Certificate No:
TAE00004DX

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Circuit Breaker

with type designation(s)
HVX12

Issued to
Schneider Electric Industries SAS
GRENOBLE, **France**

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

Application :

Medium Voltage Circuit Breaker for installation inside switchboards / enclosures onboard ships and mobile offshore units.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.
Rated voltage (V) 12 kV
Rated current (A) 630 - 3150

Issued at **Høvik** on **2021-11-09**
This Certificate is valid until **2026-11-08**.
DNV local station: **France CMC**

Approval Engineer: **Nicolay Horn**

for **DNV**

Trond Sjåvåg
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.

Name and place of manufacturer

SCHNEIDER ELECTRIC AGS
Rathenaustrasse 2
D-93055 Regensburg
Germany

Product description

Medium voltage vacuum circuit breakers.

Type:	**HVX12**
Rated voltage (kV):	12
Power frequency withstand voltage (kV):	28 / 42
Impulse withstand voltage (kV):	75
Rated current (A):	Up to 3150
Rated frequency (Hz):	50 / 60
Rated short circuit breaking capacity Isc (kA):	50
Rated short- time withstand current (3 s) Ik (kA):	50
Rated peak withstand current Ip (kA):	125

Application/Limitation

Shall be installed and tested according to DNV Rules for Ships/High Speed, Light Craft and Naval Surface Craft.

Type Approval documentation

Test Carried out

Type tests in accordance with IEC 60298, IEC 60694, IEC 62271-100 and IEC 62271-200. Vibration and seismic test.

Marking of product

HVX-12 – Rated Voltage – Rated Frequency – Rated Current – Rated Breaking Capacity – Rated Making Capacity

Periodical assessment

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

The main elements of the periodical assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routines (RT) checked (if not available tests 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.

Assessment to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE