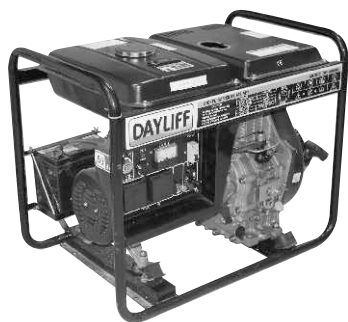




## **DG**

# **Portable Diesel Generators**



**DG 6000D**



**DG 6000DS**

## **Installation & Operating Manual**

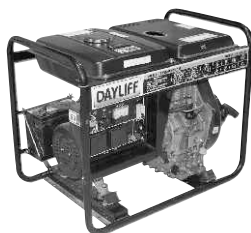


# INDEX

<b>1. GENERATOR SPECIFICATIONS</b>	1
<b>2. CONTROLS</b>	2
<b>3. ELECTRICAL CONNECTIONS</b>	2
<b>4. GENERATOR OPERATION</b>	3
<b>5. ROUTINE MAINTENANCE</b>	3
<b>6. SAFETY WARNINGS</b>	4
<b>7. TROUBLE SHOOTING</b>	5
<b>8. WARRANTY</b>	6

Thank you for choosing Dayliff DG diesel generators. It has been manufactured to the highest standards and if operated correctly should give many years of efficient and trouble free service. Careful reading of this instruction manual is therefore extremely important and if you have any queries please refer them to your retailer.

## 1. GENERATOR SPECIFICATIONS



**DG 6000D**



**DG 6000DS**

The Dayliff Range of portable diesel generators are dependable, quality products specially designed for mains standby and remote site power supply applications. Particular features include:

- Reliable and economical air cooled diesel engines equipped with large size exhausts for low noise levels available in both open and canopied configurations.
- High efficiency square core alternators providing increased power output and enabling operation of sensitive electronic equipment.
- AC auxillary current and DC welding current can be used simultaneously (DGW)
- DC output for charging.
- Integrated control panel with voltmeter for operational convenience.
- Fuseless type over current protection.
- Oil alert system to stop engine in the event of low oil level.
- High capacity fuel tank for extended operation.
- Fitted with AMF auto start facility which when combined with an optional ATS power change over panel enables fully automatic power failure operation (not DG6000D).
- Strong tubular frame for protection and ease of handling (DG6000D)
- Silent models (not DG6000D) feature strengthened canopy on castors and limits noise to 70dBA @ 7m.

Dayliff generators are of compact design and their advanced features make them suitable for all small scale power supply applications.

## Specifications

Model	Voltage (V)	Output		Engine			Fuel tank capacity (litres)	Operating Period (Hrs)	Starter
		Rated (KVA)	Max (KVA)	Model	Capacity (cc)	Max Power (HP)			
DG6000D	1x240	4.5	5.0	LA186FAFG	418	10	12.5	6	Electric
DG6000DS	1x240	4.5	5.0	LA186FAFG	418	10	16	5	Electric
DG12000DSM	1x240	10	11	LA290	954	20	53	14	Electric
DG12000DST	3x415	12.5	13.7	LA290	954	20	53	14	Electric
DGW 200D		4.2	4.6	LA186	418	7.7	12.5	6	Electric

## Welding Data

Model	Welding Performance				Welding Rod Currents (A)		
	No Load Voltage (V)	Operation Voltage (V)	Operating Current (A)	Max. Arching Current (A)	2.5mmØ	3.2mmØ	4mmØ
DGW200D	65	28-35	50-120	180	50-100	100-160	160-180

**DERATING:** Given outputs are sea level rating. Sets should be derated at 1% for every 100m higher than 100m above sea level, and 2% for every 5°C temperature above 20°C

## ELECTRICAL DATA

**Alternator:** Brushless, self exciting, 2 pole

**Power Factor:** 1

**Direct Current:** 12V/8.3A

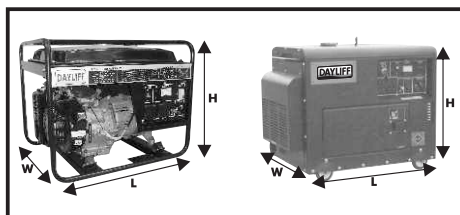
**Power Output:** 50Hz, 240V, single phase

**Voltage Regulator:** AVR

**Speed:** 3000rpm

## Dimensions & Weights

Model	L (mm)	W (mm)	H (mm)	Weight (kg)
DG6000D	740	475	590	95
DG6000DS	900	520	700	150
DG12000DSM	1160	675	945	300
DG12000DST				
DGW200D	685	520	625	107



## 2. CONTROLS

All generators are fitted with the following:-

- 2 no 3 pin AC outlets, +ve and -ve DC connections.
- Engine on/off switch.
- Magnetic circuit breaker electric cutout.
- Voltmeter

## 3. ELECTRICAL CONECTIONS



***If the generator is to be connected for standby power use ensure a qualified electrician is employed. The generator must be isolated from the utility power when connected or serious damage will result to the generator and house power circuits.***

- Ensure the total load does not exceed the generator rating. Maximum power output must only be used briefly or generator damage will occur.
- DC output to be used for charging automotive and solar 12V batteries only. Ensure correct polarity when connecting cables, i.e. +ve to +ve and -ve to -ve generator to battery terminals.
- Ensure the generator is properly earthed. Consult a qualified electrician if in doubt.

