

TYPE APPROVAL CERTIFICATE

This is to certify:**That the UPS**

with type designation(s)
EDC-V 110V/18A/26Ah

Issued to

Ellego Powertec Oy
HALIKKO, Finland

is found to comply with
DNV GL 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 GL.

Issued at **Høvik** on **2020-02-04**

This Certificate is valid until **2025-02-03**.

DNV GL local station: **Finland CMC**

for **DNV GL**

Approval Engineer: **Nicolay Horn**

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Marta Alonso Pontes
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.



Job Id: **262.1-029889-1**
Certificate No: **TAE00003V3**

Product description

Online UPS, 1 phase, with integrated batteries

Type designation	Input Voltage	Output voltage	Output current	Capacity of batteries
EDC-V xV/xxA/xxxAh	1ph, 230-690 VAC, 50/60 Hz	110 V DC	3 -18 A	26 Ah

x is output voltage [V] (x=110)

xx is output current [A] (xx=3, xx=6, xx=12, xx=18)

xxx is battery capacity [Ah] (xxx=14, xxx=26, xxx=38)

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

Application/Limitation

Protection degree: IP 34. End user is responsible for correct IP protection according to location and use.

Inclination 22.5° in each direction is allowed (no moving parts).

Type Approval documentation

Tests carried out

Vibration tests, EMC tests, functional tests, environmental tests (DNVGL-CG-0339), inclination test (IEC 60092-504) and electrical tests (IEC 62040-3 & 60146-1-1).

Marking of product

ELLEGO – Type designation – UPS input voltage – UPS output voltage – UPS output current – serial number

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 periodical 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.

Periodical assessment to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE