

[1]

TYPE EXAMINATION CERTIFICATE



[2]

**Component intended for use on/in an Equipment or Protective System
Potentially Explosive Atmospheres
Directive 2014/34/EU**

[3]

Type Examination Certificate Number: **UL 23 ATEX 3017U 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 Component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8]

UL International Demko A/S 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 Annex II to Directive 2014/34/EU of 26 February 2014.

The examination and test results are recorded in confidential report number: **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 item 18 of the Schedule.

[10]

The sign "U" placed behind the certificate number indicates that this certificate should not be confused with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems. "Schedule of Limitations" is listed under item 17 of this certificate.

[11]

This Type Examination Certificate relates only to the technical design of the specified product and not to specific items of component subsequently manufactured.

[12]

The marking of the component shall include the following:



II 3 G Ex ec IIC Gc

Certification Manager

Thomas Wilson

This is to certify that the sample(s) of the Component described herein ("Certified Component") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the component 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 component. The Manufacturer are 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: 2023-12-12

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

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[14]

Schedule

TYPE EXAMINATION CERTIFICATE No.

UL 23 ATEX 3017U Rev. 0

[15]

Description of Component:

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	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 0 Analog B BUS 6 Stainless Steel (# Note 1)
III	-	1 Digit signifying output technology	
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 Annex II clause 1.3.1 of the Directive 2014/34/EU is not covered in this certificate.

Routine tests:

None

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. 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 EN 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]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.



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