## 4. GENERATOR OPERATION



***Always start generator before applying load by switching the circuit breaker and stop the generator after disconnecting load. Starting and stopping under load will damage the generator and powered accessories.***

- CHECK ENGINE OIL. Operating without oil will cause severe engine damage and invalidate the warranty.








## 5. ROUTINE MAINTENANCE

**ENGINE OIL:** Check engine oil every time you use the generator. If low refill it. Change engine oil after first month or after 20hrs operation and thereafter every 3 months or 100 hours of operation, in both cases whichever is sooner.

**FUEL FILTER:** Every 3 months check the fuel filter under the fuel cock for debris and clean. Use a spanner to remove.

**AIR CLEANER:** Check the air cleaner every time you use it and clean it every 3 months or after 100 hours operations, whichever is sooner. Clean by blowing away accumulated dust and soaking in kerosene.

## 6. SAFETY WARNINGS

	<p><b>Read and carefully understand the Instruction Manual before use.</b></p>
	<p><b>Avoid proximity to fire when refueling.</b> Highly inflammable!</p>
	<p><b>Ensure good ventilation around the generator and do not operate indoors.</b> Exhaust gases are very poisonous.</p>
	<p><b>Do not use generator on a slope.</b> Fuel spillage may occur and cause a fire.</p>
	<p><b>Do not restrict the exhaust silencer.</b> There is a danger of overheating and fire.</p>
	<p><b>Do not connect generators together</b> Generator damage will occur.</p>
	<p><b>Ensure a competent trained person is used in case of overhaul.</b></p>

## 7. TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Engine does not start	Air cleaner dirty	Clean air cleaner
	Too much engine oil	Reduce oil to suitable level
	Insufficient engine oil	Oil sensor is activated. Add oil (Oil sensor prevents engine from running if oil level is low)
	No fuel	Check fuel cock open Clean if fuel filter blocked
	Battery flat (Electric start)	Charge/replace battery
Oil leakage from muffler or air cleaner	Engine has tipped over	Right engine oil to drain
No Electrical output	Circuit breaker tripped	Reduce generator load
		Check for short circuit in load
		Loose connection in output cable
Low Electrical output	Low output voltage	Check engine speed
	Excessive electrical load	Reduce generator load



## 8. TERMS OF WARRANTY

### i) General Liability

- In lieu of any warranty, condition or liability implied by law, the liability of Davis & Shirtliff (hereafter called the Company) in respect of any defect or failure of equipment supplied **is limited to making good by replacement or repair** (at the Company's discretion) defects which under proper use appear therein and arise solely from faulty design, materials or workmanship within a specified period. This period commences **immediately after the equipment has been delivered to the customer** and at its termination all liability ceases. Also the warranty period will be assessed **on the basis of the date that the Company is informed of the failure**.
- This warranty applies solely to equipment supplied and **no claim for consequential damages**, however arising, will be entertained. Also the warranty specifically excludes defects caused by fair wear and tear, the effects of careless handling, lack of maintenance, faulty installation, incompetence on the part of the equipment user, Acts of God or any other cause beyond the Company's reasonable control. Also, any repair or attempt at repair carried out by any other party **invalidates all warranties**.

### ii) Standard Warranty

If equipment failure occurs in the normal course of service having been competently installed and when operating within its specified duty limits warranty will be provided as follows:-

- ❑ **Up to six months - The item will be replaced or repaired at no charge.**
- ❑ **Over 6 month, less than a year - The item will be replaced or repaired at a cost to the customer of 50% of the Davis & Shirtliff market price.**

The warranty on equipment supplied or installed by others is conditional upon the defective unit **being promptly returned free to a Davis & Shirtliff office** and collected thereafter when repaired. No element of site repair is included in the warranty and any site attendance costs will be payable in full at standard chargeout rates. Also proof of purchase including the purchase invoice must be provided for a warranty claim to be considered. Also proof of purchase including the purchase invoice must be provided for a warranty claim to be considered.





**DAYLIFF** is a brand of **Davis & Shirtliff**  
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