



Refrigerant gas
leakage detector
GLD series

Connected Efficiency

Gas leakage detectors for fixed installations

CAREL offers the range of GLD sensors for detecting leakages of CFC, HFC, HFO and CO₂ refrigerant gases, designed to meet all industrial refrigeration and air conditioning needs (supermarkets, shopping centres and other public places) in units that require continuous control and monitoring.

- **savings:** allow a prompt response, avoiding unit downtime;
- **monitoring:** for people who are in the vicinity of the units and for the preservation of food;
- **signalling:** prompt notification of system gas leaks.

The CAREL GD* series gas leakage detectors guarantee monitoring in rooms where there is a risk of gas leakages due to the installation of refrigerated units, providing prompt notification and thus ensuring cost savings by avoiding system stoppages.

The sensors are calibrated to detect the most common gases (R-32, R-134a, R-290, R-404A, R-407A, R-407F, R-410A, R-448A, R-449A, R-450A, R-452A, R-452B, R-454A, R-454B, R-455A, R-466A, R-507A, R-513A, R-717 (Ammonia), R-744 (CO₂), R-1150 (Ethylene), R-1234yf, R-1234ze(E), R-1233zde, R-1270).

When a leakage above a certain concentration is detected, the sensor sends a signal to the connected controller or supervisor. An alarm is also displayed locally with an audible and visual signal. Available in versions with semiconductor sensitive element and infrared for CO₂.

A **pre-calibrated sensor** is available on request to simplify maintenance for periodic verification of the detector's calibration, thus eliminating the need to use a calibration gas.



Prompt notification of gas leaks

Reduced costs due to leakages from the circuit, protecting people's health.



Greater connectivity

Integration with most CAREL and third-party controllers.



Monitoring

Constant monitoring of the environment for verification of gas leakages even with remote supervisory systems.

Advantages

Preventing refrigerant gas leakages brings the following advantages:

- no system downtime or significant economic costs due to poor food preservation;
- help reduce greenhouse gas emissions;
- monitor the environment where the refrigerated units are installed.

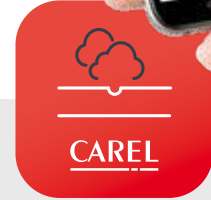
The device is integrated into the CAREL supervisory system, offering all the advantages of local and remote supervision.

Available in the built-in version or with remote sensor.

Supervision

Monitoring and control of gas concentrations in accordance with the requirements of the ASHRAE 15 and EN 378 series standards:

- control of equipment via various output signals (analogue, RS485, relay);
- activation of functions within the set required response time;
- automatic self-test to check the main functions of the detector;
- visual and audible alarms with built-in LED and buzzer;
- manual alarm reset via the "Alarm stop" function.



Dedicated app - Rileva

The app for smartphones is available (downloadable from the App Store and Google Play) for faster interaction with the device during configuration, installation and routine maintenance/service.



Main benefits and performance

Specifications	Benefits	Advantages
Temperature compensation	Accuracy of the readings and excellent precision	Higher precision (ppm) in detecting a gas leak in the environment. SAFETY AND EFFICIENCY
Wide working temperature range	Suitable for all applications	One single product for multiple purposes (even installed directly in a cold room at -40°C). EXTENDED RANGE
LED diagnostics	Immediate indication of the causes of problems	Fast troubleshooting. EASY CONTROL
3 relays	Multiple alarms (high, low, general)	Immediate alarm or warning. SAFETY
Replacement of the pre-calibrated sensitive element	Avoid the need for on-site calibration, simplifying maintenance	Save time during annual calibration No specialist installers or gas bottles are needed. EASY TO USE AND FAST INSTALLATION
User interface via Bluetooth	<ul style="list-style-type: none"> • Combined with the RILEVA app to simplify configuration • View the readings in real time • Configure the detector • Output test • Calibration/bump test • Generate customisable calibration certificates 	Faster and easier commissioning. EASY TO USE AND FAST CONFIGURATION
Magnetic switch	• Fast interaction with the device	Avoid opening the sensor cover for service and maintenance. EASY CONTROL

