Certificate No:
TAS00003NU

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Watertight Door

with type designation(s)
ARSA 3

Issued to
Caretta Systems S.A.
Aspropyrgos, **Greece**

is found to comply with
DNV rules for classification – Ships
DNV-OS-C301 – Stability and watertight integrity, Edition July 2020 (Amended August 2021)
DNV rules for classification – High speed and light craft

Application :

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

Issued at **Høvik** on **2023-11-30**
This Certificate is valid until **2028-11-29**.
DNV local unit: **Piraeus**

Approval Engineer: **Grzegorz Wolski**

for **DNV**

Thomas Revheim
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.

Product description

ARSA 3
Is a sliding door fabricated from 6 mm thick steel main plate and 6 mm thick closing steel plate. Plate is reinforced by “u” profiles, of size 30 x 46 x 30 x 4 mm, welded to the main plate by double continuous welding and spaced by max. 200 mm. Slot welding is used for welding to the closing plate. Edge of door is stiffened by 8 mm thick flat bar.

For further details see the drawings listed under Type Approval documentation below.

Application/Limitation

The doors have been Type Approved with respect to watertightness only, i.e. fire integrity has not been considered.

Max. size of opening:	1200 x 2250 mm (W x H)
Max. size of door leaf:	1300 x 2350 mm (W x H)
Max. pressure:	70 kPa

The watertight doors are found to comply with DNV-RU-SHIP July 2022 Pt.3 Ch.12 Sec.3 [4.3] and Sec. 6 for doors with installed window or side scuttle. The design pressure at the location where the doors without window/side scuttle are to be fitted shall be equal or less than the pressure above.

Window and side scuttle may not be fitted in watertight doors that are located below the freeboard deck.

The Type Approval does not cover the supporting structure of the doors, which is subject to approval. Interface showing door frame and bulkhead shall be submitted for case-by-case approval by yard/end user.

Consideration shall be given if located in highly stressed areas or in areas critical to fatigue from global hull loads.

The door frame may be welded or bolted to the bulkhead.

Indication open/closed for the watertight door shall be fitted on the bridge.

Type Approval documentation

Drawing CS-310-6 Rev. A dated 28 March 2023 from manufacturer.
Drawing CS-311-6 Rev. A dated 28 March 2023 from manufacturer.
Drawing CS-313-6 Rev. A dated 28 March 2023 from manufacturer.
Drawing CS-314-6 Rev. A dated 28 March 2023 from manufacturer.
Drawing CS-315-6 Rev. A dated 28 March 2023 from manufacturer.
Drawing CS-318-6 Rev. A dated 28 March 2023 from manufacturer.
Drawing CS-319-6 Rev. A dated 28 March 2023 from manufacturer.
Drawing CS-320-6 Rev. A dated 28 March 2023 from manufacturer.
Drawing CS-321-6 Rev. A dated 28 March 2023 from manufacturer.

Tests carried out

According to DNV rules for classification: Class Programme DNV-CP-0338, September 2022.

Marking of product

The product is to be marked with the following info:
- Manufacturer’s name or brand
- DNV Type Approval Certificate No. TAS00003NU
- The specific type designation:

Periodical assessment

DNV surveyor has the permission to perform Certification Retention Survey at any time during the validity period of this certificate. Periodical assessment will be required after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338.