

The Ricardo diesel engines was designed in advance of today's uncompromising demands within the power generation industry and includes superior performance and reliability. R series diesel engine is a four-stroke, vertical water-cooled, inline and direct injecting combustion chamber type, high-speed diesel engine.

Their premium design and specification features provide economic and durable operation as well as exceptional power to weight ratio, improved serviceability, low gaseous emissions, overall performance and reliability essential to the power generation market.

### Introduction to Model Naming

R 6 100 Z D 1-2

⑦ ⑥ ⑤ ④ ③ ② ①

①: distinguish symbol, expressed with number sequence

②: version symbol, expressed with number sequence

③: uygulama özellik sembolü, alfabeyle ifade edilir  
no alphabet: for common usage; T: for tractor; G: for engineering machinery; Q: for

vehicle; D: for generating set; C: for marine usage; P: for power take-off unit

④: construction feature symbol, expressed with alphabet; no alphabet: for natural aspirated model; Z: for turbocharged model.

⑤: cylinder bore (mm)

⑥: cylinder number

⑦: series symbol; stand for imported from RICARDO

### General Data

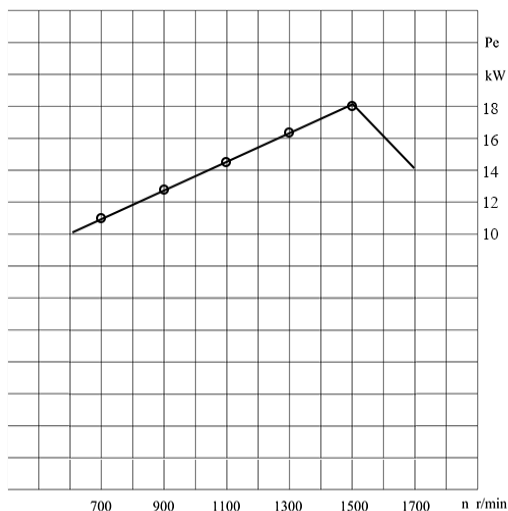
#### 1. Intake and Exhaust System

- Intake pipe - Aluminum single block type
- Exhaust pipe - A single block cast one
- Air filter - Single stage paper filter element style  
- Double stages paper filter element style
- Silencer

#### 2. Lubrication System

The engine is lubricated by pressure oil combined with splash oil.

- Oil pump - gear type oil pump
- Overload overflow valve
- Oil filter - JX0811A, J1012B type for engine lubricating oil  
- JO506 type for turbocharger lubricating oil
- Oil cooler - pipe & shell type oil cooler



#### 3. Cooling System

Forced water coolingRadiator

- Water pump fan
- Thermostat
- Oil cooler

#### 4. Electrical System

Two types electrical system: 12 V and 24 V, all are single wire system with negative pole grounded.

- Battery – should be installed near the starting motor to avoid voltage drop
- Silicon rectified dynamo
- Voltage regulator – keep the voltage at the range of 13.5 – 14.5 V or 27 – 29 V.
- Starting Motor – full closed direct current series excitation motor

### Technical Data

| General                             |                                  |           |
|-------------------------------------|----------------------------------|-----------|
| Power, Standby 1500 rpm             | 18,7 kWm                         |           |
| Power, Prime 1500 rpm               | 17 kWm                           |           |
| Cylinder Volume                     | 2,156 liter                      |           |
| Number of Cylinders and Type        | 4 line                           |           |
| Cylinder Sequence                   | 1-3-4-2                          |           |
| Aspiration and Cooling              | Natural Aspiration               |           |
| Engine RPM                          | 1500 rpm                         |           |
| Bore and Stroke                     | 85 x 95 mmxmm                    |           |
| Intake and exhaust system           |                                  |           |
| Intake Air Capacity                 | 2,2 m <sup>3</sup> /min          |           |
| Exhausted Gas Capacity              | 6,3 m <sup>3</sup> /min          |           |
| Fuel system                         |                                  |           |
| Fuel Tank Capacity                  | 120 liter                        |           |
| Governor Type                       | Mechanics/Electronics (optional) |           |
| Lubrication System                  |                                  |           |
| Oil Capacity                        | 8,5 liter                        |           |
| Cooling System                      |                                  |           |
| Water Capacity(Radiator and Engine) | 16 liter                         |           |
| Weight                              |                                  |           |
| Weight                              | 240 kg                           |           |
| 485 (1500 rpm) Fuel Consumption     |                                  |           |
| Power Rating                        | g/kWh                            | Litres/hr |
| At 110% of Prime Power Rating       | 252                              | 5,8       |
| At 100% of Prime Power Rating       | 245                              | 5,2       |
| At 75% of Prime Power Rating        | 247                              | 3,9       |
| At 50% of Prime Power Rating        | 260                              | 2,7       |