

Certificate No: **TAA00002W3** 

# TYPE APPROVAL CERTIFICATE

# This is to certify:

**That the Programmable Controller** 

with type designation(s)
Electronic Fuel Viscosity Controller

Issued to

VAF Instruments B.V.
Dordrecht, Zuid-Holland, Netherlands

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.

#### **Location classes:**

Temperature B
Humidity B
Vibration A
EMC B

Enclosure B / IP66 (front panel)

Issued at Høvik on 2020-10-29

This Certificate is valid until **2025-10-28**. DNV GL local station: **Netherlands CMC** 

Approval Engineer: Ståle Sneen



Digitally Sigher By AGLso Pontes, Marta

Location: DNV GL Høvik, Norway

Marta Alonso Pontes 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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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: 2020-02 www.dnvgl.com Page 1 of 3

Job Id: **262.1-031787-1** Certificate No: **TAA00002W3** 

# **Product description**

Electronic Fuel Viscosity Controller is a universal process controller intended for use in fuel oil treatment systems and approved for field installations.

Verified for nominal supply voltage: 230 V ~ 50 Hz

#### Place of manufacture

ABB Limited Howard Road; Eaton Socon St. Neots Cambridgeshire PE19 8EU United Kingdom

# Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, 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 GL rules for classification of 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 certification the clause for software control will be put into force.

### Software control

All changes in software are to be recorded as long as the system is in use on board. Documentation of major changes is to be forwarded to DNV GL for evaluation and approval before implemented on board. Certification of modified functionality may be required for the particular vessel.

#### Type Approval documentation

VAF Instruments - Functional test ABB Controller CM30 dated 2019-12-05
DARE!! EMC Test Report for CM30, 19C00641RPT01 dated 2019-11-11
Sebert Trillingstechniek B.V. - Vibration test for CM30, M19.002-P19.002 dated 2019-08-16
Sebert Trillingstechniek B.V. - Climate tests for CM30, M19.003-P19.002 witnessed 2019-08-22
UL - IP66 test report for CM30, E236966-D1008-1/A0/C0-UL dated 2019-06-28
VAF Instruments - Technical Manual 771 Electronic fuel viscosity controller, TIB-771-GB-1019

#### **Tests carried out**

Applicable tests according to class guideline DNVGL-CG-0339, December 2019.

#### Marking of product

The products to be marked with:

- manufacturer name (VAF Instruments)
- model name (CM30)
- serial number
- power supply ratings (100-240V AC, 50/60Hz, 10W)

Form code: TA 251 Revision: 2020-02 www.dnvgl.com Page 2 of 3

Job Id: **262.1-031787-1** Certificate No: **TAA00002W3** 

# **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

Form code: TA 251 Revision: 2020-02 www.dnvgl.com Page 3 of 3