DNV·GL

Certificate No:
TAA0000027

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Programmable Electronic System

with type designation(s)
Mk II Vision 15, Vision 17, Vision 19, Vision CPU, Vision 104, Vision SCC, Vision 17, 19, 24, CPU, SCC, 10

Issued to
Emerson Process Management Damcos A/S
NÆSTVED, Denmark

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

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
Mk II Vision 15, Vision 17, Vision 19, Vision CPU, Vision 104, Vision SCC	**A**	**B**	**B**	**B**	**A**
Vision 17, 19, 24, CPU, SCC, 10	**D**	**B**	**A**	**B**	**A**

This Certificate is valid until **2018-06-30**.

Issued at **Høvik** on

for **DNV GL**

DNV GL local station: **Copenhagen**

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.

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Product description

Marine Vision workstations covering the following components:

Vision 15	15” monitor
Vision 17	17” monitor
Vision 19	19” monitor
Vision CPU	Standalone CPU
Vision 104	Compact Work Station (10,4” monitor with touch and integrated CPU)
Vision SCC	Compact industrial PC

Vision Mk II series of Marine workstations and monitors:

16589165	Vision 17
16589166	Vision 17 Touch
16589163	Vision 19
16589164	Vision 19 Touch
16589177	Vision 24
16589162	Vision 24 Touch
16589168	Vision CPU
16589171	Vision SCC
16589169	Vision 10

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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 Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After the certification the clause for application software control will be put into force.

Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Type Approval documentation

Tests carried out

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

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.

Job Id: **262.1-004180-5**
Certificate No: **TAA0000027**

END OF CERTIFICATE