



DIESEL GENSET MODEL SGP 750 PR



Rating	Voltage	Frequency	Speed
750 kVA 600 kW	415 Volts	50 Hz	1500 RPM

Tentative Data Sheet

Optional equipment and finishing shown. Standard may vary.

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 M S Plate 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 7 Service 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	Perkins
	4006D-E23TAG2
Base Frame	SGPL
Frequency	50 Hz
Engine Speed	1500 RPM
Fuel Tank Capacity	990 Litres
Rated Current	1043 Amps

No. of Cylinders	6
Type of Construction	Inline
Displacement	22.92 L
Bore / Stroke	160X190 mm
Gross Engine Power Output	668 kW
Rated Speed	1500 RPM
Aspiration	Turbocharged
Governor Type & Class	ISO 8525-5 Class G2

► Cooling System

Method of Cooling	Radiator
Qty of Coolant (Engine + Radiator)	120 L
Radiator Fan Power	30 kW
Radiator Cooling Airflow	27545 CFM

► Fuel System

Make/Type of Injection System	Electronic
Recommended Fuel	HSD
Fuel Filter Type	Spin On Paper Element
Fuel Consumption : L/hr	
75% Load	100% Load
126.91	160.78

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

► Alternator

Make	Crompton Greaves
Frame	G1R400SC
Power Factor	0.8
No. of Phase	3
Frequency	50 Hz
Voltage	415V
Voltage Regulation	±0.5%
Excitation System	Brushless

AVR Type	AVR-SMR
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► Induction System

Air Filter Type	Dry type
Air Intake Restriction	25-37 mbar

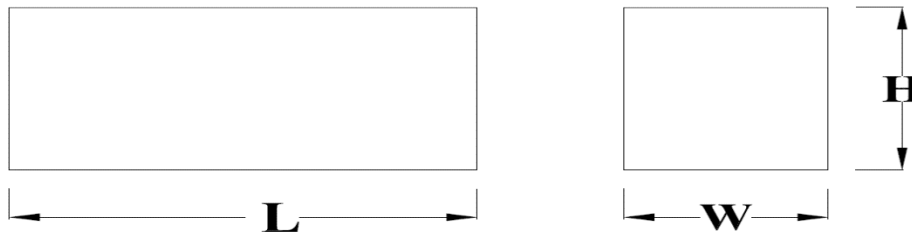
► Lubrication System

Recommended Lube Oil	15W40 API-CI4
Lube Oil Consumption	0.1% of FC
Lube Oil Filter Type Full Flow	Paper element
Lube Oil System Capacity (With Filter)	115 L

► Exhaust System

Silencer Type	Residential
Number of Silencers	2 Nos
Maximum Allowable Back Pressure	100 mbar
Exhaust Gas Temperature	480 Deg C

Dimensions & Weights



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

Acoustic Enclosure Dimensions

Length = L	mm	7200	Wet Weight (Approx.) kg	11000
Width = W	mm	2300		
Height = H	mm	3106		

Output Ratings

Generating Set Rating @ 415V - 50 Hz | 750 KVA | 600 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 Perkins Range

- Sterling provides a range of Perkins 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 (kVA)
Generator Power Factor
Generator Frequency (Hz)
Cumulative Power Consumption in kWh
Cumulative Power Consumption in kVAh
Cumulative Power Consumption in kVAh
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

Right side of the canopy viewing from Alternator end.

General Information

Documentation

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

Warranty

Please refer warranty policy.

