

## ► PolyGard

### Multi-gas controller



### Technical specifications

**Power supply:** 24 Vcc  $\pm$  20 %, reverse polarity protected, 24 Vca  $\pm$  15 % - Overvoltage category : 1

**Power consumption:** 24 Vcc

- Control board: Maxi 60 mA (1.5VA), without sensor
- Per sensor (analog): Maxi 85 mA (2.1 VA)
- Audible alert signal: Maxi 40 mA (1.0 VA)

**Fonctionnement:** Different menus operated via 6 buttons

**Analog inputs:** 3 linear inputs 4 to 20 mA overload and short-circuit proof, input resistance 200  $\Omega$

**Serial interface:** Communication RS-485 2 wire / 19 200 bauds (8 SensePoint XCL or SensePoint XRL detectors maximum)

**Digital inputs:** 2 digital inputs, potential-free

**Alarm relays:** 3 alarm relays, potential-free, 240 Vca / 5A change-over contact (SPDT)

**Transistor output:** 2 outputs 24 Vcc / 0.1A (switching to plus, only at 24 Vdc power supply)

**Analog output signal:** 1 linear output 4-20 mA overload and short-circuit proof, load  $\leq$  500  $\Omega$

**Housing:** Polycarbonate RAL 7032 (light grey)

**Installation:** Wall mounting

**Dimension (L x H x P):** 130 x 130 x 75 mm

**Weight:** 0.6 kg

**Ingress protection:** IP65 NEMA 4X

**LCD display:** 2 lines, 16 characters each, background highlighted in two colors

**Temperature range:** -25  $^{\circ}$ C to +50  $^{\circ}$ C

**Humidity range:** 15 to 95 % R.H. (non-condensing)

**Cable entries:** 6 x M20/25

### Product description

The **PolyGard** gas detection unit is a controller designed to detect the presence of toxic, combustible or dangerous gases in many tertiary and industrial applications. Reduced size and ease of use are the main advantages of this excellent value controller.

Very complete in terms of inputs / outputs, the controller can be connected to three 4-20 mA analog sensors and eight digital sensors by RS-485 communication from Honeywell **Sensepoint XCL** and **Sensepoint XRL** transmitters. Potential-free alarm relays and a 24 Vdc transistorized output complete this gas detection controller unit.

#### ► 8 RS-485 digital detectors

The **PolyGard** controller unit can receive up to 8 digital RS-485 sensors from the Honeywell **Sensepoint XCL** and **XRL** range, saving substantial wiring costs.

#### ► 3 4-20 mA analog detectors

In addition to the 8 available digital inputs, the **PolyGard** controller unit can receive 3 analog 4-20 mA sensors with overload and short-circuit protection.

#### ► 2 Digital inputs

2 potential-free digital inputs are also available for managing information such as emergency stops, an alarm acknowledgment, a ventilation motor return or a programmable clock for delayed start.

#### ► 1 Analog output 4-20 mA

An analog 4-20 mA output with overload and short-circuit protection is also available on this very complete controller unit for retransmitting a measurement feedback from a single channel.

#### ► 3 Alarm relays

For servo controls and signaling in case of reached alarms thresholds, the **PolyGard** control unit has 3 change-over contact and potential-free relays.

#### ► 2 24 Vcc outputs

In addition to the 3 potential-free alarm relays, the **PolyGard** controller unit has two 24 Vdc 0.1A solid-state outputs for local or external signaling (LED light, siren).

#### ► User friendly interface

The controller has a 16-characters 2-line LCD screen for configuring the various parameters and displaying real-time measured values and alarms. 3 LED indicators clearly indicate the control panel status.