EC-TYPE EXAMINATION CERTIFICATE



[2] Equipment or Protective System intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

- [3] EC-Type Examination Certificate Number: **DEMKO 03 ATEX 134077X**
- [4] Equipment or Protective System: 2-Wire Transmitter, MESO-HX
- [5] Manufacturer: Inor Process AB
- [6] Address: Box 9125, 200 39 Malmö, Sweden
- [7] This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to 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 report no. 134077

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

EN 60079-0:2006 EN 60079-11:2007 EN 60079-26:2007

- [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 EC-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 the certificate.

[12] The marking of the equipment or protective system shall include the following:



Certification Manager

Jan-Erik Storgaard

Notified Body

Date of issue: 2003-03-17 Re-issued: 2010-08-23

UL International Demko A/S, Lyskaer 8, P.O. Box 514, DK-2730 Herlev, Denmark, Tel. +45 44 85 65 65, info.dk@dk.ul.com

www.ul-europe.com



Underwriters Laboratories

[13]

[14]

Schedule EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 03 ATEX 134077X

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[15] <u>Description of Equipment or protective system</u>

MESO-HX is an isolated two-wire transmitter intended for temperature measurement in process industry. The input signal is either of resistance or voltage type (E.g. Thermocouples, Pt100, Pt1000 (up to 2000 ohm) and mV-inputs between –1V to +1V). The transmitter is calibrated and configured with a PC, through the output. The transmitter is intended to be mounted in hazardous area and is powered from an intrinsic safe power supply unit, which is mounted outside the hazardous area.

Nomenclature for type: NA

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range	Temperature clas
-40 °C to +85 °C	T4
-40 °C to +65 °C	T5
-40 °C to +50 °C	T6

Electrical data

Intrinsically safe specifications:

The equipment must be electrically connected (terminal 5 and 6) via an approved or certified galvanically isolated interface/ zener barrier placed outside the hazardous area.

Uı		30 V	Uo : 30 V
li		100 mA	lo : 25 mA
Ρi		0,9 W	Po : 190 mW
Li		1 mH	Lo : 19 mH
Ci	8 :	1 nF	Co : 31 nF

The terminals 1, 2, 3 and 4 of the transmitter may only be connected to transducers complying with 'Simple Apparatus' according to EN 60079-11 clause 5.7.

Installation instructions

The apparatus shall be installed into a enclosure at least IP20.

Mounting instructions Refer to "Instructions".

[16] Report No.

Project Report No.: 134077-05/SR6661678 (Hazardous Location Testing)

Documents:

The Schedule documents are listed in the document entitled "List of scheduled and related drawings", S-9063, dated 2010-08-20.



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[14]

Schedule EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 03 ATEX 134077X

Report: 134077-05/SR6661678

[17] Special conditions for safe use:

- The equipment must be electrically connected via an approved or certified galvanically isolated interface/zener barrier placed outside the hazardous area.
- The transmitter is calibrated and configured with a PC, which can be connected to the transmitter output (terminal 5 and 6). When programming the transmitter by PC and communication interface the intrinsically safe data shall be observed.
- The apparatus must be installed in an enclosure having an Ingress Protection for the actual use with an Ingress
 Protection at least IP20. The requirement from EN 60079-26, clause 4.5.2 (The chargeable non-conductive surface
 or its projection shall be limited to 400 mm² for apparatus of Group IIC) is not fulfilled. When mounted in Excompatible enclosures, such as junction boxes or DIN Standard Head, the requirement is fulfilled.

[18] <u>Essential Health and Safety Requirements</u>

Concerning ESR this Schedule verifies compliance with the ATEX directive only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.

Additional information

"Isolation input/output/PC" of the Type MESO-HX mentioned in the data sheet, indicates signal isolation only. It shall not be interpreted as an IS galvanic isolation like an isolating barrier. Therefore ordinary care in selecting barrier and grounding should be considered.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

Certification Manager Jan-Erik Storgaard

Date of issue: 2010-10-07

Notified Body

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