



Certificate No. 02-004044/025795

## 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: **2027-05-08**

Place and date: Split, 2023-05-08

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
SCR	Without SCR exhaust gas aftertreatment system

**APPLICATION / LIMITATIONS:**

**Application: Propulsion and auxiliary engines**

Engine model	D 2862 LE 454	D 2862 LE 424	D 2862 LE 444	D 2862 LE 425
Rated power (kW)	588	662	735	749
Rated speed (rpm)	1800			2100
Mean effective pressure (bar)	16,2	18,2	20,2	17,7
Max. firing pressure (bar)	179	147	139	154
Turbocharged	Single-stage			
Application / Rating*	Heavy Duty			Medium Duty

**Application: Propulsion and auxiliary engines**

Engine model	D 2862 LE 435	D 2862 LE 466	D 2862 LE 483	D 2862 LE 486	D 2862 LE 456
Rated power (kW)	882	1029	1066		1213
Rated speed (rpm)	2100				2300
Mean effective pressure (bar)	20,8	24,3	25,1		26,1
Max. firing pressure (bar)	175	165	193	185	202
Turbocharged	Single-stage		Two-stage		
Application / Rating*	Medium Duty				Light Duty

\*Reference is made to Manufacturer marine rating classification.

Power ratings lower than those 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)

**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.