



MARINE DIVISION

Certificate number: 25201/A0 BV

File number: NAV0/85542/1

Product code: 4442H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

COMAS ELECTRONICS INTERNATIONAL LTD
LIMASSOL - CYPRUS

for the type of product

BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM (BNWAS)

BNWAS Model: VesselGard

Requirements:

IMO Res. A.694(17), IMO Res. MSC.128(75), IMO MSC/Circ.982, IMO Res.MSC.191(79), IEC 61162 Series, IEC 60945 (2002), IEC 62616 (2010), IEC 62288 (2008).

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 11 Aug 2016

For BUREAU VERITAS,

At BV PIRAEUS, on 11 Aug 2011,

Dimitris DIMITROPOULOS



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The Bridge Navigational Watch Alarm System BNWAS, Model VesselGard, monitors the bridge activity and detect operator disability which could lead to marine accidents.

1.1 - BNWAS Components:

Component	Model Number
Main Unit	V1.2
Reset / Visual Alarm Unit	V1.1
Alarm Unit	V1.1
Motion Detector	V1.1 - OTD-40T (PIR + MW)
Connection Box	V1.2
Port Alarm Reset Unit	V1.1

1.2 - Technical Specifications:

Operating Modes	Mode ON, Mode OFF and Automatic Mode
Inputs	Inputs for PIR + MW motion sensors Inputs for external manual reset units NMEA port for Auto On/Off Input for Auto On/Off Input for External Emergency Input for Port Guard Reset
Outputs	Output for Visual Alarm Output for 3 level Audible Alarm NMEA port for VDR / SVDR Output for Malfunction Alarm
Main Unit Supports	10 Reset units with visual alarm 15 Alarm units in 3 levels 8 Motion detectors in 2 groups 10 Port reset units
Main Power Supply	100/240 VAC, 50-60Hz
Emergency Power Supply	24 VDC (18 - 36VDC)

Type A: Allows installation by vessels crew members.

Type B: To be installed only by technicians.

1.3 - Software Version: 1.2

2. DOCUMENTS AND DRAWINGS:

- 2.1 - Technical data sheets for intelligent motion sensors OTD-40T, rev.02, dated 07/2011.
- 2.2 - Unreferenced Technical data sheets for VesselGard - BNWAS
- 2.3 - Unreferenced User Manual V3 -BNWAS - VesselGard

3. TEST REPORTS:

- 3.1 - Test Report H.E.E.Q.A.C. N° 503616-E dated 27/04/2011
- 3.2 - Test Report H.E.E.Q.A.C. N° 503612-E dated 06/05/2011
- 3.3 - Test Report H.E.E.Q.A.C. N° 503647-E dated 25/07/2011
- 3.4 - Test Report comas S/N°, dated 22/07/2011

4. APPLICATION / LIMITATION:

- 4.1 - As per requirements stated on first page.
- 4.2 - Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.3 - Approval also valid for ships to be granted with the notations: SYS-NEQ, SYS-NEQ 1, SYS-IBS, SYS-IBS-1.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The **BNWAS - VesselGard** is to be manufactured, examined and tested by **COMAS ELECTRONICS INTERNATIONAL LTD** in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

5.2 - Production sites are to be recognized by Bureau Veritas as per NR320 for HBV products. To this end **COMAS ELECTRONICS INTERNATIONAL LTD** has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites.

5.3 - **COMAS ELECTRONICS INTERNATIONAL LTD** has declared to Bureau Veritas that the type of product described in this certificate may be manufactured at the following production site:

Ringel Electronics Agni Georgiadou & Co. LP
Industrial Area of Sindos
57022 THESSALONIKI
GREECE

6. MARKING OF PRODUCT:

6.1 - Trade name.

6.2 - Date of manufacture and serial number.

6.3 - Equipment type number or model identification under which it was type-tested.

6.4 - Marking is to be in accordance with IEC60945.

7. OTHERS:

This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that:

COMAS ELECTRONICS INTERNATIONAL LTD
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Limassol Center B.,
5th Floor Limassol
Cyprus

will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

*** END OF CERTIFICATE ***