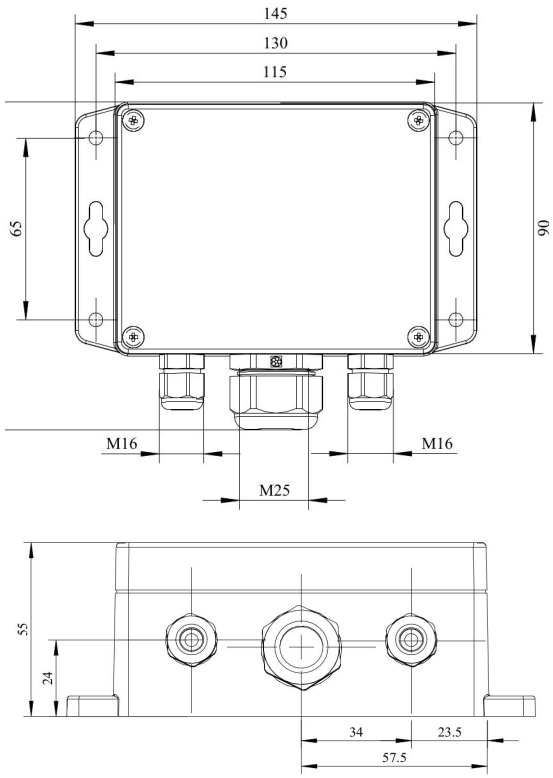
Features

- Toluene, Xylene, Ethanol etc
- Accurate and stable measurement
- Wall-mount IP65 protected housing
- Visual and acoustic alarms
- Two output relays for alarm / ventilation control

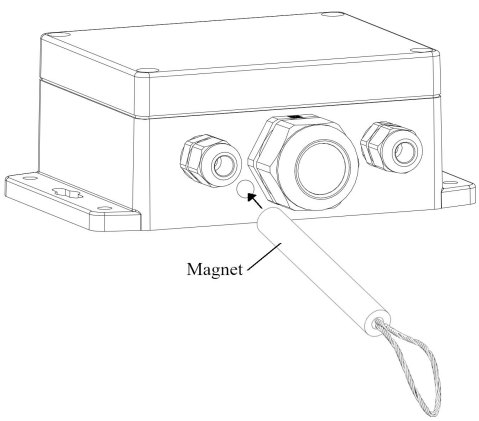
Specifications

Detected vapors	Acetone, Benzene, Ethanol, Ethyl Acetate, Toluene, Xylenes etc
Default calibration	Toluene
Sensor type	Metal oxide semiconductor
Sampling method	Diffusion
Typical detection range	0...100% LEL 0...100 to 1000 ppm
Resolution	0,1 %LEL 1 ppm
Accuracy	± 2 % of the range
Response time	< 120 seconds
Signal update	Every 1 second
Sensor lifetime	> 5 years
Maintenance interval	12 months
Self-diagnostics	Full functionality check at start-up, testing by magnetic switch
Warm-up time	≤ 1 min
Power supply	24 VAC/DC or 90...265 VAC
Power consumption	< 2 VA
Digital interface	UART
Output relays	2 relays with switch-over contact (SPDT), 250 VAC / 30 VDC, 5 A max
Default alarm set-points	Release - LOW - HIGH 7 - 10 - 25 %LEL 70 - 100 - 300 ppm
Alarms	Blinking LED, buzzer 85 dB
Enclosure	Grey ABS plastic, wall mount, protection class IP65
Dimensions	H140 × W145 × D55 mm
Operating conditions	-40...+70 °C <95 %RH; Pressure 0,9...1,1 atm; Non-atex rated spaces; Normal ambient oxygen level; Avoid strong mechanical shock, vibrations or EMI; Avoid exposure to corrosive gases or silicone containing products.

Dimensions

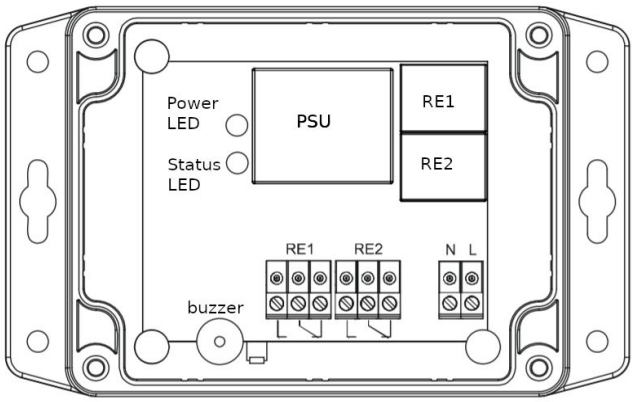


Magnet key



Ask for other versions or custom designed products

Connection diagram



Terminals

RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE1 NC	Relay 1, normally closed terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal
RE2 NC	Relay 2, normally closed terminal
L	90…265 VAC Phase (optional 24 VAC / VDC)
N	90…265 VAC Neutral (optional 24 VAC / VDC)

Solvent Vapours Detector-Transmitter E2638-PID

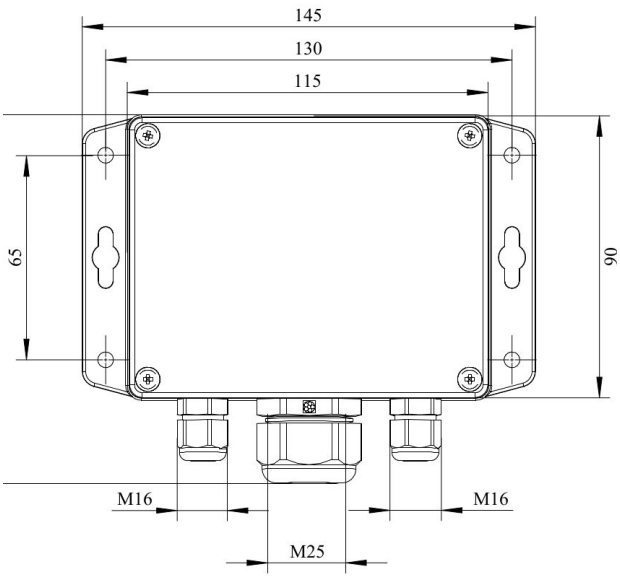
Features

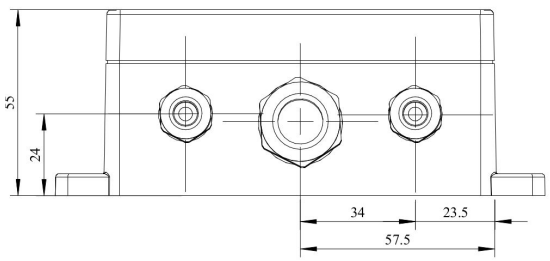
- Highly sensitive Photo Ionization Detector
- Accurate and stable measurement
- Easy to install robust enclosure
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Relay option
- Attached or remote sensor
- LCD indicator option

