

Dear readers,

While we rely on the cooling air conditioning in the office or car especially in the summer months, industrial refrigeration systems have to perform at peak levels throughout the entire year. Our proven gas detection devices recognize the leakage of hazardous refrigerants in good time, and we offer reliable water measurement technology for monitoring secondary cooling circuits for leaks.

Sincerely,

Hans-Jörg Hübner

Hans-Jörg Hübner,
President CEO GfG (Pty) Ltd



Detecting dangerous leaks in cooling circuits in time

When monitoring refrigerants, the choice of appropriate measurement technology is crucial.

Synthetic refrigerants are versatile. Since they are generally extremely harmful to the climate, it is imperative that they be monitored. The CS22 transmitter is available with a wide range of sensors for different refrigerants.

Green refrigeration technology also involves risks.

Natural refrigerants such as carbon dioxide and propane have gained a lot of importance because they are much less harmful to the environment. However, they can pose a risk to both people and equipment. We have the right gas detection devices, such as the IR22 F for CO₂ or the CC28 for propane and other flammable gases.

Another gas that belongs to the natural refrigerants is ammonia. NH₃ is not a direct greenhouse gas (GWP¹ = 0 and ODP² = 0), but it is highly corrosive. For selective monitoring of ammonia in secondary cooling circuits, we have developed the MiniCal III with fittings for a wide variety of applications. For the detection of ammonia in ambient air, we offer the SIL-capable transmitter EC28 with ATEX approval.

1 Global Warming Potential
2 Ozone Depletion Potential



Do you need to monitor refrigerants?

We are happy to advise you

Faster warning of gases

When it comes to detecting flammable gases and vapors, every second counts!

That is why we have integrated an exhaust air guide into the catalytic combustion sensors of our CC22 ex, CC28 and CC33 transmitters. It ensures that the air heated by the measuring principle escapes upwards and the sample gas reaches the sensor more quickly. Due to this chimney effect, the response time of the sensor is particularly short (t₉₀ < 9 s*) and the transmitter warns more quickly of an explosion hazard.

* Sensor and gas dependent



CO₂ detection: cold-resistant and with local alarm options

In cold stores, CO₂ must be monitored under the harshest conditions. The IR22 F withstands temperatures down to -40 °C and has two switching outputs (open collector) for on-site safety measures.

Gaseous carbon dioxide displaces oxygen and is already harmful to health at a concentration of 0.5% by volume. Continuous CO₂ monitoring is indispensable to ensure that an alarm is raised in good time in the event of a leak. Cold stores, with their extreme conditions, pose a challenge for gas detection devices. That is why we have developed the IR22 F.

Optical and acoustic alarm means warn locally before entering.

The transmitter with infrared sensor reliably detects CO₂ in environments as low as -40 °C. It is available with digital RS-485 interface or 4-20 mA signal transmission. The IR22 F is ACDC-capable for digital communication with the GMA22 controller via analog lines. Alarm devices such as warning lights and signal horns can be connected to two switching outputs. In this way, persons on site are informed in good time of any dangerous gas concentrations occurring in the cold room. The digital input is used to connect a button for acknowledging the alarm means or a manual personal alarm.



Alarm panel



Push button manual alarm

Interested?

[Here you can find more information](#)

The best service for your gas detection devices



Portable and stationary gas detection devices must be tested regularly. This is the only way to ensure that they reliably warn of the dangers posed by flammable and toxic gases as well as oxygen deficiency.

We understand safety as a holistic concept. Our responsibility for people, plants and the environment does not end with manufacturing gas detection devices. We are also your first contact when it comes to their maintenance and servicing.

GfG therefore offers you reliable services, original spare parts and customized maintenance contracts for your individual needs throughout the country. So you can be sure that your equipment will always do what it is supposed to do: Safely warn of gas hazards and protect lives.

Do you have any questions?

[Write to us!](#)

Flameproof encapsulated for hazardous areas

The CC33 warns of combustible gases in any environment, no matter how demanding.

In applications requiring gas detection devices with flameproof encapsulation, the CC33 transmitter is used. The flameproof enclosure (ignition protection type „d“) makes the device maximally ignition-proof. The CC33 transmits signals via the industry standard 4-20 mA (ACDC®-capable) or the digital RS-485 interface. Measured value display and alarming are provided directly on site. In addition to an optional buzzer, the CC33 has three relay outputs. Operation is possible via magnetic rod. The housing with thick glazing (10 mm) is made of aluminum with epoxy coating (protection class IP67).

For applications with special requirements, such as in the food industry or in gas and oil refineries, the CC33 transmitter is available in an unpainted stainless steel housing, which also has an even stronger bulletproof glass (15 mm).

Curious?

[Here you will find all information](#)



The GfG (Pty) Ltd fixed gas detection system installed at Enterprise Foods in Polokwane is the largest NH₃ system in South Africa, consisting of close to 80 x CI21 (NH₃) sensors.

The CI21 transmitter features a stable, long-life charge-carrier injection sensor. Unaffected by high-concentration exposure and boasting low-temperature operation to -40° F, the CI21 sensor is ideal for the refrigeration markets.

Within the fixed gas detection system, the NH₃ transmitters are connected to a PC displaying all the sensors with their locations and values in real time. In the event that an NH₃ leak is detected, the PC will immediately notify security, by means of both visual and audible alarm, which sensor activated the alarm as well as the location of the leak in real time, allowing for quick response and ultimately the preservation of life.

This is just another testament to GfG's commitment to safety through the advancement of our gas detection solutions.

To discuss a gas detection solution to suit your needs, give us a call or write us an e-mail.



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