DNV·GL

Certificate No:
TAM0000126

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Air Compressor

with type designation(s)
TMC 7-27, TMC 21SA, EMH 35-44, TMC 30-40SA, TMC 35-44, TMC 35-44SA, TMC 49-84, TMC 55-84SA, TMC 54-85, TMC 60-80SA, TMC 86-124, TMC 95SA, TMC 150-235, TMC 150-235SA, TMC 105-235 SL, TMC 245-360, TMC 245-360SA, RRM 105-185, TMC 400-450

Issued to
Tamrotor Marine Compressors AS
OSLO, Norway

is found to comply with
DNV GL rules for classification – Ships

Application :

The compressor unit is approved for use for instrument/control/working/service air and inert gas production.

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.
Max. working press.: 14 bar
Operating media: Air

Issued at **Høvik** on **2019-09-19**
This Certificate is valid until **2023-06-30**.
DNV GL local station: **Turku**

Approval Engineer: **Amir Dzaferi**

for **DNV GL**

Oddvar Deinboll
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.

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Job Id: **262.1-007522-18**
Certificate No: **TAM0000126**

Product description
Air compressor unit including screw compressor with driver, control system, motor starter, pressure vessel, lubrication and oil separation system.

Manufacturer and owner of product rights:
Gardner Denver Oy, Tampere, Finland

Application/Limitation
The air compressor units are approved for use for instrument/control/working/servicel air and inert gas production.

All relevant drawings are taken from information sheets for the following compressor types:

- Marine compressor type TMC 7-27 incl. types TMC 21 SA
- Marine compressor type EMH 35-44 incl. types TMC 30 SA and TMC 40 SA
- Marine compressor type TMC 49-84 incl. types TMC 55 SA and TMC 84 SA
- Marine compressor type TMC 54-85 incl. types TMC 60 SA and TMC 80 SA
- Marine compressor type TMC 86-124 incl. types TMC 95 SA
- Marine compressor type TMC105-235 SL & RRM 105-185. TMC 105-235 SL and RRM 105-185 are specially made for certain customers and have similar values as TMC 105-235 series
- Marine compressor type TMC 150-235 incl. types TMC 150 SA and TMC 235 SA. Marine compressor type TMC 245-360 incl. types TMC 245-360 SA
- Marine compressor type TMC 400-450 incl. types TMC 400-450 SA

Marking of product
The product to be marked with manufacturer's name or trademark and type number identification.

Periodical assessment
For retention of the type approval, a DNV GL surveyor shall perform an assessment after 2 years and after 3.5 years, both referring to the issue date of the type approval certificate to verify that the conditions of the type approval are complied with. A renewal assessment will be performed at renewal of the certificate.

In cases where the type approved product is manufactured at other companies, the periodical assessment shall verify that the type approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore, periodical assessment shall be carried out randomly at these companies.

Other conditions
Flexible hoses for oil to be type approved by DNV GL.

E-motors, frequency conversters and soft starters shall be type approved by DNV GL.
In example but not limited to:
El. Motors: LÖNNE E-11461, models 14BG/BP and 16BG/BP, WEG and E-12868, model W22
Frequency convertors: E-11822 (NXP 0385, NXP 0261, NXP 0460, NXP 0325)

Soft starter: E-11928 (Schneider Toshiba Inverter Altistart 48
When the soft starter "Altistart 48" is used in the cabinet, then vibration dampers must be installed.

END OF CERTIFICATE