



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx ULD 23.0014U**

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[Certificate history](#)

Status: **Current**

Issue No: 0

Date of Issue: 2023-12-12

Applicant: **Danfoss A/S**
Bldg E14-S1A
Nordborgvej 81
6430 Nordborg
Denmark

Ex Component: Pressure Transmitters, DST P1**

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased Safety "ec"**

Marking: Ex ec IIC Gc

Approved for issue on behalf of the IECEx
Certification Body:

Position:

Signature:
(for printed version)

Date:
(for printed version)

Katy A. Holdredge

Senior Staff Engineer

2023-12-12

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

UL Solutions (Demko)
Borupvang 5A
Ballerup DK-2750
Denmark





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Manufacturer: **Danfoss A/S**
Bldg E14-S1A
Nordborgvej 81
6430 Nordborg
Denmark

Manufacturing locations: **Danfoss Ltd.**
No. 9 Quanhui Road
Wuqing Development Area
301700 Tianjin
China

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The component and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the component listed has successfully met the examination and test requirements as recorded in:

Test Report:

DK/ULD/ExTR23.0016/00

Quality Assessment Report:

DK/ULD/QAR12.0002/10



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Ex Component(s) covered by this certificate is described below:

The Danfoss DST P1 series pressure transmitter is designed for demanding refrigeration, air conditioning and industrial cooling applications. There are three signal output types, Voltage, Current and Ratio-metric.

Please see Annex for additional information.

SCHEDULE OF LIMITATIONS:

- Device shall be tested for temperature suitability in end application. Hottest component achieved 97.4°C in a 40°C surrounding air temperature. A rise of 57.4K should be considered in end application.
- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with IEC 60079-0.
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment.

Annex:

[Annex to IECEx ULD 23.0014U Issue 0.pdf](#)

Annex to Certificate No.:

IECEx ULD 23.0014U

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TYPE DESIGNATION

The Danfoss DST P1 series pressure transmitter is designed for demanding refrigeration, air conditioning and industrial cooling applications. There are three signal output types, Voltage, Current and Ratio-metric.

The nomenclature is as follows:

	DST P1	A	B	
I	-	Model Identifier		
II	-	1 Digit signifying industry segment	0	Engine and Mobile Hydraulic
			1	RAC
			2	Industrial
			3	Marine
			4	Water and Air
			5	Hydrogen
III	-	1 Digit signifying output technology	0	Analog
			B	BUS
			6	Stainless Steel (# Note 1)
Pe	-	Measuring range		-1 to 50 bar (or any range within this specification)
				-14 to 726 psi (or any range within this specification)
Out	-	Output signal (Min. and Max.)	4-20 mA	(8-28 Vdc min/max supply)
			0-5 Vdc	(8-32 Vdc min/max supply)
			5-95% Ratio-metric V sup	(5V ± 0.5 Vdc supply)
			CANbus	(8-32 Vdc min/max supply)

Note 1 – DST P146 Stainless Steel 316L available with all output signals as described in Nomenclature identifier Out.

Operating temperature -40°C to +100...135°C depending on connector, see Instructions.

Electrical connector colour coding:

- Black: High pressure profile
- Green: Low pressure profile

MARKING

Marking has to be readable and indelible; it has to include the following indications:





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On smallest packaging (example):-

PRESSURE TRANSMITTER



DST P110

6430 Nordborg,
Denmark

075G4004

Single code 075G1004



MADE IN CHINA