



Gas sensor DST G200



# **Description**

The new Danfoss Dual refrigerant sensor DST G200 is designed for use in the HVAC market with a specific focus on Residential, Heat Pump, Rooftop, & Chiller applications.

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 system lifetime even in harsh application environment as it is robust against Oil, Water Spray, dust, and UV light. Additionally, we have built-in flexibility in terms of hardware and software allowing for easy customization and system integration.

### **Features & Benefits**

- Designed for use with R454B and R32
- customizable software
- Easy system check via LED status
- Patented, robust design
- Output modes: Modbus, Relay, Dual Output and Dual relay

### Accessories code numbers



073G0102

#### Accessories, sensors, Cable

Used for product: DST G, Parts included: Cable with plug 2,50 m I/40, Packing format: Industrial pack, Quantity per packing format: 40



073G0100

### Accessories, sensors, Cable

Used for product: DST G, Parts included: Cable with plug 1,00 m I/80, Packing format: Industrial pack, Quantity per packing format: 80



073G0099

#### Accessories, sensors, Cable

Used for product: DST G, Parts included: Cable with plug 0,305 m I/80, Packing format: Industrial pack, Quantity per packing format: 80



073G0101

### Accessories, sensors, Cable

Used for product: DST G, Parts included: Cable with plug 1,50 m I/80, Packing format: Industrial pack, Quantity per packing format: 80



# **Product details**

# **General data**

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

Measuring Range	0 to 100% LFL
Alarm Threshold	10% or 15% 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 54
Connector Protection (EN 60529)	IP 56 and IP 57
Flame Rating	UL 94 V-0

# **Table 2: Electrical specifications**

Output mode <sup>(1)</sup>	Relay Speci cation	MODBus Specification	Dual Output Specification
Supply voltage	24 VAC +/-10% and 24 VDC (8- 32VDC)	5VDC +/-10% 24 VAC +/-10% and 24 VDC (8- 32VDC)	24 VAC +/-10% and 24 VDC (8- 32VDC)
Power consumption (estimated) <sup>(2)</sup>	1.6 VA max.	1.6 VA max	1.6 VA max
Digital Output	-	RS485, 1200hm termination included in sensor	RS485, 1200hm termination included in sensor

<sup>(1)</sup> Other configurations available upon request

### Table 3: Mechanical characteristics

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

# Performance and environmental conditions

Table 4: Performance speci cations

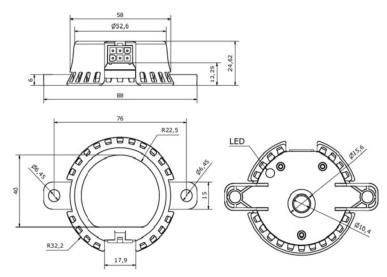
Accuracy at Ambient 15°C to 25°C, 30-70% RH	±2.5% LFL	
Accuracy across operating range	±5.0% LFL	
Response time	< 15 s	
Sensor recovery time	< 5min in clean air	
Lifetime	Min 15-year lifetime – self monitoring	
Mitigation recovery timer	0 - 5 minutes (others upon request)	
Alarm Response	Relay open –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

<sup>(2) 1.0</sup> VA version available upon request.



# **Dimensions & weights**

Figure 1: Dimensions



### NOTE:

Dimensions in mm, unless stated otherwise

### Disclaimer/Information:

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



# **Connections**

# **Table 5: Electrical connections**

Type code	Standard (6 PIN)
	3 1 1 6 5 4
	Pin 1: Supply voltage
	Pin 2: Earth/Ground
	Pin 3: Mod A (Data +)
	Pin 4: Mod B (Data -)
Electrical connection, Modbus	Pin 5: Not connected
	Pin 6: Not connected
	Pin 1: Supply voltage
	Pin 2: Earth/Ground
	Pin 3: Not connected
Electrical connection, Relay	Pin 4: Not connected
Electrical connection, nelay	Pin 5: Input relay
	Pin 6: Normally open contacts output
	Pin 1: Supply voltage
	Pin 2: Earth/Ground
Electrical connection, Dual Output	Pin 3: Mod A (Data +)
	Pin 4: Mod B (Data -)
	Pin 5: Input relay
	Pin 6: Normally open contacts output
Enclosure IP	IP 54

### NOTE:

Please check <u>store.danfoss.com</u> to find the correct variant for your requirements.



# Certi cates, 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	Certi cation body	Approval topic
Export Control Declaration	Refrigerant Leakage Sensor	Danfoss	
EU Declaration	<u>Danfoss EU-UK 073R0000.01</u>	Danfoss	EU RoHS



### **Contact details**

### Online support

Danfoss offers a wide range of support along with our products, including digital information, software, mobile apps and expert guidance. See the possibilities below.



#### The Danfoss Design center

Discover the Design Center, our advanced digital platform that streamlines product selection. With integrated tools and enhanced type pages, it's simpler than ever to access product information and documentation, and to select the right products. Check the availability of Danfoss products at partner locations and enjoy seamless transitions from selection to purchase with our basket-to-basket functionality. Whether you're buying from our distributors or directly from the Product Store, the Design Center simplifies your experience. Learn more at: <a href="design:de



### The Danfoss product store

The Danfoss Product Store is a one-stop shop available 24/7 for our customers, no matter where you are in the world or what area of industry you work in. Browse our catalog, check product details and documentation, view your prices and product availability, and quickly finalize your purchase. Start browsing at: <a href="store.danfoss.com">store.danfoss.com</a>.



#### **Danfoss Partner Portal/Product Data tool**

Designed to support you with easy access to product data extracts, essential resources, tools, and information. The Partner Portal provides a centralized hub for product documentation, training materials, marketing assets, and technical support, ensuring you have everything you need to succeed and grow your business with Danfoss. The Partner Portal is available 24/7 at: <a href="mailto:partnerdanfoss.com">partnerdanfoss.com</a> and is ready to support your business.



#### Find technical documentation

Find technical documentation you need to get your project up running. Get direct access to our official collection of data sheets, certificates and declarations, manuals and guides, 3D models and drawings, case stories, brochures, and much more. Start searching now at: <a href="mailto:documentation.danfoss.com">documentation.danfoss.com</a>.



#### **Danfoss Learning**

Danfoss Learning is a free online learning platform. It features courses and materials specifically designed to help engineers, installers, service technicians, and wholesalers better understand the products, applications industry topics, and trends that will help you do your job better Find your local Danfoss website here: <a href="learning.danfoss.com">learning.danfoss.com</a>.



### Get local information and support

Local Danfoss websites are the main sources for help and information about our company and products. Find product availability, get the latest reginal news, or connect with a nearby expert - all in your own language. Find your local Danfoss website here: <u>danfoss.com</u>.

#### Danfoss A/S

Climate Solutions . danfoss.com . +45 7488 2222

Any information, including, but not limited to information on selection of product, its application or use, product design, weight, dimensions, capacity or any other technical data in product manuals, catalogues description, advertisements, etc. and whether made available in writing, orally, electronically, online or via download, shall be considered informative, and is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogues, brochures, videos and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes to form, fit or function of the products. All trademarks in this material are property of Danfoss A/S or Danfoss group companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.