DNV·GL

Certificate No:
TAE00003BF

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Instrument for Switchboard

with type designation(s)
WC3VII "Serie Naval"and WC3VIIr "Serie Naval" (Ferrodynamic Measuring Instrument active or reactive power)

Issued to
SACI, S.A. - de Construcciones Industriales
Alcobendas, MADRID, Spain

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Location classes:

Temperature: B
Humidity: B
Vibration: A

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2019-01-15**
This Certificate is valid until **2023-12-31**.
DNV GL local station: **Madrid**

Approval Engineer: **Georgy Abramenko**

for **DNV GL**

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.

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Job Id: **262.1-019349-2**
Certificate No: **TAE00003BF**

Product description

Ferrodynamic Measuring Instrument for active or reactive power

Type designation	Front dimensions (mm)	Protection degree	Range (A)	Range (V)
WC3VII "Serie Naval"	96 x 96	IP 54	1 - 5	100 - 500
WC3VIIr"Serie Naval"	96 x 96	IP 54	1 - 5	100 - 500

Type Approval documentation

Test carried out

Type tests in accordance with IEC 60051. EMC tests & Environmental tests (DNV-GL class guidelines CG-0339 - Environmental test specification for electrical, electronic and programmable equipment and systems).

Marking of product

SACI, type designation

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and 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