

# P55-6S

Output Ratings		
Generator Set Model	Prime	Standby
230V, 50 Hz	50.0 kVA / 50.0 kW	55.0 kVA / 55.0 kW
	- / -	- / -

Ratings at 1.0 power factor.

#### **Prime Rating**

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

#### **Standby Rating**

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. The alternator on this model is peak continuous rated (as defined in ISO 8528-3).

#### **Standard Reference Conditions**

Note: Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m (328 ft) A.S.L. 30% relative humidity.

Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A2.

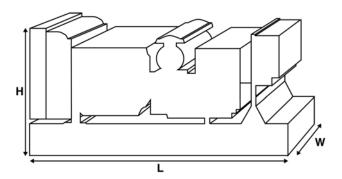




Image for illustration purposes only.

Ratings and Performance Da	ta		
Engine Make & Model:		Perkins® 1104D-	44TG2/3
Alternator manufactured for FG Wilson by:		Leroy Somer	
Alternator Model:		LLB3114D	
Control Panel:		DCP-10	
Base Frame:		Heavy Duty Fabri	cated Steel
Circuit Breaker Type:		3 Pole MCCB	
Frequency:		50 Hz	60 Hz
Engine Speed: RPM		1500	-
Fuel Tank Capacity: litres (US gal)		180 (4	7.6)
Fuel Consumption: I/hr (US gal/h	r)		
(100% Load)	- Prime	16.5 (4.4)	-
	- Standby	18.2 (4.8)	-

## **Available Options**

FG Wilson offer a range of optional features to tailor our generator sets to meet your power needs. Options include:

- Upgrade to CE Certification
- A wide range of Sound Attenuated Enclosures
- A variety of generator set control and synchronising panels
- Additional alarms and shutdowns
- A selection of exhaust silencer noise levels

For further information on all of the standard and optional features accompanying this product please contact your local Dealer or visit: www.FGWilson.com

Dimensions an	d Weights			
<b>Length</b> (L) mm (in)	Width (W) mm (in)	<b>Height</b> (H) mm (in)	<b>Dry</b> kg (lb)	<b>Wet</b> kg (lb)
1870 (73.6)	840 (31.3)	1333 (52.6)	928 (2046)	941 (2075)
Dry = With Lube	Oil	Wet = With Lube	Oil and Coolant	

Ratings in accordance with ISO 8528, ISO 3046, IEC 60034, BS5000 and NEMA MG-1.22. Generator set pictured may include optional accessories.

Engine Technical Data		
No. of Cylinders / Align	ment:	4 / In Line
Cycle:		4 Stroke
Bore / Stroke: mm (in)		105.0 (4.1)/127.0 (5.0)
Induction:		Turbocharged
Cooling Method:		Water
Governing Type:		Mechanical
Governing Class:		ISO 8528 G2
Compression Ratio:		18.23:1
Displacement: I (cu. in)		4.4 (268.5)
Moment of Inertia: kg m	<sup>2</sup> (lb/in <sup>2</sup> )	1.14 (3896)
Engine Electrical Syster	n:	
- Voltage /	Ground	12/Negative
- Battery Charg	er Amps	65
Weight: kg (lb)	- Dry	401 (884)
	- Wet	408 (899)

Air Systems	50 Hz	60 Hz
Air Filter Type:	Replaceable	e Element
Combustion Air Flow: m <sup>3</sup> /min (cfm)		
- Prime	4.7 (166)	-
- Standby	4.9 (173)	-
Max. Combustion Air Intake Restriction: kPa (in H <sub>2</sub> O)	6.0 (24.1)	-

Cooling System		50 Hz	60 Hz
Cooling System Capacity: 1 (US	gal)	16.5 (4.4)	-
Water Pump Type:		Centrifu	ugal
Heat Rejected to Water & Lui	be Oil:		
kW (Btu/min)	- Prime	47.0 (2673)	-
	- Standby	46.8 (2661)	-
Heat Radiation to Room: Heat	radiated from a	engine and alternator	
kW (Btu/min)	- Prime	14.0 (796)	
	- Standby	14.9 (847)	
Radiator Fan Load: kW (hp)		1.0 (1.3)	-
Radiator Cooling Airflow: m³/n	nin (cfm)	84.0 (2966)	-
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> O)		125 (0.5)	-

Designed to operate in ambient conditions up to 50°C (122°F). Contact your local FG Wilson Dealer for power ratings at specific site conditions.

