



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx UL 14.0107X issue No.:1
Status: **Current**
Date of Issue: **2014-11-11** Page 1 of 4

Certificate history:
Issue No. 1 (2014-11-11)
Issue No. 0 (2014-10-15)

Applicant: **United Electric Controls Co.**
180 Dexter Avenue
PO Box 9143
Watertown, MA 02472
United States of America

Electrical Apparatus: **TX200 Series Pressure Transmitters**
Optional accessory:

Type of Protection: **Flameproof "d", Dust Ignition Protection by Enclosure "tb"**

Marking: Ex d IIC T5 Gb
Ex tb IIIC T90°C Db
-40°C to +80°C

*Approved for issue on behalf of the IECEx
Certification Body:*

Paul T. Kelly

Position:

Principal Engineer, Global Hazardous Locations

*Signature:
(for printed version)*

Date:

2014-11-11

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

UL LLC
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America





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Manufacturer: **United Electric Controls Co.**
180 Dexter Avenue
PO Box 9143
Watertown, MA 02472
United States of America

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:
[US/UL/ExTR14.0140/00](#)

[US/UL/ExTR14.0140/01](#)

Quality Assessment Report:

[US/UL/QAR07.0002/07](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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.

Please see Annex for additional details.

CONDITIONS OF CERTIFICATION: YES as shown below:

The wiring to the temperature or pressure switch must only be connected in a safe area or by an approved terminal box certified to IEC 60079-0 Ed. 6, IEC 60079-1 Ed. 6, IEC 60079-31 Ed. 1 or IEC 60079-0 Ed. 6, IEC 60079-7 Ed. 4 and IEC 60079-31 Ed. 1 for hazardous locations.

The epoxy resin shall not be subjected to a temperature greater than 125°C.

An external earth screw is to be used (M460 option) if metal conduit is not used.

By the installation 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



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1: Clarification to the Conditions of Safe Use to include wiring to Increased Safety IEC 60079-7 junction boxes.

Annex to IECEx UL 14.0107X

Nomenclature:

TX200 A 05 X 1 I M460

I II III IV V VI 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.