[1] **UNITED KINGDOM CONFORMITY ASSESSMENT**

TYPE EXAMINATION CERTIFICATE

[2] **Component Intended for use on/in a Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended by UKSI 2019:696)**

[3] Type Examination Certificate No.: **UL23UKEX2865U Rev. 0**

[4] Component: **Pressure sensors, DST P1****

[5] Manufacturer: **Danfoss A/S**

[6] Address: **Bldg E14-S1A, Nordborgvej 81, 6430 Nordborg, Denmark**

[7] This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] UL International (UK) Ltd certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations. The examination and test results are recorded in the confidential report **DK/ULD/ExTR23.0016/00**.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN IEC 60079-7:2015/A1:2018**

Except in respect of those requirements listed at section 19 of the schedule to this certificate.

[10] The sign “U” is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as the basis for certification of an equipment or protective system.

[11] This TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified component. Further requirements of the Regulations apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:

II 3 G Ex ec IIC Gc

Certification Officer
Andrew Moffat

This is to certify that the sample(s) of the Product described herein (“Certified Product”) has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the UKEx Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL’s prior written approval.

Date of issue: 2023-12-18

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Schedule
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[15] Description of Component

he Danfoss DST P110 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	II	III

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

The optical radiation output of the product with respect to explosion protection, according to Schedule 1 clause 16 of the Regulation 2016 No. 1107 (as amended by UKSI 2019:696) is not covered in this certificate.

Routine tests
None

[16] Test Report No. (associated with this certificate issue)

The test report no. is provided under item no. [8] on page 1 of this Type Examination Certificate.

[17] 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.

[18] Conditions of certification:

None

[19] Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

The trademark Danfoss will be used as the company identifier on the marking label.

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[20] Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
SCHEMATIC Current output 4-20mA	075C0002	02	2021-02-10
DST P1XX ATEX Approval (7 pages)	075G9035	00	2023-12-11
SCHEMATIC (4 pages)	075C0003	01	2021-07-27