Certificate No: LR2011083TA
Issue Date: 13/08/2020
Expiry Date: 25/06/2024

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**General Electric Company**
Address	1 Neumann Way, Cincinnati, OH, 45215, United States
Place of Production	General Electric Company 1 Neumann Way, Cincinnati, OH, 45215, United States
Type	Gas Turbine Engines
Description	Commercial / Naval Marine Gas Turbine Engine
Trade Name	LM2500 & LM2500 (+) & LM2500 (+G4) Series Gas Turbine
Application	Main propulsion and auxiliary power drives in marine application as follows:- a) Electrical Power Generation: Variable load - constant power turbine speed b) Mechanical Drive: Variable load – variable power turbine speed
Specified Standard	Lloyd's Register's Rules and Regulations for the Classification of Ships (2019) Lloyd's Register's Rules and Regulations for the Classification of Naval Ships (2019) Lloyd's Register's Rules and Regulations for the Classification of Ships using Gases or other Low Flash point fuels (2019) Lloyd's Register's Rules and Regulations for Classification of Offshore Units

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Gopal Nair

Americas Design Appraisal Manager to
Lloyd's Register Quality Assurance Inc
A member of the Lloyd's Register group

1330 Enclave Parkway, Houston, Texas, 77077,
United States

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Type Approval Certificate

(2019)

Ratings

Refer Lloyd's Register MGDA UKITSO/38745305/ENG 3rd March 2020
LM2500, 2500 (+) and (+G4) series
(i) Rating (Military): Air Inlet Temperature 100^{0}F: 40% Relative Humidity: Sea Level: Inlet & Exhaust Losses 4/6" H2O: Dry: No Bleed: Liquid fuel Calorific Value 18400 Btu/lb Power Turbine Speed 3600rpm

LM2500 31250bhp
LM2500+ (PM, PZ, SC) 35293bhp
LM2500+G (RE, RF) 40633bhp

(ii) Rating (Commercial Marine): Air Inlet Temperature 59^{0}F: 60% Relative Humidity: Sea Level: Inlet & Exhaust Losses 0" H2O: Dry: No Bleed: Liquid fuel Calorific Value 19000 Btu/lb Power Turbine Speed 3600rpm

Gas Generator (Isentropic) Gas / Liquid Fuel

LM2500 GE/PE, PH 33000/30000bhp
LM2500+ GK,GV 47000/45100bhp
GR,GY 46600/44700bhp
LM2500+G4 HA, HG 51600/49700bhp
HB,HH 51300/49200bhp

Power Turbine Gas / Liquid Fuel

LM 2500 PJ 32000/30000bhp
PK,PM,PZ 42000/40600bhp
PR 41700/40300bhp
RC,RE,RF 45400/43900bhp
RD 45000/43600bhp

Additional Tests

Type tested as per LR Type approval program for gas turbines.

Other Conditions

Final configuration of the engine(s) for propulsion system are to be as per the requirements of the Lloyd's Register Rules and should be agreed with the plan approval office for each installation.

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Type Approval Certificate

This type approval does not cover the engine management system.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Quality Assurance Inc of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document No. LR2011083TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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