



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

25-0318169-PDA
29-Oct-2025
28-Oct-2030
London Engineering Department

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

SCHNEIDER TOSHIBA INVERTER EUROPE SAS

located at

33 RUE BLANCHET, , PACY SUR EURE, France, 27120

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Motor Controller
Model: Altivar Soft Starter ATS490
Endorsements:
Tier: 5 - Unit Certification Required

This Product Design Assessment (PDA) Certificate remains valid until 28/Oct/2030 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Peter Edward (Peter Deegan) Lewis
Deegan,Engineer/Consultant

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SCHNEIDER TOSHIBA INVERTER EUROPE SAS

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PACY SUR EURE

France 27120

Telephone: +33 (0)2 32 78 16 71

Fax: NA

Email: eric.delaune@se.com

Web: se.com

Tier: 5 - Unit Certification Required

Product: Motor Controller
Model: Altivar Soft Starter ATS490
Endorsements:

Intended Service:

For ABS classed Marine Vessel and Offshore Installations - Soft Starter for Asynchronous Motors.

Description:

The Altivar Soft Starter ATS490 is a controller with six thyristors using the TCS (Torque Control System) algorithm to control acceleration, deceleration, and stopping of induction motors(three-phase squirrel cage) up to 900 kW/1,200 HP with motor thermal protection.

Rating:

ATS490:

1.Power Mains:

Input/ output Voltage: 208VAC-690VAC (-15% to +10%),

Frequency: 50Hz -20%, and 60Hz +20%

2.Control Supply:

Input/ output Voltage: 110VAC-230VAC (-15% to +10%),

Frequency: 50Hz/60Hz ±5%

For more details see attachments

Service Restriction:

1.Unit Certification is required for this product when used as:

a. Motor controllers of 100 kW (135 hp) and over that are intended for essential services as per ABS MVR 2025 4-8-1/ Table 1 & 2 or for services indicated in 4-8-3/Table 7 as per 4-8-3/1.5 and 4-8-3/5.11 of the ABS Marine Vessel Rules.

b. Motor controllers of 100 kW (135 hp) and over that are intended for essential services (Offshore Unit Rules 4-1-1/ Table 3 & 4) or for services related to additional optional notations requested for the Offshore Unit Rules as per 6-1-7/9.1.1(b) and 6-1-7/19.7 of the Offshore Unit Rules.

2. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

3. When it is incorporated in /with a Category II or III system in accordance 4-9-3/Table 1 of the ABS Marine Vessels Rules the documentation detailed in 4-9-3/Table 3 & table 4 & FMEA (4-9-3/5.3) are to be submitted to ABS or to be available for review by ABS Engineering as applicable. The tests FAT(as per ABS MVR 4-9-3/8.3.6 & 8.3.7) & SAT(as per ABS MVR 4-9-3/8.5.6 & 8.5.7) required to be witness by ABS surveyor in accordance with ABS MVR 4-9-3/Table 5.

4. The current PDA does not cover any MVR 4-9-14 requirements, however when the system is proposed for use on board a vessel with construction contract date after 1 July 2024, a vessel-specific review for compliance with applicable requirements of ABS Marine Vessels Rules sections 4-9-13, and 4-9-14 is still required, to verify project-specific elements such as cyber resilience requirements.

5.To use below drives and ensure proper operation, the following ATS490 drives must be installed with vibration dampers:

a. ATS490C14Y and ATS490C17Y: vibration damper MP8-125

b. ATS490C21Y to ATS490C41Y: vibration damper MP11-175

c. ATS490C48Y to ATS490C66Y: vibration damper MP11-175

d. ATS490C79Y to ATS490M12Y: vibration damper MP15-375

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

2. The type of enclosure for motor controllers is to be selected according to the 4-8-3/1.11 and 4-8-3/Table 2 of the MVR and 4-3-3/Table 1 of the Offshore Unit Rules as applicable.

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Web: se.com

Tier: 5 - Unit Certification Required

3. If the disconnecting device is not within sight of both motor and controller, or if it is more than 15.25 m (50 ft) from either, it is to be arranged for locking in the open position as per 4-8-4/9.3.2 of the MVR and 4-3-3/3.13.2(c) of the Offshore Unit Rules.

4. This PDA is only for power module & control unit. Each installation onboard is to be specifically approved and drawings/schematics are to be submitted.

Notes/Drawing/Documentation:

See attachments

Terms of Validity:

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This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

2025 Rules for Conditions of Classification, Part 1 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2025 Marine Vessel Rules : 4-8-2/9.17.2, 4-8-2/9.17.3, 4-8-3/1.7, 4-8-3/1.11.1, 4-8-3/1.17, 5.1, 5.3.1, 5.7, 4-9-3/5.1, 4-9-3/8.3.4, 4-9-3/13.1.1

2025 Rules for Conditions of Classification, Part 1 - Offshore Units and Structures: 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2025 Offshore Unit Rules : 4-3-1/11, 4-3-1/15, 4-3-1/17, 4-3-2/ 9.13.5, 4-3-3/3.13, 6-1-1/13, 6-1-7/9.15

National:

NA

International:

IACS UR E10 rev.9 (2023)

Government:

NA

EUMED:

NA

OTHERS:

NA



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London Engineering Department

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

SCHNEIDER (WUXI) DRIVES CO., LTD.

located at

**NO.20 HANJIANG ROAD, WUXI XINWU DISTRICT, , WUXI,
JIANGSU, China**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Motor Controller
Model: Altivar Soft Starter ATS490
Endorsements:
Tier: 5 - Unit Certification Required

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Web: schneiderelectric.com

Tier: 5 - Unit Certification Required

Product: Motor Controller
Model: Altivar Soft Starter ATS490
Endorsements:

Intended Service:

For ABS classed Marine Vessel and Offshore Installations - Soft Starter for Asynchronous Motors.

