



Certificate No. 02-002894/024920

TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

DIESEL ENGINE, type UM6WG1TC-AB

MANUFACTURER:



Isuzu Motors Engine Sales Inc.
1-2-19, Matsugasimanishi,
Ichihara-shi, Chiba
290-0036, Japan

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

CRS: Rules for the classification of ships, Part 9. - Machines.

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: **2024-02-21**

Place and date: Split, 2020-02-21

Seal

Marinko Popović, dipl.ing.

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

DETAILED PRODUCT DESCRIPTION:

Number of cylinders	6
Cylinder arrangement	In-line
Working cycle	4- stroke
Cylinder bore (mm)	147
Stroke (mm)	154
Kind of fuel	Liquid
Fuel injection	Direct injection type
Valve operation	Cam control
Turbocharging system	Single-stage with charge air cooling

APPLICATION / LIMITATIONS:

Application: Propulsion engine

<i>Engine model</i>	AB1	AB2	AB3
<i>Max. rated power (kW)</i>	377	447	485
<i>At speed (rpm)</i>	1800	2000	2100
<i>BMEP (kPa)</i>	1601	713	1767

TYPE APPROVAL DOCUMENTATION:

The documentation approved by CRS with No. (dated):

022516	(2008-06-11)
024920	(2020-02-21)

MARKING OF PRODUCT:

- manufacturer's mark
- location and year of final fitting
- CRS mark

CONDITIONS FOR CERTIFICATION:

Minimal tensile strength of crankshaft material: 785 N/mm².

Signalization and protection related to the engine shall be subject to CRS approval in each particular case and will depend on service applied and the degree of automation of the engine plant.