Specifications

Detected gases	VOCs with ionisation potential < 10.6 eV	
Default calibration	Isobutylene	
Sensor type	Photo ionization detector (PID)	
Sampling method	Diffusion	
	E2638-PID-40	E2638-PID-200
Typical detection range	0...40 ppm (isobutylene)	0...200 ppm (isobutylene)
Resolution	1 ppb	1 ppm
Response time T90	< 3 s	
Signal update	Every 1 second	
Sensor lifetime	> 5 years	
Maintenance interval	Monthly or more frequently depending on operating conditions	
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...+65 °C, 0.9...1,1 atm 0...95% RH non condensing Explosion-safe areas Non-aggressive atmosphere	

Dimensions





Ask for other versions or custom designed products

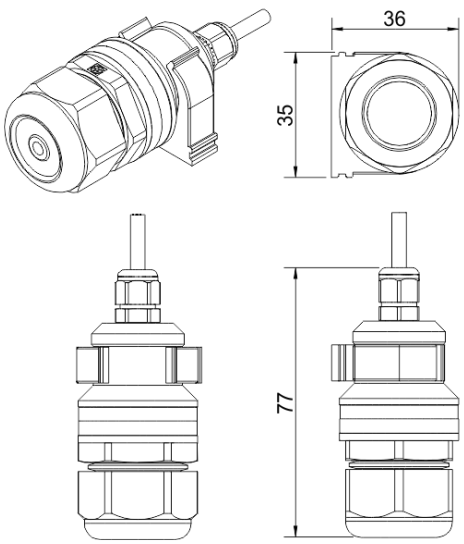
Additional options

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	Determined by user within 5-95% of the 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 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.

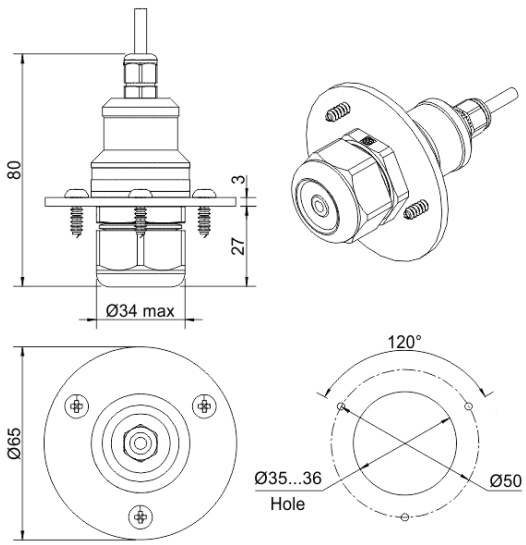
Version with LCD indicator

Remote probe



A

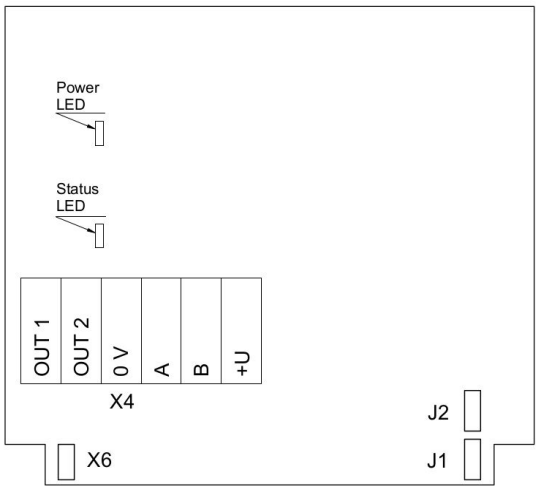
Wall mount remote probe with fixing clamp (default version)



