

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 11 ATEX 1057729X Rev. 1**

[4]

Equipment or Protective System: **Gas Detector, Series 3000 MkIII**

[5]

Manufacturer: **Honeywell Analytics Inc.**

[6]

Address: **405 Barclay Boulevard, Lincolnshire, IL 60069-3609 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. **SR8247040**

[9]

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

EN 60079-0:2009

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 1 (1) G Ex ia IIC T4**

Certification Manager

Jan-Erik Storgaard

Date of issue: 2011-10-25

Re-issued: 2011-11-28

Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com

www.ul-europe.com



[13]

Schedule

[14]

EC-TYPE EXAMINATION CERTIFICATE No.

DEMKO 11 ATEX 1057729X Rev. 1

Report: SR8247040

[15]

Description of Equipment or protective system

The Series 3000 MkIII gas detectors are intrinsically safe devices powered by a certified zener diode or galvanic barrier. A sensor plugs into the output socket. The main unit is evaluated for use in Zone 0 Hazardous Locations.

Temperature range

The ambient temperature range is -40 °C to +55 °C.

Electrical data

Entity Parameters:

V _o :	5.88 V	U _i :	30 V
I _o :	124 mA	I _i :	0.125 A
P _o :	0.183 W	P _i :	1.2 W
L _o :	1 mH	C _i :	0 µF
C _o :	10 µF	L _i :	0 mH

Installation instructions

Unused apertures shall be closed with suitable blanking elements.

Mounting instructions

Refer to "Instructions".

[16]

Report No.

Project Report No.: SR8247040 (Hazardous Location Testing)

Documents:

Description:	Drawing No.:	Rev. Level:	Date:
Power Board Schematic	3000E3077	3	2011-02-23
Power Board BOM	3000E3072	3	2011-02-23
Power Board Artwork	3000E3079	4	2011-04-14
Main Board Schematic	3000E3108	4	2011-09-29
Main Board BOM	3000E3107	4	2011-09-29
Main Board Artwork	3000E3109	2	2011-08-25
Series 3000 MkIII Transmitter Assy	3000E3080	1	2011-01-31
Series 3000 MKIII Power Board Interior Assembly	3000E3146	1	2011-08-12
Series 3000 MKIII Main Board Interior Assembly	3000E3147	1	2011-09-17
ATEX Series 3000 MkIII Name Plate	3000E3040	7	2011-10-24
Series 3000 MkIII Transmitter Assy (M20)	3000E3081	1	2011-05-31
Series 3000 MkIII Gas Detector, Technical Manual	3000M1011	1	2011-10
Series 3000 MkIII Control Drawing	3000G3303	7	2011-09-27

[17]

Special conditions for safe use:

- The enclosure is composed of aluminum. Care must be taken to avoid ignition hazards due to impact or friction when installed in the Zone 0 location.

[18]

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

The measuring function of the apparatus for explosion protection, according to Annex II clause 1.5.5, 1.5.6 and 1.5.7 of the Directive 94/9/EC, is covered in this certificate.



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 11 ATEX 1057729X Rev. 2**

[4]

Equipment or Protective System: **Gas Detector, Series 3000 MkIII**

[5]

Manufacturer: **Honeywell Analytics Inc.**

[6]

Address: **405 Barclay Boulevard, Lincolnshire, IL 60069-3609 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. **12NK04561-11ATEX1057729X**

[9]

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

EN 60079-0:2009

EN 60079-11:2012

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 (1) GD Ex ia IIC T4 Ga
Ex ia IIIC T135°C Da**

Certification Manager

Jan-Erik Storgaard

Date of issue: 2011-10-25

Re-issued: 2012-10-19

Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark

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[13]

[14]

Schedule
EC-TYPE EXAMINATION CERTIFICATE No.
DEMKO 11 ATEX 1057729X Rev. 2
Report: 12NK0456-11ATEX1057729X

[15]

Description of Equipment or protective system

The Series 3000 MkIII gas detectors are intrinsically safe devices powered by a certified zener diode or galvanic barrier. A sensor plugs into the output socket. The main unit is evaluated for use in Zone 0 and Zone 20 Hazardous Locations.

Temperature range

The ambient temperature range is -40 °C to +55 °C.

Electrical data

Entity Parameters:

V _o :	5.88 V	U _i :	30 V
I _o :	124 mA	I _i :	0.125 mA
P _o :	0.183 W	P _i :	1.2 W
L _o :	1 mH	C _i :	0 μF
C _o :	10 μF	L _i :	0 mH

Installation instructions

- All cable entry devices and blanking elements shall ATEX certified suitable for the conditions of use and correctly installed and have an ingress protection rating of at least IP6X.
- Unused apertures shall be closed with suitable blanking elements.

