

Marine propulsion engines and systems of RIGAS DIZELIS DG make, based on RDS marine engines have been designed with two things in mind – durability and cost effectiveness. The core of the engine is of German origin, marinized tested and certified in-house using carefully selected EU components.

RIGAS DIZELIS DG RDS marine engines and systems have been designed and developed to operate in diverse sea conditions. Certification by all major classification authorities is available.



### Description & Key Scope

- Heat exchanger cooling system
- Engine heater
- 24V starter, engine-driven charging alternator
- Flexible compensator and silencer
- Gearbox (ZF, TwinDisc, etc.) with different ratio available
- Flexible coupling between engine and gearbox
- Local and remote control panels
- Vibration isolators
- Drawing & Manual package
- Factory Test Report
- Certificates from RS (IACS member) and RRR are available

| Power rating group | Engine speed (rpm) | 1500 | 1800 | 2300 | 2500 | 2600 | 2800 |
|--------------------|--------------------|------|------|------|------|------|------|
| A*                 | Power (kW)         | 27,2 | 32,6 | 37,4 | 39,5 | 41,3 | 43   |
|                    | Power (HP)         | 37   | 44,3 | 50,8 | 53,7 | 56,1 | 58,4 |
| B**                | Power (kW)         | 29,4 | 35,2 | 40,4 | 42,7 | 44,6 | 46,1 |
|                    | Power (HP)         | 40   | 47,8 | 54,9 | 57,1 | 60,6 | 62,7 |

### Description & Key Scope

\* Power rating group A is classifiable power, SCFN code acc. to ISO 3046-7 for continuous operation w/o time limitation at ref. conditions: Barom. Pressure 100 kPa; air temperature +45 °C; relative humidity 60%; raw water temperature <32 °C.

\*\* Power rating group B is not classifiable power, ICFN code acc. to ISO 3046-7 for continuous operation with time limitation at ref. conditions: Barom. Pressure 100 kPa; air temperature +25 °C; relative humidity 60%; raw water temperature <32 °C.

## Engine General Data\*

|                                                            |                                            |
|------------------------------------------------------------|--------------------------------------------|
| Maker                                                      | Rigas Dizelis DG                           |
| Model                                                      | 4RD3.1M                                    |
| No of cylinders                                            | 4 in-line                                  |
| Working principle                                          | 4-stroke                                   |
| Displacement, L                                            | 3.11                                       |
| Bore x stroke, mm                                          | 94 x 112                                   |
| Compression ratio                                          | 18.5 : 1                                   |
| Aspiration                                                 | Naturally aspirated                        |
| Rotation                                                   | Counter clockwise (seen from flywheel end) |
| Flywheel                                                   | SAE 3/11.5"                                |
| Injection system type                                      | Single injection pump for each cylinder    |
| Governor type                                              | Mechanical                                 |
| Oil capacity, L                                            | 10 liter                                   |
| Starter type                                               | 2-pole, 24V, DC                            |
| Preliminary dimensions, LxWxH (including gearbox) / weight | 1050x460x700 mm / 317 kg                   |

\* Other engine parameters are available on request.

## Available Key Options (other options are available on request)

### Engine

- Radiator cooling system
- Manual lub oil drain pump
- Starting batteries
- Static battery charger
- Air, spring or hydraulic starter
- Duplex fuel filters

### Gearbox

- Nonstandard ratios
- Trolling valves
- Power take off (PTO)
- Power take in (PTI)
- etc.

### Other

- Special tools and spare parts
- Commissioning and start-up
- Extended warranty
- Propulsion lines (shafts, propellers, etc.)
- Torsional Vibration Calculation



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