



Gas sensor

DST G290 & DST G600

For general HVAC purposes and industrial heat pumps

Description

The new A3 gas sensor is designed for use in industrial heat pumps and general HVAC applications. Accurate and compact leak detector designed based on IEC 60355-2-40 compatible to customer's application specifications, both hardware and software. Photoacoustic technology offers minimum 15-year lifetime, immunity to poisoning, fast response time and reliable self-diagnostics.

Features & benefits

- Designed for use with R290 & R600a (others on request)
- Output modes: Modbus, Relay, Relay & Modbus
- Supply voltage: 5 V DC, 12 – 24 V AC/DC
- Designed for minimum 15-year lifetime without calibration
- Self-diagnostics
- CE marked
- ATEX compliant signal relay

Product details

General data

Sensor specifications

Measuring range	0 – 100% LFL
Alarm threshold	15% LFL (G290) 13% LFL (G600)
Operating temperature	-40 – 80 °C
Maximum temperature (intermittent)	-40 – 105 °C
Storage temperature	-40 – 80 °C
Operating pressure	700 – 1200 mbar
Operating humidity	0 – 100% RH
Enclosure protection (EN 60529)	IP55
Connector protection (EN 60529)	IP56 and IP57

Performance specifications

Accuracy at ambient (15 – 25 °C), 0 – 25% LFL	±2.5% LFL
Accuracy across operating range, 0 – 25% LFL	±5.0% LFL
Response time	< 27 s
Sensor recovery time	< 5 minutes in clean air
Alarm reset timer	5 minutes (can be customized)
Alarm response	Depending on the output mode: Relay open – LED red – Alarm flag
Reset setpoint	2.5% LFL below alarm setpoint

Electrical specifications

Output mode	Modbus	Modbus	Modbus and Relay⁽¹⁾	Relay⁽¹⁾
Supply voltage	12 – 24 V AC / DC ±10%	5 V DC ±10%	12 – 24 V AC / DC ±10%	12 – 24 V AC / DC ±10%
Power consumption	1.0 W max. 0.5 W average	0.4 W max. 0.3 W average	1.1 W max. 0.6 W average	1.1 W max. 0.6 W average
Digital output	RS485, 120 Ω termination included in sensor	RS485, 120 Ω termination included in sensor	RS485, 120 Ω termination included in sensor	–
Code number	073G2060	073G2061	073G2062	073G2063

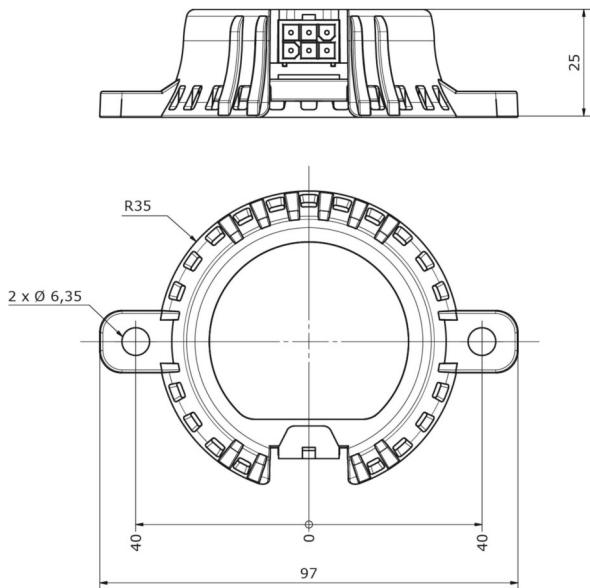
⁽¹⁾ Relay information: 30 V / 1 A max. switching load (signal relay)

Materials

Mechanical characteristics

Enclosure	PA66 25% glass filled (Top), PC (Bottom)
Electrical connection	Nylon
Net weight (depending on the format)	0.04 – 0.06 kg

Dimensions



NOTE:

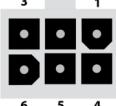
Dimensions are in mm, unless stated otherwise.

Disclaimer/Information:

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

Connections

Electrical connections

Type code	Standard (6 PIN)
	
Electrical connection, Modbus	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
Electrical connection, relay	Pin 1: Supply voltage Pin 2: Earth/Ground Pin 3: Not connected Pin 4: Not connected Pin 5: Input relay Pin 6: Normally open contacts output
Electrical connection, dual output	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 contacts output
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
EU Declaration	EU-declaration 073R0004.00	Danfoss	EU RoHS, EMC
Manufacturer's Declaration	Manufacturers declaration 073R0006.00	Danfoss	Compliance misc. Standards
Manufacturer's Declaration	Manufacturers declaration 073R0007.00	Danfoss	ATEX
Electrical Safety Certificate	UL TEC-03911-M1	UL - Underwriters Laboratories inc.	Compliance misc. Standards
Export Control Declaration	Gas sensor	Danfoss	
Electrical Safety Certificate	Safety Compliance Certificate	UL Demko - UL International DEMKO A - S	Explosive

Contact details

Online support

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