



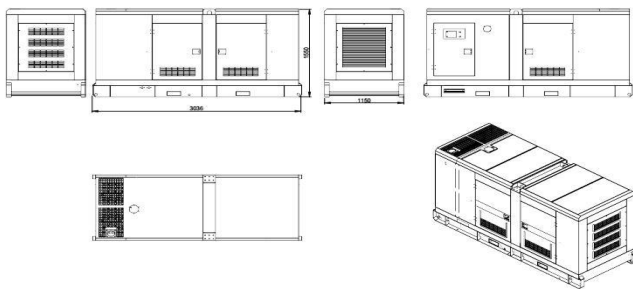




-  **WATER-COOLED**
-  **3 PHASE**
-  **50 HZ 380-415V**
-  **DIESEL FUEL**



### STANDARD SPECIFICATIONS

- 1. ENGINE**  
FOUR STROKE HEAVY DUTY IGH PERFORMANCE INDUSTRIAL DIESEL ENGINE
- 2. ENGINE FILTRATION SYSTEM**
  - AIR FILTER
  - FUEL FILTER
  - FULL FOLLOW LUBO OIL FILTER
- ALL FILTERS HAS REPLACEABLE ELEMENTS
- 3. COOLING SYSTEM**
- 4. EXHAUST SYSTEM**  
HEAVY DUTY INDUSTRIAL EXHAUST SILENCER
- 5. CIRCUIT BREAKER TYPE**  
DELIXI MCCB 3POLE

### GENERATING SET MODEL

**PWG-DFAW-28**

| OUTPUT RATING          | PRIME          | STANDBY        |
|------------------------|----------------|----------------|
| 380V,3PH, 50HZ,1500RPM | 25 kVA<br>20KW | 28 kVA<br>22KW |

### GENERATING SET MODEL

|                              |                 |         |
|------------------------------|-----------------|---------|
| ENGINE MAKE                  | FAWDE           |         |
| ENGINE MODEL                 | 4DW92-35D       |         |
| GOVERNING TYPE               | Mechanical      |         |
| NUMBER OF CYLINDERS          | 4               |         |
| CYLINDER ARRANGEMENT         | IN-LINE         |         |
| BORE AND STROKE (mm)         | 90 x 100        |         |
| DISPLACEMENT                 | 2.54L           |         |
| CYCLE                        | 4 STROKE        |         |
| COMPRESSION RATIO            | 17:1            |         |
| ASPIRATION                   | TURBOCHARGED    |         |
| COOLING SYSTEM               | WATER-COOLING   |         |
| FREQUENCY & ENGINE SPEED     | 50 HZ & 1500RPM |         |
| NOISE LEVEL @ 7M             | 70 dBA          |         |
|                              | PRIME           | STANDBY |
| GROSS ENGINE POWER kW        | 26KW            | -       |
| FUEL CONSUMPTION @ 100% L/hr | 5.48            | -       |
| FUEL CONSUMPTION @ 50% L/hr  |                 | -       |

### ALTERNATOR DATA

|                    |          |
|--------------------|----------|
| MAKE               | STAMFORD |
| MODEL              | DPC184F  |
| NO. OF BEARINGS    | 1        |
| INSULATION CLASS   | H        |
| WIRES              | 12       |
| EXCITATION SYSTEM  | SHUNT    |
| INGRESS PROTECTION | IP23     |
| VOLTAGE            | ±1%      |

## DIMENSION & WEIGHT

|                    |      |
|--------------------|------|
| LENGTH (mm)        | 1900 |
| WIDTH (mm)         | 780  |
| HEIGHT (mm)        | 1000 |
| WEIGHT*kg          | 750  |
| FUEL TANK CAPACITY | 61 L |

## CONTROL PANEL

|       |         |
|-------|---------|
| MAKE  | DEEPSEA |
| MODEL | 6020    |

## RATINGS DEFINITION

### PRIME POWER

THESE RATING ARE APPLICABLE FOR SUPPLYING CONTINUOUSPURCHASED POWER. 10% OVERLOAD POWER IS AVAILABLE FOR 1HOUR IN 12HOURS CONTINUOUS OPERATION.

### STANDBY POWER

THESE RATING ARE APPLICABLE FOR SUPPLYING CONTINUOUS ELECTRICAL POWER (AT VARIABLE LOAD) IN THE EVENT OF AN UTILITY POWER FAILURE. NO OVERLOAD IS PERMITTED.

