



connectivity, monitoring and remote management systems

sensors and protection devices



For the detection of CFC, HFC and CO2 refrigerant gases, CAREL proposes a new range of sensors designed to satisfy all requirements in the fields of industrial refrigeration and air-conditioning (supermarkets, shopping centres, other public places) on units that require continuous control and monitoring, notifying system status in order to limit the problems caused by gas leaks. The sensors are calibrated to measure the most commonly used gases (R22, R134a, R404a, R407c, R410a and CO₂). When leaks above a certain concentration are detected, the sensor sends a signal to the controller or supervisor it's connected to. The alarm is also signalled locally by audible and visual indicators.

Preventing refrigerant gas leaks has the following advantages:

- avoids system downtime or significant economic damage due to poor food storage, mean cost savings;
- contributes to reducing greenhouse gas emissions, as established by the Kyoto protocol;
- ensures surveillance over the safety of people occupying the environment where the refrigeration units are operating.

Available in built-in or remote sensor.

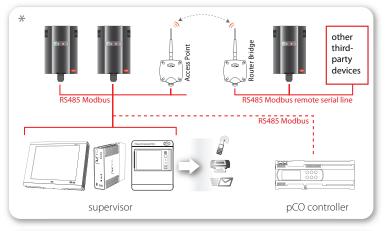
Installation of the gas leak detector ensures compliance with European standards F-GAS and EN378 as well as ASHRAE 15 (US market).

- savings: a prompt response avoids unit downtime;
- safety: for people located in the vicinity of the unit and for food storage;
- signal: prompt warning of system gas leaks

Technical specifications

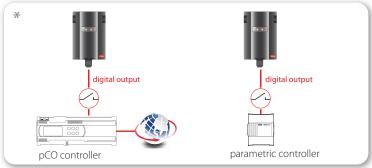
	Type of sensor	
Features	Semiconductor IP41 and IP66 for R22, R134a, R404A, R407c, R410a	Infrared IP66 for CO ₂
Outputs available	serial: RS485 Modbus analogue: 0 to 5 V, 1 to 5 V, 0 to 10 V, 2 to 10 V, 4 to 20 mA digital: relay 1 A, 24 Vac	
Local alarm	light (red LED) audible (buzzer): threshold 100 ppm	light (red LED) audible (buzzer): threshold 1500 ppm

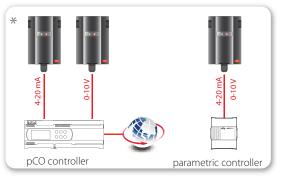
Example applications



Codes available

Code	version
DPWLA07000	Gas leak detector for R22, semiconductor version
DPWLA27000	5 m remote gas leak detector for R22, IP66 semiconductor version
DPWLB07000	Gas leak detector for R134a, semiconductor version
DPWLB27000	5 m remote gas leak detector for R134a, IP66 semiconductor version
DPWLC07000	Gas leak detector for R404a, semiconductor version
DPWLC27000	5 m remote gas leak detector for R404a, IP66 semiconductor version
DPWLD07000	Gas leak detector for R407c, semiconductor version
DPWLD27000	5 m remote gas leak detector for R407c, IP66 semiconductor version
DPWLE07000	Gas leak detector for R410a, semiconductor version
DPWLE27000	5 m remote gas leak detector for R410a, IP66 semiconductor version
DPWL417000	Gas leak detector for CO2 , infrared version
DPWL427000	5 m remote gas leak detector for CO2, IP66 infrared version





*: verify compatibility with application on controller



Prompt gas leak signal

Minimises costs due to leaks in the circuit, protecting people's health.



Better connectivity

Integration with most CAREL and third party controllers.



Standards compliant

Guarantees conformity with European (F-GAS and EN378) and US standards (ASHRAE 15).

Headquarters ITALY

CAREL INDUSTRIES Hqs.

via dell'Industria, 11 35020 Brugine - Padova (Italy) Tel. (+39) 0499 716611 Fax (+39) 0499 716600 Carel@carel.com

All trademarks hereby referenced are the property of their respective owners. CAREL INDUSTRIES is a registered trademark of CAREL INDUSTRIES in Italy and/or other countri

Sales organization

CAREL Asia - www.carel.com
CAREL Australia - www.carel.com.au
CAREL China - www.carel-china.com
CAREL Deutschland - www.carel.de
CAREL France - www.carelfrance.fr
CAREL Iberica - www.carel.es

CAREL India - www.carel.in
CAREL Russia - www.carelrussia.com
CAREL South Africa - www.carelcontrols.co.za
CAREL Sud America - www.carel.com.br
CAREL U.K. - www.careluk.co.uk
CAREL U.S.A. - www.carelusa.com

Affiliates

CAREL Czech & Slovakia - www.carel-cz.cz CAREL Korea - www.carel.co.kr CAREL Ireland - www.carel.com CAREL Thailand - www.carel.co.th CAREL Turkey - www.carel.com.tr