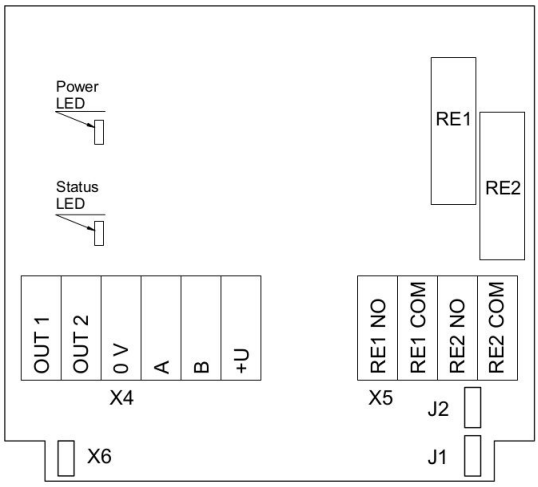
B

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

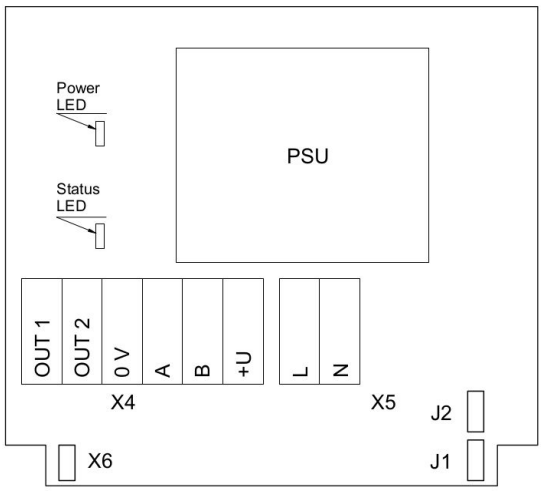
Connection diagrams



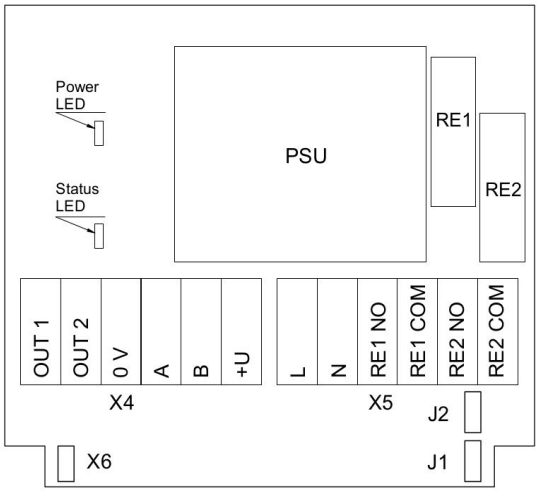
Version without PSU and relays



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

Solvent Vapours Detector-Transmitter E2638-VOC

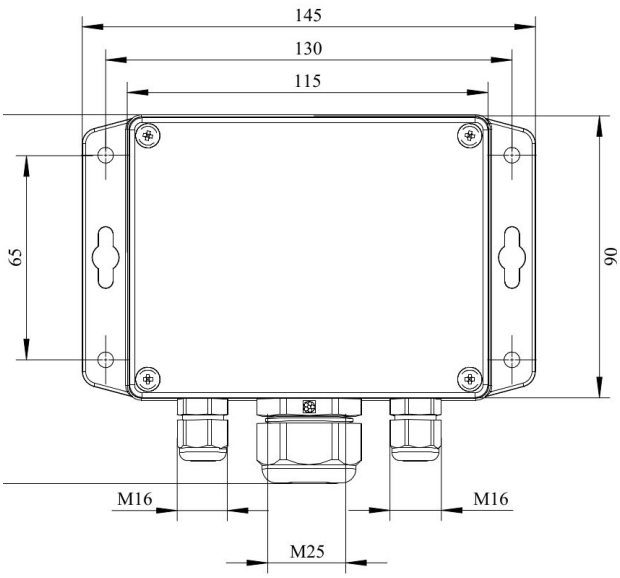
Features

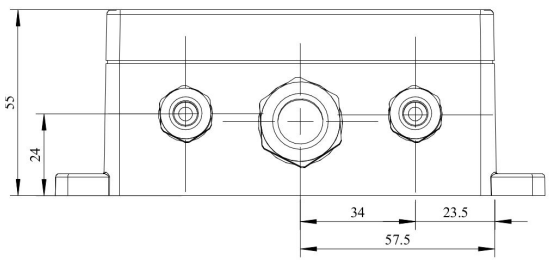
- Accurate and stable measurement
- Easy to install robust enclosure
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Relay option
- Attached or remote sensor
- LCD indicator option

Specifications

Detected gases	Toluene, xylene,ethanol etc
Default calibration	Toluene
Sensor type	Metal oxide semiconductor
Sampling method	Diffusion
Typical detection range	Up to 0...1000 ppm (toxic range) 0...100% LEL (flammable range)
Resolution	1 ppm for toxic ranges 0,1 % LEL for flammable range
Response time T90	< 120 s
Sensor lifetime	> 5 years
Maintenance interval	12 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	Grey ABS plastic, wall mount, protection class IP65
Dimensions	H90 × W145 × D55 mm (housing only) H140 with cable glands
Operating environment	Industrial indoor and outdoor locations
Operating conditions	-40…+70 °C; <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





Ask for other versions or custom designed products

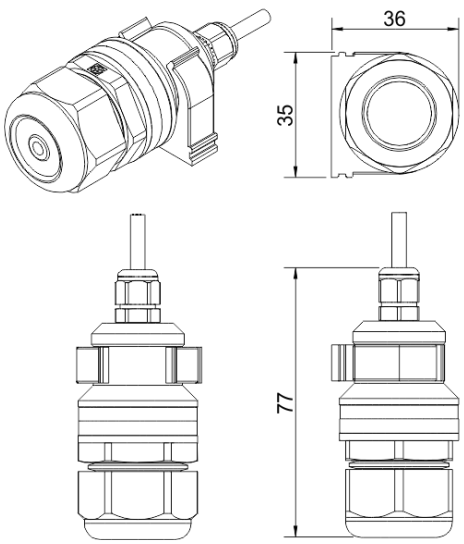
Additional options

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	LOW: set 100 , release 80 ppm HIGH: set 300, release 240 ppm (for the range 0...1000 ppm) LOW: set 20 , release 16 %LEL HIGH: set 50, release 40 %LEL (for flammability 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 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.

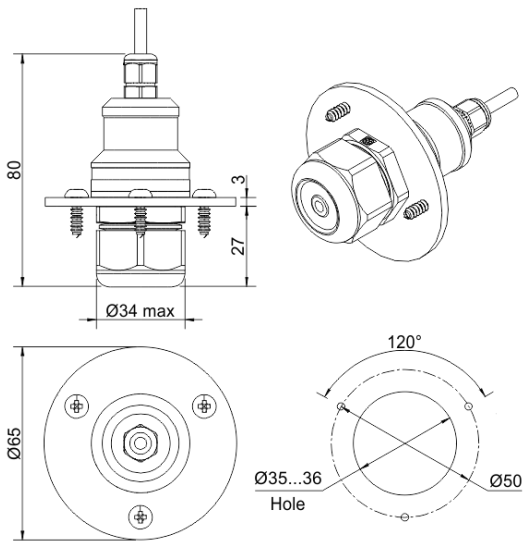
Version with LCD indicator

Remote probe



A

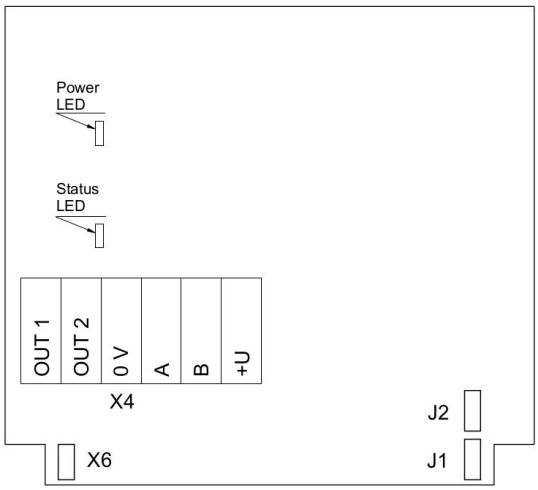
Wall mount remote probe with fixing clamp (default version)



