1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **KIWA 17ATEX0053X** Issue: **3**

4 Equipment: **Temperature Transmitter, Model IPAQ C530X**

5 Applicant: **INOR Process AB**

6 Address: Travbanegatan 10
213 77 Malmö
Sweden

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN IEC 60079-0: 2018 EN 60079-11: 2012

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:

II 1 G
Ex ia IIC T6 ... T4 Ga

Signed:

M Halliwell
Title: Director of Operations

PRODUCTS
RvA C 652

Project Number 80213752

SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE **KIWA 17ATEX0053X**
Issue 3

13 **DESCRIPTION OF EQUIPMENT**

In-head Temperature Transmitter Model IPAQ C530X is a loop powered device that converts the measurements signals of temperature sensors (RTD or thermocouple) or resistance or mV signals into a 4 – 20 mA output signals with HART communication.

The transmitter is designed to be mounted in to a Form B or larger connection head according to EN 50446.

The transmitter is provided with a USB port and NFC technology for service and configuration.

Ambient temperature range:

P_i	Temperature class	Ambient temperature range
900 mW	T6	-40°C to +55°C
	T5	-40°C to +70°C
	T4	-40°C to +85°C
700 mW	T6	-40°C to +60°C
	T5	-40°C to +75°C
	T4	-40°C to +85°C

Electrical data:

Supply and output circuit (terminals +6 and -7):
In type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit; with following maximum values:
U_i = 30 V; I_i = 100 mA; P_i = 0,9 W; C_i = 23,1 nF; L_i = 20 µH.

Sensor circuits (terminals 1 ... 5):
In type of protection intrinsic safety Ex ia IIC, with following maximum values:
U_o = 6,5 V; I_o = 11,7 mA; P_o = 19,1 mW; C_o = 24 µF; L_o = 400 mH.

Communication port (mini USB connector):
Only for connection to the associated ICON-X or ICON Interface.

The sensor circuits are infallible galvanically isolated from the power supply and output circuit and withstand a test voltage of 500 VAC for 1 minute.

The USB circuit is protected in accordance with the requirements of type of protection intrinsic safety Ex ia IIC, and has following maximum values (for information only):

U_i = 10 V, I_i = 100 mA, P_i = 0,25 W and
U_o = 30 V, I_o = 18 mA, P_o = 135 mW, C_o = 66 nF, L_o = 40 mH.

Variation 1 - This variation introduced the following changes:

i. Change of electronics and printed circuit board layout.
ii. Update of the ambient temperature range related to the supply input power parameter.
iii. Update of the marking plates, installation manual and control drawing.
iv. Update of a standard from EN 60079-0: 2012 + A11: 2013 to EN IEC 60079-0: 2018

Variation 2 - This variation introduced the following changes:

i. To permit the update of the address on the side label to list the postal address in place of PO box address.
ii. To permit minor change to the construction of the transformer.
iii. To permit minor technical / administrative changes to drawings not affecting previous assessments.
iv. Remove the reference to the obsolete Standard DIN 43729 from the description.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
1	15 March 2018	171101121-1	The release of the prime certificate.
2	25 May 2021	R80072677A	The introduction of Variation 1.
3	27 August 2024	R80213750A	The introduction of Variation 2.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

15.1 The communication port (USB connection) may only be connected to the associated ICON Interface if the temperature transmitter is outside of the hazardous area.

- If certified ICON-X interface is used, a connected sensor may be located in the hazardous area.
- If non-Ex ICON interface is used, a connected sensor shall not be located in the hazardous area.

15.2 For the applicable ambient temperature range, refer to the Product Description.

15.3 The transmitter shall be mounted in to a suitable enclosure that provides a degree of protection of at least IP20.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF MANUFACTURE

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

Certificate Annexe

Certificate Number: **KIWA 17ATEX0053X**

Equipment: **Temperature Transmitter, Model IPAQ C530X**

Applicant: **INOR Process AB**

Issue 1: Refer to the report stated in section 14.2

Issue 2

Drawing	Sheets	Rev.	Date (Stamp)	Title
APPR DESC 821204-2	1 to 14	2	14 Apr 21	Description of IPAQ C530X / OPTITEMP TT 53 C Ex
APPR BOM 821204-2	1 to 15	2	14 Apr 21	List of components IPAQ C530X / OPTITEMP TT 53 C Ex
APPR MRPRT 821204-03	1 to 5	-	14 Apr 21	Temperature tests on transmitters
4006524701	1 to 65	3	14 Apr 21	IPAQ C530/ R530 / C530X / R530X-en Manual
MNB SC-1506	1 of 1	2	14 Apr 21	Model Number Breakdown SC-1506
73C530X0000	1 to 3	9	14 Apr 21	Schematic diagram IPAQ C530X / OPTITEMP TT 53 C Ex
Spec 4006046708	1 to 15	1	14 Apr 21	PCB specification and layout C530C / TT 53 C Ex
4006360501	1 of 1	2	14 Apr 21	IPAQ C530X Installation and Control drawing
80SKY49908EX	1 of 1	3	14 Apr 21	Etikett/Label 138 x 8 mm
4007456001	1 of 1	1	14 Apr 21	IPAQ C530X Label 1, 138x8 Dwg 1(Ex Basic)
4007456101	1 of 1	1	14 Apr 21	IPAQ C530X Label 2, 38x25 Dwg 1(Ex Basic)
4007456002	1 of 1	1	14 Apr 21	IPAQ C530X Label 1, 138x8-Ex (ATEX+IECEx)
4007456103	1 of 1	1	14 Apr 21	IPAQ C530X Label 2, 38x25-Ex (ATEX+IECEx)

Issue 3

Drawing	Sheets	Rev.	Date (Stamp)	Title
APPR DL 821204_2	1 of 1	-	19 Jul 24	IPAQ C530X, list of schedule and related drawings.