DIESEL GENSET MODEL

SGN 320 PR

Optional equipment and finishing shown. Standard may vary.

Rating	Voltage	Frequency	Speed
320 kVA 256 kW	415 Volts	50 Hz	1500 RPM

PRODUCT HIGHLIGHTS

▶ Engine

- CPCB II compliant
- Fast load response
- Stable frequency
- Low vibrations and structure borne noise level
- Competitive fuel and lube oil consumption
- High power to weight ratio
- Proven low life cycle cost

▶ Alternator

- Brushless type, screen protected, self-excited alternator complying to IS 4722/IEC 60034 - 1
- Excellent motor start capability
- Excellent alternator efficiency across the load
- Compact design with sealed bearings for longer life and lower maintenance
- Optimised engine compatibility

▶ D. G. Package

- Highly optimized and efficient package design
- Excellent performance under most demanding environmental conditions
- Near zero down time for continuous power supply
- Sturdy base frame made from folded sheet metal for increased strength
- Efficient anti-vibration mounts
- Stringent shop floor testing to ensure class leading, hassle-free performance
- Testing carried out using state-of-the-art PLC based, resistive load bank

▶ Product Support

- Seamless 24 x 7Service support with **toll free number 1800 3000 7666**
- Best in class product support with PAN India
- Highly Energetic team with immense experience in troubleshooting.

APPLICATION DATA

▶Engine

Engine Make & Model	Mahindra Heavy Engines Ltd mPower 63905 G
Base Frame	SGPL
Frequency	50 Hz
Engine Speed	1500 RPM
Fuel Tank Capacity	485 Litres
Rated Current	445 Amps
No. of Cylinders	6
Type of Construction	Inline
Displacement	9.3 L
Bore / Stroke	116.6X146.1 mm
Gross Engine Power Output	390 BHP
Rated Speed	1500 RPM
Aspiration	Turbodcharged
Governor Type & Class	Electronics /A0

▶ Cooling System

Method of Cooling	Radiator
Qty of Coolant (Engine + Radiator)	54 L
Radiator Fan Power	11 kW
Radiator Cooling Airflow	13350 CFM

▶Fuel System

Make/Type of Injection System	Bosch/CRDI
Recommended Fuel	HSD
Fuel Filter Type	Spin on type with synthetic element

Fuel Consumption : L/hr

75% Load	100% Load
54.10	67.40

*Note: Specific gravity of fuel considered - 850 gms/Litre with +3% tolerance

▶Alternator

Make	Crompton Greaves
Frame	G1R315SB
Power Factor	0.8
No. of Phase	3
Frequency	50 Hz
Rated Voltage	415V
Voltage Regulation	±1%
Excitation System	Brushless
AVR Type	AVR-UVR-7

▶Induction System

Air Filter Type	Dry type
Air Intake Restirction	37 mbar

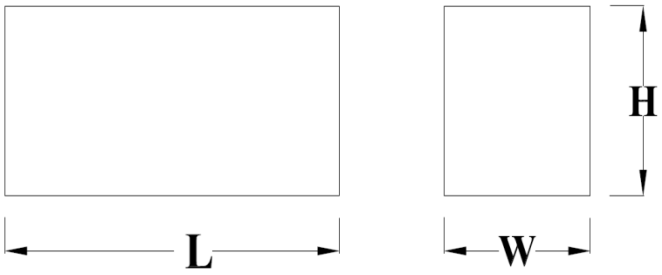
▶Lubrication System

Recommended Lube Oil	15W40 CI4+
Lube Oil Consumption	0.1% of FC
Lube Oil Filter Type Full Flow	Spin on cartridge type with paper element
Lube Oil System Capacity (With Filter)	35 L

▶Exhaust System

Silencer Type	Residential grade
Number of Silencers	1
Maximum Allowable Back Pressure	110 mbar
Eehaust Gas Temperature	-

Dimensions & Weights



Drawing above for reference purpose only. Dimensions may vary with other voltages. Not to be used for installation purpose.

Acoustic Enclosure Dimensions (Approx.)

Length = L	mm	5000	Wet Weight (Approx.) kg	5000
Width = W	mm	1800		
Height = H	mm	2950		

Output Ratings

Generating Set Rating @ 415V - 50 Hz | 320 KVA | 256 kW

Note: Ratings at 0.8 power factor.

Definitions: Prime Rating

This rating is applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power for unlimited number of hours with an average load factor of 80%.

Fuel Consumption Data:

Fuel consumption data with diesel fuel of specific gravity 0.85 and conforming to IS: 1460

Standard Features

▶ The MHEPL Range

- Sterling provides a range of MHEPL engine powered generating sets which are recognized for reliability.
- Global technology available in India.
- Most energy efficient D. G. set in its own rating.
- Microprocessor based control panels.
- Wider maintenance intervals.
- Pre tested at factory with PLC test bench.
- Well experienced and trained engineers for 24 x 7 after sales support.
- Designed to meet the latest environmental norms and approved by CPCB nodal agency.

Standard Control Panel

SG 2000:

Standard Supply
Operating Features
Microprocessor based digital controller
Accurate LCD display
Local Start/Stop
Remote Start/Stop
Generator breaker control
Easily Accessible through Fascia
Flexibility for selecting Manual, Auto operations
Easily Convertible AMF by giving Mains Fail Signal

Metering
Engine Parameters:
Engine Speed
Lube Oil pressure
Coolant temperature
Engine Running Hour
Engine Battery voltage
Running status
Fuel level in Percentage
Event Log with date and time

Electrical Parameter
Generator Voltage (Ph-Ph)
Generator Voltage (Ph-N)
Generator Current -(R,Y,B)
Generator apparent power (kVA)
Generator active power(kW)
Generator reactive power (kVAr)
Generator Power Factor
Generator Frequency (Hz)
Cumulative Power Consumption in kWh
Cumulative Power Consumption in kVAh
Cumulative Power Consumption in kVArh
Control Supply Voltage

Protection
Engine
High Water Temperature
Low oil pressure
Low Fuel Level
Electrical
Generator under Voltage (ANSI-27)
Generator over Voltage (ANSI-59)
Generator under Frequency (ANSI-81L)
Generator over Frequency (ANSI-81H)
Generator over Current (ANSI-51)
Generator kW Overload (ANSI-32P)
Control Supply under Voltage
Control Supply over Voltage

Panel Location
Rear of the canopy viewing from alternator non drive end.

General Information

Documentation

A full set of operation and maintenance manuals and circuit wiring diagrams.

Warranty

Please refer warranty policy.

IMS CERTIFIED ISO 9001 ISO 14001 OHSAS 18001