

PolyGard® Single Point Controller SPC-X3-34XX for Combustible Gases

Description

Gas measuring and monitoring controller based on state-of-the-art microtechnology with integrated sensor for continuous monitoring of the ambient air and detecting toxic gases and vapours. As an option the SPC-X3-34XX is provided with an input for one external analog transmitter. 4 alarm thresholds per sensor/transmitter are free programmable. Configuration and operation are possible via the logical, simple system menu structure without specific programming knowledge.

Application

The SPC-X3-34XX is suitable for a wide range of industrial and commercial applications. Free programmable parameters and setpoints enable the individual adaptation to a variety of applications in the field of gas measuring and monitoring.



Stainless steel housing

Features

- Continuous monitoring
- Integrated gas sensor
 - Good resistance to poisoning
 - Long life expectancy
- Modular design (plug-in technology)
- Standard version with display/LED/keyboard
- Comfortable calibration and maintenance
- Reverse polarity protected
- Overload-proof and short-circuit-proof
- (0) 4 – 20 mA / (0) 2 – 10V analog signal output
- 2 x relay outputs / 1 binary output
- Different housing versions
- 230 VAC power supply incl. 2 power relays in conjunction with POW-03 module (option)
- 230 VAC / 24 VDC power supply unit (option)
- Uninterruptible emergency power supply (option)
- 4 – 20 mA input for external transmitter (option)
- Integrated buzzer with reset function internal/external (option)
- Serial interface (option)
- Service tool for versions without display/LED/keyboard (option)
- Manual calibration via potentiometers (option)
- Heating (option)
- Duct mounting (option) only without display/LED/keyboard
- IP 65 version (option)



Standard housing

Specifications

Electrical	
Power supply	18 - 28 VDC/AC, reverse polarity protected
Power consumption (without options)	130 mA, max. (2,5 VA)
Analog output, current or voltage selectable	0 (4) – 20 mA, load ≤ 500 Ω 0 (2) – 10 V, load ≥ 50 kΩ overload-proof and short-circuit-proof
Alarm relay (1)	30 VAC/DC 0,5 A, potential-free, SPDT
Alarm relay (1)	30 VAC/DC 0,5 A, potential-free, SPNO/SPNC
Binary output	30 VDC /0,1 A open collector
Visualisation	
Display	Two lines, 16 characters each
Status LED (4)	Normal operation- Fault- Alarm1- Alarm 2
Operation	4 push-buttons – menu-driven
Sensor performance	
Gas type	Combustible gases/ vapours (see order inform.)
Sensor element	Ex sensor, catalytic bead (pellistor)
Measuring range	0 - 100% LEL
Accuracy	± 1 % of reading
Long-term zero point drift	< ± 6 % measuring range /year
Long-term sensitivity drift	< ± 1,5 % measuring range / month
Response time	t ₅₀ ≤ 3 s; t ₉₀ ≤ 10 s /methane
Sensor life expectancy	3 years/normal operating environment
Temperature range	- 20 °C to + 50 °C (-4 °F to 122 °F)
Temperature drift	≤ 1%
Storage period	Max. 6 months
Mounting height	Depending on gas type
External transmitter	Toxic gases, Ex gases, Freons, temperature, humidity, pressure, etc.
Operating environment	
Humidity	15 – 95 % RH non-condensing
Working temperature	-10 °C to + 50 °C (14 °F to 122 °F)
Storage temperature	5 °C to 30 °C (86 °F to 122 °F)
Pressure range	Atmospheric ± 10 %
Physical	
Enclosure stainless steel	Stainless steel V2A
Enclosure colour	Natural, brushed
Dimensions (W x H x D)	113 x 135 x 45 mm (4.5 x 5.35 x 1.8 in.)
Weight	Approx. 0,6 kg (1.3 lbs.)
Protection class	IP 55
Installation	Wall mounting, pillar mounting

