

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 08 ATEX 0810742X Rev. 2**

[4]

Equipment or Protective System: **TX200 Series Pressure Transmitters**

[5]

Manufacturer: **United Electric Controls**

[6]

Address: **180 Dexter Avenue, PO Box 9143, Watertown, MA 02472, USA**

[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. **2025900.441191**

[9]

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

EN 60079-0:2012+A11:2013

EN 60079-1:2007

EN 60079-31:2009

[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 2 G

Ex d IIC T5 Gb



II 2 D

Ex tb IIIC T90°C Db

Certification Manager

Jan-Erik Storgaard

Notified Body

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2008-12-12

Re-issued: 2014-11-17

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Schedule

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EC-TYPE EXAMINATION CERTIFICATE No.

DEMKO 08 ATEX 0810742X Rev. 2

Report: 2025900.441191

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Description of Equipment or protective system

The devices are hermetically sealed pressure-operated transmitters with a stainless steel flameproof housing. Model A is identical to Model B except for model designation, internal circuitry, and Model A is provided with magnetically coupled external adjustment controls. Model H is identical to Model B, except for model designation, internal circuitry and Model H has an additional output signal of HART protocol. The electrical wires are permanently mounted by the manufacturer and cannot be replaced.

Nomenclature:

$\frac{TX200}{I}$	$\frac{A}{II}$	$\frac{05}{III}$	$\frac{X}{IV}$	$\frac{1}{V}$	$\frac{T}{VI}$	$\frac{M460}{VII}$							
I	Type TX200	II	Model B= Non-adjustable A= Adjustable H= HART Protocol	III	Pressure Range Any alphanumeric character indicating a pressure range between 0 psi to 40000 psi.	IV	Pressure Reference 'X' = 'X' may be any alphanumeric character that represents type of pressure reference such as: psi, bar, in. W.C., in. Hg, etc.	V	Pressure Connections Any alphanumeric character indicating different pressure connections complying with the Pressure Equipment Directive	VI	Electrical Output T = 4-20 mA D = 1-5 Vdc H = 4-20mA with HART Protocol "X" = Any range between 0-10 Vdc, where "X" may be any other alphanumeric character not listed here.	VII	Options Four character alphanumeric code indicating different accessories/variations that do not affect the flameproof properties, electrical ratings or pressure ratings as indicated above. M460 – External Ground Connection M441 – M20 Electrical Conduit Thread

Alternate Type Variants indicating customer specification number TX200 followed by a five character alphanumeric code indicating model, pressure range, pressure reference, pressure connections, electrical output and miscellaneous options that does not affect flameproof properties, max. electrical ratings and mechanical ratings as indicated above. The alternate nomenclature is customer specific.

Temperature range

The ambient temperature range is -40 °C to +80 °C.

Electrical data

Input	Output
10-36 Vdc, 4-20 mA	4-20 mA, HART optional
10-30 Vdc, 5.7 mA	1-5 Vdc
10-30 Vdc, 15.21 mA	Any range between 0-10 Vdc

Installation instructions

See special conditions of safe use below.



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Schedule

[14]

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Routine tests

The gastight welds located between the housing and pressure connection, housing and the conduit connection, the pressure connection and the diaphragm, and between the housing and the button insert must be helium leak tested on 100% of production in accordance with the manufacturer's procedure G-60.

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Report No.

Project Report No.: 2025900.441191(Hazardous Location Testing)

Documents:

Description:	Drawing No.:	Rev. Level:	Date:
TX200 Certification Drawing Including Label	B-13815	L	2014-10-01
TX200 Installation and Maintenance Instructions (4 sheets)	IMTX200	05	N/A
TX200H Installation and Maintenance Instructions (6 sheets)	IMTX200H	04	N/A
External Ground Screw Option (M460)	A-200-2	C	2013-06-28

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Special conditions for safe use:

- The wiring to the pressure transmitter must only be connected in a safe area or by a terminal box certified to EN 60079-0:2012+A11:2013, EN 60079-1:2007 and EN 60079-31:2009 or EN 60079-0:2012+A11:2013, EN 60079-7:2007, and EN 60079-31:2009 for hazardous locations.
- The epoxy resin shall not be subjected to a temperature greater than 125°C.
- External grounding screw (M460 option) is required if metal conduit is not used.
- The wires shall be protected against mechanical damage, e.g. by use of conduit.
- Electrical conduit fitting threaded connection: M20 x 1.5, 7 threads minimum engagement

[18]

Essential Health and Safety Requirements

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

The TX 200 Series Pressure Transmitters are suitable for Ingress Protection of IP 66 in accordance with EN 60529:1991 + A1:2000.

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.

