TYPE APPROVAL CERTIFICATE

Certificate no.:
TAE0000447
Revision No:
1

This is to certify:

that the Power supply unit

with type designation(s)
ODS-750, ODS-1500 & ODS-3000

issued to
Anda-Olsen AS
Ålesund, **Norway**

is found to comply with
DNV 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.

Voltage output	**120 - 230 VAC**
Power	**750 - 3000 VA**
Temperature class	**A**
Vibration class	**A**
Humidity class	**B**
Degree of protection	**A**

Issued at **Høvik** on **2025-04-02**

This Certificate is valid until **2029-08-31**.
DNV local unit: **Ålesund**

Approval Engineer: **Qiang William Guo**

for **DNV**

This document has been digitally signed and will therefore not have handwritten signature

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.

Name and place of manufacturer

PREMIUM S.A. Assessment
Hospitalet de Llobregat, Barcelona SPAIN

Product description

DC / AC sine wave inverter with selectable output frequency (50 / 60 Hz) and adjustable output voltage.

ODS-750

Model	Input voltage	Output voltage	Power rating
7271	12 Vdc	230 Vac	450 VA
7273	24 Vdc	230 Vac	750 VA
7274	36 Vdc	230 Vac	750 VA
7275	48 Vdc	230 Vac	750 VA
7276	72 Vdc	230 Vac	750 VA
7277	110 Vdc	230 Vac	750 VA
7281	12 Vdc	120 Vac	450 VA
7283	24 Vdc	120 Vac	750 VA
7284	36 Vdc	120 Vac	750 VA
7285	48 Vdc	120 Vac	750 VA
7286	72 Vdc	120 Vac	750 VA
7287	110 Vdc	120 Vac	750 VA

ODS-1500

Model	Input voltage	Output voltage	Power rating
7111	12 Vdc	230 Vac	1200 VA
7113	24 Vdc	230 Vac	1500 VA
7114	36 Vdc	230 Vac	1500 VA
7115	48 Vdc	230 Vac	1500 VA
7116	72 Vdc	230 Vac	1500 VA
7117	110 Vdc	230 Vac	1500 VA
7121	12 Vdc	120 Vac	1200 VA
7123	24 Vdc	120 Vac	1500 VA
7124	36 Vdc	120 Vac	1500 VA
7125	48 Vdc	120 Vac	1500 VA
7126	72 Vdc	120 Vac	1500 VA
7127	110 Vdc	120 Vac	1500 VA

ODS-3000

Model	Input voltage	Output voltage	Power rating
7153	24 Vdc	230 Vac	2400 VA
7154	36 Vdc	230 Vac	3000 VA
7155	48 Vdc	230 Vac	3000 VA
7156	72 Vdc	230 Vac	3000 VA
7157	110 Vdc	230 Vac	3000 VA
7163	24 Vdc	120 Vac	2400 VA
7164	36 Vdc	120 Vac	2500 VA
7165	48 Vdc	120 Vac	2500 VA
7166	72 Vdc	120 Vac	2500 VA
7167	110 Vdc	120 Vac	2500 VA

Application/Limitation

For use on bridge, in control rooms and dry accommodation areas onboard ships and offshore units.
To be installed in an enclosure with an IP degree in accordance with DNV rules with respect to location.

Environmental Location classes:

Temperature class	A
Vibration class	A
Humidity class	B
EMC class	A
Enclosure	A

Type Approval documentation

Authorization letter, Material declaration

Drawings: ODS-3000 3000VA DC/AC inverter, ODS-1500 1500VA DC/AC inverter, ODS-750 450…750 VA DC/AC Inverter

Test reports: DELTA Report no. DANAK-19/12614 “Test for Marine Type Approval of Inverter 24Vdc/230Vac 750VA with alarm”
EMC report no.TR-0840-1_ODS-3000-7177L dated on 2024-06-20,
EMC report no. TR-0214_ODS-750 dated on 2016-07-26,
EMC report no. TR-02431_ODS-1500dated on 2016-07-26.
EMC report no.TR-0254-1_ODS-3000 dated on 2016-06-12,

Tests carried out

Type tests according to DNV-CG-0339 Aug. 2021 and IEC 60945:2002 and Corrigendum 1:2008:
Performance test, power supply failure, power supply variations, Excessive conditions – reverse polarity, Excessive conditions – excessive voltage, Low temperature (cold), Dry heat, Damp heat, Insulation resistance, High voltage, Vibration, Electrostatic discharge, Radiated radio frequency interference, Conducted low frequency, Conducted radio frequency interference, Fast transients – burst, Slow transients – surge, Radiated emission, Conducted emission, Compass safe distance, IP2X

Marking of product

Premium, model number, input voltage, output voltage, maximum current and serial number with the production date and series

Periodical assessment

The scope of the periodical assessment 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 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