

# Product announcement



Detection of R290 & R454b refrigerant leaks  
For heat pumps and room condition monitoring  
RS485 or UART (Modbus) interface  
According to IEC 60335-2-40:2022

Available  
from mid  
2025



## Refrigerant Gas Sensor SKR290 & SKR454

For residential heat pumps

# Refrigerant gas sensor // SKR290 // SKR454

For residential heat pumps



SKR290 / SKR454

## Highlights

- Digital gas sensor for detecting refrigerant leaks R290 (propane) or R454b
- Infrared absorption technology (NDIR) → High selectivity, measurement accuracy and long-term stability
- RS485 or UART (Modbus) interface
- Compact design → Installation even in confined spaces
- Complies with the standards and specifications for the use of refrigerants in air conditioning systems and heat pumps in accordance with IEC 60335-2-40 : 2022

Technical data	
<b>Type</b>	Digital sensor for detecting refrigerant leaks R290 (Propan) or R454b
<b>Measuring range</b> → R290 → R454b	0...100% LFL (1% LFL)* 0...50% LFL (0.1% LFL)*
<b>Measuring medium</b>	Ambient air (non-aggressive gases)
<b>Dimensions [mm]</b>	75.4 x 21.5 x 57 (W x H x D)
<b>Process connection</b>	Oblong hole 4.5 x 6 mm
<b>Nominal pressure</b>	n.a. (atmospheric pressure)
<b>Ambient temperature</b>	-40...80 °C
<b>Storage temperature</b>	-40...60 °C
<b>Degree of protection according to EN 60529</b>	IP54

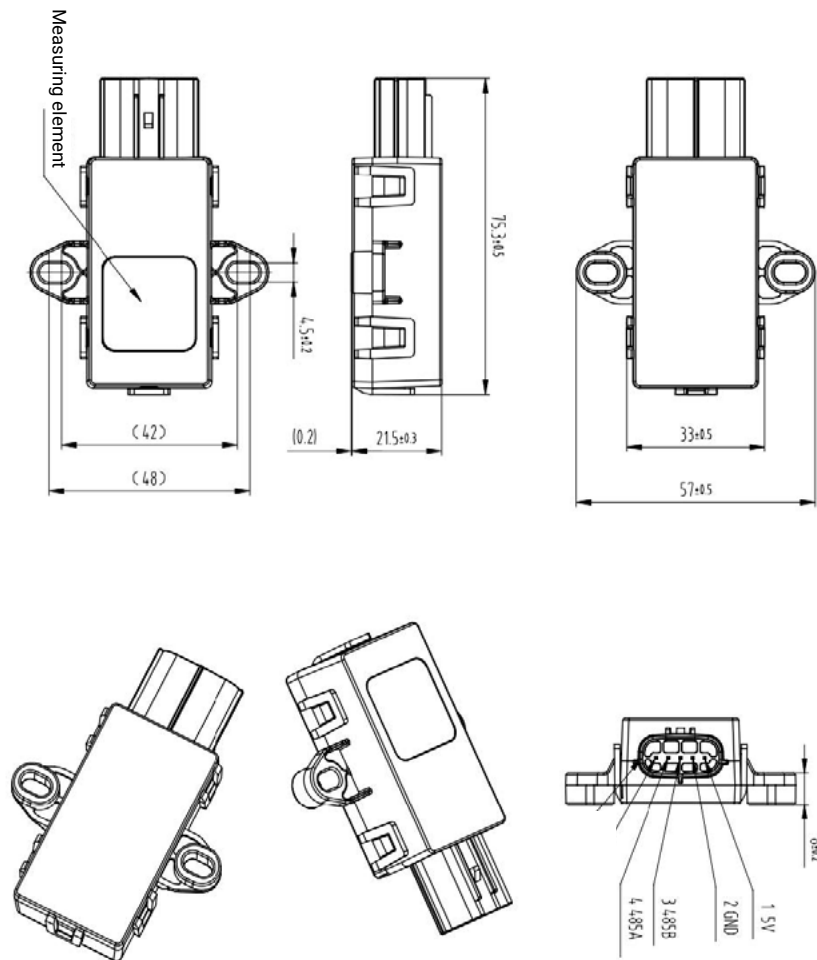
Electrical data	
<b>Measuring element</b>	1 x Non-dispersive infrared sensor (NDIR-sensor)
<b>Measuring insert</b>	Not interchangeable
<b>Accuracy</b> → R290 → R454b	±3% LFL @ -20-60 °C, 0-95% RH ±2.5% LFL @ -20-60 °C, 0-95% RH
<b>Output</b>	RS485 or UART (Modbus RTU)
<b>Electrical connection</b>	Sumitomo 6189-1046, 5-pin
<b>Supply voltage</b>	5 VDC ±0.1 V

\* Lower flammability limit (LFL)

*The product is still in development, but we don't want to withhold our new product from you. There may be deviations & Changes may occur, therefore please contact our product manager Andreas Damm (a.damm@sika.net) for up-to-date technical data.*

# Technical drawing // Dimensions // Pin assignment

SKR290 / SKR454



## Materials

Materials	
In contact with media	
Complete module	various

## Article numbers

Article code	
Type	
SKR290 Refrigerant gas sensor for R290 / Output: RS485	SKR290000RS48500
SKR290 Refrigerant gas sensor for R290 / Output: UART	SKR290000UART000
SKR454 Refrigerant gas sensor for R454b / Output: RS485	SKR454B00RS48500
SKR454 Refrigerant gas sensor for R454b / Output: UART	SKR454B00UART000