

DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. E-11494

This is to certify that the **Accommodation Heater**

with type designation(s) T2RiB

Manufactured by

TELCO FABRIKKER A/S SELBU, Norway

is found to comply with Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

> Application For dry and wet locations in accommodation spaces.

> > Rated power

250 - 2000W

Rated voltage

110 V/230 V/400 V/440 V

Enclosure

IP44

Høvik, 2012-01-02 for Det Norske Veritas AS

> Marit Laumann **Head of Section**

DNV local office: **Trondheim**

This Certificate is valid until 2015-12-31

Sverre Erikser

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.

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The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision 'Det Norske Veritas' shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

DET NORSKE VERITAS AS, Veritasveien 1, NO-1322 Høvik, Norway, Tel.: +47 67 57 99 00, Fax: +47 67 57 99 11, Org.No. NO 945 748 931 MVA www.dnv.com Form No.: TA 1411a Issue: October 2009 Page 1 of 2



Certificate No.: E-11494 File No.: 826.20 Job Id.:

262.1-005566-2

Product description

Convection heater for accommondation use.

| Type designation | Power rating (W) | Voltage rating (V) |
|------------------|------------------|--------------------------|
| T2RiB 150304-1 | 400 | 110 |
| T2RiB 150608-1 | 800 | 110 |
| T2RiB 150910-1 | 1000 | 110 |
| T2RiB 150912-1 | 1200 | 110 |
| T2RiB 151116-1 | 1600 | 110 |
| T2RiB 151320-1 | 2000 | 110 |
| T2RiB 150325-2 | 250 | 230 |
| T2RiB 150403-2 | 300 | 230 |
| T2RiB 150304-2 | 400 | 230 |
| T2RiB 150606-2 | 600 | 230 |
| T2RiB 150608-2 | 800 | 230 |
| T2RiB 150910-2 | 1000 | 230 |
| T2RiB 150912-2 | 1200 | 230 |
| T2RiB 151116-2 | 1600 | 230 |
| T2RiB 151320-2 | 2000 | 230 |

| Type designation | Power rating (W) | Voltage rating (V) |
|---------------------|------------------|--------------------------|
| T2RiB 150325-4 | 250 | 400 |
| T2RiB 150303-4 | 300 | 400 |
| T2RiB 150304-4 | 400 | 400 |
| T2RiB 150608-4 | 800 | 400 |
| T2RiB 150910-4 | 1000 | 400 |
| T2RiB 150912-4 | 1200 | 400 |
| T2RiB 151116-4 | 1600 | 400 |
| T2RiB 151320-4 | 2000 | 400 |
| T2RiB 150304-44 | 400 | 440 |
| T2RiB 150608-44 | 800 | 440 |
| T2RiB 150910-44 | 1000 | 440 |
| T2RiB 150912-44 | 1200 | 440 |
| T2RiB 151116-44 | 1600 | 440 |
| T2RiB 151320-44 | 2000 | 440 |

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:

Drawing no. T3201, Component list, Manufacturer's specifications,

Nemko test reports nos. E09742.00 dated 2009-09-22 and 134715 dated 2009-11-03. SINTEF report no. STF18 F82037 dated 1982-05-19.

Tests carried out

Type tests in according to IEC 60335-2-30, Vibration test

Marking of product

TELCO FABRIKKER A/S - Voltage rating - Power rating - IP 44

Certificate Retention Survey

The scope of the retention/renewal survey 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 survey 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.

Survey to be performed at least every second year.

END OF CERTIFICATE

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