

Features:

- Rotate speed governor: Mechanical governor
- Excitation system: self-excited SHUNT
- A.V.R model:
- 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)
- 50°C 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



Dimensions and Weights

Model	Length (L) mm	Width (W) mm	Height (H) mm	Dry Weight kg
EP13	1800	850	1100	726

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.

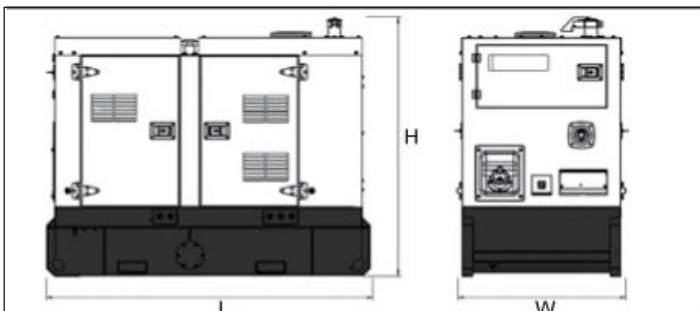
Output Ratings

Generating Set Model	Prime Power*	Standby Power**
EP13	13kVA/10kW	14kVA/11kW

Ratings at 0.8 power factor

Ratings and Performance Data

Engine Make & Model:	Perkins 403D-15G
Alternator Brand:	MECC
Alternator Model:	ECP28-0S/4
Control System:	Auto Gen
Circuit Breaker Type:	3 Pole MCCB
Frequency & Phase:	50Hz & 3PH
Engine Speed: RPM	1500
Fuel Tank Capacity: litres EP13	100
Fuel Consumption: l/hr (100% Load) - Prime Power - Standby Power	3.7 4.1



Engine model:403D-15G

Engine Technical Data

No. of Cylinders / Alignment:	3 / Vertical in-line
Cycle:	4 Stroke
Bore / Stroke: mm	84/90
Induction:	Naturally aspirated
Cooling Method:	Water cooled
Governing Type:	Mechanical
Governing Class:	N/A
Compression Ratio:	22.5:1
Displacement: L	1.13L
Moment of Inertia: kg m²	0.45
Engine Electrical System:	
- Voltage / Ground	12/Negative
- Battery Charger Amps	12/65
Weight: kg	
- Dry	197
- Wet	N/A

Performance

Engine Speed: rpm	1500
Gross Engine Power: kWb	
- Prime	12.2
- Standby	13.5
BMEP: kPa	
- Prime	650
- Standby	722

Lubrication System

Oil Filter Type:	Spin-On, Full Flow
Total Oil Capacity: l	6.0
Minimum: l	4.5
Oil Type:	API-CH4/ACEA E5
Oil Cooling Method:	Water

Exhaust System

Silencer Type:	Industrial
Exhaust outlet size:	42mm
Silencer noise reduction level:	N/A
Maximum Allowable Back Pressure: kPa	10.2
Exhaust Gas Flow: m³/min	
- Prime	2.7
- Standby	2.9
Exhaust Gas Temperature: °C	
- Prime	445
- Standby	490

Cooling System

Capacity with radiator: l	6.0
Capacity without radiator: l	2.6
Energy to coolant and lubricating oil: kW	
- Prime	11.6
- Standby	12.9
Energy to radiation: kW	
- Prime 3.2	
- Standby 3.5	
Energy to coolant fan: kWt	0.2
Radiator Cooling Airflow: m³/min	N/A
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
EP13	7.5	6.8	5.5	4.4	

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

Air Systems

Air Filter Type:	Dry element type
Combustion Air Flow: m³/min	
- Prime	1.1
- Standby	1.1
Max. Air Intake Restriction:	
-clean filter	3.0
-dirty filter	6.4

The weights are approximate and without fuel

Alternator model: ECP28-0S/4

Alternator Physical Data	
Manufactured by:	MECC
Model:	ECP28-0S/4
No. of Bearings:	
Insulation Class:	H
Winding Pitch Code:	
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	
AVR Model:	

Alternator Operating Data	
Overspeed: rpm	2250
Voltage Regulation: (Steady state)	
Wave Form NEMA = TIF:	<45
Wave Form IEC = THF:	<2%
Total Harmonic content LL/LN:	
Radio Interference:	
Radiant Heat: kW (Btu/min)	
EP13	

Alternator Performance Data:	EP13
Data Item	
Motor Starting Capability* kVA	
Short Circuit Ratio** %	0.55/0.60/0.66
Reactances: Per Unit	
Xd	203.9/184/170.9
X'd	17.95/16.2/15.05
X''d	11.52/10.4/9.66

Voltage Technical Data		EP13		
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
380V	10	12.5	10.8	13.5
400V	10	12.5	10.8	13.5
415V	10	12.5	10.8	13.5

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.

