

# ULTIMATE POWER SOLUTION (FZC)

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

POWERED BY:



## 400 KVA

3 PHASE

60 Hz

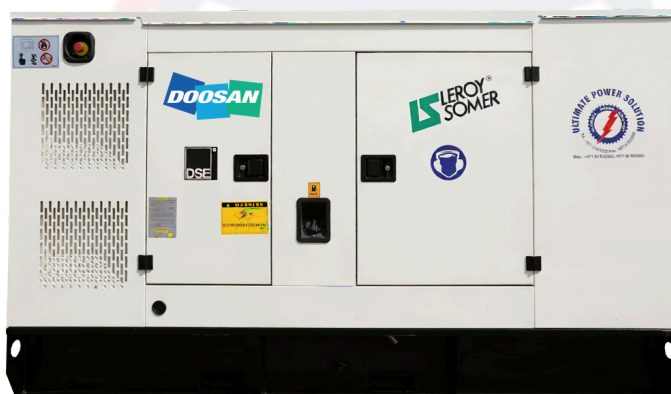
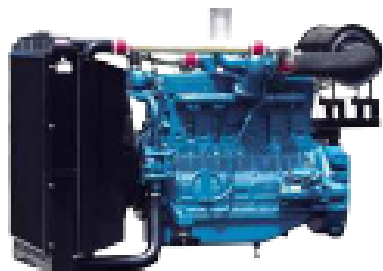
### GENERATING SET MODEL (UPSD400)

| Output Ratings                  | Prime   | Standby   |
|---------------------------------|---------|-----------|
| 380-415 V, 3ph, 50 Hz, 1500 rpm | 365 KVA | 405 KVA   |
|                                 | 292 KW  | 324 KW    |
| 380-415 V, 3ph, 60 Hz, 1800 rpm | 400 KVA | 437.5 KVA |
|                                 | 320 KW  | 350 KW    |

### ENGINE / TECHNICAL DATA

Ratings at 0.8 Power Factor

|                                       |                                           |
|---------------------------------------|-------------------------------------------|
| Engine Make                           | DOOSAN                                    |
| Engine Model                          | DP126LB                                   |
| Governing Type                        | Electrical                                |
| Number of Cylinder/ Arrangement       | 4 stroke, In-line                         |
| Number of Cylinder                    | 6                                         |
| Compression Ratio                     | 17.2 : 1                                  |
| Displacement (L)                      | 11.051 L                                  |
| Cooling/Aspiration                    | Turbocharger/ Forced Water Cooling System |
| Starter/ Charge Flow                  | DC 24V                                    |
| Bore and Stroke (mm)                  | 123 mm x 155 mm                           |
| Frequency regulation, steady state    | ≤5%                                       |
| Coolant Capacity                      | 23 L                                      |
| Total oil lubrication system capacity | 44 L                                      |
| Frequency and Engine Speed            | 50 Hz / 1500 rpm      60 Hz / 1800 rpm    |
| Fuel consumption                      |                                           |
| @50% load                             | 38 L/h      38 L/h                        |
| @75% load                             | 57 L/h      57 L/h                        |
| @100% load                            | 76 L/h      76 L/h                        |
| @110% load                            | 83.6 L/h      83.6 L/h                    |



## 365 KVA

3 PHASE

50 Hz

### ALTERNATOR

|                      |                        |
|----------------------|------------------------|
| Make                 | UPS / Leroy Somer(TAL) |
| Model                | UPS314F / TAL046H      |
| No. of bearings      | 1                      |
| Insulation           | H                      |
| Coupling             | Direct                 |
| 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 6000 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 configuraton 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

## 400 KVA

3 PHASE

60 Hz

### 1. ENGINE

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

### 2. ENGINE FILTRATION 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. CIRCUIT BREAKER TYPE

3 pole MCCB. (4 pole is optional)

### 5. 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.

### 6. 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.

### 7. 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.

### 8. 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.

### 9. EQUIPMENT FINISHING

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

### 10. DOCUMENTATION

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

### 11. QUALITY STANDARDS

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

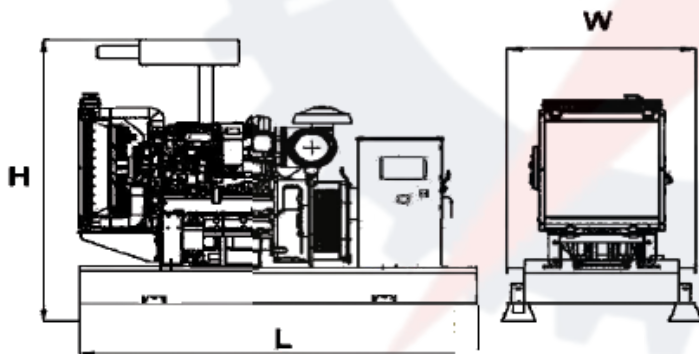
### 12. WARRANTY

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

Standard Generator

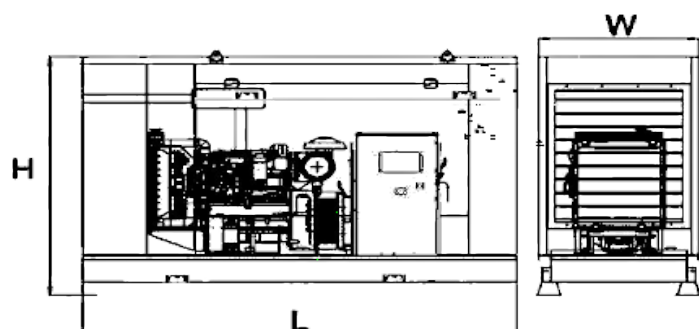


Length, L: 3250 mm

Height, H: 1752 mm

Width, W: 1136 mm

Generator with Soundproof Canopy



Length, L: 4300 mm

Height, H: 2106 mm

Width, W: 1422 mm