



POWERPLUS
SOLAR & GENERATOR

Warehouse Racking Systems \ Mezzanine Floors \ Generators & Compressors

PP Perkins 22

Prime Power Generator Three Phase

Specifications

Alternator

Make	Stamford/Leroy Somer
Model	PI144D/TAL040F
Frequency	50Hz & 1500rpm
Output Continuous / Standby	20/22 KVA
Rotating Speed	1500RPM
No. of Phases	Three Phase 12 wires
Rated Voltage	380/415
Power Factor	0.8

Engine

Make & Model	Perkins 404A - 22G1
Type	Mechanical
Output Rating	380-415 V, 3 ph, 50Hz, 1500rpm 20-22KVA/16-17.6KW
No. of Cylinders-Bore X Stroke	84 x 100mm
Piston Displacement	2.216L
Fuel	Diesel
Fuel Consumption	2.9 L/H @50% load L/H 4.0 L/H @75% load L/H 5.3 - 6.1 L/H @100% load L/H
Lube Oil Sump Cap	10.6L
Coolant Capacity	7.0L
Battery Capacity	12 - 60x1pc
Fuel Tank Capacity	130
Cooling System	Water - Cooled
Cycle	4 Stroke
Combustion System	Indirect Injection
Compression Ratio	23.3:1
Rotation	Anti-clockwise
Exhaust Temperature °C	445 - 505
Gross Engine Power	18.7KW (25.1hp) - 20.6KW (27.6hp)

Unit

Dimensions (L/W/H cm)	127x 54x 107
Wet Weight	475kg

Control Panel

Make	Deep Sea
Model	4000 Series



Alternator

INSULATION SYSTEM

- The insulation system is class H.
- All windings are impregnated in either a triple dip themorsetting liquid, oil and acid resisiting polyester varnish or vacuum pressure impregnated with a special polyester resin.
- Heavy coat of antitracking varnish additional protection against moisture or condensation

AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed automatic voltage regulator maintains the voltage regulation at $\pm 1\%$. Nominal adjustment by means of a trim pot incorporated on the AVR.

MOTOR STARTING

An overload capacity equivalent to 300% of the Full Load impedance at zero Power Factor can be sustained for 10 seconds, when AREP or PMG option is fitted.

Mounting Arrangement

BASE FRAME

The complete Generating Set is mounted as a whole on a heavy duty fabricated steel Baseframe.

COUPLING

The Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator rotor.

ANTI-VIBRATION MOUNTING PADS

Anti-Vibration pads are affixed between the Engine / Alternator feet and the baseframe thus ensuring complete vibration isolation of the rotating assembly.

SAFETY GUARDS

The Fan & Fan Drive along with the battery Charging Alternator are safety Guard protected for personnel protection

Engine / Engine Filtration System

Perkins four stroke heavy duty high performance industrial type diesel engine.

- Cartridge type dry air filter.
- Two Cartridge type fuel filter.
- Full flow lube oil filter.

All filters have replaceable elements.