

Sensata Launches First A2L Leak Detection Sensor Certified for Multiple HVAC Refrigerants

2023-10-26

- Solution is the first with full UL Recognition for the use of R454A, R454B, R454C, and R32 under the 4th edition of UL 60335-2-40
- Sensata Resonix™ RGD Sensor detects the presence of A2L refrigerant gases by monitoring the acoustic resonance of the surrounding air.
- Unique, patented technology provides HVAC manufacturers with an ideal approach to meet new global warming-related regulations.

SWINDON, United Kingdom--(BUSINESS WIRE)-- **Sensata Technologies** (NYSE: ST), today announced the launch of the Sensata Resonix™ RGD sensor, the first leak detection sensor with UL certification for multiple A2L refrigerant gases used in heating, ventilation, and air conditioning (HVAC) equipment. The new leak detection sensors support HVAC manufacturers' transition to refrigerants with a lower global warming impact.

Sensata's Resonix™ RGD sensor detects potential A2L refrigerant leaks in HVAC equipment to help enable a global shift away from potent greenhouse gas refrigerants. (Photo: Business Wire)

Sensata's Resonix™ RGD sensors leverage patented gas detection technology to meet the needs of HVAC manufacturers using new

hydrofluoroolefin (HFO) refrigerants as part of a global shift away from hydro-fluorocarbon (HFC) refrigerants.

HFC gases have been widely used in air conditioning and refrigeration equipment for decades due to their performance characteristics. However, HFC gases have a high global warming potential (GWP) – often hundreds of times more potent than carbon dioxide (CO₂). This issue was the driving factor behind the recent Kigali Amendment to the Montreal Protocol, which targets an 85 percent reduction in HFCs in the United States and other developed countries by 2036, and globally by 2047.

While HFOs have a far lower GWP, they are classified as slightly flammable (A2L categorization), and new leak detection design requirements mandate mitigation features to prevent a potential gas buildup.

Sensata's Resonix™ RGD sensors feature a unique, patented technology that measures the acoustic resonance of the surrounding air in real-time. Typically mounted near the evaporator coil, the sensors can trigger mitigation, such as a fan, when A2L gas is detected - venting it before it reaches unsafe levels.

The RGD series received full certification for R32, R454A, R454B, and R454C refrigerants under UL 60335-2-40 Edition 4, with fully certified test results – critical evidence for OEMs facing tight regulatory timelines. The sensor also received recognition under UL 60335-2-40 Edition 3.

The sensors deliver a fast response time with a life expectancy of more than 15 years – often exceeding the lifetime of the equipment itself. Because the sensors do not require field calibration or re-zeroing, they reduce service costs for both installers and end users. They are also unaffected by fouling gases, HVAC cleaning solutions, and continuous refrigerant exposure.

“Sensata's Resonix™ RGD sensors deliver a reliable, robust, and resilient gas detection solution for our customers that will be with them for the life of their equipment,” says Alice Martins, Vice President for Sensata's Industrial Solutions. “Our work in helping our customers reduce HFC use worldwide is another way that Sensata is innovating for sustainability and helping confront global warming.”

To learn more about the Sensata Resonix RGD sensor, visit <https://www.sensata.com/products/a2l-hvac-refrigerant-leak-detection>.

About Sensata Technologies

Sensata Technologies is a global industrial technology company striving to create a cleaner, more efficient, electrified and connected world. Through its broad portfolio of sensors, electrical protection components and sensor-rich solutions which create valuable business insights, Sensata helps its customers address increasingly complex engineering and operating performance requirements. With more than 21,000 employees and global operations in 13 countries, Sensata serves customers in the automotive, heavy vehicle & off-road, industrial, and aerospace markets. Learn more at www.sensata.com and follow Sensata on [LinkedIn](#), [Facebook](#) and [Twitter](#).

Investors:

Jacob Sayer

+1 (508) 236-1666

jsayer@sensata.com

Media:

Alexia Taxiarchos

+1 (508) 236-1761

ataxiarchos@sensata.com

Source: Sensata Technologies