

TYPE APPROVAL CERTIFICATE

Certificate No:
TAM0000117**This is to certify:****That the Diesel Engine**with type designation
S6R2

Issued to

Mitsubishi Turbocharger and Engine Europe B.V.
Almere, Netherlands

is found to comply with

DNV GL Rules for classification, Ships - DNVGL-RU-SHIP-Pt4 Ch3 Sec1,
Reciprocating Internal Combustion Engines**Application :**

Mechanical and electrical propulsion, auxiliary and emergency

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **31st December, 2023**.Issued at **Høvik** on **20th December, 2018**DNV GL local station: **Rotterdam**for **DNV GL**Approval Engineer: **Tage Olav Alexander Strøm**

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.

Job Id: **262.1-001009-11**
Certificate No: **TAM0000117**

Product description

Four stroke, in-line engine, non-reversible, trunk-piston, with supercharging, with charge air cooling, constant-pressure charging system, direct injection, injection operation by cams, valve operation by cams, liquid fuel

Cylinder bore [mm]	170
Piston stroke [mm]	220
No. of cylinders	6

Place of production

MHI MEA, Mulhouse, France
Mitsubishi Heavy Industries Engine & Turbocharger, Ltd., Sagamihara-City, Japan

Application/Limitation

S6R2 M(P)TK

Rated power [kW]	550	480	635	670	670	610
Rated speed [rpm]	1200	1350	1400	1500	1500	1200
Mean effective pressure [bar]	18.35	14.24	18.16	17.88	17.88	20.36
Max. firing pressure [bar]	142.2	112	142.2	142.2	142.2	138
	S6R2		-M(P)TA, -T2MPTK			-T2MPTAW3

Ratings for engine model S6R2-M(P)TA and S6R2-T2MPTK - which are lower or equal to the ratings of T2MPTK are also covered by this approval.

Marking of product

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

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

In case 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 with couplings to be type approved by DNV GL.

Engine safety, control and monitoring systems, including sensors and actuators are not covered by this type approval certificate. Documentation for engine safety, control including speed governing and monitoring systems shall be submitted for approval according to Pt.4 Ch.9 Sec.1 Table 5 - Documentation requirements.

Electric cables and cabling are not covered by this approval and must be verified to comply with the Pt.4 Ch.8 - Electrical Installation.

Engines for emergency duty shall have "Breather kit for emergency gen.set application" according to document xxxx-MEE (EB 182) dated 2009-11-30.

END OF CERTIFICATE