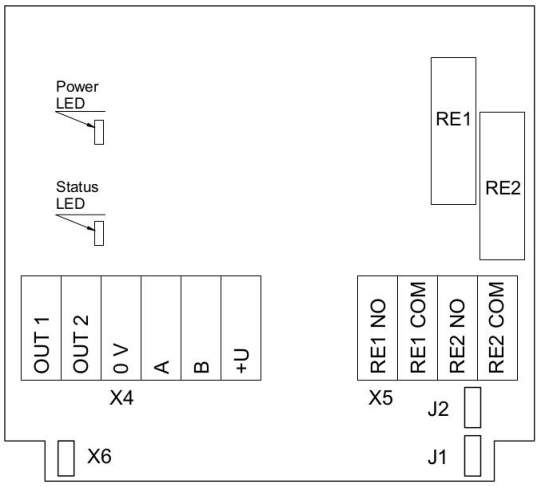
B

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

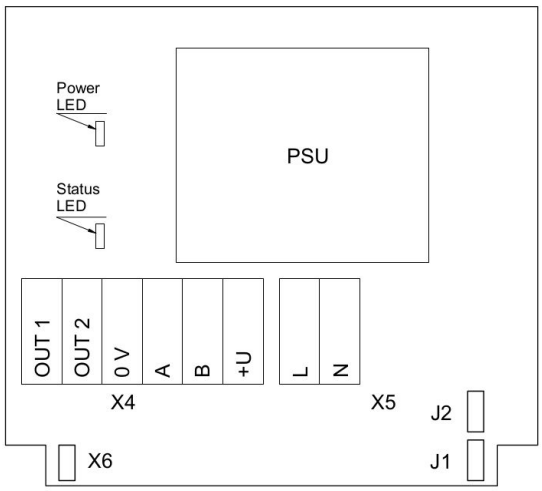
Connection diagrams



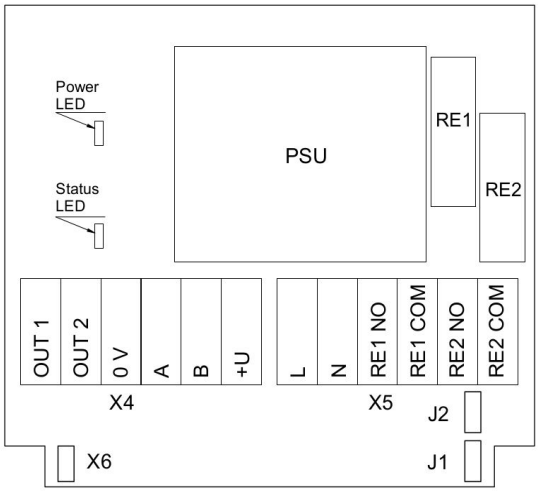
Version without PSU and relays



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

IP66 | 4-20 mA 0-10 V | RS485 Modbus

Solvent Vapours Detector-Transmitter E2648-PID

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

Detected gases	VOCs with ionisation potential < 10.6 eV	
Default calibration	Isobutylene	
Sensor type	Photo ionization detector (PID)	
Sampling method	Diffusion	
	E2608-PID-40	E2608-PID-200
Detection range	0...40 ppm (isobutylene)	0...200 ppm (isobutylene)
Minimum detection level	1 ppb	1 ppm
Response time	< 3 s	
Sensor lifetime	> 5 years	
Maintenance interval	Monthly or more frequently depending on operating conditions	
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	
Enclosure	Die-cast aluminium, wall mount, protection class IP66	
Dimensions	H120 × W125 × D57 mm	
Operating environment	Industrial indoor and outdoor locations	
Operating conditions	-40...+65°C; 0...95% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere	

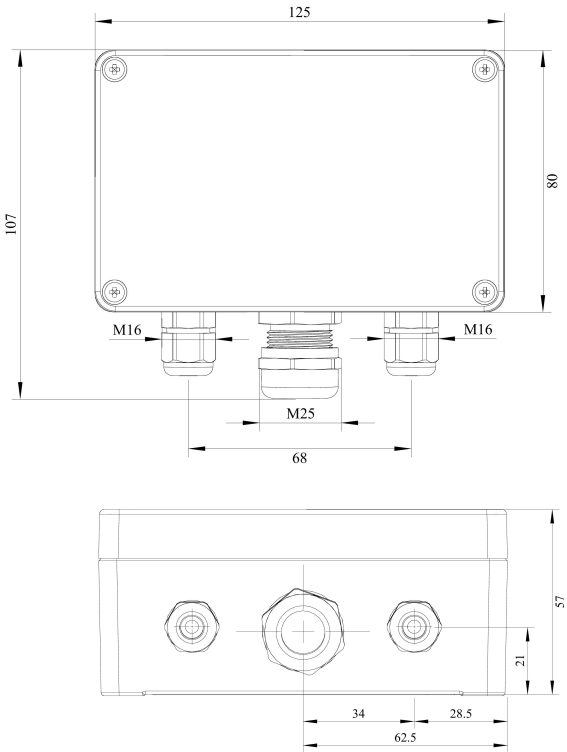
Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	Determined by user within 5-95% of the range

Other options

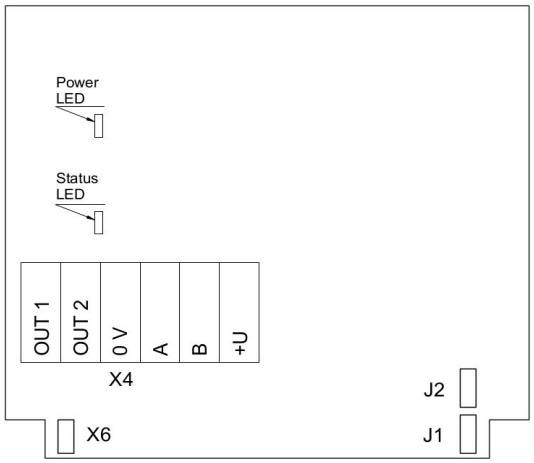
Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m

