



Certificate No. 02-004348/026138

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

D 2862 LE

MANUFACTURER:

MAN Truck & Bus SE
Nürnberg, Germany

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

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: **2028-03-07**

Place and date: Split, 2024-03-07

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	12
Cylinder arrangement	in-Vee (90°)
Working cycle	4- stroke
Cylinder bore (mm)	128
Stroke (mm)	157
Kind of fuel	Liquid
Fuel injection	Electronically controlled, direct injection type, common rail
Valve operation	Cam control
Turbocharging system	Constant-pressure, single-stage & two-stage, with charge air cooling

APPLICATION / LIMITATIONS:

Application: Propulsion engine (variable speed)

Rated power (kW)	662	735	1066	1213
Rated speed (rpm)	1800	1800	2100	2300
Mean effective pressure (bar)	18,21	20,21	25,13	26,11
Max. firing pressure (bar)	181,87	159,77	210,06	203,40
Application / Rating*	HD	HD	MD	LD

*Reference is made to Manufacturer marine rating classification.

Application: Auxiliary and emergency (constant speed)

Rated power (kW)	700	800
Rated speed (rpm)	1500	1800
Mean effective pressure (bar)	23,1	22,0
Max. firing pressure (bar)	184,68	184,68

Lower ratings than this stated is accepted as long as they are within the values approved by engine designer.

TYPE APPROVAL DOCUMENTATION:

Approved by the Croatian Register of Shipping with letter No.(dated):

1048/TSE/DL/025795	(2023-05-08)
570/TSE/KF/026138	(2024-03-07)

MARKING OF PRODUCT:

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

CONDITIONS FOR CERTIFICATION:

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.