



# 750 kVA



Optional equipment and finishing shown. Standard may vary.

Rating 750 kVA / 600 kWe

Voltage 415 Volts

Frequency 50 Hz

Speed 1500 RPM

# PRODUCT HIGHLIGHTS OJUS Diesel Gen Set Package

- · Designed to meet ISO 8528 standards
- · 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

#### 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



## **APPLICATION DATA**

► Engine		Induction System	
Engine Make	Baudouin, India	Air Filter Type	Dry
Engine Model	6M33G4D4/5	Air Intake Restriction (Dirty element)	6.5 kPa
Distribution	4 Strokes		
Aspiration	Turbocharged		
No. of Cylinders	6	▶ Electrical System	
Type of Construction	In line	Electrical System Voltage	24 V DC
Displacement	19.6 L	Starter Motor Power	8.5 kW
Bore / Stroke	150x185 mm	Battery Size	2x12V, 150 Ah
Mean Piston Speed	9.25 m/s		
Compression ratio	15:1	Alternator	
Gross Engine Power @ 100% PRP	660 kWm/885 bhp	Make***	Stamford
Gross Engine Power @ 110%	725 kWm/972 bhp	Frame	HCI 634W
Rated Speed	1500 RPM	Power Factor	0.8
Frequency	50 Hz	No. of Phase	3
5554 M 5655 M 1111 1111 1111 1111 1111 1111		Frequency	50 Hz
Cooling System		Rated Voltage (L-L)	415 V
Method of Cooling	Radiator	Rated Current	1042.5 Amps
Coolant Capacity	159L	Voltage Regulation	±19
Radiator Fan Power	23.1kW	Insulation System	H Class
Thermostat Operating Range	80 / 92 °C	Temperature Rise Limit	H Class
Coolant Alarm (Shutdown) Temperature	108 °C	Winding Pitch	2/3
Coolant Alarm (Shatdown) Temperature	100 C		Over Load for 1 hou
		Over Load	once in 12 hours
Fuel System		Waveform Distortion No-Load	1 < 1.5% NDBLL < 5%
Governor	Electronic (ECU)	Design Ambient for Alternator	40 °C
A Land to the College of the College	33 as per ISO:8528-5	Altitude	1000 m
Fuel Injection type High Pressure Common Rail (HPCR) Recommended Fuel IS 1460/ BS2869 Part1 Class A1		Protection	IP23
		Cooling	Air Cooled
Recommended ruel 15 1460/ BS	52009 Parti Class Ai	Air flow	1.614 m3/sec
Fuel Consumption: L/hr @ Specific Gravity 850 gms/Litre		Coupling	Single bearing
100% Load	149.0	Maximum Over Speed	1650 RPM
75% Load	117.0	349479633 (3194336) 44280606 (74) 442. #2. 463. 934.) 111111111111111111111111111111111111	The same of the sa
75% LOdu	117.0		ouble layer concentric
*Note: Fuel Data Confirms to ISO 3046 with +5% tolerance		Control System	Separately Excited
		Excitation System	Analogue
		AVR Type	11.11.11.11.11.11.11.11.11.11.11.11.11.
Lubrication Costons		AVR Model	MX 321
Lubrication System	451W 40 CW4	Performance: Efficiency @0.8 p.f	0.4.7004
Recommended Lube Oil	15W 40 CK4	100%	94.70%
Lube Oil System Capacity	61L	75%	94.90%
Lube Oil Consumption	<0.3 % of FC	Short Circuit Ratio	0.49
		Xd Dir Axis Reactance	2.06
NET TO THE		X'd Dir Axis Transient Reactance	0.15
Exhaust System		X"d Dir Axis Sub Transient Reactance	0.12
After Treatment System	Available	Xq Quad Axis Reactance	1.65
Location In Front of Radiator		X"q Quad Axis Subtransient Reactance 0.26	
Max Back Pressure Total System 7.5 kPa		XI Leakage Reactance	0.06
Exhaust outlet pipe size (min) 200m			0.06
Exhaust Gas Temperature	550°C	X0 Zero Sequence Reactance	0.01
DEF Tank Capacity	2 x 90 L		

\*\*\*Alternator Options available with CG & Leroy Somer



#### DG CONTROL PANEL

#### **Operating Features**

- Microprocessor-based digital controller
- Accurate LCD display
- Local and remote Start/Stop capability
- Generator breaker control
- · User-friendly fascia for easy accessiblity
- Supports Manual, Auto, and AMF modes
- · AMF enabled with mains fail signal input

