



Marine & Offshore

Certificate number: 71254/A0 BV

File number: MPA2201423

Product code: 2671H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Schneider Toshiba Inverter Europe S.A.S

Pacy-sur-Eure - FRANCE

for the type of product

ELECTRICAL MOTOR STARTERS

ATS 480, Soft Starter

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships, Offshore Units,

Naval Ships and Yachts.

IEC 60947-4-2 Ed 4-2020.

EN60947-4-2 2012

EC Code : 21/31

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 09 Aug 2027

For Bureau Veritas Marine & Offshore,

At BV DUNKERQUE, on 09 Aug 2022,

Mathieu DHINAUT

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <https://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypec.jsp?id=tcskiibw15>

BV Mod. Ad.E 530 June 2017

This certificate consists of 4 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Product Model: Soft starter, ALTIVAR ATS480 Series

ATS480 is an electronic soft starter equipment used to softly start and stop 3 Ph asynchronous motor and insure its thermal protection. ATS480 is recognized as a command component system.

Ratings:

Power Mains

- 208...690Vac -15%...+10%
- Frequency: 50Hz \pm 20% , and 60 \pm 20%

Control supply:

- 110...230Vac -15%...+10%
- 50/60 Hz \pm 5%

Ambient Temperature: 0-40°C(40-60°C when derated)

Type Designation	Main Supply (V)	Rated Operational Current (A) Note 1	3-Phase Starter rating(AC-53a) Connected in Line (kW)			
			230V	400V	500V	690V
ATS480D17Y	208-690	17	4	7.5	9	15
ATS480D22Y	208-690	22	5.5	11	11	18.5
ATS480D32Y	208-690	32	7.5	15	18.5	22
ATS480D38Y	208-690	38	9	18.5	22	30
ATS480D47Y	208-690	47	11	22	30	37
ATS480D62Y	208-690	62	15	30	37	45
ATS480D75Y	208-690	75	18.5	37	45	55
ATS480D88Y	208-690	88	22	45	55	75
ATS480C11Y	208-690	110	30	55	75	90
ATS480C14Y	208-690	140	37	75	90	110
ATS480C17Y	208-690	170	45	90	110	160
ATS480C21Y	208-690	210	55	110	132	200
ATS480C25Y	208-690	250	75	132	160	250
ATS480C32Y	208-690	320	90	160	220	315
ATS480C41Y	208-690	410	110	220	250	400
ATS480C48Y	208-690	480	132	250	315	500
ATS480C59Y	208-690	590	160	315	400	560
ATS480C66Y	208-690	660	-	355	-	630
ATS480C79Y	208-690	790	220	400	500	710
ATS480M10Y	208-690	1000	250	500	630	900
ATS480M12Y	208-690	1200	355	630	800	-

Note 1: Applies for a maximum ambient temperature of 40 °C. Above 40 °C to be modified for ship application.

Firmware version for ATS48P: V1.11E01_B07

2. DOCUMENTS AND DRAWINGS :

- ATS480 Getting Started User Manual, No. NNZ85504 rev 2, dated 31/12/2021
- ATS48 to ATS480 Substitution Manual , No. NNZ85529.01, dated 10/2021.
- ATS480 User Manual, No. NNZ85515, dated 07/2022.
- ATS480 Getting started Anex, No. NNZ86539, dated 12/2021
- ATS480 POWER S2PCBA, No. NNZ5048001, dated 09 Nov 2020.
- ATS480 POWER S3PCBA, No. NNZ5067201, dated 07 Dec 20.
- ATS480 APPLI PCBA, No. NNZ5073201, 07 Oct 20.
- UR E10 Technical Note, rev.02 dated 25/08/2021
- ATS480_TestPlan
- ATLAS-ATS48P, Firmware version file,
- Software Quality plan, No. Qua-01&02, v 0.3, dated 2019-11-08.

