# Generator JP250 (1206)

## Description

GENERATING SET MODEL (JP250)

| **Output Ratings** | **Prime** | **Standby** |
|---|---|---|
| 380-415 V, 3 ph, 50 Hz, 1500 rpm | 250 kVA | 275 kVA |
| | 200 kW | 220 kW |

GENERATING SET MODEL (JP250)

| | |
|---|---|
| Engine Make | Perkins |
| Engine Model | 1206A-E70TTAG3 |
| Governing Type | Electronic |
| Number of Cylinders | 6 |
| Cylinder Arrangement | Vertical in line |
| Bore and Stroke mm | 105 x 135 |
| Displacement / Cubic Capacity litres | 7.01 |
| Induction System | Series Turbocharged, air to air charge cooled |
| Cycle | 4 stroke |
| System Combustion | Direct Injection |
| Compression Ratio | 15.8:1 |
| Rotation | Anti-clockwise, viewed on flywheel |
| Cooling System | Water â€“ cooled |
| Frequency and Engine Speed | 50Hz & 1500rpm |

| | **Prime** | **Standby** |
|---|---|---|
| Gross Engine Power KW (hp) | 226.2 (303) | 258248.6 (333) |
| Fuel Consumption @ 50% load L/hr | 28.1 | |
| @ 75% load L/hr | 41.5 | |
| @ 100% load L/hr | 56.9 | 64.5 |
| Total Lubrication System Capacity litres | 16 | 16 |

| | | |
|---|---|---|
| Total Coolant Capacity litres | 25 | 25 |
| Exhaust Temperature: Â°C | 515.8 | 511 |
| Radiator Cooling Air Flow (Min): mÂ³/sec | 4.42 | 6.4.42 |
| Combustion Air Flow: mÂ³/min | 13.5 | 15.7 |
| Exhaust Gas Flow: mÂ³/min | 30.9 | 33.66 |
| Fuel Tank Capacity: litres | 465 | 465 |

DIMENSIONS AND WEIGHT

| **Length cm** | **Width cm** | **Height cm** | **Weight* Kg (wet)** | **Fuel Tank** liter |
|---|---|---|---|---|
| 390 | 143 | 202 | 3165 | 465 |

**STANDARD SPECIFICATIONS**

1 â€“ ENGINE

Perkins four stroke heavy duty high performance industrial type diesel engine.

2 â€“ ENGINE FILTRATION SYSTEM

- Air filter
- Fuel filter
- Full flow lube oil filter
  All filters have replaceable elements.

3 â€“ COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-ration factors)

4 â€“ EXHAUST SYSTEM

Heavy duty Industrial Exhaust Silencer:
Silencer noise reduction level: 12(dB)
Maximum Allowable Back Pressure: 10 (kPa)

5 â€“ CIRCUIT BREAKER TYPE

ABB 3 pole MCCB. (4 pole is optional)

6. FUEL SYSTEM
On Generating Sets up to 700 KVA, the baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load.
The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

7. ALTERNATOR
7.1 INSULATION SYSTEM
â€“ The insulation system is Class H.
â€“ All windings are impregnated in either a triple dip thermosetting liquid, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin.
â€“ Heavy coat of antitracking varnish additional protection against moisture or condensation.

7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)
The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at Â±1%. Nominal adjustment by means of a trim pot incorporated on the AVR.

7.3 MOTOR STARTING
An overload capacity equivalent to 300% of the Full Load impedance at zero Power Factor can be sustained for 10 seconds, when AREP or PMG option is fitted.

8. MOUNTING ARRANGEMENT
8.1 BASE FRAME
The complete Generating Set is mounted as a whole on a heavy duty fabricated steel Baseframe.

8.2 COUPLING
The Engine and Alternator are directly coupled by means of an SAE  flange. The Engine flywheel is flexibly coupled to the. Alternator rotor.

8.3 ANTI-VIBRATION MOUNTING PADS
Anti-Vibration pads are affixed between the Engine/ Alternator feet and the Baseframe thus ensuring complete vibration isolation of the rotating assembly.

8.4 SAFETY GUARDS
The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

9. FACTORY TESTS
* The Generating set is load tested before dispatch
* All protective devices control functions and site load conditions are simulated, The generator and its systems are checked before dispatch.

10. EQUIPMENT FINISHING
All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

11. DOCUMENTATIONS
Operation & Maintenance manual, Circuit wiring diagrams, and Commissioning / Fault Finding

Instruction leaflets are accompanied with the Generator.

12. QUALITY STANDARDS
The equipment meets the following standards:
BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528.

13. WARRANTY
All of the Generating Sets are covered under a warranty policy for a period of 12 months. Warranty of the equipment is in line with manufacturers warranty terms & conditions.
(check warranty statement for more details, as it may vary for different countries)

In line with continuous product development, we reserve the right to change specifications without notice.

**ALTERNATOR DATA**

| | |
|---|---|
| Make | Leroy Somer |
| Model | TAL 046D |
| No. of bearings | 1 |
| Insulation class | H |
| Total Harmonic Content | <2.5% |
| Ingress Protection | IP23 |
| Excitation System | SHUNT |
| Winding Pitch | 2/3 |
| AYR Model | R150 |
| Overspeed | 2250 minÂ¯Â¹ |
| Voltage Regulation | Â± 1% |
| Short Circuit Capacity | â€“ |

AREP or PMG Excitation System Available as Optional.

**CONTROL PANEL**

Make Deep Sea
Model DSE6110
The DSE6110 is an Auto Start Control Module for single genset applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module

can either be programmed using the front panel or by using the DSE configuration suite PC software.

**Metering and Alarm indications:**
Generator frequency
Underspeed, Overspeed
Generator volts (L-L, L-N)
Generator current
Engine oil pressure
Engine coolant temperature
Fuel level (Warning or shutdown) â€“ Optional
Hours run counter
Battery volts
Fail to start/stop
Emergency stop
Failed to reach loading voltage/frequency
Charge fail
Loss of magnetic pick-up signal â€“ Optional
Low DC voltage
CAN diagnostics and CAN fail/error

STANDARD REFERENCE CONDITIONS

Output ratings are presented at 25Â°C air inlet temperature, barometric pressure 100 kPa, relative humidity
30%. This generating set is designed to operate at high ambient temperatures (up to 55Â°C), humidity (up to 99%) and higher altitudes. De-ration may apply, please consult your dealer for specific site ratings.
Some of the specifications are not standard on all Genset models