

CERTIFICATE OF CONFORMITY

1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM18US0260X
3. **Equipment:** IPAQ C530X / IPAQ R530X
(Type Reference and Name) Temperature Transmitter/Signal Conditioner
4. **Name of Listing Company:** INOR Process AB
5. **Address of Listing Company:** PO Box 9125
SE-20039 Malmö
Sweden
6. The examination and test results are recorded in confidential report number:

PR450917 dated 29th July 2019
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2018, FM Class 3610:2018, FM Class 3810:2018,
ANSI/ISA 60079-0:2013, ANSI/ISA 60079-11:2014, ANSI/ISA 61010-1:2012
8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
10. **Equipment Ratings:**

Intrinsically Safe for Class I, Division 1, Groups A, B, C, and D and Intrinsically Safe for Class I, Zone 0, AEx ia IIC Ga in accordance with drawing ZZ 4006360501/ZZ 4006360701 with a temperature rating of T6...T4;
With $P_i \leq 700\text{mW}$: T6 Ta = -40°C to +60°C, T5 Ta = -40°C to +75°C, T4 Ta = -40°C to +85°C.
With $P_i \leq 900\text{mW}$: T6 Ta = -40°C to +55°C, T5 Ta = -40°C to +70°C, T4 Ta = -40°C to +85°C.

Certificate issued by:



J.E. Marquedant
VP, Manager, Electrical Systems

29 July 2019

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

SCHEDULE



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11. The marking of the equipment shall include:

Intrinsically Safe Class I Division 1, Groups A, B, C, D; T6...T4

Class I, Zone 0, AEx ia IIC T6 ...T4 Ga

Ta: -40 to 55/70/85°C for T6/T5/T4

12. **Description of Equipment:**

General – The IPAQ C530X and R530X is a programmable transmitter/signal conditioner designed mainly for temperature measurements in the process industry. It is a two-wire, 4-20 mA current-loop transmitter with HART digital communication and power supply on the 4-20 mA wires. Zero, span, and linearization in the input processing are calibrated either through a NFC tag to the transmitter via NFC interface in a smart phone, via the HART interface or a PC's USB port to the transmitter via a USB interface, eliminating manual trimming. The different communication interfaces NFC / USB are only used when the transmitter is in a safe, non-hazardous area, except for Ex certified smart phones. The USB interface must be used with the ICON-X Interface. A non-volatile memory stores calibration and configuration settings.

Construction - The IPAQ C530X/R530X is housed in a small cylindrical enclosure (C530X) or small square DIN Rail Mount housing (R530X), consisting of ABS Polycarbonate and filled with a casting compound.

Ratings - The IPAQ C530X/R530X Transmitter has the following electrical ratings;

In type of protection intrinsic safety, Energy limitation parameters:

Ui/Vmax:30Vdc, Ii/Imax:100mA, Pi/Pmax:900mW, Li:20µH, Ci:23.1nF (4-20mA loop/power)

Uo/Voc:6.5Vdc, Io/Isc:11.7mA, Po:19.1mW, Lo/La:400mH, Co/Ca:24µF (sensor output)

IPAQ C530X Temperature Transmitter/Signal conditioner (Hockey Puck Enclosure)

IPAQ R530X Temperature Transmitter/Signal conditioner (Square Din Rail Enclosure)

13. **Specific Conditions of Use:**

1. The communication interface (USB connection) may only be connected to the certified ICON-X interface.

When the ICON-X is connected, the temperature transmitter shall be outside of the hazardous area; a connected sensor may be located in the hazardous area.

2. For the applicable ambient temperature range see control drawing 4006360501/4006360701.

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

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

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SCHEDULE



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A copy of the technical documentation has been kept by FM Approvals.

16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
29 th July 2019	Original Issue.

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