



DIESEL GENERATOR SET

Durable | Robust | Built to Last

16M33 ENGINE SERIES

1850 kVA

DESIGNED IN FRANCE MADE IN INDIA

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) – includes erection and commissioning.
- Fully compliant with current CPCB norms and future-ready for 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 aluminum 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.
- 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

STANDARD SCOPE

Diesel Engine / AC Generator / Base frame / Standard Control Panel / Radiator / Silencer /
Battery & Battery Cable / AVMs / First Fill of Lube Oil / First fill of Coolant /
DG Set Controller / Fuel Tank / Wiring Harness / Sensors

OPTIONAL ONE-STOP POWER SOLUTION

End-to-end customized power services including system design, installation, commissioning, and operational support. Optional offerings include AMC/CAMC contracts, temporary power rental, hybrid energy solutions, electrical board approvals, advanced AMF setups, and auto-synchronizing panels.



Controller: DSE 7320 MKII

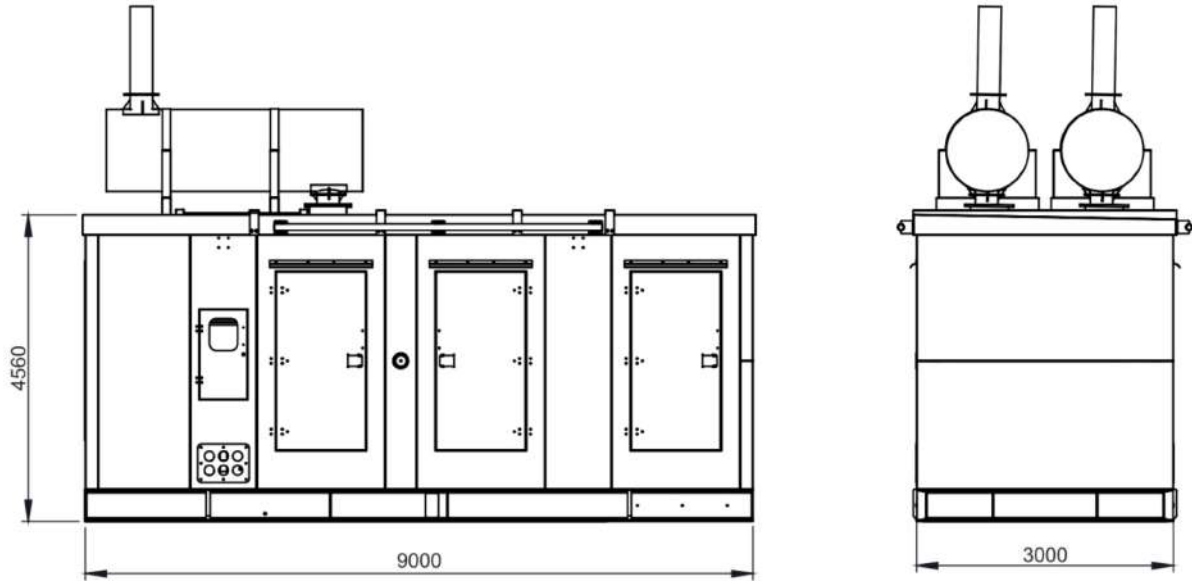
FEATURES OF OUR CONTROLLER

- LCD display with clear, icon-based interface
- Accurate True RMS voltage measurement
- Real-time monitoring of current and power
- Built-in USB communication support
- Integrated engine parameter monitoring
- Flexible digital inputs for alarms or custom functions
- ECU interface compatibility for electronic engines
- PC-configurable via DSE Configuration Suite software, enabling:
 - Custom operational sequences
 - Alarm setup
 - Scheduler programming and timer adjustments
- Operating temperature: -30°C to +70°C (-22°F to +158°F)
- Voltage tolerance: 0 V to 70 V DC (Max continuous: 35 V DC)
- USB Slave Port (Type B, USB 2.0) for PC connection (up to 6 m / 20 ft)
- USB Cable: Type A to Type B (commonly used printer cable)
- 4 configurable digital inputs
- Generator running hours counter
- Single-phase and three-phase detection
- Power parameter monitoring: kW, kVA, kVA_r, current, voltage, power factor
- Generator protections:
 - Overload
 - Over/under voltage
 - Single phasing
 - Over/under speed (RPM)
 - Low oil pressure
 - High engine temperature
- 50+ programmable event logs
- Additional parameters:
 - Battery voltage
 - Engine run-time scheduler
 - Maintenance reminders
- Auto mains (utility) failure transfer capability
- Remote start/stop support (optional)
 - IP42: Controller mounted inside panel (unsealed)
 - IP65: Controller sealed inside the panel using optional gasket kit

