

**TYPE APPROVAL CERTIFICATE****This is to certify:****That the Gas Detector**with type designation(s)  
**Sensepoint XCD H2S**

Issued to

**Honeywell Analytics Asia Pacific Co., Ltd.**  
**Seoul, Republic of Korea**

is found to comply with

**DNV GL rules for classification – Ships, offshore units, and high speed and light craft****Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Location classes:**

<b>Temperature</b>	<b>C</b>
<b>Humidity</b>	<b>B</b>
<b>Vibration</b>	<b>A</b>
<b>EMC</b>	<b>B</b>
<b>Enclosure</b>	<b>C / IP66</b>

Issued at **Høvik** on **2017-09-20**for **DNV GL**This Certificate is valid until **2022-06-30**.DNV GL local station: **Seoul**Approval Engineer: **Nils Jarem**

---

**Odd Magne Nesvåg**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-015064-2**  
Certificate No: **TAA00001B9**

## Product description

This certificate covers the Sensepoint XCD H2S type designation comprising a gas detector transmitter and toxic gas H2S sensor. For details on product description refer to "Sensepoint XCD Gas Detector Technical Manual" No. SPXCDHMANEN Issue 6.

## Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

## Application/Limitation

Ex installations to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Ex-certification is not covered by this certificate and the following paragraph, which is for information only, is based on information received from the manufacturer, but not verified by DNV GL

Information on Ex-Certification received from manufacturer – not verified by DNV GL	
Marking	Certificate No.
A Type XCD Transmitter	
Ex d IIC T6 (Ta -40°C to +65°C) Gb T5 (Ta -40°C to +75°C) Ex tb IIIC T85°C (Ta -40°C to +65°C) Db IP66 T100°C (Ta -40°C to +75°C)	Baseefa IECEX BAS 08.0072 issue No.7
A Type XCD Gas Sensor Head	
Ex d IIC T6 (Ta -40°C to +65°C) Gb T4 (Ta -40°C to +75°C) Ex tb IIIC T85°C (Ta -40°C to +65°C) Db IP6X T135°C (Ta -40°C to +75°C)	Baseefa IECEX BAS 08.0104X issue No.4

## Type Approval documentation

Sensepoint XCD Toxic Gas Specification, No. DS01077

Sensepoint XCD Gas Detector Technical Manual, No. SPXCDHMANEN, Issue 6

Test reports:

Korea Testing Laboratory (KTL) Test Report No. PIS11334-2, dated 2012-03-30

KTL Test Report No. 12-038922-03, dated 2012-07-02

KTL Test Report No. 12-2376-60, dated 2012-07-04

KTL Test Report No. 08-1454-260, dated 2008-06-10

Reliability Solution Provider Co., LTD (RSP) Test Report No. 2012-E0829, dated 2012-06-12.

DT&C Test Report No. DREETC1705-0093, dated 2017-05-31

DT&C Test Report No. DRCREL1705-0294, dated 2017-05-31

DT&C Test Report No. DRCREL1709-0521, dated 2017-09-14

Type approval renewal assessment report for A-13239, DNV GL Seoul 2017-07-03.

## Tests carried out

Applicable tests according to:

- Applicable tests according to class guideline DNVGL-CG-0339, November 2016.
- Performance tests: EN 45544-1:2015, EN 45544-3:2015.

Job Id: **262.1-015064-2**  
Certificate No: **TAA00001B9**

## **Marking of product**

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

## **Periodical assessment**

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE