Certificate no.:
TAE00004XU

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Motor Starter

with type designation(s)
ATS490

issued to
Schneider Toshiba Inverter Europe S.A.S.
Pacy Sur Eure, Eure, **France**

is found to comply with
DNV 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.

Rated voltage (V)	**208-690**
Rated current (A)	**17-410**
Frequency (Hz)	**50-60**

Issued at **Høvik** on **2024-10-18**

This Certificate is valid until **2029-10-17**.

for **DNV**

DNV local unit: **France CMC**

Approval Engineer: **Qiang William Guo**

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.

Place of Manufacture

Manufacture name	P.T. Schneider Electric Manufacturing Batam (SEMB)
Manufacture address	Batamindo Industrial Park,Jl. Beringin Block 1,4 & 208 ,Batam Island ,29433 , Indoesia

Product description

AC Semiconductor Motor Starters for asynchronous motors
Type and variants:

Type reference	Frame Size	Current rating(A)
ATS490D17Y	1	17
ATS490D22Y	1	22
ATS490D32Y	1	32
ATS490D38Y	1	38
ATS490D47Y	1	47
ATS490D62Y	1	62
ATS490D75Y	1	75
ATS490D88Y	1	88
ATS490C11Y	1	110
ATS490C14Y	2	140
ATS490C17Y	2	170
ATS490C21Y	3	210
ATS490C25Y	3	250
ATS490C32Y	3	320
ATS490C41Y	3	410

1) Values applicable for 40 °C. To be modified for ships application at 45 °C. See under "Application / limitation".

Application/Limitation

Supply voltage range	208 - 690V, 17-410A, 50/60Hz
Voltage variation	- 15 % + 10%
Frequency variation	± 20 %
Temperature range in operation	0 - 40 °C (40 - 60 °C when derated)

Location of class (According to DNV-CG-0339)

Temperature class	B
Vibration class	A (To be installed with vibration dampers, see the limitations)
Humidity class	A
EMC class	A (in accordance with the EMC directive)
Enclosure class	IP00

The ATS490 must be regarded as a component. The actual installation to be designed according to Schneider Electric Users Manual and according to the applicable DNV Rules for the actual application. Applicable for certification (product certificate) as part of a switchboard.

To be installed in an enclosure with an IP degree in accordance with DNV Rules Pt 4 Ch 8 w.r.t. location.

For marine applications size of soft starter to be chosen according to chapter "Technical Specification" and derated with respect to an ambient temperature of 40°C and drive mode in accordance with chapter "Environment" in “ATS 490 Users Manual” (1,0% per deg. C for ambient above 40 °C).

Below types shall be installed with vibration dampers:

ATS490C14Y and ATS490C17Y	reference MP8-125 manufactured by Socitec
ATS490C21Y to ATS490C41Y	reference MP11-175 manufactured by Socitec

These products may also be connected INSIDE DELTA. See manufacturer’s documentation for applicable re-rating.

Type Approval documentation

Tests carried out

Visual inspection, Performance, Power supply failure, Power supply variations, Voltage/frequency variation, Vibration, Dry heat, Damp heat, Insulation resistance, High voltage in accordance with DNV-CG-0339 Aug. 2021

EMC: The following tests are in accordance with the EMC directive / IEC 60947-4-2 edition Jun 2020: Electrical fast transient (Burst), electrical slow transient (Surge), RF-common mode Voltage, radiated RF-electromagnetic fields, electric discharge (ESD), radiated and conducted emission.

Marking of product

Altistart 490 – Type designation – Factory code (XX) – Power – Voltage

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