

# ULTIMATE POWER SOLUTION (FZC)

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

POWERED BY:



**1253 KVA**

3 PHASE

**60 Hz**

## GENERATING SET MODEL (UPSP1253)

| Output Ratings                  | Prime    | Standby  |
|---------------------------------|----------|----------|
| 380-415 V, 3ph, 60 Hz, 1800 rpm | 1253 KVA | 1385 KVA |
|                                 | 1002 KW  | 1108 KW  |

## ENGINE / TECHNICAL DATA

Ratings at 0.8 Power Factor

|                                   |                                           |
|-----------------------------------|-------------------------------------------|
| Engine Make                       | PERKINS                                   |
| Engine Model                      | 4012-46TWG2A                              |
| Governing Type                    | Electronic                                |
| Number of Cylinder/ Arrangement   | 12 60° vee                                |
| Bore and Stroke (mm)              | 160 mm x 190 mm                           |
| Compression Ratio                 | 12.8 : 1                                  |
| Displacement (L)                  | 45.8 L                                    |
| Aspiration/ Cooling               | Turbocharged, air-to-water / Water cooled |
| Combustion System                 | Direct Injection                          |
| Rotation from Flywheel End        | Anti-clockwise                            |
| Total Lubrication System Capacity | 157.5 L                                   |
| Total Coolant Capacity            | 173 L                                     |
| Cycle                             | 4 stroke                                  |
| Frequency and Engine Speed        | 60 Hz / 1800 rpm                          |
| Fuel Consumption                  |                                           |
| @50% load                         | 223 g/kWh                                 |
| @75% load                         | 197 g/kWh                                 |
| @100% load                        | 198 g/kWh                                 |
| @110% load                        | 202 g/kWh                                 |
| Exhaust temperature               | 396-410°C                                 |

## ALTERNATOR

|                      |                       |
|----------------------|-----------------------|
| Make                 | UPS / Leroy Somer     |
| Model                | UPS404G/LSA50.2M6     |
| No. of bearings      | 1                     |
| Insulation           | H                     |
| Exciter Type         | SHUNT                 |
| Wires                | 6/12                  |
| Degree of protection | IP23                  |
| Winding Pitch        | 2/3                   |
| Overspeed            | 2250 mn <sup>-1</sup> |
| Voltage Regulation   | ±1%                   |

## CONTROL PANEL

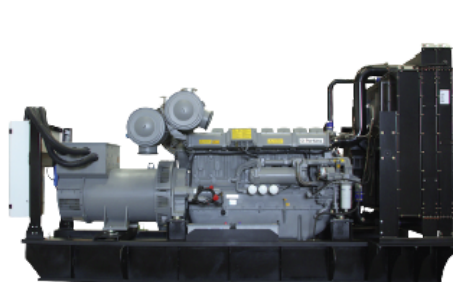
|       |                |
|-------|----------------|
| Make  | DeepSea        |
| Model | 6110/20 SERIES |

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:



**1253 KVA****3 PHASE****50 Hz**

# STANDARD SPECIFICATIONS

## 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 188-244 m<sup>3</sup>/min  
Maximum allowable back pressure 5 (kPa)

## 5. CIRCUIT BREAKER TYPE

3 pole ACB.

## 6. Fuel System

The baseframe design is not incorporated with an integral fuel tank.

## 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.

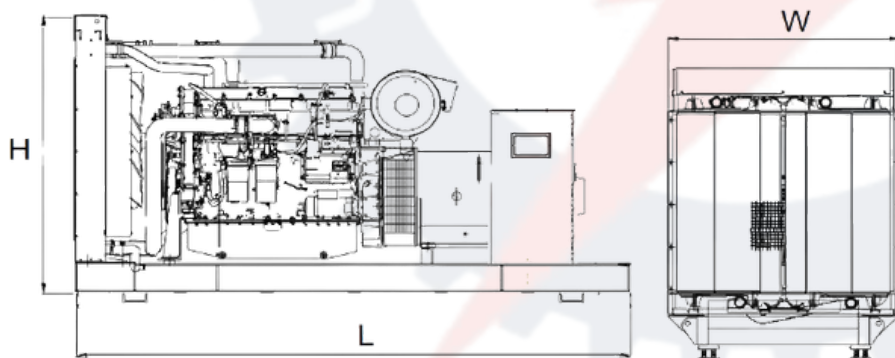
## 13. WARRANTY

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



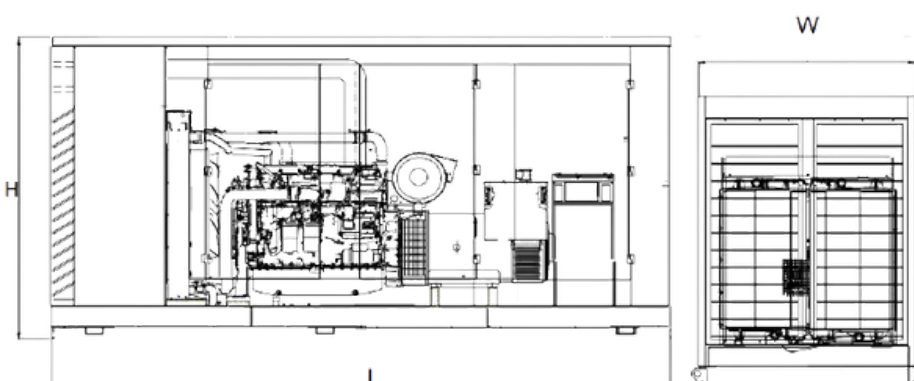
Length, L: 4700 mm

Height, H: 2600 mm

Width, W: 2000 mm

Weight: 11000 kg

Containerize Generator



Length, L: 12192 mm

Height, H: 2900 mm

Width, W: 2438 mm

Weight: 13000 kg