3. TEST REPORTS :

- Electrical Power Supply failure, No. ATS480_QTR_21267, dated 2021-06-03, No. ATS480_QTR_21268, dated 2021-06-03, No. ATS480_QTR_21269, dated 2021-06-03, No. ATS480_QTR_21199, dated 2021-05-20, No. ATS480_QTR_21206, dated 2021-05-20, No. ATS480_QTR_21240, dated 2021-05-20.
- Power Supply Variation Test, No. ATS480_QTR_21243, dated 2021-05-25.
- Vibration Test, No. LE 210043, dated 16 July 2021, No. ATS480_QTR_21156, dated 2021-06-29, No. ATS480_QTR_21155, dated 2021-06-28, No. LE 210044, dated 16 July 2021, No. LE 210045 dated 16 July 2021, No. ATS480_QTR_21154, dated 2021-06-28, No. LE210046, dated 16 July 2021, No. ATS480_QTR_21153, dated 2021-06-28, No. ATS480_QTR_21194, dated 2021-09-09, No. LE210066, dated 20 August 2021, No. P216110, dated 08 September 2021, No. ATS480_QTR_21423, dated 2021-11-17.
- Dry Heat Test, No. ATS480_QTR_21218, dated 2021-05, No. ATS480_QTR_21220, dated 2021-05-20, No. ATS480_QTR_21222, dated 2021-05-20, No. ATS480_QTR_21224, dated 2021-05-21, No. ATS480_QTR_21244, dated 2021-05-21, No. P213622, dated 10 July 2021.
- Damp Heat Test, No. ATS480_QTR_21160, dated 2021-06-28, ATS480_QTR_21159, dated 2021-06-28, ATS480_QTR_21158, dated 2021-06-28, ATS480_QTR_21157, dated 2021-06-28, ATS480_QTR_21195, dated 2021-09-13, No. P213622, dated 10 July 2021.
- Cold Test, No. ATS480_QTR_21221, dated 2021-05-20, No. ATS480_QTR_21223, dated 2021-05-20, No. ATS480_QTR_21225, dated 2021-05-20, No. ATS480_QTR_21245, dated 2021-05-21, No. 8000192061, dated 2021-07-28, No. ATS480_QTR_21219, dated 2021-05-20.
- Burst Test, No. ATS480_QTR_21233 dated 2021-11-19, No. C4301 dated 2021-11-19, No. C4297 dated 2021-06-29, No. ATS480_QTR_21098 dated 2021-03-05, No. ATS480_QTR_21054 dated 2021-06-29, No. ATS480_QTR_21061 dated 2021-06-29.
- Surge Test, No. ATS480_QTR_21074 dated 2021-06-30, No. ATS480_QTR_21297 dated 2021-06-30, No. ATS480_QTR_21294 dated 2021-06-30, No. C4285 dated 25-05-2021, No. C4300 dated 2021-11-19, No. ATS480_QTR_21234 dated 2021-11-19.
- Conducted Radio Frequency, No. ATS480_QTR_21238 dated 2021-06-29, No. ATS480_QTR_21032 dated 2021-06-29, No. ATS480_QTR_21049 dated 2021-06-29, No. ATS480_QTR_21060 dated 2021-06-29, No. ATS480_QTR_21357 dated 2021-11-19, No. RCE-EMI ESS21-B338-SCH-1-A(00), dated 2021-11-19.
- Electromagnetic Field test, No. LM210028 dated 09/04/2021, No. LM210025, dated 09/04/2021, No. LM210026, dated 09/04/2021, No. LM210029 dated 09/04/2021, No. LM210064 dated 6th Sept. 2021, No. RCE-EMI ESS21-B338-SCH-1-A(00) dated 2021-11-19.
- Electrostatic discharge, No.ATS480_QTR_21012 dated 2021/06/29, No. ATS480_QTR_21239 dated 2021/06/29, No.ATS480_QTR_21016 dated 2021/06/29, No. C4240 dated 2021/06/29, No. C4309 dated 2021-11-19, No. C4292 dated 2021-11-19.
- Radiated Emission, No. ATS480_QTR_21133 dated 2021/06/29, No. ATS480_QTR_21135 dated 2021/06/29, No. ATS480_QTR_21137 dated 2021/06/29, No. ATS480_QTR_21177 dated 2021/06/29, No. ATS480_QTR_21274 dated 2021/11/19, No. ATS480_QTR_21395 dated 2021/11/19, No. RCE-EMI ESS21-B338-SCH-1-A(00), dated 2021-11-19.
- Conducted Emission, No. ATS480_QTR_21104 dated 2021/06/29, ATS480_QTR_21102 dated 2021/06/30, ATS480_QTR_21116 dated 2021/06/30, ATS480_QTR_21117 dated 2021/06/29, ATS480_QTR_21119 dated 2021/06/30, ATS480_QTR_21120 dated 2021/06/29, ATS480_QTR_21097 dated 2021/06/30, ATS480_QTR_21100 dated 2021/06/29, ATS480_QTR_21295 dated 2021/11/19, ATS480_QTR_21229 dated 2021/11/19, ATS480_QTR_21358 dated 2021/11/19, ATS480_QTR_21359 dated 2021/11/19, No. ATS480_QTR_21295_02, dated 2022-06-14, No. ATS480_QTR_21359_02, dated 2022-06-14.
- Insulation Resistance Test, No. ATS480_QTR_21207 dated 2021-11-19, No. ATLAS_QTR_21023 dated 2021-06-29, No. ATLAS_QTR_21024, dated 2021-06-29, No. ATLAS_QTR_21025, dated 2021-06-29, No. ATS480_QTR_21230 dated 2021-06-29, No. ATS480_QTR_21227, dated 2021-11-19.
- Test Report No. ATS480_CERTIF_21257, dated 2021-07-06.
- Test Report No. ATS480_CERTIF_21291, dated 2021-07-08.
- Test Report No. ATS480_CERTIF_21143, dated 2021-07-08.
- Test Report No. SF C4402-V1, dated 2021-11-05.
- Test Report No. C4328-V2_UL and CSA Datasheet_ATS480C32Y, dated 2021-07-14.
- Test Report No. ATS480_CERTIF_21340, dated 2021-08-23.
- Test Report No. SE C4340-V1_ATS480C66Y, dated 2021-10-18.
- Test Report No. ATS480_CERTIF_21383, dated 2021-09-13.

