DNV·GL

Certificate No:
TAA000007V

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Level Switches

with type designation(s)
ERH-x-y (-K), ERH-x-07, ERH-x-07-K, ERH-xx-20

Issued to
Aplisens S.A.
Warszawa, Poland

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Location classes:

Type	Temperature	Humidity	Vibration	EMC	Enclosure
ERH-x-y (-K)	D	B	A	NA	C/IP56**, D/IP68*
ERH-x-07, ERH-x-07-K	D	B	A	NA	With fixed cable: D/IP68 Without fixed cable: D/IP68
ERH-xx-20	C	B	A	NA	D/IP68

**** IP66 (applies to both types ERH-01..-04-06 (-K) and ERH-01..-04-16 (-K)**
*** ERH-01…-04-16.1 (-K)**

This Certificate is valid until **2020-12-31**.

Issued at **Høvik** on **2016-02-01**

for **DNV GL**

DNV GL local station: **Gdansk**

Approval Engineer: **Ståle Sneen**

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.

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Product description

Type designations:

Version with supply voltage 230V, 50-60Hz in:
ERH-x-y, covering the following variants:
x = 01, 02, 03, 04 y = 07; 07-K; 06; 06-K; 16; 16-K; 16.1; 16.1-K

Version with neodymium magnet in:
ERH-x-y, covering the following variants:
x = 01, 02, 03, 04 y = 06, 06-K, 07, 07-K

Magnetic Level Switches ERH-xx-20.

Application/Limitation

ERH-04-y: Float mechanism to be provided with additional fastening guide when found necessary.

Ex-certification is not covered by this certificate. Application in hazardous area 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.

Type Approval documentation

Tests carried out

Applicable tests according to DNV Standard for Certification No. 2.4, April 2006.

Marking of product

The products to be marked with:
- manufacturer name
- model name
- serial number

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 at least every second year and at renewal of this certificate.

END OF CERTIFICATE