MRLDS-450

Avoiding an Open-Loop Fault Alarm Condition on Power Up

Issue: Avoiding Power Up Into An Open-Loop Fault

The MRLDS-450 Gas Detector by default has the analog output configured to 4-20mA. One of the features of the 4-20mA analog output is to alarm the sensor when an open-loop is detected on the 4-20mA circuit. If the +24VDC power is connected and the circuit is energized, the MRLDS-450 will detect an open-loop fault and alarm if:

- The 4-20mA circuit is not connected before the sensor is powered, or
- A jumper is not installed and tightened onto the analog output terminal block

Procedure

To avoid the open-loop fault on power up, the 4-20mA circuit can be deployed (wiring and configured to BMS or other) or install a jumper on the analog output terminal block as follows:



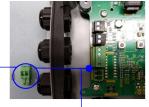
MRLDS-450 Gas Detector with lid removed



Analog output terminal block removed with jumper and installed jumper

Analog Output

MRLDS-450 Gas Detector analog output detail with jumper installed in terminal block



Analog output terminal block installed with jumper



NOTE:

- Ensure that the terminals are tightened down onto the jumper, securing it in place before reinstalling the analog output terminal block.
- Placing a jumper on the analog output terminal block and placing the sensor under + 24VDC power will not harm the sensor.
- If choosing to place the jumper on the analog output to avoid an open-loop fault, remember that the jumper will need to be removed in the future when deploying the 4-20mA circuit. Not removing the jumper will cause the 4-20mA circuit to be unresponsive. i.e., no output

For Technical Support

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