

# EC-TYPE EXAMINATION CERTIFICATE



- [1]
- [2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**
- [3] EC-Type Examination Certificate Number: **DEMKO 06 ATEX 141332X Rev. 1**
- [4] Equipment or Protective System: **Two-wire Inhead Transmitter, TT 30 C<sup>Ex</sup>**
- [5] Manufacturer: **KROHNE Messtechnik GmbH.**
- [6] Address: **Ludwig-Krohne-Strasse 5, 47058 Duisburg, Germany**
- [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. **11CA31882-06ATEX141332X**
- [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:

II 1G    Ex ia IIC T4-T6

## Certification Manager

Jan-Erik Storgaard

## Notified Body

**Date of issue:** 2006-12-19

**Re-issued:** 2011-09-08

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**Schedule**  
**EC-TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 06 ATEX 141332X Rev. 1**  
**Report: 11CA31882-06ATEX141332X**

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Description of Equipment or protective system

The OPTITEMP TT 30 C<sup>®</sup> is a two-wire transmitter intended for temperature measurements in process industry. The transmitter is made for mounting in DIN standard head. The transmitter is calibrated and configured with a PC, which can be connected to the transmitter via an outlet. The transmitter is intended to be mounted in hazardous area. The transmitter is powered with an intrinsic safe power supply unit, which is mounted outside the hazardous area.

Electrical data

Intrinsically safe specifications:

Input (Sensor)	Output (current loop)
Uo: 30 V	Ui: 30 V
Io: 25 mA	Ii: 100 mA
Po: 188 mW	Pi: 0,9 W
Lo: 50 mH	Li: 0 mH
Co: 66 nF	Ci: 1 nF

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

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

Installation instructions

For ambient temperatures below -10 °C and above +60 °C use field wiring suitable for both minimum and maximum ambient temperature.

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Report No.

Project Report No.: 11CA31882-06ATEX141332X (Hazardous Location Testing)

Documents:

The Schedule drawings are listed in the document S-9619-B entitled "List of scheduled and related drawings" dated 2009-08-06.

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Special conditions for safe use:

- The transmitter must be electrically connected via a certified isolating interface/zener barrier placed outside the hazardous area.
- The transmitter is to be mounted in an enclosure providing IP20 or better.
- The transmitter is to be calibrated and configured with the certified PC Cable, certificate DEMKO 06 ATEX 141337X, which can be connected to the transmitter via an outlet. The transmitter must not be calibrated / configured after mounting unless the area is known to be non-hazardous.

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Essential Health and Safety Requirements

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

Additional information

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.

