

**ATECHI POWER DIESEL GENERATING SET APL13(50HZ)**

<b>PRIME POWER</b>	<b>10KW / 13KVA</b>
<b>STANDBY POWER</b>	<b>11KW / 14KVA</b>

**Conditions&Definitions****Prime Power Rating:**

Prime power rating is applicable for unlimited number of operation hour per year in variable load condition. Variable load should not exceed 70% of Prime Power in average of total operation. A 10% overload is allowed for 1 hour in every 12 hour of consecutive operation.

**Standby Power Rating:**

Continuous running at variable load for emergency power. No overload is allowed.

**Standard referred:**

Engine ratings are in accordance with ISO3046 or BS5514.

**Fuel Consumption:**

Fuel consumption is defined under 100% Prime/Standby Rating.

**Genset Ratings:**

Genset is rated at 400VAC/50Hz.

**General Specification****● PERFORMANCE GUARANTEED**

Standard series and Weather and Sound Proof Canopy series are designed, Manufactured and tested under strict quality control procedure, to ensure top performance at all times.

**● PACKAGED ACCESSORIES**

Generator set units are packaged with anti-vibration system, advanced control panel, starting system, synchronizing panel, base fuel tank and other accessories which make ready for power station.

**● BASE SKID**

Standard built-in anti-vibration system - bonded rubber units fitted as standard which eliminate the need for rubber mats or spring mountings.

**● COOLING SYSTEM**

Set-mount radiator for ambient temperature of 40°C standard (50°C option); Remote radiator with fan motor or heat exchanger optional.

## Engine Specification



### PERKINS DIESEL ENGINE

Engine Model	403D-15G
Engine Speed	1500 Rpm
Prime Power	12.2Kw/16.4Hp
Standby Power	13.5Kw/18.1Hp
Type	In-Line, 4 cycle, water cooled, Naturally aspirated and Charge Air Cooled
Number of Cylinder	3
Bore x Stroke	84 x 90 mm
Displacement	1.496 L
Compression Ratio	22.5:1
Fuel Injection Pump	Indirect Injection
Governor	Mechanical Governing
Steady Speed Droop	<math>\leq 1\%</math>
Lub. Oil Capacity	6L
Lub. Oil Grade	15W40-CF4 Upgrade
Coolant Capacity	6 L (Engine)
Cooling	Forced Water Cooling Cycle
Flywheel/Flywheel Housing	SAE J620 Size 7½
Dry Weight	197 kg
Fuel Consumption at 100% load (prime)	249 g/Kw.h

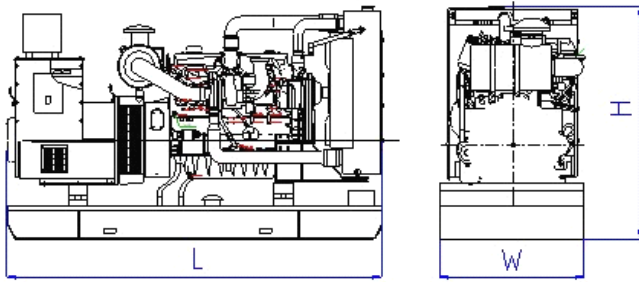
## Alternator Specification



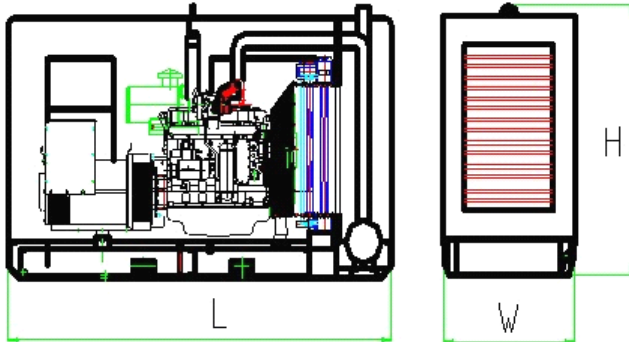
### LEROY SOMER ALTERNATOR

Alternator Model	LSA42.2VS1
Control System	Self Excited
Voltage Regulation	+/- 0.5%
Insulation Class	Class H
Protection	IP23
Rated Power Factor	0.8
Stator Winding	Double Layer Lap
Winding Pitch	2/3
Winding Leads	12
Waveform Distortion	No Load <math>< 1.5\%</math>
Telephone Interference	THF <math>< 2\%</math>
Maximum Overspeed	2250rpm
Bearing	Single
Weight	155kg

## Dimension&Weight



Open Type:APL13-H5  
 Dimension(mm):  
 1445\*797\*1224(L\*W\*H)  
 Weight(KG):445



Soundproof Type:APL13S-H5  
 Dimension(mm):  
 1680\*975\*1325(L\*W\*H)  
 Weight(KG):660

## Control System



DSE3110 can be utilised as a Manual or Auto Start Module for single gen-set applications and forms part of DSE's next generation of control modules. The module has been designed to work with electronic and non electronic engines providing advanced engine monitoring and protection features.

The DSE3110 includes a backlit LCD display which clearly show the status of the engine at all times. The module monitors engine speed, frequency, voltage and run hours and also displays warning and shutdown status of the engine.

The module includes six digital inputs and four outputs. Two of the outputs are configurable. The module can either be programmed using the front panel or by using the DSE Configuration Suite PC software.

The module is available in two variants: Magnetic Pick-up and Canbus.

CAN–For use with CAN engines only. Optional frequency(Hz)sensing from main AC alternator for genset applications.

MPU–For use with traditional (non-CAN) engines only. Optional frequency (Hz) sensing from main AC alternator for gen-set applications. Optional Magnetic Pickup speed sensing.



The DSE7220 ( Optional ) is an Auto Mains (Utility) Failure Control Module.

The DSE7220 includes the additional capability of being able to monitor a mains (utility) supply. The module has

been designed to start and stop diesel and gas generating sets that include electronic and non-electronic engines.