

DIESEL GENSET



# 2000 kVA



**16M33 ENGINE SERIES**

Designed in France | Made in India

Disclaimer- Image displayed may vary due to continuous improvement in the products

## Advantages

- Engineered with advanced French technology, proudly manufactured in India.
- Custom-engineered solutions designed with flexibility and creativity to meet diverse customer needs.
- Comprehensive 3S support model (Sales, Service, Spare parts)
- Fully compliant with current CPCB IV emission standards.
- Heavy-duty cast iron cylinder block with robust construction for reduced vibration and improved stability.
- High-strength forged steel crankshaft with induction hardening for extended durability.
- Cast iron wet liners and oil-cooled aluminium alloy pistons fitted with high-performance piston rings.
- Individual cast iron cylinder heads with 4-valve configuration for optimal performance and easier maintenance.
- Cast iron centrifugal-type freshwater pump ensures reliable cooling.
- Warranty coverage of 2 years or 5000 operational hours from the date of commissioning whichever occurs first.
- Multistage oil filtration system with electric priming pump for enhanced lubrication, reduced engine wear, and improved cold starts.
- Dual-layer fuel filtration system with built-in water separator to safeguard engine components.
- Turbocharger and exhaust manifold equipped with thermal shielding; designed to handle over 50% block loading capacity.
- 24x7 nationwide service support through dedicated helpline – +91 974 000 7700
- Certified for quality, environmental, and safety standards: ISO 9001

## FEATURES OF OUR CONTROLLER

- Graphic LCD display with clear, icon-based interface
- True RMS measurement
- Engine parameter monitoring
- Fully configurable inputs
- Generator running hours counter
- Single-phase and Three-phase sensing
- Power parameter monitoring: kW, kVA, kVAR, current, voltage, power factor

### Engine protections

- Low RPM
- High RPM
- Low lube oil
- High temperature

### Generator monitoring:

- Battery voltage
- Engine runtime scheduler
- Maintenance alarm
- Automatic transfer between generator and mains available
- Remote start/stop facility (optional)
- IP42 – when module is installed in control panel without sealing
- IP65 – when installed with optional sealing to the panel



# APPLICATION DATA



## Engine

Engine Make	Baudouin, India
Engine Model	16M33G2250/5
Distribution	4 Stroke
Aspiration	Turbocharged
No. of Cylinders	16
Type of Construction	Vee Type
Displacement	52.3 L
Bore / Stroke	150 x 185 mm
Mean Piston Speed	9.25 m/s
Compression Ratio	15:1
Gross Engine Power @100% PRP	1800 kWm / 2414 bhp
Gross Engine Power @ 110%	1980 kWm / 2655 bhp
Rated Speed	1500 RPM
Frequency	50 Hz

## Cooling System

Method of Cooling	Radiator
Coolant Capacity	542 L
Radiator Fan Power	80 kW
Thermostat Operating Range	80 – 92°C
Coolant Alarm (Shutdown) Temperature	103°C

## Fuel System

Governor	Electronic (ECU)
Governing Class	G3 as per ISO 8528-5
Fuel Injection type	High Pressure Common Rail (HPCR)
Recommended Fuel	IS 1460 / BS2869 Part1 Class A1
Fuel Tank Capacity	990 L
<b>Fuel Consumption: Litres/Hour</b>	
100% Load	378.0
75% Load	274.0

Note: Fuel Data Confirms to ISO 3046 with +5% tolerance

## Lubrication System

Recommended Lube Oil	CI4+ SAE15W-40
Lube Oil System Capacity	171 L
Lube Oil Consumption	< 0.2% of FC

## Induction System

Air Filter Type	Paper Element
Air Intake Restriction (Dirty element)	6.2 kPa

## Exhaust System

Silencer Type	Residential-grade
Number of Silencers	2 Nos.
Max Back Pressure Total System	7.5 kPa
Exhaust outlet pipe size (min)	200 mm
Exhaust Gas Temperature	≤ 550°C

## Electrical System

Electrical System Voltage	24 V DC
Starter Motor Power	2 × 8.5 kW
Battery Size	4×12V, 180 – 200 Ah

