

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Accommodation Heater**

with type designation(s)

Fan Heater EVN 3, 6 & 9 kW

Issued to

**Thermo Byggvarme AS
SLEMMESTAD, Norway**

is found to comply with

Det Norske Veritas' Rules for Classification of Ships and Mobile Offshore Units**Application :****Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.****Rated power 3 - 9 kW****Rated voltage 230 - 440 V****Enclosure IP 44**Issued at **Høvik** on **2018-06-07**This Certificate is valid until **2023-06-30**.for **DNV GL**DNV GL local station: **Oslo Maritime and CAP**Approval Engineer: **Nicolay Horn**

**Andreas Kristoffersen
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.



Name and place of manufacturer

UAB Stansefabrikken
Pasiles 10
LT-20194 Ukmerge
Lithuania

Electrical fan heater for fixed installation with brand name EVN.

Type/sizes: 3, 6 or 9 kW; 230, 400 or 440 volt, 50/60 Hz, IP 44. Built-in safety release in case of fan failure or other overtemperature effects.

Technical info:

Type	Supply voltage (V)	Effect (kW)	Heating element voltage (V)	Fan supply voltage (V)
EVN 3 – 23	230 (3ph)	3	230	230
EVN 6 – 23	230 (3ph)	6	230	230
EVN 9 – 23	230 (3ph)	9	230	230
EVN 3 – 40	400 (3ph)	3	230	230 via trafo
EVN 6 – 40	400 (3ph)	6	230	230 via trafo
EVN 9 – 40	400 (3ph)	9	230	230 via trafo
EVN 3 – 44	440 (3ph)	3	254	230 via trafo
EVN 6 – 44	440 (3ph)	6	254	230 via trafo
EVN 9 – 44	440 (3ph)	9	254	230 via trafo

Application/Limitation

For use onboard ships and offshore units.

Only for fixed installation. Installation is to be considered in each case. If not constructed with an inclined top plate, a perforated plate of incombustible material inclined about 30° shall normally be mounted above each heater.

Type Approval documentation

Tests carried out

Type tests in accordance with IEC 60335-2-30, Failure simulation, temperature increase, vibration test, design inspection, EN 55014 (EMC emission), EN60555-2/ -3 (supply harmonics), EN 50082-1 (EMC immunity).

Marking of product

Manufacturers label with information regarding type number, kilowatts, voltage and more.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)



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Certificate No: **TAE00002XD**

- Results from Routine 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.

Assessment to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE