

## Single Point Gas Detection

The GD is a microprocessor based product, which offers a simple and effective method of detection for a range of toxic and explosive gases together with refrigerants. As standard the sensor is mounted within the enclosure or for special applications can be remotely located.

Remote sensor options include IP54 enclosure, Vent line from pressure relief valves, Duct sensor and a faceplate which fits directly to a standard electrical pattrass box.

MODEL	GAS
GD230/GD24-HFC	CFC, HCFC, HFC and mixtures
GD230/GD24- (CH)	Organic vapours (Hexane, Ethanol etc)
GD230/GD24-NH3	Ammonia
GD230/GD24- (CO)	Carbon monoxide
GD230/GD24- (H2)	Hydrogen
GD230/GD24-Methane	Natural gas
GD230/GD24-LPG	Propane, Butane

Model GD230-XX (power supply 230V AC) or model GD24-XX (power supply 12-24V AC/DC).

## Operation

When power is first applied a green LED will flash to indicate the start of the heating process to the sensor. After approximately 4 minutes the green LED will be illuminated permanently and the Gas Detector is fully operational. The unit has one yellow and two red warning LED's. The yellow LED indicates a low-level gas leak (above alarm threshold C) whilst the two red LED's indicate gas concentrations above thresholds B and A.

When gas is detected above the respective alarm threshold the appropriate LED's will light and the corresponding relay contacts close. If an alarm delay is selected the respective LED will flash during the 'waiting' time. Upon expiry the LED is permanently illuminated and the relay contacts close.

## Technical Data

Standard Housing:	Polycarbonate, PC, IP21
Power supply:	230 V AC (model GD230-XX) or 12-24V AC/DC model GD24-XX)
Status Indication:	Power/Active LED and 3 alarm LED's.
Output relays:	Potential free contacts (230V, max 5A) .
Ambient temp:	-40 0 C - + 50°C (Automatic temperature compensation)
Dimensions:	160 x 80 x 56 mm
Classification:	EN 50 081-1, ed. 1 1992 EN 50 082-2, ed. 1 1995

## Fault Function

In the event of a sensor fault being detected or disconnection of a remote sensor a fault condition will be indicated. During the first four hours of a fault condition the green LED will be extinguished and the remaining LED's will flash. Alarm relay C will close. After four hours the red Alarm B LED will flash, the remainder will be extinguished and Alarm C relay will also close.



## Location

Correct location of the detector is essential otherwise delays in the reporting of gas leaks may occur. The detector must be mounted high (under the ceiling) for gases lighter than air and low for gases heavier than air (20 cm above floor) Due consideration to air movement must be made when locating the device.

## Calibration

The detectors are supplied factory calibrated for specific gas type and changes on site are not normally necessary. The gas type for which the unit has been calibrated is stated on the outside of the enclosure. Standard alarm settings are based on HSE guidelines for toxic gases and at levels lower than 20% of the LEL for explosive gases. Custom calibrations are available upon application.

## Key Features

- Easy to view LED status indicators
- 12/24 and 230 volt supply models
- Three alarm levels
- Failsafe relay operation on loss of power
- Selectable alarm time delay
- Factory calibrated
- Manual/auto alarm reset
- Test programme to verify LED/relay operation
- Optional IP54 enclosure
- Optional remote sensor for specialist applications