EC-TYPE EXAMINATION CERTIFICATE



Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

- EC-Type Examination Certificate Number: DEMKO 08 ATEX 0814213 Rev. 2 [3]
- Equipment or Protective System: GasAlertClip Extreme Series [4] Model GA24XT followed by -H, -M, -S, or -X Model GA36XT followed by -H, -M, -S, or -X
- Manufacturer: BW Technologies by Honeywell [5]

[2]

- Address: 2840 2nd Avenue SE, Calgary, AB T2A 7X9, Canada [6]
- This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the [7] documents therein referred to.
- 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, [8] 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 examination and test results are recorded in confidential report no. 13NK07475

[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.
- This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in [11] 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.
- The marking of the equipment or protective system shall include the following: [12]



Ex ia IIC T4 Ga

Certification Manager

Jan-Erik Storgaard

This is to certify that the sample(s) of the Product(s) described herein ("Certified Product") 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 product sample(s) submitted by the Applicant. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured products. UL has not established Follow-Up Service or other surveillance of the product. The Applicant/Manufacturer are solely and fully responsible for conformity of all products 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 appro

Date of issue: 2009-01-16 Re-issued: 2013-08-29

Notified Body

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

Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

[13]

[14]

[15]

Schedule EC-TYPE EXAMINATION CERTIFICATE No.

DEMKO 08 ATEX 0814213 Rev. 2 Report: 13NK07475

Description of Equipment or protective system

The Series GasAlertClip Extreme are portable, disposable, battery-operated, single gas monitors. They are intended for the detection of hydrogen sulfide, carbon monoxide, sulfur dioxide and oxygen depletion. The devices contain audible and visual alarms that are activated when conditions exceed preset limits.

Model	Gas Monitored	
GA24XT-H	Hydrogen Sulfide (H2S)	
GA36XT-H		
GA24XT-M	Carbon Monoxide (CO)	
GA36XT-M		
GA24XT-S	Sulfur Dioxide (SO2)	
GA36XT-S		
GA24XT-X	Oxygen (O2)	
GA36XT-X		

The letter "T" indicates version with optional internal vibrator

Temperature range

The devices are intended for use in an ambient temperature range of Tmin ≤ Ta ≤ +50°C, where Tmin is dependent on the target gas of the device as specified in the following table:

Model	Gas Monitored	Lower Temperature Limit, Tmin	
GA24XT-H	Hydrogen Sulfide (H2S)	-40°C	
GA36XT-H	. N/ii. N/ii. N/ii.		
GA24XT-M	Carbon Monoxide (CO)	-30°C	
GA36XT-M			
GA24XT-S	Sulfur Dioxide (SO2)	-30°C	
GA36XT-S	. V III. V III. V III	- Mil. Mil. M	
GA24XT-X	Oxygen (O2)	-20°C	
GA36XT-X			

The largest ambient temperature range is -40°C to +50°C.

Electrical data

One 3.6 V lithium battery, non-replaceable.

The devices have been evaluated to EN 60079-11:2012 when used with the following electrochemical sensors:

Gas Detected	Part No.	Manufacturer
Oxygen (O2)	4OX(2)	City Technology
Oxygen (O2)	2-A2	Alphasense
Sulfur Dioxide (SO2)	AD200-801-M3	Citicel Minitox
Hydrogen Sulfide (H2S)	000-OH2S-A2	Alphasense
Hydrogen Sulfide (H2S)	AC220-800-M8	City Technology
Hydrogen Sulfide (H2S)	BW20-3H2S	BW Europe
Carbon Monoxide (CO)	AB200-801-M1	Minitox City
Carbon Monoxide (CO)	BW20-3CO	BW Europe
Carbon Monoxide (CO)	CO-AF	Alphasense

Performance testing

The measuring function of the GasAlertClip Extreme 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.

Installation instructions

None.

Mounting instructions

None.

Routine tests

None.



[13] [14]

EC-TYPE EXAMINATION CERTIFICATE No.

DEMKO 08 ATEX 0814213 Rev. 2

Schedule

Report: 13NK07475

[16] Report No.

13NK07475 (Hazardous Location Testing) Project Report No.:

Documents:

2004			
Description:	Drawing No.:	Rev. Level:	Date:
GasAlertClip Extreme Certification Label	50110594-005	В	2012-05-30
GasAlertClip Extreme Enclosure Details [1 sheet]	GEUD-06C.1	C.1	2007-02-22
GasAlertClip Extreme Overall Assembly [1 sheet]	GEUD-05A.2	A.2	2009-01-06
Project Master Block Diagram [sheet 1 of 4]	GAXW-01C.sch	С	/II. \/I
Universal Sensor Circuitry [sheet 2 of 4]	GAXW-10C.sch	C	$\{U_{i},U_{$
Microcontroller and Peripheral Circuitry [sheet 3 of 4]	GAXW-20C.sch	С	-
Alarm, IR Tx, and Battery Protective Circuitry [sheet 4 of 4]	GAXW-30C.sch	С	/II. \/I
GasAlertClip Extreme Component/Trace Layout [13 sheets]	GEUE-02A	A	2007-05-25
GasAlertClip Extreme Parts List [15 pages]	113604	K	-
GasAlertClip Extreme Sensor Specification Sheet [1 sheet]	QF-EN-055	REL	2001-01-12
GasAlertClip Extreme Instruction Sheet [4 pages]	50110594-011		2012-05
GasAlertClip Extreme Instruction Sheet [4 pages]	50110594-013		2012-05

[17] Special conditions for safe use:

[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.

