

[1] **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 08 ATEX 0726203**

[4] **Equipment or Protective System: HART Communicator, Model 4150X**

[5] **Manufacturer: Meriam Process Technologies**

[6] **Address: 10920 Madison Ave., Cleveland, Ohio 44102 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. 07NK26203**

[9] **Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
EN 50014: 1997 E incl. A1+A2      EN 50020: 2002      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 1 G    EEx ia IIC T4**

On behalf of UL International Demko A/S

Herlev, 2008-02-29

Revised: 2008-06-23

Jan-Erik Storgaard  
Certification Manager

**UL International Demko A/S**

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Certificate: 08 ATEX 0726203

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## Schedule

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### EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 08 ATEX 0726203

[15] Description of Equipment or protective system

The Model 4150X is a portable, hand-held HART (Highway-Addressable Remote Transducer) communicator, used in the process control and instrumentation field. The device consists of an enclosure containing two circuit boards and six AA batteries. The device is provided with a rubber boot over the plastic enclosure. The plastic enclosure has approximate overall dimensions of 9 in. by 4 1/4 in. by 2 in. Consists of two molded halves secured together by 6 screws. The enclosure has a keypad and square graphics. The HART terminals and RS232 port are located at the top of the enclosure.

#### Temperature range

The ambient temperature range is:  $-5^{\circ}\text{C} \leq T_a \leq 50^{\circ}\text{C}$

#### Electrical data

The device is powered by six batteries in series and has been evaluated for use with the following:

Manufacturer	Part No.	Type
Duracell	MN1500	Alkaline
Duracell	PC1500	Alkaline
Varta	4906	Alkaline

#### Hart Terminals:

U<sub>i</sub> : 30V dc  
I<sub>i</sub> : 100mA  
C<sub>i</sub> : 0uF  
L<sub>i</sub> : 0mH

#### Installation instructions

See Special Conditions for Safe Use.

#### Mounting instructions

The device is portable.

#### Routine tests

None.

[16] Report No.

Project Report No.: 07NK26203 (Hazardous Location Testing)  
08NB21041

Drawings:

Description:	Drawing No.:	Rev. Level:	Date:
Schematic, MFC Main (6 pages)	9S000028	B	2007-12-03
Assy, MFC Main (3 pages)	9B000029	C	2008-02-05

### UL International Demko A/S

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Report: 08NB21041



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## Schedule

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### EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 08 ATEX 0726203

MFC PCB Bare Board	9P000088	A	2007-11-09
MFC ATEX Main Board (16 pages)	9P00088PN01	A	2007-11-07
Assy, Final MFC ATEX	9R000064	B	2008-02-13
Battery Door, MFC ATEX	Z4150-8	IR	2007-12-03
Mesh Window, MFC 4150	Z4150-6	B	2008-02-19
Main Keypad (2 pages)	26203-00	E	2007-11-28
Side Keypad	26381-00	B	2007-08-28
User Manual (40 pages)	9R000053	B	2008-04
Certification Namplate	9P000140	C	2008-02-13
Graphics Display Board	SH-950	A	1995-10-13

[17] Special conditions for safe use:  
None

[18] Essential Health and Safety Requirements

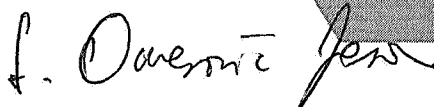
Concerning ESR this Schedule verifies compliance with the Ex standards only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.

Additional information

The Model 4150X has in addition passed the tests for Ingress Protection to IP40 in accordance with EN60529: 1991+A1:2001.

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.

On behalf of UL International Demko A/S



Jan-Erik Storgaard  
Certification Manager

Herlev, 2008-02-29  
Revised: 2008-06-22

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January 25, 2010

Timothy Lint  
Adalet/Scott Fetzer Co.  
4801 W. 150<sup>th</sup> St.  
Cleveland, OH 44135, USA

Our Reference: DEMKO 08 ATEX 0726203    Project: 10NK09964  
Your Reference: T. Lint 7/2/10  
Subject: Completion of Project 10NK09964: ATEX Investigation - Alternate Encapsulation of the Model 4150X HART Communicator.

The following revisions related to the above certificate number were submitted for our review.

- Two Alternate Encapsulations Sylgard 182 and 184, manufactured by Dow Corning.

The alternate encapsulations were considered acceptable as they belong to the same product family as the currently certified encapsulation, Part No. 255 from the same manufacturer, having an identical 200°C temperature rating and similar properties, and no tests were considered necessary.

UL Demko's (Notified Body)/UL's investigation of your product has been completed under the above project number and the subject product was determined to comply with the applicable requirements of the standards listed on your ATEX certificate DEMKO 08 ATEX 0726203:

- EN 50014:1997 E incl. A1 + A2, EN 50020:2002, and EN 60079-26:2007

These standards have been replaced by more current standards in the Official Journal. It is your responsibility to review the most up-to-date standards to determine whether your product still complies with the state-of-the-art requirements of the ATEX Directive (94/9/EC). The next time the product is revised and significant changes take place, we will need to evaluate your product to the current standards for compliance. At that time, contact UL and we will open a project to update your ATEX certificate to the current standards.

If you have any questions or comments, please feel free to contact me.

Very truly yours,

Casey Martin  
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