

RICARDO-R4105ZD

61 kWm at 1500 rev/min

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 özelliği 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
- Turbocharger

2. Fuel System

- Fuel delivery pump
- Fuel filter - Brand: BALDWIN
 - Model: Filter1-BF9853
 Filter2-BF9821
- High pressure pump - type A
- Governor - Mechanics/Electronics
- Injector - Spring low installed and low inertia types
 - J series and S series injector

3. 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

4. Cooling System

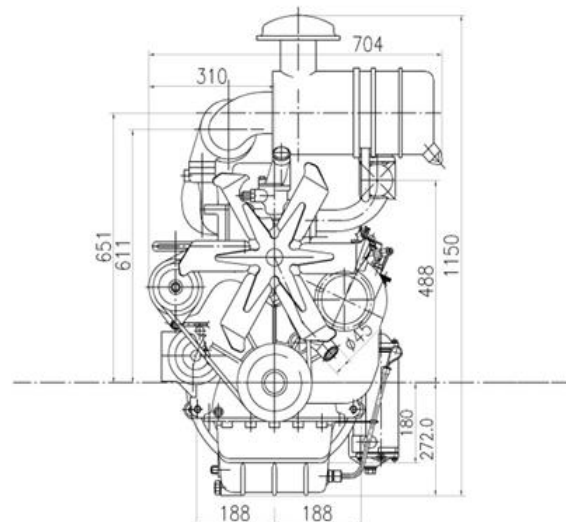
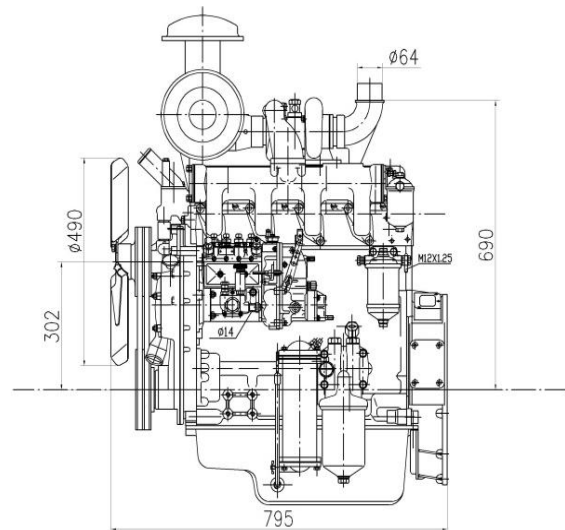
- Forced water cooling
- Radiator
- Water pump fan
- Thermostat
- Oil cooler

5. 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

General Dimensions



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Technical Data

General

Power, Standby 1500 rpm 67 kWm
 Power, Prime 1500 rpm 61 kWm
 Cylinder Volume 4.33 liter
 Number of Cylinders and Type 4 order
 Cylinder Sequence 1-3-4-2
 Aspiration and Cooling Turbocharged
 Engine RPM 1500rpm
 Bore and Stroke 105x125 mm x mm

Intake and exhaust system

Intake Air Capacity 4.5 /min
 Exhausted Gas Capacity 11.5 m /min

Fuel system

Fuel Tank Capacity 150 liter
 Governor Type Mechanics/Electronics

R4105ZD (1500 rev/min) Fuel Consumption		
Power Rating	g/kWh	Litres/hr
At 100% of Prime Power Rating	231	14.7
At 75% of Prime Power Rating	229	10.9
At 50% of Prime Power Rating	233	7.4
At 25% of Prime Power Rating	235	3.7

Lubrication System

Oil Capacity 13 liter

Cooling System

Water Capacity
 (Radiator and Engine) 66 liter

Weight

Weight 435 kg

Performance Graph

