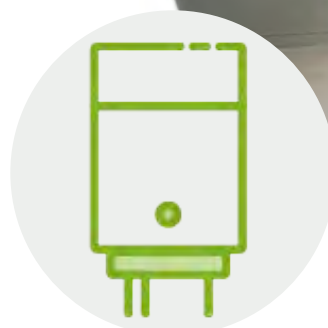


# AGSCH4CO-TWA

## Mini Merlin

### Datasheet

## Combined Natural Gas & Carbon Monoxide Monitor



### Product Overview



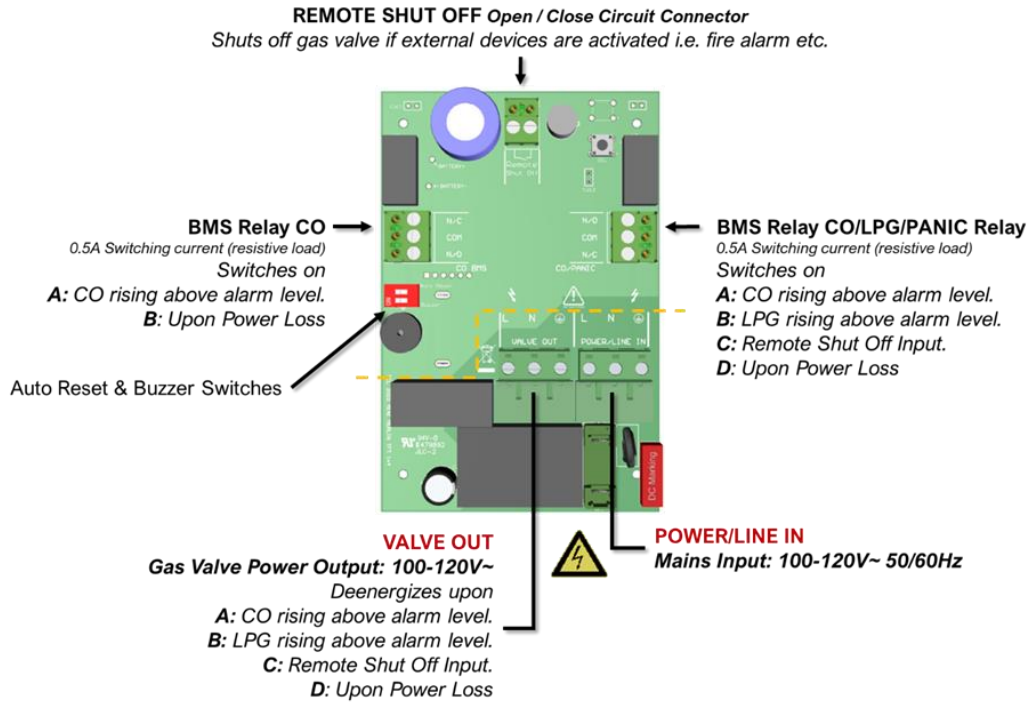
The AGS Mini Merlin CH4CO-TWA is a dual gas sensor designed and tested to UL standards for the purpose of monitoring levels of Natural Gas - Methane (CH4) and Carbon Monoxide (CO) in the air.

If there is a dangerous build-up of gas or unsafe levels of carbon monoxide at the sensor, this device can shut off fuel supplies or power supplies via gas valves and/or electrical contactors. On board relays can interrupt appliances built in safety circuits such as fan proving switch or louver proving switch.

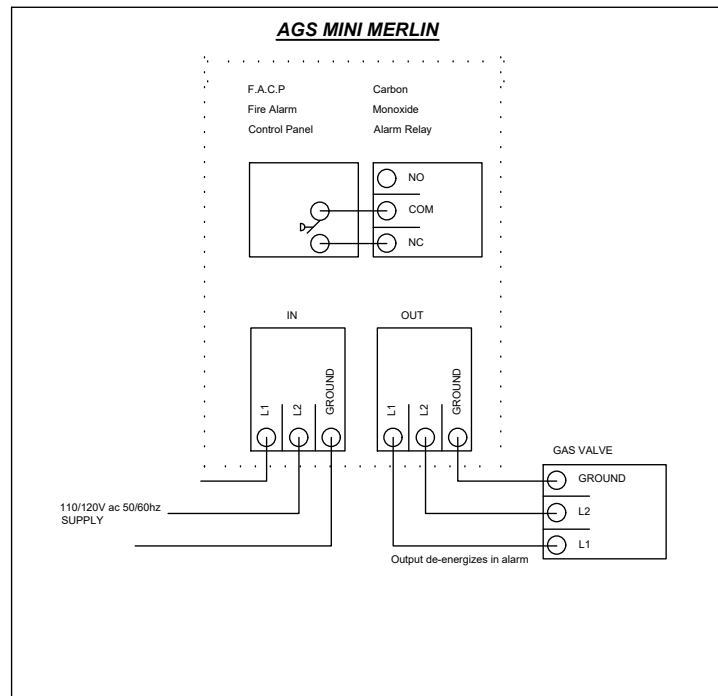
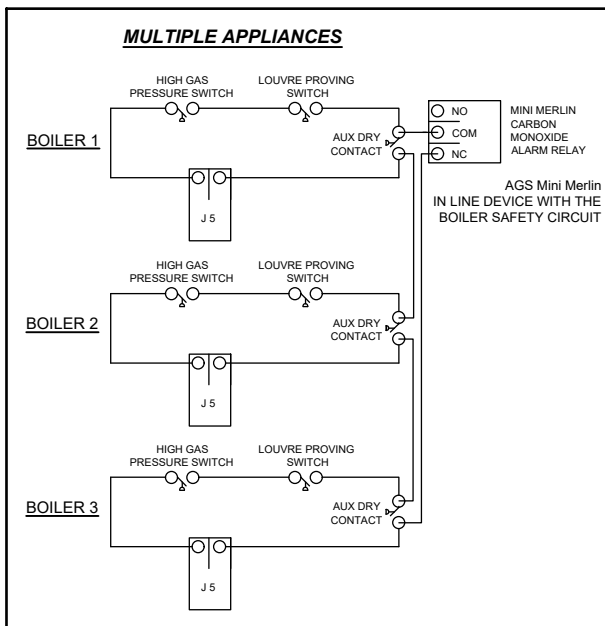
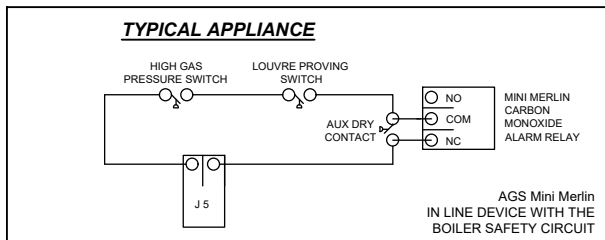
This device has a manual reset button, as well as audible and visual alarm - it can also be integrated with a Building Management Systems and fire alarm control panels. Meets the TWA guidelines for Carbon Monoxide (CO) & Natural Gas (NG).

