

TYPE APPROVAL CERTIFICATE

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

with type designation(s)

TWT

Issued to

Frico AB**Sävedalen, Sweden**

is found to comply with

Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards**Application :****Electric space heaters**

Rated power	300W - 1000W
Rated voltage	230V & 400V
Enclosure	IP44

This Certificate is valid until **2018-12-31**.Issued at **Høvik** on **2015-02-23**DNV GL local station: **Gothenburg**Approval Engineer: **Marta Alonso Pontes**for **DNV GL**

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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.

Certificate No: **E-14035**
File No: **826.20**
Job Id: **262.1-006733-2**

Product description

Fan heater with the following types and sizes:

Type	Power	Voltage	Frequency	Ingress Protection
TWT10321	300W	230V 1 ph	50 - 60Hz	IP 44
TWT10521	500W	230V 1 ph	50 - 60Hz	IP 44
TWT11021	1000W	230V 1 ph	50 - 60Hz	IP 44
TWT10331	300W	400V 3 ph	50 - 60Hz	IP 44
TWT10531	500W	400V 3 ph	50 - 60Hz	IP 44
TWT11031	1000W	400V 3 ph	50 - 60Hz	IP 44

Application/Limitation

For dry and wet accommodation spaces. Only for fixed installation. Shall normally be protected with a top plate in accordance with our Rule Pt.4, Ch.8, Sec. 8, A 303. Installation is to be considered in each case.

Type Approval documentation

Technical info:

"ThermoWarmfor" datasheet for Frico AB space heater of type TWT.

Nemco Test Report no. E10215.00 dated 2010-10-12, SEMKO type test report no. 813722-1 dated 2007-06. SEMKO test nos. SE-56183, SE-56184 & SE-56185 dated 2008-11-04. SEMKO report no. 715512/M dated 2008-10-09.

Tests carried out

Type tests according to IEC 60335-2-30, IEC 61892-3.

Marking of product

TWT – Frico AB – type designation

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 periodical assessment are:

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

Periodical assessment to be performed at least every second year.

END OF CERTIFICATE