

# TYPE APPROVAL CERTIFICATE No. ELE81524XP

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

Description FREQUENCY CONVERTERS

Type VACON 100 and VACON 100X

Applicant Danfoss Drives Oy

Runsorintie 7 65380 Vaasa FINLAND

Manufacturer Danfoss Drives Oy

Place of manufacture Runsorintie 7

65380 Vaasa FINLAND

Reference standards RINA Rules Pt.C, Ch.3, Sec. 6 and IEC 61800-3; IEC 61800-5-1

Issued in GDANSK on August 7, 2024. This Certificate is valid until September 9, 2029

RIA

RINA Services S.p.A.

This certificate consists of this page and 1 enclosure. This certificate replaces TA certificate No. ELE141019XG



# TYPE APPROVAL CERTIFICATE No. **ELE81524XP Enclosure - Page 1 of 2** VACON 100 and VACON 100X

#### **Product Description:**

Multiple purpose frequency converters for AC applications.

#### Models/Versions:

VACON 100 and VACON 100X

### **Technical Data and Product Marking:**

VACON-100-Wall-mounted-Drives-Operating-Guide-DPD01711H-EN VACON-100-IP00-Drive-Modules-Installation-Manual-DPD01665E-UK VACON-100-Enclosed-Drives-Installation-Manual-DPD01666E-UK VACON-100-x-20-x-brochure-DPD01196B-english

Approval Conditions: See test reports

## **Test Reports:**

- MR5 Vacon100 Cold
- MR5\_Vacon100\_DampHeatCyclic

- MR5\_Vacon100\_DryHeat
   MR7\_Vacon100\_Cold
   MR7\_Vacon100\_DampHeatCyclic
   MR7\_Vacon100\_DryHeat
- -9031F649
- -4609F2CA
- F44181FB
- B2790525
- BDDD450C
- C2EF177B
- 294638-1a and 294638-1b
- 293589-1 and 293589-2
- VTT-S-00567-18 and VTT-S-01711-18

#### Operating Instructions/Additional Documentation:

- Vacon100
- Vacon100 presentation Aug
- Vacon-100-x-20-x-brochure-DPD01196B-english
- Vacon-100-100-FLOW-Drive-Switch-Installation-instr
- Vacon-100-Enclosed-Drives-Installation-Manual-DPD01666E-UK
- Vacon-100-IP00-Drive-Module-Installation-Manual-DPD01665E-UK
- Vacon-100-Marine-Installation-Guide-DPD01773A-UK 11.8
- Vacon-100-Wall-Mounted-Drives-Operating-Guide-Manual-DPD01711H-EN
- Vacon-100-X-Graphical-Keypad-Installation-Manual-D
- Vacon-100-X-Installation-Manual-DPD00534H-UK
- Vacon-100-X-Mains-Switch-Installation-Manual-DPD00
- Vacon-100-X-Optional-Heater-Arctic-Option-Installation



# TYPE APPROVAL CERTIFICATE No. ELE81524XP Enclosure - Page 2 of 2 VACON 100 and VACON 100X

#### **Reference Documents:**

- CB Certificate Safety MR10-12-ED
- CB Certificate Safety MR4
- CB Certificate Safety MR5
- CB Certificate Safety MR6
- CB Certificate Safety MR7
- CB Certificate Safety MR8
- CB Certificate Safety MR8ED
- CB Certificate Safety MR9A, MR9B and MR11
- CB Certificate Safety MR9AED, MR9BED and MR11ED
- CB-EMC Certificate MR4
- CB-EMC Certificate MR5
- CB-EMC Certificate MR6
- CB-EMC Certificate MR7
- CB-EMC Certificate MR8
- CB-EMC Certificate MR9 (renamed to MR9A)
- EC Type-Examinination Certificate for Vacon100
- MR10ED 500 V
- MR10ED 690 V
- MR12ED 500 V
- MR12ED 690 V
- MR8ED 500 V
- MR8ED 690 V
- MR9ED 500 V (renamed to MR9A)
- MR9ED 690 V (renamed to MR9A)
- Vacon-VTT-ATEX-048X-EN

#### **Quality Certificates:**

- 2\_Vacon Oyj 90011400118001 2015-2018 FIEN
- 4 Vacon Oyj 90011400118001 2015-2018 FIEN
- 6\_Vacon Oyj 90011400118001 2015-2018 FIEN
- IMS CertificateVaconsrl eng

#### Places of Manufacture:

Danfoss Drives Oy
Runsorintie 7
65380 Vaasa
Finland

Panfoss SRL
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.

