



# 1. TYPE EXAMINATION CERTIFICATE

- 2. Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
- 3. Type Examination Certificate Number: ITS09ATEX26305X
- 4. Equipment or Protective System: IPAQ C520
- 5. Manufacturer: INOR Process AB
- 6. Address: PO Box 9125, SE-200 39 Malmö, Sweden
- 7. This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8. Intertek Testing and Certification Limited certifies that this equipment or protective system 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 94/9/EC of 23 March 1994

The examination and test results are recorded in confidential Report: ES3567, dated 2009-05-15

- 9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards EN 60079-15: 2005 except in respect of those requirements referred to at item 16 of the Schedule.
- 10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- 11. This Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate..
- 12. The marking of the equipment or protective system shall include the following:

⟨Ex⟩II 3G Ex nL IIC T4-T6

Intertek Testing & Certification Limited Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB Tel: + 44 (0)1372 370900 Fax: +44 (0)1372 370977

http://www.Intertek.com

Registered No 3272281 Registered Office: 25 Savile Row London W1X 1AA

This certificate may only be reproduced in its entirety and without any change, schedule included. and is subject to Intertek Testing and Certification Conditions for Granting Certification.

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Peter T. Lauritzen

Date: 02 June 2009

**Deputy Certification Officer** 





# SCHEDULE TYPE EXAMINATION CERTIFICATE NUMBER: ITS09ATEX26305X

## 13. Description of Equipment or Protective System

IPAQ C520 is a programmable transmitter 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 through a PC's USB port to the transmitter via a USB interface, eliminating manual trimming. The USB interface is only used when the transmitter is in safe, non-hazardous area. A non-volatile EEPROM stores calibration and configuration settings.

IPAQ C520 must be mounted in an enclosure with at least IP 54 for non-incendive use (Category 3G, Zone 2) and it can be powered with a standard Power Supply (mounted outside the hazardous area). The transmitters PCBs and components are completely molded in casting compound reducing high temperature of small components and internal sparks on the PCB.

## Output port (J5-6 and J5-7)

Ui: 36 VDC Ci: 12.1 nF Li: 10 μH

## Sensor port (J5-1, J5-2; J5-3, J5-4 and J5-5)

Uo: 3.3 VDC lo: 1.8 mA Po: 1.5 mW Co: 500 μF Lo: 500 mH

## Comm.port

Ui: 10 VDC Ii: 100 mA Pi: 0.25 W Ci: 10 nF Li: 10 µH

### **Ambient temperature:**

T6: -40°C< Ta < +65 °C T5: -40°C< Ta < +80 °C T1-T4: -40°C< Ta < +85 °C

## 14. Report NUMBER

Intertek Report ETS3567, dated 2009-05-15.

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# SCHEDULE TYPE EXAMINATION CERTIFICATE NUMBER: ITS09ATEX26305X

- 15. CONDITIONS OF CERTIFICATION:
  - a. Special Conditions for safe use

The Communication port used for configuration and calibration is not to be used in hazardous area

The transmitter IPAQ C520 shall be mounted in DIN standard head or similar with an IP rating of IP54 for intrinsic safety.

For ambient temperatures below -10°C and above +70°C special wiring precautions must be considered and suitable field wiring must be used

b. Conditions For Use (Routine Tests)

Electric strength test according to EN60079-15: 2005 § 34.2.1 shall be carried out

16. Essential Health and Safety Requirements (EhsR's)

The relevant EHSR's that have not been addressed by the standards listed in this certificate have been identified and assessed in Intertek Report ETS3567, dated 2009-05-15.

17. DRAWINGS

Scheduled and related drawings are listed in 88DRW00026-1 dated 2009-05-08

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# SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE

- 2. Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC
- Supplementary 1 to EC-Type Examination Certificate Number: ITS09ATEX26305X
- 4. Equipment or Protective System:

IPAQ C520 and IPAQ C520S

Manufacturer:

**INOR Process AB** 

- 6. Address: PO Box 9125, SE-200 39 Malmö, Sweden
- 7. This supplementary certificate extends EC-Type Examination Certificate Number to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said Certificate but having variations specified in the Schedule attached to this certificate and the documents therein referred to.

Intertek Report INT-DK 10 044713, ETS3889 dated 20 January 2010.

This Supplementary Certificate shall be held with the original Certificate ITS09ATEX26305X prepared under the following job number: INT-DK 09 040354, ETS3567

P Moss Certification Officer 28<sup>th</sup> January 2010

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# Schedule

## SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE NUMBER: ITS09ATEX26305X

#### **VARIATION ONE**

Description of the Variation 1 to the Equipment or Protective System.

This Variation 1 is issued because drawings 88SCH07504-1 and 88SCH07506-2 have been updated.

These updates means that the list of drawings have changed from 88DRW00026-1 dated 2009-05-08 to 88DRW00026-2 dated 2010-01-18

Please refer to below report for details

#### Report No.

Intertek Report Ref: INT-DK 10 044713, ETS3889

#### CONDITIONS OF CERTIFICATION

- (a) Special Conditions for Safe Use:
  - Please refer to original certificate for detailed description.
- (b) Conditions for Use (Routine Tests):

Please refer to original certificate for detailed description.

### **Essential Health and Safety Requirements**

See original certificate

#### **REVISED DRAWINGS**

Scheduled and related drawings are listed in 88DRW00026-2 dated 2010-01-18

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