# **GDS** Defender

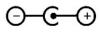
### INTERFACE SENSOR



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# 24V DC power connector (alternative supply)

(J13) 2.1mm Jack DC socket, the centre pin is positive and the outer pin is negative.



ALM/SND (J2)

#### **JUMPERS**

#### 4 - 20/CONTACTS (J1)

No jumper = 4 - 20mA input.

## Jumper fitted = contact inputs.

No jumper = Relay activates when in alarm. Jumper fitted = Relay activates when the sounder is active.

#### OPT (J3) - not used

(Relay resettable with sounder).

No jumper = Not used.

Jumper fitted = Not used.

# NO/NC (J4) – only used when a jumper is fitted in (J1)

No jumper = Input contact is normally open contact.

Jumper fitted = Input contact is normally closed contact.

#### 4 – 20mA source or sink (J7)

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Sink = The 4 - 20mA input signal needs to be sinking (4-20 to 0v) default – sink.



Source = The 4 - 20mA input signal needs to be sourcing (4-20 to 24V).

#### Mute (J8)

No jumper = Sounder is permanently disconnected. Jumper fitted = Sounder is connected.

#### REL NE (J9)

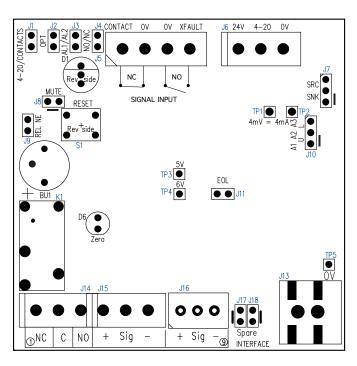
No jumper = Relay is normally de-energised. Jumper fitted = Relay is normally energised.

## Latched / unlatched alarms (J10)

- AL1 alarm will be unlatched, AL2 alarm & AL3 alarm
- will be latched.
- AL1, AL2 & AL3 alarms unlatched factory set.
  - AL1, AL2 & AL3 alarms latched.

# EOL (J11) – end of line termination (fit to last sensor only)

No jumper = End of line load resistor is not connected. Jumper fitted = End of line load resistor is connected.



#### **CONNECTORS**

### Signal input contact (J5)

Connect the contacts to (J5) 4 way screw terminal connector pins 1 and 2.

- Pin 1 = Alarm contact N/C to 0V for N/O option see jumper (J4)
- Pin 2 = 0V
- Pin 3 = 0V
- Pin 4 = External fault (XFault) N/O to 0V.

# 4 – 20mA source sensor input (J6) – for sink option see jumper (J7)

Connect the 4 – 20mA output to (J6) 3 way screw terminal connector.

- Pin 1 = 24V fused output
- Pin 2 = 4 20mA signal input
- Pin 3 = 0V

#### Relay contacts -

### 230V/3A not resettable until gas cleared

(J14) 3 way screw terminal connector.

- Pin 1 = Normally Closed
- Pin 2 = Common
- Pin 3 = Normally Open

#### Defender signal -

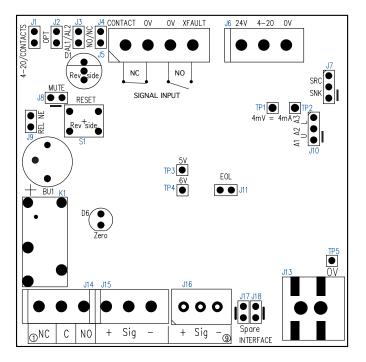
#### DC supply and output signal to defender

(J15, J16) 3 way screw terminal connectors, connect to the Defender control panel.

- Pin 1 = 24V input
- Pin 2 = The Defender Signal
- Pin 3 = 0V



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#### **TEST POINTS**

4 – 20mA Signal level (TP1, TP2 test pins) mV=mA 5V (TP3), 6V (TP4), 0V (TP4)

#### Zero LED

The Zero LED is illuminated when the sensor is reading 4mA.

#### Reset button

The relay can be setup to activate on AL1, AL2 & AL3 alarms or to just activate on AL2 & AL3 alarms (Factory set is AL1, AL2 & AL3 alarms – unlatched).

### Alarm relay AL2 & AL3 only:

- 1. Power up the sensor, the front LED will be flashing for approx. 1 Mins.
- 2. With the front LED flashing, press and hold the reset button on the front.
- 3. The zero LED will start flashing.
- Releasing the reset button when the zero LED is lit, the relay does activate on AL1 alarm. Releasing the reset button when the zero LED is off, the relay does not activate on AL1 alarm.

The current setting can be check by the status of the Zero LED on power up.

Zero LED on = Relay activates on AL1, AL2 & AL3 alarms. Zero LED off = Relay only activates on AL2 & AL3 alarms.





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