



Gas sensor

DST G4ze

For refrigeration purposes

Description

The DST G4ze gas sensor designed to meet the demanding requirements of chillers, large commercial and industrial cooling systems, as well as industrial and commercial heat pumps. It offers exceptional performance and reliability, ensuring efficient operation in these critical applications. The DST G4ze provides optimal energy efficiency and robust functionality, making it an ideal and smart choice for large scale installations and offers a minimum 15-year lifetime

It is engineered for use with R1234ze, ensuring compatibility and performance in diverse systems.

Engineered to withstand harsh environments, the DST G4ze is resilient against condensation, dirt, dust, and UV light, maintaining optimal functionality over time.

Its unique design incorporates both hardware and software flexibility, facilitating seamless customization and integration into existing systems.

The DST G4ze sensor is the smart choice for those looking for a straight forward, reliable solution that consistently delivers dependable results with the refrigerant R1234ze.

Features & benefits

- Flexible alarm threshold and customizable software
- Designed for high performance on R1234ze
- Patented, robust design
- Output modes: Modbus, Relay and Dual Output
- Constant consistent refrigerant %LFL measurement

Product details

General data

Sensor specifications

Measuring range	0 – 100% LFL
Alarm threshold	13% LFL
Operating temperature	-40 – 175 °F (-40 – 80 °C)
Maximum temperature	-40 – 200 °F (-40 – 95 °C)
Storage temperature	-67 – 203 °F (-55 – 95 °C)
Operating pressure	700 – 1200 mbar
Operating humidity	0 – 100% RH with condensation
Enclosure protection (EN 60529)	IP54
Connector protection (EN 60529)	IP56 and IP57
Flame rating	UL 94 V – 0

Electrical specifications

Output mode	Relay specification	Modbus specification	Dual output specification
Supply voltage	24 V AC \pm 10% and 24 V DC (8 – 32 V DC)	5 V DC \pm 10% 24 V AC \pm 10% and 24 V DC (8 – 32 V DC)	24 V AC \pm 10% and 24 V DC (8 – 32 V DC)
Current requirement ⁽¹⁾	300 mA max	300 mA max	300 mA max
Digital output	–	RS485, 120 Ω termination included in sensor	RS485, 120 Ω termination included in sensor

⁽¹⁾ Other current limits upon request

Materials

Mechanical characteristics

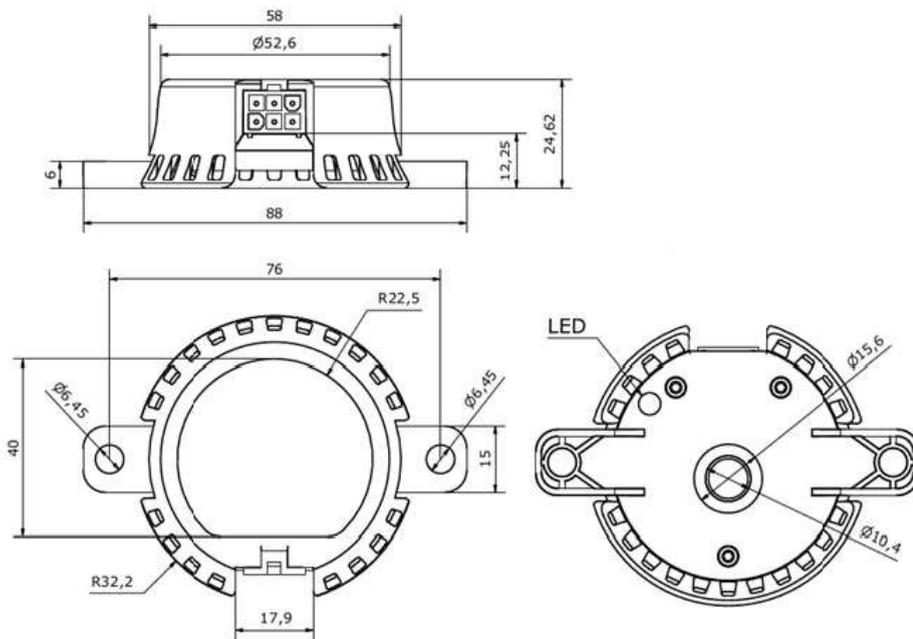
Enclosure	PA66 25% GF
Electrical connection	Nylon
Net weight (depending on the format)	0.04 – 0.06 kg

Performance and environmental conditions

Performance specifications

Accuracy at ambient 15 – 25 °C, 30 – 70%	±2.5% LFL
Accuracy across operating range	±5.0% LFL
Response time	< 15 s
Sensor recovery time	< 5 minutes in clean air
Lifetime	Min. 15-year lifetime – self monitoring
Alarm reset timer	5 minutes (can be customized)
Alarm response	Relay open – LED red – Alarm flag
Alarm reset	2.5% LFL hysteresis

Dimensions



NOTE:

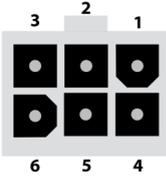
Dimensions are in mm, unless stated otherwise.

Disclaimer/Information:

Sensor stores diagnostic values for warranty and analysis. Data can be provided by returning the product. A service fee may apply.

Connections

Electrical connections

Type code	Standard (6 PIN)
	 <p>The diagram shows a 6-pin connector with pins numbered 1 through 6. Pins 1, 2, 3, and 4 are arranged in a top row from right to left. Pins 5 and 6 are arranged in a bottom row from right to left.</p>
Electrical connection, Modbus	<p>Pin 1: Supply voltage Pin 2: Earth/Ground Pin 3: Mod A (Data +) Pin 4: Mod B (Data -) Pin 5: Not connected Pin 6: Not connected</p>
Electrical connection, relay	<p>Pin 1: Supply voltage Pin 2: Earth/Ground Pin 3: Not connected Pin 4: Not connected Pin 5: Input relay Pin 6: Normally open contact's output</p>
Electrical connection, dual output	<p>Pin 1: Supply voltage Pin 2: Earth/Ground Pin 3: Mod A (Data +) Pin 4: Mod B (Data -) Pin 5: Input relay Pin 6: Normally open contact's output</p>
Enclosure IP	IP54

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

Certificates, declarations and approvals

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
Export Control Declaration	Gas sensor	Danfoss	

Contact details

Online support

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