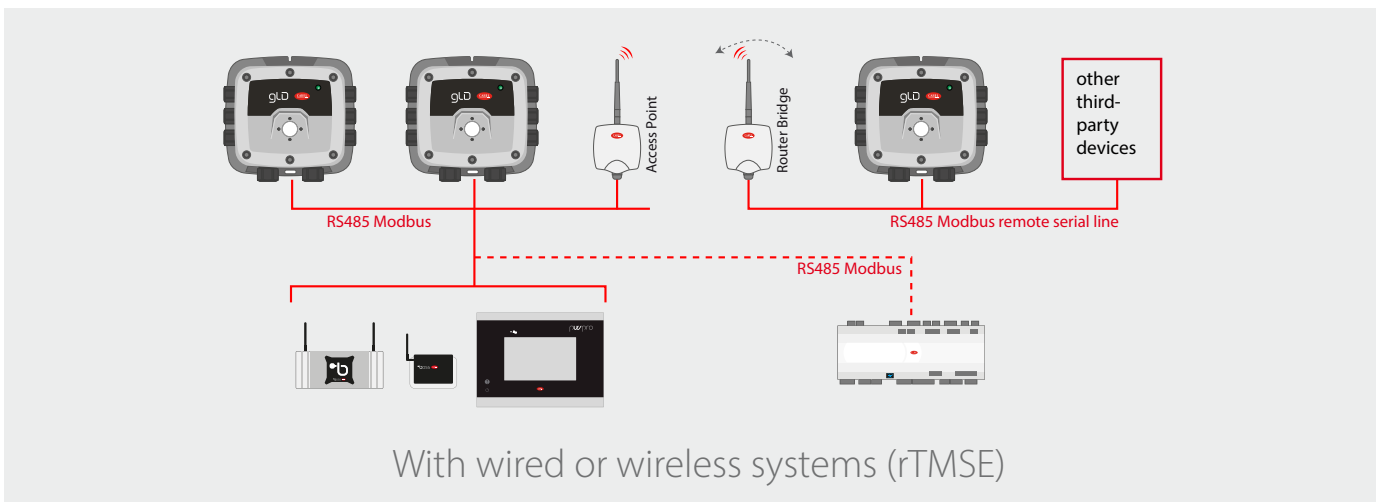
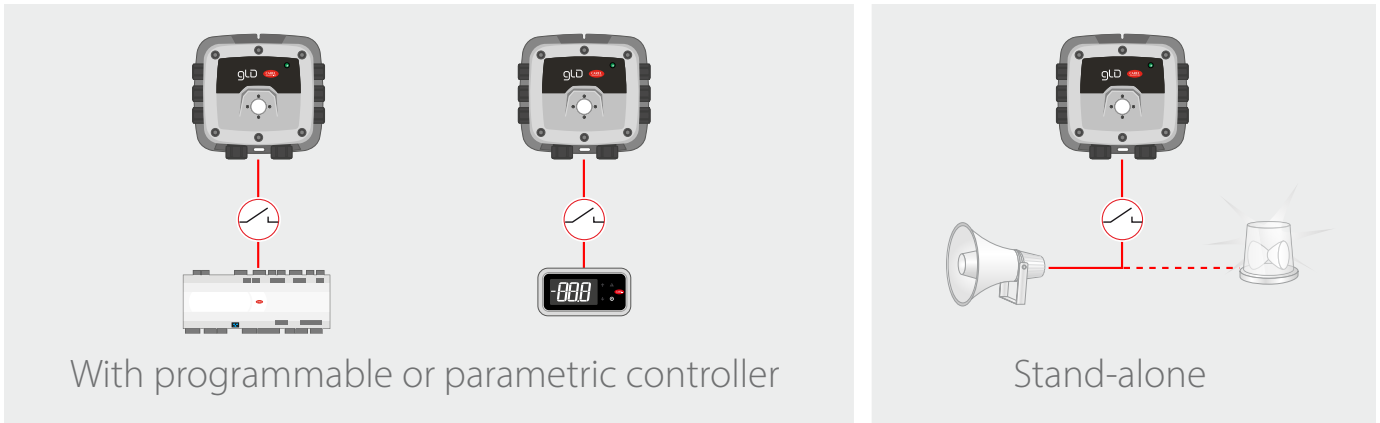
Functions

- Audible alarm ON/OFF;
- Performance guaranteed down to -40°C;
- User interface: "RILEVA" app for Android and IOS;
- Safety relay ON/OFF.



Application examples

(check compatibility with the controller's application program)



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