

DIESEL GENSET MODEL



650 kVA



Rating

650 kVA / 520 kW_e

Voltage: 415 V

Frequency: 50 Hz

Speed: 1500 RPM

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

PRODUCT HIGHLIGHTS

Diesel Gen Set Package

OJUS Diesel Genset Package

- Conforms to the latest CPCB IV+ norms
- Reliable performance in harsh environments
- Minimal downtime for uninterrupted power supply
- Rigid base frame for enhanced durability
- Anti-vibration mounts for smooth operation
- Rigorous in-house testing ensures consistent, trouble-free performance
- Tested with advanced PLC-based resistive load bank

Engine Features

- Cooling system rated for 50°C ambient conditions
- Rugged cast iron cylinder block reduces vibration and noise
- Induction-hardened forged steel crankshaft for extended life
- Integrated full-flow oil filter and lube oil cooler for optimal engine temperature
- Cast iron dry liners and aluminum alloy pistons with performance piston rings
- High power-to-weight ratio for cost-effective operation
- Heat-shielded air intake, exhaust manifold, and turbocharger
- HPCR pump with ECU for optimized power and fuel efficiency
- Electronic governing for precise control
- Fast load response
- Stable frequency under varying loads
- Low fuel and oil consumption
- Compliant with ISO 3046-1/1 and ISO 15550 standards

Controller Features

- Backlit full-graphics LCD with user-friendly interface
- Battery monitoring & reverse protection
- 7/9 configurable analogue/digital inputs
- Auto, Manual & Remote start/stop
- Supports island operation
- Automatic mains failure detection
- CANbus engine interface
- Logs up to 100 recent events
- PC configuration via USB or RS485
- DC battery input range: 8–32V
- Operating temperature: –20 to 65°C
- IP65 protection with gasket
- LCD alarm indication
- Power save mode
- 7 configurable digital output

Alternator Features

- Brushless, screen-protected, self-excited alternator compliant with BS:5000 / IEC 60034-1
- High motor starting capability
- Consistent efficiency across varying load conditions
- Compact build with sealed bearings for extended life and reduced maintenance
- Optimized for compatibility with engine performance

SALIENT FEATURES OF OJUS GENERATORS

- Baudouin engine technology - globally recognized
- Global technology, available in India
- High energy efficiency diesel gensets
- Microprocessor-based control panels
- Longer maintenance intervals
- PLC-tested for quality and reliability
- Experienced and trained engineers for after-sales support
- Built to meet the latest environmental standards
- Round-the-clock (24x7) service support
- Expert technical team for troubleshooting and service

APPLICATION DATA



Engine

| | |
|------------------------------|-----------------|
| Engine Make | Baudouin, India |
| Engine Model | 6M33G2D4/5 |
| Distribution | 4 Stroke |
| Aspiration | Turbocharged |
| No. of Cylinders | 6 |
| Type of Construction | In line |
| Displacement | 19.6L |
| Bore / Stroke | 150x185 mm |
| Mean Piston Speed | 9.25 m/s |
| Compression Ratio | 15:1 |
| Gross Engine Power @100% PRP | 573 kWm/771 bhp |
| Gross Engine Power @ 110% | 633 kWm/849 bhp |
| Rated Speed | 1500 RPM |
| Frequency | 50 Hz |

Cooling System

| | |
|--------------------------------------|------------|
| Method of Cooling | Radiator |
| Coolant Capacity | 159 L |
| Radiator Fan Power | 23.1kW |
| Thermostat Operating Range | 80 / 92 °C |
| Coolant Alarm (Shutdown) Temperature | 108 °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 Consumption: Litres/Hour | |
| 100% Load | 130.7 |
| 75% Load | 102.6 |

Note: Fuel Data Confirms to 150 3040 with +5% tolerance

Lubrication System

| | |
|--------------------------|--------------|
| Recommended Lube Oil | 15W 40 CK4 |
| Lube Oil System Capacity | 61 L |
| Lube Oil Consumption | <0.3 % of FC |

Induction System

| | |
|--|---------------|
| Air Filter Type | Paper Element |
| Air Intake Restriction (Dirty element) | 6.5 kPa |

Exhaust System

| | |
|---------------------------------|----------------------|
| After Treatment System | Available |
| Location | In Front of Radiator |
| Max. Back Pressure Total System | 7.5 kPa |
| Exhaust outlet pipe size (min) | 200 mm |
| Exhaust Gas Temperature | ≤ 550 °C |
| DEF Tank Capacity | 2 x 90 L |

Electrical System

| | |
|---------------------------|---------------|
| Electrical System Voltage | 24 V DC |
| Starter Motor Power | 8.5 kW |
| Battery Size | 2x12V, 150 Ah |

Alternator

| | |
|-------------------------------|--|
| Make | Stamford |
| Frame | HCI544F |
| Power Factor | 0.8 |
| No. of Phase | 3 |
| Frequency | 50 Hz |
| Rated Voltage (L-L) | 415 V |
| Rated Current | 904.2 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<5.0% |
| Design Ambient for Alternator | 40 °C |
| Altitude | 1000 m |
| Protection | IP23 |
| Cooling | Air Cooled |
| Air flow | 1.614 m²/sec |
| Coupling | Single Bearing |
| Maximum Over Speed | 1650 RPM |
| Stator Winding | Double layer Lap |
| Control System | Self excited |
| Excitation System | --- |
| AVR Type | Analogue |
| AVR Model | Mx321 |

Performance: Efficiency @0.8 p.f

| | |
|---------------------------------------|--------|
| 100% | 95.20% |
| 75% | 95.50% |
| Short Circuit Ratio | 0.412 |
| Xd Dir Axis Reactance | 2.43 |
| X'd Dir Axis Transient Reactance | 0.13 |
| X''d Dir Axis Sub Transient Reactance | 0.09 |
| Xq Quad Axis Reactance | 2.03 |
| X''q Quad Axis Subtransient Reactance | 0.21 |
| X1 Leakage Reactance | 0.04 |
| X2 Negative Sequence Reactance | 0.15 |
| X0 Zero Sequence Reactance | 0.07 |

** Alternator Options available with CG & Leroy Somer.

DIMENSIONS & WEIGHT



Acoustic Set

| | |
|-------------------------|------------|
| Length | 6750 mm |
| Width | 2350 mm |
| Height without Silencer | 2550 mm |
| Height with Silencer | 3480 mm |
| Weight, Dry | 9040 kg |
| Fuel Day Tank | 990 litres |

OUTPUT RATING & DEFINITION

DG Set Rating @ 415V - 50 Hz : 650 kVA / 520 kW

Note: Ratings based on 0.8 power factor.

Definition

Prime Power: Suitable for varying electrical loads for unlimited hours. Defined by ISO 8528 (PRP). A 10% overload is allowed as per ISO 3046.

GENERAL INFORMATION

Documentation: Includes full set of operation and maintenance manuals, plus circuit wiring diagrams

Warranty: Refer to the warranty policy



+91 974 000 7700

www.ojuspowers.com

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

