



Certificate No. 02-005500/027103

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 6090

MANUFACTURER:

JOHN DEERE POWER SYSTEM
3801 West Ridgeway Avenue
P.O. Box 5100
Waterloo, IA 50704-5100
USA

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: **2030-05-15**

Place and date: Split, 2026-05-15

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)	118
Stroke (mm)	136
Kind of fuel	Liquid
Fuel injection system	Electronically Controlled, Common rail, Direct injection
Valve operation	Cam control
Turbocharging system	With turbocharging, with charge air cooling 6090SFM: aftercooled, air to seawater 6090AFM: aftercooled, air to enginecoolant

APPLICATION / LIMITATIONS:

Application: Propulsion

Model	6090 SFM85	6090SFM85 and 6090SFM75					6090AFM85 and 6090AFM75			
Rated power (kW)	242	242	280	317	373	410	213	242	280	317
Rated speed (rpm)	2000	2100	2200	2300	2400	2500	2100	2200	2300	2400
Mean effective pressure (bar)	16,3	15,5	17,1	18,5	20,9	22,1	13,6	14,8	16,4	17,8
Application / rating*	Hybrid	M1	M2	M3	M4	M5	M1	M2	M3	M4

*Reference is made to Manufacturer marine rating classification.

Application: Auxiliary and emergency

Model	6090SFM85 and 6090SFM75		6090AFM85 and 6090AFM75		6090HFG86	
Rated power (kW)	278	222	222	195	315	278
Rated speed (rpm)	1800	1500	1800	1500	1800	1500
Mean effective pressure (bar)	20,8	19,9	16,6	17,5	23,5	24,9

Power ratings (at the same rated speed) 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):

168/TS/IA/024061, 2017-02-01
2011/TSE/AD/025373, 2021-10-06
1561/TSE/KF/027103, 2026-05-15

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.