

## 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	13 (dB)
Maximum allowable back pressure (kPa)	10.0 @50 Hz
	15.0 @60 Hz

### 5. CIRCUIT BREAKER TYPE

3 pole ACB / MCCB (supplied disconnected and without cables)\*

(contd.)

### CONTROL PANEL

Make	Deep Sea
Model	DSE6120

**The DSE6120 is an Auto Start Control Module for single genset applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be programmed using the front panel configuration suite PC software. Metering and Alarm indications:**

- Generator frequency
  - Underspeed, Overspeed
  - Generator volts (L-L, L-N)
  - Generator current
  - Engine oil pressure
  - Engine coolant temperature
  - Fuel level (Warning or shutdown)
  - Hours run counter
  - Battery volts
  - Fail to start/stop
  - Emergency stop
  - Failed to reach loading voltage/frequency
  - Charge fail
  - Loss of magnetic pick-up signal
  - Low DC voltage
  - CAN diagnostics and CAN fail/error
- (Please refer to DSE6110 brochure for more details)

## ENGINE / TECHNICAL DATA

Engine Make	Perkins			
Engine Model	1104A-44TG2			
Governing class	ISO 8528-G2			
Number of Cylinders	4			
Cylinder Arrangement	Vertical in line			
Bore and Stroke	105 x 127			
Displacement / Cubic Capacity litres	4.4			
Induction System	Turbocharged			
Cycle	4 stroke			
Combustion System	Direct Injection			
Compression Ratio	17.25:1			
Rotation	Anti-clockwise, viewed on flywheel			
Cooling System	Water - cooled			
Frequency and Engine Speed	50Hz & 1500rpm		60Hz & 1800rpm	
	<b>Prime</b>	<b>Standby</b>	<b>Prime</b>	<b>Standby</b>
Gross Engine Power kW (hp)	64 (85)	70.4 (94.3)	91.3 (122)	100 (134)
Fuel Consumption @ 50% load L/hr	9.7	-	11.9	-
@ 75% load L/hr	14.0	-	16.9	-
@ 100% load L/hr	18.7	20.5	22.3	24.4
Total Lubrication System Capacity: litres	8	8	8	8
Total Coolant Capacity (inc. radiator): litres	13.0	13.0	13.0	13.0
Exhaust Temperature: °C	555	580	535	560
Radiator Cooling Air Flow (Min): m <sup>3</sup> /sec	1.48	1.48	1.85	1.85
Combustion Air Flow: m <sup>3</sup> /min	4.8	3.9	4.7	4.9
Exhaust Gas Flow: m <sup>3</sup> /min	12.5	13.3	15	15.85
Fuel Tank Capacity: litres	240	240	240	240

## DIMENSIONS AND WEIGHT\*

Length cm	Width cm	Height cm	Weight* kg (wet)
300	110	153	1800

\* For skid mounted genset with enclosure wet weight = with lube oil and coolant

## GENERATING SET MODEL (STPG 80)

Output Ratings	Prime	Standby
380-415 V, 3 ph, 50 Hz, 1500 rpm	80KVA	88 KVA
	64 KW	70.4KW
480 V, 3 ph, 60 Hz, 1800 rpm	90 KVA	100KVA
	72 KW	80 KW

Applicable Voltages: 240/415 V at 50/60 Hz only (Consult your dealer for more details)

Ratings at 0.8 Power Factor

# STPG 80

POWERED BY:



Generating Set pictured may include optional accessories.



## ALTERNATOR DATA

Make	STAMFORD
Model	UCI224G
No. of bearings	1
Insulation class	H
Total Harmonic Content	at no load <2%
Winding Leads	12
Ingress Protection	IP23
Excitation System	SHUNT
Winding Pitch	2/3 (BOB 6)
AVR Model	SX 460
Overspeed	-1 2250 mn
Voltage Regulation	± 1.5 %
Short Circuit Capacity	

## STANDARD SPECIFICATIONS

### 6. FUEL SYSTEM

*On Generating Sets up to 800 KVA, the baseframe 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 dipthermosetting 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  $\pm 0.5\%$ . 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 flange. 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 the Battery Charging

**8.4 SAFETY GUARDS** The Fan & Fan Drive along with the Battery Charging Alternator are Safety 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.

### RATINGS DEFINITION

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

### STANDBY POWER

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

### 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 temperatures (up to 55°C), humidity (up to 99%) and altitudes. De-rating may apply, please consult your dealer for specific site ratings.

JET Generators are assembled Some of the specifications are not standard on all Genset models. in facilities certified to ISO 9001 All information in this document is substantially correct at time of printing and may be altered subsequently.

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 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 product please contact your local dealer or visit:**

**[WWW.STAUNCHMACHINERY.COM](http://WWW.STAUNCHMACHINERY.COM)**

### AVAILABLE OPTIONS & ACCESSORIES

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



### ACCESSORIES

- switches
- Load banks
- Auxiliary fuel tanks
- Manual & automatic
- Genuine spare parts transfer

### OPTIONS

- Water jacket heater
- A variety of generating set
- Additional protection alarms
- Water fuel separator control and synchronizing and shutdowns
- panels
- Battery charger