





# EC-Type Examination Certificate

- 2 Equipment and protective systems intended for use in potentially explosive atmospheres – Directive 94/9/EC
- 3 EC-Type Examination Certificate Number: KIWA 14ATEX0023 X Issue: 1
- 4 Equipment: Temperature Transmitter Model IPAQ R520X

and Model IPAQ R520XS

- 5 Manufacturer: INOR Process AB
- 6 Address: PO Box 9125, 20039 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 Kiwa Nederland B.V., notified body number 0620 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential ATEX Assessment Report No. 141201002-1.

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

EN 60079-0: 2012 EN 60079-11: 2012 EN 60079-26: 2007

- 10 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.
- 11 This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- 12 The marking of the equipment shall include the following:



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Ex ia [ia Ga] IIC T6 ... T4 Gb

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Pieter van Breugel

Certification Officer

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# 13 SCHEDULE

## 14 to EC-Type Examination Certificate KIWA 14ATEX0023 X Issue No. 1

#### 15.1 **Description**

Rail mounted Temperature Transmitters Model IPAQ R520X and Model IPAQ R520XS are loop powered devices that convert the measurement signals of temperature sensors (RTD and thermocouples) or resistance or mV signals into a 4 - 20 mA signal with HART communication. The transmitter is provided with two galvanically connected sensor channels that are isolated from all other circuits to a test voltage of 500 Vac.

The transmitter is provided with a USB connector for connection of a programming device.

Ambient temperature range: -20 °C to +50 °C for temperature class T6;

-20 °C to +65 °C for temperature class T5;

-20 °C to +70 °C for temperature class T4.

#### 15.2 Electrical data

Supply/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:  $U_i = 30 \text{ V}$ ,  $I_i = 100 \text{ mA}$ ,  $P_i = 0.9 \text{ W}$ ,  $C_i = 12.1 \text{ nF}$ ,  $L_i = 10 \text{ µH}$ .

Sensor input circuits (terminals 1 ... 8): In type of protection intrinsic safety Ex ia IIC, with following maximum values:

 $U_0 = 6.6 \text{ V}$ ,  $I_0 = 28.9 \text{ mA}$ ,  $P_0 = 46 \text{ mW}$ ,  $C_0 = 581 \text{ nF}$ ,  $L_0 = 25 \text{ mH}$ .

Maintenance Communication Channel (MMC) (mini USB connector): Only for connection to the associated ICON interface.

#### 15.3 Instructions

The instructions provided with the equipment shall be followed in detail to assure safe operation.

### 16 ATEX Assessment Report

No. 141201002-1.

#### 17 Specific conditions of use

- The communication port (USB connection) may only be connected to the associated ICON interface, if the temperature transmitter is outside the hazardous area and with no sensor connected to it that is in the hazardous area.
- For the applicable ambient temperature range, refer to section 15.1.
- The transmitter shall be mounted into a suitable enclosure that provides a degree of protection of at least IP20.

#### 18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at section 9.

## 19 Test documentation

As listed in ATEX Assessment Report No. 141201002-1.