

Features:

- Rotate speed governor: Electronic
- Excitation system: AREP
- A.V.R model: R250/R450
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
(Only for Soundproofed sets)
- 50Ø radiator
- Oil pump on the engine
- Steel base frame with fork holes
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for daily running
- Drain points for fuel tank
- Operation Manual / Specifications



Output Ratings

Generating Set Model	Prime Power*	Standby Power**
EP600	600kVA/480kW	660kVA/528kW

Ratings at 0.8 power factor

Dimensions and Weights

Model	Length (L) mm	Width (W) mm	Height (H) mm	Dry Weight kg
EP600	4500	1550	2450	6856

Ratings and Performance Data

Engine Make & Model:	Perkins 2806A-E18TAG1A
Alternator Brand:	Leroy somer
Alternator Model:	LSA47.2L9
Control System:	Auto Gen
Circuit Breaker Type:	3 Pole MCCB
Frequency & Phase:	50Hz & 3PH
Engine Speed: RPM	1500
Fuel Tank Capacity: litres EP600	1020
Fuel Consumption: l/hr (100% Load) - Prime Power - Standby Power	123 134

Notes:

*Prime Power

Continuous duty operation, under variable load 24/24h-10% over load permissible 1 hour/12 hours;

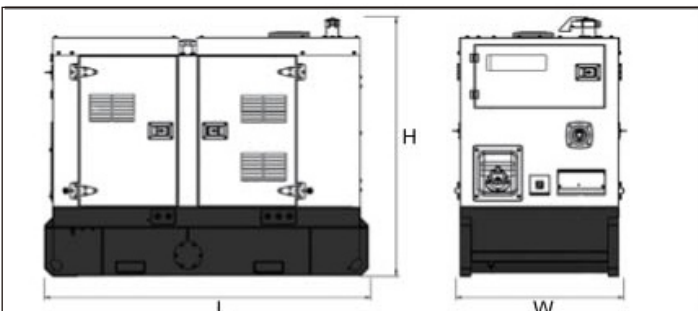
**Standby Power

Standby duty, operation under variable load, without over load;

Standard Reference Conditions

Note: Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m(328 ft) A.S.L. 30% relative humidity.

Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A2.



Engine model:2806A-E18TAG1A

Engine Technical Data

No. of Cylinders / Alignment:	6/Vertical, in-line
Cycle:	4 Stroke
Bore / Stroke: mm	145/183
Induction:	Turbocharged
Cooling Method:	Water cooled
Governing Type:	Electronic
Governing Class:	ISO 8528-5 Class G3
Compression Ratio:	14.5:1
Displacement:	18.13L
Moment of Inertia: kg m²	2.31
Engine Electrical System:	
- Voltage / Ground	24/Insulated return
- Battery Charger Amps	24/70
Weight: kg	
- Dry	2050
- Wet	2158

Performance

Engine Speed: rpm	1500
Gross Engine Power: kW	
- Prime	539.7
- Standby	592.7
BMEP: kPa	
- Prime	2381
- Standby	2615

Lubrication System

Oil Filter Type:	Spin-On, Full Flow
Total Oil Capacity: l	62
Minimum: l	45
Oil Type:	API-CG4/APEA E5
Oil Cooling Method:	Water-cooled

Exhaust System

Silencer Type:	Industrial
Exhaust Outlet Size (internal):	202mm
Silencer Noise Reduction Level:	N/A
Maximum Allowable Back Pressure: kPa	6.9
Exhaust Gas Flow: m³/min	
- Prime	96.0
- Standby	104
Exhaust Gas Temperature: °C	
- Prime	568
- Standby	571

Cooling System

Cooling System Capacity: l	61
Capacity without Radiator: l	N/A
Energy to Water & Lube Oil: kWt	
- Prime	208
- Standby	222
Energy to Radiation: kWt	
- Prime 38	
- Standby 42	
Energy to Fan and Restriction Losses: kWt	18.1/18.9
Radiator Cooling Airflow: m³/min	702
External Restriction to Cooling Airflow: Pa	N/A

Designed to operate in ambient conditions up to 50°C (122°F).

Fuel System

Fuel Filter Type: Replaceable Element					
Recommended Fuel: Diesel Class A2					
Fuel Consumption: l/hr					
	Prime	110% Load	100% Load	75% Load	50% Load
EP600	134	123	90	61	

(Based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, Class A2)

Air Systems

Air Filter Type:	Paper Element
Combustion Air Flow: m³/min	
- Prime	34
- Standby	36
Max. Air Intake Restriction: kPa	6.4

The weights are approximate and without fuel.

Alternator model: LSA47.2L9

Alternator Physical Data	
Manufactured by:	Leroy somer
Model:	LSA47.2L9
No. of Bearings:	Single
Insulation Class:	H
Winding Pitch Code:	2/3
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	SHUNT, AREP or PMG
AVR Model:	R250, R450

Alternator Operating Data	
Overspeed: rpm	2250min ⁻¹
Voltage Regulation: (Steady state)	±0.5%
Wave Form NEMA = TIF:	<50
Wave Form IEC = THF:	<2%
Total Harmonic content LL/LN:	No load <1.5%-on load <2%
Radio Interference:	
Radiant Heat: kW (Btu/min)	
EP600	

Alternator Performance Data:	EP600
Data Item	
Motor Starting Capability* kVA	1258/1400
Short Circuit Ratio** %	0.37
Reactances: Per Unit	
Xd	330
X'd	16.5
X''d	11.4

Voltage Technical Data		EP600		
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
380/220V	600	480	630	504
400/230V/200V	600	480	630	504
415/240V	600	480	630	504

Control System

PLC-7420

FEATURES

- Microprocessor control, with high stability and credibility .
- Mains supply and generator operation monitoring.
- Indicating operation status and fault conditions.
- Multiple protections; multiple parameters display, such as pressure, temperature.
- Manual and automatic work mode selectable.
- Real time clock for time and date display, overall runtime display, 99 log entries
- Overall power output display.
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed.
- Communication with PC via RS485 or RS232 interface, using MODBUS protocol.
- Engine ECU is available.
- Common USB cable is usable for parameter configuration.
- Multi-language is available.

