

| SGD SERIES

A3 REFRIGERANT LEAK SENSOR

The Sensata SGD series refrigerant leak detection sensor is a compact embedded module designed to meet demanding OEM requirements and be easily integrated into Air conditioning, Heat pumps and Refrigeration Equipments Engineered to meet the demanding environments of Heat pumps and refrigeration systems.



Features

- Complies to IEC 60335-2-40:2022, CE, RoHS, REACH
- Works with R290
- LFL range of 0-100%
- Built-in environmental compensation
- 15-year lifetime
- No field calibration required for the full lifetime

Applications

- Residential and commercial air conditioning
- Heat pumps
- Refrigeration equipment
- VRF systems

SPECIFICATIONS

Mechanicals

Materials	UL V0 Rated
Dimensions	35 x 38.5 x 16-17mm(excluding mounting tabs)
Weight (Approx.)	TBD

Electrical

Output	RS485 Modbus RTU PWM
Supply Voltage	5VDC-24VDC(+/- 10%)
Current Consumption	<100mA Average
Wire Size Connector	4 pin sealable connector

Recommended Mating Connector Components

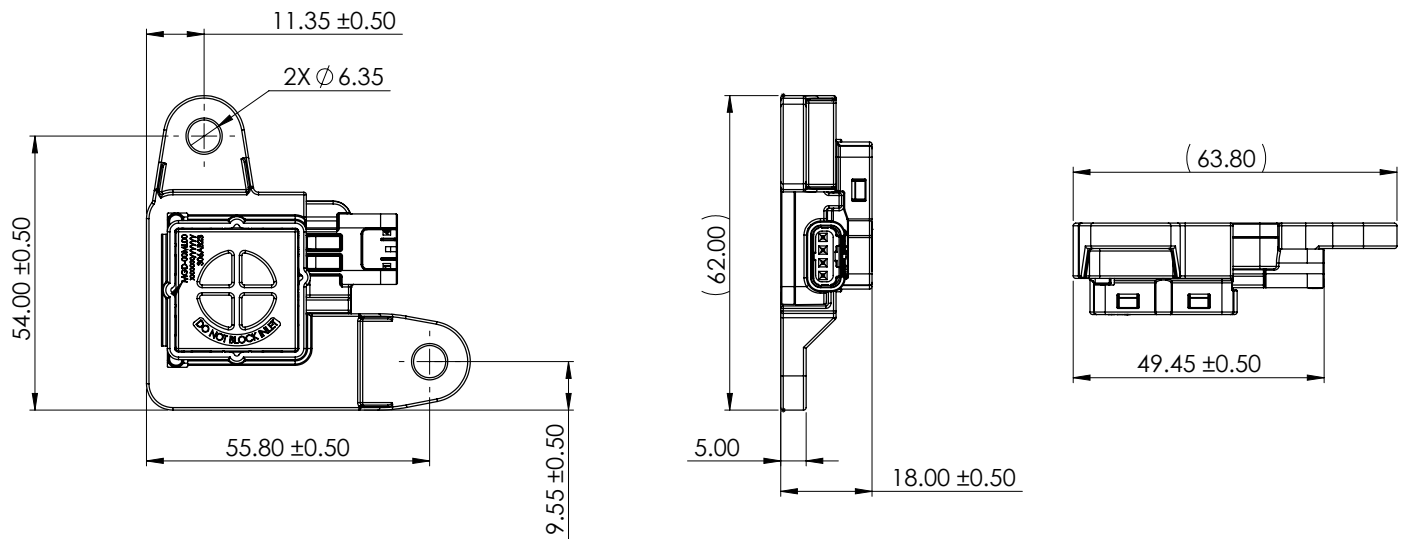
Housing	2443729-4
Terminal	2321921-1
Rear wire seal	2321922-4
Perimeter seal plug	2321920-4
Terminal position assurance	2321919-4

Environmental / Performance

Target Gases	R290
LFL Range	0 to 100%
Response Time	T60 <20s
Warm Up Time	30 sec
Accuracy at Alarm Set Point	±2.5%LFL Out of Box at Nominal Conditions ±5%LFL Over Life and Environmental Range
Working Temperature	-40°C to 75°C
Storage Temperature	-40°C to 85°C
Working Humidity	0 to 100%RH
Working Pressure	60 to 120kPa
Protection (EN 60529)	IP54
Fault Detection	Sensor Out of Range
Calibration	Factory calibrated, no field calibration required
Compensation	Temperature and Pressure
Lifetime	15 years
Conformity	IEC 60335-2-40:2022 UL 60335-2-40 ed.4 Annex LL CE,RoHS,REACH

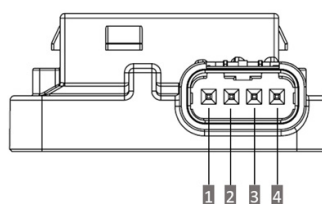
DIMENSIONS

Dimensions are in millimeters



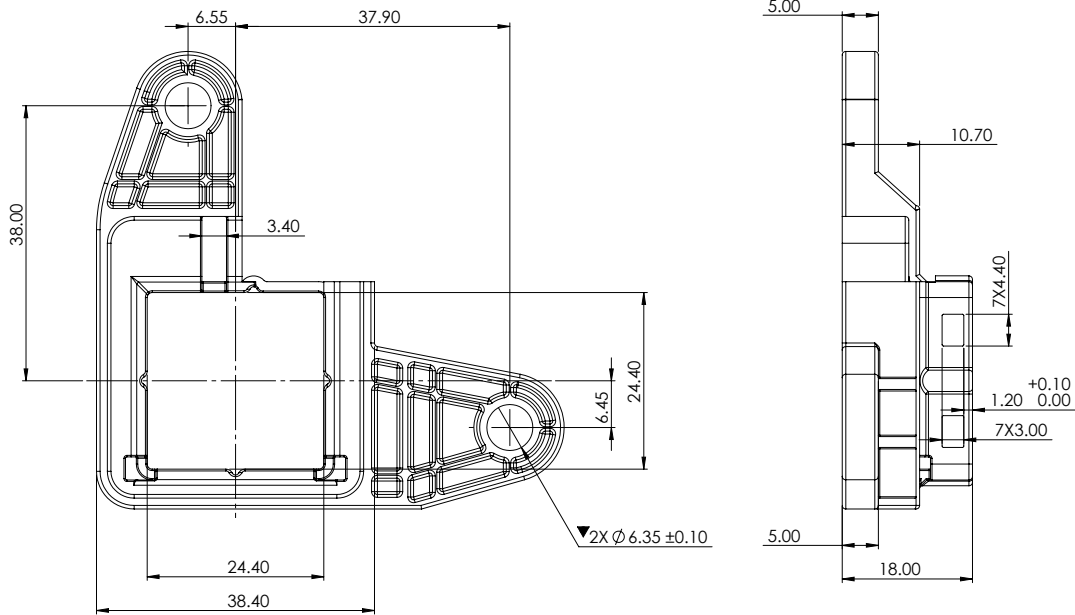
PIN OUT DIAGRAM

No	Description
1	RS485 Data -
2	GND
3	RS485 Data +
4	Vin



ACCESSORIES

Mounting Bracket



ORDERING OPTIONS

Example : SGD-00MH00

	SGD	-	00		M		H		00
Series	_____								
SGD= Sensata Gas Detection Sensors									
Refrigerant	_____								
00= R290									
Output Type	_____								
M = 485 Modbus RTU P = PWM									
Input Voltage	_____								
H= 5VDC – 24VDC									
Customer Specific	_____								
00= Flying lead									

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