



DIESEL GENERATOR SET

Durable | Robust | Built to Last

12M33 ENGINE SERIES
1250 kVA

DESIGNED IN FRANCE MADE IN INDIA

ADVANTAGES

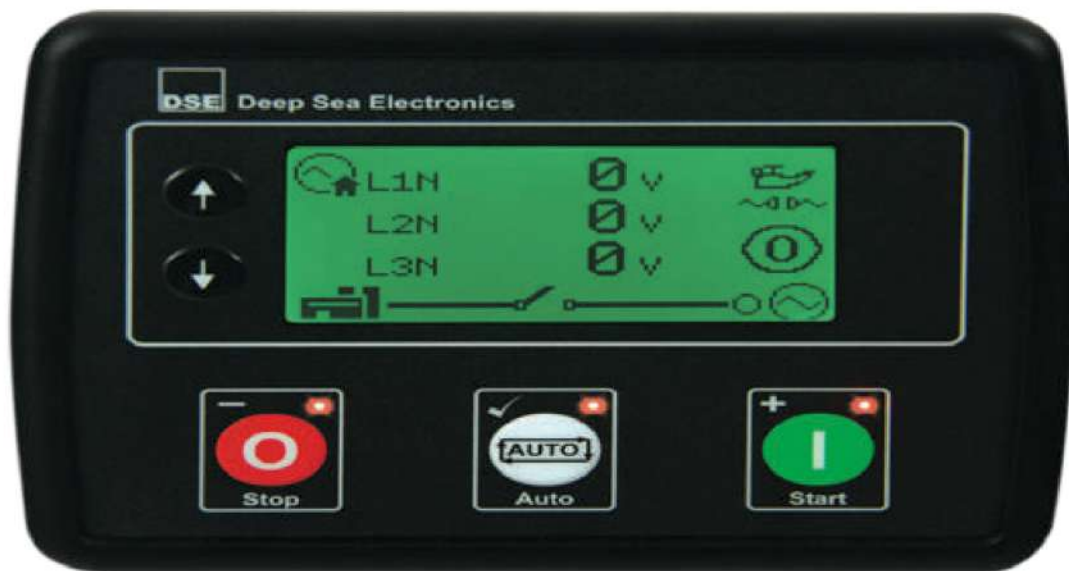
- Engineered with advanced French technology, proudly manufactured in India.
- Custom-engineered solutions designed with flexibility and creativity to meet diverse customer needs.
- Comprehensive 3S support model (Sales, Service, Spare parts) – includes erection and commissioning.
- Fully compliant with 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 4522 MKII

