GDS102

DUAL SENSOR GAS ALARM

Data Sheet
ref C1934Av2
377D1C

- Two detector channels:
  Channel 1: mV Bridge
  Channel 2: 4~20mA
- Traffic light status display
- Data logging
- Three alarm stages + relays
- 4~20mA analogue output
- Front panel access to set up and maintenance of parameters
- Weatherproof
- Internal or remote sensor options
- Aspirated sensor option

A fixed dual sensor gas alarm unit that meets the requirements for economic and reliable monitoring of gas levels in a wide range of environments, from commercial premises through to heavy industrial applications that may require hazardous area sensing. The GDS102 may be utilised as a standalone unit or as an addressable sensor forming part of the GDS Combi CANbus addressable network system and therefore offering the features of our most advanced system. Typical monitor locations are – public buildings, boiler plant rooms, swimming pools, water treatment works, H&V control systems, manufacturing and process plants.

Measuring Range

Combustible Gas – LEL, % Vol
Toxic Gas – ppm
Oxygen – % vol – Depletion/Enrichment
Any 4~20mA source input signal

Indicators

Two line alphanumeric backlit display
System Normal – Green / Blue display
Alarm 1 (Low Alarm) text
Red screen flashing 1 sec + sounder
Alarm 2 (High Alarm) text
Red screen flashing 0.5 sec + sounder
Alarm 3 (Overrange Alarm) text
Red screen flashing 0.25 sec + sounder
Fault
Amber screen flashing + sounder

Audible Alarm

1, 2, 3 and Fault Alarms – mutable
85dB @ 10cm

Power Supply

24v nominal 18v to 30v DC
Mains 100~240vAC 50/60 Hz
The two voltages may be utilised simultaneously – standby supply

Power Consumption

4 watts – full alarm

Outputs

1, 2, 3 (alarm) and 4 (fault) alarm relays – SPCO normally de–energised – energised latched or unlatched options
Relay 3 selectable:-
Duplicate Relay 1, 2, 4 or resettable global alarm relay
Relay 4 selectable:-
Fault or resettable global alarm relay
All contacts rated 3A – 230v AC
Selectable inhibit active indicator or resettable sounder output – o/c 100mA – 24v DC (Y – Output)
4~20mA signal output, sink/source.
CANbus
Internal mains power supply 24vDC @1.2A available to user 500mA

Logging

Intervals – Variable time
Rollover / stop
Storage – 2,880 readings

Alarm Settings

Digital setting
Delay to alarms 0~255s
Relay off delays 0~255s

GDS Sensor Types

Catalytic	4~20mA / mV Bridge
Electrochemical	4~20mA
Infrared	4~20mA / mV Bridge
PID	4~20mA / mV Bridge
Semiconductor	4~20mA / mV Bridge
E-Stop	4~20mA / mV Bridge

Sensor Cable

3 core standard, 2 core option for simple electrochemical transmitters, 1mm^2 screened – 500m

Sensor Inputs

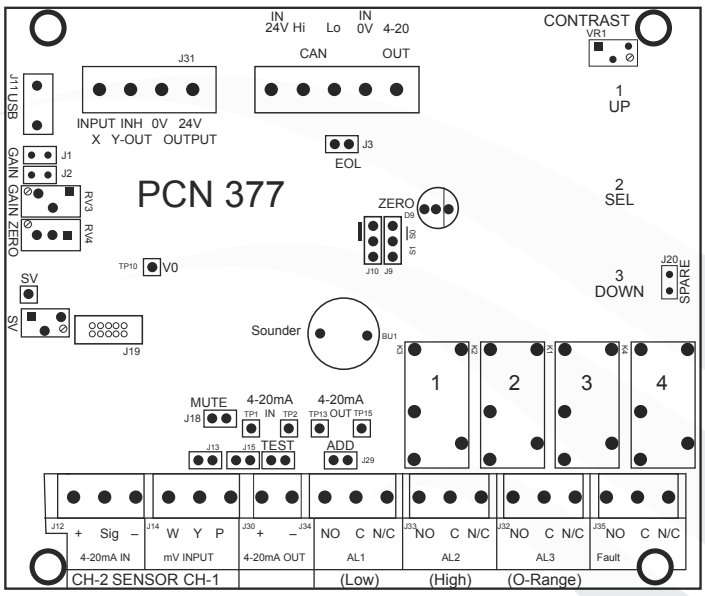
(CH1) Bridge type direct 3 wire detector mV signal
(Catalytic, IR, PID, Semiconductor, E-Stop)
(CH2) 4~20mA analogue transmitter signal –source
(Catalytic, Electrochemical, IR, PID, Semiconductor, E-Stop)

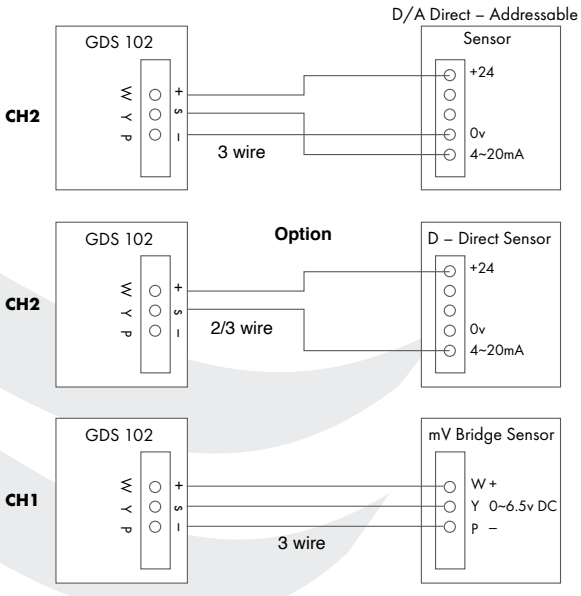
Supply Volts	Internal Sensor	Remote Sensor	Aspirated Sensor
24vDC	CH1 + CH2	CH1 + CH2	CH1 (+ CH2 remote)
Mains	CH1	CH1 + CH2	–
Mains double box	CH1 + CH2	CH1 + CH2	CH1 or CH2 (+ CH remote)

Miscellaneous

Passcode entry
Operating temperature –15 to +50˚C
Storage temperature –5 to +55˚C
Alarm relay inhibit during calibration
X – Input – external input to 0V
Sounder Isolate – mute link
System function test
Dimensions L 145mm H 145mm D 65mm (S) shallow box
D 100mm (D) deep box
Weight 0.8 kg
Protection IP64, IP66 over housing option
Field Terminals – screw type 2.5mm
Cable entry – top, bottom, sides, rear
Document of Conformity C1943

Control Unit PCB





ISO 9001
ISO 14001
ISO 45001
INTEGRATED MANAGEMENT

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