



Certificate No:
TAA0000392

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Programmable Electronic System

with type designation(s)
Ovation OCC100, Ovation OCR3000

Issued to

Emerson Process Management Power & Water Solutions, Inc.
Pittsburgh, PA, USA

is found to comply with

DNV 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.

Location classes:

Temperature A

Humidity A

Vibration A

EMC A

Enclosure Required protection according to the Rules shall be provided upon installation.

Issued at **Hamburg** on **2023-03-10**

This Certificate is valid until **2028-03-09**.

for **DNV**

DNV local unit: **Houston Offshore Services**

Approval Engineer: **Holger Jansen**

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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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2022-12

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Product description

Ovation OCC100 Subsystem

Item number	Designation
5X00790G01	OCC100 Controller Processor Module
5X00791G01	OCC100 Controller Base Assembly
5X00500G01	32 Channel Digital Output Electronics Module
5X00605G01	32 Channel SOE Electronics Module
5X00062G01	8 Channel HART AO Electronics Module
5X00063G01	8 Channel HART AO Personality Module
5X00807G01	2 Slot Horizontal IO Base, Marshalling
5X00809G01	4 Slot Horizontal IO Base, Screw Terminals
5X00501G01	16 Channel AI Electronic Module
5X00502G01	16 Channel AI Personality Module
5X00300G02	Profibus Electronics Module
5X00321G01	Profibus Personality Module

Ovation OCR3000 Subsystem

Item number	Designation
5X00875G01	OCR3000 Controller Processor Module
5X00876G01	OCR3000 Controller Base Assembly
5X00419G02	Ethernet Link Electronics Module
5X00497G01	Higher Density I/O Base
1B30035H01	2 Slot IO Base
1B30023H01	IO Base terminator, left
1B30023H02	IO Base terminator, right
3A99266G01	ROP I/O Transition Panel
5X00489 G01	Power Distribution Module

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.

Type Approval documentation

Tests carried out

Applicable tests according to DNV Class Guideline CG0339, August 2021.

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