

Senseair Refrigerant Detection System

R32, R454A, R454B, R454C

Refrigerant Leakage Sensor

Senseair Refrigerant Detection System (RDS) is a leak detection sensor for HVAC applications.

A protective housing, with a high-quality gas diffusion vent, protects the sensor element from dust and condense water droplets. Thanks to the built-in heating element, the Senseair Refrigerant Detection System can operate in cold environments.

Using Modbus protocol, the measured data can digitally be transmitted to the control system.

A digital output signal is activated whenever the measured gas concentration reaches a configurable threshold. The output can alternatively be configured as an analogue linear output reflecting the measured gas concentration.

Senseair Refrigerant Detection System is intended for mounting inside or close to the HVAC appliance, where a leak could potentially occur.



Standard specification

Article number	009-3-0007, R32 24V 009-3-0008, R32 12V 009-3-0009, R32 5V
Operating principle	Non-dispersive infrared
Measured gas	R32, R454A, R454B, R454C ¹
Measurement range	0–50% LFL
Accuracy	±2.5% LFL
Operating conditions	-40–70 °C
Response time	< 30 s
Power supply	5 VDC/12 VDC/24 VAC/DC
Communication	Modbus over RS-485
Outputs	Digital signal (High/Low or PWM) or Analogue voltage or Analogue current
Compliance	IEC / UL 60335-2-40
Maintenance	Maintenance free
Life expectancy	> 15 years
Dimensions	113x65x40 mm
Storage conditions	-40–85 °C

Key benefits

- Fast response time
- High accuracy
- Wide temperature range
- Maintenance-free
- Compliant with IEC / UL 60335-2-40
- Factory calibrated
- Long term stability
- Long lifetime
- Immune to poisoning
- Based on LED light source

Note 1: The sensor can measure molecules containing C-H bonds.
Disclaimer: Please refer to product specification for the complete technical details.

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Senseair
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