

# **DGP-800**

#### **POWERED BY:**



Generating Set pictured may include optional

# **ENGINE / TECHNICAL DATA**

Engine Make	Perkins
Engine Model	4006-23TAG3A
Governing class	ISO 8528-5 G2
Number of Cylinders	6
Cylinder Arrangement	Vertical in line
Bore and Stroke mm	160 x 190
Displacement / Cubic Capacity litres	22.921
Induction System	Turbocharged, air to air charge cooled
Cycle	4 stroke
Combustion System	Direct Injection
Compression Ratio	13.6:1
Rotation	Anti-clockwise, viewed on flywheel
Cooling System	Water - cooled

Cooling System	water - cooled			
Frequency and Engine Speed	50Hz & 1500rpm		60Hz & 1800rpm	
	Prime	Standby	Prime	Standby
Gross Engine Power kW (hp)	705 (945)	786 (1054)	759(1018)	839(1125)
Fuel Consumption @ %50 load L/hr	90.0	-	96.0	-
@ %75 load L/hr	130.0	-	144.0	-
@ %100 load L/hr	172.0	194.0	200.0	224.0
Total Lubrication System Capacity litres	113.4	113.4	113.4	113.4
Total Coolant Capacity (inc. radiator) litres	106	106	106	106
Exhaust Temperature:C°	500	500	500	500
Radiator Cooling Air Flow (Min) : m3/sec	13.95	19.4	-	-
Combustion Air Flow : m3/min	69.0	73.0	76.0	78.0
Exhaust Gas Flow: m3/min	193.0	193.0	209.0	209.0
Fuel Tank Capacity: litres	N/A	N/A	N/A	N/A

#### **OUTPUT RATINGS**

Output Ratings	Prime	Standby
380-415 V 3 ph, 50Hz 1500 rpm	800.00 KVA 640.00 KW	880.00 KVA 704.00 KW
480V 3 ph, 60Hz 1800 rpm	805.94 KVA 644.75 KW	886.53 KVA 709.23 KW

Applicable Voltages: 220/127 V at 60 Hz only (Consult your dealer for more details) Ratings at 0.8 Power Factor

#### **DIMENSIONS & WEIGHT**

Length	Width	Height	Weight - wet
(mm)	(mm)	(mm)	(kg)
5800	2100	2530 +EXHAUST	8800

\* For skid mounted genset without enclosure wet weight = with lube oil and coolant

#### **CONTROL PANEL**

Make	Deep Sea
Model	DSE7310/7320

The DSF7310 is an Automatic start Control Module and The DSE7320 is an auto Mains(Utility) Failure Control Module. Both Modules have been designed to start and stop diesel and gas generating sets that include electronic and non-electronic engines. The DSE7320 includes the additional capability of being able to monitor a mains(utility) supply.

- Backed up real time clock132x64 pixel LCD display
- Programmable event logging (50), showing reason, date and time
   Five key menu navigation
- Fully configurable via PC software
- · Configurable start & fuel outputs
- KWh monitoring Automatic load transfer
- Magnetic pick-up
- Front panel programmingMultiple date and time exercise scheduler
- Programmable load shedding/acceptance
- KW overload protection
- Unbalanced load protection
- · DSENet compatible
- Engine exercise mode

# **RATINGS DEFINITION**

**ALTERNATOR DATA** 

### PRIME POWER

Model

KVA

KW

No. of bearings

Insulation class

Winding Leads

Winding Pitch

AVR Model

Overspeed

Ingress Protection

**Excitation System** 

Voltage Regulation

**Short Circuit Capacity** 

Total Harmonic Content

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. 10% overload power is available for 1 hour in 12 hours continuous operation.

#### **STANDBY POWER**

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.



TAL 049 C

820

656

Н

in linear load <5%, at no load <3.5%

6

IP23

Self-Excited

2/3

R150 / R180

2250 mn<sup>-1</sup>

±1.0 %



#### STANDARD SPECIFICATIONS

#### 1 - ENGINE

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

#### 2 - ENGINE FILTRATION SYSTEM

- Cartridge type dry air filters.
- Cartridge type fuel filters.
  Full flow lube oil filters.

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-ration factors).

#### 4 - EXHAUST SYSTEM

Silencer noise reduction level	14 (dB)
Maximum allowable back pressure	7.0 (kPa)

#### 5 - CIRCUIT BREAKER TYPE

3 pole MCB / MCCB (supplied disconnected and without cables)

#### 6 - FUEL SYSTEM

On Generating Sets up to 2000 KVA, the base frame design can be 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.

#### 7.2 - AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at ±0.5%.

Nominal adjustment by means of a trim pot incorporated on the AVR.

#### 7.3 - MOTOR STARTING

An overload capacity equivalent to 300% of the Full Load impedance at zero Power Factor can be sustained for 10 seconds.

#### 8 - MOUNTING ARRANGEMENT

#### 8.1 - BASE FRAME

The complete Generating Set is mounted as a whole on a heavy duty fabricated steel Baseframe.

#### 8.2 - COUPLING

The Engine and Alternator are directly coupled by means of an SAE

The Engine flywheel is flexibly coupled to the Alternator rotor.

#### 8.3 - 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.

The Fan & Fan Drive along with Battery Charging.

#### 8.4 - SAFETY GUARDS

The Fan & Fan Drive along with the Battery Charging Alternator are Safely Guard protected for personal protection.

#### 9 - FACTORY TESTS

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

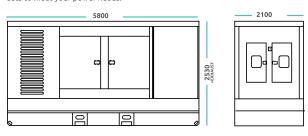
The generator and it's systems are checked before dispatch.

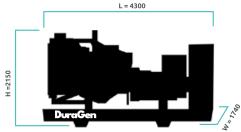
#### 10 - EQUIPMENT FINISHING

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

# AVAILABLE OPTIONS & ACCESSORIES

We offer a range of optional features and accessories to tailor our generating sets to meet your power needs.





#### **OPTIONS**

- Water jacket heater.
- A variety of generating set
- · Additional protection alarms. Water fuel seperator control and synchronizing
- and shutdowns.
- · Panels.
- Battery charger.

#### **ACCESSORIES**

- · SWITCHES.
- · IOAD BANKS.
- · AUXiliary fuel tanks. • Manual & automatic.
- Genuine spare parts transfer.

# STANDARD REFERENCE CONDITIONS

Output ratings are presented at 25°C air inlet temperature, barometric pressure 100 kPa,

relative humidity 30%. This generating set is designed to operate at high ambient temperature (up to 55°C), humidity (up to 99%) and altitudes

De-ration may apply, please consult your dealer for specific site ratings.

**DURAGEN** generators are assembled some of the specifications are not standard on all

genact modes: in facilities certified to ISO 9001 All information in this document is substantially correct at time of printing and may be altered

Generating set pictured may include optional accessories.

11. DOCUMENTATIONS a set of Operation & Maintenance manual, Circuit wiring diagrams and Commissioning / Fault Finding instruction leaflets accompany the Generator.

#### 12. QUALITY STANDARDS The equipment meets the

product please contact your local dealer or visit:

following standards: BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528

13. WARRANTY All of the Generating Sets are covered under a warranty policy for a period of 12 months. 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.

For further information on all of the standard and optional features accompanying this

WWW.DURAGEN.NET

