DIESEL GENSET MODEL
SGP 600 PR

Rating	Voltage	Frequency	Speed
600 kVA 480 kW	415 Volts	50 Hz	1500 RPM

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 range
- Compact design with sealed bearings for longer life and lower maintenance
- Optimised engine compatibility

► D. G. Package

- Highly optimised 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 Presence
- Highly Energetic team with immense experience in troubleshooting.

APPLICATION DATA

► Engine

Engine Make & Model	Perkins-2806D-E18TAG1A
Alternator Make & Model	Leroy Somer LSAP40C2
Base Frame	SGPL
Frequency	50 Hz
Engine Speed	1500 RPM
Fuel Tank Capacity	750 Liters
Rated Current	834 Amps
Ratings in accordance with ISO 8528, ISO 3046, IEC 60034, BS 5000. Accessories shown many not be part of standard Generating Set	
No. of Cylinders	6
Type of Construction	Inline
Displacement	18.1 L
Bore / Stroke	145X183 mm
Gross Engine Power Output	724 BHP
Rated Speed	1500 RPM
Aspiration	Turbocharged
Governor Type & Class	Class G2

► Cooling System

Method of Cooling	Radiator
Qty of Coolant (Engine + Radiator)	55.6 L
Radiator Fan Power	9 kW
Radiator Cooling Airflow	24790 CFM

► Fuel System

Make/Type of Injection System	MEUI
Recommended Fuel	HSD
Fuel Filter Type	Spin On Paper Element

Specific Fuel Consumption : L/hr

75% Load	100% Load
94.44	129.44

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

► Alternator

Make	Leroy Somer
Frame	LSA47.2L9
Power Factor	0.8
No. of Phase	3
Frequency	50 HZ
Rated Voltage	415V ±5%
Voltage Regulation	±1%
Excitation System	Self-Excited Self-Regulated Brushless
AVR Type	R 450

► Induction System

Air Filter Type	Dry type
Air Intake Restriction	37-62 mbar

► Lubrication System

Recommended Lube Oil	15W40 API-CI4
Lube Oil Consumption	0.1% Of SFC
Lube Oil Filter Type	Paper element
Lube Oil System Capacity (With Filter) :	71 L

► Exhaust System

Silencer Type	Critical-grade
Number of Silencers	1 No. Dual
Maximum Allowable Back Pressure	70 mbar
Exhaust Gas Temperature	518 Deg C

Dimensions & Weights

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

Length = L mm	5950	Wet Weight (Approx.) kg 6727
Width = w mm	2000	
Height = H mm	3111	

Output Ratings

Generating Set Rating @ 415V - 50 Hz | 600 KVA | 480 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

▶ Perkins Range

- Sterling provides a range of Perkins engine powered generating sets which are recognised 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 2011:
Standard Supply

Operating Features
Microprocessor based digital controller

Accurate LCD display

Local Start/Stop

Auto Main Fail Detection & Mains Monitoring

Remote Start/Stop

Generator breaker control

Easily Accessible through Fascia

Engine Protection/Faults Moni through CAN

Flexibility for Selecting Manual, AMF Operations

Metering
Engine Parameters:
Engine Speed

Lube Oil pressure

Coolant temperature

Charge Air Temperature

Boost Pressure

Fuel Rate of Flow

Engine Running Hour

Engine Battery voltage

Running status

Fuel level in Percentage

Event Log with date and time

Electrical Parameter Generator
Generator Voltage (Ph-Ph)

Generator Voltage (Ph-N)

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

Monitoring
Generator Breaker Status

Generator Healthy Status

Mains Healthy Status

Mains Breaker Status

Engine
High Water Temperature

Low Coolant Level

Engine Overspeed

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

Breaker/Contactor
DG Breaker	No
Mains Breaker	No

Communication
RS485-Modbus Communication Available for BMS/PLC

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.