



PRODUCT HIGHLIGHT

SENSATA RESONIX™ REFRIGERANT LEAK SENSOR RGD SERIES

The Sensata Resonix refrigerant leak detection sensor is a compact embedded module designed to meet demanding OEM requirements and be easily integrated into HVAC & Refrigeration Equipment. Featuring the innovative Speed of Sound technology with high accuracy and fast response times.

Superior resistance to overexposure and poisoning, high temperature and humidity resistance, and a lifetime greater than 15 years with no need to calibrate make the Sensata Resonix the ideal, easy to maintain, solution for HVAC&R systems.

SPECIFICATIONS

- Complies to UL60335-2-40 ed. 4
- Works with R32, R454 series, and R455 series refrigerants
- LFL range : 0 – 100%
- Working temperature -40°C to +105°C
- Working humidity 0 to 100% RH with condensation
- Working pressure 70 to 120kPa
- Protection (EN 60529) : IP54
- Low power: <40 mA (for 5 VDC input)

NO CALIBRATION NEEDED

Factory calibrated sensor that does not require any field calibration or re-zeroing during its lifetime

LONG LIFETIME

15+ years, to withstand the extended lifetime of HVAC equipment

FAST RESPONSE TIME

Fast response T28 of 2.5s, T60 of 5s (average) and warm up time (<5 seconds).

EMBEDDED SELF DIAGNOSTICS

Sensor completes self-diagnostics once per minute providing fault alarms

NO FALSE POSITIVES

No false positives from fouling gases as required by UL standards

IMMUNITY TO POISONING

Immune to degradation even with continuous poisoning

HIGH ACCURACY

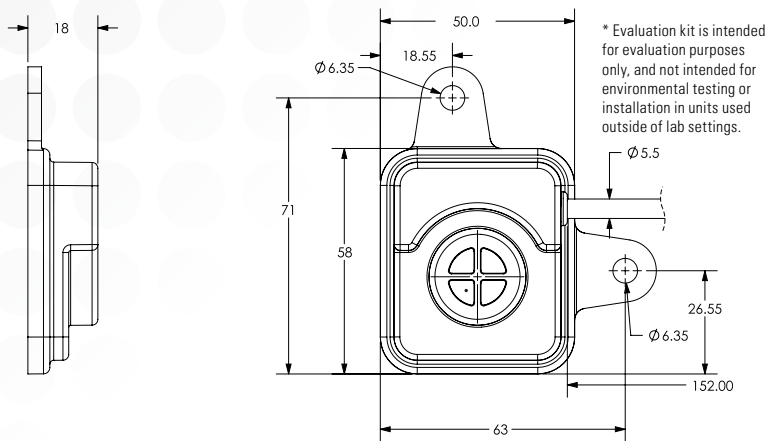
Temperature and humidity compensation sensors present for high accuracy over environmental conditions

MECHANICAL AND ENVIRONMENTAL ROBUSTNESS

Robust package that performs throughout the environmental conditions and requirements for industrial HVAC equipment



DIMENSIONS



AGENCY APPROVALS & CERTIFICATIONS



ORDERING OPTIONS

Series	RGD	00	M	L	00
RGD - Resonix Gas Detection Sensor					
Refrigerant					
00 = R32					
01 = R1234yf					
02 = R454B					
03 = R454C					
04 = R454A					
10 = R455A					
Output Type					
M = RS485 MODBUS RTU					
Input Voltage					
L = 5VDC					
H = 24V					
Customer Specific					
00 = 6 foot unshielded cable, unterminated					

*Consult factory for other output type availability

APPLICATIONS

- Residential, commercial and industrial air conditioning and heat pump systems
- Commercial refrigeration

The HVAC industry is converting to refrigerants that are environmentally friendly, energy efficient, and have lower GWP solution such as the R32, R1234yf and blends of those gases. Those refrigerants are classified A2L (ASHRAE classification) which means they are considered flammable at a certain concentration in air. For this reason, manufacturers of residential and commercial air conditioning and heat pump systems must implement a detection and mitigation in their equipment in order to comply to standards ASHRAE-15, UL60335-2-40 and UL60335-2-89.



CONTACT US

SENSATA TECHNOLOGIES INC.
529 Pleasant Street,
Attleboro, MA 02703
USA

+1 (800) 350 2727
sensors@sensata.com