



Gas sensor

DST GS4A / DST GS4B

For use in residential applications

Description

Introducing the all-new A2L Gas Sensor, expertly engineered with a sleek, compact design, perfect for residential applications and air conditioning units. This innovative sensor delivers top-tier performance without compromising on space or efficiency. Experience cutting-edge technology in a small package, tailored to meet the demands of modern living.

Our thermal conductivity technology offers rapid & accurate leak detection, +15 year lifetime, immunity to poisoning, automated self-calibration, and reliable self-diagnostics to avoid silent failures.

Our unique design is optimized to ensure performance over the lifetime even in harsh application environment as it is robust against condensation, dirt, dust, and UV light. Easy portability and seamless system integration with Modbus.

Our small and light design is compatible with all systems due to our customizable software.

Features & Benefits

- Designed for use with R454B, R32, R454A, R454C and R455A
- Flexible alarm threshold and customizable software
- Patented, robust design
- High IP rating (IP 66)
- No field service required

Product details

General data

Table 1: Sensor specifications (UL 60335-2-40)

Measuring Range	0 to 100% LFL
Alarm Threshold	9% to 20% LFL
Operating Temperature	-40°F to 175°F (-40°C to 80°C)
Intermittent Temperature	-40°F to 203°F (-40°C to 95°C)
Storage Temperature	-67°F to 203°F (-55°C to 95°C)
Operating Pressure	700 to 1200 mbar
Operating Humidity	0 to 100% RH with condensation
Enclosure Protection (EN 60529)	IP 66
Connector Protection (EN 60529)	IP 69k
Flame Rating	UL 94 V-0

Table 2: Performance specifications

Accuracy at Ambient 15°C to 25°C, 30-70%	±2.5% LFL
Accuracy across operating range	±5.0% LFL
Response time	< 15 s
Sensor recovery time	< 5min in clean air
Lifetime	Min 15-year lifetime – self monitoring
Mitigation recovery timer	0-5 minutes (others upon request)
Alarm Reset	2,5% LFL hysteresis

Table 3: Electrical specifications

Output mode ⁽¹⁾	MODBus Specification
Supply voltage	5 VDC +/-10 %
Power consumption (estimated)	1.1 VA max
Digital Output	RS485, 120 Ohm termination resistor included

⁽¹⁾ Others upon request

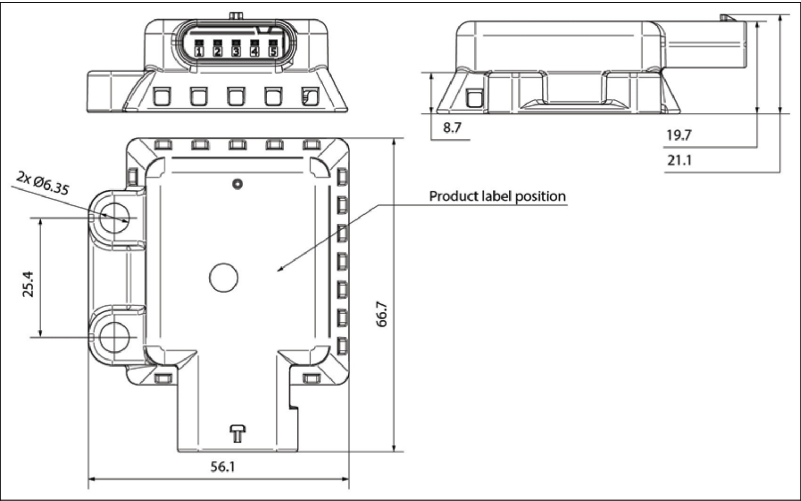
Table 4: Mechanical characteristics

Materials – Enclosure	PA66 25%GF
Materials – Electrical connection	PA66 25%GF
Net weight (depending on the format)	0.03 - 0.04 kg



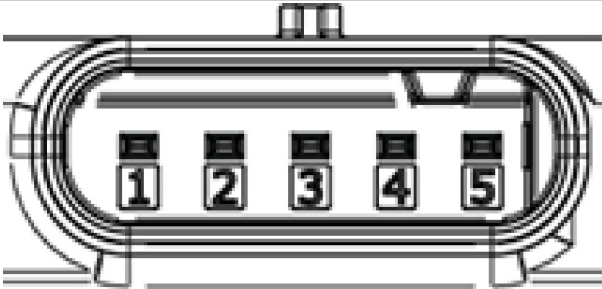
Dimensions & weights

Figure 1: Dimensions



Disclaimer/Information:
Sensor stores diagnostic values for warranty analysis. Data can be provided by returning the product. Fee may apply.

Connections

Type code	Standard (5 PIN)
	
Electrical connection, ModBus	Pin1: Supply voltage Pin2: ModA (Data +) Pin3: ModB (Data -) Pin4: Earth/Ground Pin5: Not connected
Enclosure IP	IP66 for sensor IP69K for MCON connector

NOTE:
Please check store.danfoss.com to find the correct variant for your requirements.



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The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the ‘Declaration of Conformity’. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Certification body	Approval topic
EU Declaration	Danfoss EU-UK 073R0000.01	Danfoss	EU RoHS

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