

## Features:

- Rotate speed governor: Mechanical governor
- Excitation system: self-excited SHUNT
- A.V.R model: R220/R438
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V 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**
EP30	30kVA/24kW	33kVA/26kW

Ratings at 0.8 power factor

### Dimensions and Weights

Model	Length (L) mm	Width (W) mm	Height (H) mm	Dry Weight kg
EP30	2350	1050	1450	1269

### 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;

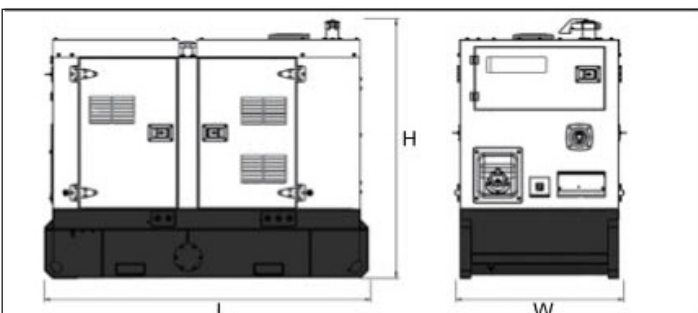
#### Standard Reference Conditions

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.

### Ratings and Performance Data

<b>Engine Make &amp; Model:</b>	Perkins 1103A-33G
<b>Alternator Brand:</b>	Leroy somer
<b>Alternator Model:</b>	LSA42.3VS3
<b>Control System:</b>	Auto Gen
<b>Circuit Breaker Type:</b>	3 Pole MCCB
<b>Frequency &amp; Phase:</b>	50Hz & 3PH
<b>Engine Speed: RPM</b>	1500
<b>Fuel Tank Capacity: litres</b>	
EP30	240
<b>Fuel Consumption: l/hr (100% Load)</b>	
- Prime Power	7.1
- Standby Power	7.9



## Engine model:1103A-33G

### Engine Technical Data

<b>No. of Cylinders / Alignment:</b>	3 / Vertical in-line
<b>Cycle:</b>	4 Stroke
<b>Bore / Stroke: mm</b>	105/127
<b>Induction:</b>	Naturally aspirated
<b>Cooling Method:</b>	Water cooled
<b>Governing Type:</b>	Electronic
<b>Governing Class:</b>	ISO 8528, G2
<b>Compression Ratio:</b>	19.25:1
<b>Displacement: L</b>	3.3L
<b>Moment of Inertia: kg m<sup>2</sup></b>	23.3
<b>Engine Electrical System:</b>	
- Voltage / Ground	12/Negative
- Battery Charger Amps	12/65
<b>Weight: kg</b>	
- Dry	412
- Wet	430

### Performance

<b>Engine Speed: rpm</b>	1500
<b>Gross Engine Power: kWm</b>	
- Prime	28.2
- Standby	31.0
<b>BMEP: kPa</b>	
- Prime	684
- Standby	752

### Lubrication System

<b>Oil Filter Type:</b>	Spin-On, Full Flow
<b>Total Oil Capacity: l</b>	8.31
<b>Minimum: l</b>	6.2
<b>Oil Type:</b>	API-CG4/CH4
<b>Oil Cooling Method:</b>	Water

### Exhaust System

<b>Silencer Type:</b>	Industrial
<b>Exhaust outlet size:</b>	56mm
<b>Silencer Noise Reduction Level:</b>	N/A
<b>Maximum Allowable Back Pressure: kPa</b>	8
<b>Exhaust Gas Flow: m<sup>3</sup>/min</b>	
- Prime	5.7
- Standby	5.8
<b>Exhaust Gas Temperature: °C</b>	
- Prime	500
- Standby	520

### Cooling System

<b>Capacity with radiator: l</b>	10.2
<b>Capacity without radiator: l</b>	4.4
<b>Power to coolant and lubricating oil: kW</b>	
- Prime	16.0
- Standby	18.0
<b>Power to Radiation: kW</b>	
- Prime 5.0	
- Standby 6.0	
<b>Power to cooling fan: kW</b>	0.5/0.6
<b>Cooling Fan Airflow: m<sup>3</sup>/min</b>	53.0/53.0
<b>External Restriction to Cooling Airflow: Pa</b>	N/A

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

### Fuel System

<b>Fuel Filter Type:</b>	Replaceable Element			
<b>Recommended Fuel:</b>	Diesel Class A2			
<b>Fuel Consumption: l/hr</b>				
<b>Prime</b>	<b>110% Load</b>	<b>100% Load</b>	<b>75% Load</b>	<b>50% Load</b>
<b>EP30</b>	7.9	7.1	5.4	3.9

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

### Air Systems

<b>Air Filter Type:</b>	Dry element type
<b>Combustion Air Flow: m<sup>3</sup>/min</b>	
- Prime	2.16
- Standby	2.15
<b>Max. Air Intake Restriction:</b>	
-clean filter	3.0 kPa
-dirty filter	6.5 kPa

The weights are approximate and without fuel.

**Alternator model: LSA42.3VS3**

Alternator Physical Data	
Manufactured by:	Leroy somer
Model:	LSA42.3VS3
No. of Bearings:	Single
Insulation Class:	H
Winding Pitch:	2/3
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	SHUNT, AREP OR PMG
AVR Model:	R220, R438

Alternator Operating Data	
Overspeed: rpm	2250min <sup>-1</sup>
Voltage Regulation:	±0.5%
Wave Form NEMA = TIF:	<50
Wave Form IEC = THF:	<2%
Total Harmonic content THD:	No load <3%-on load <2%
Radio Interference:	
Radiant Heat: kW (Btu/min)	
<b>EP30</b>	

Alternator Performance Data:	EP30
Data Item	
Motor Starting Capability* kVA	67.7/79.2
Short Circuit Ratio** %	0.45
Reactances: Per Unit	
Xd	268
X'd	16.6
X''d	8.3

Voltage Technical Data		EP30		
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
380/220V	32	25.6	35.2	28.16
400/230V	32	25.6	35.2	28.16
415/240V	32	25.6	35.2	28.16

# Control System PLC-920

## FEATURES

- Parameter configuration via RS-232 serial communication;
- Log last 50 events & alarm information with measured values;
- Statistics records;
- Remote start/stop;
- Speed sensing from alternator voltage or magnetic pickup;
- Configurable 3 inputs and 6 outputs;
- ECU powers, ECU stop, STOP or fuel solenoid selection;
- Automatic transfer switching control and engine control;
- Adjustable start, load and stop timers.