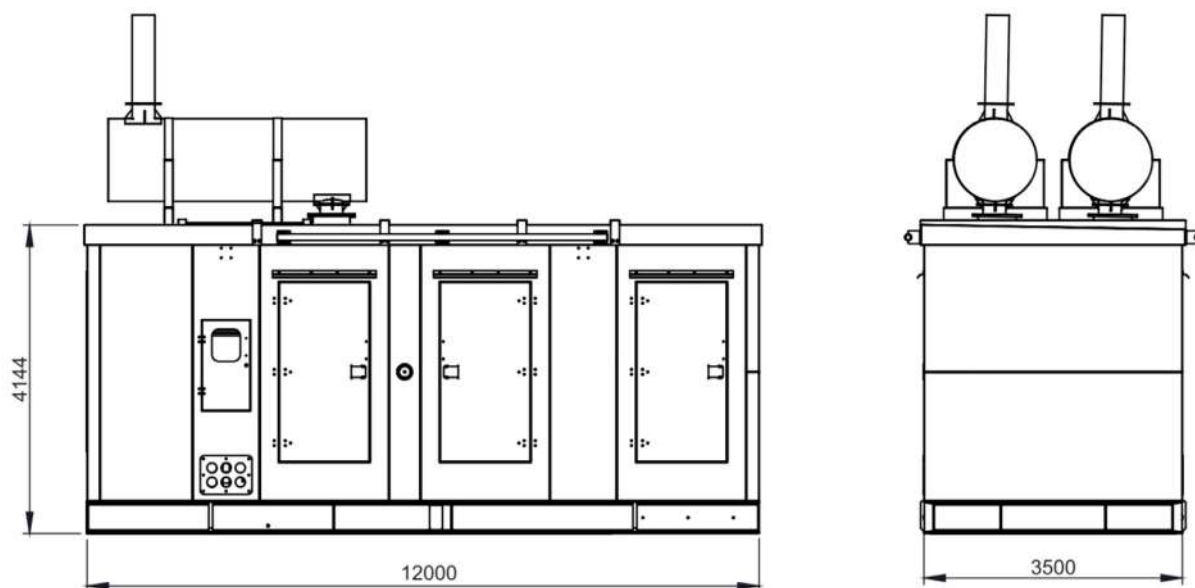
## Alternator

Make	Stamford
Frame	S7L1D-G4
Power Factor	0.8
No. of Phase	3
Frequency	50 Hz
Rated Voltage (L-L)	415 V
Rated Current	2780 Amps
Voltage Regulation	±1%
Insulation System	H Class
Temperature Rise Limit	H Class
Winding Pitch	2/3
Over Load	10 % Over Load for 1 hour once in 12 hours
Waveform Distortion	No-Load < 1.5% NDBLL<5%
Temperature Ambient	40 °C
Altitude	1000 m
Protection	IP23
Cooling	Air Cooled
Air flow	2.39 m3/sec
Coupling	Single Bearing
Maximum Over Speed	1650 RPM
Stator Winding	Double layer concentric
Control System	Separately excited
Excitation System	PMG
AVR Type	Analogue
AVR Model	MX 341

## Performance: Efficiency @0.8 p.f

100%	96.10%
75%	96.30%
Short Circuit Ratio	0.45
Xd Dir Axis Reactance	2.21
X'd Dir Axis Transient Reactance	0.16
X" d Dir Axis Sub Transient Reactance	0.11
Xq Quad Axis Reactance	1.66
X" q Quad Axis Subtransient Reactance	0.19
X1 Leakage Reactance	0.07
X2 Negative Sequence Reactance	0.14
X0 Zero Sequence Reactance	0.03

# DIMENSIONS & WEIGHT



Acoustic Set	
Length	12000 mm
Width	3500 mm
Height without Silencer	4144 mm
Height with Silencer	4825 mm
Weight, Dry	23500 kg
Fuel Day Tank	990 litres

Note: The drawing is intended for reference purposes only and should not be used for installation planning. For the latest information, please contact OJUS. All technical data reflects the specifications of respective manufacturers. OJUS reserves the right to alter product designs or specifications at any time, without prior notice or obligation.

Disclaimer: In line with ongoing product enhancements, specifications are subject to change without notice.



+91 974 000 7700

[www.ojuspowers.com](http://www.ojuspowers.com)

[contact@ojuspowers.com](mailto:contact@ojuspowers.com)

**Corporate Office Address:** No. 2/1, J C Industrial Area, Yelachenahalli, Kanakapura Road, Bangalore - 560 062 , Karnataka

**Factory 1 Address:** Survey # 944/1-945/1, Thorapalli Road, Moranapalli, Hosur - 635 109, Tamil Nadu

**Factory 2 Address:** # 17/A, Gurukul Industrial Estate, Near Banna Exports, Sector 38, Gurukul Industrial Area, Faridabad - 121 003, Haryana

