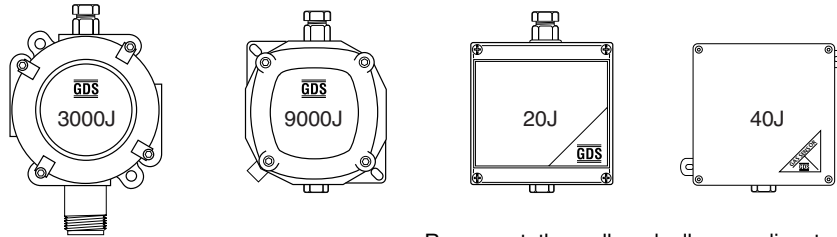


TECHNICAL

Input voltage	12~30v DC – 24v nominal
Output Standard	Analogue 4~20 mA (250 ohms max) – source Option 1~5v output – solder G 2 core screened
CV-Sensor Cable	3 wire system only (2 wire if the 4~20mA signal is not used)
Alarm relay board options (safe area board only)	Signal relay contacts S.P.C.O. rated 1A/24v (Logic and fire panel signal only) Mains relay S.P.C.O. 5A/230v AC Trip Indicator LED – trip point selectable 10% to full scale Fire Alarm panel signalling – cut F Logic output - JP3 position L and end of line link JP4
Full board (safe area board only)	On board sounder Auxiliary output DC volts – standard-as input volts 24v (selection by fixed voltage regulator U5 – 5, 12,15v) DPM – gas readout display – (zero and span potentiometers used only for DPM setting)



INSTALLATION

For hazardous area equipment see specific instructions supplied with the equipment, or visit our website for technical information. Siting of the equipment should be chosen with regard to the following points:

- 1) Away from sources of heat and with room for adequate air circulation.
- 2) Within easy reach for operating and maintenance personnel.
- 3) Connecting cables to be electrically shielded, i.e. M.I.C.C., steel wire armoured, screened cable or steel conduit.
- 4) For sensor location see our website.

Note: Sensor cables should not be run in the same ducting as power cables.

CALIBRATION

1. Connect a digital voltmeter (millivolt range) to the + and – test terminals (2 wire system) or X and Y test terminals (3 wire system). For 3 wire systems the CV is preset in the current source mode.
2. In clean air check that the DVM reads 4mV, if not adjust the 4mA potentiometer on the CV transmitter board.
3. Apply test gas and wait until a maximum DVM reading is obtained, if necessary adjust the 20mA potentiometer for the required mV reading for the calibration gas used (see range/reading on test certificate or printed on the CV circuit board).
4. For oxygen level monitoring remove the sensor terminal connector from the PCB J4 or yellow wire and adjust the 4mA potentiometer for 4mA (4mV).
5. Where a digital panel meter is fitted to the CV card the reading may be adjusted by the DPM Zero potentiometer.

Reconnect the cell and allow reading to stabilise adjust the DVM reading for 17.3mA (20.8% ambient oxygen) using the 20mA potentiometer.

Where a Digital panel meter is fitted the display may be adjusted by using the DPM S potentiometer (span).

ADDITIONAL RELAY BOARD ALARM TRIP POINT ADJUSTMENT

This level will normally be set at 20% of the range reading i.e. 7.2mA.

1. Connect the DVM as above, using the 4mA potentiometer adjust for the required trip level.
2. Adjust the alarm level potentiometer until the alarm LED just comes on.
3. Using the 4mA potentiometer re-adjust the DVM to 4mV.

The above adjustment may be carried out in house by connecting the CV transmitter directly to a DC power supply.

Should a full board be required to operate on a 2 wire loop then the relay must be disabled - remove JP2

Gas Type Programming – Works/preset.

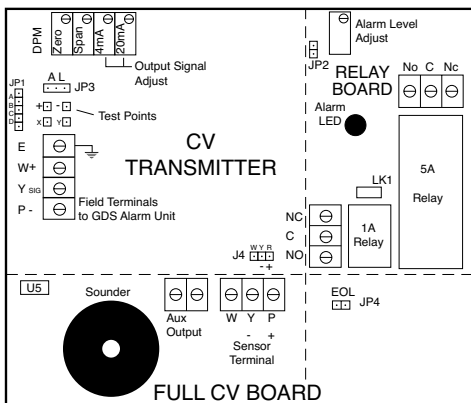
NH₃, CO, H₂S, SO₂, H₂ remove R4, R6, R15, R28, R29, R10

HCN remove R4, R6, R8, R15, R28, R29, R10

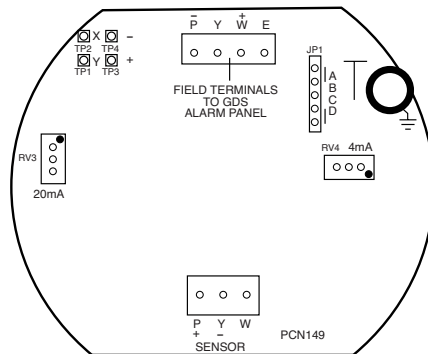
NO₂, CL₂ O₃, remove R4, R7, R11, R28, R29, R10

NO, HCL, C₂H₄O Remove R3, R4, R6, R12, R15, R28, R29, R10

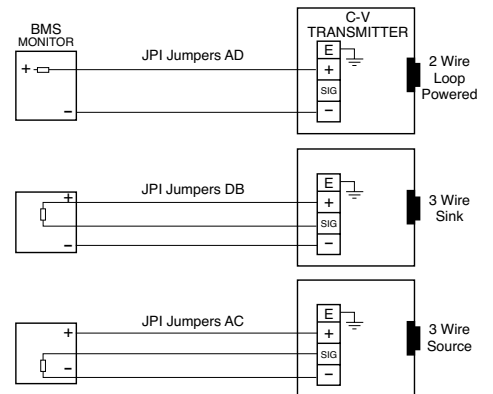
O₂ Remove R3, R8, R6, R15, R42, R43, IC-U2



SAFE AREA BOARD



EExd BOARD



C940

This document is non contractual and the equipment specification and detail may be modified at any time without prior notice.

GDS Technologies Ltd

Fusion Point, Ash Lane

Garforth, Leeds LS25 2GA

Tel +44 (0)113 286 0166

Fax +44 (0)113 287 8178

sales@gds-technologies.co.uk

www.gds-technologies.co.uk

