

3M Occupational Health and Environmental Safety Division
3M™ Macurco™ Combustible Gas Detector, Controller and Transducer GD-6



Selectable Gas Detection

Multiple Output Options

Methane, Propane or Hydrogen Gas Detection

The GD-6 is a versatile, easy-to-use device that allows you to select between methane, propane or hydrogen gas detection. It provides low-level detection of combustible gas in an easy-to-maintain monitor that is factory calibrated for simple installation.

This low voltage detector provides automatic feedback and fan control that can help reduce combustible gas concentrations in parking garages, maintenance facilities, and other locations that require combustible gas detection.

Selectable options include:

- Measurement: Methane (NG), Propane (LP) or Hydrogen (H₂)
- Output: Fan relay, alarm relay and 4-20 mA current loop
- Controls: Digital display (0-50% LEL), buzzer, fan delay, fan minimum run time

The GD-6 is an advanced combustible gas detector with the selectable options that make it an effective solution for multiple applications that need an accurate combustible gas detector.



Combustible Gas Detection

- Measures Methane (NG), Propane (LP) or Hydrogen (H2)
- Low level meter capable of displaying from 0-50% LEL EX

Display, Control & Calibration

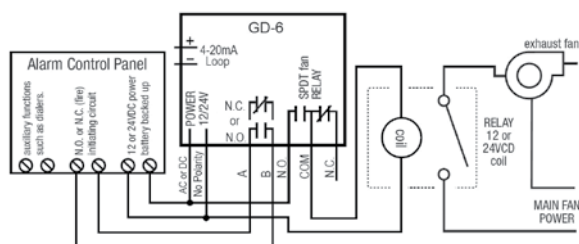
- Selectable (on/off) digital display, buzzer, fan delay (minutes), fan minimum run time
- Selectable fan and alarm relay activation
- Factory calibrated. Can also be field calibrated using 10% LEL Methane, 10% LEL Propane or 10% LEL Hydrogen gas, regulator and calibration hood
- One screw allows access for calibration

Installation

- Mounts on a standard 4" x 4" electrical box, no cover needed
- 5 A SPDT fan relay controls starters of exhaust fans
- 0.5 A N.O. or N.C. alarm relay connects to warning devices or control panels
- 4-20 mA current loop
- Optional calibration kits allow the GD-6 to be tested and field calibrated using Methane, Propane or Hydrogen gas

Other Features

- Supervised system design: internal detector problem will cause the fan & alarm relay to activate
- ETL Listed to UL 61010-1



Typical Connection to Alarm Control Panel

- GD-6 can be used with 12VDC or 24VDC N.O. (fire) panels
- Alarm panel provides battery backed up power to GD-6
- GD-6 dry contact fan relay can use panel power or fan power. Check ratings on panel and fan
- Match fan relay contacts to fan size, and coil voltage to power source
- Alarm control panels are available with many features and can control other devices such as smoke detectors, fire detectors and burglar alarms

3M

Occupational Health & Environmental Safety Division

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www.3M.com/detection

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Specifications

| | |
|------------------------|--|
| Accuracy: | ±5% of the LEL reading up to 50% LEL |
| Power: | 3 W (max) from 12 to 24 VAC or 12 to 48 VDC |
| Current @ 24VDC: | 75 mA in alarm (two relays), 50 mA (fan relay only) and 23 mA stand by |
| Shipping Weight: | 1 pound (0.45 kg) |
| Size: | 4.5 x 4 x 2.125 in. (11.4 X 11.4 X 5.3 cm) |
| Color: | Dark gray |
| Connections: | Plugs/terminals |
| Mounting Box: | (Not included) 4x4 electric |
| Fan Relay: | 5 A, 240 VAC, pilot duty, SPDT |
| Fan Relay Actuation: | Selectable at 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 (default), 11, 12, 13, 14, 15, 16, 17, 18, 19, 20% LEL |
| Fan Delay Settings: | 0, 1, 3 (default), 5 and 10 minutes |
| Fan Minimum Run Time: | Settings are OFF (default), 3, 5, 10, 15 minutes |
| Alarm Relay: | 0.5A 200 V, 10 VA |
| Alarm Relay Actuation: | Selectable N.O. default or N.C. |
| Alarm Relay Settings: | OFF, 5, 10, 15, 20 (default), 25% LEL |
| Current Loop: | 4-20 mA for 0-50% LEL |
| Operating Environment: | 0 °F to 125 °F (-18 °C to 52 °C) 10 to 90% RH |

Ordering Information

| 3M ID | UPC | Description |
|----------------|--------------------|--|
| 70-0716-0802-3 | 0 00 51131 49886 0 | 3M™ Macurco™ Combustible Gas Detector, Controller and Transducer GD-6, 1 Each/Case |
| 70-0716-0803-1 | 0 00 51131 49887 7 | 3M™ Macurco™ Combustible Gas (EX) Calibration Hood GD-6-CH, 1/Case |
| 70-0716-1751-1 | 0 00 51131 49928 7 | 3M™ Macurco™ Methane Gas Field Calibration Kit 34L, 10% LEL, 34L, 20% LEL, Carry Case, Regulator, Tubing, Calibration Hood GDM-FCK, 1/Case |
| 70-0716-1752-9 | 0 00 51131 49929 4 | 3M™ Macurco™ Propane Gas Field Calibration Kit 34L, 10% LEL, 34L, 20% LEL, Carry Case, Regulator, Tubing, Calibration Hood GDP-FCK, 1/Case |
| 70-0716-1753-7 | 0 00 51131 49930 0 | 3M™ Macurco™ Hydrogen Gas Field Calibration Kit 34L 10% LEL 34L, 20% LEL, Carry Case, Regulator, Tubing, Calibration Hood GDH-FCK, 1/Case |
| 70-0716-1754-5 | 0 00 51131 49931 7 | 3M™ Macurco™ Methane Replacement Gas, 34L, 10% LEL Methane CANN10M, 1/Case |
| 70-0716-1755-2 | 0 00 51131 49932 4 | 3M™ Macurco™ Methane Replacement Gas, 34L, 20% LEL Methane CANN20M, 1/Case |
| 70-0716-1756-0 | 0 00 51131 49933 1 | 3M™ Macurco™ Propane Replacement Gas 34L, 10% LEL Propane CANN10P, 1/Case |
| 70-0716-1757-8 | 0 00 51131 49934 8 | 3M™ Macurco™ Propane Replacement Gas, 34L, 20% LEL Propane CANN20P, 1/Case |
| 70-0716-1758-6 | 0 00 51131 49935 5 | 3M™ Macurco™ Hydrogen Replacement Gas, 34L, 10% LEL Hydrogen CANN10H, 1/Case |
| 70-0716-1759-4 | 0 00 51131 49936 2 | 3M™ Macurco™ Hydrogen Replacement Gas, 34L, 20% LEL Hydrogen CANN20H, 1/Case |