

TYPE APPROVAL CERTIFICATE

This is to certify:

That the General Alarm System

with type designation(s)
GAS 3000

Issued to

**DECKMA Decksmaschinen und Automation Vertriebsges.
mbH**
Rosengarten-Klecken, Germany

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.

Temperature	B
Humidity	B
Vibration	A
EMC	B
Enclosure	Required protection according to DNV GL Rules shall be provided upon installation on board

Issued at **Hamburg** on **2018-02-15**

for **DNV GL**

This Certificate is valid until **2023-02-14**.

DNV GL local station: **Hamburg**

Approval Engineer: **Didier Girardin**

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Joannis Papanuskas
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.



Product description

General Alarm System (GAS 3000)

Function: Manual and automatic generation of General Alarm and Abandon Ship Signal

Outputs:

- 1 pot. free contact NC/NO (manually given signals), 1A 30VDC
- 1 pot. free contact NC/NO (manual & automatic. given signals), 1A 30VDC
- 1 pot.free contact NC/NO (continues signal contact), 1A, 30V DC
- 1 pot.free contact NC/NO for unit failure, 1A, 30V DC

Inputs:

IN 1,2,3, Inputs for external activation of "General alarm"

Dimension 64 x 136 x 100 mm (Housing)

72 x 144 mm Front plate

Application/Limitation

none

Type Approval documentation

See Annex

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

Marking of product

The products to be marked with:

- model name
- manufacturer 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 after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE



Job Id: **262.1-027620-1**
Certificate No: **TAA00001R4**

ANNEX

hidden

Type Approval documentation

Test Reports

Paconsult No. 07-1746, EMV Services No. 07/7076-4, ES Elektronik Nr.08/0101