Mounting instructions

Refer to "Instructions".

[16]

Report No.

Project Report No.: 12NK04561-11ATEX1057729X (Hazardous Location Testing)

Documents:

Description:	Drawing No.:	Rev. Level:	Date:
Power Board Schematic	3000E3077	3	2011-02-23
Power Board BOM	3000E3072	3	2011-02-23
Power Board Artwork	3000E3079	4	2011-04-14
S3K MkII & MkIII Main Board Schematic	3000E3108	5	2011-11-11
S3K MkII & MkIII Main Board BOM	3000E3107	5	2011-11-11
Main Board Artwork	3000E3109	3	2011-11-11
LCD Support	3000D0086	1	2012-01-16
Series 3000 MkIII Transmitter Assy	3000E3080	1	2011-01-31
Series 3000 MKIII Power Board Interior Assembly	3000E3146	1	2011-08-12
Series 3000 MKIII Main Board Interior Assembly	3000E3147	1	2011-09-17
ATEX Series 3000 MkIII Name Plate	3000E3040	8	2012-06-18
Series 3000 MkIII Transmitter Assy (M20)	3000E3081	1	2011-05-31
Series 3000 MkIII Gas Detector, Technical Manual	3000M1011	2	2012-09
Series 3000 MkIII Control Drawing	3000G3303	7	2011-09-27

[17]

Special conditions for safe use:

- The enclosure is composed of aluminum. Care must be taken to avoid ignition hazards due to impact or friction when installed in the Zone 0 location.

[18]

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


The measuring function of the apparatus for explosion protection, according to Annex II clause 1.5.5, 1.5.6 and 1.5.7 of the Directive 94/9/EC, is covered in this certificate.



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 11 ATEX 1057729X Rev. 3**
- [4] Equipment or Protective System: **Gas Detector, Series 3000 MkIII**
- [5] Manufacturer: **Honeywell Analytics Inc.**
- [6] Address: **405 Barclay Boulevard, Lincolnshire, IL 60069 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. **4786851564**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012+A11:2013 EN 60079-11:2012 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 (1) GD Ex ia IIC T4 Ga
Ex ia IIIC T135°C Da**

Certification Manager

Jan-Erik Storgaard

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: 2011-10-25

Re-issued: 2015-06-07



Notified Body

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[13]

Schedule

[14]

EC-TYPE EXAMINATION CERTIFICATE No.

DEMKO 11 ATEX 1057729X Rev. 3

Report: 4786851564

[15]

Description of Equipment or protective system

The Series 3000 MkIII gas detectors are intrinsically safe devices powered by a certified zener diode or galvanic barrier. A sensor plugs into the output socket. The main unit is evaluated for use in Zone 0 and Zone 20 Hazardous Locations.

The measuring function of the apparatus for explosion protection, according to Annex II clause 1.5.5, 1.5.6 and 1.5.7 of the Directive 94/9/EC, is not covered in this certificate.

Temperature range

The ambient temperature range is -40 °C to +55 °C.

Electrical data

Entity Parameters:

U_o	: 5.88 V	U_i	: 30 V
I_o	: 124 mA	I_i	: 0.125 mA
P_o	: 0.183 W	P_i	: 1.2 W
L_o	: 1 mH	C_i	: 0 μ F
C_o	: 10 μ F	L_i	: 0 mH

Installation instructions

- All cable entry devices and blanking elements shall ATEX certified suitable for the conditions of use and correctly installed and have an ingress protection rating of at least IP6X.
- Unused apertures shall be closed with suitable blanking elements.

Mounting instructions

Refer to "Instructions".

[16]

Descriptive Documents.

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EC-Type Examination Certificate.

[17]

Specific conditions of use:

- The enclosure is composed of aluminum. Care must be taken to avoid ignition hazards due to impact or friction when installed in the Zone 0 location
- For installations in which both the C_i and L_i of the intrinsically safe apparatus exceeds 1% of the C_o and L_o parameters of the associated apparatus (excluding the cable), then 50% of C_o and L_o parameters are applicable and shall not be exceeded. The reduced capacitance of the external circuit (including cable) shall not be greater than 600 nF for Group IIC.

[18]

Essential Health and Safety Requirements

Concerning ESRs this Schedule verifies compliance with the Annex III of ATEX directive only. By placing the product on the market, the manufacturer declares compliance with other relevant Directives, and all other safety related requirements including those of Annex II of this Directive.

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.