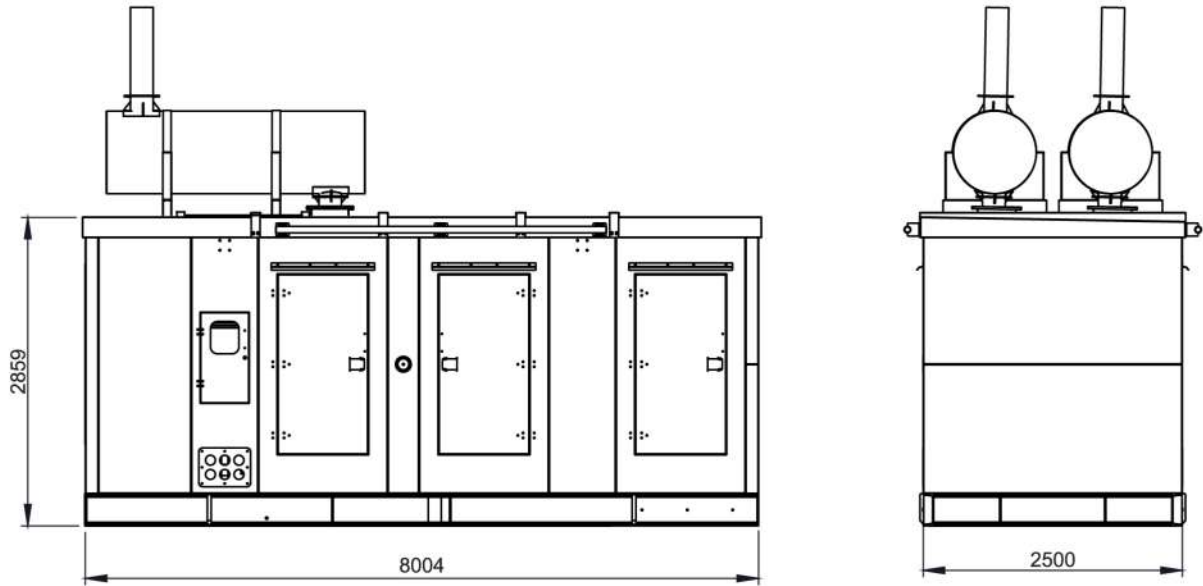
FEATURES OF OUR CONTROLLER

- Con-based LCD display
- True RMS voltage monitoring
- Current and power monitoring
- USB communications
- Engine parameter monitoring
- Fully configurable inputs for use as alarms or various functions
- ECU interface for electronic engines
- Compatible with DSE Configuration Suite PC Software
- Supports alteration of operational sequences, timers, alarms, and functions
- Operating Temperature: -30°C to +70°C (-22°F to +158°F)
- Operating Voltage: 0V to 70V DC (max continuous: 35V DC)
- USB Slave Port: Type B USB 2.0 (connects to PC with DSE Configuration Suite, max cable length 6 m / 20 ft)
- USB cable type: A to B (standard PC-printer cable)
- 4 configurable digital inputs
- Generator running hours counter
- Single-phase / Three-phase sensing
- Power monitoring (kW, kVA, Amps, Power Factor)
- Generator protections:
 - Overload
 - Overvoltage
 - Undervoltage
 - Low voltage
 - Single phasing
- Engine protections:
 - Low RPM
 - High RPM
 - Low lube oil
 - High temperature
 - Event log (stores 50 events)
- 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

1250 kVA DG SET TECHNICAL SPECIFICATIONS

Engine		Induction System	
Engine Make	Baudouin, India	Air Filter Type	Paper Element
Engine Model	12M33D1210E200	Air Intake Restriction (Dirty element)	6.2 kPa
Distribution	4 Strokes		
Aspiration	Turbocharged	Electrical System	
No. of Cylinders	12	Electrical System Voltage	24 V DC
Type of Construction	Vee Type	Starter Motor Power	10 kW
Displacement	39.2 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	1100 kWm/1475 bhp	Frame	HCKI634Z
Gross Engine Power @ 110%	1210 kWm/1623 bhp	Power Factor	0.8
Rated Speed	1500 RPM	No. of Phase	3
Frequency	50 Hz	Frequency	50 Hz
Cooling System		Rated Voltage (L-L)	415 V
Method of Cooling	Radiator	Rated Current	1739 Amps
Coolant Capacity	240 L	Voltage Regulation	±0.5%
Radiator Fan Power	30 kW	Insulation System	H Class
Thermostat Operating Range	80 - 92°C	Temperature Rise Limit	H Class
Coolant Alarm Temperature	103 °C	Winding Pitch	2/3
Fuel System		Over Load	10 % Over Load for 1 hour once in 12 hours
Governor	Electronic (ECU)	Waveform Distortion	No-Load < 1.5% NDBLL<5%
Governing Class	G3 as per ISO-8528-5	Temperature Ambient	40 °C
Fuel Injection Type	High Pressure Common Rail (HPCR)	Altitude	1000 m
Recommended Fuel	IS 1460/ BS2869 Part1 Class A1	Protection	IP23
Fuel Tank Capacity	990 L	Cooling	Air Cooled
Fuel Consumption: L/hr @ Specific Gravity 0.85 gms/Litre		Air flow	2.095 m3/sec
100% Load	251.60	Coupling	Single bearing
75% Load	187.20	Maximum Over Speed	1650 RPM
*Note: Fuel Data Confirms to ISO 3046 with +5% tolerance		Stator Winding	Double layer concentric
Lubrication System		Control System	Separately Excited
Recommended Lube Oil	CI4+SAE15W-40	Excitation System	PMG
Lube Oil System Capacity	155L	AVR Type	Analogue
Lube Oil Consumption	< 0.3 % of FC	AVR Model	MX 321
Exhaust System		Performance: Efficiency @0.8 p.f	
Silencer Type	Residential-grade	100%	94.70%
Number of Silencers	1 No.	75%	95.40%
Max Back Pressure Total System	7.5 kPa	Short Circuit Ratio	0.45
Exhaust Outlet Pipe Size (min)	220 mm	Xd Dir Axis Reactance	2.24
Exhaust Gas Temperature	≤ 550 °C	X'd Dir Axis Transient Reactance	0.12
		X''d Dir Axis Sub Transient Reactance	0.09
		Xq Quad Axis Reactance	—
		X''q Quad Axis Subtransient Reactance	0.18
		XI Leakage Reactance	0.08
		X2 Negative Sequence Reactance	0.14
		X0 Zero Sequence Reactance	0.02
		***Alternator Options available with CG & Leroy Somer.	

DIMENSIONS AND WEIGHT



Overall Size (L x W x H): 8004x2500x2859mm

Weight (Dry, Max): 13500 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.

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