

ULTIMATE POWER SOLUTION (FZC)

The world's best dealer for Power Generation, Control System, & Power Solution

POWERED BY:



311 KVA

3 PHASE

50 Hz

342.1 KVA

3 PHASE

60 Hz

GENERATING SET MODEL (UPSP311)

Output Ratings	Prime	Standby
380-415 V, 3ph, 50 Hz, 1500 rpm	311 KVA 249 KW	343 KVA 275 KW
380-415 V, 3ph, 60 Hz, 1800 rpm	342.1 KVA 273.6 KW	376.3 KVA 301 KW

ENGINE / TECHNICAL DATA

Ratings at 0.8 Power Factor

Engine Make	PERKINS								
Engine Model	1706A-E93TAG1								
Governing Type	Electronic								
Number of Cylinder/ Arrangement	6/ Vertical in-line								
Bore and Stroke (mm)	115 mm x 149 mm								
Compression Ratio	16.5 : 1								
Displacement (L)	9.29 L								
Aspiration/ Cooling	Turbocharged aftercooled/ Water cooled								
Combustion System	Direct Injection								
Rotation from Flywheel End	Anti-clockwise								
Total Lubrication System Capacity	26-30 L								
Total Coolant Capacity	33 L								
Cycle	4 stroke								
Frequency and Engine Speed	50 Hz / 1500 rpm 60 Hz / 1800 rpm								
Fuel Consumption	<table><tr><td>@50% load</td><td>205 g/kwh</td></tr><tr><td>@75% load</td><td>194 g/kwh</td></tr><tr><td>@100% load</td><td>190 g/kwh</td></tr><tr><td>@110% load</td><td>189 g/kwh</td></tr></table>	@50% load	205 g/kwh	@75% load	194 g/kwh	@100% load	190 g/kwh	@110% load	189 g/kwh
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@75% load	194 g/kwh								
@100% load	190 g/kwh								
@110% load	189 g/kwh								
Exhaust temperature	538°C 549°C								

ALTERNATOR

Make UPS / Leroy Somer(TAL)

Model UPS314G / TAL046F

No. of bearings 1

Insulation H

Exciter Type SHUNT

Wires 6/12

Degree of protection IP23

Winding Pitch 2/3

Overspeed 2250 mn⁻¹

Voltage Regulation ±1%

CONTROL PANEL

Make DeepSea

Model 6110/20 SERIES

The DSE 6110/20 Seeries., is an Auto Start Control for single genset application. It includes a LCD display which clearly shows the status of engine all the times. This module can either programmed using the front panel or by using configurator sale PC software.

Metering and Alarm Indications:

- Generator frequency
- UnderSpeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Hours run counter
- Battery volts
- Fail to start/stop
- Emergency stop
- Failed to reach loading voltage/frequency
- Charge fail
- LOW DC voltage
- CAN diagnostic and CAN fail/error



CERTIFIED BY:



STANDARD SPECIFICATIONS

311 KVA

3 PHASE

50 Hz

342.1 KVA

3 PHASE

60 Hz

1. ENGINE

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

2. ENGINE FILTERATION SYSTEM

- Cartridge type dry air filter.
 - Cartridge type fuel filters.
 - Full flow lube oil filter.
- All filters have replaceable elements.

3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-rating factors)

4. EXHAUST SYSTEM

Exhaust gas flow 42-45 m³/min
Maximum allowable back pressure 10 (kPa)

5. CIRCUIT BREAKER TYPE

3 pole MCCB. (4 pole is optional)

6. Fuel System

The baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

7. ALTERNATOR

7.1 INSULATION SYSTEM

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

7.2 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.

8. MOUNTING ARRANGEMENT

8.1 COUPLING

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

8.2 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.

8.3 SAFETY GUARDS

- The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

9. FACTORY TEST

- The Generating set is load tested before dispatch
- All protective devices control functions and site load conditions are simulated. The generator and its systems are checked before dispatch.

10. EQUIPMENT FINISHING

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

11. DOCUMENTATION

Operation & Maintenance manual, Circuit wiring diagrams and Commissioning/Fault Finding instruction leaflets are accompanied with the Generator.

12. QUALITY STANDARDS

The equipment meets the following standards: B84999, B65000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO8528.

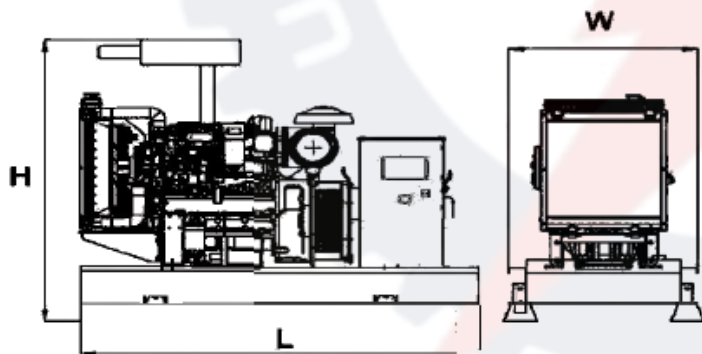
13. WARRANTY

All of the Generating Sets are covered under a warranty policy for a period of 12 months or 1000 working hours, Warranty of the equipment is in line with manufacturers warranty terms & conditions. (check warranty statement for more details, as it may vary for different countries)

In line with continuous product development, we reserve the right to change specifications without notice.

STANDARD GENERATOR DIMENSION

Open type Generator



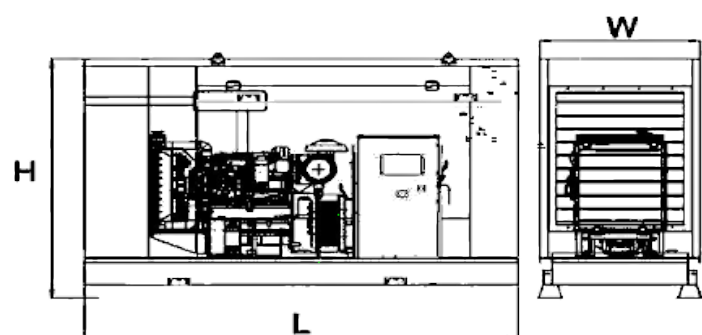
Length, L: 3200 mm

Height, H: 2000 mm

Width, W: 1150 mm

Weight: 2800 kg

Close type Generator



Length, L: 3770 mm

Height, H: 2020 mm

Width, W: 1300 mm

Weight: 3500 kg