



Certificate No. 02-002891/024915

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, series NEF

MANUFACTURER:



FPT Industrial S.p.A.
Via Puglia 15
10156 Turin, Italy

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: **2024-02-20**

Place and date: Split, 2020-02-20

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:

4-stroke, single acting, water cooled diesel engines

Types: N45 MNA M10, N67 MNA M15, N67 NMT M28
 Cylinder bore: 104 mm
 Piston stroke: 132 mm
 Cylinder number: 4 in-line, 6 in-line
 Compression ratio: 17,5:1

APPLICATION / LIMITATIONS:

Engine type:	Mean eff. press. (bar)	Max. cyl. press. (bar)	Rated cont. output (kW)	RPM
For propulsion:				
N45 MNA M10	5.9	94	61.4	2800
N67 MNA M15	5.4	94	85.02	2800
N67 MNT M28	10.8	109	169	2800
For auxiliary duty:				
N45 MNA M10	-	-	48	1800
N45 MNA M10	-	-	44	1500
N67 MNA M15	-	-	70	1800
N67 MNA M15	-	-	61	1500
N67 MNT M28	-	-	120	1800
N67 MNT M28	-	-	120	1500

TYPE APPROVAL DOCUMENTATION:

The documentation approved by CRS with No. (dated): 022376 (2007-07-04)

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.