Description:

The Altivar Soft Starter ATS490 is a controller with six thyristors using the TCS (Torque Control System) algorithm to control acceleration, deceleration, and stopping of induction motors(three-phase squirrel cage) up to 900 kW/1,200 HP with motor thermal protection.

Rating:

ATS490:

1.Power Mains:

Input/ output Voltage: 208VAC-690VAC (-15% to +10%),

Frequency: 50Hz -20%, and 60Hz +20%

2.Control Supply:

Input/ output Voltage: 110VAC-230VAC (-15% to +10%),

Frequency: 50Hz/60Hz ±5%

For more details see attachments

Service Restriction:

1.Unit Certification is required for this product when used as:

a. Motor controllers of 100 kW (135 hp) and over that are intended for essential services as per ABS MVR 2025 4-8-1/ Table 1 & 2 or for services indicated in 4-8-3/Table 7 as per 4-8-3/1.5 and 4-8-3/5.11 of the ABS Marine Vessel Rules.

b. Motor controllers of 100 kW (135 hp) and over that are intended for essential services (Offshore Unit Rules 4-1-1/ Table 3 & 4) or for services related to additional optional notations requested for the Offshore Unit Rules as per 6-1-7/9.1.1(b) and 6-1-7/19.7 of the Offshore Unit Rules.

2. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

3. When it is incorporated in /with a Category II or III system in accordance 4-9-3/Table 1 of the ABS Marine Vessels Rules the documentation detailed in 4-9-3/Table 3 & table 4 & FMEA (4-9-3/5.3) are to be submitted to ABS or to be available for review by ABS Engineering as applicable. The tests FAT(as per ABS MVR 4-9-3/8.3.6 & 8.3.7) & SAT(as per ABS MVR 4-9-3/8.5.6 & 8.5.7) required to be witness by ABS surveyor in accordance with ABS MVR 4-9-3/Table 5.

4. The current PDA does not cover any MVR 4-9-14 requirements, however when the system is proposed for use on board a vessel with construction contract date after 1 July 2024, a vessel-specific review for compliance with applicable requirements of ABS Marine Vessels Rules sections 4-9-13, and 4-9-14 is still required, to verify project-specific elements such as cyber resilience requirements.

5.To use below drives and ensure proper operation, the following ATS490 drives must be installed with vibration dampers:

a. ATS490C14Y and ATS490C17Y: vibration damper MP8-125

b. ATS490C21Y to ATS490C41Y: vibration damper MP11-175

c. ATS490C48Y to ATS490C66Y: vibration damper MP11-175

d. ATS490C79Y to ATS490M12Y: vibration damper MP15-375

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

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Tier: 5 - Unit Certification Required

2. The type of enclosure for motor controllers is to be selected according to the 4-8-3/1.11 and 4-8-3/Table 2 of the MVR and 4-3-3/Table 1 of the Offshore Unit Rules as applicable.
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Notes/Drawing/Documentation:

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STANDARDS

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2025 Marine Vessel Rules : 4-8-2/9.17.2, 4-8-2/9.17.3, 4-8-3/1.7, 4-8-3/1.11.1, 4-8-3/1.17, 5.1, 5.3.1, 5.7, 4-9-3/5.1, 4-9-3/8.3.4, 4-9-3/13.1.1

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National:

NA

International:

IACS UR E10 rev.9 (2023)

Government:

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EUMED:

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OTHERS:

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PT. SCHNEIDER ELECTRIC MANUFACTURING BATAM

located at

**JL. BERINGIN LOT. 208, BIP MUKAKUNING, KEL. MUKA KUNING,
KEC. SUNGAI BEDUK, BATAM 29433 , BATAM, Indonesia**

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Fax: +62 770 611134
Email: bambang.riyadi@se.com
Web: www.schneider_electric.com

Tier: 5 - Unit Certification Required

Product: Motor Controller
Model: Altivar Soft Starter ATS490
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Tier: 5 - Unit Certification Required

Comments:

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2025 Offshore Unit Rules : 4-3-1/11, 4-3-1/15, 4-3-1/17, 4-3-2/ 9.13.5, 4-3-3/3.13, 6-1-1/13, 6-1-7/9.15

National:

NA

International:

IACS UR E10 rev.9 (2023)

Government:

NA

EUMED:

NA

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Tier: 5 - Unit Certification Required

OTHERS:

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