

### **Transmitter IR22 F – Low Temperature CO<sub>2</sub> detection**

# Optional local alarms for each transmitter location



**GfGsafety.com** 

# Transmitter IR22 F

CO<sub>2</sub> detection for Cold Storage

 $CO_2$  leaks in cold storage rooms can quickly become dangerous because  $CO_2$ refrigeration systems operate at high pressures. In the case of subcritical and transcritical systems, these are often above 100 bar.

The IR22 F transmitter reliably monitors the  $CO_2$  concentration under the toughest of conditions. whilst providing additional safety functions.

#### **Robust and Durable**

The rugged IP65 transmitter IR22 F measures Carbon Dioxide (CO<sub>2</sub>) from -40 °C to +60 °C.

Two switching outputs enable connectivity to additional safety devices, such as

audible and visual alarms or self-contained alarm push buttons for each detection point. Tri-Colour LED status (green, yellow and red) provides instant operating status of the transmitter.

#### **Digital, Analogue or ACDC**

The IR22 F is available with digital RS-485 interface and Modbus protocol or as analogue 4-20 mA. It is also ACDC-capable (Analogue Carrier for Digital Communication) which allows additional data to be transmitted digitally over the 4-20 mA cabling.



Alarm panel



Push button manual alarm

Dependant on transmitter quantity and the connected alarm devices, bus cable lengths of up to 1200m are possible.

#### Manual Alarm/Alarm acknowledgement

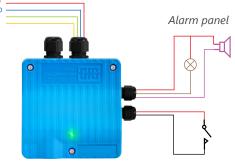
The digital input can be used to connect a manual push button for instant alarm activation/alarm acknowledgement.



Switching outputs



Connection and configuration example



e.g. manual alarm button or acknowledgement of the horn

Technical data IR22 F:

#### **Gas and Detection Range:**

Carbon dioxide in the range 0 to 5% vol. Resolution: 0.01% vol. **Detection Principle:** 

Infrared Measuring Gas Supply:

Diffusion or gassing via calibration adapter **Response time:** T90 < 50 seconds

## Expected average life of the sensor:

>5 years **Temperature range:** -40 °C to +60 °C

Air humidity: 0 % to 95 % r. h. (non-condensing) Pressure: 70 kPa to 130 kPa

#### Output Signal:

Analog: 4-20 mA with ACDC Digital: RS-485 Modbus Switching Outputs: 2x Open Collectors Digital Input:

Binary input, optionally quiescent or operating current, for manual alarms

#### Power supply: 12 VDC to 30 VDC

Housing: Plastic Protection class: IP65 Weight: 125 g to 150 g Dimensions: 96 x 123 x 49 mm (W x H x D)



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