Lubrication System	
Oil Filter Type:	Spin-On, Full Flow
Total Oil Capacity:   (US gal)	8.0 (2.1)
Oil Pan: I (US gal)	7.0 (1.8)
Oil Type:	API CH4 15W-40
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: <sup>kPa</sup> (in Hg)	12.0 (3.5)	_
Exhaust Gas Flow: m <sup>3</sup> /min (cfm)		
- Prime	11.2 (396)	-
- Standby	12.3 (435)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	570 (1058)	-
- Standby	627 (1161)	-

Performance 50 Hz 60 Hz 1500 Engine Speed: rpm -Gross Engine Power: kW (hp) 56.6 (76.0) - Prime - Standby 61.0 (82.0) BMEP: kPa (psi) 1029.0 (149.3) - Prime - Standby 1109.0 (160.9) \_

Fuel System				
Fuel Filter T	уре:	F	Replaceable Elen	nent
Recommend	led Fuel:	C	Class A2 Diesel o	or BSEN590
Fuel Consur	<b>nption:</b> I/hr (US g	jal/hr)		
	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	18.2 (4.8)	16.5 (4.4)	12.3 (3.2)	8.4 (2.2)
60 Hz	-	-	-	-
		100%	75%	50%
Standby		Load	Load	Load
50 Hz		18.2 (4.8)	13.5 (3.6)	9.2 (2.4)

(Based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, Class A2)

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60 Hz

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LLB3114D
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - M
Wires:	4
Ingress Protection Rating:	IP23
Excitation System:	SHUNT
AVR Model:	R250

Alternator Operating Data	
Overspeed: rpm	2250
Voltage Regulation: (Steady state)	+/- 0.5%
Wave Form NEMA = TIF:	50
Wave Form IEC = THF:	2.0%
Total Harmonic content LL/LN:	2.5%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	5.6 (318)
- 60 Hz	-

Alternator Performance Data:		50	Hz		60 Hz
Data Item	240V	230V	220V		
Mada Stanting					
Motor Starting	145	136	128		
Capability* kVA					
Short Circuit	300	300	300		
Capacity** %	500	500	500		
Reactances: Per Unit					
Xd	1.603	1.746	1.908		
X'd	0.135	0.147	0.161		
X"d	0.081	0.088	0.096		

Reactances shown are applicable to prime ratings. \*Based on 30% voltage dip at 0.9 power factor and SHUNT excitation. \*\*With optional permanent magnet generator.

Output Ratings Technical Data 50 Hz					Output Ratings Technical Data 60 Hz				
Voltage	Prime:		Standby:		Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW		kVA	kW	kVA	
240V	50.0	50.0	55.0	55.0					
230V	50.0	50.0	55.0	55.0					
220V	50.0	50.0	55.0	55.0					

### Documentation

A full set of operation and maintenance manuals and circuit wiring diagrams.

#### **G**enerator Set Standards

The equipment meets the following standards: BS5000, ISO 8528, ISO 3046, IEC 60034, NEMA MG-1.22.

FG Wilson is a fully accredited ISO 9001 company.

EU stage IIIA emissions compliant.

#### Warranty

All prime equipment carries a one year manufacturer's warranty. Standby equipment, limited to 500 running hours per year, has a two year manufacturer's warranty. For details on warranty cover please contact your local Dealer, or visit our website: FGWilson.com.

## Dealer contact details:

## FG Wilson manufactures product in the following locations:

Northern Ireland • Brazil • China • India • USA

With headquarters in Northern Ireland, FG Wilson operates through a Global Dealer Network.

To contact your local Sales Office please visit the FG Wilson website at www.FGWilson.com.

FG Wilson is a trading name of Caterpillar (NI) Limited.