

TYPE APPROVAL CERTIFICATE

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

with type designation(s)
9X55 5-15kVA

Issued to

Eaton Power Quality Oy
ESPOO, 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 **2019-04-05**

This Certificate is valid until **2024-06-30**.

DNV GL local station: **Helsinki**

for **DNV GL**

Approval Engineer: **Nicolay Horn**

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Trond Sjøvåg
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.



Product description

Online UPS 's ,1 or 3 phase, with or without integrated batteries. External battery cabinets also available.

Type designation	Input Voltage	Output	Output voltage
9x55-xx-xxx-M... TA	1 ph / 3ph 100V – 690V	5 – 15kVA	100V – 690V

x is number of output phases (x=1, x=3)

xx is output power, kVA (xx=5, xx=8, xx=10, xx=12, xx=15)

xxx is additional info (S : single phase input, N: three phase input, T: internal transformer, L : Long life batteries)

Battery cabinets

Type designation	Number of batteries	Capacity of batteries
9X55-BAT*-M-nxcAh	32, 64 or 96	7Ah or 9Ah

n is number of batteries

c is capacity of the batteries

* is battery design life (*=empty, *=5 or *=10)

Classification according to DNV Sfc 2.4	
Temperatur class	A
Vibration class	A
Humidity class	A
Enclosure class	A
EMC class	B

Application/Limitation

The output current will be decreased if operating at 45 °C for longer period or with restricted ventilation. Derating with 2,0 % / °C > 40 °C.

Protection degree: IP22. End user responsible for correct IP protection according to location and use.

Type Approval documentation

Tests carried out

Vibration tests (Sfc 2.4 class A), EMC tests (IEC 60945 / IEC 62040), functional tests (DNV Sfc 2.4, environmental tests (DNV Sfc 2.4) and electrical tests (IEC 62040).

Marking of product

Eaton – Type designation – UPS input voltage – UPS output voltage

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



Job Id: **262.1-010496-4**
Certificate No: **TAE00003FC**

- 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