

RICARDO

Technical Specifications



ENGINE

- RICARDO series heavy duty diesel engine
- 4 cycle, water cooled, turbocharged & air to air charge cooled /turbocharged & air to water charge cooled
- Direct injection
- Electronic governor system
- 24 volt self-starter and charger alternator
- Changeable air, fuel and oil filter
- Tropical type radiator
- Flexible fuel pipe
- Oil discharge valve and extension pipe
- Industrial type silencer, exhaust spiral or compensator
- Maintenance free battery
- Engine block water heater (in automatic models)
- Diesel gen-set maintenance and operating instructions and electrical circuit diagram

QUALITY STANDARD

Our generators are manufactured in compliance with VDE 0530, BSE 4999 BS5000, IEC 34, TS ISO 8528, TS EN ISO 3744, TS EN ISO 3746, TS EN 60034-1, TS EN 60204-1, TS EN 60335-1, TS EN 61439-1,

EN 61000, TS EN ISO12100 standards.

We have ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 and ISO10002:2006 management system certificates from Kiwa & MEYER, an accredited independent quality organization.

Our generators up to 400 kw are manufactured in compliance with 2000/14/EC European noise emission directive and certified from Ente Certificazione Macchine.

We also have TS ISO 8528-4, TS ISO 8528-5, TS EN 13501-1+A1:2013 flame retardancy and TS EN ISO 9227 certificates against anti-corrosion together with CE Declaration.

ALTERNATOR

- Brushless, single bearing, flexible disc 4 poles alternator for harmonic failure
- H type isolation class
- IP 21-23 protection class
- Self exciter
- Electronic automatic voltage regulator
- Stator 2/3 step for harmonic failure
- The alternator windings are protected by insulating varnish against oil and acid.

EXTRA EQUIPMENTS

- Charge ammeter
- Moulded case circuit breaker (in automatic models)
- Hospital/Critical type silencer
- Sound-proof canopy
- Mobile - trailer
- Synchronization control panel for 2-16 gensets
- 3 pole/4 pole automatic transfer panel (A.T.S.)
- Fuel and oil heater
- Alternator heater
- Automatic fuel filling system
- Fuel-water separator filter
- PMG warning system

CANOPY

- Modular type sound-proof canopy
- Canopy installation executed with screw and nut, without welding process
- Epoxy and polyester powder painted canopy
- Canopy designed for easy maintenance
- Lockable doors on both sides of canopy
- Emergency stop button
- Transparent panel inspection window

AUTOMATIC CONTROL PANEL

- LCD display screen
- Hardware and materials needed
- Battery charger
- USB port & RS-485 output

GEN-SET SAFETY PROTECTION & ALARMS

- High water temperature
- Over current load
- Low oil pressure
- High & low genset voltage
- High & low engine speed
- Start/stop failure
- Low radiator water level



Easy maintenance canopy design



Refilling from the outside of the canopy



Canopy made of galvanized steel



Warning system for decreasing fuel with electronic fuel level sender



RICARDO Series

Diesel Generator Sets

RICARDO Series Diesel Generator Sets 82-125 kVA

| MODEL | | | | E RC XX 0082 | E RC XX 0094 | E RC XX 0110 | E RC XX 0125 |
|--|---------------------------------|------------------|-------|----------------------------|----------------------------|----------------------------|----------------------------|
| GROUP | GEN-SET POWER | STAND BY | kVA | 82 | 94 | 110 | 125 |
| | | | kW | 65,6 | 75,2 | 88 | 100 |
| | | PRIME | kVA | 75 | 85 | 100 | 114 |
| | | | kW | 60 | 68 | 80 | 91,2 |
| | CANOPY DIMENSION (W x L x H) mm | | | 1000x2600x1410 | 1000x2600x1510 | 1100x3050x1690 | 1100x3050x1690 |
| | CANOPY WEIGHT kg | | | 1245 | 1363 | 1883 | 1883 |
| | OPEN DIMENSION (W x L x H) mm | | | 1000x2200x1410 | 1000x2200x1510 | 1100x2600x1690 | 1100x2600x1690 |
| | OPEN WEIGHT | | | 1048 | 1085 | 1630 | 1630 |
| ENGINE | BRAND | | | RICARDO | RICARDO | RICARDO | RICARDO |
| | TYPE | | | N4105ZLDS | R4105BZLDS | R6105ZDS | R6105ZLDS |
| | POWER | STAND BY | kW | 73 | 80 | 93 | 111 |
| | | | PRIME | kW | 66 | 72 | 84 |
| | SPEED (rpm) | | | 1500 | 1500 | 1500 | 1500 |
| | CYCLE | | | 4 | 4 | 4 | 4 |
| | DISPLACEMENT (lt) | | | 4,15 | 4,67 | 6,49 | 6,49 |
| | NUMBER OF CYLINDERS | | | 4 IN LINE | 4 IN LINE | 6 IN LINE | 6 IN LINE |
| | BORE x STROKE (mm x mm) | | | 105x120 | 105x135 | 105x125 | 105x125 |
| | COMPRESSION RATIO | | | 17 : 1 | 17 : 1 | 17 : 1 | 17 : 1 |
| | GOVERNOR TYPE | | | ELECTRONIC | ELECTRONIC | ELECTRONIC | ELECTRONIC |
| | INDUCTION | | | TURBOCHARGED - INTERCOOLED | TURBOCHARGED - INTERCOOLED | TURBOCHARGED - INTERCOOLED | TURBOCHARGED - INTERCOOLED |
| | COMBUSTION SYSTEM | | | DIRECT | DIRECT | DIRECT | DIRECT |
| | COOLING SYSTEM | | | WATER | WATER | WATER | WATER |
| | FUEL CONSUMPTION lt / h | %100 PRIME POWER | | 17,5 | 19,1 | 22,2 | 25,6 |
| | | %75 PRIME POWER | | 13,1 | 14,3 | 16,7 | 19,2 |
| | | %50 PRIME POWER | | 8,7 | 9,5 | 11,1 | 12,8 |
| TOTAL LUBRICATION SYSTEM CAPACITY (lt) | | | 13 | 16 | 17 | 17 | |
| TOTAL COOLANT CAPACITY (lt) | | | 13 | 16 | 23 | 23 | |
| FUEL TANK CAPACITY (lt) | | | 139 | 210 | 275 | 275 | |

Emsa reserves the right to make changes in model, technical specifications, color, equipment & accessories without prior notice.