

GAS DETECTION RANGE

MERLIN

Merlin CO2 Alarm



Features

- ✓ Pre-configured alarm thresholds
- ✓ NDIR CO2 Sensing Technology
- ✓ Two thresholds of alarm
- ✓ Can be linked to the Merlin Gas Interlock Systems
- ✓ Volt free change over alarm contact
- ✓ 230V Supply
- ✓ Digital display of CO2 ppm
- ✓ Alarm status indication

The Merlin CO2 Alarm is a stand alone Carbon Dioxide alarm. It has two thresholds which can be pre-configured to switch the two on board relays at any required level of Carbon Dioxide up to 10,000 ppm. The CO2 Alarm has an onboard digital display and Alarm status indicator lights.

The pre-configured alarm (threshold 1) will provide a remote alarm signal. The second relay will change over if Carbon Dioxide levels continue to rise. This pair of contacts can be used to either break the circuit to a combustion control or in the case of commercial kitchens break the supply to the Gas safety shut off valve. This controller is widely used in commercial catering establishments and science laboratories and classrooms for comfort and safety control.

If the levels of Carbon Dioxide continue to increase it is apparent that the action taken by relay 1 was not effective and therefore the control system is not in control of the Carbon Dioxide levels.

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The second threshold is in place to provide safe occupation of a given area. Should levels rise above the second threshold the CO2 Alarm will sound the internal audible alarm to notify the occupants that a potentially dangerous situation could occur.

The second relay can automatically isolate the electrical supply to the gas valves supplying burners producing the CO2.

Features

- 100 - 277 V. AC Supply Voltage
- Two pre-configured alarm and control thresholds
- Thresholds factory set to customer requirements
- Non dispersive infrared sensing technology
- Supply voltage (100 - 277 V. AC) output from - Level 1 alarm.
- Volt free change over contact - Level 2 alarm
- Optional internal audible alarm
- Digital display of Carbon Dioxide levels (ppm).
- Alarm status indicator lights
- Flame resistant ABS.
- Sensor fault indication

Technical Specification:

Electrical Characteristics

- Supply: 100-277V AC
- Max current:2A

Sensing Range

- Alarm 1 threshold Off/On 3500/4000ppm (**or customer specified**).
- Alarm 2 threshold Off/On 4000/5000ppm (**or customer specified**).
- Accuracy +/- 2% of displayed value

Environment

- Operating temperature: 0oC. to 50oC
- Storage Temperature -40oC + 70oC
- Protective Rating: IP30

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Alarm Contact Rating

- Alarm 1 - 8A (230V)
- Alarm 2 -10A (230V)

Connection capacity

- Flexible 0.5mm²
- Rigid 0.5mm²

Enclosure Specification

- Wall mounting
- Colour: Ivory
- Flame Resistant ABS
- External Dimensions: LxHxD (mm) 155 x 124 x 41Max.

Operation

When Carbon Dioxide levels rise to alarm threshold 1 an output at the supply voltage 100-277VAC is derived.

This is usually used for automatic ventilation control or remote alarm indication.

The second relay changes over if Carbon Dioxide levels continue to rise. The alarm 2 contact can be used to either break the circuit to a combustion control or in the case of commercial kitchens break the supply