




TYPE APPROVAL CERTIFICATE
No. **ELE146815XG**

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	FREQUENCY CONVERTERS
<i>Type</i>	VACON 100 and VACON 100X models
<i>Applicant</i>	VACON Ltd. RUNSORINTIE 7 65380 VAASA FINLAND
<i>Manufacturer</i>	VACON Ltd.
<i>Place of manufacture</i>	SEE ATTACHMENT
<i>Reference standards</i>	RINA Rules Pt.C, Ch.3, Sec. 6 and IEC 61800-3; IEC 61800-5-1

Issued in **HAMBURG** on **March 8, 2016**. *This Certificate is valid until* **March 7, 2021**





RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure

TYPE APPROVAL CERTIFICATE
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VACON 100 and VACON 100X models

Product Description:

Multiple purpose frequency converter for AC applications.

Models/Versions:

VACON 100 and VACON 100X

Technical data:

See Vacon100.pdf and Vacon-100-x-20-x-brochure-DPD01196B-english.pdf

Marking of Product:

See Vacon100.pdf and Vacon-100-x-20-x-brochure-DPD01196B-english.pdf

Approval Conditions:

See test reports

Test Reports:

- MR5_Vacon100_Cold.pdf
- MR5_Vacon100_DampHeatCyclic.pdf
- MR5_Vacon100_DryHeat.pdf
- MR7_Vacon100_Cold.pdf
- MR7_Vacon100_DampHeatCyclic.pdf
- MR7_Vacon100_DryHeat.pdf
- 9031F649.pdf
- 4609F2CA.pdf
- F44181FB.pdf
- B2790525.pdf
- BDDD450C.pdf
- C2EF177B.pdf

Operating Instructions/Additional Documentation:

- Vacon100.pdf
- Vacon100_presentation_Aug.ppt
- Vacon-100-x-20-x-brochure-DPD01196B-english.pdf
- Vacon-100-100-FLOW-Drive-Switch-Installation-instr.pdf
- Vacon-100-Enclosed-Drives-Installation-Manual-DPD01666B-UK.pdf
- Vacon-100-IP00-Drives-Installation-Manual-DPD01665B-UK.pdf
- Vacon-100-Marine-Installation-Guide-DPD01773A-UK_11.8.pdf
- Vacon-100-Wall-Mounted-Drives-Installation-Manual-DPD01711F-UK.pdf
- Vacon-100-X-Graphical-Keypad-Installation-Manual-D.pdf
- Vacon-100-X-Installation-Manual-DPD00534H-UK.pdf
- Vacon-100-X-Mains-Switch-Installation-Manual-DPD00.pdf
- Vacon-100-X-Optional-Heater-Arctic-Option-Installa.pdf

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VACON 100 and VACON 100X

Reference Documents:

- CB Certificate Safety MR10-12-ED.pdf
- CB Certificate Safety MR4.pdf
- CB Certificate Safety MR5.pdf
- CB Certificate Safety MR6.pdf
- CB Certificate Safety MR7.pdf
- CB Certificate Safety MR8.pdf
- CB Certificate Safety MR8ED.pdf
- CB Certificate Safety MR9.pdf
- CB Certificate Safety MR9ED.pdf
- CB-EMC Certificate MR4.pdf
- CB-EMC Certificate MR5.pdf
- CB-EMC Certificate MR6.pdf
- CB-EMC Certificate MR7.pdf
- CB-EMC Certificate MR8.pdf
- CB-EMC Certificate MR9.pdf
- EC Type-Examination Certificate for Vacon100.pdf
- MR10ED 500 V.pdf
- MR10ED 690 V.pdf
- MR12ED 500 V.pdf
- MR12ED 690 V.pdf
- MR8ED 500 V.pdf
- MR8ED 690 V.pdf
- MR9ED 500 V.pdf
- MR9ED 690 V.pdf
- Vacon-VTT-ATEX-048X-EN.pdf

Quality Certificates:

- 2_Vacon Oyj 90011400118001 2015-2018 FIEN.pdf
- 4_Vacon Oyj 90011400118001 2015-2018 FIEN.pdf
- 6_Vacon Oyj 90011400118001 2015-2018 FIEN.pdf
- IMS_CertificateVaconsrl_eng.pdf

Places of Manufacture:

VACON Ltd
Runsorintie 7
65380 Vaasa
Finland

VACON S.R.L.
Via Roma 2
39014 Postal
Italy

Remarks:

- This approval is granted only on the basis of positive outcome of verifications on board to be carried out according to the all above mentioned remarks and to all other applicable RINA Rules.
- Any modification / upgrade of the firmware installed in the system is to be communicated; functional test and spot check are to be carried out and witnessed by a RINA Surveyor, to give evidence of the correct function of the system.
- Flame retardant test (IEC 60092-101 or IEC 60695 11-5) has not been carried out. See IEC 61800-5-1 chapter 4.4.3. for details, material is of flammability class 5VA according to IEC 60695-11-20. This has been proven by datasheets.

HAMBURG March 8, 2016

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A handwritten signature in blue ink, appearing to read 'John Doe'.