4. APPLICATION / LIMITATION :

4.1 - BV Rules for the Classification of Steel Ships, Offshore Units, Naval Ships and Yachts.

4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS,**

AUT-PORT and AUT-IMS.

4.3 - The equipment fulfils the EMC requirements for installation on the General Power Distribution zone.

4.4 - BUREAU VERITAS Environmental Category, **EC Code :21/31**

4.5 - Only Hardware and Firmware / Software successfully tested together in compliance with the regulations as referred to in cover page, according to the declaration of the manufacturer are covered by this certificate.

4.6 - Any modification of the hardware, firmware or software having an impact on the product performance or functionality has to be validated with type testing.

4.7 - In accordance with IACS UR E22 and as applicable to programmable devices for computer based systems of Category II or III, for each ship application:

- Ship specific documentation is to be submitted including software documentation and categorization of the computer based system.

- Inspection and testing before installation onboard is to be performed under the surveillance of the Society.

4.8 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev8.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The above products are to be supplied by **Schneider Toshiba Inverter Europe S.A.S** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **Schneider Toshiba Inverter Europe S.A.S** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **Schneider Toshiba Inverter Europe S.A.S** has declared to Bureau Veritas the following production site (s):

**PT Schneider Electric Manufacturing Batam
Batamindo Industrial Park
BLK 1-4 & 208- Muka Kuning
Batam Riau
Indonesia**

**Wuxi Pro-Face Co. Ltd.
No.20, Hanjiang Road,
National Hi-Tech Industrial Deve. Zone,
Wuxi
214028 Wuxi, China**

6. MARKING OF PRODUCT :

6.1 - Maker's name or trade mark,

6.2 - Serial number of the units,

6.3 - Equipment type number or model identification under which it was type-tested.

7. OTHERS :

7.1 - It is **Schneider Toshiba Inverter Europe S.A.S's** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

***** END OF CERTIFICATE *****