

TYPE APPROVAL CERTIFICATE

Certificate No:
TAE00001J3
Revision No:
1

This is to certify:**That the Enclosure for Electrical Equipment**

with type designation(s)
CUBO E, CUBO F

Issued to

**Casemet Oy
MIKKELI, Finland**

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

Application :**Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.**

Degree of protection IP 66 (single door), IP55 (double door)
Vibration class A

Issued at **Høvik** on **2020-09-22**This Certificate is valid until **2025-10-24**.DNV GL local station: **Helsinki FIS**Approval Engineer: **Nicolay Horn**for **DNV GL**

Digitally Signed By: Alonso 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.



Job Id: **262.1-024243-2**
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Product description

CUBO E:

Degree of protection IP66 (single door), IP55 (double door)
Mechanical strength IK 09
Material: Painted sheet steel (EFEF and EFEP)
Stainless steel (ESSP)
Acid proof steel (EASP)

CUBO F:

Degree of protection IP66
(two-screw model of the size 100x100x90 mm IP 65)
Mechanical strength IK 09 (window IK 07 -5/+80 °C)
Material: steel, stainless steel and acid proof steel
Models:
Steel : FFUP... and FFUF...
Stainless steel: FSUP...
Acid proof steel: FAUP...

Application/Limitation

Temperature class: A.
Humidity category: B.

Operating instruction of the manufacturer to be observed.

Drawings for the actual application is to be submitted for approval in each case. A product certificate normally required for the total cabinet.

Type Approval documentation

Test report: [SGS Fimko No. FI 30478 \(20.06.2018\)](#), [SGS Fimko No. FI 30480 \(20.06.2018\)](#), [Innventia 276327 A+B \(2010\)](#).

Tests carried out

GL Guidelines for the Performance of Type Approvals, Chapter 2- Test Requirements for Electrical / Electronic Equipment and Systems (VI-7-2), Edition 2012, EN 62208 (2011), EN60529 (2000), EN62262 (2002).

Marking of product

Manufacturers name, type designation and serial number.

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) and selected type tests (ref. to applicable class programs) checked (if not available these tests shall 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 the renewal of certificate.

END OF CERTIFICATE