

TYPE APPROVAL CERTIFICATE

This is to certify:

That the UPS

with type designation(s)
RV UPS Marine

Issued to

Eltek AS
DRAMMEN, Norway

is found to comply with
DNV GL 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 GL.

This Certificate is valid until **2021-12-14**.

Issued at **Høvik** on **2016-12-15**

DNV GL local station: **Station Oslo Maritime and CAP**

Approval Engineer: **Nicolay Horn**

for **DNV GL**

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Andreas Kristoffersen
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.

Name and place of manufacturer

ELTEK S R O
PALENICA 53/79
033 17 LIPTOVSKY HRADOK
SLOVAK REPUBLIC

Product description

RV UPS Marine: UPS for AC backup power for 230 V AC or 115 V AC and 48 V DC power for battery charging for instantaneous voltage drop or power interruption.

Part number	CIER0418.001	CIER0418.002
Input Voltage AC	100 - 120	220 - 240
Input Voltage DC	40 - 58	40 - 58
Input frequency	50 / 60	50 / 60
AC Output voltage	115 V _{AC}	230 V _{AC}
AC Output current	26 A continous	26 A continous
AC Output power	2400 W / 3000 VA	4800 W / 6000 VA
DC Output voltage	53,5 V _{DC}	53,5 V _{DC}
DC Output power	300 W	600 W
Manual bypass switch	63 A (make before breake)	
Protection class	IP33	
Battery back up time	30 - 60 min (at maximum AC power)	
Dimensions (WxDxH)	604,4 x 611,3 x 1088 mm	

Classification according to DNVGL-CG-0339	
Temperature class	A
Vibration class	A
Humidity class	B
Enclosure class	A*
EMC class	B

Application/Limitation

For installation in control rooms and dry accommodation spaces onboard ships and mobile offshore units.

To be installed in an enclosure with an IP degree in accordance with DNV GL Rules w.r.t. location if higher IP protection than IP33 is required.

Applicable for bridge installation in accordance with Class requirements. Use together with equipment that requires MED certificate /wheelmark is not reviewed and may require additional tests.

Type Approval documentation

Tests carried out

Type tests in accordance with IEC 62040-1. Low temperature (-5 °C) & Vibration in according to DNVGL-CG-0339 Class A, Humidity/ Damp heat in accordance with DNVGL-CG-0339 Class B. Power Supply Failure and variation test in according to DNVGL-CG-0339. EMC in accordance with DNVGL-CG-0339 Class B / IEC 60945.



Job Id:
Certificate No: **TAE00001J8**

Marking of product

ELTEK-model no.- input rating – output rating.

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 Routine tests (RT) checked (if not available, tests according 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 after 2 and 3.5 year.

END OF CERTIFICATE