

RICARDO-490

24,2 kWm at 1500 rpm

The Ricardo diesel engines was designed in advance of today's uncompromising demands within the power generation industry and includes superior performance and reliablity. 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 reliablity 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

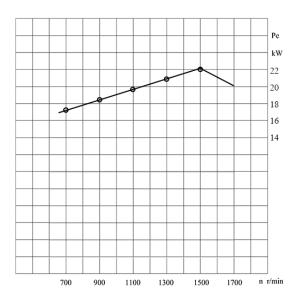
Intake and Exhaust System

- 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

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



Cooling System

Forced water coolingRadiator

- Water pump fan
- Thermostat
- Oil cooler

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	24,2 kWm	
Power, Prime 1500 rpm	22 kWm	
Cylinder Volume	2,545 liter	
Number of Cylinders and Type	4 line	
Compression Ratio	17:1	
Aspiration and Cooling	Natural Aspiration	
Engine RPM	1500 rpm	
Bore and Stroke	90 x 100 mmxmm	
Intake and exhaust sys	tem	
Intake Air Capacity	3,5 m³/min	
Exhausted Gas Capacity	7,8 m³/min	
Fuel system		
Fuel Tank Capacity	120 liter	
Governor Type	Mechanics/Electronics (optional)	
Lubrication System		
Oil Capacity	9 liter	
Cooling System		
Water Capacity(Radiator and Engine)	20 liter	
Weight		
Weight	300 kg	
490 (1500 rpm) Fuel Consumption		
Power Rating	g/kWh	Litres/hr
At 110% of Prime Power Rating	250	7,2
At 110% of Prime Power Rating At 100% of Prime Power Rating	250 243	7,2 6,6