1850 kVA DG SET TECHNICAL SPECIFICATIONS

Engine		Induction System	
Engine Make	Baudouin, India	Air Filter Type	Paper Element
Engine Model	16M33G2000/5	Air Intake Restriction (Dirty element)	6.2 kPa
Distribution	4 Strokes		
Aspiration	Turbocharged	Electrical System	
No. of Cylinders	16	Electrical System Voltage	24 V DC
Type of Construction	Vee Type	Starter Motor Power	2x8.5 kW
Displacement	52.3 L	Battery Size	4x12V, 180 - 200 Ah
Bore / Stroke	150x185 mm		
Mean Piston Speed	9.25 m/s	Alternator	
Compression ratio	15:1	Make***	Stamford
Gross Engine Power @ 100% PRP	1680 kWm/2253 bhp	Frame	S7L1D-F4
Gross Engine Power @ 110%	1800 kWm/2414 bhp	Power Factor	0.8
Rated Speed	1500 RPM	No. of Phase	3
Frequency	50 Hz	Frequency	50 Hz
		Rated Voltage (L-L)	415 V
Cooling System		Rated Current	2572 Amps
Method of Cooling	Radiator	Voltage Regulation	±1%
Coolant Capacity	542 L	Insulation System	H Class
Radiator Fan Power	74 kW	Temperature Rise Limit	H Class
Thermostat Operating Range	80 - 92°C	Winding Pitch	2/3
Coolant Alarm Temperature	103 °C	Over Load	10 % Over Load for 1 hour once in 12 hours
		Waveform Distortion	No-Load < 1.5% NDBLL<5%
Fuel System		Temperature Ambient	40 °C
Governor	Electronic (ECU)	Altitude	1000 m
Governing Class	G3 as per ISO-8528-5	Protection	IP23
Fuel Injection Type	High Pressure Common Rail (HPCR)	Cooling	Air Cooled
Recommended Fuel	IS 1460/ BS2869 Part1 Class A1	Air flow	2.52 m3/sec
Fuel Tank Capacity	990 L	Coupling	Single bearing
Fuel Consumption: L/hr @ Specific Gravity 0.85 gms/Litre		Maximum Over Speed	1650 RPM
100% Load	351.0	Stator Winding	Double layer concentric
75% Load	265.0	Control System	Separately Excited
*Note: Fuel Data Confirms to ISO 3046 with +5% tolerance		Excitation System	PMG
		AVR Type	Analogue
Lubrication System		AVR Model	MX 341
Recommended Lube Oil	CI4+SAE15W-40	Performance: Efficiency @0.8 p.f	
Lube Oil System Capacity	171 L	100%	95.90%
Lube Oil Consumption	< 0.2 % of FC	75%	96.20%
		Short Circuit Ratio	0.42
Exhaust System		Xd Dir Axis Reactance	2.38
Silencer Type	Residential-grade	X'd Dir Axis Transient Reactance	0.18
Number of Silencers	2 No.	X''d Dir Axis Sub Transient Reactance	0.13
Max Back Pressure Total System	7.5 kPa	Xq Quad Axis Reactance	1.75
Exhaust Outlet Pipe Size (min)	200 mm	X''q Quad Axis Subtransient Reactance	0.2
Exhaust Gas Temperature	≤ 550 °C	XI Leakage Reactance	0.08
		X2 Negative Sequence Reactance	0.15
		X0 Zero Sequence Reactance	0.03
		***Alternator Options available with CG & Leroy Somer.	

DIMENSIONS AND WEIGHT



Overall Size (L x W x H): 9000x3000x4560mm

Weight (Dry, Max): 19000 Kg

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.

OJUS Power and Technologies Private Limited

Corporate Office:
#2/1, JC Industrial Estate, Yelachenahalli, Kanakapura Road, Bangalore – 560 062

Factory:
Survey No. 944/1–945/1, Thorapalli Road, Moranapalli, Hosur – 635 109

Office Number:
+91 974 000 7700

Email:
contact@ojuspowers.com