#### Metering

#### Engine Parameters

- Engine speed
- Lube oil pressure
- Coolant temperature
- . Engine running hours
- Engine battery voltage
- Running status
- Fuel level (%)
- Event log with date & time

#### Electrical Parameters

- Generator Voltage (Ph-Ph, Ph-N, RYB)
- Generator Current
- Generator Apparent Power (kVA)
- Generator Active Power (kW)
- Generator Reactive Power (kVAr)
- Power Factor
- Frequency
- Cumulative Power Consumption (kWh, kVAh, kVArh)
- Control supply voltage

#### Protection

#### Engine

- High water temperature
- Low oil pressure
- Low fuel level
- Over speed
- Engine fail to start

#### Electrical

- Under/over voltage (ANSI-27/59)
- Under/over frequency (ANSI-81L/81H)
- Over current (ANSI-51)
- Control supply undervoltage
- Phase reversal
- Unbalanced load

### Controller

- Make: DEIF. Denmark
- Model: SGC 420 MK II
- Suitable for AMF gensets with CANbus engines or electronic governors

#### 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 mode7 configurable digital output

#### Electrical Specification

- Voltage range: Nominal 12/24V DC
- Cranking drop-out period: 50 ms
- Max reverse voltage protection: -32V DC
- Battery voltage accuracy: ±1% full scale
- Resolution: 0.1V
- Max current consumption: ~200 mA
- Accuracy: ±1% full scale

#### Environmental Specification

- Operating temp: -20 to 65°C (IEC 60068-2-1,2)
- Vibration: 2G (X, Y, Z axes), 8-500Hz (IEC 60068-2-6)
- Shock: 15g for 11 ms (IEC 60068-2-27)
- Humidity: 0-95% RH (IEC 60068-2-78)
- IP65 protection with gasket (IEC 60529)
- EMI/EMC: IEC 61000-6-2, 4 compliant

#### Approvals

- CE Compliant
- UL/cUL Recognized to UL/ULC6200:2019 (1st edition)





#### STANDARD SCOPE OF SUPPLY

- Water-cooled diesel engine
- Engine-driven radiator
- Electric starter with charging alternator
- Electronic governor
- Microprocessor-based genset controller
- Dry-type air filter
- Single-bearing IP23 alternator
- Base frame with anti-vibration mounts
- Flexible fuel lines and lube oil drain pump
- Engine-mounted fuel water separator filter
- Exhaust outlet with flexible and flanged fittings
- DG control panel
- Battery, battery leads & battery stand
- Day fuel tank with high/low level switch
- First fill lube oil
- First fill coolant
- 1 set of documents

#### OPTIONAL SUPPLY

#### Engine

- Coolant heater
- Oversize batteries
- Extra fuel pre-filter water separator

#### Alternator

- Permanent Magnet Generator (PMG)
- Space heater, RTD & BTD sensor
- AVR upgrade (3-phase sensing)

#### Cooling System

- Air inlet filters
- Heat exchanger
- Remote radiator

#### General

- Synchronization module
- Isolator panel
- Automatic transfer switch
- Manual/Automatic fuel transfer pump

#### **OUTPUT RATING & DEFINITION**

DG Set Rating @ 415V - 50 Hz:

750 kVA | 600 kWe

Note: Ratings based on 0.8 power factor.

#### Definition

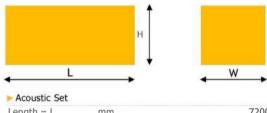
Prime Power: Suitable for varying electrical load for unlimited hours. Defined by ISO 8528 (PRP). A 10% overload is allowed as per ISO 3046.

#### SALIENT FEATURES OF OJUS GENERATORS

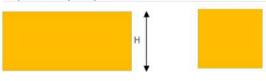
- · Powered by Baudouin engines, globally recognized for reliability
- Global technology available in India
- High efficiency across DG set range
- Advanced microprocessor-based control panels
- . AMF, Auto, and Manual operation support
- Factory load tested with PLC-based resistive load bank
- Experienced sales and service team
- Built to withstand demanding environmental conditions
- Designed for 24x7 support
- Strong focus on fast response and customer service

#### **DIMENSIONS & WEIGHT**

►Open Set	
Length = L	mm
Width = W	mm
Height = H	mm
Weight, Dry	kg
Day Fuel tank (L	itres)



Length = L	mm	7200
Width = W	mm	2200
Height = H	mm	3395
Weight, Dry	kg	8800
Day Fuel tank (Litres)		990



Note: Dimensions & weights are for reference only.

#### OJUS Power and Technologies Private Limited

#### Corporate Office:

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Includes operation, maintenance and wiring diagrams

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#### Warranty

Refer to the warranty policy

