

CO₂ Detection and Protection

Protection from Carbon Dioxide in confined spaces



Carbon Dioxide Risks

Carbon Dioxide (CO₂) is used extensively in the pub and catering industries. Leaks from equipment can build up in confined areas. It also can build up in other industries where it can occur including chemical industries, plant growing and fermentation.

Build up of CO₂ can be very dangerous in confined spaces resulting in death in extreme cases. Because it is odourless and colourless a person cannot easily detect an increase in CO₂.

Legislation

The Confined Spaces Regulations of 1997 forces employers to be responsible for the health and safety of any employees who could be at risk of CO₂.

How to protect from CO₂

The Amos 360 CO₂ Detector protects by

- detecting the presence of increasing CO₂ long before it reaches unsafe levels
- sounding an alarm when a leak is detected
- triggering remote alarms to warn people not to enter the room
- switching on ventilation systems



Domestic & Commercial Gas Detection Systems

How it works

A simple gas detector (similar in size and operation to a smoke detector) is sited in the confined space. Increased levels of CO₂ are detected well before they reach an unsafe level.

When a build up of CO₂ is detected, a red warning light comes on and an optional alarm sounds. A remote alarm (if fitted) is also triggered to warn people not to enter

the premises and that ventilation must be undertaken. Other remote systems such as Building Management Systems (BMS) can also be alerted and even ventilation systems switched on.

When the gas has dispersed the alarm will automatically turn off, or this can be controlled by a push switch.

Using the detector ensures that dangerous levels of CO₂ are always detected.

Specification

Detector

Applicable legislation:

Confined Spaces Regulations 1997

Alarm trigger level: 0.5% concentration of CO₂

Alarm: Red warning light.
Audible sounder, 85 dB at 3 m

Outputs: 1 relay
240v or 12v dc powered out (for remote alarm)
Volt free (for remote signalling) (10 A at 230v ac or 30 v dc)

Reset operation:
Only permitted when gas has cleared.

Alarm reset: Automatic or push button

Size: 110 * 110 * 57 mm (4.3 * 4.3 * 2.2 inch)

Weight: 420 g (15 oz)

Power: 240v ac or 12 dc or 24 dc

Life 5 years

Model number: 360

Installation: Wall fixing on
back bracket (supplied)

Remote alarm

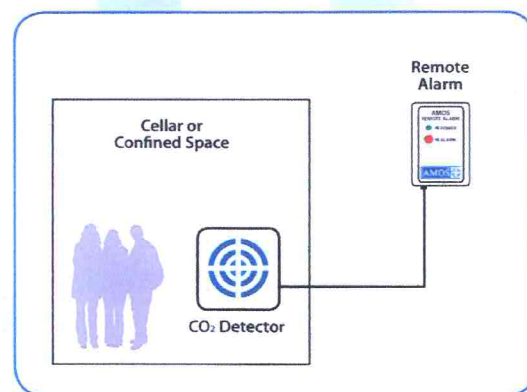
Status monitor: green light for
correct operation

Alarm: Red light plus optional sounder

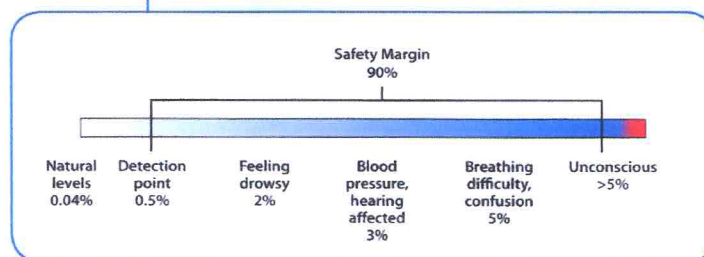
Power: low voltage from detector

Cable: 10 m

Installation



Concentration of CO₂



Amos gas detectors have been used for many years in a wide range of applications where gas presents a risk to life or property. Our extensive experience in detector design and manufacture has made us the detector of choice for many councils, companies and housing associations.

Manufactured by Ruston Electronics Ltd an ISO 9001:2000 Approved Company.

The content of this document is subject to change and may not be used as part of a contract.

Living Safely with Gas



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