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

Certificate No.: **IECEx KIWA 17.0029X**

Page 1 of 4

Certificate history:
Issue 1 (2021-05-26)
Issue 0 (2018-03-15)

Status: **Current**

Issue No: 2

Date of Issue: 2024-08-27

Applicant: **INOR Process AB**
Travbanegatan 10
213 77 Malmö
Sweden

Equipment: **Temperature Transmitter, Model IPAQ R530X**

Optional accessory:

Type of Protection: **Intrinsically Safe**

Marking: Ex ia IIC T6 ... T4 Ga

Approved for issue on behalf of the IECEx Certification Body: **Dave Magee**

Position: **Senior Director of Operations, Toronto**

Signature:
(for printed version)

Date:
(for printed version)

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:

CSA Group
178 Rexdale Blvd
Toronto Ontario M9W 1R3
Canada

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Manufacturer: **INOR Process AB**
Travbanegatan 10
213 77 Malmö
Sweden

Manufacturing locations: **INOR Process AB**
Travbanegatan 10
213 77 Malmö
Sweden

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 equipment 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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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 equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

NL/KIWA/ExTR17.0030/00 NL/KIWA/ExTR17.0030/01 NL/KIWA/ExTR17.0030/02

Quality Assessment Report:

DK/ULD/QAR11.0003/09

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Rail mounted Temperature Transmitter Model IPAQ R530X, with a non-metallic enclosure, is a loop powered device that converts the measurement signals of temperature sensors (RTD or thermocouple) or resistance or mV signals into a 4 - 20 mA output signal with HART communication.

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

Electrical data

Supply and output circuit (terminals +21 and -22):
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 ... 4):
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.

Ambient temperature range:

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

SPECIFIC CONDITIONS OF USE: YES as shown below:
- 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.
- For the applicable ambient temperature range, refer to the General product information.
- The transmitter shall be mounted in to a suitable enclosure that provides a degree of protection of at least IP20.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This issue, issue 2, introduces the following changes:

1. To permit the update of the address on the side label to list the postal address in place of PO box address.
2. To permit minor change to the construction of the transformer.
3. To permit minor technical / administrative changes to drawings not affecting previous assessments.