Dimensions

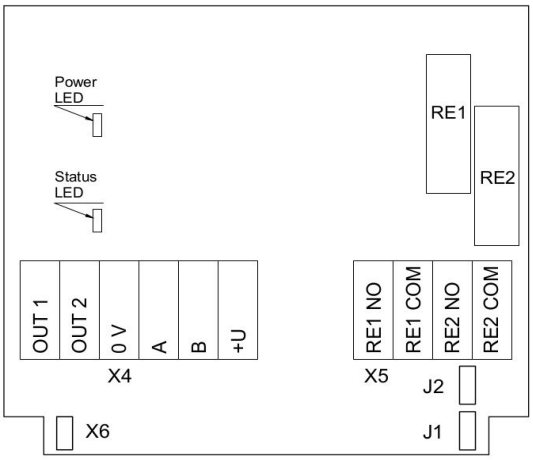


Ask for other versions or custom designed products

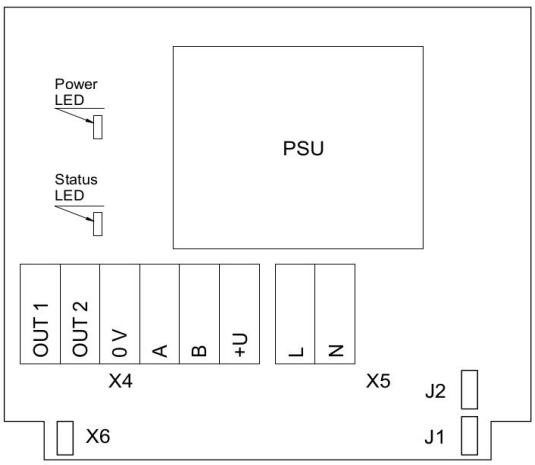
Connection diagrams



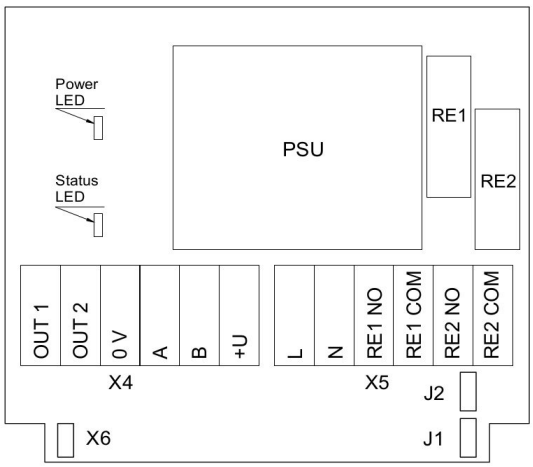
Version without PSU and relays



Version without PSU and with relays



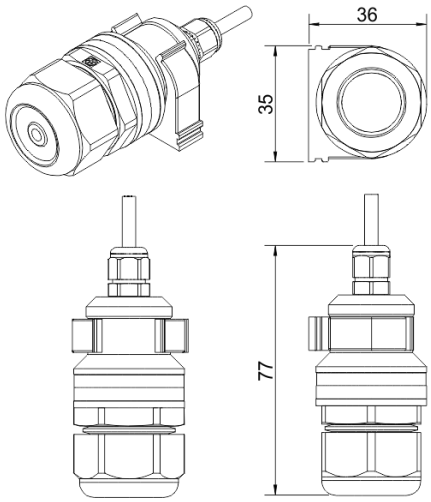
Version with PSU and without relays



Version with PSU and relays

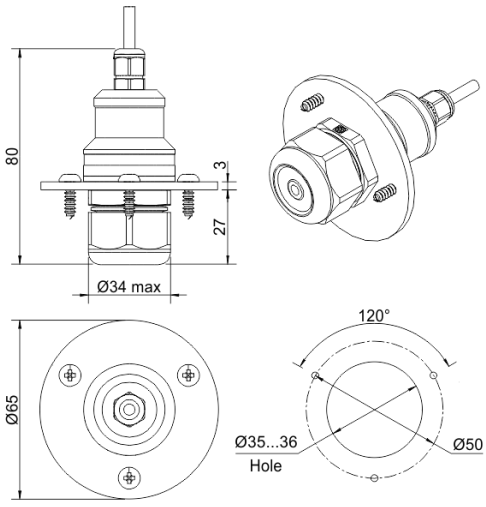
Jumpers	
J1	OUT1 type (open: 4-20 mA; closed 0-10 V)
J2	OUT2 type (open: 4-20 mA; closed 0-10 V)
X6	Reset Modbus network parameters to default
X4 terminals	
OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 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)

Solvent Vapours Detector-Transmitter E2648-VOC

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

Detected gases	Toluene, xylene,ethanol etc
Default calibration	Toluene
Sensor type	Metal oxide semiconductor
Sampling method	Diffusion
Typical detection ranges	Up to 0...1000 ppm (toxic range) 0...100% LEL (flammable range)
Resolution	1 ppm for toxic ranges 0,1 % LEL for flammable range
Response time	< 120 s
Sensor lifetime	> 5 years
Maintenance interval	12 months
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
Enclosure	Die-cast aluminium, wall mount, protection class IP66
Dimensions	H120 × W125 × D57 mm
Operating environment	Industrial indoor and outdoor locations
Operating conditions	-40…+70 °C; <95% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Normal ambient oxygen level Avoid exposure to corrosive gases or volatile silicone containing products

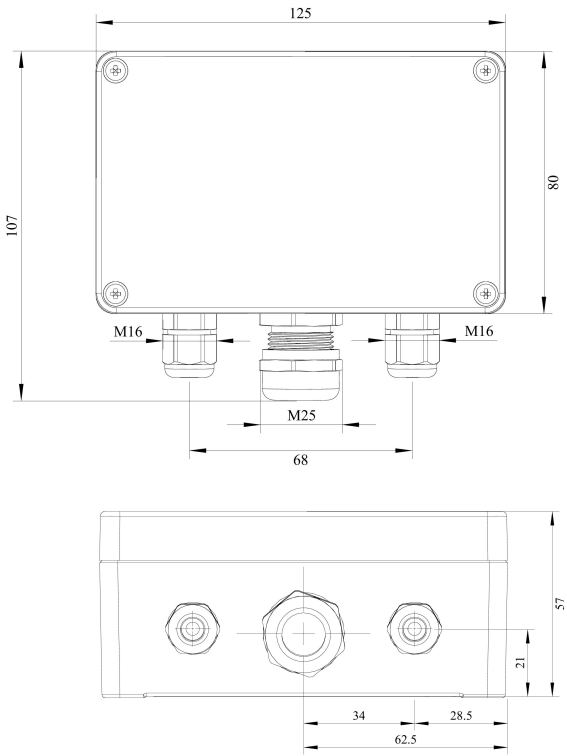
Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	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 (for flammability range)

