

Annex B

Diesel Generator 100 kVA Specifications

Three phase four wires, (50 or 60) Hz at (1500 or 1800 to 3000 or 3600) RPM, silent type. Guarantee Period: One year or 1000 hours whichever comes first.

General features:

- Preferred engine brand: Perkins Model (1104C 44TAG2)
- Alternator Type: MJB 225 MA4
- Oil and fuel filter fitted, water separator.
- Lube-oil drain valve fitted
- Electric starter motor 12 V. D.C
- Output range: Prime-100KVA / Standby-110KVA
- Induction system: Turbocharged
- 8-hour operation base tank
- Key start / auto start
- Mechanical /Electrical governor
- 4 pole MCCB, set mounted starting battery
- Soundproof and weatherproof canopy
- Operation and Maintenance manual
- Special Integrated Steel Base tank and sprayed overall in gloss enamel paint
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Genset Specification:

Voltage Regulation

Voltage regulation maintained within $\pm 0.5\%$

- Between 0.8 and 1.0 lagging and unity
- From no load to full load
- At speed droop variation up to 4.5%

Frequency Adjustable Ratio

Change load from 0-100%, within 1.0% (electric speed regulator), within 4.5% (mechanical speed regulator)

Frequency Undulation

- Load from 0-100%, Frequency undulation within 0.25%
- No load wire volts max undulation ratio within 1.8%
- Three phase balanced load in the order of 5%

Engine Specification:

Preferred engine brand: Perkins

In-line direct injection 6-cylinder 1000series diesel engine.

Type

Water cooled, four cycle, Turbocharged.

Construction

Two valves per cylinder, forged steel crankshaft and connecting rods, cast iron block. Starter 12-volt negative earth. battery charging alternator 65 amp on engine.

Fuel System

Fuel filter type: Replacement Element

Fuel Type: Class A2 Diesel

12V fail safe actuator. Spin-on paper element fuel filters with Bosch fuel pump injection system with integral

Electronic governor. Dual flexible fuel lines and connectors. Standard fuel water separator.

Filters

Air cleaner with dry element and restriction indicator. Spin full flow lube oil filter.

Oil cooler. Drain Tap

Alternator Technical Data:

- Alternator Make Marelli or Equivalent
- Brushless, self-exciting
- Class (H) insulation
- Standard degree of protection is IP23
- Self-regulating
- With fan cooling
- Resist humid grease
- AC excitation, rotating rectification tube
- Stator grease insulation covered
- Rotator and excitation high polymer, Resist the corruption of oil and acid.
- Rotator balance is in accordance with BS2869 standard
- High-quality lubrication sealed long-time bearing
- Rotator silicon steel close tight