



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **E-12960**

This is to certify that the
UPS

with type designation(s)
EATON 9130 UPS

Issued to
Eaton Power Quality Oy
ESPOO, Finland

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application
UPS for use in ships and offshore units

This Certificate is valid until **2017-12-31**.

Issued at **Høvik** on **2014-01-03**

DNV local station: **Helsinki**

Approval Engineer: **Sverre Eriksen**

for **Det Norske Veritas AS**

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Marit Laumann
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.
If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

Product description

UPS for computer and navigation equipment. Including batteries of 12 V vented lead acid type. Equipped with battery test facility and automatic by-pass. Protection degree: IP20.

Part no.	Type	Input Voltage	Output at 40°C	Output at 45°C	Output voltage
103007846-6591	9130i1000T-XL	1 ph 160 - 276 V AC, 40 - 70 Hz	1000 VA	900 VA	200/208/220/230/240 VAC
103007847-6591	9130i2000T-XL	1 ph 180 - 276 V AC, 40 - 70 Hz	2000 VA	1800 VA	200/208/220/230/240 VAC
103007848-6591	9130i3000T-XL	1 ph 180 - 276 V AC, 40 - 70 Hz	3000 VA	2700 VA	200/208/220/230/240 VAC

Battery cabinets

Part no.	Type	Size
103006438-6591	9130N1000T-EBM	2x3 12V, 9Ah
103006440-6591	9130N3000T-EBM	2x8 12V, 9Ah

Classification according to DNV Sfc 2.4

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

Application/Limitation

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.

End user responsible for correct IP protection according to location and use.

Type Approval documentation

Technical info:

Eaton 9130 UPS 700 VA – 3000 VA, User's Guid 164201718 Rev 2 dated 2008.

Test reports:

- Vibration and condition UPS 3KVA – Eaton 9130, Centria Report no. 17082009.21 version 1.0.1, dated 2009-09-30
- Vibration and condition UPS 1KVA – Eaton 9130, Centria Report no. 0310200.21 version 1.0.0, dated 2009-10-07
- Environmental type test for 1&3kVA UPS units, Eaton Power Quality Oy revision 1.0.0, dated 2009-09-25
- EN 60945 PW9130i3000T-XL, Nemko test report no. 125905B, dated 2009-04-21
- EN 60945 PW9130i1000T-XL, Nemko test report no. 125905A, dated 2009-04-21
- EMC Test report PW9130i3000T-XL, Shenzhen EMTEK Co., Ltd report number E0806008E, dated 2008-08-20

Test certificate:

- CB Test Certificate Conformity with IEC 62040-1-1:2002, TÜVRheinland Report no. JPTUV-024025, dated 2008-09-04

Tests carried out

Low temperature in accordance with IEC 60068-2-1, Dry heat in accordance with IEC 60068-2-2, Vibration in according to CN No. 2.4 Class A/60068-2-6, Humidity/ Damp heat in accordance with IEC 60068-2-78 and EMC in accordance with CN No. 2.4 Class B/ IEC 60945.

Marking of product

Eaton 9130 – UPS model no. – UPS input – UPS output.

Periodical assessment

The scope of the retention/renewal survey 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 survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routines Tests (RT) checked (if not available tests according to 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.

Survey to be performed at least every second year.