Other options

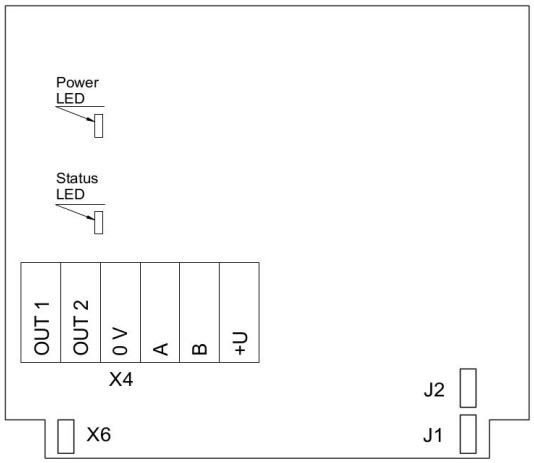
Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m

Dimensions

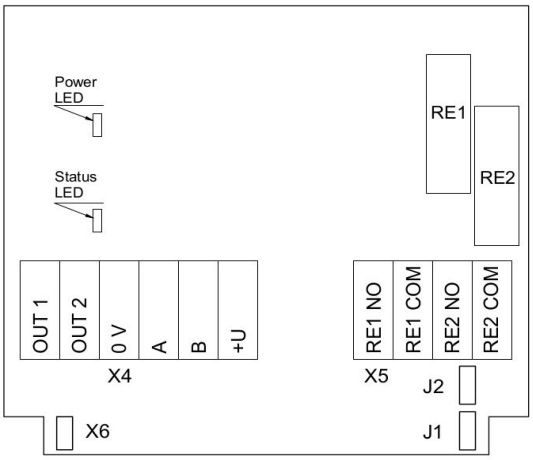


Ask for other versions or custom designed products

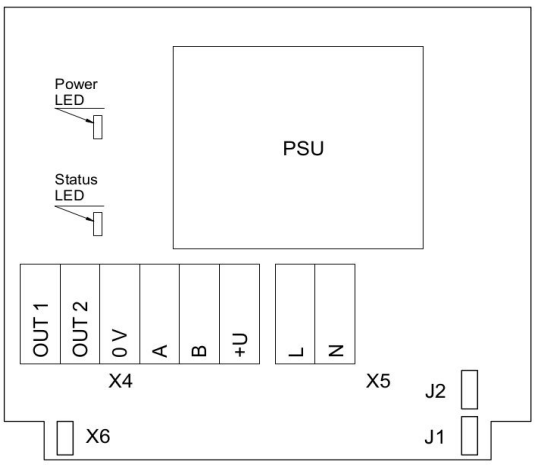
Connection diagrams



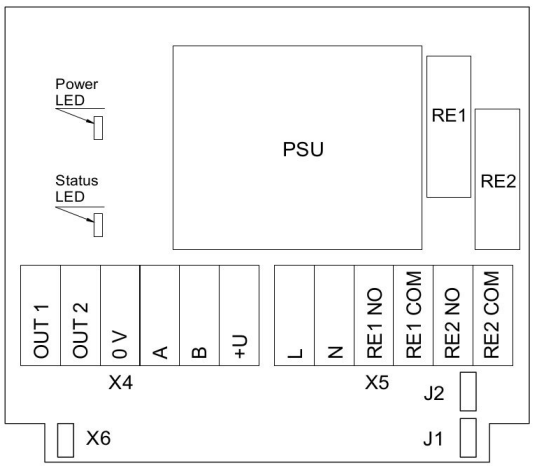
Version without PSU and relays



Version without PSU and with relays



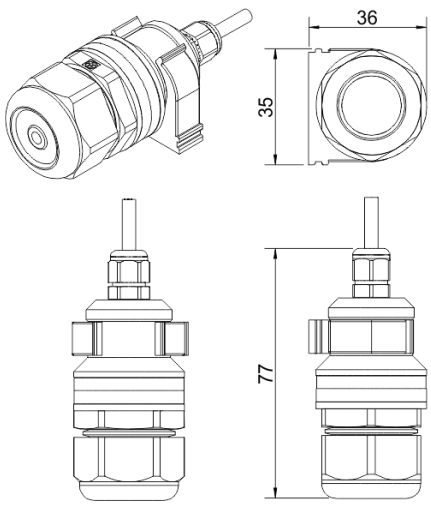
Version with PSU and without relays



Version with PSU and relays

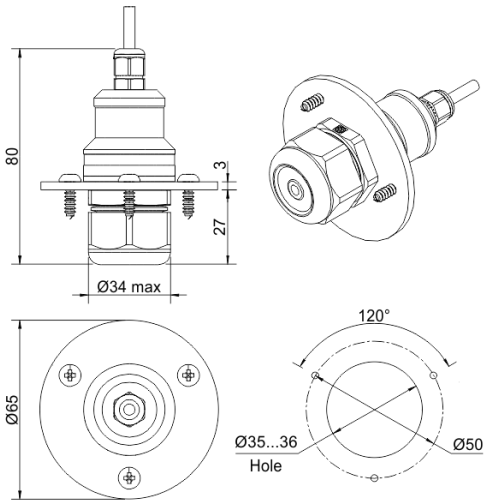
Jumpers	
J1	OUT1 type (open: 4-20 mA; closed 0-10 V)
J2	OUT2 type (open: 4-20 mA; closed 0-10 V)
X6	Reset Modbus network parameters to default
X4 terminals	
OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 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)

Flameproof Solvent Vapours Detector-Transmitter E2658-PID

Features

- Highly sensitive Photo Ionization Detector
- 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

Detected gases	VOCs with ionisation potential < 10.6 eV	
Default calibration	Isobutylene	
Sensor type	Photo ionization detector (PID)	
Sampling method	Diffusion	
	E2608-PID-40	E2608-PID-200
Detection range	0...40 ppm (isobutylene)	0...200 ppm (isobutylene)
Minimum detection level	1 ppb	1 ppm
Response time	< 3 s	
Sensor lifetime	> 5 years	
Maintenance interval	Monthly or more frequently depending on operating conditions	
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...+65°C; 0....95% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Non-aggressive atmosphere	

Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	Determined by user within 5-95% of the range

Ask for other versions or custom designed products

Approvals

Enclosure:

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

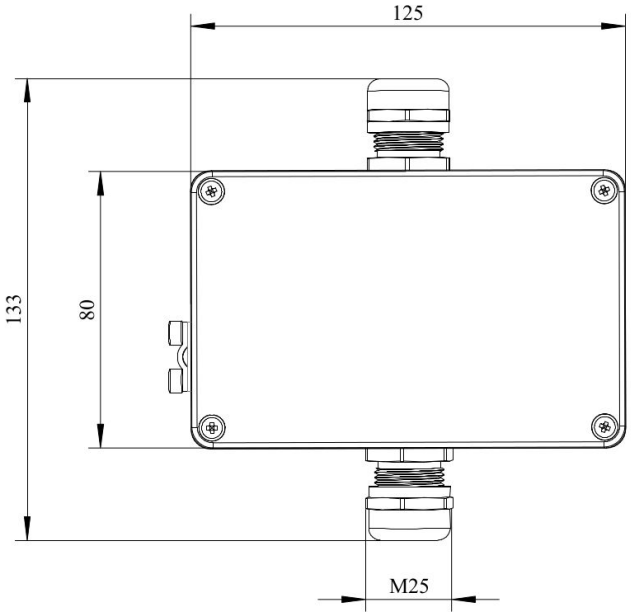
Glands:

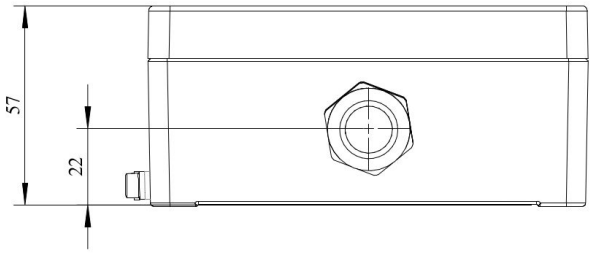
ATEX / IECEx
EESF 19 ATEX 023X
Ex II 2G Ex db IIC Gb
Ex II 2D Ex tb IIIC Db IP66

CE conformity

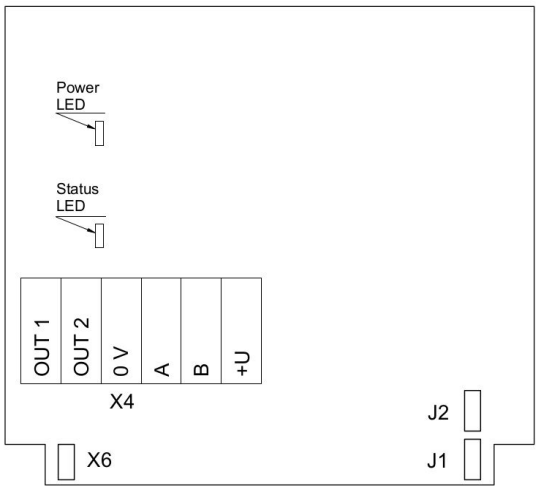
Flameproof to IEC EN 60079-1
Increased safety to IEC EN 60079-7
EMC Emissions to EN 61000-6-3, EN 61326-1
EMC Immunity to EN 61000-6-1, EN 61000-6-2

Dimensions

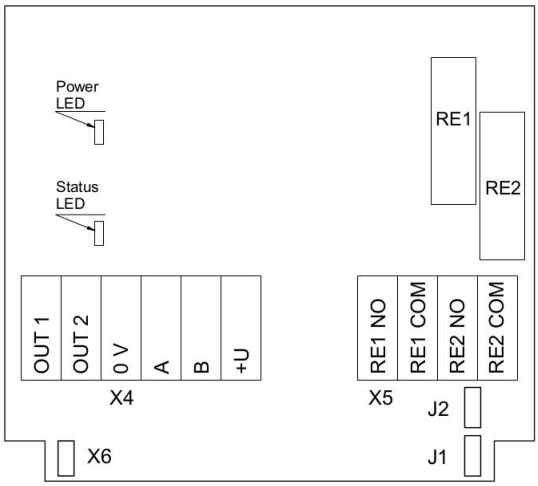




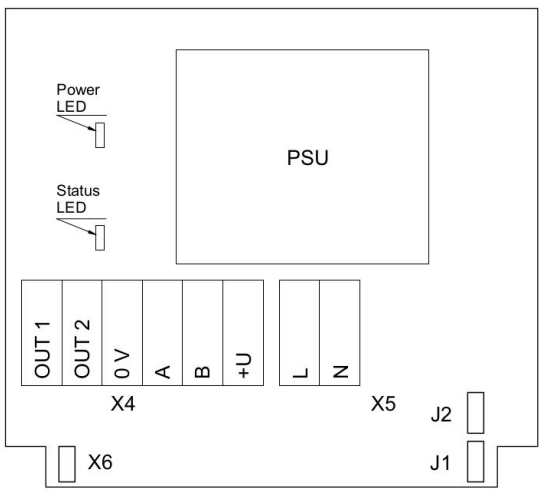
Connection diagrams



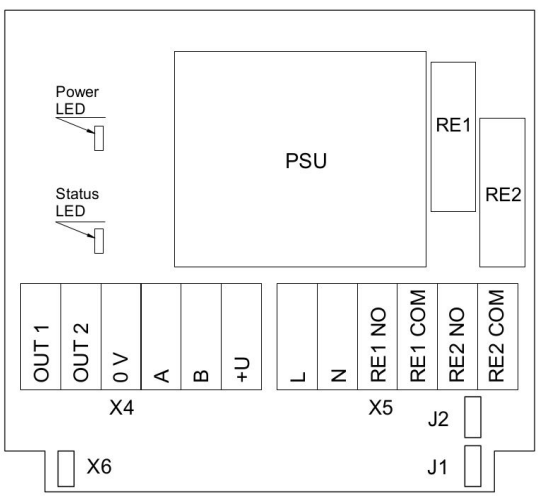
Version without PSU and relays



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 Solvent Vapours Detector-Transmitter E2658-VOC

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

Detected gases	Toluene, xylene,ethanol etc
Default calibration	Toluene
Sensor type	Metal oxide semiconductor
Sampling method	Diffusion
Typical detection ranges	Up to 0...1000 ppm (toxic range) 0...100% LEL (flammable range)
Resolution	1 ppm for toxic ranges 0,1 % LEL for flammable range
Response time T90	< 120 s
Sensor life-time	> 5 years
Calibration interval	12 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...+70°C; <95% RH non-condensing; 0,9...1,1 atm; Explosion-safe areas Normal ambient oxygen level Avoid exposure to corrosive gases or volatile silicone containing products.

Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	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 (for flammability range)

Approvals

Enclosure:

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

Glands:

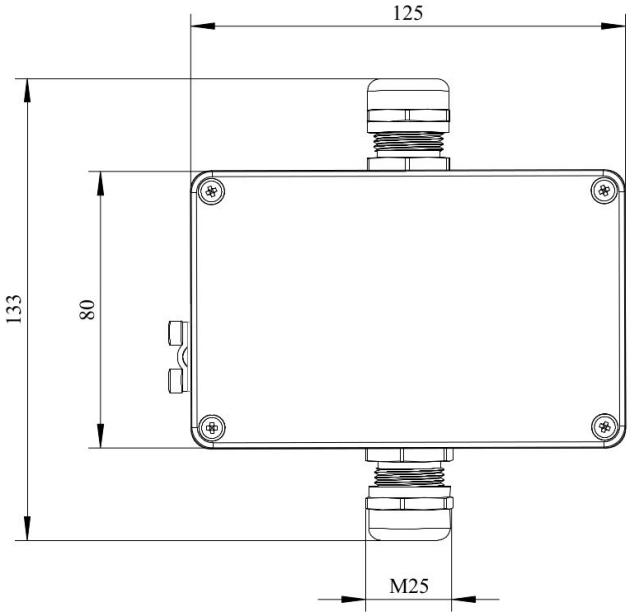
ATEX / IECEx
EESF 19 ATEX 023X
Ex II 2G Ex db IIC Gb
Ex II 2D Ex tb IIIC Db IP66

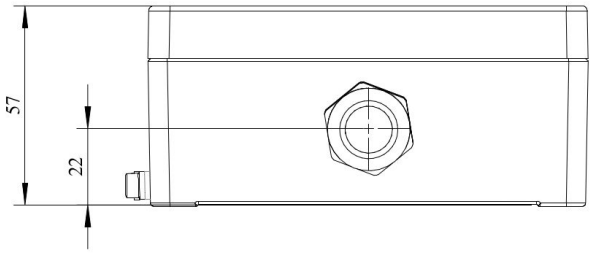
CE conformity

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

Ask for other versions or custom designed products

Dimensions





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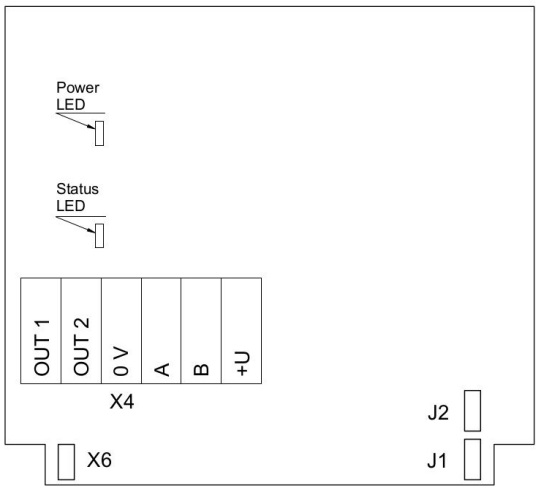

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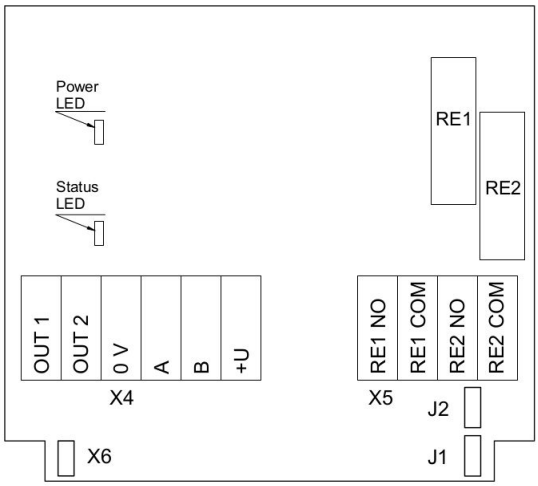
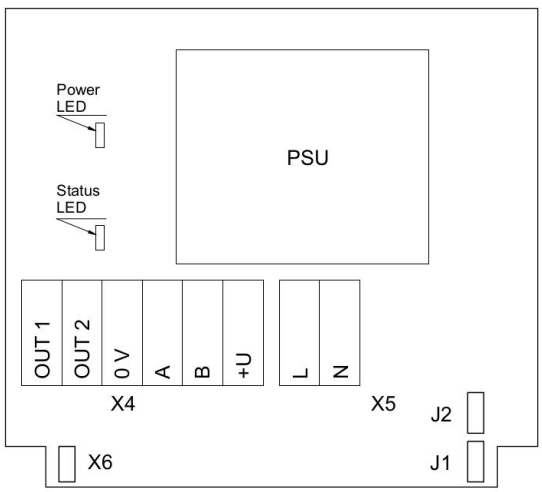
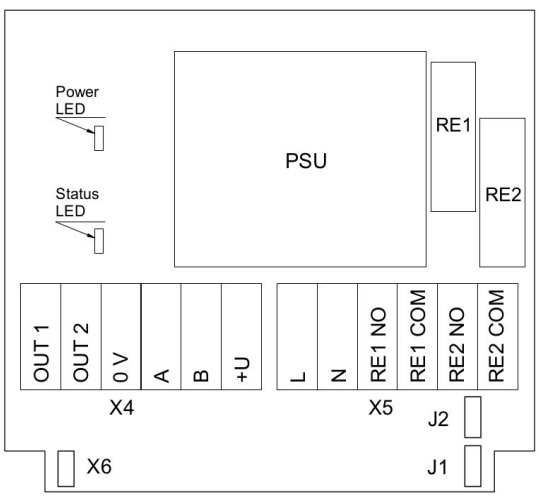


Version without PSU and with relays



Version with PSU and without relays



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