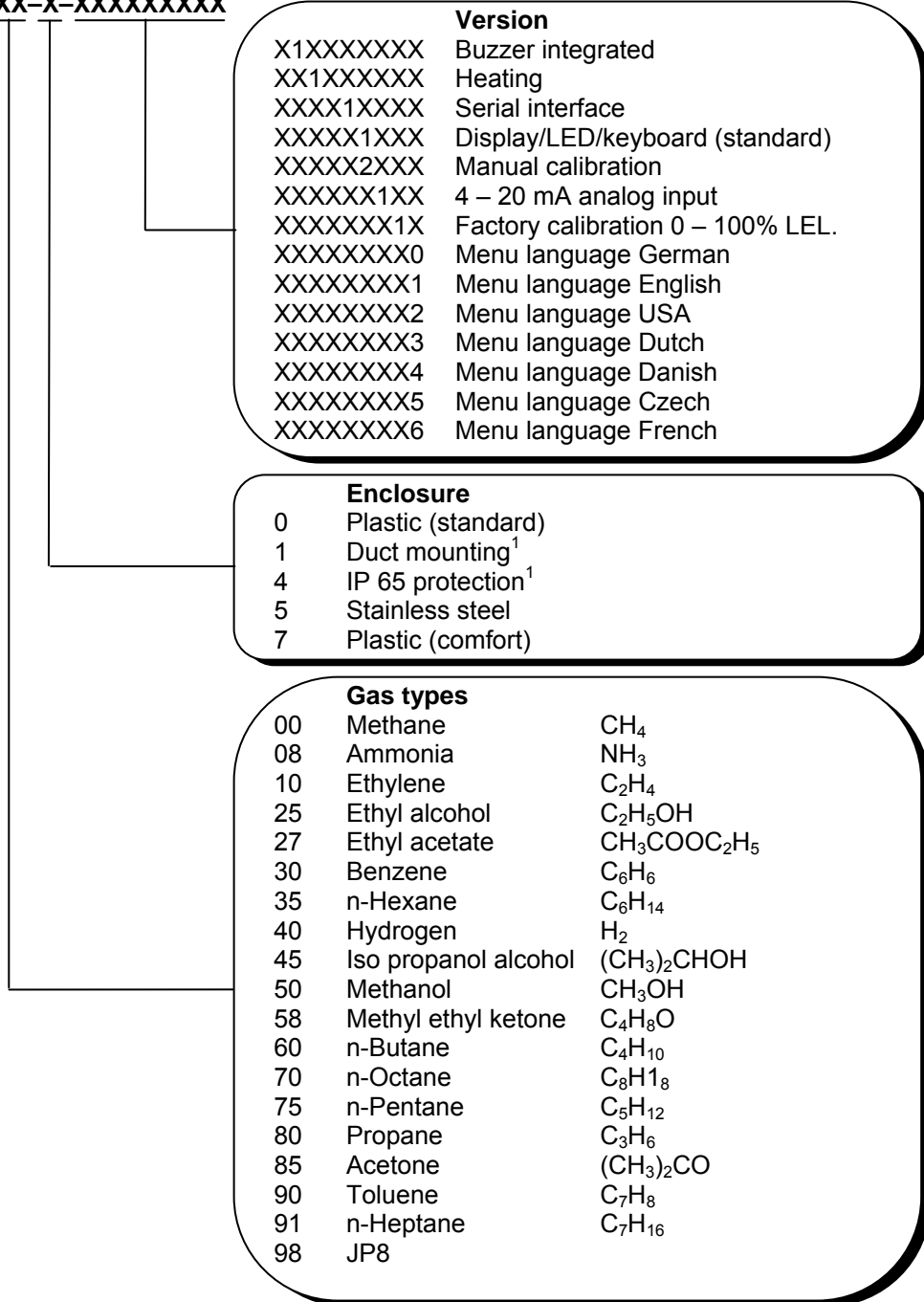
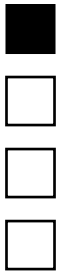


Enclosure Standard / Comfort	Plastics GWPLAST
Enclosure colour	RAL 7032 (light grey)
Dimensions Standard type (W x H x D)	87 x 127 x 56 mm
Dimensions Comfort type (W x H x D)	114 x 156 x 75 mm (4.89 x 6.15 x 2.95 in.)
Weight	Approx. 0,4 kg (0.88 lbs.)
Protection class	IP 55
Installation	Wall mounting
Cable entry	Standard 2 x M 20
Wire connection	Screw type terminal, min. 0.25 mm ² (24 AWG) max. 2.5 mm ² (14 AWG)
Guidelines	EMC Directives 2004 / 108 / EEC CE
Warranty	1 year on material (without sensor)
Options	
Analog input	4 – 20 mA overload-proof and short-circuit-proof, input resistance 200 Ω
Voltage for ext. analog transmitter	24 VDC max. load 50 mA
Buzzer	
Acoustic pressure	83 dB (A) (distance 200 mm) (0.6 ft.)
Frequency	2300 Hz
Serial interface	
Transceiver	RS 485 / 19200 Baud
Heating	
Temperature controlled	3 °C ±2°C (37,5 °F ± 35.5°F)
Ambient temperature	- 40 °C (- 40 °F)
Power supply	18 - 28 VDC/AC
Power consumption	0,5 A; 12 VA



Ordering Information

SPC-X3-34XX-X-XXXXXXXXXX



¹ See data sheet "PolyGard AT/DT Enclosures"

Example: Single Point Controller SPC-X3 for methane, stainless steel housing, buzzer, incl. factory calibration 0 - 100 % LEL, menu language English

Order No.: SPC-X3-3400-5-X1XXXXX11

Connecting diagram