| General   |   |       |                |                |                              |   |              |
|---|---|-------|----------------|----------------|------------------------------|---|--------------|
| Model:  | Mini Merlin CH4CO TWA   |       |                |                |                              |   |              |
| Target Gases:   | Methane/Natural Gas & Carbon Monoxide   |       |                |                |                              |   |              |
| Size: (H x W x D)   | 5.95 x 4.37 x 1.97" (151 x 111 x 50mm)  |       |                |                |                              |   |              |
| Housing Material:   | ABS PA765 (Flame Rating UL94 V-1)   |       |                |                |                              |   |              |
| Mounting:   | Safe Zone - Indoor use - Wall Mounted   |       |                |                |                              |   |              |
| Weight:   | 12.24oz (0.347kg)   |       |                |                |                              |   |              |
| Display:  | 1.8" TFT  |       |                |                |                              |   |              |
| Visual Indicators:  | TFT visual. Green: Normal; Yellow: Pre-Alarm; Red: Alarm  |       |                |                |                              |   |              |
| Audible Alarm:  | 85db  |       |                |                |                              |   |              |
| Buttons:  | Multi-Function – Initial Start / Reset / Circuit Test   |       |                |                |                              |   |              |
| Power Consumption:  | 3W max  |       |                |                |                              |   |              |
| AC Power:   | 100-120V~ 50/60Hz   |       |                |                |                              |   |              |
| Internal Fuse:  | Anti-Surge 3.15A 250Vac   |       |                |                |                              |   |              |
| Overtoltage Category:   | II  |       |                |                |                              |   |              |
| Volt Free BMS relay output:                                     | 0.5A switching current (resistive load)   |       |                |                |                              |   |              |
| Ingress Protection:   | Not Formally Evaluated  |       |                |                |                              |   |              |
| Operating:  | -10 ~ 50°C / 14 ~ 122°F 30 ~ 80% RH (non-condensing)  |       |                |                |                              |   |              |
| Storage:  | -25 ~ 50°C / -13~122F° up to 95% RH (non-condensing)  |       |                |                |                              |   |              |
| Wiring  | Min. 18-22AWG   |       |                |                |                              |   |              |
| Electrical Safety and Electromagnetic Compatibility             | UL61010-1/2012/R:2019-07. UL2075 R:2013-02 Gas and Vapor Detectors and Sensors. CAN CSA C22.2 No. 61010-1-12/A1:2018-11 / EMC EN 61326-1:2013 |       |                |                |                              |   |              |
| Sensor Specification  |   |       |                |                |                              |   |              |
| ▲ Rising Alarm ▼ Falling alarm *EOL – Expected Operational Life |   |       |                |                |                              |   |              |
| Gas Sensor  | Indicating Range  | Steps | Response (t90) | Recovery (t10) | Alarm: 1 (Pre alarm warning) | Alarm: 2  | *EOL (Years) |
| Electrochemical Sensors   |   |       |                |                |                              |   |              |
| Carbon Monoxide (CO)  | 0-999ppm  | 1     | <60s           | <60s           | ▲20ppm                       | ▲20ppm @ 2 hours / 50ppm @ 1 hour / 100ppm @ 10 minutes / 300ppm @ 1 min. | 7            |
| Semiconductor Sensors   |   |       |                |                |                              |   |              |
| Methane (CH4)   | 0-20% LEL   | 0.1   | <30s           | <30s           | ▲8% LEL                      | ▲10% LEL  | 10           |

## Circuit Board Overview



## Wiring Examples



Find out more  
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