



VELORA

250 kVA Diesel Generator Set

Prime-rated, three-phase, sound-attenuated canopy or open-skid configuration.

POWER

250 kVA / 200 kW PRP

VOLTAGE

400/230 V · 50 Hz

STANDARD

ISO 8528 · IEC 60034

Engineering-Driven Supply.

Velora Engineering & Trading PLC · Addis Ababa, Ethiopia · www.veloraet.com

SAMPLE / INDICATIVE DATASHEET — actual specification confirmed at quotation

250 kVA Diesel Generator Set

Three-phase, prime-rated, open-skid or sound-attenuated canopy.

Key Highlights

- **Power Output:** 250 kVA / 200 kW prime · 275 kVA / 220 kW standby
- **Engine:** Tier-1 OEM (Cummins / Perkins / Volvo class) — turbocharged, water-cooled
- **Alternator:** Brushless, IP23, AVR-controlled, Class H insulation
- **Compliance:** ISO 8528-1/3/5, IEC 60034, EU Stage IIIA emissions
- **Documentation:** FAT certificate, Country-of-Origin, O&M manuals

1. Performance Ratings

Prime Power (PRP)	250 kVA / 200 kW @ 0.8 PF
Standby Power (ESP)	275 kVA / 220 kW @ 0.8 PF
Voltage / Frequency	400/230 V, 3-phase 4-wire, 50 Hz
Speed / Pole	1500 rpm · 4-pole
Power Factor	0.8 lagging
Rating Standard	ISO 8528-1 PRP / ESP

2. Engine

Manufacturer	Tier-1 OEM (Cummins / Perkins / Volvo / Doosan class)
Type	4-stroke, in-line 6-cylinder, turbocharged after-cooled
Displacement	8.9 L (typical)
Cooling	Water-cooled with integral radiator and pusher fan
Fuel System	Mechanical or common-rail diesel injection
Governor	Electronic isochronous
Emissions	EU Stage IIIA / EPA Tier 2 (territory dependent)
Starting System	24 V DC electric, sealed maintenance-free batteries

3. Alternator

Manufacturer	Stamford / Leroy-Somer / Mecc Alte (or equivalent)
Type	Brushless, self-excited, AVR-controlled
Insulation Class	Class H

Protection	IP23 (canopy units IP54 ingress)
Voltage Regulation	$\pm 1.0\%$ steady state
Total Harmonic Distortion	< 3% @ no load
Bearings	Single bearing, sealed-for-life

4. Control Panel

Controller	DSE 7320 / ComAp IntelliLite (or equivalent)
Display	Backlit graphical LCD with 3-phase metering
Functions	Auto-start, AMF, AMF+ATS option, alarm history, event log
Communications	RS-485 Modbus, USB, optional Ethernet/SMS
Protection	Over/under voltage, over/under frequency, overload, EPS, low oil, high temp

5. Mechanical Construction

Base Frame	Heavy-gauge steel, integrated fuel tank (8 hr base tank typical)
Vibration Isolation	Anti-vibration mounts between engine/alternator and base
Open-Skid Dimensions (typical)	3500 × 1200 × 1850 mm L×W×H
Canopy Dimensions (typical)	3700 × 1300 × 2150 mm L×W×H
Sound Level (canopy)	≤ 75 dB(A) @ 7 m
Weight (open / canopy)	~ 2100 kg / ~ 2450 kg

6. Compliance & Standards

- ISO 8528 — Reciprocating internal combustion engine driven AC generating sets.
- IEC 60034 — Rotating electrical machines.
- ISO 3046 — Reciprocating internal combustion engines.
- CE marking (where applicable to destination market).

7. Documentation Provided

- Factory Acceptance Test (FAT) certificate.
- Country-of-Origin certificate and Declaration of Conformity.
- Electrical schematic and General Arrangement (GA) drawings.
- Operation & Maintenance manuals (engine, alternator, controller).
- Recommended spare parts list for 1 year operation.

All values are typical for a 250 kVA prime-rated set. Final make, model and ratings are confirmed against the project specification at quotation.