

Bard Part #8301-061 VDC HGD Hydrogen Gas Detector – use with DA/DL Series Units with PLC Logic Boards

FEATURES OF THE VDC HGD HYDROGEN GAS DETECTOR

The VDC HGD Hydrogen Gas Detector (Bard Part #8301-061) is designed for Hydrogen gas detection device for battery rooms and shelters. When used in conjunction with the PLC controlled DA/DL Series Wall Mount Unit, the HGD can be used to detect hydrogen gas as low as 1% volume and operate the Wall Mount Unit economizer and indoor blower to bring in outdoor air. At 2% volume, a warning alarm will sound and an alarm signal will be activated through the LC Controller.

- Sensor is pre-calibrated and requires no adjustment. At higher elevations and temperatures, the sensor may activate the alarm functionality at slightly lower Hydrogen Levels.
- “Push to Test” button to verify sensor electronic circuitry.
- The sensor detects several other combustible gases in addition to hydrogen -- ethanol, isobutane, methane, propane. Its sensitivity to these other gasses, however, is much lower than its sensitivity to hydrogen. This should not noticeably affect its operation.
- 17 to 60VDC power required for operation. Use 18GA. SJT 3 conductor PVC jacketed cable for power connection. Use 14GA wire for relay operation.
- Sensor life of 5 years.
- Unit Dimensions: 7"H x 4.5"W x 2.25"D
- Detector operating range: 14°F (-10°C) to 104°F (40°C)
- Detector may be installed directly to a wall, ceiling, or conduit box.



SEQUENCE of OPERATION

1. If the concentration of hydrogen gas in the air surrounding the sensor reaches 1% by volume, the yellow LED will light and the 1% internal relay will close to activate a remote fan and/or alarm. A 4-second delay prevents false activation.
2. Should the concentration reach 2%, the red LED will flash, the internal 80 db warning alarm will sound, and the 2% internal relay (dual-relay model only) will close. The 1% relay will remain closed & the yellow LED on.
3. When the concentration decreases below 2%, the red LED will turn off, the internal alarm will stop, and the 2% relay (dual-relay model only) will open. When the concentration falls below 1%, the 1% relay will open and the Yellow LED will turn off



WARNING: This detector is added protection, not a substitute, for prudent safety measures where hydrogen gas is present. For large or highly sensitive areas, use two (2) or more detectors. Refer to instructions provided with the Hydrogen Detector for additional information regarding safety, unit operation and proper installation.