



Certificate No. 02-005288/026943

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
QSK 38 and KTA 38

MANUFACTURER:

CUMMINS Inc.
4400 Leeds Avenue, Suite 300
Charleston, SC 29405
USA

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: **2030-02-14**

Place and date: Split, 2026-02-14

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	Vee (V-angle 60°)
Working cycle	4- stroke
Cylinder bore (mm)	159
Stroke (mm)	159
Kind of fuel	Liquid
Fuel injection system	QSK 38: Electronically controled, common rail, direct injection KTA 38: Injection operation by cams, direct injection
Valve operation	Cam control
Turbocharging system	With supercharging, with charge air cooling, constant pressure

APPLICATION / LIMITATIONS:

Application: Propulsion

Model	QSK 38		
Rated power (kW)	1044	1193	1044
Rated speed (rpm)	1900	1800	1600
Mean effective pressure (bar)	17,4	21,1	20,4
Max firing pressure (bar)	154,0	164,0	153,2

Application: Propulsion

Model	KTA 38				
Rated power (kW)	1119	1007	1007	970	783
Rated speed (rpm)	2050	1950	1900	1800	1600
Mean effective pressure (bar)	17,8	16,4	16,9	17,1	13,8
Max firing pressure (bar)	152,4	140,7	142,1	151,7	133,7

Application: Auxiliary and emergency

Rated power (kW)	QSK 38		KTA 38	
Rated power (kW)	1044	984	1007	880
Rated speed (rpm)	1800	1500	1800	1500
Mean effective pressure (bar)	18,5	20,9	17,8	19,7
Max firing pressure (bar)	152,9	141,2	152,9	152,4

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): 13/TS/IA/023547 (2014-01-07)

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.