## STANDARD REFERENCE CONDITIONS

OUTPUT RATING ARE PRESENTED AT 27°C AIR INLET TEMPERATURE, BAROMETRIC PRESSURE 100kPa, RELATIVE HUMIDITY 30%, THIS GENERATING SET IS DESIGNED TO OPERATE AT HIGH AMBIENT TEMPERATURE (UP TO 52°C), HUMIDITY (UP TO 90%) AND HIGH ALTITUDES. DE-RATION MAY APPLY, PLEASE CONSULT US FOR SPECIFIC SITE RATINGS.

## AVAILABLE OPTIONS & ACCESSORIES

WE OFFER A RANGE OF OPTIONAL FEATURES AND ACCESSORIES TO TAILOR OUR GENERATING SETS TO MEET YOUR POWER NEEDS.

### OPTIONS

- A VARIETY OF GENERATING SET CONTROL AND SYNCHRONIZING PANELS
- ADDITIONAL PROTECTION ALARMS AND SHUTDOWNS
- WATER - FUEL SEPERATOR
- WATERJACKET HEATER
- BATTERY CHARGER

### ACCESSORIES

- GENUINE SPARE PARTS
- AUXILIARY FUEL TANKS

## 1. FUEL SYSTEM

ON GENERATING SETS UP TO 750KVA STANDBY, THE CHASSIS DESIGN IS INCORPORATED WITH INTEGRAL FUEL TANK WITH A CAPACITY OF APPROX 5 HOURS TO 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.

## 2. ALTERNATOR

### 2.1. 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

### 2.2. AUTOMATIC VOLTAGE REGULATOR (AVR)

THE FULLY SEALED AUTOMATIC VOLTAGE REGULATOR MAINTAINS THE VOLTAGE REGULATION AT  $\pm 1\%$ .

### 2.3. MOTOR STARTING (OPTIONAL)

- AN OVERLOAD CAPACITY EQUIVALENT TO 300% OF THE FULL LOAD IMPEDANCE AT ZERO POWER FACTOR CAN BE SUSTAINED FOR 10 SECONDS, WHEN AREP (AUXILIARY WINDING) OPTION IS FITTED.

## 3. MOUNTING ARRANGEMENT

### 3.1. CHASSIS

THE COMPLETE GENERATING SET IS MOUNTED AS A WHOLE ON A HEAVY-DUTY FABRICATED STEEL CHASSIS.

### 3.2. ANTI-VIBRATION MOUNTING DUMPER

DUMPER ARE AFFIXED BETWEEN THE ENGINE & ALTERNATOR FEET AND THE CHASSIS, THUS ENSURING COMPLETE

## 3.3. COUPLING

THE ENGINE AND ALTERNATOR ARE DIRECTLY COUPLED BY MEANS OF AN SAE FLANGE. THE ENGINE FLYWHEEL IS FLEXIBLY COUPLED TO THE ALTERNATOR ROTOR.

## 3.4. SAFETY GUARDS

THE FAN & FAN DRIVE ALONG WITH THE BATTERY CHARGING ALTERNATOR ARE SAFETY GUARD PROTECTED FOR PERSONAL PROTECTION.

## 4. TESTS

THE GENERATING SET IS LOAD TEST BEFORE DISPATCH.

ALL PROTECTIVE DEVICES CONTROL FUNCTIONS AND SITE LOAD CONDITIONS ARE SIMULATED. THE GENERATOR AND ITS SYSTEMS ARE CHECKED BEFORE DISPATCH.

## 5. EQUIPMENT FINISHING

ALL MILD STEEL COMPONENTS ARE FULLY DEGREASED AND PAINTED WITH POWDER COATED PAINT TO ENSURE MAXIMUM 7.2 AUTOMATIC VOLTAGE REGULATOR (AVR) SCUFF RESISTANCE AND DURABILITY.

## 6. EQUIPMENT FINISHING

OPERATION & MAINTENANCE MANUAL, CIRCUIT WIRING DIAGRAMS

## 7. QUALITY STANDARDS

THE EQUIPMENT MEETS THE FOLLOWING STANDARDS: BS4999, BS5000, BS5514, IEC60034, VDE0530 AND ISO8528

## 8. WARRANTY

ALL OF THE GENERATING SETS ARE COVERED UNDER A WARRANTY POLICY FOR A PERIOD OF 12 MONTHS OR 1 YEAR (WHICHEVER COMES EARLIER) OF THE EQUIPMENT IS IN LINE WITH MANUFACTURERS WARRANTY TERMS AND CONDITIONS.

## DISTRIBUTED BY



**POWERGUARD GENERATOR**

**FOURTEEN STAR ENGINEERING CO., LTD**

**No.121B, Myat Lay Street, Pale Myo Thit, Mingalardon Township, Yangon, Myanmar.**

**Tel: 09 792939 222**

**Email: [powerguard@14starengineering.com](mailto:powerguard@14starengineering.com)**

**<https://www.14starengineering.com/>**