



## 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 time (T28 of 2.5 seconds, T60 of 5 seconds) 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**

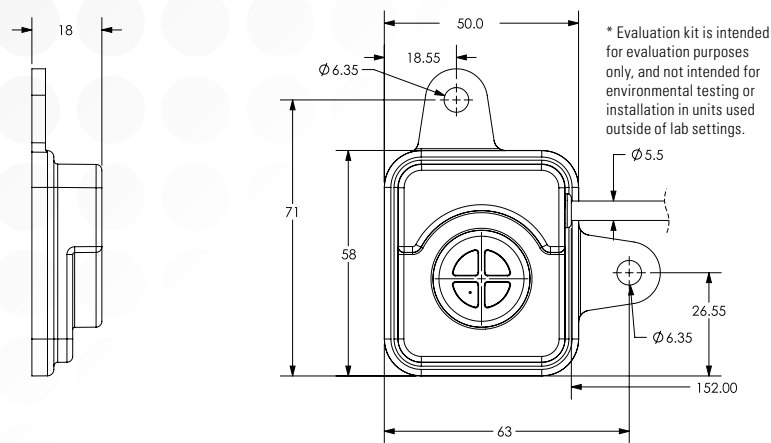
Temperature and humidity compensation sensors present for high accuracy over environmental conditions

#### **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					
99 = Evaluation Kit (RS485 output, 6 foot cable, USB termination, Reader Application)					

\*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

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