

[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**

**Jan-Erik Storgaard  
Certification Manager**

**Herlev, 2008-02-29**

**Revised: 2008-06-23**

**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:

Schematic, MFC Main (6 pages)  
Assy, MFC Main (3 pages)

#### Drawing No.:

9S000028  
9B000029

#### Rev. Level:

B  
C

#### Date:

2007-12-03  
2008-02-05

### UL International Demko A/S

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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

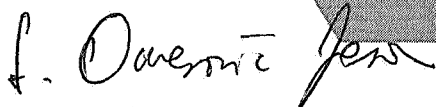
The Model 4150X has in addition passed the tests for Ingress Protection to IP40 in accordance with EN60529: 1991+A1:2001.

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

Herlev, 2008-02-29

Revised: 2008-06-22



Jan-Erik Storgaard  
Certification Manager

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