

TYPE APPROVAL CERTIFICATE

Certificate No:
TAM00000T7**This is to certify:****That the Diesel Engine**with type designation(s)
S6B3-MPTA/-MPTK/-(T2)MPTAW

Issued to

**Mitsubishi Heavy Industries Engine & Turbocharger, Ltd.
Sagamihara, Japan**

is found to comply with

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

propulsion, multi engine plant / auxiliary / emergency

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

This Certificate is valid until **30th June, 2022**.Issued at **Høvik** on **16th January, 2018**DNV GL local station: **Rotterdam**for **DNV GL**Approval Engineer: **Dag Harald Williksen**

**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: **262.1-000958-6**
Certificate No: **TAM00000T7**

Product description

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

Cylinder bore : 135
Piston stroke : 170
No. of cylinders : 6

Additional place of production

Mitsubishi Turbocharger and Engine Europe B.V., Almere, Netherlands
MHI MEA, Mulhouse, France

Application/Limitation

	Propulsion			Auxiliary / Emergency		
Rated power [kW]	345	395	415	270	355	410
Rated speed [rpm]	1940	2000	2065	1200	1500	1800
Mean effective pressure [bar]	14.6	16.3	16.5	18.5	19.5	18.8
Max. firing pressure [bar]	120	128	132	132	132	132

Ratings which are lower than the above given ratings are also covered by this approval

Type Approval documentation

Tests carried out

Test reports dated 95-05-18

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 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 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 the Rules Pt.4 Ch.9 Sec.1 Table 5 and/or as listed in relevant type approval certificates.

Electric cables and installation of this is not covered by this approval and must be verified to comply with the requirement of the Rules Pt.4 Ch.8 - Electrical Installation.

END OF CERTIFICATE